INTERNATIONAL HANDBOOK ON ECOTOURISM

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Edited by

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1. Ecotourism: themes and issues

Roy Ballantyne and Jan Packer

INTRODUCTION

Increasing interest in both tourism and environmental conservation over the past 30 years have combined to produce the phenomenon of ecotourism, which at its simplest is environmentally responsible tourism in a natural setting (see Buckley, Chapter 2). Ecotourism has been claimed to be the fastest growing tourism segment around the world, growing at 20–25 per cent each year (Ceballos-Lascurain, 2012). This Handbook explores this phenomenon by bringing together a variety of perspectives on the nature and practice of ecotourism, from a range of authors who have researched specifically in ecotourism, or in fields that have some broad relevance to ecotourism, over many years.

Ecotourism is a field rather than a form of knowledge (Hirst, 1974) as it involves the integration of a number of concepts, logic and criteria from different disciplines. This volume thus explores ecotourism from multiple disciplinary perspectives, including business, economics, environmental education, environmental science, ethics, geography, health, human resources management, marketing, psychology and sociology. Inevitably, there are some areas of congruence and some areas where a diversity of views have been incorporated.

One of the most obvious areas where we have not sought to impose uniformity is in defining ecotourism. In fact, we have deliberately sought contributions from those working in contexts that are not traditionally included under the term ecotourism. By attempting to test these boundaries, we hope to raise questions about the concepts that are core to a contemporary understanding of ecotourism, and those that represent grey areas that are open for negotiation. Buckley (Chapter 2) suggests that one reason why definitions of ecotourism remain disputed is that different authors focus on different aspects of ecotourism. For example, it might be seen as a product (nature-based tourism), an outcome (conservation tourism) or an approach to management (sustainable tourism or responsible tourism). Defining ecotourism is thus one of four key themes that run through this volume, along with exploring the benefits or impacts of ecotourism, managing ecotourism and researching ecotourism. These four themes are elaborated here in order to provide an overview of the issues raised in this Handbook.

THEME 1: DEFINING ECOTOURISM

In Chapter 2 of this volume, Buckley explores various ideas around the definition of ecotourism and identifies a number of components that many consider core. These include:

- minimal impact management
- a nature-based setting or product

- an environmental education or interpretation component
- a contribution to conservation
- benefits to the local community.

Fennell (Chapter 4) adds an ethical perspective to the consideration of what is and isn't ecotourism. He argues from an animal rights perspective that practices based on animal capture and confinement should not be considered ecotourism, thus disqualifying zoos and aquariums from inclusion. Other authors in this volume (Mann & Vernon, Chapter 34; Grajal, Chapter 35; Sutherland, Chapter 36) argue from the perspective of zoos, aquariums and botanic gardens that the cost-benefit relationships in terms of maintaining biodiversity and minimal impact actually favour zoo and aquarium visitation over tourism to wilderness areas. In fact, if philosophical arguments are taken to the extreme, authentic ecotourism would be a logical impossibility as tourism always has some impact (Hughes, Chapter 10). White, Buultjens and Shoebridge (Chapter 8) also argue that a view of ecotourism as strictly non-consumptive is problematic from an Indigenous perspective.

It is generally although not universally held that a core feature of ecotourism is that it occurs in a nature-based setting. Does that imply, however, that the setting is pristine? An early definition of ecotourism (Ceballos-Lascurain, 1988, p. 13) specified 'relatively undisturbed or uncontaminated natural areas'. It might be argued that any intrusion of tourists into a natural setting immediately contaminates its pristineness. There is thus a continuum from relatively untouched wilderness through to artificial and themed nature-based environments such as zoos, aquariums and botanic gardens. Where along this continuum should the dividing line be drawn, or should all of these nature-based settings be accepted as potential ecotourism sites, provided the other criteria are met? Pushing the boundaries even further, should tourism to ecologically degraded environments be considered ecotourism if it provides opportunities for meaningful experiences of nature and contributes to both education and conservation (Hughes, Chapter 10)?

The extent to which ecotourism does or should have a positive net effect on conservation is also open to debate. As many ecotourism sites are remote, the travel involved in reaching them may do more global environmental damage than their small, local positive impacts are able to offset. Attention has turned, therefore, to the benefits that might be gained by motivating and mobilizing ecotourism participants to become lifelong environmental advocates (Packer & Ballantyne, Chapter 16). From this perspective, the notion of urban ecotourism (Higham & Lück, 2002) may have something to offer: it is less disruptive of remote, natural areas; it can potentially promote a conservation message to a much larger market; and it encourages the restoration and regeneration of natural environments and wildlife habitats within urban areas.

Rather than debating definitional issues, perhaps a more practical and constructive approach would be to forge more intentional links between zoos, aquariums, botanic gardens and ecotourism, especially in developing countries. Many zoos and aquariums are ready and willing to use their resources to provide support to fledgling ecotourism ventures, especially in developing countries. Such support might include specialist staff training and offering expertise in hospitality services, education or interpretation. Zoos, aquariums, botanic gardens and ecotourism ventures are all working towards the same

goals in terms of providing visitor experiences that heighten visitors' awareness of and appreciation for the natural environment and so motivate for its continuing preservation. Alliances based on these common goals are likely to be mutually beneficial on a number of levels.

THEME 2: BENEFITS AND IMPACTS OF ECOTOURISM

Getz (Chapter 32) notes that ecotourism is often conceptualized in terms of its benefits rather than its activities. Although the 'triple bottom line' of economic, environmental and social sustainability provide a starting point for considering the benefits and impacts of ecotourism, the contributors to this volume go much further in identifying the ways in which ecotourism might contribute to the wellbeing of environments, societies and tourists themselves. The benefits claimed for ecotourism fall into three main categories: benefits for the environment; benefits for local communities; and benefits for participating tourists.

For the environment, it has been claimed that ecotourism facilitates the protection of natural resources by providing an economic incentive for conservation, as well as the funds required to implement conservation plans. Ecotourism operators may engage directly in wildlife research and monitoring as part of their business activities, or support this financially through fees and levies. Ecotourism also benefits the environment indirectly by raising awareness of environmental issues, building an appreciation for natural environments and educating visitors regarding the skills and actions that contribute to more sustainable lifestyles. Compared with other tourism or economic activities, ecotourism's negative impact on the environment should, by definition, be minimal. Despite all of these considerations, it is still a matter of debate whether ecotourism's net impact on the environment is a positive or negative one.

For local communities, it has been claimed that ecotourism similarly facilitates the protection of traditional and Indigenous cultures, and builds visitors' cultural awareness, appreciation and respect. It should intentionally strive to provide employment and income for local communities, thus in theory at least, alleviating poverty and sustaining the wellbeing of local people. By encouraging local participation and ownership, ecotourism can also contribute to increasing local pride and a sense of empowerment. Arguably, it all too often fails to meet these ideals.

For tourists and other visitors, it has been claimed that ecotourism provides a wide range of social and psychological benefits. The opportunity to reconnect with nature, considered by some to be a biological need, has been postulated to have many associated benefits. Natural environments facilitate restorative experiences, reduce the effects of stress and mental fatigue and enhance feelings of wellbeing. The educational aspects of ecotourism provide opportunities for acquiring new knowledge, developing a greater awareness of and appreciation for nature and wildlife, reflecting on deep and important issues, reconsidering attitudes, values and beliefs, making changes to everyday actions and thus facilitating the adoption of a sustainable lifestyle. Such transformative experiences can be deeply satisfying, leading to increased self-efficacy and self-esteem. Self-development may also occur through meeting physical and intellectual challenges and developing new skills. Volunteering and contributing financially to conservation can also

be satisfying and fulfilling experiences. Finally, ecotourism is similar to other forms of tourism in that it provides opportunities for social interaction, communitas and involvement in social worlds. Many of these accrue regardless of whether visitors are ecotourists, environmentally sustainable tourists or environmentally sustainable ecotourists (Dolnicar, Yanamandram & Juvan, Chapter 9).

On the down-side, however, ecotourism also has the potential to negatively impact on the environment being visited, as well as contributing carbon emissions through travel to and from the site (perhaps to an even greater extent than mass tourism because of its often remote location; see Hall, Chapter 6). Warning is also sounded in relation to the potential of ecotourism operations to lead to the commodification of Indigenous cultures, and the tendency for Western worldviews to predominate over Indigenous worldviews (White, Buultjens & Shoebridge, Chapter 8). In some cases, local communities may be displaced rather than empowered, and economic benefits do not always flow back into the protection and preservation of local environments. Personal benefits are to a large extent determined by the predispositions and motivations of the participants. Thus, the positive impacts noted above are by no means universal, and should be considered ideal rather than actual outcomes.

THEME 3: MANAGING ECOTOURISM

The authors of this volume identify numerous issues and challenges that are involved in managing ecotourism, including managing environmental impacts, community relations and visitor behaviour as well as managing the business itself.

Ecotourists rightly expect that activities and sites labelled as ecotourism will pay attention to issues of minimal impact and sustainable environmental management. They appreciate that they may be expected to sacrifice some goods, services or activities in order to achieve an authentic ecotourism experience. Thus, ecotourism managers must be familiar with issues of resource management, impact management, biosecurity management and waste management.

In order to provide maximum benefit to local communities, ecotourism managers may need to negotiate co-management strategies with government agencies, local communities and Indigenous groups. Allowing these groups to experience some degree of ownership and control is likely to contribute to the long-term success and sustainability of the enterprise. There are also advantages in cooperating with other enterprises within the destination, especially those that share common values with ecotourism.

Visitor behaviour management, designed to reduce visitor impacts and enhance visitor experiences, may be addressed using various means, for example, enforcing laws and policies; restricting access to sensitive areas; interpreting the site in such a way as to win visitors' appreciation and respect and so encourage voluntary compliance with environmental management strategies; and using social controls to influence visitor behaviour (Hughes & Ballantyne, Chapter 25; Pearce, Chapter 11). The reasons behind restrictions and minimal impact strategies should be explained to visitors, as voluntary compliance will result in longer-lasting change, and greater social and psychological benefits for visitors. Environmental responsibility will thus become a core theme within the experience offered to and co-created with visitors.

Managing an ecotourism business entails a number of other unique challenges. These relate to issues of economic management (Dwyer & Edwards, Chapter 20), human resources management (Baum, Chapter 21), risk management (Ritchie & Reid, Chapter 22) and compliance with accreditation or certification standards (Spenceley & Bien, Chapter 31). In all of these areas, performance monitoring, evaluation and benchmarking can assist ecotourism managers to measure the extent to which they are meeting their own goals.

THEME 4: RESEARCHING ECOTOURISM

It has been suggested that ecotourism, as well as associated topics such as sustainability and environmental impacts, are among the most frequently published and highest priority areas of tourism research (Dowling, Chapter 3). There remains much to be discovered, however, regarding the interplay among the various groups that claim a stake in ecotourism, including ecotourism managers, conservationists, local and Indigenous communities, government agencies and not least, of course, ecotourists themselves.

A number of areas where further research is required have been identified in this volume. Given the nature of ecotourism, such research draws from many disciplines, all with their distinctive research paradigms, questions and methods. Research that is able to cross disciplinary boundaries, and find innovative ways of combining insights from multiple perspectives, is likely to make the most significant contribution to advancing research in this area.

In relation to environmental impacts, research is needed into both the environmental costs and benefits of ecotourism. Such research needs to extend beyond site-specific studies, and include a consideration of the impacts of travel to and from the site, and the benefits of the experience as they develop over time. Hall and Baird (Chapter 7) suggest that the relationships between tourism and biological invasion need further research, as well as the development of effective strategies that seek to prevent it. Continuing research into management strategies that minimize environmental impacts will help to sway the balance between environmental costs and benefits in favour of the benefits.

Fennell (Chapter 4) calls for further research into ecotourism ethics. Management approaches need to be developed that are based on genuine and effective community consultation, ownership and empowerment, and ensure that benefits flow into and remain within the local community. Challenges and obstacles in this regard need to be identified and solutions tested and refined.

Perhaps the most important area of future research is the need to better understand the expectations and experiences of visitors to ecotourism activities and sites, and the benefits they derive from these experiences. Dolnicar, Yanamandram and Juvan (Chapter 9) argue the need to more clearly define and operationalize the term 'ecotourist'. Falk and Staus (Chapters 13 and 15) call for further research into the scope and extent of learning that is possible through ecotourism, as well as the affective dimensions of the experience. In this regard, Packer and Ballantyne (Chapter 16) demonstrate the need to research and develop strategies for extending the influence of an ecotourism learning experience by supporting the translation of positive post-visit behavioural intentions into the adoption of environmentally sustainable actions in everyday life. Such research needs

to incorporate observations of visitor behaviour as well as questionnaire and interview methods (Pearce, Chapter 11).

According to Curtin (Chapter 17), such research will help to move ecotourism research 'beyond impact and management into the realms of eco-psychology'. In this way, ecotourism managers will be better equipped to design and implement ecotourism experiences that re-engage and reconnect human populations with nature, and thus have a lasting and on balance beneficial impact on the global environment.

HANDBOOK OVERVIEW

The 35 chapters that comprise the Handbook are grouped into four Parts. The four themes discussed above are interwoven throughout these Parts, although some emerge more naturally in one part than in others.

Part I on Ecotourism Issues, Concepts and Challenges discusses some of the complexities of understanding and defining ecotourism. It explores the historical development of ecotourism and some of the contentious issues that arise when the interests of social responsibility and commercial viability are expected to co-exist.

Part II on Ecotourist Behaviour and Visitor Experiences focuses on ecotourism from the participants' perspective. It explores visitor behaviour, visitor experiences and visitor learning, and delves into the psychological aspects of ecotourism, thus providing insights into the needs and interests of those who engage in ecotourism.

Part III on The Practice of Ecotourism presents a range of practical issues that ecotourism operators need to consider. Staffing their enterprise, managing risks, protecting and interpreting the site or natural resources on which their business depends, being responsible contributors to and collaborators with local and Indigenous communities and attaining and maintaining accreditation are all common challenges discussed in this section.

Part IV on Ecotourism Contexts: Pushing the Boundaries explores a range of different contexts where the principles of ecotourism are being applied. These contexts, including zoos, aquariums, botanic gardens and ecotourism events, stretch the definitions of ecotourism that have previously been accepted, but in return, may offer a new set of perspectives and resources that can enrich and strengthen our understanding of the mission and practice of ecotourism. Should these contexts be permitted to share the term ecotourism? We will let the reader decide.

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PART I

ECOTOURISM ISSUES, CONCEPTS AND CHALLENGES

2. Defining ecotourism: consensus on core, disagreement on detail

Ralf Buckley

INTRODUCTION

Ecotourism has proved to be an enduring concept in the popular as well as the academic literature of travel and tourism. The frequency with which the term has been used has increased in an approximately linear fashion in both fields, with popular usage lagging scholarly publications by about a decade (Buckley & Ollenburg, 2011).

Ecotourism has also become a term with a degree of political power. Not surprisingly, therefore, different interests promote their own perspectives on what it means. Each protagonist sees commercial or political advantage through the adoption of their preferred definition. This includes those researchers who propose normative frameworks under which ecotourism terminology should be applied according to some predefined position. Other researchers, however, take a descriptive approach, setting out simply to summarize how the term is used in practice. A few have set out to define ecotourists rather than ecotourism, but with a similar variety of approaches.

Both the behaviour of an individual tourist on holiday and the structure of an individual retail packaged tourism product may contain some components that would qualify as ecotourism and others that would not. In addition, the emphasis given to different aspects of ecotourism differs not only between stakeholders, but also between countries and cultural traditions. Both these issues add to the difficulty in generating any universally recognized definition of ecotourism.

UNITED NATIONS DEFINITION

During the International Year of Ecotourism in 2002, the United Nations Environment Programme and the World Tourism Organization (now the United Nations World Tourism Organization) held a World Ecotourism Summit in Quebec, with a series of international preparatory conferences. This produced a Quebec Declaration on Ecotourism, itself an input to the World Summit on Sustainable Development. In so far as there is any official definition of ecotourism, the Quebec Declaration (UNEP & WTO, 2002) provides the most definitive version. The Declaration does not, in fact, contain an explicit definition. Instead, following the language protocol of such documents, it states that the participants of the World Ecotourism Summit:

> *Recognize* that ecotourism embraces the principles of sustainable tourism, concerning the economic, social and environmental impacts of tourism. It also embraces the following specific principles which distinguish it from the wider concept of sustainable tourism: contributes actively to the conservation of natural and cultural heritage; includes local and indigenous

> communities in its planning, development and operation, and contributing to their well-being; interprets the natural and cultural heritage of the destination to visitors; [and] lends itself better to independent travellers, as well as to organized tours for small size groups.

This is a rather extended definition, and a number of its components would not necessarily be agreed by all (Buckley, 2009a, 2009b). For example, the issue of scale remains contentious (Harrison, 2011; Weaver, 2011). Likewise, the notions that ecotourism should contribute actively to conservation and to local communities are not always incorporated in industry definitions. The shortest of these, produced by an Australian State government tourism agency, is simply 'sustainable tourism in a natural setting'. This is certainly succinct and comprehensible, but since sustainability is too broad a term to have much meaning, this approach essentially defines ecotourism as synonymous with nature tourism, rather different from the United Nations approach. In the following, therefore, I consider the component criteria that are perhaps more critical than the precise form of words used to define ecotourism.

COMPONENT CRITERIA

Reviews of published academic literature on ecotourism (Buckley, 1994, 2009a, 2009b; Weaver, 2001; Weaver & Lawton, 2007) have continued to identify the same component criteria, but also the same disagreements over which criteria are critical and how they should be measured. There seem to be five or six fundamental criteria, all of them contested to some degree.

1. Ecotourism is a type of tourism. Tourism is both a type of human behaviour and a commercial industry. Most ecotourism enterprises are private sector businesses. There are also a number of enterprises worldwide, however, which provide ecotourism experiences, but which are supported financially by donors or non–governmental organizations (NGOs). The consensus view is that ecotourism enterprises are commercial tourism businesses, but this view is not held universally.
2. Most definitions include environmental management, but few demand and define best practice. Many rely merely on the term sustainable, which is used so broadly that it is largely meaningless. Tourism ecocertification agencies have proposed providing more detailed technical criteria through certification. These schemes, however, have limited cover, low transparency and commercial conflicts, so this approach has not generally proved successful (Buckley, 2011, 2012). Some industry associations and government agencies use ecotourism as synonymous with nature-based tourism, ignoring all aspects of environmental management, but that is not a consensus view.
3. Most definitions of ecotourism refer specifically to a nature-based product or setting. A few authors, principally those who focus on social rather than environmental aspects of sustainability, have proposed that urban ecotourism should also be possible. That, however, is not the consensus view.
4. Many definitions propose that ecotourism should include an environmental education or interpretation component, though this is not well defined. This view is

commonly propounded by those with a background in education or guiding. Whilst it seems clear that an active education programme can contribute significantly to client satisfaction, it is, however, only under limited circumstances that it reduces tourist impacts on-site (Littlefair & Buckley, 2008). There seems as yet to be no clear demonstration that ecotourism education changes subsequent client behaviour to any significant degree. One recent analysis of 240 visitors to four marine tourism attractions (Ballantyne, Packer & Falk, 2011) found that four months after their visits, 7 per cent of respondents claimed to have made some behavioural change. These changes, however, were rather limited, such as being more careful not to litter, selecting product purchases more consciously and talking to friends and children about environmental issues.

5. The more stringent definitions of ecotourism also include a contribution to conservation. For approaches to ecotourism that use a triple bottom-line framework, conservation is a critical component (Buckley, 2003a). Many other definitions, however, ignore this component. There is also considerable leeway in how this criterion is interpreted. There is a big difference, for example, between (1) establishing private reserves that are funded by tourism and protect significant populations of threatened species (Buckley, 2010a, 2010b) and (2) simply paying the same per person park entry fees that would apply to independent visitors. In addition, if the conservation impacts of global climate change are also considered, then there are some technical accounting difficulties in calculating conservation contributions net of climate-related and other conservation impacts.
6. Some approaches to defining ecotourism also consider social benefits, notably to local resident communities near the area of operations. Of these, some treat community benefits as a valid goal of ecotourism independent of environmental aspects, whereas others consider it important only because of its significance for conservation of biodiversity. Thus, this cannot be considered as a consensus core component, but it is an important corollary.

One reason why definitions of ecotourism remain disputed is that the criteria mix aspects of product, management and outcome. Perhaps as a result, a range of related terms are now in use. Nature-based tourism (Coghlan & Buckley, 2012) refers only to the product aspects. Sustainable tourism (Buckley, 2012) and responsible tourism (Sharpley, 2012) refer to management aspects. Conservation tourism (Buckley, 2010b) refers to outcomes and net positive gain for conservation.

CASES AND CULTURES

Since any individual tourism company may offer a range of products with very different designs, ecotourism is better defined at the scale of individual products or local-scale operational enterprises rather than entire organizations. Whilst there are indeed some tourism corporations whose entire philosophy and product portfolio may qualify as ecotourism, these seem to be rather less common than companies that offer a broader portfolio across a combination of nature and adventure tourism activities. There are now several compendia of ecotourism case studies (Buckley, 2003b; Gössling & Hultman,

2006; Stronza & Durham, 2008; Zeppel, 2006). To some degree, these can be seen as defining ecotourism by what they include or exclude.

The ways in which the term ecotourism, and its equivalent terms in other languages, are used in practice have evolved along somewhat different pathways in different countries. Some of the products sold as safaris in sub-Saharan Africa, for example, are entirely congruent with concepts of ecotourism, though this does not apply universally. Buckley et al. (2008) argued that the Chinese equivalent of ecotourism, known as *sheng-tai luyou*, is in fact subtly different in several important respects, and had evolved as an amalgam of Chinese and Western concepts. Corresponding conclusions were reached independently by Donohoe and Lu (2009). Wang and Buckley (2010) found a similar pattern for public forests in China, which are managed for multiple uses including both tourism and conservation under a philosophy known as *shengtai anquan*. No doubt such distinctions may also apply in other languages.

A review of around 170 case studies in ecotourism (Buckley, 2003b) identified regional signatures, with different product characteristics more prevalent in different continents and ecosystems. Private lodges and reserves in sub-Saharan Africa, for example, focus on four-wheel-drive game drives, whereas those in the dense rainforests of the Amazon Basin focus on boat trips, canopy towers and birdwatching. A corresponding review of cases in the broader field of adventure tourism (Buckley, 2006) found no evidence of regional signatures. A review of the more restricted field of conservation tourism (Buckley, 2010b) was geographically structured, and reported differences related to culture, politics, land tenure and wildlife ownership, but without identifying any general patterns. This is still a very new and rapidly evolving field.

ECOFRIENDLY TOURISTS?

Attempts to define ecotourists, as an alternative to defining ecotourism, have not proved any easier (Buckley, 2010c). Weaver and Lawton (2002), for example, identified three statistically distinguishable clusters amongst ecolodge patrons in Lamington National Park, Queensland. Members of all three clusters had purchased the same ecotourism product, but they had rather different characteristics. An attempt to classify tourists into environmentally friendly or unfriendly as a basis for selective marketing (Dolnicar & Leisch, 2008) suffered from some statistical shortcomings, and also focused on urban behaviours largely irrelevant to the unspoilt natural areas that the analysis aimed to address.

The most severe impacts in unspoilt natural areas are caused by a small proportion of visitors, who engage in unsanctioned activities (Buckley, 1996) and who ignore both regulations and highly targeted minimal-impact messages, let alone vaguely constructed green marketing. In addition, no link has been demonstrated between stated ecofriendly behaviour in urban contexts and actual minimal-impact practices in unspoilt natural areas. Urban respondents may be concerned about the environment, but poorly skilled and equipped for minimal impact travel. Long-term country residents, in contrast, may not score highly on generic environmental questionnaires designed for urbanites, but may be skilled at wilderness travel without leaving tracks or traces.

Given that concepts of ecotourism allow a very broad latitude in the specific types

of attraction and activity, we may perhaps anticipate a correspondingly broad range of motivations and socioeconomic characteristics amongst ecotourists. The wealthy guests of upmarket lodges such as North Island in the Seychelles, for example, are effectively funding a conservation programme for a critically endangered bird species, the Seychelles White-eye (Buckley, 2010b); but this is not why they visit North Island, and many may not even know that this bird exists. At the other extreme, independent travellers who successfully make their way to various small-scale ecolodges run by NGOs and local communities in developing countries may indeed be motivated by an individual desire to contribute to these initiatives; but that does not guarantee that these enterprises will necessarily yield the intended outcomes. Whilst the motivations of park visitors, volunteer tourists and commercial ecotour clients are all valid subjects of study in their own right, none is likely to yield a definitive definition of an ecotourist (Buckley, 2010c). Therefore, at present, it seems that it is easier to define ecotourism products than ecotourists.

CONCLUSIONS

There is no universally agreed definition of ecotourism: not because of any technical difficulty, but because of essentially political disagreements between different interests, amongst academics as well as practitioners. There is a broadly shared understanding of the issues and criteria relevant to ecotourism, and perhaps even a broad consensus as to the kinds of characteristics that an ecotourism product should embrace. There is much less agreement, however, over the significance, priority and application of such criteria. In consequence, whilst there are some products and enterprises that would qualify as ecotourism under all extant definitions, there are many more that some commentators would consider as ecotourism, but others would not.

Necessarily, therefore, there is a corresponding range of views as to what constitutes greenwash or ecotourism 'lite', products or enterprises that refer to themselves as ecotourism but without adequate justification. We can think of a continuum from (1) the most stringent definitions of ecotourism, cases that clearly generate net gains for conservation and communities as well as clients and shareholders to (2) cases that fail to comply with any of the definitions or criteria for ecotourism, but claim the label nonetheless. Strictly, of course, this would be a multi-dimensional continuum, which cannot necessarily be reduced to a single index. Conceptually, however, we can see that different authors, stakeholders and commentators choose different points along this continuum to distinguish between ecotourism and greenwash. If we then expand this idea conceptually from a single point on a single line to the boundaries of a space in several dimensions, we can see that not only the size but also the shape of the surface distinguishing ecotourism from greenwash will depend on the relative priority given to different criteria.

Does it matter if there is no single definition for ecotourism that is at once precise and generally agreed? Probably not. A precise definition would be valuable in some circumstances, for example, for incorporation into legislation or for the collection of statistics (Buckley, 1994). Many statutes, however, include terms whose precise meaning is only clarified through later litigation. It is not necessarily problematic if this also applies for ecotourism.

Ecotourism has proved to be a useful generic concept even without a precise definition. The various issues that it encompasses, on the interactions between the environmental, social and economic aspects of tourism, remain relevant; and it matters little whether they are examined under the heading of ecotourism or some other terminology.

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3. The history of ecotourism

Ross Dowling

INTRODUCTION

Natural areas have been tourism destinations for centuries, with initial forays into natural areas being considered 'romantic' at the beginning but latterly more 'ecological' (Davidson & Spearritt, 2000). It was not until the mid-twentieth century that ecotourism was born, through the growth of mass tourism, on the one hand, and environmental awareness, on the other. Thus, to understand the birth and growth of ecotourism it is first necessary to examine the evolution of the environment–tourism relationship. An investigation of this illustrates the range of factors that led to the genesis of ecotourism.

This genesis has been attributed to a number of people over a range of decades in the second half of the last century. The history of ecotourism has been described by Lindberg and McKercher (1997) and Fennell (1999) described the convergent evolution of ecotourism. Both suggest that it was only in the 1980s that it sought to find common ground due to the expansion of global tourism and the increasing interest in the natural environment. The phenomenon known as ecotourism was in existence long before the terminology began to be used within tourism studies even though it was often called other things. For example, the Victorian National Parks Association in Australia has been conducting ecotours, originally referred to as excursions, since 1952 (Davidson & Spearritt, 2000).

This is reiterated by Beaumont (1998, p. 240) who suggested that 'ecotourism is not new to Western society. It has been around since at least the 18th century but by a different name. The early geographers who toured the world in search of new lands, species and cultures were ecotourists . . . The establishment of National Parks – Yellowstone in the US in 1872 and Banff in Canada in 1885 – is further evidence of the early interest in nature tourism . . . African wildlife safaris and Himalayan treks in the 1960s and 1970s were also part of this trend'.

In characterizing and defining ecotourism, early references have been made to the work of Hetzer (1965/1970) and Ceballos-Lascuráin (1987). From their early work the concept and practice of ecotourism has grown and today it is a rapidly growing type of tourism that is now widely accepted around the world and often employed by governments as an economic tool to foster sustainable development. This growth of ecotourism has spawned an array of ecotourism – attractions, accommodations and activities along with an allied growth in ecotourism – information, research, strategies, development, management and professional associations. One of the first professional associations to be established was Ecotourism Australia, which was founded in 1991, and has pioneered a number of ecotourism developments in Australia and beyond. This chapter reviews the environment–tourism relationship and the development of ecotourism. It also presents a case study of a pioneering ecotourism organization, Ecotourism Australia.

Table 3.1 The tourism–environment relationship

Decade	1950s	1960s	1970s	1980s	1990s	2000s	2010s
Relationship	Coexist-ence	Conflict	Symbiosis	Integration	Sustainability	Specialization	Maturity
Aspects		Environ-mental awareness; mass tourism	Tourism as a tool for conservation	Ecodevelop-ment	Sustainable development	Wildlife tourism; geotourism	Widespread adoption; responsible tourism

THE ENVIRONMENT–TOURISM RELATIONSHIP

The environment–tourism relationship has evolved through many phases since the latter half of the last century. During the middle of the twentieth century the relationship was considered to be in coexistence (Table 3.1). It then moved through an iterative process to arrive at the current status of having both 'breadth' and 'depth' of composition. In the 1950s the prevailing view was that tourism had few impacts on the natural environment. Zierer (1952, p. 463) stated that 'a notable characteristic of the tourist industry and recreation industry is that it does not or should not lead to the destruction of natural resources'. However, tourism's professional body, the International Union of Official Travel Organizations (IUOTO – predecessor of the United Nations World Tourism Organization, UNWTO) – did recognize the possibility of adverse impacts. In 1954 it introduced into its General Assembly a section on the preservation of the 'tourist heritage' that focused on the protection of tourism 'capital' or resources from potentially adverse physical and social effects.

During the 1960s increasing public environmental awareness paralleled the advent of mass tourism. Therefore, it was inevitable that environmental protection and tourism development would interact and in many cases conflict. Early stirrings of widespread global environmental awareness and concern were arising in relation to pollution (Carson, 1962), overpopulation (Hardin, 1968), resources (Erhlich, Erhlich & Holdren, 1970) and the environment (Nicholson, 1970).

This awareness, which had already embraced the tourism industry, was highlighted by Akoglu (1971) in the same year in which the IUOTO adopted an environmental tourist policy. Central to it was the recommendation that at the national level countries should establish an inventory of natural tourist resources. Implicit in the policy directive was the concept of classifying or zoning whereby areas with a particularly sensitive or fragile environment would be developed on a small scale, if at all. Another key feature of the environmental tourist policy was the establishment of guidelines for the development of new tourist resorts. The IUOTO suggested that environmental considerations be incorporated in the commissioning of the design of any new tourist development so that buildings blended in with their surroundings and any adverse environmental impacts were minimized.

These policies were shared at the United Nations Conference on the Human Environment in Stockholm in 1972. During this meeting an important concept was formulated that would have far-reaching implications for the future. It was the birth of the

Ecodevelopment Strategy, which suggested that economic development should only take place if it was linked to environmental protection. A corollary to this strategy was the notion that any resulting natural area tourism development should be entirely compatible with local values and culture. These views were also endorsed by the World Bank (1972), which concluded that tourism planning should avoid disparities in the standards of amenities for visitors and the local population.

Although the environment–tourism relationship was initially viewed primarily as one with problems, early stirrings were occurring with regard to tourism being advocated as an agent of conservation, as in the case of nature conservation, through the establishment of national parks in East Africa (Griffiths, 1970; Myers, 1972; Pollock, 1971). In addition, two tourism professionals provided the strongest support for acknowledgement of the link between tourism and the natural environment. The Commissioner General of Tourism in Belgium (Haulot, 1974) and the Director of the Swiss Tourism Association both espoused the tourism–environment connection (Krippendorf, 1975). Their books were the first on the theme of tourism and the environment and after consideration of a wide range of tourism's effects on the environment, they concluded that tourism developments in natural areas must embrace conservation.

The following year was a landmark one in the environment–tourism debate, with a major paper by the Director General of the International Union for the Conservation of Nature (IUCN) exploring the relationship between nature conservation and tourism (Budowski, 1976). He suggested that the relationship is particularly important when tourism is partly or totally based on values derived from nature and its resources and added that the relationship could be one of conflict, coexistence or symbiosis. Budowski stated that conflict occurs when tourism induces detrimental effects on the environment and that the two are in coexistence particularly when there is little contact and each remains in isolation. He postulated that the environment and tourism are in symbiosis when each derives benefits from the other, that is, natural attributes are conserved whilst tourism development is attained.

Budowski indicated that the environment–tourism relationship at that time was more often one of conflict than coexistence. He challenged both conservationists and tourism developers to change their attitudes and work together, suggesting that this would lead to the environment–tourism relationship becoming symbiotic. Budowski suggested that if this approach were followed, then conservation and tourism would benefit mutually from each other. He said 'tourism helps by lending support to those conservation programmes which will "develop" educational, scientific, and recreational resources, with the objective that they in turn will attract more, and different kinds, of tourists' (Budowski, 1976, p. 29).

The beginning of the new decade heralded a wave of interest in tourism and conservation issues and 1980 was another landmark year for the environment–tourism debate. The world's major environmental organizations, the IUCN, United Nations Environment Programme (UNEP) and the World Wildlife Fund (WWF; later to be known as the World Wide Fund for Nature), joined forces to present a global conservation plan – the *World Conservation Strategy* (WCS) (IUCN, 1980). The strategy argued that development can only be sustained by conserving the living resources on which it depends as well as by the integration of development and conservation. This policy took the earlier concept of 'ecodevelopment' linking the environment and development

and added the notion of the 'integration' of the two in order for the Earth to be able to continue supporting humankind into the future. This was to shape the future direction of conservation for the remainder of the decade and gained increased importance when, during the same year, the Brandt Commission Report on North–South relations stated that development must include the care of the environment (Brandt Commission, 1980).

By the mid 1980s it was clear that the idealism of the environment–tourism relationship as advocated through symbiosis was being tempered by the realism that in actual fact the underlying conflicts were still ever-present. The close of the decade brought about a renewed concern for the environmental aspects of tourism (Dowling, 1990). More research was advocated on the role of national parks and protected areas in regard to regional planning and development, Indigenous people and tourism (Nelson, 1988). A major study found that although tourism brings substantial economic benefits it is damaging the world's environment (Smith & Jenner, 1989). Specific problems identified and described included pollution of beaches, damage to coral reefs, disturbance of wildlife, degradation of historic sites, air pollution, congestion and negative social impacts on local culture and customs. The study concluded that 'the tourism industry in its widest sense needs to take a lead in becoming more environmentally sensitive before it becomes one of the main targets of accusation that it is environmentally irresponsible' (Smith & Jenner, 1989, p. 68). Underpinning this closer relationship between the environment and tourism was the Brundtland Commission's 'sustainable development' concept, which equated development with environmental and social responsibility (WCED, 1987).

Thus, the environment–tourism relationship evolved from coexistence to sustainability in the latter half of the twentieth century (Dowling, 1992, 1993). This has underpinned its development over the past two decades and today it includes the growth of niche forms of environmental tourism such as wildlife tourism with its focus on wildlife viewing, which has grown rapidly and generally embraces the same principles as ecotourism (Dowling, 2001; Newsome, Dowling & Moore, 2005). Recent research has focused on the different types of wildlife tourists and activities as well as their impacts (Newsome & Rodger, 2012a, 2012b).

An emerging global phenomenon is geotourism, which focuses on the abiotic environmental component of ecotourism's wider abiotic and biotic elements (Newsome & Dowling, 2010; Newsome & Dowling, 2010). Geotourism is 'geological tourism' that focuses on geology and landscape. It promotes tourism to geosites and the conservation of geodiversity and an understanding of earth sciences through appreciation and learning. This is achieved through visits to geological features, use of geo-trails and view points, guided tours, geo-activities and patronage of geosite visitor centres (Dowling & Newsome, 2010). Geotourists can comprise both independent travellers and group tourists, and they may visit natural areas or urban/built areas wherever there is a geological attraction (Newsome, Dowling & Leung, 2012). Another recent addition is that of 'celestial ecotourism' (Weaver, 2011).

ECOTOURISM

People have always travelled to natural areas and nature-based tourism has been a mainstay of travel for hundreds of years. The establishment of national parks in the USA

in the late 1800s fostered nature-based recreation and tourism and Yellowstone was declared the world's first national park in 1872 and seven years later, in 1879, the Royal National Park was established in Australia.

With the advent of commercial air travel in the twentieth century, mass travel exploded, especially with the introduction of jet aircraft in the 1950s. The British Overseas Airways Corporation (BOAC) operated the first commercial jet service, from London to Johannesburg in 1952, with the de Havilland Comet jetliner. During the 1960s, mass tourism was accompanied by a growing public awareness of environmental issues. Thus, it was only a matter of time before international tourists discovered wild places in remote parts of the world through tours such as African wildlife safaris and Himalayan treks.

The development of ecotourism has been described by numerous commentators including Lindberg and McKercher (1997), Fennell (1999, 2002), Page and Dowling (2002), Fennell and Weaver (2005) and Weaver and Lawton (2007). Fennell (1999) suggested that it was only in the 1980s that ecotourism sought to find common ground with tourism and the environment due to the expansion of global tourism and the increasing interest in the natural environment.

During the 1980s a new kind of nature tourism emerged that placed greater emphasis on the environmental aspects of places visited. Called 'Ecotourism', it combined ecology with tourism and like nature-based tourism, it was based in natural areas. However, it also included a number of characteristics that differentiated it from nature-based tourism. First, it was described as tourism that provides an understanding of the natural environment; second, it is managed to be ecologically sustainable; and third, it provides an appropriate return to the local community and long-term conservation of the region. Thus, ecotourism's essential elements were proffered as being nature-based, ecologically sustainable, environmentally educative, locally beneficial and generating tourist satisfaction. The first three characteristics are essential for a product to be considered 'ecotourism' whilst the last two characteristics are viewed as being desirable for all forms of tourism (Page & Dowling, 2002).

The Term Ecotourism

Fennell (1999) traced the term to a 1965 reference by Dr Nicolas Hetzer, President of the Forum International, International Ecology University (IEU), Berkeley, California. In the December 1970 issue of *Ecosphere, the Newsbulletin of the International Ecology University* (Vol. 1, No. 2), Hetzer reports on a workshop that he chaired at the University of California, Berkeley in September 1970 on the topic of 'Tourism: Promise & Reality, the Need for Eco-Tourism'. He noted that the workshop had an attendance of over 100 participants from among faculty, students, staff, consumers and advocacy groups (Hetzer, 1965/1970). The workshop was a forerunner to another that was held a year later in September 1971 and the December 1970 issue of *Ecosphere* stated that 'in order to set the tone for this event we re-print here Dr Nicolas Hetzer's initial article on "Environment, tourism, culture" (from *Links*, July 1965)' (Hetzer, 1970).

The July 1965 article by Hetzer argued for a re-think of culture, education and tourism through a new form of 'responsible (alternative) tourism'. He suggested that the characteristics of this form of tourism include it having:

1. minimum environmental impact
2. minimum impact on, and maximum respect for, host cultures
3. maximum economic benefits to the host country, especially its grassroots community
4. maximum 'recreational' satisfaction to participating tourists.

He argued that if tourism fulfilled the above then it would be a type of ecological tourism or 'ecotourism'. 'The development of the concept of ecotourism grew, according to Hetzer (personal communication, October 1997 noted in Fennell, 1999), as a culmination of dissatisfaction with governments' and society's negative approach to development, especially from an ecological point of view' (Fennell, 1999, p. 31). The entry on 'Ecotourism' in Wikipedia supports Fennell's assertion and states that 'Hetzer, an academic and adventurer from Forum International in Berkeley, CA, coined the term in 1965 and ran the first ecotours in the Yucatán during the early 1970s' (wikipedia.com). Thus, in light of the above and the lack of any other substantiated claims, it seems that the term 'ecotourism' was first coined by Dr Nicolas Hetzer in the USA in 1965.

However, it should be noted that the word was also used by Arq. Hector Ceballos-Lascuráin in Mexico in 1983, and he is credited with popularizing the term in the late 1980s. According to Ceballos-Lascuráin, he initiated the word ecotourism in 1983 when establishing the non-governmental organization (NGO) Pronatura in Mexico (Ceballos-Lascuráin, 1987, 1996). His website states that 'In 1983, he coined the term "ecotourism" and its preliminary definition' (http://www.ceballos-lascurain.com). In an interview with Ron Mader (http://www.planeta.com), Ceballos-Lascuráin states: 'I coined the term "ecotourism" in early July 1983, when I was performing the dual role of Director General of Standards and Technology of SEDUE (the Mexican Ministry of Urban Development and Ecology) and founding president of PRONATURA (an influential Mexican conservationist NGO). PRONATURA was lobbying for the conservation of the wetlands in northern Yucatan as breeding and feeding habitats of the American Flamingo.'

He continues: 'Among the arguments that I used to dissuade the building of marinas in the Celestún estuary area was the presence of an ever growing number of tourists, especially from the United States. Back in those days I was already convinced that such people could play an important role in boosting the local rural economy, creating new jobs and preserving the "ecology" of the area, and began using the word "ecotourism" to describe this phenomenon' (http://www.planeta.com).

BEYOND HETZER AND CEBALLOS-LASCURÁIN

According to Beaumont (1998, p. 240), Hall (1984) was one of the earliest writers to use the term ecotourism in a paper published in *New Scientist* and was closely related to natural area-based tourism. Subsequently, a rapid growth in interest within tourism and environmental science has led to it arguably becoming one of the most frequently published areas of research in tourism journals (Page, 2000). A search of the literature up to 2000 on 'Leisure, Recreation and Tourism Abstracts' for the 1990s yielded over 500 articles of relevance, which attests to the multidisciplinary nature of much of the research when one considers the type of research and outputs generated. Much of the early literature on ecotourism naturally sought to debate the issue of semantics, definitions and

the very essence of this new term that rapidly became a buzzword and trendy area to research (for example, Björk, 2000; Dowling, 2002; Page and Dowling, 2002).

A survey of 85 definitions of ecotourism in publications from 1991 to 1996 was carried out by Fennell (2001) using a content analysis methodology. He found the most frequently cited variables in the definitions included reference to natural areas, conservation, culture, benefits to locals and education. From the perspective of time, the data indicate that the years ranging from 1991 to 1996 were the most productive in terms of the development of ecotourism definitions, and more specifically from 1994 to 1996, the following variables were better represented: conservation, education, ethics, sustainability, impacts and local benefits.

ECOTOURISM'S ONGOING EVOLUTION

Fennell (2002) noted that how we viewed tourism in the year 2002 was a lot different from how it was perceived 20 years before. He argued that in that period conventional tourism had been joined by an alternative paradigm that spawned a proliferation of new tourism types, including ecotourism. He noted that this had arisen from the environmental movement of the 1960s, the ecodevelopment movement of the 1970s and from sustainable development during the 1980s.

Underpinning this rise of interest in, and development of, ecotourism was the underlying dichotomy between 'technocentrism' and 'ecocentrism', the worldviews of a human-centred or environment-centred approach to viewing the Earth. The latter approach has been the dominant driver of ecotourism development over the past decade by reducing the tension between stakeholders, fostering the long-term viability and quality of resources, protecting the limits to growth and generating visitor satisfaction (Bramwell & Lane, 1993).

Cater (2006) stated that most of the literature on ecotourism is essentially Western-centric, in that it is based on an approach that is deeply embedded in Western cultural, economic and political processes. He adds that 'Despite the fact that it should be obvious that it is patently not the case that "one size fits all" we have witnessed the internationalisation of ecotourism, as evolved from a Western "classical conservationist" approach (suggested by Mowforth and Munt (2003) to be more akin to preservationism), and its apparent universality as a concept' (Cater, 2006, p. 23).

Another focus of ecotourism in recent times has been the need to understand the politics of ecotourism. It has been argued that 'defining ecotourism reveals its politics: can it be provided by global tour operators, luxury nature-based resorts or is genuine ecotourism found in small scale local community run projects and campsites?' (Duffy, 2006, p. 2). Duffy notes that this is difficult to answer, partly because the definitions of ecotourism are often related to wider debates on the theoretical underpinnings for development, as described above by Fennell (2002).

Ecotourism is often viewed through the lens of being small in scale and community-based in countries of 'The South', that is, in the southern hemisphere, yet it often depends on large-scale multinational organizations and businesses from 'The North' (northern hemisphere), to deliver tourists to such communities.

No matter how one arrives at an understanding of ecotourism today, the reality is that

it has been the focus of intense debate and discussion over the past 20 years. Around the end of the last century and at the start of the new millennium, the question was being posed whether ecotourism was to become a new form of mass tourism (Dowling, 1998, 2000; Weaver, 2001a, 2001b). This debate was viewed from a distance by Donohoe and Needham (2006, p. 192) who stated that the 'rise in the popularity of ecotourism has coincided with voluminous definitional discourse'. They argued that a number of core themes underpin an ecotourism conceptual framework, which is based on the key tenets of it being nature-based, conservation-oriented, sustainable, educative, equitable and ethical.

Donohoe and Needham (2006, p. 193) note that historically, the term 'ecotourism' was adopted in order to describe the nature–tourism phenomenon (Wallace & Pierce, 1996) as advocated by Ceballos-Lascuráin in the 1980s. However, they suggest that since that time the definitional discussion has broadened to include the other dimensions listed above. They note that 'ecotourism is not a homogeneous phenomenon but instead, it has become accepted as a complex and synergistic collection of social, ecological and economic dimensions that reflect a common core idea'. This reflects the earlier notions by Newsome, Moore and Dowling (2002) that ecotourism incorporates five interrelated characteristics based around the tourist experience, that is, it should be nature-based, ecologically sustainable, environmentally educative, locally beneficial and (participant) satisfactory.

By the middle of the last decade there was a call for greater investigation of critical components of ecotourism such as quality control, the industry, external environments or institutions (Weaver & Lawton, 2007). The authors suggested that 'This imbalance, combined with the fragmentation and lack of integration within the literature, suggest that ecotourism, as a field of academic inquiry, is still in a state of adolescence' (Weaver & Lawton, 2007, p. 1168).

It has also been suggested that ecotourism is being threatened by an approach that minimally fulfils the three core criteria of ecotourism – nature-based attractions, learning opportunities, ecological and sociocultural sustainability (Fennell & Weaver, 2005). Fennell and Weaver propose a new model based around the development of an international network of protected areas known as 'ecotouriums', which are designed to stimulate positive socioeconomic change and sound ecological health of protected areas. Themes central to the concept are research and education, ecological health, community participation and development, and partnerships (Fennell & Weaver, 2005). They argue that ecotourism comprises three core criteria, namely, an emphasis on nature-based attractions, learning opportunities and management practices that adhere to the principles of ecological, sociocultural and economic sustainability. A similar investigation was made into the import of cultural values on the themes of Chinese ecotourism which found that 'a rigid Western model for ecotourism may not be best suited for domestic [Chinese] ecotourists' (Donohoe & Lu, 2009, p. 370).

According to Weaver (2008, p. 3) ecotourism existed well before the generally accepted introduction of the term in the 1980s. He suggests that during the latter part of the twentieth century ecotourism was used in the context of one of four phases or platforms that were advanced for the field of tourism since the end of World War II (Jafari, 2001). With the advent of tourist air travel, and especially the introduction of the jet aircraft, which made long-haul travel more available, the modern mass tourism era began.

Subsequently, the study of tourism evolved through a number of phases or platforms from 'advocacy' (tourism is all 'good'), 'cautionary' (tourism's 'good' is tempered by it having some negative elements), 'adaptancy' (alternative types or forms of tourism were introduced under the banner of 'alternative (to mass) tourism', and finally a 'knowledge-based' platform that championed a more sustainable approach to tourism development generally. Weaver (2008, p. 6) notes that 'from an ecotourism perspective, a critical outcome has been the growing perception that this sector can legitimately occur as either alternative or mass tourism'. Weaver argued that this was a critical change and shifted ecotourism away from the traditional view of it being a 'form' or 'type' of tourism to it being an 'approach' to tourism. However, from this standpoint it seems as if ecotourism as a 'type' of tourism is being confused with sustainable tourism, which is usually accepted as an 'approach' to tourism generally. It is the latter that underpins the former and the two terms are not synonymous.

Weaver (2005, 2008) suggests that arising from these approaches ecotourism can be further identified as either 'minimalist' or 'comprehensive'. The former is more likely to be focused on a particular site or species and involves only superficial learning, whereas the latter is wider in scope and encourages greater learning opportunities. Whichever way it is viewed, ecotourism includes a number of criteria. These are its being based in nature, encompassing a learning element and fostering sustainable principles, including the economic imperative of at least being financially viable. Weaver (2008, p. 17) suggests that ecotourism should include the following characteristics:

1. Ecotourism is a form of tourism (with temporal and spatial elements).
2. Attractions are primarily nature-based, but can include associated cultural resources and influences.
3. Educational and learning outcomes are fostered.
4. It is managed so that environmental and sociocultural sustainability outcomes are more likely to be achieved.
5. The importance of an operation's financial sustainability is recognized.

CASE STUDY: ECOTOURISM AUSTRALIA

Australia was an early adopter of ecotourism and the Ecotourism Association of the Indo Pacific Region was formed in Brisbane after Australia's first Ecotourism Conference held at the University of Queensland in 1991. It aimed to promote ecotourism, develop ethics and standards, promote understanding, appreciation and conservation of the natural and cultural environments visited, and facilitate interaction between the tourist, host community, tourism industry, government and conservation groups.

The following year it was renamed the Ecotourism Association of Australia, and in 2002 it became more simply, Ecotourism Australia (EA, http://www.ecotourism.org.au). In particular, EA pioneered, in conjunction with the Australian Tourism Operators Association (ATOA), the National Ecotourism Accreditation Progamme (NEAP), which was launched in November 1996. The scheme distinguished bona fide ecotourism products on the basis of a number of principles including best practice environmental management, education, contribution to local communities, sensitivity to different

cultures, consistency of product delivery and ethical marketing. The entities eligible for accreditation were nature-based tour companies, natural attractions relating to the regional environment and accommodation providers in natural areas.

NEAP was a world first. It has been developed by industry for industry, addressing the need to identify genuine ecotourism and nature tourism operators in Australia. The accreditation scheme provided the industry, protected area managers and consumers with an assurance that an accredited product is backed by a commitment to best practice environmental management and the provision of quality experiences. Under NEAP, nature tourism is any tourism that occurs in a natural area, and meets the standards of environmental sustainability. Ecotourism is ecologically sustainable tourism that fosters environmental and cultural understanding, appreciation and conservation.

In 2000 the programme was broadened to include nature-based tourism and was relaunched as the Nature and Ecotourism Accreditation Programme, commonly referred to as NEAP II. In 2003 this programme was further upgraded and renamed as ECO Certification III. The scheme rated ecotourism products according to three levels – nature-based tourism, ecotourism and advanced ecotourism (Figure 3.1). In 2010 the programme was further updated as ECO Certification IV and today it is a globally recognized brand that assists travellers to choose an authentic experience that is environmentally, socially and economically sustainable. The ECO Certification Programme

Figure 3.1 Ecotourism Australia's ECO certification logos

assures travellers that certified products are backed by a commitment to sustainable practices and provides high quality nature-based tourism experiences.

The programme is aimed at tourism businesses based in nature or whose clients spend at least half their time experiencing nature. Applicants are awarded the Tourism Accreditation Australia Limited (TAAL) business accreditation in addition to ECO Certification. TAAL's charter is to provide leadership and coordination in the development and implementation of accreditation programmes for the tourism industry within a national framework (http://www.tourismaccreditation.org.au). It provides for continuous increases in industry professionalism and standards, ensures a quality experience for tourists throughout Australia and delivers clear business benefits for tourism enterprises.

Another initiative by EA is the development of a National Ecotour Guide Certification Programme. Its key components are interpretation and education, and ecologically sustainable minimal impact techniques, operations and awareness. The EcoGuide Programme is an industry-driven programme for nature and ecotour guides. The programme provides a credential, endorsing the recipient as a guide who will deliver an authentic, environmentally responsible and professional ecotourism experience. Both general guiding principles such as group management, risk assessment and occupational health and safety (OHS) as well as interpretation, communication and minimal impact principles are covered by the programme.

A third EA initiative is the Respecting Our Culture (ROC) Programme. This is a tourism industry development tool originally developed by Aboriginal Tourism Australia (ATA) and now administered by EA. The programme was created through an extensive and ongoing national consultation by ATA with Indigenous communities, industry stakeholders and tourism operators. It is for any Indigenous or non-Indigenous tourism business that involves Aboriginal culture as well as tours that enter into land significant to Aboriginal people. ROC ensures certified tourism experiences meet customer expectations of professionalism and sustainability. It also encourages non-Indigenous businesses to operate with respect for Indigenous cultural heritage. The ROC Programme is business-specific, which means that a business as a whole will receive accreditation as opposed to ECO Certification which is product-specific.

Finally, a fourth initiative is EA's Climate Action Certification Programme, designed for all sectors of the tourism industry including hotels, attractions, tours, transport, restaurants, travel agencies and industry bodies. The programme is dedicated to reducing carbon emissions and energy consumption and identifies areas where a business can reduce its footprint across all aspects of the business and assists owners and/or operators to work towards becoming carbon neutral.

In 2002 Australia featured heavily in the International Year of Ecotourism (IYE) and EA convened its first international conference in Cairns. Global recognition followed in 2008 when it won the prestigious World Travel and Tourism Council 'Tourism for Tomorrow' Conservation Award for its conservation and preservation of natural heritage. Twenty years after its inception, EA holds the Global Eco Asia-Pacific Tourism Conference annually and publishes *The green travel guide* (Figure 3.2). However, its ECO Certification Programme still remains its flagship and its logo is a globally recognized brand that assists travellers to choose and experience a genuine and authentic tour, attraction, cruise or accommodation that is environmentally, socially and economically sustainable. The ECO Certification Programme assures travellers that certified products

Figure 3.2 Ecotourism Australia Chief Executive Kym Cheatham (left) with EA staff at the Global Eco Asia-Pacific Tourism Conference in Sydney, November 2011

are backed by a strong, well-managed commitment to sustainable practices and provides high quality nature-based tourism experiences.

Recognition of the ECO Certification Programme was highlighted by EA's ECO Certified operators dominating the 2011 Australian Tourism Awards held in Cairns in 2012. Nine of the winners of the 26 categories of tourism were environmentally certified through EA. A further 13 EA Certified operators won either Silver or Bronze awards. In the categories of Ecotourism, Adventure Tourism, Unique Accommodation and the Qantas Sustainable Tourism Award, EA-certified products took out all three levels (Gold, Silver and Bronze).

Also in 2012 EA was one of ten organizations in the world recognized by the United Nations Foundation-sponsored Global Sustainable Tourism Council (GSTC). The GSTC is a global initiative dedicated to promoting sustainable tourism practices around the world. It serves as the international body for promoting increased knowledge, understanding and adoption of sustainable tourism practices. Momentum around this movement is growing (http://new.gstcouncil.org) and the GSTC is currently active in all UNWTO regions, including Africa, the Americas, East Asia and the Pacific, South Asia, Europe and the Middle East.

EA's Ecotourism and Advanced Ecotourism Certification have been formally recognized along with the Rainforest Alliance's Standard for Tourism Operators and eight

other certification programmes around the globe. To achieve this recognition, EA went through a rigorous review and authorization procedure. As a result, Ecotourism and Advanced Ecotourism Certification are now considered equivalent to the Global Sustainable Tourism Criteria, which are the worldwide minimum requirements for tourism businesses of all sizes to approach sustainability. This is the first step in the three-stage GSTC recognition process. Stage 2 will evaluate certification processes to ensure they are transparent, impartial and conducted by people with technical competence. The third and final stage will be full accreditation, and will begin implementation in December 2014.

The other programmes recognized by the GSTC are:

- Bundesministeriumfür Land – und Forstwirtschaft, Umwelt und Wasserwirtschaft (BMLFUW)'s Austrian Ecolabel for Tourism (Österreichisches Umweltzeichen)
- Costa Rica Tourist Board's (ICT) Certification for Sustainable Tourism (CST)
- Ecotourism Ireland's Ecotourism Ireland label
- European Ecotourism Knowledge Network's European Ecotourism Labelling Standard (EETLS)
- Fair Trade in Tourism for South Africa (FTTSA)
- Instituto de Turismo Responsable's Biosphere hotels
- Japan Ecolodge Association's environmentally sustainable accommodations standard
- Rainforest Alliance's Standard for Tourism Operations
- Sustainable Travel International's Sustainable Tourism Eco-Certification Programme (STEP).

Today EA has cemented its place as one of the world's leading ecotourism organizations, which has been a pioneering, innovative leader in the field and has played a significant part in the history of the development of ecotourism. From a small group of enthusiasts who met at an Ecotourism Conference in Brisbane, Australia in 1991, the organization has evolved through a number of iterations to arrive at its present position as a leader in the development of ecotourism through its ECO Certification Programme, global conferences and international links.

CONCLUSIONS

The history of ecotourism is tied to the evolution of the environment–tourism relationship. Fifty years ago the term was unknown. Today it is viewed as 'a complex phenomenon that has emerged rapidly over the course of the last three decades. As a result, ecotourism literature is characterised by continued debates of definitions, bias towards small-scale, one-shot case studies, and overall lack of coherence, and a dearth of explanatory theory' (Hunt & Stronza, 2009, p. 1). The authors suggest that the way forward is to organize research inquiries, characterize the conclusions drawn from them and reconcile competing definitions and theories through Hierarchy Theory, which limits complex problems to a single temporal and spatial phenomenon. In a parallel fashion it has been suggested that ecotourism research should focus on finding a common definition or set

of tenets in order to overcome the cases of 'greenwashing', 'environmental opportunism' and/or 'eco-exploitation' (Donohoe & Needham, 2006).

Just maybe the answers to some of these problems will emerge from the recent seminal paper on 'Tourism and environment' by Buckley (2011), who suggests that in order to understand the future of the relationship, including its niche component ecotourism, it is necessary to examine:

1. Tourism's nature-based products – this includes its mainstream, adventure, consumptive and non-consumptive sectors as well as geography and land tenure.
2. Environmental impacts and management – accommodation, resorts and eco certification; travel, climate change and indirect implications; the impacts of outdoor tourism in areas of high conservation value; as well as managing tourists' impacts in protected areas.
3. Tourism contributing to conservation.

Buckley (2011, p. 410) concludes that 'as tourism increases in importance both as a tool and as a threat to the global environment, it deserves attention from researchers in both natural and social sciences, across borders and languages'. This is supported by another recent study of tourism research issues that found that key topics for research include 'destination sustainability "best practices" and their effects' as the fourth (out of ten) top ranked management research priorities (Williams, Stewart & Larsen, 2012, p. 5). They note that despite the rhetoric that exists about the advantages of sustainability practices, there is still limited appreciation of how markets and destination stakeholders will respond to proposed or existing sustainability initiatives (Williams et al., 2012, p. 7). Finally, a recent discourse on ecotourism found that there is much discussion on the definition of ecotourism and ecotourists, the values of ecotourism in a sustainable context and the role of stakeholder engagement and participatory governance (Boyd, 2012).

Ecotourism is a relatively young subject and is still emerging as a niche discipline within tourism. It is not a pervasive type of mass tourism nor an approach to tourism. It is still a growing form of tourism that is now accepted by the mainstream tourism industry as a significant sector whose sustainable character makes it an excellent exemplar for all other forms of tourism. Much is still being discovered about its nature, characteristics and impacts, despite the assertion that it has come of age as a legitimate area of academic inquiry (Weaver & Lawton, 2007). This brief overview of the history of ecotourism helps us to unlock the past in order to arrive at the current state of the situation, as evidenced by the individual chapters and the whole of this book, so that a better future may be planned for the contributions that ecotourism can make to the natural, cultural and economic sectors of the world. In this way, ecotourism can be one of the leaders of a more responsible, sustainable tourism future (Dávid, 2011).

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4. Ecotourism and ethics

David A. Fennell

INTRODUCTION

Perhaps no other form of tourism has been identified as having so much promise and yet so many inherent contradictions as ecotourism (Duenkel & Scott, 1994). This stems from what ecotourism proposes to stand for in the face of the many external market forces that dictate the pace, scale and nature of ecotourism development. Ecotourism, like all other forms of tourism, is faced with many competing demands: personal and organizational prosperity against ecological and socio-cultural stability. For the Swiss tourism theorist Krippendorf (1991), who had much to say about the environmental impacts of tourism, each aspect of the industry clamours for a greater percentage of the market, and 'Each will sacrifice everything and operate with the most stringent marketing methods to reach its target' (p. 309).

The purpose of this chapter is to examine the short history of the use of ethics in ecotourism. As supposedly the most ethical form of tourism – or at least that type of tourism that should be most open to the theory and practice of ethics – there is still much to do. While the aim is not to write a history of ecotourism, aspects of history are included in order to situate ecotourism, that is, to place it in a context of being a more ethical form of tourism by virtue of how it evolved. In this chapter the moral foundation of ecotourism is discussed, followed by examples of early successes and challenges in some of the regions where ecotourism has been well studied. This is followed by examples of early research in the area of ecotourism, codes of ethics and finally a discussion on an emerging area of research significance that might help strengthen and expand the use of ethics in ecotourism research. Ethical responses like fair trade in tourism, pro-poor tourism and certification are not covered here. It suffices to know that these tools have an ethical underlay, and have been used widely (particularly certification) in addressing ecotourism industry issues.

THE MORAL FOUNDATION OF ECOTOURISM

While there are literally dozens of definitions of ecotourism, I follow the lead of Laarman (1987) who argued that at its core ecotourism is tourism based on natural history, that is, people travel to enjoy the natural history, either in general or more specifically, of a destination. Beyond this core characteristic, a number of variables have been used to differentiate ecotourism from other forms of tourism, including conservation, learning and education, sustainable development, local benefits, truth in marketing, low impact and non-consumptiveness. These variables are helpful in positioning ecotourism or other related types of tourism, but the primary essence of the former is its core focus on natural history (Fennell, 2013a).

I also support the observation made by Wheeler (1994) who wrote that 'Ethics in tourism involves issues such as ecological impacts' (p. 46). I take this to mean that the ecological, socio-cultural and economic impacts of tourism are, at a deeper level, ethical dilemmas, which should be investigated not only using the conventional impacts approach but more fundamentally using a range of ethical tools. The relationship between tourism, ethics and impacts is demonstrated below:

- Much of tourism research involves the study of impacts.
- Ethics subsumes or at the very least relates directly to impacts.
- Ethics should take a more central role in the study of impacts and therefore the study of tourism.

Ethics does not, and has not, taken a central role in tourism and ecotourism research and practice. The reasons for this are not immediately evident. It may be that scholars trained in tourism studies and other aligning fields or disciplines simply have not had formal education in the area of ethics and philosophy. Venturing down this road is seen to be treacherous. Thinking ethics is not easy, and applying ethics may be even that much more difficult in a field that is so diverse along economic, socio-cultural and ecological lines. It may also be that the industry side of tourism often prevails in the thinking of most scholars, and industry is not going to invest in ethical thinking beyond what they view as being an appropriate best practice standard, which is thought to be codes of ethics and certification. Such an approach will prevent industry and theory from riding parallel.

To know something about how ethics relates to ecotourism is to understand how ecotourism evolved. Fennell (2002) argues that ecotourism was an outgrowth of the sweeping changes taking place in society during the 1960s and 1970s. Although many factors are responsible for these changes (for example, Rachel Carson's *Silent spring* in 1962), Nelson (1994) argues that people and organizations were becoming dissatisfied with government and industry policies that promoted excessive use of resources at what today would be an unsustainable rate, in the absence of knowledge on the effects of these actions. The ecodevelopment literature emerged in response to this dissatisfaction, and was structured according to the following three main ideals (Riddell, 1981; see also Miller, 1978):

- Enlarge the capacity of individuals to fulfil the desire to be useful and wanted, thereby dignifying labour-intensive and socially directed efforts of environmentally non-degrading kinds.
- Expand the capacity of communities to be self-sufficient, thereby leading to the replenishment of renewable resources and the careful use of non-renewable resources.
- Enhance the fairness and justice of society, in environmental terms, avoiding wasteful consumption.

Ecotourism emerged amidst the backdrop of these concerns: social justice, wise use of resources, expanding the capacity of communities, finding dignifying labour for those who might otherwise be disconnected from the internal workings of the economy and

so on. Even so, it is not at all clear that there is an explicit connection between the need to secure benefits for the economically marginalized and protect natural areas versus the need or demand for high-end nature-based excursions. That is, the push may have been towards satisfying the needs of a niche hungry to experience the ecological flavour of many different long-haul destinations made accessible by the industry (this need may have been generated by the environmental movement, media and other factors), instead of to adhere specifically to the ecodevelopment tenets outlined above.

Tourism was not left off the agenda in terms of these widespread social and ecological concerns, which is evident in some of the formative writing on tourism. In what appears to be the first publication ever on ecotourism, Hetzer (1965) called for a type of tourism that reflected the concerns raised in the ecodevelopment literature. He formulated the following four pillars for a more responsible and new type of 'eco'tourism:

- minimum environmental impact
- minimum impact on – and maximum respect for – host communities
- maximum economic benefits to the host country's grassroots
- maximum 'recreational' satisfaction to participating tourists.

Notice what appears to be a deliberate hierarchy within these four pillars. The needs of the environment are foremost, followed by respect for host communities, followed by economic benefits, followed in turn by the needs of tourists. Following this, Budowski (1976) argued that tourism and conservation could join forces in the creation of 'a brilliant future' for the tourism industry if such was based on sound planning involving due consideration of ecological principles. The genesis of ecotourism becomes evident in Hetzer's and Budowski's work, which recognize the right kind of development in achieving ecological and socio-cultural symbiosis.

ECOTOURISM THE VIRTUOUS . . . AND NOT SO VIRTUOUS

The ontology sketched above is important as a foundation from which to construct the ideal that was ecotourism during the period of its establishment. This was reflected in much of the popular literature, where ecotourism was viewed as an important new tool for saving both habitat and the rare and threatened species in many biodiverse landscapes (see Halbertsma, 1988). Crouse (1988), for example, wrote of how gorilla tourism was essential in saving the mountain gorillas; howler monkey tourism provided the key to saving the jungle in Belize (Lipske, 1992); and ecotourism, among other land use practices including hunting, was also making wildlife pay its way (Achiron, 1988). New publications such as *Real Travel* focused almost exclusively on the ecotourism and adventure tourism markets. The winter 1988 edition published stories on the parks of Costa Rica, choosing the right African safari, the African outback, cruising the Amazon, Peru's largest jungle park and picking the right travel option in getting the most out of your Galapagos adventure. Also during the latter part of the 1980s, practitioners were starting to refer to ecotourism as the new ethic in travel. Kutay (1989) argued that this type of tourist was making a difference in the destinations they chose to visit. Helping to clean up Machu Picchu is a case in point. Ecology is clearly linked not only to economy

but also some of the social problems that exist in these places, with the expectation that not only tourists but also operators act in ethical or responsible ways.

Costa Rica was one such destination representative of this new ethic in travel, which moved from national park investiture in 1972 (Santa Rosa was the first) to the seeds of a thriving ecotourism industry in a relatively short period of time. In just over ten years writers were extolling the virtues of this system as an example of how to do things right (Carr & Carr, 1983). The level of interest in Costa Rica as a travel destination began to intensify during this time in concert with the invitation on the part of the Costa Rican government for foreign investment (Whelan, 1988). In short, travel writers were suggesting that Costa Rica was the place where 'green is gold' and the ecotourism industry was leading the way (English, 1990).

Very quickly, however, travel writers and theorists were finding a disconnect between what was taking place on the ground and what was starting to emerge in the literature. For example, Shnayerson (1993, p. 46) wrote that in Costa Rica, 'the road to hell is paved with good intentions'. Good tourists or good tourism was actually found to be bad because ecotourism, in the end, was all about money. Even though the protected areas system increased in size as one of the most impressive of its kind in the world, the rainforest was under threat from gold mining operations, excessive deforestation and bad ecotourism practices (Tangley, 1986). Similar realities were being recognized in other ecotourism destinations like the Galapagos Islands (Emory, 1988) and Antarctica. Furthermore, the concept of wildlife pays, so wildlife stays (noted above) crept into the thinking of those who would use animals in ways not consistent with the tenets of ecotourism. This is a mindset articulated in safari tourism in Africa but also in other areas like South and Central America. Farquharson (1992), commenting on ecotourism as a dream diluted, writes that 'Once jaguar became more valuable alive than dead, *campesinos* would stop hunting jaguar. This school of thought recognized that people with empty stomachs are not much interested in respecting environmental legislation' (p. 9).

In the early to mid 1990s, writers started asking how we could put ecotourism back on track from over-exploitation of local people and local resources. Was it possible to maintain the integrity of the natural environment and at the same time have a level of infrastructure and base of facilities to satisfy the needs of ecotourists (Thompson, 1995)? At the fourth world congress on parks and protected areas in Caracas, Venezuela in 1992, Machlis and Bacci (1992) argued, as did many other commentators, that ecotourism was ideologically biased, elitist, short-sighted, anti-democratic, unsustainable and spread benefits to developers and tourists instead of those who needed help the most. At one point in time ecotourism was a haven for birdwatchers and other like-minded tourists; at least by 1992, the concept had gone mainstream (Farquharson, 1992).

The pattern of development experienced by ecotourism in many regions is one well recognized by tourism theorists. We tend to exploit what is new and different, even if turning a profit comes at the expense of other people or other things. This has been documented by Masterton (1992) who found that there is a great deal of 'buck-passing' when it comes to the tourism industry's responsibility for protecting what they rely on. Masterton found that although operators recognized that abusing the environment is a bad thing, they did not want to discuss their environmental performance. So even though ecotourism operators have been found to score higher on questions pertaining

to their ethical decision making on ecological, socio-cultural and economic grounds than adventure, cruiseline, fishing and golf operators (Fennell & Malloy, 1998), there is still the question of whether this translates to higher ethical standards on the ground (see Weeden, 2001 who has investigated the connection between ethical marketing and service provision in tourism and how this corresponds to tourist needs). Smith and Duffy (2003) observe that anything that we use in tourism, whether it be people, cultures or environments, are reduced to commodities with exchange value instead of intrinsic value. The main problem, according to Nowaczek, Moran-Cahusac and Fennell (2007), is that ecotourism operates in the global free market economy, with all the political structures and implications of this in place, which have completely different values and objectives. The metaphor of this is working or swimming against the current, which ultimately challenges ecotourism to secure an ethical future. Practice is in most cases completely removed from theory.

The literature has also identified the loss of control and marginalization of local people at the hands of large external forces. Those marginalized by the instrumental, calculative mindset of tourism, particularly those in less developed countries, are thought to be morally irrelevant and powerless in the face of these primarily external forces that guide tourism development (D'Sa, 1999; Stark, 2002). These same forces shape the manner in which tourism is conducted at organizational levels but also at individual and personal levels (Fennell & Przeclawski, 2002). What we are left with, however, is the absence of an explanation of why. That is, why is it that the needs of the individual and of the organization should take precedence over the needs of others who are perhaps more deserving of our aid and cooperation? These are fundamental issues that have not been sufficiently examined in tourism and ecotourism research, and have more to do with an understanding of the basis of human nature than any explanations and solutions we have attempted to generate within tourism itself. In short, because tourism transactions are largely brief (taking place over a period of minutes, hours, days or perhaps weeks), cooperative relationships are not built because of the short-term nature of these interactions. We cheat each other in these cases in order to secure benefits over costs, a premise that has been supported time and time again in game theory simulations (see Fennell, 2006 for an extended explanation of this).

Even third party groups such as non-governmental organizations (NGOs) have been criticized for putting the environment over the needs of local people. These organizations are now putting words like 'culture' and 'community' beside words like 'nature' and 'environment'. It is just that this form of development comes packaged more as a form of persuasion to satisfy the agenda of these organizations (see also Butcher, 2005 who argues that ecotourism comes packaged with a certain moral authority that in theory has it positioned on a higher moral plane than other forms like mass tourism). Carrier and Macleod (2005) share some of Butcher's concerns when they argue that ecotourism is often abstracted from an idealized form, but in practice this image is greatly distorted socially and environmentally.

By 2002, the International Year of Ecotourism, the rhetoric surrounding ecotourism had clearly expanded to incorporate both sides of the issue: ecotourism the virtuous and not so virtuous. To many commentators on the subject, ecotourism was becoming more of a buzzword, and through misuse and manipulation threatened the very assets (nature) upon which it depended (Buhasz, 2002).

RESEARCH ON ECOTOURISM ETHICS

In addition to the media reports on ethical issues tied to ecotourism that emerged in the late 1980s, research on ethics surfaced during the early 1990s, after initial work on ethics and hospitality (see Hall, 1989; Lea, 1993; Whitney, 1989). Wight (1993a) examined the marketing aspects of ecotourism as eco-ethics or eco-sell. The challenge to the industry, in particular ecotourism operators, was to infuse the values and principles so important in defining this form of tourism in the products and activities sold. Unfortunately, motivations of industry stakeholders reflect the eco-sell platform rather than the eco-ethics one. In a more broadly based paper on ethics and ecotourism, Wight (1993b) argued that responsible environmental practices should encompass not only the external aspects of the operation, that is, with respect to sensitivity to cultural and environmental resources, but also a firm's internal operations. In both cases, Wight discusses the attributes of codes of ethics for travellers but also other industry stakeholders.

In related work, Weiler (1993) questioned whether or not nature-based tourism operators were environmentally friendly, and found mixed results in regard to the private and the not-for-profit sectors, with the latter appearing to be much more environmentally friendly than the former. Work over a decade later by Nowaczek and Smale (2005) found that there was tremendous variance between guides at the Tambopata reserve, Peru, based on their perceptions of an ethical approach to service provision and actual behaviour. Nowaczek and Smale warn that guides and operators will not likely change their behaviours, which may be called into question, if clients have first assessed them as ethical. Holden (2003) argued that service providers are often more interested in short-term benefits based on the instrumental (rather than intrinsic) use of nature.

During the mid 1990s ecotourism and ethics research advanced through the use of moral theory in exploring how ecotourism ought to be conceptualized and operationalized. Karwacki and Boyd (1995) discussed ecotourism on primarily utilitarian grounds (although egocentrism and issues of justice are touched on as well). Opponents of ecotourism argued that ecotourism can be criticized on a utilitarian basis because the benefits (for example, economic impact) do not outweigh the costs. Pollution, loss of culture, displacement of local people and so on are disturbances that simply cannot be offset by marginal benefits realized by many on the periphery of the industry. By contrast, proponents argued that if ecotourism is well managed it has many positive spinoffs that are good for the environment and local people that cannot be realized through other mainstream forms of tourism. Fennell and Malloy (1995) built upon this work in the development of a comprehensive ethical framework that all ecotourism stakeholders could use in making good (teleology), right (deontology) and authentic (existentialism) decisions. This work was deemed important as a manner by which to elevate the discussion on ethics in ecotourism beyond the use of checklists and codes of conduct that had limited effect in demonstrating how ethics could be used as more of a proactive agent rather than the reactive approaches normally used in tourism (impacts).

Moral theory in ecotourism continued to expand during the 1990s and included use of the organizational culture literature in attempting to differentiate between ethical and non-ethical work climates in the ecotourism industry (Malloy & Fennell, 1998b). These authors identified three phases, applied to ecotourism as: (1) the market ecotourism culture; (2) the socio-bureaucratic ecotourism culture; and (3) principled ecotourism

culture. To the authors, it is the last stage that the ecotourism industry must strive to reach, which demands not solely an economic and/or sociological agenda, but rather a socio-ecological change that reflects the general goals of ecological and social holism.

In the early 1990s, codes of ethics became an important topic of investigation in tourism. Payne and Dimanche (1996) illustrate that the French Ministry of Tourism recommended the development of a global code of ethics for tourism during the 1991 AIEST congress in Seychelles. In the same year, the British Columbia Ministry of Development, Trade and Tourism (1991) published a document on how to develop a code of ethics. This was followed by the Globe '92 conference at Simon Fraser University, British Columbia, which focused on the greening of the tourism industry. In the resulting compendium, Williams (1993) wrote of the value of environmental codes of ethics for best practice in tourism, and Falconer (1993) developed a code of conduct for tour operators in South Moresby, British Columbia. Several other examples of codes were listed for the industry. Also in 1993, D'Amore (1993a, 1993b), working from these Canadian meetings, published work on the use of codes of ethics at global and local levels for the purpose of developing socially responsible and environmentally sound ecotourism. The evolution of codes of ethics for ecotourism gained further momentum through the development of ecotourism guidelines for nature tour operators by The Ecotourism Society (1993). Guidelines were developed for pre-departure, programmes in the field, monitoring and management. Other noteworthy contributions to the stock of codes of ethics for ecotourism include the United Nations Environment Programme (UNEP Industry and Environment, 1995) publication on environmental codes of conduct for tourism, and Mason and Mowforth's (1995) comprehensive statement on codes of ethics in tourism (see also Mason's, 1997 work on codes in the Arctic and sub-Arctic realm).

In an effort to connect moral theory with the codes literature, Malloy and Fennell (1998a) used content analysis to investigate 414 individual guidelines contained within 40 codes of ethics. They found that 77 per cent of all guidelines in the study were deontological, that is, they were concerned with following normative principles and duties along cultural and ecological dimensions, without a focus on an understanding of the consequences of action (that is, deontology focuses more on the means rather than ends and, as such, fails to provide the decision maker with the rationale for abiding by a specific guideline). The following statement is representative of this deontological focus:

> Do not touch wildlife.

In contrast, teleology focuses more on the consequences of action or inaction. Malloy and Fennell argued that by including a rationale for action or inaction, the decision maker could choose to act in an ethical manner or not based on the message built into the specific guidelines, that is, there is an explanation of consequences included in the code guideline that would aid the decision maker in his or her choices. The following is an example of a teleological component attached to the guideline, above:

> Do not touch wildlife. The bond between parent and young can be disrupted, and the survival of the young jeopardized.

The authors also found that most of the codes were developed by associations (NGOs), and for tourists; many of the codes were ecologically based, rather than socially or

economically based; about 85 per cent were positively stated; and the focus of such codes was on people or the resource base. Garrod and Fennell (2004) used a similar methodology in examining the use of codes of conduct for the whalewatching industry (see Fennell & Malloy, 2007 for an extended discussion on tourism codes of ethics; see also Rivera, 2004 who found that other measures beyond the programme itself were required to stimulate proactive voluntary environmental behaviour in Costa Rica's Certification for Sustainable Tourism programme).

What surfaced as a promising start in regard to the relationship between ecotourism and ethics in the 1990s appeared to subside at the outset of the new millennium. While there were a few critical studies that emerged during this time (see Buckley, 2005; Nowaczek and Smale, 2005), most of the focus appears to have switched to more comprehensive works on tourism ethics. Most noteworthy are contributions by Butcher (2003), Smith and Duffy (2003), Fennell (2006) and Fennell and Malloy (2007). Although these were general texts on ethics, all of these used case study material stressing the important link between ecotourism and ethics, with the suggestion, either implicit or explicit, that much more work was required in this area.

In an effort to strengthen the link between ecotourism and ethics, the *Journal of Ecotourism* published a special edition on ethics and ecotourism towards the end of 2011. Five papers were included in the edition, including work on responsible tourism and values (Weeden, 2011), the ethical considerations of last chance tourism (Dawson, Johnston, Stewart et al., 2011), fair trade tourism in South Africa (Boluk, 2011), the use of ecocentric ethics in evaluating dingoes on Fraser Island, Australia (Burns, MacBeth & Moore, 2011) and the use of animal ethics theory in evaluating the sled dog cull after the Vancouver Olympics (Fennell & Sheppard, 2011). All of these papers touched on important issues within the ethics of ecotourism, but it is the last two ideas that I wish to focus on in conclusion.

CONCLUSION: THE VACANT NICHE

If ethics in ecotourism is to garner more than passing interest, it may be that a different approach is required. The seeds of this new approach are discernable in some of the work published in the special edition of the *Journal of Ecotourism* (see above). As suggested earlier in this chapter, ecotourism is about natural history and in particular animals. Following from this, ecotourism theorists should be willing to incorporate as much interdisciplinary knowledge into this area as possible in the search for explanations of the nature of our interactions with animals on many levels and scales, and the degree of care that should be afforded to animals in this relationship, given ecotourism's moral foundation. In general, however, this has only recently begun. The point is that the literature on animal ethics from philosophy, sociology, critical animal studies and other fields is bountiful, and the lack of intensive treatment in ecotourism represents what might be viewed as a vacant niche.

Animal ethics is defined as the area of study that 'considers the acceptability of the use of animals in different contexts' (Collins, Hanlon, More & Duggan, 2008), as well as the quantity and quality of care that should be extended to animals whom we enlist in our various activities and initiatives (Håstein, Scarfe & Lund, 2005). These tourism

activities include animals used for work (for example, yaks used for high altitude trekking), animals as captives (for example, zoos as a form of ecotourism), animals forced into competition (for example, horse racing or bullfighting), animals pursued for sport (for example, hunting) and wildlife viewing (for example, ecotourism). The range of theoretical approaches that may be employed to navigate these various uses is tremendous. Animal rights theorists would argue that animals have inherent and intrinsic value, and should never, under any circumstances, be exploited for human enjoyment (Regan, 1983). Ecocentrism theorists, in contrast, would argue that population and ecosystem stability is the primary metric; so as long as these are in check, the exploitation or removal of individuals within these populations and ecosystems is morally justifiable (Wade, 1990). Animal welfare advocates would argue that it is morally acceptable to use animals for human enjoyment, but that the animal's welfare considerations should be protected in this use, including good shelter, good quality water and food, comfort, freedom from pain and discomfort, freedom from fear and distress and the freedom to engage in normal behaviour (Farm Animal Welfare Council, 2009). Other theories that would be useful in navigating ecotourism issues tied to the animal–human interface include utilitarianism (Singer, 1987), ecofeminism (Donovan, 1990), respect (Taylor, 1986) and contractarianism (Fudge, 2005).

By ignoring the animal ethics literature, ecotourism theorists are unable to make clear statements on the rightness or wrongness of certain practices. For example, it has been suggested that zoos can be a form of ecotourism because of the conservation, education and research mandate they embrace, and because of the ability to gain close proximity to animals (Mason, 2000). However, some animal ethicists argue that the capture and display of animals for touristic consumption should never be considered as bona fide ecotourism because these conditions violate animals' status as free-living creatures, denying their ability to express normal behaviors. Zoos are prisons where artificial space is created to impose occupancy and demonstration – a 'carceral archipelago' (Acampora, 2005). Many species also exhibit atypical behaviours while in captivity, including abnormal startle responses, depression, anti-social behaviour, hyper-aggression, deprivation, pain, loss of personal control, forcible enclosure and forcible exposure, shorter life expectancy, higher infant mortality, lower reproductive capacity, stress and obesity. The question remains whether the ecotourism industry should be supportive of institutions that hold captive animals, especially when these institutions are more successful at attracting the family market over the ecotourist market, the latter of which has more concerns over animal welfare (Ryan & Saward, 2004; see also Fennell, 2012). The issue of whether zoos are acceptable as ecotourism or not has prompted Fennell (2013b) to argue that ecotourism should maintain a first principle in guiding the relationship that exists between animals and humans. As such, ecotourism should:

- Reject as ecotourism all practices that are based on or support animal capture and confinement, or other forms of animal use that cause suffering, for human pleasure and entertainment.
- Embrace as ecotourism interactions that place the interests of animals over the interests of human agents. This would include encounters with free-living animals that would have the liberty to engage or terminate interactions independent of human influence.

This first principle would no doubt aid in efforts to differentiate ecotourism from other forms of tourism or nature-based tourism that take on the appearance or characteristics of ecotourism. This would include activities like fishing and hunting, for example, where there is little theoretical guidance providing an acceptable moral foundation for deciding what qualifies as ecotourism and what does not, and under what conditions. The failure to engage this moral debate will limit the ability of ecotourism theorists and practitioners to develop programmes that serve the interests of both the ecotourism industry and the animals that are so highly sought after as ecotourism attractions.

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5. Ecotourism and community participation

Jim Butcher

INTRODUCTION

Who could possibly object to greater community participation? It suggests a greater level of control by and democracy for people – surely a laudable goal at all times and in all things. Certainly, the community participation agenda is a broad one in contemporary society, and in the developing world 'getting local people involved' in projects for development and for conservation is a commonplace theme. According to one account, 'since the 1970s in many ways, community participation has become an umbrella term for a supposedly new genre of development intervention . . . [T]o propose a development strategy that is not participatory is now almost reactionary' (Tosun, 2000, p. 615).

The implication of the call for greater community participation is often that it is more democratic, as it involves communities in decisions that affect their lives. It suggests a greater degree of control for the community over their destiny, rather than control being exercised from outside. Often this sentiment is articulated explicitly through terms such as 'empowerment'. In this sense, the call for community participation in development is very much in the neopopulist development tradition – it emphasizes the role of communities in their own development.

The chapter begins by setting out the centrality of community participation as a rhetorical orthodoxy, and briefly illuminates its origins, assumptions and prospective benefits. It then establishes the centrality of community participation in ecotourism. Here community participation is commonly presented as a principle, and is associated with a progressive, democratic impulse. We then look in more depth at some key assumptions. First, we look at the question of control, as the moral force behind community participation rests upon its claim to transfer control onto the community from external interests. Second, we look at localism, as the 'community' in community participation is generally conceived of as a local community, and this is viewed as a progressive development vis-à-vis macro-level development strategies. Third, we look briefly at the claim for community participation to be part of an alternative, progressive and even radical development agenda – an assumption that is always either implicit or explicit in the discussions about community participation in ecotourism.

THE CENTRALITY OF PARTICIPATION IN SUSTAINABLE DEVELOPMENT

In both development and conservation thinking, community participation has become established as a rhetorical orthodoxy. This is clear when we consider the rise of sustainable development in contemporary thinking. Influential expositions of sustainable development argue for community participation as being of great importance. Whilst

remaining elusive in practice, it encapsulates the aspiration to not only combine conservation and development, but engage communities and societies in this project. For example, the influential *Caring for the Earth: A strategy for sustainability* (IUCN, 1991) lists one of its nine principles for sustainable development as to 'enable communities to care for their own environments'. Also, the 1992 Rio United Nations (UN) Conference on Environment and Development – the event that proved to be a watershed in establishing sustainable development as a rhetorical orthodoxy – put great emphasis on community participation (UN, 1993).

More specifically, community participation is fundamental to neopopulist views on development, views that are very influential in the advocacy of sustainable development more broadly (Potter, Binns, Elliot & Smith, 1999), and that are characteristic of ecotourism (Butcher, 2007). A typical neopopulist definition of community participation is that it should be about 'empowering people to mobilise their own capacities, to be social actors, rather than passive subjects, to manage the resources, make the decisions, and control the activities that affect their lives' (Cernea, 1985, cited in Wells & Brandon, 1992, p. 42). This definition emphasizes control by the community – it is clearly their agency that is at the forefront of this formulation of development, not that of 'big' government or 'big' business. This sentiment is widely expressed in the literature on participation (Singh & Titi, 1995; Stiefel, 1994; Warburton, 1998). It is a central feature of the outlook of many non-governmental organizations (NGOs) and companies involved in ecotourism development, and is prominent in the contemporary discourse on sustainable development (Butcher, 2007).

COMMUNITY PARTICIPATION IN ECOTOURISM

Community participation is absolutely central to the advocacy of ecotourism – it is viewed as a point of principle and intrinsic to its success. It is generally taken as given that community participation is desirable, the outstanding issues being the extent of participation and the form it takes. This is especially so since the 1980s, a decade in which seminal publications such as Murphy's *Tourism: A community approach* (1985) and Krippendorf's *The holidaymakers: Understanding the impact of leisure and travel* (1987) established an association between community participation and a more ethical tourism industry. Mowforth and Munt (1998, pp.103–4) argue that '[t]he debate is currently not one of whether local communities should be involved in the development of tourism to their areas, but how they should be involved and whether "involvement" means "control"'.

Notably, community participation is considered vital for achieving sustainable tourism development (Scheyvens, 2002). Indeed, in a thorough review of literature on community participation in tourism, Tosun even argues that 'a community approach to tourism development is a *prerequisite* to sustainability' (Tosun, 2000, p. 617, emphasis added). The view that community participation is so important for sustainable development is based on the logic that it is the communities living in and around conservation areas who are best placed to manage the environment in a sustainable fashion.

The role of local community participation in establishing sustainable tourism development is sometimes counterposed to the experience of mass tourism. Mass tourism,

as exemplary of modern, mass society, is often considered to have been too grand and impersonal to reflect the diverse cultures and views especially of rural communities in the developing world. For example, according to Brohman, 'developing countries may avoid many of the problems that have plagued past tourism . . . by involving diverse social groups from the popular sectors of local communities in decision making' (Brohman, 1996, p. 68). Here, Brohman presents local and small-scale initiatives as a partial antidote to national development schemas on a grander scale. Indeed, ecotourism has acquired a certain moral authority vis-à-vis mass tourism in debates on sustainable development (Butcher, 2003).

Whilst there may in practice be a gulf between the ideas expressed in the literature and the reality of tourism planning, those directly involved in planning have also bought heavily into the ethos of community participation. For example, the World Tourism Organization (WTO) tourism planner Inskeep has advocated community participation as essential to tourism planning (Inskeep, 1991, p. 29), and elsewhere industry practitioner and academic Ritchie (1993) correctly predicted that resident responsive tourism would become 'the watchword of tomorrow'. International agencies as diverse as the WTO, World Travel and Tourism Countil (WTTC), World Bank, UN, national development agencies and NGOs have all adopted community participation as their own in general, or with regard to tourism in the developing world in particular.

Community participation, then, is widely supported and advocated with regard to tourism in the developing world (see also Fennell, 2007; Hawkins & Khan, 1998; Scheyvens, 1999; Theopile, 1995). Community participation in ecotourism can, it is held, increase the extent to which local communities have 'control'. It can 'empower' them, make them more 'self-sufficient' or give them 'ownership' over a project. These terms, and the neopopulist sentiments that lie behind them, are commonplace, and are reflective of more general thinking on development and conservation. Moreover, community participation carries an association with sustainable development and hence also a legitimacy and authority in ecotourism development discourse.

There is also a more prosaic, but nonetheless important, argument for community participation. It is important to note that community participation is sometimes argued to be an intrinsic aspect of the ecotourism product. If ecotourists are interested in authentic expressions of local culture, then it makes sense that the community plays an active and meaningful role in shaping the tourist experience – effectively the way in which and the terms upon which their culture is available to the tourist gaze (for example, Fennell, 2007; Wearing & Neil, 2009).

COMMUNITY PARTICIPATION: 'EMPOWERMENT', CONTROL AND DEMOCRACY

'Empowerment' has become ubiquitous as a justification for community participation. It is a broad term referring to the increased ability of individuals or communities to influence their destiny. Scheyvens provides a more detailed and nuanced definition of empowerment (1999, pp. 247–9; see also Scheyvens, 2002). She identifies four related aspects of empowerment that she believes should be features of ecotourism. These are listed below with brief definitions:

- Economic empowerment. Lasting economic gains that are spread within the community.
- Psychological empowerment. Relates to the self-esteem of members of the community, enhanced due to, for example, outside recognition of the 'uniqueness and value of their culture' and their 'traditional knowledge' (Scheyvens, 1999, p. 247).
- Social empowerment. Social empowerment is held to have been achieved when '[e]cotourism maintains or enhances the local community's equilibrium' (p. 247) and when '[c]ommunity cohesion is improved' (p. 247) through the project.
- Political empowerment. 'The community's political structure, which fairly represents the needs and interests of all community groups, provides a forum through which people can raise questions relating to the ecotourism venture and have their concerns dealt with. Agencies initiating or implementing the ecotourism venture seek out the opinions of community groups (including special interest groups of women, youths and other socially disadvantaged groups) and provide opportunities for them to be represented on decision making bodies' (p. 247).

All four of the categories above are micro-political categories – they pertain to politics within the community, in which the protagonists are individuals and interest groups. Even the widest category, that of 'political empowerment' (Scheyvens's definition of which is reproduced in full above) conceives of politics exclusively as internal to the community.

Yet, in a sense, the parameters of empowerment are substantially given prior to the community participation process itself. It is true that, as Akama states, 'the local community need to be empowered to decide what forms of tourism facilities and wildlife conservation programmes they want to be developed in their respective communities, and how the tourism costs and benefits are to be shared amongst different stakeholders' (Akama, 1996, p. 573). However, a mix of small-scale tourism and conservation to be funded or invested in (as may well be the case with ecotourism) is generally beyond participation – it is established prior to the project itself, and in the sort of projects Akama is referring to, funding or investment is likely to be conditional upon its acceptance. Akama criticizes 'Western' environmental values, and argues that the community should be 'empowered' to overcome Western bias (Akama, 1996, p. 573). But the empowerment invoked by Akama may be illusory, its limits determined by a prior conception of what constitutes desirable development.

Arguably, in locating the issue of power within the community, empowerment eschews what might be regarded as a social understanding of power (Butcher, 2007). A social understanding would inevitably consider the external relationship of the community to the world market, to Western aid agencies and to NGOs themselves. None of these are features of empowerment as conceived of by Scheyvens (2002). Broader issues of power between nations, between the developed and developing world, between social classes, and notions of social power beyond the immediate experience of individuals have little profile in discussions of community participation in ecotourism.

Much research into community participation in ecotourism has tended to adopt a positivist approach, looking at how projects fare when their performance on participation is measured against formal criteria, or through accreditation and benchmarking. Probably the most commonly invoked example of a scale for gauging performance is Pretty's

(1995) typology (see also Scheyvens, 2002, p. 55). This typology can be read as a gauge of the thoroughness of community participation. Pretty's seven levels of participation feature 'manipulation' at one end and 'self-mobilization' at the other. Pretty's analysis presents a greater level of participation as 'good', with the ideal being 'self-mobilization'. Here, communities instigate, as well as plan and see through, conservation and development projects within their community.

Yet prior to the project, as Mowforth and Munt point out, 'the push for local participation comes from a position of power, the first world' (1998, p. 242). The community participation agenda that has become the focus of many people's aspirations to 'empower' developing world communities eschews these power relations between the developed and developing worlds and focuses on the micro politics of the project. The extent to which power, control, democracy and other related ideas invoked in the advocacy of and debates about ecotourism can be understood in this limited arena is questionable. However, to take the rhetoric at face value, if the community is, to a greater or lesser degree, in control, then what is the role of NGOs and companies involved in the development of ecotourism? Very often their role is presented as, in part, that of facilitators of the community.

Brohman advocates this facilitation role, and sees it in terms of the devolving of 'political control' to the local level in tourism (Brohman, 1996). Yet the term 'political control' may be misleading. Control in the case of ecotourism projects is linked to funding or investment, and the funding is invariably tied to the outlook or the interest of the donor or investor. This is, of course, unsurprising – these are, after all, commercial organizations or NGOs founded and developed on the basis of the pursuit of profit, environmental conservation or rural development, all of which are political and contested aims. The emphasis on community participation, when articulated through the language of empowerment and control, presents the role of these organizations as one of a relatively disinterested facilitator of the community's wishes.

Community participation also suggests it is part of a democratic agenda – greater choice, empowerment and control all evoke a greater degree of democracy in development. The neopopulist tradition underpinning ecotourism has at its heart a promotion of the agency of the popular majority, usually within a locality. Tosun even asserts, with reference to tourism development, that without community participation 'democracy and individual liberty may not be sustainable' (Tosun, 2000, p. 615).

Yet a few writers have noted the obvious dilemma in community participation. What happens when communities opt for alternatives – mass tourism perhaps – that are not in keeping with the aims of funding authorities such as NGOs or Western development agencies? Weaver articulates this as follows: 'If [these] experts attempt to impose an AT [alternative tourism] model or to re-educate the local people so that they change their preferences, the entire issue of local decision making, control and community based tourism is called into question' (Weaver, 1998, p. 15). However, this dilemma may rarely surface, as whilst communities may have many opportunities to engage with how a project is implemented, and how its benefits are distributed, the broader issue of choosing development priorities is foreclosed. Arguably, such wider political priorities are the stuff of national politics rather than community participation.

Jon Tinker, President of the Panos Institute, questions the democratic credentials of many 'participatory' aid projects, arguing that developing world communities

are 'seduced by Western NGOs into accepting their projects on their terms' (cited in Scheyvens, 2002, p. 231). In reality, it may be less a case of seduction, and more one of pragmatism. Faced with the possibility of assistance or investment tied to a particular type of project, or no assistance at all, the pragmatic choice is to accept assistance regardless of any unfavourable terms attached (White, 2000). Hence, participation may not involve real choice at all, as there may be an absence of alternatives on offer. Rather, participation by the community is likely to be instrumental to the prospect of some limited financial assistance, the terms of which it has little if any control over (White, 2000). Also, the language through which this funding is rationalized and presented by donors ('participation', 'ownership' and 'empowerment') is likely to be adopted by recipients based on a recognition of its instrumental value rather than a deep-seated commitment to the development ideas it expresses (Hann & Dunn, 1996). Hence, the democratic credentials of participation, seen in a slightly wider context, may be questioned.

LOCALISM AND COMMUNITY PARTICIPATION

A further important aspect of community participation is the assumption that the community should be a local as opposed to a national community. This is the corollary of the neopopulist emphasis on development conceived of at a local level, rather than a national level, at least in the first instance. Central to this view is what Sachs has called 'participatory planning and grass roots activation' (Sachs, 1979, p.113). For Glaeser and Vyasulu (1984, p. 26), participatory development should mean that 'people who are affected by changes which they have decided are desirable cooperate voluntarily in the process of implementing the changes by giving them direction and momentum'. Formulations such as these posit participation as a local affair and implicitly prioritize local views over regional and national ones in development.

This privileging of the local is mirrored and magnified in the specific literature about ecotourism. Brohman puts this case clearly:

> Community based tourism development would seek to strengthen institutions designed to enhance local participation and promote the economic, social and cultural well-being of the popular majority. It would also seek to strike a balanced and harmonious approach to development that would stress considerations such as the compatibility of various forms of tourism with other components of the local economy; the quality of development, both culturally and environmentally; and the divergent needs, interests, and potentials of the community and its inhabitants. (Brohman, 1996, p. 60)

Here the local community, not the nation, is clearly cited as the appropriate level to address a development that is environmentally and culturally benign. It is local participation that is to be enhanced, and the local economy, rather than the national economy, with which tourism is to be compatible in this formulation.

The emphasis on local development is clear in Scheyvens's book *Tourism for development: Empowering communities* (2002). Scheyvens makes explicit that the locality is the most appropriate unit for development in terms of human wellbeing. She says of her book, '[i]t is not a book about how governments can extract the greatest economic benefits from encouraging foreign investment in tourism . . . Rather, the interests of

local communities in tourism development are placed at the forefront' (Scheyvens, 2002, p. 8, emphasis added). In her estimation, it is governments that benefit from a more traditional approach to development, whilst ecotourism can and should be oriented towards local people in their communities. This is typical of the neopopulist outlook on development – it presents large-scale development as beneficial to distant governments, with local community-level development holding out greater potential for people.

In this vein, Parnwell argues that community participation is desirable in order to compensate for a lack of democracy or good governance at a national level. He argues that the ability of NGOs and communities themselves to shape tourism in a fashion that is positive for the community depends on the 'prevailing socio-economic context' (Parnwell, 1998, p. 217), and goes on to contend that developing world governments may encourage international capital to benefit the elites rather than the majority of the people. Once again, the state is posed as a limiting factor upon the community.

There is a strong neopopulist emphasis in the literature on ecotourism to the effect that local community-level development is the most appropriate spatial unit from which to address development. This is presented as progressive compared to the grand schemas of national governments, schemas typically proposing modernization and transformation beyond the local, at the national level.

So what of the nation's role in participatory ecotourism? Scheyvens (2002) sees the issue in terms of central government's role in facilitating community-level development. The national strategies she advocates are 'an appropriate policy environment, regulatory framework, infrastructure and support for small business development' and 'give priority to investors working to assist local communities, and grant communities secure tenure over their land and other resources' (Scheyvens, 2002, p. 244). Here the national policy is about backing up the community, and even ceding control of land to localities. Scheyvens's view sees the national priority as one of acting as an enabling state in rural areas, enabling the functioning of locally based, sustainable development. She is ultimately interested in development through 'local agency' (Scheyvens, 2002, p. 56). This is a common theme, developed by Chambers (1983, 1997) and other neopopulist writers.

This localism, central to community participation, does have merit. For example, Scheyvens (2002, p. 33) is partly right to claim that modernist discourse has been preoccupied with macro-level improvements rather than a broader concern for well-being. However, much of the discussion about development through ecotourism fails to mention national perspectives at all. As such, it may replace a bias towards macro indicators – a national bias that neopopulists claim is symptomatic of modernization as development – with an inability to envisage development as anything other than a locally based phenomenon (see Joseph, 2001).

For example, Scheyvens (2002, p. 54) articulates the case for community-based ecotourism thus: 'A concern for livelihoods should be integral to development efforts, based on the recognition that local people need to benefit from the existence of natural resources in their area . . .'. To argue that a concern for livelihoods should be central to development is uncontentious, but equally vague. However, to suggest that local people need to benefit from the existence of natural resources in their area is more difficult to accept. In most contexts in developed countries, with an international division of labour and global trade, people do not benefit from the natural resources in their area. They tend to benefit from resources in the widest sense – every time they switch

on a light, light the gas oven, drive their car, read a book or visit a museum they are benefiting from resources produced far from their own communities. Resources that communities in the developed world have at their disposal, and the efficiency with which they can transform them into goods, is shaped by modern development that itself is premised on an international division of labour. Ecotourism's emphasis on local participation often eschews this legacy in favour of self-sufficiency and smallness of scale, on principle.

Also, concerns about the lack of a 'trickle down effect' from nationally based development can be well justified (for example, Butler, 1990; Hitchcock, King & Parnwell, 1993; Scheyvens, 2002, p. 8). Local participation could play a part in rectifying that. However, in a world of nation states, development of any substantial scale has to have a strong national perspective if it is to contribute to the transformation of national economies towards greater prosperity.

Further, it has been argued that a benefit of ecotourism is its ability to link with the local, informal sector, such as the production of crafts, thus ensuring that the poor see direct benefits (Oppermann, 1993). Yet if the ability to link with these informal economic circuits is a strength, it is also a weakness. Informal circuits may alleviate poverty locally, but economic development requires the development of the formal economy (which is also the tax-paying economy) feeding into national development. Whilst local, informal linkages are often talked up in the advocacy of ecotourism, their ability to contribute to significant economic development should be questioned.

COMMUNITY PARTICIPATION: A RADICAL AGENDA?

Community participation is viewed as a progressive, alternative or even radical agenda, as a counter to overbearing governments and the free market agenda associated with the big global financial institutions such as the World Bank and the International Monetary Fund (IMF). This is the tenor of Scheyvens's *Tourism for development* (2002) and of Tourism Concern's *Community tourism guide* (Tourism Concern & Mann, 2000). Green tourism activist Anita Pleumaron even argues that true 'grassroots' participation is necessary as part of the construction of 'an alternative "new world order" in which people themselves, rather than outside interests, determine and control their lives' (Pleumaron, 1994, p. 147).

Yet the radical rhetoric of 'empowerment' and 'community control' has an ambiguous relationship with the free market. This is clear if we compare the New Policy Agenda (the term sometimes given to the 'New Right' emphasis on markets in development, especially in the 1980s and subsequently), and the Alternative Development Paradigm (the alternative, 'people'-oriented view of many NGOs, often associated with the Left, and consistently associated with the promotion of community participation). The Alternative Development Paradigm, situated in the cultural and environmental 'Left', has increasingly turned away from the state, associating it with failed grand development schemas, and has adopted a neopopulist localism as a key priority. One author is frank enough to admit that 'putting people in the centre of development implied removing the state and its agents from that centre' (Tandon, 2001, p. 53). From the perspective of the New Policy Agenda, the developing world state was an inefficient and bureaucratic burden

upon business, and needed to slim down and adopt a set of free-market-oriented policies (a view developing world states were impelled to take on board in order to benefit from debt relief under structural adjustment policies). Hence the shared assumption between these two apparently contrary viewpoints is a diminished view of the role of the state and sovereignty (Feldman, 1997).

The talking up of the community – always a local community, never a national and rarely a regional one – is accompanied by a denigration of the nation's ability to achieve progress for its people. The lack of democracy or poor governance may provide pragmatic arguments for localism. However, ultimately an important but rarely asked question remains: how far can local community-based projects contribute to any sort of transformation of the economic prospects of a nation, and through doing so, increase the ability of the centre to govern? The denigration of the developing world state is based on real, not just ideological factors – states are often affected by corruption, inefficiency and a lack of legitimacy. But the problem is that the promotion of local development, linking in to local needs on a small scale, may fail to address this problem adequately, if at all.

From a different perspective, Midgeley writes with insight that 'the notion of community participation is deeply ideological in that it reflects beliefs derived from social and political theories about how societies should be organised' (Midgeley, 1986, p. 4). Midgeley is referring here to the notion that the rhetoric of community participation could be a cover for Western-style 'modernization', an argument also prominent in Mowforth and Munt's *Tourism and sustainability: New tourism in the Third World* (1998). In this view, the community is invoked and involved in a tokenistic way to lend credibility to, effectively, 'top-down' development.

Many critics have questioned the efficacy of community participation along these lines, regarding it as a cover for commercial or preservationist schemes. For example, Woodwood's research argued that the norm in South African ecotourism projects was to adopt a participatory approach primarily in terms of its public relations value (Woodwood, 1997, p. 166). Similarly, Scheyvens cites the work of the Conservation Corporation of Africa (CCA) as an example of an organization that she believes works with local communities only out of a sense of economic pragmatism rather than a commitment to the communities themselves (Scheyvens, 2002, pp.192–3).

So the alternative credentials of community participation are contestable on two fronts: first, any turn away from the state and national perspectives on development could also constitute a turn away from the prospect of development itself; second, community participation could, in some cases, be a radical sheen over, effectively, little change.

CONCLUSION

It is a truism that, in any given circumstance, it would seem to be better to seek out the views of those affected by development, even if this results in only minimal change to the development project itself. Community participation, in this prosaic sense, can represent an advance on top-down development. Yet the claims made for community participation go a lot further than this. Community participation in ecotourism is presented as an ethical approach to development, running counter to previous forms of development

that did not seek to involve the community. It is sometimes presented as having the potential to substantially shift power in development to the communities themselves.

Clearly the question of community participation is problematic in a number of senses. It can be an instrument of interests outside of, prior to and potentially antithetical to those of the community. In its rhetoric and practice, it may construct community participation as a local phenomenon, with an attendant limited conception of development and democratic participation itself. Ultimately, community participation is about negotiating the terms on which a project is to be implemented. The wider claims implying greater democracy or control for the community should, at the very least, be treated with a degree of circumspection.

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6. Ecotourism and global environmental change

C. Michael Hall

INTRODUCTION

The majority of ecotourism research tends to occur at a local or destination scale (Hall, 2007). Because of this there is often a failure to appreciate the wider impacts of ecotourism. For example, in the case of long-distance tourism more than 90 per cent of a typical journey's contribution to climate change comes from the transport component and particularly aviation (Gössling, 2000) in getting to and from the destination or the study site in which tourists are intercepted by researchers (Hall, 2007). Therefore, by only studying what happens at a destination or a specific site rather than over an entire trip there is potential to grossly underestimate the environmental, and other, consumptive impacts of tourism (Gössling, 2002; Gössling & Hall, 2006a, 2006b; Gössling, Borgström-Hansson, Hörstmeier & Saggel, 2002; Høyer, 2000). Of course, in some situations narrowly setting the boundaries for the environmental impacts of tourism may have benefits for the promotion of the environmental credentials of some destinations or attractions. However, such a situation may also provide a serious challenge to the environmental credentials of ecotourism. As Gössling et al. (2002, pp. 199–211) argued, 'even ecotourism projects often seem to ignore the global environmental aspects of travel. Ecotourism may thus be sustainable on the local level (in the sense that it puts a minimum threat to local ecosystems through the conversion of lands, trampling, collection of species, etc.), but it may in most cases not be sustainable from a global point of view.'

This chapter discusses the relationship between ecotourism and global environmental change (GEC). After defining the concept of global change and GEC the chapter looks at different dimensions of change including climate change and emissions, habitat loss and biotic exchange. It then concludes by emphasizing the need for a more thorough assessment of environmental change and ecotourism's contribution than what has hitherto been the case.

THE CONCEPT OF GLOBAL ENVIRONMENTAL CHANGE

Although global climate change now receives considerable attention in both tourism and the wider media, climate change is only a part of the broader issue of global change. Global change refers to planetary-scale biophysical and societal changes in the Earth system. Although these changes are interrelated GEC is often treated as a separate subsystem of global change (Gössling & Hall, 2006a, 2006b).

The global environment is always changing although change is never uniform across time and space. Nevertheless, 'all changes are ultimately connected with one another through physical and social processes alike' (Meyer & Turner, 1995, p. 304). However,

what is most significant with respect to contemporary GEC is that it is not primarily due to natural processes. Instead, the scale and rates of change have increased dramatically as a direct result of human action related to the consumption of natural resources, the creation of new habitats for humans, which has in turn altered the habitats of other species, and the waste products of human consumption and production. Human impacts on the environment may have a global character in two ways. First, 'global refers to the spatial scale or functioning of a system' (Turner, Clark, Kates, Richards, Mathews & Meyer, 1990, p. 15), for example, the climate and the oceans have the characteristic of a global system. Second, GEC occurs if a change 'occurs on a worldwide scale, or represents a significant fraction of the total environmental phenomenon or global resource' (Turner et al., 1990, pp. 15–16), for example deforestation and desertification. Tourism is significant for both types of change (Gössling, 2002; Gössling & Hall, 2006; Gössling et al., 2002; Hall & Lew, 2009).

The potentially negative impacts of tourism on the biophysical environment at a local scale has been recognized since the late 1960s (for example, Mathieson & Wall, 1982; Rosenow & Pulsipher, 1979; Turner & Ash, 1975). However, that tourism can have environmental impacts at a global scale is a much more recent conceptualization that arguably developed from two primary sources. The first was the emergence in the 1980s of the concept of sustainable development. In institutional and policy terms this is most closely associated with the development of the World Conservation Strategy and the World Commission on Environment and Development and in academic terms with interest in climate change and biodiversity conservation (for example, Brookfield, 1988; Colby, 1990; Turner et al., 1990). The second influence was the application of systems approaches to the study of tourism that emphasized not only the destination as part of trip behaviour but also the importance of generating areas and transit zones in assessing the wider impacts of tourism on the environment (Hall & Page, 2010; Matley, 1976). The latter approach therefore led to an increase in awareness of system-wide effects of tourism consumption, such as transport-related greenhouse gas emissions that while negligible at a destination scale may be significant over the entire course of a tourist trip.

Initially, tourism was presented as more of a victim of GEC than a contributor (for example, Gable & Aubrey, 1990; Seki & Christ, 1995). Yet as the 1990s wore on increased attention began to be given to tourism's role in environmental change at a global scale (for example, Schafer & Victor, 1999; Wilson, 1997). In the 2000s this focused especially on tourism's growing contribution to climate change with the scale of the contribution becoming recognized by lead organizations such as the United Nations World Tourism Organization (UNWTO, 2007).

THE GLOBAL ENVIRONMENTAL CONSEQUENCES OF TOURISM

The first attempt to seek to provide a comprehensive overview of the global environmental consequences of tourism was undertaken by Gössling (2002) who argued that from a global perspective, tourism contributes to: changes in land cover and land use; energy use; biotic exchange and extinction of wild species; exchange and dispersion

Table 6.1 Tourism's contribution to global environmental change

Dimension	2001 estimates	2007 estimates
Number of international tourist arrivals	682 million[a]	898 million[a]
Number of domestic tourist arrivals	3580.5 million[b]	4714.5 million[b]
Total number of tourist arrivals	4262.5 million[b]	5612.5 million[b]
Change of land cover – alteration of biologically productive lands	0.5 percent contribution[c]	0.6–0.66 per cent contribution[c]
Energy consumption	14 080 PJ[c]	18 585.6 PJ[d]
Emissions	1400 Mt of CO_2-e[c]	1848 Mt of CO_2-e[d] (1461.6 Mt of CO_2)[e]
Biotic exchange	Difficult to assess[c]	Difficult to assess, however rate of exchange is increasing[d]
Extinction of wild species	Difficult to assess[c]	Difficult to assess, particularly because of time between initial tourism effects and extinction events but increasing. One estimate of 3.5–5.5 per cent of species loss with a future higher figure being likely if climate change factors are considered[f]
Health	Difficult to assess[c]	Difficult to assess in host populations, but sickness in tourists in tropical destinations assessed at 50 per cent by the World Health Organization (WHO)[g]
World population[h]	6169.8 million	6632.2 million
Total number of tourist arrivals as percentage of world population	69.1%	84.6%
Number of international tourist arrivals as percentage of world population	11.1%	13.5%

Notes:
a. UNWTO figures.
b. Hall and Lew (2009) estimates based on UNWTO data.
c. Gössling (2002) estimate.
d. Hall and Lew (2009) extrapolation based on Gössling's estimates and other research.
e. UNWTO, UNEP and WMO (2008) estimate for 2005.
f. In Hall (2010a).
g. WHO (2003).
h. Mid-year world population estimate by US Census Bureau (2009).

of diseases; and changes in the perception and understanding of the environment. Gössling's (2002) estimates for 2001 with respect to tourism's contribution to GEC and updated in Gössling and Hall (2006) have been more recently examined in Hall and Lew (2009) and Hall (2009) (Table 6.1) and suggest that the contribution of

tourism to GEC is continuing to grow as a result not only of increasing numbers of domestic and international tourist trips, but also because of increases in distance travelled (Gössling, Ceron, Dubois & Hall, 2009; Hall, 2005, 2008; Scott, Gössling & Hall, 2012a, 2012b).

Although Gössling's (2002) categories of GEC are useful to conceptualize the different overall contributions of tourism to change, there may be significant qualitative and quantitative issues when trying to identify the relative contribution of ecotourism. For example, the most critical issue is the extent to which ecotourism (however defined) comprises a portion of the overall tourism market. In 1998 the World Tourism Organization (WTO, 1998) along with the International Ecotourism Society (in the US Department of Agriculture Animal and Plant Health Inspection Service, Veterinary Services, Centers for Epidemiology and Animal Health, Center for Emerging Issues (USDA APHIS, VS, CEAH, Center for Emerging Issues, 2001)) estimated that ecotourism accounted for 20 per cent of all international travel. Yet just four years later, at the launch of the International Year of Ecotourism, the UNWTO estimated that it accounted for just 2–4 per cent of international tourism (the figure also used by Fennell, 2008 in his seminal work on ecotourism). Nevertheless, earlier statements that ecotourism was growing at 20 per cent per year (Lindberg, Furze, Staff & Black, 1997) are repeated up to the present day: 'Ecotourism, characterized by responsible travel to natural areas that promotes conservation of the environment, is one of the fastest growing segments of tourism worldwide, and is growing at a pace of more than 20 percent annually – two to three times faster than the tourism industry overall' (Langford, 2011). A figure also noted elsewhere, but with a lower percentage of world travel: 'Ecotourism and nature tourism are growing at three times the rate of traditional tourism, according to the International Ecotourism Society. The WTO estimates that ecotourism captures 7 per cent of the international market' (Hoag, 2007). All the above highlight the difficulties in ascribing an absolute figure for ecotourism's contribution to tourism – and therefore proportional contribution to global change. Yet, contribute it does.

Emissions

In the case of carbon dioxide (CO_2) emissions resulting from tourism, the UNWTO, United Nations Environmental Programme and World Meteorological Organization (UNWTO, UNEP & WMO, 2008) estimated that approximately 40 per cent came from air transport, 32 per cent from car transport and 21 per cent from accommodation in 2005, with growth continuing to occur in all areas (Gössling, Hall, Peeters & Scott, 2010). If tourism was a country, its emissions would rank after the USA, China, the European Union and Russia, although, if the upper estimate of radiative forcing effects were used, tourism would rank only behind the USA and China in terms of its contribution to climate change (Hall, 2010b). Using the various percentage estimates of ecotourism, market size could provide a variation in emissions contribution in 2007 ranging from 36.96 Mt of CO_2-e (million tonnes of carbon equivalent emissions) (at 2 per cent of the total tourism market), 129.36 Mt of CO_2-e (at 7 per cent), through to 369.6 Mt of CO_2-e (at 20 per cent) (utilizing Gössling's 2002 estimates). The UNWTO, UNEP and WMO (2008) estimates for 2005, which do not account for radiative

forcing, provide figures of 29.23 Mt of CO_2-e (at 2 per cent), 102.31 Mt of CO_2-e (at 7 per cent) and 292.32 Mt of CO_2-e (at 20 per cent). Such wide variations are not that helpful in themselves in providing an accurate account of emissions from ecotourism, but perhaps it is just as important to recognize that ecotourism – which often focuses on its environmental benefits – is also a contributor to emissions. Indeed, the emphasis on travel to more peripheral destinations in much ecotourism discourse (Fennell, 2008) suggests that the per trip emissions from ecotourism may be higher than mass tourism.

Although environmental change occurs at a global scale, local and regional analyses are essential (Kasperson, 1992). Changes find different expression and have different consequences in different regions (Meyer & Turner, 1995). One area in which ecotourism is a major driver of tourism activity, and which is also significant in terms of global change, is the Antarctic (Scott et al., 2012a, 2012b). At a regional level the relative contribution of tourism to greenhouse gas (GHG) emissions in polar regions is likely greater than for many other regions because of the reliance on aviation and cruise ships for tourist access (Hall, 2010b). In examining Antarctic tourism emissions in the 2004–05 season, Amelung and Lamers (2007) reported that cruising provided the largest single source of emissions, although because aviation is important in terms of radiative forcing, air travel contributes close to 60 per cent of emissions when calculated in CO_2 equivalents. Amelung and Lamers (2007) found that the average per-capita emissions from travelling to the gateway ports of Ushuaia/Punta Arenas (Argentina/Chile) and Christchurch (New Zealand) by Antarctic-bound tourists were 8.58 and 8.48 tonnes per capita, respectively. Average ship-based CO_2 emissions per capita were 6.16 tonnes per passenger, but the contribution varied widely depending on the ship, ranging from 2.09 tonnes per passenger for the *Alexander Humboldt* to 22.63 tonnes per passenger for the *Spirit of Enderby*. The per-capita emission of land-based tourism in Antarctica was estimated at just under 50 tonnes per tourist, including transport between gateway cities and Antarctica. From their research, Amelung and Lamers (2007) estimated that the total contribution of Antarctic tourism to GHG emissions for 2004–05 was 425 ktons CO_2-e. In absolute terms such an amount is negligible. However, on a per-capita basis the 14.97 tonnes of GHGs produced during the typical two-week travels of the Antarctic tourist is equal to the total emissions produced by an average European in 17 months (Scott et al., 2012).

Studies of ecotourism in northern polar regions provide similar results (Hall, 2010b). Dawson, Stewart and Scott (2010) estimated that the emissions of tourists participating in a polar bear viewing experience in Churchill, Manitoba, Canada range from 1.54 to 58.61 t CO_2-e per person. This means that a polar bear viewing experience is six to 34 times higher than an average global tourist experience, depending on the distance flown between the usual place of residence and Churchill.

The emissions of ecotourism, particularly as a result of aviation and transport, also reflect some aspects of energy consumption. Although considerable attention is given to energy conservation and renewable energy by many ecotourism operators (Andereck, 2009), the bulk of energy consumption by tourists occurs in the transport used getting to and from destinations. Given that the majority of tourism transport remains dependent on fossil fuels, this adds a further dimension to ecotourism's contributions to environmental change.

Habitat Loss and Extinction

Ecotourism is a major economic justification for the conservation of species and habitat (Buckley, 2009; Frost & Hall, 2009). Nevertheless, tourism directly affects habitat through processes of tourism urbanization as well as the direct, for example, trampling, and indirect impacts of visitation, for example, acting as vectors of diseases or weeds. Mozumder, Berrens and Bohara (2006) identified the association of tourism with increasing biodiversity risk when examining the regression results between the log of tourist arrivals and the log of an upgraded national biodiversity risk index for 61 countries. Tourism urbanization processes are spatially and geographically distinct, often being related to high natural amenity areas such as the coast, where coastal ecosystems are subject to urbanization, land clearance and the draining and clearance of wetlands (Gössling & Hall, 2006). This may lead to situations in which while tourism has provided the justification for habitat conservation in one location, other areas nearby may have suffered habitat loss because of tourism infrastructure development. This may be particularly the case in resort areas, such as Hawai'i, Gold Coast or Fiji, which seek to diversify their product offerings via ecotourism.

One of the difficulties in assessing the effects of tourism, including ecotourism, on habitat and species loss is the time lag between the initial tourism stimulus and recognition that change has occurred. Change is quickly recognizable with respect to the development of tourism infrastructure and even trampling, but the impacts on exotic flora or climate change may take some time before being recognized (Hall, 2010b). Given the relationship observed by Ehrlich (1994) between energy and emissions as well as energy use and biodiversity loss, Hall (2010a) conservatively estimated that tourism overall is responsible for approximately 3.5–5.5 per cent of species loss, with a future higher figure being likely if climate change scenarios are considered. This situation may be even worse when the role of tourism in biological invasion is considered.

Biotic Exchange

Although the rate of biotic exchange is increasing and tourism is recognized as a major mechanism for biological invasion because of the capacity of tourists and the infrastructure of tourism to act as vectors for disease and exotic species, the exact contribution of tourism is difficult to determine (see Hall & Baird, Chapter 7, this volume). Since the seventeenth century, invasive alien species have contributed to nearly 40 per cent of all animal extinctions for which the cause is known (Secretariat of the Convention on Biological Diversity, 2006). Pimentel, McNair, Janecka, Wightman, Simmonds, O'Connell and Tsomondo (2001) estimate that approximately 480 000 species have been accidentally or deliberately introduced beyond the natural limits of their geographic range. Although the impacts of biological invasions are particularly economically important for nature-based industries such as agriculture, forestry and fisheries, they can also have a significant affect on environmental services that support tourism as a result of agricultural, landscape or species change. This may be particularly important for national parks or other areas with high scenic values, although the effects on tourism are likely to be higher as a result of the loss or decline of charismatic species, rather

than just aesthetic changes to the landscape (Hall, James & Baird, 2011). The long-term impacts of biological invasion are therefore an extremely important dimension in the calculation of the overall costs and benefits of ecotourism and tourism and biodiversity conservation; however, such issues are usually not included in assessments (for example, Buckley, 2009).

The official designation of an area as a national park or wilderness area, which may contribute to the commoditization of tourism attractions and therefore increase visitor numbers, may also increase visitor impacts due to species introductions (Frost & Hall, 2009; Hadwen, Hill & Pickering, 2007; Sæþórsdóttir, Hall & Saarinen, 2011). For example, Vilà and Pujadas (2001a), in a study of the socio-economic parameters influencing plant invasions in Europe and North Africa, found that the density of naturalized species was positively correlated to the number of tourists that visit a country ($r = 0.49$), with Mediterranean international tourist destinations also having high numbers of naturalized species. In addition, they also argued that this may be directly related to the positive relationship between the number of visitors to natural areas and the number of alien species (Lonsdale, 1999).

In a comparison of plant invasions between developed and developing countries in the Mediterranean region of Europe and Africa, Vilà and Pujadas (2001b) found that the level of imports and the level of human development were the only variables that contributed significantly to explaining the variation in density of exotic plant species, with a combined value of 60.7 per cent. When land use variables alone were considered in the analysis, percentage cover of protected land and the length of terrestrial transport networks together explained 57.2 per cent of the variation in the density of alien plants with the length of the terrestrial transport networks being positively correlated with imports ($r = 0.78$). The length of the terrestrial transport networks was also correlated with the number of tourists that visit the country ($r = 0.75$) with Vilà and Pujadas (2001b, p. 399) commenting, 'Mediterranean basin countries such as France, Italy and Spain that receive many tourists are the ones with the highest density of alien species. Contrary to our expectations the correlation between the density of alien plants and the percentage cover of protected land was positive.'

Although the contribution of tourism to the spread of invasive species is frequently noted in the biological invasion literature, there is a relative lack of acknowledgement in the tourism literature of the direct contribution of tourism and recreation to biological invasion and the corresponding loss of species (Pickering & Hill, 2007; Pickering & Mount, 2010; Hall, 2011a). The one topic that has seen considerable attention is the role of international tourism and travel in disease spread (Budd, Bell & Brown, 2009; Hulme, 2009; Mouchtouri, Anagnostopoulou, Samanidou-Voyadjoglou, Theodoridou, Hatzoglou, Kremastinou & Hadjichristodoulou, 2008; Tatem, 2009; Tatem & Hay, 2007; Tatem, Hay & Rogers, 2006), and the affects that it can have on travel and tourism destinations (for example, Hall, 2011a; Stanbury, Pryer & Roberts, 2005). Colizza et al. (2006, p. 2019) report that 'the air-transportation-network properties are responsible for the global pattern of emerging diseases'. For example, the international spread of Severe Acute Respiratory Syndrome (SARS) was closely associated with the speed at which international aviation moves travellers from one hub to another. As Raptopoulou-Gigi commented, 'The rapid worldwide spread of the coronavirus that causes SARS ... suggested that as for other infectious diseases, evolution and spread is facilitated by the

mobility of the society either through air travel or the densely populated urban areas especially in Asia' (2003, p. 81).

Ecotourism has long been implicated in disease spread because of the travel of individuals to, often remote, locations where they are exposed to new pathogens and where they may, in turn, introduce pathogens to both human and animal populations (Hall & Lew, 2009; Musa, Hall & Higham, 2004; Rudkin & Hall, 1996; Wilson, 1995). Visitors to peripheral and rural destinations are at increased risk of infection with local diseases for several reasons: (1) lack of immunologic experience with the pathogens present in the new location; (2) increased susceptibility due to genetic differences compared with the local population; and (3) lack of knowledge about the disease risks leading to riskier behaviour as compared to the local population (Wilson, 1995). USDA et al. (2001) identified five factors associated with disease emergence and ecotourism/nature-based tourism:

1. Movement of people into an undeveloped rural environment.
2. Environmental change (for example, deforestation, road/infrastructure building).
3. Increased contact of humans with wildlife.
4. Increased contact of humans with arthropod disease vectors (for example, mosquitoes, ticks).
5. Increased risk of infection with local diseases for people visiting a new area.

According to USDA et al. (2001, p. 7), 'Tropical areas, which are popular destinations for nature travel and ecotourists, are particularly likely places for the emergence of new animal and zoonotic diseases because of the increased biological diversity in tropical regions relative to temperate regions.' Indeed, in 2000, an outbreak of leptospirosis occurred among international participants in a Malaysian eco-challenge event as a result of river swimming. A Centers for Disease Control and Prevention (CDC, 2001) study reported that 44 per cent of the 158 participants in the eco-challenge event contacted met the case definition for leptospirosis. However, while disease outbreaks may gain a public profile, the reality is that much of the pathogen exchange that occurs as a result of ecotourism often goes unnoticed, at least in the short term. Yet ecotourism is clearly implicit in the transfer of pathogens and disease to both human and animal populations. For example, the great apes are dying from respiratory viruses directly transmitted to them by humans to whom they are genetically very similar and therefore subject to many of the same diseases and illnesses (Köndgen, Kühl, N'Goran, Walsh, Schenk, Ernst, Biek, Formenty, Mätz-Rensing, Schweiger, Junglen, Ellerbrok, Niysche, Briese, Lipkin, Pauli, Boesch & Leendertz, 2008). Such findings pose a major problem for those protecting the declining populations of gorillas in Uganda, Rwanda and the Democratic Republic of Congo, which now number less than 650, as well as orangutans on Borneo and Sumatra in Indonesia, thought to number around 15 000 (Hall & Lew, 2009). The ecotourist dollar is essential for protecting the endangered apes from poachers as well as supporting measures aimed at restricting commercial hunting and habitat loss. Nevertheless, it is increasingly recognized that other measures to manage tourist contact may also be required.

CONCLUSIONS AND FUTURE

Ecotourism has long been portrayed as being a major contributor to the conservation of biodiversity, and in many ways it is. However, this chapter has sought to emphasize that any evaluation of the impacts of ecotourism need to be understood within larger spatial and temporal scales than the immediate activities of ecotourists at a destination (Hall, 2007). From this context, ecotourism is a potentially significant contributor to GEC, particularly with respect to emissions, biotic exchange and even biodiversity loss. Any consideration of the environmental impacts of ecotourism needs to weigh up its contribution to habitat and species conservation against its role in environmental change. The difficulty in doing this is that it requires a greater appreciation of the role of time in assessing tourism's impacts than is usually the case (Hall, 2011b). Nevertheless, this chapter has indicated that the perceived environmental benefits of ecotourism, particularly in peripheral locations that are distant from their main markets, may need a fundamental reassessment. There is also potentially some irony to this when ecotourism might be more seriously affected by GEC than other forms of tourism as a result of tourist perceptions of the environment and natural attractions (Gössling, 2007; Hvenegaard, 2002). However, although assessments of the consequences of GEC for ecotourism need to consider the perception of ongoing and expected changes by ecotourists, these perceptions are likely to be complex, translating into non-linear changes in behaviour (Gössling & Hall, 2006b; Gössling, Scott, Hall, Ceron & Dubois, 2012). This means that change in one or several environmental parameters does not necessarily result in an equivalent change in tourist behaviour.

The chapter also raises the obvious issue as to whether ecotourism can actually be sustainable (Biggs, Ban & Hall, 2012; Biggs, Hall & Stoeckl, 2012; Hall, 2011b). The answer is a qualified yes and lies in the development of more sustainable forms of travel, and a notion of development that is grounded in ecological economics, whereby travel is contextualized within the entire consumptive patterns of individuals and households and within the biophysical boundaries of environmental services. In order to achieve such a goal, travel needs to be significantly decarbonized as well as localized (Hall, 2009). As Gössling et al. (2002, p. 209) concluded, 'in order to become more sustainable, destinations should seek to attract clients from close source markets'. Nevertheless, as Hall (2007) noted, such a conclusion, while environmentally appropriate, presents a major challenge for many ecotourism operations. Unfortunately, some of the locations that most depend on the contribution of ecotourism to local community and economic development are also the most peripheral and therefore distant with respect to source markets. In these locations ecotourism may well be one of the few development options available (Hall, 2012). In such situations difficult or different development decisions may need to be made.

This chapter has also emphasized that in order to ascertain the full impacts of ecotourism and therefore judge the actual contribution of ecotourism to the environment, a much broader analysis in time and space needs to be conducted. To do so may lead not only to results that many tourism stakeholders will not want to acknowledge but also the solutions. Therefore, the challenge facing ecotourism is part of the broader challenge facing tourism, in that medium to long-distance travel is not environmentally friendly or sustainable. The polluter, whether labelled an ecotourist or not, needs to pay.

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7. Ecotourism, biological invasions and biosecurity

C. Michael Hall and Tim Baird

IMPLICATIONS OF INVASIVE DISEASES AND SPECIES FOR BIODIVERSITY CONSERVATION

The conservation of biological diversity (biodiversity) is integral to the viability of ecotourism (Hall, 2007). Biodiversity refers to the total sum of biotic variation, ranging from the genetic level, through the species level and on to the ecosystem level (Martens, Rotmans & de Groot, 2003). Unfortunately, 'there are multiple indications of continuing decline in biodiversity in all three of its main components – genes, species and ecosystems' (Secretariat of the Convention on Biological Diversity, 2010, p. 9), with the continued growth in biological invasion being a significant contributor to loss of biodiversity (Gössling, 2002; Gössling & Hall, 2006; Hall, 2010a, 2011a; Secretariat of the Convention on Biological Diversity, 2010, p. 9).

Compared to other environmental problems, invasive species present at least six particular management and policy challenges (after Keller, Geist, Jeschke & Khün, 2011):

1. Their impacts tend to increase over time as populations spread and become larger.
2. The actions of neighbouring jurisdictions are critical in the management of invasive species.
3. Economically valuable trade, including tourism, is often the vector of invasive species.
4. It is usually impossible to determine the exact conditions that will lead to a biological invasion.
5. Controlling the spread of invasive species requires difficult to achieve international cooperation.
6. There is often a considerable time lag, also referred to as an 'invasion debt' (Essl, Dullinger, Rabitsch, Hulme, Huelber, Jarošik, Kleinbauer, Krausmann, Kühn, Nentwig, Vilà, Genovesi, Gherardi, Desprez-Loustau, Roques & Pyšek., 2011), between the introduction of non-native species and their spread.

The introduction of alien species into an environment is often associated with tourism because of the capacity of tourists and the infrastructure of tourism to act as carriers of exotic species (Fox & Loope, 2007; Hall, 2007). Since the seventeenth century, invasive alien species have contributed to nearly 40 per cent of all animal extinctions for which the cause is known (Secretariat of the Convention on Biological Diversity, 2006). As of the turn of the century, it was estimated that approximately 480 000 species had been accidentally or deliberately introduced by humans into locations that lie beyond the natural limits of their geographic range (Pimentel, McNair, Janecka, Wightman, Simmonds, O'Connell, Wong, Russel, Zern, Aquino & Tsomondo, 2001). For example, in a discus-

sion of tourism-related species introduction pathways into eight Nordic countries and regions, Hall, James and Wilson (2010) noted that 169 species had been introduced in ballast water and sediments, 29 by hull fouling, 172 by transport, 24 for hunting and 21 for angling or sport. Even given the potential for double counting, such figures highlight tourism's role as a vector or even justification for species introductions. Undoubtedly, a number of alien species have provided considerable socio-economic benefits, especially with respect to food production and even sport and recreation (Hall, 2003). However, alien species have also had major negative economic effects in agriculture, forestry and ecosystem services (Heikkilä, 2011; Vilà, Basnou, Pyšek, Josefsson, Genovesi, Gollasch, Nentwig, Olenin, Roques, Roy, Hulme & DAISIE partners, 2010). Pimental et al. (2001) estimated that non-native species invasions in the six nations they reviewed (the United States, United Kingdom, Australia, South Africa, India and Brazil) were causing more than US$314 billion per year in damages. In the United States alone Pimental, Zuniga and Morrison (2005) estimated that invading alien species cause losses adding up to almost US$120 billion per year.

That tourism may be a significant contributor to biodiversity loss is something that is often seemingly at odds with the substantial literature on tourism's, and especially ecotourism's, contribution to biodiversity conservation via the economic justification it supplies for national park and conservation reserve establishment and management (Buckley, 2009; Christ, Hilel, Matus & Sweeting, 2003; Frost & Hall, 2009; Hall, 2007; Higham, 2007). Nevertheless, there is a growing awareness of the potential negative impacts of tourism on the natural environment including not only direct and indirect pressures on species, pollution and emissions but also the capacity of tourists and tourism infrastructure to act as vectors of invasive species (Hall & Lew, 2009). Therefore, this chapter focuses on the interrelationships between ecotourism and biosecurity – the protection of a country's, region's, location's or firm's economic, environmental and/or human health from harmful organisms – as a means to ensure the maintenance of the biological resources that underpin ecotourism. We first discuss the role of tourism and ecotourism as a factor in biological invasion as well as the implications of invasive species for tourism. We then go on to note some of the prevention and adaptation strategies in biosecurity as well as the implications of current biosecurity strategies for risk assessment. We conclude the chapter with a discussion on the need for improved institutional arrangements for biosecurity as well as specifically for ecotourism.

THE ROLE OF TOURISM AND ECOTOURISM AS A FACTOR IN BIOLOGICAL INVASIONS

Tourism can contribute to biological invasion in three main ways:

1. By providing a justification for the planned introduction of new species or the reintroduction of species to their former range.
2. By being a vector for unplanned biological invasion.
3. By disturbing habitat and therefore making it easier for invasive species to become established.

Tourism as a Justification for Planned Species Introduction

Many in the tourism industry may be unaware of the role that tourism plays in biosecurity management beyond the perceived inconvenience they believe that tourists may encounter with respect to customs and biosecurity clearance (Pinfield, 2001). However, tourism has long been a reason for the introduction of species from one location to another. Several countries, particularly those settled by Europeans, have a legacy of the deliberate introduction of alien species that were regarded as desirable from the perspective of hunting, fishing and other forms of tourism and recreation. For example, there is a history of fish species, such as salmon and trout, being deliberately introduced from one location to another outside their previous range in order to enhance recreational fishing opportunities (Huckins, Osenberg & Mittelbach, 2000). The opportunity to fish is often now regarded as an important element of nature-based tourism activities even though the fish are not native species (Hall, 2007).

In the United States, the stocking of wilderness lakes with trout began in the 1800s (Pister, 2001). This practice was followed for nearly a century with the singular goal of creating and enhancing sport fishing and without any consideration of its ecological ramifications. It was only in the 1960s that changes to practices started to occur when research indicated negative impacts on the native biota attributable to introduced species. For example, more than 80 per cent of the naturally fishless lakes of the Sierra Nevada in California now contain non-native trout (Knapp, Corn &Schindler, 2001). This situation has led to a major decline in the population of the mountain yellow-legged frog, *Rana muscosa*, which was once the most common vertebrate in these high elevation ponds and lakes (Knapp & Matthews, 2000; Vredenburg, 2004). Introductions of trout for recreational fishing in Australia (Gillespie, 2001) and New Zealand (Flecker & Townsend, 1994) have similarly affected indigenous fauna. As Pister (2001) notes, the necessity for wilderness or natural area fish stocking is now the subject of widespread debate in the United States, especially in view of changing social values and priorities with respect to preserving the biodiversity of mountain lake ecosystems. However, there remains considerable resistance from recreational fishing organizations to any removal of trout or other introduced sports fish from lakes and waterways, not only because of their recreational significance but also economic value.

A contrasting situation with respect to the role of tourism in biosecurity issues is its function as a justification for the reintroduction of species to habitats they have previously been removed from or hunted to extinction. The process of attempting to restore environments that have experienced the loss of key species is referred to as wilding, with the return of landscapes to something akin to their prehistoric ecology gaining substantial interest in Western Europe (Hall & Lew, 2009). For example, in May 2008, the Scottish government announced that the European beaver was to be reintroduced to Knapdale, Mid Argyll, for a five-year trial period, with the introduction of four families of beavers from Norway (Scottish Wildlife Trust, 2008). The beaver reintroduction was proposed by the Scottish Wildlife Trust (SWT) and the Royal Zoological Society of Scotland (RZSS), who argued that beavers could have a positive effect on the environment (from which they had been eliminated 400 years earlier), and could

also attract tourists to the area. Iain Valentine, the head of animals, education and conservation at the RZSS, commented, 'As well as being a keystone species, in terms of the benefits they bring to ecosystems, they will also provide a socio-economic boost by increasing tourism in the local area' (BBC News, 2007). However, opposition to the proposal was voiced by the Scottish Rural Property and Business Association (SRPBA) whose Chief Executive, Doug McAdam, stated: 'The reintroduction of the European beaver to Scotland would effectively be an introduction of a now alien species. After a gap of 400 years, former habitats have been developed and are now a managed landscape, providing environmental, economic and recreational benefits' (BBC News, 2007).

Unplanned Species Introductions

Although the deliberate introduction of species is a significant point of debate between different stakeholders in nature-based tourism because of the tradeoffs between ecological impacts and economic and personal benefits (Huckins et al., 2000), there is usually little debate over the damage caused by unplanned introductions of species (Hall, 2007). There is a substantial legacy of research on the role of tourism and recreation in introducing weeds and alien species, for example (Hall, 2010b; Pickering & Mount, 2010). Indeed, research conducted by Usher (1988) into biological invasions of nature reserves found that there was a positive correlation between tourist visitation and the number of introduced species. In a study of the socio-economic parameters influencing plant invasions in Europe and North Africa, Vilà and Pujadas (2001a) also found that the number of naturalized species was positively correlated with the number of tourists that visit a country ($r = 0.49$), with Vilà and Pujadas (2001b, p. 399) also commenting that 'the correlation between the density of alien plants and the percentage cover of protected land was positive'. Similarly, Wasilowska (1999) surveyed forestry tracks in the Mumlawski Wierch region of Poland, and compared those tracks that were rarely used to those tracks that were frequently used by tourists. Results indicated that the number of non-indigenous tree species that had colonized the area was dependent on the intensity of the tourist traffic as those tracks that were rarely used featured less alien plant species compared with those that lead to the popular tourist destination of Mount Szrenica (Wasilowska, 1999).

However, it is important to note that not all unplanned introductions may be negative for tourism (Leppakoski, 1991). Many invasive species may become naturalized and perceived as being part of the naturalness of the environment by many tourists, especially if they have been a part of the environment for an extended period of time, for example, wild rabbits in Britain – a species that was introduced by the Romans. Indeed, the extent to which biosecurity measures are put in place to deal with alien species depends perhaps even more on the cultural frameworks within which notions of naturalness, environmental authenticity and economic value are constructed than they are on ecological understanding.

The susceptibility of islands to biological invasion remains one of the great challenges in ecotourism management. Although islands are often significant ecotourism destinations because of their relatively high numbers of endemic species, their isolation also makes them extremely vulnerable to the introduction of new fauna and flora, including

by tourists (Cook, Dawson & MacDonald, 2006; Hall, 2010c). Island vulnerability is also affected by the frequency of transport connections and the growth of cruise and expedition tourism has been a major factor in the transfer of exotic species to destinations, ranging from tropical islands to polar regions (Chown, Huiskes, Gremmen, Lee, Terauds, Crosbie, Frenot, Hughes, Imura, Kiefer, Lebouvier, Raymond, Tsujimoto, Ware, Van de Vijverk & Bergstrom, 2012; Hall, 2010b, 2010c; Hall & Wilson, 2010; Tatem, 2009).

Tourism is recognized as a primary driver of change on the Galápagos Islands (Gonzalez, Montes, Rodriguez & Tapia, 2008). The volcanic archipelago has a unique flora and fauna, including different species of finches on different islands, flightless cormorants, giant tortoises, blue-footed boobies and marine iguanas that inspired Charles Darwin's theory of natural selection. Growth of interest in the environment, the showing of numerous documentaries on the islands on television and improved air and sea access has led to substantial international tourism growth with the islands being promoted as a leading ecotourism destination (Hall & Lew, 2009). Tourism growth has been significant with the number of days spent by cruise ship passengers increasing by 150 per cent from 1992 to 2007. This growth in tourism has created economic opportunities, which has fuelled increased immigration from the Ecuador mainland to the islands. In 1972, the island group's population was 3488. By the 1980s, this number had risen to more than 15 000 and in 2006, there was an estimated 40 000 people (Hall & Lew, 2009, p.17). The increase in the local human population and a rise in tourism visitor numbers have been blamed for raising the risk of pathogen spillovers into native avian populations in the Galápagos Islands with the introduction of biosecurity measures being regarded as essential in the reduction of disease vectors (Gonzalez et al., 2008; Soos, Padilla, Iglesias, Gottdenker, Bedon, Rios & Parker, 2008). Nevertheless, finding the appropriate balance between tourist visitation and regulation is vital given that campaigns to eradicate alien species on the islands have been funded by tourism initiatives that saw tourists remaining on cruise ships and not inhabiting the islands, thereby limiting tourism numbers (Hall & Lew, 2009). Yet the Galápagos experience suggests that not only do the tourists themselves need to be subject to a biosecurity and biodiversity conservation strategy but also the local support population that enables tourism activities. Indeed, the experience of a number of ecotourism destinations reinforces the management paradox that tourism both simultaneously acts as a vector in the introduction of alien species as well as providing an economic source and rationale to prevent their introduction.

Habitat Disturbance

The Galápagos experience highlights that tourism's contribution to biological invasion includes not only its direct role as a vector but also the extent to which infrastructure development and habitat disturbance provide opportunities for invasives to become established. Environment stress arising from increased tourism-related activity was studied in the Mediterranean and Black Sea region by Occhipinti-Ambrogi and Savini (2003), who found that habitat modification provided opportunities for aquatic invasive species and that an understanding of disturbance processes would aid in the prevention of marine biological invasions (Occhipinti-Ambrogi, 2007).

THE INCORPORATION OF BIOSECURITY MANAGEMENT STRATEGIES INTO ECOTOURISM

Given the importance of biodiversity conservation as one of the underpinning concepts of ecotourism, one would potentially expect biosecurity to be a high priority of ecotourism businesses. However, available evidence suggests that this is generally not the case. Instead, the utilization of biosecurity measures usually arises as part of the regulatory requirements of national or regional governments and by national park and reserve management authorities, especially for high value and vulnerable destinations such as the sub-Antarctic islands. For example, in a study of the biosecurity measures utilized in the rapidly expanding Arctic cruise ship and marine expedition market, Hall et al. (2010, p. 360) found a 'patchwork quilt of national and commercial biosecurity and environmental standards' with the majority of cruise operators in the region not having evidence of biosecurity policies.

The incorporation of biosecurity strategies in ecotourism occurs at different scales (Hall, 2007). At the operational level, the International Association of Antarctic Tour Operators (IAATO) are at the forefront of providing biosecurity guidelines to their members, and have influenced businesses operating in similar environments such as the Association of Arctic Expedition Cruise Operators (AECO) (Hall et al., 2010). However, such organizations are in the minority and, arguably, their guidelines have also been strongly influenced by those established for some of the destinations they visit. For example, many of the management plans for the sub-Antarctic islands give a great deal of attention to biosecurity and quarantine procedures (for example, Australian Antarctic Division, 2005).

Although not aimed at ecotourists per se, the national-level biosecurity regulations developed to prevent the introduction of exotic species in a number of jurisdictions, which provide the basis for border management of what tourists bring into a country, serve a very important role in protecting biodiversity. However, the implementation of border biosecurity controls is something that tends to be undertaken by wealthier, more developed countries and those with substantial agricultural industries that are highly vulnerable to introduced diseases and weeds. Yet, even here the capacity for protecting indigenous biodiversity from alien species will be affected by resource availability. For example, in South Africa, constraints due to insufficient skills, funding and the fragmented nature of the national legal system have been noted as having a profound effect on the abilities of communities to respond to the threats posed by alien species (Day, Witt, Asaba, Simons & Chege, 2010). Such a situation is not unusual given that only 62 countries have established mechanisms to assess, monitor and measure the impact of tourism on biodiversity (Hall, 2010d) and that the capacities to limit international tourism mobility on the basis of biosecurity concerns are limited (Hall, 2011a). Nevertheless, in light of the potential economic, environmental and health risks posed by exotic species, increased attention is being given to prevention of introductions or, if this is not possible, to the development of adaptation strategies.

PREVENTION AND ADAPTATION

The prevention of and adaptation to biological invasion are closely related to the selection of risk management strategies, as the decisions regarding where to allocate scarce resources appear to be based on whichever of the two paths is chosen (Burnett, D'Evelyn, Kaiser, Nantamanasikarn & Roumasset, 2008; Leung, Lodge, Finnoff, Shogren, Lewis & Lamberti, 2002). This suggests that investments in pre-event detection and protection systems (Heikkilä, 2011) can be made if the choice is prevention; conversely, if the decision is adaptation, then strategies designed to work within this dimension to manage and control invasive species population growth (Perrings, 2005) are fundamental to success.

Policy objectives and budget constraints have an effect on strategy selection (Mahul & Gohin, 1999). Prevention strategies aid in damage minimization and help to reduce the level of expenditure required to deal with the aftermath of biological invasions (Gutrich, Wan Gelder & Loope, 2007). The enforcement of tariffs on imported goods is one example of the employment of a common risk reduction strategy (Margolis, Shogren & Fischer, 2005), although in tourism the prohibition of entry to certain foods and meats and souvenirs made of biological material, such as wood, is a more visible strategy. Such preventative approaches are viewed as providing socially optimal outcomes (MacLeod, Evans & Baker, 2002; Margolis et al., 2005).

Another important line of research concerning biological invasion is the level of uncertainty that comes with the introduction of alien species to a natural environment. This has been studied using Zebra mussels in the United States (Leung et al., 2002), a species that has had a substantial impact on recreation and tourism activities, and the Asian longhorn beetle in Europe (MacLeod et al., 2002), which affects forestry and forest aesthetics. The challenges presented by levels of uncertainty have been addressed from an economic perspective through discussions based on protection mechanisms (Burnett et al., 2008; Mumford, 2002), quarantine inspection strategies (Moffitt, Stranlund, Field & Osteen, 2008) and disease resistance (Waage & Mumford, 2008). Cooperation at a sub-state and an intra-state level has served to aid uncertainty by providing increased protection, prevention and strategy optimization (Fernandez, 2008; Perrault & Carroll Muffett, 2001). Deliberative Multi-Criteria Evaluation (DMCE) has been applied to deal with uncertainty in alternative risk management strategies and has been found to be effective in dealing with stakeholder tradeoff decisions based around competing societal goals such as economic benefits and social welfare (Liu, Proctor & Cook, 2010).

Monitoring of invasive species is also important at the sub-state level and in protected areas in particular. Even countries with strong national biosecurity strategies may have weak location-specific processes. For example, there has been criticism of actual monitoring processes in protected conservation areas in Australia where programmes designed to emphasize invasive species and visitor management on both a continental and regional scale appear to be thwarted by a lack of detail and effectiveness in the monitoring of management responses to the impacts of increasing visitor numbers (Buckley, Robinson, Carmody & King, 2008).

Ensuring that the biosecurity policies deliver solutions that are both privately and socially optimal (Hilje & Stansly, 2008) is regarded as being of paramount importance to the development of regulation and legislation regarding invasive species (Albers, Fischer & Sanchirico, 2010; Jones & Corona, 2008; Scalera, 2010). Structuring poli-

cies so that they are both effective and efficient has resulted in a number of different approaches towards policy choice including subsidies (Dehnen-Schmutz, Perrings & Williamson, 2004; Hennessey, 2007), tariffs (Batabyal & Beladi, 2008; Perrings, Burgiel, Lonsdale, Mooney & Williams, 2005), user charges (Blignaut, Marais & Turpie, 2007), ambient tax (Jones & Corona, 2008) and the polluter pays principle (Jenkins, 2001). Tradeable risk permits (Horan & Lupi, 2005) and Pigovian taxes have also come under scrutiny, while incentives designed to provide economically desirable outcomes have also been investigated (Fernandez, 2008). Policy instrument selection ultimately affects the level of control that can be achieved (Gren, 2008), so determining the best policy to be applied to any potentially hazardous situation is critical to providing the most optimal outcome.

CONCLUSIONS AND FUTURE

Due to the many conflicting strategies available to manage biological invasions, there is a distinct need for the development of a universal set of legislative guidelines designed to frame appropriate biodiversity conservation techniques (Wynberg, 2002). Formative approaches towards such guidelines exist within the framework of the Convention on Biological Diversity (1992) and strategies put forward by the Council of Europe (Genovesi & Shine, 2003). Other attempts at defining suitable criteria designed to combat the spread of invasive species resulted in the development of the Community Animal Health Policy (CAHP), released by the European Commission (2006). Perrings, Burgiel, Lonsdale, Mooney and Williamson (2010) contend that conformity with the International Health Regulations (IHR) is important in order to develop mechanisms that allow the rapid dissemination of information on invasive species risks and their impacts. Hall (2011c) argues that many of the international regulatory structures that have been currently developed are only partial measures that rely on voluntary implementation and there are no sanctions for regulatory failure. Indeed, he elsewhere notes that the challenge for the Convention on Biological Diversity as well as for the tourism industry and the destinations that it affects is to find institutional arrangements, policies and economic approaches that actually value biodiversity above other policy demands (Hall, 2011b).

Attempts to prevent the transmission of vector-borne diseases have been hampered by governmental and global management failures (Harrus & Baneth, 2005), which suggests that greater collaboration between government agencies and research institutions could serve to provide a coordinated global legislative and regulatory approach. There may also be positive benefits for tourism in this. In the case of New Zealand, it has been argued that adherence to international environmental treaties and the containment of biosecurity risks are paramount to the protection of the image of New Zealand on the international stage, which is dependent on both tourism and export-led primary production (Lawton & Lawton, 2003).

However, when regulations are implemented in theory, but not adequately enforced, invasive species can continue to flourish. Zenetos, Pancucci-Papadopoulou, Zogaris, Papastergiadou, Varadakas, Aligizaki and Economou's (2009) study of 'Aquatic alien species in Greece' found that international as well as European Union regulations

were not being strictly enforced, and recommended the adoption of public awareness campaigns aimed at users of marine-based resources and stricter surveillance in order to reduce their impacts. Nevertheless, such measures, while useful, may be costly to develop in the short term and therefore difficult to fund in the contemporary economic environment.

Indeed, the combination of economic constraint, lack of ecological awareness of the impacts of invasive species – even in the ecotourism market – as well as a focus by many nature-based tourism organizations on what looks 'natural', as opposed to valuing what the indigenous ecosystem should be, make the incorporation of biosecurity strategies in tourism extremely difficult. There is no doubt that there is a clear relationship between the extent of international trade, including tourism, and the number of invasive alien species in a country (Whestphal, Browne, MacKinnon & Noble, 2008). The risk of biological invasion is only likely to increase further in the future as a result of climate change (Hall, 2010b; Peacock & Worner, 2006), while the potential lag between invasion and impact may mean that the effects of the rapid growth in tourism mobility from the late 1960s on may only be starting to become obvious now in some destinations. There is therefore a real need not only for greater research on the relationships between tourism and biological invasion but also the development of effective strategies to seek to prevent it.

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8. Complex interrelationships between ecotourism and Indigenous peoples

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INTRODUCTION

Proponents of ecotourism have suggested it offers a new way forward for environmentally sustainable development (ESD) (Duffy, 2002). The involvement of Indigenous people in ecotourism can provide positive economic development opportunities for people who are generally marginalized from the broader global economy. In addition, ecotourism can also provide social and environmental benefits for Indigenous people. However, the interrelationships between ecotourism and Indigenous peoples are much more complex and require further investigation. While the consensual involvement of Indigenous people in ecotourism may provide benefits, as discussed in Chapter 24 by Buultjens, Shoebridge and White, there are also a number of Indigenous people who have a non-consensual involvement with the industry. In addition, there are others that have a mindful determination of non-involvement with the contemporary ecotourism industry.

There are a number of issues and challenges around Indigenous ecotourism, of which a key aspect is Indigenous ownership and control (Zeppel, 2006) especially relating to Indigenous peoples' consensual involvement in ecotourism. This chapter explores some of the complexities in the relationships between ecotourism and Indigenous peoples, especially those who are non-consensual participants, those who wish to remain disassociated from ecotourism altogether or those who are unable to participate in the industry. As Bunten (2010) states, many Indigenous peoples around the world remain disenfranchised from the dominant political economy and are unable to take advantage of economic development opportunities afforded through tourism. There are others, however, who deliberately choose not to capitalize on their culture through touristic display.

This chapter outlines some of the core concepts, issues and challenges that underpin this problematic relationship between ecotourism and Indigenous peoples. The chapter begins with an examination of who the Indigenous peoples of the world are and the position they occupy in their countries. This is followed by an overview of Indigenous discourses on the development of ecotourism and discussions around ecotourism being an essentially 'Western' construct. An explanation of how ecotourism often commodifies and exploits Indigenous culture follows. The chapter then explores some core issues that exist in the complex interrelationships between ecotourism and Indigenous people. These include: traditional resource and intellectual property rights; equity and democratic decision making; issues of Indigenous sovereignty; sacred sites and tourism; and allochronic Western views of Indigenous peoples. The next section provides an examination of the

need to ensure Indigenous control, decision making and rights. The chapter concludes with a summary of pertinent points for consideration.

DEFINITION OF INDIGENOUS PEOPLES

There are many terms used to describe Indigenous peoples including Aboriginal, First Nations peoples, Inuit, Metis, First Peoples, Indian, Native and Innu (National Aboriginal Health Organisation (NAHO, 2011)). The United Nations (UN), however, has yet to adopt an official definition despite years of considered debate. This is due to both the great diversity of Indigenous peoples worldwide and the complexity of the term 'indigeneity' (Stephens, Porter, Nettleton & Willis, 2006; UN, 2004). Contentious debate also continues in some quarters over whether the concept of indigeneity is a legitimate term as some have argued that all people are indigenous to somewhere (Stephens et al., 2006).

One of the most cited definitions of Indigenous persons to date is that offered by José Martinez Cobo (1984, Supra 1, paragraphs 379–82):

> Indigenous communities, peoples and nations are those which, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of the societies now prevailing on those territories, or parts of them.

An Indigenous person is one who self-identifies as Indigenous and is recognized and accepted by their Indigenous population as one of its members. Indigenous people around the world are considered to have a long-standing historical association with their land and culture. They either occupy or part occupy their ancestral land, or they have common ancestry with the original occupants of the ancestral land; continue to practice their culture, or specific manifestations of culture, such as dress, religion or lifestyle; or continue to speak their Indigenous language (Cobo, 1984).

INDIGENEITY

Some Indigenous peoples, such as those from Australia, New Zealand and Canada, are widely accepted as being these countries' first recorded human occupants. However, in other countries, for example, those within Africa, due to events such as apartheid, genocide and European settlement, Indigenous lineage may be unclear and indigeneity has been challenged (Stephens et al., 2006). These different experiences have resulted in Indigenous peoples' claims to indigeneity varying greatly between countries. For example, the Maori people of New Zealand negotiated *The Treaty of Waitangi* in 1840, protecting future ownership of their land and resources; however, their Aboriginal Australian neighbours are still in the process of claiming Native Title rights to land. Within the Asian countries of China and India, government policy has been purposefully created to undermine people's claims to indigeneity (Oguamanam, 2006), while in Northern Europe, the Indigenous Saami or Lapland

people have managed to resist the dominant polity and assert their rights to indigeneity (Oguamanam, 2006).

INDIGENOUS PEOPLES OF THE WORLD

Indigenous peoples possess some of world's richest and most unique cultures, traditions, language and social capital; yet have a long history of being the world's poorest, most marginalized and socially excluded people (Borland & Hunter, 2000; Kuhn & Sweetman, 2002; Maani, 2004; RCADC, 1991; Sorkin, 1970, 1974). The World Bank estimates a global Indigenous population of approximately 370 million, equivalent to 5 per cent of the world's population, living in some 70 countries worldwide (IFAD, 2011; World Bank, 2010).

According to World Bank estimates, Indigenous people account for at least 15 per cent of the world's poorest people (World Bank, 2010). As a direct result of poverty, many Indigenous peoples face enormous disparities in terms of access to health, access to education and comparable mortality rates. Worldwide, Indigenous peoples face discrimination, exclusion from social, political and economic development and process, and the violation of human, social and political rights (IFAD, 2011), with women and youth facing additional challenges due to age and gender (Lewis & Lockheed, 2006; UN, 2010).

The poverty and discrimination continues despite the efforts of the UN. In 2000, the UN's Millennium Declaration was designed to halve the rate of extreme hunger, poverty and disease by the year 2015. In 2007, *the United Nations Declaration on the Rights of Indigenous Peoples* was adopted (UN, 2008). However, at the time, despite 144 nations voting in favour, Australia, New Zealand, Canada and the USA voted against the Declaration (UN, 2011). The declaration is a non-binding agreement that outlaws discrimination against, and emphasizes the individual and collective rights of, Indigenous peoples (Lai, 2010; UN, 2008).

ISSUES OF EQUITY, LAND AND GLOBALIZATION

Despite being the custodians of ancestral lands containing some of the world's richest natural resources, the lack of social, economic and political equity granted to Indigenous peoples has resulted in precarious Indigenous control over their land and resources. As a consequence, Indigenous peoples are often unable to utilize their resources and assets in order to secure their futures and find a way out of poverty (IFAD, 2011).

Minority commercial interests in natural resources such as mining, timber, oil and food production have led to the dispossession of many Indigenous peoples, and has left many environmentally fragile Indigenous ancestral lands in threat of deforestation, pollution and destruction (IFAD, 2011; Sethi, Lowry, Veral, Shapiro & Emalianova, 2011). In addition to environmental and economic impacts, the environmental destruction of ancestral lands has great cultural and spiritual ramifications for Indigenous peoples. The complex spiritual relationship between people and land is shared by many different Indigenous cultures around the world, and is a relationship many non-Indigenous peoples find difficult to comprehend (UN, 2001). For Indigenous cultures, land is central

to their belief systems and societies: 'Indigenous peoples have emphasized that the spiritual and material foundations of their cultural identities are sustained by their unique relationships to their traditional territories' (Gupta, 2005, p. 44).

Globalization also poses a threat to Indigenous culture as it provides the opportunity for 'Western' countries to easily access, sell and commodify cultural practices. Some academics have suggested that globalization 'gives rise to the possibility of new invasion' (Smith, Burke & Ward, 2000, p. 2) and the ecotourism industry is largely implicated in this cultural invasion.

ECOTOURISM: A WESTERN CONSTRUCT

The natural environment is conceived, and socially and culturally constructed in differing paradigms around the world. As Oguamanam (2006, p. 50) argues, 'Indigenous conceptions of the natural environment are sites of epistemological conflict between the colonizer and the colonized, the Western and the non-Western.' This conflict naturally spills over into constructions of ecotourism since its core emphasis is on the natural environment.

Poirier (2007) suggests that in many countries ecotourism structures have an 'imperial view' of land that is divorced from meanings derived by Indigenous experiences. In terms of the formal structures that define and market ecotourism, Buultjens, Gale and White (2010) argue that the paradigm of ecotourism accreditation agencies may be that of a colonialist or Western-style viewpoint of what constitutes nature. As such, the ecotourism–Indigenous tourism nexus is likely to diverge owing to different societal worldviews.

Cater (2006, p. 24) describes the Western vision of ecotourism as a form of cultural hegemony:

> because the origins of ecotourism lie in Western ideology and values, and its practice is frequently dominated by Western interests, the advocacy of ecotourism as a universal template arises from Western hegemony. This is reflected in the institutionalisation of ecotourism through influential and powerful, supranational organisations, Western donor agencies, INGOs [international non-governmental organizations], NGOs and industry alliances, often working in partnership which strengthens their influence yet further.

However, in arguing that the concept of ecotourism is a Western construct, it is important to acknowledge that 'the West' has Indigenous knowledge of its own. Western and non-Western knowledge systems cannot be easily separated or delineated, and to do so can be contentious (Oguamanam, 2006). For some Indigenous peoples, such as those in Northern Europe, it is particularly difficult to tease apart Western and non-Western knowledge due to the fluid and amorphous nature and history of knowledge in that region. Indigenous groups of Norway, Finland, Sweden and Russia in the European Arctic region, for example, continually assert their indigeneity in a geographically Western world.

Despite the presence of Indigenous people in Western countries and an increasing influence in their voice, a challenge for the ecotourism industry is to engage Indigenous people globally in determining what the industry encompasses. At the present time it is apparent that many Indigenous people either feel disassociated or deliberately

disassociate themselves from the Western constructions of ecotourism and their structures. For example, Buultjens et al. (2010, p. 507) found that a substantial majority of Indigenous Australian operators did not see themselves as 'being in ecotourism, and in fact, many would not have an understanding of the ecotourism market'.

While the Western conception of ecotourism claims to be able to provide a variety of developmental benefits to Indigenous people and communities, Duffy (2002, p. 99) argues 'in the end it is part of a wider system that actually frustrates their development and their (Indigenous) capacity to engage in genuine participation in local, national and global political and economic processes'. Ecotourism is deeply political as a development strategy (Duffy, 2002), as can be seen from the Indigenous Declaration from the International Forum on Indigenous Tourism, discussed later in this chapter. Additionally, the hegemony alluded to earlier in this chapter adds to the political complexity, particularly in the developing world, as Duffy (2002, p. 101) asserts, 'there is an added layer to the politics of tourism because of memories of colonial control'. Zeppel (2006) suggests that an ecotourism framework incorporating political factors including Indigenous land rights is important, since it is ownership and control over a country that enables Indigenous people, amongst other things, to develop economically.

This Western appropriation of ecotourism has drawn considerable criticism. For example, Johnston (2005, p. 52) states:

> From an international perspective there is no greater threat to Indigenous Peoples today than industrial ecotourism. The ecotourism industry creeps into the deepest recesses of culture and community life. It impacts the full spectrum of rights and is responsible for rights violations on all levels. Globally, no other industry single-handedly endangers the spiritual core of Indigenous cultures to such an extent.

In view of this criticism it is little wonder that Indigenous people around the world would want to deliberately disassociate themselves from ecotourism.

The Western concept of ecotourism can also result in the exclusion of some Indigenous peoples. A number of formal Western ecotourism accreditation schemes can come into direct conflict with Indigenous ways of knowing about the environment. For example, Buultjens et al. (2010) argue that the non-consumptive principles of ecotourism are a particularly thorny issue in the relationship between ecotourism and Indigenous people. The consumptive activities of some Indigenous people may preclude them from gaining ecotourism accreditation and this is unlikely to fit well with how Indigenous people perceive 'ecotourism' (see Nepal, 2004) and is in opposition to the intentions of ecotourism. This view is also supported by Miller (1996).

The tendency to use Western, science-based accreditation schemes has the effect of sidelining non-Western ways of knowing. Oguamanam (2006, p. 57) suggests that mechanisms that have been designed to encourage and reward ecologically friendly practices are 'not presented in terms familiar to indigenous or local epistemic approaches to the natural environment'. Traditional knowledge is a multifaceted knowledge system evolving from a socio-cultural conception of a worldview in which spiritual and ecological harmony is central (Oguamanam, 2006). The concept of traditional knowledge is elastic (Oguamanam, 2006). Similarly Indigenous ecotourism, as it embodies traditional knowledge, is an elastic concept as well. A working definition can thus be favoured, thereby defining Indigenous ecotourism with regard to the cultural context. This restructuring

of the meaning of ecotourism may attenuate the Indigenous cultural context and break down some of the barriers that bring about Indigenous disassociation with ecotourism.

INDIGENOUS DISCOURSES ON THE DEVELOPMENT OF ECOTOURISM

In comparison to the plethora of non-Indigenous academic literature on the development of ecotourism, the voice of Indigenous peoples is relatively quiet. This is unsurprising as Smith (1999, p. 29) argues, 'having been immersed in the Western academy which claims theory as thoroughly Western, which has constructed all the rules by which the indigenous world has been theorised, indigenous voices have been overwhelmingly silenced'. The Indigenous voices that do exist on Indigenous ecotourism present an interesting dichotomy of views. For example, while some Indigenous people note the benefits from ecotourism (Anon, 2006) there are a number of Indigenous voices that are very critical of the impacts from ecotourism (for example, Chavez, 1999).

The benefits from ecotourism are identified by Buultjens, Shoebridge and White in Chapter 24. They include: the protection of Indigenous culture through the transference of traditional knowledge and skills to young people; reconnecting people to land through traditional activities; enhancing legal claims to traditional land (Colton, 2005); protecting ancestral lands from more destructive industries such as logging; increased Indigenous community wellness, pride and self-esteem through re-establishing cultural identity; and enhanced health of youth due to lower drug and alcohol consumption directly resulting from participation in the ecotourism industry (Colton, 2007).

Despite the perceived benefits, the criticism of ecotourism and its impacts is considerable. For example, the *Declaration of the International Forum on Indigenous Tourism* held in Oaxaca, Mexico, in March 2002, strongly criticizes the UN International Year of Ecotourism (IYE). This document, a powerful joint statement from Indigenous representatives from 13 countries, raised a number of perceived failings of IYE and attempts at ecotourism and sustainable tourism in general. The Forum noted that IYE 'does not go far enough' and that ecological degradation and cultural erosion associated with tourism development are being experienced under the influence of globalization (International Forum on Indigenous Tourism, 2002, p. 1). Another area for concern was that the IYE had 'not sought to involve an informed participation of Indigenous representatives in its planning'. The Forum also strongly disagreed with IYE's 'most basic assumptions that define Indigenous communities as targets to be developed and our lands as commercial resources to be sold on global markets' (International Forum on Indigenous Tourism, 2002, p. 1).

The Indigenous tourism representatives in Oaxaca voiced a number of concerns that also appear regularly elsewhere in the debate surrounding Indigenous people and ecotourism. Clearly the representatives were aggrieved at what they perceive as lack of Indigenous participation in IYE planning. Other criticisms by the Forum include the fact that the tourism market can result in the appropriation of Indigenous lands and the treatment of Indigenous peoples as consumer products. The Forum members also suggest that tourism can result in the corruption or loss of traditional knowledge, and renders their traditional knowledge vulnerable. According to the Forum, successful

tourism projects are those that are based on Indigenous self-determination and ensure that biological and cultural diversity, Indigenous sacred sites and rituals, and collective property and traditional resource rights are protected.

Another critic of tourism, Chavez (1999), has similar views to the Forum members and notes that while ecotourism is a relatively new phenomenon, it has existed for a long time in Africa. He argues that in Africa 'tourism's effects on indigenous peoples have been profound: wide scale eviction from their lands, economic dislocation, breakdown of traditional values, and environmental degradation' (Chavez, 1999, p. 1). Similarly, Kamuaro (1996, p. 59) argues that the tourism industry has not acknowledged or supported Indigenous peoples' struggle 'for cultural survival, self-determination, freedom of cultural expression, rights to ancestral lands, and control over land use and resource management'. However, it is not clear if Chavez's and Kamuaro's criticisms are based on Africa's and other developing countries' experience with ecotourism or tourism generally.

In developed countries similar concerns are also voiced. For example, the Alaska Native Science Commission (2011), while acknowledging the potential benefits from ecotourism, also identifies some negatives. This results in their 'ambivalence' towards the industry. Major problems from the Commission's viewpoint are the non-Indigenous provision of cultural product, the 'crossing of Native lands' by ecotourists as well as the issues around consumptive practices of Indigenous people.

COMMODIFICATION AND EXPLOITATION OF CULTURE

The promotion of Indigenous peoples' culture in ecotourism products and marketing is essentially a commodification of culture, that is, turning that which has intrinsic value into a commodity of economic value. Arguably there are positive aspects of the inclusion of Indigenous culture in ecotourism products. As Ryan and Aicken (2005, p. 70) suggest, if 'threats exist to the perpetuation of a culture, the opportunity to have that culture recognized and honoured as possessing value to the mainstream of society is one that restores a sense of pride and ownership to a subordinate group'. Duffy (2002, p. 112) presents an example of this in Belize: 'Conejo Creek in the SarstoonTemash area has re-established its traditional deer dance with funding from the Kekchi Council of Belize. This funding allowed them to rent costumes from Mayan communities in Guatemala that still practised the dance. However, Mayan leaders have pointed out that these rituals and traditions should be revitalized to ensure that Mayan culture will continue, not simply for ecotourist consumption.' This situation is an example where the benefit of revitalization of cultural practices is offset by economic reality: the cultural practice is commodified in order for the tradition to continue. Duffy (2002, p. 111) continues:

> Mayan organizations have raised objections to the ways in which Mayan culture has been packaged for ecotourist consumption. Mayan villages constitute a major cultural attraction for international visitors. Traditional Mayan crafts are particularly sought after by international ecotourists, and Mayan communities have actively responded by developing wood and stone carving, basket weaving and textile production. One of the difficulties with this is that Mayan crafts are then divorced from their cultural and religious context, and thereby lose a great deal of their significance.

It is important to question how Indigenous culture has been incorporated in ecotourism products, and the effect this has on cultural context. In the example above, the cultural and religious context and significance of Mayan crafts are lost or diminished through the process of making the items specifically for ecotourists. It is equally important to ask on whose terms Indigenous culture has been commodified; who has authorized it; and under what authority. Johnston (2005, p. 86) claims that:

> Whether an eco-tour is purely nature oriented or includes ethnic components, chances are that the local Indigenous culture(s) will be featured in the marketing package and/or trip itinerary without community permission, input or equitable exchange. This unauthorized use of culture for marketing is one of the ethical issues raised time and time again by Indigenous Peoples.

While the potential benefits of community-based ecotourism that incorporate Indigenous culture have been identified by a number of authors (see Colton, 2005, 2007; Colvin, 1994; Weaver, 2001), it is important to recognize that serious concerns have been raised about the customization and commodification of Indigenous culture for consumption by ecotourists. As Johnston (2005, p. 84) has claimed, 'globally, no single industry is more implicated in commercializing culture than ecotourism . . . worldwide, the ecotourism industry aggressively appropriates and commodifies Indigenous cultures'. This aggressive commodification of Indigenous cultures in the name of ecotourism, particularly where culture is non-consensually usurped, is a practice that is damaging to Indigenous people and to the reputation of ecotourism. It is an issue that must be addressed and resolved for the benefit of Indigenous peoples and the ecotourism industry.

TRADITIONAL RESOURCE AND INTELLECTUAL PROPERTY RIGHTS

The global expansion of tourism into remote areas and Indigenous lands has increased concern for the sustainability of tourism particularly in terms of the impacts on Indigenous groups (see, for example, Duffy, 2002; Johnston, 2000, 2005; Mowforth & Munt, 2003; Zeppel, 2006). Ecotourism products and marketing collateral that incorporate Indigenous intellectual property or traditional knowledge without appropriate Indigenous control or authorization in place are effectively appropriating the intellectual property rights and traditional knowledge of Indigenous people. Apart from being unlawful, this type of tourism, which could be described as Indigenous-themed tourism, is very different to Butler and Hinch's (1996) description of Indigenous-controlled tourism.

The practice of appropriating intellectual property rights and/or traditional knowledge also conflicts with the tenets of ecotourism and as such ought not to be declared as 'ecotourism'. Nature-based tourism enterprises that fail to consult with Indigenous people, fail to seek permission for access to their lands and fail to follow cultural protocols result in a perceived lack of respect for traditional custodians (Smith, Scherrer & Dowling, 2009). Traditional knowledge of Indigenous peoples is considered to be an 'integral part of their being and identity' (Oguamanam, 2006, p. 4) and in order for ecotourism to meet its own standards, intellectual property rights and traditional knowledge must be respected.

Indeed, in almost all Indigenous cultures, there are 'customary rights for the protection of knowledge' (Oguamanam, 2006, p. 202). Within these Indigenous cultural groups there are protocols as to who holds knowledge and how it must be protected. Therefore, in order for traditional knowledge to be presented or utilized in ecotourism, operators must acknowledge that this knowledge is 'a concept riddled with cultural dynamics and complexities' (Oguamanam, 2006, p. 30). Ecotourism enterprises, including marketing bodies, must seek to ensure that they are truly authorized to utilize any forms of traditional knowledge. The other factor that operators must be cognizant of is that not 'all indigenous knowledge is communal or collectively held' (Oguamanam, 2006, p. 30).

In addition to intellectual property rights, traditional resource rights can present another point of possible conflict between Indigenous peoples and ecotourism, for example, around the issue of consumptive use of wildlife. Hinch (2001, p. 352) identified the likelihood of conflict 'should a group of ecotourists stumble across the harvesting of wildlife while they are visiting an indigenous territory'. Similarly in the Australian context, Buultjens et al. (2010, p. 509) felt that 'a number of ecotourism consumers would find it very difficult to accept the harvesting of certain species, and this situation would have to be handled with great care and sensitivity. Additionally, the burning of bush-land, which is common in indigenous land management . . . may cause distress and confusion amongst ecotourists.' However, as the Alaska Native Science Commission (2011, p. 1) assert, from an Indigenous viewpoint 'in some circumstances, conservation of wildlife and other natural resources is viewed as antagonistic to economic development and improving the economic lot of local areas and citizens'.

Indigenous traditional resource rights also extend to land rights. For example, in Belize, the 'history of exclusion has meant that ecotourism in Toledo has provoked demands from Mayan organizations for the recognition of indigenous land rights. This has meant that community-based ecotourism has become intimately bound up with one of the most politicized issues in Central America' (Duffy, 2002, p. 113).

EQUITY AND DEMOCRATIC DECISION MAKING

Ecotourism enterprises that enhance rather than diminish equity are needed in order for the ecotourism industry to meet its core principles. Unfortunately this is not always the case. In terms of providing local benefits, Cater (2006, p. 30) asserts that benefits from the industry may be limited because active local participation in ecotourism is 'overwhelmingly confined to low-skilled, low paid, often seasonal, employment'. Baum (Chapter 21, this volume) also discusses this aspect of ecotourism. In addition to poor employment outcomes, Cater also notes that within a community, tourism can widen the gap in equity between those who are engaged in the ecotourism industry and those who are not. So while remuneration can often be relatively limited in ecotourism, this income can still create increased economic inequality.

Inequity can also be exacerbated by decision making processes that are inherently embedded with power relations. As discussed earlier, Indigenous people are often economically and politically marginalized and this can put them at a disadvantage in their engagement with the ecotourism industry. Unless Indigenous people are truly empowered, then decision making can occur without the input of Indigenous individuals

and groups. Therefore, despite the accepted acknowledgement that community-based ecotourism should involve a high degree of public participation, a number of 'critics have pointed out that communities very rarely have the right or opportunity to say no to government-inspired schemes. In this way, community-based ecotourism can in fact end up serving the interests of local and global elites because the political nature of decision making processes can often cut out communities and their interests' (Duffy, 2002, p. 103).

An example of this political disenfranchisement is provided by Cater (2006, pp. 27–8). She describes a situation where Conservation International has been 'advocating corporate schemes, including tourism and ecotourism, which give total management control to the private or NGO sector. In doing so they fail to recognize existence of village conservation movements opposing development projects' (Mowforth & Munt, 2003, cited in Cater, 2006, p. 27). Conservation International's links with the World Bank has led the Bank to adopt this approach with deleterious impacts for Indigenous peoples.

Despite the importance of the involvement of Indigenous people in decision making, it may not necessarily be a panacea to the issues arising in the development of the Indigenous ecotourism industry. For example, Farrelly (2011) found that in Fiji, the introduction of democratic decision making systems may have been deleterious to political empowerment in community-based ecotourism management. In the case of the Lavena Backpacker Lodge and Coastal Walk in Fiji, the introduction of a democratic decision making process in lieu of traditional decision making systems, contributed to confusion and political disempowerment for community members. Community members felt incapable of making fully informed decisions due to a perceived lack of transparency and authorization.

ISSUES OF INDIGENOUS SOVEREIGNTY

Another major issue surrounding the involvement of Indigenous people in decision making is determining the legitimacy of Indigenous ownership in different situations. Indigenous peoples are generally regarded as tribal or native groups still living in their homeland areas (Zeppel, 2006). However, a number of Indigenous people have been displaced and this may impact on their ability to participate in decision making around Indigenous ecotourism. This question of legitimacy remains complex and uncertain (Oguamanam, 2006).

An example of this uncertainty and complexity can be found in Africa where European powers effectively undermined the natural boundaries of traditional African societies by 'merging or partitioning them arbitrarily under the alien concept of the Westphalian state' (Oguamanam, 2006, p. 70). This means that identifying or self-identifying indigeneity is far from a simple matter. The difficulty in identifying the legitimacy of Indigenous ownership can have important implications for the way the ecotourism industry is managed in a location since there may be differences in the way different Indigenous communities wish to have their heritage presented by tourism enterprises. For example, Keitumetse (2007, p. 109) argues that conflicting debates about the categorization of the San people from Botswana as Indigenous are perpetuated by a profound failure by the Botswana government and Survival International to 'look at the root of

their problem which is variation in perception of what constitutes cultural difference of these communities'.

Another example where the uncertainty and complexity around Indigenous legitimacy can be problematic is provided by Duffy (2002). In the Toledo district of Belize, some of the Mayan communities are split between Mopan and Kekchi Maya:

> and there is some dispute over their nationality and origin. Mopans are generally accepted to have lived in Belize over a very long period, possibly since before the arrival of colonial settlers. It is unclear whether Kekchi are recent settlers fleeing from persecution in Guatemala, or whether they are the same as the Mopan, who have a recognized historical right to live in Belize. (Duffy, 2002, p. 114)

The uncertainty surrounding the legitimacy of some of these communities may result in conflicts between different Indigenous groups who contest the legitimacy of other Indigenous groups' claims. This conflict will pose phenomenological barriers that hinder some Indigenous communities from engaging effectively in Indigenous ecotourism.

Issues around legitimacy of Indigenous ownership have also occurred in other countries. For example, Oguamanam (2006, p. 70) argues that in Asia there is a 'deliberate policy of undermining claims to indigeneity, especially by the two populous countries of India and China'. This apparently state-sanctioned denial of indigeneity can further exacerbate the complexity in the relationships between Indigenous peoples and the ecotourism industry.

SACRED SITES

The importance of the involvement of Indigenous people in decision making and the recognition of their rights to manage and control access to sacred sites is a very important issue globally. The importance of sacred and ceremonial sites is shared by many Indigenous people and these sites are considered sacred because of the 'function they serve in exercising ancestral title' (Johnston, 2005, p. 120). In an assessment of the impact of the *United Nations Draft Declaration on the Rights of Indigenous Peoples* on the interests and the operations of the tourism industry, Higgins-Desbiolles (2007, pp. 89–90) found that the Declaration 'blocks access to and affords protection of Indigenous sacred sites from non-Indigenous people. Conversely, it demands Indigenous access to sacred sites that are under the ownership of others.' However, while this protection and assurance appears to augur well for Indigenous peoples' relationship with sacred sites, various complexities, ambiguities and compliance issues may stymie universally positive outcomes from the Declaration. Johnston (2005, p. 121) argues that problems may arise due to differing interpretations of what constitutes a sacred site: 'to most world governments, a sacred site . . . is interpreted and handled as site specific rather than on a territorial basis. This may lead to legislation recognizing a single confined site. However, safeguards are hard to secure since colonial courts belittle Indigenous Peoples' oral testimony on ancestral title.' Thus, ecotourism activities may still occur within sacred sites, regardless of Indigenous consent.

Meanwhile, some ecotourism enterprises have become embroiled in disputes with Indigenous customary authorities over access to sacred sites (Johnston, 2005). For

example, the Dumbartung Aboriginal Corporation Wall of Shame website specifically rejects ecotourism because it does impact on sacred sites (Ryan, 2005). International rock-climbing destinations such as Mato Tipila (known as Devil's Tower National Monument, USA) and De-ek Wadapush (known as Cave Rock, USA) are frequented by tourists 'despite Lakota and Washoe declarations that recreational use is sacrilegious' (Johnston, 2005, p. 125).

Likewise in Australia, many tourists continue to climb Mt Warning/Wollumbin in Northern New South Wales despite signage advertising the wishes of Indigenous Australians that it not be climbed due to its spiritual significance (Gale & Buultjens, 2007). Also, in Australia people continue to climb Uluru (see McKercher & du Cros, 1998) despite substantial signage at the base of the rock and details on the internet indicating that the Anangu (the local Indigenous people) would prefer that people do not climb the rock. This practice continues despite the Anangu having a majority presence on the Uluru-Kata Tjuta National Park Management Board.

Reversing the previous impacts of ecotourism on sacred sites is not possible; however, remediating the current situation and preventing future impacts from ecotourism is certainly a matter of urgency. It is of great concern to Indigenous people that the impacts of tourism may affect their capacity to practise their traditional ceremonies and customs, and their ability to impart traditional knowledge to future generations (Mercer, 1998; Midgley, Spennemann & Johnston, 1998).

ALLOCHRONIC WESTERN VIEWS OF INDIGENOUS PEOPLES

Allochronism is a term used by Fabian (1983) to describe the placement of 'the Other' in a different time to ourselves. Rather than being viewed in a contemporaneous sense, as living cultures, Indigenous people are often viewed as living in primitive societies and past civilizations (Kowal, 2010). This allochronic distancing is also framed in the literature as 'temporal imperialism' and 'chronopolitics' (see Adam, 2004; Fitzpatrick, 2004). Bunten (2010, p. 289) claims that some Indigenous groups have considerable experience of 'Western practices of representing them as "the Other," practices that originated in the nineteenth century and have been carried to the present'. Many examples exist of this allochronic view of Indigenous people in tourism and ecotourism product marketing and delivery.

In a case study of ecotourism in Queensland, Australia, Peace (2005) identified discourse that placed Aboriginal people in this allochronic frame. Sofield (2002, p. 119) also recognized marketing stereotypes that depict all Australian Aboriginal people as 'primitive' desert nomads (the 'noble savage'). Sofield (2002, p. 119) argues that this 'perpetuates only one form of Aboriginal cultural expression and denies the diversity of contemporary Aboriginality . . . nostalgia for the past and marketeers' preoccupation with "the exotic other" ignores contemporary expressions of Aboriginal culture, emphasizing a hiatus between the Aboriginal past and present'.

In Belize and other Central American states, the images of Mayan culture used by governments to attract ecotourists show Mayans 'as being untouched by modernity, living a simple, agrarian life, wearing traditional clothing and engaging in age-old spiritual rituals. Of course, the reality of life for Mayan communities is significantly more

complex. Most Mayan people experience social, political and economic marginalization, and even exclusion' (Duffy, 2002, p. 113).

Many other examples of allochronism exist around the world at sacred sites that are depicted as 'archaeology', preserved in a historical state that has little or no connection to existing Indigenous people. Ceremonial items found at sacred sites are 'described as "artefacts". They are cast as "heritage" of mankind [sic], rather than active centres of ceremony and spiritual connection. This is a linguistic coup with far-reaching implications. Such language is a potent form of extinguishment. It symbolically erases not just land rights, but also Indigenous Peoples' (Johnston, 2005, p. 123).

While allochronism is the placement of 'the Other' outside the dominant flow of time, homochronism places them within it, displacing them from their own distinctive temporalities (Kowal, 2010). Homochromism can lead to a focus on conservation rather than preservation, and acknowledges living contemporaneous Indigenous cultures. This approach also challenges the 'widespread misconception that Indigenous peoples are inherently antigrowth, a stereotype that often stymies policy change and prevents Indigenous communities from taking part in the global economy on their own terms' (Bunten, 2010, p. 287). It is important that Indigenous peoples and traditional knowledge is not viewed or portrayed as antiquated and static (Oguamanam, 2006) in any realm, including ecotourism, and as such a homochronic approach to temporality is necessary to appropriately represent Indigenous peoples and their living cultures.

INDIGENOUS CONTROL, DECISION MAKING AND RIGHTS

According to the doctrine of Agenda 21, the UN action plan for sustainable development, sustainable development 'will only be achieved through planned democratic, cooperative means, including community involvement in decisions about the environment and development' (Leonard & Barry, 2010, p. 185). While Indigenous tourism ideally 'involves native people negotiating access to tribal land, resources and knowledge for tourists and tour operators' (Zeppel, 2006, p. 2), what happens when this negotiation is unsuccessful, incomplete or flawed? Further, as legitimate citizens and 'holders of collective and human rights, including . . . effective participation' (International Forum on Indigenous Tourism, 2002, p. 1), Indigenous peoples have the right to participate in sustainable tourism development planning, at least at the local scale under the tenets of Agenda 21. This right to participation should exist regardless of whether Indigenous peoples have any intention of becoming directly involved in ecotourism themselves.

One of the problems with participation in tourism planning is that participatory planning attempts to select representative stakeholders, and commonly an Indigenous person or group is selected or nominated to represent all Indigenous people in a given area. However, as discussed previously, establishing the legitimacy of Indigenous ownership can be problematic. In addition, in any collective group, it can often be difficult for a single person/entity to represent the views of all of the people they are expected to represent. Also it is erroneous to suggest that all Indigenous knowledge is communally or collectively held (Oguamanam, 2006) or that there would be consensus on issues around the development of ecotourism in an area that is important to Indigenous people.

Sofield (2002) identified a number of circumstances that may affect an individual's or

community's willingness to authorize tourism activity through research conducted in the far north of Queensland, Australia. Sofield (2002, pp. 119–20) found, for example, 'some individuals, clans, or communities may make a conscious decision not to participate in a venture even if the prospects for success are high because of socially imposed, obligatory "contributions"'. In addition, it may be felt that an 'increased inflow of tourists may disrupt a community's willingness, or ability, to undertake traditional pursuits such as hunting or the performance of rituals and ceremonies'. Finally, it may be felt that 'involvement with tourism might cause a shift in the traditional structure of authority or changes in gender roles or intergenerational relations' within a community.

As can be seen in the writings of Sofield, decision making by Indigenous people surrounding ecotourism goes beyond the obvious questions of whether to participate or not. Decisions are also made about undertaking traditional pursuits, such as hunting. As mentioned previously, other authors have identified the likelihood of distress if the ideals of ecotourists come into conflict with these traditional pursuits (Buultjens et al., 2010; Hinch, 1998, 2001). Indigenous hunting and the use of fur, for example, has been contested by environmental organizations. These elements of traditional practice then sometimes disappear from the cultural heritage that is displayed or is for sale, whether intended for ecotourists' consumption or not (Muller & Pettersson, 2005). These influences affect the cultural practices of Indigenous people who are not consensually involved in ecotourism, as well as those who are. It is questionable as to whether the right to self-determination is upheld in such instances and whether ecotourism is enabling the conservation of local culture.

Clearly, the ability of Indigenous people to take control and make decisions regarding the management of ecotourism, whether they are direct participants in the industry or not, will depend on their level of empowerment. Johnston (2002) argues that Indigenous rights to self-determination are central to traditional ecosystem management that can contribute to ecotourism. The *United Nations Draft Declaration on the Rights of Indigenous Peoples* calls for Indigenous participation in decision making at all levels in the decisions that affect them (Higgins-Desbiolles, 2007). However '(i)n most cases, Indigenous Peoples lack the political stature and financial wherewithal to initiate talks with government or the tourism industry over sacred sites misappropriation' (Johnston, 2005, p. 123) and over the management of an industry that can have substantial impacts on their lifestyles. The ecotourism industry and all its stakeholders must ensure, in order for the industry to live up to its ideals, empowerment of Indigenous people. They must be given control over the crucial elements of the industry that affect them.

CONCLUSION

This chapter has outlined some problematic issues associated with the interrelationships between Indigenous peoples and ecotourism. Unfortunately there is no simple remedy for addressing some of the negative aspects of these interrelationships. As Duffy (2002) has identified, the genuine participation by Indigenous communities and individuals in ecotourism is intrinsically linked with national and global political processes. In some cases the deleterious effects of ecotourism are acknowledged by the industry. The executive director of The International Ecotourism Society (TIES) stated in 2004: 'Under

the rubric of ecotourism, far too many indigenous communities have continued to lose their land, found jobs to be often menial and training minimal, and seen far too much "leakage" of tourism dollars' (Honey, 2004, cited in Johnston, 2005, p. 308). Still, there appears to be no substantive record of the losses incurred by Indigenous peoples due to appropriation of their land, cultures and cultural practices by ecotourism (Johnston, 2005).

It has been claimed that '(e)cotourism recognizes the special cultural links between Indigenous peoples and natural areas' (Zeppel, 2006, p. 2). However, this chapter has provided arguments that challenge this claim. In order for the future interrelationships between ecotourism and Indigenous people to be more positive, 'it must be ensured that ecotourism plans adequately consider the needs, aspirations and values of indigenous communities, and protection of natural resources' (Nepal, 2004, p. 175). The balancing of Indigenous and non-Indigenous worldviews is crucial for a sustainable future for the industry and to minimize negative impacts and provide real benefits for Indigenous people.

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9. Ecotourists: who are they and what should we really call them?

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INTRODUCTION

In this chapter, we critically review definitions and operationalizations of the ecotourist and investigate whether the operationalizations used in empirical studies match the theoretical definitions. Results indicate that both definitions and operationalizations differ substantially across studies and that operationalizations used in empirical studies frequently are not in line with the definitions specified by the same authors. Therefore, there is currently no common understanding of who the ecotourist really is. This lack of common understanding appears to be due to different positions taken with respect to two key criteria: the ecotourist's interest in nature and their level of environmental sustainability. We propose a simple naming convention that provides clear guidelines for future researchers with respect to both the definition and the operationalization of ecotourists.

In 2008, Dolnicar, Crouch and Long asked the question how much we actually know about tourists who behave in an environmentally friendly way, concluding that 'operationalisations of EFTs [environmentally friendly tourists] are inconsistent and, at times, do not ensure that EFTs are actually studied, thus jeopardizing the quality of cumulative knowledge on this critical issue. There is little insight into who EFTs are' (p. 197). The aim of the present chapter is to follow the same pattern of analysis and investigate how much we know about ecotourists and whether there is a consensus on how ecotourists are defined and operationalized in empirical studies.

The chapter commences by reviewing the original literature on ecotourism, and then reports on a review of recent work in the area of ecotourism that reveals current understandings of who the ecotourist is. The chapter concludes by proposing a simple naming convention that provides guidance to future researchers. Hopefully, the simplified naming convention will lead to more systematic development of empirical knowledge about ecotourists in the future. The references of the reviewed papers can be obtained from the authors.

HISTORIC DEFINITIONS OF THE ECOTOURIST

Hetzer (1965) was one of the first to present a definition of ecotourism, with a focus on the area where the tourists travel. Hetzer viewed ecotourism as based principally upon natural and archaeological resources such as birds and other wildlife, scenic areas, reefs, caves, fossil sites, archaeological sites, wetlands and areas of rare or endangered species. This definition thus focuses entirely on the aspect of enjoyment of nature.

Decades later, scholars characterized ecotourism as either nature-based travel and/or travel to undisturbed areas with an emphasis on education, experience or appreciation (for example, Boo, 1991; Wight, 1993). Again, this set of definitions emphasized nature and the dimension of learning about nature. A slightly broader view was taken by Ceballos-Lascurain (1988) including not only nature and learning about nature, but also learning about culture. All these definitions of ecotourism, and thus ecotourists, have one thing in common: they do not mention the environmental conservation aspect.

Similarly, the World Travel and Tourism Environment Research Centre in its *World Travel and Tourism Environment Review 1993* defined ecotourism as tourism with the specific motive of enjoying wildlife or undeveloped natural areas (WTTERC, 1993), thus not distinguishing between nature tourism and ecotourism. Such a view is reflected in a number of early articles that essentially treat nature tourism and ecotourism as identical (Aylward & Freedman, 1992; Lindberg, 1991; Steele, 1993). Others argue that ecotourism is a subset of nature-based tourism, where nature-based tourism includes activities such as camping, hiking and canoeing, whereas ecotourism is more typically associated with visiting pristine natural areas (Parks, Parks & Allen, 2009; Priskin, 2003).

With the exception of a few studies (for example, Buckley, 1994; Fennell & Eagles, 1989), early ecotourism literature did not identify conservation of nature and environmental sustainability to be part of the definition of ecotourism or ecotourists. Swarbrooke and Horner (1999) make this notion explicit by segmenting ecotourists into 'shades of green', identifying those who are not at all green, light green (think about green issues), dark green (demonstrate green behaviour by boycotting hotels with bad environmental records) and totally green (do not take holidays away from home so as not to damage the environment). In so doing, Swarbrooke and Horner acknowledge that the dimensions of interest in nature and environmental sustainability are independent. As a consequence, there could not only be ecotourists in different shades of green, but also tourists who are environmentally friendly and show more or less interest in nature. The systematics we propose at the end of this chapter follow Swarbrooke and Horner's position.

It is correct, however, that there is likely to be some positive association between ecotourists and tourists in general who conserve and protect the environment, simply because both may have a core interest in nature. Empirical evidence for this is provided, for example, by Hvenegaard and Dearden (1998) who found that tourists whose primary motivation was to watch birds were more likely to have donated money to conservation causes than most other tourists. Similarly, Uysal, Jurowski, Noe and McDonald (1994) found that national park visitors whose main destination was the park were found to be more concerned about the fragility of nature's balance compared to those who only visited the park as part of a trip.

More recently, an increasing number of authors assume, either explicitly or implicitly, that an ecotourist is, by definition, a tourist who protects the environment. For example, Stem, Lassoie, Lee, Deshler and Schelhas (2003) argue that ecotourism acts as a conservation and development tool, providing local economic benefits, while maintaining ecological integrity through low-impact, non-consumptive use of local resources.

DEFINITIONS OF THE ECOTOURIST

To determine how the ecotourist has been defined and operationalized in empirical studies, we conducted a literature review of all online volumes of the following journals: *Journal of Travel Research*, *Annals of Tourism Research*, *Tourism Management*, *Journal of Sustainable Tourism* and *Journal of Ecotourism*. These journals were selected because they either represent the leading international tourism journals and/or specialize in the area of sustainable tourism or ecotourism. In total, 46 articles were identified that contained definitions and/or operationalizations of ecotourists, either explicitly or implicitly. We added one additional article (Holden & Sparrowhawk, 2002) because it was frequently cited in other articles included in the review.

Attributes used in those 46 articles to define or empirically measure ecotourists were identified. They were all included in a spreadsheet and each article was coded within this spreadsheet, assigning a value of 0 if a specific attribute was not part of the definition or operationalization and assigning a value of 1 if it was.

Frequency counts were computed to determine which attributes occurred how frequently. This is precisely the opposite approach of that taken by other authors (for example, Nowaczek & Smale, 2010) who reviewed the literature and subsumed attributes into higher-level groupings such as nature, culture or education. The latter approach suggests substantial agreements across studies because a range of very different attributes related to, for example, nature, are grouped together. In contrast, our approach drills down to the precise attribute used in the definition or measurement in the empirical part of the study. We have chosen this approach because we are interested in determining the extent of actual consensus and the exact areas of consensus about what defines an ecotourist.

Finally, for each of the 46 studies separately, the attributes used in the theoretical definition were compared with the attributes used in the operationalizations (rules for empirical measurements) and a 'matching index' was calculated. The index takes values between 0 per cent (if none of the attributes in the definition are reflected in the operationalization) and 100 per cent (if all attributes in the definition are reflected in the operationalization). The matching process was conducted generously: operationalization attributes that fell into a broader area of definition were also accepted as matches. For example, if the definition included 'interested in nature' and the attribute used in the measurement was 'visit parks or protected areas', this was counted as a match.

Table 9.1 includes frequency counts of attributes used in definitions of the ecotourist. In the 46 studies reviewed, 33 different attributes were identified. As shown in Table 9.1, attributes range from quite general to very specific ones. The more specific ones mention destination settings visited by ecotourists, their interests and preferred activities and some also include ecotourists' attitudes and behaviours.

There is only one single attribute that is present in more than half of the articles including definitions of ecotourists – the educational dimension of ecotourism (Donohoe & Needham, 2008; Lai & Shafer, 2005): 61 per cent of the analysed articles mention attributes of learning, experiencing, researching and observing the environment or nature. This aspect represents one of the six component criteria listed by Buckley (Chapter 2, this volume).

Table 9.1 Frequency count of attributes used in definitions of the ecotourist

Attributes	Percentage (%)
Learn, observe, experience, research – environment and nature	61
Visit natural, remote, pristine, protected, undisturbed areas and parks	46
Maintain, conserve, protect – nature, people, animals	35
Love, admire, enjoy, interested in, understand, appreciate – nature	28
Contribute to community	28
Engage in physical activity, challenge, recreation	28
Conscious, sensitive, concerned, committed – environment	24
Interested in wilderness	20
Interested in wildlife	20
Interested in, respect for, engage with – culture	20
Engage in eco activities	15
Socialize, meet people with same interest	11
Donate and contribute to conservation	9
Increase skills and knowledge	9
Attentive to time available	9
Interested in rural areas and lifestyle	9
Willing to pay more	9
Environmental values and attitudes	7
Seek adventure	7
Visit ecolodge	4
Take longer trips	4
Higher income	4
Interested in mountains, ocean sides, lakes, streams	4
Travel in small groups	2
Interact and engage with natural environment	2
Avoid services	2
Sense of accomplishment	2
Hedonistic behaviour	2
Learn about cultures	2
Support sustainability	2
Older people	2
Escape home surroundings	2
Enhance physical health	2

The next set of attributes refers to the type of area considered as an eco-destination: 46 per cent of the reviewed definitions suggest that the ecotourist is a visitor to natural, remote, pristine, undisturbed and protected areas; 18 per cent refer specifically to protected areas. While the term 'protected' is relatively unambiguous, other terms used, such as 'remote', 'pristine' and 'undisturbed', are not equally clear and thus contribute to blurring the definition of the ecotourist.

Approximately one third of studies use attributes that correspond with an ethical dimension of ecotourism (Donohoe & Needham, 2008), namely the aspect of protection and conservation of the destination's environment. This is in line with Weaver (2002) and Becken and Simmons (2008) who claim that ecotourism should be about

protecting the environment and minimizing negative environmental impacts while travelling. Yet, it is not generally seen as a part of ecotourism, thus somewhat contradicting Buckley's assessment (Chapter 2) that it forms one of the key component criteria of ecotourism.

About one third (35 per cent) of articles used attributes of protection, maintenance and conservation when defining the ecotourist. It should be pointed out that the authors of the reviewed articles used different subjects and situations when applying attributes of protection, maintenance and conservation. In general, the attributes can apply either to natural environments (plants and animals) or to people. Another set of attributes pointing to the ethical dimension of ecotourists are conscious and sensitive behaviours towards environment and nature. About one quarter (24 per cent) of articles define the ecotourist as someone who is concerned, conscious, sensitive and committed to protect the environment. The second ethical attribute, 'contribution to the community', was mentioned in 28 per cent of the reviewed articles. The implicit or explicit assumption is that the ecotourist contributes to the local community by purchasing local products, using the local labour force (for example, local tour guides), purchasing locally crafted products and staying in small and locally owned accommodations (Chaminuka, Groeneveld, Selomane & Van Ierland, 2012; Zografos & Allcroft, 2007). Less evident is the assumption that the ecotourist would engage in activities that improve social conditions of the destination visited (for example, volunteering, donating to local charity organizations, minimizing carbon dioxide emissions and so on).

Another group of attributes relates to behavioural characteristics of the ecotourist: 28 per cent of articles use attributes describing vacation activities that ecotourists usually engage in, such as playing sports, another 15 per cent include what they refer to as specific 'eco activities' such as 'bush-walking', 'trekking', 'photographing', 'hiking', 'water based activities' and 'biodiversity tours'.

The emotional dimension of ecotourists' behaviour is used in 28 per cent of the articles to describe ecotourists. The attributes used were describing the ecotourist as a person, who loves, admires, enjoys, understands, appreciates or is interested in nature. Despite being a quite vague set of attributes, they all refer to the emotional and motivational characteristics of the ecotourist's profile.

Attributes that define the ecotourist as someone who is interested in wildlife and wilderness are used in 20 per cent of the articles. The content of those articles suggests that ecotourists engage in wildlife watching and potentially animal feeding and photographing.

The cultural dimension in explaining ecotourists' interests is used in 20 per cent of the articles. Attributes used to explain the cultural dimension of the ecotourist were interest, engagement and respect for culture. These articles suggest that ecotourists are attracted to cultural events and activities. While travelling, they encounter cultural experiences and display respect towards host cultures.

Attributes used in about 9 per cent of studies include donating and contributing to conservation, increasing skills and knowledge, being attentive to time available, being interested in rural areas and lifestyle and being willing to pay more for the ecotourism experience.

A large number of attributes were mentioned by only a small number of studies (4 per

cent or less of the reviewed articles: staying at an ecolodge, taking longer trips, having higher income, being interested in mountains, ocean sides, lakes, streams, travelling in small groups, interacting and engaging with the natural environment, avoiding services, having a sense of accomplishment, behaving in a hedonistic manner, learning about cultures, supporting sustainability, being older, escaping the home surroundings and enhancing physical health).

It can be concluded that an ecotourist has been defined by a vast number of different attributes in the past, including vacation activities (for example, observing ecological landscapes, socializing and meeting people, hedonistic experiences), interests (for example, rural areas, rural lifestyles, making souvenirs, travelling with eco-certified travel agents or engaging in local eco-certified tours), psychological needs (for example, desire for freedom, personal growth, ego enhancement, nostalgia, sensory stimulation) and typical destinations visited (for example, remote areas, natural areas, protected areas, natural parks, forests). The two dimensions that appear to occur most frequently, and thus arguably represent the most consensus among researchers in relation to who an ecotourist is, are (1) that the ecotourist travels to natural, remote, pristine, undisturbed, protected areas and parks, (2) with the purpose of learning, observing and experiencing the natural environment.

OPERATIONALIZATIONS OF THE ECOTOURIST

Overall, 42 attributes were used to operationalize (formalize the way in which they were empirically identified) the ecotourist in the 46 reviewed articles. The list of attributes and the percentage of studies that use each attribute is provided in Table 9.2. It should be noted, however, that not all studies explicitly discuss their approach towards identifying ecotourists. Some descriptions are very general, making the identification of specific attributes used to operationalize the ecotourist difficult and forcing the researcher to interpret the implicit suggestions given in the methodology, results and conclusion sections of articles. In terms of the number of attributes used: 15 studies used two attributes, six studies used three, 11 studies used four, one study used five, three studies used six and two studies used seven attributes to operationalize the ecotourist.

A first key observation is that 72 per cent of attributes were used by only a very small number of studies (4 per cent or less). This suggests that there is little agreement among researchers on how to identify whether or not a tourist is an ecotourist.

One attribute emerges as most commonly used to identify ecotourists empirically: visitation of parks and protected areas (39 per cent of studies). One study used only this attribute to identify ecotourists, whereas the remaining studies supplemented this criterion with additional attributes such as ecotourist activities (for example, trekking, wildlife watching) or preferred accommodation (for example, ecolodge, campsite), or simply measuring natural site visitors' interests in taking a trip to natural sites (7 per cent).

The second most frequently used criterion was visitation to a well-known tourist destination (20 per cent) and whether respondents stayed in an ecolodge (20 per cent).

A set of attributes was used in 7–15 per cent of articles which describe either

Table 9.2 Frequency count of attributes used to operationalize the ecotourist

Attribute	Percentage (%)
Visitors to parks, protected areas	39
Visitors to well-known eco destination	20
Stayed in ecolodge	20
Engaged in trekking	15
Engaged in wildlife watching	13
Visitors to natural sites, forests, wetlands	11
Eco motives	9
Travellers of accredited travel agency	7
Interested in holidays for appreciation and understanding of nature	7
Interested in taking an eco trip	4
Preference for eco activity	4
Preference for ecotourism	4
Interested in wilderness	4
Engaged in ecotourism activities	4
Interested in rural tourism	4
Economic ability to travel	4
Member of volunteer organization	4
Scientific volunteer	4
Nature-based motives	4
Purchased an eco trip in last 2–3 years	4
Importance of ecotourism opportunities	2
Potential of travelling to distant birding destination	2
Interested in wildlife	2
Members of a birdwatchers association	2
Willing to engage in eco activity	2
Willing to attend event	2
Willing to pay a fee for event	2
Interested in adventure vacation	2
Interested in culture vacation	2
Participated in unguided experience	2
Visitors to popular tourism destination	2
Participants of an eco organization trip	2
Interested in learning about nature	2
Achieved sustainable practice	2
Ecologically sensitive	2
Eco self-awareness	2
Having access to environmental education	2
Frequency of visiting protected areas	2
Members of an eco organization	2
Donated to an eco organization	2
Took a camping trip	2
Campsite visitor	2

respondents' motives for or interests in ecotourism activities such as trekking (15 per cent), wildlife watching (13 per cent) and eco motives (9 per cent).

It can be concluded from this review that the single most frequently used method to identify and sample ecotourists is to go to a destination or natural attraction that is

assumed to attract ecotourists and question visitors. Other criteria are used by small proportions of studies, and therefore cannot be viewed as common approaches to operationalizing the ecotourist. However, the majority of empirical researchers chose the approach of intercepting tourists at a location they deemed to be a typical destination for ecotourists, which is not necessarily the best approach. There can be many reasons to visit a national park, many of which would not be seen as in line with definitional consensus about the ecotourist. For example, the Royal National Park south of Sydney, Australia attracts many day visitors who come because the barbeque facilities are good and the view is nice. It is plausible that these visitors do not wish to learn about nature or conserve it; they simply want a convenient, pretty and easily accessible barbeque site; it just happens to be located in a national park. Does this fact alone make them ecotourists? Probably not.

ALIGNMENT OF DEFINITIONS AND OPERATIONALIZATIONS OF THE ECOTOURIST

The research question behind investigating the match between definitions and operationalizations within research studies on ecotourists is to determine whether the empirical knowledge derived from surveys of ecotourists (as operationalized) is actual knowledge about the ecotourist as defined by the same researcher. The same example can be used as before: if a researcher is interested in determining how much the average ecotourist spends per day of their vacation, and ecotourist is defined most in line with common understanding (namely (1) travel to natural, remote, pristine, undisturbed, protected areas and parks, (2) with the purpose of learning, observing and experiencing the natural environment) but is simply operationalized as a visitor to the Royal National Park south of Sydney, Australia, it is likely that the results would be biased, because a number of respondents will be included who really are not in line with the ecotourist definition. It is valuable to understand the average extent of match or mismatch, because it allows conclusions to be drawn about the validity of our current empirical knowledge about the ecotourist.

Our analysis indicates that the average match between attributes used in the definitions and attributes used in operationalizations is only 34 per cent. The average match increases to 38 per cent if studies that provided insufficient details on how they identified ecotourists are excluded.

Only three studies achieved a 100 per cent match between the definition and the operationalization. These studies are explicit in defining an ecotourist (using only one or two attributes) and reuse those same attributes to identify ecotourists among the tourist population. Specifically, one study (Mackoy & Osland, 2004) defined an ecotourist as a visitor to an ecolodge and the researcher conducted a survey among respondents staying in an ecolodge. The second study (Lemelin, Fennell & Smale, 2008) defined ecotourists as individuals with 'interest in wildlife' and as individuals who visit a 'natural area or park'. In that study, the researcher measured the level of specialization of visitors engaged in wildlife watching which took place in a natural park. The third study, which we coded as a perfect match (Holden & Sparrowhawk, 2002), was conducted among visitors to a natural park who engaged in trekking. This study defined an ecotourist

as 'a visitor to natural, remote or protected area, who engages in a physical activity or recreation'.

One further study achieved an 80 per cent match (Wight, 1996). The study investigated the general travelling population and operationalized ecotourists as tourists with ecotourism interests (interest in holidays for appreciation and understanding of nature, interest in wilderness). Ecotourism interests were considered as having an interest in one of the listed eco activities and having experienced these activities in the last two years. The study defined ecotourists as travellers interested in wilderness, adventure seeking travellers, committed to the environment and nature conservation. The only definition attribute that was not measured in actual operationalization was the attribute of 'conservation and protection of nature'.

Another high match (71 per cent) was achieved by Ballantine and Eagles (1994). This study used seven attributes to define and six attributes to operationalize the ecotourist. Researchers used attributes such as the most common destination setting an ecotourist would travel to (for example, undisturbed and protected area or park), the most typical ecotourism activity they would engage in (for example, observing wildlife) and their motivation for travelling to a natural area (for example, to learn about nature). In addition, this particular study also clearly specified the personal characteristics of an ecotourist (for example, affluent individual, older individual). Ecotourists were identified using attributes referring to the respondent's interest in learning about nature and interest in wilderness as well as their previous experiences with eco activities and travelling with eco-certified travel agencies.

Matching indices for the remaining studies were between 0 per cent and 67 per cent. From this matching analysis, it becomes apparent that there are three key reasons why 80 per cent of studies scored only a 50 per cent or lower match between their operationalization and their definition of the ecotourist:

1. Ambiguous description of attributes (for example, interest in eco activities, eco motives, preference for ecotourism and so on). Authors also did not provide a clear explanation of how they ensured that respondents understood the listed attributes or how these attributes were presented to the respondent.
2. Generalization that all visitors to natural or protected areas are ecotourists. As mentioned above, one fifth of studies assume that a visitor to a well-known eco-destination or someone who stays in an ecolodge is an ecotourist.
3. Lack of definition. Some authors summarized past work on ecotourists, but failed to provide their own clear working definition.

As a consequence of the use of a range of different definitions, a range of different operationalizations as well as the misalignment of definitions and operationalizations, the current empirical understanding of the ecotourist is questionable. It is of key importance that future empirical work on ecotourism definition and operationalization is streamlined to add to the cumulative body of knowledge. We therefore in the next section propose a new naming convention that can be used by future researchers to guide their use of terms and, more importantly, their choice of definitions and operationalizations of ecotourists in a way that will ensure sufficient consistency across studies to truly build, study by study, a good understanding of the ecotourist.

A PROPOSED NAMING CONVENTION

We propose a new naming convention. This naming convention is derived from the above review, and is based on the majority understanding of the term ecotourists and its variations. As illustrated in Figure 9.1, we suggest that the primary characteristic of an ecotourist is their engagement in nature-based tourism with the deliberate intention to experience nature. This means that people who camp because this is the cheapest form of accommodation would not comply with this definition. As intended by the early work on ecotourism, the definition is driven by the enjoyment of nature rather than the 'accidental' spending of time at a natural attraction. In terms of operationalizing the ecotourist, we suggest that at least two questions be included: (1) reported past behaviour in relation to engagement in nature-based tourism and (2) motivation for engaging in nature-based tourism. Only if their motivation is related to experiencing nature would tourists be classified as ecotourists.

From this definition and suggested operationalization, it is clear that, as previously suggested by Swarbrooke and Horner (1999), the ecotourist can, but does not have to be, environmentally friendly. Therefore, we suggest that the sub-segment of ecotourists who behave in an environmentally sustainable manner is referred to explicitly as 'sustainable ecotourists'.

Similarly, environmentally sustainable tourists may, but do not necessarily, spend their vacations visiting natural attractions. We therefore propose to use the broader term 'environmentally sustainable tourists' to refer to tourists whose actual vacation behaviour consists of conserving, protecting or even improving the environment at the destination. Given that actual behaviour is not simple to measure, we suggest that a reasonable operationalization would be reported past conservation, protection or improve-

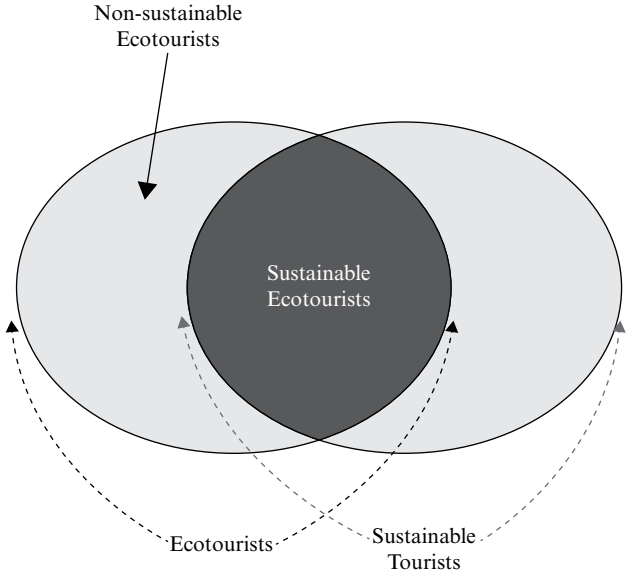

Figure 9.1 Ecotourist naming convention

ment behaviour at the destination. We acknowledge that reported past behaviour may be biased by social desirability, but believe – based on past studies asking people to report past pro-environmental behaviour (for example, Dolnicar & Grün, 2009) – that it is a useful and more direct measure than deriving the 'environmentally sustainable' status from attitudinal statements.

To operationalize the sustainable ecotourist, consequently, requires a tourist to comply with the measures proposed above for qualifying as a member of both the segment of ecotourists and the segment of sustainable tourists.

We hope that the above suggestions offer one step in the direction called for by Acott, Trobe and Howard (1998, p. 241) that such a classification system could have 'policy implications in terms of providing information for potential ecotourists, segmenting the ecotourist market, and more importantly, stimulating discourse on the development of a genuinely deep form of environmental ecotourism that is consistent with concepts of sustainable development and sustainable living'.

CONCLUSION

Buckley asks in Chapter 2: 'Does it matter if there is no single definition for ecotourism that is at once precise and generally agreed?' and comes to the conclusion that 'Probably not'. The case premise of our study is that it does matter because only if the scientific community agrees on what ecotourism means and how an ecotourist is characterized can meaningful knowledge about ecotourism and ecotourists be developed. Without agreement on the definition of ecotourism and the ecotourist we will continue to produce knowledge that, rather than being pieces of a puzzle, are pieces of different puzzles, thus preventing the full ecotourism picture to be visible.

The review undertaken in this study provides an explanation for the large amount of variability in the definition and operationalization of the term ecotourist. The term ecotourist has been defined by a vast number of different attributes in the past, including vacation activities, interests, psychological needs and typical destinations visited. The two dimensions that appear to occur most frequently across studies, and thus arguably represent the most consensus among researchers in relation to who an ecotourist is, are that the ecotourist travels to natural, remote, pristine, undisturbed, protected areas and parks, with the purpose of learning, observing and experiencing the natural environment.

There are substantial differences in how the ecotourist has been both defined and operationalized in the past, and often definitions and operationalizations within one study are not in full compliance. Our matching analysis indicates that the average match between attributes used in the definitions and attributes used in operationalizations is only 34 per cent. The ambiguous description of attributes, over-generalization and lack of definition are the three key reasons why studies scored only a 50 per cent or lower match between the operationalization and the definition of the ecotourist. As a consequence, empirical profiles developed of ecotourists are actually profiles of different subsegments of ecotourists, depending on the actual operationalization used in the study.

Based on this insight, we propose definitions and outline operationalizations that could be used in future to develop more streamlined knowledge about the ecotourist. Furthermore, we propose the use of a naming convention that clearly differentiates

between interest in nature (which is the key characteristic of the ecotourist) and behaviour that conserves, protects or improves the natural environment at the tourist's destination (which is the key characteristic of the environmentally sustainable tourist) and suggest that ecotourists who also demonstrate behaviour of conservation, protection or improvement of the natural environment be clearly referred to as environmentally sustainable ecotourists.

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10. Ecotourists and views of nature

Michael Hughes

INTRODUCTION

Ecotourism is one form of nature-based tourism. It is generally considered a niche market involving smaller groups and specialized experiences. The first part of this book provides a detailed and extensive discussion of the definition, origins and characteristics of ecotourism. For the purposes of this chapter, a brief reiteration of the central characteristics of ecotourism is necessary for context. Defining ecotourism has been somewhat of an academic cottage industry with more than 80 definitions over recent decades (Fennell, 2001; Krider, Arguello, Campbell & Mora, 2010). The idea of ecotourism was popularized in the 1980s, with a growing awareness of concepts such as sustainability. It is intended to provide benefits both to the tourist and the location visited (Gurung & Seeland, 2008). Analysis of the numerous ecotourism definitions by Blamey (1997), Fennell (2001) and Krider et al. (2010) noted three central components:

1. ecotourism is nature based
2. ecotourism includes meaningful education and learning
3. ecotourism adheres to sustainable management principles.

Of interest in this instance is the nature-based component of the experience. While there have been issues around the usurping of the term 'ecotourism' as a means of marketing products that may or may not fit the definition, traditionally, a true ecotourism experience is considered to include access to a minimally disturbed or pristine natural area setting (Weaver, 2001). Conversely, natural areas that are degraded, developed or crowded with people are perceived not to offer a 'true' experience (Clarke, 1997; Hughes & Morrison-Saunders, 2003). Weaver (2001) points out that an ecotourist may be interested in an entire ecosystem or habitat but may also be focused on a more specific component such as a rare plant or animal. In other words, the conceptualization of 'authentic' ecotourism has been arguably dominated by the academic, scientific and management view of what constitutes a niche market sustainable use of a pristine natural area. This is ultimately based on assessment of the integrity of the measurable ecological processes or conservation status of a species population. This precludes the views of tourists as laypeople with non-expert views on nature-based experiences and the meaning and benefits generated.

NATURALNESS AND ECOTOURISM

The literature on ecotourism often premises its discussion with statements regarding the multitude of ecotourism definitions such that there is no definitive agreement on what

ecotourism specifically is (Weaver & Lawton, 2007). This can make discussion of the topic either difficult when attempting to deal with specifics or very wide ranging to the point of vagueness. Even though it is agreed that ecotourism is centred on experiences of nature, this triggers a debate on what constitutes an 'authentic' nature-based experience. Orams (2001) approached this issue by citing expert opinion that defines 'hard ecotourism' and 'soft ecotourism'. The former involves difficult to access locations with minimal human disturbance, little or no amenities, favoured by those with expert knowledge or a lifelong interest in a particular aspect of nature. Soft ecotourism includes easy to access locations that may not be pristine, with a high level of comfort and educational guidance. It seems that 'hard' and 'soft' could possibly be construed as 'authentic' and 'inauthentic' or 'real' and 'contrived'. This suggests an elitist form of ecotourism and a mass-market form, given tourism to remote and pristine natural areas is traditionally dominated by well-educated, middle-aged individuals with above-average incomes (Hvenegaard & Dearden, 1998).

Concepts such as hardship and level of enthusiasm and naturalness of location may be assigned by the opinion of experts but are also very much a function of the perceptions of those undertaking the experience. From a tourist's perspective, experience of nature is very much influenced by the elements of what Urry (1992) described as the 'Tourist Gaze'. What is defined as pristine and natural to a nature expert differs from what could be seen as natural by a layperson with minimal knowledge of nature. The layperson's view of nature is influenced by metaphorical and metonymic cues as well as elements such as expectations and motivations. A metonymic cue refers to a physical object that is representative of the concept itself. For example, a tree or a wilderness landscape could both be metonymies of nature. A metaphor is an emotive figure of speech that characterizes an object or idea. For example, the notion of 'Mother Nature' is a metaphor. That is, the non-expert is more likely to view a natural area from the affective perspective, differing significantly from the scientific cognitive, rationalist view of nature. As repeated throughout the literature, ecotourism is deemed to be a nature-based activity that educates, is sustainably managed and contributes to the social and environmental good. Perhaps it is not important whether this occurs through a niche group of experts accessing a remote area scientifically defined as being a pristine ecosystem or through a wider audience in a more accessible nature setting.

Rolston (1998) noted that a meaningful nature experience can be provided by even the most ecologically degraded natural habitat. This is because people bring their own perceptions and meaning to an experience of nature, which may or may not align with the opinion of experts (Waitt, Lane & Head, 2003). This perhaps renders the idea of 'hard' and 'soft' ecotourism as an academic exercise in market segmentation. 'True' or 'authentic' or 'hard' ecotourism is a construct defined by experts based on the cognitive domain of definitions and core principles. This type requires relatively pristine natural areas removed from human habitation and disturbance. However, as an affective experience of nature from the layperson's perspective, an experience that may be termed 'soft' by experts could be perceived as 'hard' by non-experts and could arguably bring about the same benefits of nature-based education and conservation in a sustainably managed context.

VIEWS OF NATURE

Nature may be most simply defined as the non-human elements of an environment (Soper, 1995). This general definition refers to nature as the environmental components that existed prior to humans or those elements that humans did not create. It is often aligned with the notion of a dichotomy between the human built environment and the natural, pristine environment. Budianski (1995) and Cole (2000) argued that the notion of a pristine and distinct form of nature is misguided in a world where impacts on natural areas are both unavoidable and necessary for the survival of humans and natural systems. Budianski (1995) highlighted the global human influence on natural areas whereby no natural area is entirely 'ecologically pure' or pristine. If this viewpoint holds true, then 'hard' or 'authentic' ecotourism cannot occur. Taking a less hardline approach, Newsome, Moore and Dowling (2002) conceptualized a nature spectrum that ranged from natural to built environments. Natural areas occupied one end of the scale and were defined as those places that retained their essential endemic ecological processes. This may include natural areas that are not necessarily pristine or ecologically pure but that have a measurable viable, self-sustaining ecosystem. At the other end of the scale, built environments were characterized by little or no evidence of the original self-sustaining ecological processes. Somewhere in the middle the two blend together and could include urban parkland, reconstructed natural habitats and so on. While moving away from the nature/human dichotomy, Newsome et al. (2002) still approach the definition of nature from a natural sciences perspective based on scientifically measurable functions. This can and often does differ from how nature is viewed from a non-biophysical scientific standpoint.

From a social science perspective, Soper's (1995) definition of nature forms part of the social constructivist paradigm where nature is discussed in terms of the 'human' and 'non-human'. That is, rather than the presence or absence of viable, ecological processes, this view gauges naturalness in terms of the extent of evident human presence and interference in a landscape. The perception of disturbance and human presence is influenced by a person's socio-cultural context, or past experience of landscapes. That is, a person who has spent their entire life in a large, densely populated city will have a different view of naturalness than a person who has lived in a remote, sparsely populated forest. For example, the former may view an agricultural landscape as being 'natural' simply owing to the comparative absence of the human built environment, while the latter probably would not. This social construction of nature has commanded a central role in the debate about what nature is, especially amongst geographers (Demeritt, 2002). It also circumvents Budianksi's (1995) view because the social construction of pure nature does not rely on the presence or absence of complete and undisturbed ecological processes, but the perceived lack of human presence in the landscape.

The scientific and social constructivist views of nature may respectively align with the scientific expert and non-expert laypersons' views. For example, the definition of nature based on scientific measures alluded to by Newsome et al. (2002) may deem a natural area consisting of post logging secondary forest regrowth with visitor facilities and services to be an ecologically degraded semi-natural location. Research by Krause (2002) has shown that even after a logged forest re-grows, significant components of the ecological process structure can be missing, meaning it is not a pristine habitat. However, a tourist

not trained in forest ecology or biology may view their surroundings as if it were a completely natural forest. A review of published research by Ergin, Karaesmen, Micallef and Williams (2004) found that there was no correlation between the tourists' ratings of perceived quality of a remote natural setting and the scientifically measured extent of ecological degradation. That is, even when the ecological processes were not intact and biodiversity was low, tourists still considered that they were surrounded by nature in a remote wilderness area. Research by Moore and Polley (2007) came to a similar conclusion when studying remote coastal campers in Western Australia. Research by Waitt et al. (2003) demonstrated that people visiting Australia's largest human-made artefact, the Argyle Dam (Lake Argyle) viewed it as a natural attraction in a remote natural area wilderness, despite its role as an irrigation dam feeding a large-scale agricultural scheme nearby.

The point is that the view with regards to what nature is can vary significantly according to personal knowledge, training and experience in relation to natural areas and ecological processes. From the viewpoint of land managers and those trained in the ecological and biological sciences, naturalness might relate to the integrity of ecological processes where a natural area is defined in terms of functionality and resilience. Accordingly, a truly natural area would be defined as having self-sustaining ecological processes mainly intact and minimal human disturbance. From this viewpoint, the pristine natural area as a requirement for 'true' ecotourism occupies a fairly small niche segment of the market. That is, what may be defined by the experts as 'true' ecotourism occupies a narrow spectrum of activities. However, from the layperson's point of view, naturalness is more likely to relate to the perceived abundance of human built features and human presence within a given geographical area relative to natural features and landscapes. Thus, while an area may have a severely degraded and dysfunctional ecosystem, the absence of obvious human built structures generates the perception of a natural area, dominated by nature. From this perspective, the notion of ecotourism may occupy a considerably broader range of nature-based locations and activities as long as they fulfil the other two requirements of education and sustainability.

Access to remote and pristine natural areas may have unintended or unavoidable impacts. For example, Lewis and Newsome (2003) found that demand for close interaction with stingrays in a natural setting was associated with a high risk of injury to both humans and stingrays. Tisdell and Wilson (2002) noted a number of potential impacts of ecotourism-type activities focused on turtles in their natural setting, including disturbance of natural behaviour and damage to nests. Müllner, Eduard Linsenmair and Wikelski (2004) found that even passive activities such as birdwatching can have negative impacts on wildlife if occurring during sensitive times such as breeding periods. The opportunity to expose tourists to similar experiences in a managed setting that is not a pristine natural area can function to achieve the goals of education regarding conservation and sustainability while reducing the risk of impacts on 'pristine' natural areas. The following case examples demonstrate that tourists perceived they have had a fulfilling and educational nature-based experience despite the setting in both cases being contrived. The design of the locations and experiences adhere to conservation, education and sustainability principles, irrespective of how they may be formally defined in the context of ecotourism.

CASE EXAMPLE: THE TREE TOP WALK

The Tree Top Walk is a natural area tourism attraction located in the relatively remote Valley of the Giants, a remnant patch of temperate rainforest dominated by Tingle and Karri trees on the south coast of Southwestern Australia. The forest remnant is located within a national park but is also in close proximity to extensive agricultural areas. The unique characteristics of the giant Tingle trees, endemic to the region, have traditionally provided the focus for tourist visitation (Hughes & Morrison-Saunders, 2003). Historically, visitation to the remote Valley of the Giants was uncontrolled and tourists were significantly impacting on the habitat and trees. Access to the forest was originally comprised of an unsealed road to a large gravel car park with numerous 'goat tracks' through the surrounding forest. Soil compaction, severe erosion and damage to trees resulted in a 1990 management plan emphasizing the need for urgent protection from the negative impacts of nature-based tourism. Construction of an elevated walkway (Tree Top Walk) and hardened pathways was subsequently proposed.

This led to a shift away from a mostly unmanaged, unsustainable nature-based experience with a minimal educational component, replaced in 1996 by development of a highly managed experience with a strong education and conservation focus. This was centred on an engineering structure known as the Tree Top Walk (TTW); a 600 metre long, free-standing elevated walkway through the canopy level of the Tingle forest. The TTW is comprised of a series of prefabricated 60 m long metal bridge spans supported by cylindrical metal piers. This allows a view of the forest from the canopy level on a flexible catwalk structure. The TTW extends over a forested valley such that the slope gradient from the entry point to the highest point above ground level (40 metres) is low enough to permit easy access for prams and wheelchairs. Access to the TTW structure is through a visitor centre and boardwalks all raised above ground level. The site also includes a 600 metre ground level trail loop of hardened pathways, stabilized earth and boardwalks to allow a view of the Tingle trees from ground level. The redeveloped site was designed to allow large volumes of tourists with minimal effect on the biophysical quality of the site. Physical contact with the trees and other forest inhabitants is discouraged.

These structures, in a natural area setting that is far from ecologically pristine, may be seen to be at odds with what might be expected of an ecotourism experience from a scientific perspective. However, the nature-based experience of rare plant and animal species based on sustainable management principles combined with a strong educational component fits with the general concept of ecotourism. From a sustainability perspective, the construction of the TTW and site hardening has reduced visitor impacts to close to zero. This was despite a doubling of visitor numbers to 200 000 per year when the TTW site was opened. Research published by Hughes (2004) and Hughes and Morrison-Saunders (2002, 2003) demonstrated that the TTW was visited by a considerable number of tourists who normally would not visit nature-based attractions. This means that the education focus of the experience reaches a broader audience. The overall visitor response was of a positive educational and affective nature experience of large rare trees with the advantage of human-built structures enabling close-up views with minimal impact.

CASE EXAMPLE: BARNA MIA WILDLIFE SANCTUARY

This facility is operated by the Western Australian State Government Department of Environment and Conservation (DEC), an agency responsible for managing protected areas and wildlife in Western Australia. Barna Mia is located in a large, protected remnant woodland, known as Dryandra, in the central southern Wheatbelt of Western Australia, approximately 165 kilometres southeast of the state's capital, Perth. The Western Australian Wheatbelt is an agricultural area mostly cleared for grain and sheep production with a scattering of degraded remnant native vegetation blocks that are often no more than a few hectares in extent (Hobbs, 2003). Dryandra Woodland is a cluster of adjacent remnant native vegetation blocks, totalling 28 000 hectares, the largest of which is 12 000 hectares. For this reason, Dryandra Woodland is significant owing to its relatively large size, ecological health and subsequent role as a sink for displaced and rare Wheatbelt fauna and flora. Dryandra is also an important recreation and tourism resource.

Barna Mia is made up of a 2.5 hectare enclosure and a visitor centre. The enclosure is surrounded by electrified fencing to keep feral predators out and the captive fauna in. A visitor centre is incorporated into the fence line and functions as the education centre, merchandise sales area and the gateway into the enclosure. The facility houses six native fauna species involved in a breeding and reintroduction programme in Dryandra Woodland. These are: the bilby (*Macrotis lagotis*), boodie (*Bettongia lesseur*), rufous hare-wallaby (*Lagorchestes hirsutus*), banded hare-wallaby (*Lagorchestes fasciatus*), burrowing bettong (*Bettongia penicillata*) and the western barred bandicoot (*Perameles bougainville*). These small, rare marsupials were either endangered or locally extinct prior to the breeding programme owing to land clearing and fox predation. A fox eradication programme coupled with the breeding programme has resulted in the re-establishment of rare marsupial populations in Dryandra Woodland.

Tours are by booking, with one tour conducted per night to view the nocturnal animals. On arrival, the visitors are seated in the visitor centre and the guide presents a 15 minute description of the history of Dryandra Woodland, the fox eradication programme, the breeding programme and Barna Mia itself. The presentation is followed by a walk through the enclosure. The guided walk incorporates a defined 300 metre walk trail loop of packed sand through the enclosure with three 'feeding stations'. The feeding stations are small clearings adjacent to the path with log seating. During the guided walk, the animals are fed fresh chopped fruit and feed pellets by the guide in order to attract them to the visitor groups. The guide then points out the animals using a spotlight with a red filter (to minimize disruption of the animals' night vision). This is repeated at each of the three feeding stations. On return to the building, visitors have time to browse the available merchandise or chat with the guide. From the scientific viewpoint, Barna Mia is essentially a free-range zoo in a semi-natural setting. From the visitors' perspective, it provides a 'comfortable' and contrived nature-based encounter.

Barna Mia presents rare, secretive and charismatic nocturnal fauna in a naturalized setting and in an interactive manner. This experience cannot be guaranteed in a scientifically defined 'pristine' natural wilderness setting, where considerable time, money and effort would be required to glimpse these animals. Barna Mia thus makes the experience more accessible to a broader range of tourists. The facility also has an educational focus

based on a strong conservation ethic. The direct association of the enclosure with the Dryandra Woodland breeding programme emphasizes the practical contribution made to the conservation of native fauna. The construction, maintenance and operation of Barna Mia is conducted using locally sourced materials and staff. Hughes and Carlsen (2008) and Hughes and Macbeth (2005) found that visitors considered that they were having an experience of wildlife in a natural setting. There was a high level of satisfaction mainly around the opportunity to view such rare marsupials in this setting. This is despite the facility consisting of a fenced 2.5 hectare enclosure within a 12 000 hectare degraded woodland remnant in a large agricultural area of Western Australia. While the tourists visiting Barna Mia may be identified as a certain type of ecotourism segment, they are focused on the experience of rare wildlife in a 'natural' setting, having what they perceive as a nature-based experience, and the end result is the same.

CONCLUSION

Nature can be viewed from an ecological process (expert) perspective where the integrity of ecological processes can be scientifically measured to ascertain how 'natural' a place is and the ecological value it contains. This can then inform an expert opinion on what constitutes a true ecotourism experience. The social constructivist view of nature assesses naturalness more from past experience and how this compares with the relative abundance of evident human presence and disturbance in a landscape. The tourist, untrained in ecological science, may perceive natural areas differently such that ecologically degraded places can be seen as a positive 'true' nature experience. The two cases demonstrate that an ecotourism-type experience can be provided in less than pristine natural settings such that impacts are minimized while ecotourism objectives are achieved. These objectives can be achieved without having to access sensitive natural areas that can require considerable time, expense and effort to visit. In this sense, educational messages and awareness raising in more accessible and affordable locations can reach a broader audience. Rather than buying into the 'is it or isn't it ecotourism' debate, the point is that the debate is irrelevant from the demand side because the experience of tourism is mostly constructed by the tourist based on their own knowledge, motivations, perceptions and past life experience.

Weaver and Lawton (2007) noted the growth in prominence of ecotourism as a field of study since its inception in the 1980s. What arguably has happened is that the idea of classifying certain types of nature-based tourists as ecotourists has burgeoned since the 1980s. Ultimately, this is an academic and market segmentation exercise. Tourism of any sort is an experience- and destination-driven phenomenon, not segment driven. Terms such as ecotourism are applied by academics and market segmentation researchers to tourists who fulfil a certain set of predetermined categories. Continuing this argument from a naturalness perspective, how the tourist views a place as part of a nature-based tourism experience, is arguably more important than the measurable ecological quality of a natural area and whether it conforms with the published definition of a hard or soft ecotourism experience. This is because tourists will opt for an experience based on their own ideas of nature rather than select a tourism market segment they would like to participate in. From a management perspective, this could mean that it is not neces-

sary to access pristine and fragile natural areas for ecotourism to fulfil its objectives of nature-based and sustainable educational experiences. From the supply side, while there is a niche market for 'authentic' ecotourism products, confined to a small segment of the market, there is also a market opportunity for a broader scope of educational nature-based experiences.

Orams (2001) notes ecotourism is an activity that aims to 'do the right thing' in terms of nature conservation, education and socio-economic contribution (p. 29). However ecotourism is defined, the case examples presented here demonstrate that naturalness is in the eye of the beholder. If these criteria are fulfilled, the semantics regarding different types of ecotourism are academic.

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PART II

ECOTOURIST BEHAVIOUR AND VISITOR EXPERIENCES

11. Visitor behaviour in ecotourism settings

Philip L. Pearce

INTRODUCTION

In contemporary psychology, as well as in applied areas such as consumer studies, the term behaviour embraces both the experiential world of the individual (decisions, emotions, beliefs, attitudes, memories) and their overt behaviour (acts, interactions and movements). The full scope of these interests is daunting. For the purposes of reducing the scale of the task, this review attends only to what we can see visitors doing. This attention to overt behaviour should not be taken as implying that the inner world of the visitor is not important (Cutler & Carmichael, 2010; Pearce, 2011, pp. 5–6). For a consideration of the experiential world of the visitor other reviews in this Handbook offer directions of interest.

Furthermore and also in accord with the orientation of this volume, we are most interested in observable visitor behaviour in ecotourism settings: that is, locations that can be classified as strong in natural and cultural values and where some clear interpretive signals are provided that these settings matter (Black & Weiler, 2003, p. 22; Garrod, 2003). The trajectory of the review proceeds by considering how information is collected about overt visitor behaviour. Next, five core considerations are presented. These defining issues are, in turn, the value of studying the topic of what visitors do; the interpretation of the intentionality of behaviours; the power of exploring the use of space in ecotourism settings; and the analysis of behaviour over time. The fifth consideration is a brief overview of the key management strategies available to those who are charged with the stewardship of ecotourism settings. As a codicil to these considerations, two succinct cases studies illustrating the challenges of visitor behaviour management are presented using original data collected by the author. The first case study is that of Flinders Chase National Park, Kangaroo Island, South Australia, an ecotourism setting with strong natural values. The second site is Hidden Valley Cabins, North Queensland, a setting with a well-defined sustainability agenda.

RESEARCHING OVERT VISITOR BEHAVIOUR

There are three principal pathways to accessing what people do. First, researchers can directly observe visitors' behaviour. This activity of 'people watching' has diverse and deep roots (Collett, 2004). Prior to the development of social science analysis, literary and philosophical commentators portrayed many of the foibles and follies of public behaviour (Argyle, 1975; Morris, 1985). The early social science observational work on human societies was conducted by anthropologists, such as Malinowski (1922 [2006]) and sociologists such as Goffman (1959). Their studies highlighted the value of keeping detailed records and tracking what people did as well as what they said about

their worlds. Other contributions to the practice of good observational analysis derive from the ethologists (Eibl-Eibesfeldt, 1989; Hinde, 1972). Since axiomatically animals do not speak, the ethologists' efforts to study animal behaviour have relied exclusively on careful observation and have been instrumental in devising predictive mathematical models of behavioural sequences (Ball, 2004).

For our interest in visitor behaviour it can be suggested that direct behavioural observation is of particular value under the following circumstances: where the research phenomena cannot be compartmentalized and studied in laboratories, for example, crowd behaviour; where there is a need to describe behavioural patterns and movements through space; where the interest is in non-verbal behaviour, particularly facial expressions, laughter, gestures and posture; where the behaviour is illegal or anti-social and thus unlikely to be readily reported; and where people cannot reliably report their own behaviour such as when they are drunk or drugged. Additionally, even outside of these circumstances much behaviour is simply difficult to recall, such as how much time was spent in specific spaces within a setting. For many of these naturalistic, socially sensitive, time- and space-dependent recall tasks, there is an advantage to watching public behaviour rather than asking questions about it (Gomm, 2004; Pizam, 1994).

A second pathway to observing visitor behaviour lies beyond the task of directly watching people and involves the use of electronic or visual records. Hidden cameras and videos, electronic beams, heat-sensitive indicators of human presence and various tracking devices can be employed. This kind of study has a somewhat 'detective/spy novel' flavour and is subject to close scrutiny by ethics boards and review panels. There has been a rising interest in analysing tourists' photographs, video footage and Web 2.0 records for research purposes in the last decade and some of this interest has implications for researching overt visitor behaviour (Rakic & Chambers, 2012). For example, an analysis of the content of photos taken by visitors on their iPhones may lead to the identification of behaviours that might take many hours to observe directly because of privacy or timing issues. In particular, unsafe or foolhardy behaviours in dangerous natural environments may be identified more readily in this way rather than staking out the site and waiting to see what people do (Heggie & Amundson, 2009). A third and somewhat subsidiary route to observing visitor behaviour lies in recording the consequences accompanying public activities (Webb, Campbell, Schwartz & Sechrest, 1966). These unobtrusive measures, which are often referred to as traces, encompass both erosion, such as looking for wear and tear on trails, and accretion, which refers to what is left behind, such as litter and graffiti (Bell, Greene, Fisher & Baum, 1996).

CORE CONSIDERATIONS

Relevance

Armed with information from these varied observational strategies, several issues confront the researcher interested in visitors' behaviour at ecotourism sites. A common question in tourism studies is the importance or relevance of pursuing a particular topic. While one defence is that expanding the knowledge base of any topic of study is an intrinsically worthwhile goal, for visitor behaviour there are some quite pragmatic

answers to this challenge. Managers of tourist sites have to deal with the negative consequences of less desirable visitor behaviour. The literature on ecotourism impacts is rich in studies documenting specific kinds of damage (Edgell, 2006, pp. 41–56; Ryan, 2003, pp. 209–19; Shackley, 1999; Turton, 2005; van Polanen Petel, 2011). Managers may need to take direct action in terms of enforcing legal action or more often attempting to promote more desirable behaviour by social influence processes (Ham, 1992; Moscardo, 1999; Moscardo, Ballantyne & Hughes, 2007; Pastorelli, 2003). In this quest to prevent damage to flora, fauna, landscapes and cultural sites, the effort to study observable visitor behaviour and hence the options for mitigating undesirable outcomes can be a pathway to sustaining ecotourism places.

The negative outcomes of tourist behaviour may capture the most media and public attention, but site managers and businesses are also seeking to shape behaviour that is rewarding and fulfilling to visitors (Bowen & Clarke, 2009; Packer & Bond, 2010; Sax, 1980). Studies of the time spent at sites and the enthusiasm visitors show in exploring places and reading about them in terms of the use of signs are all indicators of consumer involvement and potentially positive and rewarding experiences (Gursoy & Gavcar, 2003). In both considering behaviours that are defined as negative as well as those that managers seek to endorse, a key determining issue is whether or not the behaviour observed is intentional or accidental.

Intentionality

When examining certain classes of observable visitor behaviour some clear questions of intentionality arise. Did visitors mean to break the coral on a delicate tropical reef as a souveniring activity or was it simply an accident due to unskilled behaviour (Townsend, 2003, p. 140)? Were visitors unconcerned about their disposal of rubbish when walking on a long-distance track or did strong winds wreck a campsite and scatter debris in ways making it impossible to reclaim (Turton, 2005, p. 146)? Was the joke made by the individual meant to be insulting to the local guide or was it merely culturally naïve behaviour (Wiseman, 2007, p. 215)? These kinds of questions highlight some of the limitations of simply observing public behaviour.

In a detailed analysis of how we interpret observable behaviour, Morris and Mason (2009) argue that if we see the behaviour as intentional we think like storytellers and suggest motives and reasons and embellish the observed behaviour with personality descriptions. For behaviour we see as unintentional, typically we reason abstractly like scientists and discount the personal issues and resort to situational explanations. These arguments are underpinned by advances in neuroscience that suggest that there are indeed different parts of the brain involved in processing behaviour in our field of vision. One area of the brain involves the superior temporal sulcus (STS) and is activated when we track motion. This has been referred to as body reading. A second region of the brain is activated when perceivers attempt to explain why a person performed an action; this area of the brain is the medial prefrontal cortex and is linked to mindreading (Morris & Mason, 2009, p. 59). The early triggers that we are likely to see the behaviour as intentional and therefore mostly engage in mindreading are when the person we are tracking appears to have planned the action, has the skill to accomplish the goal and appears to be aware of the outcomes achieved.

The value of this preceding discussion lies in how managers treat the behaviours that they are called upon to oversee. If intentionality is inferred, such as when deep tyre tracks at a scenic lookout are seen as evidence of deliberate destructive off-road driving, then the regulatory and informational forces brought into play will have certain characteristics predominantly aimed at changing people's behaviour. By way of contrast, if the behaviour is seen as unintentional and physical parameters of the road surface and its camber are perceived to be at fault, then more direct physical infrastructure interventions to the environment may be invoked. A similar reasoning may be applied to other ecotourism behaviours that are directly observed (such as getting too close to sensitive animal nesting or feeding sites).

Intentionality is one part of the complexity of looking at what people do in time and space. A second level of interpretation consists of thinking about the meaning of the act. A good example lies in the behaviour that we can describe when two people are looking at each other: the case in question is simply the observed movement of one person's upper eyelid closing rapidly and then opening again. In many situational contexts we will refer to this behaviour as winking, although it could simply be blinking. Winks of course are intentional, blinks much less so. More importantly, the meaning of the wink is not just about its intentionality but its intended and perceived meaning that may vary from establishing a basic connection, to participating in some form of social conspiracy or, further still, to outright flirting (Collett, 2004, pp. 139, 264–8).

Clearly, even if we decide that behaviour is intentional, it can still be problematic to proceed further to interpret motives and meaning. For tourism researchers who are often interested in the meaning of what visitors do, it is therefore wise to proceed with considerable caution in interpreting meaning or ascribing meaning to seen behaviour. This caution does not negate the value of looking at what people do but it does direct attention to larger and more molar considerations of the behaviour in time and space rather than focusing on intended meanings.

Spatial Behaviour

One of the foundation studies in natural settings using observation of visitor behaviour was conducted by Robinson (1928 [1978]) in museums in Philadelphia. His work and that of similar studies by Melton (1933, 1936, 1972) established key points about the ways visitors moved through rooms and at attractions. The principles have much relevance for ecotourism settings. Bitgood (2006) summarizes a number of the major findings by considering the earliest studies plus extensive work by Loomis (1987), Falk (1993) and Serrell (1997) as well as his own papers and research collaborations (for example, Bitgood & Cota, 1995; Bitgood & Dukes, 2006; Bitgood & Lankford, 1995). In particular, Bitgood identifies the tendency for people to walk in relatively straight lines. It has been found that walkers only tend to divert occasionally from this pattern when 'pulled' away by highly attractive exhibits. Additionally, people moving through open courtyards tend to approximate straight line movements but do tend to cut the final corners of diagonals as they move in their chosen direction. He also identifies a right turning tendency as people enter rooms but this pattern is contested and may be linked to other cultural behaviours including road rules and driving patterns.

A core part of the overview Bitgood has provided concerning these spatial behaviour

studies of visitors lies in what he terms the general value principle. It can be argued that the choice of viewing exhibits (or parts thereof) is influenced by the actual or perceived benefits of viewing divided by the costs such as physical effort or inconvenience. Many objects are viewed because they are in the visitors' direct path and thus require no extra mental or physical effort. Some exhibits or points near a trail or open space that are especially attractive to individuals may warrant the effort of visitors changing direction and walking further. It is noteworthy here that there is a cognitive explanation – an algebra of supposed mental effort versus attractiveness – invoked in the explanation of the tourists' behaviour (Moscardo et al., 2007, p. 39). The principle may be expanded to model the kind of behaviour seen in both self-drive as well as guided tours of wildlife viewing in Africa. Vehicles generally keep to the tracks but opportunistic sightings of key target species, notably lions, cheetahs and leopards, can cause deviations from the main paths and a rapid clustering of vehicles close to the desired species. The attractiveness effort principle is apparent in these settings because for some visitors the chance to see a member of the 'Big 5' may only occur once in their African travels (Lindsey, Alexander, Mills, Romanach & Woodroffe, 2007).

Other studies of tourists' and people's movements in outdoor environments complement the research undertaken in attraction and exhibition spaces. Ball (2004) comments that people moving in open air spaces behave in ways that are consistent but possibly unknown to them as participants. For example, visitors moving along a wide walking track are likely to proceed in what Ball terms loose counterflowing streams. Typically people moving in opposite directions organize themselves with collision avoiding tactics to preserve their personal space while achieving their directional goals. Mechanistic models of particle flow adopted from core physics principles provide some insights into how these flowing streams behave (Helbing, Molnár, Farkas & Bolay, 2001). It appears, for example, that when restrictions such as vegetation, crossings and narrow sections impede visitors' direct movement trajectories, alternating pulses of small visit groups pass through the common point of restriction. The work of Batty, Desyllas and Duxbury (2003) has demonstrated that when a crisis occurs, such as a fire or flash flood, then the pulsing behaviour of visitors breaks down. In these panic inducing circumstances the interpersonal distances are compressed and the attempts to move faster actually become slower and potentially hazardous.

Wiseman (2007) amongst others has identified the issue of the speed at which people move through spaces. In a series of detailed observational studies on walking speeds in 30 countries, researchers have established that people do walk at consistently different speeds in similar settings (Levine & Norenzayan, 1999). In the latest round of work the fastest walkers are in Singapore and, in the countries studied, the slowest are in Malawi. Citizens of Berlin, New York, London and Guangzhou were amongst the fastest movers. Citizens in Bahrain, Bulgaria and Jordan were more relaxed. The difference was a matter of four seconds across 60 feet. In a race the Singaporeans would beat those from Malawi and Bahrain by 15 feet. Additionally, the pace of walking was also shown to have increased across all the sampled sites, with the standard distance being covered on average 1.2 seconds or 5.5 feet faster in 2007 versus 1999 (Wiseman, 2007, pp. 264–6).

The issue of walking speed may usefully be applied to ecotourism settings. It can be linked to the notion of slow time and the concept of slowness (Honore, 2004). As already

indicated by the walking studies, there is a view that in modern and postmodern cultures, speed and fast-paced living is the norm and is in fact accelerating. The slow movement argument is that there are many activities that are better appreciated and more richly fulfilling if undertaken in a leisurely and low key manner. Participating in ecotourism experiences and taking time to appreciate settings is a good candidate for the application of the ideas of slowness. In particular, the biological rhythms of places may assist individuals to connect to other time horizons and the enduring nature of cultural relics may also prompt reflections on time and slowness.

Molz (2009) emphasizes that those participating in slow tourism seek to live like locals 'establishing local routines, indulging in local cuisines, and becoming connoisseurs of the local culture' (p. 280). The activities enjoyed are simple and can include shopping at local stores, going to the same places each day or taking the time to see attractions that are in the vicinity of the vacation home (Dickinson, 2007). Findings from Dickinson's research suggest that these travellers typically engage more deeply with places and people and that slow travel experiences can be rewarding and relaxing. Dickinson and Lumsdon (2010) note that slow tourism activities involve contemplation of one's type of transport, with desirably low emission forms preferred over airplanes, cruise ships and cars. In these ways slow travel may align with messages about conservation and sustainability present in ecotourism settings.

Time

The concepts of walking speed and slowness act as links to another key topic in observing and understanding visitor behaviour. From the earliest museum studies right through to some of the latest work on technology uses in mobile recommender systems, the assessment of how long tourists spend in settings has been of interest (Kramer, Modsching, ten Hagen & Gretzel, 2007; Robinson, 1928 [1978]). Two key concepts help capture the way time has been treated in visitor observation work. The first concept is holding power, which is normally described as the length of time an individual remains predominantly focused on an object, view or exhibit (Bell, Greene, Fisher & Baum, 1996). A second concept is that of attracting power, which is defined as the percentage of people who stop to view a site or object for some minimum threshold period of time – usually a time period long enough to specify that the individual (or vehicle) has indeed stopped. Some features of ecotourism settings have both high attracting power and high holding power, though it is not uncommon for other combinations to occur. As an illustration, Niagara Falls was once described in a Canadian Tourism Commission report as the best ten minute attraction in the world – a slight on the magnificence of the attraction but an assessment based on its enormous attracting power but limited holding power in terms of a large-scale outdoor attraction (Getz, 1992). An additional concept that is subtle but useful is that of 'passing'. This term refers to visitors who visually inspect the exhibit, site or attraction as they follow their track but do not actually stop. The visitors' walking speed may be reduced and they are not ignoring the site. Instead, they appear to process enough information to make a rapid decision and simply do not find the specific feature appealing enough to cause them to stop.

Time-based records may be used as stand-alone or supplementary records of visitor

interest and help assess the success of component parts of an ecotourism site or interpretive display. Some time ago McManus (1989) advised researchers to be cautious in using mean time as the only measure of visitor attentiveness. She argued that average time scores can strongly mask skewed distributions of time data, with a few visitors spending very long periods of time and many brief periods. This caution should prevent research and textbook writers from making bland statements such as visitors look at signs for say ten seconds. It is more likely that many are involved in passing, some look for 3–5 seconds and a few look for several minutes.

The measurement of time spent at component parts of a site can be brought together with tracking studies. In this kind of work the sequence of visitor movement through space is combined with time spent at component parts of the site (McManus, 1998). The combination of this information can provide a full picture of visitor time–space budgets. Green (1996) provided an interesting application of the approach by examining and tracking how much time visitors spent in various in-water activities versus staying on the catamarans at Great Barrier Reef coral viewing sites. On day trips he observed that many visitors mismanaged their time and often spent the last hour of a three to four hour reef trip sitting on the main vessel as they had miscalculated the timing of their swimming, lunch, snorkelling and glass bottom boat activities.

The value of tracking studies is perhaps underestimated in some ecotourism settings. Often there is assumed knowledge of where visitors spend their time, how much time they spend and in what order they proceed. In one tracking study of visitor centre behaviour it was revealed that visitors spent a mean time of 15 minutes in the interpretive displays. The visitors' own estimates of time spent indicated over half an hour (Pearce, 2007). The possibility of using more time-based appraisals and the sequences of visitor movements may offer managers as well as businesses fresh opportunities to investigate experimentally the details of how their sites work. Additionally, time-based information and tracking studies can check on the value and effectiveness of changes that managers or businesses choose to make.

VISITOR BEHAVIOUR MANAGEMENT OPTIONS

The direct management of visitor behaviour is rarely a stand-alone activity. It is usually set inside policies and frameworks of governmental organizations or acted out within the objectives of a business (Swarbrooke, 1999). Five options that may form part of visitor management systems can be briefly enumerated. They are not mutually exclusive and often work together, particularly at those ecotourism sites that are under the most intense visitor behaviour pressure.

A first option is the development and enforcement of a strong legal framework indicating clearly what visitors can and cannot do within the province of the law. Breaking this law can become a criminal act predisposing the individual to jail or very large fines. Alternatively, transgressing against legal requirements may possibly be classed as a civil infringement involving restitution and community service. A second form of control is the active use of local regulations and rules including identifying zones and creating restricted access areas where only certain specific approved visitor behaviours may take place. Often these regulations involve the visitor paying for permits and access rights

with personnel on hand to check on conformity to the regulatory environment. Another route to desirable visitor behaviour and a common one in many ecotourism settings is that of interpretation. Partly due to the expensiveness of enforcing regulations and partly due to the desire to facilitate the intelligent use of settings, interpretation either through static displays, visitor and interpretive centres or guided tours can influence those who come to experience significant places. A fourth managerial strategy that can be subtly encouraged rather than directly manipulated involves social control; that is, encouraging well-behaved visitors to monitor the less desirable behaviour of others. These techniques either separately or acting in concert can influence not just what people are seen to be doing but also their experience of the settings.

Other chapters in this Handbook pursue the above themes in more detail but they are specified here as a succinct introduction to considering visitor behaviour in two specific ecotourism case studies. One of the advantages of contemplating case studies lies in avoiding the over-generalizations and bland remarks that can prevail when diverse settings are kept in mind. As Diamond (2005) suggests, case studies in social science are naturally occurring experiments and if selected carefully researchers can gain special insights from variations in case study outcomes and comparisons (Eisenhardt, 1989; Yin, 2009).

CASE STUDY ONE: FLINDERS CHASE NATIONAL PARK, KANGAROO ISLAND, SOUTH AUSTRALIA

Kangaroo Island is the ecotourism centrepiece of South Australia. The name of the island, originally bestowed by Captain Matthew Flinders in 1802, is well suited to current ecotourism promotional purposes. The island is rich in Australian marine and terrestrial wildlife including but certainly not limited to large numbers of the local, dark coated kangaroos. It also has a rugged and varied coastline that is directly exposed to the Southern Ocean. A significant amount of visitor attention is focused on Flinders Chase National Park (Figure 11.1), which is an 8000 square kilometre site with rolling vistas of well-preserved native vegetation. The park is bounded to the west and south by a wind-lashed coastline. In the 1980s and 1990s the tourism value of Kangaroo Island with its wildlife and coastal landscapes began to be appreciated. International and domestic visitors both increased rapidly and by the end of the century total visitor numbers exceeded 120 000 annually. The protection of iconic sites such as Seal Bay (the main wildlife site outside the Flinders Chase National Park) and Remarkable Rocks (a much promoted feature inside the park) from visitor pressures posed several challenges. Some of the pressing visitor behaviour issues included unsafe climbing on cliffs and rocky promontories, uncontrolled and disruptive contact with wildlife and erosion damage to vegetation near tracks and car parks. From an experiential point of view, visitors were often disappointed with not being able to see the much publicized wildlife due to the timing of their travels. Further, visitor safety was a public issue with car accidents and deaths by drowning at the Remarkable Rocks site raising issues of managerial responsibility.

Based in part on research conducted by a James Cook University academic team, a new Flinders Chase visitor centre was constructed (Pearce & Moscardo, 2007). The aim

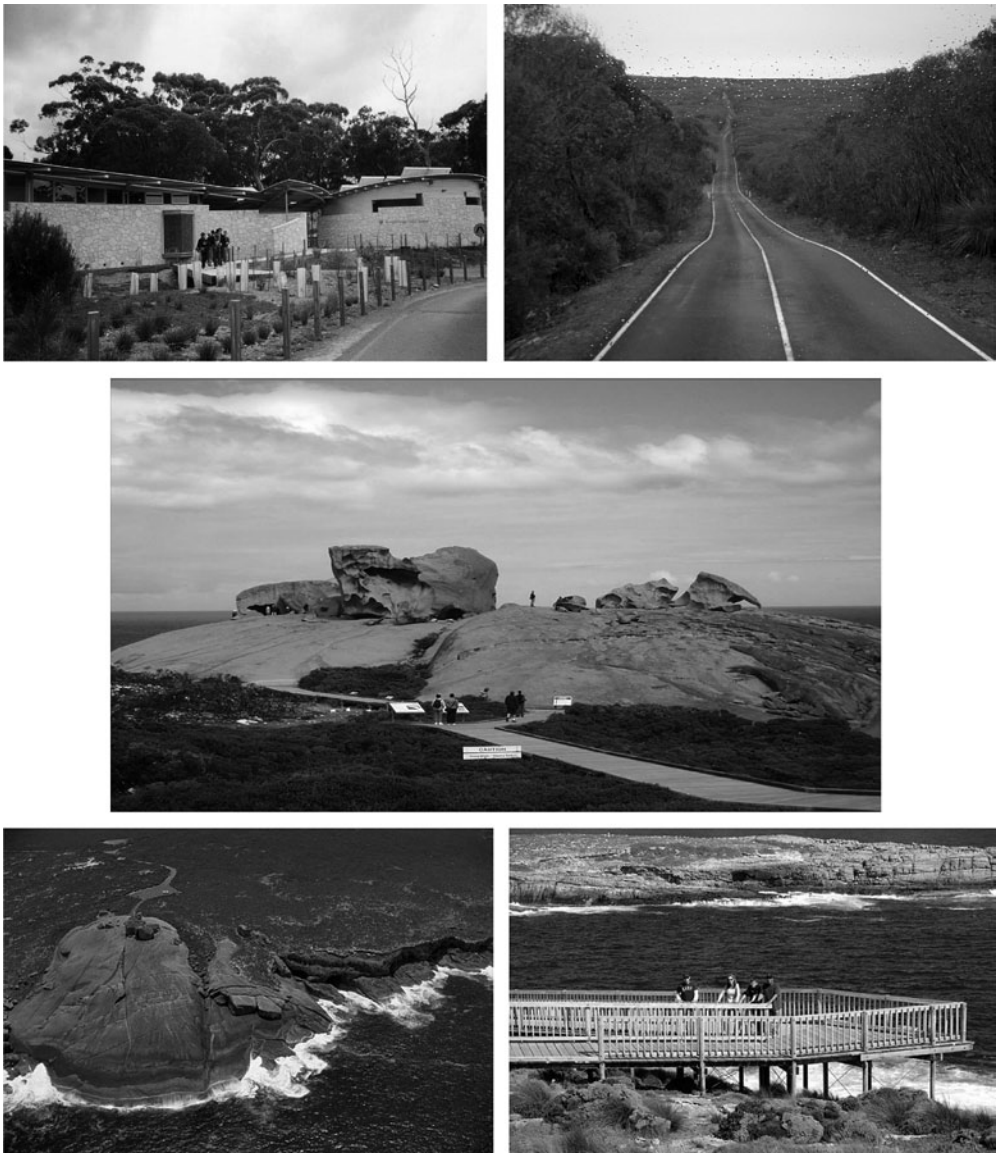

Figure 11.1 Flinders Chase National Park including Remarkable Rocks, South Australia

of the new facility was to provide a starting point and comprehensive information base for Flinders Chase National Park that could influence individual visitor and group tour expectations and behavioural choices. An impressive programme of infrastructure additions coincided with the visitor centre development. Better roads, new wooden coastal boardwalks and on-site safety and interpretive signage were carefully planned and implemented. Research conducted both through survey analysis as well as by watching visitor

behaviour at the centre and in the key locations concluded that the efforts have been worthwhile: major outcomes have been improved visitor satisfaction, longer viewing times at sites and reduced visitor accidents (Pearce, 2006; Pearce & Moscardo, 2007).

Clear implications about visitor behaviour and its management can be deduced from these government and national park management efforts. It is expensive to implement an integrated set of visitor management changes (the visitor centre alone cost $7.5 million) but a holistic approach works. Tourists new to the site, unlike some locals who recall the location in earlier and simpler times, do appreciate the benefits of contemporary information and enhanced management practices. Knowing where to go, what to do and how to do it is a benefit not a burden provided that there is a subtlety and respect for visitor intelligence embedded in the communication efforts. Not unimportantly, the long-term effects of the visitor management actions are critical. Visitor behaviour at this ecotourism site will be shaped by the facilities for decades to come and not just the present.

CASE STUDY TWO: HIDDEN VALLEY CABINS

The second site of interest is Hidden Valley Cabins (Figure 11.2); a small family run business in northern Queensland (http://www.hiddenvalleycabins.com.au/). The value of the location as an ecotourism experience can be defined in four ways. First, and in common with many other ecotourism sites, the property is small scale. It hosts a maximum of 60 visitors at any one time, and rarely has this many guests. Small-size properties in themselves do not define an ecotourism experience but when that scale of business is located in a distinctive environmental zone the ingredients for environmentally conscious and well-managed experiences begin to form. The environmental access and distinctiveness of the business location is the second component of its ecotourism appeal. The distinctive environment of Hidden Valley is that the business is on the edge of the Wet Tropics World Heritage Area. The main access road provides all guests with a 25 kilometre transect of landscapes and vegetation – from the tropical lowland coast through sclerophyll woodland to the full wet tropics rainforest back into a tall timber sclerophyll zone and on to the Hidden Valley Cabins, which are at the margin of the semi-arid country and the tall eucalypts. This pre-arrival experience sets a context for the low key accommodation in rustic-style cabins. The defining element of the ecotourism experience does not, however, reside in the location and environmental context alone. As a third key ecotourism consideration, and perhaps all importantly, Hidden Valley Cabins have won a number of state and national tourism awards for ecotourism because they were the first location in Australia to be truly carbon neutral. The consequences of this commitment to environmental sustainability principles for guests are considerable. There is a large-scale solar power installation that provides a limited power source for the off-grid destination. The guest rooms have low levels of lighting, limited refrigeration and cooling systems and restricted television and entertainment facilities. The cabins, while modest and comfortable, are cleaned with environmentally friendly materials, the toilets are a part of an on-site recycling system and the irrigation of the limited grass spaces is with grey water. Visitor entertainment in the evenings consists of two options – conversations with the family members in a communal eating space where the hosts provide meals followed

Figure 11.2 Hidden Valley Cabins

by quiet reading and personal activities based around a small pool facility, or guided night-time walks in the local environment. The fourth and final defining element of the ecotourism experience, the importance of interpretation, is carried further for guests with daytime tours supplementing the night-time options. In the daylight hours, tours of a local gorge, inspection of old mining sites and a more extensive tour to an Indigenous tourist attraction are offered. The family's long personal history with the site provides a fund of local stories and events.

Some visitor behaviour responses to ecotourism initiatives can be understood by combining the kinds of direct behavioural observation studies already considered in this chapter with more probing analyses of visitor responses through interview and questionnaire material. An understanding of this second case study can be determined through the use of multiple information sources; effectively a mixed methods approach. On-site visits to this ecotourism business have been made on more than five occasions including two periods in which the author was judging the site for tourism awards. The visitor behaviours observed closely on these occasions included noting the hesitancy of some visitors to deal with the modest facilities and their associated lack of media and internet connectivity. Other visitors in conversation and through enthusiastic involvement in the question asking process while on the guided tours were clearly attentive to the environmental setting and curious about the management issues involved in running a carbon neutral operation.

A study exploring the guests' reactions was pursued with the operators' consent to further analyse the visitor experience at this ecotourism site (Daryani, 2008). The design of the study sought to establish immediate and on-site reactions to the carbon neutral initiatives as well as seeking to assess the enduring loyalty to this kind of ecotourism. The strategy of considering the short- and longer-term visitor reactions was complemented by also considering whether the guests would be prepared to return to this specific property or whether they are or would be attracted to similar styles of operations. This consideration of visitor loyalty thus deals with two issues in visitor behaviour: are visitors loyal to a carbon neutral operation in both the short and long term and is this loyalty localized or does it generalize or transfer to other apparently similar operations? The long-term loyalty was established by using the business records to contact and question previous guests. Immediate loyalty was assessed through questionnaires handed to visitors accessed on-site in a two month period. Over 150 visitors were considered in total, a modest number by some market and visitor satisfaction research standards, but in the context of a small operation with fluctuating occupancy levels, a reasonable spread of types of visitors in terms of age and source of origin was achieved. Survey responses to the detailed questionnaire established both short-term and long-term visitor loyalty; that is, those for whom the experience was arguably now a somewhat distant memory were as enthusiastic as the on-site immediate experience visitors in committing to further Hidden Valley Cabin experiences. Additionally, both immediate and previous guests reported that they would stay in similar accommodation styles in the future. Not surprisingly, perhaps, this figure was marginally higher than the percentages obtained in the data about returning directly to the Hidden Valley operation since the visitors were scattered across Australia (and a few were from overseas). This spread of visitor origins emphasizes the value of asking about transferred loyalty in tourism studies since it is often impractical and expensive for visitors to return to the

same site (Pearce & Kang, 2009). The data represent an encouraging result for ecotourism operators seeking to present a low carbon footprint experience to visitors. Visitors may have to modify some of their holiday behaviour and expectations but at least for this successful Australian site they appear to do so while retaining an enthusiasm for further similar experiences.

CONCLUSION

This chapter reduces the complexity of visitor behaviour studies in ecotourism settings by focusing on people's overt or observable activities. Observing visitor behaviour is a feasible and useful research approach with a distinctive power and capacity for insights. It is of particular interest when the behaviours are holistic, naturalistic, socially or legally sensitive, and involve movement over time and space. In any of these circumstances recalling behaviour accurately is likely to be a problem. Nevertheless, this focus on overt behaviour still has its own intricate issues. It is challenging and often impossible to interpret visitors' intentions from their acts alone. The meaning that an observer can ascribe to a reported action may also be different to the interpretations given by those in the setting.

In this review the power of focusing on observable visitor behaviour is demonstrated in studies of how people view attractions and key interest sites. Visitor behaviour is found to exhibit key regularities in the way people move through spaces. Studies of the time visitors spend at sites can be illuminated by the value of recording attracting and holding power supplemented by attention to passing behaviour. It is argued that the development of the concept of slow tourism, an antidote to the speed of contemporary life, was congruent with the potential benefits visitors may obtain as they contemplate ecotourism settings. Two case studies, one at the natural ecotourism setting of Flinders Chase National Park, Kangaroo Island and one at Hidden Valley Cabins, offer specific accounts of the management of visitor behaviour. In the first case information provision through a visitor centre and on-site signage supplemented by improved infrastructure has produced positive results for the setting and visitor experience. In the Queensland case there appears to be a visitor response to sustainability practices that means their future behavioural choices will reinforce the ecotourism operators' vision of providing a carbon neutral experience. The studies at the two sites prompt reflection that the ways communities and businesses now manage these two sensitive sites mirror their overriding vision of the value of these ecotourism settings.

The research opportunities framed by the concepts expressed in this chapter offer some focused directions. It can be suggested that direct observational work may usefully complement the more standardized survey and questionnaire designs. The ability to observe visitors in ecotourism settings and collect systematic records of what they do, for how long they do it and with whom they enact their chosen behaviours may complement other information sources. While assessing intentionality is an issue, the validity of the observational work is a powerful reason for its use because the actual record of what visitors do can usefully be juxtaposed with what they say they do. Above all perhaps, the value of the concepts and approach to understanding visitor behaviour expressed in this

chapter might assist researchers to become keener and more incisive observers of what happens in ecotourism settings.

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12. Generational cohorts and ecotourism

Pierre Benckendorff and Gianna Moscardo

INTRODUCTION

The future of ecotourism will depend to some extent on how well the tourism industry understands the social and demographic trends influencing traveller behaviour. The ecotourism market can be understood by dividing participants using multiple criteria and characteristics, including gender, age, cultural background, attitudes, motives and activity preferences. Some authors have argued that generational cohort theory provides another framework for investigating consumer behaviour (Stevens, Lathrop & Bradish, 2005). Generational cohort theory posits that each generation is characterized by somewhat predictable traits directly attributable to events in their formative years. Insights gained through generational theory have the potential to inform our understanding of attitudes, intentions and visitor behaviour trends in ecotourism. A generational cohort approach can be useful for not only analysing trends in ecotourism consumption but also production (Pendergast, 2010). From a production perspective, the contemporary tourism industry is experiencing a generational shift, with Baby Boomers likely to retire from leadership roles in the workforce, Generation X taking over the reins and Generation Y entering the workforce.

This chapter will:

- provide an overview of generational theory
- discuss the most common traits of the three largest living generations
- examine the challenges associated with generational cohort research
- analyse the implications for ecotourism of the generational traits of the three major living generations
- outline what some of these trends might mean for the future of ecotourism.

GENERATIONAL COHORT THEORY

Generational theory seeks to understand and characterize individuals according to their membership of a generational cohort. Instead of an individual focus, generational cohort theory offers a more dynamic, socio-cultural theoretical framework for understanding broader behavioural trends. Generations or generational cohorts can be defined as 'proposed groups of individuals who are born during the same time period and who experienced similar external events during their formative or coming-of-age years (i.e., late adolescent and early adulthood years)' (Noble & Schewe, 2003, p. 979). It must be noted at the outset that no generation should be viewed as homogeneous. Rather, generational cohorts are analogous to cultures (Moscardo & Benckendorff, 2010). Generational cohorts are shaped by the larger socio-cultural environment of different time periods just

as groups of individuals are shaped by regional variations in culture (Twenge, Campbell & Freeman, 2012). Members of a generational cohort, like individuals belonging to the same culture, share a set of broad values and traits that can be used to predict attitudes and behaviours.

Generational cohort theory has been strongly influenced by the work of Mannheim who argued that individuals are significantly influenced by the socio-historical experiences that dominate their formative years (1952, p. 291):

> belonging to the same generations or age group endows the individuals sharing in [it] with a common location in the social and historical process, and thereby limit them to a specific range of potential experiences, predisposing them for a certain characteristic mode of thought and experience, and a characteristic type of historically relevant action.

Generations shaped by similar formative experiences develop similar collective personas and follow similar life-trajectories. These experiences produce social generations that in turn become agents of change and give rise to events that shape future generations. According to Strauss and Howe (1997), this results in a repeating cycle of social eras which they call 'turnings'. Each turning lasts about 20 years, with four turnings comprising a full cycle called a 'saeculum'. Each turning corresponds with the formative years of a particular generational cohort (that is, childhood and early adulthood), thereby influencing the values and beliefs of individuals in that cohort. This results in four generational archetypes, which Strauss and Howe (1997) refer to as prophets, nomads, heroes and artists. When these generational types are tracked across the life cycle, there are characteristics that appear consistently throughout successive generations. The generations in each archetype not only share similar life-trajectories through each turning, they also share basic attitudes towards family, risk, culture and values, and civic engagement. Strauss and Howe (1997) describe each of the four turnings as follows:

1. 'The high': a post-crisis era in which society is rebuilding, recovering and strengthening itself but the focus is on national goals and unity rather than individual values. The most recent turning in the Anglophone world was the post-World War II era in which the Silent Generation (artists, born 1925–42) came of age.
2. 'The awakening': a period of social and spiritual upheaval when leaders and institutions are attacked in the name of personal and spiritual authenticity. The most recent second turning occurred during the 1960s and 1970s as the Baby Boomers (prophets, born 1943–60) rebelled against their parents and leaders from the GI Generation (heroes, born 1901–24).
3. 'The unravelling': an era characterized by strengthening individualism and a pervasive distrust of institutions and leaders. The values and beliefs of Generation X (nomads, born 1961–81) and their disillusionment with political and corporate leaders, lack of loyalty, free agency and perceived lack of direction epitomizes the mood of the third turning.
4. 'The crisis': an era in which civic engagement is revived as a result of secular upheaval in which old institutional regimes are destroyed and rebuilt. The crisis usually reaches a climax late in the fourth turning, fuelled by an accumulation of unmet needs, unpaid bills, rising cost of living and other unresolved problems. The

Table 12.1 Characteristics of generational archetypes

Archetype	Prophet	Nomad	Hero	Artist
Living generation	Baby Boomers	Generation X	Generation Y	Generation Z
Years	1943–60	1961–81	1982–94	1995–2010
Contemporary social roles	Leadership: transferring values, leading institutions	Power: asserting values, managing institutions	Vitality: testing values	Growth: acquiring values and belief systems
Childhood	Relaxed (H)	Underprotected (A)	Tightening (U)	Overprotected (C)
Young adult	Reflecting (A)	Competing (U)	Building (C)	Remodelling (H)
Mid life	Judgemental (U)	Exhausted (C)	Energetic (H)	Experimental (A)
Elderhood	Wise, visionary, austere, safe (C)	Persuasive, pragmatic (H)	Busy, confident, grand, inclusive (A)	Sensitive, flexible, pluralistic (U)
Motto	Truth	Persuasion	Power	Love
Positives	Principled, resolute	Pragmatic, perceptive	Rational, competent	Caring, open-minded
Negatives	Selfish, arrogant, ruthless	Pecuniary, amoral, disrespectful	Overconfident, need structure and praise	Indecisive, impatient, emotional

Note: Turnings: (H) = High; (A) = Awakening; (U) = Unravelling; (C) = Crisis.

Source: Strauss and Howe (1997) and Pendergast (2010).

most recent crisis began with the 1929 stock market crash and climaxed with the end of World War II. If history repeats itself, then the Western world is moving from an unravelling to a crisis at a time when Generation Y are coming of age. Terrorism and the global financial crises may signify the start of a new era of crisis (McCrindle & Wolfinger, 2009). The looming threat of climate change also foreshadows an era of resource scarcity that may culminate in a climax at some point between 2025 and 2035.

In order to gain the full benefit of generational theory, it is important to bring the various elements discussed so far together. Table 12.1 provides a summary of the characteristics of each generational archetype through each turning. Major living generations are shown as examples, along with their contemporary social roles in society. Of particular interest to this chapter is the notion that collective generational thinking can drive the behaviour of ecotourism consumers and producers (McCrindle & Wolfinger, 2009). The following discussion examines in more detail the three generations that are currently driving economic activity, society and culture.

The Baby Boomers (prophet generation) currently dominate many of the leadership positions in the tourism field, both in the private and public domains. They were born into a post-war 'golden' era and are now entering elderhood. This generation experienced childhood and young adulthood in the 1960s and 1970s, a time that was

characterized by social and sexual revolution; anti-war, feminist and civil rights movements; and rebelling against the 'establishment' (Table 12.2) (Cone-AMP, 2006). The Boomers were the first generation to express concern about environmental degradation. While much of this concern was aimed at local environmental issues, the Moon landing in 1969 beamed back imagery of a vulnerable biosphere, turning attention to global environmental threats. One group of Baby Boomers were proponents of alternative lifestyles and became known as the 'hippies' who started the green movement. Boomers grew up watching black and white television with a limited number of channels featuring shows such as *The Ed Sullivan Show*, *The Brady Bunch* and the *Wonderful World of Disney*. They were children in large traditional families where their father was the sole income earner (McCrinde & Wolfinger, 2009). They are sometimes described as the pampered children of stay-at-home mums (Cone-AMP, 2006). They were influenced and moved by the music of Elvis Presley and Bob Dylan and bands such as the Rolling Stones and the Beatles. Major defining events included Woodstock, the Oil Crisis, the Vietnam War, the assassination of US political figures and the Moon landing.

As a result of these formative experiences, the Baby Boomers have been described as ambitious, materialistic and idealistic (Table 12.3). It is claimed that members of this generation exhibit a strong work ethic, believe in authority and are committed to equity and justice. But the tendency for some members of this generation to be preoccupied with personal growth and gratification has been interpreted by younger generations as self-centred (Cone-AMP, 2006; Pennington-Gray, Fridgen & Stynes, 2003). The focus on personal gratification has meant that some Baby Boomers are more likely to leave unfulfilling relationships, resulting in increasing divorce rates. The ambition of this generation is also at odds with their ideals to create a better world where people live in harmony with each other and with nature. Younger generations have criticized the Baby Boomers for abandoning their ideals. There is a view that corporate greed and the quest to 'keep up with the Joneses' have driven consumption to unprecedented levels and have created many problems that younger generations will have to solve (Heath, 2006). As this generation moves into elderhood, the tourism industry will have to consider whether individuals have enough retirement savings to continue to drive leisure consumption. The public sector will have to consider whether there are enough younger consumers to pay taxes in order to maintain infrastructure while commercial operators will be challenged by the vacuum created when Baby Boomers leave employment.

A prophet generation is usually followed by a nomad generation such as Generation X. Nomads are typically described as cynical and often depressed by what they perceive as the weight of the world on their shoulders. Members of Gen X came of age during the 1980s and 1990s. The spectre of AIDS meant they could not enjoy the sexual revolution. They were bombarded with safe sex campaigns, anti-smoking campaigns and anti-drugs campaigns that 'killed the fun' experienced by the previous generation. They were the first generation subjected to mass media, public relations and advertising campaigns. In the home, they were the first generation of children to grow up in dual income families. While older generations criticized Gen Xers for spending too much time in front of the 'idiot box', they were rarely around to spend quality time with their children. This 'hands-off' parental style resulted in them being called the 'latchkey' kids (Cone-AMP,

Table 12.2 Defining events for selected generations

Events	Baby Boomers	Generation X	Generation Y
Socio-cultural	Social and sexual revolution, feminist movement, activism, civil rights, anti-war movement	AIDS, sexual caution, anti-smoking campaigns, gay rights movement, dual income households, divorce	Postmodernism, extended adolescence, civic minded, self-esteem movement
Science and technology	Television, transistor radios, moon landing, records, tape players, VCRs, contraception, organ transplants	Technology revolution: colour TV, personal computers, arcade games, Walkman, microwaves, compact disc players. Failure of technology (i.e. Challenger explosion, Chernobyl nuclear meltdown)	'The Information Age', internet, email, social media, console games, online gaming, mobile phones, wireless technologies, digital cameras, flat panel TVs, Human Genome Project, gene therapy
Economic	Post-war 'golden years', oil crisis	1980s recessions, corporate downsizing, redundancies, growth of multinationals, 'Thatcherism', 'Reaganomics' and economic rationalism	Globalization, sustained economic growth, soaring property and energy prices, global financial crisis, European debt crisis
Environmental	Green movement, local environmental concern and activism	Exxon Valdez oil spill, 'the greenhouse effect', global environmental concern	Natural disasters, climate change
Political	Cold War, Vietnam and Korean Wars, political assassinations and unrest, left-wing politics	Fall of communism, end of apartheid, neoliberalism, 'war on drugs', Tiananmen Square	The 'third way', September 11, 'war on terror', Middle East conflicts, growth of China
Entertainment:			
Television	*The Ed Sullivan Show, The Dean Martin Show, Brady Bunch, The Twilight Show, Happy Days, Wonderful World of Disney*	*Dallas, Dynasty, Cheers, Seinfeld, Beverly Hills 90210, Baywatch, The A-Team, The Simpsons, The X-files, MTV*	*Friends, Dawson's Creek, CSI, Grey's Anatomy, Reality TV, Two and a Half Men, Big Bang Theory, Mad Men*
Music	Beatles, Rolling Stones, Abba, Elvis Presley, Bob Dylan, Woodstock	Michael Jackson, Madonna, Nirvana, Live Aid Concert	Britney Spears, Robbie Williams, Justin Bieber, Eminen
Film	*The Sound of Music, Mary Poppins, Grease, Breakfast at Tiffany's, The Graduate, Star Wars, Jaws, Rocky*	*E.T., Terminator, Indiana Jones, Top Gun, Titanic, Jurassic Park*	*Lord of the Rings Trilogy, Harry Potter, Pirates of the Caribbean, Avatar*

Source: AMP:NATSEM (2007), Australian Bureau of Statistics (2007), Beutell and Wittig-Berman (2008), Borges et al. (2006, 2010), Corvi et al. (2007), Donnison (2007), Eisner (2005), Hill (2002), Kupperschmidt (1998), Losyk (1997), Lyons et al. (2005), McCrindle (2009), Mitchell (2005), Oblinger (2003), Strauss and Howe (1997) and Tulgun (1996).

Table 12.3 Characteristics of selected living generations

Factors	Baby Boomers	Generation X	Generation Y
Traits	Idealistic, materialistic, ambitious, self-absorbed	Sceptical, disloyal, independent, informal, pragmatic, adaptable	Social, confident, competitive, narcissistic, multi-taskers, tolerant
Beliefs and values	Strong work ethic, security, loyalty, personal fulfilment, equality	Variety, work–life balance, self-reliance	Lifestyle, fun, optimism, innovation, civic responsibility
Motivations	Advancement, responsibility	Individuality	Self-discovery, escape, novelty, relationships
Change	Avoid change	Accept change	Expect change
Earning and spending	Conservative, pay upfront	Credit savvy, confident investors	Short-term wants, credit dependent
Learning styles	Auditory, content-driven monologue	Auditory, visual dialogue	Visual, kinaesthetic, multi-sensory stimulus junkies
Marketing and communication	Mass	Descriptive, direct	Participative, viral, word of mouth

Source: Benckendorff and Moscardo (2010), Beutell and Wittig-Berman (2008), Borges et al. (2006, 2010), Clemmons (2008), Corvi et al. (2007), Donnison (2007), Eisner (2005), Glass (2007), Hill (2002), Howe and Strauss (2000, 2003), Jorgenson (2003), Kupperschmidt (1998), Littrell et al. (2005), Losyk (1997), Lyons et al. (2005), McCrindle (2009), Mitchell (2005), O'Bannon (2001), Pendergast (2010), Sheahan (2005), Strauss and Howe (1997), Volunteering Queensland (2012) and Walker, Martin, White, Rowena, Norwood, Mangum and Hayne (2006).

2006; O'Bannon, 2001). Increasing divorce rates meant that many Gen Xers grew up in single parent households or blended families (McCrindle, 2006; Pennington-Gray et al., 2003; Tulgun, 1996). Many experienced first hand the impact of economic rationalism, recessions and stock market crashes when their parents lost their jobs as a result of corporate downsizing. A series of political scandals and weak leadership caused this generation to lose faith in government, corporate politics and bureaucracy (Carpini, 2000; Cowling, 2012). While this generation was the first to experience the computer age and an array of new electronics, they also saw the catastrophic consequences of technological failure. Events such as the Challenger explosion, Chernobyl and the Exxon Valdez oil spill are strongly embedded in the minds of this generation. 'Global warming' and concerns about the 'ozone layer' raised the issue of environmental degradation from a local issue to a global problem. On a more positive note, the 1990s ushered in the end of the Cold War and the fall of the Berlin Wall as well as the end of apartheid. While the Baby Boomers started the backpacking trend, Gen Xers were the first generation to embark on an overseas working gap year in large numbers. Some stayed and never returned to their country of birth.

These events have forged a generation that some have described as disillusioned, sceptical, disloyal and individualistic (Cone-AMP, 2006; Tulgun, 1996). Pennington-Gray et al. (2003) suggest that Gen Xers are sceptical about their economic future because

they realize that they will have to work harder to achieve the same standard of living as their parents. Their scepticism is also partly borne out of a feeling of being let down by authority figures and partly the result of the advertising and media-rich environment in which they have grown up. They dislike hype and anything that smacks of phoniness (Losyk, 1997; Prichard & Morgan, 1996). Lack of parental supervision has resulted in a generation that resents rules, authority and supervision and that is stubborn, self-reliant and independent. They are often called the 'slacker generation' because they are perceived as having a poor work ethic (O'Bannon, 2001). However, Gen Xers shrug off these stereotypes and argue that their work ethic and lack of employer loyalty are the result of being more family-oriented and seeking a better work–life balance (Miller, 2011). When this cannot be achieved, they will change jobs (O'Bannon, 2001; Tulgun, 1996). They are described as involved parents who do not want to repeat the sacrifices their workaholic parents made only to be rewarded with redundancies (Miller, 2011). Members of this generation are moving into mid life and are starting to assume leadership and power positions in the tourism industry. They typically have young families but are highly mobile consumers who will compare holiday and leisure choices in the global marketplace to find the best value.

Generation Y (hero generation) are the youngest generation to enter the tourism workforce. Most members of this generation are now in young adulthood, are starting their careers and make up the bulk of the young singles and couples market. Gen Ys grew up in a media-saturated postmodern world where technology was pervasive. They were the first generation to grow up with high-definition television, mobile phones, the internet and social media. This technology brought natural disasters and global conflicts such as the 'war on terror' into the home in vivid detail, while reality television produced a generation of voyeurs. 'Stranger danger' campaigns, paedophilia, child abductions and the rising incidence of drink spiking made Gen Y very conscious of personal safety. Like Gen Xers they were raised in dual income families that often splintered as a result of divorce. However, unlike Gen X the parents of Gen Ys were often older and have been described as overprotective, leading to the pejorative phrase 'helicopter parents'. These parents took a keen interest in the education, experiences and problems of their children. Parents and teachers have conditioned Gen Ys to believe that 'everyone is a winner' and as a result they seek constant praise and feedback. Gen Ys grew up in a world of unprecedented economic growth that has driven up the cost of housing. Many Gen Ys are expected to be lifelong renters as the dream of home ownership fades (Davey, 2011). Increasing housing costs coupled with overprotective parenting has also meant that many Gen Ys have had an extended adolescence and have remained in the family home longer than previous generations.

Gen Ys are characterized as confident, determined and tolerant, with respect for authority and a strong sense of civic responsibility. The growth of social media has been fuelled by a generation that values relationships, connections and networking. However, a fixation with reality television and social media status updates has led to Gen Ys being described as narcissistic (Twenge & Foster, 2010). It has been claimed that Gen Y are more community-oriented, caring, and interested in environmental causes than previous generations were (Epstein & Howes, 2006; Greenberg & Weber, 2008), but this view has been disputed by an extensive longitudinal study (Twenge et al., 2012).

CHALLENGES IN APPLYING GENERATIONAL COHORT THEORY

While generational cohort theory has a substantial history in sociology, there are several challenges in studying cohorts. Given the importance of defining events in shaping cohort traits, it is not surprising to find that they are not uniform across cultures and places. Generational theory is originally a North American concept, and contemporary generations are often defined according to Anglophone socio-economic conditions and paradigms. Hole, Zhong and Schwartz (2010) provide a useful comparison of how these Anglophone generational cohorts align with generations from other countries (Table 12.4). While there does appear to be some degree of congruence between American generational cohorts and other cohorts from developed English-speaking countries (including Commonwealth countries), a study comparing European and American Gen Ys noted that there were core differences in the defining events and social conditions of these two groups (Corvi, Bigi & Ng, 2007).

Pendergast (2010) argues that the internet, mass media and globalization are driving the 'mono-culturalization of society', resulting in a dramatic increase in the number of people who can be included in a single generational cohort. In addition, global industries such as tourism are using English as the lingua franca for information dissemination, further reinforcing and facilitating the reach and effect of generational patterns and impacts (Fields, Wilder, Bunch & Newbold, 2008).

Corvi, Bigi and Ng (2007) raise another challenge for studying generations: determining what the historical event or social conditions might be that defines a generation. Although Schuman and Scott (1989) provide evidence that major events like World War II and the Vietnam War are clearly linked to the values and consciousness of older generations, evidence for significant events for younger generations is much less clear (Noble & Schewe, 2003). A related point is that there is very little consensus about the years that constitute each generation. This is because generational differences are not necessarily discrete. The reality is that rather than sharp generational distinctions, there is a blended change that may reflect the changing nature of the times.

Generational cohorts also interact with life cycle stages and this can make it difficult to determine which characteristics and behaviours are connected to the cohort, and thus likely to remain with them as they age, and which are connected to the life cycle stage (McCrindle, 2009). This is especially a problem for cross-sectional research that compares different age groups at one point in time (Moscardo & Benckendorff, 2010). In the case of Gen Y, for example, it is difficult to determine which characteristics are connected to their cohort and which are connected to the fact that they are still adolescents and younger adults who are only just beginning to have families and move into careers (Moscardo & Benckendorff, 2010). The picture is further complicated by a number of trends associated with ageing regardless of cohort or life cycle stage. Carlson (2010), for example, demonstrates that as people get older they get less materialistic and this effect is clear across different cohorts, life cycle stages and cultures.

Identifying the traits that define a generation can be a frustrating and complex task. McCrindle and Wolfinger (2009) observe that the mass media is saturated with commentary on generations and that it can be challenging to distinguish fact from

Table 12.4 Global generational comparison

Country	1940s	1950s	1960s	1970s	1980s	1990s	2000s
China		Post-50s (1950–59)	Post-60s (1960–69)	Post-70s (1970–79)	Post-80s (1980–89)	Post-90s (1990–99)	Post-00s (2000–09)
India	'Traditional' (1948–68)			'Non-Traditional' (1969–80)	Gen Y (1981 onward)		
South Korea		'475' generation (1950–59)	'386' generation (1960–69)	Gen X and Gen Y (1970 onward)			
Japan	Baby Boomers I (1946–50)	Danso (1950–60)	Shinjinrui (1961–70)	Baby Boomers II (1971–75)	Post Bubble (1976–87)	Shinjinrui Junior (1986–95)	
						Yutori (1987–2002)	
Russia	Baby Boomers (1943–64)			Gen X (1965–83)		Gen Y (Gen 'Pu') (1983–2000)	
Bulgaria	Post-war generation (1945–65)			Communist generation (1965–80)	Democracy generation (1980 onward)		
Czech Republic	Baby Boomers (1946–64)			Husak's Children (1965–82)		Gen Y (1983–2000)	
South Africa	Baby Boomers (1943–70)				Gen X (1970–89)		Gen Y (1990 onward)
USA, UK, Canada, Australia, Brazil	Baby Boomers (1943–60)		Gen X (1961–81)		Gen Y (1982–94)		Gen Z (1995 onward)

Source: Adapted from Hole et al. (2010), Howe and Strauss (2000) and Strauss and Howe (1997).

hype and conjecture. Despite recent academic interest, the potential for understanding generational differences has been recognized for some time by the commercial world. As a result, a great deal of material has been generated by journalists and commercial consultants, with many contradictory claims and very disparate conclusions (Moscardo & Benckendorff, 2010). Media coverage provided by social commentators and journalists has tended to be more anecdotal and speculative rather than being based on sound empirical research conducted by social scientists (McCrindle & Beard, 2006). Not surprisingly, these 'pop commentators' have attracted criticism and this criticism has often spilled over into condemnation of the concept of generational cohorts. McCrindle and Beard (2006) note, however, that while the discussions of specific aspects of particular generations may be suspect, it does not logically follow that the concept itself is flawed. It is possible to identify a core set of traits for each generation that most commentators agree on. The chapter now turns to a more detailed analysis of what some of the core traits of each generation mean for the future of ecotourism.

A FRAMEWORK FOR ECOTOURISM AND GENERATIONS

Understanding how generational cohorts can be linked to ecotourism futures requires a more detailed examination of what ecotourism is. According to the United Nations Environment Programme (UNEP, 2002), ecotourism has the following characteristics:

- It is nature based.
- It attracts tourists who are motivated by a desire to experience nature and traditional cultures.
- It incorporates educational or interpretive elements.
- It minimizes negative impacts on both the environment and host destination community.
- It supports protection of natural areas through generating economic benefits from conservation, providing employment and income for local communities and increasing conservation awareness amongst all stakeholders including staff, local communities and tourists.

This description of ecotourism suggests that there are four main stakeholder groups involved in ecotourism – ecotourism owners and operators, ecotourism staff, ecotourists and local communities. For each of these stakeholders there are four key dimensions to be considered – orientations to tourism and travel experiences in general, values and attitudes towards sustainability in general, values and attitudes towards natural environments in particular, and interests in and approaches to learning in informal or free-choice settings. Generally, generational cohort characteristics can be linked to all four of these dimensions but a more detailed analysis is much more difficult because there is little research in tourism that has examined generational differences in tourism operators, communities or visitors. The following sections attempt to link the characteristics of the three main current cohorts in tourism, Baby Boomers, Gen X and Gen Y, to these key dimensions of ecotourism.

BABY BOOMERS: THE PARENTS OF ECOTOURISM

Ecotourism as a phenomenon can be linked directly to Baby Boomers. It is a style of tourism born from the idealistic values and aspirations of Baby Boomers both as producers and consumers. Ecotourism emerged in the late 1960s and became a clearly defined form of tourism in the late 1970s and early 1980s. It developed out of a desire to find alternatives to the phenomenon of large-scale or mass international tourism associated with many coastal and island destinations in the 1970s, and to focus more on environmental conservation (Blamey, 2001). There is a clear link between ecotourism and the work on general consumption that describes the emergence and growth of the Lifestyles of Health and Sustainability (LOHAS) consumer market, which in turn has been identified as a product of Baby Boomer values, attitudes and behaviours (Natural Marketing Institute, 2011; Ottman, 2011). While studies of ecotourists have rarely measured generational cohorts, research conducted during the 1990s and 2000s presents a consistent profile of ecotourists as being wealthier consumers from Western developed countries (WDCs) with higher levels of education and an age profile that places them clearly within the Baby Boomer cohort (Weaver & Lawton, 2007; Wight, 2001). This is confirmed in more recent studies of nature-based and ecotourism markets where Baby Boomers have been specifically identified as core ecotourism consumers (Nerg, Uusivuori, Mikkola, Neuvonen & Sievanen 2012; Yi, Day & Cai, 2012). Similarly, the limited information that is available on the age of ecotourism entrepreneurs and business owners provides further evidence of the links between Baby Boomers and the rise of ecotourism (Fennell & Malloy, 1999; Shepherd, 2002).

Two important questions about the future of ecotourism arise from having Baby Boomers as core producers and consumers of ecotourism. Firstly, what will happen in the shorter term to ecotourism as this group becomes older and moves into the later stages of their lives? Secondly, will ecotourism continue to be a viable form of tourism in the longer term without this generation? A major global demographic trend is the ageing of the population with the proportion of the population aged over 65 years continuing to grow in comparison to that aged less than 65 years (UNDESA, 2009). For many commentators in tourism this ageing population is seen as supporting growth in tourism because of the importance of senior travellers as a tourism market in the last two decades. These seniors, who are primarily from the generation before Baby Boomers (the Silent Generation) have been able to take advantage of earlier retirement ages, freedom from family responsibilities, better health and greater affluence to engage in travel. For many in tourism a growth in the number of older people means a growth in this type of senior travel (see Moscardo, 2006 for a review of this argument). This assumed growth in senior travel amongst Baby Boomers has then been linked to continued interest in ecotourism (Cleaver & Muller, 2002).

But an ageing population has important implications for taxation, welfare and health provision, with many governments recognizing the problems that could arise from changes in the ratios of workers to retirees. Not surprisingly, there have been significant changes in retirement ages, and government social welfare and pension policies and these, in combination with the consequences of the global financial crisis, mean that Baby Boomers are likely to have to continue to work for longer, both full time and

part time, and may be less affluent than previous retirees (US Department of Labor, Employment and Training Administration, 2012; Victorian Department of Justice, 2011). Baby Boomers are also the first generation that is responsible for the simultaneous care and support of their parents, children and grandchildren (Beutell & Wittig-Berman, 2008; Williamson, Bannister, Makin, Johanson, Schauder & Sullivan, 2006). Thus Baby Boomers face a very different future as they age and may have less capacity to travel as seniors than the Silent Generation.

There is also the issue of the consequences of the retirement of Baby Boomer owners of ecotourism businesses. Very little information is available to inform this issue, but some research into small tourism businesses in general suggests that few of these businesses have clear succession plans and it is unlikely that many will continue when the current operators are no longer willing or able to continue to work (Andersson, Carlsen & Getz, 2002). It is not at all clear who will continue to operate current ecotourism businesses into the future.

The analysis of the shorter-term future for ecotourism suggests that a reliance on Baby Boomers is a high risk option and that ecotourism's viability is likely to depend on the extent to which it can attract and retain members of the next two generational cohorts as operators, staff and tourists. This leads directly to the question of the extent to which ecotourism is likely to appeal to other generations. The answer to this question requires both a consideration of the characteristics of these two generations, which is provided in the following sections, but also an analysis of the extent to which current forms of ecotourism are tied to Baby Boomer characteristics. It could be argued that three features of current forms of ecotourism are closely tied to Baby Boomers – a focus on more luxury accommodation in ecotourism, an emphasis on environmental conservation rather than sustainability and a central role for structured interpretation. There have a been a number of critiques of ecotourism that have highlighted the focus on luxury consumption and raised concerns about the extent to which ecotourism is focused on environmental conservation at the cost of the social and cultural aspects of sustainability (Carrier & Macleod, 2005; Kruger, 2005; Stamou & Paraskevopoulos, 2003). An interest in comfort, conspicuous consumption and environmental issues were all traits linked to Baby Boomers earlier in this chapter.

Generational cohorts have also been linked to differences in their approaches to information and learning. Baby Boomers have been said to differ from other cohorts in that they are more interested in learning as part of their leisure (Williamson et al., 2006), and more comfortable with structured learning styles such as lectures and books (Johnson & Romanello, 2005; Notarianni, Curry-Lourenco, Barham & Palmer 2009). Interpretation is a central part of ecotourism and many of the ways this informal education is currently provided to ecotourists is consistent with styles of learning favoured by Baby Boomers. This link to Baby Boomers is also evident in the content of ecotourism interpretation. Peake, Innes and Dyer (2009), for example, found evidence that the older members of their sample of ecotourists (Baby Boomers) were more open to the conservation messages presented than younger participants.

It could be argued that many features of the way ecotourism experiences are organized and provided are tied to Baby Boomer values and preferences both because of their dominance as ecotourism consumers and central role as ecotourism producers. To some extent these values and preferences are also superimposed onto subsequent

generations by Baby Boomer teachers and parents. However, the evidence presented in this section indicates that as Baby Boomers age, ecotourism will have to look to other generational cohorts for support and that it will have to change in order to attract their attention.

GEN X: DISILLUSIONED ECOTOURISTS

The characteristics of Gen X have implications for three aspects of ecotourism production and consumption: marketing; attitudes towards conservation and civic responsibility; and experience and product design. The marketing and 'ecolabelling' of ecotourism experiences has received a great deal of research attention. Much of the research attention about ecotourism marketing has focused on 'ecolabelling' or 'greenwashing' and on consumer awareness of accreditation schemes (Buckley, 2001). While many Gen Xers tend to be sceptical, it is more useful to describe them as well-informed, cautious consumers who are particularly sensitive to marketing hype and inauthenticity in marketing communications (Prichard & Morgan, 1996). Unethical marketing practices have made many Gen Xers suspicious of products that have an 'eco' label with the result being that ecotourism has an image problem. For many members of Gen X the term 'ecotourism' is tinged with the recognition that all nature-based experiences, no matter how environmentally friendly, have some sort of impact on the environment. In a quest for more authentic product information, Gen Xers have shunned traditional marketing channels and have fuelled the growth in electronic word of mouth services such as TripAdvisor and Virtual Tourist. It is likely that ecotourism experiences and the way they are marketed will need to be redefined as electronic word of mouth and the management of information becomes more important.

The issues of ecolabelling and greenwashing are also linked more broadly to Gen X attitudes towards the environment and conservation. A meta-analysis conducted by Benckendorff, Moscardo and Murphy (2012) found no discernible increases in pro-environmental attitudes between generations. Although Gen Xers have witnessed first hand some of the greatest ecological disasters, they are becoming increasingly disengaged from issues such as climate change (Miller, 2012). Miller (2012) argues that this apathy is the result of 'issue fatigue' caused by a limited tolerance for public policy issues that persist over a number of years. He does note, however, that Gen Xers with a higher level of education are more likely to express alarm or concern over climate change and environmental issues, suggesting that education is an important moderating variable. Given that ecotourists are generally more highly educated (Wight, 2001), this might signal a continuing synergy between concern for the environment and demand for ecotourism experiences. However, there is further evidence that while younger consumers (including Gen X and Gen Y) are concerned about the environment, they disengage from environmental concerns while on holiday (Wearing, Cynn, Ponting & McDonald, 2002). The corollary of this is that there may continue to be demand for soft ecotourism experiences that do not require too much effort to behave in an environmentally responsible manner. In the short to medium term, the socio-demographic characteristics of this generation and their desire to spend time with the children would suggest that soft ecotourism focused around quality family experiences (such as bushwalking) might be successful

(Miller, 2011). On the other hand, the cynicism of Gen Xers might also translate into a 'see it now before it is gone' mentality, resulting in demand for ecotourism activities in threatened environments such as reefs and rainforests.

As a nomad generation, Gen Xers are not prone to being proactive and are unlikely to change the environmental debate through activism. The pragmatic traits of this generation suggest a more balanced and reactive response to environmental problems. One outcome of this is the high rate of volunteering amongst Gen Xers. This bodes well for ecotourism as many environmental organizations rely on volunteers to care for the environment and provide interpretation for visitors. However, a deeper look at the evidence indicates a decline in civic orientation across these generations (Miller & Buys, 2004; Twenge et al., 2012). Twenge et al.'s (2012) longitudinal study found that civic orientation (that is, interest in social problems, political participation, trust in government, taking action to help the environment and save energy) was highest for Baby Boomers and has declined with subsequent generations. Some of the largest declines appeared in taking action to help the environment. They claim that Gen Xers and Gen Ys show higher rates of community service and volunteering than previous generations but that this behaviour is driven by school programmes rather than a notable increase in civic orientation. However, it has been argued that the internet may provide new types of civic engagement not measured by older scales developed for longitudinal studies (Vromen, 2003). Bussell and Forbes (2003) also argue that volunteerism rates follow a predictable life cycle. Volunteerism rates tend to be higher in the teens than in early adulthood, before recovering and peaking in middle age and dropping off in elderhood. It is no surprise then that Gen Xers currently exhibit higher rates of volunteerism than generations that are at the beginning or end stages of the volunteer life cycle. However, if ecotourism organizations want to retain Gen X volunteers they may need to look at similar strategies to those being employed by commercial employers (Cowling, 2012).

The work–life balance sought by Gen Xers may mean that smaller ecotourism businesses that require a lot of time and personal sacrifice are unlikely to be attractive career and lifestyle choices. The undesirability of small ecotourism businesses will be exacerbated by a growing skills shortage. Many of these smaller operations may simply end when Baby Boomers move towards retirement. On the other hand, a pragmatic streak may encourage Gen X resource managers to look for ways to balance commercial interests with conservation. Gen Xers have not only seen corporate greed but also how good corporate citizenship can be effective in bringing about positive outcomes. There is a growing faith in the private sector and the market as the best way to address major concerns. In contrast, government and politics are viewed as irrelevant and ineffective and the source of many contemporary problems (Carpini, 2000). Rather than locking up natural areas for posterity, Gen Xers may be more accepting of public–private partnerships that deliver sustainable ecotourism experiences. These ideas are somewhat speculative, but if informed by research they have implications for the planning and use of natural and protected areas.

Ecotourism experiences and products are likely to be impacted by the technology fluency of Gen X. New mobile technologies blur the boundaries between work and leisure. Ecotourism experiences that are completely disconnected from hectic work and family commitments are unlikely to be appealing as Gen Xers try to balance their work and family lives by multi-tasking. New mobile technologies further reinforce this

behaviour and are also likely to play an increasingly important role in interpretation and learning. Traditional guides or static text-based interpretative techniques designed by (and for) Baby Boomers are unlikely to engage Gen Xers who have grown up in a visual, media-rich environment. Younger consumers will most likely be looking for interpretation that blends 'high touch' with 'high tech' to create experiential, interactive and authentic learning experiences. This technology is not seen as intruding on nature's serenity, rather it is assumed to be a natural part of the environment (Oblinger, 2003). There will be an expectation that even in ecotourism settings individuals will be able to use mobile devices to access information and social connections to engage in real-time dialogues.

GEN Y: EVOLVING ECOTOURISTS

An initial consideration of the claimed characteristics of Gen Y suggests that there may be a positive match between ecotourism and this generational cohort. It has been suggested that Gen Y are environmentally conscious, concerned about sustainability, want to work for responsible businesses and interested in social equity and justice (McDougle, Greenspan & Handy, 2011; Moscardo, Murphy & Benckendorff, 2011). It has also been proposed that Gen Y are interested in travel and are likely to be active tourism consumers in the future (Pendergast, 2010). Taken together it seems that these motivations and travel propensities would support Gen Y as both ecotourism consumers and potential ecotourism staff. But this simple analysis needs to be balanced against two cautions – the extent to which the claims made for Gen Y are accurate and the need to understand how these motives and interests are translated into tourism practice by the members of this generation.

In the first instance it is important to remember that many of the claims made about Gen Y have been based more on anecdotal than empirical evidence. As this cohort has attracted the attention of academic researchers, many of the claims are being challenged. Moscardo and Benckendorff (2010), for example, found no evidence that Gen Y were likely to be more frequent travellers than previous generations. A number of studies of Gen Y environmental attitudes have also failed to find evidence that Gen Y is significantly more environmentally aware or conservation-oriented than other generations (Hume, 2010; Strauss & Howe, 2012; Wray-Lake, Flanagan & Osgood, 2009). Similarly, more recent research into Gen Y work values and attitudes suggests that they may not be as interested in the social and environmental performance of their employers as previously claimed (Twenge, Campbell, Hoffman & Lance, 2010).

As more longitudinal and detailed research has been conducted into Gen Y, a different and more complex picture is emerging. For example, while they may not be particularly concerned with environmental conservation there is evidence that they are interested in tourist experiences in natural environments (Cini, Leone & Passafaro, 2012; Moscardo et al., 2011). Further, there is evidence that volunteer and educational tourism is very attractive to this cohort (Moscardo et al., 2011; Pendergast, 2010). This more complex picture of Gen Y characteristics indicates that Gen Y could be active and enthusiastic ecotourists. This evidence also suggests that ecotourism experiences will need to change in order to meet this interest. More specifically, Gen Y ecotourism will need to develop

more social as well as environmental sustainability programmes, connect more to volunteering opportunities, provide opportunities for more social interaction with both other ecotourists and locals, develop a more relaxed and casual style in accommodation and services, develop stronger online marketing programmes and greater flexibility and diversity in interpretive programmes.

CONCLUSIONS

This chapter has reviewed the major living generations of consumers and producers who are likely to have the most influence on ecotourism in the next few decades. The discussion has explored the formative events that have shaped each generation and has attempted to summarize a broad literature describing the traits of Baby Boomers, Gen Xers and Gen Ys. The second half of the chapter has explored what some of these generational traits and trends might mean for the future consumption and production of ecotourism. The discussion has examined each generation separately but ecotourism marketplaces and workplaces are considerably more complex than might be implied because they are dynamic social spaces in which generations generally mix together. While some of the past literature has highlighted inter-generational conflict and differences in generational value systems, it is not clear how the different generations mix and interact in leisure and tourism settings. On the consumption side, the analysis in this chapter implies that the style of ecotourism experiences desired and created by Baby Boomers may not align with the values or preferences of younger generations. In terms of ecotourism production, the chapter highlights that a lack of succession planning coupled with different values regarding work–life balance may jeopardize many ecotourism businesses established by Baby Boomers.

It has been argued that generations should be viewed in the same way as cultures. An understanding of generational differences can be just as valuable as exploring cultural differences in ecotourism contexts. However, without robust research and clear evidence, predictions about the behaviour and attitudes of different generations are merely speculative. More specifically, attempts to predict how Gen Ys might behave as consumers and how they might manage ecotourism experiences are also tentative. Many members of this generation are just starting their own families and it is not yet clear how this will impact on their discretionary time and wealth or their work and consumption choices. These comments highlight a clear need for longitudinal and cross-sectional research to explore the impact of generational traits on ecotourism and tourism more generally.

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13. Free-choice learning and ecotourism

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INTRODUCTION

The early origins of Western tourism were associated with a desire for learning experiences, but were mostly restricted to the wealthy. The advent of mass tourism in the late nineteenth and twentieth centuries provided opportunities in Western societies for the middle classes to participate in leisure travel – increasingly leisure and tourism were seen as mechanisms for escaping from the physical and sometimes mental exhaustion of work. Classic "supply" responses to tourists' needs for diversion and relaxation at this time were the growth of European and UK seaside resorts, the development and worldwide proliferation of tropical resort hotels and in the USA the invention by Disney of the theme park. By the mid twentieth century, the vast majority of tourism experiences were designed to be passive, hedonistic experiences. Today, tourism has matured into an industry with many different specialized experiences, including many that are primarily active and educationally oriented – ecotourism experiences being the fastest growing of these. Edwards, McLaughlin and Ham (2003, p. 293) note that one of ecotourism's "essential and defining characteristics . . . is that it raises awareness of the environment and its natural and cultural values; that is, that it has an educational or learning component." Accordingly, it is expected that ecotourism operators need to be able to conceptualize and measure their public educational impact. Yet, surprisingly, there appears to be little research on the learning opportunities afforded by ecotourism or measurement of their impacts. In order to progress in this direction, three things are necessary for ecotourism managers and researchers to do: (1) better understand the nature of learning in tourism and leisure contexts; (2) explore ways in which learning can be incorporated in ecotourism and leisure experiences; and (3) develop methods to measure the educational impact of such experiences. Overall, it would appear that ecotourism operators and researchers have been slow to acknowledge or incorporate these aspects. For example, in many of the most recent primers on ecotourism, everything but a thorough discussion of the learning aspects of ecotourism is discussed. This underestimates the important and integral role that learning plays in twenty-first-century ecotourism experiences.

FREE-CHOICE LEARNING IN AN ECOTOURISM CONTEXT

Increasing numbers of people in Western society, particularly those with the discretionary income to spend on tourist experiences, appear to have a growing appetite for lifelong learning (Falk and Dierking, 2002: Falk, Ballantyne, Packer & Benckendorff, 2012). Tourism and leisure settings have become an important medium through which people can acquire knowledge, develop ideas and construct new visions for themselves and their society. Indeed, for many people, "the information they encounter while at

leisure may offer the only opportunity to learn about their bonds to the environment, or to their history and culture" (Moscardo, 1998, p. 4).

If learning represents an important outcome of the ecotourism experience, ecotourism providers and researchers need to have an understanding of the fundamentals of human learning. Learning is such a profoundly human experience that all of us assume we have some basic understanding of what it is and how it occurs, yet few human processes are so poorly understood. Our lack of understanding is not because scientists, philosophers and psychologists have never tried to understand learning, quite the contrary. It has been a topic of inquiry for well over 2500 years. The reason it has been so difficult to understand is that learning is an extremely complex process, involving many counter-intuitive components and activities. What then is learning and how does it relate to ecotourism experiences?

THE NATURE AND PRINCIPLES OF FREE-CHOICE LEARNING

Most learning is free-choice and extends across the day and across the lifespan. Although commonly used as synonyms, the words learning, education and schooling do not refer to the same things. Education is the process by which learning is supported by other humans. Individuals have always drawn from many different sources to support their learning, including, but not limited to, schooling (for example, Cremin, 1980). Despite the expansion of schooling in the developed world to as many as twenty years, formal education still represents a relatively small percentage of our lives (Gerber, Cavallo & Marek, 2001). An increasing body of research shows that most learning now takes place outside schools, universities and other places of formal education (Falk & Dierking, 2010; Falk & Dierking, 2007). In fact, the percentage of the public's learning that is derived from self-directed experiences on the Internet or as part of leisure experiences is on the rise (Estabrook, Witt & Rainey, 2007; National Science Board, 2010). The vast majority of this non-school-based learning is free-choice learning, learning that individuals do when they have a reasonable amount of choice and control over what, where, when, with whom and why they learn (Falk & Dierking, 1992, 2000, 2002).

A growing body of evidence supports the contention that the public learns through these free-choice experiences. A recent report by the US National Research Council (2009) describes a range of evidence demonstrating that even everyday experiences such as a walk in the park contribute to people's knowledge and interest in science and the environment. Adults visit settings such as national parks, wildlife preserves and botanical gardens not only to relax and enjoy themselves but equally to satisfy their intellectual curiosity and enhance their understanding of the natural world. Even more common is the learning people engage in while satisfying their personal need to know. Sometimes the need is fleeting. For example, individuals may choose to watch a nature show on television, or invest in their children's science learning by taking them to a regional park or the zoo, or encourage their children to participate in a wide variety of extracurricular experiences such as scouting and summer nature camps. At other times the need is more profound and long-lasting as when an individual pursues a lifelong passion for bird-watching and the desire for detailed information becomes fundamental to the pursuit.

Data from a large-scale, multi-year investigation of a single free-choice learning institution – the California Science Center in Los Angeles – demonstrated that even a one-time visit to such an institution could result in a wide range of significant learning outcomes (Falk & Needham, 2011). Findings from one part of this series of studies – large-scale, random telephone surveys – found that more than 60 percent of Los Angeles residents had visited the Science Center in the decade since its renovation in 1998, including residents of all races/ethnicities, neighborhoods, incomes and education levels. Findings also showed that a majority of former visitors (95 percent) self-reported that the experience increased their understanding of science and technology as well as piqued their interest in science and prompted further inquiries after the visit. Self-report data were validated by a "conceptual marker" in the form of a specific scientific concept – homeostasis. Prior to the opening of the new Science Center, only 7 percent of the Los Angeles public could define this important but relatively obscure biological term (including all of the visitors entering the California Science Center immediately after reopening). However, because of a popular exhibition experience designed to teach this single concept – a ten minute show featuring a 15.25 meter animatronic woman – a majority of Science Center visitors could define the term upon exiting the museum. The ability to correctly explain this one scientific concept has increased nearly threefold in Los Angeles over the decade following the reopening of the Science Center. Using this definition like a conceptual "radioactive tracer," Falk and Needham (2011) were able to document that specific learning outcomes could be directly attributed to visits to the Science Center. These data, along with data emerging from research at other comparable free-choice learning settings, demonstrate the significant learning that happens during leisure time.

Learning is Both a Process and a Product

Learning is not, as it is often envisioned, merely a product or a collected store of knowledge in our heads, but is simultaneously also a process – in fact a never-ending process. Although many non-Western peoples have intuitively appreciated the holistic nature of learning, Western science has only relatively recently begun to fully embrace the idea that learning is a whole series of complex processes interwoven together, which in turn are intertwined with nearly all other parts of our being (Bransford, Brown & Cocking, 2000; Wenger, 1998). It is because of this very complexity that learning, more than virtually any other life activity, has been slow to reveal its underlying secrets.

The Outcomes of Learning are Highly Individual

Perhaps the most important finding of the last 20 years is how high individual learning is. For most of the twentieth century, the prevailing view was that learning was a totally generalizable, linear and predictable accumulation of knowledge. It was assumed that everyone learned in the same way, and as long as the same information was presented, they learned the same things. However, despite the fact that the general process of learning is similar in all humans, the products of learning are anything but comparable. In one of those strange, ironic twists of nature, it is as if everyone started off driving down the very same road, but ended up in a different place – learning is a uniquely individual, idiosyncratic event; no two people learn exactly the same thing in quite the same way

(Fosnot & Perry, 2005: Marcus, 2008). The essence of learning is the ability to combine past experience with the present moment in order to meaningfully understand and, to a degree, predict and control the future. Since no one's past is exactly the same as another's, it stands to reason that everyone's mental foundations must also be different; hence all understandings are different.

Learning is a Process of Constructing Meaning

Learning researchers have come to appreciate that the human mind uniquely "constructs meaning" (Bransford et al., 2000). In other words, all human knowledge, in fact all memories, are not permanent, "whole-cloth" features of the mind. Knowledge is not stored like a collection of widgets in the brain, each on its particular shelf. Rather, all knowledge and experience are stored in bits and pieces, and the bits and pieces are distributed throughout our brains (Gazzaniga, Ivry & Mangun, 2002). These bits and pieces of "memory" are assembled, on an as-needed basis, to quite literally construct a memory or an idea as we need it (Fosnot & Perry, 2005; Pope & Gilbert, 1983). It thus cannot be assumed that ecotourists' learning will focus on those things that are "presented" or "taught" to them. For example, it is often assumed that visitors to an aquarium will discover something about the diversity and biology of the fish on display or that zoo visitors will depart more knowledgeable about animal conservation, because all the signage and labels at the aquarium and zoo are designed to "teach" these ideas. Considerable research has shown that while some aquarium and zoo visitors do indeed "take away" such information, many actually do not (Ballantyne & Packer, 2011; Ballantyne, Packer & Falk, 2011; Falk, Heimlich & Bronnenkant, 2008). Learning outcomes often represent a unique and individual combination of what is seen, read, heard, felt or reflectively considered (Ballantyne, Packer & Sutherland, 2010) rather than a simple transfer of the presented information. Recent conceptualizations of the tourist experience thus focus attention on the tourist as a co-creator of meaning rather than on the displayed objects provided by the industry (Uriely, 2005).

Learning is Dependent on Context

The knowledge of the world a individual constructs is almost always tightly connected to the unique and specific social, cultural and physical context in which it is constructed (Clark, 1997; Engle, 1999). It is thus very context-specific and only poorly generalizable beyond the situation in which it was learned (Falk & Dierking, 2000).

Learning is a Cumulative Process

Learning is rarely an instantaneous event, but rather an unfolding, cumulative process (Bransford et al., 2000). Typically, individuals acquire an understanding of the world through a continuous accumulation of experiences, deriving from many different sources at many different times (for example, Anderson, Lucas, Ginns & Dierking, 2000; Brotman, Mensah & Lesko, 2011; Caillot & Nguyen-Xuan, 1995; Korpan, Bisanz, Boehme & Lynch, 1997; Miller, 2010; Rogoff & Lave, 1984). Thus, year by year, event by event, over a lifetime individuals construct their knowledge about the world from

not one but literally hundreds if not thousands of experiences. This appears to be as true in ecotourism contexts as in other learning situations (Ballantyne & Packer, 2011; Ballantyne et al., 2011).

Learning can be Fun

Beyond expanding our view of what constitutes learning, another major step towards reconceptualizing the role of education and learning in ecotourism is to overcome the long-standing assumption that entertainment and education are two ends of a single continuum; presumably a vestige of our conflation of learning, education and schooling. Packer and Ballantyne (2004) provide data that clarify the relationship between entertainment and education. They conclude that the weight of evidence shows these two constructs are currently perceived by the public not as contradictory, either-or attributes of leisure, but in fact as complementary. In general, across a range of measures, the educational and entertainment aspects of a visit to an educationally oriented tourist setting such as an ecotourism site were found to be not only compatible but synergistic, that is, their combined action or cooperation produced greater effectiveness than the sum of their individual effects (Falk, Moussouri & Coulson, 1998; Packer & Ballantyne, 2004; Schänzel, 2004). Packer (2006) took this a step further, arguing that in some tourism and leisure contexts, people engage in learning experiences not for any instrumental reasons but because they value and enjoy the process of learning itself. Learning experiences can thus be seen as autotelic or intrinsically rewarding, where the experience itself is its own reward (Csikszentmihalyi, 1990).

To summarize, free-choice learning is a uniquely personal, contextual experience. It is rarely linear and is almost always highly idiosyncratic. Learning is strongly influenced by the inside world of our past experiences, but equally by the outside world. The outside world has two important dimensions: the outside world as dictated and interpreted by other humans in our lives (Gutiérrez & Rogoff, 2003) and the sights, sounds, tastes and sensation of that world as perceived directly through our own senses and framed by the lens of our evolutionary history (Barkow, Cosmides & Tooby, 1992). Ecotourism experiences offer a vast range of new and different sights, sounds, tastes and sensations, as well as exposure to new and different environments from those the visitor is used to. It is not surprising then that learning has become an integral and satisfying part of the ecotourism experience.

INVESTIGATING ECOTOURISTS' LEARNING

An appreciation for the fundamental connection between leisure and learning was noted over 2000 years ago by Cicero, who wrote: "If the soul has food for study and learning, nothing is more delightful than an old age of leisure . . . Leisure consists in all those virtuous activities by which a man grows morally, intellectually, and spiritually." However, serious efforts to study the learning of tourists, particularly within an ecotourism context, have been quite limited and recent. Ecotourists learn in many ways, including through the development of skills, knowledge and wisdom (including the wisdom to make sound environmental decisions).

Research examining the development of practical skills through travel is limited. In one exception to this observation, Pearce and Foster (2007) raised the question of whether travel experiences contribute to the growth or development of generic skills. Their study of backpackers found that travel can be useful in developing generic skills such as problem solving, adaptability, social and cultural awareness, management of resources and self-awareness. While studies of this nature are limited in the tourism literature, the work of Pearce and Foster (2007) echoes a large adjacent body of work dealing with educational travel and the study abroad experiences of students (Black & Duhon, 2006; Brecht, Davidson & Ginsberg, 1993; Brown, 2009; Carlson & Widaman, 1988; Gmelch, 1997; Inkson & Myers, 2003; Kinginger, 2008; Kitsantas, 2004). While largely concerned with formal education, research into educational travel and studying abroad makes a useful contribution and offers a starting point for understanding the passive development of skills across a variety of different travel contexts.

There is also a paucity of research exploring the active enhancement of physical and cognitive skills through travel. Csikszentmihalyi's (1990) concept of flow provides one avenue for better understanding the relationship between travel, skills and learning but the framework has rarely been applied in this context. In one exception, Filep (2008) used the concept of flow to explore study abroad students' satisfaction with their travel experience. He found that students derived a sense of exhilaration from their cognitive involvement in the challenges presented by the experience. There is an opportunity to explore the active development of skills in a range of ecotourism contexts, including participation in activities as diverse as birdwatching, whale watching, diving and nature photography. While the focus in this instance is on the development of skills, the distinction between skills and knowledge is not always clear and it is acknowledged that the development of knowledge and skills can be closely intertwined. For example, a birdwatcher might visit a new site to develop their birdwatching skills but may also acquire knowledge of new species and their behavior.

Research examining the development of knowledge through ecotourism experiences is somewhat better developed. The literature on interpretation and visitor education often relates to knowledge about sites, settings and species (Knudson, Cable & Beck, 1995; Moscardo, 1998; Moscardo, Woods & Saltzer, 2002). For example, Powell and Ham (2008) and Powell, Kellert and Ham (2009) demonstrate the capacity of interpretation to affect learning outcomes and attitudes. Much of this research is concerned with how travelers actively engage with interpretation and the outcomes of this interpretation. Recent work has focused on the co-constructed nature of interpretive experiences and the recognition that both consumers and producers are involved in shaping the learning experience (Chronis, 2005). The study of "mindfulness" provides a useful theoretical framework for learning from interpretive material (Moscardo, 1996). Derived from the work of Chanowitz and Langer (1980) and Langer (1990) in the social cognition field, this framework attempts to understand the way people think and learn in everyday settings. Moscardo (1996) argues that mindful visitor experiences in tourist settings foster a greater understanding of the wider environment. However, the learning outcomes of an ecotourism experience cannot be adequately described by merely understanding the "content" of the tourism site being visited or the design of the educational offerings presented at the site.

Learning while traveling is often perceived as being "good" and non-problematic as it

can lead to an increase in visitor knowledge, understanding and appreciation of nature. However, it should be acknowledged that this is not always the case – there may be a darker side to learning through ecotourism. Research has, for instance, indicated that tourists' learning experiences may in many instances be based upon misconceptions leading to the reinforcement of colonialist racial and cultural stereotypes that privilege some groups at the expense of less dominant others (Caton & Santos, 2008, 2009). According to Buzinde, Santos and Smith (2006, p. 707), "images used to market tourism rely heavily on ethnic/racial pictorial symbols in order to attract tourists to particular destinations" and may be based upon misleading media representations of destination images resulting in what Santos (quoting Hall, 1995) says is a reflection of dominant ideologies that "provide us with the means of making sense of social relations and our place in them" (Santos, 2006, p. 625). This process of "dark" learning is aided by the marketing of ecotourism destinations using travel brochure images and text based on stereotypes of peoples and places (Echtner & Prasad, 2003; Santos, 2006). In this way, the media can project false stereotypical images that influence visitors' preconceived knowledge and attitudes regarding destinations and peoples that may not be based upon real experience. Given the constructed nature of learning, it is not surprising that tourists often "see what they believe" rather than "believe what they see" (Falk et al., 2012).

The work on educational travel and study abroad experiences demonstrate that student travel can foster intellectual and personal growth, intercultural awareness, foreign language acquisition and professional development. The recognition that international travel can also encourage reflexive traits such as self-awareness, global citizenship and a sense of identity (Dolby, 2004, 2005; Lewin, 2009; Talburt & Stewart, 1999) extends beyond the acquisition and refinement of skills and techniques and spills over into the idea that travel in general, and ecotourism in particular, can lead to greater wisdom; specifically pro-environmental behaviors.

The use of ecotourism experiences to promote pro-environmental behaviors such as conservation of natural resources, preservation of biodiversity and individual actions designed to minimize the impacts of climate change and habitat destruction are considered the "gold standard" outcomes of ecotourism experiences. In fact, proponents of ecotourism regularly assert that such experiences strengthen environmental values and promote long-term environmentally friendly behaviors and attitudes (Beaumont, 2001). But there are few robust, empirical studies that have tested follow-up assessments to support this assertion (among the few are Orams, 1995, 1997; Powell et al., 2009). Although exposure to an ecotourism experience almost certainly leads to some level of enhanced knowledge (for example, Falk et al., 2008; Powell & Ham, 2008), recent research suggests that these kinds of experiences only occasionally result in changes in behaviors, and then only for some visitors (Ballantyne & Packer, 2005, 2011; Ballantyne, Paker, Hughes & Dierking, 2007; Ballantyne et al., 2011; Broomhall, Pitman, Majocha & McEwan, 2010; Falk et al., 2008; Hughes, Packer & Ballantyne, 2011). Recently, Ballantyne et al. (2011) identified those predispositional factors and on-site experiences that are most important in facilitating visitors' long-term environmental learning outcomes (knowledge, attitudes and adoption of environmentally sustainable behaviors). They found that although the impact of a wildlife tourism experience was strongly influenced by visitors' pre-visit environmental orientations and learning motivations, aspects of the on-site experience also contributed to visitors'

long-term learning outcomes. In particular, it was found that reflective engagement, which involved both cognitive and affective processing of the experience, was more strongly associated with learning outcomes than the immediate but fleeting excitement of seeing the animals, although this excitement was instrumental in eliciting a reflective response. These findings highlight the importance of the cumulative nature of learning – it does not begin and end on-site, but is influenced by both previous and subsequent experiences.

INCORPORATING LEARNING IN ECOTOURISM EXPERIENCES

From the perspectives outlined above, affecting a positive educational impact through an ecotourism experience turns out to be a non-trivial undertaking. Ensuring that meaningful visitor learning occurs as a consequence of an ecotourism experience turns out to be just as complicated and challenging to accomplish as turning a profit or ensuring protection of fragile sites and wildlife, and thus needs to be investigated with the same level of care and professionalism.

Ultimately, no ecotourism enterprise can be successful without meeting, and ideally exceeding, the desires and needs of its visitors. Weil (1999) asserted that the educational goal of an organization cannot be merely to describe, demonstrate or communicate about something, whether that is a particular organism, conservation practice or precious natural ecosystem; today any organization that has an educational mission must set as its goal to be for somebody. Although Weil was specifically speaking about museums, his ideas equally apply to the operation of ecotourism experiences. In other words, ecotourism experiences need to be designed and evaluated with the goal of satisfying the varied needs, interests and motivations of individual visitors.

Many ecotourism venues would argue that they exist to serve their community, to support public understanding and potentially to even influence visitor behaviors in ways that are more consistent with a sustainable world and the preservation of biological diversity. However, the assumption for many of these organizations has been that merely providing access to their resource, accompanied by a presentation from a knowledgeable expert, should be sufficient to achieve these lofty goals. As suggested above, recent research suggests that this kind of minimal exposure only occasionally, and then for only some visitors, achieves these outcomes.

It is clear from the above that the learning that visitors derive from their ecotourism experiences requires a deeper, more synthetic analysis that builds on the growing understandings of the cognitive and learning sciences. Without a doubt, many tourism sites have overly simplified the educational challenges of supporting sustained and meaningful learning by framing the problem as one of overcoming visitors' knowledge deficits. Examples of this approach would be a whale watching excursion that confines its visitor experience to a lecture on the biology and ecological importance of whales or an African safari that begins each guided tour with a primer on the habitats and behaviors of the "big five." All of these well-intentioned, but ultimately misguided efforts begin with the assumption that these are understandings that their visitors lack; and true learning can only begin when these understandings are acquired. It is no longer sufficient, if in fact

it ever was, for those designing tourist experiences to confine their concept of visitor learning to the acquisition of "lacking" factual information.

A better approach, described by some as asset-based rather than deficit-based, suggests that personal growth and learning only happens when individuals build from their existing interests, knowledge and skills (Brotman et al., 2011; Falk, 2009; Falk & Dierking, 2000; Foley, 1997; Moll, Amanti, Neff & Gonzalez, 1992; Nares, Robson-Haddow & Gosse, 2001; Pope & Gilbert, 1983; Roth & Lee, 2002). By seriously inquiring into the needs, interests and motivations of visitors it becomes possible to discover and mobilize the layers of assets found in any population; bringing together the visitor's knowledge and skills with the resources and information possessed by the site. This perspective on public learning requires ecotourism operators to carefully think through such questions as:

- Why would the public want to visit us?
- Why would the public want to engage in the activities we offer, and to what end?
- How will each tourist be better from "their" perspective as a result of engaging in our experience?
- And equally importantly, how can our organization best start from and build on the assets (for example, prior knowledge, experience, interests, values and expectations) the visitor brings to the experience so that the benefits of the experience can be maximized from a learning perspective?

One of the most powerful approaches to thinking about the important role that expectations and motivations play in leisure and tourism was Driver and Tocher's (1970) "experiential approach." Later extended by Manfredo and Driver (1996), the experiential approach suggested that leisure and tourism experiences should not be viewed merely as an activity such as whale watching, fishing, camping or sightseeing but rather "should be conceptualized as a psychophysiological experience that is self-rewarding, occurs during non-obligated free time, and is the result of free-choice" (p. 203). Approaching ecotourism from this perspective is strikingly different from the typical view that primarily focuses on "what" someone does as opposed to "why" someone does what they do. In particular, this view of leisure posited that people pursue engagement in leisure and tourism in order to satisfy inner needs or problems (Knopf, Driver & Bassett, 1973).

Building on these ideas, Falk and his colleagues (Bond & Falk, 2012; Falk, 2009, 2012; Falk & Storksdieck, 2010; Falk et al., 2008) explicitly framed leisure and tourism experiences within an identity framework and defined a series of identity-related categories that appeared to describe the motivations of the majority of visitors to a range of tourism destinations. Equally, if not more importantly, these identity-related categories also provided a measure of predictive power in understanding the nature of the learning that occurred in these settings. Identity-related motivations, like the desire to satisfy personal curiosity or facilitate social bonding, proved to not only be powerful indicators of why individuals participated in the leisure/tourist experience, they were also revealed to strongly shape learning – how memories were formed and what meanings were made.

Emotion too plays an important role in ecotourism learning experiences (Staus & Falk, Chapter 15, this volume). Rather than viewing emotion as an interesting "by-product" of ecotourism experiences (for example, the perception of "danger" urban

residents feel when they venture into the "wild" or the sense of excitement visitors feel when encountering wildlife), these emotions appear to be both integral to the identity-related experiences visitors are seeking (Bond & Falk, 2012; Gillespie & Falk, in review) as well as directly supportive of the learning that occurs (Falk & Gillespie, 2009; Staus, 2012). These emotional experiences also directly enhance visitors' sense of satisfaction with the experience (Falk, 2009; Gillespie & Falk, in review).

According to this view, a visitor's overall satisfaction with a tourist experience is directly related to whether or not that individual can successfully situate the new ideas and experiences within their pre-existing cognitive and affective repertoires and expectations – the greater the fit, the greater the meaning-making; and also the greater the satisfaction. In this way, both meaning-making and satisfaction can be seen as directly connected to personal identity (Falk, 2009).

These ideas mesh well with the research of Lee and Shafer (2002). Visitors in their study found their tourism experience satisfying if their perceived identity-related needs were well matched with what the tourism site afforded. If these needs and expectations were not met, visitors perceived the tourism experience to be less than satisfying. According to Lee, Shafer and Kang (2005), perceptions were more important than situations. Their study found that although all the various episodes and interactions that occurred during a tourism experience were involved to a greater or lesser extent in the algorithm of a visitor's ratings of satisfaction, overwhelmingly the most important consideration was how visitors saw themselves within the situation. In particular, visitors' ratings of satisfaction were most strongly associated with the degree to which their self-identity and identity-related needs were satisfied. And these, of course, turned out to be directly related to their entering expectations and motivations for the visit, which in the case of many tourists revolve around learning-related experiences. Similar findings have been documented in other investigations of tourism (del Bosque & Martin, 2008; del Bosque, Martin & Collado, 2006).

Falk (2004, 2009, 2012) further argues that the actual time spent engaged in an ecotourism experience comprises only a small fraction of what is needed for understanding the learning outcomes that emerge from the experience. For most people, most of the time, the ecotourism experience is not life, but a small slice of life; just one of many experiences in a lifetime filled with experiences. Although it is convenient to frame the tourist experience within the context of the tourist moment, for the individual who engages in such experiences, even an experience as unique as a visit to the Galapagos Islands or the Serengeti, these are often neither readily delineated nor necessarily even seen as singular events. Ultimately, it is important to frame the ecotourism learning experience within the broader context of an individual's life; to see each experience as nested within a larger set of experiences and travel career patterns.

Extending these findings, Ballantyne and Packer (2011) argued that the tourism industry has the responsibility to engage visitors in powerful and transformative learning experiences, both during and after their visit. They suggested that the long-term impact of an ecotourism experience can be significantly increased by using technology and social networking to maintain contact with visitors after they leave the site, encouraging them to further process their experience both cognitively and affectively in order to develop new concepts, ideas, identities and actions that become part of their everyday lives.

In summary, although learning can be assumed to be a natural outcome of most

ecotourism experiences, there is relatively little research into the scope and extent of such learning. Attention is beginning to be paid to learning in ecotourism contexts, particularly related to changes in visitors' pro-environmental behaviors. However, given that such learning outcomes are by nature highly personal and dependent upon pre-existing visitor characteristics, they have proved to be both challenging to influence as well as to describe and document. However, there is evidence that ecotourism experiences that enable visitors to build upon pre-existing interests, knowledge, expectations and motivations, which permit visitors to make personal meanings around deeply felt experiences, and are supplemented by subsequent, post-visit experiences, are likely to have the greatest impact.

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14. Encouraging reflective visitor experiences in ecotourism

Jan Packer and Roy Ballantyne

INTRODUCTION

Reflection has long been recognized as an important, perhaps even necessary component of experiential learning, or learning from doing. It is an integral part of Kolb's (1984) experiential learning cycle, Revans' (1980, 1982, 1998) process of action learning and Schon's (1983, 1987) reflective practitioner. Recent research has revealed that it is also an important component of learning in tourism and leisure contexts (Ballantyne, Packer & Falk, 2011; Ballantyne, Packer & Sutherland, 2011). The concept of mindfulness (Langer, 1989, 1997; Moscardo, 2009) has also often been used in these contexts, highlighting the need for visitors to consciously maintain awareness and control over their thoughts and behaviour. This chapter argues that visitor mindfulness is a necessary but not sufficient precondition for the kind of learning that changes lives – the kind of learning that ecotourism aims to encourage. It suggests that in order to facilitate meaningful and lasting changes in visitors' environmental behaviours, ecotourism operators need to encourage visitors to intentionally reflect on their experience and its meaning for their lives, and to make concrete and achievable plans for changes they will make in response to their experience. Ideally, they should also find ways to follow up with their visitors, to hold them accountable to their own commitments. This chapter suggests ways in which this might be achieved.

MINDFULNESS THEORY

The twin concepts of mindfulness and mindlessness have been used in tourism research to explore visitors' responses to the interpretation offered at natural and cultural heritage attractions (Moscardo, 1996, 1999; Moscardo & Pearce, 1986), and more recently, to support a mindfulness model of tourist experiences (Moscardo, 2009). A mindful tourist is actively engaged, aware of multiple or alternative perspectives and alert to new information. A mindless tourist acts automatically and follows a routine script, without paying attention or actively processing information. Mindful tourists are more likely to have a satisfying experience, while mindless tourists are more likely to feel helpless, bored or frustrated (Moscardo, 2009). Mindfulness is normally seen as a necessary condition or first step towards appreciation, meaning-making, attitude and behaviour change. However, changes in behaviour, the ultimate goal of environmental education, do not come easily. It is argued here, therefore, that for visitor environmental behaviour change to be achieved, more than facilitating visitor mindfulness and experiential engagement is usually required. Visitors need to reflect on their experience.

REFLECTION AND EXPERIENTIAL LEARNING THEORIES

According to Boud, Keogh and Walker (1985a, p.7), 'experience alone is not the key to learning'. In order to turn experience into learning, and to gain the maximum possible benefit from an experience, people need to engage in reflection. Reflection is 'an important human activity in which people recapture their experience, think about it, mull it over and evaluate it' (Boud, Keogh & Walker, 1985b, p. 19). It involves a deliberate attempt to process the events, and the associated feelings, to bring ideas to consciousness and make sense of them, to integrate them with previous knowledge and understandings, and to make choices about future actions. Similarly, Mezirow's (1991) concept of 'transformative learning' incorporates reflection as a process through which people can challenge and transform the 'meaning perspectives' they hold. Jordi (2011, p.193) suggests that people are 'forever reconstructing themselves' and seeking to make meaning through processes of experiential learning. These processes include physical sensing, perception, memory, understanding and decision making, and help to bring the felt experience to cognitive awareness.

Kolb's (1984) theory of experiential learning suggests that there are four stages in the experiential learning cycle: 'concrete experience' provides a basis for 'reflective observation', which elicits the personal meaning of the experience. This may then be followed by 'abstract conceptualization', where new concepts are formed. These are developed into implications for action, through which a change is made in a process of 'active experimentation', and this in turn leads to the next 'concrete experience'. In simpler terms, this is a cycle of experiencing, reflecting, thinking and acting.

REFLECTION AND EXPERIENTIAL LEARNING IN ECOTOURISM CONTEXTS

Our research in the context of wildlife-based ecotourism experiences (Ballantyne, Packer & Sutherland, 2011) has found evidence of the four stages of the experiential learning cycle outlined above. Visitors' responses four months after participating in a wildlife tourism experience (the concrete experience) showed evidence of reflective observation through which they had processed and created meaning from their experience. Some visitors appeared to have come to a new understanding of their environmental responsibility (abstract conceptualization), which they had attempted to translate into new environmental practices in their everyday lives (active experimentation). This process is illustrated by the following comments made by visitors to four different wildlife tourism sites:

> I saw the turtles walk to the sea [concrete experience] and I felt that humans need to protect them [reflective observation]; the world is for all of us [abstract conceptualization]. (Turtle-viewing ecotourist)

> I felt completely relaxed watching them [concrete experience] and panic at the same time as to how to protect these amazing animals [reflective observation, abstract conceptualization]. (Whale-watching ecotourist)

> It made me much more aware of the cycle of life that surrounds us [reflective observation] and that every human action has an effect on the planet [abstract conceptualization]. (Whale-watching ecotourist)

> We don't look after what we have and the realization that it is not going to be there forever and our children will miss out on what we have if we don't take care of it [reflective observation, abstract conceptualization]. (Aquarium visitor)

> My feelings have become more passionate about the need to be aware of our impact on the environment [reflective observation, abstract conceptualization]. (Marine theme park visitor)

> I felt I was actually part of it [concrete experience, reflective observation], that it actually was something that I could influence [abstract conceptualization]. (Turtle-viewing ecotourist)

> I understand a little more and find myself wondering what little things I can do to help [reflective observation, abstract conceptualization]. (Aquarium visitor)

> By experiencing them first hand [concrete experience], it impacted on me just how important it really is to protect our waterways and oceans from contaminated substances [reflective observation, abstract conceptualization] by always thinking about the impact of what you're about to pour down the drain [active experimentation]. (Whale-watching ecotourist)

> Not that I littered before, but it has made me more aware of what other people are doing [reflective observation] and I often pick up after them [abstract conceptualization, active experimentation]. (Aquarium visitor)

Although only a minority of visitors progressed through the full cycle of experiencing, reflecting, thinking and acting, the fact that *some did* provides evidence of the potential of ecotourism experiences to have a lasting and life-changing impact. Overall, almost half of the respondents displayed evidence that they had reflected on, or cognitively processed, the implications of what they had seen or heard. The importance of reflection in the process of learning from the ecotourism experience has also been confirmed quantitatively (Ballantyne, Packer & Falk, 2011). The extent to which visitors reported having engaged in reflection during their wildlife tourism experience was one of a few variables that were predictive of short- and long-term environmental learning outcomes. Similarly, activities that encouraged a reflective response were among the most successful in facilitating school students' learning from their experiences in natural environments (Ballantyne, Anderson & Packer, 2010; Ballantyne & Packer, 2009).

It should be noted that the process of reflection does not need to be detached from emotions and feelings, but rather these should be considered important sources of experiential knowledge. According to Jordi (2011), reflection can provide a process for integrating sensations, perceptions, feelings, emotions, memories and ideas together with old and new information to make new meanings. Boud et al. (1985b) consider that addressing feelings is one of the important elements of the reflective process. Our research (Ballantyne, Packer & Sutherland, 2011) also indicated that reflective activity is often built upon an awareness and cognitive interpretation of emotional responses.

Emotional responses alone, however, are not enough to bring about lasting changes in attitudes and behaviours. According to the Elaboration Likelihood Model (Petty, DeSteno & Rucker, 2001; Petty, Gleicher & Baker, 1991), attitude change

may occur in one of two ways: through systematic or mindful processing of relevant arguments, or through simple associations and emotional responses. There is some evidence that greater elaboration or cognitive processing is associated with stronger attitudes, that is, attitudes that are persistent, resistant and predictive of behaviour (Petty & Krosnick, 1995). Such processing requires deliberate engagement in reflective activities.

Zeppel and Muloin (2007) argue that 'the benefits for participants on marine wildlife tours are realized when the affective (emotional) benefits and excitement of seeing unique marine life are integrated with the cognitive (education) benefits of learning new facts about marine wildlife' (p. 40). The findings of our research support this conclusion, but suggest that more is needed than a presentation of 'facts about marine wildlife'. Effective environmental learning involves more than a change or growth in cognitive understanding. Ideally, participants in an ecotourism experience will be led to question their previously held attitudes and beliefs, and make commitments to new ways of interacting with the world. They need to be encouraged to think deeply about what they have seen and heard and to make a personal response.

INCORPORATING REFLECTION INTO THE VISITOR EXPERIENCE

Although reflection is very much under the control of the visitor, and dependent to a large extent on the visitors' interests, motivations and cognitive style, there are some actions that ecotourism operators and interpreters might take to encourage and facilitate reflective processes. These include:

- designing experiences to keep visitors mindful
- providing a time and space for reflection
- promoting emotional engagement
- highlighting the importance of reflective activity
- encouraging imagination
- individualizing the learning experience
- providing opportunities for interpersonal interaction, questioning and discussion
- maintaining contact with visitors after the experience
- reflecting on their own practice.

Each of these suggestions is discussed in greater depth below.

Designing Experiences to Keep Visitors Mindful

It has been suggested that mindfulness is the first step towards engaging visitors in reflective activities. Moscardo and her colleagues have identified a number of factors that encourage mindfulness (Moscardo, 2009). These include:

- good physical orientation
- variety of activities

- visitor comfort
- multisensory stimulation and interactivity
- choice
- immersion
- multiple or new perspectives
- aspects of place (authenticity, rarity, uniqueness, diversity, cultural significance)
- themes and narratives.

By incorporating at least some of these factors into the ecotourism experience, operators can prepare visitors for a more reflective experience. Highlighting the uniqueness of the natural environment on which the ecotourism experience depends will not only increase visitor mindfulness but also provide important information that may prompt visitors to reflect on environmental or conservation issues. Providing opportunities for visitors to get as close as possible to rare wildlife or ecosystems, or allowing visitors to observe these from multiple or new perspectives, will increase the likelihood of mindfulness and reflective activity.

Providing a Time and Space for Reflection

It is often possible to set aside a time and space, as part of the ecotourism experience, for visitors to reflect on the meaning of the experience. This would be most appropriate towards the conclusion of the experience, which according to Forestell and Kaufman (1990, cited by Lück, 2007), is a time of 'personal validation' when visitors can make connections between their experience and broader environmental issues. This may take the form of a debriefing session, in which participants are encouraged to recall the details of their experience, attend to the feelings it aroused in them and consider what deeper meanings it may hold in their lives. Visitors could also be given a personal journal and encouraged to write about their experience and their reactions to it, or they could be encouraged to share their thoughts and feelings with a companion. As part of this process, visitors should be made aware of a range of environmentally responsible behaviours that might contribute to protecting the particular environment they have just experienced, and prompted to make concrete and achievable plans for changes they will make in response to their experience.

Promoting Emotional Engagement

It is known that emotions often prompt curiosity and exploration (Berlyne, 1960; Csikszentmihalyi & Hermanson, 1995) and can lead to greater concentration and willingness to learn (Krapp, Hidi & Renninger, 1992; Pekrun, 1992). In the context of ecotourism, an emotional experience can provoke deeper thought, and lead to a concern and respect for the environment. Ecotourism operators can draw attention to and reinforce emotional responses such as a sense of wonder, awe, excitement and privilege. However, it is important that visitors are encouraged to process these feelings, and use them as prompts for further thought and decision making rather than as a short cut to attitudes and intentions that are quickly forgotten or abandoned.

Ballantyne, Packer and Bond (2012) suggest that interpretation dealing with emotional

issues should be guided by five principles, which are also relevant in dealing with environmental issues:

1. Narrative and personal storytelling should occupy a central place and should provide multiple points of personal connection with visitors.
2. Despair should be balanced with hope, providing visitors with a way to deal with their feelings and move forward.
3. Presentation of historical evidence and balanced interpretation should leave visitors feeling educated rather than persuaded.
4. Providing a place or space for reflection should encourage visitors to personalize and internalize their learning.
5. Focusing on the past to inform the future should provide visitors with a way of learning from the mistakes of others and contribute to building a better future for all.

Highlighting the Importance of Reflective Activity

Reflective activity is a deliberate and thoughtful response on the part of the visitor and requires an investment of mental effort. Visitors may be more willing to engage in reflection if they are made aware of its important place in the learning process, and in gaining maximum benefit from the experience. Preparing visitors before the experience, so that they expect and appreciate the education component may also facilitate this process.

Encouraging Imagination

Experiential learning is as much about the future as it is about the past, and thus draws on the capacity for imagination (Jordi, 2011). Visitors can be encouraged to use their imaginations to experience the natural world in new and different ways, to explore alternative perspectives and to reflect on the possible consequences of different courses of action. They might also imagine themselves adopting specific environmentally responsible behaviours in their everyday lives and thus mentally rehearse or practise these behaviours.

Individualizing the Learning Experience

Experiential learning is learner-centred. It relies more on the needs and interests of the learner than on the content or structure of the interpretation or education programme. The learning experience, as far as possible, needs to be flexible enough to respond to the individual needs of visitors. Well-trained, competent guides are able to discern and adapt to these needs and thus provide a personalized and engaging experience for visitors. Providing visitors with choices in relation to how, when and if they engage with reflective learning experiences can also allow for individualization.

Providing Opportunities for Interpersonal Interaction, Questioning and Discussion

Making meaning from experience is often a relational process (Jordi, 2011). For some, it may be an internal dialogue, a process of making connections between different elements of consciousness, or between old and new knowledge. For others, sharing thoughts and feelings with a companion is a necessary part of the process. Kals, Schumacher and Montada (1999) noted that 'the sharing of experiences with significant others may function as an amplifier of the impact of stays in nature' (p. 182). Anderson and Shimizu (2007) suggested that discussion and reflection on an experience perform a similar function to rehearsal and thus lead to more detailed and vivid memories. Intergenerational interaction is particularly important, as children and parents are likely to have a strong and mutual influence upon each other's environmental behaviour (Ballantyne, Fien & Packer, 2001). Ecotourism operators can offer activities that facilitate interpersonal interaction and also include a reflective component. They can also ensure that staff or volunteer guides are available to answer visitors' questions and initiate conversations.

Maintaining Contact with Visitors After the Experience

Ballantyne and Packer (2011) argue that it is unrealistic to expect that the full cycle of experiential learning (experiencing, reflecting, thinking and acting) could be completed during a single ecotourism experience. Ideally, visitors need to be supported and encouraged to continue this process after their visit in the context of their home environment and everyday lives. Web-based technologies and social networking facilities might allow ecotourism providers to maintain contact with visitors after they leave the site (Ballantyne & Packer, 2011), encouraging further reflection and holding people accountable to the commitments they have made.

Reflecting on Their Own Practice

In order to provide the best possible experience for visitors, ecotourism operators themselves need to engage in reflective practice, drawing on the experiential learning cycle outlined above. Staff at all levels should regularly set aside time to critically observe and reflect on the experiences they provide, experiment with new ideas and evaluate their impact from the visitors' perspective.

CONCLUSION

It is proposed that reflection is often the missing link between ecotourism experiences and environmental actions. It is argued that ecotourism operators should provide experiences that encourage visitors to not only remain mindful but also engage in intentional reflective activities. A number of actions have been suggested in this regard. These actions will assist ecotourists to extract the maximum benefit from their experience, and have the potential to lead not only to an increase in environmentally responsible behaviour but also greater visitor satisfaction.

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15. The role of emotion in ecotourism experiences

Nancy L. Staus and John H. Falk

INTRODUCTION

A humpback whale and her calf breach so close to your boat that you can look into each others' eyes.

A sea turtle hatchling struggles to make its way to the sea as you stand watching on the beach.

It is no surprise that ecotourism experiences such as those described above can evoke strong emotional reactions (Ballantyne, Packer & Sutherland, 2011). In particular, wildlife tourism experiences in which visitors encounter non-domesticated animals in their natural environment often elicit a range of positive emotions such as "pleasure," "amazement" and "fascination" (Schänzel & McIntosh, 2000). Conversely, some visitors also report negative emotions associated with these experiences such as "sadness to know that some animal species have to be looked after" (Schänzel & McIntosh, 2000, p. 45) or concern about visitors' impacts on the animals and their habitats (Ballantyne et al., 2011). Clearly, such wildlife encounters can stimulate a complex array of emotions that may greatly affect visitors' perceptions of, and satisfaction with, an ecotourism experience.

Despite the seeming importance of visitor emotions during ecotourism experiences, little research has focused on the affective dimensions of these experiences. Until recently, most of the research regarding wildlife tourism has been conducted from a motivational perspective that addresses visitor expectations, goals and desired outcomes about the activity (Curtin, 2005). Consequently, much of our understanding about wildlife tourists is focused on visitor satisfaction rather than on the nature of the experience itself. Although ecotourism research has begun to address other aspects of these experiences such as environmental knowledge, attitudes and behavioral intentions (Falk, Ballantyne, Packer & Benckendorff, 2012; Lee & Moscardo, 2005; Tisdell & Wilson, 2005; Zeppel & Muloin, 2008), very few examine the emotional and psychological effects on visitors and how these factors influence the value or meaning attained from ecotourism experiences (Schänzel & McIntosh, 2000). Thus, while the motivational approach might reveal that people enjoy participating in wildlife tourism, it does not examine peoples' perception of the experience itself (for example, what it means to enjoy wildlife experiences), the emotional responses it provokes (Patterson, Watson, Williams & Roggenbuck, 1998) and how these relate to desired conservation-related outcomes.

In contrast, the experiential view of consumer behavior argues that tourism consumption is about purchasing experiences rather than things, and the choice of experiences in which to participate is often based on hedonic and aesthetic criteria such as "fantasies, feelings and fun" (Holbrook & Hirschman, 1982, p. 132). From this perspective, wildlife tourism can be viewed as a hedonistic activity that seeks to satisfy pleasure-seeking goals

and fulfill our need for "emotional recreation" through activities that are not possible in everyday life (Krippendorf, 1984, p. 74). The importance of such experiences should not be discounted as the memories of them can be relatively long-lasting and significant to peoples' lives (Ballantyne et al., 2011; Falk et al., 2012). Indeed, "lived experiences gather significance as we reflect on and give memory to them" (Curtin, 2005, p. 3) and, taken as a whole, lived experiences are "the totality of life" (Van Manen, 1990, p. 38).

However, there is a lack of research that focuses on the personal and emotive context of wildlife–visitor interaction and interpretation experiences (Schänzel, 2004). The challenge then is to better understand the human dimensions of ecotourism including how the emotional aspects of these experiences impact the tourists themselves, as well as desired learning and conservation outcomes. A better understanding of these relationships can help inform the development of more successful education and interpretation programs, which in turn can lead to more positive environmental attitudes, increased learning, long-term changes in pro-environmental behavior, as well as more satisfied visitors.

WHAT ARE EMOTIONS?

Emotions are part of affect, a term used to refer to the general class of feeling states that also include moods and drives (Manfredo, 2008). Research in the area of affect and emotion has been hampered not by a lack of interest in the topic but in part by the lack of a clear definition of terms – over a hundred definitions of emotion have been proposed from researchers in fields as diverse as cognitive science, sociology and engineering (Picard, Papert, Bender, Blumberg, Breazeal, Cavallo & Strohecker, 2004). Despite the lack of a clear definition, emotion researchers from a variety of disciplines increasingly accept the idea of emotions as evolutionarily based (but culturally affected) adaptive responses to objects or events of importance in one's environment (Dolan, 2002). In addition, many researchers agree that emotions should be divided into primary (basic) and secondary categories on the basis of cultural universality and distinctness of physiological responses (Manfredo, 2008). A number of typologies of primary emotions have been proposed including Izard's (1977) list of fear, anger, enjoyment, interest, disgust, joy, surprise, shame, contempt, distress and guilt and Eckman's (1984) fear, anger, sadness, happiness, disgust and surprise. Secondary emotions like shame are defined as blends of primary emotions such as fear and disgust (Plutchik, 2003). However, there is still no consensus among emotion researchers as to how many human emotions exist or how to accurately define them (Russell, 2003).

DIMENSIONS OF EMOTION

Due to the lack of agreement on what constitutes an emotion, some researchers have sought to develop a framework that identifies primitive elements into which to simplify the complex construct of emotion. An empirically well-established solution conceptualizes emotions from a dimensional perspective (Russell, 2003). Many theorists agree that human emotion is organized into two basic dimensions along a continuum:

pleasantness–unpleasantness (valence) and degree of arousal or activation from excited to bored (Mehrabian & Russell, 1974). Thus, any discrete emotion can be described in terms of its valence and arousal. For example, fear is generally a negatively valenced, high arousal emotion, but the level of valence and arousal may vary depending upon the stimulus. This framework has allowed researchers to move beyond the use of discrete emotions that are difficult to define and measure, and examine the effects of valence, arousal or both on constructs of interest such as attitude or behavior.

THEORIES OF EMOTION

Several emotion theories have been proposed to explain the nature of emotion, each focusing on different aspects of this construct. Darwinian theory (Darwin, 1872 [1965]) advanced an evolutionary explanation for the origins of emotion and proposed that they had evolved as adaptations for the survival of the species. In contrast, Jamesian (James, 1884) theory focused primarily on the emotional experience, especially physiological changes (for example, heart rate) associated with many emotions. The cognitive perspective emphasized the appraisals people make to assess how objects and events in the environment may affect them before an emotion is elicited (Arnold, 1960), while the social constructivist perspective highlighted the role of culture rather than biology in the construction of emotions and focused on the social functions of emotions (Averill, 1980).

More recent emotion theory focuses not on what emotions are but on what emotions do. In particular, it is widely accepted that emotions serve an evaluative function that allows people to index occurrences of value that may or may not warrant further attention or processing (Dolan, 2002). Functional emotion theories have been proposed to integrate the disparate theories described above by acknowledging the biological, psychological and social functions of emotions (Keltner & Gross, 1999). On the basis of work by a number of emotion researchers (for example, Arnold, 1960; Frijda, 1986; Lazarus, 1991), Nabi (1999) summarized the fundamental principles of these theories in four statements:

1. Emotions have inherent adaptive functions.
2. Emotions are based on events that are personally relevant.
3. Each emotion has a distinctive goal or motivation represented in its state of action readiness or tendency to action designed to arouse, sustain and direct cognitive or physical activity, or both.
4. Emotions are organizers and motivators of behavior.

From this perspective, emotions are important for perceiving objects or events in the environment that may be important to personal wellbeing, and guiding one's actions and social interactions in ways that are most relevant to one's goals (Lazarus, 1991). Arguably, emotions are the primary mechanism humans use to support our identity-driven navigation through the world (Falk, 2012; Falk & Staus, Chapter 13, this volume). In addition, since emotions can be conceptualized as action tendencies or states of readiness that can direct cognitive activity (Lang, Bradley & Cuthbert, 1998), the func-

tional theory of emotions provides a suitable framework for investigating how emotion affects important cognitive outcomes of ecotourism experiences such as environmental attitudes, knowledge and behavioral intentions. This framework also supports investigations of the role of emotions in long-term behavior change.

EMOTION AND ECOTOURISM OUTCOMES

In order to achieve desired environmental learning and sustainability goals, ecotourism providers strive to create positive changes in a variety of visitor outcomes that are related to environmental conservation. In particular, there has been an emphasis on documenting changes in visitors' environmental attitudes, pro-environmental behavior and conservation knowledge as a measure of the success of the ecotourism experience in meeting sustainability goals (Kimmel, 1999; Lee & Moscardo, 2005; Powell & Ham, 2008; Tisdell & Wilson, 2005).

Consequently, much of the research in this area has focused on the factors that relate to these outcomes such as the amount and quality of education materials available to visitors (Tisdell & Wilson, 2005) and presence or type of environmental interpretation during wildlife encounters (Orams, 1995; Zeppel & Muloin, 2008). However, these studies have emphasized the cognitive aspects of ecotourism outcomes while largely ignoring the affective factors that arguably may be just as important in influencing visitors' environmental attitudes, behavioral intentions and learning outcomes. Because of the potential emotional nature of most ecotourism experiences, it is important to understand how visitor emotions may affect the desired outcomes.

EMOTION AND ENVIRONMENTAL ATTITUDES

One of the goals of ecotourism experiences is to instill positive attitudes about nature and the environment in visitors (for example, Lee & Moscardo, 2005). Attitude has been defined as a "psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor" (Eagly & Chaiken, 1993, p. 1). In an ecotourism setting, an attitude would represent a visitor's tendency to consistently like or dislike the environmental issue or object (for example, sea turtles and their conservation). Although traditionally attitudes were believed to be rational or logical in nature and formed on the basis of argument and reason (Edwards, 1990), now psychologists believe that people's attitudes are influenced by both a "rational" cognitive assessment of the attitude object and the emotions that the attitude object arouses in them (Lavine, Thomsen, Zanna & Borgida, 1998). For example, an issue such as global climate change may inspire both feelings (for example, fear, sadness) and rational beliefs (for example, that my government should be a party to international climate change agreements). Thus, attitudes are formed not only through reason but also through needs, wishes and other emotional factors.

Although attitudes have both cognitive and affective components, the influence of these factors is not necessarily equal in magnitude; certain situations or issues appear to promote a greater dominance of either affect or cognition during the decision process

(Lavine et al., 1998). This is important to consider because knowledge of an attitude's origins (for example, affective or cognitive) can inform the development of strategies to change it. Specifically, research suggests that affect-based attitudes can be changed more readily using affective means of persuasion, while cognition-based attitudes can be changed under both affective and cognitive forms of persuasion (Edwards, 1990). Thus, it would be advantageous to understand the basis of environmental attitudes to facilitate changing them. For example, Pooley and O'Connor (2000) showed that attitudes toward logging, urban development and restriction of vehicle emissions had significant affective as well as cognitive components. Since attitudes toward nature are likely to be at least partly affect-based, ecotourism programs that wish to change visitors' environmental attitudes need to focus on affective means of persuasion that tap into people's emotions, rather than just providing factual information about the environmental issue of interest.

One emotion that appears to be important in environmental attitude formation is empathy (Berenguer, 2007). Empathy is congruent with the perceived welfare of another – feelings such as compassion and sympathy are invoked when another individual is perceived as oppressed or in need (Batson, Chang, Orr & Rowland, 2002). While much of the research in this area has focused on empathic feelings toward other people, several studies suggest that inducing empathy for plants and animals in the natural environment can lead to the formation of more responsible environmental attitudes (Berenguer, 2007; Meyers, Saunders & Bexel, 2009; Powell & Ham, 2008; Schultz, 2000; Shelton & Rogers, 1981).

There is some evidence that animal-based ecotourism experiences naturally evoke empathy in visitors (Miles, 1986/87). For example, at a penguin viewing attraction in New Zealand, one respondent stated that "you do not want to think that you are the only thing that matters in the world, that there are other things and what you do impacts with what happens to other animals" (Schänzel & McIntosh, 2000, p. 41). Tisdell and Wilson (2005) suggested that simply seeing adult sea turtles promoted empathy and concern for these animals. In addition, Ballantyne and Packer (2002) found that field trips to natural areas to observe and experience wildlife aroused feelings of empathy in school students, which in turn impacted their behavioral intentions toward conserving the environment and wildlife. A significant finding from Berenguer's (2007) experimental work on empathy and pro-environmental attitudes was that activation of empathy toward a specific environmental object (for example, a bird) led to more favorable attitudes not just toward that object but also toward nature as a whole. Thus, ecotourism experiences that focus on the conservation of one species could potentially affect participants' attitudes toward nature conservation in general.

Implications for ecotourism providers who wish to influence visitor's pro-environmental attitudes are several. First, it is important to ascertain the basis of visitors' attitudes (for example, cognitive or affective) in order to devise effective interpretation programs that lead to attitude change. Second, interpretive programs should integrate environmental knowledge with the emotional aspects of observing or interacting with nature and wildlife by activating feelings of empathy in visitors (Pooley & O'Connor, 2000; Zeppel, 2008). By addressing both the cognitive and affective domains simultaneously, interpretive programs may be more successful in changing visitors' attitudes and possibly their pro-environmental behavior.

EMOTION AND BEHAVIOR CHANGE

A commonly used argument to justify nature-based tourism is that through such experiences, tourists adopt more environmentally responsible behavior (Russell, 1994). However, there is little empirical research to support this claim (Orams, 1994) and, in fact, changing people's behavior – and maintaining those changes – is quite difficult (Gudgion & Thomas, 1991). Dozens of behavioral theories have been proposed that identify various psycho-social factors (for example, attitudes) that are believed to explain why people act in an environmentally responsible manner. These are covered in other chapters, so we focus here on the role of emotion in the factors that are most commonly associated with environmentally responsible behavior.

Most behavior models rely heavily on cognitive factors such as knowledge, and lack an adequate conceptualization of the impact of affective factors such as emotion that may affect environmentally responsible behavior. Three variables from these models that consistently showed a positive influence on environmentally responsible behavior were (Bamberg & Möser, 2007):

- attitudes
- perceived behavioral control
- social and personal norms.

The impact of emotions on pro-environmental behavior is largely a consequence of the influence they have on attitudes, which we discussed in detail above. Although attitudes are a strong predictor of behavioral intentions, subjective norms (perceived social pressure to perform the behavior) are also important, and these norms contain a significant affective component (Ajzen & Fishbein, 1980). This is particularly evident when social or personal norms are violated. For example, individuals may feel disgust or anger when others violate a norm (for example, seeing someone litter) or shame and embarrassment if they are admonished for a similar violation. Moral emotions such as shame, guilt and pride may play an important part in pro-environmental behaviors by providing motivation to act in the interests of others (Manfredo, 2008). Bamberg and Möser (2007) found that feelings of guilt exerted a strong direct effect on moral norms, which in turn strongly affected pro-environmental behavioral intentions in their model.

Emotional appeal theory offers additional models for influencing behavior directly through evoking certain emotions (Leventhal & Singer, 1966). For example, threat and fear appeals have been quite successful in persuading people to support environmental causes such as air pollution and ozone depletion (Eagly & Kulesa, 1997). Shelton and Rogers (1981) demonstrated that a threat appeal that presented the suffering of whales led to stronger intentions to support anti-whaling organizations than did appeals that were less threatening.

Of course, negative emotional appeals are not universally successful in promoting environmentally responsible behavior. Some people are motivated to protect the environment on the basis of positive feelings such as emotional affinity toward nature – a measure of positive emotions such as feeling good and safe in nature – which appears to be linked to direct encounters with nature both past and present (Kals, Schumacher &

Montada, 1999). In addition, caring for individual animals may also contribute to the development of affinity toward nature and subsequent pro-environmental behaviors, particularly in young children (Meyers & Saunders, 2003). This research showed that when children established a link between a favorite zoo animal and its habitat, they developed affinity with not only the wellbeing of the animal but also the preservation of the animal's habitat. Similar outcomes might be possible within ecotourism settings as well.

It is clear that the emotional and aesthetic aspects of encountering wildlife during ecotourism experiences play an important role in promoting visitor affinity for nature (Ballantyne & Packer, 2005; Ballantyne et al., 2011). Hence, interpretive programs should focus on creating or enhancing opportunities for visitors to observe or interact with wildlife in order to better influence changes in long-term pro-environmental behavior.

EMOTION AND ENVIRONMENTAL LEARNING

Ecotourism has been advanced as a means of inducing conservation-related behaviors through its relationship with environmental learning (for example, Kimmel, 1999; Roggenbuck, 1987). There is a growing body of research documenting the nature and extent of environmental learning in ecotourism contexts and other informal or free-choice settings such as museums, zoos and aquariums (see Falk & Staus, Chapter 13, this volume). Here we focus on the role of emotion in the learning process and how this could inform educational and interpretive activities in ecotourism programs.

Traditional learning theories have tended to privilege "rational" cognitive functions over "irrational" affective factors such as emotion by viewing learning in terms of information processing (Picard et al., 2004). Much of the nature-based tourism interpretation has been developed in this tradition, and addresses only the cognitive dimensions of learning by enhancing people's knowledge and understanding about specific species or environmental issues (Schänzel, 2004). For example, at a sea turtle watching site in Australia, the interpretation consisted of information about the egg laying process and hatchling behavior of sea turtles (Tisdell & Wilson, 2005) and at a penguin reserve, rangers gave scheduled talks about penguin biology and behavior (Hughes & Saunders, 2005).

Although environmental educators have long known that the "gateway to the learning process is the affective domain" (Iozzi, 1989, p. 3), there is little known of the affective dimensions of interpretive practice and how the emotional aspects of ecotourism experiences may influence environmental learning. A growing body of research in neuroscience, psychology and cognitive science indicates a complex interrelationship between emotion and other domains of cognition including attention and memory, two important components of learning (Bechara, Damasio & Damasio, 2000; Cahill, Babinsky, Markowitsch & McGaugh, 1995). A better understanding of these relationships is needed to inform the design of interpretive programs that are more likely to lead to greater learning as well as such previously discussed outcomes as pro-environmental behaviors.

Emotional Arousal and Learning

In the context of learning during ecotourism experiences, emotional arousal may be particularly important due to its relationship with attention and memory. Emotionally arousing events (for example, observing wildlife) activate attention, which is a significant first step in the learning process. Associated messages that are delivered during heightened states of attention are more likely to be processed and recalled later (Lang, Zhou, Schwartz, Bolls & Potter, 2000; Wolfe, 2006). In addition, memories formed in the presence of emotional arousal are readily recalled even long after memory formation (Cahill & McGaugh, 1995). Since direct experiences with nature often result in profoundly important and memorable experiences (Orams, 1997), it is possible that significant long-term learning and associated behavioral changes could occur.

These relationships have been suggested but not formally investigated in ecotourism contexts (Ballantyne et al., 2011). However, they have been examined in other free-choice learning settings. For example, Falk and Gillespie (2009) measured science center visitors' self-reported emotional arousal during an exhibit about fear. Visitors to this exhibit experienced significantly higher arousal than other science center visitors and experienced greater long-term learning outcomes. In particular, the more aroused visitors' memories of the experience were much more extensive than those of a control group and they were able to describe their visit experience in greater depth and accuracy several months after the visit.

Similarly, Staus (2012) found a significant relationship between emotional arousal, attention and short-term learning outcomes in visitors at narrated sea otter and sea lion presentations at an aquarium. Specifically, visitors who reported higher levels of emotional arousal were significantly more likely to pay attention to the associated narration and attention was a strong positive predictor of post-test score. In addition, visitors who reported higher levels of emotional arousal were able to describe their experience at greater length and with more complexity in interviews conducted 2–3 months after their visit. Thus, it appears that emotion was an important factor in both short- and long-term learning outcomes.

However, some theorists suggest that there is an inverted U-shaped relationship between emotional arousal and cognitive outcomes such that learning may not be possible in situations of intense arousal when information processing resources are limited (Lang, 2000). For example, Smith (2008) found a negative correlation between emotional arousal and attention during a birds of prey animal presentation at a zoo in Australia because visitors were so distracted by the birds flying very near them that they were unable to pay attention to the associated conservation messages that the zoo intended to convey. Thus, a challenge for ecotourism operators is to determine the threshold between experiences that are exciting enough to elicit attention and learning and those that are so exciting that they are a distraction.

Pleasure and Learning

In addition to the arousal dimension, emotional valence (pleasure) is also important in the learning process although its relationship to memory and attention is less clear than that of arousal (Staus, 2012). While some research indicated that negative stimuli led to

increased recollection (Mickley & Kensinger, 2008), others have concluded that mild positive affect (for example, happy feelings) facilitated recall of positive memories and increased flexibility in thinking (Isen, 1999). Although a meta-analysis of visitor experiences at national parks and historic sites indicated a moderate positive link between visitor enjoyment and visitor learning (Moscardo & Pearce, 1986), more research is needed to better understand the relationship between pleasure and learning in ecotourism contexts.

Implications for Ecotourism

These results indicate that in order to promote significant learning that may lead to positive changes in environmental attitudes and behavior, interpretation needs to include both cognitive (knowledge) and affective (emotional) components. This will entail moving away from strictly cognitive models of environmental learning and behavior change and designing interpretation experiences that also address the affective domain.

Several such models have been proposed for designing effective education programs in the context of ecotourism. For example, Forestell (1993) described an experiential learning model that addresses the affective domain in which he suggested that the excitement generated by seeing whales may lead to motivation to learn more about them. He observed that whale watch tours could be divided into three phases, pre-contact with whales, contact and post-contact, and participants demonstrated identifiably different cognitive and emotional states during each phase. In particular, he observed that during the post-contact phase, whale watchers were very receptive to environmental issues in general. Thus, he proposed that key conservation messages were more likely to be remembered and heeded if presented after seeing whales when participant arousal levels were high and that the post-contact phase should be used to provide sound scientific knowledge and/or conservation messages when participants were most primed to learn.

Orams (1994) extended Forestell's (1993) model to include both cognitive dissonance and the affective domain as important aspects of the design of interpretation programs. He suggested that such programs should offer a variety of interesting questions to activate visitors' curiosity and develop "dynamic disequilibrium," which would motivate them to learn about a conservation issue and to act on it (for example, sign a petition; Lück, 2003). An education program based on this model was designed for a dolphin feeding program in New Zealand (Orams, 1997) and pre- and post-program results were compared. Orams found that both groups showed increases in knowledge about dolphins and indicated a desire to engage in pro-environmental behaviors after interacting with the dolphins, but only those who participated in the education program carried out these intentions. Thus, engaging both the emotional and cognitive dimensions of interpretation led to successful learning and behavior change in this example.

EMOTION AS A BENEFICIAL OUTCOME

In addition to its influence on attitudes, learning and pro-environmental behavior, emotion itself can be seen as a beneficial (that is, satisfying) outcome of ecotourism

experiences (Hull, 1990). As discussed earlier, the experiential view conceptualizes ecotourism as a hedonistic activity that is undertaken to gain experiences that are regarded by the participant as pleasurable and beneficial (Schänzel & McIntosh, 2000). If on-site psychological experiences such as stimulation, pleasure or other feelings are desired and give satisfaction, then those are a benefit to participants (Schreyer & Driver, 1989).

Although there is little research in this area of ecotourism, there is some evidence that psychological outcomes are perceived as a valuable product of leisure activities (Hull, 1990). For example, Schänzel and McIntosh (2000) interviewed visitors at a penguin viewing site to better understand the personal and emotive aspects of their experience. The main beneficial experiences reported by tourists included both enhanced knowledge (cognition) and "beneficial feelings such as 'a sense of exploration', of 'fascination', 'amazement' and privilege, of 'seeing endangered birds in their natural habitat', and feeling of 'happiness'" (p. 49).

In addition, the research of Falk and his colleagues (Falk, 2009, 2012; Falk, Heimlich & Bronnenkant, 2008; see also Falk & Staus, Chapter 13, this volume) has suggested that a major outcome of ecotourism experiences is identity building, which also has a strong emotional component. Recent research by Gillespie and Falk (in review) found that visitors to a free-choice learning setting reported that their most "emotionally satisfying experiences" were those that most directly supported their identity-related visit motivations.

These results suggest that emotion constitutes an important aspect of the ecotourism experience and provides meaning and personal benefit to participants. Since increased emotional responses to wildlife encounters may also lead to off-site benefits such as greater environmental awareness and support for nature conservation work (Orams, 1997), it would behoove ecotourism managers to provide experiences that trigger such emotions in their visitors.

FACTORS THAT PRODUCE BENEFICIAL EMOTIONAL RESPONSES

Emotion is a major component of wildlife tourism, especially for charismatic megafauna such as whales and dolphins (Orams, 2000; Peake, Innes & Dyer, 2009) and these emotions may be instrumental in influencing conservation-related outcomes in visitors. Therefore, it is important to understand what features of ecotourism stimulate the emotional reactions that lead to these outcomes in order to inform more successful interpretation programs.

For many visitors, an important feature of their ecotourism experience appears to be close proximity to wildlife (Zeppel & Muloin, 2008). For example, Pearce and Wilson (1995) discovered that apart from the natural setting, "proximity" to the wildlife was the most important aspect of the wildlife viewing experience. Similarly, Schänzel and McIntosh (2000) found that visitor satisfaction during penguin watching stemmed from the notion of "the closer the better" with higher reported enjoyment resulting when visitors got closer to the penguins than expected. Tisdell and Wilson (2005) found that just seeing sea turtles in the wild led to an increased desire to protect them and pay for their conservation. However, some studies (for example, Orams, 1997)

have indicated that the "best" experiences involve some type of direct interaction with wildlife (for example, swimming with the dolphins). In all of these cases, the emotional aspects of these encounters play an important role in promoting visitor empathy and affinity for nature (Ballantyne & Packer, 2005), which are positively correlated with pro-environmental attitudes and behavior change. However, as pointed out by Ballantyne, Packer and Hughes (2009), benefits must also be weighed against the possible negative effects on the animals and environment that visitor experiences may exacerbate.

In addition to closeness to nature, authenticity of the experience also ranks as a highly important and emotionally salient aspect of ecotourism (Schänzel & McIntosh, 2000). Authentic experiences are those in which individuals feel that they are in touch with the "real" world and their "real selves" (Handler & Saxton, 1988) and are sought by tourists to compensate for alienation from nature in their everyday lives (Curtin, 2005). However, the experience of nature within an organized tour is usually a highly mediated one, marked with physical boundaries (for example, viewing platforms) and associated factors (for example, overcrowding) that may detract from visitors' sense of belonging and ability to identify with the place (Markwell, 2001). Thus, successful ecotourism activities need to create an authentic-feeling experience for visitors without compromising the ecological values of the area.

CONCLUSION

Ecotourism experiences can be seen as experiential products that facilitate feelings, emotions and knowledge for visitors (Schänzel, 2004). Positive feelings related to these experiences such as pleasure and wonder are perceived as beneficial outcomes by many visitors. In addition, emotions are an essential part of environmental attitude formation; they enhance the learning process and are implicated in pro-environmental behavior change. Although interactions with wildlife in authentic settings can elicit positive emotional responses, these emotions themselves are insufficient to create the desired outcomes – if an education or interpretation program is not in place to deliberately change attitudes and behavior, it is extremely unlikely that these outcomes will be realized (Orams, 1997).

Weiler and Ham (2001) suggested that educational and interpretive activities are necessary to establish the intellectual and emotional connections between people and the places they visit in order to provide meaning about the things they see and do. Thus, the challenge for ecotourism operators will be to develop experiences that promote these connections so that they can effectively enhance both the educational and conservation outcomes that make ecotourism experiences socially and politically important as well as the visitor satisfaction outcomes fundamental to the economic success of such enterprises. To meet these goals, further research is needed into the complex relationship between the affective and cognitive dimensions of visitor experiences and how these understandings can better inform the development of effective programming within ecotourism contexts.

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16. Developing ecotourists' environmentally sustainable behaviour

Jan Packer and Roy Ballantyne

INTRODUCTION

As noted by Buckley and other authors in this volume, most definitions of ecotourism include some kind of environmental education or interpretation component. In Australia, ecotourism accreditation requires that the experience 'fosters environmental and cultural understanding, appreciation and conservation' (Ecotourism Australia, 2012). Some form of environmental education has thus become a key component of most ecotourism experiences. It is often argued that increasing visitors' environmental understanding and awareness will lead to their voluntary compliance with environmentally sustainable practices and thus help to reduce the negative impacts of ecotourism. Not only does the ecotourism industry have the responsibility to minimize its own negative impacts, it also has the opportunity to play a positive role in helping to solve global environmental problems by providing environmental learning experiences that promote positive change in people's everyday behaviour and lifestyles. Adopting a proactive role, in which environmental responsibility is not only embedded in ecotourism products and services but also actively communicated to tourists and other visitors might be considered a moral and ethical responsibility (Ballantyne & Packer, 2011; Miller & Twining-Ward, 2005).

The provision of an educational component is not only an obligation for ecotourism but also a response to consumer demand. The demand from consumers for experiences that incorporate learning and education is increasing rapidly (Ritchie, Carr & Cooper, 2003). There is an expectation that tourism in general, and ecotourism in particular, should play a role in encouraging and supporting visitors' adoption of environmentally sustainable principles and practice (Marion & Reid, 2007; Secretariat of the Convention on Biological Diversity, 2004). Research by Ballantyne, Packer and Hughes (2009) indicated that visitors to an ecotourism site were highly supportive of the site's conservation ethic. Packer (2006) further suggests that in tourism and leisure contexts, many visitors seek a learning experience that is both enjoyable and potentially transformative. These findings have important implications for ecotourism as they suggest that visitors are not only likely to be open to receiving conservation messages but also likely to feel that such learning has enhanced their experience.

The environmental problems facing the world today, including global warming, acid rain, air pollution, ozone depletion, water contamination and depletion, waste and deforestation, are largely the result of the behaviours of individuals and societies (Nickerson, 2003). Individuals and societies thus need to contribute to the solution of these problems by adopting more sustainable behaviours. Education is necessary to help

people build the capacity to grapple with these issues and relate them to their own lives (Scott & Gough, 2004).

Ecotourism experiences provide important opportunities for informal environmental learning that are rarely possible in more formal contexts. They allow learners to engage with and in the environment, to observe the evidence and effects of environmental mismanagement and to explore and construct their environmental knowledge, skills, attitudes, beliefs and behaviours in personally relevant and meaningful ways (Ballantyne & Packer, 2005). The emotional component that often accompanies learning in such contexts also contributes to a powerful, memorable and transformative learning experience.

APPROACHES TO FREE-CHOICE ENVIRONMENTAL LEARNING AND BEHAVIOUR CHANGE

Two different broad approaches to free-choice environmental learning and behaviour change have been identified in the literature: a social marketing approach, which applies behaviour change principles to target and modify specific conservation behaviours; and an environmental learning approach, which applies educational principles to develop an environmental ethic and environmental literacy (Monroe, 2003; Ogden, Routman, Vernon, Wagner, Winsten, Falk, Saunders & Reinhard, 2004). The former has usually been applied to target specific on-site visitor behaviours that ecotourism operators wish to encourage or discourage, for example, encouraging visitors to stay on marked paths, while the latter addresses more generalized environmental behaviours that can be applied off-site, after the visit, for example, dealing responsibly with household waste.

Social Marketing Approaches

Ecotourism providers often use interpretation strategies to influence people's behaviour on-site. In this regard, interpretation is seen as a 'soft' form of visitor management, which attempts to influence visitors' behaviour through information and gentle persuasion rather than through rules and regulations or physical controls (Kuo, 2002; McArthur & Hall, 1996; Orams, 1996). For example, persuading visitors that adopting the target behaviour will halt or reverse environmental damage is often successful in bringing about voluntary behaviour change.

One particularly influential theory in relation to behaviour change has been Ajzen's (1985, 1991) Theory of Planned Behaviour. The theory posits that behaviour is a function of three categories of salient beliefs: behavioural beliefs (beliefs about the outcomes and consequences of particular behaviour); normative beliefs (beliefs relating to social pressures to perform or not perform the behaviour); and control beliefs (beliefs relating to one's own ability, knowledge, skill, resources and opportunity to perform the behaviour). To be persuasive, interpretive messages need to address visitors' specific beliefs about a phenomenon and target the information upon which these beliefs are founded (Ajzen, 1992). Thus, environmental interpretation that aims to influence specific environmental behaviours is often designed to challenge the salient behavioural, normative or control beliefs upon which the behaviours are based, and promote behavioural,

normative or control beliefs that will achieve the desired outcomes (Ham & Krumpe, 1996; Ham & Weiler, 2002).

Ham and Krumpe (1996) discuss the application of the Theory of Planned Behaviour (Ajzen, 1991) to encourage horse campers, through carefully designed signs and brochures, to adopt new behaviours to lessen their environmental impacts. They argue that, in order to influence visitors' behaviours, interpretation should address the specific beliefs that are prominent, pertinent and important to the target audience. Ballantyne and Hughes (2006) developed and compared signage using three different theoretical approaches, including the Theory of Planned Behaviour, to reduce the incidence of visitors feeding wildlife in national park areas. Powell and Ham (2008) demonstrated that interpretation based on a combination of EROT principles (enjoyable, relevant, organized and thematic) with the Theory of Planned Behaviour was successful in increasing tourists' philanthropic support of conservation. All of these studies suggest that well-designed interpretation programmes can be effective in changing visitors' on-site behaviour.

Community-Based Social Marketing Theory (McKenzie-Mohr & Smith, 1999) is based on the Theory of Planned Behaviour, but extends it by including consideration of the perceived barriers that prevent people from adopting a specific behaviour and the perceived benefits that support the behaviour. The Community-Based Social Marketing approach includes a range of strategies that can be applied to overcome the perceived barriers and reinforce the perceived benefits of a specific behaviour. These include prompts, incentives, feedback and social support. Such an approach has been successfully applied in an ecotourism setting by Hughes and colleagues, although it should be noted that in this case the target behaviours were off-site and post-visit (Hughes, 2011; Hughes, Packer & Ballantyne, 2011).

Environmental Learning Approaches

Attempts to define the nature and scope of environmental education invariably promote, as its ultimate aim, the development of responsible environmental behaviour (Howe & Disinger, 1991; Hungerford & Volk, 1990). Environmental education approaches in ecotourism settings do not target specific behaviours, but more generally address visitors' factual knowledge and understanding (or misunderstanding) of environmental phenomena, their general awareness of and attitudes towards environmental issues and their skills and abilities to engage in environmentally responsible practices. An environmental learning approach aims to develop life-long learners who are able to apply their knowledge, attitudes and skills to make responsible environmental decisions in new and changing contexts (Ardoin, 2009).

Such an approach is consistent with contemporary theories of education in both formal and informal contexts, which focus on meaning-making rather than meaning-taking (Silverman, 1999; Uzzell, 1998). Rather than focusing on whether a particular message has been conveyed or target behaviour attained, an environmental learning approach attends to the multiple ways in which visitors make meaning from the information they encounter and the observations they make. From this perspective, in considering how ecotourism experiences might promote and encourage the adoption of environmentally sustainable behaviours, it is therefore important to interpret such

outcomes in their broadest sense. Changes in behaviour might involve lifestyle changes, talking to others about environmental issues, searching for further information, joining volunteer programmes or donating to environmental organizations.

Ballantyne and Packer (2005, 2011) emphasize the importance of influencing visitors' behaviour not only at the site itself but also in their home, work and leisure environments. Newsome, Dowling and Moore (2004, p. 32) also argue that interpretive messages and experiences need to be designed 'not only to meet immediate on-site needs, but also [to] contribute to enhanced wildlife conservation awareness which visitors may take with them when they return to their normal lives or visit some other natural area in the future'. To achieve this, many ecotourism experiences are accompanied by conservation-themed interpretation that aims to increase visitors' awareness of conservation issues and encourage them to comply with pro-conservation practices both while participating in the experience and on their return home. The primary aim of such interpretation is to raise awareness and appreciation of the fragile state of the environment (Turley, 1999), the interrelationships between wildlife and habitats, and the impact of human activities upon the long-term viability of natural environments and their wildlife populations (Mason, 2000).

Learning from this perspective is recognized as a cumulative process, drawing from a wide variety of sources over long periods of time. Ecotourism experiences can play an important role in contributing to this process. Ballantyne and Packer (2011) suggest that the primary role of such experiences is to draw attention to the issues and provide a motivating force that drives further information-seeking. When left to chance, however, this motivation can often quickly dissipate. They argue that 'extending the on-site experience to provide access to "take-home" information and ongoing reinforcing events will optimise the potential impact of the experience on visitors' adoption of environmentally sustainable behaviour in their home and work environments and their ability to translate their behavioural intentions into actions' (p. 210).

BEHAVIOUR CHANGE STRATEGIES IN ECOTOURISM SETTINGS

Weaver (2005) identifies two types of ecotourism experience – 'minimalist' and 'comprehensive' – that vary according to the extent of their educational impact. The former emphasizes superficial learning opportunities and aims only to maintain the status quo (for example, minimal impact) in relation to sustainability objectives. The latter emphasizes deeper understanding and aims to influence environmentally sustainable behaviour more broadly. According to Weaver, strategies and techniques need to be devised that enable ecotourism experiences, even those that involve relatively short and physically non-challenging interactions with nature, to have a 'transformative' effect on visitors' environmental ethos. Similarly, Orams (1995) calls for ecotourism management strategies that aim not only to provide visitor enjoyment and satisfaction but also to achieve a shift towards more environmentally responsible behaviour.

Strategies that have been found to be successful, both in influencing specific on-site behaviours and more general environmental practices in the home and workplace include:

- providing and building on opportunities for close encounters with nature
- engaging visitors' emotions
- encouraging a reflective response
- focusing on achievable actions
- providing long-term support for visitors' behaviour change.

Providing and Building on Opportunities for Close Encounters with Nature

One of the key assets of ecotourism experiences in contributing to visitors' environmentally sustainable behaviours is the opportunity they provide for visitors to have a close and personal encounter with nature. This is arguably the most powerful starting point for effecting lasting and positive behavioural change. Ecotourism offers unique opportunities for participants to reconnect with nature in a potentially life-changing way, and such experiences are important in today's society, where many people feel disconnected from nature due to increasing urbanization and mechanization (Forestell, 1993).

Based on research with school students attending environmental education programmes in natural settings, Ballantyne and Packer (2009) proposed five principles for facilitating student learning for sustainability in natural environments. Although these were developed in a formal education context, it is argued that they can be applied to visitor learning in ecotourism settings as they build on the unique learning opportunities that are available in natural environments. The five principles are: (1) learning by doing – actively involving learners in hands-on exploration and investigation; (2) being in the environment – encouraging learners to experience and appreciate the special characteristics of the natural environment; (3) real life learning – basing learning activities on real places, real issues and authentic tasks; (4) sensory engagement – providing opportunities to explore the environment using all five senses; and (5) local context – encouraging learners to explore and investigate environmental problems and issues in 'their own backyard'.

Suggestions for applying these principles in ecotourism might include:

1. Learning by doing. Provide opportunities for ecotourists to participate in environmental rehabilitation programmes or research studies. Such programmes should include a strong educational component. It is likely that such opportunities would contribute to visitor satisfaction, as well as conservation and behaviour change outcomes.
2. Being in the environment. Environmental interpretation should, by definition, contribute to visitors' understanding, appreciation and enjoyment of nature. According to Interpretation Australia (2012), the benefits of interpretation include to 'enrich the visitor's experience by making it more meaningful and enjoyable' and to 'assist the visitor to develop a keener awareness, appreciation and understanding of the heritage being experienced'. Interpretation that draws out the significance of the ecotourism site, and allows visitors to appreciate its special features while they are immersed in it, is likely to lead to the desire to protect not only that environment but other similar environments.
3. Real life issues. Alert visitors to environmental issues that are currently affecting the ecotourism site and/or its wild inhabitants. Seeing the evidence of human impacts on

the environment or on wildlife is a powerful motivator for action (Ballantyne, Fien & Packer, 2001).

4. Sensory engagement. Ecotourism experiences are well placed to immerse visitors in nature. Interpretation can help to focus visitors' attention on the sensory environment, which is often an important aspect of visitors' memories and the first step towards a behavioural response (Ballantyne, Packer & Sutherland, 2011): point out unique sounds and smells; prepare specimens or replicas that visitors can touch; use art or poetry to enhance visitors' appreciation of what they see; and include local indigenous foods on the menu.
5. Local context. Help visitors to make connections between the ecotourism environment they are visiting and their own local environment. The new knowledge, understanding, appreciation and skills they gain from their ecotourism experience will be more valuable if they can be applied in other situations, and particularly in their home environment.

In some settings, of course, the very act of visiting a pristine or wilderness environment can have substantial negative impacts on the environment and its inhabitants (Marion & Reid, 2007). Reducing negative impacts through the implementation of appropriate policies, planning and management strategies is essential and is addressed elsewhere in this volume. It is important to note, however, that visitors can be an important ally in this process. Evidence presented by Ballantyne et al. (2009) suggests that ecotourists strongly support the conservation aspects of the experience and place primary importance on minimal impact concerns, at the expense, if necessary, of their own experience and personal comfort. The key is to clearly communicate to visitors the reasons behind particular management practices in terms that relate directly to protecting the site or its wildlife from human impacts. The knowledge that they are accepting restrictions for the sake of minimal impact may even make the experience more special for tourists. Conversely, if tourists have cause for concern about the impact of their visit on the environment or the welfare of wildlife, it is likely to detract from their enjoyment and satisfaction.

Engaging Visitors' Emotions

Ballantyne, Packer and Sutherland (2011), in a qualitative analysis of visitors' memories of their ecotourism and wildlife tourism experiences, observed that many visitors responded emotionally to the experience, and that this appeared to be a trigger or catalyst for more in-depth cognitive and behavioural responses. This was particularly the case when visitors could witness the struggles of wildlife to survive, or when interpretation was focused on the threats posed by human actions. Emotion plays a motivational role in learning as it influences people's selection of what they attend to (Boler, 1999), prompts curiosity and exploration (Berlyne, 1960; Csikszentmihalyi & Hermanson, 1995) and increases concentration and willingness to learn (Krapp, Hidi & Renninger, 1992; Pekrun, 1992).

Myers, Saunders and Bexell (2009) argue that emotion contributes to the meaning of an experience and thus plays a role in whether and how the experience is remembered. The emotional aspects of activities and events also provide important contextual memory prompts that aid later recall of information (Sylwester, 1994). Emotions such as guilt, fear or emotional affinity towards nature can be a motivating force for the adoption of

nature-protective behaviours such as reduced energy consumption (Kals, Schumacher & Montada, 1999). According to Myers et al. (2009), free-choice environmental learning settings are well placed to develop visitors' empathy with nature, which is seen as a motivator of, or even prerequisite for, environmental action.

Interpretive commentaries and signage can be used to engage visitors' emotions by reinforcing their sense of wonder, awe, excitement, privilege and empathy, and highlighting specific threats to the environment and/or wildlife, especially those caused by human actions. For example, 'hot interpretation' (Uzzell, 1989) uses emotive and challenging interpretive content and experiences to prompt visitors to re-examine their own previously held beliefs and perceptions regarding specific social, environmental or moral issues (Ballantyne, 2003; Ballantyne & Uzzell, 1993; Uzzell & Ballantyne, 1998). In this regard, Ballantyne, Packer and Bond (2012) identified the following five principles for the application of hot interpretive techniques: the central place of personal stories; the need to balance despair and hope; the need to balance education and persuasion; providing a place for reflection; and focusing on the past to inform the future.

Encouraging a Reflective Response

The important role of reflection in free-choice environmental learning has been demonstrated both qualitatively (Ballantyne, Packer & Sutherland, 2011) and quantitatively (Ballantyne, Packer & Falk, 2011), and is discussed in detail in Chapter 14 in this volume. Specifically, it is recommended that visitors be given opportunities and encouraged to reflect on the meaning of the experience, to discuss it with their companions and to ask questions of staff or volunteer guides.

Focusing on Achievable Actions

Ecotourists are likely to be more knowledgeable, concerned and environmentally aware than the general public (Ballantyne et al., 2009; Perkins & Grace, 2009) and in many cases do not need to be convinced that environmental problems exist. What is needed, however, are tools and solutions – specific and achievable options that will make a small but positive difference. People need to be convinced that their actions can contribute to halting or reversing environmental damage, in order to overcome the 'action paralysis' identified by Uzzell and Rutland (1993). This is one of the main challenges facing ecotourism and wildlife attractions in relation to developing ecotourists' environmentally sustainable behaviour. Highlighting environmental problems without providing solutions or suggestions for individual actions can actually be counterproductive because they erode visitors' confidence in their ability to combat conservation problems (Yalowitz, 2004). Visitors should thus be given examples of practical and achievable things that they can do both on-site and at home in their own local environment.

Providing Long-term Support for Visitors' Behaviour Change

Research in formal education contexts demonstrates the importance of the reinforcement and consolidation of learning (Anderson, Lucas, Ginns & Dierking, 2000). However, in free-choice learning settings, such reinforcement and consolidation processes are hap-

hazard at best (Falk & Dierking, 2000). Although an ecotourism experience may result in a heightened awareness of environmental issues and an increased motivation to adopt more environmentally sustainable behaviours, unless these are reinforced by subsequent experiences, they are likely to be relatively short-lived (Adelman, Falk & James, 2000; Dierking, Adelman, Ogden, Lehnhardt, Miller & Mellen 2004; Rickinson, 2001).

Ecotourism providers can extend their influence in this regard by staying in touch with their visitors for some time after their visit. Today's technologies and social media provide mechanisms for doing this that are relatively attractive and inexpensive. Post-visit contacts might prompt visitors to cognitively and affectively process their experience, encourage responsible decision-making with regard to the issues highlighted during the on-site visit and provide specific examples of appropriate responses that visitors might make to fulfil their behavioural intentions (Ballantyne & Packer, 2011). They can provide resources to enable visitors to follow up particular interests, extend their learning and maintain their motivation to act. In this way, ecotourism providers can build on and extend on-site conservation learning and sustainability messages and link these with post-visit behavioural responses. Preliminary research in this regard has demonstrated a measurable, statistically significant effect of the provision of post-visit action resources on long-term behaviour change (Hughes et al., 2011), and suggests that substantial numbers of visitors would like to be provided with post-visit materials to enable them to continue learning about environmental issues after their visit (Ballantyne & Packer, 2010).

CONCLUSION

Bogner (1998) suggests that contacts with nature provide a 'foot-in-the-door' that helps to shift individuals' orientation to environmental issues. It is argued that ecotourism operators not only have a moral and ethical responsibility to take advantage of this opportunity, but by doing so, will add value to the experience they provide for their visitors. Ecotourism providers are well placed to draw people's attention to the issues and provide them with a reason to care. By going just a little further and intentionally focusing on developing ecotourists' environmentally sustainable behaviour, they can facilitate transformative experiences that have a long-term impact on visitors' understanding, attitudes and behaviour in relation to the environment.

Ecotourism experiences are, of course, limited in what they can achieve in isolation. Educating the public about environmental issues and sustainable behavioural responses needs to be understood as a life-long and life-wide learning endeavour. The impact of a single ecotourism experience may be small, but this can be multiplied exponentially as people continue to explore and develop their relationship with the environment, make small positive changes in their everyday lives and encourage others to do the same.

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17. The intrinsic motivations and psychological benefits of eco and wildlife tourism experiences

Susanna Curtin

INTRODUCTION

Tourism based upon natural environments and wild animals is a major and expanding part of the tourism industry (Mintel, 2008; Rodger, Moore & Newsome, 2009; UNEP, 2006). Tour operators and destinations with iconic, accessible and semi-predictable wildlife have been quick to include wildlife tourism opportunities in their marketing and product portfolios in order to differentiate destinations and add value to tourist experiences. Many forms of destination marketing are thus proliferated with images of iconic, place-specific species that signify an unspoilt environment and unique, authentic and novel tourist activities. This culminates in animals being both symbolic of place as well as being an added interest or focus. For the species and/or habitats that are in decline, wildlife tourism also affords tourists an opportunity to see iconic mega fauna while it still exists (Lemelin, Dawson, Stewart, Maher & Lueck, 2010). Wildlife viewing can be an educational and emotional activity; therefore, both affective and cognitive motives underpin and shape the tourist experience and provide several psychological benefits (Schanzel & McIntosh, 2000; Zeppel & Muloin, 2007).

Wildlife watching activities can range from informal visits to nearby countryside to see local wildlife, day trips or highly organized, high-end tour itineraries to see exotic wildlife in diverse and often remote settings (Knight, 2009). They span specialist, alternative and mass forms of tourism development and occur in a wide range of terrestrial and marine habitats. Wildlife tourism, although often thought of as a distinct type of tourist experience, clearly overlaps with other forms of tourism such as adventure and particularly ecotourism. However, eco and wildlife tourism are neither synonymous nor mutually exclusive (Newsome, Dowling & Moore, 2005). While some wildlife tourism products reflect ecotourism principles in that they claim to be sustainable, educative and support both conservation initiatives and local communities, this certainly cannot be said for all products that have, over time, changed to meet market demands in terms of size, infrastructure and interpretation (see Duffus & Dearden, 1990; Higham, 1998). Neither do all ecotourism ventures include wildlife.

The wildlife watching market is remarkably diverse and involves a number of tourist activities including habitat-specific tours, overland safaris, cruises, thrill and adventure seeking activities, conservation or research-orientated trips, and finally, opportunities for direct embodied experiences such as feeding wildlife or diving, snorkelling and 'swimming with' large, charismatic marine fauna such as sharks, rays and potato-cod (Cloke & Perkins, 2005; Curtin & Garrod, 2008; Orams, 2004). The diversity of terrestrial focal species can be equally surprising and is not always based on the aesthetically appealing, cute or cuddly; although many mass-marketed tours tend to be (Moscardo, Woods & Saltzer, 2004). Tours

can include all kinds of birds, mammals and reptiles as well as insects such as butterflies, dragonflies and glow worms. They may also include reference to wild flowers.

The burgeoning number of wildlife destinations and products is testimony to the fact that wildlife appears to have a wide, universal and growing appeal, but why this is so has yet to be fully explained. For example, what came first? A contemporary quest for animal encounters or the business interests and marketing that correspond with it? There is no empirical evidence to suggest one or the other. If the tourism motivational literature is correct and tourists are using tourism to not only escape the everyday but also bring greater meaning to their lives (Godbey, 1994; MacCannell, 1976), the question becomes how and why such animal encounters fulfil these needs and, more importantly, how these experiences can influence new ways of thinking about nature, animals and our own place in the ecosystem. Answers to these questions are important as ultimately the fate of the environment is in our hands. Understanding why nature is so significant to people strengthens the argument for conservation and enables the construction of initiatives and environmental policies.

To date, much of the wildlife tourism literature is predisposed to concentrate on the negative aspects of tourism on wildlife, communities and habitats; there is less comment on the positive benefits beyond the obvious commercial and economic spin-offs. However, the fact that wildlife tourism can influence the human psyche beyond the boundaries of the tangible experience gives rise to a much greater appreciation of the complex interrelationship between people and nature. Using wildlife tourism as a vehicle to explore how such experiences reconfigure human–nature relations and how they might awaken people's ecological subconscious, challenges current wildlife tourism paradigms based upon the binary assumption that humans are distinct from nature. It also helps to move current thinking far beyond impact and management into the realms of eco-psychology and how wildlife tourism experiences can be better organized to re-engage and reconnect human populations with nature through the use of 'affective' experiences and interpretation (Ballantyne, Packer & Sutherland, 2011; Bentrupperbaumer, 2005; Moscardo et al., 2004; Orams, 1995).

This essential agenda suggests that ecotourism and wildlife tourism (if carefully managed) be embraced and welcomed as a crucial opportunity for people to experience and learn about nature. This chapter therefore concentrates on the intrinsic motivations and the psychological and restorative benefits of time spent watching wildlife in a natural setting. It begins with a brief discussion of how this form of nature-based travel may fulfil a contemporary search for meaning, particularly where such experiences reflect interests, identities and lifestyles. It then discusses why experiences in the natural world are good for us, the multisensory characteristics of these tourist experiences and how they inspire feelings of connectivity, flow, self-efficacy and spiritual reflection. Finally, it suggests the practical implications of these findings in terms of products, delivery and interpretation.

THE SEARCH FOR MEANING: RECONNECTING WITH NATURE

There are three possible factors that work together in order to produce the noticeable and increasing demand for nature-based tourism experiences. First, there is increased

interest in wildlife and the natural environment brought about by education, popular media coverage and travel and tourism itself (Holden, 2000; Newsome et al., 2005). Second, there is a blurring of holiday and home interests and lifestyles in which tourism choices reflect self-development and self-identity (Curtin, 2010a; Franklin, 2007; Green & Jones, 2005). Daily interest in the natural world can then 'spill over' into leisure and holiday activities. Eco and wildlife tourism therefore becomes an extension of identity and interests rather than separate, bracketed, tourist experiences (Curtin, 2010a). Finally, for some people there is a 'call of the wild' in which they exhibit an inherent, biological need to reconnect with the nature that is missing in their busy, urban lifestyles (Wilson, 1984). This is evidenced by a greater number of people keeping pets, gardening, contributing to conservation organizations, wildlife watching and feeding garden birds.

Understanding tourist motivations for eco and wildlife tourism experiences is highly complex. Commentators have proposed that tourism allows the human psyche to search for the authenticity that has been lost in modernity (MacCannell, 1976). While others argue that it is more to do with self-identity and ego-enhancement (Dann, 1977; Desforges, 2000) or that it is rooted in a need for escape, fantasy and novelty (Boorstin, 1961/1992; Crompton, 1979; Dann, 1977). What all of these concepts have in common is that the demand occurs in prosperous, post-industrialized and highly consumptive societies that have become urbanized and thus separated from nature and nature's processes (Gossling, 2002).

Prosperity tends to bring long working hours and a culture highly embedded in consumption. It also brings with it a different set of needs and values with regards to the natural environment in so far as occupational changes and new technologies mean that we are no longer directly dependent on the land on which we live for our livelihoods. There is also a greater emphasis placed on leisure and recreation and new personal identities based on lifestyles and values rather than occupations. Inglehart and Baker (2000, p. 21) thus propose 'that affluent societies place increasing emphasis on quality of life, environmental protection and self-expression'. There is also the growing recognition that material possessions (and the drive to attain them) do not necessarily bring personal or spiritual fulfilment (Steiner & Reisinger, 2006) and that people are increasingly seeking nature and the outdoors to fill this psychological chasm (Manfredo, Pierce & Teel, 2002). The scale and growth of nature-based tourism suggests that tourist motivations may be driven, therefore, not only by marketing and media representations but also an inherent affiliation and need for nature; marked by a desire to spend time in places and spaces that are viewed as healing in some way, and that provide meaningful, transformative, spontaneous and extraordinary experiences.

In his Biophilia Hypothesis, Wilson (1984) posits that the natural world continues to influence the human condition through our previous close and evolutionary relationship with it. He suggests that technological development has been so rapid that it outpaces our adaptation to modern environments. Therefore, inherent in all of us is a need to be with nature through 'an innately emotional affiliation to other living organisms' (Wilson, 1993, p. 31). While Wilson's theory has yet to be convincingly tested, environmentalists and nature writers have long since maintained that humans derive psychological and physical benefits from spending time in the natural world (Kaplan & Talbot, 1983; Mayer, 2009). Indeed research has shown that exposure to nature alleviates aggression, anxiety and depression (Van den Berg, 2005), improves mental health and cognitive

capacities (Kaplan & Kaplan, 1989; Kuo, 2001; Wells, 2000), aids the healing process (Ulrich, 1984) and provides opportunities for reflection (Curtin, 2009; Herzog, Black, Fountaine & Knotts, 1997).

WHY NATURE IS GOOD FOR US

There are three important theories that underpin most of the work on the psychological benefits of nature. These are Attention Restoration Theory (Kaplan & Kaplan, 1989), the Psycho-physiological Stress Recovery Theory (Ulrich, 1983) and the aforementioned Biophilia Hypothesis (Wilson, 1984). Interest in these formative theories has recently emerged due to a growing unease caused by the recognition of the damage we are doing to the environment (climate change, habitat loss, endangered species) and the sociological, physical and psychological challenges of living in modern, affluent, hyper-consumptive societies (Bauman, 2001). These concerns focus on the breakdown of family and community values, the increase in obesity and mental health disorders such as depression and stress, a general lack of exercise and a whole generation of children who no longer have freedom to roam outdoors. This has reawakened an interest in the importance of access to green space to human health and wellbeing and an exploration of what makes it so important for us.

According to Hinds and Sparks (2008, p. 109), modern lifestyles 'have created psychological and physical divisions between human inhabitants and the natural world'. As a result, many people no longer experience the natural world directly but rather indirectly or vicariously. Pyle (1978) claims that this 'extinction of experience' from childhood leads to a cycle of disengagement with the natural world and its wildlife, which serves no good in the long term as (1) it is not good for our own health and wellbeing and (2) pro-environmental behaviours tend to stem from direct contact with nature (Millar & Millar, 1996) due to the sensory impressions, emotional affinity and reflective responses that nature stirs in us (Ballantyne et al., 2011; Curtin, 2009). Louv (2005) claims that this separation from nature causes 'nature deficit disorder', which diminishes use of our senses, creates attention difficulties and results in higher rates of physical and emotional illnesses. This, he suggests, is evident at the individual, family and community level, and the only cure is time spent in nature (see also Mabey, 2005).

The assumption that contact with nature provides people with restoration from stress and fatigue is not a new concept. Experiences in nature have long been seen to have health benefits. The idea that you can be mended by the healing currents of the great outdoors goes back to classical times (Mabey, 2006). The Romans recommended rambling as a way of resolving emotional tangles (*solvitur ambulando*) and the French philosopher Foucault (2001, p. 62) wrote that the countryside, 'by the variety of its landscapes wins melancholics from their single obsession by taking them away from the cause and the memory of their sufferings'. The notion of nature's cure has clearly embedded itself in the human psyche. Frerichs's (2004) nationwide survey of people living in the Netherlands revealed that 95 per cent of respondents perceive that a visit to nature is a useful way of obtaining stress relief. Similarly, a survey of residents in nine urban areas in Sweden claims that they would recommend a walk in the forest as the first way to deal with any anxieties (Grahn & Stigsdotter, 2003). The fact that nature reduces stress is accredited

to the Attention Restoration Theory (ART) first espoused by two psychologists, Kaplan and Kaplan (1989, 1995), who studied the effects that the natural environment has on the brain. They began this work by looking at concentration.

Their theory proposes that prolonged and/or intensive use of directed attention diminishes a person's capacity to ward off distractions, which is evidenced by difficulty concentrating, increased irritability and increased rate of errors on tasks that require concentration; thus creating stress because they have less cognitive resources to cope with everyday demands (Kaplan & Kaplan, 1995). This is referred to as 'directed attention fatigue' (Bird, 2007). Where a stimulus is weak or uninteresting, it takes greater effort to block out more attractive but less important distractions. This is mentally demanding as the brain uses inhibitory control mechanisms, which MRI scans show to be situated in the right cortex of the brain (Kastner, De Weerd, Desimone & Ungerleider, 1998), the same part of the brain that is affected in children with deficit hyperactivity disorder (Bird, 2007). Examples of directed attention include driving in traffic, study, computer work and phone calls. Directed attention fatigue is prevalent in people who are stressed, overworked, bereaved or sleep deprived and is a widespread condition of modern life that is overloaded with information, communication and multiple stimuli that either demand our attention or need to be blocked out.

In contrast to directed attention, involuntary attention or 'fascination' is effortless and is naturally held when a person finds the subject interesting and absorbing. Recovery from directed attention fatigue requires restorative environments and activities that do not use the tiring inhibitory control mechanism. Attention restoration involves clearing the mind, a recovery from directed attention fatigue, the opportunity to think about personal and unresolved problems and the chance to reflect on life's larger questions such as direction and goals. Clearing the mind and recovery from fatigue is called attentional recovery whereas dealing with personal problems and thinking about philosophical viewpoints is reflection. Together, reflection and attentional recovery completes the restorative process. The outdoor environment is usually restorative but according to Kaplan and Kaplan (1995) it is only so if it:

1. Involves being away, that is, being in a physically distinct location.
2. Has extent, that is, the location must be absorbing and somewhere that is distinct where a person can settle into and where there is enough to see, experience and think about.
3. Is fascinating to behold, that is, effortless attention allows the inhibitory fibres to relax, since they no longer have to block out distractions. Fascination can be divided into hard fascination (for example, watching sport, television and computer games), which holds attention effortlessly but does not allow enough space for reflection, and soft fascination (for example, looking at nature, exploring the countryside and gardens), which holds one's attention to allow attentional recovery but also allows time and space for personal reflection.
4. Is compatible with our expectations, that is, the setting must be able to provide what the seeker requires of it without it being a struggle (Hartig, Mang & Evans, 1991).

The theory upholds that restoration and recovery is greatest for nature-based activities, less for entertainment and leisure that involves hard fascination such as watching

sport and least for urban areas that demand continued directed attention. Several studies have confirmed this hypothesis (Hartig et al., 1991; Hartig, Evans, Jamner, Davis & Garling, 2003; Herzog et al., 1997). Other studies focus on recreational experiences in natural settings and report how exercise in natural settings (green exercise) produces more psychological benefits such as reduced stress, increased self-esteem and feelings of wellbeing compared to exercise in closed or urban spaces (Pretty, Peacock, Hine, Sellens & South, 2007). Similarly, Korpela and Kinnunen (2010, p. 11) report that 'a higher level of interaction with nature implicates a lower need for stress recovery' and therefore can be a preventative solution.

Given the above theory and findings, it becomes apparent how eco and wildlife tourism experiences possess these four restorative criteria. It is outdoors and away from everyday work. It provides complex ecosystems, trails and paths for exploration to satisfy extent. It affords fascination with animals, birds, trees, plants and landscapes, and comprises compatible activities such as walking, watching and photographing focal species. In so doing, it facilitates a highly memorable, emotional, authentic, meaningful and restorative experience. Given that the setting of these activities is also influential in the recovery process, it is important to consider why some settings are more attractive than others.

Ulrich's (1983) Psycho-physiological Stress Recovery Theory is based on empirical studies that reveal an immediate positive and physical response to views (settings) of nature. When a person is stressed, their blood pressure, muscle tension and pulse rate all reduce within minutes of exposure to views of nature. Ulrich (1983) suggests that this is an inherent reflex associated with the limbic system and the oldest part of the brain. He claims that in one million years of evolution we have learned that we will have a greater chance of survival by remaining in areas that are safe and abundant with food. This, he claims, means that gazing upon the following environments is more likely to be restorative:

- verdant foliage and plants
- calm or slow moving water
- spatial openness
- park-like, savannah-like, properties
- unthreatening wildlife
- environments that provide a sense of security.

In their discussion of aesthetic landscapes and ecology, Gobster, Nassauer, Daniel and Fry (2007, p. 962) argue, however, that while 'there may be a tendency, based on evolutionary processes and cultural expectations, to assume that good ecological quality is associated with good aesthetic quality' there is not always a positive correlation. Not all aesthetically pleasing landscapes represent healthy ecosystems and not all rich ecosystems are aesthetically pleasing. Given the latter, it follows that not all forms of wildlife tourism take place in beautiful places as people travel to where the focal species are. Furthermore, some forms of eco and wildlife tourism are designed to take tourists out of their 'comfort zone' and into wild, untamed, even forbidding habitats where the product is focused on seeing wild, large, iconic and charismatic dangerous mammals such as lion, tiger and polar bear that are not human-safe orientated and

in whose company stress might well increase rather than decrease; this adds adrenalin and adventure to the mix of experiences. Ulrich's (1983) theory nonetheless reminds us to consider the embodied, multisensory aspects of nature-based tourism and the importance of seeing animals in an authentic, 'natural' landscape rather than a built enclosure.

MULTISENSORY EXPERIENCES, EMOTIONAL AFFINITY AND WONDERMENT

Lefebvre (1991, p. 286) claims that 'the hegemonic role of visuality overwhelms the whole body and usurps its role', but while the visual 'spectacle' is at the centre of the wildlife experience, it is by no means the only sense that is involved. There are also olfactory experiences such as the smell of a whale's blow, the pungent smell of a bat colony or the cloying smell of guano; all of which are experienced in a unique soundscape of birdsong, ocean waves and animal calls; thus, the experience is a heightened, multisensory one. During eco or wildlife tourism experiences nature consequently absorbs us via a complex array of multisensory stimuli caused by the sights, smells and sounds of habitats and animals (Ballantyne et al., 2011; Crouch & Desforges, 2003; Curtin, 2010b; Dann & Jacobsen, 2003; Gibson, 2010). This involvement is accompanied by embodied reactions to our environment such as the feel of sun, wind or water on the skin coupled with the physiological changes caused by the art of wildlife watching or walking in a variety of settings; notably, the kinetic energy created by movement through the sea or over the landscape, and the increased heart rate caused by the anticipation, excitement and thrills of the search and chase (Wylie, 2005).

This total physical and mental immersion into nature can initiate feelings of 'flow' whereby an individual becomes so absorbed in the moment and their surroundings that they lose awareness of the passing of time (Csikszentmihalyi, 1990). In this state, awareness of self, particularly the ego, falls away and thoughts and skills can run freely and creatively. According to Csikszentmihalyi (1990, p. 3), these are the 'best moments of our lives' that bestow great satisfaction. Csikszentmihalyi's theory of flow has been applied to the eco and wildlife tourism experience in a number of studies where qualitative inquiry describes how tourists can dwell in a calm/excited but focused existence that invokes feelings of profound happiness and wellbeing (Curtin, 2009; Hill, Curtin & Gough, 2013). It can also facilitate the refinement of skills such as tracking, scoping and photography, which results in fulfilment and self-efficacy (Curtin, 2010a).

During a state of immersion in nature there is also evidence of a much 'deeper' experience where feelings allow the participant to go into an altered state. Nature-based experiences provide us with unique opportunities for reflection and contemplation by allowing us time and space to be still and to feel the natural rhythms of the day and the seasons. Price (1999, p. 252) claims that animals and nature provide 'a refuge from modern life; a reprieve from irony and self-awareness and a release from artificial clock-time'. Chawla (2002) attempts to understand this magical form of consciousness, which is characterized by the 'silent intuition' of the union of self and other, individual and world; an 'at-oneness'. Here 'feelings of being lucky, fortunate or graced' are released (Keltner & Haidt, 2003, p. 302). The occurrence of these experiences is seen to both reflect optimal cognitive

and emotional functioning and to be important to the wellbeing of the individual. 'At-one-ness' with nature can be an epiphany of self-realization (Bulbeck, 2005) caused by the intense emotional and sensual responses to the natural environment.

Fredrickson and Anderson (1999, p. 31) confirm how participants in their study of wilderness tourism frequently mentioned how exhilarating it was to hear or see various signs of wildlife or to feel the weather shift before a storm; things that they 'very rarely experienced in their everyday lives in the city'. Such observations provide a platform for contemplation of the non-human 'other' and the human condition and can provoke deep contemplation of life's deepest questions (Curtin, 2009; Fredrickson & Anderson, 1999). Kaplan (1993) asserts that although snapshot experiences of beautiful landscapes can temporarily lift one's moods, extended dialogues with nature and wildlife can restore people psychologically and allow opportunities for inner contemplation and change. The deepest and strongest attachments between people and nature give rise to spiritual experiences in which people feel a sense of connection with a larger reality that helps gives meaning to their own lives (Schroeder, 1996).

There are a number of reasons why time spent watching animals and birds is particularly transformative. Rolston (1987) highlights animals' 'agency' and the fact that they provide movement and life in an otherwise still environment. They are subjects in the environment whereas the mountains, trees and rivers are objects. This spontaneous movement and life in defence of its very survival, he claims 'moves us aesthetically' (1987, p. 187) and adds adventure and thrill. The excitement lies both in the surprise and the anticipated where there is 'intrusion, intimacy and otherness' (1987, p. 190). While the landscape and topography will always be there to behold, the birds in the trees, the tiger running wild; these are unique moments in time that are inordinately memorable for us.

This is due in part to the fact that animals are sentient beings. We look at them and they look at us and in this gaze there is an immediate connection although bound with both differences and similarities; one life form seeking to understand and evaluate the other. There is kinship and empathy to be found in the struggle for survival, the success and the failure (Mabey, 2003). Seeing unfettered wildness adds to our own quality of life. Wildlife marks our passage through time from the arrival of the swallows in spring to their departure in autumn; nesting birds and spring flowers and the autumn fall provide especially dramatic markers in our annual calendar. Wildlife is also associated with place. Places we return to later in life remain strangely haunted with the animal events we have encountered there (Curtin, 2010b). These memories are testimony to the delight, surprise, thrill and excitement of the encounter and the value that we place on them.

There are three main factors that assist the recall of such memories. These are involvement (Renninger & Wozniak, 1985), engagement (Bartlett, Burleson & Santrock, 1982) and 'outstandingness' (Whitehouse, 2001). Recalling wildlife tourist experiences is therefore dependent on having a personal interest in what one is seeing or doing, being utterly absorbed by it and the degree to which the experience differs from one's everyday norms and/or expectations. Milton (2002) asserts also that the presence and intensity of particular emotions affect the ease with which experiences are remembered. So anything that affects the emotional quality of an experience at the time such as the impact of the event, the presence of other individuals and the aesthetic quality of the surroundings may

render a wildlife experience memorable. In return, memories themselves are extremely effective inducers of emotion, recreating the emotions originally experienced in the past (Izard, 1991). Involvement, engagement, outstandingness and emotion therefore demonstrate the interrelated functions of memory and the complex network of activities on which it depends.

IMPLICATIONS

So, having ascertained that eco and wildlife tourism experiences have the potential to facilitate multisensual, provocative and meaningful tourist experiences, what are the implications and possible outcomes of this type of tourist activity? Ballantyne et al. (2011) argue that the greatest positive impact of wildlife tourism is to educate visitors about the threats facing wildlife and the actions needed to protect biodiversity and the environment for the future. The above discussion highlights how emotional affinity (empathy) underpins wonder, reflection and contemplation and also lays the foundations for memory recall. Being emotionally engaged with an experience affords greater concentration and involvement. Those working in environmental interpretation, particularly Ballantyne et al. (2011), Zeppel and Muloin (2007) and Orams (1997), ascertain that for wildlife tourism experiences to be environmentally transformative, the affective (emotional) benefits of wildlife watching need to be combined with the cognitive appreciation of wildlife and habitats. This combination encourages tourists to think more deeply about what they have experienced and how they might contribute to a more environmentally sustainable future.

Some wildlife tourism experiences, however, cannot facilitate such empathy; particularly those that are orientated towards a single focal species, are short-lived, lack sufficient interpretation and are mass marketed. These trips tend towards a myopic view of nature in so far as the interrelationships between habitats and other species are largely ignored in place of only the popular, charismatic and flagship mega fauna. On such trips the short time spent in the field, whether or not focal wildlife are seen, the close proximity of charismatic fauna, the behaviour of the crowd, noise and the quality of interpretation can negatively impact upon the experience. On these occasions the extent to which wildlife tourism reconnects people and nature is somewhat questionable as the tourism providers are neither imaginative nor passionate in their product design. Their interpretation of fauna and flora does not convey to tourists the 'magic' of the natural world; not just of flagship and charismatic species but also how plants, insects, birds and animals in a habitat co-exist in perfect symbiosis.

This natural 'magic' can also be lost when tourist experiences are heavily mediated and controlled by the use of trails, jeeps, fences, hides and boundaries, which formalize the relationship between man and nature, thus reinforcing nature as 'other'. Such highly mediated experiences can lack the intimacies that provoke emotional and potentially lifelong affiliations with the natural world (Hill et al., 2013). Franklin (2007, p.146) refers to this segregation of man and nature as a 'museumised form of nature where sensual, embodied and consumptive ties and skills are missing and where the possibility of indifference can occur'. The reverse of this is the 'right to roam', which is more likely to provoke moments of absorbed enlightenment and thus a greater personal attachment

and affiliation (Macnaghten & Urry, 1998). Nature in our dreams and perceptions is neither fenced nor contained. By definition it is unbound, authentic and wild, and in it we can find personal, spatial and temporal freedoms. While this is an ideal it may not be attractive for many people who enjoy the structure and safety of a managed natural landscape and a mediated wildlife experience; neither does it allow for any environmental education.

There are, however, many examples where wildlife tourism is conducted in small groups with a wildlife guide and where a unique combination of interpretation and embodied tourist experience elicits feelings of wonderment, awe and engagement and thereby facilitates lasting sensory impressions, emotional affinities, new environmental awareness and interests, and treasured memories that potentially frame further wildlife experiences at home and away (Curtin, 2009, 2010b). The work on wildlife tourism interpretation, particularly Ballantyne et al. (2011, p. 774), is of critical importance in determining such a platform for human engagement in nature. In their investigation of wildlife tourist memories they uncover the essential ingredients of a wildlife experience such as the multisensory facets of the setting, the landscape, sound, touch and 'smellscapes' that make the experience more memorable. They conclude that 'the combination of emotional affinity with a reflective, cognitive response appears to have the most powerful impact on visitors, leading to a concern and respect not only for the specific individuals encountered in the wildlife tourism experience, but the species as a whole'. In this way, the wildlife experience made environmental issues more personal and relevant to them.

CONCLUSIONS

This chapter is by no means exhaustive in its coverage of the intrinsic motivations and the psychological benefits of eco and wildlife tourism. Nonetheless, it has provided a sense of how beneficial nature is to the human psyche, particularly how absorbing experiences in nature can be healing and restorative. It also suggests how and why ecotourism and wildlife watching are important tourism products not only for their economic and conservation benefit but also because they offer great potential to help urbanized, disconnected tourist populations to appreciate and reconnect with the natural world. This reconnection is a vital precursor for conservation and environmental behavioural change. Without such tourist opportunities much of the world's wildlife might cease to exist.

Fredrickson and Joiner (2002) found that positive emotions facilitate the broadening of people's mindsets. This being so, it follows that emotionally positive experiences with animals in a tourist setting might foster a deeper connection and empathy with regards to the protection and conservation of species and habitats, and a recognition of their intrinsic value. Tourism is essentially the transformation of a once imagined state to an actual, experienced and embodied one. For a wildlife tourist to gaze upon a tiger in India is to experience the anticipation and the hunt, but most of all it is to feel what it is to be embodied in the same space as a tiger; to share its world and to imagine its existence. It follows that to understand the wonder of nature, one has to have direct experience of it and empathy with it. Emotional affinity, compassion, feelings of connectivity and flow

are most likely to be inspired by experiences that are multisensory and that allow time for contemplation, reflection and education.

While it is widely acknowledged that wildlife tourism can have a negative impact upon biodiversity (Croall, 1995; Green & Higginbottom, 2001; Holden, 2000), its true benefit may lie in its potential to contribute to a growing awareness of the intrinsic value of nature and wildlife for the entire ecosystem and for our own future, health and wellbeing (Kals, Schumacher & Montada, 1999; Milton, 2002). To ensure that we pursue relations of care towards the environment it is important that practitioners and commentators continue to understand the human dimensions of wildlife and nature; what benefits we derive from these tourist experiences and how the feelings and memories inspired by these experiences are both healing and transformative. This requires a research programme that is dependent on both qualitative and quantitative methods to understand the processes of engagement and to measure the physical and psychological benefits.

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18. The benefits of ecotourism for visitor wellness

Eric Brymer and Anne-Marie Lacaze

> When health is absent, wisdom cannot reveal itself, art cannot manifest, strength cannot fight, wealth becomes useless, and intelligence cannot be applied. (Herophilus, 300 BC)

INTRODUCTION

Travellers have been motivated by desires to improve their health since the ancient world (Bennett, King & Milner, 2004). In recent times, health conscious consumers seeking to improve or enhance their wellness through travel are increasingly searching for deepening experiential value, more intense experiences and more specific health outcomes (Mihelj, 2010). As part of this change, awareness of wellness lifestyle choices has increased the demand for wellness tourism, prompting the development of new destinations and opportunities. Research validating the integral contribution of nature-based environments and experiences to the attainment of holistic wellness outcomes suggests that some of the most intense and valuable wellness experiences can be found in one of the fastest developing tourism segments: ecotourism. This chapter outlines the benefits of nature-based experiences for wellness.

HUMAN WELLNESS

Human wellness can be conceptualized as a holistic multidimensional notion that perceives a person in terms of their journey towards optimal health (Adams, 2003, cited in Erfurt-Cooper & Cooper, 2009). Wellness is most often presented as consisting of six interrelated dimensions that, when integrated effectively, enhance an individual's quality of life and their ability to contribute to society (Hettler, 1980). Specifically, wellness is considered to be an integration of the emotional, physical, social, intellectual, occupational and spiritual facets of life (Brymer, Cuddihy & Sharma-Brymer, 2010). While good health in each of these dimensions is characterized by freedom from illness, wellness is characterized by an individual's journey to achieving optimal functioning (Corbin, Welk, Corbin & Welk, 2009).

The emotional dimension is conceptualized as 'an awareness and acceptance of feelings, as well as a positive attitude about life, oneself and the future' (Roscoe, 2009, p. 218). This dimension relates to the process of constructively and positively managing personal feelings in response to daily events, rather than a state where emotional or mental illness are absent. The physical dimension concerns the proactive effort to maintain physical activity and good nutrition, coupled with the maintenance of healthy lifestyle choices. This dimension is also about acceptance of physical states with a focus on the journey towards realizing personal potential (Roscoe, 2009; Sackney, Noonan

& Miller, 2000). A person who is optimizing the physical dimension of wellness will be undertaking regular physical activity, making healthy dietary choices and effectively utilizing medical services. The social dimension emphasizes the quality of interactions with others. A person who is optimizing their social dimension cultivates effective relationships that enhance the quality of life for all people involved, and is willing to both receive and give support (Corbin et al., 2009; Horton & Snyder, 2009). The intellectual dimension emphasizes learning and other mental stimulation for its own sake (Horton & Snyder, 2009). A person who is maximizing their intellectual dimension uses their mind constructively. This dimension embraces metacognitive processes, encouraging individuals to be aware of not only their thoughts but also how these thoughts affect their lives. The occupational dimension describes the fit between workplace and worker. High levels in the occupational dimension of wellness correlate with high levels of work satisfaction and life enrichment (Scheer & Lockee, 2003). Career development is an essential component in the conceptualization of wellness. Incongruity between professional and personal lives is often the cause of deterioration in the physical, emotional and spiritual domains of wellness (Dorn, 1992). The spiritual dimension of wellness focuses on the realization of a shared connection to a greater power and the search for purpose and meaning. A spiritually well person feels fulfilled (Roscoe, 2009). This dimension is typically construed as being fundamental to all other wellness dimensions (Chandler, Holden & Kolander, 1992).

From the perspective above, wellness is a broad, holistic notion incorporating more than just physical health. The main goal of the wellness endeavour is to keep the body, mind and spirit working in harmony. Wellness is not described in terms of a desired end point; rather, it is a journey that changes over time (Global Spa Summit LLC, 2010). While wellness is presented as a process that is pursued on an individual level, environmental conditions and experiences also affect wellness levels. That is, the multidimensional concept also recognizes the interaction between a person and their environment, whether that is physical (for example, natural word) or social (for example, work, culture). Personal awareness and responsibility is part of the proactive health approach where individuals are encouraged to pursue and maintain effective lifestyle behaviours. In turn, this has encouraged many wellness practitioners to seek new wellness experiences and environments.

WELLNESS AND TOURISM

Wellness tourism is considered a distinct category within the health tourism sector (Mueller & Kaufmann, 2001). In direct contrast to medical tourists seeking curative, recuperative, recovery or reconstructive services, wellness tourists focus on the prevention of disease, the maintenance of good health and the promotion of better health. Wellness tourists also possess a holistic approach to health. Research undertaken on behalf of the global spa industry (Global Spa Summit LLC, 2010) conservatively estimated that 'the wellness industry cluster represents a market of nearly $2 trillion dollars globally' (p. iii). Within this industry, wellness tourism was estimated to account for approximately 1.06 billion dollars. While differences between wellness and other health tourism guests exist they are mainly determined by motivations (Voigt, Brown

& Howatt, 2010). Consequently, for most tourism operators in this sector there are relatively few barriers to the development of multi-services appropriate for all of these tourist groups. Some spa destinations and cure institutions are able to offer services that cater for both their original core business and wellness guests. This allows operators to take advantage of similar infrastructure and professional services to garner new business. Wellness components can be easily integrated into almost any tourism product, with added services available for an additional cost and tailored to provide specific benefits (Harten & Stoelting, 2011). As the pursuit of wellness is an ongoing process it creates a solid platform for a multi-billion dollar industry. This aspect of wellness promotes the prospect of repeat business, a key factor in the success of any industry (Lawrence, 2004).

The wellness industry is considered a growth area with untapped market segments, and consumers who are becoming aware of the opportunities available for improving their health (Pesonen, Laukkanen & Komppula, 2011). Until recently, most wellness services were designed for the mature, female market. The new principle market group of 'baby boomers' is now coming to the fore. This segment is characterized by disposable income and a preference for personal rewards. Their presence as a healthier, more active and more influential generation of retirees will redefine wellness tourism activities and experiences. However, as the gender focus is still predominantly female, the wellness tourism industry would also benefit from developing products to attract other market segments such as families, men and young adults. Such developments might encourage the involvement of corporate marketing campaigns and government health initiatives in wellness tourism promotion. Ecotourism is in an ideal situation to benefit from being a wellness option. Ecotourism destinations could easily incorporate wellness services to appeal to original core customers while also attracting emerging wellness tourists.

With more people travelling to improve their health, wellness tourism is a rapidly emerging market segment (Pesonen et al., 2011). The wellness target group of consumers includes people seeking long-term health optimization, and whose preferences and satisfaction are best measured through benefit segmentation. In benefit segmentation tourists are distinguished according to the benefits they seek rather than traditional demographic, socio-economic or geographic factors (Frochot & Morrison, 2001). Hayley (1968) determined that benefit segmentation provides more comprehensive information on consumers' buying behaviour by highlighting what kinds of relative value people attach to different benefits. Several segments may find specific benefits important, while other segments may seek a combination of benefits. The relative importance and combination of benefits differentiates the segments (Weaver & Lawton, 2002). Benefit segmentation within different tourism groups has identified the pull attributes of a destination, travellers' push motivations to travel as well as combinations of both. However, push and pull attributes in wellness tourism can be difficult to separate as the benefits sought can be either the means to reach a desired outcome or an end state (Pesonen et al., 2011). Wellness destination pull factors often include specialized wellness products or services that enable a wellness traveller to pursue specific wellness outcomes. However, push factors can include a diverse range of wellness motivations, which may also be responsible for driving wellness tourists to those destinations. For example, spa resorts located by the beach or in the mountains may attract wellness tourists who are looking for a spa experience as much as those who have escapism, relaxation or existential motivations.

Irrespective of segment, nature-based environments offer some of the greatest benefits (Pesonen et al., 2011; Pretty, Griffin, Sellens & Pretty, 2003).

WELLNESS AND THE NATURAL WORLD

Consumers interested in wellness are exploring different environments. Work pressures, urban noise and combinations of modern life stressors drive many people to seek relief through nature-based activities (Hartig, Evans, Jamner, Davis & Garling, 2003). As research explores why humans are drawn to recreational settings such as gardens, urban parks and wilderness areas, different perspectives have emerged to explain the influences of nature on wellness.

From an evolutionary perspective humans are perceived to possess a deep connection with the natural world as the majority of human existence has been embedded in the natural environment. Biologist E.O Wilson's (1984) biophilia hypothesis proposed that there is an 'innately emotional affiliation of human beings to other living organisms' (Frumkin, 2001, p. 235). This innate connection has been extended to include other dimensions of nature, such as streams, ocean waves, wind and landscapes. Ulrich's Psycho-Evolutionary Theory (PET) proposes that human behaviours, attitudes, cognitions and emotions are shaped by what proved adaptive during human evolution and are the result of the forces of natural selection. With the growth of the industrialized society and modern urban environments, humans have become alienated from this deep and vital connection with nature while concurrently developing an apparent need to control and exploit its resources (Hay, 2005). Those espousing the ecopsychology perspective propose that these events constitute 'existential shock', which in turn produces a sense of denial that can only be remedied by direct experiences in nature-based environments.

Exposure to nature has been shown to provide a great number of wellness related benefits including the development of a relationship with the natural world and personal renewal and growth (Brymer, Downey & Gray, 2009). These include promotion of physical activity and physical wellbeing (Booth, Owen, Bauman, Clavisi & Leslie, 2000; Pretty et al., 2003), a reduction in the risk of mortality in high risk groups (Holbrook, 2009), improvements in emotional wellbeing and stress relief (Leather, Pyrgas, Beale & Lawrence, 1998), an increase in positive mood (Maller, Townsend, Pryor, Brown & St Leger, 2006), enhanced life skills (Mayer & Frantz, 2005), reduction of mental fatigue and increased concentration abilities (Maller, Townsend, St Leger, Henderson-Wilson, Pryor, Prosser & Moore, 2008) and reductions in the tendency for aggressive behaviour (Kuo & Sullivan, 2001). Research has also demonstrated that the natural world can foster enhancements in the social and occupational dimensions of wellness (Greene, 2009; Ruter, 2009). Studies have found that workers report less stress and higher job satisfaction if their workplace includes views of nature (Kaplan, 1993; Kaplan & Kaplan, 1989). Indeed viewing nature has been shown to increase pleasurable emotional states to such an extent that there are reciprocal reductions in desires to engage in unhealthy behaviours such as smoking and drinking (Mehrabian & Russell, 1974). Even viewing nature through a window has been found to assist patients with recovery and encourage higher cognitive performance in students (Ulrich, 1984).

Interventions developed to increase nature-based contact have delivered positive wellness related benefits. For example, a research project that compared a walk in nature with a walk in a shopping centre demonstrated that a walk in the country significantly counteracted depression and increased self-esteem (Barton, Hine & Pretty, 2009). Berman, Jonides and Kaplan (2008) showed that an hour's walk in a park at any time of year can increase attention and memory by 20 per cent. Kaplan and Kaplan's (1989) Attention Restoration Theory (ART) suggests that nature has special characteristics that induce a restorative effect. Kaplan and Kaplan theorize that nature provides restoration by alleviating psychological attention, increasing feelings of fascination and producing a sense of a special compatibility. From the ART perspective, nature also provides the opportunity to interact with something larger and richer than everyday life, having the scope to completely occupy attention. While Ulrich's PET and Kaplan and Kaplan's ART have different antecedents, both successfully document the restorative advantage provided by natural environments for a range of emotional states, the ability to focus attention and the promotion of psychophysiological recovery (Hartig et al., 2003).

Natural environments have been shown to produce an altered state of consciousness (ASC). Research by Kjellgren and Buhrkall (2010) demonstrated that being immersed in the natural environment produces a greater ASC than exposure to a simulated environment. Phenomenological analysis identified six categories of positive experiences: intensified sensory perception; a feeling of harmony and union with nature; wellbeing and quality of life; renewed energy and awakening; a 'here and now' thinking; and a 'sense of tranquillity'. Peak experiences (described as states of optimal mental health), wilderness experiences and adventure experiences possess ecopsychological elements that can evoke transpersonal experiences (Roscoe, 2009). These experiences can range from momentary events with minimal lasting effect to intense events with life-transforming consequences. Peak experiences are often characterized by awe and reverence, a feeling that the world is unified, ineffability and a sense of bliss and ecstasy (Brymer, 2005; Davis, 1998). Schreyer, Williams and Haggard (1990) highlighted the role of such wilderness values in the process of self-concept formulation, concluding that wilderness settings are important for the enhancement of human wellness. However, most research to date revolves around specific structured wilderness experiences rather than the more general phenomenon of contact with nature (Cole, 2011; Frumkin, 2001).

Both nature-centred spiritual traditions and fundamental tenets of feminism link gender and the natural environment. In particular, ecofeminism emphasizes the need for environmental ethics and ecological care. This paradigm acknowledges personal lived experiences and promotes a vocabulary of care and nurturing to foster the maintenance of our connection with nature (King, 1996). Empirical research indicates that women and men differ in environmental values, attitudes and behaviours (Arnocky & Stroink, 2012). Ecofeminism proposes that these differences can be bridged by ecologically ethical activities. Incorporating nature into a range of ecologically ethical wellness activities, from viewing landscapes and wildlife, to actively participating in different kinds of environments, should produce a comprehensive array of wellness benefits. These benefits include any combination of restorative states, reflective conditions, ASC or peak experiences, thereby leading to fully integrated forms of holistic wellness outcomes.

In summary, research has shown that nature experiences can improve physical, emotional, intellectual, spiritual, social and occupational dimensions of wellness. From this

perspective ecotourism is already enhancing wellness, and is well placed to benefit from the consumer searching for new wellness related opportunities.

ECOTOURISM AND WELLNESS

Arguably, ecotourism is growing three times faster than the tourism industry in general (Nee & Beckmann, 2011). Traditionally, ecotourism involves a focus on natural places and existing cultural manifestations. The literature identifies a set of distinct and robust ecotourism criteria with six themes appearing most frequently. In ranked order these are: (1) nature-based; (2) preservation/conservation; (3) education; (4) sustainability; (5) distribution of benefits; and (6) ethics/responsibility/awareness (Donohoe and Needham, 2006). A wide range of ecotourism activities can or do align with these themes, which in turn align with ecotourist segmentation. Ecotourism has been further defined in terms of a hard to soft spectrum of ecotourism activities (Weaver, 2008). Hard ecotourists are a relatively small group of highly environmentally aware participants with preferences for long specialized trips, few services or luxuries and who engage in physically active, non-mediated experiences with nature (Weaver, 2001). Soft ecotourism is more representative of the mass tourism market segment. These tourists possess a more shallow regard for environmental concerns, prefer less physically taxing activities, engage in lighter nature-based experiences and expect a range of tourism services, often hoping for optional luxury inclusions. Weaver and Lawton (2002) also identified the emergence of a structured ecotourist. These ecotourists behave similarly to hard ecotourists while interacting with nature, but prefer the services and comforts of a soft ecotourist when returning from their nature-based activities.

The wellness benefits that ecotourism provides for visitors can be related to the types or combinations of nature experiences in which they choose to participate. Ecotourism activities provide the visitor with their preferred experience of nature and consequent wellness outcomes. Nature-based viewing activities such as Indigenous tourism, birdwatching, celestial ecotourism, flower gazing, leaf peeping, nature observation, nature photography, outdoor education and whale watching allow soft ecotourists to simply observe and absorb the natural environment on their own terms (Weaver, 2008). More interactive activities such as canoeing, camel trekking, cross-country skiing, hiking/bushwalking, horseback riding, safaris, scuba diving/snorkelling, trekking and interactive whale watching allow structured and hard ecotourists a more intense experience with nature (Weaver, 2008).

Ecotourism activities provide a range of familiar opportunities for physical, emotional and social wellness. They also offer other valuable but less documented opportunities for wellness. Ecotourism offers an abundance of activities to improve or maintain physical wellbeing. Visitors looking for mild exercise can participate in soft ecotourism activities while those wanting to achieve more strenuous health goals can participate in more physically challenging alternatives. Regardless of activity levels, ecotourism destinations provide visitors with wild and often raw connections with nature, allowing them to emotionally recharge and subsequently re-engage their positive attitudes regarding life. Destinations that promote cultural features encourage visitors to engage with local communities, and provide colourful experiences to enhance social awareness and abilities.

Most importantly, ecotourism, as differentiated from other nature-based experiences, uniquely captures an educational component regarding the natural environment. This learning dimension is both broad and subjective enough to include a diverse array of possible motivations and interactions. It is this learning factor that links ecotourism to the less discussed aspect of intellectual wellness. The focus of the intellectual dimension of wellness is the process of using one's mind in the pursuit of lifelong learning. Ecotourism offers endless opportunities for visitors to learn about nature, conservation, sustainability and local communities. Hard and structured ecotourists often have formal education or qualifications in different types of interactive ecotourism activities. For example, scuba divers pursue diver certification, naturalists often possess formal ornithological or botanical education and bushwalking clubs usually require their members to complete first aid training. Bushwalkers also like to pursue mountaineering credentials like those provided by the well-established Mountain Leader Training organization in the United Kingdom. By contrast, soft ecotourists usually seek out less complex and more entertaining kinds of information sharing, often preferring interpretative guided experiences or socially interactive viewing opportunities.

An often overlooked group of visitors to ecotourism locations are the people who choose to work in these environments. As employees of ecotourism providers are required to live 'on site' or in nearby purpose-built communities, they are usually completely immersed in the natural environment. Usually these employees cultivate the environmental culture and ecotourism values of the property and possess a high level of congruence between their personal values and their occupation. As one of the aspects of occupational wellness includes well-integrated career and personal identities (Dorn, 1992) ecotourism employees demonstrate that such career choices are possible. Akin to health industry or non-profit organization workers, ecotourism employees are ideally positioned to value the importance of their personal employment satisfaction as well as their contribution to the community at large. Equally, as ecotourism organizations are often found in remote locations, employees frequently develop functional, transferable skills that enable them to assume multiple roles and responsibilities. Similar to ski instructors travelling between snowfields, interpretative guides are able to travel between ecotourism destinations. Staff can enjoy the same kind of nature-based wellness benefits as tourists, with an additional learning component. Employees are involved with the implementation and practical refinement of environmental sustainability practices on a daily basis, which in turn assist in determining best practice for the future (Bohdanowicz, 2006).

Ecotourism also encourages ecologically ethical conversations that increase awareness regarding how to maintain the natural environment for future generations so they also may experience deep connections with nature. As global ecotourism evolves, emerging ecotourist preferences are already focusing on ecotourism experiences that allow deep connections with nature while simultaneously limiting the 'carbon footprint' (Hoctor, 2011; Merkel, 2003). The development and promotion of new preferred behaviours regarding lifestyle choices and sustainability adds a transformational element to the ecotourism experience (Weaver, 2008). Ecotourism experiences encourage the kind of contact that is simultaneously beneficial for both visitors and the natural environment, yielding a truly holistic spiritual wellness experience. While dimensions of wellness may be singled out and connected to any specific activity, ecotourism experiences typically

provide simultaneous stimulation in more than one dimension (Finnicum & Zeiger, 1996).

Nature-based experiences that promote optimal wellness are those that afford feelings of connection with nature (Brymer et al., 2010). By allowing visitors their preferred style of interaction, ecotourism encourages optimal wellness experiences. Ecotourism visitors are able to choose experiences and activities that enhance the integration of the emotional, physical, social, intellectual, occupational and spiritual dimensions. Ecotourism activities and environments inherently supply fully integrated nature-based experiences, thereby increasing visitors' connections with nature and producing greater wellness outcomes.

WELLNESS OPPORTUNITIES IN ECOTOURISM

Ironically, new themes within the literature attempt to expand the boundaries of ecotourism beyond its original configuration to include activities such as trophy hunting, recreational angling and non-captive zoo environments (Weaver & Lawton, 2007). While such re-conceptions are highly controversial, it is possible that attempts to expand the boundaries of ecotourism will occur by incorporating more cultural components or by recognizing overlaps with complementary tourism markets. The demographic similarities and complementary overlapping factors between wellness tourism and ecotourism markets could provide superb synergistic outcomes and increased wellness benefits for visitors. Demographic similarities between ecotourism and wellness tourism segments include heterogeneous consumer bases made up of a higher percentage of females than males, with wellness tourists and ecotourists both possessing higher educational qualifications and higher incomes by comparison to other tourists (Voigt et al., 2010). Currently, ecotourism has the ability to attract a broader base of clientele than the wellness tourism industry. Presently, most wellness tourists either travel alone or with a partner (Pesonen et al., 2011). With soft ecotourism options, there is the opportunity to bring groups of people together to participate in a range of ecotourism activities and wellness programmes. This would decrease human alienation with nature in general while simultaneously promoting the pursuit of wellness benefits for domestic and international travellers.

There are three main categories of group travel that ecotourism can more readily attract than traditional wellness spas and resorts: families, men and corporate markets. Traditional ecotourism offers a range of activities to suit families, especially children. For children, connection with nature is as important for the promotion of wellness as for adults (Mayer, Frantz, Bruehlman-Senecal & Dolliver, 2009). Current research indicates that young people are disconnected from the natural world and therefore unable to be fully functional (Louv, 2008). Direct contact with nature will generate positive effects on motor skills development, attention, moral development, cognitive development, affective development and improved academic performance as well as being able to reduce symptoms of attention deficit hyperactivity disorder (ADHD), anxiety and depression (Fjørtoft, 2001; Grahn, Martensson, Lindblad, Nilsson & Ekman, 1997; Wells, 2000). Ecotourism activities encourage children to interact with and learn about nature, as well as creating increased opportunities for socialization with other children without

technological props. With the advantage of expert guides to lead children's groups into interactive, age appropriate areas of any eco-destination, ecotourism offers a safe, psychosocially beneficial change of environment filled with unique wildlife viewing opportunities to capture the imagination of children in a way that wildlife parks or petting zoos are unable to replicate (Booth et al., 2000).

Men are often introduced to ecotourism experiences as children by their families, and return to those environments as adults, often with their own families. In ecotourism, the traditional male domination of nature-based activities has been superseded by female dominance (Wright, 2001). Historically, male participation in ecotourism has been predominantly determined by the type of activities available (Wright, 2001). From childhood men have been more interested in participating in interactive nature-based eco-experiences such as adventure activities, endurance hiking, and 'boys' wilderness weekends, with many encouraging their sons to undertake similar activities. As the wellness tourism figures indicate, men are less likely to pursue wellness activities that are hosted in the traditionally female-orientated spa or resort environments unless accompanying a partner. With men's health and wellness initiatives beginning to receive media attention it would be advantageous for ecotourism operators to introduce men's wellness initiatives in conjunction with ecotourism destinations and experiences.

The most lucrative categories of group travel are the conference and incentive markets. These contain a unique combination of business and leisure travel, hence providing increased benefit (Adele, 2006). With more companies adopting preventative health measures and corporate wellness initiatives, ecotourism operators have the opportunity to integrate nature-based wellness activities into conference and incentive programmes. Business event delegates also often overlap with the 'baby boomer' demographic – a group of consumers presently adjusting to the challenges of ageing. They are beginning to modify their attitudes and behaviours, becoming more self-aware, self-responsible and ultimately taking a more pragmatic approach to their health (Erfurt-Cooper & Cooper, 2009). To tap into this market, ecotourism operators will need to understand the wellness needs, desires and expectations of this group. This market is searching for a diverse range of experiences including connection and transcendence, physical activity, increased social interaction, exciting learning and generational kinship (Sellick, 2004). Ecotourism is in an ideal position to respond to these needs.

There are natural synergies between ecotourism experiences and wellness activities. Ecotourism operators will be able to capitalize on the media surrounding national wellness campaigns, adding value to ecotourism experiences by including the attainment of identified wellness goals (Finnicum & Zeiger, 1996). Ecotourism operators who align wellness activities with region-specific eco-activities will be able to design programmes that maximize wellness benefits for visitors. Ecotourism health and wellness initiatives could be designed for children. These may include provision for schools with tailored programmes that not only outline eco-friendly practices but also attain specific age-appropriate wellness goals. Along the same lines, ecotourism operators could explore the implementation of an ecotourism prescription activity. Activities providing a range of health outcomes could be created in partnership with medical practitioners or health insurance providers. Such nature-based prescription programmes are already occurring, with current research being taken seriously enough that nature-based wellness

prescription activities in the United States have received federal government funding (Grossman, 2011; Savedge, 2011). In Western Australia, nature-based prescriptions have been cautiously endorsed by the Australian Medical Association (Mayes, 2011). For developed countries, research suggests that nature-based experiences close to home are as important as experiences in exotic locations (Holbrook, 2009), hence prescribed activities will provide new and ongoing opportunities for domestic tourists. Simultaneously, this will afford greater understanding of the sustainability requirements of both local ecotourism destinations and nature in general, as more people experience the natural world in 'awareness mode'.

CONCLUSION

A growing body of research is finding that nature-based experiences benefit health and wellness. Ecotourism can provide a well-structured format facilitating reconnection with the natural world. This will be of benefit to both the natural environment and the wellness of visitors. Ecotourism is well placed to make use of wellness tourism trends and take advantage of wellness-focused consumers. While more research is required to fully explicate the specifics of what makes the natural environment so effective in attaining wellness, this should not stop health or tourism professionals from using what we already know. However, to make the best use of the opportunities that are presenting themselves ecotourism operators and health providers will need to ensure that benefits are properly defined. Research is needed to determine which nature-based experiences lead to which specific kinds of wellness benefits, and whether these benefits are long-lasting. Research is also needed to determine how often visitors need to return to maintain or bolster their wellness.

The ecotourism concept might also be influential in the creation of new wellness ideas. Fully integrated nature-based restorative experiences may be designed across the lifespan (Scopelliti & Giuliani, 2004). An understanding of wellness brings the benefits of ecotourism to light. Ecotourism standards maintain the focus on how our interactions affect the natural environment, thereby producing a reciprocal tourism perspective. In nurturing and developing this relationship, the growing global need to reconnect with the natural world can be comprehensively answered by combining wellness tourism with nature-based experiences in ecotourism environments, thus providing interesting and unique ways of improving human health and behaviour.

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PART III

THE PRACTICE OF ECOTOURISM

19. Ecotourism and conservation

Ralf Buckley

INTRODUCTION

The editorial invitation to contribute this chapter also suggested a subtitle: 'The good, the bad and the ugly'. Although I have not adopted this phrase in the title, it does potentially provide a useful conceptual framework, because it throws into stark relief the different perspectives of commercial tourism operators, and landowners and wildlife managers.

At a global scale, most tourism does not involve conservation, and most conservation does not involve tourism. Where they do overlap, there are commonly costs and controversies as well as potential gains (Buckley, 2008). Generally, tour operators want access to land and wildlife that are attractors for their clients, in order to make money for themselves and their shareholders. If they can get such access cheaply, free or subsidized, they can make larger profits, especially if they can gain exclusive or preferential rights that their immediate competitors do not have.

Owners and managers of lands and wildlife, in contrast, need funds and other resources for conservation management. They see tourists, either as individuals or as clients of commercial operators, as one potential source of income. Other income sources include government budget appropriations, donor funding, and payments for ecosystem services such as water supply or carbon sequestration. In contrast to these sources, tourism also brings substantial costs. These include: financial costs for visitor infrastructure and management; legal risks from potential liabilities; social conflicts between user groups and between tourists and residents; and environmental costs through a range of biophysical impacts.

These factors differ greatly between different types of tourism and land tenure. Most notably, they differ between individual visitors who deal directly with the landowner, and commercial tour clients where the dealings are between landowner and tour operator. They also differ between: public lands allocated for primary production; public lands designated as protected areas; communally or privately owned lands where tourism and conservation are only two of many possible land uses; and private reserves owned directly by the tourism operator.

CONSERVATION

It is generally considered good if tourism can make a net positive contribution to conservation. That is, none of the stakeholders actively oppose this. They do, however, have very different perspectives on whether, when, why and how tourists and/or tourism enterprises may or should have any motivation, responsibility or obligation to make any contribution to conservation; and what they might be entitled to, or able to acquire, in

return (Buckley, 2009a, 2010). There is also a great deal of uncertainty in how any such contribution might be measured or accounted for. In particular, there is a distinction between mandatory measures, such as park visitor fees, and voluntary measures, such as those taken by some individual tourism enterprises. There is also a distinction between gross and net contributions, with the latter taking into account the impacts of tourism both in reaching a site and once they arrive.

Most of the research on positive net contributions to conservation has been carried out for private and community lands in developing nations. This is a relatively new but rapidly growing area in both practice and research. The scale and scope, mechanisms and measures used in accounting for net conservation gains are still under debate and development. Whilst there are indeed cases worldwide where commercial tourism operations make a net positive contribution to conservation of biological diversity and ecosystem services on either private, community or public lands (Buckley, 2010), these are still very small in scale as yet, constituting only a tiny fraction of the total tourism industry worldwide.

These conservation tourism approaches are ecologically significant and valuable nonetheless, especially for off-reserve conservation of threatened species and ecosystems, and for landscape–scale linkages and connectivity. Some mechanisms are far more significant ecologically than others, depending on scale. Political mechanisms are most far-reaching, especially where tourism provides incentives for governments to protect ecologically valuable areas under threat from other sectors.

There are significant differences between countries and regions, depending on both political and economic factors. In countries with strong economies, stable land tenure systems and a high proportion of land in private ownership, the most effective mechanism is the establishment of private reserves funded by up-market lodges. In countries with large areas of land held under communal tenure, community partnerships are key. In nations where governments do not fund public protected areas adequately, tourism can provide one substitute source of funding (Buckley, Castley, Pegas, Mossaz & Steven, 2012).

IMPACTS

In broad terms, environmental impacts associated with tourism in conservation areas may be seen as bad, for all parties concerned. None of the stakeholders are actively in favour of impacts. They do, however, have rather different perspectives on whose responsibility it is to minimize impacts, and how this should be done. Though by no means comprehensively studied, this is now becoming a mature field of research, with a well-established discipline of recreation ecology to measure and analyse impacts, and a well-established toolkit of management approaches to minimize or control them. In practical terms, most of the research to date on environmental impacts of ecotourism has been carried out for individual visitors in public protected areas (Buckley, 2004, 2009b, 2011, 2012; Liddle, 1997; Monz, Cole, Leung & Marion, 2010; Steven, Pickering & Castley, 2011).

Minimal impact management is one defining criterion of ecotourism (Buckley, 2009b). In practice, this requires: an understanding of impact mechanisms; management tools

and technologies to reduce impacts; and indicators to assess the effectiveness of these approaches. There are commonly very different impacts from different components of ecotourism operations, including the many various types of accommodation, transport and activities.

For ecotourism accommodation, impacts are derived from: construction; water and energy supplies; and waste treatment and disposal. Water supply ranges from creeks and waterholes for backcountry camping to large-scale supply for up-market lodges. Similarly, power supplies range from candles and campfires to solar panels, microhydro systems, diesel generators or mains powerlines. Treatment of human wastes ranges from backcountry burial and carry-out systems, composting and pump-out toilets to a variety of septic tanks and sewage treatment plants, each with its own impacts. Greywater is lower in nutrients than blackwater, but higher in volume, and commonly also contains detergents.

All forms of transport, whether terrestrial, marine or aerial, run the risk of transporting weeds, pathogens and invasive animal species. Most can cause physical damage to soil, vegetation and sometimes wildlife. Motorized transport produces noise and exhausts and contributes to climate change. All these types of impact depend on the type of ecosystem and the intensity as well as the type of transport. Examples include: soil erosion by off-road vehicles; damage to nests and burrows; inadvertent ignition of wildfires; coral damage by anchor chains; and noise and visual disturbance to wildlife.

Research on the environmental impacts of ecotourism and outdoor recreation has been described as 'sparse, crude and clumped' (Buckley, 2004). It is sparse in the sense that of all the possible combinations of activities, intensities, impacts, ecosystems, species and management regimes, only a very small proportion have been studied. It is clumped in the sense that particular combinations, such as pedestrian trampling of ground layer vegetation in Northern temperate ecosystems, have been studied much more intensively than others. It is crude in the sense that, with a small number of notable exceptions, most recreation ecology research has focused on direct, visible and easily quantified impacts, regardless of relative ecological significance.

This is one of the most active subfields in ecotourism research. There were several recent reviews (Buckley, 2009a, 2009b, 2011; Monz et al., 2010; Steven et al., 2011; Zhong, Deng, Song & Ding, 2011). In 2011 alone, there have been at least a dozen new studies on the ecological impacts of tourists and tourism infrastructure, mainly on birds and mammals (Acevedo-Gutiérrez, Acevedo & Boren, 2011; Higham and Shelton, 2011; Halfwerk, Holleman, Lessells & Slabbekoorn, 2011; Huang, Lubarsky, Teng & Blemstein, 2011; Kociolek, Clevenger, St Clair & Proppe, 2011; Lian, Zhang, Cao, Su & Thirgood, 2011; Reed & Merenlender, 2011; Maréchal, Semple, Majolo, Qarro, Heistermann & MacLarnon, 2011; Remacha, Pérez-Tris & Delgardo, 2011; Velando & Munilla, 2011; Wipf & Rixen, 2011). Some of these are still relatively crude in approach, but others show increasing ecological sophistication.

In general, impacts depend on the environment, visitation, activities, timing and management. Environment includes climate, terrain and ecosystem. Visitation includes total number, timing and group size. Activity includes equipment and visitor skills and behaviour. Timing includes season, duration and repetition of activities. Management includes all forms of intervention to influence any of the above.

Impacts may occur at different ecological scales, from individual organisms to entire

ecosystems. At the scale of individual organisms, impacts can affect behaviour, physiology, reproduction or survival. At the scale of species populations or subpopulations, impacts can cause increases, decreases or even extinctions. At the scale of biological communities, impacts affect multiple species and their interactions. And at the ecosystem scale, impacts affect both biotic and abiotic components.

There are opportunities to use recreational disturbances as experimental interventions in order to contribute to the broader research progress in the ecology of: invasive species; fire; plant pollination; animal reproduction; behaviour and physiology; and predation, foraging and energetics. Greater ecological sophistication in this recreation ecology research could include increasing focus on, for example: physiological indicators of impact; population-scale consequences of impacts; indirect impact mechanisms; and diffuse, delayed or evanescent impacts, especially those invisible to the naked eye. Ecological research on impacts could distinguish between those that are: immediate compared with delayed; self-propagating compared with self-limited; and one-off compared with repeated. They could consider a broader range of stress-response relationships, including linear, asymptotic, sigmoidal, inverse-U and abrupt thresholds. They could also consider stress–recovery relationships, incorporating hysteresis effects, multiple disturbances and the threshold effects of extreme events.

POLITICS

In addition to good conservation and bad impacts, there is a large grey area of contested political negotiation, some of it certainly far from pretty. Some of this negotiation is within single government agencies. Parks agencies, for example, have to decide internally how to allocate their resources between conservation and recreation management, subject to a range of political pressures. Some is between different government agencies, for example, in determining: government budget allocations to protected area management agencies; the proportions of their budgets that they are required to raise through tourism revenue; and the restrictions on how they may raise and spend any such revenues. At least part of this political negotiation, however, is between parks agencies, aiming for conservation and protection, and tourism developers, aiming for commercial opportunities and profit.

In developed nations, parks agencies employ a range of approaches to permit private commercial tourism enterprises to operate inside public protected areas, under various conditions. In the USA, these are known as concessions. Elsewhere, they are referred to as permits, licences or leases, depending on the precise operations and legal mechanisms. In some countries, such systems have been operating for many decades or longer, but they still remain relatively little studied. The details of parks agency budgets, of legal and commercial arrangements with licensees and concessionaires, and outcomes for either conservation or visitor management, are not often publicly available.

Government tourism portfolios, tourism industry associations and various recreational groups lobby continually for parks to provide more access and more infrastructure, even though this always has a cost for conservation. In some countries, individual tourism developers and other tourism industry advocates also use a range of political and legal tactics to gain private development rights inside public protected areas. Most

of these approaches use the terminology of partnerships, but their proponents give little more than lip service either to conservation contributions or impact minimization.

The politics of tourism in and around public national parks and community conservation areas has been addressed extensively, but much of this writing is either selective and uncritical or is itself political in intent. For many decades, tourism advocates and industry associations have engaged in a variety of political marketing campaigns intended to gain preferential access to public protected areas in ways that are not available to other industries or individual citizens. This is generally contrary to the primary purpose and function of protected areas in conserving biological diversity and ecosystem services. It is commonly also contrary to the provisions of their establishing legislation, which in most jurisdictions provides for conservation and individual recreation, with no mention of commercial tourism.

This does not necessarily imply that commercial tourism has no place in public protected areas; only that it has no right to demand such a place, since the management of these areas should be solely at the discretion of parks agencies. These political campaigns, however, have led some researchers to publish interviews with tour operators reporting their perspectives on park management, without considering whether these perspectives are relevant. One does not, for example, see published interviews reporting park ranger perspectives on day-to-day management of tourism corporations, which would be equally (il)logical. These academic publications, however, are then used as political ammunition in continuing campaigns for commercial access.

Protected area management agencies (PAMAs) and commercial tour operators (CTOs) do not have the same goals for tourism in parks. Contrary to public rhetoric, their dealings with each other should be seen as trades, not partnerships. Each wants something from the other, and is offering something different in return. In general, CTOs want: access; development and/or operating rights; exclusivity and preferential treatment; discounted per capita fees where applicable; maximum subsidization through access to publicly owned natural resources and publicly funded visitor infrastructure; and the lowest possible lease, permit fees or other payments for these privileges. PAMAs want to provide enjoyable and socially equitable opportunities for visitors to appreciate nature and biodiversity, including a limited set of low-impact outdoor recreation activities. They also want funds for operational conservation management, and for construction and maintenance of visitor infrastructure.

CTOs may see parks as portfolios of commercial business opportunities, but PAMAs see themselves as managing and providing public goods. Advocates of increased commercial tourism in protected areas argue that because CTOs are used to operating in a business environment, they can do so more profitably than parks agencies. Such profits, however, accrue to the CTO, not to the PAMA. Parks agencies could indeed raise a great deal more revenue from tourism if they were to construct portfolios of commercial opportunities and extract the maximum rental for each of them. The reason they do not do so is that such approaches create social inequities and environmental impacts, which conflict with their primary management goals and legislative mandates.

Parks agencies see private sector permittees and concessionaires not so much as a source of revenue, but as a low-cost option to outsource some of their obligations or visitor demands. Examples include: the maintenance of historic and heritage buildings by converting them to tourist facilities; on-site outlets for food and beverages in parks

remote from urban infrastructure; provision of public transport inside parks so as to reduce use and congestion from private vehicles; and in heavily visited parks, the provision of first aid and medical facilities. From a business perspective, these are commercial opportunities with monopoly rights and captive markets. From the parks agency perspective, they are services that the agency wants to provide to the public at minimum cost to either. Concession contracts are thus more likely to focus on capping charges to individual parks visitors, than on maximizing revenue for the parks agency.

There is also a suite of commercial tourism operations inside public protected areas that are not negotiated, but represent historical rights of various types. Common examples include enclaves of private land that were occupied before the park was declared, and long-term legacy leases for commercial infrastructure established at the same time as the park. There are also a few cases where parks agencies have granted permission for private tourism developers and entrepreneurs to build specialist viewing infrastructure inside public protected areas as a way to finance visitor opportunities that they cannot fund themselves. Examples include permanent pontoons for viewing coral reefs, infrared camera systems for viewing bat colonies, hides for watching birds and other wildlife and canopy towers and walkways in tall forest ecosystems.

In a few cases, individual national parks in the USA have subcontracted their entire visitor services operations to private corporations, as a single very large concession rather than a set of smaller ones. The policy considerations behind such an approach are not documented publicly, so any analysis is necessarily speculative. The most likely motivation, perhaps, is that a private corporation has greater flexibility than a government agency in terms of employment contracts. For example, this could include seasonal, shiftwork or casual staff, at rates corresponding to those for the hospitality industry rather than park rangers. For the very heavily visited icon national parks where these arrangements have been adopted, outsourcing of visitor services could thus create considerable cost savings.

It appears that this strategy was adopted initially through the formation of a special-purpose private company, Xanterra, by former staff of USNPS. Most of the USNPS whole-of-park visitor services concessions are still with Xanterra. There are now one or two, however, which are with two other companies, Aramark and Delaware North. It seems likely that these companies took advantage of regulations requiring open tenders for US government procurement, and underbid Xanterra to gain a foothold and future opportunities in the outdoor tourism sector. Delaware North, for example, which is principally an urban hotel corporation, has started a new division that has also purchased private nature tourism businesses in Australia. USNPS, however, has many decades' experience in the management of concession contracts, and whilst it does not seem to receive a very significant financial return from these arrangements, it does at least seem to retain close control over operational aspects. This does not necessarily apply in other countries.

PRINCIPLES AND POLICIES

A joint tourism–parks conference held by the Australian Academy of Sciences in 2001 (Buckley, 2002) developed a set of principles to guide the development of individual

permits, concessions or other agreements between CTOs and PAMAs. These principles are summarized as follows. Parks are for conservation first, recreation second. Only low-impact recreation should be in parks, and tourism has no special right to parks. Planning for parks and tourism needs a regional ecosystem approach, and commercial partnerships need mutual consent rather than political coercion. Tourism facilities in parks should provide a net benefit for conservation. User fees should reflect all management costs, including conservation impacts. Commercial tour operators should meet all the costs they impose on parks, and should also pay a resource rent. Marketing of tourism in parks should match park management plans, and parks agencies need a range of staff skills to address tourism as well as conservation and recreation.

These principles are based on two premises. Firstly, it is unrealistic to expect that a private profit-making entity would share the same goals as a public authority charged with broad and long-term responsibilities on behalf of an entire nation. Under appropriate conditions, commercial agreements between parks agencies and tour operators can be beneficial to both, but these conditions will not occur automatically. Secondly, commercial tourism operations in parks are different from individual recreation, even if the physical activities are identical, because they use parks principally for private profit rather than social welfare. Three differences are particularly important (Buckley, 2002): legal obligations and liabilities; duties to the general public; and political power.

The principles recognized that many people prefer packaged tours rather than self-guided activities. They note that conflicts can occur between conservation, public recreation and commercial tourism in national parks, and that commercial tours can use private land or other public lands. Many forms of outdoor recreation produce relatively high impacts on the natural environment and other people, and only low-impact activities are consistent with the primary conservation goals of protected areas.

From a public policy perspective, commercial users of public protected areas should meet the marginal management costs associated with that use. In practice, however, these costs are often difficult to define. For localized effects of waste treatment discharges on water quality, for example, the impacts of different sources can be distinguished without difficulty. For control of weeds or other invasive species, in contrast, or use of road networks by vehicles, it is much more difficult to draw such distinctions. Simple permit systems can go some way towards apportioning costs.

EVALUATIONS

For public protected areas in developed nations, which receive the bulk of their operational funding from central government appropriations, the negative biophysical impacts of ecotourism generally outweigh the positive financial contributions of visitor fees and tour operator licence fees, in the short term. In the longer term, potential economic opportunities associated with park-based tourism may potentially contribute to conservation by reducing political opposition to the declaration of new protected areas. This includes economic opportunities outside as well as inside the parks themselves. This political aspect, however, can also generate some severe negative impacts, by creating

opportunities for high-impact users to gain access to protected areas. These may include tourism property developers, and tours using livestock or motor vehicles in areas where this is not otherwise permitted.

There certainly seems to be a current trend in many countries, including both more and less wealthy nations, that governments are requiring parks agencies to raise larger proportions of their total revenue from various tourism-related commercial activities. This trend has been driven at least partly by the tourism industry itself, which has lobbied for several decades to gain increased commercial access. It is not, however, likely to yield positive outcomes either for tourism or conservation.

If parks agencies have to rely on revenue from tourism, they will no longer be able to afford to provide commercial opportunities cheaply to the private sector. Instead, they will be forced into competing directly with the off-park tourism industry, so they will not give away concessions to their competitors. In addition, since the parks have the best assets and the largest capital reserves, in any long-term commercial competition they will ultimately win. If tourism industry advocates continue political lobbying to make parks agencies part of the tourism industry rather than a public-good conservation agency, they will ultimately create a giant competitor that will drive them out of business to maintain its own profitability.

A parks agency acting principally as a competitive commercial tourism enterprise would no longer permit any other commercial operator inside its gates. It would run all tours itself. It would charge high entrance fees, both to reduce visitor management costs and to discourage competitors in gateway areas. It would build its own accommodation inside the park, competing directly with gateway accommodation; and it would sell integrated holiday packages including transport, entry fees, accommodation and in-park activities. Larger parks could build their own airstrips in the same way as many up-market private reserves, so that tourists could fly directly to the parks and bypass the urban tourism sector completely. Indeed, if a private tourism operator such as Wilderness Safaris can operate its own airline, there is no reason why a large national parks agency could not do likewise.

In most countries, for parks agencies to operate as commercial tourism entities would involve changes to its establishing legislation in order to permit a wider range of tourism infrastructure and a much reduced requirement for social equity. Such changes to legislation are already occurring, however, under pressure from the commercial tourism industry itself. Overall, therefore, it is entirely possible that in seeking to create commercial opportunities for itself inside public protected areas, the private sector tourism industry and its advocates will instead force the parks agencies into taking those opportunities for itself and locking private entrepreneurs out. This would have negative consequences for conservation, for public recreation and for commercial tourism.

The model outlined above is in fact exactly how many private wildlife reserves already operate. In some developing nations, with Kenya as a prime example, government funding for national parks systems has fallen so severely that they now rely on tourism revenue for over 50 per cent of their total operating budgets. Most of their visitors are international tourists, and the parks are effectively competing directly with private wildlife conservancies. Similar patterns are developing in Namibia, where tourists can choose whether to visit a public national park with its own tourist accommodation or a communal conservancy with a privately operated lodge.

In South Africa, Kruger National Park has its own airstrip, its own gateway hotel, its own road network and its own rest camps, as well as a set of small up-market lodges built by private entrepreneurs on exclusive access leases within the park. These private lodges do not seem to have been very successful commercially, precisely because they are in competition with long-established luxury lodges on private reserves immediately adjacent to the park. Those reserves, however, are successful in part because their wildlife populations are interconnected with those of the much larger Kruger National Park. The dynamics of this particular case are still unfolding, and the outcomes remain unknown. To date, however, it seems that the parks agency has not gained the additional income it was hoping for.

Somewhat different arrangements in other national parks in South Africa, however, and in other countries such as Botswana and Nepal, do seem to have generated some gains for conservation. Overall, therefore, it seems that international visitors to public national parks in less wealthy developing nations are indeed making a significant contribution to conservation, both financially and politically. Additional evidence for this comes from countries where terrorism, coups or civil unrest have caused sudden downturns in inbound tourism, and poaching of threatened wildlife species has increased in consequence (Buckley, 2010, 2012b; Buckley & Pabla, 2012).

As the costs of international air travel increase in future, however, this source of tourism revenue for parks agencies may diminish. At the same time, domestic tourism is increasing enormously and very rapidly in a number of newly wealthy nations, notably the so-called BRICS countries of Brazil, Russia, India, China and South Africa. This includes an increase in all forms of nature, adventure and wildlife tourism. It is not clear how this will change future political pressures on parks agencies in the countries concerned. Overall, therefore, the mechanisms and consequences of tourism for conservation in existing protected areas are complicated, with the net outcomes dependent on a wide range of larger-scale socioeconomic changes and some very complex local-scale political negotiations.

Outside existing protected areas, the contribution of tourism to conservation is perhaps more generally positive, essentially because the baseline for comparison is different. Inside national parks, the baseline is publicly funded conservation. Increasing reliance on tourism, with its associated political complexities and biophysical impacts, is a retrograde step for conservation. Outside protected areas, the prior baseline in most areas is primary production, at either a subsistence or industrial scale, on a range of private, communal or public land tenures. Converting land from farming or ranching, forestry or fisheries to tourism and conservation generally represents a net gain for the natural environment, with a few exceptions such as high-impact adventure or large-scale accommodation and infrastructure development.

Global conservation currently relies heavily on lands outside as well as inside the public protected area estate. These unprotected areas are experiencing continual attrition. The aim of the Aichi targets under the *Convention on Biological Diversity* is to combat this attrition by adding a further 7 per cent to the 10 per cent of the world's terrestrial surface that is currently included in protected area systems. Most of this increase is likely to be in the lower International Union for the Conservation of Nature (IUCN) protected area categories, and most is likely to be through redesignation of other public lands, and through various forms of conservation agreement on private and communal

lands. In most cases, such measures are likely to require funding, either to provide economic incentives for landowners to change land use practices, or to provide financial payments to previous users of public lands in order to achieve critical political support. The latter is necessary in practice because primary producers have commonly enjoyed heavily subsidized access to natural resources in public lands, and are naturally reluctant to forgo private gains in the public interest.

Worldwide, governments and landowners are currently examining potential mechanisms to provide this funding. Tourism is one of these, along with various forms of national or international government funding for conservation stewardship, carbon sequestration or other ecological services. Any new tourism ventures, however, become part of the global tourism industry, subject to the same market pressures as commercial tourism enterprises worldwide. Only some areas of land, irrespective of tenure, have the attractions and access needed to establish tourism businesses with the commercial viability to support conservation.

There are effectively three successive economic barriers to the conversion of currently unprotected lands to tourism and conservation. The first is that primary industries, especially logging, effectively receive large public subsidies for private exploitation of public natural resources, and they use every political means at their disposal to retain this privileged position. The second barrier, once subsidies are removed so that the playing field is levelled, is simply whether a commercial tourism operation can run profitably: that is, whether ecotourism is a commercially viable option for the land concerned. There are many cases where it is, but also many where it is not. And the third barrier is the relative rate of return from various competing land users, depending on the timescale of interest to the landowner. There are a number of cases where ecotourism does indeed generate a higher return than alternative land uses, on a variety of land tenures, but this depends on tourism opportunities. In the public forests of the USA and Australia, tourism generates an order of magnitude higher revenue than logging (Buckley, 2010; Ward, 2003), but this includes high-impact adventure tourism. In the rangelands of southern Africa, wildlife tourism is a more profitable land use than cattle ranching (Castley, 2010). In the rainforests of the Tambopata area of Peru, ecotourism yields more for local communities than logging or subsistence farming (Kirkby, Giudice-Granados, Day, Turner, Velarde-Andrade, Duenas-Duenas, Lara-Rivas & Yu, 2010).

CONCLUSIONS

The links between ecotourism and conservation are rarely all good or bad, ugly or pretty. They are complicated, with outcomes heavily dependent on detailed circumstances. Ecotourism is dependent on conservation, since nature, wildlife and natural scenery are key components of ecotourism products, attractions and activities. Ecotourism can have both negative and positive impacts on the natural environment, through a variety of direct and indirect social mechanisms (Buckley, 2009a). The balance and the overall outcome depends on what is considered as ecotourism, where it takes place and how it is managed, and also on the timescale and spatial scale over which it is evaluated.

Whether or not ecotourism, as a land use, is good or bad for the natural environment depends on the basis for comparison, and this depends on the practical politics in

the countries and areas concerned, and on the scale and characteristics of the tourism enterprises. The tourist village on the South Rim of the Colorado Grand Canyon, for example, certainly has substantial impacts; but these are far less than either uranium mining or hydroelectric dams, both of which were proposed historically as alternative land uses. Low-footprint wildlife lodges have lower impacts than hunting tourism, at least for the target species. Well-managed hunting tourism may have lower impacts than livestock ranching; but for threatened species of high commercial value in the international legal wildlife trade, hunting tourism can provide a cover for the export of animal parts. This has occurred recently, for example, in the case of black rhino in southern Africa. In public protected areas in developed nations, any increase in tourism in areas that are currently wilderness represents an impact on conservation, especially if it includes the development of access infrastructure. For heavily visited areas of heavily visited parks, however, parks agencies may find advantages in subcontracting visitor services operations to private enterprises. In public forests used for logging, even relatively high-impact tourism such as ski resorts may still represent a net gain for the environment, if a localized high-impact tourist facility can successfully halt logging across a large area. If not, however, then new year-round intensive-use tourist infrastructure will create a net loss for the natural environment, even compared to logging, and especially if it includes retail and residential precincts.

The bottom line is that while ecotourism relies on conservation, conservation cannot rely on ecotourism. Dealing with the commercial tourism industry may be compared to 'dancing with a messy monster' (Buckley, 2000). Sometimes harmonious, but sometimes not!

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20. Ecotourism and the triple bottom line

Larry Dwyer and Deborah Edwards

INTRODUCTION

Good managers recognize the monetary value that corporate reputation, employee loyalty, job satisfaction and positive government relations have on the single bottom line. Such factors enhance shareholder value. From this some theorists argue that a focus exclusively on profit will naturally inculcate behaviours that are socially and environmentally responsible. A contrary view is that, in reality, there exists today unprecedented pressure on business managers to satisfy short-term profits and immediate success, resulting not only in adverse social and environmental impacts of business operations but economic problems as well, as evidenced by the recent Global Financial Crisis.

On what is perhaps the 'standard view' of industry responsibility, reflecting social movements, loose, flexible, evolving partnerships that create new market dynamics, the tourism industry shares with local residents, governments and community the obligation to protect and maintain the natural and cultural heritage resources of our planet, both to sustain economies and be passed on unimpaired to future generations (UNEP, 2001; WTO, 1995). Perhaps in no sector of tourism is meeting this responsibility more expected than in ecotourism.

Ecotourism began as a reaction to conventional mass tourism in the late 1970s. Many different types and definitions of ecotourism exist. According to one definition,

> Ecotourism is travel to fragile, pristine, and usually protected areas that strive to be low impact and (usually) small scale. It helps educate the traveler; provides funds for conservation; directly benefits the economic development and political empowerment of local communities; and fosters respect for different cultures and for human rights. (Honey, 1999, p. 25)

Ecotourism Australia, the peak industry body for Australia's ecotourism industry, states that ecotourism is about 'uniting conservation, communities, and sustainable travel'. To realize such goals it is necessary to establish nationally and internationally accepted principles. In this regard The International Ecotourism Society (TIES) is the most influential, asserting that those involved in ecotourism should follow seven principles: (1) minimize impact; (2) build environmental and cultural awareness and respect; (3) provide positive experiences for both visitors and hosts; (4) provide direct financial benefits for conservation; (5) provide financial benefits and empowerment for local people; (6) raise sensitivity to host countries' political, environmental and social climate; and (7) educate the traveller on the importanceof conservation.

The TIES principles are published on the websites of many ecotourism associations including Ecotourism Australia. Ecotourism Australia has a diverse membership that includes key industry sectors such as: ecotourism accommodation providers; tour and attraction operators; tourism planners; protected area managers; academics and

students; tourism, environmental, interpretation and training consultants; local and regional tourism associations; and travellers. It has significantly contributed to the long-term development of the ecotourism industry on a national and global level through its ground-breaking and world class Eco Certification Programme. This programme, which is now being exported to the rest of the world as the International Ecotourism Standard, has essentially established a 'triple bottom line' national standard providing environmental, economic and social sustainability benchmarks for the ecotourism industry. The website reads,

> Ecotourism certification is based on triple bottom line sustainability not just environmental sustainability. So, tourism operators need to run good businesses and also be socially and culturally sustainable as well. (http://www.ecotourism.org.au)

Developing a competitive advantage by establishing and promoting sustainable practices has traditionally distinguished ecotourism from other tourism markets. If 'ecotourism' as a sector is to develop in a sustainable way, the firms that comprise this sector must adopt practices that support this objective. Despite the reference to triple bottom line (TBL), this concept is left undefined on Ecotourism Australia's website. But what is TBL? And how can it be incorporated into ecotourism operations?

NATURE OF TBL

TBL is the most comprehensive approach to achieving sustainable operations, to integrate economic, environmental and social thinking into core business activities. TBL reporting is an important means by which both the private sector and government bodies in tourism at all levels can demonstrate they are assuming their part of the responsibility for sustainable development. TBL is a planning and reporting mechanism and decision-making framework used to achieve sustainable development in both private and public sector organizations – an internal management tool as well as an external reporting framework.

The notion of TBL stems from the work of Elkington (1997, p. 10) and is defined as:

> Focusing corporations not just on the economic value they add, but also on the environmental and social value they add – and destroy. At its narrowest, TBL is used as a framework for measuring and reporting corporate performance against economic, social and environmental parameters. At its broadest, the term is used to capture the whole set of values, issues and processes that companies must address in order to minimise any harm resulting from their activities and to create economic, social and environmental values.

The concept of TBL, acknowledging the importance of corporate social responsibility (CSR), demands that a company's responsibility lies with stakeholders rather than shareholders. In this case, 'stakeholders' refer to anyone who is influenced, either directly or indirectly, by the actions of the firm. TBL in effect requires the firm to add two more balance sheets covering the social impacts and environmental impacts of the business. It is a framework that is intended to be prescriptive in capturing the set of values, issues and processes that companies should address in order to minimize any harm that results from their activities and to ensure creation of positive economic, social and environmen-

tal value. TBL reporting aims to extend decision making and disclosure so that business decisions explicitly take into consideration the impacts on society and the environment, as well as on profit (Robins, 2006).

TBL is closely related to sustainable development defined in the Brundtland Report (World Commission on Environment and Development, 1987, p. 11) as the 'development that meets the needs of the present world without compromising the ability of future generations to meet their own needs' and, in this way, is a natural fit with the principles of ecotourism.

With the ratification of the United Nations and the International Council for Local Environmental Initiatives (ICLEI) TBL standard for urban and community accounting in early 2007, TBL has become the dominant approach to public sector full cost accounting. TBL has achieved considerable imprimatur because major global corporations have adopted it (Savitz & Weber, 2006; Willard, 2002).

BENEFITS OF A TBL APPROACH TO ECOTOURISM MANAGEMENT

A company that can meet the needs of the present in terms of social and environmental impact, without compromising the needs of the future, is more likely to appeal to investors and customers alike, and thus be financially successful (Sauvante, 2001). This is of particular relevance for ecotourism firms that depend crucially on unique features of the natural and social environments to maintain competitive advantage (Dwyer & Kim, 2003).

Advantages of TBL include efficiencies and cost savings, improved market positioning, better stakeholder relationships, improved strategic decision making and wider social and environmental benefits for the destination.

Efficiencies and Cost Savings

TBL reporting can identify potential cost savings by:

- Reducing operating costs through the detection of wasteful activities, for example, reducing materials and energy use, increasing operational and design efficiencies, recycling/reusing wastes, reduced transportation, storage and packaging costs. These are of particular importance when TBL reporting leads to adoption of and/or is based on an environmental management system and/or activity-based costing that provide firms with better information on the true costs of activities. Studies of materials and energy use in accommodation providers reveal the importance of cost minimization in maintaining viable operations (Stipanuk, 2001). For example, Hidden Valley Cabins and Tours, an ecotourism business northwest of Townsville in Queensland, Australia is 100 per cent solar powered and saves 78 tonnes of carbon dioxide (CO_2) emissions per year (http:/www.hiddenvalleycabins.com.au/hv_tours.html).
- Potentially lower compliance costs. Regulatory processes will run more smoothly if regulators have greater understanding of a company's performance. As for other

businesses, ecotourism operators are responsible for compliance with operational development plans, planning conditions, standards and targets for sustainable tourism (Suggett & Goodsir, 2002).

- Attracting and retaining competent staff. The tourism industry has been criticized for 'its high turnover, anti-social working hours, low pay, seasonal employment, instability and low job status' (UNEP, 2002, p. 13; see also Hinkin & Tracey, 2000). There is evidence that TBL helps with both recruitment and retention of employees, and improves employee morale, productivity and creativity (Sauvante, 2001). This results from organizations adopting policies that meet employee values and concerns and is focused on values that underpin its long-term existence.
- Caring for staff. An environment that encourages employees to share their ideas and opinions on business and workplace practices is considered by many businesses to be both ideal and effective. One of the most effective ways to encourage input from employees is an open and respectful exchange between employees and owners/managers. TBL encourages firms to seek staff feedback and consider all thoughts and ideas seriously. Such social strategies incorporated into human resources management (HRM) result in reduced turnover of staff, fewer sick days, reduced penalties, reduced insurance and workers' compensation costs, higher levels of worker satisfaction and an increased ability to attract good quality staff.

  The social capital element of TBL requires firms wherever possible to provide employment opportunities to local people. Employing local people, using an all-inclusive stakeholder approach to planning, management and policy development that supports the training of locals in all aspects of business operations can result in improved retention of sales revenues in the local community and the incentive to protect the natural resource. A good example of these TBL practices is Jaringan Ekowisata Desa (JED) Village Ecotourism Network. JED is owned by the communities of four villages across Bali in Indonesia. The network promotes ecotourism in the four communities and reinvests revenue in community development. JED offers visitors the opportunity to experience Bali as the Balinese know and love it. Local guides, local foods, community designed and managed, all JED profits contribute to community development and conservation activities in the villages. JED recognizes that the sacredness of many aspects of Balinese culture is lost within a consumption and leisure focused tourism industry. It aims to strengthen cooperation between villages and promote cross-cultural understanding between Balinese locals and visitors (http://www.jed.or.id/index.html).
- Improved access to capital from potential shareholders and financial institutions. The proliferation of 'green' and 'ethical' investment funds is making it more attractive for listed companies to meet the investment criteria of such funds (Ethical Investment Association, http://www.ethicalinvestment.org.uk). Ecotourism firms typically face strong impediments to investment due to lack of expertise in assessing high risk tourism investments with variable cash flows, coupled with a reluctance by institutions to invest heavily or in the long term in the tourism industry (Dwyer & Forsyth, 1993).The micro-financing of community-level ecotourism operations is also seen as an effective tool for assisting rural communities to improve the protection, management and sustainable use of their environments (Wild, Millinga & Robinson, 2008). TBL reporting may help to overcome this constraint by attract-

ing investors interested in companies with long-term sustainability plans that minimize operating risks in the future. Many international donors support ecotourism ventures as part of Official Development Assistance. Donors can be a source of grant funds (though this is often short term) or can play a role in capacity building or information sharing programmes. Examples of donors that have supported ecotourism include the European Union (EU), the United Kingdom Department for International Development (DfID), the United States Agency for International Development (USAID), the Canada International Development Agency (CIDA), the World Bank, the Asian Development Bank and national aid organizations for many developed countries. The Chi Phat Ecotourism Site was established in 2007 in Cambodia with the assistance of the international environmental non-governmental organization (NGO) Wildlife Alliance (formerly WildAid), which helped the community to set up an ecotourism committee. Another NGO, Live and Learn Environmental Education (with funding from the World Conservation Union) is a project partner and provides training in the core components of ecotourism for the local community. Wildlife Alliance provides financial support for local initiatives such as guest houses, home stays and outdoor equipment, and also works with community members on a reforestation programme. The NGO also provides technical assistance to the Royal Government of Cambodia in protecting the forest and wildlife of the Cardamom Mountains.

Improved Market Positioning

Adoption of TBL reporting can improve an ecotourism firm's market position, resulting in increased revenue and market share. The perceptions of key stakeholders such as clients, suppliers and investors and the community are key considerations to the positioning of an ecotourism business within the market, taking into account environmental and social considerations as well as financial considerations. Such perceptions influence an operator's image and reputation. Adoption of what is perceived to be a more ethical approach to business may expand opportunities to firms such as gaining access to new markets, new clients and the forming of new partnerships. For example, an ecotourism operator may attract responsible green travellers who make purchases based on minimizing their carbon footprint, increasing its market share compared to rival resorts.

In 2001, New Zealand AID provided a grant to the Philippine National Ecotourism Programmeme (PNEP), with Pamilacan Island as a target area. The Pamilacan Island community organized itself into the Pamilacan Island Dolphin and Whale Watching Organization (PIDWWO) and was formed into a cooperative to conduct Marine Life Tours designed by PNEP. The tour itself is conducted by members of the organized community: the boatmen, guides, caterers who provide the food and souvenir sellers who provide their services via fixed scheduled turns. PIDWWO formed a partnership with a private tour operator, Travel Village Ltd, who handles most of the marketing and sales, and this allowed them to greatly expand their operations and the number of tourists taking the tours.

Ecotourism firms can adapt to new business sectors with the help of TBL. Since many business opportunities are developing in the realm of social entrepreneurialism, businesses hoping to reach this expanding market must design themselves to be financially

profitable, socially beneficial and ecologically sustainable or fail to compete with those companies who do design themselves as such. For example, Fair Trade and Ethical Trade companies require ethical and sustainable practices from all of their suppliers and service providers. Therefore, a business intending to work with Fair Trade or Ethical Trade companies must design their business model to be TBL.

TBL can also help ecotourism firms in particular to achieve their untapped market potential. TBL companies can find financially profitable niches that might be missed when money alone is the driving factor. This might involve adding ecotourism to an already rich tourism market or providing products or services that benefit underserved populations and/or the environment that are also financially profitable. The latter is evidenced in the PIDWWO and JED cases as discussed above.

TBL reporting is also used as a device for reputation management (Robins, 2006). TBL can have positive impacts on the branding of the ecotourism firm's products or services, thereby creating value through enhanced reputation and positive customer response (Suggett & Goodsir, 2002). It can help the firm to appeal to new and growing markets and encourage repeat customers. In today's tourism industry, travellers are typically more sophisticated, have more disposable income and are more confident about their expectations (Dwyer, Edwards, Mistilis, Scott & Roman, 2009). As such, these consumers are attracted to businesses that are showing responsibility and awareness for the environment and the communities in which they operate.

Good organizational performance in relation to environmental and social issues can build the brand reputation of ecotourism firms in the industry (Worby & DeLacy, 2003, p. 14). There is a growing understanding that social responsibility implies risk minimization, and that customers perceive the operator's 'duty of care' to extend to the environment and the global community. Reduced risk implies that organizations incorporating TBL efforts are seen as safer investments, making it easier for them to procure funds. The TBL results in organizations avoiding legalities with governments, bad publicity and angering special interest groups. There is growing evidence to suggest that over time these benefits do contribute to the increased market value of an organization (Bakshi & Fiksel, 2003).

Better Stakeholder Relationships

The term 'stakeholder' encompasses all individuals and bodies who have an interest in or are affected by (or potentially affected by) an activity. Obviously, the term implies that the person has a 'stake' in the operation of an organization (Freeman, 1984). Stakeholders of an ecotourism business include, inter alia, owners/shareholders/investors, employees, customers, business partners, suppliers, competitors, government regulators, pressure groups, local communities and future generations. Stakeholders may be categorized as primary and secondary (Freeman, 1984).

Primary stakeholders are those who exert a direct economic influence on the firm and, in turn, are directly influenced by the company's performance. These stakeholders of an ecotourism operation would include customers, suppliers, employees, creditors, investors and shareholders.

Secondary stakeholders are those who have a less direct relationship with the economic base of the company (but may have significant expectations). Secondary stakeholders of

an ecotourism operation might include media, government, local communities, interest groups, non-profit organizations and the general public.

The Cambodia Community-Based Ecotourism Network (CCBEN) is a network of more than 30 members consisting of both primary and secondary stakeholders, including communities, NGOs, academic institutes and private companies who are working closely with ecotourism in Cambodia. CCBEN aims to support, promote and advocate for this style of tourism in order to conserve natural and cultural resources, to protect the environment and to raise the sustainable wellbeing of the local communities across the country. Each community in CCBEN is supported by a variety of non-government and government organizations. CCBEN promotes conservation of nature, tradition and culture to the benefit of all stakeholders, primary and secondary. An important aim of CCBEN is to improve the local livelihood as well as to enhance meaningful interactions between the host community and visitors.

TBL reporting is a vehicle for organizations to render an account of their activities towards a wide group of stakeholders and thereby respond to society's growing expectations of transparency. Organizations that support the community affect their surroundings beyond the walls of the organization, through educational development, charitable events and visibility of issues. To the extent that ecotourism firms adopt TBL reporting, the greater the opportunities for genuine community involvement in tourism development. A more complete picture of the company can be communicated through the disclosing of environmental, social and financial information. The forging of TBL as a communication tool can be a powerful corporate statement, including information that allows stakeholders to obtain a more detailed understanding of the company, allowing them to make more informed decisions. It can help in the forming of new relationships, the strengthening of existing relationships with clients and suppliers, improved relationship with industry regulators and new partnerships with industry representatives.

Koh Yao Noi, Thailand by 1995 was becoming increasingly attractive to tourists. As a result, negative impacts were starting to occur such as unsuitable use of natural resources, changes in land use by building bungalows for tourists and an increase in rubbish and water pollution. Although the villagers had more income, they lacked a plan for using the resources wisely. To conserve the natural resources sustainably, the local community of Koh Yao Noi cooperated to form the Koh Yao Noi Eco-tourism Club (KYN ET Club). The KYN ET Club is a 100 per cent community-owned ecotourism operation located in Phang Nga Province, southern Thailand. The key aims of the KYN ET Club are to raise awareness about natural resource conservation; encourage local participation in tourism management; provide more jobs and income opportunities for local people; and support proper sanitation, waste management and safety in tourism. The KYN ET Club has enabled the local community to participate in the management, planning and policies concerning the growth and direction of tourism on Koh Yao Noi. This participation has facilitated the protection of natural resources and local cultures and ensured the benefits from tourism employment and income are more equally distributed amongst the local community on Koh Yao Noi.

Competitive advantages can be derived from strong and meaningful relations between an ecotourism business and its key stakeholders (especially those at the local community level). Effective stakeholder engagement can produce significant corporate value in the form of: reputation/brand strengthening and assurance; enhanced

operational certainty through achievement of 'social licence to operate; reduced/minimized pressure on government to implement restrictive regulatory frameworks; and enterprise agility through a strong understanding of external issues and trends (Dwyer & Kemp. 2004).

Improved Strategic Decision Making

TBL is a means of promoting integrated decision making within businesses and other organizations – a way of embedding sound corporate governance and ethics systems throughout all levels of an organization. TBL helps ensure a values-driven culture is integrated at all levels of an organization.The importance of organizational culture in tourism firm performance is well recognized (Dwyer, Teal & Kemp, 1998/99; Dwyer, Teal, Kemp & Wah, 2000; Kemp & Dwyer, 2001).

A TBL approach not only results in a more complete reporting framework, but also has some influence on the strategic decisions that are made by the ecotourism operator. Issues that go beyond economic considerations may be raised and have an increasing influence on the strategic decision-making process. Figge, Hahn, Schaltegger and Wagner (2006) provide an example of some of the questions that may be raised when considering company strategy: does the environmental or social aspect represent a strategic core issue for the business strategy of our business unit?; does the environmental or social aspect contribute significantly to a strategic core issue and therefore represent a performance driver for the business strategy of our business unit?; is the environmental or social aspect simply a hygienic fact, which necessarily has to be well managed but leads to no particular strategic or competitive advantage?

TBL systematizes and institutionalizes best practice and provides the ability to benchmark both within and across sectors. TBL can foster innovation as the integration of all three aspects may result in a more innovative approach by an organization in the development of its future processes, product development, technologies and services, which will subsequently influence planning and management strategies (Suggett & Goodsir, 2002).

TBL can result in improved management of risk through stakeholder engagement, enhanced management systems and performance monitoring (Gray & Bebbington, 2000). This may also lead to more robust resource allocation in decisions and business planning, as risks are better understood and factored into decision making.TBL also supports the development of communication tools that enable information to be shared internally more effectively, thereby facilitating company learning (Gray & Bebbington, 2000). Formalizing and enhancing communication with key stakeholders allows an ecotourism business to develop a more proactive approach to addressing future needs and concerns.

Wider Destination Benefits

In the various models of destination competitiveness that have been developed, environmental and social factors reflect the differentation and diversity of a destination and therefore play an important role as 'attractors' of tourists (Hassan, 2000; Ritchie & Crouch, 2003). Since destination competitiveness depends crucially on the performance

of the constituent businesses, widespread adoption of TBL reporting by ecotourism companies with respect to their social and environmental activities will also enhance destination sustainability and competitiveness. Widespread adoption of TBL reporting would therefore also benefit policy making at the destination management level. Since the ultimate objective of achieving destination competitiveness is to improve the quality of life of residents, a TBL approach by ecotourism firms that supports local employment and maintains the natural environment can help to achieve this result, particularly for destinations that emphasize ecotourism opportunities.

CHALLENGES TO TBL IMPLEMENTATION

TBL reporting will only be a meaningful exercise as long as practitioners are genuinely committed to its success. TBL therefore needs to be perceived as good business practice for operations as well as contributing to the more distant goal of sustainable development, and not as merely adding to the regulatory burden on business. Implementing change means facing new obstacles and challenges. An organization's culture and systems must support these changes.There are several essential behaviours and attitudes that are required in those firms that seek to adopt the TBL approach.These include: integration of TBL into long-term strategies, goals and measures; employee training on TBL concepts, measures and challenges; concern for transparency; need for stakeholder engagement; selecting appropriate indicators; evaluation trade-offs; awareness of implementation costs of TBL; and performance monitoring. However, a significant challenge for ecotourism firms is that this integration will require thinking across decades, generations and, in some instances, centuries (Elkington, 2004), especially in relation to development projects for which long-term impacts are generally an afterthought.

Implementing Integrated Planning and Operations

The implementation of a TBL framework that attempts to measure economic, social and environmental performance needs to be properly embedded within the strategic planning, organizational strategy and core processes of a company. This implies that a TBL strategy must become integrated into the day-to-day operations and be aligned through the systems and processes of the ecotourism firm. Greater quantities and quality of information will tend to provide better capacity to make decisions, both in society as a whole and within the organization itself. This is imperative with the increased transparency of company operations associated with TBL reporting and the need to reflect an accurate position of the company.

Core management systems into which TBL should be integrated include planning, operations, employee relations, community involvement, information management, environmental management and management appraisal and reward systems. Taking the holistic approach demanded by TBL may require significant internal cultural change in an organization, with detailed attention paid to values, ethos, mission and long-term corporate reputation, stakeholder inclusivity, employee engagement and so on (Kemp & Dwyer, 2001). Thus, TBL is important as a lever for cultural change within the company. Organizations committed to integrating TBL as a philosophy have developed

and implemented training and processes that support management and staff and educate employees about the challenges and difficulties presented by the TBL.

Transparency

As indicated, TBL reporting increases the transparency of the company's reports to its stakeholders. Factors that have facilitated the trend of increasing transparency include the rapid developments in information technology, ease of means of communication, the powerful role of the media and the increasing demands by investors and stakeholders. Subsequently 'businesses will find its thinking, priorities, commitments and activities under increasingly intense scrutiny worldwide' (Elkington, 2004, p. 3). Ecotourism firms have an obligation, within commercial limits, to be transparent about their activities and impacts beyond financial performance, allowing their TBL processes to be viewed by all (Dwyer et al., 1998/99; Dwyer et al., 2000). Recognizing the legitimacy of stakeholders' 'right to know' and disclosing multidimensional results and impacts is a powerful TBL requirement that can be included in the company 'vision' or mission statement, its communication with stakeholders and in the actual content of its public reporting.

Stakeholder Engagement

It is imperative that companies engage and interact with their stakeholders (both internally and externally). TBL reporting allows companies to engage their stakeholders on a social and environmental level as well as a financial level. TBL requires firms to integrate and engage different stakeholders through a firm's various processes and participatory planning and consensus building in the planning process. Stakeholders such as industry, government and community should be engaged in strategy implementation including the establishment of codes of practice. Importantly, TBL requires firms to reflect on how their activity affects stakeholders, what the main concerns/issues of stakeholders are, how these issues are being addressed and how their positive initiatives are being recognized. CCBEN, discussed above, is one ecotourism organization that has met this challenge successfully.

Formalized, collaborative and meaningful stakeholder engagement, rather than an ad hoc approach, is an essential component to integrating TBL into business strategies and operations. This requires businesses to provide greater access for stakeholder dialogue and to build stakeholder engagement into their project timeframes. At each point in the corporate decision-making process, there is an opportunity to ensure that key stakeholder concerns, perspectives, insights and priorities are addressed and integrated. Important issues include: identifying stakeholder concerns/issues about all aspects of operations; seeking input, advice and support for programmes and planning activities; identifying appropriate types of reporting; and seeking stakeholder support for stated goals (Freeman, 1984).

Partnerships can be useful in assisting communities to establish ecotourism ventures. Manyallaluk is a 3000 square kilometre property near Katherine in Australia's Northern Territory. The property is owned and managed by the Jawoyn people. Around 150 people run a small community-based tourism enterprise. They offer a series of tours

that emphasize learning about their traditions and culture as well as the opportunity to travel to waterfalls, rock pools and ancient rock art sites. During the early years of operation, the Jawoyn people worked with a commercial tour operator (Terra Safari Tours) to bring visitors to the community. This partnership helped the community to establish the tourism venture and focus on developing and delivering a quality visitor experience within Manyallaluk. While the partnership had a number of benefits during establishment, having booking fees go to a private tour operator reduced revenues for the community. Once successfully operational, the community sought to promote its own tours and increase the number of visitors booking directly with Manyallaluk. The community printed brochures and commissioned a Darwin-based marketing company to distribute flyers on an annual basis. The manager and one guide also attended tourism trade shows in Darwin and Sydney to expand their industry engagement (http://www.aboriginalaustralia.com.au/tour_info.cfm?id=58).

Effective stakeholder engagement is something that ecotourism firms can easily relate to. Recognition of the importance of broad community participation, of effective coordination and support between all involved parties is crucial to the achievement of sustainable tourism (Timothy, 2002).There are some problems however. TBL offers business no means of prioritizing among the requirements of different stakeholder groups. Further, TBL does not help the business operator to trade-off the wishes of one group against those of another when the needs of different stakeholder groups are in conflict. Fortunately, the default for ecotourism firms is the underlying ecotourism principles, two of which encourage firms to empower the local community and be sensitive to the host destination's political, environmental and social climate.

Ecotourism businesses affirm a responsibility to raise awareness of the principles of 'best practice' in sustainable tourism by promoting the exchange of information between stakeholders (UNEP, 2000). This exchange of information can play an important role in establishing networks for dialogue on implementation of the principles of sustainable development and ecotourism and for promoting a broader understanding and awareness to help strengthen attitudes, values and actions that are compatible with sustainable ecotourism operations.

Selecting Appropriate Indicators

The ability of an ecotourism operation to sustain itself and the environment depends on its ability to understand the type of impacts that it may have. There is a substantial research literature on environmental and social indicators for tourism (Bossel, 1999; Manning, 1999; McCool, Moisey & Nickerson, 2001). Indicators are critical to the success of environmental monitoring and reporting as they provide the basis for objective performance assessment. Indicators function as a 'measuring stick', by which companies can evaluate how they are accomplishing explicit goals (Suggett & Goodsir, 2002). Generally, the discussion in the tourism literature has focused on indicators for sustainable development at a macro (destination) level rather than at the micro level of the firm.

Defining boundaries for the purposes of environmental performance measurement is an important part of the TBL reporting process. As any manager knows, what gets measured gets attention. It is typical to define the scope of TBL practice as including operations over which an organization has control or influence. While this is straightforward

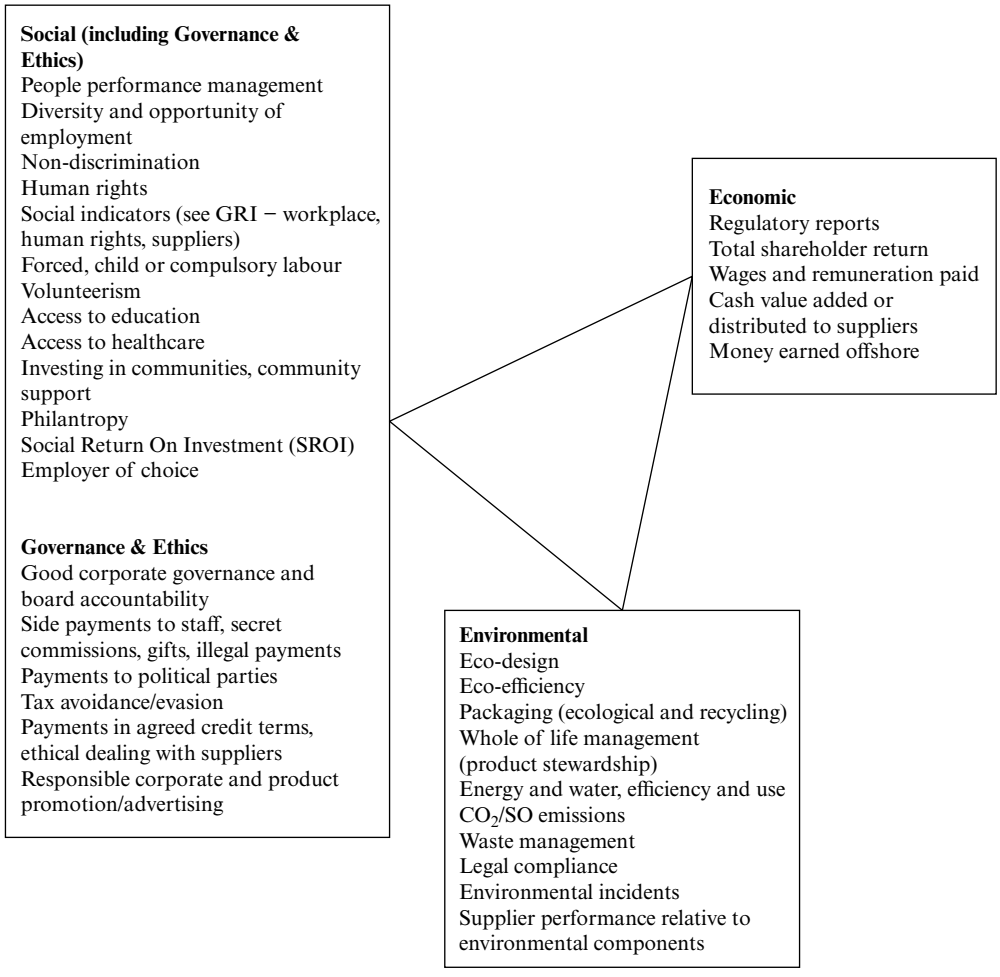

Figure 20.1 Selected TBL indicators

in many cases, it is less clear for ecotourism firms that may outsource parts of their operations, use contractors extensively, have joint ventures or numerous suppliers.

The Global Reporting Initiative (GRI) is an organization established to support TBL and sustainability reporting guidelines. Guidelines are for voluntary use by organizations for reporting on the economic, environmental and social dimensions of their activities, products and services. The GRI incorporates the active participation of representatives from business, accountancy, investment, environmental, human rights, research and labour organizations from around the world (GRI, 2002).

The GRI methodology provides a framework for reporting that promotes comparability between reporting organizations while recognizing the practical considerations of collecting and presenting information across diverse reporting organizations. A list of economic, social and environmental indicators appears in Figure 20.1. The issue list is based largely on GRI web sources but is further extended by a number

of specific industry supplements such as the Tour Operators' Sector Supplement (GRI, 2002).

In its 2002 Reporting Guidelines, the GRI (2002) emphasized the need to develop techniques that enhance the ability of firms to report more consistently and more comprehensively on the economic, environmental and social dimensions of their activities, products and services. The GRI's objective is to enhance the quality, rigor and utility of sustainability reporting. To date, the TBL is the format most commonly chosen by business for this purpose (Robins, 2006).

The GRI methodology is attractive because it: allows a partial and incremental implementation; involves a continuous learning process; and will adapt to new demands. However, while the GRI provides an internationally accepted guide, it does not yet provide methodologies for many of its indicators, nor does it take into consideration specific conditions in different countries, particularly in relation to established indicators and methodologies. While some companies are successfully adopting the GRI and other frameworks, others take a more eclectic approach where they review indicators used by other companies and adopt the most appropriate from various sources.

To check the suitability of its indicators, an ecotourism firm can ask internal and external stakeholders the following types of questions:

- What is of key importance to stakeholders?
- Which environmental issues will impact how we do business tomorrow?
- Which risks are relevant to how an organization operates within the present as well as the future context?
- What can we collect data on, and what comparative data are available?

Ecotourism firms undertaking environmental reporting for the first time may prefer to scope their initial report narrowly, with the aim of broadening reporting boundaries over time as experience develops.

Unfortunately to date, tourism researchers, including ecotourism operators, have neglected the potential relevance of GRI indicators to promote a better understanding of tourism's environmental and socio-cultural impacts and as an underpinning of sustainable tourism. It is clear, however, that the principles of ecotourism, as highlighted above, are consistent with these indicators.

Evaluation Trade-offs

TBL measurements must be based on solid information of better quality than is generally available now. The required information can be generated through the use of environmental management systems (EMS) and updated accounting practices (Suggett & Goodsir, 2002).

The real challenge is to understand how these factors interrelate, that is, the 'joined-up' bottom line rather than measuring how the economic, environmental and social dimensions fit into three separate bottom lines.There is presently no accepted single standard for measuring the combined economic, environmental and social performance of an organization. Because there is no single way in monetary terms to measure the benefits

to the society and environment as there is with profit, it does not allow for businesses to sum across all three bottom lines. Some commentators argue that this is unachievable (Norman & MacDonald, 2003). Attempts have been made to use money as the common denominator, for example, by putting a monetary value on the cost of restoring environmental damage or the cost of treating an injured worker. There are, however, limits to the success of a monetary formula, for example, what monetary value can be put on the extinction of a species or the exploitation of child workers in developing countries making items for tourism shopping? Essentially, any imputed dollar value would, ultimately, rest on individual judgement and, consequently, be open to legitimate challenge (Robins, 2006).

Since TBL at its broadest level is an integral decision-making process based upon outcomes rather than outputs, reporting needs to reflect this activity and not place measurements into three separate bottom lines. However, until (if ever) a common measurement is created and achieves broad acceptance, the accounting and reporting of the three sectors of the TBL will continue to be measured and reported separately and against the type of criteria listed above.

Performance Monitoring

Monitoring is an essential component of any planning or management system. Monitoring specifically aids in: the evaluation of an operation's effectiveness through a financial control process; providing information for management to assist with accountability and transparency; providing information on consumer satisfaction for successful marketing activities; avoiding unforeseen negative and social impacts arising from an operation's actions; and incorporating changes that may occur in an operation's external environment.

The monitoring of management practices against performance indicators and baseline measures is an increasingly important component of ecotourism operations. Ecotourism operators will need to identify their own indicators and set them within the context of their broader business environments, working in partnerships with their communities and matching them with their business objectives. They will also need to confront the challenges of adopting the new paradigm of reporting. Advances in information technology have greatly improved monitoring performance in all industries including tourism (Sheldon, 1997). It is essential that ecotourism firms that adopt TBL reporting engage in continuous monitoring of the effects of business operations. Since the concept of the TBL is intended to be integrated into the philosophies, values and business planning of the organization, TBL accounting does not end with the first report. It is a continual process of monitoring, assessment, evaluation and amendment of organizational procedures.

Implementation Costs

Ecotourism firms adopting TBL reporting will inevitably weigh improving social and environmental quality against compliance costs. The costs of preparing a TBL report will vary from organization to organization. TBL reporting implementation costs are likely to be small compared to the cost of the management systems needed to collect the

underlying information. If the nature or size of a company's activities does not warrant the adoption of such systems, TBL reporting should not be too costly an exercise. Larger businesses, due to their access to resources, are well placed to make significant inroads into operating sustainably, particularly if they can utilize their own staff to become involved and committed to the principles of sustainability.

Since the different skills and competencies required to integrate TBL may be lacking within many ecotourism businesses, the implementation of TBL requires staff commitment and thus allocation of resources. In this manner, adoption of TBL becomes an investment to maintain competitive advantage over time.This commitment should be internalized by the owners and managers of ecotourism firms.

MANDATORY VERSUS OPTIONAL REPORTING

Views vary regarding the issue of mandatory TBL reporting. The general perception is that TBL reporting will become a commercial imperative rather than an imposed measure. The necessary government approach would need to involve a combination of facilitation, promotion and education. Government has a crucial role in supporting TBL as part of the broader CSR and environmental sustainability reporting agenda. Without government support, it will be very difficult to achieve a consistent and more standardized reporting approach.

Some form of government support may be needed (and justified in terms of the wider destination benefit) to promote TBL measurement, reporting and auditing. TBL reporting can be promoted to the business sector as a means for improving competitiveness. Governments at all levels can act as catalysts for the development of TBL. Inter alia, governments can do the following: provide support for and facilitate TBL to allow strategic partnerships and support networks to develop and experiences to be shared; develop and promote support networks that encourage the sharing of experiences among government agencies including the implementation of a TBL procurement policy for state government agencies; develop improved strategies and measurements of accountability and transparency in public sector decision making; support research into TBL reporting, monitoring and auditing; and provide financial incentives (for example, tax concessions) for firms attempting to improve their TBL performance (Allen Consulting Group, 2002).

Government pressure on business to adopt TBL reporting will only be credible, however, if government bodies are subjected to the same discipline. For the government to demonstrate a commitment to TBL, opportunities need to be created for stakeholders to genuinely engage in decision making and reporting. However, governments should be sensitive to the capabilities and resources of small ecotourism firms.

THE ROLE OF CODES OF CONDUCT IN SUPPORTING TBL

Economic, environmental and socio-cultural pressures are resulting in increasingly stringent legislation and taxation designed to encourage people to act more considerately towards the environment. Therefore, the best businesses will anticipate such action and

minimize their impacts well in advance. Self-management practices will increase through the adoption of codes of practice and certification schemes. It will also minimize compliance costs.

Introducing professional codes of conduct in support of a TBL implies that organizational policies and behaviour would need to reflect a more ethical approach in relation to the economic, environmental and social performance of the firm. This would form part of the integration process of a TBL framework within an organization and the overall CSR strategy. It would also make firms more accountable for the manner in which they go about doing business. Input from stakeholders (internal and external) should be considered when drafting codes of conduct and if monitored and enforced properly, will hold credibility with stakeholders.

Globally, many tourism industry sectors have responded to sustainable development through the establishment of voluntary initiatives, that is, 'a set of expectations, behaviours or rules written by industry members (often interchangeably) with an emphasis on accreditation of operators' (Newsome, Moore & Dowling, 2002, p. 223). Examples in the tourism industry include: Code of Ethics and Guidelines for Sustainable Tourism (Tourism Industry Association of Canada); Environmental Codes of Conduct for Tourism (United Nations Environment Programme); Sustainable Tourism Principles (Worldwide Fund for Nature and Tourism Concern); Code for Sustainable Tourism (Pacific Asia Travel Association); Responsible Traveller Guidelines (Africa Travel Association); Declaration of Earth Friendly Travelers (Japanese Travel Association); Agenda 21 for the Tourist and Travel Industry (promoted by the World Tourism Organization, the Earth Council and the World Travel and Tourism Council). There are numerous ecotourism codes of conduct such as the ecotourist's code of conduct (government of Quebec); Ecotourist Codes of Conduct and Tour Operator Codes of Conduct (Northwest Yunnan Ecotourism Association); certification and standards (TIES); Codes of Conduct for Tour Operators (Rainforest Alliance); codes of ethics (Oceanic Society); certification and eco codes programmes (Ecotourism Australia).

El Remanso Lodge (Osa Peninsula, Costa Rica) was awarded the 'Level 5' of the Certification for Sustainable Tourism (CST), a rigorous certification programme run by the Costa Rican Tourism Board (ICT) that evaluates tourism companies' sustainability practices in natural, cultural and social resource management. CST is regulated by the Costa Rican National Accreditation Commission and consists of a scale of five levels of sustainable tourism achievements.

Guides of Australia (GOA) is a national tour guide accreditation programme that provides a benchmark for all tour guides in all sectors of the industry in Australia. Established in 2003, GOA serves as an umbrella body for individual guiding organizations and associations throughout Australia. GOA oversees best practice in services to tourists visiting Australia, and provides visitors with an assurance that a guide has met specific standards and has a commitment to the best practice standards outlined in the Australian Tour Guides' Code of Guiding Practice. The accreditation is suitable for tour guides in all sectors of the ecotourism industry and encourages professional development and promotes training in all relevant skills.

Historically, adoption of sustainable initiatives by industry has been slow for a number of reasons: many tourism operators, especially in developing countries, are simply unaware that such codes of practice exist; the language used in the documenta-

tion is intimidating for small businesses; the size of many tourism operators restricts their ability to implement recommended guidelines and initiatives; tourism operators, already overburdened with their day-to-day operations, have little time for locating and familiarizing themselves with the relevant codes of practice; the codes often provide only generic principles, and businesses find it difficult to translate them to an operational level.

Despite these challenges a number of initiatives can provide valuable and practical guidance to both small and large ecotourism businesses, including awards, codes of conduct and certification, education and awareness programmes. Industry codes have a potentially valuable role to play in fostering a TBL approach to sustainable business operations in the tourism industry.

CONCLUSION

TBL accounting has emerged in response to the demand from stakeholders for greater accountability for the social and environmental impact of the firms' operations. This chapter has attempted to convey the potential role of TBL in underpinning sustainable operations of ecotourism businesses.

In no sector of the global tourism industry is adoption of TBL principles and reporting more appropriate than in ecotourism. The ecotourism industry operates throughout the world; in developing and developed economies; in countries with cultural diverse backgrounds; with entities from large multinational companies to very small owner-operated businesses; and in remote locations as well as cities and towns. This diversity, not reflected in other commercial sectors, presents tourism entities with an opportunity to provide leadership in the conduct of business and particularly in the adoption of the new philosophy that reflects not only the ideals of the societies in which they operate but also the international community. TBL forces an organization to be clear about what it is achieving: 'what gets measured gets managed'. It also improves the quality of information for decision makers, clarifies organizational responsibilities and results in a more informed and accountable decision-making process through greater levels of transparency.

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21. Staffing ecotourism businesses

Tom Baum

INTRODUCTION

This conceptual chapter is intended to consider the nexus that is created when the challenging characteristics of the workplace environment within the tourism sector intersect with the business context of ecotourism enterprises in terms of their guiding environmental principles, economic realities and geographical location. The purpose of this chapter is to address the gaps in the literature with respect to a considered reflection of human resource issues within ecotourism businesses. As Zimmermann (2006) rightly points out, sustainable tourism requires the involvement of local communities and in order for tourism development to be sustainable, human resources must be included in the overall development policies of an ecotourism destination. This chapter will endeavour to demonstrate that the challenges faced by organizations operating in an ecotourism context with respect to their labour market features, sourcing and recruitment of staff to work in the sector, employee retention, training and development and career progression have dimensions that set them apart in both kind and extent from the issues faced by enterprises located in more 'mainstream' tourism environments.

The human resource dimension is one of the most important elements of any industry sector, none more so than in a service sector such as tourism, which is characterized by high levels of human involvement in the development and delivery of services or vacation experiences (Baum, 2006). Whatever means are employed to deliver tourism services to the customer, the role of human intervention (as individuals and groups) is almost universal.

> The story of successful tourism enterprises is one that is largely about people – how they are recruited, how they are managed, how they are trained and educated, how they are valued and rewarded, and how they are supported through a process of continuous learning and career development. (Fáilte Ireland, 2005, p. 8)

In the context of this imperative, the management and development of employees is a critical function and one that, ultimately, determines whether a tourism organization is competitively successful or not. Highly successful tourism organizations, particularly in the high-touch and luxury end of the marketplace, appear to place considerable emphasis on the engagement, education and empowerment of their employees at all levels to deliver services that define or differentiate the organization from others in the field (Baum, 2007). At the same time, parts of the tourism sector, alongside other parts of the economy, are making increasing use of technology substitution and the creation of an e-service environment within which human mediation in the service process is reduced or eliminated. Electronic ticketing and check-in with airlines and hotels are examples of this process at work.

In an era of increasing emphasis on quality in the delivery of tourism services, service quality and the human support such service demands can be looked upon as a competitive opportunity as well as a strategic issue. Consideration of the role of human resources in creating quality and its efficient management has widely been recognized as one of the most important methods to improve quality and competitiveness. At the same time, the tourism industry, worldwide, is characterized by ambiguous attitudes to investment in human capital, inflexible employment practices and an unsustainable approach to its development (Jithendran & Baum, 2000). Often perceived purely in operational terms (Baum, 1993), the management and development of human resources in tourism is readily described as an example of 'adhocism'. It is also an area of activity that has repercussions far beyond the operational domain and clearly impacts on the marketing and financial effectiveness of tourism organizations.

This generic analysis with respect to the role of human resources in tourism is of direct relevance in the context of ecotourism businesses, which may be characterized in terms of their geographical and economic isolation, limited economic diversity and the nature of their clientele.

ECOTOURISM BUSINESSES AND THE LABOUR MARKET

A discussion of the human resource characteristics of ecotourism businesses must be underpinned by recognition of the typically weak labour market features that operate within tourism generally (Riley, 1996). Riley is helpful in his application of the weak-strong internal labour market model to illustrate the relationship between the wider labour market and a number of key characteristics of tourism work, notably educational requirements, points of entry into the workforce, workplace pay differentials and level of trade union membership. This analysis has important ramifications for the status of tourism work and the perceived attractiveness of the sector both for employment and educational/training opportunity. Keep and Mayhew (1999, pp. 8–9) summarize a list of the characteristics of tourism work that confirm Riley's weak internal labour market attribution:

- Tendency to low wages, except where skills shortages act to counter this.
- Prevalence of unsocial hours and family-unfriendly shift patterns.
- Rare incidence of equal opportunities policies and male domination of higher level, better paid work.
- Poor or non-existent career structures.
- Informal recruitment practices.
- Failure to adopt formalized 'good practice' models of human resource management and development.
- Lack of any significant trade union presence.
- High levels of labour turnover.
- Difficulties in recruitment and retention.

The skills profile of tourism, in turn, is influenced by the labour market that is available to it, both in direct terms and via educational and training establishments. The

weak internal labour market characteristics in themselves impose downward pressures on the skills expectations that employers have of their staff and this, in turn, influences the nature and level of training that the educational system delivers. There is an evident cycle of down-skilling, not so much in response to the actual demands of tourism work or of consumer expectations of what it can deliver, but as a result of the perceptions of potential employees and the expectations that employers have of them (Wood, 1997).

Ecotourism operations do not always conform to the wider generalizations addressed above but, nevertheless, do exhibit labour market characteristics that create real challenges for the delivery of quality tourism products and services. Tourism in such destinations may be characterized by marked seasonality, possibly depending on operating seasons of a few months per year. The tourism sector is also relatively immature in many locations, responding to market demand for new forms of tourism in locations that may frequently be off the beaten track for many travellers. In such situations, the tourism labour market cannot be seen as an embedded part of the wider employment environment for a significant number of the resident population. Rather, employment in tourism can be a transitory activity that is taken up either

- by local residents who work in tourism enterprises alongside other economic activity or during periods of extended economic inactivity or unemployment or
- by 'incomers' or lifestyle employees, styled 'seekers' by Adler and Adler (1999), who choose to migrate to ecotourism destinations for the season from mainland locations or from other seasonal ecotourisms in search of work or to participate in some of the lifestyle activities that the ecotourism has to offer.

The immaturity of many ecotourism destinations, in terms of their tourism experience, means that the former are frequently not well equipped to avail themselves of opportunities demanding more than the most basic of skills levels. Adler and Adler (2004) further describe the latter transitory, lifestyle-seeking tourism workers in some detail in their exploration of hotel work in Hawaii. They talk of a substantial number of tourism workers who spend part of their year working and playing in ski resorts in the USA and Canada and the balance surfing and working in Hawaii. 'Incomers' such as these satisfy both their personal, usually sporting ambitions and their economic needs while also providing a range of skills that may be unavailable within the resident labour market. In extreme forms, this lifestyle form of incomer migration means that worker motivations for being in a destination can mirror those of the paying guests and the two become almost indistinguishable for much of their respective stays. Arnould and Price (1993) discuss the context of white-water rafting and reveal that experiential themes – personal growth, self-renewal, communities and harmony with nature – are significant in explaining the underlying dimensions of satisfaction for both tourists and many of those who work with them as guides and instructors. This motivational convergence between guests and employees is a theme that is emergent within wider tourism (Baum, 1997), particularly in what might be called the aesthetics of labour, within which it becomes difficult to distinguish the two in terms of interests, behaviour and appearance (Warhurst, Nickson, Witz & Cullen, 2000).

In many ecotourism businesses, many of those employed are 'incomers' into the local

community. Seasonality impacts upon the extent to which the resident community is able to provide the specialist skills required in ecotourism businesses. Some of these may be closely associated with the day-to-day lifestyle of such communities – marine activities (fishing, wildlife viewing), mountain activities or winter sports – but others have little in common with other economic and leisure activities in the destination, notably those related to the delivery of hospitality and services. There is also frequently a level of cultural dissonance between the host and visitor communities, particularly relating to meeting the skills demands of contemporary, Westernized entertainment within traditional societies. Thus, the labour market frequently suffers from a tourism skills deficiency and this, in turn, may have serious consequences for the ability of the destination to compete in the international tourism arena.

Ecotourism businesses are, characteristically, micro to small operations, employing few staff and are often family owned. The impact of larger, multiple operations (hotels, local travel companies) is virtually non-existent in such environments. Smaller tourism businesses, universally, have characteristics in their operations and organization that have wider labour market implications in terms of the sustainability of the work that is on offer, opportunities for career progression and their investment in the skills development of those who work within the businesses (Baum, 1999a). Small tourism businesses frequently operate alongside or as part of wider economic activities such as agriculture or fishing, in a family context and there is a merging of personnel between the two functions, often as a result of differing seasonal demands.

The characteristics of the labour markets within which ecotourism businesses operate, therefore, dictate to a significant extent the manner in which more specific human resource management functions are carried out in such locations, notably the impact of seasonality, their immaturity as tourism destinations, a dependence on external labour and the size and structure of the locally based tourism businesses that are able to operate.

SOURCING AND RECRUITMENT OF STAFF TO WORK IN THE SECTOR

Most ecotourism businesses are located in environments where they have access to small and constrained labour pools upon which to draw when developing tourism as an area of economic activity. The immaturity of the sector and seasonality of its operation mean that tourism does not always offer attractive opportunities to local residents. In this context, as suggested above, 'incomers' with lifestyle motivations may be more willing and able to seize the more attractive employment opportunities offered within the tourism sector. Creating greater business and employment viability within the tourism sector is frequently a challenge addressed by public sector authorities as they seek to embed tourism within the local economy.

Many of the specialist and 'authentic' skills required to support tourists visiting ecotourism destinations, whether activity-based, sporting or cultural, may be uniquely located within the local resident community but need to be harnessed in a way that is complementary to existing economic activity. Recruitment of, for example, land-based or marine guides, cultural animators, exponents of traditional crafts or sports

instructors, for whom such activities may be an extension of their 'normal' lives, may require a 'selling' of the tourism concept to the community in a manner that goes beyond economic criteria. Persuading the community that opening its doors to tourism is in the general good must underpin and, indeed, precede more formal measures to recruit staff for specific tourism functions.

The small business culture of tourism in most ecotourism destinations has its limitations but also provides an opportunity to encourage resident participation, providing core business skills are available within the community. Such participation can be fostered through targeted training in entrepreneurial skills and appropriate business development support to encourage people to use their existing skills within the context of tourism. While not recruitment in the traditional human resource management sense, such strategies increase the labour pool within the community who have an economic and skills commitment to tourism.

Notwithstanding measures to increase the tourism operating season and, with it, core employment, there are limitations to the extent to which sustained work can be offered by tourism businesses in ecotourism destinations. Therefore, particular focus is required on measures to recruit seasonal staff for the key periods when tourism activity is high and to ensure that they are fully equipped with skills to undertake the tasks required of them. When local recruitment measures do not meet the demand for labour within ecotourism destinations, external recruitment is inevitable. The 'selling' point in this context is frequently lifestyle-related, seeking to attract people, generally younger workers with few family ties, to enable them to combine activity and cultural interests with what in effect becomes a working vacation. The challenge, within local labour markets, of this 'incomer' model is that such employees may come to the ecotourism business with skills sets and experience profiles that exceed that available locally and may be willing and able to work for remuneration and in conditions that are inferior to those demanded locally.

In-migration as a response to meeting the skills needs of ecotourism destinations raises challenging issues with respect to the 'authenticity' of the tourist experience. Availing themselves of migrant labour may be expedient for tourism businesses in ecotourism destinations such as the Maldives, but are incomers able to deliver experiences to tourists (service, animation or performance) that satisfies demands for local, particularly cultural, interaction (Baum, Hearns & Devine, 2007; Duncan, Scott & Baum, 2009)?

EMPLOYEE RETENTION

Seasonality is perhaps the main barrier to long-term employee retention in the tourism sectors of many ecotourism destinations. The reality of tourism in ecotourism destinations is that it is not an economic sector that can offer sustained employment opportunities on a year-round basis, excepting for a very small proportion of staff in management or marketing functions. Thus, retention in the normal use of the term may not be a real issue in that seasonal commitment to employment is generally good. However, moving out of ecotourism, especially for younger employees, is a serious problem in many ecotourism communities and is exacerbated by the insecurity of seasonality (Baum, 1999b).

However, investment in training for seasonal employment can be relatively high

and, therefore, there are significant costs attached to the loss of trained staff at the end of the main operating season unless measures are in place to attract them back again the following year. Therefore, in many ecotourism destinations, the concept of retention can take on a meaning that relates to the ability of organizations to attract the same operational team back on an annual basis, whether they are local residents or 'incomers'. The value of this form of retention lies in savings with respect to training and the ability of such staff to 'hit the ground running' and deliver products and services to the organizational standard immediately. Where other industrial seasons complement tourism (as can be the case with forestry, fishery or agriculture), this form of retention is a realistic proposition and local residents can operate within defined seasons and industrial sectors on a long-term basis. Conflict can emerge when tourism seeks to extend its seasonal activity outside the traditional timeframe because then employees may be torn between two loyalties and opportunities. Another retention model adopted by innovative tourism employers in seasonal destinations is to support employees to seek alternative tourism work during the down season so that they can return the following year with enhanced skills and experience. Hotels in the far southwest of Ireland, for example, have partnered with counterparts in ski destinations in Switzerland in 'trading' employees during their respective off seasons to the benefit of both sets of operators.

TRAINING AND DEVELOPMENT

Issues relating to the training and development of tourism employees in ecotourism destinations are also strongly predicated upon the structure of the sector and its operating cycle. The lack of continuous employment on offer to employees can make both parties (employers and employees) reluctant to invest in training and development beyond the minimum required to meet the demands of the job. At the same time, ensuring that staff are able to meet the service and product standards of the business is essential if tourism operators are to be competitive in the international marketplace. The notion that travellers will accept what they would see as substandard services because they are in remote locations is questionable, given that such locations are frequently high cost in terms of access and destination services. Chan and Baum (2005) explore traveller expectations of accommodation in remote ecotourism sites in Sabah, Malaysia and note that, while some compromise in terms of luxury is acceptable, core service standards and comfort levels are expected by international visitors. The implications of this are that there are few compromises that can be made with respect to the skills sets of tourism employees in remote locations.

The small business structure of tourism businesses in small ecotourism locations also mitigates against effective training and development of employees. This is noted as a general issue with respect to tourism training in most contexts of the sector (Baum, 2002). Tourism businesses in general, and smaller operations specifically, do not invest significantly in employee training and development unless compelled to do so by legal or market pressures. In ecotourism locations, the most common form of training provided to tourism employees is designed to ensure that they meet the basic requirements of the job. Few small ecotourism destinations have the critical population masses within which

to provide a full range of pre-entry or in-service educational opportunities in the tourism sector. The smaller the ecotourism community, the greater the likelihood that potential entrants to the tourism sector will be required to go out of their local community in order to avail themselves of educational and training opportunities. While this may be feasible for young school leavers with ambition to develop a sustained livelihood in tourism, it is not always a realistic option for more mature aspirants or those seeking to enter tourism after experience in another sector of the economy. While similar barriers are faced with respect to educational opportunity for other sectors, combining this reality with other structural barriers in tourism further exacerbates this problem. Furthermore, tourism education and training, especially in applied areas, is not wholly appropriate for delivery via remote technologies and cannot look to such substitutes for direct classroom and laboratory learning. Latham (2008) talks about the challenges of maintaining credible training for the sector in the context of Samoa and cites the problems faced by local training providers in competing with institutions designed to 'train for export', so that graduates are prepared for work overseas with no reference to the needs of the local ecotourism economy.

CAREER PROGRESSION

The concept of a career in tourism within many ecotourism destinations must, again, be tempered by the structural and demand-side reality of a highly seasonal industry, with a preponderance of small business operators. In this situation, conventional notions of progressive and developmental careers within 'employed' status are unlikely to be of relevance to all but a very small minority. Even sustained employment, as suggested above, is also relatively rare unless there is sectoral complementarity, allowing for movement between work areas on a regular basis.

However, the area where a form of meaningful career can be seen is in relation to self-employment or the development of entrepreneurial employment. Opportunities to create self-employment and, from this, a career, are open within ecotourism as they are elsewhere and do form an attractive option, particularly in the absence of larger-scale operators. Such opportunity exists within resident communities of ecotourism destinations but, in practice, are much more likely to be in evidence through the initiative of 'incomers' (Lynch, 2005; Tinsley & Lynch, 2001). In the case of entrepreneurial activity, in-coming is often driven by lifestyle considerations (Getz, Carlsen & Morrison, 2003) whereby people from, generally, urban locations choose to relocate to more remote situations and to develop new careers in tourism after working lives in other sectors of the economy. The value of such initiatives to the economy and community development of small ecotourism is questionable in that economic and cultural commitment to the location may not be long term and sustainable.

CONCLUSIONS

There is little doubt that the tourism sector in remote, small ecotourism destinations faces challenges and opportunities across a range of business criteria, notably marketing

and operations. The operating features of the tourism sector, in terms of remoteness, access, size and, above all, seasonality, place tourism in a really challenging situation when competing with more standard but far less interesting sectors.

This chapter has sought to illustrate how these contextual factors impact upon the effective management of the people who are required to deliver products and services across a wide range of ecotourism businesses. Each of these factors presents challenges (and, in some cases, opportunities) that need to be addressed by both the private sector operators and by public authorities responsible for economic development and education/training within small ecotourism destinations. Without such consideration, ecotourism locations of this kind will be unable to compete effectively on the international tourism stage.

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22. Risk management and ecotourism businesses

Brent W. Ritchie and Sacha Reid

INTRODUCTION

Risk management assists ecotourism businesses to provide experiences in the safest possible manner, while mitigating potential losses to the business. Therefore, it is essential that ecotourism businesses formally plan for and develop strategies to deal with the possible consequences of unplanned events or circumstances that may pose business risk. This chapter provides an overview of risk management for ecotourism businesses and identifies a range of tools to assist managers in planning and managing risk in the context of ecotourism. The chapter begins by defining risk and risk management from an ecotourism perspective, before providing a systematic framework for understanding and managing ecotourism risks. The remainder of the chapter addresses the components of the framework, providing examples from the scant literature throughout. This chapter emphasizes the importance of managing ecotourism business risks and the process that managers can follow to manage risks appropriately.

The nature of ecotourism can create a number of internal and external risks for businesses. Risks and hazards can cover all aspects of the operation including health and safety of guests and workers, environmental risks, task and equipment risks such as mechanical breakdowns and crowding, as well as compliance with local laws and regulations. Risks can be internal or external to the business, created by clients, suppliers or even operators themselves through inaction. Authors such as McKercher (2001) have identified the high failure rate of small specialized ecotourism businesses, yet research that examines the influence of external factors on business operations is rare (Weaver & Lawton, 2007). Previous research on ecotourism risks has focused on war, foreign relations, agriculture and climate change (Amerom, 2006; Ospina, 2006; Preston-Whyte & Watson, 2005; Yu, Hendrickson & Castillo, 1997). Ecotourism, as defined in Chapter 1, may include some elements of adventure tourism, as they share the same environmental settings and have been described as close cousins (Fennell, 1999). Therefore, ecotourism and adventure tourism may share similar risks and hazards.

Weaver and Lawton (2007) conceptualize the supply of ecotourism consisting of both venues or settings and industry operators. Venues or settings provide a foundation for ecotourism businesses and commonly include both public and private protected areas, or private land that provides a setting for ecotourism operators. The industry itself can be divided into a number of specific sectors, including ecolodges and ecotour operators, as well as mediating attractions (such as canopy walkways and cableways) that facilitate access to the environment and act as attractions in their own right (Weaver & Lawton, 2007, p. 1171). Industry operators can range from micro-businesses through to major transnational corporations, although Page and Dowling (2002) suggest that the majority tend to be small operators. A challenge for smaller operators, which dominate the ecotourism market, is that many have entered without the knowledge or capital to

adequately develop and enforce safety standards (Page & Meyer, 1996). Previous studies have identified a number of barriers for business risk management in ecotourism including their operational rather than strategic focus, time and cost constraints, and a lack of safety/risk management knowledge (Bentley, Page & Walker, 2004).

Business operators may provide ecotourists with services at the origin (such as travel agents and tour operators), transport to the destination area (airlines, bus services and so on) and a range of services at the destination (accommodation providers, attractions, guides and so on). They may also provide a range of experiences ranging from 'deep' or 'hard' experiences to those that are considered 'shallow' or 'soft' experiences (Fennell, 2008; Weaver & Lawton, 2007). Regardless of the location or range of service offerings, ecotourism business operators must endeavour to provide a safe environment for tourists and to mitigate hazards and business risk.

UNDERSTANDING ECOTOURISM RISKS

Risk is generally defined as any threat that will negatively impact an organization's ability to achieve its objectives and execute its strategies successfully. The Australian and New Zealand Standard (AS/NZS ISO 31000, 2009) defines risk as the 'effect of uncertainty on objectives'. Glaesser (2006, p. 38) defines risk as 'the product of magnitude of damage and the probability of occurrence', while Priest (1990) differentiates between real risk and perceived risk, with perceived risk the best estimate of real risk. As can be deduced from these definitions, risk involves some form of uncertainty and the potential for a risk event or occurrence to create damage or loss to an organization. Damage can be wide ranging, from physical damage such as injuries, deaths, property and equipment damage, to negative public image, lawsuits or financial losses.

According to Bentley, Cater and Page (2010), ecotourism has a less clearly defined link to risk compared with adventure tourism. Risk, in the ecotourism context, is defined as any event or action that could negatively impact an ecotourism operator executing their strategies and meeting their objectives. This could be due to anything that might affect the outcome of an ecotourism experience or business operation, or anything that might expose a public or private operator to loss. Risk can arise from the dangers that may be linked to environmental characteristics of the area where the activity is conducted or to the type and manner in which any equipment is used. A number of authors have attempted to catalogue the diversity of risks within an ecotourism context. Bentley et al. (2010) outline four risk themes (client-related; task and equipment-related; environment-related; organizational/management-related). Fennell (2008) suggests that the main sources of risk in an ecotourism context can include facilities, equipment, the programme itself and people. Patterson (2007) has also identified a number of key risks including property damage to physical assets, business interruption, disability, loss of key individuals, medical and public liability. These are pertinent for ecotourism businesses, which need to be cautious in the development and operation of their experiences (Fennell, 2008). However, Patterson (2007) argues that people may perceive the industry as being riskier than it actually is.

Risks can also be divided into those caused by internal forces and those caused by external factors. Therefore, ecotourism managers must understand and manage risks

that are not just related to their day-to-day operations, but potential external risks from the broader political, economic, environmental, social and technological environment in which the ecotourism business operates.

Risk management is also sometimes referred to as safety management (Patterson, 2007), whereby the operator may need to provide an element of perceived risk without significant risk to the customer through safety and risk management procedures. Nevertheless, as this chapter demonstrates, risk management is broader than safety management, which can be conceptualized as one component of risk management.

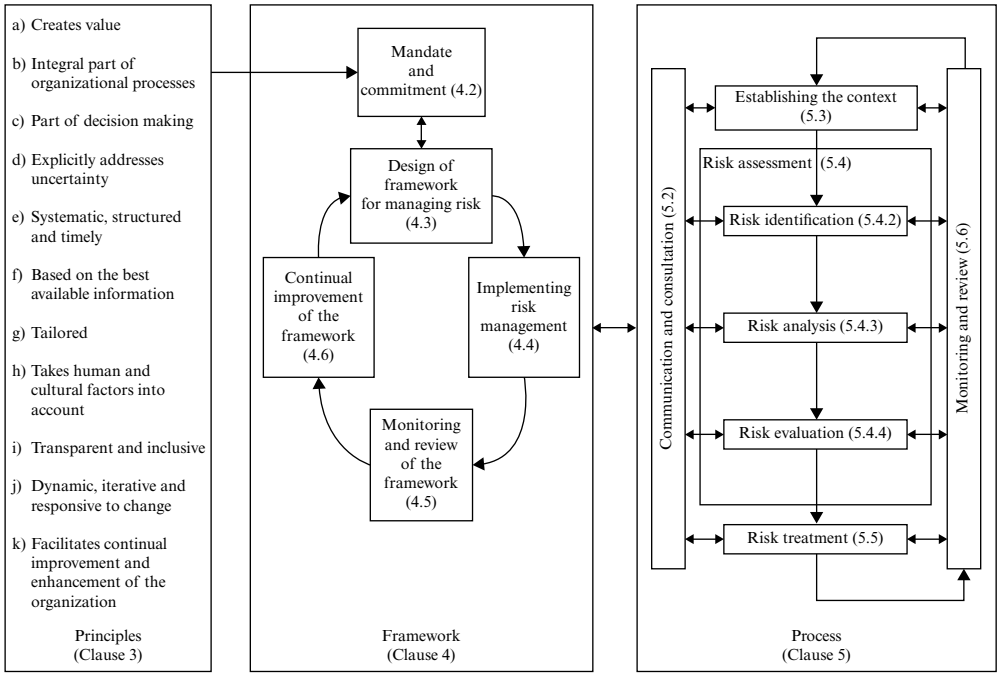
Risk management should be recognized as an integral part of good management practice, consisting of well-defined steps that support better decision making and contribute greater insights into risks and their impacts. There are two major stages of risk management. First, risk assessment, which includes risk identification, analysis and evaluation, and second, risk treatment, which includes strategies or actions to manage the risk. The prime objective of risk management is to minimize the potential for physical, social, emotional or financial loss arising from participation in an activity in an unfamiliar environment with unknown outcomes (Ewart & Boone, 1987). This is supported by Fennell (2008), who considers that risk management as a process should begin with good programming and execution of plans in the settings or venues where ecotourism takes place. In this way, potential risks may be able to be turned into opportunities, perhaps through improving practices, improving customer satisfaction and reducing insurance costs.

RISK MANAGEMENT: A SYSTEMATIC FRAMEWORK

Effective risk management requires a systematic approach to control the range and impact of potential losses. Figure 22.1 presents the international standard for risk management (AS/NZS ISO 31000, 2009), which provides a systematic process for managing risks through establishing the context, identifying, analysing, evaluating, treating, monitoring and communicating risks associated with any activity or function. Importantly, it also highlights five parts of a framework that assist the risk management process and should occur before risk management begins. It also highlights seven principles that should underpin the initial framework and risk management process. Standards help provide a consistent approach to understanding and managing risk across industry sectors and organizations, including ecotourism, as they provide principles and generic guidelines on risk management. The remainder of this chapter discusses the application of the risk management process in an ecotourism business management context, providing examples, starting with communication and consultation (see step 5.2 in Figure 22.1).

Communication and Consultation (Step 5.2 in Figure 22.1)

Communication and consultation with stakeholders is vital to help with the identification, assessment and treatment of ecotourism risks and is an ongoing function of effective business risk management. Internal stakeholders such as paid staff and volunteers have a wealth of experience that can help identify relevant risks and effective risk management actions. External stakeholders can include government authorities such as



Note: Sections 5.1 and 5.4.1 are not directly referred to in this chapter as these are introductions to the relevant sections from the standards. For instance, section 5.1 is an introduction to the risk management processes, while section 5.4.1 is an introduction to the risk assessment section of the standards.

Source: AS/NZS ISO 31000 (2009).

Figure 22.1 Risk management principles, framework and process

police, health and meteorological agencies, as well as suppliers and clients themselves. These external stakeholders may provide important information that can help assess the likely occurrence and severity of a risk event and its implications. Information may come from secondary data, such as that provided by weather or health agencies, or from primary research with clients.

Effective internal and external communication is important to ensure that stakeholders understand the issues relating to the risk and the process to manage it. Effective communication will ensure that all stakeholders are aware that ecotourism risk management is everyone's responsibility. It is only when all the stakeholders become proactively and cooperatively involved in developing risk management strategies that the level of risk can be reduced. Frontline staff have important interactions with clients and a vital role to play in promoting safety in commercial ecotourism (Rantala & Valkonen, 2011). Buckley (2010) found that good communications were critical in rescuing rafting and kayaking clients from life-threatening dangers. Unfortunately, communication mechanisms are sometimes challenged by ecotourism products and services within remote or inaccessible locations. Communicating and consulting with internal stakeholders (such as volunteers and staff) is not only vital in implementing risk treatment strategies, but

also in the monitoring and feedback stage to help improve future ecotourism risk management plans.

Establishing the Context (Step 5.3 in Figure 22.1)

A thorough understanding of the environment or context in which the ecotourism organization operates is vital in the early stages of risk management. The context includes the financial, operational, competitive, political, social, client, cultural and legal aspects of the organization's functions as well as the goals and objectives of the organization providing the ecotourism experience. From an operational perspective, it includes understanding the type of ecotourism experience offered, the management structure and resources, organizational culture, stakeholder analysis and a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis of the organization in the context of its internal and external operating environment.

The ecotourism context is dynamic with continual fluctuations within the political, economic, environmental, social and technological environments. Managers need to understand these changes and their likely impact on their operations. For instance, climate change may result in a different set of potential risks and the need for risk management procedures to be changed. Further, financial turmoil from the global financial crisis may have an impact on the demand for ecotourism experiences, which may affect business revenue and profitability.

The background and experience of clients is also a particular issue in understanding ecotourism risks. Existing illness or past injury may affect a guest, in particular diabetes, asthma, prior back injuries or other ailments (Beeton, 2001). Qualifying clients through discussions and gathering information on their physical condition, personality and preferences has been recommended for outdoor recreation and adventure tourism experiences (Patterson, 2007; Wilks & Davis, 2000). Operators should remember that clients are often in unfamiliar and unpredictable settings and may lack relevant experience and skills in undertaking the activity (Bentley et al., 2010). The environmental conditions of the ecotourism setting are also important. As Bentley et al. (2010) note, exposure to extreme temperatures was identified as a risk factor in New Zealand but not in Queensland, Australia. Furthermore, a client's knowledge of these conditions will affect their ability and capacity to respond to conditions that they experience.

Understanding the type and nature of an ecotourism operation will give an indication of possible risks that the operator will be exposed to; while the organizational purpose, goals and objectives will indicate what risks can be tolerated by the organization. For instance, if the operator is a private enterprise where individuals live off anticipated profits, then financial risks may be more important than perhaps a national park managed by the public sector whose purpose is to provide an environment for education and conservation.

Risk Assessment (Step 5.4 in Figure 22.1)

Risk identification (step 5.4.2)

A comprehensive identification of risks using a well-structured systematic process is critical. Ideally the identification of risk factors should take place before an ecotourism

experience is offered to visitors. A number of tools outlined below can assist managers to think through the possible sources of the risks, the parties who would be affected and the possible consequences. The approaches used to identify risks include using a work breakdown structure, fault diagram, brainstorming, incident report, scenario analysis, environmental scanning or using an accident potential model (Patterson, 2007) to identify and help evaluate risks and approaches to minimizing risk. Bentley et al. (2010) provide four main types of risk, and through research identified the most frequently identified risk factors from a survey of Queensland ecotourism and adventure operators. Table 22.1 illustrates the four themes (client-related; task and equipment-related; environment-related; organizational/management-related) and the main results of the study.

Project management techniques, such as the work breakdown structure and fault diagrams, are useful for identifying risks and their implications. Risk events or actions can be worked backwards to determine the possible causes of the potential risk effects based on the four categories outlined above. For instance, tracing potential accident risks (such as a fall or exposure to extreme temperatures) back to client, equipment or environmental factors could allow specific management actions to be developed to prevent or reduce the likelihood of these risk factors occurring.

Convening a risk assessment meeting to pool the experience or expertise of staff and volunteers can be useful to identify risks. Brainstorming and testing a range of scenarios of potential risks and their likely impacts can also be helpful (Patterson, 2007). This allows managers and stakeholders to consider possible risks, possible actions and their consequences in advance. The role of experience and the context of the ecotourism operator are crucial in identifying and assessing relevant risks. Previous experience needs to be captured and used to enhance future risk management plans. This highlights the importance of risk monitoring and review both during and after the experience is finished. Undertaking training drills or particular programmes with staff are also useful to determine possible risks.

The main risks in a range of ecotourism types and locations are identified and outlined below to provide an overview of the main risk categories.

Health and safety risks

The ecotourism operator is responsible for providing a safe and healthy environment for staff as well as clients, although the focus of research appears to be primarily related to client risks and safety. Potential threats to the safety of tourists play a major role in visitors' choice of an ecotourism destination (Weaver, 2001). Security in some destinations is problematic, for example, in southern Africa and the Middle East, and may be influenced by political instability and crime levels (Parker & Khare, 2005; Weaver, 2001).

As noted by Fennell (2008), travellers can be exposed to a range of health-related risks from plants and animals in ecotourism settings and venues, as well as from adverse environmental conditions such as extreme weather. In particular, in protected areas dangerous animals (such as spiders, snakes, sharks and bears) may be prevalent, depending on the location. Stomach ailments or other illness may be caused by contaminated food or water. Furthermore, clients may have difficulties in breathing, injure themselves or require urgent medical and first aid treatment. Often, the location of the ecotourism

Table 22.1 Summary of most frequently identified risk factors, and comparison with the proportion of respondents identifying each factor in the most recent New Zealand survey of adventure tourism operators

Risk factor	Proportion of respondents selecting factor (%)	New Zealand study comparison (%)
Client-related		
Clients not following instructions	26	67
Clients not understanding instructions (language)	10	18
Horseplay/showing off	16	20
Level of client skills and abilities	12	46
Level of client fitness/health	20	33
Client experience/familiarity with the task	12	22
Client choice of clothing/footwear	15	–
Client taking unnecessary risks/short-cuts	12	–
Other	12	–
Task and equipment-related		
Activity difficulty level/degree of challenge	10	–
Travelling to and from the activity/transit	5	–
Unusual/unpredicted activity events	40	–
Environment-related factors		
Adverse or changeable weather conditions	40	47
Hazardous underfoot terrain	20	33
Hazardous overhead conditions	5	–
Hazardous wilderness conditions	5	28
Exposure to water/drowning threat	15	21
Rips/water currents	5	–
Exposure to sun	32	–
Exposure to dangerous creatures	15	–
Insect bites	16	–
Other	13	
Organizational/management-related		
Time pressure to complete activity on schedule	15	–
Fatigue/stress due to long working periods	7	–
Insufficient client/guide ratios	2	3
Team dynamics	7	–
Communication problems	9	3
Ability to recruit experienced and qualified guides	19	13
Pressure to operate in sub-optimal conditions	8	–
Failure to identify, assess, control hazards	12	–
Other	12	–

Note: Although the table title does not include ecotourism, 35 per cent of respondents to the Queensland study classified themselves as ecotourism operators. Activities included bushwalking, kayaking, diving, whale watching and scenic flights. In the New Zealand study the most common activities surveyed were ecotourism (20 per cent), horse riding (12 per cent), sea kayaking (9 per cent), multi-adventure (9 per cent), diving (7 per cent) and tramping/hiking (6 per cent).

Source: Bentley et al. (2010, p. 567).

activity may necessitate extensive consultation between ecotourism guide, head office and external stakeholders to ensure this is coordinated.

Bentley and Page (2008) identified activities presenting the greatest risk of injury to participants as well as key risk factors for client injury, and current risk management practices to address these risks. Their study found that in terms of client injuries, the highest ranked commercial adventure activities were horse riding and white water rafting. The study also found unguided/non-commercial adventure activities, notably mountaineering, tramping and mountain biking, to be the major injury concern for adventure recreationalists in New Zealand. Slips, trips and falls (STF) were by far the most common type of injury for adventure and ecotourism operations, while underfoot/STF hazards, changeable weather conditions and clients not following instructions were the risk factors most frequently associated with client injury risk by operators (Bentley & Page, 2008).

Wilks and Coory (2000) found that decompression illness associated with scuba-diving comprised 55 per cent of water-related hospital admissions of overseas' visitors. A major factor identified by Wilks and Atherton (1994) is that many tourist accidents are the result of participating in unfamiliar activities for which they are mentally and physically unprepared. The study undertaken by Bentley et al. (2010) showed that 40 per cent of operators in New Zealand identified clients' lack of familiarity as a risk factor, compared with 30 per cent in Queensland, Australia. Employing inexperienced and unqualified guides who may also lack familiarity with the activity constitutes a further potential health and safety risk. For instance, in the study undertaken by Bentley et al. (2010), 19 per cent of Queensland ecotourism and adventure operators believed this was a major risk factor, compared with 13 per cent in the New Zealand study.

Weather has become a universal issue for ecotourism operators. This is because weather and climate can strongly influence the quality of visitor experiences, as well as the success and degree of difficulty of outdoor activities. As Page and Dowling (2002) suggest, environmental factors can include unexpected adverse weather, sudden weather changes, river flows, temperature extremes and slips and trip hazards. Depending on the nature of the ecotourism experience and setting, frostbite, dehydration and exhaustion can thus be major issues (Beeton, 2001). Sun exposure may also be a problem for clients in certain locations (Bentley et al., 2010), as can cyclones (Weaver, 2008), torrential rain downpours or snow 'white outs'. Early warning systems can help alert operators and clients to natural hazards. As the World Tourism Organization (UNWTO, 1998) identified, the most important way to mitigate risks associated with cyclones is through effective warning systems. However, smaller localized hazard warning and mobilization may rest with tour guides or operators, particularly for adventure and ecotourism activities.

An example of the importance of tour operators and warning systems is the Swiss Canyoning river disaster in Interlaken. A total of 21 people died as a result of a heavy thunderstorm that sent a torrent of water and rocks down the river canyon. Although the thunderstorm had been forecast in weather reports and could be seen from the start point of the trip, the trips down the river were not cancelled despite such warnings. The thunderstorm sent a wall of water through the group, which killed 18 tourists and three tour guides. The company, Adventure World, was found guilty of manslaughter through culpable negligence. Evidence from the trial suggested a lack of training for tour guides

to detect and monitor river conditions and a lack of knowledge of where forecasts could be found. This example suggests the need for adventure tourism operators to carefully consider staff training in accessing timely information and forecasts and detecting possible risks as a result of natural hazards. This is especially important for commercial tour operations as tourists place their trust in tour operators to assess risk and vulnerability on their behalf.

In addition to the concerns over the health and safety of clients, ecotourism managers also have the legal responsibility to provide a safe working environment for their workers, ensuring that they are protected from injury, damage or disease (Fennell, 2008; Patterson, 2007). Hence, workplace health and safety measures must also be in place to protect employees and volunteers. These measures may differ depending on the country where the event takes place and their respective regulations.

External pressures may also create potential health and safety hazards for clients and staff. For instance, management may feel under time pressure to complete activities on schedule or may feel under pressure to operate in sub-optimal conditions (such as having poorly maintained equipment or poorly planned activities for clients).

Task and equipment risks

Task and equipment risks may exist for a number of reasons, with mechanical equipment failure significantly increasing the potential for accidents (Patterson, 2007). Task risks include aspects of the experience or activities that may be desired by clients (such as challenge, peace and quiet or wildlife encounters), as well as appropriate transport to the site (Bentley et al., 2010). Financial pressures in managing parks and protected areas may result in poor maintenance of built infrastructure (such as bridges and platforms). For instance, in 1994 a viewing platform at Cave Creek in New Zealand collapsed killing 14 people. The platform did not meet building standards, and as a result more than 60 structures were closed pending upgrade or removal (Beeton, 1998).

Depending on the nature of the experience, crowding can be a potential risk that may affect client experience and satisfaction. Crowding can be defined as a negative assessment of a certain density level in a given area, and may negatively influence the quality of clients' experience and their activities. A total of 22 per cent of back country hikers in New Zealand suggested that crowding on the walking trails significantly affected their enjoyment (Kearsley, 2000). Due to perceived crowding, experienced domestic hikers were displaced to more remote and potentially unsafe locations to avoid crowded locations at peak hiking periods (Kearsley, 2000). In some circumstances ecotourism clients may expect to see wildlife (such as in whale watching), which can influence their satisfaction and trip experience. However, boat passengers cannot be guaranteed a sighting and in some situations clients are unable to enter the water if a whale is in close proximity.

Client behaviour may also influence the task or activity experience and may create issues and risks for other clients and the operator (Gramann, Bonifield & Kim, 1995; Ward & Roggenbuck, 2003). Some clients may not follow instructions properly and may damage equipment or the setting (the environment) in which the activity takes place. Compliance may also be affected by communication issues between client and staff as a result of language barriers (Page & Dowling, 2002). In certain settings the negative impacts of an ecotourism activity can lead to a lack of local community support for ecotourism activities and result in business failure (Parker & Khare, 2005). In some

circumstances vandalism or non-compliant behaviour may also affect the operator's permits or approvals to use certain sites (such as protected areas).

If clients require specialist equipment, then risks may be as a result of absence of any safety equipment, or the use of poor quality equipment, or equipment that is inappropriate for the conditions. Equipment may not fit clients or staff or can be inappropriate for their skills and knowledge (Page & Dowling, 2002). Depending on the type of ecotourism experience, equipment may range from a backpack to highly specialized oxygen bottles for scuba-diving or hiking in high altitudes. Silva and McDill (2010) found that unanticipated costs, such as equipment failure and higher than expected maintenance repairs, affected ecotourism business operations and the achievement of their business goals.

Legal risks

As mentioned by Patterson (2007), operating an ecotourism business legally and responsibly is the cornerstone of effective risk management. Hazards faced by persons participating in an ecotourism experience can translate into legal risks for operators, especially if it is proven that the organizers have been negligent in identifying and preventing those hazards. Thus, it is essential that operators ensure compliance with the law and exercise duty of care to safeguard all those involved in the activity. This in turn will reduce their risks and potential consequences such as their legal liability.

In practice, this means complying with local regulations and ensuring appropriate licences and permits have been secured by ecotourism operators for relevant activities. Furthermore, regulations may differ between jurisdictions. A number of local regulations that ecotourism operators need to be aware of may include:

- liquor licensing laws
- health regulations
- building regulations
- fire regulations
- police legal Acts (such as vandalism or theft)
- employment law
- local government Acts
- banking Acts
- general contract law
- environmental protection authority regulations.

Scuba-diving has been the focus of considerable attention in some locations. One example is in Queensland, where workplace health and safety legislation has been used to direct the risk management practices of scuba-diving operators (Wilks & Davis, 2000), as well as government licensing requirements and Codes of Practice (Morgan & Fluker, 2006). Despite this there have been cases of negligence amongst scuba-diving operators (see Wilks & Davis, 2000 for examples).

Other ecotourism risks

The types of event risk factors discussed above are certainly non-exhaustive. A number of other risks associated with ecotourism businesses can be identified, including internal

risks and problems such as lack of programme planning, finances, organizational structure as well as external risk factors (see McKercher & Robbins, 1998; Silva & McDill, 2010 for more detail). Further, different operators are exposed to different risk factors and the severity of risks will vary in different contexts. It is therefore vital for ecotourism operators to develop a culture of risk awareness and preparedness, so that they are in a better position to anticipate and manage risks, thereby responding quickly to any incidents, crises or disaster situations.

Risk Analysis and Evaluation

The identification of threats and potential hazards should be followed by an assessment of the probability of occurrence and the severity of the consequences on ecotourism operator goals and strategies. Management will need to rely on foresight and good planning, as well as the implementation of control mechanisms outlined later in the chapter, to reduce either or both of the variables to an acceptable level in order to manage risk. Priorities and actions will be determined following the risk assessment, with special attention awarded to those with negative and severe consequences.

As Fennell (2008, p. 180) outlines, the perceived likelihood and consequence of certain risks occurring can be rated and given a descriptor. It is helpful if descriptors are provided and consideration given to tolerance levels and potential impacts if the risk remained untreated. Table 22.2 provides a hypothetical example of an ecotourism manager's descriptors based on the management of an ecotourism activity.

Following the risk analysis, the next step is to evaluate the risks by determining which ones are acceptable and what needs to be treated. The assessments of perceived likelihood and consequences are then combined to evaluate the likely impact and possible risk treatment options (Figure 22.2). For instance, a risk that was identified to have a likelihood of 5 (almost certain) and a consequence of 5 (catastrophic) would be rated 25 in the matrix, a very high risk. The ecotourism operator should consider avoiding the risk completely, by cancelling/postponing the activity or changing the part of the activity that creates such a high level of risk. By contrast, a risk that has a likelihood of 1 (rare) and an impact of 1 (insignificant) would be rated as being a very low level of risk. Ecotourism managers may decide to retain the risk and develop contingency plans to deal with it should an incident eventuate.

Risk is a subjective concept, and so rating scales are used by managers to try to create a more objective assessment of risk likelihood and consequence. Key questions to help determine the likelihood and consequences are:

- What happens if the risk is not treated?
- Who will it affect?
- Whose responsibility is it to deal with the risk?
- What information do we need to treat it?
- What risks will ecotourism stakeholders accept?

Weightings can be applied to certain risks if they are less tolerated by ecotourism operators, thus increasing their consequences and overall rating, respectively.

Table 22.2 Risk likelihood and consequences rating scales and descriptors

Consequences						
Level	Descriptor	Financial	Safety	Business activities	Social impacts	Reputation/public image
1	Insignificant	Less than $10 000	No injuries	No disruption to business activities	No social impacts	No significant adverse impact on the organizational reputation
2	Minor	$10 001–$100 000	First aid treatment	Minimal disruption to business activities	Minimal social impacts	Adverse impacts on the organizational reputation
3	Moderate	$100 001–$1 million	Medical treatment	Significant disruption to business activities	Significant social impacts	Direct adverse impact on the organizational reputation
4	Major	$1 million–$10 million	Extensive injuries	Major disruption to business activities	Major social impacts	Direct adverse impact on the chief executive officer/ accountable officer
5	Catastrophic	Greater than $10 million	Death	Severe disruption to business activities	Severe ongoing impacts	Extensive damage to organizational reputation

Likelihood		
Level	Descriptor	Description
1	Rare	May occur in exceptional circumstances
2	Unlikely	Could occur at some time
3	Possible	Might occur at some time
4	Likely	Will probably occur in most circumstances

Risk Treatment (Step 5.5 in Figure 22.1)

Risk treatment strategies are considered important to reduce the vulnerability of the operator and assess exposure and potential actions (Fennell, 2008; Wilks & Davis, 2000). Risk treatment measures include four main actions, which are not mutually exclusive. First, for risks of high frequency and low potential severity it is recommended to reduce these risks. Second, risks that are high frequency and high in potential severity should be avoided. Third, those risks that are low in frequency but high in potential severity should be avoided or transferred through the use of third parties such as suppliers or insurance companies. Finally, risks that have both low likelihood and low potential impact can be retained and contingency plans developed to deal with these risks if they eventuate.

This step in the risk management process involves identifying the range of risk treatment options, assessing the options, preparing risk treatment plans and implementing

	Consequences				
Likelihood	1	2	3	4	5
5	Medium − 11	High − 16	High − 20	Very High − 23	Very High − 25
4	Medium − 7	Medium − 12	High − 17	High − 21	Very High − 24
3	Low − 4	Medium − 8	High − 14	High − 18	High − 22
2	Low − 2	Low − 5	Medium − 9	Medium − 13	High − 19
1	Low − 1	Low − 3	Medium − 6	Medium − 10	High − 15

Note: Assessment matrix taken from HB 426:2004 Risk management guidelines companion to AS/NZS 4360.

Figure 22.2 Risk assessment matrix

them by allocating and controlling management resources. Strategies used for managing risks may require additional documents, such as an emergency evacuation plan, visitor management plan, safety communication plan and the development of clear guidelines and codes of conduct for clients and staff. These risk treatment strategies are briefly outlined in the next subsections.

Risk reduction/retention

For brevity purposes risk reduction and retention are dealt with together in this subsection. Prevention and reduction are the first line of defence for ecotourism operators. Planning can help to identify potential risks so that preventative measures can be devised and their effects considered. According to Fennell (2008), if an ecotourism activity is perceived to be too risky or severe, it should be avoided or the risky activity should be prevented through human behaviour or actions. However, not all risks can be easily avoided and hence damage reduction strategies will help to reduce the severity of any potential losses. Such strategies are the most prevalent amongst ecotourism managers simply because many risks have to be retained and potential damage reduced. Therefore, this risk treatment option involves actions taken to lessen or diminish the potential impact of risks on a business.

This could be accomplished through better management, training and emergency response procedures to improve response times to incidents, accidents and crises. Choosing the most appropriate option would also involve a cost-benefit analysis, whereby the cost of implementing each option is measured against the benefits obtained. The operational context and tolerance levels are important considerations in conducting a cost-benefit analysis.

The development, testing and communication of an overall risk management plan and procedures (such as emergency evacuation, equipment maintenance, emergency contacts) are vital. Operational plans should be developed that clearly specify the responsibilities of the team members and how potential risks and hazards should be communicated to all staff. This is particularly important if regulations and laws need to be followed. Buckley (2010) suggests that the communication of health and safety risks is vital, suggesting that guides need strong communication skills.

In many ecotourism experiences the employment of qualified and experienced guides is vital to protect clients from risks (Fennell, 2008; Page & Dowling, 2002). In the study conducted by Bentley et al. (2010), 82 per cent of adventure and ecotourism operators had completed a risk assessment of their activities and developed formal emergency plans or procedures. A total of 75 per cent had undertaken staff/guide training and 60 per cent had completed safety audits or reviews (Bentley et al., 2010, p. 568). Such actions are evidence of a safety culture that is an important part of managing ecotourism (Bentley et al., 2010; Rantala & Valkonen, 2011).

Treating health and safety risks

Ecotourism operators need to ensure that they adhere to occupational health and safety (OHS) standards, providing a work environment that is safe and free of hazards that may cause injury, damage or disease. Clients, and inexperienced guides, may lack familiarity with the setting, or indeed the activity itself. Operators need to ensure that there is adequate food, water and clothing for the conditions and nature of the location. If food is provided as part of an ecotourism experience, then ecotourism operators need to pay attention to hygienic practices to reduce any potential liability from clients due to illness. Buckley (2010) notes that procedures for sanitation and hygiene in the paddle sports industry have become standardized, with operators able to construct camp toilets, wash and clean dishes, separate garbage and keep campsites clean.

Medical and first aid treatment for clients and staff are important to have on hand as minor trips and falls are common. Less common but more severe risks, such as dehydration and frostbite, may also need to be prepared for, depending on the nature of the activity and its location.

Ecotourism activities can occur in sensitive locations that are prone to natural hazards or unpredictable weather. Ecotourism operators should thus monitor weather conditions and communicate any potential risks (such as natural hazards) as soon as possible to guides and clients. Communication and tracking through relevant technologies, such as global positioning system (GPS)-based monitoring and satellite phones may be required in remote locations.

Activities should be matched with the clients' experience level in order to reduce or prevent health and safety risks. Guides are personally responsible for the safety of their clients and should provide briefings and assessment of their clients. For instance, in scuba-diving Wilks and Davis (2000) suggest a briefing should include both an area briefing and a pre-dive safety check. The area briefing should include information on water and diving conditions, potential hazards, precautions, buddy system procedures, signals, entry and exit methods and emergency procedures (Wilks & Davis, 2000, p. 597). Buckley (2010) also reports that most rafting and kayaking tours also included an initial

briefing related to operating the craft and safety procedures. Written, audio or video information for clients before the activities were undertaken was only reported by 50 per cent of ecotourism and adventure tourism operators according to Bentley et al. (2010). This is clearly an area that can be improved to reduce potential health and safety risks as well as task and equipment risks.

Treating task and equipment risks

As outlined earlier, task and equipment risks are related to the on-site ecotourism experience as well as transport to and from the setting or venue. The development of and adherence to voluntary codes of conduct and regulations are important to reduce or prevent risks to both operators and clients at ecotourism settings. Cater and Cater (2001) describe the case of Pulau Sipadan, off the eastern coast of Sabah, Malaysia, which introduced restrictions in 1998 on the number of visitors allowed. These regulations were set at a quarter of the previous daily peak numbers in order to protect the island's population of turtles and a dwindling supply of fresh groundwater. In Finland the Product Safety Act requires wilderness safari companies to develop control mechanisms to guarantee safety (Rantala & Valkonen, 2011), while regulations exist to control whale watching activities in many countries (Weaver, 2008). For instance, the National Marine Fisheries Service in the USA recommends that boats should not approach within 100 yards from any direction or move faster than the whales (Weaver, 2008, p. 249). Failure to adhere to regulations or even voluntary codes of conduct can result in operators losing relevant permits or licences to operate.

The provision of information or persuasive communication may be required to reduce potential disturbance to the environment and reduce the non-compliance behaviour of both commercial and independent ecotourists (Ham, Weiler, Hughes, Brown, Curtis & Poll, 2008). This is seen as a more indirect visitor management tool and less authoritative. Signage can help to protect visitors from potential dangers and risks and also improve their experience by providing useful interpretive material. For maximum effect, signage must be clear, highly visible and readily recognizable.

To reduce congestion and overcrowding on hiking trails, and perhaps even dissatisfaction, national park managers may implement de-marketing activities encouraging dispersal and matching of client experience, motivations and needs with that of the setting characteristics. Several visitor management tools are available for this purpose, including the Recreation Opportunity Spectrum or the Tourism Opportunity Spectrum (see Butler & Waldbrook, 1992). An understanding of the physical as well as the psychological carrying capacity is also required in order to manage visitors in national parks. Spatial planning through zoning based on carrying capacity and visitors' needs are commonly used by national park managers (see Fennell, 2008 for a good overview of planning for ecotourism).

Equipment must be appropriate for the conditions and planned activities to be undertaken (Page and Dowling, 2002). According to Bentley et al. (2010) 82 per cent of operators had undertaken regular maintenance checks on plant, vehicles and equipment. Maintenance programmes are required for equipment and transport. These may need to be undertaken prior to an activity (such as testing boats and vehicles as well as specific equipment or infrastructure). Activities at the site need to be supervised

to ensure that the operator has discharged their duty of care and fulfilled their legal requirements.

Treating legal risks

Compliance with statutory and regulatory laws not only reduces risk for the ecotourism operator, it illustrates care and respect to those participating in the experience. Having written contracts and legal documents for all activities related to the operation is essential as it helps to safeguard the operator by specifying the responsibilities and risks assumed by each party, thereby limiting legal liability.

Contract law and negligence are particularly important for ecotourism operators. Although contract law may differ between countries, generally speaking, duty of care is widespread and requires both parties to take reasonable care. Wilks and Davis (2000) outline the implications of duty of care and negligence in more detail in the context of scuba-diving.

Risk transfer

Risk transfer (or diffusion) is a process to spread out potential risks. This often involves transferring the risk to another company contracted to perform certain tasks and responsibilities or to clients themselves. This could also include storing equipment at different locations, subcontracting transportation to the site or location or insisting clients sign waivers to reduce legal liability.

The use of insurance can protect against financial issues, business interruption due to bad weather or personal injury or sickness, contractual disputes, loss and theft to property, and the risks of being held responsible for damage or injury to others. Many organizations use insurance as their only risk management strategy. However, there is increasing evidence to suggest that unless organizations are able to demonstrate that they have adequate risk controls in place, it will be difficult to obtain insurance at an affordable price or perhaps even at all (Beeton, 1998, 2001; Patterson, 2007). Further, as Patterson (2007) suggests, insurance companies may consider ecotourism operators as high risk and charge higher premiums. A reduction may be possible if a comprehensive risk management plan is provided to insurance companies

Risk avoidance

If perceived risks are likely to be high in both frequency and severity, it is recommended that the activity or programme is restricted, limited, postponed or cancelled (Fennell, 2008). This may provide short-term inconvenience to clients and staff, but may be the best decision considering possible detrimental impacts if a risky activity or programme was allowed to be undertaken.

Monitoring and Review (Step 5.6 in Figure 22.1)

In light of changing circumstances, risks and the effectiveness of control measures should be constantly monitored. Reviewing strategies is also an integral part of the risk management process to assess the effectiveness and feasibility of the risk management treatment plan. For effective evaluation and feedback, long-term learning from current experience

needs to be captured and understood in order to ensure that (1) the same mistakes/problems do not reoccur and (2) new strategies are increasingly better informed.

Preskill and Torres (1999) argue that evaluative enquiry is needed for organizations to critically reflect on their strategies and their success. This requires that organization members 'critically consider what they think, say and do in the context of the work environment' (Preskill & Torres, 1999, p. 92). They use this wording because evaluation is used to seek answers and information about an object or outcome, which should include not only the action or object itself, but also the values, standards and assumptions that relate to it. By critically evaluating all the aspects of risk strategy formulation, implementation and outcomes, it should be possible to gain important knowledge for the future and change the currently held collective mental models of organizational members.

Mechanisms often used to ensure ongoing review include setting up post-review meetings to de-brief and assist managers to evaluate strategies and avoid future repetition of mistakes. Incident reports that document the causes of incidents and actions taken during activities or programmes should be assessed at the meetings to help identify areas that need improvement or adjustment (Patterson, 2007). A range of stakeholders, both internal and external, should be consulted, and where appropriate may include participants, police, emergency services and so on. Workshops and seminars with ecotourism managers can also be useful in communicating potential risks through previous experiences. Ecotourism associations may be best placed to organize and communicate such seminars or workshops to ecotourism operators.

CONCLUSION

As outlined in the introduction to this chapter, the nature of ecotourism experiences creates a number of internal and external risks for managers. Potential risks cover all areas of an operation including health and safety of guests and workers, task and equipment risks and compliance with local laws and regulations. Risk management assists ecotourism managers in devising and conducting operations in the safest possible manner, while mitigating losses. It is essential that organizations formally plan for and develop strategies to deal with the possible consequences of potential events. It is hoped that this chapter has made the reader aware of the importance of risk management and the process that can be followed to systematically manage risks in an ecotourism context, regardless of the size or nature of the ecotourism operation.

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23. Ecotourism: planning for rural development in developing nations

Anna Spenceley and Edward W. (Ted) Manning

INTRODUCTION

Tourism, including ecotourism, can be a strong component of development for rural areas, taking advantage of ecological and cultural assets in areas where such resources may be among the only ones available. To achieve this goal, tourism must be planned as a component of overall development planning at all scales. This chapter outlines how ecotourism planning can be used as a tool for rural development in developing countries. The chapter establishes the characteristics of good planning processes in natural destinations and for ecotourism enterprises, while outlining some of the challenges that can arise. Best practice planning processes and programmes incorporate all elements of sustainable development: economic, environmental and social considerations. The discussion concentrates on implications for local economic development while sustaining the resources on which ecotourism is based. Key factors such as strengthening opportunities for local employment and training, enterprise ownership and revenue generation through supply of products and services are addressed. Information is also provided to guide planners in sourcing useful planning approaches and tools. Ecotourism can benefit from integrating tourism planning into sustainable development planning at all scales, with particular attention to the sensitivity of the cultural and natural assets to which this form of tourism is more strongly linked than others.

PLANNING FOR ECOTOURISM

Effective planning of ecotourism is critical to the establishment of a platform for sustainable and viable development. Plans that address elements of rural development and local economic development within destinations can provide a road map for creating local employment, opportunities for local producers and service providers, and for local ownership and management of enterprises. Ecotourism planning is necessarily embedded within any broader process of planning of a destination where this exists.

The planning of ecotourism, as defined earlier in this volume, needs to address elements of the natural environment, culture, education, awareness raising and local socio-economic benefits. Ecotourism planning necessarily occurs within the ambit of all the factors that define sustainability, and must cover social, environmental and economic factors affecting ecotourism. Some of these are examined in greater detail in other chapters. This chapter focuses on ecotourism planning at a destination and enterprise level, and specifically on rural development.

Typically the questions that ecotourism planning addresses in relation to rural development are:

- What is the policy and planning context for tourism in the destination (for example, is there already a destination tourism or economic development masterplan or strategy)? What are the national and local planning regulations?
- Who are the stakeholders at all scales that need to be invited to participate in ecotourism planning processes (for example, government, non-governmental organizations (NGOs), development agencies, business organizations, conservation agencies, civil society groups and tourists)?
- Are there any ecotourism or other businesses operating in the destination that can be linked together (for example, tour operators, guides, restaurants, transport, accommodation)?
- What supporting products are available or could be created or supplied locally (for example, food, beverages, furnishings and décor and construction materials)?
- What services are available, or could be made available, in and around the destination (for example, transport, maintenance, construction, plumbing, laundry, electricians and security)?
- Where can tourism activities be located so that they create the greatest opportunity for residents in the destination and the least negative effects (for example, siting an ecotourism lodge on community land or near a village that can supply products, services and employees or separating potentially disruptive or noisy activities from residential or culturally sensitive areas)?
- What skills are available in and around the destination, and what additional skills need to be provided through training and capacity building?
- What are the current livelihood activities and industrial sectors in the region (for example, what already exists, and can be enhanced, influenced or mobilized to support tourism)?
- What are the destination inhabitants' perceptions and/or previous experiences of tourism (for example, it may be positive, negative or mixed, depending on the history of the area)?
- What are the current barriers to the establishment of successful and sustainable ecotourism at the community or enterprise scale?

Planning for ecotourism occurs at many scales. At the national or regional scale, the policies and programmes that permit or foster ecotourism development need to be in place. At the scale of the destination or tourism site, social, economic, cultural and infrastructural plans directly affect ecotourism's development and sustainability. Within this framework, enterprise-level planning including siting, structural design, facilities design and management, and operational management all need to be considered in the planning process. What is permitted or excluded becomes the palette for enterprise development within the destination. At all scales, elements of social, cultural and environmental impact analysis are also important parts of the overall planning process.

Some key challenges that relate specifically to ecotourism include the following:

- Most ecotourism occurs outside areas that have formal planning – in new, remote or relatively unoccupied areas, and is heavily dependent upon the cultural and or natural conditions of these areas remaining essentially intact.
- Baseline information on social, economic and environmental conditions may not be readily available, particularly in remote regions of developing nations.
- The act of establishing or running an ecotourism initiative or enterprise may itself adversely affect some of the attributes of the natural or cultural resource on which it depends.
- Expertise may not be available, including that needed to design programmes or ecotourism projects and enterprises and to provide training and management.
- Policies and programmes at national regional or destination levels may not be designed with small-scale or ecologically sensitive attractions or enterprises in mind. Planning may need to deal with a range of barriers (natural, cultural, economic and institutional) that must be overcome to establish successful ecotourism.
- Where local entrepreneurs wish to initiate ecotourism, they may lack the capital and knowledge base to succeed.

A typical ecotourism planning process would follow a series of steps and is ideally an iterative process that includes setting goals and objectives, planning, implementation and monitoring indicators (Figure 23.1). The goal setting and planning phases are normally part of the traditional planning process, leading to implementation. These are delineated in greater detail in the following subsection on destination-level planning

Some characteristics of the most effective ecotourism plans are: a desire by destination stakeholders to create and use a plan; active stakeholder participation in the planning process; practical and realistic objectives, targets, timeframes and budgets; short, simple and easy to use documentation, including maps and illustrations; clear tiering of

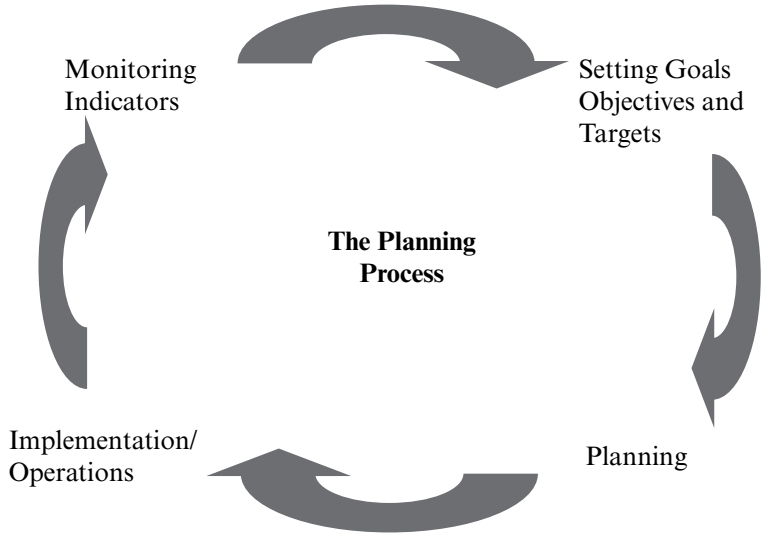

Figure 23.1 Typical planning process

destination-level planning with suitable regulations and programmes at the enterprise level; roles and responsibilities of stakeholders in implementing the plan are agreed and documented; monitoring and evaluation processes are integrated within the implementation of the plan; and effective re-planning and adaptation to changing circumstances.

There are a series of publications and guidelines that have been produced to assist destinations and enterprises in developing ecotourism. Some of the key resources are outlined in the bibliography section of this chapter.

The next section describes approaches that can be used for planning ecotourism that incorporate these elements and that can stimulate rural development at the destination and enterprise levels.

APPROACHES AND TECHNIQUES FOR PLANNING FOR ECOTOURISM

Destination-level Planning

Tourism of all types often 'just happens'. Individuals start a bed and breakfast. Fishermen sell a few tours of the mangroves to visitors or someone sets up a food stall next to a waterfall. However, without the capacity to plan and manage tourism, what 'just happens' may imperil the resources on which the tourism is based and the fate of the community depends, and may undermine the capacity to sustain the enterprise and the community. Ecotourism is, by definition, more sensitive to disruptions in nature and culture, essentially selling experiences that depend on the integrity of the ecology and community. That is why planning at the destination level for ecotourism is so important.

Planning for ecotourism is a subset of overall tourism planning and also covers elements of community planning and ecological planning. At the same time, the places where ecotourism is proposed are very often outside the planning framework of even the more developed nations – in rural and remote areas, small communities and unorganized areas. Yet ecotourism is often identified as a promising means to foster development in these same areas and potential tourism assets (natural or cultural) are viewed as the primary resources on which development can be based. It is often easier to see the interrelation of society, economy and environment in the context of developing areas but the ability to capture these and effectively plan within them is often severely limited.

The steps in destination-level ecotourism planning (after WTO, 2004, p. 23, which refers to the steps in destination planning) include the following:

- definition/delineation of the destination/development area and identifying the conditions present.
- establishment of the participatory planning process.
- formulation of vision and/or what is wanted for the destination.
- initial assessment and analysis of assets, risks, impacts (situation analysis that may involve a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis for ecotourism and review of barriers at the destination level).
- setting up ecotourism and ecotourism-related objectives (for the short, medium and long term according to priority needs).

- formulation and evaluation of strategies targeting ecotourism objectives.
- formulation of action plans and specific projects based on the optimal strategy (which will include many projects that occur at the enterprise level).

This is followed by implementation and evaluation, which may then lead to re-planning. In practice several fundamental principles underlie the planning of ecotourism:

- Science, including social science knowledge, is critical to understanding the strengths and weaknesses of a destination relative to possible tourism products.
- The precautionary principle needs to be respected particularly where the social, cultural or ecological sensitivity of the key assets is not well understood. For example, how many tourists can walk by a nesting site before a rare bird decides to leave or not to breed, or attend a cultural event before it is changed or abandoned?
- It is important to anticipate and prevent damage, whether to the community or to the system. Once the assets are damaged or degraded they are often very difficult to repair, as is the reputation of tourism that depends on them. Planners should try to reduce the physical impact of each tour, each tourist and any structures.
- Ecotourism planning needs to be done in conjunction with other stakeholders, and not in isolation. Those who also use the resources need to be involved. Ideally, ecotourism is planned jointly with those who manage the resources (often industry sectors like fishing or forestry, protected area managers and community organizations). Only the community itself may be able to define which assets or which social mores are important to them.
- All stakeholders should be invited to become involved in the process. Sustainability requires maintaining the values of all users (for example, co-management of tourism by the resort operator and the community, resource sharing agreements). However, a pragmatic approach is needed, since it may be hard to achieve engagement by all stakeholders given their other priorities.

Establishing the conditions for successful ecotourism

At the destination level, planning for ecotourism involves establishing the framework of policies, laws, infrastructure and related conditions that permit successful ecotourism. This involves efforts to sustain the ecological and cultural conditions that allow enterprises and attractions to be established and be economically successful. These are normally congruent with the conditions that permit successful rural development. In fact, in most cases community planning, rural planning and ecotourism planning at the community or regional level will occur together (Box 23.1).

Where there is a formal planning process in place at the community or regional level, the challenge is to integrate ecotourism objectives into that planning process; where there is no plan in place, work must focus on the creation of such a plan with ecotourism activity as a central component. Where there is no planning capacity, effort needs to focus on the removal of barriers to ecotourism and the creation of partnerships with other tourism, community, economic and environmental sector representatives who share and use the community or environment. In developing countries much ecotourism will occur outside areas subject to a formal planning process, even though at the national or regional scale some project review capability may exist or integrated approaches to, for

BOX 23.1 CAPACITY FOR GREENING

It is very difficult to undertake green activities when the key physical and human infrastructure is not in place. For example, the initiative by the Association for Caribbean States to establish a Sustainable Tourism Zone for the Caribbean found the lack of any recycling capacity on most of the islands meant efforts to separate and recycle waste were not feasible (ACS, 2004). Similarly, in United Nations World Tourism Organization (UNWTO) Sustainable Destination workshops in Asian, African and Latin American destinations (for example, Manning, Diaz, Norman & Manning, 2004; Manning, Vereczi & Macatuno, 2008), the absence of waste collection, recycling, waste treatment, as well as the paucity of expertise in the destination were serious barriers to the greening of the destination and any enterprises in it. The recent United Nations Environment Programme (UNEP) study on the green economy has shown that many barriers exist at the state and destination level that impede greening of any sector, including tourism. The work to adapt this study to Small Island Developing States has identified barriers and opportunities that affect these states (UNEP, 2012).

example, coastal zone management or park management may have some influence on the development of the area in question. Recent work in development of coastal tourism in African countries under the United Nations Industrial Development Organization (UNIDO, n.d.) has revealed that a majority of the areas where new ecotourism development is desired fall outside any mandates for urban or rural planning and are often outside any defined local jurisdiction. Any planning that does take place is done by the proponent, and infrequently subject to effective government oversight. It is not enough to elucidate plans; effort is also needed to address provision of the regulatory framework, human and financial resources and access to a range of skills including marketing and product design for the community and for ecotourism enterprises.

Informing the planning process

The initial step in destination planning is to collect and analyse information on the factors likely to be of importance in sustainability (Manning & Dougherty, 2000) such as:

- inventory of the biophysical assets of the area (for example, endangered species).
- clear definition of the cultural assets of the area (for example, heritage buildings).
- former and current use of such assets (for example, land use, damaged sites).
- natural hazards (for example, avalanche zones, flood plains).
- current land use controls (for example, zoning, easements, designations, habitual uses).
- governance structures and systems (for example, from any local, regional, national and international organizations with an interest in the area).
- identified values associated with the assets and perceived limits to acceptable change related to them.

Ecotourism is frequently in remote areas or in small communities, where information of this type is difficult to obtain. An initial scan of existing materials can be followed by a gap analysis with supplementary data gathering to fill the gaps (possibly done in coordination with the ecotourism enterprises themselves).

Sensitivity to change

In their work on planning tourism in sensitive areas, Manning and Dougherty (2000) examined the factors that can lead to successful and sustainable tourism. In this work sensitivity was seen as a critical factor, where an integrated planning approach was based on an understanding of the cultural and ecological factors and their sensitivity to different levels of change. Any destination's sensitivities to change are based on the assets it contains, the numbers and activities of the users and the attitudes of each user. The ecosystems at any destination have the capacity to serve a finite range of demands. This fact is fundamental to how we define the destination's capacity to support different types and levels of tourism, which vary depending on the needs and wants of the users of the ecological and social systems. The cumulative demands of all users, residents and tourists, can stress the ecology and society of a destination. The changes residents and visitors are willing to accept determine whether the development will succeed over the long term. Similarly, the ecological conditions will also define what is sustainable. In the following subsections the factors most relevant at the enterprise level are covered in detail but together these need to integrate well with the destination-level planning process. This will usually involve collaboration between officials, ecotourism organizations and enterprises. A good source for guidance for this type of participatory process is the UNWTO guidebook (WTO, 2004) and the work by Jamieson (2001) on community tourism planning.

Participatory approaches

Any attempt to identify factors for success in ecotourism planning must consider the different scales at which ecotourism occurs. Most ecotourism is small, often involving single enterprises and attractions or small clusters of enterprises that share a community or ecosystem.

At the site or destination level, planning for ecotourism is a form of risk management. Planners must ask: 'What is of value, what is worth keeping and what do we have to do to protect it?' The answers will vary. Tourists may come with their own particular wish lists and expectations while the values of residents, government officials, the private sector and NGOs may differ significantly. Planning must take into account all these value sets, examining what is negotiable and what is not. A broad consultative approach such as that employed in the UNIDO Coastal Tourism project for Africa (see http://coast.iwlearn.org/project-documents-reports) or in the UNWTO destination case studies (see WTO, 2004, Part 2 Indicators Development Procedures and Part 6 case studies) can ensure that all relevant values are considered in plans and identify who may benefit from alternative types of tourism.

Manning and Dougherty (in press) ask: 'How can the host community best address the complex question of sustaining many values at once, obtaining the most benefit with the least cost, maintaining competitiveness on a sustainable basis, and benefiting the tourism industry and the host community economically, socially, and ecologically?' Do we eat

BOX 23.2 EFFECTIVE CONSULTATION

In its approach to destinations, UNWTO defines a participatory process which:

- identifies all potential stakeholders
- seeks input from all regarding their knowledge and concerns
- brings stakeholders (individuals, officials, private sector NGOs and scientists) together to deliberate options and make recommendations
- establishes an ongoing dialogue throughout
- monitors results and reports them to all.

This approach is elaborated in the UNWTO guidebook (WTO, 2004, pp. 26–32). See also Jamieson (2001) for a good model for local-level consultations.

the fish or show them to tourists? Can we use the fishing boats in the off season as tour boats? Will the community still have good access to the beach if a resort is constructed? Will we let tourists in the church or mosque, and when? However, tourism that respects the definition of ecotourism used in this book needs to be able to answer this question, hopefully to the benefit of all stakeholders. In defining the key values, niche markets can also be defined, ranging from viewing of specific species or village ceremonies to activities that will directly benefit conservation through participation of visitors in village activities. Links to tools and guides to participatory approaches in planning can be found at the end of this chapter (Box 23.2).

Criteria for sustainability in destinations

The recent work by the Global Sustainable Tourism Council has produced lists of criteria and indicators that can be used to define sustainable destinations (and enterprises within them). While aimed at all destinations, these can be used as a basic checklist for those factors that need to be considered in the overall destination planning process. Key factors for ecotourism include the planning and effective management of basic resources such as water and energy; the planning of the tourist offer; marketing means to retain economic benefit within the destination; means to ensure participation, local access and satisfaction; and effective measures to protect critical resources, sensitive sites and areas impacted by tourist activity. Also at the destination level is a need to provide support mechanisms for individual enterprises entering into ecotourism including a framework of regulations that may help guide their activities, relationships with the local community, employment procurement practices and contributions to the general welfare of the destination. In a review sponsored by the World Wide Fund for Nature of best practice in ecotourism for application in Cuba and the Caribbean, a tabular representation of best practice in tourism across many different certification approaches was identified and can be used as a source of information on best practice at the local destination scale, although the execution will normally occur at the enterprise level (Box 23.3). This list can be downloaded from http://www.tourisk.com.

BOX 23.3 MALDIVES ECOTOURISM

The Maldives have fostered ecotourism for many resorts (from simple beach huts to some of the most luxurious in the world) by setting strong rules at the national level applicable to each new island development. They have made environmental factors important to the approval process for new resorts, requiring resorts to be designed with minimal impact on the reefs, aquifers on the smaller islands, no building higher than the palm trees, no removal of vegetation, coral or sand, all garbage to be removed, zero discharge of sewage into the ocean, ecologists on staff and cultural sensitivity to native communities. Several resorts have received international recognition for best practice. Key has been the destination-level framework for resort and island planning that promotes excellence at the enterprise level.

Source: Maldives Environmental Planning Act 1993, http://www.agoffice.gov.mv/pdf/sublawe/Environment.pdf and Maldives Third Tourism Master Plan 2007–11, http://www.tourism.gov.mv/downloads/ttmp.pdf.

Integrating Ecotourism Planning into Overall Planning

In practice, the planning of ecotourism seldom occurs as a separate entity at the destination scale. Some destinations like the island of St John in the US Virgin Islands (http://www.virginisles.com/ecotourism.php), the Maldives (http://www.agoffice.gov.mv/pdf/sublawe/Environment.pdf), the island of Nosy Be in Madagascar (EDSA, Détente Consultants, GLW Conseil & Spenceley, 2005), the district of Vilanculos in Mozambique (EcoAfrica, 2009) or the destination of Bwindi National Park in Uganda (ESDA & Spenceley, 2004) address ecotourism at a regional or national scale. They also provide a framework that they expect individual enterprises to meet – physical planning occurs at a more general scale, but with programmes designed to foster ecotourism enterprises. At a national scale, NGOs may be important to ecotourism planning and development. For example, in Kenya the Ecotourism Society is active in supplying planning and management support to individual communities that may wish to develop ecotourism products. Most examples of successful regional or destination-level planning for ecotourism have been in areas where, for example, a national park or a major attraction has provided the focus for nature-based planning including tourism (such as Kangaroo Island Australia and national parks in many nations).

In conclusion, ecotourism planning faces many challenges. Since ecotourism usually occurs in remote and unorganized areas, often the most simple planning process will be the most important. At the community or destination level, plans need to deal with the most important risks and barriers to ensure that the assets critical to ecotourism are protected. Regions need to ask whether they are tourism ready and can they provide basic support to the enterprises within them. More so than in more developed areas, resources will likely be scarce and possibly unobtainable. In particular, financial resources and expertise may be difficult to find. For this reason, communities who wish to develop

ecotourism products should use the planning process as a reality check and a means to garner partners to make ecotourism a success at the community or regional levels.

ENTERPRISE PLANNING

At the micro level, individual enterprises create the building blocks towards rural development in destinations. Individually, tourism operations can create tangible economic benefits within local communities through their procurement and employment practices. If many tourism businesses in a destination stimulate linkages with local entrepreneurs and businesses, they can cumulatively create significant changes in the local economy of a destination. Planning for individual ecotourism enterprises follows the following general steps:

- initial idea or concept
- feasibility study
- business planning including market research
- infrastructure design (with an architect)
- environmental and social impact assessment
- construction
- business registration and licensing
- recruitment of employees and training
- marketing and promotion
- launch and operation.

The way in which ecotourism planning incorporates rural development elements largely depends on two key factors: the planning requirements of the destination and the knowledge and interest of the developer in addressing rural development issues.

As defined by international organizations like the Global Sustinable Tourism Council, sustainable tourism necessarily addresses a broad range of ecological, economic and social issues and ecotourism is a distinct subset, with even more direct links to the community and natural assets it targets. Therefore, the planning of ecotourism enterprises must explicitly address the range of issues, from cradle to grave, that are identified in Box 23.4. While there are some generalities, due to the unique ecological and cultural circumstances of each enterprise the specific requirements for enterprises to meet will be different in different locations. As noted earlier, many places where ecotourism enterprises are established do not have formal plans while other destinations may have specific requirements to be met.

As an example of planning requirements in destinations, some planning authorities require that ecotourism enterprises incorporate local economic development within their planning processes. At the same time, each enterprise should carefully consider in the planning process the list of criteria identified in Box 23.4. This involves sound design, site planning, design of attractions and experiences, establishment of positive relationships with the entire chain of supply for tourists and materials, control of impacts associated with resource use, waste management and use of community resources, and the establishment of strong links to partners both in tourism and allied or competing

BOX 23.4 BEST PRACTICE IN ECOTOURISM – AS DEFINED THROUGH CERTIFICATION PROGRAMMES

A study done by Tourisk Inc. and World Wildlife Fund Canada compiled standards used for ecotourism certification by several of the leading organizations offering certification for ecotourism. It compares Green Globe 21, Certification for Sustainable Tourism, Central America Audubon Green Leaf (Canada), Green Tourism Business Scheme (Scotland), The Swan Ecolabel (Nordic) and Blue Flag (Caribbean). Combined, these organizations cover criteria from planning to project/product planning and design, construction, sewage/liquid waste management, water conservation, energy conservation, air quality, noise, solid waste management, materials reuse and recycling, products and purchasing, food sourcing, reduction/use of waste food products, beach management, community relations, partnerships, cultural sensitivity, environmental management systems, training, operator behaviour, wildlife conservation, natural experiences, marketing, guest education, tourist satisfaction and the maintenance of a monitoring programme. These constitute a significant menu for enterprises that wish to achieve recognition as ecotourism properties or activities, but also help to identify what is meant by best practice in ecotourism. Comparative results can be accessed at http://www.tourisk.org/content/projects/downloads.htm.

enterprises. Commercial sources (for example, work by Hitesh Mehta or Hector Ceballos Lascurain – available online) have defined the components of good ecolodge design and firms like these provide commercial assistance in the development and design of ecotourism products. Another source that helps define the key components of built ecological resorts is http://www.tourisk.org/content/projects/Resort%20Best%20Practice%20Evaluation%20Criteria.pdf, which discusses best practice in resort design. Another strong source for information about planning and management of environmentally sound tourism is the tourism section of the 2011 United Nations *Green economy report* (particularly section 4), which discusses overcoming barriers to the greening of tourism (http://www.unep.org/greeneconomy/Portals/88/documents/ger/GER_11_Tourism.pdf).

There are many models of ecotourism enterprises that can work alone or with local jurisdictions or partners to plan and deliver ecotourism products and each may have different requirements, some of which favour sustainable rural development. For example, South African National Parks (SANParks) developed a programme of private concessions, or public–private partnerships. This programme was preceded by a change in policy that allowed the private sector to invest in, and operate, tourism within the national parks (a realm that had previously been reserved for government). The initiative was driven by the need to stimulate investment that was ecologically sensitive in protected areas. Prospective concessionaires not only submitted financial bids, but also environmental and socio-economic proposals (Spenceley, 2004). By 2007, this programme had led to an increase in tourism infrastructure investment in national parks of US$14.7 million by the private sector, an extra 620 jobs and a guaranteed spend of

US$1.6 million per year in local communities (Varghese, 2008). Below are illustrations of the types of rural development plans that concession bidders made (Spenceley, 2004, pp. 275–6):

- Food production. One bidder proposed the development of an irrigated community garden, from which they and other lodges could purchase fresh produce. Another included a proposal for a community fishing project, through which the community could charge visitor entrance fees and also sell fish.
- Maintenance/transport. A bidder proposed a joint venture company with a local community, which would service all staff transport and maintain buildings and roads.
- Laundry. A bidder proposed to develop a laundry that would provide salaries of around R50 000 (approximately US$5700 in 2002) for local community members – 10 per cent of the equity would be held by the local tribal authority.

Ecotourism enterprises can either incorporate rural development options during their planning and design phases or may increase their positive contribution to the local economy and to rural development over time as they become established. Some of the means that can be employed include: equity structure and partnerships; employment, training and advancement; procurement of products and services; and philanthropy and corporate social responsibility. These four options are described in more detail below.

Equity structure and partnerships

Different forms of equity structures have different levels of risk, responsibility, investment and potential benefits for both the private sector and their partners. Partners may include collective representatives of local communities (for example, Pafuri Lodge with the Makuleke; South Africa: Honey, 2008) and/or government institutions (for example, Rocktail Bay, South Africa; Poultney & Spenceley, 2001). Enterprises may also be completely private sector (which is the norm) or may be completely owned by community-based entities (for example, Amadiba Adventures; Ntshona & Lahiff, 2003).

One type of partnership that is increasing in prevalence in developing countries is joint ventures. Joint ventures can be described as business activities undertaken between two or more parties for their mutual benefit. The venture may be a formal contractual partnership or a more simple operating business agreement between the parties. The essence of a joint venture is that mutually beneficial commercial operations can be developed through pooling various skills and resources between joint venture members (Spenceley, Relly, Keyser, Warmeant, McKenzie, Mataboge, Norton, Mahlangu & Seif, 2002). In such partnerships, communities may bring land and wildlife to the partnership and/or funds sourced from donor agencies or NGOs, while the private sector brings business acumen and linkages to the market.

During the planning of joint ventures, ecotourism planners should consider the following (Spenceley et al., 2002):

- Preferentially enter into agreements that directly benefit local communities and conservation through the business and land tenure arrangements:
  - Avoid token equity arrangements, and ensure that sharing in the venture is

matched by an input of land, lease rights, expertise, labour, joint management, capital or combinations thereof.
    - Develop partnerships in which communities have a significant investment and in which they can play substantial roles in management through appropriate training and capacity building.
    - Link rights and responsibilities in situations where communities are providing resources or investment into tourism operations, in terms of community equity and shareholding in the companies.
- Obtain legal advice to ensure transparent contractual agreements regarding responsibilities of stakeholders, risk sharing and equitable sharing of profits, dividends, management fees, preferential loans or any other benefits extending from a joint venture enterprise.

Employment, training and advancement

For any ecotourism business, the means or procedures through which employees are recruited, selected, remunerated, trained and empowered will have significant implications for the local economy and stability. For optimal results during planning and operation, they should aim to (adapted from Global Sustainable Tourism Criteria, 2011; Spenceley et al., 2002):

- Recruit and employ staff in an equitable and transparent manner.
- Ensure consistency, transparency and fairness in recruitment and employment (the enterprise should lay out its human resources policies for all staff to view, in line with national policy).
- Encourage recruitment and training for people living in local communities, particularly those affected by wildlife or access to natural resources that the enterprise depends on.
- Go beyond the standard minimum wages for the region, and transparently link wages to positions and experience, rather than gender or race.
- Minimize the seasonality of employment.
- Promote the human and career development of local people, and especially women and members of minorities.
- In collaboration with staff, consider developing a written policy for equal opportunities in employment and training and ensure that all staff are aware of its contents (for example, see Ecole Hôteliére de Lausanne, 2004 for useful vocational training guidance).
- Prohibit child labour, forced labour and sexual exploitation of staff (Box 23.5).

Procurement of products and services

By purchasing products and services within the destination it operates in, ecotourism can support economic development and poverty reduction locally. The Global Sustainable Tourism Criteria (2011) describe basic guidelines for sustainable tourism enterprises, which include:

- Local and Fair Trade services and goods are purchased by the business, where available.

BOX 23.5 RECRUITMENT AND EMPLOYMENT AT ROCKTAIL BAY, SOUTH AFRICA

At Rocktail Bay in South Africa (http://www.rocktailbay.com) the lodge manager approaches the local community leader (Induna) regarding vacancies. The Induna then puts the names of all interested people in a hat, and draws a selection of names at random. The people whose names are chosen qualify for an interview, and the most suitable person is selected for the position by the lodge manager. The Rocktail Bay method has resulted in 83 per cent of staff being local residents from nearby villages of Mqobela or Ngwanase. Recruitment and selection procedures can have critical impacts on the level of power held by certain families and groups within the staff and the wider community, and therefore this is a fair mechanism that does not favour particular elites.

Source: Poultney and Spenceley (2001).

- The company offers the means for local small entrepreneurs to develop and sell sustainable products that are based on the area's nature, history and culture (including food and drink, crafts, performance arts and agricultural products).
- The purchase of disposable and consumable goods is measured, and the business actively seeks ways to reduce their use.
- The business uses elements of local art, architecture or cultural heritage in its operations, design, decoration, food or shops, while respecting the intellectual property rights of local communities – historical and archeological artefacts are not sold, traded or displayed, except as permitted by law.

Even small tourism enterprises can have a considerable amount of buying power especially when it comes to purchasing building and operational goods and services in rural areas. Some examples of business linkage during construction and operation of tourism enterprises are outlined in Table 23.1.

Some of the activities that can be undertaken by ecotourism enterprises to boost local procurement include the following (Spenceley et al., 2002):

- Purchase locally made goods wherever quality, quantity and consistency allow.
- Advise small local retail businesses of requirements for consumables and services. This includes the types needed and the standards required.
- Provide feedback to local entrepreneurs and small, medium and micro enterprises regarding the quality, range and quantity of products that are required by the established enterprise and tourists.
- Provide opportunities for ecotourists to purchase locally made goods (for example, craft).
- Pay fair prices for goods and services sourced from local communities.

Table 23.1 Opportunities for local procurement of products and services

Phase	Products and services	
Construction phase	Brick-making	Electrical work
	Building materials	Furniture making
	Construction labour	Plumbing
Operational phase	Crafts	Security
	Entertainment	Stationery
	Furniture	Supply of food
	Gardening services	Tourism services
	Housekeeping	Transportation
	Laundry	Uniforms
	Linen	Waste removal
	Maintenance	

Source: Spenceley et al. (2002).

If an existing ecotourism operation is considering reviewing and changing its procurement processes, supply chain analysis is a useful tool that can be used to identify business opportunities with entrepreneurs and enterprises in the destination. A case study example from Spier in the Western Cape is provided in Box 23.6.

To help analyse existing supply chains and areas for improving the proportion of expenditure accrued by local entrepreneurs or businesses see Ashley, Haysom, Poultney, McNab and Harris (2005), Ashley, Poultney, Haysom, McNab and Harris (2005a), Ashley, Poultney, Haysom, McNab and Harris, (2005b) and Eligmann (2009).

Philanthropy and corporate social responsibility

Many ecotourism operations provide donations of money, their time or resources (including human resources) to rural communities located close to them. Such initiatives may use donations channelled from tourists and foundations or may be supported by the enterprise itself. Interventions often focus on areas of health, education and provision of basic services and infrastructure (Trialogue, 2010).

Corporate social responsibility (CSR) is a formal business mechanism for companies to provide support to communities. It is defined as the strategic and operational activities of a business as these relate to its social, environmental, economic and ethical responsibilities. The foundations of CSR rest on a business agreeing to, and meeting, acceptable standards of behaviour and performance in terms of adherence to law, ethical standards and international norms and values. This includes upholding the principles of good governance, fair labour standards, sound health, safety and environmental management, and respect for human rights (ILO, 2011).

In its traditional form, CSR has been seen as a reactive risk management function to protect reputation and maintain community support to operate. Today, CSR has a strategic role in business sustainability as businesses seek to build brands, self-regulate through voluntary codes of conduct and capture a new generation of socially aware consumers (ILO, 2011).

Some tools that can be used to plan for CSR include *The CSI handbook* (Trialogue,

BOX 23.6 CASE STUDY OF SUPPLY CHAIN ANALYSIS TO TRANSFORM PROCUREMENT: SPIER

Starting in early 2004, a supplier survey questionnaire was sent to all Spier Leisure suppliers. The topics integrated conventional criteria against which any business would evaluate its suppliers (for example, quality) and specific criteria such as employment practice and environmental activities.

The supply chain analysis enabled Spier to adapt its overall strategy for sustainability and to focus heavily on rigorous criteria and targets for procurement. Old suppliers were not dropped, but new suppliers needed to achieve a certain predetermined score on the criteria. A number of suppliers have been selected recently, not due to price, but rather the fact that their values better reflect the values of Spier.

In some areas this led to win-wins. Benefits to the community from developing a laundry are far greater than doing the work in-house. From Spier's perspective, the enterprise development approach involved ZAR85 000 (US$11 300) to get going (mainly structure and equipment), but nevertheless saved them money overall. Over the first year a saving of R117 000 (US$15 600) was made, which was equivalent to 25 per cent of what Spier would have spent on a conventional laundry. Thus, in this instance, there is a clear commercial business case for shifting procurement as well as clear returns in terms of Spier's non-financial values.

Source: Ashley and Haysom (2008).

2010) and the *Travelers' philanthropy handbook* (Honey, 2011). Approaches like these can help provide both checklists and approaches to aid in planning and assessment of individual ecotourism enterprises. It should be noted that the requirements for development that are inside or adjacent to protected areas or that use them as part of the experience may be constrained or facilitated by the plans and regulations of the protected area.

Sources such as Green Globe (http://www.greenglobe.com) or the Global Sustainable Tourism Criteria (http://new.gstcouncil.org/page/adopt-the-criteria) are available online and can assist ecotourism enterprises in understanding what is likely involved in their planning process. Each also (as do many others) provides a certification process that can be purchased and confers third party testament that the enterprise meets the required standards. Most of these ecotourism standards would also represent attributes of sustainable rural development.

CONCLUSION

Good ecotourism can and should generate good rural development. Since ecotourism normally involves local entrepreneurs and communities, small enterprises and local

cultural and environmental assets, linkages must be recognized within the planning process and reinforced both at the level of the destination and the enterprises within and using it.

Tourism planning is the essential element that, at destination and enterprise levels, can help direct development to support sustainability. All planning is designed to anticipate and prevent risks and optimize in terms of the desired outcomes. Without good planning, development may be ad hoc, poorly informed, weakly coordinated with stakeholders and may not ultimately lead to the development of ecotourism. Tourism in natural destinations may be the result, but without preparation and consideration of the local economic, environmental and socio-cultural implications of tourism, the ecotourism ideals can easily be undermined.

Clearly, planning for ecotourism rural development is not sufficient alone. Destinations and enterprises should consider linkages with other industries (for example, agriculture, communications, construction). Also ecotourism development plans need to be followed up by implementation, and not be left on bookshelves to gather dust. By ensuring active stakeholder participation in the planning process, documenting plans in simple and easy to understand documents and ensuring that there is sufficient capacity and support to implement those plans, ecotourism and rural development can be improved in practice.

This chapter has attempted to outline some of the principles of good ecotourism planning processes for rural development at both a destination and enterprise level. In addition to using the guidance provided here, practitioners may also make use of the information sources provided in the bibliography of this chapter.

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24. Indigenous ecotourism

Jeremy Buultjens, Amanda Shoebridge and Nadine E. White

INTRODUCTION

As White, Buultjens and Shoebridge note in Chapter 8, Indigenous peoples suffer considerable economic and social disadvantage. One suggested strategy for overcoming this disadvantage has been the pursuit of business opportunities provided through ecotourism. Although there are examples of positive Indigenous participation in ecotourism resulting in economic, social and environmental benefits, there are a number of issues that require attention. This chapter examines Indigenous participation in ecotourism and looks at some of the issues that need to be addressed in order to advance Indigenous ecotourism. The chapter begins with an examination of Indigenous tourism and its market demand and supply factors. This is followed by a section that outlines the potential and actual costs and benefits associated with Indigenous peoples' participation in the industry. The final section is the conclusion.

INDIGENOUS TOURISM

Indigenous peoples around the world have been encouraged to become involved in the tourism industry as a way of overcoming situations of disadvantage and achieving greater economic and community development (Bunten, 2010; Commonwealth of Australia, 1994; WTO, 2002; Zeppel, 2006). While much of the focus on tourism's ability to provide development has been on developing countries (see UNWTO, n.d.), there is relevance for disadvantaged Indigenous peoples in developed countries as well.

Despite the perceived benefits of Indigenous tourism, there is not a universally accepted definition and its interpretation can vary amongst different stakeholders. A commonly cited definition is that provided by Butler and Hinch (2007, p. 5) who define Indigenous tourism as:

> tourism activities in which Indigenous people are directly involved either through control and/or by having their culture serve as the essence of the attraction. The factor of control is a key issue when discussing development. Whoever has control or exercises power generally determines such critical factors as the scale, pace, nature, and indeed, the outcomes of development. Similarly, given the centrality of attractions in tourism, the extent to which the attraction is a manifestation of Indigenous culture is also a primary indicator of Indigenous tourism.

Regardless of the definition used, two central themes – control and culture – are identified as key factors (Zygadlo, McIntosh, Matunga, Fairweather & Simmons, 2003). Currently Indigenous peoples participate at all levels of the industry – as employees,

investors, joint venture partners – and they provide both Indigenous cultural tourism products and mainstream tourism products (see ATSIC & Office of National Tourism, 1997; Notzke, 2004).

Despite sometimes providing mainstream products, Notzke (2004, p. 29) notes that Indigenous tourism is 'more commonly understood as referring to a tourism product whose focus is native culture, i.e. aboriginal cultural tourism or cultural ecotourism'. Sinclair (2003) also remarks that Indigenous tourism is often seen as a subset of ecotourism. According to Zeppel (2006, p. 11) '(E)cotourism includes Aboriginal people and their traditions because of the strong bond between Indigenous cultures and the natural environment'. However Buultjens, Gale and White (2010), while noting that there are substantial synergies between Indigenous tourism and ecotourism, caution that there are several issues that need to be addressed in order for this relationship to flourish. These issues are examined later in the chapter.

Given the synergies between Indigenous tourism and ecotourism, this chapter examines the ecotourism aspect of Indigenous tourism. However, it is acknowledged that not all Indigenous tourism can be classified in this way. The types of ecotourism enterprises controlled by Indigenous peoples include cultural ecotours, ecolodges, hunting and fishing tours, cultural villages and other nature-oriented facilities and villages (Zeppel, 2006).

Despite sometimes being difficult to classify, it is clear that tourism not only provides economic benefits, through increasing gross income and creating employment, it can also have substantial cultural and environmental outcomes for Indigenous peoples. Indigenous participation in the industry can encourage collective leadership, the stewardship of land and natural resources, as well as cultural perpetuation and building understanding between Indigenous and non-Indigenous people through education. Tourism can also be an instrument of community pride and can help to build bridges between people. Through increased understanding Indigenous tourism can help to dispel stereotypes and address historical inaccuracies that persist in society (Bunten, 2010).

The United Nations World Tourism Organization (UNWTO, n.d.) suggests that there are a number of characteristics of tourism that advantage Indigenous people. For example, a rich cultural heritage, inspiring landscapes and abundant biodiversity, features that exist in many remote and rural areas, are seen as providing a comparative advantage for tourism. In addition, tourism is a labour-intensive sector, often requiring low skills, where small and micro businesses can be competitive. Tourism also ensures that consumers are brought to the producers, resulting in individual benefits as well as benefits for the local community. In addition to alleviating poverty amongst the Indigenous population in a country, the presence of Indigenous peoples and their provision of tourism services also provide the country in which they reside with a competitive advantage and product differentiation in the international tourism marketplace (DITR, 2004; Sinclair, 2003).

Despite the potential benefits of tourism, there are also a number of negative impacts that may arise for Indigenous people. These are discussed later in the chapter. It is important that these negative impacts are addressed to ensure the beneficial outcomes for Indigenous people are maximized. For example, issues of ownership, the level of economic leakage from the local economy, the level of local employment, the distribution of benefits from the industry and control of the social and environmental impacts need

to be effectively addressed. This can only occur at the destination level with the active participation of the local Indigenous communities (UNEP, n.d.).

THE INDIGENOUS ECOTOURISM MARKET

Despite the enthusiasm expressed for Indigenous tourism by governments and other stakeholders, there is a great deal of uncertainty about the market in most countries (see Notzke, 2004; Ryan & Huyton, 2000a, 2000b). The development of the Indigenous ecotourism industry globally has fluctuated considerably since the early 1980s. For example, in Australia, Schmiechen (2006) notes that despite the impetus of the 2000 Sydney Olympic Games, the sector remains extremely fragile and tenuous. In Canada, Aboriginal tourism development falls far short of its potential where the sector constitutes less than half of 1 per cent of the Canadian tourism industry despite the Indigenous population constituting 4 per cent of the total population (Doucette, 2000, cited in Notzke, 2004). In New Caledonia, d'Hauteserre (2010) suggests that the industry is still 'embryonic'.

Despite its early developmental state, Indigenous ecotourism is in a position to benefit from the spread of tourism into more remote and marginal areas including national parks, nature reserves and tribal areas where Indigenous peoples live (Zeppel, 2006). However, the tendency to visit remote communities is often seen as an 'add on' experience for tourists who are already in the country (Sinclair, 2003) and is often a secondary motivator for choosing a holiday destination (Neilson, 2002). Research in New Zealand indicates that the demand for eco-cultural products is more likely to be associated with nature tourism than the cultural component. The Maori products are seen as adding value to nature-based products (Becken & Sampson, 2007). In studies of tourists in Australia, Ryan and Huyton (2000a, 2000b) found that those who showed an interest in Aboriginal culture were also likely to show an interest in engaging with aspects of the natural environment. This feature of the Indigenous ecotourism market means it is likely that it will remain relatively 'limited' and that it may not provide for the economic viability of many Indigenous tourism businesses (Notzke, 2004).

Another problem for the Indigenous ecotourism industry in a number of countries is the low level of interest amongst domestic tourists; this can have serious implications for the development of the industry since the domestic component can be significant. For example, in New Zealand, the Tourism New Zealand and Ministry for Tourism report (2003) states that interest in Maori tourism products was almost non-existent among locals. In Australia, the domestic component constitutes 75 per cent of the tourism industry and this group apparently shows little interest in cultural tourism. Similarly, in Canada, the Travel Activities and Motivations Survey (2001) concluded that only 15 per cent of Canadians were interested in Indigenous tourism products.

A further perceived problem with the market is that the reported interest in Indigenous tourism tends to be much greater than participation levels (Tremblay, 2007). This would suggest that participation in Indigenous tourism is hampered by an apparent lack of consumer awareness on the part of tourists, a dearth of products available for tourists and an underutilization of partnerships between local product suppliers and tour operators (Notzke, 2004). This feature could also indicate that tourists feel they should be inter-

ested in Indigenous tourism but actually do not pursue the opportunities available. Tour operators usually work with suppliers who have provided a consistent, quality product over a sustained period of time. Notzke (2004) suggests that while many tour operators indicate that there is considerable demand for Aboriginal tourism experiences, these operators are not confident that there is an adequate supply of products at an acceptable standard.

Despite a lack of clarity about the demand and supply of Indigenous ecotourism, it is clear that governments in many countries are encouraging Indigenous peoples to become more involved in ecotourism (Notzke, 2004). It is also apparent that many Indigenous peoples are interested in taking up the opportunity. Participation in ecotourism seems sensible since in most countries the natural environment and/or the land are at the very heart of Indigenous culture and in many instances their political identity is derived from their bonds with the land (Notzke, 2004). The next section examines some of the issues facing the establishment of Indigenous ecotourism businesses.

ISSUES: THE POTENTIAL COSTS AND BENEFITS OF INDIGENOUS ECOTOURISM

Vulnerability

As stated previously, many stakeholders believe that Indigenous ecotourism offers what would seem a relatively good way to achieve economic development and independence as well as assist in protecting fragile cultural and natural resources from the impact of tourism (Notzke, 2004). However, there are also those who are much less enthusiastic, even pessimistic, about the opportunities offered by ecotourism (see Chavez, 2002; Johnston, 2006; Pera & McLaren, 2002). For example, Johnston (2006) sees ecotourism as a substantial threat to Indigenous peoples with the potential to violate the full spectrum of Indigenous rights, culture and spirituality. She argues that there is an incompatibility between ecotourism and sacred Indigenous knowledge. Johnston also suggests that governments, businesses and non-governmental organizations (NGOs) are not open to the community consultation and capacity building that would be required for ensuring Indigenous peoples benefit from the industry.

Clearly, there is considerable potential for the negative impacts arising from Indigenous participation in ecotourism to outweigh any benefits that may arise. Indigenous peoples and communities are vulnerable to increased accessibility and contact from outsiders (Zeppel, 2006). As Sinclair (2003, p. 141) notes, the challenge is to structure the 'tourism experience in such a manner as to guarantee the greatest integrity to the Indigenous peoples and their lifestyles, even as the demands of the tourist are being satisfied'. An additional issue for those Indigenous peoples involved in tourism is to protect the community members who are involuntary hosts, that is, those who do not wish to participate in the industry, and help them to cope with tourists and their impacts.

The challenge for Indigenous peoples is to use their culture and land as tourist assets while managing the behaviour of tourists and maintaining control of Indigenous knowledge (Pera & McLaren, 2002). Unless this is achieved the historical exploitation of Indigenous peoples will be perpetuated (Sinclair, 2003).

In order for Indigenous peoples to reduce their vulnerability from ecotourism and prevent inappropriate behaviours by other stakeholders there has to be substantial local involvement in the planning of the industry. There also needs to be strict enforcements of protocols governing the industry (Sinclair, 2003). However, Whyte (2010, p. 76) argues that many environmental tourism practices violate 'direct participation' because tourism operators and tourists do not make genuine efforts to provide a forum in which 'the social circumstances and cultural terms of community members can be fairly represented and considered'.

Commodification/Exploitation of Culture

The commodification of culture is a major issue confronting Indigenous peoples globally. For example, a number of countries use images of (usually) traditional Indigenous peoples in their marketing collateral. This type of appropriation of culture by outsiders has raised serious concerns for many Indigenous peoples since it is often done without their consultation. Commonly, Indigenous peoples are portrayed in ways that many do not want themselves to be portrayed. Notzke (2004) notes that it has only been recently that Indigenous peoples have been able to address this long held resentment by increasingly assuming control over tourism and therefore control over how their culture is used by the industry. However, there is still a long way to go in this area.

This resumption of control, according to Bunten (2010), has taken place since the 1990s, and has resulted in a more sustainable, culturally appropriate model of ecotourism that compels the tourism industry to meet the needs of Indigenous peoples. In this situation, Indigenous value systems ultimately determine the business and operations model of Indigenous tourism (Bunten, 2010).

Despite attempting to increase control, Indigenous businesses still need to deal with commodification and the fact that their culture is often neatly packaged and culturally sanitized so as not to offend or overload the visitor with cultural information (Bunten, 2010; Sinclair, 2003). This can often result in the falsification or dilution of culture, as discussed earlier by White et al. in Chapter 8. Indigenous businesses must balance their desire to provide accurate and sometimes painful information that confronts existing stereotypes with the consumers' desire to experience a non-confronting 'Other'.

Another problem with the mass cultural tourism model associated with many of the 'successful' Indigenous tourism businesses is that it does not allow for a deeper level of interaction between the Indigenous peoples and the tourists (Zygadlo et al., 2003). Providing an alternative to the staged experience may involve the portrayal of a 'lived' perspective of Indigenous culture rather than a staged performance (Zygadlo et al., 2003). Becken and Sampson (2007) suggest that one potential avenue for less staged cultural experiences is the development of eco-cultural products. These experiences allow Indigenous peoples to share their mythologies and provide interpretation on traditional land uses and other environmental issues in more intimate settings.

Tribal/Community Lands

Indigenous ecotourism businesses are commonly bound by the social and political framework of the communities within which their businesses often operate. While land

tenure may vary between and within countries, there is often a collective component associated with it. There are two major issues with community title. The first is that it is difficult for Indigenous peoples to access credit since mainstream lending organizations are reluctant to finance projects using community land as security (Ivory, 2003). The lack of access to credit is exacerbated by the fact that many Indigenous peoples generally have low savings due to their economic circumstances and a historical lack of experience in dealing with money (Collins, 1999). This factor puts them at a disadvantage as potential entrepreneurs (Fuller, Howard & Cummings, 2003).

Another problem with community land tenure is that individual Indigenous entrepreneurs have to gain the approval of the 'community' and this can often be a difficult and time-consuming process. There can be factionalism within Indigenous communities resulting in some issues such as who can divulge or sell stories and who can have access to certain areas (Bunten, 2010). The difficulties associated with communal land can also work against joint venture partnerships with non-Indigenous partners. For example, in Canada, Notzke (2004) notes that provincial governments are reluctant to get involved because it is an area of exclusive federal jurisdiction.

Lack of Skills, Qualifications and Business Knowledge

Notzke (2004) asserts that being a niche product, Indigenous ecotourism warrants an extra degree of professionalism because niche products operate within an extremely competitive marketplace catering to an increasingly sophisticated clientele. However, she argues that many Indigenous operators do not understand the requirements of the tourism industry. Many Indigenous peoples, particularly those in the more remote areas, find it difficult to be directly involved with tourists because of cultural differences and/or lack of fluency in the English language (Altman & Finlayson, 2003; Dyer et al., 2003). The lack of literacy within Indigenous communities can also restrict many Indigenous peoples from directly participating in the industry (Altman & Finlayson, 2003).

In addition to a lack of literacy, Indigenous peoples generally have little business experience (Bunten, 2010; Ryan & Huyton, 2000b). Many have not had experience in applying for business loans, developing partnerships, satisfying government codes and regulations, marketing their products, establishing a client base and growing their business from one year to the next (Bunten, 2010).

In order to overcome low literacy rates and a lack of business experience these Indigenous peoples require training. However, Indigenous communities in remote areas are unlikely to be within close proximity to the facilities required to equip Indigenous peoples with the necessary commercial, trade or technical skills that are important to the operation of small businesses. Similarly, there are very few opportunities for Indigenous peoples from remote communities to receive on-the-job training or to concurrently undertake formal training away from work to enhance future employment prospects (Fuller et al., 2003).

Another important factor in enabling Indigenous business development is to recognize that Indigenous-owned businesses differ from their non-Indigenous counterparts (Bunten, 2010; Buultjens & Gale, 2008). Bunten (2010, p. 285) argues that Indigenous businesses have 'a distinct strategy to achieve ethical, culturally appropriate, and

successful Indigenous participation within the global economy' based on a company's ethos that reflects different values. It is also apparent that it is not necessarily profits that drive Indigenous entrepreneurs and enterprises.

Government Policy

The disadvantaged position of Indigenous peoples, their lack of access to finance and their need for business training requires government to play an important role in capacity development that facilitates Indigenous ecotourism business development (Buultjens, Waller, Graham & Carson, 2005). For example, in Australia, successive governments have introduced a number of programmes over the years in an attempt to facilitate Indigenous enterprise development. However, most have been unsuccessful. The reasons for failure include a focus on economic outcomes with little regard for the social, political and environmental outcomes resulting in the commodification of Indigenous art and culture (Whitford, Bell & Watkins, 2001). It appears the programmes have been more about meeting the needs of mainstream industry rather than a concern about the wellbeing of Indigenous peoples (Whitford et al., 2001). Buultjens et al. (2005) found that the focus of many programmes was on promoting the idea of Indigenous participation in enterprise development rather than providing resources to ensure ongoing success beyond the business planning phase. Buultjens et al. (2005) also found that many of the programmes were difficult for Indigenous peoples to access, there were substantial barriers preventing Indigenous peoples from applying for assistance and there was often insufficient funding to meet demand.

A further problem with government programmes is that Indigenous peoples are not involved in their design, increasing the likelihood that they will not meet the needs of the recipients. For example, in Canada, Notzke (1999) noted that the government's approach to community-based development did not involve community control but rather just involvement. Clearly, unless Indigenous communities and individuals have control, as discussed in the following subsection, there is a good possibility that the outcomes from tourism will not meet their needs.

Planning and Control

Sinclair (2003) argues that tourism must be driven by Indigenous sovereignty over their natural and cultural resources. It is very important that the community is involved in all aspects of tourism planning and that any development is endorsed by the community and takes place on the community's terms (Sinclair, 2003). This often does not happen. For example, during the development of The Head-Smashed-In Buffalo Jump Interpretive Centre in southern Alberta there was extensive Indigenous input in programming and many Indigenous peoples were employed by the facility. However, control and management rests with the provincial government (Notzke, 2004).

Another issue surrounding planning for Indigenous ecotourism is the sometimes extensive (and sometimes excessive) time required during the planning process (Notzke, 1999). The high level of community engagement in tourism, the nature of land tenure in many countries and local politics may make planning a drawn-out process.

Accreditation

Gaining ecotourism accreditation can be a difficult task for many Indigenous businesses. Buultjens et al. (2010) identified that inconsistencies in the accreditation process, the costs associated with accreditation and the fact that many Indigenous peoples operating ecotourism ventures do not know they are, in fact, an 'ecotourism' business are factors that have led to low levels of ecotourism accreditation for Indigenous businesses. The other major issue related to accreditation are the Indigenous consumptive practices of hunting and fishing and their uncomfortable fit with the non-consumptive principles of ecotourism as discussed by White et al. in Chapter 8. In this instance, it appears that there needs to be greater education and understanding of the socio-cultural practices of Indigenous societies. For many Indigenous peoples, hunting and fishing are activities that are representative of, and intertwined with, their relationship to the Earth and sense of place within it (Fennell, 2008). Bunten (2010) argues that resource-extractive tourism such as hunting and fishing are indeed compatible with conservation ethics.

CONCLUSION

The benefits that Indigenous peoples can gain from their participation in ecotourism are attractive. However, there are a number of issues that need to be addressed in order to ensure this participation is successful. Currently, the Indigenous ecotourism sector is relatively underdeveloped and there needs to be further appropriate development to ensure its sustainability. It is clear that the success of the sector will depend on the ability of all stakeholders to allow Indigenous peoples to assert their control over the way the industry develops and is managed. This will require the goodwill of all participants to ensure that the ecotourism industry does not become another instrument that disenfranchises and marginalizes Indigenous peoples.

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25. Winning hearts and minds through interpretation: walking the talk

Karen Hughes and Roy Ballantyne

INTERPRETATION: WHAT, HOW AND WHY?

Tourists are becoming increasingly sophisticated and well informed, and as a result, are searching for innovative, unusual and/or unique tourist experiences (Rodger & Calver, 2004; Shackley, 1996). This may in part account for the increasingly wide variety of environmental experiences and opportunities on offer – activities ranging from jungle treks, butterfly viewing and cross-country skiing to snorkelling with whale sharks, eating breakfast with orangutans, going on safari and ballooning over waterfalls. Many of these activities are accompanied by interpretation designed to give visitors an insight into the fauna, flora and/or culture being viewed. This interpretation can be delivered in a variety of ways, ranging from guided tours, re-enactments, audio talks and specialist presentations to signs, brochures, multi-media exhibits and interactive experiences. Regardless of delivery mode, interpretation aims to present information in a way that inspires visitors to learn about the particular topic, issue or event being interpreted. So what exactly is interpretation and how does it achieve these aims?

Interpretation is essentially a form of communication in which technical concepts are 'translated' into a language that people with little or no expertise can readily understand (Ham, 1992). Early definitions of interpretation by Tilden (1977) prescribed the use of illustrative media, first-hand experiences and original objects to impart meaning and relationships. A key tenet of Tilden's approach was that factual information is not interpretation. There have been many subsequent definitions of interpretation that build upon Tilden's (1977) basic ideas but one of the most widely used definitions of interpretation in Australia is

> interpretation is a means of communicating ideas and feelings which help people understand more about themselves and their environment. (Interpretation Australia Association, 2012)

Well-designed and creatively delivered interpretation allows us to build intellectual, emotional and physical connections between visitors and the environment. It enables us to raise their awareness of environmental issues; to enhance their knowledge of the natural environment; to put them 'in touch' physically, emotionally and spiritually with their surroundings; to encourage them to react in particular ways; and to adopt pro-environmental behaviour, not only at the interpretive site, but for life! Interpretation is thus a form of communication that attempts to meaningfully connect visitors with the environment by helping them to consider things from different perspectives, assisting them to understand 'big picture' concepts and encouraging them to reflect upon humans' role in the ecosystem. In other words, interpretation aims to embody visitor experiences

in nature with meaning, enhances visitors' nature experience and empowers them to act in environmentally sensitive ways. Essentially, interpretation has the power to

> give visitors a sense of place; to instill new ideas; to excite, inspire and teach; to conserve natural and cultural resources; to reinforce or refute existing beliefs; to enrich recreational experiences; and to enhance peoples' understanding of their relationship to their environment and culture. (Moscardo, Ballantyne & Hughes, 2007, p. 6)

To achieve this, interpretation needs to be carefully planned and sensitively implemented. Goals and objectives need to be clearly articulated; messages designed and tested for accuracy; and experiences regularly evaluated for impact, relevance and meaning. While the style and type of interpretation offered at ecotourism sites often depends on environmental, budgetary and staffing factors, at their core, interpretive experiences have six key principles as follows:

1. Interpretation should personally connect with, or be relevant to, intended audiences. To achieve this, designers need to make clear links between new information and the everyday experiences of visitors; scientific concepts should be explained in layman's terms; and analogies, metaphors and examples used to connect new information to visitors' existing knowledge. Stories about plants, animals and other features of the environment can also be used to make information 'come to life'. Examples include using skyscrapers to explain how rainforests are layered; using teenagers to explain the sleeping patterns of nocturnal animals; and giving animals a life story that connects with visitors' experiences.
2. Interpretation should provide novelty and variety. Visitors rapidly lose attention and interest in settings that are repetitive, bland or boring. Interpretation overcomes this by delivering information in a variety of ways that include but are not limited to audiovisual presentations, computer exhibits, models, games, quizzes, costumed theatre, workshops and interactive displays.
3. Interpretation should be organized with clear, easy to follow structures.Interpretation based on sequential experiences such as guided tours, performances and audiovisual presentations is usually divided into an introduction, body and conclusion to enable visitors to easily absorb new information. Likewise, effective interpretive signs have a title to attract attention; a lead-in sentence or paragraph to act as an introduction; a number of sentences or paragraphs as the 'body'; and a punch-line that functions as a conclusion. This structured approach facilitates visitors' learning as it presents information in a logical, step-wise fashion that enables visitors to systematically add to their body of knowledge.
4. Interpretation should be thematic. Effective interpretation is built on themes. Themes in this context are the core ideas or messages that guide the direction, content and delivery of interpretation. Essentially, they are 'big picture' concepts that enable visitors to understand and connect different elements of their experiences. Examples include: 'New life is constantly emerging from the forest floor'; 'Frogs tell us how healthy the environment is'; and 'Vultures are nature's garbage collectors'.
5. Interpretation should engage visitors in the learning experience. Choice, variety and participation are fundamental to successful visitor experiences. Effective

interpretation encourages visitors to use a variety of senses (sounds, smell, taste, touch) to experience their surroundings. It also poses questions to engage them in the learning process and gives them a choice about how much or little they wish to participate. These elements all stimulate interest and help to keep visitors focused and engaged.

6. Interpretation should demonstrate an understanding of, and respect for, the audience. One of the key challenges for interpreters is that visitors vary considerably in terms of their motives, interests and preferences; their views and perceptions; their prior knowledge and experiences; and their cultural, social and economic backgrounds. How does one cater for all these differences? The key is to recognize that not all visitors are the same, and to provide different levels of information or types of experiences for different groups.

Further discussion and detailed examples of how these six principles can be used to design effective interpretation can be found in Moscardo et al. (2007).

With its focus on experiential learning, relevance, variety and choice, interpretation is well placed to enhance ecotourism experiences. The primary aim of ecotourism interpretation is to raise visitors' awareness of, and appreciation for, the need to conserve natural resources by alerting them to the fragile state of the environment; the interrelationships between wildlife and habitats; and the impact of human activities upon the long-term viability of natural environments and their wildlife populations (Mason, 2000; Turley, 1999). Many ecotourism sites provide visitors with interpretation designed to encourage them to adopt 'minimal impact' practices. The aim of these messages is not so much to restrict their behaviour but prompt them to consider how humans affect the natural environment.

While many ecotourism experiences offer some form of interpretation, the quality and focus varies widely. Reasons for providing interpretation also vary, ranging from complying with accreditation requirements and enhancing visitor satisfaction to increasing visitors' awareness and understanding of environmental issues. Despite this variation, the decision to offer interpretation is usually based on the presumption that increasing visitors' understanding of environmental issues will foster visitors' appreciation of nature and that this in turn will translate into positive environmental attitudes and behaviour (Beaumont, 2001). But is this actually the case?

IMPACTS OF INTERPRETATION

Effective interpretation requires designers and managers to carefully consider what it is that they want visitors to think, feel and do as a result of their experiences. In other words, what are the key messages they want visitors to remember and what reactions do they envisage will result from the experience? Besides enhancing visitors' environmental knowledge, interpretation has the potential to elicit a range of reactions – visitors can be encouraged to search for further information, discuss environmental issues with family and friends, champion various environmental causes, act in an environmentally responsible manner at an ecotourism site and even to adopt environmentally responsible behaviours in settings completely removed and disparate from the ecotourism setting.

Impacts on Knowledge

It is widely accepted that imaginative, well-designed interpretation can make substantial contributions to the public's collective knowledge of environmental issues. Several studies suggest that the impact of interpretation on visitors' knowledge may vary depending on their initial levels of conservation awareness (Ballantyne, Packer & Falk, 2011). For example, Hayward and Rothenberg's (2004) study of first-time visitors to the Congo Gorilla Forest exhibit at the Bronx Zoo found learning variations between 'novice' and 'experienced' conservationists. Respondents with little or moderate knowledge of rainforests were significantly more likely to learn something from their visit and to report an increased concern for preserving these environments. Similar patterns were reported by Falk and Adelman (2003) who compared the pre-visit and post-visit comments of 100 visitors to the National Aquarium in Baltimore. They found the greatest gains in knowledge were reported by those who entered with minimal conservation knowledge. This was particularly evident in visitors with moderate to high interest in conservation issues.

The impact of prior conservation knowledge on conservation learning was also explored by Dierking, Adelman, Ogden, Lehnhardt, Miller & Mellen (2004) at Disneyland's Conservation Station. At the entrance, visitors were categorized as being in the contemplation stage (thinking about being involved in conservation activities); preparation stage (generally committed to becoming involved in conservation and already involved in some activities); or the action stage (involved in a range of conservation-related activities). The greatest increase in awareness of and interest in conservation was reported by those in the contemplation stage (lowest level of awareness/involvement). The opposite was found in a recent study of visitor learning at Mon Repos turtle rookery (Ballantyne et al., 2011). Here, the greatest increases in conservation knowledge were recorded by respondents with high levels of pre-visit conservation knowledge. While discrepancies between study findings may be due to methodological differences, results nevertheless highlight the importance of having a clear understanding of what visitors already know prior to entry as this allows interpreters to build upon visitors' pre-visit knowledge in a way that is likely to enhance understanding and enjoyment of the experience. As mentioned earlier, interpretation needs to be relevant for intended audiences if it is to be effective.

Although these studies validate the viewpoint that interpretive experiences can and do augment visitors' knowledge of environmental issues, an increase in knowledge does not necessarily equate to adoption of conservation actions. To illustrate, Lackey and Ham (2004) found that almost all visitors (98 per cent) to Yosemite National Park recalled encountering information about black bears and human safety, yet few visitors complied with the park's food storage policies. Thus, there was little correspondence between knowledge of bear-safe behaviour and visitors' on-site behaviour. Likewise, Powell and Ham (2008) failed to find a significant correlation between knowledge gained during a cruise to the Galapagos Islands and intentions to donate to the Galapagos Conservation Fund. It seems that while an understanding of environmental issues and actions is required before individuals can engage in conservation behaviour, increasing knowledge is not a guarantee that such behaviour will be adopted, and that there may be intervening factors such as attitudes and opportunity that are also important.

Impacts on Attitudes

A range of studies demonstrate that interpretive experiences in ecotourism settings engender pro-conservation attitudes. Ballantyne et al. (2011) surveyed 110 visitors prior to, immediately after and four months after an interpretive turtle viewing experience. Approximately one third felt the experience had enhanced their attitudes towards environmental conservation and a further 53 per cent reported similar but stronger conservation attitudes. A similar study conducted at a dolphin feeding site in Queensland revealed that the interpretive experience enhanced conservation attitudes in 81 per cent of respondents, and that 52 per cent said the experience had made them more likely to assist with conservation programmes (Mayes, Dyer & Richins, 2004). Likewise, Tisdell and Wilson (2005) found that interpretation at Mon Repos turtle rookery enhanced visitors' attitudes towards adopting conservation behaviours, with many reporting that the interpretation had made them more likely to dispose of plastics and fishing equipment correctly, switch off lights near beaches, not purchase turtle products and take care on beaches used by nesting turtles.

Not all studies have found such positive results, however. In 2001 Beaumont examined the impact of interpretation on the conservation attitudes of visitors to Lamington National Park, Queensland. A sample of 488 tour group participants, day trippers and campers completed pre-visit and post-visit questionnaires. Analysis revealed that none of the groups demonstrated significant changes in their environmental attitudes either immediately following their national park interpretive experience or four months later. Despite this, many did mention that the interpretive experience had reinforced existing views or made them more appreciative of nature. In this instance, it appears that the interpretation strengthened existing conservation attitudes.

Using a similar approach, Tubb (2003) also found limited changes in visitors' attitudes following trips to Dartmoor National Park in the UK. Comparison of pre-visit and post-visit questionnaires showed that visitors' attitudes changed considerably but that this change was only in relation to two of 11 attitude items – whether visitors should feed ponies that roam in the area and the role of the National Park Authority in protecting the natural resources of the area. There were no significant differences on other attitude statements relating to issues such as the importance of protected areas, the role of farming in the region and concern about environmental degradation. This suggests that attitudes relating to specific issues may be easier to influence than more general attitudes towards the environment. As with Beaumont's (2001) study, maybe interpretation reinforced rather than changed attitudes per se. Although not generally regarded as an attitude change, it could be argued that reinforcement and strengthening of existing attitudes is also important, particularly as ecotourism experiences are likely to attract visitors who already have positive environmental attitudes.

Impacts on Behaviour

Interpretive programmes in ecotourism settings are often designed to target site-specific behaviour such as littering, trampling vegetation, souveniring flora and harassing wildlife (Beeton, Weiler & Ham, 2005). A range of studies have examined the impact of interpretive programmes on visitors' on-site behaviour. In 1998, Orams and Hill observed

a significant reduction in deliberate touching, staff cautions and other inappropriate behaviour after the introduction of an interpretive programme and concluded that interpretation had prompted voluntary compliance with behaviour regulations. Wilson and Tisdell (2001) claimed that interpretive programmes offered at Mon Repos Conservation Park and Heron Island in Queensland had been instrumental in raising funds for wildlife conservation. Moscardo (1998) attributed the success of Alaska's Dollars-A-Day for Conservation programme to interpretive messages encouraging their visitors to donate to the cause. Powell and Ham (2008) reported similar levels of compliance following participation in conservation-themed tours of the Galapagos Islands.

These studies suggest that interpretation has considerable potential to manage visitors' behaviour in the short term but what about long-term behaviour change? Orams (1994) surveyed two groups of visitors at Tangalooma resort in Queensland – one group prior to the establishment of an information centre and education programme (the control group) and one group after the programme and centre were in operation (the treatment group). Immediately after their visit both groups indicated similar levels of intention to increase their involvement in conservation actions. Telephone interviews three months later revealed that respondents with access to the information centre and education programme were significantly more likely to have looked for information on dolphins, picked up litter on beaches, been involved in environmental issues and donated to conservation causes than those in the control group.

Beaumont's (2001) research in Lamington National Park had a four-month follow-up component that measured changes to visitors' conservation practices as a result of their visit. Responses revealed that adoption of conservation practices was limited, with only 14 per cent of respondents reporting behavioural changes following their visit. These changes predominantly related to practices around the home and garden or using minimum impact techniques when visiting natural areas. Ballantyne et al. (2011) explored long-term changes in visitors' conservation behaviour at Queensland sites: Mon Repos Conservation Park (turtle nesting and hatching); whale watching at Hervey Bay and at the Gold Coast; Underwater World (aquarium); and Sea World (ocean theme park). Immediately after their visit, approximately one third of visitors expressed a strong desire to engage in conservation actions, yet four months later, only 7 per cent had actually done so (Ballantyne & Packer, 2011). Another long-term study conducted at Mon Repos (Hughes, Packer & Ballantyne, 2011) with 100 families found that those given access to post-visit action resources (for explanation of term, see Ballantyne & Packer, 2011) showed a significantly increased level of engagement between pre-visit and follow-up measures (three months later) on eight of the 13 behaviours measured. These studies all highlight the potential as well as the challenges of using interpretation to change visitor behaviour.

OTHER IMPORTANT ELEMENTS OF INTERPRETIVE ACTIVITIES

Emotional Involvement

Besides building on the six principles of interpretation, there are a number of practical elements that have been identified as important for the effective delivery of interpretive

experiences in ecotourism settings. One of the more commonly cited ones is the ability to present information and experiences in a way that encourages visitors to emotionally connect with the natural environment. This is often done in wildlife tourism settings, where animals are used to evoke feelings of wonder, awe, empathy and concern. Encounters with these animals are likely to have powerful impacts on visitors. For example, at Brookfield Zoo, Meyers, Saunders and Birjulin (2004) found a correlation between feeling wonder and respect for the animals on view and a desire to save those particular animals. Although encouraging, they cautioned that some animals are inherently more attractive and more likely to evoke positive emotional responses than others. Creatures displaying human-like characteristics are likely to have the most impact (Woods, 2000), as are those with positive images in television documentaries, newspapers, wildlife brochures and other forms of media (Reynolds & Braithwaite, 2001). This has important implications for the design of interpretive programmes as it suggests that preserving the habitats of less popular species may require interpreters to design programmes and messages that focus on their more appealing neighbours (Ballantyne, Packer, Hughes & Dierking, 2007).

Emotions can also be evoked by providing real or graphic evidence of environmental damage. Ballantyne, Fien and Packer (2001) surveyed 580 students aged 8 to 17 participating in environmental education programmes in Southeast Queensland. Programmes designed to engage students on an emotional level (for example, those featuring encounters with wildlife or those showing students the negative impacts of human behaviour) prompted the most changes in conservation knowledge, attitudes and behavioural intentions. Similar findings were reported by Kals, Schumacher and Montada (1999) who identified indignation about environmental problems as a key precursor to environmental behaviour. Likewise, Hughes's (2011) study at Mon Repos turtle rookery found that emotional engagement was closely linked to intentions to adopt conservation actions. Respondents were significantly more likely to report increases in their intentions to adopt conservation actions if they felt an emotional connection with the turtles viewed; if the experience was surprising, enjoyable or exciting; and/or if they experienced something that made them sad or angry about environmental problems. It is interesting to note that both positive emotions (emotional connections, surprise, enjoyment, excitement) and negative emotions (sadness, anger) prompted visitors to pledge their support for environmental conservation, suggesting that interpretation can and should be designed to elicit a range of emotional responses.

Ballantyne, Packer and Bond (2012) also looked at the role of emotions in an exhibit entitled 'Broken Links: Stolen Generations in Queensland'. This was an emotionally challenging exhibition that graphically displayed the history of forced removals and their impact on Queensland's Aboriginal communities. The focus of the exhibition was audio, video and photographic records covering the personal stories of five Aboriginal Queenslanders removed from their families during this period. These were accompanied by government documents, artefacts, personal letters and interpretive text that gave graphic descriptions of the harsh conditions faced by Aboriginal children. Not surprisingly, many visitors reported being deeply affected by the 'Broken Links' exhibition, with respondents commenting that they had gained a real insight into the personal experiences of those who had been removed from their communities. They expressed

surprise at how recent the events and policies were as well as dismay at their own lack of awareness. Some also reported that the exhibition had influenced their attitudes towards the Stolen Generations, Indigenous people and other minority groups. It seems that interpretation in this context helped create emotional bonds between the visitor and the storyteller. Visitors were encouraged to 'imagine themselves in the place of the other; to experience the world through the other's eyes; to experience the feelings and perceptions of the other; and to develop an understanding of their situation' (Ballantyne et al., 2012, p. 160).

For most visitors, the sadness and anger experienced while viewing the exhibit were balanced with feelings of admiration for the resilience of the Aboriginal people. Thus, it seems that when focusing on emotive topics or events, interpretation should aim to provide a balanced, positive perspective to help visitors deal with their feelings. The authors recommend that interpretation of such topics should use personal stories, balance hope with despair, meld education with persuasion, provide places for reflection and focus on the past in order to inform the future (Ballantyne et al., 2012). In an ecotourism context, interpreters should aim to present environmental issues from the perspective of key stakeholders, and to discuss why and how particular events and/or practices contributed to environmental problems or situations. As Ballantyne et al. (2012) highlight, it is important to focus not only on the past but on the future – we need to empower visitors with both a sense that they can help and practical strategies to put good intentions into practice.

Designing for Cultural Differences

The emergence of new outbound tourism markets such as China and India has prompted discussion amongst researchers and practitioners about whether Western-based interpretive practices are suitable for non-Western audiences and contexts (Moscardo, 2003). To date, little has been done to identify cultural differences and similarities in visitors' interpretive preferences, perceptions and values and how these impact on visitors' ecotourism experiences. Studies in the heritage tourism area suggest that visitors' cultural background can influence the type of information sought as well as satisfaction with the interpretation at heritage sites. It also seems that people from different cultures may perceive and interact with interpretation in different ways and that one site may hold multiple meanings depending on the cultural background of the visitor (see Austin, 2002; Poria, Biran & Reichel, 2009; Poria, Reichel & Biran, 2005).

In an ecotourism context, research suggests that visitors' cultural backgrounds may influence how they view and interact with the natural environment. To illustrate, studies in China have identified a number of cultural differences between Chinese and Western visitors that are likely to impact on their preferences and perceptions of environmental interpretation. First, the Chinese place great importance on literary and artistic works. As a consequence, landscapes that inspired famous poems, paintings and stories are revered and often become major tourist attractions. In many cases, these scenic spots also become associated with particular ideas, philosophies or ideals. For Chinese visitors, these environments resonate with meaning and significance that may not be apparent to visitors from other cultures (Sofield & Li, 1998). Second, the Chinese believe that enlightenment comes from being immersed in nature (Xu, Cuia,

Ballantyne & Packer, 2012; Xu, Ding & Packer, 2008). Artificial features that improve visitors' access to natural environments such as concrete paths, roads, cable cars and viewing platforms are considered good management. Likewise, modern and highly visible signage, lighting, retail and eating outlets are seen as enhancing the attractiveness of the site (Niyiri, 2009; Sofied & Li, 2007). Third, the Chinese tend to think in figurative or metaphorical terms so imagery is very important. Environmental features such as mountains or rocky outcrops are often described in terms of the animals they resemble, and Chinese tour guides tend to highlight these similarities in their commentaries (Xu et al., 2012).

These culturally based worldviews have a number of implications for the design of interpretive experiences for Chinese visitors. The importance the Chinese place on literature and art suggests that interpretation of environments for this market should focus on well-known paintings, poems and stories connected to the site. Important historical figures who have visited the site or key events that occurred in the vicinity should also be mentioned. A study by Ballantyne, Hughes, Ding and Liu (in review) supports this, as surveys distributed at Beijing's top five tourist attractions found that Chinese visitors wanted interpretation to include legends, stories, poetry and cultural information. They also wanted to know about famous people who had written about or painted the landscape, as well as celebrities who had visited the site (Ballantyne et al., in review). The importance the Chinese place on immersing oneself in nature suggests that management should aim to design 'up close and personal' interpretive experiences. Opportunities for visitors to touch animals, smell plants and taste produce are likely to be particularly well received by this market, as are facilities that enable them to sit and contemplate the scenery. Finally, because the Chinese often describe environmental features in human or animal terms, interpreters should aim to interpret landscapes using animal or human characteristics. For example, plants growing in arid deserts could be given qualities such as persistence and resilience; rock formations could be compared to particular animals or famous personalities. These techniques could be incorporated into interpretive commentaries and signage, and should help broaden the appeal to audiences from different nationalities.

Persuasive Communication

Another important element of interpretation is the language used to convey information. The importance of using everyday, non-specialist terms has already been discussed, but it is also worth considering the tone and focus of the messages being communicated. Interpretation designed to enhance visitors' environmental knowledge, attitudes and behaviour needs to be relevant and believable if it is to be effective. Messages should also emphasize aspects of the experience that visitors themselves find important. For instance, Ballantyne and Hughes (2006) used front-end and formative evaluation to design and test the perceived effectiveness of warning signs relating to bird feeding in national parks. Stage one examined park visitors' beliefs, attitudes and bird feeding behaviour and found significant differences between feeders and non-feeders, with feeders claiming they did so out of a concern for the birds' wellbeing. This group did not regard bird feeding as dangerous for the birds or for humans; did not consider birds' dependency on humans to be an issue; and felt that feeding

birds provided an unprecedented opportunity to interact with wildlife. The researchers used this information to design three warning signs that were then tested with another sample of park visitors. Respondents rated the sign that focused on the birds' health and safety as the most persuasive. This sign specifically addressed the common misconceptions about the benefits of bird feeding, misconceptions that included the view that picnic foods are good for birds; that feeding does not make birds depend on humans for food; and that feeding is the only way humans will see birds in the wild. Respondents felt this sign was the most persuasive because it gave reasons why not to feed birds; it was clear and concise; and the title 'Picnic scraps can kill!' attracted attention. Respondents' preference for signs that present a clear argument for not feeding birds supports Oram's (1996) claim that 'in order to prompt behaviour change, tourists must be convinced of the reasons why they should change' (p. 89). To be persuasive, therefore, interpreters need to first understand their visitors' beliefs and viewpoints; second, develop messages, materials and activities that are likely to appeal to, and influence, their target audiences; and third, check whether the interpretation is 'hitting its mark'. Regular and comprehensive evaluation is a vital ingredient in this process.

Evaluation and Remediation

Regular and systematic evaluation allows interpreters to ascertain whether their intended messages are having the desired effect. Admittedly, it is costly and time-consuming, but if not done, there are significant risks of having dissatisfied customers. This in turn is likely to impact on the sustainability and long-term viability of the ecotourism site or business.

There are three stages when evaluation should be conducted – in the planning phase (front-end evaluation); in the design phase (formative evaluation); and once the messages, exhibits, displays, signs and talks are 'in situ' (summative evaluation). Front-end evaluation is predominantly used to guide the content, design and themes of new interpretive activities, though it can also be used to refresh or renovate existing products. Because this approach allows interpreters to assess how much and what their target audiences already know about a given topic, it is often used to identify common 'gaps' and/or areas of potential overkill (things that most people already know). This is important as otherwise sites may spend considerable time and effort designing experiences that visitors are not interested in, can't understand or already know about. Common questions asked of visitors at this stage include:

- How much time are you likely to spend at the site?
- What other similar experiences have you been to?
- What do you already know about these topics/objects/events?
- What would you like to know about these topics/objects/events?
- What are your interests and needs and how can we best meet these?
- What would encourage you to visit this site more than once?

Formative evaluation is used in the development stage to ascertain whether interpretive messages, displays and activities are likely to appeal to potential visitors. Usually

evaluation in this phase involves the use of 'mock-ups' and prototypes as these can be tested, revised and retested relatively cheaply. Testing can focus on clarity of explanations; positioning and sequencing of events, signs and exhibits; positioning; visual appeal; legibility, readability and text length; and/or ability to engage visitors. To enhance the relevance and validity of feedback, formative evaluation should be done in conditions that closely mimic what visitors will experience in the final setting. This will also enable interpreters to measure the holding power of exhibits, signs and talks (length of time people spend reading or listening) as well as the knowledge gained by visitors from participating in the experience (Moscardo et al., 2007). The following are questions often used in formative evaluation:

- What do you think are the main messages being communicated here?
- Is there anything that is difficult to understand or do?
- Do you find the information interesting, useful and/or relevant?
- What elements of the interpretive experience interest you most?
- Are there any elements that are distracting, boring, not worth including?
- Is there anything else you would like to know?

The biggest benefit of formative evaluation is that unsuccessful elements can be redesigned and retested prior to installation and use.

Summative evaluation is conducted on real exhibits, signs and activities with actual visitors. It can be used to identify both successful and unsuccessful elements, and in some cases allows experiences to be 'tweaked' to maximize visitors' learning and enjoyment. The key to effective summative evaluation is to ask specific questions – 'what did you particularly like about the presentation?' will give far more useful answers than 'did you enjoy your visit here today?'. There are many different questions that can be asked in the summative phase, including:

- What do you think are the main messages, concepts or ideas presented?
- How does what you have learned here today link to your previous experiences?
- What particular element or activity appealed most/least and why?
- Has this experience changed your views or attitudes towards the environment? If so, how?
- Do you intend to change your behaviour as a result of your visit? If so, how?

Summative evaluation also includes less formal techniques such as observation, staff–visitor interactions and visitor books and blogs. Observation allows interpreters to record how visitors use the site and identify any possible problems such as inaccessible areas, bottlenecks, short-cutting, crowding and fatigue. Regular occurrence of these is a warning that the interpretation or sequencing requires remediation. This may be as simple as moving a display or installing new instructions, or as complex as reconfiguring a whole exhibit. Staff–visitor interactions and reviews of visitor books, blogs and other social media can also be used to identify possible problem areas, as well as those elements that are working particularly well. These approaches can all be used concurrently to assess the impact of the interpretive experience. Again, if negative comments occur regularly, remediation is recommended.

CONCLUSION

This chapter has explored the role of visitor interpretation in the achievement of ecotourism goals, viz., how to facilitate visitor environmental learning, and in particular, the adoption of conservation behaviour during and after ecotourism experiences. It is argued that with its focus on experiential learning, interpretation is well suited to promote visitor learning of environmental knowledge, attitudes and behaviour. Moscardo et al.'s (2007) six key principles are presented to inform the design of best practice interpretation aimed at engaging ecotourism visitors in reflection on environmentally sustainable knowledge and adoption of appropriate attitudes and behaviour. These are:

- Interpretation should personally connect with, or be relevant to, intended audiences.
- Interpretation should provide novelty and variety.
- Interpretation should be organized with clear, easy to follow structures.
- Interpretation should be thematic.
- Interpretation should engage visitors in the learning experience.
- Interpretation should demonstrate an understanding of, and respect for, the audience.

Literature regarding the influence of interpretation upon visitor learning outcomes needs to be considered and applied in order to develop powerful educational experiences that impact positively upon visitor acquisition of environmental knowledge, attitudes and behaviour. This literature suggests that designers need to work 'backwards' by first deciding upon the environmental messages and visitor education outcomes they wish to achieve; second, deciding on the 'stories' and information they can use to illustrate such messages; and third, determining the most appropriate manner of engaging and presenting the message and information to the visitor.

The importance of using persuasive communication techniques and engaging the visitor emotionally during the interpretation process are identified as crucial if the aim is to facilitate visitor long-term adoption of environmentally sustainable behaviour. Research has indicated that one of the best ways to emotionally engage visitors is through interaction with animals. Although many animal encounters can promote positive emotional responses in visitors, it has been found that interpretation of the negative impacts of human behaviour on wildlife and the environment is also a powerful means to motivate people to make changes to their environmental behaviour. The use of emotion can unfortunately be a bit of a 'hit or miss' situation as individuals respond differently to the same emotional material. Engendering emotion through interpretive experiences is thus still a controversial issue as it is possible to simplify a situation so that only one side is presented – when this occurs interpretation can quickly become indoctrination. Accordingly, care needs to be taken to ensure that visitors are emotionally engaged but also encouraged to reflect on different aspects of the situation with which they are confronted – interpretation after all is a free-choice learning experience.

Finally, the importance of evaluating the impact of interpretive experiences upon visitor learning outcomes is discussed. Unfortunately, evaluation of this nature is not often undertaken and even when it is, the findings are rarely translated into remedial

action. Most of the normally scarce financial resources are used in the design and production of the interpretation materials and little money is left for evaluation. Notwithstanding this reality, it is argued that front-end, formative and summative evaluation of interpretive materials is very important in order to ensure that as far as possible interpretation experiences are effective in helping achieve a major goal of ecotourism, viz., the presentation of powerful educational experiences that impact positively upon visitor environmental knowledge, attitudes and consequent adoption of environmentally sustainable behaviour.

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26. Current themes and issues in ecotour guiding

Rosemary Black and Betty Weiler

INTRODUCTION

While the early twentieth century saw the coining of the term 'nature guiding' by American guide Enos Mills (1920), the term 'ecotour guiding' is a more recent addition to the ecotourism lexicon (Manidis Roberts Consultants, 1994). Ecotour guides work at destinations in both developing and developed countries, and in diverse contexts and environments such as national and state parks, visitor attractions, resorts and eco-lodges, interpretive centres, nature reserves, museums, heritage sites, waterways, marine environments and zoos and aquaria. They can be employed by tourism destination organizations, nature, adventure and cultural tour operators, accommodation providers, tourism attractions, land and marine management agencies, non-governmental organizations (NGOs), educational institutions or be self-employed. Not surprisingly, then, the roles and contributions of guides to ecotourism can vary widely. That said, ecotour guides are now acknowledged by many as guides with specialized knowledge and skills (Black, 2002), and are frequently described as being 'pivotal' to the success of ecotourism (Ham & Weiler, 2003; Page & Dowling, 2002; Weiler & Ham, 2001; Weiler & Kim, 2011).

The definition of an ecotour guide adopted for this chapter is someone who is employed on a paid or voluntary basis who conducts paying or non-paying visitors around natural (but may include cultural) attractions, areas or sites, utilizing ecotourism and interpretation principles. In other words, she or he communicates and interprets the significance of the environment, promotes minimal impact practices and advances the sustainability of the natural and cultural environment (Black, 2002). In addition, ecotour guides are expected to role model environmentally and culturally sensitive behaviour and act as a cultural mediator between clients and the local community (Black & Weiler, 2005; Black, Ham & Weiler, 2001; Weiler & Ham, 2001). Of particular note are ecotour guides' roles as interpreters in revealing meanings and relationships, and engaging and connecting visitors with places and environments (Weiler & Ham, 2001).

A review of nearly 30 years of research, including scholarly publications and government reports on nature and ecotour guiding, reveals in numerable conceptual papers and empirical studies on ecotour guides, the latter ranging from case studies of individual operators, sites and management agencies (Ballantyne & Hughes, 2001; Carmody, King & Prideaux, 2010; Ham & Weiler, 2003) through to nationwide studies using multiple data sources and methods (Black, 2002; Weiler, 1999; Weiler & Crabtree, 1998) and even some cross-national studies (Black et al., 2001; Weiler & Ham, 2002). In 118 publications identified in the literature, four themes emerged as particularly prominent: the multiple roles of the ecotour guide; interpretation as a key role; ecotour guide certification as a vehicle for quality assurance; and ecotour guide training and education. This chapter provides an overview of the published literature on each of these four themes.

THE MULTIPLE ROLES OF AN ECOTOUR GUIDE

Theoretical and empirical research on the role of the guide in the context of nature-based and ecotourism experiences emerged very early in the tour guiding literature; indeed the first published paper on the role of the nature guide (Almagor, 1985) appeared in the same issue of *Annals of Tourism Research* as Cohen's (1985) seminal paper on tour guiding: 'The tourist guide: The origins, structure and dynamics of a role'. While Almagor's paper was based on unstructured observations of a single guide on a single tour in Botswana, it nonetheless introduced a theme that has continued to feature in the literature: the multiple roles that guides are expected to play.

Since then, many authors have undertaken to inventory or otherwise try to capture the diverse roles played by ecotour guides. Some of these efforts have been atheoretical and unempirical in their approach, and thus it is neither possible nor particularly useful to list all of the roles identified by these authors. Perhaps of more use is Black and Weiler's (2005) review of 12 of these studies over a period of 22 years (1979 to 2001), which identified ten key roles that are expected of guides. In descending order of frequency of mention, these were: (1) interpreter/educator; (2) information giver; (3) leader; (4) motivator of conservation values/role modeller; (5) social role/catalyst; (6) cultural broker/mediator; (7) navigator/protector; (8) tour and group manager/organizer; (9) public relations/company representative; and (10) facilitator of access to non-public areas. Most of the authors of these studies acknowledge, however, that 'the number [and relative importance] of roles vary depending on . . . the tour setting, the type of group and their needs and interests, and the employer's and industry's expectations of the guide' (Black & Weiler, 2005, pp. 26–7).

Comprehensive lists and inventories of roles can be challenging to work with and to build on for both research and practical outcomes such as recruitment and training. Thus, in an effort to make theoretical sense of these, Weiler and Davis (1993) published their model depicting the roles of the nature-based tour leader (guide). Informed by a survey of tour operators and a content analysis of tour brochures, they proposed that an ecotour guide's multiple roles could be collapsed into three meaningful dimensions, each of which included two distinct roles. The first and second dimensions, meeting the needs of individual tour participants (two roles – tour leader and teacher) and the needs of the tour group (two roles – organizer and entertainer), are refinements of Cohen's (1985) original model of mainstream tour guides. Weiler and Davis (1993) added a third dimension, the needs of host communities and environments. In this dimension, the guide plays a key role in motivating and managing tour participants' on-site behaviour to minimize adverse effects on the natural and cultural environment, as well as fostering longer-term understanding, appreciation and conservation of those environments, mainly through interpretation and persuasive communication.

Although informed by a fairly limited analysis of guides and guided tours in Australia, Weiler and Davis's six-cell model became a point of departure for subsequent papers (for example, Ballantyne & Hughes, 2001; Gurung, Simmons & Devlin, 1996) and also served as a theoretical framework for at least three empirical studies (Haig & McIntyre, 2002; Howard, Thwaites & Smith, 2001; Randall & Rollins, 2009). For example, Gurung et al.'s (1996) survey of 117 Nepalese tour and trekking guides revealed that interpretation of bio-geography and culture is, according to these guides, their most important role.

Howard et al. (2001), on the basis of interviews with Indigenous guides and observations of selected tours, confirmed the relevance of all six of Weiler and Davis's (1993) tour guiding roles to Indigenous tours, identifying specific and multiple examples of guides performing all of these roles.

Haig and McIntyre (2002) and Randall and Rollins (2009) undertook to operationalize Weiler and Davis's (1993) model and assess tourists' perceptions of the relative importance and/or performance of each guiding role. In Haig and McIntyre's (2002) study, tourists rated all the six roles identified by Weiler and Davis (1993) as important. However, the role of entertainer was viewed as notably less important by ecotour clients (in comparison to the ratings by visitors staying at an ecotourism resort). Using 12 rating items, Randall and Rollins (2009) obtained visitors' perceptions of both role importance and guides' performance of the six roles. Communication was rated as somewhat less important, although this could be a result of the particular items that Randall and Rollins used to measure this dimension. Guides were rated by tour clients as performing well on all six roles. Given that guides often perform multiple roles simultaneously and sometimes these roles conflict (Arnould & Price, 1993), this was a somewhat unexpected result.

On the other hand, the results of other studies indicate that some underestimate the importance of the mediating and brokering roles of the guide, and judge the provision of information as more important than roles such as good interpretation, the delivery of minimal impact messages and influencing visitor attitudes and behaviour (Ballantyne & Hughes, 2001; Weiler, 1999). Overall, results of these studies are mixed, not widely generalizable and largely inconclusive, other than to confirm that all six roles identified by Weiler and Davis (1993) are seen as important by most operators, guides and visitors.

Thus, while intended as a heuristic rather than a testable theoretical model, the Weiler and Davis (1993) framework has nonetheless stood the test of time in drawing attention to both the many mainstream guiding roles and the specialist roles that ecotour guides are required to perform. Most of these studies have called for further refinement and wider investigation of both role importance and guide performance.

In the meantime, documentation and analysis of the roles played by ecotour guides have served numerous purposes (Black, 2002; Black & Weiler, 2005). They have underpinned the development of competencies required by a guide to undertake these roles such as group management, communication, presentation and leadership skills, each of which is associated with underpinning knowledge. These in turn have formed the building blocks of training programmes (discussed later in this chapter). Guiding roles have also informed other quality assurance schemes such as guide certification programmes and tools developed within these programmes for assessing and enhancing performance (also discussed later in this chapter).

Case studies examining both the 'eco' and the more generic roles of guides have been prevalent in developing countries, including Botswana (Almagor, 1985), Nepal (Gurung et al., 1996), several Latin American countries (Jacobsen & Robles, 1992; Kayes, 2005; Kohl, 2007; Pereira & Mykletun, 2012) and Madagascar (Ormsby & Mannle, 2006). Important subthemes have emerged from these studies about the roles of guides that seem particularly pertinent in a developing country context, notably that guiding in these countries is a means of earning a living and lifting individuals and families out of poverty (Shephard & Royston-Airey, 2000). This may motivate guides to perform their

customer service role at a high standard (in anticipation of receiving a tip) as well as their tour management role (in order to keep their job). On the other hand, in at least one study (McGrath, 2007), there were issues regarding authenticity and accuracy, with guides fabricating stories to please their clients. McGrath also suggests that the role of the guide in developing countries needs to mature to being a facilitator and broker of multiple meanings rather than the more traditional 'show and tell' role played by guides in these countries.

Moreover, when earning a living is a priority, there may be less attention to delivering conservation messages and monitoring visitor behaviour, suggesting that mechanisms may be needed to ensure that guides perform these roles well. A notable example of the latter is Ormsby and Mannle's (2006) study of Madagascar, in which the authors conducted 135 individual and group interviews with a total of 214 individuals including park staff, NGO staff, guides and local residents. Their findings illustrate the roles that some guides play in explaining the benefits of parks and delivering other conservation messages to local residents, by way of a weekly hour-long programme on local radio. The guides are also active in making connections with people in the villages and directing tourist dollars to these areas, which has the added effect of building local support for protected areas and ecotourism.

As Shephard and Royston-Airey (2000, p. 331) note, 'the roles and ethos of ecotour guides have diverged in developed and developing countries'. Empirical research on the roles of the ecotour guide in developed countries include Australia (Haig & McIntyre, 2002; Hillman, 2003; Howard et al., 2001; Scherrer, Skanava & Matthopoulos, 2011), Canada (Randall & Rollins, 2009), Greece (Giannoulis, Skanavis & Matthopoulos, 2006; Gilg & Barr, 2006; Giovannetti, 2009; Skanavis & Giannoulis, 2009), Japan (Yamada, 2011), the UK (Shephard & Royston-Airey, 2000) and the USA (Ham & Weiler, 2003; Sharpe, 2005). Many of these studies have focused on interpretation, quality assurance or training, so are discussed in greater detail in other sections of this chapter. Some, though not all, have focused on guiding in protected areas. While not unique to developed countries, a common theme evident in these studies is the central role of the guide as a tool for visitor management in protected areas and remote locations. The guide's role in this regard is not only to role model responsible behaviour but also monitor and sometimes control visitor behaviour to help protect natural and cultural heritage resources and sites, as well as reduce risk associated with on-site visitor behaviour.

Another subtheme in research on ecotour guiding roles has been the perceptions of different stakeholder groups such as operators, guides, visitors, residents or expert assessors regarding the importance and/or performance of guides' roles (for example, Amalgor, 1985; Ballantyne & Hughes, 2001; Gurung et al., 1996; Weiler & Davis, 1993). Some have looked at how the physical setting or context (for example, Thomas, 1994: aboard a ship to Antarctica where the guide is on duty 18 hours a day), the cultural context (for example, Howard et al., 2001: Indigenous Australia), the location (Carmody et al., 2010; Hillman, 2003: in remote areas) and the audience (Ham & Weiler, 2003; Shephard & Royston-Airey, 2000: well-travelled, experienced, sophisticated or affluent tourists) can affect role expectations and performance.

Yamada's (2011) investigation of ecotourism policy in Japan represents an isolated example of research that links government policy with ecotour guiding roles and practice. She illustrates how Japanese government policies regarding the roles of guides have

helped to build their image as value-adding to ecotourism and led to developments in tour guide training and improvements in the quality of tour guiding, but also notes the need to monitor guides' performance of their roles in relation to both enhancing the experience and achieving ecotourism's other goals.

One important research subtheme within ecotour guiding roles has been the normative role expectations and performance of guides with respect to their emotions which, in the context of the workplace, is referred to as emotional labour (Sharpe, 2005). Guiding ecotours is, more often than not, an extended service encounter (Arnould & Price, 1993) in which guides' performance of their roles requires them to both manage their own emotions and generate emotional response from participants. Some research on the emotions expected of guides by tourists and the mechanisms by which heritage and adventure guides manage these has been published, but has only recently surfaced in an ecotourism context (Hillman, 2003; Van Dijk, Smith & Cooper, 2011).

Collectively, these studies confirm that an ecotour guide's job cannot be captured in a single one-size-fits-all position description. This has implications for recruitment, training, remuneration and reward systems, guide certification and portability of qualifications. It is also evident that research findings often cannot be widely generalized and, as a result, our understanding of the relationships between the antecedents and consequences of the roles performed by ecotour guides is limited. More research is thus required to span the many types of ecotour guides and guiding.

In the Black and Weiler (2005) study described earlier, the one role that was seen as important in all the studies reviewed was that of interpreter. Delivering environmental conservation messages through nature and heritage interpretation (for example, Henning, 2008) is also the role that has received the most research attention in the ecotour guiding literature.

INTERPRETATION: A KEY ROLE OF ECOTOUR GUIDING

From the earliest ecotour guiding literature through to the present, there is considerable discussion of the role of interpretation, including much attention to defining what it is (Howard, 1998; Pereira & Mykletun, 2012; Weiler & Ham, 2001). In some papers, nearly all of what an ecotour guide says and does is subsumed under the interpretation label. Others describe guiding practices that might be considered interpretive, without using either the term interpretation or ecotourism (for example, Arnould & Price, 1993). Those authors who do embrace the term cite Tilden (1977) and Ham (1992) to distinguish interpretation from education, noting that interpretation aims to reveal meanings and relationships rather than simply communicate factual information. Interpretation has also been defined as 'engagement with visitors in ways that provoke them to think about and connect with natural and cultural heritage, including places, sites, people, artefacts, and natural and historical events' (Weiler & Kim, 2011, p. 115) and to foster a sense of care and stewardship among visitors (Skanavis & Giannoulis, 2011, p. 50).

A common theme in the literature has been the importance of interpretation as a key strategy for achieving the goals of ecotourism (Commonwealth of Australia, 1994; Giannoulis et al., 2006; McGrath, 2007; Weiler & Ham, 2001; Weiler & Kim, 2011). For

example, Henning (2008, p. 189) sees the role of the interpretive guide in at least one Canadian national park as follows:

> to communicate to visitors the ecological problems that face the park staff, the errors that were made in the past, the restoration efforts that have been made and are currently underway, the relationship of the park environment to the world at large, and the idea that people can do something about the environment.

Weiler and Kim (2011, p. 114) present four categories of sustainable outcomes that can be influenced by tour guides, and while interpretation is specifically mentioned only in relation to the first outcome, all are communication-dependent and thus interpretation has a role to play in all four outcomes:

1. Enhancing visitors' understanding and valuing of the site and its natural and cultural resources through interpretive guiding.
2. Influencing visitors' decisions about their voluntary on-site behaviour through communicating and role modelling sustainable tourism practices.
3. Monitoring and managing visitors' on-site behavioural compliance through enforcing regulations and role modelling practices associated with protecting ecological and cultural values.
4. Fostering visitors' post-visit pro-environmental and pro-conservation attitudes and behaviours through persuasive communication.

Some scrutiny of interpretation as a role used by ecotour guides has occurred in a number of developing countries, mainly in Latin America (Brazil, Costa Rica, the Galapagos Islands, Panama, Peru) but also in Madagascar and Nepal. Other case studies that explicitly examine the contribution of interpretation to ecotourism have been undertaken in Antarctica, Australia, England, Greece, New Zealand and Japan, although the role of interpretation is alluded to in many other studies. These studies almost always conclude, based on surveys with tourists, guides and sometimes other stakeholders, that interpretation is a key element of effective ecotour guiding. The underutilization or poor quality of interpretation delivered by ecotour guides is often noted (Gurung et al., 1996; Pereira & Mykletun, 2012; Randall & Rollins, 2009; Weiler, 1999; Weiler & Ham, 2001). This is clearly an issue given that tourists, when asked, often rate the guide's interpretive and communication skills as equally or more important than their knowledge and other skills and attributes, particularly in facilitating a quality experience (Haig & McIntyre, 2002: Ham & Weiler, 2003).

Many authors, including Hughes and Ballantyne (Chapter 25, this volume), discuss interpretive principles, practices, tools and techniques that can be and have been applied to ecotour guiding (Howard, 1998; Pereira & Mykletun, 2012; Weiler, 1999; Weiler & Ham, 2001). However, sophistication in interpretation research is relatively recent, particularly in terms of the operationalization and analysis of relationships between antecedents and outcomes. Hughes and Ballantyne's chapter provide some examples such as the role of emotions and culture in interpretive guiding. Nonetheless, Uzzell's (1998) call for further development and application of theory to assess the effectiveness of interpretation in achieving the goals of ecotourism seems as relevant today as it was in the late 1990s.

Finally, interpretation as a fundamental component of ecotour guide training is noted in at least the last 20 years of research reviewed for this chapter (Jacobson & Robles, 1992; McGrath, 2007; Kohl, Brown & Humke, 2001; Pereira & Mykletun, 2012), with several studies highlighting the absence or inadequacy of interpretation training in particular contexts (Black et al., 2001; Christie & Mason, 2003; Periera & Mykletun, 2012; McGrath, 2007; Skanavis & Giannoulis, 2010; Thomas, 1994; Weiler, 1999). Kohl et al. (2001, p. 23) make a particularly compelling case for revisiting the content and delivery of interpretive training in developing countries:

> The guide must be a critical thinker able to observe a site, boil down its contents, extract the essence, render it into interpretive form for a particular audience, and then communicate it. When the norm is memorization, students tend only to describe the barrel rather than reaching deep into the barrel and extracting the meaning.

Interpretation as a subset of ecotour guide education and training is discussed in more detail later in this chapter.

CERTIFICATION AND QUALITY ASSURANCE

The role of the guide has gained prominence in facilitating a quality tourist experience at the same time that expectations of quality from tourism industry stakeholders and consumers have been increasing (Jones, 1999; Page & Dowling, 2002). Some studies of the mainstream tour guiding industry in countries such as Australia and Hong Kong (Ap & Wong, 2001; Australian Tourism Export Council & Tourism Queensland, 2001) have highlighted problems associated with current tour guiding practices, including inadequate skills and unethical behaviour of tour guides. The tour guiding discourse is punctuated by calls for more theoretical bases, benchmarks and best practice principles (Christie & Mason, 2003) and frequently mentions the need for professionalism, more comprehensive training programmes, and greater monitoring and enforcement of standards (Christie & Mason, 2003; Dioko & Unakul, 2005).

This suggests the need to develop and implement quality assurance and regulatory mechanisms that might address some or all of these issues in ecotour guiding. Examples include minimum guiding standards, tour guide awards for excellence, professional certification, and awareness-raising activities regarding guiding roles and standards among guides and industry stakeholders (Black & Weiler, 2005). Each of these is argued to be a way of enhancing individual guide performance (Black, 2002; Black & Weiler, 2005; Weiler & Davis, 1993; Weiler & Ham, 2001).

Australia has led the way in ecotour guiding quality assurance and certification (see Dowling, Chapter 3, this volume). During the 1990s, several key events and developments led to the recognition of quality ecotour guiding as an important and specialized type of guiding. The *National ecotourism strategy* (Commonwealth of Australia, 1994) first raised the issue and possibility of a certification system for ecotour guides, stating that guide certification would 'encourage the delivery of high-quality, sustainable tourism products and the provision of accurate interpretive services' and would 'allow natural resource managers to monitor ecotourism operators and guides working within their region' (Commonwealth of Australia, 1994, p. 39).

During the development of this strategy, the concept of a national ecotourism accreditation scheme that included training and education of ecotour guides and an ecotour guide certification programme was proposed that would include specific guide competencies (Manidis Roberts Consultants, 1994). A year later, *A national ecotourism education strategy* (Social Change Media, 1995) also endorsed the concept of an ecotour guide certification scheme recommending the revision of national tour guide competencies to include specific ecotourism-related competencies.

Research underpinning the *National ecotourism education strategy* (Social Change Media, 1995) and the *Ecotourism education directory* in Australia (Commonwealth Department of Tourism, 1996) highlighted a lack of work-friendly and regionally based training in Australia. These two reports provided the impetus for further research by Weiler and Crabtree (1998) on 'Developing competent ecotour guides' that aimed to assess the on-the-job performance of nature-based/ecotour guides. This study developed performance criteria to assess guides' competencies in group management, leadership, communication/interpretation, minimal impact and cultural awareness. The study outcomes (Weiler & Crabtree, 1998) advanced the development of a national ecotour guide certification programme in Australia.

In 1999, the process of developing the Australian EcoGuide Programme commenced (see Dowling, Chapter 3, this volume). Extending the work of Weiler and Crabtree, Black's (2002) critical analysis of the Programme's development process resulted in a best practice model for tour guide certification (Black & Ham, 2005). Following Black's work, a number of other studies have been published on quality assurance and certification in ecotour guiding in other countries (Calvo, 2010; Nasopoulou, 2011; Yamada, 2011).

Utilizing Black's model, Carmody et al. (2010) critically examined another Australian ecotour guide certification programme known as Savannah Guides, a programme serving tour guides working in northern Australia. Their study investigated whether the organization's training, mentoring, accreditation and professionalism could be transferred to other locations across Australia. They found the organization met most of the characteristics identified by Christie and Mason (2003), Black and Weiler (2005) and Black and Ham (2005) as being essential for good guiding practice and could be applied to other regions. Adopting a sociological perspective, Hillman (2003) explored the salient issues related to the perceived professionalization of Savannah Guides, finding that the guides' philosophy is based on a collective sense of identity and recognition as an elite ecotourism organization that excludes guides who do not conform to their group philosophies, organizational standards and codes of conduct.

Drawing on some of the preceding literature, Black and Weiler (2005) identified the roles and areas in which guides need to perform well to deliver a quality tourist experience, suggesting that guides are underperforming in some areas. This seminal paper (Black & Weiler, 2005) examined the potential of a range of tour guiding quality assurance and regulatory mechanisms to enhance guide performance with respect to their key roles. These included codes of conduct, professional associations, awards of excellence, training, professional certification, accreditation and licensing. Training and education is discussed in the next section of this chapter.

More recent research has focused on specific quality assurance mechanisms (Black, 2007; Calvo, 2010; Carmody et al., 2010; Christie & Mason, 2003) and Ponting's (2009)

work explored more general issues of professionalism among Australian ecotour guides. Her study aimed to understand and interpret the impact professionalization has on the work of these guides. She found that the terms profession and professional have been adopted without question in the tour guiding literature and are used interchangeably in describing the occupation of tour guiding without clarification of what professional tour guiding involves (cf. Ap and Wong, 2001; Pond, 1993; Weiler & Ham, 2001). Arguing for a better understanding of what professionalism means for ecotour guiding to gain professional status, her study proved to be timely as the ecotour guiding occupation continues to move through a process with the emergence of professional associations, professional certification and more theoretically grounded guide training.

While most of the literature on certification and quality assurance emanates from Australia, a few studies from other countries have been published. Using the six mechanisms identified by Black and Weiler (2005), Yamada (2011) in a study of ecotour guiding in Japan found that professional associations, awards of excellence and training already existed, but recommended the establishment of a professional certification programme, codes of conduct and compulsory licensing. In Greece, Nasopoulou (2011) described the Guides of National Parks and Recreation Areas as a relatively new certified guide specialty. However, she noted that many agencies do not employ them and recommended a register of guides be created and legislation developed to support tour guide certification.

Other than frequent calls in the literature for more tour guide training, only a few developing country studies have addressed other quality assurance mechanisms. Kayes's (2005) study based in Panama recommended the establishment of an ecotour guide certification programme, while in Costa Rica (Calvo, 2010) tour guides are licensed, and certified tour operators are required to train their guides in sustainability and community development activities.

The majority of the ecotour guiding quality assurance and certification literature is largely descriptive, with notable examples in recent years of model- and theory-building (Black & Ham, 2005; Black & Weiler, 2005) and critical analysis (Carmody et al., 2010; Yamada, 2011). However, the early studies that underpinned many quality assurance initiatives, at least in Australia, helped ensure that ecotour guiding certification in particular was grounded in theory and empirical evidence of what makes quality guiding practice. The following section examines whether there are similar trends for ecotour guide training.

TRAINING AND EDUCATION

As already noted, tour guide training and education are frequently acknowledged as mechanisms to improve the quality of tour guide performance (Ap & Wong, 2001; Dioko & Unakul, 2005; El Sharkawy, 2007; Mason & Christie, 2003; Pond, 1993). The literature suggests that many guides in the 1990s, including ecotour guides, learned through experience and on the job and did not have any formal education and training (Mason & Christie, 2003; Weiler & Davis, 1993). In 1997, Weiler, Crabtree and Markwell (1997) highlighted the inadequacy of training opportunities and the lack of adequate rewards for Australian guides, describing the status of guiding at that time as highly fragmented, uncoordinated and unregulated.

Researchers have suggested that training programme content be based on guide roles and the abilities, skills and knowledge needed to perform these roles (Black & Weiler, 2005; Ham & Weiler, 2003). At a detailed level, Black (2007) and others (Black & Ham, 2005; Black & Weiler, 2005; Weiler & Ham, 2001) have identified the key areas of knowledge and skills relevant for tour guides, such as: the ability to meet tourists' needs and expectations; the ability to guide according to legal, ethical and safety requirements; general knowledge about the destination; the ability to deliver accurate and relevant commentary; sensitivity to cross-cultural needs and differences; the ability to deliver enjoyable yet educational messages; and the ability to manage a group. As discussed earlier in the chapter, ecotour guides are expected to perform a number of diverse roles (Black & Weiler, 2005; Black et al., 2001; Weiler & Ham, 2001) and many have argued that these skills and competencies be acquired through training. For example, in discussing training content, Black and Weiler (2005) suggested an emphasis on leadership roles and environmental knowledge to ensure comprehensive guide training. They and others have argued for ecotour guide training content to emphasize knowledge and skills relating to environmental and cultural sustainability, including the delivery of content aimed at influencing visitor attitudes and behaviour. A few studies have critically analysed ecotour guide training content. Skanavis and Giannoulis (2010) in Greece and Yamada (2011) in Japan suggest their respective training programmes inadequately cover interpretive skills. The tailoring of ecotour guide training content to meet the specific regional and site-specific context of ecotour guide work is considered by some authors to be important (Hutchison & Bramwell, 1996; Mason & Christie, 2003; Yamada, 2011). This reflects the specific nature of ecotourism sites and destinations as well as interactions with host communities, with Mason and Christie (2003) stressing the need for culturally sensitive guides.

With respect to training approaches, a review of the literature and professional tour guide association internet sites reveals that training programmes come in many different shapes and forms and can be delivered by a wide range of organizations (Mason & Christie, 2003; Pond, 1993). Ap and Wong (2001) argue for an apprenticeship system for guides in established tour operations, while others propose and discuss more formal programmes that are knowledge and competency based (Haase, 1996; Hutchinson & Bramwell, 1996). For example, Hutchison and Bramwell (1996) describe the development of the Certificate III in Ecotourism Operations, a regionally focused competency-based short course that developed skills and knowledge to transition staff from tourism to ecotourism.

However, Mason and Christie (2003) argue that standardized programmes emphasize skill acquisition and development, an approach that fails to consider the complex nature of ecotour guiding. They express some concern with competency-based training programmes, suggesting they lack a philosophical and theoretical base and are unlikely to focus on developing a guide's critical analytical abilities. Similar to Kohl (2007) and Kohl et al. (2001), they argue that ecotour guides need self-reflective skills and awareness especially when working in cross-cultural situations. Christie and Mason (2003) suggest good training should include not only competencies but also cultural sensitivity, critical self-assessment, values and attitudes, proposing transformative learning as a more reflective approach that leads to personal change for the guides.

One factor explored in the literature to a limited extent is the influence of organizational culture on the training and learning abilities of guides (Carmody et al., 2010; Lugosi & Bray, 2008). Based on a case study of one tour company, Lugosi and Bray (2008) suggested that the development of a participative learning culture within a tour guiding organization creates a positive environment for guides. They identified two factors needed to enhance a participative learning culture: the provision of physical or virtual learning spaces and learning opportunities where guides can meet, discuss and share experiences and formalized guidance and monitoring by more experienced guides to ensure best practice is shared among all the group members.

Reflecting the growth in ecotourism in developing countries, some authors have described and proposed various models for training programmes that meet the specific needs of guides and destinations in developing countries (Calvo, 2010; Gurung et al., 1996; Jacobson & Robles, 1992; McGrath, 2007; Nasopoulou, 2011; Paaby, Clark & Gonzalez, 1991; Skanavis & Giannoulis, 2010; Yamada, 2011). Weiler and Ham (2002) successfully developed and implemented an ecotour guide training programme in a number of Central and South American countries that highlighted the importance of targeted training delivered in partnership with in-country counterparts. They suggest an ideal curriculum should incorporate: expansion and refinement of product knowledge; language training where required; and interpretive guiding skills for managing and delivering high-quality experiences.

Based on her study of Indigenous guides working at Machu Pichu in Peru, McGrath (2007) recommended the redesign of existing tour guide training to facilitate inspirational tour guiding and encourage quality assurance in both curriculum design and service delivery. Like Weiler and Ham (2002), she emphasizes the need to develop interpretive skills. McGrath also stressed that new programmes should be aimed at local Indigenous people who currently cannot participate in the industry. This seems consistent with Kohl (2007), whose theoretically informed work training ecotour guides in Central and South America concluded that guides should strive to improve the environmental, cultural and social conditions of a destination to meet ecotourism's goals. Supporting the work of Mason and Christie (2003), his training model promotes continuous learning as essential to the success of ecotour programmes and guides.

An interesting theme emerging in the ecotourism and tour guiding literature, particularly in relation to developing countries, is the relationship between guide training and the guide's contribution to sustainability and ecotourism goals (Kohl, 2007; Novelli & Hellwig, 2011; Weiler & Kim, 2011). Based on previous models for ecotour tour guide training (Black & Ham, 2005; Pereira & Mykletun, 2012), Skanavis and Giannoulis (2009) proposed a training model for ecotour guides in Greece to address sustainable development issues. Similarly, Dioko and Unakul (2005) argue that training local people to be ecotour guides is one avenue for local communities to gain economic, conservation and social benefits from ecotourism.

As already noted, many authors acknowledge the multiple roles of the guide and note that the relevant competencies to perform these roles must be addressed in training (Black, 2002; Black & Weiler, 2005). The growth of ecotourism globally, and the increasingly diverse range of roles played by ecotour guides, has raised the urgency for ecotour guides to gain qualifications and expertise, particularly environmental knowledge and communication/interpretation skills. At the same time, Pereira and Mykletun

(2012) argue that training programmes need to be both portable and flexible to adapt to regional-, site- and context-specific needs, particularly in developing countries. Finally, other recent studies (Kohl et al., 2001; Mason & Christie, 2003) suggest that programmes should balance generic guiding skills and knowledge with the needs of individual learners, allowing guides to tailor their delivery and performance to their own personal needs and circumstances. The contribution of adult learning theory principles and practices such as reflective, interactive and experiential approaches to ecotour guide training is still largely unresearched (Christie & Mason, 2003; Weiler & Ham, 2002).

CONCLUSION

The role of the guide has been prominent in the ecotourism literature since the early 1990s, which in turn has highlighted interpretation as a key role associated with ecotour guiding. Studies have examined the role of the ecotour guide in facilitating a quality visitor experience (Ham & Weiler, 2003; Howard et al., 2001), the ecotour guide's role as mediator and cultural broker (Gurung et al., 1996; Hillman, 2003), the role that emotional labour plays in the life and work of a guide (Hillman, 2003; Van Dijk et al., 2011) and the guide's role in raising community awareness and support for environmental and heritage conservation (Ormsby & Mannle, 2006; Skanavis & Giannoulis, 2009).

Some research has explored the relative importance of the various roles as perceived by different stakeholders and the performance of these roles, with limited consideration of how these might differ across guiding contexts or vary over time. With a few exceptions, studies on guiding roles have focused on a single context or case, with little or no reporting of differences between destinations, guiding contexts or industry sectors (for example, accommodation versus attractions versus tours).

Interpretation is generally acknowledged as an important role for ecotour guides, but one that is underperformed particularly in developing countries. Given the largely descriptive studies on this topic, little can be concluded regarding exactly how, or how well, interpretation facilitates the goals of ecotourism. Evaluation of particular interpretation techniques in specific ecotour guiding contexts and settings is largely absent in the discussions. Weiler and Kim (2011) make a compelling case for more theory-driven research linking ecotour guiding and interpretation principles to sustainability outcomes.

On the other hand, the literature is quite rich with studies examining the use of quality assurance mechanisms for enhancing and monitoring the quality of tour guiding (Black & Weiler, 2005), particularly certification programmes. The literature describes and analyses a number of ecotour guide certification models, particularly in Australia. A limited number of studies indicate some other countries are exploring quality assurance mechanisms for ecotour guides in different contexts but, with the exception of certification, critical analysis of their application is lacking. There is a need for critical and comparative studies of the efficacy of different quality assurance mechanisms in improving guiding performance.

Not surprisingly, the focus on ecoguide roles, role performance and quality assurance has led to considerable research on training and education of guides, including training models. The need for training to address the multiple roles of ecoguides and the competencies required to fulfil these roles is highlighted in much of this literature.

More recently, the literature points to the need for portability, flexibility to adapt to regional-, site- and context-specific needs, more critical, analytical and self-reflective skill development in guides and customization to the learning styles of individual guides.

This review of nearly 30 years of research on ecotour guiding has identified four themes that are prominent in the literature: the multiple roles of the ecotour guide; interpretation as a key role; ecotour guide certification as a vehicle for quality assurance; and ecotour guide training and education. Other topics and issues have received less attention, although individual researchers have more recently started to explore contemporary issues such as the maturation and professionalization of tour guiding, government policy in relation to tour guiding, cultural mediation, emotional labour, guiding and sense of place, the brokering of multiple meanings and guiding as a visitor management tool. Such studies employing theory and empirically grounded analysis should help to further our understanding of ecotour guides and guiding.

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27. The role and management of non-captive wildlife in ecotourism

Gianna Moscardo

INTRODUCTION

There is an important, but complex, relationship between wildlife and ecotourism. On the one hand, the opportunity to participate in wildlife-based experiences is a central element of many ecotourism activities, while, on the other hand, these same ecotourism activities can have significant negative impacts on both the wildlife and the destination they inhabit. This chapter provides an overview of this relationship between wildlife and ecotourism describing the important roles that wildlife viewing and interaction play in the ecotourism experience. It then discusses the potential impacts that tourist–wildlife interactions can have on the tourist and the impacts that ecotourism can have on wildlife and the destination, both positive and negative. The chapter concludes by briefly describing some of the management opportunities and issues that arise from this relationship.

Ecotourism Australia (2011, p. 1) defines ecotourism as 'ecologically sustainable tourism with a primary focus on experiencing natural areas that fosters environmental and cultural understanding, appreciation and conservation', and it is this definition that the current chapter will use. While it is not the intention of this chapter to enter into the extensive debate about ecotourism and ecotourist definitions, four features of this operational definition need to be highlighted:

- Ecotourism exists in, and relies upon, natural environments.
- Ecotourism has the overt goal of encouraging visitors to learn about, understand and seek to conserve these environments.
- Ecotourism should encourage sustainability.
- Ecotourism should be about more than environmental sustainability or conservation; it should also include cultural elements and a consideration of the people who live in or near the ecotourism operations (Kerstetter, Jou & Lin, 2004).

Wildlife-based tourism can be defined as a type of tourism in which the opportunity to view and/or interact with wildlife is the central focus of both the activities provided and the motivations or expectations of the visitors who participate in the activities (Miller, 2008). Wildlife-based tourism activities can be seen as varying along a number of dimensions including the type of wildlife (Ryan, 1998), whether or not the activity focuses on a single species or multiple species (Moscardo, 2006) and the degree of intensity of the experience (Reynolds & Braithwaite, 2001).

The most common dimension is one that runs from captive to non-captive and Figure 27.1 provides both an overview of this dimension and examples of wildlife-based tourism experiences that vary on this dimension (Moscardo, 2008a). At one end

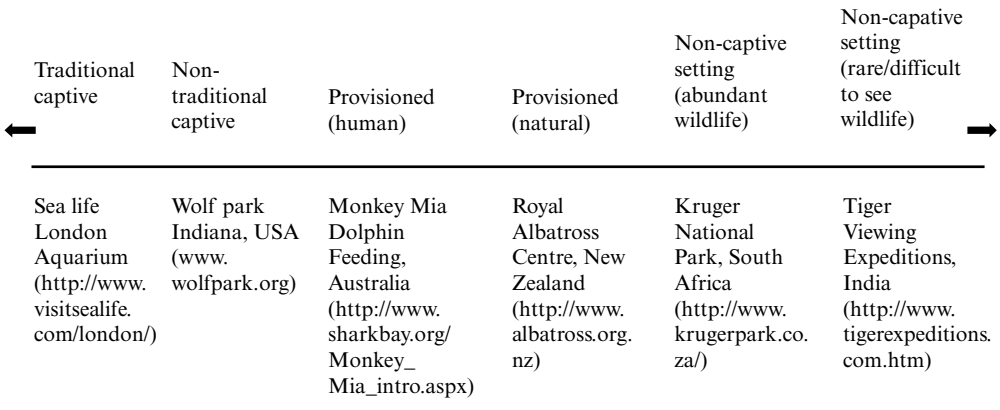

Figure 27.1 A captive to non-captive continuum for wildlife-based tourism experiences

are traditional captive settings such as zoos and aquaria with smaller enclosures that guarantee wildlife can be seen, while at the other end are natural environments with free-ranging wildlife that may be difficult to see, either because of their rarity or behaviour. In between these two extremes are less traditional captive settings such as wildlife parks where the animals are captive but may not always be visible, as well as free-range settings where wildlife can be easily seen because of the provision of food or shelter. On the captive side of this point are locations where the provisioning is done by humans to ensure the presence of the wildlife, while on the non-captive side are situations where the provision is natural but still encourages the gathering of certain species. Further on the non-captive side are natural settings where numerous different species are likely to be seen. Considering the operational definitions of both ecotourism and wildlife-based tourism and this dimension from captive to non-captive, it can be argued that there is considerable overlap between ecotourism and wildlife-based tourism experiences in the non-captive end of the continuum and this chapter therefore focuses on the role of non-captive wildlife in ecotourism experiences and operations.

A FRAMEWORK FOR UNDERSTANDING THE INTERACTIONS BETWEEN WILDLIFE AND ECOTOURISM

Figure 27.2 provides a basic descriptive framework that identifies the different points of interaction between ecotourism and wildlife. At the centre of this framework is the ecotourism experience available for visitors and this is comprised of the activities and settings offered by ecotourism operations and influenced by both the characteristics of the tourist and the actions of tourism providers. Encounters, both intentional and incidental, with wildlife can be seen as part of this ecotourism experience. The possibility of wildlife encounters may also be seen as an important part of the motivations and expectations that visitors bring with them to the ecotourism setting. Through these ecotourism encounters wildlife may have a number of impacts on tourists including physical (such as injury from attacks), cognitive (through learning and attitude change),

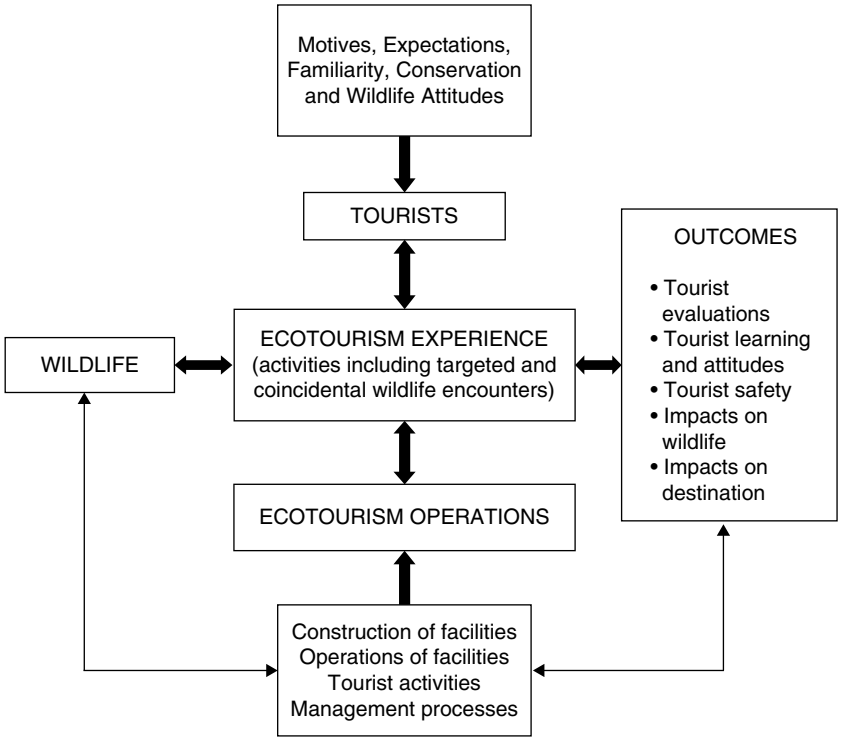

Figure 27.2 Overview of interactions between ecotourism and wildlife

affective (including satisfaction) and behavioural. Similarly, the encounter can have varied impacts on the wildlife, both directly, through the actual activities involved in the ecotourism experience, and indirectly, through the construction and operation of the ecotourism infrastructure and facilities. A better understanding of each of these points of intersection between wildlife and ecotourism operations is important for improving the management of this relationship between wildlife and ecotourism and the following sections will provide an overview of each point.

EXAMINING THE ROLE OF WILDLIFE IN ECOTOURISM EXPERIENCES

The framework set out in Figure 27.2 suggests that the opportunity to see and/or interact with wildlife may be an important component of the motivations, decision-making processes and expectations of those visitors who select ecotourism opportunities. A simple analysis of the promotional material of a random sample of 50 tourism operations in Australia with Ecotourism Accreditation indicates that wildlife opportunities are an important part of the marketing and promotion of ecotourism operations. The sample of ecotourism businesses included operations from every Australian state, and accommodation (40 per cent), tours (35 per cent), cruises (15 per cent), and wildlife sanctuaries

and nature reserves (10 per cent). The content analysis found that all 50 mentioned wildlife in either the description of the experience offered, the list of activities available or both. The centrality of wildlife encounters to the ecotourism experience was apparent in promotional statements like:

- 'native wildlife abounds'
- 'opportunities to see wildlife in its natural habitat'
- 'fascinating and amazing rainforest and wildlife'
- 'take small groups to experience the wildlife'
- 'the rich variety of wildlife will simply delight everyone'.

The available research into visitor perspectives on ecotourism opportunities confirms the importance of wildlife viewing opportunities for visitors. Chan and Baum's (2007a) review of research into ecotourist motivation concluded that observation and appreciation of wildlife was a common reason for their travel, as well as a key activity selected and a primary factor in travel decisions. Similar conclusions were offered by Kwan, Eagles and Gebhardt (2010). In this review of ecotourist motivation wildlife viewing was one of three main reasons for travel along with learning and spending time in natural environments. While little detailed research is available about the nature of ecotourism experiences, the studies that have been published suggest that wildlife encounters are important elements that visitors remember and incorporate into their ecotourism stories (Chan & Baum, 2007b). Given the importance of wildlife viewing to ecotourist motivations and experiences, it is not surprising to find that proximity to wildlife is a key component of ecotourist satisfaction (Mackoy & Osland, 2004).

Understanding Visitor Outcomes from Wildlife Encounters in Ecotourism

The previous studies provide evidence that wildlife encounters are motivators for, expected by, and important to, the satisfaction of ecotourists. The effective management of ecotourism operations does, however, require a more detailed understanding of visitors than this. In particular, it requires knowledge of the factors that contribute to positive and memorable wildlife encounters in non-captive settings and how these interact to generate visitor outcomes such as satisfaction and changes in wildlife and conservation attitudes and behaviours. Moscardo and colleagues (Moscardo, 2006, 2008a; Moscardo & Saltzer, 2004; Moscardo, Woods & Greenwood, 2001) report on a research programme that provides both a review of research into wildlife-based activities in non-captive settings conducted in a variety of locations and the results from surveys of more than 3000 tourists participating in wildlife encounters in non-captive settings in a range of different countries. This research programme found a consistent set of factors was associated with visitor satisfaction including:

- The opportunity to see wildlife in natural environments and the quality of those natural environments.
- Seeing rare, unique or unusual wildlife, or wildlife that had not previously been seen live or in a natural, non-captive setting.
- Being able to get close to the wildlife (preferably within 5 metres).

- Seeing a large variety of wildlife.
- The presence of knowledgeable guides and good information about the wildlife.

These findings have been confirmed in subsequent studies (Andersen & Miller, 2006; Coghlan, 2012; Mackoy & Osland, 2004; Okello & Grasty, 2009; Okello, D'Amour & Manka, 2008; Ziegler, Dearden & Rollins, 2012).

The importance of guides and wildlife information is worth highlighting because interpretation is a critical tool for the management of visitors in these types of settings (Moscardo, Woods & Saltzer, 2004) and because most definitions of ecotourism include the idea of visitor education and change in knowledge and attitudes (Kerstetter, Jou & Lin, 2004). The question of effective wildlife interpretation has been addressed in a number of studies in zoos, aquaria and other captive settings (see Ballantyne, Packer & Hughes, 2007 for a review). There has been considerably less research conducted in the non-captive settings likely to be part of ecotourism operations. Further, much of the research that has been published focuses solely on the question of whether or not the available interpretation in specific non-captive contexts can be linked to changes in ecotourist knowledge, attitudes and behaviours (see Acevedo-Gutierrez, Acevedo, Belonovich & Boren, 2010; Boren, Gemmell & Barton, 2009; Modin & Fenton, 2004 for examples). The results of this type of research provide mixed evidence of the value of interpretation (Higham & Carr, 2002), but as Stamation, Croft, Shaughnessy, Waples and Briggs (2007) note, this type of research typically assumes that the available interpretation is of good quality. Critical analyses conducted by Mayes and Richins (2009) indicate that there is considerable variety in the quality, intensity and content of wildlife interpretation provided to ecotourists. Therefore, it is likely that the mixed results reflect differences between good and poor quality interpretation rather than suggesting that interpretation in general is not valuable.

Some of the key findings from studies (Higham & Carr, 2002; Kang & Gretzel, 2012; Ponnampalam, 2011; Powell & Ham, 2008; Schanzel & McIntosh, 2000) that have examined visitors' responses, including satisfaction, preferences and learning, to interpretation in non-captive wildlife settings include:

- The use of multiple communicators.
- Taking a conversational style in written material.
- Content that includes directions for desirable behaviours.
- The use of multiple interpretive methods.
- Coverage of a variety of topics related to the wildlife.
- Content that explicitly includes wider environmental issues and conservation advocacy.
- Experienced guides.
- Interpretation that encourages exploration of the setting.

These conclusions are consistent with two converging conceptual approaches to understanding tourist responses to wildlife encounters – the mindfulness model of wildlife experience developed by Moscardo (2006, 2009) based on the work of Langer (1997) and the Ballantyne, Packer and Falk (2011) concept of reflective engagement. Both approaches are based on the idea of dual processing from psychology (Evans & Curtis-Holmes, 2005), which distinguishes between two possible ways of responding to social situations.

One option is to use existing routines to guide behaviour with little attention paid to the details of the setting – this is called shallow processing (Evans & Curtis-Holmes, 2005) or mindlessness in the Moscardo (2009) model. The alternative is deep processing where people pay more attention to the setting they are in, the information available in that setting and create new routines for behaviour (Evans & Curtis-Holmes, 2005). This is called mindfulness in the Moscardo (2009) model and is very like Ballantyne et al.'s (2011) concept of reflective engagement, which was the label given to a cluster of visitor responses including 'feeling an emotional connection with the animals, reflecting on new ideas about animals and their environments, discussing new information with companions, experiencing something surprising or unexpected, and feeling sad or angry about environmental problems' (p. 1247).

Figure 27.3 provides an overview of the mindfulness model proposed by Moscardo

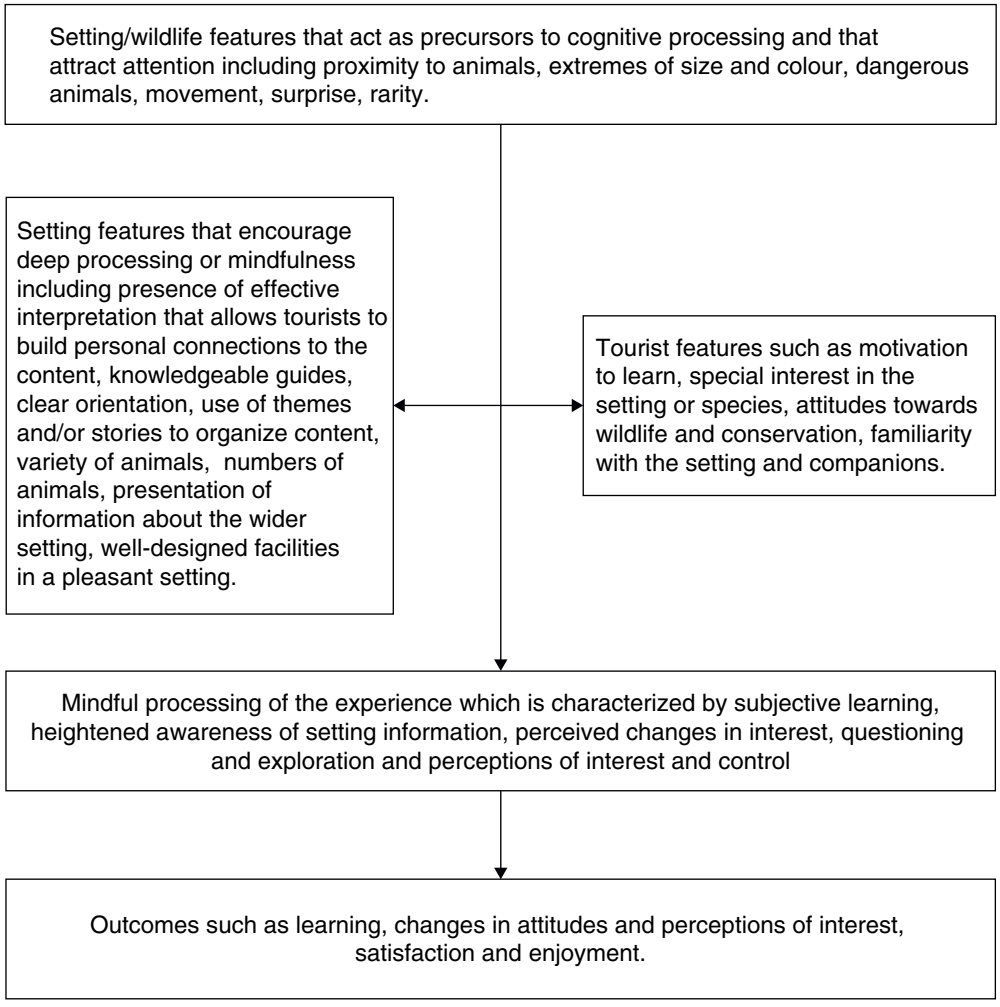

Figure 27.3 Mindfulness model of tourist responses to wildlife-based experiences

and colleagues (Benckendorff, Moscardo & Murphy, 2006; Moscardo, 2006, 2009; Woods & Moscardo, 2003). In this model tourist attention is activated by features of the setting and the wildlife such as extremes of size and colour, movement, perceived danger and proximity. Attention is a necessary but not sufficient condition for deep or mindful processing. Attention alone can contribute to perceptions of excitement and enjoyment, but without further processing these perceptions are unlikely to lead to lasting positive evaluations or learning. This excitement and enjoyment associated with proximity and movement is referred to as experiential engagement in the Ballantyne et al. (2011) model and, as with the mindfulness model, it was argued that while this experiential engagement can be positive for tourists and is related to reflective engagement, on its own it does not lead to learning. In the mindfulness model tourist features such as motivation and experience combine with setting features to encourage mindfulness. In particular, mindfulness is encouraged by variety, questioning and the ability to make personal connections to the information and supported by motivations to learn and clearly organized information. Mindfulness is characterized by a sense of engagement, questioning and changes in understanding and awareness. Ballantyne and colleagues' (2011) concept of reflective engagement combines some of the conditions that encourage mindfulness, such as feeling a personal connection, and some of the characteristics of mindfulness, such as discussion and reflection on the information in the setting. Mindfulness has been shown to contribute to positive outcomes such as learning, changes in attitudes and satisfaction, and reflective engagement has been empirically linked to short- and long-term environmental learning, and through that, the adoption of environmental behaviour change.

Managing Ecotourist Safety in Human–Wildlife Interactions

The previous sections have discussed the impacts of wildlife encounters on visitors' affective and cognitive responses to ecotourism, but visitor–wildlife interactions can also result in physical impacts for both the wildlife and the visitors. This subsection briefly reviews the issue of ecotourist safety in wildlife encounters, while the following section examines in more detail the consequences for the wildlife. One of the studies reported previously (Woods & Moscardo, 2003) gathered more than 1300 critical incidents describing memorable wildlife encounters in a range of settings across the globe providing insights into the factors that contribute to satisfaction, learning and changes in attitude and behaviour. But a considerable number of these stories (38 per cent of all negative incidents) were about encounters in which tourists were threatened and injured by the wildlife (Moscardo, Taverner & Woods, 2006). These negative incidents were associated with:

- feeding wildlife
- wildlife attracted to camp and picnic sites by food
- coming across wildlife in places they were not expected to be in
- encounters where animals behave in unexpected ways.

Two themes were clear from these critical incidents – problems with wildlife feeding and scavenging and tourists who were poorly prepared for wildlife encounters. The animals most commonly reported in the negative critical incidents included kangaroos,

monkeys, snakes, elephants, birds and lizards. Wildlife can also pose a threat to ecotourists through the transmission of diseases via insects such as ticks and mosquitoes (Choi, 2003; Huff & Barry, 2003; Lindback, Lindback, Tegnell, Janzon, Vene & Ekdahl, 2003) and their contributions to road accidents in wilderness areas (Armour & Macdonald, 1998; Wilks, Watson & Faulks, 1999). The available evidence suggests that these impacts are much more prevalent than direct attacks although visitors do not always evaluate risk in this way (Moscardo et al., 2006). An area for further development in ecotourism is that of finding ways to effectively inform and educate ecotourists about safety in wildlife encounters.

UNDERSTANDING THE IMPACTS OF ECOTOURISM ON WILDLIFE

The previous sections have considered both the value of wildlife to ecotourism and the impacts of wildlife encounters on ecotourists. This section briefly outlines a range of impacts that ecotourism can have on wildlife. One way to consider the impacts of an activity is to conduct a product life cycle assessment to identify the points in the production process where impacts are generated. Figure 27.4 provides such an assessment focused on potential negative impacts of ecotourism products on wildlife.

The first component in this process is the construction of ecotourism infrastructure such as roads and docks, and ecotourism facilities such as accommodation and walking trails. The clearing of space for this construction can destroy wildlife habitat, removing shelter and reducing food sources, and create noise and pollution that can disturb the normal behaviours of wildlife (Buckley, 2004a, 2004b; Newsome, Dowling & Moore, 2005). The second component is the transport associated with moving tourists and the goods and supplies needed to support them, such as food, drink and fuel, into the ecotourism areas. This component of the process generates carbon emissions (Simmons & Becken, 2004) and can also be connected to other sorts of pollution such as fuel spills. The transport systems used both to bring tourists to the ecotourism facilities and in finding the wildlife can create barriers to wildlife movement. Roads and clear-

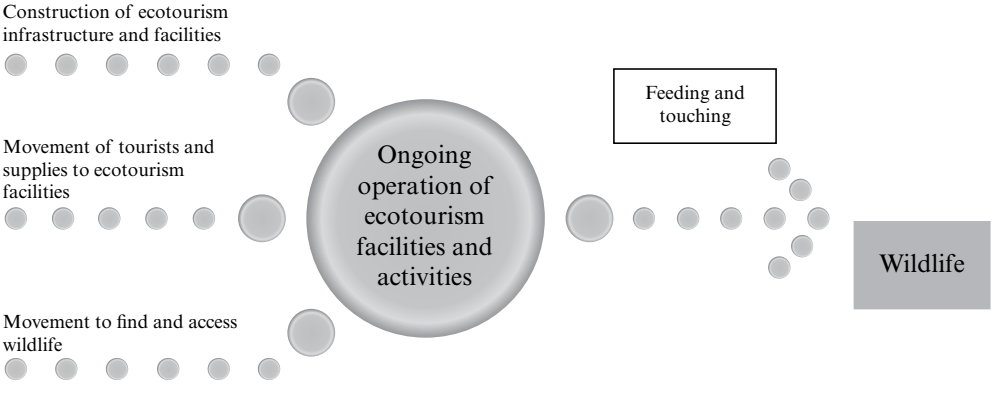

Figure 27.4 Life cycle assessment of ecotourism production processes

ings for power and utility provision, for example, can be problematic for species that are reluctant to cross open spaces (Newsome et al., 2005). Similarly, the building of accommodation and viewing areas near water may provide viewing opportunities for visitors but prevent birds and other species from being able to access water (Buckley, 2004a). Animals seeking to cross these ecotourism infrastructure barriers also run the risk of death and injury from collisions (Beckers, 2008; Higham & Lusseau, 2004). The transport associated with ecotourism operations can also create barriers to animal communication, which can be another source of stress for the wildlife (Higham & Lusseau, 2004).

The core component refers to the ongoing operations of the ecotourism facilities, which again can be linked to pollution and wildlife disturbance from noise and lights. Ecotourist facilities can also be places where food scraps and other human waste can accumulate, encouraging scavenging by wildlife, changing their behaviour patterns and introducing predators. Connected to this component of the life cycle assessment are the activities related to gaining access to the wildlife, typically in motor vehicles, boats and/or by foot. Impacts here include collision, disturbance, noise, pollution and damage to habitat (Higham & Lusseau, 2004; Newsome et al., 2005; Warnken & Byrnes, 2004). When wildlife are distracted or disturbed by ecotourist activities they expend extra energy in moving away from the disturbance and they may have interruptions to their feeding. In combination, these two forces can harm the health and breeding success of the animals (Buckley, 2004a, 2004b; Higham & Lusseau, 2004). There is evidence that even if animals do not physically move away from ecotourists, and so may not seem to be disturbed, their attention is directed towards the tourists and over time this can have negative impacts (Higham, 1998; Price, 2008).

There is also the situation where tourists may more directly interact with the wildlife, touching and/or feeding them. In addition, a number of ecotourism operations practise feeding to encourage wildlife to come to certain places so that they can be more easily seen by the tourists. Feeding wildlife is associated with numerous problems including nutritional problems, changes in animal behaviours and the attraction of larger concentrations of predators (Buckley, 2004a, 2004b; Newsome et al., 2005). Touching animals is not a common ecotourist activity but where it does occur it can result in stress and disease transmission (Newsome & Rodger, 2008). Finally, animals that become habituated to human presence can also become either easy targets for human poachers (Newsome et al., 2005) and/or aggressive towards tourists. These animals then often become targets for culling (Buckley, 2004b).

While much of the discussion of ecotourism impacts on wildlife focuses on negative impacts there is some evidence of the benefits that ecotourism can provide for both the wildlife and humans who live in or near ecotourism destinations. These benefits fall into three main categories. Firstly, there is evidence that ecotourism can provide an economic incentive for wildlife conservation and the maintenance and restoration of wildlife habitats through employment in ecotourism and the fees and taxes paid by ecotourism operators (de Vasconellos, Pegas & Stronza, 2008; Higginbottom & Tribe, 2004; Higginbottom, Northrope & Green, 2001; Rodriguez, 2008; Walker & Moscardo, 2011). Secondly, many ecotourism operations support wildlife research and monitoring that in turn can contribute to more effective wildlife management and conservation (Higginbottom & Tribe, 2004; Higginbottom et al., 2001). Finally, the interpretation

of wildlife for ecotourists can contribute to education for local communities about the importance of wildlife conservation (de Vasconellos et al., 2008; Higginbottom et al., 2001). It is important to note that the evidence to support these benefits is not strong and there are many examples where ecotourism has failed to provide its promised benefits (Moscardo, 2008b).

MANAGING WILDLIFE AND ECOTOURISM: CRITICAL ISSUES FOR ACHIEVING SUSTAINABILITY IN ECOTOURISM OPERATIONS

Ecotourism has come under increasing criticism in the academic literature for failing to achieve its promised benefits and in some cases for creating considerable social costs in the pursuit of environmental objectives (Butcher, 2006; Carrier & Macleod, 2005; Kiss, 2004; Kruger, 2005; Stamou & Pareskevopoulos, 2003). The research into the costs and benefits of ecotourism for non-captive wildlife and host communities in ecotourism destinations provides examples of both these issues. While it could be argued that good management programmes can minimize many of the negative impacts that have been listed in the previous section, it is not so easy to suggest ways to maximize the positive benefits for the residents of ecotourism destinations. For example, ecotourism has often been a force for the development of protected areas that has been seen as a benefit for the conservation of wildlife. Such developments have not always been seen as a benefit for the people who live in and around these areas. Several authors have provided examples from Africa where the development of protected and conservation areas driven by a desire to develop wildlife ecotourism opportunities has resulted in the displacement of local communities and subsequent problems of poverty, disruption to traditional agriculture and herding, leading to malnutrition and starvation and a loss of access to traditional lands and rights (Akama, 1996; Ashley & Jones, 2001; Brooks, 2005; McGregor, 2005; van Beck, 2003). This type of ecotourism is often developed and controlled by external tourism operators and consequently there are often high levels of economic leakage out of the destination (Dieke, 2003; Kirsten & Rogerson, 2002; Mbaiwa & Darkoh, 2006; Sindiga, 1999; Sirakaya, Teye & Sonmez, 2002). Johnson and Wilson (2000) concluded that there was little evidence that any wildlife ecotourism operations provided more than token benefits to local communities.

Moscardo's (2008b) review of community capacity building for sustainable tourism suggests a number of actions that ecotourism planners and managers need to consider in order to enhance the positive outcomes of ecotourism for destinations. The first is investment in community education programmes conducted prior to the decision to develop ecotourism to allow for higher levels of meaningful community consultation about the development options. Such education programmes need to cover the nature of tourism as a system, its potential impacts, both positive and negative, the nature of tourist markets and tourist expectations and, in the case of wildlife tourism, an understanding of the value of the wildlife and the importance of wildlife conservation. Secondly, ecotourism operations need to be structured in such a way as to ensure that the benefits of conserving wildlife for ecotourists actually flow to and remain within the destination community. This requires greater attention to be paid to building

equitable partnerships between local communities and external organizations such as wildlife lodge operators, to mechanisms for the distribution of fees and taxes and to programmes to support local entrepreneurs. Finally, it is important to also develop and support local tourism leaders to facilitate the maintenance of local community control over ecotourism activities.

CONCLUSIONS

A defining characteristic of ecotourism is its location within, and dependence upon, natural environments, and non-captive wildlife are an important element of such environments. Not surprisingly, the opportunity to see non-captive wildlife is a central theme in research into ecotourist motivations, expectations, activities and experiences. The challenge for ecotourism practice is to provide such opportunities in a way that is both safe for the wildlife and the tourists and sustainable for both the natural environment and host communities. This chapter has argued that while it is possible for ecotourism to achieve these goals, it does not happen often in practice. Greater attention needs to be paid to developing effective wildlife interpretation programmes for tourists that include advice and guidance on safety and minimal impacts. The available evidence suggests that interpretation aimed at encouraging mindful cognitive processing and reflective engagement amongst tourists is more likely to be effective. Greater reflection on, and mindfulness about, the wider impacts of ecotourism operations and their contribution to local communities is also needed.

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28. Watching and swimming with marine mammals: international scope, management and best practice in cetacean ecotourism

Kaye Walker and Elizabeth Hawkins

INTRODUCTION

Since the Stone Age, humans have had a long-standing fascination with marine mammals. They have often been associated with mythology or folklore, attributed close connections to the gods with shape shifting powers, including the ability to take human form, and even being direct ancestors to humans. Such connections are still evident in the native cultures of Alaska and the Northern American continent (Baird, 2002). Marine mammals, particularly dolphins, also had and in some cases still do have close associations with fishermen, for example, herding fish into fishermen's nets (Hall, 1984). There are even more amazing documented stories of Killer whales (Orca) assisting the herding of migrating whales for the whale hunters of Eden on the southeast coast of Australia from the 1840s to the 1930s (Davidson, 1997). In some parts of the world hunting of marine mammals continues with the use of modern vessels or traditional hunting practices (Cunningham, Huijbens & Wearing, 2012; Moyle & Evans, 2008).

The human relationship with marine mammals has thus continued into the twenty-first century, but with a more recent and substantial mental shift in social perception as growing majorities instead favour their protection and express opposition to their hunting (Forestell, 2008; Lavigne, Scheffer & Kellert, 1999). This modern fascination for cetaceans in particular (whales, dolphins and porpoises) was initiated with the opportunity to see and learn more about these complex and highly social animals via facilities such as Marineland, Florida. Due to the public interest, many of these facilities evolved into oceanarium exhibits and attracted behavioural scientists who further revealed the intriguing and personable nature of dolphins (Samuels & Tyack, 2000). Subsequent media productions such as *Flipper* substantially expanded the interest and curiosity of the general public towards dolphins and this fascination has largely fed the international growth of the 'in the wild' or 'non-captive' marine mammal watching and interactive ecotourism industry.

Now, over 56 types of marine mammals, comprising 43 per cent of known species, are the focus of tourism activities in over 120 countries that target wild (non-captive) populations (derived from Kirkwood, Boren, Shaughnessy, Szteren, Mawson, Huckstadt, Hofmeyr, Oosthuizen, Schiavini, Campagna & Berris, 2003; O'Connor, Campbell, Cortez & Knowles, 2009). Although captive facilities remain a popular tourist attraction, this chapter addresses ecotourism operations that involve cetaceans (whales, dolphins and porpoises) in a 'natural' or 'non-captive' environment. It considers the international scope of practices, management issues and the principles and influences of best practice implementation in an industry often surrounded by controversy and political

intervention. The chapter concludes with a case study of the 'swim with Humpback whale' ecotourism industry in Tonga that highlights these aspects.

INTERNATIONAL SCOPE OF THE CETACEAN ECOTOURISM INDUSTRY

The establishment of cetacean ecotourism has occurred in many areas as an alternative and, arguably, more sustainable and desirable use of populations in contrast to direct hunting for consumption (Moyle & Evans, 2008; Orams, 2001). The community capacity benefits have been extolled 'as an ecotourism product and . . . activity that is fast growing, holds potential for local regeneration, promotes conservation and sustainable practice and is ecological and profitable' (Cunningham et al., 2012, p.143). It is conducted from a number of different platforms including those that are land-based, vessel-based and air-based, and involves watching, swim with tours, wild feeding or provisioning programmes (Higham & Hendry, 2008). Land-based and vessel-based whale watching can serve as major tourism attractions for regional towns located along coastlines, as well as island communities, particularly along whale migration routes. The most popular operations utilize a variety of vessels as platforms to offer different experiences. These can range from large to small motorized vessels that have a capacity from 200 people to the more personally guided experience for a few. They can offer relatively 'comfortable' experiences that may involve viewing cetaceans from a distance or very close (for example, Hervey Bay, Australia), to the more adventurous situations of jumping off the vessel to swim with whales (for example, Tonga) or dolphins (for example, Hawaii, Bahamas, New Zealand) (Higham & Hendry, 2008). Alternatively, dug-out canoes have engines fitted in Bali (Indonesia) to observe Spinner dolphins at dawn and kayak trips are conducted in Alaska amongst the mighty Orca that grow to 10 metres in length.

These types of operations can potentially provide more intimate encounters with respect to proximity to the animals or nature, but throughout the global scope of the industry the size and density of operators, and tourists, will directly affect the experience. In Bali, for example, during the peak holiday season up to 300 'semi-traditional' canoes can be seen following a group of dolphins for up to two hours. Australia provides four of a limited number of global destinations that offer the hand-feeding of wild dolphins in natural settings, and that specifically attract thousands of visitors annually to regional communities such as Tin Can Bay and Shark Bay. Thus, there is a need to consider the industry scope and management not only from the perspective of interacting with and protecting the animals, but also from the view of providing a quality tourism experience.

Whilst cetacean ecotourism operations are subject to their own nation's policy or regulations with regard to interactions with the animals and tourism management, these vary throughout the world. They may not even exist in many places, or if existent are not enforced, or are only in a development phase as the popularity of cetacean ecotourism rapidly grows, particularly in the less developed nations. Zeppel (2009) addressed swim with dolphin ecotourism experiences and suggested that not only were negative impacts upon wild dolphin populations evident, but also there was some evidence to suggest that in-water, non-captive dolphin encounters were proving to be unsatisfactory experiences for tourist participants (O'Neill, Barnard & Lee, 2004). In fact, those observing

the dolphins from a vessel indicated greater satisfaction with their tourism experience than those supposedly experiencing a closer in-water encounter. Zeppel's (2009) review revealed that the proximity, number of dolphins and length of time swimming with dolphins had not been adequately studied with regard to participant satisfaction, nor had tourist preferences for the type of in-water dolphin encounter been addressed.

Table 28.1 summarizes the international scope of the cetacean ecotourism industry, addressing the targeted species, operational platforms, number of participants, tourist expenditure and its average annual growth rate in different world regions. The industry has grown exponentially since its small beginnings in the early 1960s, and over a ten-year period between 1998 and 2008 the number of countries participating in cetacean watching activities grew from 87 to 119 (O'Connor et al., 2009). The average global annual growth rate of the whale watching industry has been 3.7 per cent for the last ten years, compared to global tourism growth of 4.2 per cent. However, at regional levels this varies greatly. For example, there has been an estimated 14 per cent growth rate in the South Pacific and 17 per cent in Asia, with some countries rapidly embracing this form of ecotourism and far exceeding even these figures. China has demonstrated a 107 per cent growth rate and the Maldives 86 per cent in the same ten-year period (O'Connor et al., 2009) (Table 28.1). In all, more than 13 million people participated in cetacean watching across the globe in 2008. The industry was estimated to contribute US$2.1 billion in total expenditure, whilst an estimated 3300 operators employed around 13 200 people globally in the cetacean watching industry (O'Connor et al., 2009).

Hence, it is evident that the growth of cetacean tourism in some areas has exceeded the rate of general tourism growth. It can be estimated that the industry could generate an additional $US413 million and 5700 jobs if other countries where the industry is viable initiate similar ecotourism operations (Cisneros-Montemayor, Sumaila, Kaschner & Pauly, 2010). It should be noted that these estimates do not take into account the projected growth of existing industries or other global influences and are merely general projections. However, the industry figures have indicated a sound resilience in the face of global occurrences, such as severe acute respiratory syndrome (SARS), that have negatively impacted upon general tourism figures over the past decade or so. This may be explained by not only the increase in demand to experience wild animals in natural habitats (O'Neill et al., 2004), but also the demonstrated increase in number of countries offering more varied cetacean ecotourism experiences as well as other land-based wildlife experiences (Higginbottom, 2002). For example, the Tonga Humpback whale ecotourism industry is based on one of the most unique wildlife experiences in the world (Walker & Moscardo, 2011) and hence has a very distinctive appeal to the international wildlife tourist, and contributes significantly to the tourism attraction of the South Pacific region (IFAW, 2008).

MANAGEMENT AND REGULATION OF CETACEAN ECOTOURISM

Globally, the industry is typically managed through voluntary codes of conduct, guidelines and government or industry regulations (Berrow, 2003; Garrod & Fennell, 2004). Management is, however, multi-layered and highly complex (Carlson, 2008; Higham,

Table 28.1 Scope of the global cetacean ecotourism industry according to different global regions and associated tourist expenditures, number of participants, target cetacean species, operational platforms and average annual growth rate (AAGR)

Region	$ Total expenditure (2008) (million)	Number of participants (2008)	Target species	Platforms	AAGR (between 1998 and 2008)
Africa and Middle East	$163.5	1 361 330	Humpback whale Bryde's whale Southern right whale Sperm whale Spinner dolphin Bottlenose dolphin Indo-Pacific Humpback dolphin Heaviside's dolphin	Boat Swim with	–1.3
Antarctic	$36.8	45 520	Orca Humpback whale Fin whale Minke whale	Boat	33.7
Asia	$65.9	1 055 781	Humpback (pink) dolphin Irrawaddy dolphin Spinner dolphin Sperm whale Bottlenose dolphin Finless porpoise	Boat Traditional Canoes Swim with	17.2
Australia	$171.9	1 635 374	Humpback whale Dwarf minke whale Blue whale Southern right whale Bottlenose dolphin (two species) Common dolphin Indo-Pacific Humpback dolphin	Boat Swim with Kayak Provisioning	8.3
North America	$1192.5	6 256 277	Minke whale Gray whale Humpback whale Blue whale Northern right whale Fin whale Orca Dall's porpoise Harbour porpoise	Boat Swim with Kayak	1.3

Table 28.1 (continued)

Region	$ Total expenditure (2008) (million)	Number of participants (2008)	Target species	Platforms	AAGR (between 1998 and 2008)
North America			Pacific white-sided dolphin Spotted dolphin Bottlenose dolphin Beluga Narwhal		
Central America (including Caribbean)	$53.7	259 437	Humpback whale Gray whale Bottlenose dolphin Spotted dolphin Sperm whale	Boat Swim with	12.8
Europe (including UK)	$97.60	828 115	Minke whale Short-beaked common dolphin Bottlenose dolphin Harbour porpoise	Boat Kayak	7.1
New Zealand	$80.9	546 445	Bryde's whale Maui dolphin Hector's dolphin Dusky dolphin Common dolphin Sperm whale	Boat Swim with Kayak	9.0
South America	$211.8	582 547	Humpback whale Southern right whale Bryde's whale Tucuxi dolphin Amazon river dolphin (boto)	Boat	10.0
South Pacific	$38.1	249 861	Humpback whale Bottlenose dolphin Spinner dolphin	Boat Swim with	14.1

Source: Derived from O'Connor et al. (2009) and Carwardine, Hoyt, Fordyce and Gill (2005).

Bejder & Lusseau, 2009) and can involve several levels of international and national policy and management frameworks. This is due to the varied environmental, political and socio-economic contexts within which these interactions take place (Higham et al., 2009). In order to influence the regulation and conduct of operations, political relationships and alliances are pursued and forged between international wildlife conservation agencies, local and national governments and regional environmental management

organizations. The case study below showcases the layers of political complexity the industry attracts. Countries also have their own multiple layers of environmental legislation, wildlife and marine environment protection, sustainable development policies and tourism governance shaped by internal politics, culture and heritage. It is due to these elements that the governance of the industry remains multifaceted, controversial, confused or even lacking altogether, despite the industry becoming one of the largest international sectors of nature-based tourism (Constantine & Bejder, 2008).

Most regulations covered in legislation involve definitions and consequences for humans directly interrupting or disturbing cetaceans through harassment, injury or direct killing. These were first introduced by the USA in 1972 under the Marine Mammals Protection Act (Berrow, 2003). Specific amendments to legislation are (or have been) necessary to include cetacean tourism and the appropriate management of on- or in-water encounters (Berrow, 2003; Forestell, 2008). The International Whaling Commission (IWC) first outlined the general principles of sustainable whale watching (adopted in 1996), setting an international benchmark for the management of cetacean tourism (IWC, 1994). However, since this outline it has become apparent that some management approaches require international affiliations, particularly for migratory species. For example, Australian Humpback whale populations are protected under the national Environmental Protection and Biodiversity Conservation Act 1999 and provided additional protection under international agreements with the IWC, Convention on Migratory Species (Appendix II) and the Convention on International Trade in Endangered Species (Appendix I) (DEH, 2010). Whilst these arrangements address the potential cumulative impacts of activities such as whale watching (IFAW, 2004), they can create further diplomatic impediments to the establishment and implementation of effective industry management.

Regulations and guidelines informing the industry's best practice typically outline restrictions for approach distances and techniques (for example, vessel manoeuvring), travel speeds and time allowance for each encounter (Berrow, 2003). Additional specifications for number of trips and boats permitted per day and per defined area, and areas of closure have also been used as measurements to manage encounters and reduce potential negative impacts (Berrow, 2003; Higginbottom, 2002).

When regulatory frameworks do not exist, voluntary codes of conduct or best practice are often established (Allen, Smith, Waples & Harcourt, 2007) by representative industry groups (for example, whale watching associations). These are often more specific to the type of operations and species behaviours at the tourism location. Although such codes are to be commended and operators encouraged to voluntarily strive for best practice, Allen et al. (2007) comment that they may not always be effective and have limited value when not supported by regulation, enforcement and importantly education. As the Tonga case study below demonstrates, even if codes of conduct are backed up by regulation, if operators and the local community are not educated or aware of the reasons for them, and subsequently do not make any significant connections between their implementation and the community's benefit or capacity development, then there is likely to be limited inclination to adhere to them. Forestell (2008) supports this premise, suggesting that regulatory frameworks are not an effective mechanism to conserve cetaceans and manage tourism encounters alone due to their derivation in authoritative action rather than best outcomes. Hence, this approach alone is likely to result in high levels of

non-compliance and increase potential negative effects. The incorporation of operator and community education and training is essential for improved understanding of the purpose of these management approaches and thus the implementation of best practice, particularly when local community members are employed in the industry. Through increased understanding, in theory, an increase in compliance and sense of responsibility will result (IFAW, 2004).

Management approaches and response strategies relating to cetacean ecotourism encounters are also dependent on the type of behaviour, habitat (for example, feeding or resting grounds), life-history stages (for example, adults or dependent calves) and species of cetaceans being targeted (for example, migratory versus non-migratory species) (Constantine & Bejder, 2008; IFAW, 2004). Cetacean species are generally more vulnerable to disturbance from tourism operations when they are engaged in critical behaviours, which can often occur in specific habitats. Consequently, a spatio-temporal approach has recently been recommended to provide more comprehensive management of cetacean tourism activities and increase the protection of the areas they operate within (Berrow, 2003; Higham & Lusseau, 2007; Hoyt, 2005). It is based on the identification of critical habitats with designated multi-level sanctuaries or marine protect areas. This involves even more layers of complexity for the many countries currently developing this form of ecotourism and has further implications for the implementation of best practice. It means that nations cannot simply adopt another nation's established best practice framework. Hence, variations of frameworks exist between countries and type of cetacean species targeted by the industry. There is currently no standardization for best practice specific to the cetacean ecotourism industry despite growing evidence of the negative impacts it can have on target species (Garrod & Fennell, 2004).

ESTABLISHMENT AND IMPLEMENTATION OF BEST PRACTICE

Government and Legislative Approach

It is apparent from the previous section that the focus for establishing best practice has been largely based on assessing the impacts upon the target animals themselves. It has not addressed the tourism experience, sustainability of the industry or enhancement of the local community's capacity for involvement in the industry. These aspects are currently the missing components and considerations in establishing best practice. Responsible management agencies have been poorly prepared for the industry's rapid growth, and consequently there has been a delayed response in the preparation of appropriate policies and management priorities to address its overall performance (Higham et al., 2009; Hoyt, 2001).

Recently, Higham et al. (2009) presented an in-depth model for integrated adaptive co-management frameworks for cetacean ecotourism. It suggests that best practice should take a multi-disciplinary and co-management approach, entailing both governmental management frameworks and industry operational protocols and practices. At the same time, this approach must have the ability to be adaptive, flexible and responsive in order to incorporate new research and knowledge to manage long-term sustainability

of the industry (Berrow, 2003; Higham & Bejder, 2008; Higham et al., 2009). Whilst such approaches in the industry are rare, there are emerging cases of best practice management that encompass each of these elements (Higham & Bejder, 2008). In Shark Bay (Western Australia), rigorous scientific data demonstrated long-term negative impacts of the dolphin watching industry (Bejder, Samuels, Whitehead, Gales, Mann, Connor, Heithaus, Watson-Capps, Flaherty & Krutzen, 2006). The government responded rapidly by reducing the number of permitted dolphin watching operators from two to one to effectively manage the industry on which this regional town is reliant. This example, although based on a relatively small representation, provides important insight and acts as a precedent to emerging sites for dolphin ecotourism operations (Higham & Bejder 2008). Subsequently, the environmental protection authority in Byron Bay (Australia) quickly responded to recent recommendations generated from research by one of the authors (Hawkins & Gartside, 2008) of the impacts of local dolphin watching tours. The authority implemented changes to legislated permit conditions to reduce the level of exposure of resident dolphins to tours within an identified critical habitat zone (Marine Parks Authority, personal communication, 2012). Such examples are 'indicative of a growing awareness that whale and dolphin watching tourism . . . require thoughtful mitigation strategies if the industry is to move towards sustainability' (Constantine and Bejder, 2008, p. 322).

Table 28.2 summarizes principles and recommendations considered necessary for the regulative management of the cetacean ecotourism industry. It draws from current literature, government sources and the authors' experience to promote sustainable outcomes and increase the industry benefits.

Tour Operator Approach: Codes of Conduct and Best Practice Guidelines

It could be argued with regard to the industry growth and diversification of tourism experiences and targeted species that governments have the main responsibility to improve the standards of cetacean ecotourism management. To encourage best practice these management approaches should involve mechanisms that promote social, economic, cultural and environmental sustainability in accordance with contemporary ecotourism principles advocated in the literature (Jamal, Borges & Stronza, 2006). This is achieved through local capacity building and industry participation (Ross & Wall, 2001) to reflect criteria such as conservation, ethics, education, increased awareness and responsibility, and distribution of benefits (Donohoe & Needham, 2006). However, the difficulties discussed and subsequent delays with regard to governments developing or even adopting existing management approaches and implementing these through regulations tend to move this responsibility towards the operators to ensure industry sustainability. Such difficulties, which include lack of opportunity or information, complex legislative situations or lack of resources to enforce regulations, encourage the development of voluntary codes of conduct or best practice guidelines. Although many may be critical of the effectiveness of these mechanisms (Allen et al., 2007; Mason, 2007) there is evidence to suggest that they can influence tourists' and tourism operators' behaviour and practices, and can initiate more formal and enforceable industry standards (Black & Crabtree, 2007).

Codes of practice often involve operators' self-commitment to ecological and ethical

Table 28.2 Best practice principles for the regulative management of the cetacean ecotourism industry

Component	Action
Education and interpretation	• Provide support for education and training, and enhance awareness of operators, guides and local community (specific to the industry's environmental and socio-cultural impacts and benefits). • Provide up-to-date information on species, relevant regulations, guidelines or codes of conduct (and inform operators of changes to these). • Provide for the understanding and appreciation of a local industry's position in the regional and global tourism and ecological arena
Operational	• Ongoing compliance monitoring of vessel operations and encounters with cetaceans. • Facilitate opportunities for stakeholder workshops to provide for more informed and integrated management decisions concerning the industry, local community and environment. • Support for continued research to advance understanding and information of target species ecology, impacts and tourist outcomes.
Legislative	• Regulations regarding timing, approach distances, manoeuvrability, speed, numbers and duration for vessels and aircraft, and numbers and proximity of swimmers during encounters with cetaceans. • Regulations for specific guide and operational training requirements for all industry members. • Penalties for non-compliance of regulations. • Allowances for nationally recognized marine protected areas for cetaceans that specifically encompass critical habitat areas. • Allowances for adaptation and changes to legislation and relevant management frameworks to incorporate new research findings. • Where appropriate, integrate international approaches to the protection of migratory cetaceans and management actions.
Permitting and licensing	• Licensing and permitting of commercial cetacean tourism operators that adhere to specific conditions. • Permitted numbers of operators should be based on sustainable carrying capacity levels and where unknown, precautionary levels. • Licensing conditions should include a reporting system for wildlife encounters and tourist numbers, compulsory certified training for operators and staff, a levy system (where funds are used for research, monitoring and management of wildlife, protected areas and operations) and standards for types of vessels permitted for cetacean watching to promote least disturbance. • Permits should be reviewed after a set timeframe (for example 3–5 years) with consideration to regional and international socio-environmental changes and integrated international approaches. • Permit limitations and considerations should take into account critical habitat areas and species.
Research	• Provide long-term support mechanisms for environmental, biological, social and economic research into the impacts and sustainability of the cetacean watching industry.

Source: Derived from Berrow (2003), Carlson (2008), DEH (2005), Hoyt (2005), IFAW (1997, 2004) and Orams (2005).

ecotourism practices without enforcement (Black & Crabtree, 2007), and thus may be viewed by operators, staff and the local community as a demonstration of their credibility and moral commitment to environmental and local sustainability. If for no other incentive than the operator's best interest, they can provide a marketing edge and tend to enhance tourists' experiential satisfaction (O'Neill et al., 2004). Reviews such as Zeppel and Muloin's (2008, p. 19) identify 'a need for more systematic, in-depth evaluation of marine wildlife tourism experiences and educational programmes to identify techniques that increase tourist benefits and knowledge'. There are also still great challenges noted in the literature with regard to identifying and achieving ecotourism's role in local community capacity building and sustainability, particularly in more remote destinations or developing nations (Walker, 2008). However, it is evident that current regulations do not effectively address the best practice aspects noted to be missing in the discussion so far, such as the quality of the tourism experience, overall industry sustainability and performance and enhancing local community capacity and involvement. It is therefore proposed that voluntary codes of practice or guidelines may more effectively address these aspects and through their incorporation assist in forging links between the stakeholders, integrating knowledge and skills and thus building industry capacity and resilience.

Table 28.3 expands upon the contribution of Table 28.2 by addressing these sustainability issues, taking the industry to a level beyond merely preventing negative impacts to the targeted animal population. It recommends principles for the development of voluntary best practice guidelines or codes of conduct that address the provision of quality tourist experiences as well as behavioural management. It provides practical operational considerations to ensure effective guide training and interpretive delivery, local environmental and community sustainability and capacity building.

Whilst a list of sources is provided for Table 28.3 and includes relevant literature, best practice plans and accreditation criteria, we include recommendations based on our interpretation of the material and on our own experience and research. The authors have research and applied expertise in cetacean biology, ecotourism, guide training and marine wildlife interpretation, development, delivery and evaluation. Table 28.3 is presented here trusting that readers will consider it in conjunction with information addressed in the rest of this Handbook, as necessary, relating to ecotourism principles, governance, development and sustainability, the ecotourist experience, education, interpretation and guide training. A case study follows in order to enhance the tabled information and illustrate the issues described in this chapter with regard to the political, socio-cultural and ecological complexity that surrounds cetacean ecotourism experiences offered in the world today.

CASE STUDY: SWIM WITH HUMPBACK WHALES IN VAVA'U, TONGA (SOUTH PACIFIC)

The complex and controversial situation of the 'swim with whales' ecotourism industry in Vava'u was brought to Walker's attention by the tourism industry stakeholder-based Vava'u Tourism Association (VTA) (the case study is adapted from Walker & Moscardo, 2011). In particular, it had identified issues regarding the employment of local staff in the whale swim industry. The local industry consists of whale swim

Table 28.3 Best practice principles and recommendation for inclusion in codes of conduct for cetacean ecotourism operations

Component	Action
Social	• Identify and support linkages with local enterprises, businesses and community in aspects of socio-cultural importance through promotion of products, services and assistance rendered. • Be an equal opportunity employer. • Employ local or regional residents and conduct coaching and training programmes to facilitate staff's professional and personal development. • Monitor client experience, outcomes and satisfaction and incorporate necessary changes and staff training as indicated. • Provide access for special needs and multi-cultural clients.
Cultural	• Acknowledge culturally significant or sensitive areas, operate respectfully and with the permissions of traditional owners. • Natural and cultural heritage is respected and demonstrated in the marketing and delivery of the product with reference to the importance of the region/animals to the local people. • Attempts made to identify and understand the local community's affinity or connection with the operational region and animals, their understanding of the tourism operation and industry and their interest and options for involvement, management and so on. • Appropriate feedback, discussions and awareness meetings held with local community and stakeholders to enhance their understanding of the tourism operation or industry, its history, its goals and its likely impacts (utilizing professional or academic services as required). • Mechanisms are implemented to allow local community and stakeholders to voice (and be heard with respect to) their interests and concerns regarding the industry and operations.
Environmental	• The company contributes to the conservation of the targeted species and their environment (through supporting local and global conservation initiatives and research). • Local activities and access to areas associated with operations are not disrupted and are respected by operators and their staff. • Water and energy consumption are reduced and where possible renewable energy sources used. • No dumping of wastewater, effluent or rubbish occurs and appropriate disposal utilized. • Use of harmful substances is minimized (for example, harmful paints and disinfectants). • Level of pollution from noise and waste are reduced through, for example, purchase of engines with minimal noise, maintenance of engines and facilities for recycling on board.
Education and interpretation	• Promotional and marketing materials create realistic expectations for clients, are accurate and present the local culture appropriately. • Staff are supported to attend regular training workshops (where available) and regularly appraised for their guiding and operational performance.

Table 28.3 (continued)

Component	Action
Education and interpretation	• Quality on-board education and interpretive programmes are provided by qualified/certified/trained guides and tourist behaviour is managed and monitored appropriately. • Interpretive programmes incorporate both local and global ecological and socio-cultural aspects linked to the operational region and animals. • Educational materials are provided or made available to clients during each stage of the experience (including booking, arrival, during the tour and after).
Operational	• Vessel operation should be conducted to prevent and reduce disruptions to the 'normal' behaviour of animals and contact should cease if signs of disturbance of the animal occurs. • Mothers and calves should be treated with extra sensitivity, for example, reduced contact time and increased distances from the vessel. • Compliance with relevant regulations and codes of conduct, which include vessel operations during encounters with whales, marine protected area zoning plans, local activities and residents. • Company maintains a trip log that includes tourist information and observations, interactions with local resident activities as well as animal encounter information and observations such as identification, number, time and location. • Communication between operators and other locally operated vessels should be maintained to coordinate movements and times to reduce impacts on local activities and animals. • Maintain vessel and engines to reduce environmental impact and noise. • Vessel meets appropriate health and safety standards in addition to insurance policies.

Source: Berrow (2003), Carlson (2008), Ecotourism Australia (2003), Forestell (2008), Global Sustainable Tourism Council (2012), Higginbottom (2002), Orams (2005), Walker (2008) and Walker and Blackman (2009).

operations catering to groups of about 8–20. The operations are largely owned and managed by expatriates, but their operational staff are mostly local or Tongan nationals employed in positions of naturalist and snorkel guides, deckhands, boat skippers and assistants, and other land-based roles. Many of the expatriate owners are hands-on and skipper or host on their own vessels. Staff issues included retention and ongoing training, guide knowledge and skill development, job satisfaction and possibly most importantly their motivation, or in some cases a seeming lack of motivation, to adhere to regulations and the industry's voluntary codes of practice. The VTA sought assistance to improve this local employment situation through a guide training approach in order to constructively contribute to the long-term capacity, skill development and sustainability of both the industry and local community. However, it became apparent that in order to address these issues within a training programme a greater understanding of the community-orientated values, perceptions and goals associated with the whale ecotourism industry were needed. The government values and goals associated with

the industry could be considered to be reasonably and obviously represented via the Tonga national whale protection regulations. The industry's values were represented through its representative organization and best practice guidelines. But there were no identifiable local community-orientated values, goals or perceptions associated with the industry, or even more fundamentally with regard to the whales themselves and their seasonal presence in Vava'u waters. It seemed that the local community had no remaining heritage stories or cultural values associated with the whales (other than consumption) and generally did not understand why anyone would travel to Vava'u to swim with the whales. There appeared to be a lack of understanding of the industry overall, and hence there was no community-driven motivation to adhere to the guidelines seemingly set by the largely expatriate-owned and conducted industry, or to support the industry's overall presence in Vava'u.

This was a dilemma for the industry and the national government as the industry had already attracted international attention from conservation and management agencies. The Vava'u waters are recognized as an important breeding and birthing location for the Southern Hemisphere Humpback whale population. It was also until recently the only destination in the world that officially permitted this unique wildlife experience. In most whale tourism destinations, the focus is on whale watching and the practice is governed typically by stringent no-swimming and no-interference regulations in order to protect replenishing populations. However, the Vava'u activities involve tourist interaction in water (that is, swimming) with these whales and, significantly, with their newborn young during a critical period in their lives. Adequate feeding conditions for suckling calves is essential if they are to survive the long migration south to their summer feeding grounds in Antarctic waters. Thus, international and regional wildlife conservation and management agencies have concerns about the conduct of this practice. The challenge for the effective management of this industry in this setting is the conflict of stakeholder values involving international and local political perspectives of resource use, conservation, tourism governance and community sustainability.

Tonga is the recipient of substantial international monetary aid, particularly from Australia and Japan, who each claim strong political relationships with Tonga. The significance of this is relevant to activities occurring with regard to the International Whaling Commission (IWC). Over the past two decades these nations' respective anti-whaling and whaling stances have seen them have substantial influence in the South Pacific region and the Southern Ocean. Tonga officially banned whaling by royal decree in 1978, and since the late 1990s has witnessed a significant increase in its tourist attraction via the 'swim with whale' tourism industry. During this time, Japan has sought continually to increase its whale harvest in the Southern Ocean (which inherently involves the Tonga whale population) with supportive votes in the IWC meetings from South Pacific nations (and others) to whom they provide aid and actively lobby. Alternatively, Australia lobbies for anti-whaling and has supported the designation of whale protection zones and recovery plans in the Pacific region to allow endangered and threatened whale species to rebuild their populations. Consequently, the South Pacific Regional Environment Programme (SPREP), and the non-governmental organization (NGO), International Fund for Animal Welfare (IFAW), established a significant relationship in their identification of Vava'u as a priority location for observation and involvement (that is, influence). Tonga was their case study in the development of a

regional whale tourism policy in light of its growing potential and attraction in the South Pacific region.

The Vava'u industry was initiated by one expatriate operator in 1993. Growth of the industry led to the establishment of an industry representative group that forged close relationships with Tongan royalty, national government representatives and the IFAW to develop a set of industry guidelines to be incorporated into Tongan Regulations in 1998. The local industry also has a set of unregulated codes of practice for specific conduct around the Vava'u whale population to limit repeated boat and swimmer interactions with any one mother and calf in any one day. It is these codes of practice that are subject to quite disparate interpretation by vessel crew and skippers. The IFAW also established and funded a marine information and education centre in Vava'u, appointing a local Vava'u man as manager. Until the Global Financial Crisis they provided annual guide training programmes through this centre for all local industry participants and assisted in community whale awareness activities. However, their presence did not appear to greatly alleviate the local community's lack of understanding of either the whale presence in Tonga or the industry.

This situation reached a pinnacle in 2008 when a local government representative controversially proposed the reinstatement of whale hunting in Vava'u. Needless to say, this drew every stakeholder's attention and opened discussion regarding the industry and operational ownership, revenue equity and distribution, and associated concerns with levels of local satisfaction and understanding in relation to the industry. At the time, Tonga had one of the fastest growing whale ecotourism industries in the world (22 per cent). Within months of this controversial proposal Her Royal Highness (Princess of Tonga, the then King's sister) was officially declared the Royal Patron for Whales at an event notably hosted by the IFAW in honour of the Tongan Royal Family's commitment to protecting whales. This Royal strategy almost certainly served to protect the ecotourism industry from collapse with regards to nullifying any further consideration of reintroducing whale hunting in Tonga. It can also be presumed that with a choice between the devil and the deep blue sea with respect to locals hunting whales versus tourists swimming with whales, it was an event worthy of support from the IFAW, despite their own concerns about the industry's conduct. However, despite the tourism associations' support and appreciation of this Royal protection (as described in the quotes below), the issue of training and local non-compliance with the regulations and codes of conduct continued.

> HRH Princess Pilolevu will be a powerful spokesperson for the protection of endangered whales in Tonga and the Pacific region and will help promote Tonga's whale watching industry which directly benefits tourism in Tonga. (Lolesio Lui, President of the Vava'u Tourism Association)

> 'Having such a significant and influential voice speaking on behalf of the whales will help ensure we protect whales and the benefits they bring to the region,' said President of the Tonga Whale Watching Operators Association, Allan Bowe. (Samoa News, 2008)

This situation culminated in 2011 with Walker being asked by the Tonga industry representative group to develop a new training programme to address the ongoing issues. The Tonga Whale Guide Training Program (TWGTP) was developed and delivered with New Zealand Aid Programme funding and resulted in the first nationally certified whale

guide training programme in the South Pacific region. The aim was to create a training programme of an international standard independently of agencies with a specific interest or mandate in whale management and conservation, address local community capacity building and improve their informed involvement in the industry.

CONCLUSION

The Tonga case study highlights the management complexity and controversy that cetacean ecotourism attracts from local to international stakeholders, all of whom influence the successful implementation of best practice. It provides an example of the truly global scope and reach of the industry. Its conduct not only affects the tourists who are attracted to its operations, but those in distant countries who presume a stake in the management of the industry's main resource, the whales, and the inherent corresponding impact upon such. It highlights the importance of the local community values and perceptions to successfully conduct best practice with regard to not only the targeted animals but also how the industry is managed and who are seen to be involved or benefit.

It is interesting to note that the Vava'u industry has since refused further conservation agency involvement in guide training. Instead, as noted, the Tongan government contracted Walker to develop their national whale guide training programme to ensure unbiased programme material with respect to whale management and information. The focus in the training shifted to the guides' professional development in interpretation and tourist management skills, facilitating an awareness of their industry roles, reputation and experiential product in the international arena, and the identification of their relationship with these aspects and their community.

The case study in conjunction with this chapter also helps to identify the areas in need of substantial research to inform the effective management of this industry. It demonstrated the focus has been upon impact management with respect to the animals, with nominal research being conducted on the experiential outcomes or expectations of the tourists. Whilst ever more locations, opportunities and supposedly more intimate cetacean encounters are being offered worldwide there is still little information to guide their conduct or even the features of such experiences with regard to tourist satisfaction, enhancement of environmental awareness and appreciation. There is even less research that examines local community involvement and their influence in the implementation of best practice. The economic figures portrayed in this chapter indicate such a continuing global touristic appeal that immediate attention to further research is warranted to ensure the effective management of the cetacean ecotourism industry internationally.

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29. Ecotourism experiences promoting conservation and changing economic values: the case of Mon Repos turtles

Clem Tisdell

INTRODUCTION

Ecotourism is credited with promoting the conservation of wildlife species in several ways. One is that it fosters pro-conservation behaviour among ecotourists and increases their economic valuation of those wildlife species that are the focus of ecotourism, particularly as a result of the educational content of such tourism. The purpose of this chapter is to explore this point of view in light of data collected from a survey of visitors to Mon Repos Conservation Park who came there to participate in the viewing of turtles nesting on Mon Repos Beach or their hatchlings emerging from those nests and making their way to the sea. The facility at the site is operated by the Queensland Parks and Wildlife Service.

During the turtle-watching season, visitors pay to enter the facility at this site, are provided with information about sea turtles and threats to their survival by a variety of means (for example, posters, pamphlets, film) and are taken in groups by guides to watch nesting turtles or turtles hatching. The guides (accompanied by volunteers) provide information on the beach about processes being observed and scientific data are collected at the same time about the turtles being viewed. More information about the procedures involved can be found, for instance, in Tisdell and Wilson (2002).

The following matters are considered in turn in this chapter. After the nature of the survey is introduced briefly, the ways in which respondents stated that their experiences at Mon Repos had changed their intended (non-economic) conservation behaviours and their attitudes are outlined. Attention is then given to the changes reported by respondents in their relevant economic valuations affecting the conservation of sea turtles. This is followed by a critical discussion of the consequences for conservation of the survey results and some additional observations on the role of ecotourism in promoting nature conservation.

STATED CHANGES IN THE INTENDED (NON-ECONOMIC) CONSERVATION BEHAVIOURS OF ECOTOURISTS RESULTING FROM THEIR EXPERIENCES AT MON REPOS – SURVEY RESULTS

Tisdell and Wilson's survey of visitors who came for turtle watching at Mon Repos Conservation Park (located not far from Bundaberg in Queensland) was conducted from December 1999 to the end of March 2000. This period corresponds approximately with

the turtle-watching season at this location. About 15 questionnaires were distributed each day to different groups of visitors before they embarked on viewing turtles. A total of 1500 forms were distributed and 519 usable replies were received and, therefore, the response rate was 43 per cent. This is considered to be a relatively high response rate (Jakobsson & Dragun, 1996). Respondents could leave their completed questionnaires (completed after viewing turtles or after trying to do so) with rangers or volunteers at the Mon Repos Information Centre or they could return them in a post-paid envelope to the Department of Economics at the University of Queensland.

Further information about the survey, background information about Mon Repos turtles and general aspects such as visitors' socio-economic profiles can be found in Tisdell and Wilson (2002). Here it is only intended to report and discuss information relevant to the purpose of this chapter.

One of the attributes of ecotourism thought to be important by some authors is that it should be educational. Of the 519 respondents to the survey of Tisdell and Wilson, 514 (99 per cent) said that their experience at Mon Repos based on turtles was educational. Furthermore, almost a third (31 per cent) of respondents said that they learned for the first time about threats to sea turtles and about their biology and a further 54 per cent said that they had gained additional information about these aspects as a result of their visit. Therefore, 85 per cent of respondents reported they had learned something from their experience at Mon Repos. However, 14 per cent stated that they learned nothing new and 1 per cent did not respond to the relevant question. Overall, the ecotourism programme at Mon Repos was shown to have a high educational content.

When asked whether their experience at Mon Repos had convinced them of the urgency of taking action to conserve marine turtles in Australia, 87 per cent responded that it had. The distribution of the responses of those surveyed is shown in Table 29.1. Furthermore, nearly all respondents (98 per cent) said following their experience that more should be done to reduce threats to sea turtles.

A list of threats to sea turtles was presented to respondents and they were asked if they had become more informed about each of these individual threats. Their responses are summarized in Table 29.2. Note that the list of possible threats presented to respondents is not exhaustive.

Respondents were also asked whether their experiences at Mon Repos would influence them to be more careful about their future behaviour likely to affect the conservation

Table 29.1 Distribution of responses of surveyed ecotourists to the question of whether their visit to Mon Repos convinced them of the urgency of taking action to conserve sea turtles in Australia and elsewhere

Response	Percentage of respondents
Yes	87
No	5
Unsure	5
Not applicable	3
Total	100

Table 29.2 Relative frequencies with which respondents said that they had become more informed about the listed threats to turtles as a result of their visit to Mon Repos

Type of threat	Percentage of respondents stating they are better informed about listed threats
Threats from prawn trawlers	64
Boat strikes	60
Fox/wild pig predators	59
Harvesting for meat	56
Entanglement in crab pots	55
Pollution of waterways	53
Collection of eggs for consumption	52
Natural predators, e.g. goannas	45
Natural diseases	37

Table 29.3 Percentage of respondents stating that their experience at Mon Repos will result in them being more careful about the actions listed

Behaviour	Percentage of respondents intending to be more careful
Using beaches where sea turtles nest	75
Refraining from buying/consuming turtle products while overseas	73
Switching off lights near beaches	68
Disposing of plastics	62
Care with fishing gear	47

of turtles. A set of particular behaviours was listed and respondents could indicate their intentions for each type of behaviour. The set of behaviours and the percentage of respondents indicating that they would take more care with these individual behaviours are listed in Table 29.3. Indications are that substantial changes occurred in the intended behaviours of the ecotourists as a result of their experience at Mon Repos.

In addition to the above, respondents were asked whether, given their experience at Mon Repos, they would be likely to report the sighting of sick or injured turtles or the poaching and mistreatment of sea turtles. The majority of respondents said 'yes' for each of these events. The highest response was for the likelihood of reporting the poaching or mistreatment of sea turtles (88 per cent), followed by reporting sick turtles (66 per cent) and injured sea turtles (61 per cent). This indicates a high propensity to want to report such events following visits to Mon Repos.

Respondents were questioned about whether their increased desire to protect sea turtles following their visit to Mon Repos occurred because marine turtles have one or more of the following attributes: (1) are unique; (2) are ancient; (3) have recreational value; or (4) can generate income. More than one attribute could be mentioned. The

Table 29.4 Per cent of respondents identifying listed attributes of sea turtles as influences on their increased desire to protect sea turtles following their visit to Mon Repos

Attributes	Percentage of respondents influenced
Unique	90
Ancient	66
Of recreational value	32
Generates income	23

distribution of responses is shown in Table 29.4. Their uniqueness and being an ancient form of life topped the list whereas their recreational value and their ability to generate income were at the bottom of the list. The frequencies with which the latter attributes were mentioned were much lower than for the former ones. It can be concluded that economic reasons were not the main ones motivating the ecotourists surveyed to want to conserve sea turtles, even though economic impacts are likely to be important considerations for local communities.

INFLUENCES ON ECONOMIC VALUES OF ECOTOURISTS' EXPERIENCES AT MON REPOS

Apart from favourably altering the conservation behaviour of ecotourists, ecotourism experiences are widely believed to increase the economic value that tourists place on the conservation of nature, especially nature that attracts such tourism. One indicator of this is ecotourists' statements about their increased willingness to contribute financially to conservation causes following their ecotourism experiences. With this in mind, those surveyed at Mon Repos turtle rookery were asked whether their visit to Mon Repos would influence them to contribute more money than before for sea turtle conservation. They were given the option of answering 'Yes', 'No' or 'Unsure'. The distribution of responses is summarized in Table 29.5.

Despite the high educational content of the experience at Mon Repos supporting the conservation of sea turtles and the fact that the vast majority of visitors surveyed were very satisfied with their visit to Mon Repos to see turtles, half of those sampled said that

Table 29.5 Distribution of responses of ecotourists surveyed at Mon Repos about whether their turtle experience will influence them to donate more than previously to the conservation of sea turtles

Response	Percentage of respondents
Yes	49
Unsure	35
No	15
No reply	1

they would either not contribute more money than before for turtle conservation or that they were unsure about doing so. On the other hand, 49 per cent of respondents stated that they would be influenced to contribute more money than previously towards the conservation of sea turtles. The extent to which these pro-conservation intentions would be subsequently acted on was not determined, but this issue is discussed later. It is possible that stated intentions would be realized in only a fraction of these cases.

The contingent valuation method (CVM) is one of the methods (a stated preference method) used by economists to measure the economic value placed by individuals on the conservation of species, nature and other environmental commodities for which markets are missing or incomplete. In most cases, this involves eliciting from individuals their willingness to pay to conserve focal commodities, for example, particular wildlife species or natural areas. It is well known that this procedure is subject to several limitations, including hypothetical bias. Hypothetical bias is present when the willingness to pay values elicited from respondents differs from the amounts they are actually willing to pay (Murphy, Allen, Stevens & Whitehead, 2005). Some of the reasons for such bias are discussed below. It might, however, be noted here that sums individuals say they are willing to pay for conservation of an environmental feature are usually biased upwards if these values are elicited very soon after a favourable experience with this feature. A consequence of this is that CVM analysis undertaken soon after ecotourists have had a favourable experience with nature is likely to exaggerate the economic support that their experience actually generates for the conservation of the nature that was observed.

Estimates were elicited from those surveyed at Mon Repos of the maximum amount they would be willing to pay weekly for the next ten years to protect sea turtles in Australia (for details, see Tisdell & Wilson, 2002). Australians (in the sample), on average, stated that they would contribute $A2.15 weekly. This would amount to $A111.80 annually; $A1115 over a ten-year period. Can these figures be used as an indicator of how much economic value the turtle watchers surveyed place on protecting sea turtles in Australia? Would, in fact, these stated values be followed up by actual donations of a similar amount to sea turtle conservation in Australia? It is also interesting to consider reasons given by those who said they are unwilling (unable) to contribute any money to the conservation of sea turtles in Australia. The most common reason given was that they could not afford to contribute (Table 29.6). In fact, it could be inferred from Table 29.6 that about two thirds of those who said they would not contribute money for sea turtle

Table 29.6 Frequency of reasons given by turtle-watching respondents for stating that they would contribute no funds to sea turtle conservation in Australia

Reason	Frequency
Cannot afford	13
Contribute to other charities	9
Pensioner	5
Unemployed	3
Student	1
Total respondents	31

Table 29.7 Frequency of reasons given by Mon Repos respondents for protesting about a regular personal financial commitment to contribute to sea turtle conservation in Australia

Reason	Frequency
Government is responsible	
Paying taxes	7
Government should provide protection	4
Reduce government waste and pay for protection	4
Lobby MPs	1
Subtotal	16
Favour other causes	
There are other more important causes	4
Too many animal causes	6
Subtotal	10
Miscellaneous	
Voluntary donations preferred	4
Have paid entrance fee	2
Nature can take care of itself	1
Subtotal	7
Total	33

conservation in Australia had low incomes. The remainder said that they contribute to other charities; which presumably means that they put a higher priority on contributing to those than to turtle conservation.

A number of respondents also objected to the proposal that based on their willingness to pay for sea turtle conservation in Australia, there should be a regular deduction from their income in order to translate their willingness to pay into practice. They could give reasons for not wanting to have their income regularly reduced to pay for this conservation. The reasons given are listed in Table 29.7. About half the reasons (16) given by respondents for objecting to individual financial payments for sea turtle conservation in Australia imply that such conservation is a government responsibility rather than a private one.

About a third (ten) of those protesting, favour support for other causes. In four cases, respondents objected to being required (voluntarily) to 'pledge' to contribute money to turtle conservation. In a couple of cases, respondents thought that it was enough to pay the entrance fees and in one case there was clearly no empathy with the plight of nature at all.

While it is important to note the nature of the reasons for offering no money to conserve sea turtles and for objecting to being asked to make a personal financial contribution to the conservation of sea turtles, it should be remembered that it was only a minority who said they would not contribute to the conservation of turtles or who objected to personal private payments for the purpose. Nevertheless, about half of respondents said that following their visit to Mon Repos they would not increase their donations for turtle conservation or were unsure about whether they would do so.

DISCUSSION OF THE RESULTS FROM THE SURVEY

Influence of Cognitive and Emotional Experiences or Support for Conservation

Much of the available literature on ecotourism stresses the importance of education as a means for fostering support for nature conservation. In other words, it focuses on the role of cognitive (or educational) experiences of tourists as a means for building support for conservation (see, for example, Fishbein & Manfredo, 1992; Kimmel, 1999; Mercado & Lassoie, 2002, p. 268). Tisdell and Wilson (2005) analysed the responses of ecotourists surveyed at Mon Repos to assess the educational influence. It was found using binomial logit analysis that the sampled ecotourists were more likely to state that their desire to protect sea turtles increased following their visit to Mon Repos if they reported their visit to Mon Repos to be educational. This effect was strengthened if they saw adult sea turtles or their hatchlings. Both these variables were highly significant statistically (significant at the 1 per cent level). However, the marginal effect on the probability of a respondent stating that their desire to protect turtles had increased was somewhat higher for seeing sea turtles than for their reporting their visit to Mon Repos to be educational. Furthermore, using binomial logit analysis both these factors were found to have a positive impact on the likelihood of respondents saying that they would report sightings of such sea turtles but in this case, the statistical significance of these influences was lower, namely significant at the 5 per cent level.

Tobit statistical analysis of the Mon Repos results also revealed that the probability of respondents saying that they would contribute funds for the protection of sea turtles in Australia increased if they stated that their visit to Mon Repos had been educational. It also rose with their level of education and their level of income. While seeing sea turtles had a positive effect on the probability of respondents indicating their willingness to contribute funds for the protection of sea turtles in Australia, the statistical significance of the relationship in this case was low. Nevertheless, this analysis (as a whole) indicates that seeing turtles and being educated about them at Mon Repos were important factors in altering the stated preferences and proposed conservation behaviours of the tourists surveyed.

Those who saw turtles at Mon Repos had an active, direct experience with them whereas visitors who did not see them could only rely on information they obtained at the Mon Repos Information Centre about sea turtles as a source of possible changes in their attitudes to turtle conservation. In many cases, those who saw turtles were also permitted to touch the carapace of adult turtles at the appropriate time. The above finding about the consequences for pro-conservation behaviours of seeing turtles lends some support to the findings of Swanagan (2000) that active experiences with wildlife (such as touching the trunks of elephants) can be more powerful in building pro-conservation attitudes than purely passive experiences. Ballantyne, Packer and Falk (2011, p. 1250) came to the conclusion after analysing relevant empirical data that 'tourism managers optimise the long-term impact of a wildlife tourism experience by encouraging visitors to emotionally connect with animals they are observing, respond thoughtfully to the threats facing these animals, reflect on these ideas and discuss them with their companions'. They, therefore, found emotional factors to be an important influence on conservation behaviours of tourists.

Active experiences with wildlife are likely to promote empathy with them, and complement the support for conserving them generated by learning about them. However, it should also be kept in mind that individuals differ in the relative extent to which their behaviours are altered by emotional and cognitive (educational) experiences. For example, some are much more influenced by emotional factors than by learning and vice versa (see, for example, Tisdell & Wilson, 2012, Chapter 6). Therefore, this needs to be taken into account in designing conservation policies.

This raises some awkward issues. For example, if for some tourists their direct interactions with wildlife species (such as feeding animals) are more powerful in gaining their support for conserving this wildlife than is the provision of information about the wildlife, to what extent should these direct interactions be allowed? To what extent should they be permitted even when these human–animal interactions have some negative impacts on the animals involved? While some conservationists would claim that such interactions should not be allowed at all, they can (depending on the circumstances) be a positive force for conservation, as pointed out in Tisdell and Wilson (2012, Chapter 6).

Tisdell and Wilson (2012, Chapters 6–8) also find considerable differences in the receptivity of visitors to the provision of information about wildlife in protected areas. This limits the scope for influencing the conservation behaviours of visitors by means of education.

The Drop-off or Decay Effect and Hypothetical Bias

In the Mon Repos turtle survey of Tisdell and Wilson (2002), changes in proposed conservation behaviours and economic values were elicited from ecotourists shortly after their experience with turtles. However, it seems likely that the magnitude of the stated (and actual) pro-conservation effects can be predicted to drop off or decay as time goes by and the ecotourism experiences of respondents increasingly slip into the past. Ballantyne and Packer (2011) find evidence for such a drop-off effect and suggest means for its amelioration. Tisdell, Wilson and Swarna Nantha (2008) discuss the dynamics of such decay in relation to contingent valuation and attribute it largely to psychological factors and bounded rationality.

Economists generally use the term 'hypothetical bias' to refer to the fact that the stated willingness of individuals to pay for the conservation of an environmental commodity (as, for example, elicited by CVMs) generally exceeds actual payments (Arrow, Solow, Portney, Leamer, Radner & Schumand, 1993). Various reasons have been given for such a bias in stated valuations. These include the following:

1. The stated commitments are not binding on respondents and, therefore, are not considered seriously by them in reporting their intentions.
2. A 'warm-glow' effect may be present in the answers of the respondents and may reflect moral satisfaction, that is, what the respondent would like to do morally but what they will not or cannot do entirely.
3. The respondent may want to give an answer that seems to be socially responsible (a social influence).
4. The design of the survey instrument may prompt an upward bias in stated intentions of respondents to adopt particular pro-conservation behaviours.

However, the dynamics of upward bias in contingent valuation have been little explored by economists. Even if none of the above-mentioned factors are important, a drop off or decay in stated conservation intentions and behaviours may still occur. In other words, even if the intended conservation behaviours and economic values of respondents are stated genuinely when they are surveyed, these are liable to alter subsequently for psychological reasons. Both forgetting and crowding out may be involved (Tisdell et al., 2008). New experiences tend to crowd out the memories of the old ones and, consequently, the influences of older experiences on later behaviour tend to be reduced.

Visits by tourists to see (and possibly interact with) wildlife and learn about it are often experiential commodities. The tourists' previous experience with and knowledge of these species is, as a rule, limited and in some cases, virtually zero. They, therefore, often learn about particular attributes or threats to the focal species for the first time or add to their existing information about these. Ways in which this information can alter the stated (and actual) preferences of individuals for conserving species is modelled in Tisdell (2007) who also notes that such experiences may entice tourists to search subsequently and independently for further information about the focal species following their earlier experience with it. Consequently, conservation valuations and behaviours may alter not only as a result of initial passive learning activities and emotional experiences but also as a result of subsequent active independent searching for information by tourists. The extent to which this happens would be worth empirical investigation.

One approach to how information about a wildlife species might change the conservation behaviour of tourists is to suppose that the probability of a tourist adopting (or wishing to adopt) a pro-conservation action or type of behaviour in relation to a particular species is a function of the amount of information obtained by the tourist about its attributes or characteristics, other things being held constant. If y_i represents the probability of an ecotourist adopting (or wanting to adopt) an action i to protect a focal species, and if x_j where ($j = 1, \ldots\ldots n$) indicates the amount of knowledge that the ecotourist has about the individual attributes ($1, \ldots\ldots\ldots n$) of the species, then the relationship

$$y_i = f_i(x_1, x_2, \ldots\ldots\ldots\ldots, x_n) \tag{29.1}$$

might apply. Lancaster (1966) used a similar characteristics approach to specify the preferences of consumers for economic commodities. It is possible that greater knowledge of some attributes ('good' qualities) of the species in this set will increase the likelihood of the tourist adopting pro-conservation action i but knowledge about other attributes ('bad' qualities) can decrease the probability. Consequently, the pro-conservation consequences of the provision of information about species is sensitive to the array of information provided to the recipient.

In the above model, only alterations in information about the values of the attributes, x_j, change behaviour. However, it might be that some experiences alter the functional form itself, that is, the form of f_i in Equation (29.1) and not just the values of the independent variables, x_j. One of the several limitations of this model is that it does not allow for the consequences of emotional experience. Highly emotional experiences may result in larger impacts of information on actual or proposed conservation behaviours than

less emotional ones. Therefore, modelling of these relationships needs to be developed further.

ADDITIONAL CONSIDERATIONS

The consequences of ecotourism for the conservation of wildlife species depend not only on changes in the conservation attitudes, behaviours and economic values of tourists generated by their ecotourism experiences. Local social support for ecotourism is often essential for its long-term sustainability. One contribution to such support can be the involvement of locals in the management of ecotourism, either on a voluntary basis or to earn income from their employment. Payments may also be received by landholders for allowing ecotourists to access their properties to view wildlife. In addition, scientists and conservation groups can be effective political lobbyists. They were, for example, influential in the establishment of the Conservation Park at Mon Repos (see Tisdell & Wilson, 2012, Chapter 9).

Furthermore, in most instances (but not all) on-site payments associated with ecotourism usually only represent a small fraction of the total economic benefits obtained by local economies from this tourism. For example, it was estimated that the first round (primary) expenditure generated by the Mon Repos rookery in the Bundaberg region was at least ten times greater than the revenue obtained from entrance fees to the rookery (Tisdell & Wilson, 2002). This takes account of the extra local expenditure of ecotourists intending to view sea turtles at Mon Repos on accommodation, food and so on in the Bundaberg region.

While all these positive conservation effects are important, one cannot rely on ecotourism alone to conserve wild biodiversity optimally. Reasons for this include the following:

1. Species favoured by ecotourists are likely to be charismatic species or to have some special qualities of interest to tourists, for example, are dangerous, as in the case of saltwater crocodiles used for tourism in the Northern Territory of Australia.
2. Some species utilized for ecotourism are not endangered nor vulnerable to extinction globally. In such cases, ecotourism is not essential for conserving global biodiversity. This is so in the case of the fairy penguin. However, this ecotourism may prevent local extinction of the species concerned or there may be a spillover effect favouring the conservation of other species.
3. Often the area in which ecotourism is conducted is too small to support a minimum viable population of the focal species or make a significant contribution to the survival of the focal species. In such cases, the overall effectiveness of ecotourism conducted at such sites depends on its bolstering support for the conservation of the focal species at additional sites. Its contribution to conservation depends on spillover effects. Such spillover effects can include political lobbying to protect the focal species on a wide scale as well as changed behaviours by ecotourists in other areas where the focal species is present. For example, most ecotourists surveyed at Mon Repos said that they would adopt conservation-friendly behaviours when visiting other areas where turtles are present. However, the extent to which this actually happens has not been determined.

CONCLUSIONS

The ecotourism study conducted at Mon Repos by Tisdell and Wilson (2002) found that those surveyed intended to adopt pro-conservation behaviours and increased their stated support for the protection of sea turtles, including their willingness to pay for their conservation. However, the responses of those surveyed were elicited not long after their favourable ecotourism experience with sea turtles at Mon Repos. It is likely, therefore, that there was an elevation in pro-conservation responses. With the passage of time, a drop-off or decay effect is likely. The adoption of behaviours favourable to sea turtle conservation are likely to weaken and the economic value placed on their conservation by respondents can be expected to decline as their ecotourism experiences fade into the past. Consequently, actual behaviours of respondents are likely to increasingly fall short of their original intended or stated changes in pro-conservation behaviours as time passes. This also implies that contingent valuation payments are time-dependent. Although economists have given considerable attention to the presence of hypothetical bias in contingent valuation and have identified several factors that may contribute to it, they do not seem to have captured the essence of the drop-off effect arising from the influences on behaviour of psychological factors and bounded rationality.

There is evidence that both cognitive (educational) factors and emotional elements (such as arise from direct interaction with nature) play a significant role in developing pro-conservation behaviours and sustaining them. This is evident, for example, from the work of Ballantyne, Packer and Falk (2011), Ballantyne, Packer and Sutherland (2011) and Tisdell and Wilson (2012, particularly Chapter 6). It seems also that different individuals vary in their dependence on cognitive and emotional experiences for developing empathy with nature and their pro-conservation attributes. Therefore, it is not only the educational content of ecotourism that can be an important factor in developing pro-conservation behaviours but also emotional factors. Insufficient account is taken of the role of emotions in some analyses of the potential of ecotourism to promote conservation.

Although ecotourism (or more generally nature tourism) can play a positive role in promoting biodiversity conservation, it should not be relied on solely for this purpose. As shown, it is not free from biases in favouring selected species for conservation and it also has other conservation limitations. Even though ecotourism is not a perfect means for increasing biodiversity conservation, it nevertheless helps to conserve some biodiversity that would otherwise be lost forever.

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30. Birding, sustainability and ecotourism

Duan Biggs

INTRODUCTION

Birding, birdwatching or birding tourism is a specialized sector of nature-based tourism focused explicitly on searching for, watching and enjoying birds. Birding has become increasingly popular over the last three decades (Cordell & Herbert, 2002; Naidoo & Adamowicz, 2005; US Fish and Wildlife Service, 2001, 2007). Despite tough economic times, the UK Royal Society for the Protection of Birds (RSPB) experienced record growth in membership between 2008 and 2010 (The Travel Editor, 2012). The number of international bird fairs also continues to expand across a diversity of countries.

The number of companies offering birding related products and services has increased tremendously over the past two decades. The first bird tour companies that offered tour packages to various destinations around the world started in the UK and the USA in the 1970s. Destinations and countries that offer a high number of bird species and high levels of endemism are particularly popular. These countries are often in the lower- or middle-income countries in the tropics and for many years companies that offered birding tours did not exist in these countries. However, by 2011 at least six companies offered 150 or more tour departures per annum (Birding.com, 2012). The number of companies that offer tours internationally, or within a region such as East Africa or South Asia, are now in the hundreds. In addition, the majority of destinations including low income countries like Papua New Guinea, Nepal and Ethiopia now have home-grown companies that offer birding tours. The international cruise industry has grown rapidly over the past decade (Brida & Zapata, 2010) and cruises with a specific birding focus have experienced similar growth. Most of the established and many of the newer bird tour companies also sell cruises.

Over the past decade and a half, birding has also become an increasingly popular mechanism through which to integrate conservation, environmental sustainability and socio-economic development. This is particularly the case for remote rural areas that are rich in biodiversity, but have limited other options for economic development (Biggs, Turpie, Fabricius & Spenceley, 2011; Sekercioglu, 2002). This chapter starts with an introduction to the key initiatives through which birding has grown and been used to stimulate sustainable development and conservation. This is followed by a discussion of the common threads and challenges that have emerged across different types of initiatives and the identification of key areas for future research.

BIRDING ROUTES

From the late 1990s, the number of initiatives that aimed to use birding as a basis for socio-economic development and conservation increased substantially. Birding routes

were used as a conceptual basis for a number of these initiatives. Birding routes are a type of tourism route (Biggs et al., 2011). Tourism routes aim to cluster activities, developments and user-friendly infrastructure along a particular route and stimulate partnerships and cooperation among communities to stimulate economic development (Briedenhann & Wickens, 2004).

The birding route concept originally started in Texas with the Great Texas Coast Birding Trail. Texas attracts large numbers of US birders who travel there to search for more tropical species. Texas is home to more bird species in the USA than any other state. The first section of the Great Texas Coast Birding Trail was opened in 1994. South Africa was one of the first lower or middle-income countries to develop a birding route. The Zululand Birding Route (http://www.zbr.co.za) was initially formalized in 1997 and by 2002 BirdLife South Africa, the BirdLife International partner in South Africa, had appointed a full-time person to manage the development of the birding route. Since 2002, the success of South Africa's Zululand Birding Route has led to the expansion of the birding route concept throughout South Africa (http://www.birdingroutes.co.za).

Over the past decade, birding routes and associated developments have expanded well beyond Texas and South Africa. For example, the American Bird Conservancy has set up a website, http://conservationbirding.org, which links birders to birding lodges that actively support conservation initiatives throughout the Americas.

SITE-BASED CONSERVATION AND BIRDING INITIATIVES

Birding routes are not the only initiative through which birding has been used to promote economic development and conservation. Site Support Groups associated with Important Bird Areas (areas that are internationally recognized for their importance in bird conservation) were supported and developed in Kenya from the mid 1990s (Bennun, Matiku, Mulwa, Mwangi & Buckley, 2005). Site Support Groups are community-based organizations that work towards conservation and sustainable development at and around a particular site. In South Africa, the Zululand Birding Route is essentially a cluster or route of different birding sites. Many of these sites have their own equivalent of a Site Support Group in the form of community and other stakeholder groups that play a role in the site's conservation (Biggs, 2006).

In addition, accommodation facilities directly targeting birdwatchers (birders) as clientele have taken off all over the world. In some countries such as South Africa, they are registered through a formal structure called 'Birder-friendly Establishments' (http://www.birdlife.org.za), whereas in other countries the destinations market themselves as birder friendly and are listed on international birding portals such as http://www.fatbirder.com.

Easy and close access to good birding is a critical component of a birder-friendly establishment. For this reason, many birding lodges are established in close proximity to birding attractions such as nature reserves. In some cases, for example, Wild Sumaco lodge in Ecuador, the lodge has established its own private nature reserve (http://www.wildsumaco.com). The owner or entrepreneur's motivation for this stems from the lifestyle values associated with a conservation cause and living in an attractive landscape

(Biggs, 2011; Carlsen, Getz & Ali-Knight. 2001; Lai & Lyons, 2011), and ensuring that the habitats of the birds that attract birders to the lodges are protected.

CHALLENGES AND DIRECTIONS FOR FUTURE RESEARCH

The rapid growth of birding over the last two decades and the associated commercial, conservation and socio-economic development initiatives raise a number of issues. The sustainability of birding tourism, birding tourism initiatives and the factors associated with the success, or lack thereof, of these initiatives has received only limited attention in the peer-reviewed literature and even less empirical research (but see Biggs et al., 2011; Naidoo & Adamowicz, 2005). Clearly, there is a need for further research into birding tourism and its social-ecological benefits and sustainability. The key issues that the growth of the birding sector raises and the need and areas for future research are discussed below.

Conservation Benefits

Empirical peer-reviewed research on the conservation impacts of birding and birding tourism is limited to using birding tourism to maximize revenue in a Ugandan National Park (Naidoo & Adamowicz, 2005) and a study on community-based birding tourism projects in South Africa (Biggs et al., 2011). Considering the role that birding can play in generating revenue for conservation, particularly in remote rural areas with little other sources of income, this is a significant research gap.

The study conducted in South Africa by Biggs and others (2011) investigated the factors associated with a higher level of conservation benefit as measured by the Threat Reduction Assessment Tool (Salafsky & Margoluis, 1999). This study showed that levels of conservation benefits are not significantly correlated with levels of income generated. This result is supported in the broader community-based conservation literature. Non-cash benefits such as the levels of local pride in a resource, and the levels of local ownership, equity and empowerment are more important than monetary incentives for conservation (Berkes, 2004; Biggs et al., 2011; Salafsky, Cauley, Balachander, Cordes, Parks & Margoluis, 2001). A Tanzanian study on butterfly farming (Morgan-Brown, Jacobson, Wald & Child, 2010) suggests that higher income can be associated with higher levels of conservation benefit. But increased income generation is unlikely to lead to greater levels of participation in conservation on its own.

The potential conservation contribution of birding is becoming increasingly important as greater and greater numbers of bird species are faced with extinction (BirdLife International, 2008). Numerous bird tour companies state that they are active in bird and habitat conservation initiatives (see, for example, http://www.birdquest.co.uk; http://www.birdingafrica.com; http://www.birdingectours.com). Although BirdLife partners such as BirdLife South Africa have actively and successfully pursued this link, there is little in the form of strategic high-level guidelines for using the birding market to reduce the risk of species extinction. Bird tour companies gain marketing leverage from advertising their commitment to bird conservation. An opportunity exists to translate this marketing advantage that stated conservation support generates for bird tour companies

into funding that supports strategic and coherent conservation initiatives (Hartmann & Ibáñez, 2006). The Rainforest Alliances programme for sustainable and biodiversity-friendly coffee production represents one example of how this can work (Rainforest Alliance, 2012).

The Environmental Benefits and Impacts of Birders

The environmental impacts of birders are an important consideration when discussing the potential conservation benefits associated with birding. The environmental impacts of birding can be classified into three categories: (1) impact on birds and their natural environment; (2) carbon emissions associated with birding travel; (3) environmental impacts of the tourism infrastructure developed for birders.

Impact on birds and their natural environments

Birding as a tourism activity impacts in a number of ways on the birds and natural environments that birders visit and enjoy. When searching for 'hard to find' species, birders often use playback of that species' call or vocalization to attract an individual into view. In parts of the world with large numbers of birders, such as reserves in the UK, the USA and Ecuador, playback is banned or strictly controlled. However, there is little or no peer-reviewed empirical research that demonstrates the negative impacts of playback. Published research on playback is mainly in the form of behavioural studies that use playback as a way to research bird behaviour (for example, Hahn & Silverman, 2007). The impact of playback on birds and the mechanisms by which large number of birders can enjoy range-restricted species whilst minimizing their ecological impact require urgent research. In addition, research is required to understand the impact on birds of innovative techniques developed for showing birders difficult species, such as highlighted in Box 30.1.

In some cases, birders have direct negative impacts on the health of bird populations. Research from New Zealand has shown that the unregulated presence of visitors on beaches negatively affects the breeding success of Yellow-eyed Penguins (McClung, Seddon, Massaro & Setiawan, 2004). The presence of birders delays the adult return times post-foraging, which has a negative impact on chick body mass and survival. Negative impacts of visitors have also been shown in populations of the Humboldt penguin on the coast of Chile (Ellenberg, Mattern, Seddon & Jorquera, 2006). However, a number of studies from the Antarctic show that controlled visitation has no detectable negative effect on the stress levels or breeding success of different penguin species (Cobley & Shears, 1999; Nimon, Schroter & Stonehouse, 1994). Clearly, birding like other forms of wildlife tourism, requires context-specific carefully considered management and monitoring strategies to ensure that the negative impacts of birders on birds and natural habitats are minimized (Higginbottom, Green & Northrope, 2003).

Carbon emissions

International birding requires international or long-distance air travel. Aviation is one of the fastest growing contributors to global carbon emissions (Simpson, Gossling, Scott, Hall & Gladin, 2008) and one of the main sources of criticism against nature-based tourism contributing to conservation. In addition, the nature of birding

BOX 30.1 ANGEL PAZ'S INNOVATION FOR HARD TO FIND SPECIES

Ecuador is home to an innovative development at the juncture of birding, conservation and community development. Antpittas are a family of striking birds, much sought after by birders. Prior to 2006, birders were fortunate to view any members of this family beyond the Tawny Antpitta, the family's most easily seen species. In 2006, Angel Paz opened the Refugio Paz de Laz Aves near Mindo in northwest Ecuador. Angel Paz habituated Antpittas through a structured process of calling these birds closer and feeding them earthworms. Based on the success of Angel Paz's initiative, this practice is spreading to other parts of Ecuador including many privately owned lodges.

Angel Paz's initiative presents a substantial source of revenue in a middle-income country like Ecuador. Birders pay US$20 each to go out with Angel and other lodges charge a US$5 fee. Antpitta sightings in Ecuador are possible in most months of the year. Under a conservative assumption that Angel takes out clients 200 days of the year and group sizes vary between 5–15, these figures amount to US$100 to US$300 per day and US$20 000 to $60 000 per annum. This compares to Ecuador's gross domestic product (GDP) of US$5057 per capita.

There are a range of 'hard to find' bird families and species that are sought after by birders across South and Central America, Africa, Asia, Australasia and the Pacific. Modified versions of the technique developed by Angel Paz in Ecuador can be used in other parts of the world for birders to view families such as flufftails, pittas and other skulkers. Such techniques also present an opportunity for the generation of income in low-income countries that is associated with the conservation of habitats and bird species.

often requires domestic flights within a country or long-distance road travel. There is debate over the willingness of travellers to pay for the offset costs, or environmental costs, of their emissions from travel. Bower, Brander and van Beukering (2007) show that there is substantial willingness to pay for offset costs and that it amounts to 23 billion euros per annum. However, other researchers have found lower levels of a willingness to pay for offsetting carbon emissions (Dalton, Lockington & Baldock, 2008; Mair, 2011).

The structure of birding as a form of tourism presents an opportunity for the birding community to address the emissions associated with the hobby. First, some bird tour companies are offering accredited carbon offsets as part of the packages that they sell to birders to differentiate themselves from their competitors. Second, birders are organized into societies such as the RSPB with regular meetings and outings. These societies can adopt their own guidelines for carbon-responsible birding travel and provide a mechanism through which birders can offset or reduce their emissions. Furthermore, these societies provide an institution through which informal social pressure may be applied to birding travellers who do not participate in offset schemes.

Infrastructure for birders

The environmental concerns surrounding infrastructure developed for birders are similar to the concerns surrounding infrastructure and service development and management for tourism more broadly (for example, see Rivera, 2002; Russel, Lafferty & Loudoun, 2008). Birders are typically highly educated and environmentally aware travellers (Turpie & Ryan, 1998; US Fish and Wildlife Service, 2001). The development of accommodation facilities and other tourist infrastructure for birders will in general need to display a high level of sensitivity for the environment to avoid negative sentiments from the consumer market. If there are two birding lodges in an area, most birders would probably choose to stay with the establishment with stronger environmental credentials (see Rivera, 2002 for an example of positive market differentiation through environmental certification in Costa Rica).

Community and Socio-economic Benefits

Birders travel in substantial numbers to remote, rural locations in biodiversity-rich tropical countries that often suffer from high levels of poverty (Biggs, 2006). For this reason, birders are seen as an important mechanism through which rural poverty can be alleviated. Some countries, like South Africa, have developed official government birding tourism policies to maximize the socio-economic benefits that birding can deliver to South African society (Department of Trade and Industry, 2010). The use of birding as a mechanism to provide socio-economic benefits raises two key issues: (1) how effective and sustainable is birding as a means of job creation and socio-economic development? and (2) what are the interactions between the globalized corporate birding tourism sector and local-scale community-driven birding initiatives?

Effectiveness and sustainability of birding for socio-economic development

Birding can be a cost-effective mechanism for the achievement of socio-economic development and for the creation of jobs (Biggs, 2006). However, birding is a specialist sector of the tourism market and a long-term commitment to capacity building and local-level support is required for birding-based development initiatives to be sustainable (Biggs et al., 2011). Initiatives such as the Zululand Birding Route in South Africa involved a long-term commitment of support from local and international non-governmental organizations (NGOs) in partnership with government and the private sector for over ten years, and this played an important role in the longer-term success and sustainability of this initiative (Biggs et al., 2011). At a smaller scale, partnerships between NGOs and private sector tourism establishments such as lodges provide a mechanism through which the necessary long-term support and facilitation can be provided to develop the capacity in individuals from low-income communities to be sustainably successful in birding tourism.

The challenges facing community-based birding initiatives are similar to those that face community-based conservation and tourism more broadly (Biggs et al., 2011). These challenges include a lack of market access and marketing, low levels of business skills and poor accessibility to visitors (Dixey, 2008; Spenceley, 2008). The long-term support required for community-based birding tourism to become sustainable is therefore not unique.

It is widely acknowledged, however, that a key challenge in engaging with the tourism market is its volatility (Ashley, Roe & Goodwin, 2001; Briedenhann & Wickens, 2004). Birding tourists are in some ways akin to hunters and respond less negatively to media concerns over security at a destination. Nevertheless, major security concerns also affect the birding market. Furthermore, due to the seasonality of the presence or the visibility of certain birds, birding in some destinations has a distinct season in which there is more activity. Birding tourism should therefore be pursued as one component of a broader socio-economic development and livelihoods strategy in a region, and in many cases should complement rather than displace existing economic community activities (Fabricius, 2004; Tao & Wall, 2009).

Where the global meets the local

Birding is unique in the numbers of people involved that travel from high-income parts of the world to remote rural locations, often in low-income tropical countries in pursuit of birds. Birding therefore provides a connection between the highly educated, global elite and communities in regions that have little contact with this segment of global society. The opportunity therefore exists for the flow of knowledge, skills and resources from the global elite with the capacity for regular international travel to communities that reside in regions with high numbers of range-restricted, and often threatened, bird species. Examples from Kenya, Ecuador, South Africa and elsewhere described above illustrate mechanisms through which such a transfer of resources, knowledge and capacity can take place. In addition, the less tangible benefits of the generation of a sense of pride, ownership and stewardship over birds and natural habitats can emerge and be facilitated through interactions between local community members and the international birding community (Biggs, 2006; Biggs et al., 2011). High-income individuals also derive substantive value and personal benefit from their birding experience being visibly connected to a cause that promotes conservation and socio-economic upliftment.

However, the global and profit-driven nature of the international birding tourism market also poses the risk that birders visit remote areas of low-income countries but that the vast majority of income generated from these visits flows back to capital cities and other countries closer to the source market. Similar challenges are faced in tourism development across different sectors (Ashley et al., 2001; Spenceley, 2008). Once more, the structure and organization of the birding market and birding communities provides an opportunity for the creation of a branding mechanism for bird tours and birding accommodation establishments and services that are socially and environmentally responsible. The Zululand Birding Route in South Africa is one successful example of how this has been achieved. The Zululand Birding Route management ensured that the standards of service delivered by community members on the route would be acceptable to the international market and also promoted the use of community birding services.

CONCLUSION

Birding has grown tremendously in recent decades as has the number of commercial products targeting birders and the number and extent of conservation and socio-

economic development initiatives that use birding as a basis for their activities. The scope to use the birding market and the opportunities it presents for promoting environmental and social sustainability in remote and low-income parts of the world is hampered by the lack of research and information on how to best utilize the opportunities that birding presents. There are four key areas for research and development that require urgent attention in order for the potential that birding represents to be more fully realized:

1. The impacts of playback, and other techniques for attracting skulking and 'hard to find' species, on the health of those bird species and populations and the necessary management and monitoring protocols for these activities.
2. The development of a network and brand that promotes environmentally and socially responsible birding travel, particularly in relation to:
    - addressing carbon emissions from birding travel
    - ensuring favoured support of pro-conservation, environmentally and socially responsible bird tourism operators.
3. Understanding and promoting the role of birding in the development of conservation and environmental ethics in both highly educated/high-income and poorly educated/low-income communities.
4. Understanding and promoting the unique opportunity that birding represents to generate global connectivity and a global community that transcends high- and low-income countries and communities for the environmentally and socially responsible appreciation of biodiversity.

Through addressing these issues the diverse international birding community can continue to grow and develop in a way that becomes increasingly environmentally and socially responsible and provides an example to other sectors of the tourism market.

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31. Ecotourism standards: international accreditation and local certification and indicators

Anna Spenceley and Amos Bien

INTRODUCTION

Ecotourism could be considered as a 'well-meaning' term, which was devised with the best of intentions (Hetzer, 1965). However, it is one that has provoked much research, discussion, debate and critique. An analysis of 15 definitions of ecotourism by Fennell (2003) demonstrated that the versions reviewed encompassed aspects of nature, relationships with local people, conservation and preservation. Nevertheless, there is a fundamental challenge in establishing what ecotourism is, and what it is not. Discriminating between them permits recognizing exemplary performance (providing market advantage to those who achieve it), while avoiding false claims (or 'green-washing') by those who do not qualify as operating ecotourism.

The Mohonk Agreement (2000; see Bien, 2009) established for the first time a general agreement among tourism certification programmes to differentiate between the verifiable characteristics of ecotourism as a specialized tourism sector and those of sustainable tourism that apply to all tourism activities. This was reinforced in 2001 by the World Tourism Organization (WTO), which indicated that a clear distinction should be made between the terms ecotourism and sustainable tourism. While ecotourism itself refers to a segment within the tourism sector, principles of sustainability should apply to all types of tourism activities, their operations, establishments and projects (UNWTO, 2001).

In conjunction with the increasing focus on the importance of sustainable tourism, we have seen an increase in the development of ecotourism globally (Pratt, Rivera & Bien, 2011). The tools for evaluating the performance of tourism activities, such as indicators, certification programmes and accreditation systems, were gradually developed during the twentieth century, beginning with independent certification of quality in the 1920s. Environmental aspects of tourism activities began to be evaluated in the 1990s, while socio-economic and cultural criteria gained prominence in the following decade (Bien, 2007).

In parallel, the basic tools and premises for standardization, third-party certification and accreditation were developed under the auspices of the International Organization for Standardization (ISO) and the International Social and Environmental Accrediation Labeling (ISEAL) Alliance. The standards and certification mechanisms for tourism, however, were largely developed outside this framework, which is widely accepted in nearly all other industries. As a result, well over 100 environmental, sustainable tourism and ecotourism standards were developed between 1990 and 2010, each with its own certification programme and variable adherence to generally accepted principles for standardization and conformity assessment (Bien, 2009). An effort to bring coherence and good practice to these programmes began in 2000, with the Mohonk Agreement, the

publication of indicators for sustainable tourism destinations by the WTO (UNWTO, 2004), and culminating with the establishment of the Global Sustainable Tourism Council (GSTC) in 2008 and 2009, respectively. Nevertheless, there has been little progress since the Mohonk Agreement on establishing criteria specific to the ecotourism niche.

This chapter considers the development and application of indicators, certification and accreditation to the tourism industry, and their application to ecotourism in particular.

INDICATORS

Indicators are measures of the existence or severity of current issues, which can be used to signal risks or upcoming problems and actions required. Indicators can be used to measure (1) changes in tourism's structures and internal factors; (2) changes in external factors that affect tourism; and (3) impacts caused by tourism (UNWTO, 2004, p. 8). Some of the benefits of using indicators identified by the United Nations World Tourism Organization (UNWTO, 2004, p. 9) include:

- better decision making – lowering risks or costs
- identification of emerging issues – allowing prevention
- identification of impacts – allowing corrective action when needed
- performance measurement of the implementation of plans and management activities – evaluating progress in the sustainable development of tourism
- reduced risk of planning mistakes – identifying limits and opportunities
- greater accountability – credible information for the public and other stakeholders of tourism that fosters accountability for wise use in decision making
- continuous improvement due to constant monitoring.

Indicators can be used at all levels, including at regional or national levels for governments, at destination level or at key tourism sites for municipalities or communities, by tourism companies or individual tourism establishments. There are several types of indicators with different uses for decision makers, which can detect the current state of the tourism industry, stresses on the system, the impacts of tourism development on the environment and the effect of management (UNWTO, 2004). For ecotourism, they could be used by conservation authorities for specific protected areas or by companies operating ecotourism in natural destinations where they measure and enhance their net-positive impacts.

Indicator Development Processes

The UNWTO's (2004) guidebook for indicator development outlines 12 key steps in the process, which are outlined in the Table 31.1. There are three key phases to this process: research and organization, indicator development and implementation. The process incorporates establishing the scope of the indicator process, participatory processes with relevant stakeholders, evaluations of assets, systems of prioritizing key issues and

Table 31.1 Indicator development process

Step of the indicator development process	Application for ecotourism
Research and organisation phase	
Step 1: Definition/ delineation of the destination	For example, a protected area; a biodiversity hotspot; an ecosystem; or the location of an ecotourism enterprise.
Step 2: Use of participatory processes	Involvement of relevant stakeholders in the process, which may include communities, the public sector, the private sector, non-governmental organisations and tourists.
Step 3: Identification of tourism assets and risks	Natural assets may include beaches, wildlife, mountains, landscapes and also cultural elements, which are valued by destination stakeholders. A 'Strengths, Weaknesses, Opportunities and Threats' analysis can be used.
Step 4: Long-term vision for a destination	Stakeholder workshops can be used to brainstorm and develop consensus on a vision for an ecotourism destination.
Indicator development phase	
Step 5: Selection of priority issues	A participatory approach can be used to create a list of issues, and then to prioritise which are the most important (e.g. wildlife diversity).
Step 6: Identification of desired indicators	A 'long list' of indicators that reflect the priority issues can be developed (e.g. number of wildlife species; population of elephants).
Step 7: Inventory of data sources	Two main approaches to consider are: 1. What can we do with the data we have (i.e. data driven)? 2. What issue is most important, and can we obtain the data needed to address it? (i.e. issue/policy driven) For ecotourism destinations, existing data may come from wildlife surveys by a conservation authority. Issues may include 'How many elephants do we need to attract tourists?'
Step 8: Selection procedures	To screen indicators, evaluate each of them according to 5 criteria: 1. Relevance to the issue; 2. Feasibility of obtaining and analysing the information; 3. Credibility and reliability of the data; 4. Clarity and understandability to users; and 5. Comparability over time, and across regions
Implementation phase	
Step 9: Evaluation of feasibility/ implementation	Each indicator is elaborated to identify the source of data; data characteristics; frequency of collection; access to data and confidentiality; reporting units, validity and accuracy; data availability; responsibility for providing data; cost; and technical requirements. Refinement of indicators may be done to make it practical to implement.
Step 10: Data collection and analysis	Typical procedures for each indicator may include: – Use of existing data (e.g. protected area visitor numbers); – Extraction and manipulation of data from existing sources (e.g. extraction, integration or re-assembly of data);

Table 31.1 (continued)

Step of the indicator development process	Application for ecotourism
Implementation phase	– Creation of new data (e.g. monitoring tourism stays through monthly contact with tourism enterprises); – Creation of sample data (e.g. exit surveys of tourists, using questionnaires). Expression and portrayal of indicators can be done through presenting numbers, tables, graphs and symbols.
Step 11: Accountability, communication and reporting	Indicators can become part of planning and decision making. Public reporting of the indicators and their implications can be done through websites, for example.
Step 12: Monitoring and evaluation of indicators application	Regular review of indicators can be done by using a simple checklist including: – Are the indicators being used: by whom and how? – Do users find the current set useful? – Are there other ways to collect or analyse information that are easier or more efficient? – Is there evidence of outcomes influenced by the use of the indicators? – What barriers have hindered optimal use of the indicators?

Source: Adapted from UNWTO (2004).

establishing indicators that relate to them, and once indicators have been selected, actually collecting and analysing relevant data and reporting on findings.

For ecotourism destinations, the UNWTO (2004, pp. 268–9) suggests that indicators need to focus on six key elements:

- conservation of the natural environment at ecotourism destinations or areas
- relations with the local community and preservation of cultural assets
- ecotourism operations to reduce negative impacts on the natural and socio-cultural environment and contribute towards conservation of natural areas
- information and interpretation
- marketing and management of ecotourism
- safety for ecotourism activities.

Some of the ecotourism destinations that have developed indicators through this process include El Garraf Natural Park (Catalonia, Spain), Yacutinga Lodge (Argentina), Cape Breton Island (Canada) and Arches National Park (USA). Details of the processes undertaken, and their achievements, can be found in the UNWTO (2004) guidebook.

Other indicator tools also exist that are used more broadly than in the tourism industry, such as the Global Reporting Initiative (GRI). The GRI provides a reporting framework that is intended to serve as a generally accepted framework for reporting on

BOX 31.1 GLOBAL REPORTING INITIATIVE INDICATORS BY THE WILDERNESS GROUP

Wilderness is a specialist luxury safari operator with 59 safari camps and lodges in seven southern African countries, hosting over 25 000 guests each year. The company has developed 64 sustainability indicators relevant to the business, and presented their first report on these in August 2011. In terms of conservation elements, they reported on the operational footprint of the group in relation to different biomes; habitats protected or restored; RAMSAR sites on or adjacent to their operational areas; International Union for the Conservation of Nature (IUCN) Red List species occurring in the operational areas; and the number of species of birds, mammals, reptiles and amphibians present. Their contribution to conservation through 79 research projects undertaken in collaboration with over 60 independent institutions are described, as is their financial contribution to these initiatives (Wilderness Holdings Ltd, 2011b). Some key results from the 2011 report are:

- Operation on nearly 2.8 million hectares (6.9 million acres) of land in seven southern African countries.
- Operation in eight of Africa's 11 biomes, and within four of the eight African centres of endemism.
- Operation in areas inhabited by four critically endangered, seven endangered and 25 vulnerable mammals, birds, amphibians and reptiles.
- Contribution of over $US275 000 from Wilderness Holdings and $US115 000 from Wilderness Wildlife Trust.

In recognition of the quality of reporting, the Wilderness Group won the award for *Best Sustainability Report by a Newcomer at the Association of Chartered Certified Accountants* (ACC), South Africa Awards for Sustainability Reporting in 2011, for excellence in transparent environmental, social and sustainability reporting (Wilderness Holdings Ltd, 2011a).

an organization's economic, environmental and social performance. It is designed for use by organizations of any size, sector or location. The GRI Reporting Framework contains general and sector-specific content that has been agreed to by a wide range of stakeholders around the world to be generally applicable for reporting an organization's sustainability performance (GRI, 2000–06). A set of Indicator Protocols are provided in relation to performance indicators to assist companies in understanding, compiling and reporting their performance on various indicators. Although there are no specific sectoral guidelines for ecotourism, a tour operators' supplement was drafted in 2002 (GRI, 2002).

Version 3 of the GRI (GRI, 2006) has been applied by the ecotourism company Wilderness Holdings Ltd. As a company listed on the Botswana Stock Exchange,

Wilderness Holdings Ltd is bound by the corporate governance standards of the King Code and Report on Governance (King II). However, the company chose to comply with the standards of the more advanced King III,[1] which incorporates the guidelines of the GRI on sustainability reporting. The company went further than the GRI by also addressing the Zeitz Foundation's four 'Cs' (Conservation, Community, Culture and Commerce),[2] elements of the Global Sustainable Tourism Criteria,[3] the South African Responsible Tourism Standards[4] and indicators that were meaningful to their own stakeholders.

The use of indicators, and their public reporting, is a solid step that ecotourism destinations and operations can take to demonstrate their performance towards sustainable tourism. Certification provides a further step in this process, by providing external evaluations by independent third parties. Moreover, most certification standards, as well as the Global Sustainable Tourism Criteria, are accompanied by performance indicators that are used by the certifier to determine whether or not an activity is in conformity with a standard.

CERTIFICATION

Honey and Rome (2001, p. 5) offer a useful definition of certification as it applies to tourism: 'a voluntary procedure that assesses audits and gives written assurance that a facility, product, process or service meets specific standards. It awards a marketable logo to those that meet or exceed baseline standards.' Certification is generally taken to signify that an independent third party has verified the conformity of an activity or product to a written standard. In sustainable tourism, this signifies that the standard should include socio-economic, cultural and environmental criteria, such as those specified by the Global Sustainable Tourism Criteria. In ecotourism, additional variables should be considered, such as those of the Mohonk Agreement (2000) or the European Ecotourism Labelling Standard.

The general aim of certification is to foster responsible environmental, social and cultural behaviour and provide a quality product to consumers. Certification provides a mechanism through which enterprises can achieve voluntary standards of performance that meet or exceed baseline standards or legislation (Dodds & Joppe, 2005). Certification verifies claims made by enterprises and acts against green-washing. It assists consumers and trade buyers who are looking for sustainable products and provides a basis for sustainable businesses to promote and network with each other with mutual confidence (Denman, 2010, p. 6).

The variables specific to ecotourism within certification programmes, over and above those of sustainable tourism, are, according to the Mohonk Agreement:

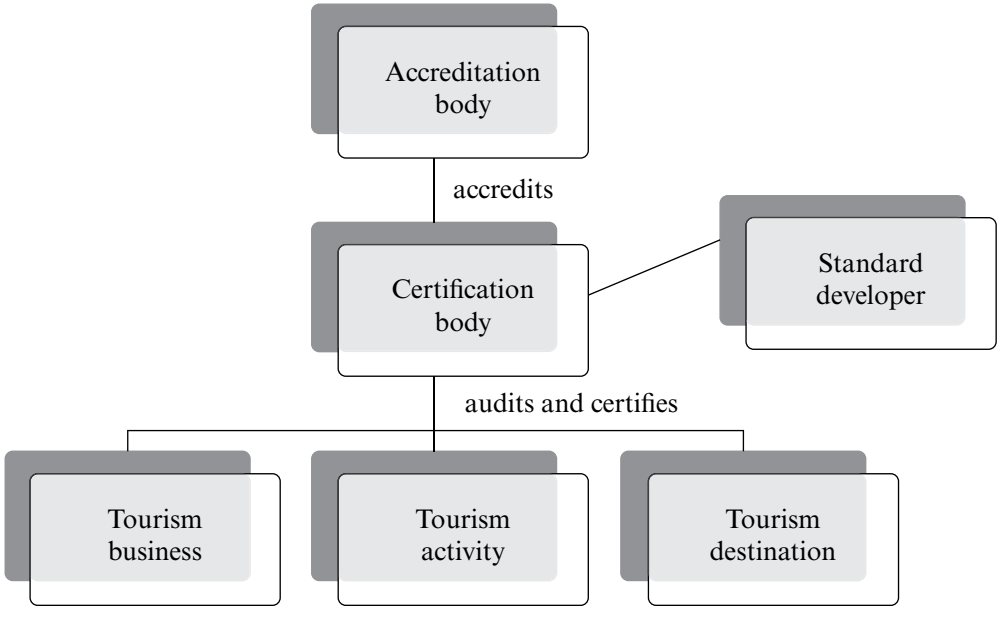
- focus on the visitor's personal experiences of nature to lead to greater understanding and appreciation
- interpretation and environmental awareness of nature, local society and culture
- positive and active contributions to conservation of natural areas or biodiversity
- economic, social and cultural benefits for local communities
- fostering of community involvement, where appropriate

- locally appropriate scale and design for lodging, tours and attractions
- minimal impact on and presentation of local (Indigenous) culture.

All except the first of these points are reflected to some degree in the GST Criteria and hence are found in many sustainable tourism standards. However, the concepts of direct and personal contact with nature and local culture are highly specific to ecotourism.

Certification can provide a useful tool for destination managers seeking to influence and work with tourism enterprises in developing and promoting sustainable destinations. It can be used as the basis for incentive schemes and rewards. Most valuably, it can help enterprises understand what they need to do to be considered sustainable. The process can help them identify weaknesses and gaps in their performance and seek to fill them within a programme of continuous improvement (Denman, 2010, p. 6). Credible certification programmes that use internationally recognized standards and processes can facilitate the selection of suppliers by outbound travel agencies and wholesalers. Increasingly, European tour operators require that their hotels and inbound operators be certified by a reputable programme. In addition, Costa Rica offers free or subsidized participation in trade shows and advertising for certified businesses, while Barbados offers them significant tax benefits (Rome, 2005).

A generic tourism certification process is described in Figure 31.1. It shows how an independent accreditation body evaluates a certification body and accredits it as competent to evaluate a written standard. The certification body assesses the conformity to the



Source: Authors.

Figure 31.1 Generic tourism certification process

standard of an applicant (for example, a tourism enterprise or activity). If the applicant is judged by an independent audit to be in conformity with the standard, the certification body awards it a certificate of conformity and a marketable logo. The scope of the certification must be clearly delineated (for example, what services are covered and for how long). Governing each stage of the process are numerous international standards from the ISO, ISEAL Alliance, International Accreditation Forum (IAF), WTO and the GSTC (Bien, 2009). A successful applicant will market itself once it has achieved the certification using the independent evaluation to justify its claims of sustainability. Other institutions, such as the certification body or the GSTC, may contribute to marketing certified sustainable tourism products (Figure 31.2).

Some certification programmes are oriented to focus on ecotourism operations (for example, the Kenyan Eco-rating Scheme, the Australian EcoCertification Programme (formerly National Ecotourism Accrediation Programme (NEAP)) and Nature's Best of Sweden), while others more broadly address sustainable or responsible tourism, and are applied to a variety of types of tourism operations, including ecotourism (for example, Fair Trade in Tourism South Africa; Box 31.2).

Despite the idealistic aims of certification, there are a number of limitations and constraints, which include the following:

- The number of applicants to certification programmes globally within the private sector is only growing slowly, and this growth is mainly due to geographical diversification, not market penetration; attrition rates are significant and yet unreported (Font, 2009; Thwaites, 2007; WTO, 2002). Nevertheless, the number of certified sustainable tourism businesses recorded from only 39 of 132 identified certification programmes worldwide grew from 8340 in May 2007 to 16 553 in January 2012, in addition to 4000–5000 hotels and restaurants certified to ISO 14,001 (environmental management systems) and ISO 9,000 (quality management systems) (GSTC; Marc Myers (Re-Plan), personal communications, 2012).
- Most sustainable tourism certification programmes lack robust and regular sources of income to operate effectively and to market themselves as relevant, appropriate and credible. Many of these programmes cannot cover their complete operating costs from user fees alone (Rome, Crabtree, Bien, Hamele & Spenceley, 2006).
- Sophisticated tourism operations working across geographical regions and pushing the boundaries of sustainability feel that available certification programmes are not sophisticated enough to fully capture their work (Wilderness Holdings; & Beyond, personal communications).
- Once initial savings have been made from resource saving programmes (for example, energy, water), it is difficult for companies to justify retaining membership of certification programmes, and recurring membership and evaluation fees (Rome et al., 2006) unless market advantages are clear.
- The market advantage envisaged from certification has not been fully realized. The vast majority of tourists are largely unaware of tourism certification labels or indeed of sustainable tourism offerings (TUI Travel Plc, 2010). Evidence does exist, however, that travel intermediaries do favour certified businesses and,

BOX 31.2 EXAMPLE OF A FAIR TRADE IN TOURISM CERTIFIED ECOTOURISM ENTERPRISE: TSWALU, SOUTH AFRICA

'Tswalu', which in SeTswana means 'new beginning' is an anchor for local economic development in the far northern region of the Northern Cape Province of South Africa. The reserve is situated at the foot of the Korannaberg Mountains, some 300 kilometres northwest of Kimberley and covers 1000 square kilometres (100 000 hectares) of land on the edge of the Kalahari Desert.

Tswalu began as a large, private conservation project on a 100 000 hectare reserve with the introduction of thousands of game animals. Free from malaria and other tropical diseases, the reserve now boasts 70 species of mammals including lion, cheetah, desert black rhino, sable and roan antelope. More than 200 species of birds can also be found. Guests at Tswalu are able to enjoy a range of unique experiences including the incredible thrill of tracking black rhinos, and the solace that can only be found within this stark yet unique landscape.

Top-notch hospitality is central to Tswalu, where guests can enjoy stylish yet rustic accommodation characterized by high quality amenities and service. From the indoor and outdoor heated shower in every suite (the outdoor version looks out across the Kalahari plain) to the private suite sundecks and a well-stocked library, Tswalu embodies the essence of modern luxury with an African ambiance. The emphasis at Tswalu is on exclusivity, which is why the entire reserve can accommodate no more than 30 people at a time.

Tswalu is dedicated to its staff and community as well as to the conservation of the Kalahari. The business has invested considerable resources in community health and education initiatives with an emphasis on improving adult literacy and providing access to primary health care.

Source: http://www.fairtourismsa.org.za/holiday_stay_tswalu.html (accessed 31 March 2013).

moreover, that the process of certification induces businesses to become more efficient and offer higher quality services. Although there is little evidence that a certification label will induce higher occupancy, higher quality of service does do so (Bien, 2005).

- A plethora of tourism certification programmes makes it difficult for tourists and tourism operators to discriminate between them, or understand what each really means in terms of ecotourism and sustainability. For example, tour operators in the Caribbean feel that the number and variety of different schemes makes it very difficult to educate their customers or their staff (Dodds & Joppe, 2009).

It is this last point, on the plethora of certification programmes, that accreditation aims to address.

ACCREDITATION

Accreditation involves certifying the certifiers. It is a third-party assessment of the transparency, impartiality and competence of certification programmes to evaluate conformity with a given standard. The overarching aim is to ensure that certification activity in tourism is being carried out professionally and fairly, and that it genuinely assesses sustainability. In principle, the GSTC's Accreditation Programme would reduce consumer confusion between different schemes, labels and standards, and would also foster trade confidence in certification and encourage mutual trust between schemes (Denman, 2010).

A practical model that describes how accreditation would fit within certification processes is provided in Figure 31.2. This scheme applies to sustainable tourism standards and certification programmes, of which ecotourism certification forms a subset. In practice, this has resulted in GSTC recognition of several ecotourism standards, as well as of the European Ecotourism Labelling Standard (EETLS), which is itself a benchmark for European ecotourism standards.

Feasibility studies and business plans for the GSTC accreditation programme have revealed the following:

- Certification bodies frequently do not see the value of accreditation in relation to the financial outlay required given that few of them currently comply with international best practice in conformity assessment.
- The market value of accreditation has not been demonstrated.
- The number of certification bodies globally with large numbers of certificate holders is not sufficient to make an accreditation programme commercially viable.
- Certification programmes, hotel chains and tour operators that have developed proprietary sustainable tourism standards desire recognition and approval of their standards, for which there is a larger market.

These findings led to an adaptation of the accreditation programme to provide three options of GSTC recognized, GSTC approved and GSTC accredited (GSTC, 2011):

- GSTC recognized means that a sustainable tourism standard has been reviewed, is deemed equivalent to the Global Sustainable Tourism Criteria for sustainable tourism and is administered by a standard owner that meets GSTC requirements.
- GSTC approved means that a certification programme is using a GSTC-recognized standard and is following processes and procedures that have been reviewed and approved by the GSTC.
- GSTC accredited means that a certification body is using a GSTC-recognized standard and is following processes and procedures that have been reviewed and authorized by an accreditation body endorsed by the GSTC.

GSTC-approved and accredited certification programmes are entitled to use the GSTC name and logos as promotional tools, as may their certified businesses, activities and destinations.

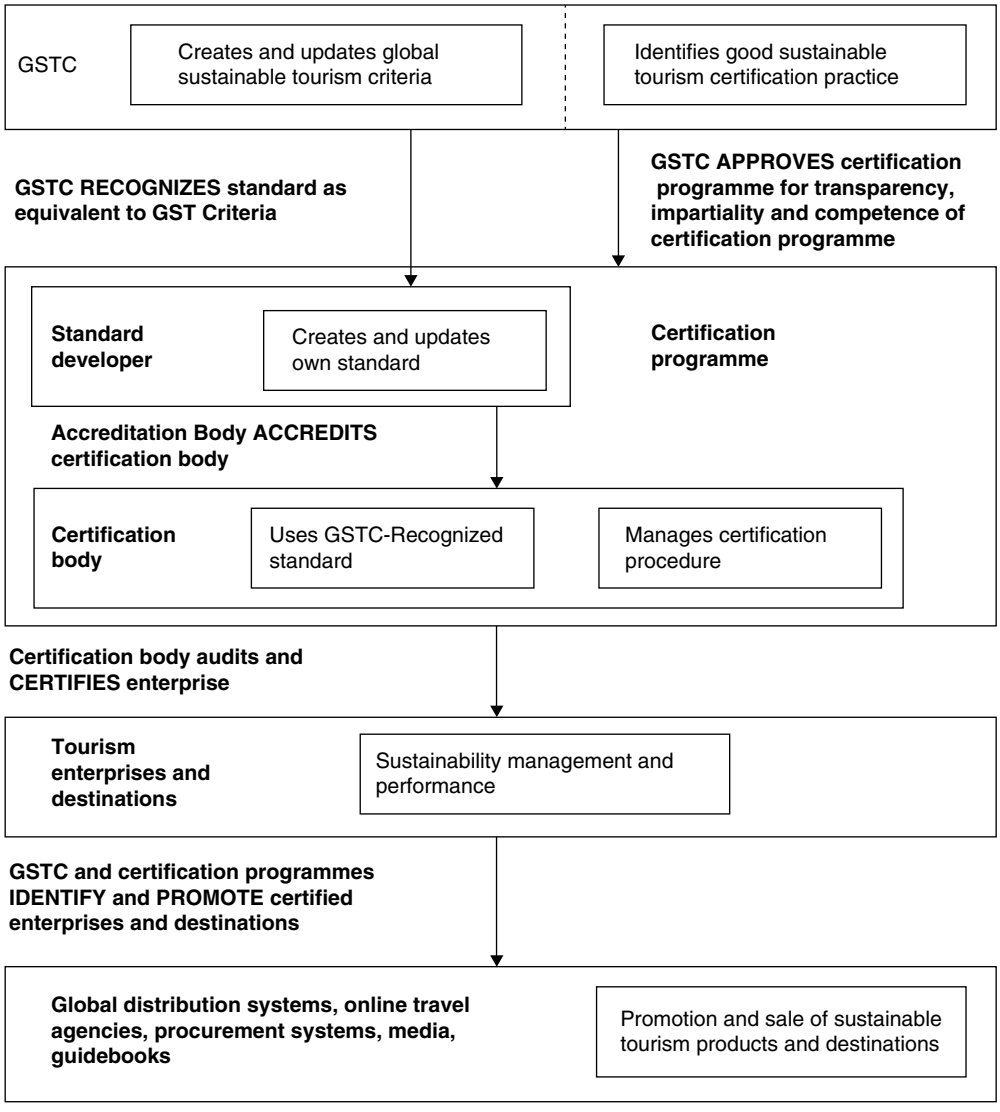


Figure 31.2 Recognition, approval and accreditation process of the Global Sustainable Tourism Council (GSTC)

Still in its infancy, it remains to be seen whether the recognition, approval and accreditation options offered by the GSTC will achieve their objectives of reducing consumer confusion and improving confidence in certification programmes. It is likely that over the next 3–5 years the impacts of such processes will emerge. A critical aspect of this scheme is intensive marketing of certified products through global distribution systems, online travel agencies, procurement systems, media and guidebooks. Although, based on the experience of other industries, it may take many years to develop direct consumer

interest in certification, the priority given to them by these travel intermediaries is likely to strongly motivate businesses and destinations to seek certification (Rome, Sanders, Vergara & Bien, 2005). Strong interest and commitment to this scheme has been shown by several of the most important intermediaries in travel and tourism (E. Harms, personal communication, 2012).

WAY FORWARD AND FUTURE FOR ECOTOURISM STANDARDS

The literature on ecotourism standards is growing globally, as are the tools available to tourism businesses and destinations to have their efforts independently recognized. It remains to be seen as to how indicators and certification programmes will evolve in the future.

What is clear is that there is a demand for sustainable ecotourism from a relatively small but increasing number of tourism operations, destinations and the tourists who visit them. This proportion may increase in the future as awareness rises among consumers and industry players. Improvements will also be seen where host communities in destinations are more vocal, and take more responsibility towards promoting improvements in the areas where they live and in tackling poor business practices when they perceive them.

The number of ecotourism enterprises that are certified by independent certification bodies, and the number of certification bodies recognized by third-party accreditation bodies, will only increase if there is a market demand for such validation. Already two of the four worldwide global distribution systems, several online travel agencies and most trade associations of European outbound tour operators require convincing demonstration of sustainability in their supply chain. Amadeus, Melia, Royal Caribbean Cruises Ltd, Sabre Holdings and TUI Travel Plc have publicly committed to promoting sustainable tourism products and services recognized by the GSTC (2012). The European Ecotourism Labelling Network is requiring its member certification programmes to comply with their GSTC-recognized standard, as well as international best practice in certification. The Brazilian government will require capacity building workshops for hotels to integrate sustainable practices and promote existing credible certification of hotels that wish to participate in the 2014 World Cup and the 2016 Summer Olympics (H. Reyes, personal communication, 7 March 2011). It is hoped that businesses using sustainable ecotourism standards will become market leaders and will prosper with greater returns from their efforts. Should this be the case, then sustainable practices will eventually become the norm of the mainstream rather than the target of a minority of motivated and driven individuals.

Given the diversity of opinions and approaches to sustainability globally, it is highly likely that independent efforts by ecotourism operators and destinations to measure and report on their efforts will continue. Whether the current diverse range of certification programmes condense and are amalgamated over time will largely depend on market forces and the viability of individual programmes. For the foreseeable future, maintaining a diverse range of approaches, tools and options that the tourism sector can use, and consumers can understand, is a positive approach.

NOTES

1. For more information on the King report, see https://www.saica.co.za/TechnicalInformation/LegalandGovernance/King/tabid/626/language/en-ZA/Default.aspx (accessed 31 January 2012).
2. For more information on the four Cs, see http://www.zeitzfoundation.org/index.php?page=4cs&subpage=ourapproach (accessed 31 January 2012).
3. For the GST Criteria, see http://www.gstcouncil.org/resource-center/sustainable-tourism-gstc-criteria.html (accessed 31 January 2012).
4. For the minimum standards and supporting documents, see http://www.tourism.gov.za:8001/Pg/PageContent.aspx?SiteMapNodeId=188 (accessed 31 January 2012).

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PART IV

ECOTOURISM CONTEXTS: PUSHING THE BOUNDARIES

32. Planning and staging ecotourism events

Donald Getz

INTRODUCTION

This chapter discusses the meaning and nature of 'ecotourism events' and provides guidelines for their planning and staging. It is shown that planned events have multiple roles to play in nature conservation and in realizing the strategies of parks and protected areas. Communities, tourist destinations and protected areas can include ecotourism events within a managed portfolio of events, attractions and services to achieve their aims. But not all events held in natural settings or produced by parks meet the criteria of ecotourism.

Hvenegaard and Manaloor (2007) observed that the number of wildlife festivals has grown rapidly across North America, and it is likely that this trend – paralleling the broader surge in festivals of all types – has been global in scope. But festivals and other planned events have not been studied in any detail as ecotourism phenomena; indeed, most texts on ecotourism do not specifically include a discussion of events. There are published articles on birding and wildlife festivals that do indicate their potential economic impacts, and they also generate an awareness of the potential for events to make an important contribution to ecotourism.

Examples are provided of a range of events that are explicitly nature-themed, and a table is presented to illustrate the range of relationships events can have with nature; some key planning, management and marketing issues are highlighted. Then a demand-side approach is considered by looking at the ecotourist, as documented in the research literature. For marketing purposes it is important to understand the underlying motivations, or benefits, sought from ecotourism experiences, and to describe the more highly involved ecotourists who are likely to constitute the primary target segment for events. Several inter-related theoretical constructs are therefore discussed, with a view to fostering more targeted consumer research on ecotourism event demand. A distinction is made between hard and soft ecotourism events, and the implications are discussed.

In the concluding section the main points are summarized, with emphasis on planning, management and marketing implications. The final figure conceptualizes the ecotourism event from the perspective of the dedicated ecotourist seeking specific benefits. This model also encompasses the concept of core and augmented product, as both ecotourists and those seeking more generic benefits can find these both at the event and within the destination.

CONCEPTUALIZING ECOTOURISM EVENTS

Answering the question 'what is an ecotourism event?' is complicated, requiring an examination of ecotourism, the forms and functions of planned events, demand and supply

issues, and ultimately how to produce, manage and market them. It could be argued that any event held in, or sanctioned by, a park or conservation authority to further its objectives should qualify as an ecotourism event. Similarly, any nature-themed festival, fair or meeting might be included.

Parks and protected areas, just like communities and tourist destinations, should consider development of a balanced portfolio of events to meet their various goals. Multiple events throughout the year serve to reduce seasonality of demand and generate higher levels of publicity. Overall, an event-tourism strategy aims to generate new tourist demand and spread it out both temporally and spatially to create positive images and aid in place marketing.

Events also can act as catalysts for new infrastructure and improved marketing, and they animate attractions that would otherwise continuously offer the same experiences. Not all events held in parks need to have an ecotourism theme or be produced mainly for ecotourists, and their value can be measured in terms of any of the following:

- attracting (eco)tourists from outside the country, thereby supporting national economic development
- interpreting park values and conservation issues to (presumably) sympathetic visitors and asking them to be ambassadors for the cause
- employing events as tools to raise money or volunteer labour for worthwhile projects
- using events as media lures, resulting in favourable coverage and image-boosting to national and international audiences.

Events can attract new visitors who might not otherwise be motivated to travel to a park, or give previous visitors a reason to come back. Events can generate revenue for parks and other stakeholders (such as the local community and/or Aboriginal groups) through ticketing and merchandise sales. They can be used as interpretive and social marketing vehicles to increase knowledge and foster a conservation ethic. Different types of events, appealing to a broad audience should be complemented by ecotourism events that are targeted at specific ecotourism segments.

It is clear from searching the internet and scholarly literature that many parks and communities are hosts to nature- and ecotourism-themed events, not to mention many sporting events being held in parks and natural settings that make no pretence about being conservation-oriented. In Table 32.1 a number of examples are provided of events, mostly called festivals, with clear nature and ecotourism themes, and highlights of their programming. They are held in a variety of natural and built settings, and their programming includes many elements that could be called soft or hard ecotourism. But, as will be argued, their themes and programming do not in themselves constitute an 'ecotourism event'.

Although a systematic analysis has apparently not been published, it does appear that the principal form of nature and ecotourism event is that of wildlife-themed festivals, usually focused on birds, but a butterfly festival has also been studied (Kim, Kim & Agrusa, 2008). Weaver (2011) has discussed celestial-themed ecotourism, and by implication there could be developed a broad range of celestial ecotourism events featuring

Table 32.1 Examples of nature-themed events and their programming

Themes	Examples	Programming elements
Nature and science	Bristol Festival of Nature (England), http://www.festivalofnature.org 'The event, run by the Bristol Natural History Consortium, principally takes place at At-Bristol, Bristol Museum and Art Gallery, Bristol Zoo, the University of Bristol and the University of the West of England'	Lectures, tours and film screenings on subjects of science, natural history and the environment; speakers
Wildlife; birds	Morro Bay Winter Bird Festival (California), http://www.morrobaybirdfestival.org 'Every January on the Martin Luther King Jr. holiday weekend, the Morro Coast Audubon Society in collaboration with California State Parks, Central Coast Natural History Association, the city of Morro Bay, the Morro Bay Chamber of Commerce, and Friends of the Estuary, host the Winter Bird Festival . . . Morro Bay California is one of the few remaining estuaries on the Pacific flyway. Christmas Bird Counts on the bay have numbered above the 200 species mark, and the festival bird lists have totalled over 220 species for the weekend, making this area on the central California coast a prime birding destination', http://www.centralcoast.com/bird_watching.asp	All-day and half-day tours take participants to a wide variety of habitats, including deep water pelagic, oak woodland and riparian, wetland and estuary, and the unique grassland habitat of the Carrizo Plain; workshops cover a vast array of topics ranging from beginner birding classes to gull identification; outstanding evening speakers make presentations on Saturday and Sunday; a variety of vendors are present with nature related artwork, books, field equipment and attire, and local merchant wares
Celestial phenomena	Jasper Dark Sky Festival (Canada), http://www.jasperdarkskyfest.com/ 'Jasper National Park celebrates its designation as a Dark Sky Preserve with this (first, annual) event'	Star viewing; interpretation; exhibition; lectures/presentations; dinners and family activities
Geological/geomorphological phenomena	Geology Festival, Bryce Canyon National Park (USA), http://www.nps.gov/brca/geofest.htm	Guided tours and walks; lectures; family activities
Marine and aquatic phenomena	Pacific Rim Whale Festival (Canada), http://www.pacificrimwhalefestival.com/ 'Join the fun on the shores of Vancouver Island's wild west coast, as we celebrate the arrival of upwards of 20 000 grey whales on their northbound migration from the Baja Peninsula to Alaska's	Grey whale and marine life education; inspirational talks and interpretive walks; children's fun; culinary events; First Nations cultural workshops

Table 32.1 (continued)

Themes	Examples	Programming elements
Marine and aquatic phenomena	Bering Strait and beyond . . . throughout the coastal towns of Tofino and Ucluelet and the Pacific Rim National Park Reserve', http://www.westcoastaquatic.ca/tsawalk/events/pacific-rim-whale-festival	
Lifestyle and nature	Eating Festival (Thailand), http://www.thaihoteldeals.com/	Villagers organize the food event to promote nearby ecotourism hikes
The meanings, process and impacts of ecotourism (e.g. conservation, planning, management, marketing, stakeholder relationships, funding)	Ecotourism Festival, http://www.lebanonwire.com/0305/03052807DS.asp	The Association for Forest Development and Conservation (AFDC), Lebanon organizes an Ecotourism Festival at its centre in Ramlieh; the main objective of the festival is to explain what ecotourism is and help local tour operators promote their outdoor activities

the viewing and understanding of phenomena in the sky. Indeed, there are already places celebrating the Northern Lights, and occasional events like comets and eclipses tend to generate special events. Many other themes are apparent, including geology and volcanology, vegetation, oceans and freshwater, and man–environment interactions (for example, farming, forestry, fishing). As to forms of event, festivals are not the only possibility, as exhibitions, fairs, meetings and conventions with nature and ecotourism themes are being held.

Connections to Nature and Ecotourism

Planned events are discrete temporal and spatial phenomena, and are always unique because of the somewhat uncontrollable interactions of people, setting and management (including programming). While there cannot be a single ideal or model ecotourism event, a range of possible 'models' of the relationships between events and nature can be suggested.

'Model' in this context does not refer to a standard to compare against (as in benchmarking or buying into a franchise), nor a small-scale version to test an ecotourism event idea. Rather, it means a description of the various relationships that planned events can have with nature, conservation and ecotourism (Table 32.2). Each of the suggested models can be observed in the real world, so this is in part a phenomenological approach to classification. Each of these models is also a different kind of system

Table 32.2 Event models and their connections to nature and ecotourism

Models	Relationship with nature	Planning, management and marketing issues
A. Nature as merely a setting • e.g. outdoor sports, concerts, music festivals, parties • not promoted or managed with explicit interpretation or conservation themes	• might be neutral (if green and sustainable in its production) • might be harmful either in terms of direct impacts (e.g. erosion, wildlife disruption, pollution) or effects on attitudes (e.g. treating nature as a playground; no concern for environmental impacts)	• all outdoor events should be required to adhere to green environmental practices • it is desirable to incorporate environmental interpretation and education in all public outdoor events
B. Nature as a theme • e.g. community-based wildlife festivals; exhibitions held in cities or resorts	• ostensibly these events celebrate and interpret nature	• the appeal of community-based (wildlife and other themed) festivals is usually generic, that is, related to entertainment and social benefits • events with a nature theme are likely to attract potential ecotourists, thereby providing a marketing platform for ecotourism events
C. Nature as a setting and theme • e.g. festivals and interpretive events held in parks/protected areas or other natural settings	• their purpose must be to celebrate, interpret and/or aid in nature conservation	• interpretive events within parks and protected areas are usually aimed at existing visitors but can be marketed to ecotourists • it should be expected that any such event will attract some ecotourists
D. Ecotourists as a target • any type of event, indoors or outdoors, can be aimed at ecotourists as a primary or secondary market segment • the type of event, its programme and marketing can be determined by the interests of existing and potential ecotourists	• with ecotourists as a target segment, there has to be an experiential connection to nature and conservation: cognitive (learning, problem solving); affective (celebration and generating feelings of making a positive contribution to conservation) and conative (activities that connect to nature and conservation)	• an event can be designed specifically for ecotourists or an existing event can aim to attract ecotourists • such events do not have to be in a natural or protected setting (e.g. an exhibition of wildlife paintings or a convention held in an urban venue)

Table 32.2 (continued)

Models	Relationship with nature	Planning, management and marketing issues
E. Ecotourism events • ecotourism events will both target ecotourists and contribute positively to nature conservation • can be of any form, indoors or out, within natural settings or not	• ecotourists will have to be satisfied that they are making a positive contribution to nature and conservation efforts, regardless of setting, form of event and theme	• this is a demand-based concept requiring market intelligence and events designed to deliver benefits to specific types of ecotourist

in terms of how the event has to be organized and produced, and in terms of its inter-relationships (especially inputs and outcomes) with its physical and institutional environment.

Each model represents a theoretical approach to the question 'what is an ecotourism event?' This is the most challenging use of the word model, as it requires an attempt to explain how these various forms of event come about and evolve (especially the purposes they serve), and an ability to predict the likely consequences of selecting one over the others for development or marketing. The extent of research to date will only support some general conclusions about how certain nature-themed events attract people for both generic and targeted benefits, and (in line with theory on event tourism in general) how economic impacts are generated.

The differences between these five models are in some places subtle, and in others profound and obvious. Many outdoor events have no connection to conservation or ecotourism values; they are simply held there as an attractive or convenient backdrop. Such events might be potentially harmful to the environment (for example, active sports requiring facilities or generating alterations to the natural environment). Ideally, all outdoor events should be required to conform to green and sustainable standards, and they all have the potential to carry environmental messages.

Many nature-themed events are held within and outside parks and protected areas, and they might or might not attract ecotourists. Research on festivals strongly supports the conclusion that many – and often the majority – of those in attendance are motivated by generic reasons, including entertainment, escapism and the pursuit of something novel, socializing and hedonism (for a review of festival motivation, see Chang & Yuan, 2011). When nature is both the setting and theme, however, it should be expected that ecotourists will attend, thereby presenting a platform for targeted marketing. Interpretive events held in parks are generally aimed at visitors already there, but can be modified to attract ecotourists – again it should be noted that not all interpretive events held in parks address ecotourism values, for example, historical re-enactments.

Finally, the fifth model is purely demand-based, suggesting that any event targeted to ecotourists, whatever the setting or format, must deliver specific benefits sought by ecotourists. It can be assumed that ecotourism events must be green and sustainable, so a discussion of these concepts is needed.

Sustainable Events

According to Singh, Slotkin and Vamosi (2007), ecotourism is often conceptualized in terms of benefits – that is, what tourism should do for the environment or culture – rather than as activity. Criteria have generally been agreed upon for determining what is ecotourism, according to Wood (2002), and these can be applied to the events sector. By inference, ecotourism events should provide the following benefits:

- conserving biodiversity
- sustaining the wellbeing of local people (Indigenous or not)
- experiential learning
- responsible action by stakeholders
- the use, where possible, of renewable resources
- local participation and ownership.

This set of criteria implies that ecotourists will be looking for these benefits in the programme, marketing and evaluation of events that attract them, whereas their personal experiences will be expected to deliver benefits such as self-development and socializing.

This is a different set of criteria from those typically applied to being a 'green' or 'sustainable' event. Several books are available to provide guidelines and examples of green and sustainable events and so these do not need to be repeated here. Both Goldblatt (2011) and Jones (2010) define the sustainability of events as a combination of green practices and corporate social responsibility. Jones (2010, p. 5) views sustainable events as models for sustainable living and sustainable communities, and therefore they have an educational role that aims to transform people and their practices. Generating a positive legacy is part of being sustainable. While 'green practices' are not a uniform management system, the starting point is Reduce, Reuse and Recycle. Jones discusses the following topics in detail: energy and emissions, transport, water, purchasing, resource use and waste.

Generally, in a triple bottom-line approach, economic viability is added to the sustainability argument, whereas this is not necessarily a part of defining ecotourism events. It is, rather, a management and ownership issue. It can be argued that being 'green' is a prerequisite to being an ecotourism event, whereas being a 'sustainable event' is a matter of context and purpose.

Lawton (2009) undertook a survey of 108 US-based birding festivals to examine their adherence to ecotourism criteria, and found that formal identification with ecotourism through promotion or membership was low; none were formally affiliated with ecotourism organizations. However, Lawton concluded that birding festivals do satisfy basic ecotourism criteria as nature-based attractions.

Demand for Ecotourism Events

Taking a demand-side approach, it can be argued that any event that is targeted at, and appeals to, ecotourists qualifies as an ecotourism event, with one important proviso – there is a necessity for meeting the expectations of ecotourists as they apply to both event impacts and their personal experiences. This is the weak point in research conducted to

date: identifying those ecotourists most likely to travel, and specifically, to travel for events.

This discussion is focused on leisure travel, but there is certainly a segment of professionals (for example, biologists, park employees, tourism marketers, event managers) who can become event ecotourists, and their motivations will be somewhat different. No doubt professionals engaged in ecotourism will emphasize learning and networking opportunities, in common with convention and exhibition tourists, and perhaps including the desire for setting up formal or informal exchanges. Professionals are also the target audience for seminars and conferences about event ecotourism.

A number of research studies have examined the economic impacts of birding and wildlife festivals, and in doing so have profiled their visitors. Hvenegaard and Manaloor (2007) reviewed the pertinent literature and concluded that wildlife festivals in North America attract the 'very educated', and somewhat more female and older visitors than the general population. The proportion of tourists attracted to the documented events ranged from 10 to 73 per cent. In their own research on two Canadian wildlife festivals, Hvenegaard and Manaloor determined that the one attracting more longer-distance, higher-yield tourists appealed to the more specialized ecotourist – in this case by featuring wood carvings for sale.

Several inter-related theoretical constructs are highly pertinent, namely serious leisure, recreation specialization, ego-involvement and social worlds. Taken together, these theoretical perspectives enable the identification of highly involved ecotourists and how to appeal to them, but the ecotourism dimension has not been studied specifically within these frames. To account for changing ecotourism propensity and preferences over time we can employ the event-tourism career trajectory; it is theory-in-development that has been advanced to shed light on how changing levels of involvement result in changes in event-related travel behaviour.

For the most part, it can be said that ecotourists are engaged in 'serious leisure'. Stebbins (1992, p. 3) defined it as 'the systematic pursuit of an amateur, hobbyist, or volunteer core activity that is highly substantial, interesting, and fulfilling and where, in the typical case, participants find a career in acquiring and expressing a combination of its special skills, knowledge, and experience'. Curtin (2010) applied the concept to 'serious wildlife tourists', concluding that 'the "culture" of "serious" wildlife tourism is made up of individuals who differentiate themselves from other tourists in terms of dress, behaviour, development of skills, equipment and intellectual capital, illustrated by their desire to scope, identify and photograph wildlife' (p. 17).

A closely related concept is that of 'recreational specialization' (Bryan, 1977, p. 175), defined as 'a continuum of behaviour from the general to the particular, reflected by equipment and skills used in the sport, and activity setting preferences'. This construct postulates that as people become more involved in a leisure pursuit their increasing specialization can be measured by attitude and behaviour. Burr and Scott (2004) found that only a small fraction of participants at a birding festival were highly specialized, and they were less satisfied with the event. Most attendees had an interest in birds but did other things, and enjoyed general festival programming. Maple, Eagles and Rolfe (2010) examined specialization among birdwatchers, finding that beginners spent less time birdwatching, and their trips were shorter and resulted in lower tourist expenditure. Intermediate and expert birders were similar to each

other, and were different from the beginners. The more experienced birders required specialized programmes.

Ego-involvement theory has been successfully employed with regard to many leisure pursuits, and scales are available to separate people by levels of involvement (see the reviews by Havitz & Dimanche, 1999). Kim, Scott and Crompton (1997) determined that commitment (conceptualized as centrality to lifestyle) and social-psychological involvement scales were highly inter-related among a sample of birdwatchers, and that behavioural measures of involvement were more useful in predicting behaviour. According to these same researchers, involvement is likely an antecedent of commitment and might be at the root of 'serious leisure'.

Social worlds theory extends the serious leisure, involvement and specialization constructs by incorporating the wider communities of interest that form around leisure and professional/business concerns. In recent years social worlds have been greatly facilitated by the internet and social media, so that anyone can connect with others sharing the same interest. Unruh (1980, p. 271) used the term 'social world' to describe 'the notion that actors, events, practices, and formal organizations can coalesce into a meaningful and interactionally important unit of social organization for participants'. Involvement in social worlds is voluntary, even though 'guidelines, expectations, and rules certainly exist' (p. 277). It can be partial, so that order within a social world is negotiated and its bounds are those of the 'universe of discourse'.

Social worlds can encompass 'insiders', who are the most serious about their affiliation and identify strongly with the community (others perceive them to be devotees), and 'regulars', who participate at a lower level of involvement; 'tourists' come and go, simply checking it out or participating briefly, while 'strangers' are mostly non-members who somehow contribute to the social world, perhaps as facilitators.

Eubanks, Stoll and Ditton (2004, p. 152) defined the 'birding social world' to include 'all who watch birds for recreation or consider themselves birdwatchers or birders'. They suggested that the birding social world would 'contain a diversity of individuals who participate in a diversity of birding forms for a diversity of reasons or motivations' (p. 152). Members were thought to start out as 'strangers', while more dedicated 'insiders' had birding as a central life interest and a basis for self-identity. This corresponds to what Scott, Baker and Kim (1999) called 'serious birders' participating in the Great Texas Birding Classic. McFarlane (1996) used cluster analysis on data from a sample of birders and was able to rank them from low to high specialization. The birding social world ranged from casual birders to advanced birders (7 per cent of the sample) who share their expertise with others, take several birding trips per year, can identify many species and have a great deal invested in their birding activity.

Social worlds theory provides insights on how ecotourists interact with others in their community of interest, including the role of personal and planned events in the advancement of their 'careers'. Within social worlds some events take on iconic status (that is, high symbolic value as the biggest, best, most prestigious, most challenging). Achieving this status can be the aim of ecotourism event producers, but it requires detailed knowledge of their target segments.

Finally, the event-tourism career trajectory (Getz, 2008; Getz & Andersson, 2010; Getz & McConnell, 2011) hypothesizes that as involvement in a leisure pursuit increases there will be a progression in motivations, travel and preferences that incorporate events

for their recreational, symbolic and social value. Supportive results have been obtained from studies of highly involved mountain-bikers and runners who pursued challenging events that were also fun and thrilling. Self-development motives are stronger for the highly involved event tourist, compared to, say, relaxation and socializing, although many highly involved people travel as couples and families. Uniformly, the highly involved runners and mountain-bikers value well-run events, no doubt reflecting the considerable investment (personality, time and money) they put into attending events and competing.

Although birders have been studied from some of these theoretical perspectives, nothing has been reported in the research literature that covers the broad concerns of identifying existing and potential event ecotourists. We can deduce that serious, highly involved ecotourists are the most likely to travel (especially over great distances) to attend an ecotourist event, and therefore should be a primary target segment. These people are engaged in long-term leisure careers, and involved in one or more related social worlds that generate an interest in attending events that promise to yield the environmental benefits they seek. They might travel to events in the capacity of tourists, volunteers, organizers or officials. Designing events with this segment in mind presents a number of challenges. They will require experiential programming that is different from that offered to lesser-involved guests, as they seek different benefits.

Soft and Hard Ecotourism Events

According to Laarman and Durst (1987), 'nature-oriented tourism has hard and soft dimensions in two senses' and these relate to the extent to which the tourism is dedicated or casual, on the one hand, and difficult or easy, on the other. Weaver and Lawton (2007) concluded that the hard/soft dichotomy is dominant in the ecotourism literature. However, they also identified the 'structured ecotourist' who wants a hard ecotourism experience in natural environments but at other times prefers luxury, or soft ecotourism.

Singh et al. (2007) sampled visitors to two US bird festivals, which they called 'soft ecotourism events'. The market is composed of 'somewhat older, educated and affluent ecotourists who participate in these events for entertainment as well as learning' (p. 119). They found evidence that a significant segment participating in 'soft ecotourism' 'contributed towards enhancive sustainability' by way of engaging in conservation and advocacy. However, those researchers also concluded that 'little is known about the underlying psychographic characteristics that define ecotourists, and additionally, whether different categories exist in terms of their level of commitment to sustainable tourism' (p. 120).

In Table 32.3 this hard/soft model is employed to separate two major types of ecotourism events, although it should be cautioned that they are not mutually exclusive, and the evidence indicates cross-over potential from 'structured ecotourists'. The hypothesis implicit in this illustration is that those attracted to 'hard ecotourism events' are more likely to be the highly involved or specialized ecotourists, and they can be separated from a less involved market for 'soft ecotourism events'. Both segments might be high-yield tourists who pay for long trips and holidays, combine events with other activities in destinations and use (occasionally or predominantly) commercial accommodation.

Table 32.3 Hard and soft ecotourism events and their target segments

Target markets	Hard and soft ecotourism events (there is scope for some overlap)
Dedicated ecotourists travelling for specific benefits: • learning, volunteering, self-development through meeting challenges and contributing to conservation • participating in iconic events and experiencing communitas within their social world	Hard ecotourism events • nature festivals incorporating wildlife viewing or nature study requiring substantial effort and a high level of involvement by visitors (not merely spectators) • fairs and exhibitions with specialist appeal • meetings and conventions with specialist appeal
Those attending for generic benefits: • novelty, escape, socializing, being entertained • residents of area plus casual tourists (i.e., already in the area)	Soft ecotourism events • family-oriented festivals with a nature theme and incorporating easy wildlife observing opportunities; learning through seminars, speeches or films; other activities and attractions for a fun experience, such as games, food, rides • fairs and exhibitions that have a general appeal

SUMMARY AND CONCLUSIONS

In conceptualizing 'ecotourism events' both supply- and demand-side approaches were considered, with the conclusion that it is primarily a demand-side concept. Ecotourism events must attract and satisfy dedicated ecotourists. They seek specific experiences, and they will require that such events meet basic ecotourism experiences. Both hard and soft events will have appeal, with a mix of highly targeted and generic benefits offered to visitors. Ecotourism events should take their place in a managed portfolio of attractions, events and services within communities, destinations, parks and protected areas. There is no particular type, although most existing ones are called festivals.

Planning and Management of Ecotourism Events

There is ample advice available on planning, designing, producing, managing and evaluating events of all kinds, although little if any pertains specifically to ecotourism events. General event management texts include those by Goldblatt (2011), while that of Getz (2005) covers event tourism and event management.

Ecotourism events will often require the collaboration of a number of stakeholders sharing common interests in tourism and conservation, namely:

- parks and protected area agencies (who might host, produce or benefit from the events)
- professional event producers (under contract or independent; in or outside parks)
- destination marketing organizations (DMO) and other development-oriented agencies

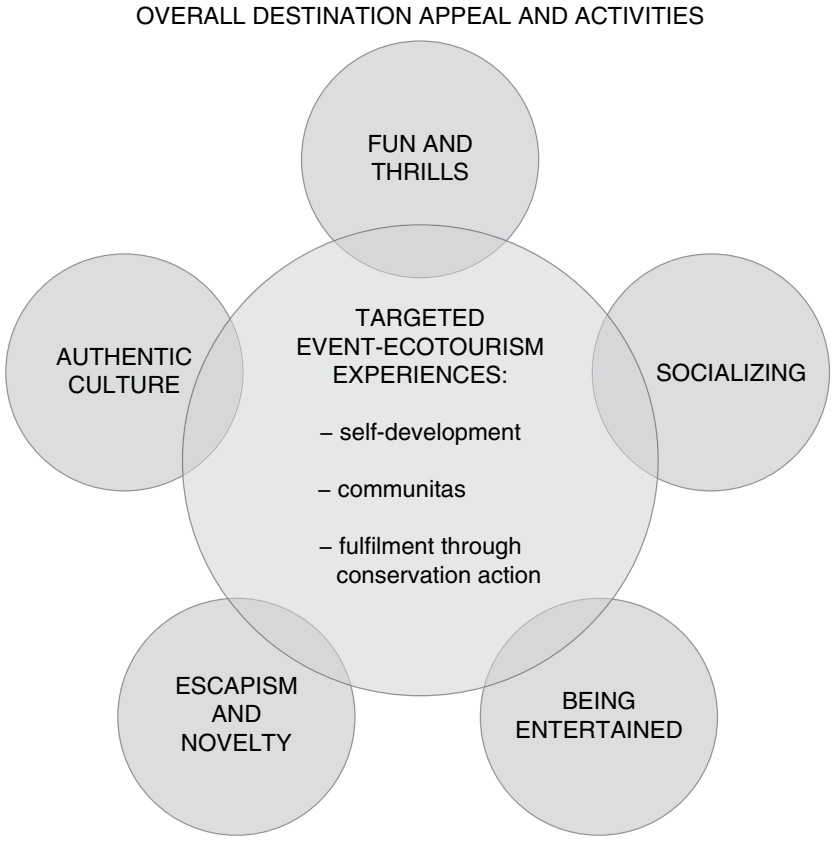

Figure 32.1 Ecotourim-event experiences: targeted and generic

- tour companies who will package and promote ecotourism events (including so-called destination management companies who provide logistical support)
- other necessary suppliers (accommodation, food, souvenirs, equipment, entertainers, educators, researchers)
- community groups, clubs, lobbyists representing local interests and culture
- local government and regulators
- ecotourism and other nature-related societies (for supply and demand advice).

Figure 32.1 suggests themes and programmes that can be applied to ecotourism events, ranging from wildlife to lifestyle and including programming for families as well as highly involved ecotourists. Although most existing ecotourism events are called festivals, there can be other forms including exhibitions, fairs, conventions and seminars. It is difficult to imagine sports as ecotourism events, but maybe there can be ecotourism 'games'.

In Figure 32.1 are a number of practical considerations related to the relationships between events and nature, including the desirability of making all events in nature both green and sustainable and to incorporate educational programming. Where ecotourists

are targeted, their desired benefits must be fully understood; not all ecotourism events need be situated in natural settings. From Figure 32.1 there are implications for hard versus soft orientations, and although these are not mutually exclusive it is clear from the literature that more involved or specialized ecotourists want different experiences and benefits from their event-related trips.

As an experience, ecotourism events must encompass cognitive (perceiving, learning, problem-solving), affective (emotional engagement) and conative (behavioural) dimensions.

The essential programmic elements of style will therefore always include education/interpretation, viewing of natural phenomena and emotional stimulation through such options as celebration, belonging and sharing (that is, communitas).

Another way to conceptualize the ecotourism event experience is presented in Figure 32.1. The core consists of those benefits desired by dedicated ecotourists, namely self-development (through meeting challenges, learning, pursuing excellence), fulfilment (through making a difference, volunteering, assisting in conservation) and the communitas that comes from sharing with others within a social world. Augmentation of this core can consist of many different programmic elements of style that will broaden the audience to those seeking generic benefits and might include the dedicated ecotourists as well. The event and destination can both provide for authentic culture, hedonism (fun and thrills), escapism (getting away from routine, novelty-seeking), being entertained (a passive experience of something pleasurable) and socializing (meeting people, people watching, exchanging information). Whereas communitas reflects deeper involvement and sharing, socializing can occur at a superficial level; indeed, all planned events are social phenomena.

Research Needed

The most important conclusion of this chapter is to emphasize the need for further research, both on the supply and demand sides. Few wildlife and nature-themed events have been studied in depth from the perspective of applying ecotourism criteria, and the range of events has been limited mostly to festivals. Little is understood of the dedicated event ecotourist, particularly for events other than birding festivals. Market research for ecotourism events should include the following methods and address these questions:

- through focus groups or interviews, identify benefits sought by ecotourists; specify types of events and experiences that attract them
- those developing or marketing ecotourism events need to conduct original market research in origins with high potential to generate ecotourists as well as other tourists who can be motivated to participate in ecotourism events
- through large-scale (online) surveys, assess the market potential for specific ecotourism events and event ideas
- because highly involved ecotourists belong to clubs, subscribe to specific publications, participate in blogs, search websites and are experienced travellers there are specific channels to reach them – but what messages and imagery work best?
- ecotourists belong to, and participate actively in, one or more social worlds

(for example, birders, whale watchers, fund-raising and lobbying), but how do social worlds generate interest in, create and mediate event tourism?
- complement market area research with research on the ground, in the destination and its protected areas, as these ecotourists will already have made decisions that can provide insights for future planning; they can be administered identical questions as a check against the results of market area surveys
- benchmark already successful ecotourism events and determine how their marketing works; collect data on their visitors and satisfaction ratings and so on.

More theoretically, there is a need to evaluate how people become involved in the social worlds of ecotourists, and how their travel preferences and patterns (or event-tourist-career trajectories) evolve.

As a final word, it can be concluded that there is a vast, untapped potential for developing and utilizing ecotourism events to enhance communities, destinations, parks and protected areas. The key is to better understand ecotourists and the event experiences that will attract and satisfy them.

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33. Feeding of wildlife: an acceptable practice in ecotourism?

David Newsome and Kate Rodger

INTRODUCTION

Wildlife tourism is a sub-sector of natural area tourism where the flora and/or fauna play a primary role in attracting tourists to specific destinations. Although it includes both fauna and flora, in most cases wildlife tourism refers to tourism activities that focus on watching and interacting with animals (Newsome, Dowling & Moore, 2005; Rodger, Moore & Newsome, 2007; UNEP & CMS, 2006). The desire people have to interact with wildlife, particularly in the natural environment continues to grow (Newsome & Rodger, 2012). The outcome of this trend is a continuing interest in and increased visitation to sites with wildlife (Newsome & Rodger, 2012; Newsome et al., 2005; Rodger et al., 2007; Tisdell & Wilson, 2004).

In addition, throughout the world tourists are seeking interactions with wildlife in their natural settings. Wildlife tourism encompasses a wide array of activities and species as well as a range of levels of interactions and providing for photographic opportunities. Interactions can range from watching wildlife from a distance through to swimming, touching or feeding of wildlife. There is often the desire from people to have close contact with wildlife. As a result, feeding has developed as a way of ensuring close interactions. The feeding of wildlife is an important albeit controversial component of wildlife tourism. Yet, in some circumstances feeding can be seen as a way of stimulating awareness and knowledge of wildlife (Newsome & Rodger, 2008).

In this chapter we ask the question 'is the feeding of wildlife an acceptable practice in ecotourism?' For some people this would be an easy question to answer while for others there would be some debate. We discuss and consider the question by examining what ecotourism is and then see how, or if, it can apply to the feeding of wildlife. We highlight the wide spectrum of wildlife feeding opportunities (Newsome & Rodger, 2008) and develop a matrix to determine if it is possible for any types of feeding of wildlife to be considered an acceptable ecotourism practice.

ECOTOURISM AND WILDLIFE

Although ecotourism, nature-based and wildlife tourism are not the same, neither are they exclusive as there can be much overlap between them. The term wildlife tourism developed so any concerns and issues relating to the wildlife would not be lost in nature-based tourism and ecotourism (Braithwaite & Reynolds, 2002). Ecotourism is similar to wildlife tourism in that it occurs in the natural environment. However, it has a wider focus including physical, general biological and cultural features. It needs to be noted

that simply visiting sites and engaging in activities such as wildlife viewing does not make you an ecotourist (Nowaczek & Smale, 2010).

There has been a wide range of ecotourism definitions developed over the years although the majority share the same fundamental concept. Earlier typologies classified ecotourists on the basis of setting, activity and group dynamics (Fennell, 1999). Most definitions include the three principal components: nature-based, learning-focused and conservation-orientated (Nowaczek & Smale, 2010; Orams, 2001). As Fennell (2008, p. 24) wrote, 'ecotourism is a sustainable, non-invasive form of nature-based tourism that focuses primarily on learning about nature first-hand, and which is ethically managed to be low impact, non-consumptive, and locally oriented (control, benefits, scale). It typically occurs in natural areas, and should contribute to the conservation of such areas.' The definition of ecotourism provided by Newsome, Moore and Dowling. (2002) is similar, identifying five key principles including nature-based, ecologically sustainable, environmentally educative, locally beneficial and generating tourist satisfaction. Using these definitions it is thus possible to debate whether the practice of feeding of wildlife tourism can be seen as an acceptable ecotourism activity.

FEEDING OF WILDLIFE

Newsome et al. (2005) assert that with the human desire to feed wildlife competing with perceived disadvantages to the wildlife there are conflicting viewpoints as to whether it is a desirable practice. Feeding of wildlife in tourism settings has developed as a means of allowing humans to be in contact with animals that they do not normally see or desire to see or to provide the opportunity for a close-up view/human–wildlife interaction. The feeding of wildlife can result in increased visitor satisfaction through good sightings, close contact and improved photo opportunities (Newsome & Rodger, 2008). Unfortunately, there are also negative impacts that can result from the tourist–wildlife interaction when feeding takes place. These include feeding wildlife the wrong food, abnormally high concentrations of animals at feeding sites and reliance of wildlife on the food (Higginbottom, 2004; Orams, 2001; Shackley, 1998). Feeding of wildlife can also result in a disruption of normal foraging activity, the attraction of dominant and/or predatory species, pollution of water bodies where waterbirds are involved, increased risk of road kill where species are attracted to vehicles and death of provisioned animals as a result of choking on inappropriate food items (Newsome et al., 2005). Moreover, where carnivorous and dangerous species are involved there is the risk of tourists being intimidated, attacked and injured. Particular problems arise when primates become habituated and attracted to humans as they may interfere with tourists who are not feeding the wildlife (Newsome & Rodger, 2008; Newsome et al., 2005).

The feeding of wildlife can be classified as either the intentional or inadvertent supply of food to wild animals. Intentional feeding can be further categorized as informal feeding (tourists provide food with no management, for example, feeding of stingrays at Hamelin Bay, Western Australia) and structured feeding under supervised conditions (for example, feeding of dolphins at Monkey Mia, Western Australia). Inadvertent feeding is where the tourists do not have the intention to feed the wildlife but the animals acquire food from disposal areas (for example, dingoes on Fraser Island, Australia),

Table 33.1 Spectrum of wildlife feeding opportunities according to the criteria that define ecotourism

	Inadvertent feeding, e.g. bears in North America and discarded food wastes	Feeding through habitat modification, e.g. planting of bird-attracting trees and shrubs	Unstructured feeding, e.g. unmanaged feeding of stingrays at Hamelin Bay, Western Australia	Structured feeding, e.g. feeding dolphins Tangalooma, Queensland
Nature-based	Often	Yes	Yes	Yes
Learning centred	No	In some situations	Not normally	Normally
Ecologically sustainable	No	Yes	In many cases this is unknown	Yes if managed carefully
Locally beneficial	Not normally	Can be for local communities due to increased tourism numbers	Can be	Yes in most situations
Generates tourist satisfaction	Variable and potentially positive if there are no incidents such as damage to property or intimidation/ injuries to visitors	Yes due to increased presence of wildlife	Yes	Yes in most situations

through stealing from tourists (monkeys in Asia and Africa) and through discarded food wastes (for example, bears in North America) (Newsome & Rodger, 2008). When looking at all food provisioning situations (Table 33.1) the spectrum of wildlife feeding opportunities can be categorized as inadvertent, via habitat modification, unstructured or structured (Newsome & Rodger, 2008).

For most wildlife feeding situations, it can clearly be seen that the feeding of wildlife does not necessarily fit the criteria that define ecotourism. However, in certain situations, including the structured feeding of wildlife and feeding through habitat modification, the feeding of wildlife could be classed as an ecotourism experience. Using several case studies the structured feeding of wildlife as an ecotourism experience is now discussed in further detail.

GUIDED AND MANAGED FEEDING OF WILDLIFE IN NATURAL ENVIRONMENTS AS ECOTOURISM EXPERIENCES

The control and supervision of wildlife feeding practices in a natural setting (structured food provisioning under the control of a tour operator or manager) would be a key aspect in order to qualify as an ecotourism experience. Feeding of wildlife can be

employed to foster conservation efforts and learning about wildlife and its management, but the prime motivation is to facilitate sightings and interactions. In many cases there is considerable overlap between these three main purposes. Sighting of wildlife is often the dominant motivation, but when sighted and during the feeding process tourists can also learn about wildlife and how and why the feeding is managed. These two aspects combined can then be used as a platform for conservation messages and ultimately tourist participation in conservation efforts. Some examples of structured wildlife feeding in the natural environment are provided here with each example reflecting the nature of, and issues surrounding, the motivation behind the feeding activity.

Vulture Restaurants

Vulture restaurants were originally established as a conservation measure for certain species, such as the griffon vulture (*Gyps fulvus*) in Europe, but in recent years have been developed as a response to concerns about a decline in vulture populations in many different countries. Following their success in increasing the number of birds new restaurants with viewing hides are now being developed to provide close-up views of vultures feeding on carcasses along with educational programmes about vulture ecology and conservation. Such hides can also be used as a base for scientific monitoring and the restaurants have been shown to increase the breeding populations of vultures (Siyabona Africa, 2012). Feeding must be controlled and managed in order to reduce the risk of vultures becoming dependent on the restaurant. For example, at the Phalaborwa Restaurant (Greater Kruger National Park, South Africa) carcasses for the vultures are only put down at weekends.

In Namibia a vulture restaurant was set up in 1987 with the aim of providing carcasses, uncontaminated by veterinary drugs and treatments, as a food source for a declining cape vulture (*Gyps coprotheres*) population (NARREC, n.d.). The setting up and management of a vulture restaurant is described by NARREC (n.d.) and aspects of management are indicated in Box 33.1.

Vulture restaurants are now prime birdwatching tourism attractions in Bulgaria, Cambodia, India and Africa, while at the same time providing education about vultures and contributing to the conservation of vultures worldwide (for example, BirdLife International, 2010; Green Balkans, 2012; NARREC, n.d.; Siyabona Africa, 2012). Despite their success, however, Cortes-Avizanda, Selva, Carrete and Donazar (2009) and Cortes-Avizanda, Carrete, Serrano and Donazar (2009) report that vulture restaurants can increase competition between certain species of vulture and increase the predation pressure on other species occurring in the vicinity of the vulture restaurant. Such sites can be utilized by facultative scavengers such as ravens (*Corax corax*) and increase the detection rates of prey species. Cortes-Avizanda, Carrete, Serrano and Donazar (2009) and Cortes-Avizanda, Selva, Carrete and Donazar (2009) therefore caution that the locations of vulture restaurants need to be carefully considered before they are established.

Tasmanian Devil Restaurants, Australia

The Tasmanian devil (*Sarcophilus harrisii*), because of its shy nature and nocturnal habits, is a difficult animal to observe in the wild. Moreover, in recent years this species

BOX 33.1 GUIDELINES FOR THE DEVELOPMENT AND MANAGEMENT OF A VULTURE RESTAURANT AND VIEWING HIDE

- Recommended size of at least 1 hectare site of open ground away from disturbance.
- Vultures need to be able to obtain clear views of carcasses and there should be no obstacles for take off following feeding.
- Maintain large perching tress in the vicinity of the restaurant so that vultures can rest in the trees, or in shaded conditions on the ground, following feeding activity.
- Avoid setting up the restaurant in the vicinity of powerlines. Fences need to be located at least 100 metres from the restaurant.
- The restaurant needs to be kept clean by removing old carcasses that may ultimately be a source of infection.
- Provide fresh water in saucer-shaped troughs so that vultures can clean themselves following feeding.
- It is possible to use the carcass of any species and to facilitate feeding the carcass should be opened along the abdomen and along the inside of the legs.
- A viewing hide should not be constructed until the vultures have accepted the restaurant. This may take several months.
- Views from the hide should take account of trees where vultures perch.
- The hide can be located only 15 metres from the restaurant.
- Access to the hide, like other bird viewing hides, should cause minimal disturbance via the use of a covered walkway or other invisible approach. Normal birdwatching protocols of avoiding noise are essential for optimum viewing conditions.

Source: Modified from NARREC (n.d.).

has declined due to facial tumour disease. Devil restaurant tourism was developed to provide an opportunity to engage people who knew little about the animal, and to create a tourism opportunity. Through sightings under controlled conditions, coupled with information about the devils, the aim is to foster the conservation of a declining and little understood species.

Devil restaurant tourism consists of setting up a food station and hide where tourists can observe the devils feeding on a provisioned carcass at a distance. There is also a significant degree of authenticity attached to the provisioning as road kill carcasses of native wildlife are used, consistent with the scavenging habits of the devil. Mooney (2005), who was significantly involved in the genesis of the concept, noted that in the developmental stages it was unclear at what distance the hide should be from the food station. Initially, the hides were positioned too close to the feeding station and devils were disturbed by the sound of cameras and people talking. A distance of 40 metres was

deemed suitable as it was then possible to enter and leave the hide without causing the devils to disperse. An intercom system was employed for commentary and observation via telescopes gave visitors ownership of the image they were seeing. A group size of 8–10 is preferred to avoid crowding and allows sufficient time for telescope usage and interaction with the guide. Modern technology has allowed the taking of photos via the telescopes. The experience is supported with the opportunity for visitors to see, handle and discuss various specimens of devil scat (containing echidna spines), items (bones) that devils have chewed and various skulls. Plaster of Paris footprints are also available as tourist souvenirs.

Currently, tourists can view Tasmanian devils at a 'restaurant' located at Marrawah in northwest Tasmania. Clarke (2008) describes how a road-killed wallaby is placed near a light and when the sound of a devil is detected via a microphone clients are ushered into the hide for viewing. The sound of devils feeding is audible to the clients and provides additional experiential impact. The tour operator reduces the risk of devil dependence on the feeding station by not operating the facility more than three days in a row and on no more than five days within a two-week period.

Feeding Birds in a Rainforest Setting: O'Reilly's, Lamington National Park, Australia

O'Reilly's Guesthouse and tourism provider is a world-famous birdwatching location. Part of the experience is the structured feeding of birds, particularly at a parrot feeding station (Figure 33.1). The main feeding station comprises a paved interaction area, which

Figure 33.1 King parrots and crimson rosellas being hand fed at the feeding station at O'Reilly's Guesthouse, Lamington National Park, Australia

Figure 33.2 Female satin bowerbirds at feeding bowls in O'Reilly's Guesthouse, Lamington National Park, Australia

can be easily cleaned and where feeding is supervised by O'Reilly's staff. Day-trippers and other tourists are watched by the guides at the feeding station in order to ensure that inappropriate food items are not given to the birds. The educational aspect of the experience delivered by guides is also supported with information panels. Historically (prior to 1988), tour operators servicing day-trippers would bring their own food for the birds but this food was deemed unsuitable for the birds and O'Reilly's now supply an appropriately formulated mix for the wild birds. Crimson rosella (*Platycercus elegans*), brush turkey (*Alectura lathami*) and king parrot (*Alisterus scapularis*) are the main species attending the feeding station and interacting with tourists (Figure 33.1). Visitors are able to feed parrots with the approved seed mix and interact closely and photograph the birds as they fly at close range and land on people (Figure 33.1).

In addition to the main bird feeding attraction bowerbirds are attracted to bowls of fruit that are placed at locations visible from the restaurant and main reception area of the guesthouse (Figure 33.2). The third aspect to bird feeding at O'Reilly's is the feeding of different species along a designated and guided birdwatching trail. In this case the guide controls the feeding activity and small pieces of cheese are provided for insectivorous species such as the eastern whipbird (*Psophodes olivaceus*) and fruit is supplied to attract satin bowerbirds (*Ptilonorhynchus violaceus*). This activity also provides an opportunity for visitors to photograph different species of birds.

O'Reilly's receives more than 300 000 visitors annually and records very high levels of visitor satisfaction. Over time the guesthouse has become a world-renowned ecotourism destination with 50–60 per cent repeat visitation. In addition, O'Reilly's conducts

Figure 33.3 Eastern whipbird being hand fed at the feeding station at O'Reilly's Guesthouse, Lamington National Park, Australia

mammal and frog watching programmes, a glow-worm walk and special birdwatching weeks. The guesthouse provides education and interpretation as an integral part of the wildlife tourism experience and contributes directly to conservation, for example, in the fig parrot (*Cyclopsitta diophthalma coxeni*) recovery programme (Perry, 2005).

Albatross Viewing Trips, Kaikoura, New Zealand: Case Study and Results of Participant Observation

Kaikoura, located on the northeast coast of New Zealand's South Island, is a wildlife tourism hotspot with opportunities to view sperm whales, observe New Zealand fur seals, swim with dolphins and view seabirds and particularly albatrosses. Albatross viewing trips of 2–3 hours duration take place daily all year round with group sizes of 8–12 clients. Seabirds are attracted to the boat via the use of food parcels (chum) comprising mainly fish liver provided in the form of a 10 kilogram frozen block, which is cast into the water. There is a congregation of albatrosses and other species in response to the food block being cast into the sea (Figure 33.4).

There is a pre-talk that anticipates visitor expectations and clients are told that all of them will get good views as the chum is not easily accessible to the birds and that the birds will be present for sufficient time for clients to take photographs and identify birds. This pre-talk is designed to manage crowding at a particular end of the boat and people competing for photo opportunities. The tourism operator explains why this site (deep water trench with nutrient upwelling that provides food sources for the birds), which

occurs only one kilometre offshore, is the tourism site; however, clients are allowed to experience the birds before additional information is provided. General observations of birds and any other species such as cetaceans and pinnipeds are made. After clients have some time to view the birds various species of seabird such as albatrosses, petrels and shearwaters are identified by the operator. The tour operator has a good knowledge of the birds and is able to identify different species, discuss the amount and type of food being provided, and explain why the birds are provisioned. Information on behavioural ecology, breeding activity, natural food sources, threats and conservation is also provided. At the end of the trip clients are given information as to what they can do to assist in the conservation of seabirds in New Zealand and around the world.

There are many positive elements to this wildlife tourism experience that is facilitated by the provision of a food source designed to attract seabirds to the boat. These positive elements include assisting clients with bird identification, providing knowledge of seabird ecology and setting the scene for clients to be involved in seabird conservation after they have been on the trip. On the negative side, albatrosses and petrels have been observed fighting (Figure 33.4) over the provided food. Such aggression might be energy expensive and constitute a disruption of normal foraging activity resulting in fitness costs. Injuries to birds have been noted but are deemed rare by the tour operator. It was noted that giant petrels (*Macronectes giganteus*) occasionally kill the smaller cape petrels (*Daption capense*) out of frustration in competition to acquire the chum. Furthermore, the attraction to provisioned food may be leading to an abnormal concentration of birds on a regular basis. The operator is of the view that there is a frequent turnover of birds

Figure 33.4 Albatrosses and petrels are attracted to frozen chunks of fish liver cast from the boat into the sea. Kaikoura, New Zealand

and that the same individuals are not in attendance all the time, but there is no scientific data to support this view.

The negative aspects noted above do not necessarily indicate that the overall impact of the activity is negative. For example, many species of seabird congregate at natural feeding opportunities and compete over wild food resources. Moreover, the chum itself is a very rich food source and it is possible that the energy spent attending the site and squabbling over food is worthwhile in terms of the benefits of high-energy-rich food acquisition. However, under more natural conditions they may be more dispersed and thus there might be less aggression. Feeding might be seen as having a positive impact by disseminating a conservation message and by providing additional resources (chum) for a suite of species that are under threat from pollution, the impacts of long-line fishing and loss of breeding habitat. In addition, there may be longer-term support for conservation measures due to the very high visitor satisfaction associated with the seabird viewing activity.

Feeding Flamingos, Dubai

The feeding of flamingos (*Phoenicopterus roseus*) at Ras Al Khor, a natural estuarine wetland in Dubai, is designed to facilitate close sightings and add value to the Khor Dubai Nature Reserve experience. Greater flamingos migrate to the Arabian Peninsula and feed on the mudflats with groups of flamingos staying and breeding at various locations such as at the Al Ghar Lake (man-made wetland) in Abu Dhabi (Al Shidagah, 2002). In 2002 there were 1000–1400 flamingos at Khor Dubai Nature Reserve. The Dubai creek was formerly used as a recreational site but the wetland is now fenced off and only accessible to visitors with special permits. The reserve, however, has two hides where various species of birds (150 recorded at the site) can be observed with the aid of telescopes. Staff are also available to assist with identification aided by illustrations and field guides. The wetland has been modified to create additional habitat, refuge and breeding opportunities for birds. These modifications include platforms and artificial perches for birds of prey, a mud dam to retain water in an artificial pond for birds to rest at when the tide is out, planting of mangrove seedlings and an artificial island in the centre of the creek with nesting platforms to encourage breeding activity.

Unlike many other feeding situations where visitors can feed birds, under supervised conditions, the flamingo feeding in Dubai is a management activity and tourists are not involved in the feeding process. Each morning the birds are fed, at locations close to the bird hides, pellets that are designed to supplement natural food derived from the saline creek and mudflats. The birds feed on the pellets (comprising brine shrimps and other invertebrates) in much the same way as they would forage under natural conditions. In January 2011, 3100 flamingos were counted, which is the largest number ever recorded at the site and there is some evidence of nest building (S. Lindsay, personal communication, 2011).

Flamingo feeding at Khor Dubai Nature Reserve therefore serves to create suitable feeding conditions for flamingos with the intention that they will breed at the site. Coupled with this has been the creation of a protected nature reserve that now serves as an 'ecotourism' destination in Dubai. This is not a typical wildlife feeding situation but exemplifies that feeding wildlife is multi-faceted in its modus operandi and does

not necessarily involve tourists directly. The outcome of flamingo feeding, however, is similar to other 'ecotourism' opportunities where people can visit the site, observe and photograph flamingos at close range, see other species of birds and have the opportunity to learn about the wetland and bird life of Dubai at the same time.

Feeding Wild Sharks

Sharks are the focus of various tourism operations around the world that include adventure dive tourism, nature-based tourism experiences and shark feeding programmes. Countries involved in this type of wildlife tourism include South Africa, Australia, the Philippines, the Bahamas and the USA (Topelko & Dearden, 2005). A key aspect of shark tourism is being able to obtain close views and photograph the sharks and this is frequently achieved through the use of chum or berley (blood and fish parts) or baits that are not necessarily fed to the sharks (Bruce & Bradford, 2011; Dobson, 2008; Topelko & Dearden, 2005). Such foods are provided to attract sharks for the purposes of cage diving in South Africa (Figure 33.5) and Australia or, as in the Bahamas, chum may be anchored at a point on the seabed to attract sharks. In some locations diver-managed feeding of sharks comprises a diver wearing a chain mail glove and hand feeding dead fish to sharks for tourist photographic opportunities (Topelko & Dearden, 2005).

Topelko and Dearden (2005) and Dobson (2008) raise concerns about the possible impacts of feeding sharks for tourism purposes, including risks of tourists being bitten,

Figure 33.5 Great white shark being attracted towards tourists (located in a diving cage) by the use of bait that is pulled alongside the boat. Such actions bring the sharks closer to the cage to facilitate photo opportunities

sharks expending energy in false food chases (baiting), shark attraction to boats and loss of fear of humans, abnormal concentrations of sharks in feeding areas that may denude other areas of predators and shark congregations becoming vulnerable to opportunistic fishing. Recent work by Bruce and Bradford (2011) has found that berleying/food provisioning is affecting the residence time of great white sharks at the Neptune Islands cage diving site in South Australia. In order to reduce any further changes in the behavioural activity of great white sharks (*Carcharodon carcharias*) Bruce and Bradford (2011) recommend that current levels of berley (chum) should be reduced along with the use of minimum size teaser baits and that every effort should be made to reduce the number of baits taken by sharks.

Topelko and Dearden (2005) and Dobson (2008) acknowledge that the benefits of shark tourism may include greater awareness and increased interest and support for shark conservation. The educational aspect is also used for tourism marketing purposes and Topelko and Dearden (2005) note that education is often offered as part of the shark dive experience. Both Topelko and Dearden (2005) and Dobson (2008) report that a number of great white shark tour operators support shark conservation and offer education/interpretation as part of cage diving experiences. In South Africa various tour operators offer cage diving excursions and the tours are described as highly educational. Great white sharks are lured past dive cages with bait (tuna heads) tied to a floating rope. This ensures good views for clients in the diving cage and from the boat. The line is drawn close to the cage to maximize underwater photographic opportunities and some operators have been observed to hold sharks on bait lines to ensure that they thrash around in front of the diving cage (Dobson, 2008). Although tour operator boats may contain wording such as 'we care, protect and educate' (Figure 33.6a), 'discover and protect' and 'white shark eco-adventures' such activities can best be described as adventure tourism (Figure 33.6b) rather than ecotourism, particularly in the reported absence of any education/interpretation (Dobson, 2008; Newsome & Rodger, 2012). Newsome and Rodger (2012) observe that, because of successful white shark sightings, such tourism may yield high levels of visitor satisfaction. They also suggest that satisfaction can be achieved even when there is poor quality interpretation, little evidence that the operation is well managed and conservation messages/efforts are unclear or apparently non-existent.

IS THE FEEDING OF WILDLIFE AN ACCEPTABLE COMPONENT OF ECOTOURISM?

The feeding of wildlife is a controversial topic that has been debated for many years. We do not intend to debate whether or not wildlife should be fed but rather question whether the feeding of wildlife can be classified as an acceptable component of ecotourism. There is a wide spectrum of wildlife feeding activities, including inadvertent feeding, feeding through habitat modification, structured feeding and unstructured feeding. Only two of these activities could be classified as fulfilling the five key principles of ecotourism, that is, being nature-based, ecologically sustainable, environmentally educative, locally beneficial and generating tourist satisfaction. It is only when there is control and supervision of the wildlife provisioning (for example, structured feeding activities and habitat

Figure 33.6 Great white shark cage diving tour operator boats at Gaanbai, South Africa. Top (a) illustrates intended aspects of the shark tour while the bottom (b) illustration could promote a more adventure-oriented tourism experience

modification) that activities involving the feeding of wildlife can even be considered as an ecotourism experience.

The case studies illustrate a wide range of structured wildlife feeding activities that could be considered ecotourism. All of these feeding operations are conducted under tight management with most having strict guidelines in place. All take place in nature-based settings and therefore meet the first principle of ecotourism (Table 33.2). Yet the other remaining principles need further discussion when trying to determine whether these wildlife feeding activities could be considered as ecotourism.

The second principle of ecotourism is to be ecologically sustainable. This means to

Table 33.2 Wildlife feeding operations and the five main principles of ecotourism

	Vulture restaurants	Tasmanian devil restaurants	Bird feeding O'Reilly's Guesthouse	Albatross viewing	Feeding flamingos, Dubai	Feeding wild sharks
Nature-based	✓	✓	✓	✓	✓	✓
Learning centred	✓	✓	✓	✓	✓	?
Ecologically sustainable	✓	✓	✓	?	✓	?
Locally beneficial	✓	✓	✓	✓	✓	✓
Generates tourist satisfaction	✓	✓	✓	✓	✓	✓

ensure the tourism activity will not have negative ecological impacts on the wildlife and their environment. The vulture restaurants fulfil this principle as this type of feeding operation has been shown to increase population numbers (Siyabona Africa, 2012). The feeding of flamingos in Dubai, where the habitat is modified in order to create suitable feeding and breeding conditions for flamingos, has resulted in an increased population. For Tasmanian devil restaurants there is a strong focus on conservation and ensuring minimal impacts. These wildlife tourism feeding activities might thus be considered ecologically sustainable. The same cannot be said for the feeding of the albatrosses and the wild sharks as there is not enough scientific knowledge currently available to determine if both these activities are ecologically sustainable. Therefore, it could be debated as to whether they can be classified as an ecotourism experience.

A further principle of ecotourism is to be environmentally educational. This is a vital component of the ecotourism experience. All of the wildlife feeding experiences discussed include education/interpretation as a part of the experience. Yet, the type of visitor also needs to be considered. Are they interested in learning about the wildlife and environment or are they just wanting the experience of being up close with the animal? For example, with the feeding of wild sharks are visitors interested in learning about the sharks or are they after the adrenalin buzz that comes from seeing a wild predator close up? This is also the case for the 'jumping' crocodiles in the Northern Territory of Australia. On these tours crocodiles are encouraged to jump out of the water to snatch at meat held up high on a pole from the boat. Although they include an educational component they could in fact be considered more adventure tourism or entertainment rather than ecotourism.

To be classified as ecotourism the feeding of wildlife needs to be locally beneficial, and in most cases such activities are considered to be locally beneficial (see, for example, Table 33.2). The feeding of wildlife can add to local communities in a number of ways including increased visitation to the area. Changes to feeding operations or the cessation of feeding have been known to have economic impacts on local communities. At Komodo National Park, Indonesia regular feeding of Komodo dragons (*Varanus komodoensis*) caused increased dragon numbers and resulted in increased visitors. The cessation of feeding caused dragon numbers to decline to natural levels. However, local revenue declined as tourists were less likely to see dragons. Also, local communities had

been supplying goats for the dragons and local community revenues declined with the loss of demand for goats (Walpole, 2001).

The final principle of ecotourism that needs to be discussed is visitor satisfaction. Visitor satisfaction is predominantly high for wildlife feeding activities as visitors have closer interactions with animals they do not normally see. The case studies discussed above (except for the parrot feeding at O'Reilly's Guesthouse) all involve the manipulation of the animals to allow for close human–wildlife interaction through the provisioning of food rather than direct feeding by tourists. This differs from other feeding interactions where it is the desire of tourists to actually feed the wildlife themselves. For example, with the dolphins at Monkey Mia, marketing of the experience has often depicted visitors standing in the water feeding fish to the visiting dolphins. This type of activity meets the principles of ecotourism as it is nature-based, ecologically sustainable, contains an educational component and is locally beneficial. Yet, in reality, there can be over 100 people (sometimes up to 200) at the appointed feeding time with only six people chosen to feed the dolphins. This can result in much lower visitor satisfaction for the vast majority of people who attended the feeding session but did not realize their expectations.

CONCLUSION

The feeding of wildlife can be an important component of the wildlife tourism experience. However, the desire to feed wildlife competes with perceived disadvantages to the wildlife, resulting in conflicting viewpoints as to whether it is a desirable practice. Through feeding of wildlife in tourism settings humans are given the possibility of close and personal interactions with animals that they would not normally see. Yet, can the feeding of wildlife be considered an acceptable ecotourism practice?

Structured and managed wildlife feeding operations contain the major elements of ecotourism and can provide for a bona fide ecotourism experience. However, it is vital to appreciate that not all wildlife feeding is likely to fit with the sustainability and educational criteria of ecotourism. Moreover, there will be other cases where historical unstructured and inadvertent feeding will have created significant problems such as intimidation of tourists, tourists being bitten and injured and the need for problem animals to be relocated or destroyed. Particular problems have arisen with bears in North America, dingos (*Canis lupis familiaris*) in Australia and monkeys in Africa and Asia, indicating that, in some cases, tourists need to be managed when they come into contact with such species, and that some species (for example, primates) should not be fed at all.

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34. Using aquariums and their visitor experiences to promote ecotourism goals: issues and best practice

Judy Mann and Cynthia L. Vernon

WHY AQUARIUMS?

While zoos and aquariums are generally grouped together as visitor attractions that feature wildlife, aquariums, with their focus on aquatic animals and ecosystems, have some unique challenges and concomitantly distinctive advantages when using their facilities to promote ecotourism goals. While there is an increasing body of research looking at the role of zoos in ecotourism, very little attention has been paid to aquariums (Frost & Roehl, 2008; Mason, 2000).

The oceans cover over 70 per cent of the surface of the Earth, yet remain the most unexplored part of our planet. The oceans help to regulate the Earth's climate, provide most of the world's oxygen, soak up carbon dioxide, supply 2.9 billion people with at least 15 per cent of their average per capita animal protein intake (FAO, 2009), transport goods and people and provide employment and recreation. Despite their incredible importance, the current state of the oceans is disturbing. According to the state of the oceans report (Rogers & Laffoley, 2011), the capacity of the oceans to support life is decreasing at a rate faster than previously assumed. Over the past 50 years overfishing, pollution and unsustainable practices have resulted in the loss of over 40 per cent of the world's coral reefs (Hoegh-Guldberg, 2011). While 28 per cent of the world's major fisheries are either overexploited or depleted and 52 per cent are fully exploited (FAO, 2009), 90 per cent of the large predatory fish of the Atlantic have been lost (Myers & Worm, 2005) and habitats such as mangroves and seagrass beds are disappearing at an unparalleled rate (Rogers & Laffoley, 2011). The combination of these stressors, together with the impacts of climate change, have the potential to cause mass extinctions in the oceans (Barnosky, Matzke, Tomiya, Wogan, Swartz, Quental, Marshall, McGuire, Lindsey, Maguire, Mersey & Ferrer, 2011). Freshwater ecosystems, equally critical for life on Earth, face even more frightening challenges. While freshwater habitats cover less than 1 per cent of the world's surface, they provide a home for 7 per cent of the estimated 1.8 million described species (Vié, Hilton-Taylor & Stuart, 2009). From a human perspective, the loss of the goods and services supplied by freshwater ecosystems will have serious and long-term impacts.

As terrestrial species, humans have generally had relatively little contact with the oceans. The pioneer Jacques Cousteau's early television programmes introduced millions to the 'Silent World' and inspired a generation of ocean enthusiasts. Recent years have seen an explosion of documentaries on the oceans and freshwater ecosystems. However, while interest has increased (Rodger, Smith, Newsome & Moore, 2011), many people remain disconnected from aquatic life. With the exception of marine mammals, people do not often have a natural empathy for fish or other marine animals and usually

view them as food. Aquariums are in a unique position to change this perception and to connect people to the aquatic realm to inspire visitors to care about aquatic ecosystems and animals. Aquariums can also create an awareness of the challenges facing aquatic systems and empower visitors to take tangible action to address these issues.

THE AQUARIUM INDUSTRY

There are approximately 300 substantial public aquariums in the world and this number is increasing each year with over 100 public aquariums being opened around the world in the last 20 years, 35 of which opened in China and Japan, and 32 in Europe and the USA (Penning, McReid, Koldewey, Dick, Andrews, Arai & Garratt, 2009). The use of aquariums as attractions in areas with high visitor flows including tourism precincts, such as regenerated inner cities and docklands, tourism-orientated shopping malls and hotels (Frost, 2011), detracts from the fact that many aquariums do play an important role in conservation and education initiatives. Requiring relatively little space, aquariums are ideal 'anchor attractions' for redeveloped land. Examples include the uShaka Marine World complex in Durban, South Africa, the Sydney Aquarium in Darling Harbour, Australia and the National Aquarium in Baltimore's Inner Harbour, USA. On the positive side, the existence of aquariums in such high flow areas, the variety of settings and locations in all regions of the world, create many opportunities for ecotourism goals to be achieved amongst a diverse and multicultural audience representative of all socio-economic categories (Penning et al., 2009). It is clear that aquariums are now a worldwide, multi-million dollar industry.

In order to build an understanding of the diversity of aquariums internationally, an attempt was made to find the websites of the world's larger (with respect to visitor numbers) stand-alone aquariums, based on the list in Penning et al. (2009), with additions. This review revealed that aquariums encompass a broad spectrum of organizational types, including for-profit and not-for-profit models; those operated by municipal or regional authorities and those privately owned; and aquariums embedded in commercial marine theme parks or hotels.

English translations of websites could not be found for eight Chinese aquariums. The 44 remaining aquarium websites were analysed to obtain a mission statement and to determine the ease with which the terms conservation, education and sustainability could be found. If the terms could be easily located on the front page or within a second page, the website was noted to have the component. If it required more than a cursory search, then the terms were considered to be absent. Analysis of the websites and mission statements used the typology described by Patrick, Matthews, Ayers and Tunnicliffe (2007), where education was considered to have been included if the site or mission statement included words such as inspire, instill, motivate, understanding, teaching, knowledge and inform, while conservation-related words such as protect and stewardship were noted. Where possible, if the website was in a language other than English, it was translated using Google Translate.

The mission statements of 34 of the aquariums were located. Of these, only one did not mention conservation or education (or words related to these two terms); 27 mentioned both education and conservation and six mentioned education with no reference to

conservation. This was similar to the finding by Patrick et al. (2007), where the mission statements of 136 accredited zoos in the USA were analysed. They found that the theme of education appeared in the statements of 131 zoos, while 118 zoos specifically mentioned conservation in their mission statements. A similar survey of 190 zoos and aquariums in 40 countries found that of the 86 per cent of the organizations that had mission statements, 77 per cent specifically included biological conservation (Zimmermann & Wilkinson, 2007).

Of the 44 aquarium websites analysed, 34 held easy references to education and 30 mentioned conservation. This is a significant finding in that for many people the first contact with an aquarium is through its website. If over half of the websites feature both conservation and education relatively prominently, the first impression of many visitors may well be an introduction to these important ecotourism concepts. In contrast to the zoos of the world, which tend to be owned by local authorities, municipal institutions, charitable trusts or private companies (Cain & Meritt, 1998), it is notable that many aquariums are owned or operated by a commercial, for-profit company. Examples include Australia's Oceanis group, Merlin Entertainments group (SeaLife aquariums in Australia, Europe, UK and the USA) and the Spanish-based Parques Reunidos and Aspro Ocio groups. In the USA, Busch Entertainment Corporation operates three Sea World marine theme parks and Walt Disney Parks and Resorts operates 'The Seas with Nemo and Friends Pavilion' in Epcot, part of DisneyWorld. Kerzner International Resorts Incorporated operates two aquariums in its hotel complexes in Dubai and the Bahamas, and Ocean Park Corporation owns Ocean Park Hong Kong, which added the Grand Aquarium in 2011. The trend of aquariums being owned and/or operated by commercial enterprises has both positive and negative implications for the future of aquariums as serious sites for ecotourism. Should these companies be committed to the principles and goals of ecotourism, their enormous visitorship across a wide spectrum of countries and cultures would bode well for the future of aquariums. Conversely, should these holding companies be primarily focused on profit, with lip service being paid to the principles of environmental sustainability and education, all aquariums run the risk of being viewed as commercial enterprises that utilize captive animals for profit.

WHO VISITS AQUARIUMS AND WHY?

Visitors to aquariums, like those who visit zoos, can be characterized as seeking recreational or leisure experiences, primarily in a social context with family and friends (Adelman, Falk & James, 2000; Briseño-Garzón, Anderson & Anderson, 2007; Packer & Ballantyne, 2002). Aquarium visitors tend to be grouped together with zoo and sometimes museum visitors for research purposes, but people who visit aquariums do have some distinct characteristics, which will be described below (Falk, Heimlich & Bronnenkant, 2008).

Understanding why people visit educational leisure settings (like aquariums, zoos, science centres and museums) has been a focus of visitor research for some time (Dierking, Burtnyk, Büchner & Falk, 2002; Packer & Ballantyne, 2002) partly for marketing reasons, but primarily to improve the impact of the visitor experience related to the institution's purpose or mission. Demographics of visitors by themselves are not

particularly helpful in telling us what motivates someone to attend, the knowledge and attitudes visitors bring with them during a visit or how their experiences might influence their behaviour afterwards. Previous research on science centre visitors by Falk and Storksdieck (2005) found that the motivations individuals have for visiting appear to cluster around just a few identity-related reasons. In a study at the National Aquarium in Baltimore, Falk and Adelman (2003) found support for their theory that grouping visitors based on their entering understanding and attitudes was helpful in more accurately assessing changes in visitors' conservation learning.

Building on that research, Falk et al. (2008) found that visitors to zoos and aquariums in the USA arrive with specific identity-related motivations and these motivations directly impact how they conduct their visits, as well as the outcomes they experience. Nearly half (48 per cent) of visitors who participated in this research came for a single, dominant identity-related motivation, though the majority came for multiple reasons. Relevant to ecotourism efforts, visitors whose primary motivation for visiting is to see an important site tend to be tourists or those in the community who like to promote their local attraction. Interestingly, this group possessed the least knowledge about conservation or natural history and had the lowest expectations for their visit; however, this is the group that showed the most significant positive change in both cognition and affect. Visitors who are primarily seeking a contemplative and/or restorative experience comprised the smallest group overall (only 4 per cent of the entire sample) but were more common in aquariums than zoos. Packer and Ballantyne (2002) found that visitors to an aquarium in Australia listed learning and discovery goals as second only to enjoyment goals, while visitors to a museum viewed learning as their primary goal.

ECOTOURISM

Before it is possible to consider the role of aquariums and their visitor experiences in promoting ecotourism goals, it is necessary to determine the extent to which aquariums are considered ecotourism venues. The concept of ecotourism has been hotly debated for many years (Garrod, 2003). Despite a lack of a universally accepted definition, the following general principles are accepted: ecotourism must be intrinsically nature-based; it must be managed to be sustainable; social equity is essential; and it must include an educational component (Donohoe & Needham, 2008; Weaver & Lawton, 2007; Wilson & Garrod, 2003). Given these principles, many aquariums could consider themselves to be ecotourism destinations.

Ryan and Saward (2004) propose that aquariums could be considered to be at the far end of a continuum of wildlife tourism operations that range from seeing animals in their natural habitats with limited human intervention to captive animal facilities, a view shared by Orams (1996). Cater (2010) noted that marine aquariums are not ecotourism *per se* but that they fulfil tourist needs for interaction with animals, while Cater and Cater (2007) suggest that aquariums are a type of 'fake' ecotourism, where animals, particularly marine mammals, are excessively anthropomorphized in order to commodify nature. Interestingly, similar anthropomorphizing may take place during whale watching tours, dolphin encounters or turtle nesting experiences (Bulbeck, 2005; Cater & Cater, 2007). Another view holds that classifying aquariums as ecotourism negates

the contribution of ecotourism to genuine sustainable ecotourism (Wearing & Jobberns, 2011). Cater and Cater (2007) conclude that ecotourism should rely on 'wild' animals, which would exclude aquariums from their definition. However, they do recognize the enormous educational potential of aquariums, the role of aquariums in research and the possibility that aquariums could help relieve pressure on wild ecosystems and animals. The potential for education and conservation led Mason (2000) to suggest that captive animal facilities could be considered as ecotourism attractions and there is an increasing body of research to support the view that ecotourism attractions, including aquariums, do contribute to increasing visitors' knowledge and awareness of environmental matters (Ballantyne & Packer, 2011; Ballantyne, Packer, Hughes & Dierking, 2007).

An interesting trend has been the 'Disneyization' of captive animal facilities whereby zoo exhibits and, to a lesser extent, aquarium exhibits are made to 'replicate' an authentic wildlife experience (Beardsworth & Bryman, 2001; Ryan & Saward, 2004). It has been suggested that, in the electronic age, consumers are more relaxed about authenticity, as they seek out experiences that are effectively staged and entertaining, allowing them to enjoy wildlife in captive as well as in wild environments with equal ease (Beardsworth & Bryman, 2001; Cater, 2010; Frost & Laing, 2011). In many popular marine aquariums and parks, reality and fantasy are integrated into exciting animal-based attractions (Mann, 2005). However, the challenge remains to ensure that aquariums do not devolve into amusement parks exhibiting animals as décor between funfair-type rides with no relevance for or reference to conservation (Conway, 2004).

WHAT ARE THE ECOTOURISM GOALS OF AQUARIUMS?

While an exact definition of ecotourism is elusive, there appears to be greater agreement on the goals of ecotourism, which include education and interpretation, conservation and research, socio-economic benefits and environmental sustainability (Cater & Cater, 2007; Donohoe & Needham, 2008). The World Zoo and Aquarium Association (WAZA) Global Aquarium Strategy (Penning et al., 2009) defines nine focus areas in which action is required in order for aquariums to achieve their goals in conservation. These focus areas include integrating conservation into all aquarium operations, contributions to the conservation of wild populations, science and research, education and training, effective communication and marketing, sustainability and ethics. Many of these focus areas could be considered to be the ecotourism goals of aquariums.

Integrating Conservation

For a tourism activity to be considered an ecotourism venture, conservation should be considered as integral to all operations. In the case of aquariums conservation should be woven into the culture of the organization, with integrated conservation a clear and explicit aim (WAZA, 2005). The importance of conservation in an aquarium can be gauged only partly by its mission statement. Although simply including conservation in the mission statement of an organization does not necessarily mean a serious commitment to conservation principles, it is encouraging to note that almost 80 per cent of the aquarium mission statements found on their websites contained references to

conservation. However, it should be remembered that visitors are increasingly critical of what is perceived as 'greenwashing' and aquariums need to ensure that they can back up their conservation-based mission statements with environmentally sound practices throughout their operations. Evaluation of the effectiveness of the conservation efforts of aquariums, as well as ecotourism operations, remains a challenge that requires more attention worldwide (Gusset & Dick, 2010; Mace, Balmford, Leader-Williams, Manica, Walter, West & Zimmermann, 2007).

Sustainability

The operation of an aquarium requires consumption of natural resources. Huge power and water consumption is required to run life support systems and most buildings have been designed to require air-conditioning and artificial light, which all contribute to the environmental footprint of the industry. However, issues related to sustainability are increasingly being addressed by aquariums:

- financial sustainability – does the aquarium have the financial means to sustain itself into the future?
- biological sustainability – where does the animal collection come from and how are the animals fed?
- environmental sustainability – what is the overall environmental impact of the facility with respect to resources such as water, energy and waste?
- social sustainability – does the facility employ local people and contribute to local economies and does the aquarium have the support of the local community?

It is increasingly clear that aquariums need to prove sustainability in all four areas to be considered as truly meeting the goals of ecotourism. In addition, aquariums need to demonstrate their commitment to sustainability to ensure that their credibility is maintained. If an aquarium curio shop sells endangered turtle shell products or the restaurant serves seafood that is not harvested sustainably, visitors will question the credibility of the aquarium, which in turn calls into question the commitment of the organization to conservation (Frost, 2011).

Science and Research

Research should play an important role in contributing to the development of sustainable ecotourism (Cater & Cater, 2007) and is also critical for the success of sustainable aquariums. Aquariums provide unique opportunities for environmental and biological research, as well as research on the social and economic facets of the operation (Fraser & Wharton, 2007).

While some attention has been devoted to measuring the effectiveness of the educational and interpretive programmes offered by aquariums, less attention has been paid to determining the success of the environmental sustainability and conservation efforts of aquariums (Rodger et al., 2011). In addition, very little research has been undertaken in aquariums in Asia, and, with the growing market for aquariums in this region, research in this area is sorely needed (Frost & Roehl, 2008).

Education, Interpretation and Training: Creating the Visitor Experience

Only a small body of research exists to help characterize the visitor experience in aquariums (see Schram, 2011), perhaps because motivations for visiting vary so widely, as do the activities, programmes and exhibitions offered. Researchers have focused more attention on experiences in zoos, but several studies specific to aquariums have shed light on what visitors are learning, feeling and doing during and after their aquarium visit.

Since the pioneering work done by Serrell (1977), little attention was paid to aquariums until Adelman et al. (2000) undertook a comprehensive visitor research study that looked at four key aspects of the visitor experience at the National Aquarium (Baltimore, USA): incoming conservation knowledge, attitudes and behaviour of visitors; patterns of use and interaction with exhibition components throughout the aquarium; exiting conservation knowledge, attitudes and behaviours of visitors; and over time, how the experience altered or affected individuals' conservation knowledge, attitudes and behaviours.

While visitors were generally more knowledgeable about, more concerned about and more involved in conservation-related issues than the general public, they still absorbed ocean conservation messages put forward by the aquarium. Changes in visitors' conservation knowledge, understanding and interests persisted over six to eight weeks after visiting. However, the aquarium experience rarely led to new conservation behaviours. As might be expected, visitors' enthusiasm to act and emotional commitment to conservation dropped to original levels over time.

These findings are supported by evaluation studies conducted at the Monterey Bay Aquarium and synthesized by Yalowitz (2004). Visitors to the aquarium were interested in and receptive to conservation content and learned new conservation information from exhibitions. Visitors' interests were most influenced by their personal involvement with conservation issues and previous visitation to the aquarium. After leaving the aquarium, there is evidence that a minority of visitors retained specific conservation information and maintained levels of concern about conservation topics for weeks, and even months, after their visit. This is consistent with research done in Australian ecotourism venues (Ballantyne et al., 2007; Ballantyne, Packer & Falk, 2011), which stressed the importance of creating an emotional affinity with animals as well as the opportunity to reflect on their experiences with wildlife.

In a study about adult learning experiences at the Vancouver Aquarium, Briseño-Garzón et al. (2007) found that the adult members of family groups learn as a result of their visit to the aquarium in cognitive, social and affective ways. After their aquarium experience, the adults were able to recall specific facts and concepts regarding habits and habitats of marine animals and ocean conservation, although there was little evidence of higher order intellectual skills such as analysis, synthesis or evaluation of concepts associated with the aquarium visit. Visitors did, however, tap into their past affective experiences when they interacted with living creatures, eliciting emotional responses and connections. This research also found that other important affective outcomes for adult visitors were appreciation of marine life diversity and the opportunity to be close to it. The authors suggest that this plays a role in the desire to engage in future activities related to the ocean.

An interesting attitudinal finding of the adult zoo and aquarium visitor impact study (Falk et al., 2008) was that visitors may see their visit to an aquarium or zoo as a nature

experience, and that visit experiences can successfully encourage nature exploration and valuing. Ballantyne et al. (2007) also note that wildlife tourism 'offers unique opportunities that allow participants to reconnect with nature in a potentially life-changing way'. This supports the idea that aquariums fulfil an ecotourism role, especially for urban dwellers, who may not have other nature options.

Fraser, Gruber and Condon (2008) posit that tourists to urban zoos (and, by extension, aquariums) are seeking novel, real experiences with animals as a tool to explore their own environmental identity. Based on responses to poetry in a zoo setting, the authors suggest that seeing iconic wild animals, even in a simulated natural environment, encourages visitors to contemplate human responsibility to the natural world. The tourism value of zoos, therefore, may be more about visitors' encounters with live animals than the simulated experience of artificial nature. The authors further suggest that zoo experiences are 'more meditative than spectacular', which can arguably apply to aquariums even more so than zoos.

HOW CAN AQUARIUMS PROMOTE BEHAVIOURS THAT RELATE TO ECOTOURISM CONSERVATION GOALS?

Just as many ecotourism ventures have struggled to measure their impact with respect to changing tourists' environmental knowledge, attitudes and behaviours (Tisdell & Wilson, 2005; Zeppel, 2008; Zeppel & Muloin, 2008), so too have aquariums been challenged by the need to demonstrate their role in changing visitors' environmental capacity. Public opinion research conducted via an online survey by The Ocean Project (2009) showed that Americans view aquariums, zoos, museums and other types of independent, non-profit organizations as trusted authorities on many environmental issues. As a result of this trust, respondents seem to be receptive to messages in aquariums about how they can help ocean conservation. For example, respondents strongly agreed with the statement 'I trust non-profit agencies such as an aquarium to protect the quality of the ocean' and overwhelmingly agreed with the statement 'Aquariums should suggest or recommend specific behaviours or ways for the general public to protect the environment.'

Aquariums and zoos have typically taken an environmental education approach to encouraging conservation (Ballantyne et al., 2007), focusing on helping visitors – especially children – to develop environmental literacy and an environmental ethic. More recently, many aquariums have also added a social marketing approach to facilitate conservation behaviour, which complements the necessarily longer-term ethic-building among visitors. These could be considered to be post-visit action resources, the value of which has been shown in a number of studies (Ballantyne & Packer, 2011; Hughes, Packer & Ballantyne, 2011). The Ocean Project survey also found support for this approach, especially in one area that aquariums and some other conservation organizations have focused on over the past ten years: providing recommendations to consumers about purchasing sustainable seafood. The most well known of these is Monterey Bay Aquarium's Seafood Watch programme, which offers science-based suggestions about seafood choices via a pocket guide and smart phone app. Other programmes such as the South African Sustainable Seafood Campaign, the Seafood Choices Alliance Produits de

la Mer in Europe and Australia's Sustainable Fish Guide also provide consumers with specific recommendations regarding seafood to enjoy or avoid.

Research into the effectiveness of Seafood Watch specifically found that most visitors who picked up a pocket guide at the Monterey Bay Aquarium continued to use it months later and had changed their seafood buying habits in several respects (Dianto-Kemmerly & Macfarlane, 2009). While seafood awareness campaigns have been criticized (Jacquet & Pauly, 2007) and it is not conclusive yet whether those individual consumer choices have collectively made a difference in shifting fishing practices (and ultimately a positive impact on fish populations), the programmes have encouraged increasing numbers of seafood buyers and chefs, who control what is served in restaurants, to utilize sustainable seafood options. Over two thirds of the world's fish consumption is in Asia, yet Asia has very few seafood choice campaigns (Jacquet & Pauly, 2007). The potential for the development of new sustainable seafood campaigns amongst Asian aquariums is, therefore, considerable.

A study at the Monterey Bay Aquarium – called the Inspiring Ocean Conservation (IOC) project (Vernon, Yalowitz, Ferguson & Macfarlane, 2012) – was begun in 2006 to determine the extent to which the aquarium was achieving its mission to inspire conservation of the oceans through its on-site visitor experience. The purpose of this multi-year, outcome-based research project was to define and measure the ways in which visiting the aquarium inspired people to become more interested in and concerned about ocean conservation, and to want to engage in conservation actions during their visit as well as at home. Researchers used a variety of methods including on-site surveys, follow-up online surveys and whole-visit observational tracking to examine the relationship between three sets of factors: visitors' individual characteristics, interests and backgrounds; their on-site visit experiences; and their post-visit experiences.

The IOC project found that positive conservation-related outcomes were influenced by a visitor's incoming beliefs and values, but these outcomes were bolstered by certain types of aquarium experiences. Impacts were greatest for visitors who were conservation-minded when they arrived at the aquarium, but significant differences were seen if visitors viewed more of the aquarium's conservation exhibits, attended certain programmes, talked to aquarium staff members or volunteers or took home a Seafood Watch pocket guide. Conservation messages that resonated most with visitors were specific, repeated, interactive and tied to live animal displays; feeding presentations appeared to be particularly effective at delivering these messages. Many visitors who encountered conservation information or experiences during their visit retained and translated these encounters into personal actions that persisted for months following their visit.

Increasingly, aquariums are bringing attention to another conservation issue that will arguably have the greatest impact on the ocean, and probably marine ecotourism, in the future. Climate change caused by carbon emissions is degrading ocean health by both warming the ocean and making it more acidic, and an increasing number of aquariums are interpreting this information for visitors. Exhibitions on climate change and the ocean have been mounted at NAUSICAA (France), Ocean Park (Hong Kong, China), Steinhart Aquarium (San Francisco, USA), Birch Aquarium (La Jolla, USA) and Monterey Bay Aquarium (California, USA); and many others, for example the New England Aquarium (Boston, USA), uShaka Sea World (Durban, South Africa) and the National Aquarium (Baltimore, USA), incorporate messaging into public programming

about this issue. Evaluation of the climate change exhibition and programmes at the Monterey Bay Aquarium indicates that visitors are more likely to absorb climate change messaging from interactive programmes (such as theatrical performances and conversations with interpreters) than from exhibitions (Korn, 2011).

Visitors to aquariums (and zoos) in the USA are more likely to agree that climate change is happening compared to the general public (Luebke, Clayton, Saunders, Matiasek, Kelly & Grajal, 2012) and are more likely to be categorized as 'alarmed' and 'concerned' according to the Yale University/George Mason University *Global Warming's Six Americas* public opinion research (Leiserowitz, Maibach, Roser-Renouf & Smith, 2010). This finding is true across all categories of visitors, including tourists. Aquariums appear to be a logical ally for other ecotourism efforts to encourage conservation action on this issue.

SUMMARY

Just as marine ecotourism faces numerous dilemmas and challenges, so too do aquariums face challenges in their attainment of ecotourism goals. Both marine tourism and aquariums are fast growing tourism market segments (Cater, 2003; Penning et al., 2009), and both face the challenge of how to manage their activities sustainably. Many aquariums are dynamic institutions that are actively challenging the criticisms levelled at them and are continually reinventing themselves to be more proactive in reaching the goals of ecotourism. However, just as not all ecotourism ventures are committed to the goals of sustainability, not all aquariums are committed to sustainability. The gap between the theory of ecotourism and operational realities is as evident in ecotourism operations (Ross & Wall, 1999) as it is in the operations of aquariums. Equally challenging are efforts to meaningfully evaluate how effective such ventures are in attaining their goals. It seems clear that aquariums have the opportunity, through the experiences they offer, to promote learning (cognitive, affective and behavioural) that is in synch with ecotourism goals. Visitors to aquariums are predisposed to absorbing information about the natural and cultural history of an area, and are receptive to suggestions for personal actions they can take on behalf of conservation. Aquariums should be considered important partners to other ecotourism ventures that seek to conserve the environment and sustain local people by providing educational and responsible wildlife experiences.

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35. Zoos as ecotourism experiences

Alejandro Grajal

INTRODUCTION

A visitor crosses under a waterfall while bird chirps fill the humid tropical air. A few steps away, caimans bask on a sandy beach while a band of monkeys shakes the branches above. The scene has the rich potential for an emotional life-changing moment, which is the core spirit (and hope) of an ecotourism destination. The surprising part is that this scene, with its powerful affective and sensorial load, not only happens at a remote national park or "traditional" ecotourism destination, but also can happen at a local zoo. For an increasingly urbanized world, zoos provide visitors with a unique portal to wildlife and nature (Falk, Reinhard, Vernon, Bronnenkant, Heimlich & Deans, 2007). (In the interest of brevity, "zoos" is used as a code word including both zoos and aquariums. Zoos and aquariums are unique in their own ways, but both also have the unique opportunity to present live animals in designed spaces with powerful narratives.)

Modern zoos easily conform to the main tenets of ecotourism, such as those provided by the *Québec Declaration on Ecotourism* (2002), particularly as they contribute actively to the conservation of natural and cultural heritage locally and internationally. Many zoos include local and Indigenous communities in planning, development and operation of their exhibits and events, and are important economic engines of local communities, contributing to their wellbeing. Zoos are masterful interpreters of the natural (and sometimes the cultural) heritage of their exhibits.

Yet zoos do not see themselves traditionally as ecotourism destinations, and it is likely that zoo visitors in general do not see themselves as ecotourists. This is probably a question of semantics (how widely or narrowly is the term "ecotourism" defined?), but also a question of self-image (do zoos "want" to be ecotourism destinations?). This chapter argues that zoos are ecotourism destinations, and should be considered as valid components of the larger ecotourism proposition.

ZOOS ARE MASSIVE ECOTOURISM OPERATIONS

Zoos have a huge attendance that dwarfs almost all the combined visitation at other cultural or outdoor destinations. In North America, for example, about 130 million people visit zoos and aquariums annually, which is more than the annual combined attendance of the top four organized sports (baseball, basketball, football and hockey). At the global scale, a conservative assessment of zoo visitation hovers around more than 700 million people annually (Gusset & Gerald, 2011). Equally impressive is that most of these visitors come from large metropolitan areas, and more than three quarters of adults visit the zoo with a child or in the context of a family or school outing. The average visit

for zoos in North America is about four hours, and the nearly ten million members visit their local zoos several times a year.

Zoos in large metropolitan areas are major tourism attractions, and cater not only to residents, but also to visitors from afar. Recent assessments (Fuller, 2011) of the economic impact of accredited public and non-for-profit zoos and aquariums in the USA found that zoos collectively support 126 000 jobs, generate USD $8.4 billion in economic activity and spend directly USD $3.3 billion in operating and capital outlays. Many of these direct jobs are based in local communities, and particularly urban communities in which nature-based or animal-based jobs are relatively rare.

The link between zoos and traditional ecotourism destinations (for example, natural areas or national parks) can also be direct. A recent assessment by the USA-based Association of Zoos and Aquariums (AZA, 2011) showed that 174 of AZA's 239 accredited institutions spent USD $130 million during 2010 on direct field conservation initiatives. This amount encompassed over 1900 conservation initiatives in more than 100 countries, with the bulk of these initiatives in developing countries. Nearly one third of these were classified as "conservation and development" projects, in which local communities are involved in sustainable development. North American zoos have also prioritized their conservation focus around important themes that link charismatic elements of their zoo collections with global-scale conservation issues. These initiatives include:

- Climate change and impacts on wildlife, with an emphasis on polar animals and ecosystems.
- Amphibian conservation, particularly the role of wetland habitat fragmentation and emerging diseases.
- Ape conservation, including orangutans, gibbons, gorillas and chimpanzees.
- Tiger conservation, focusing on Amur, Sumatran and Malayan tigers.
- Elephant conservation, including African and Asian elephants.
- Marine mammal conservation, with emphasis on whales, dolphins and pinnipeds.
- Ocean conservation.

These efforts are becoming rapidly relevant in an increasingly fragmented world. Zoos have a lot to offer in terms of managing fragmented populations and habitats (Conway, 1990, 1995). For large animals requiring large landscapes, such as tigers or elephants, the management of these charismatic species is plagued with serious genetic and ecological constraints, such as inbreeding, conflict with humans, random mortality and genetic drift (for example, Dunn, Clancey, Waits & Byers, 2011). Zoos have coped with such issues with varying levels of success, using an increasingly scientific approach (Andrews, Baker, Ballou, Boyle, Conde, Cook, de Man, Flesness, Green, Gusset, Holst, Hori, Kelly, Lacy, Lawrenz, Mirande, Guha, Pagel, Rubel, Schwartz, Wharton & Wilcken, 2011).

In many cases, the support that zoos provide to these conservation projects goes well beyond financial help (Conway, 2003). Zoos provide highly technical support to nature areas in rural and underdeveloped regions of the world in which ecotourism is a sustainable development alternative. The bulk of this help comes in the way of biologists, veterinarians or environmental educators and their accompanying skills. Furthermore, nearly one quarter of North American zoos have dedicated travel programs for their members, in which the most loyal zoo members visit exotic destinations, such as the Serengeti or

the Australian Great Barrier Reef. Some of these trips are with small and medium companies that support ecotourism tenets.

ARE ZOOS AS ECOTOURISM DESTINATIONS AFFECTING VISITORS' ENVIRONMENTAL ATTITUDES?

Apart from all these opportunities for economic support and conservation action, what are the effects on zoo visitors? This is something that all ecotourism destinations should ask. Zoos offer unparalleled experiences with live animals within a rich emotional context (Myers, Saunders & Birjulin, 2004). The experience is fun, meaningful and personally relevant. In the case of zoos (and other outdoor destinations), recent reports show that life-long science learning happens mostly outside the classroom or school (Falk & Dierking, 2010). Zoos are part of that "informal" life-long learning that happens outside the "formal" setting of the classroom. This is particularly true for science issues heavily filtered by personal values and social context (biodiversity conservation, climate change and evolution, as examples). For these issues, experiences outside the classroom – informal learning experiences – become even more powerful. Thus, informal learning institutions like zoos have been heralded as wellsprings of science learning for schoolchildren and adults alike (NRC, 2009). For these reasons, zoos are uniquely poised as ecotourism destinations to increase environmental literacy and fill critical gaps in science knowledge (Ballantyne, Packer & Sutherland, 2011). Zoos are among the most trusted cultural institutions by the public, and the live animals in their collections provide powerful emotional, cognitive and spiritual connections to the natural world.

The challenge for zoo educators and interpreters is to capitalize on these priceless attributes and to transform a meaningful visit into new personal behaviors that benefit the environment. Recent studies reveal a link between the zoo visit and environmental attitudes, but more must be done to ascertain these connections (Ballantyne & Packer, 2011; CBSG, 1993, Mayes et al., 2004; WAZA, 2005). For example, some evidence shows that environmental attitudes seem to fade after a zoo visit (Adelman, Falk & James, 2000; Ballantyne, Packer & Falk, 2011; Smith, Broad and Weiler, 2008). This is not unique to zoos, as it is likely that all ecotourism destinations face similar challenges. While we certainly hope that a visit to an ecotourism destination results in positive changes in environmental behavior and action, not all audiences are ready to take immediate actions (Beaumont, 2001), particularly when they perceive environmental problems as remote (for example, "not their problem"). If zoos initiate a meaningful dialogue about biodiversity conservation and sustainable development, they can be influential in planting the seed for visits to other destinations, such as natural areas or national parks.

However, it is improbable to assume that one visit can bring life-changing patterns of behavior, just as one lesson does not build a discipline. The zoo proposition has to be couched in an understanding of how diverse audiences respond to different messages (Myers et al., 2004). Recent research indicates that the level of connectedness to nature and animals is an important factor in describing the types of environmental behaviors that can be expected from various audiences (Mayer & Frantz, 2004). As much as radical environmentalists would like all zoo visitors to take the role of "environmental pilgrims" or as much as zoo critics point out that there is no evidence of wholesale change in

visitors' environmental attitudes, the plausible reality is that it would be unrealistic to expect that all zoo visitors respond equally or in the same direction. More likely, visitors' environmental concerns and actions may be influenced by a variety of values related to social, economic and spiritual factors. For example, Schultz (2001) categorized audience segments according to the level of concern for self, concern for others and concern for the biosphere. It is likely that other more nuanced audience segmentations, such as a six-tier segmentation for global warming audiences (Maibach, Leiserowitz, Roser-Renouf & Mertz, 2011), would help explain how different audiences respond to different education interventions, and also help to inform more fine-tuned experimental designs that could help understand how learning happens in informal environments. Finally, it will also be important for "take-home" messages to have actionable items, as opposed to simply describing the conservation problem and its consequences (for example, Gardner & Stern, 2009).

HOW ZOOS CAN HELP OTHER ECOTOURISM DESTINATIONS

In many respects, zoos and aquariums are already significant ecotourism destinations, operators and supporters. How can these roles be enhanced? There are a number of major roles in which zoos have rarely provided support for ecotourism, but in which they have significant experience and resources. Zoos are major hospitality service operations. Most large zoos have significant experience in training hospitality personnel, delivering hospitality services to visitors and evaluating guest satisfaction. Such skills are rarely used or projected beyond the boundaries of the zoo, mainly because guest services departments are usually seen simply as subservient to guest operations, and not as advancing the mission of biodiversity conservation. But zoos, with their significant capacity, can help small and medium remote ecotourism operations with such skills and training. Similarly, zoos have significant experience in interpreting and communicating biodiversity conservation, through education programs and signage. While a few zoos have delivered education programs to remote ecotourism destinations, many such programs have been relatively shallow – at times no more than translating materials to the local language or supporting local production of t-shirts or posters. But zoos have a lot more potential than that, including the creation of locally tailored learning strategies and educational frameworks that are compatible with local cultures and needs. Such endeavors take more energy and time, but eventually are a lot more meaningful.

Another common point between zoos and ecotourism destinations is the eternal dynamic conflict between mission-driven objectives and the need for economic sustainability, particularly in the volatile economic climate of the last decade. For non-profit mission-based zoos, this "dynamic conflict" presents a never-ending parade of difficult choices, because in the end, zoos have to take care of business. In other words, "conservation without money is conversation" (H. Guada, personal communication). Thus, the choices are always measured against the dual filter of conservation impact and financial sustainability. Perhaps revealing of the challenge is an unpublished ongoing study at the Brookfield Zoo, Chicago, which shows that audiences can be segmented into three main categories. At least a third of the visitors come for a leisure-time activity, so the zoo needs to provide a client-approved transaction. Roughly another third come for a fun,

family social day with some learning aspirations from their visit. Finally, about another third is the archetypical environmentally inclined visitor. These are visitors that come with a deep belief in animal and nature conservation, and have great expectations not only of increased learning, but opportunities for environmental action and even spiritual uplifting. Whether these audience categories are universal to other zoos is a current project that has just commenced, so it is too early to say. But such audience segmentation presents a challenge for interpretation and education, because it means that at least three narrative voices need to be provided in the zoo. Modern zoos are relatively good at aiming for the first and third categories, providing good leisure and fun opportunities and talking with environmentally active visitors. The major challenge is how to move all these audience segments upwards in the ladder of environmental expectations.

These opportunities and challenges probably will not convince those with extreme opinions as to whether or not zoos are ecotourism destinations. But it is clear that zoos offer rich personal experiences, advance conservation, support local communities and help biodiversity conservation. They also face similar challenges to those faced by other ecotourism destinations, such as defining the impact of a visit and sustaining conservation attitudes in ephemeral visitors.

Zoos and traditional ecotourism operations have a lot to learn from each other, and also many opportunities for collaboration and support. If these collaborations are strengthened, benefits will follow, at both ends of the ecotourism spectrum.

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36. Botanic gardens as ecotourism sites

Lucy A. Sutherland

INTRODUCTION

The potential of botanic gardens for ecotourism has often been overlooked in the literature and within the industry. There are various explanations as to why botanic gardens could be seen to challenge the ecotourism industry. Having been primarily established to study, exchange and display plants for research, education and public enjoyment, botanic gardens are most often regarded as cultural institutions. Consequently, botanic gardens are frequently associated with heritage, cultural and/or garden tourism. In contrast, ecotourism has often been discussed in the context of natural protected areas that have been perceived as undeveloped, undisturbed and pristine. While a limited view of appropriate settings and experiences for ecotourism dominated the literature in the 1990s, threats to the sustainability of natural protected areas created the need for consideration of other settings and experiences for ecotourism.

The industry has recognized the range of opportunities that a wider view of ecotourism can present and there is a growth in discourse on ecotourism in modified spaces and urban-based settings. Initially, this discourse was wildlife focused and primarily exploratory in character (Lawton & Weaver, 2001; Mason, 2000; Weaver, 2001, pp. 85–90). Later research by Waitt, Lane and Head (2003) and Chirgwin (2005) has made important contributions to these discussions by examining the tourist perspective. Waitt et al.'s work on the boundaries of nature tourism revealed tourists perceived modified settings, such as dams, as part of the natural landscape (Waitt et al., 2003, p. 541). Similarly, Chirgwin's work on artificial wetlands in Australia found these modified spaces to be viable settings for nature-based tourism that satisfied nature tourists' motivations and expectations of 'natural' sites (Chirgwin, 2005, p. 60).

This chapter contributes to the discussion of ecotourism in modified spaces and urban-based settings by examining botanic gardens as sites for ecotourism. The chapter initially provides a contextual background for the research by examining the literature. Nature in captivity, contextualization of native species in garden settings and the social construction of 'nature' and 'natural' are some of the key topics examined. Further, this chapter presents empirical research, from South Africa, Cuba and Belize, on the tourist perspective of botanic garden settings and experiences to explore the potential of these attractions as sites for ecotourism. Finally, the chapter draws on these findings to discuss the potential of botanic gardens as sites for ecotourism.

MODIFIED LANDSCAPES AND ECOTOURISM

Lawton and Weaver (2001, p. 315) and Weaver (2001, pp. 85–90, 2005a) have drawn attention to the potential of heavily modified landscapes for ecotourism, particularly

in relation to wildlife viewing. They discuss the potential of such areas as agricultural land, artificial reefs, degraded landscapes and urban areas. While Lawton and Weaver consider urban green spaces to be obvious settings for ecotourism, they discount botanic gardens and zoos because of the 'captive nature of their wildlife attractions' (Lawton & Weaver, 2001, pp. 320, 322).

The paradigm of botanic gardens as captive nature has deep historical roots. It stems, initially, from the ancient pleasure gardens of the world's Royalty and the Middle Age Monastic physic gardens and then, more recently, from the 'modern' botanic garden design based on a desire, during the sixteenth-century Renaissance, to order the world and recreate paradise (Byrd, 1989, pp. 44–5). This paradigm continued through to the twentieth century and, consequently, botanic gardens became characterized by geometrically designed plant beds, high wall enclosures and, from the eighteenth century, ordered plantings according to Linnaeus's nomenclature system (Byrd, 1989, p. 45). Within this paradigm, gardens most often lack a contextualization of the species within their setting(s).

During the twentieth century, a new paradigm evolved for botanic garden design and settings and many contemporary gardens include pockets of natural vegetation and collections curated to represent geographic regions and ecological systems. Consequently, discounting the potential of botanic gardens for ecotourism because of their 'captive nature' arguably fails to recognize this new paradigm. In fact, around 400 botanic gardens globally have pockets of largely unmodified vegetation (Wyse Jackson & Sutherland, 2000, p. 26) and play a key role linking into urban and semi-urban green space networks. In South Africa, for example, all nine national botanical gardens contain natural indigenous vegetation with the associated biological interactions and biodiversity (Willis & Morkel, 2007, p. 2). Therefore, if modified spaces such as agricultural lands, urban spaces and dams have potential as ecotourism sites, then it is suggested that botanic gardens, as havens of biodiversity, also present possibilities for some ecotourism.

Different ways of seeing ecotourism should surely allow for consideration of different nature-based experiences and settings provided by botanic gardens. Higham and Carr (2003, p. 23) argue that ecotourism should not be limited to pristine, undeveloped, unmodified or sensitive environments. In fact, Higham's earlier work with Lück described three successful ecotourism operations in New Zealand that were located in heavily modified urban settings (Higham & Lück, 2002). A key reason why botanic gardens should be considered for ecotourism links to the industry's sustainability. For example, ecotourism can threaten the 'ecosystems on which it depends' (Honey, 2008, p. 6) and alternative mass and urban ecotourism can alleviate pressure on vulnerable natural areas by diverting some of the visitation to more hardened areas (Weaver, 2005b), such as botanic gardens.

It is also suggested that the diversity of social constructions of 'nature' and the 'natural landscape' provides opportunities for a range of ecotourism experiences to meet visitors' varying perceptions of nature including those existing within botanic gardens (see Chirgwin, 2005; Tuan, 1990; Waitt et al., 2003). Orams's (2001) continuum of ecotourism types according to their impact on the natural environment reveals further potential for broadening the ecotourism paradigm to include such modified spaces as botanic gardens and zoos. Mason (2000) suggests that zoos can provide a more sustainable form of ecotourism, meaning tourism that is specialized, educational

and nature-based, without involving the heavy consumption of finite resources through long-distance travel. According to Orams's continuum of ecotourism types, this could be classified between the passive and active ends of the continuum. Similarly, the potential of botanic gardens to provide effective educational and nature-based experiences for ecotourism, which contribute to the health of the host environment, needs consideration.

SETTING THE SCENE: TOURISM, ECOTOURISM AND BOTANIC GARDENS

There are a handful of known botanic gardens, such as Blue Mountains Botanic Gardens, Mt Tomah in Australia (Worsman & Gray, 2004) and Xishuangbanna Tropical Botanic Garden in China (Xishuangbanna Tropical Botanic Garden, 2006), actively involved in nature-based tourism, or more specifically such sustainable forms as ecotourism. While active involvement is only undertaken by a minority, a preliminary mail survey of botanic gardens ($n = 795$) in Less Developed Countries revealed that various directors (15.5 per cent) were interested in involving their institution in ecotourism (Sutherland, 2005). The rich biodiversity in Less Developed Countries attracts tourists seeking nature-based experiences, and possible tourism revenue for conservation is attracting the interest of botanic gardens management. Directors from botanic gardens in the Bahamas, Mexico, Argentina and Vietnam were all found to be in the early stages of partnership projects to develop their role in this ecotourism industry.

Despite a resurgence of botanic garden development and restoration globally since the early 1980s, Benfield (1999) argues that the tourism potential of gardens is poorly developed and they are not adequately prepared for the growing tourism industry and increasing segmentation in the travel market. The view that tourism has been a peripheral role of some botanic gardens, and a lack of understanding of the industry, is reinforced by the narrowly focused attention it receives in regional and international strategies (Burbidge & Wyse Jackson, 1998; Cheney, Navarrete Navarro & Wyse Jackson, 2000; Wyse Jackson & Sutherland, 2000). In addition, similar to Mason's (2000, p. 335) findings on zoos and tourism, academic texts addressing such relevant topics as urban tourism (for example, Law, 2002; Page & Hall, 2003), heritage tourism (for example, Timothy & Boyd, 2002) and tourist attractions (for example, Swarbrooke, 2002) do not discuss botanic gardens. Furthermore, perusal of key academic tourism journals, such as *Annals of Tourism Research*, *Journal of Ecotourism*, *Journal of Sustainable Tourism* and *Tourism Management*, reveal these attractions to be poorly researched. Most botanic garden literature originates from such networks as Botanic Gardens Conservation International and the American Public Gardens Association (formerly the American Association of Botanical Gardens and Arboreta). Ironically, in these publications there are limited accounts where tourism is discussed as part of the core business of botanic gardens, despite some having become top tourist attractions in such countries as South Africa (Cape Town Routes Unlimited, 2010; Grant Thornton Kessel Feinstein, 2003), the United Kingdom (Association of Leading Visitor Attractions, 2010) and Singapore (Singapore Tourism Board, 2010).

The growing discourse on modified spaces for ecotourism and the recent strategic

refocus of botanic gardens to address the sustainable use of biodiversity provides an appropriate opportunity to examine the potential of botanic gardens as sites for ecotourism. Botanic gardens do not form a homogeneous group of attractions. Discussions about the settings they provide and their relevance for ecotourism need to consider the relationship between botanic gardens, ecotourism and the visitor. Using data from tourist surveys in the case study botanic gardens in South Africa, Cuba and Belize, this chapter explores the potential of botanic gardens to provide a nature-based setting and experience that can appropriately reflect an ecotourism experience for the tourist. The following section introduces the research methods used for this investigation to examine botanic gardens settings and experiences from the tourist perspective.

RESEARCH METHODS

This research involved a tourism study of three botanic gardens: Kirstenbosch National Botanical Garden (KNBG) in Cape Town, South Africa, Jardín Botánico Nacional de Cuba (JBNC) in Havana, Cuba and Belize Botanic Gardens (BBG) in San Ignacio, Belize. Findings presented in this chapter form part of a broader study examining botanic gardens and tourism from several perspectives (see Sutherland, 2005, 2009). This chapter focuses on the tourist perspective and presents results relating to tourist expectations of botanic garden settings and experiences. Before discussing the approach taken to data collection, the three botanic garden case studies are briefly described.

Kirstenbosch National Botanical Garden (KNBG)

Within the 528 hectare (ha) estate of KNBG, the cultivated garden covers 52 ha. The remainder of the estate consists of a nature reserve with areas of southern Afrotemperate forests and fynbos vegetation and the eastern slopes of the iconic Table Mountain in the background. There are nearly 6000 species of southern African plants growing in the cultivated garden and more than 125 birds have been recorded. Kirstenbosch has a well-defined place in mainstream tourism and has strong partnerships with tourism authorities and other tourist attractions. Kirstenbosch is one of the founding members of the Cape Town Big Six, an informal network of primary tourist attractions in the Western Cape, which meet regularly to explore cross-marketing opportunities (NBI, 2000).

Jardín Botánico Nacional de Cuba (JBNC)

The 600 ha JBNC, located in Havana, has extensive displays and plantings dedicated to Cuba's native flora and ecosystems, as well as exotic plants from various tropical and subtropical areas of the world. The JBNC has well-developed tourism and visitor facilities, including Havana's first vegetarian organic restaurant, as well as cafes, a gift shop and car/coach parking. A guiding service is available for all visitors on their arrival and JBNC employs 17 full-time guides, who are multi-lingual and university trained in education and biology.

Belize Botanic Gardens (BBG)

The Belize Botanic Gardens are located west of San Ignacio on the banks of the Macal River. The 18 ha gardens are adjacent to duPlooys Jungle Lodge and display a range of Belizean flora representing several habitats within the country. There is a particular focus on collections of nationally threatened plants, as well as economically, botanically or horticulturally important species. The collections are managed without the use of pesticides or chemicals. A series of trails and attractions, such as the Native Orchid House and the Hamilton Bird Hide, are visitor hotspots. Around 300 bird species have been recorded within a five mile radius of the botanic gardens and duPlooys Jungle Lodge, making birdwatching a popular activity in the gardens. Plants of the Maya are also a feature of the gardens and visitors have the opportunity to learn about Mayan cultural traditions and their use of native plants.

DATA COLLECTION

The research methods framework was modelled on Goodwin, Kent, Parker and Walpole's (1998) earlier work in protected areas in India, Indonesia and Zimbabwe. A combination of qualitative and quantitative techniques was used to examine the role of botanic gardens in ecotourism. This chapter specifically discusses findings from a questionnaire administered to tourists at each of the study sites, which assists in identifying any hindrances, from the tourist perspective, to these attractions being sites for ecotourism. The tourist questionnaire was administered using an interview. Several questions aimed to investigate and compare perceptions of botanic garden experiences in terms of ecotourism and the expectations of settings provided in botanic gardens generally. The purpose of examining these factors with tourists was to help determine if aspects of a botanic garden experience had the potential to complement those commonly associated with ecotourism, as well as attempt to identify any hindrances to botanic gardens being accepted by tourists as sites for ecotourism.

NATURE OF THE SAMPLE

Willing tourists were interviewed in the peak visiting period (10.00–16.00)[1] during the high season. One adult per group was directly approached and attempts were made to interview equal numbers of males and females where possible. Local visitors did not form part of this study. A total of 336 interview-administered questionnaires were completed over the three sites (Table 36.1). Limitations of the survey must be acknowledged with regard to sample size and respondent profile. While the number of days administering the survey at each site did not vary (17 days), the number of respondents was determined by obvious factors such as weather, the total number of tourists visiting on the day, tour group demands and tourists' time availability, for example tourists with children were hesitant to be interviewed. Attempts were made to communicate with a range of tourists, but language was a limitation with the researcher and assistants competent in English in South Africa and Spanish and English in Cuba and Belize.

Table 36.1 The nature of the sample

Tourist characteristics	Botanic gardens		
	KNBG South Africa	JBNC Cuba	BBG Belize
Sample size	198	105	35
% Male	46.9	51.4	37.1
% Female	53.1	48.6	62.9
% National tourists	13.8	31.4	0
% Foreign tourists	86.2	68.6	100
% >55 years	49.5	22.8	14.3

While wide variations in sample size due to seasonality make comparisons difficult, this work provides some preliminary data to enable consideration of the potential of botanic gardens as ecotourism sites.

BOTANIC GARDENS AS ECOTOURISM EXPERIENCES

People's personal experiences guide them in developing their perceptions and expectations (Waitt et al., 2003). In this study, the majority (around 91 per cent) of all responding tourists had visited botanic gardens previously and, therefore, had experience to draw upon to discuss their expectations of botanic garden settings.

Expectations of Botanic Garden Settings

Many and varied responses were received to an open-ended question on tourists' expectations of landscape and natural setting features in botanic gardens. Field observations noted that more experienced travellers, in particular in Belize, recognized that botanic gardens are not homogeneous attractions and generalizing about settings and experiences presented a challenge to them. Consequently, several indicated that their expectations of botanic garden settings 'depended' on the country, its geography and climate (Table 36.2). Many botanic garden tourists had strong views of these attractions as heavily modified settings and expected setting features associated with urban environments including displays of flowering plants, open space, formal garden beds and water features (Table 36.2).

The view of botanic gardens being created urban environments was further highlighted when almost two thirds of JBNC and BBG tourists described these gardens as cultivated (ratings of 4 or 5 using a scale of 1 being 'natural' and 5 being 'cultivated'; Table 36.3).

Discussions also presented anomalous results supporting the argument that botanic garden settings are heterogeneous and revealing the potential for them to be viewed as natural settings. For example, one quarter of KNBG respondents described the garden as a natural setting (ratings of 1 or 2 using a scale of 1 being 'natural' and 5 being 'cultivated'; Table 36.3). In addition, open discussions with around one third to one half of the KNBG and JBNC respondents highlighted expectations of botanic garden setting features that are more traditionally associated with more natural protected areas, such as wildlife and natural areas of vegetation (Table 36.2).

Table 36.2 Expectations of natural and landscape features in botanic garden settings

Setting features (% of respondents)	Botanic gardens		
	KNBG $n = 186$ (%)	JBNC $n = 105$ (%)	BBG $n = 35$ (%)
Flowering plants	64.5	51.4	42.9
Natural areas of vegetation	56.5	51.4	2.9
Formal garden beds	28.5	22.9	14.3
Wildlife	30.6	34.3	17.1
Waterfalls/water features	39.2	41.9	34.3
Rugged topography	12.9	12.4	2.9
Scenic	2.7	2.9	8.6
Open space	44.6	25.7	0
Depends	5.4	2.9	20.0

Note: Tourists may have given more than one response to this open question.

Table 36.3 Describing the case studies' botanic garden setting

Setting ranking (% respondents)	1 Natural	2	3 Semi-natural/ cultivated	4	5 Cultivated	Mean score
KNBG $n = 124$	8.9	19.4	49.2	16.9	5.6	2.9
JBNC $n = 79$	5.1	5.1	27.8	35.4	26.6	3.7
BBG $n = 18$	0	11.1	27.8	38.9	22.2	3.7

The research findings highlighted that nature and natural are viewed in many ways, irrespective of whether the setting was perceived to be modified. When tourists were asked to rank the quality of the gardens' nature experience on a scale of 1 indicating 'poor' and 5 indicating 'excellent', the botanic garden case studies were seen by the majority to provide excellent quality nature experiences (KNBG 92.6 per cent, $n = 122$; JBNC 79.7 per cent, $n = 79$; BBG 64.7 per cent, $n = 17$). These findings provide evidence to support the argument for botanic gardens as sites for ecotourism. To examine this argument further, botanic gardens were also considered in terms of the experience that they provide.

Perceptions of the Botanic Garden Experience

The research explored tourists' perceptions of botanic garden experiences in an attempt to ascertain if botanic gardens were considered effective in providing any of the commonly cited components of an ecotourism experience. Various components of ecotourism, as discussed by Wight (1997, p. 218), were used to frame a question designed using a five-point Likert-type scale with response options ranging from 'ineffective' to 'very effective'.

The findings show a range of perceptions about the effectiveness of botanic gardens in providing key aspects of an ecotourism experience and highlight views that botanic

Figure 36.1 Botanic gardens, such as Kirstenbosch National Botanical Garden, can provide an effective remote experience for some tourists

gardens are not homogeneous attractions. Botanic gardens were considered to be particularly effective in providing opportunities to learn about plants, wildlife and nature, and opportunities to view plants. For around half of the tourists interviewed, botanic gardens generally were also perceived to have high levels of effectiveness in providing a remote experience and, furthermore, an experience where crowds were lacking (See Table 36.4 on page 478). However, botanic gardens were not perceived as being effective in providing all the ingredients of an ecotourism experience. Key 'weaknesses' were their perceived lack of effectiveness in providing opportunities to learn about cultures, view animals or provide physically challenging recreational opportunities.

A botanic garden experience generally has been shown to effectively present some aspects of an ecotourism experience for some tourists. Arguably, this finding supports the possibilities for botanic gardens to be considered as sites for ecotourism. The findings also highlight the key experiences that would need to be developed to enhance their potential as sites for ecotourism, or those that need to be marketed to change tourist perceptions of botanic gardens experiences.

BOTANIC GARDENS AS ECOTOURISM SITES

Any setting that has the potential to alleviate pressure on natural protected areas by providing alternate ecotourism must be critically assessed. Consequently, botanic garden

Table 36.4 Effectiveness of botanic gardens 'generally' in providing key experiences associated with ecotourism: mean values

Ecotourism experiences	Botanic gardens		
	KNBG $n = 190$	JBNC $n = 96$	BBG $n = 34$
Remoteness from civilization	3.36	3.51	3.29
Lacks crowds	3.53	3.63	3.71
Opportunities to learn about plants/ wildlife/nature	4.17	4.44	4.15
Opportunities to learn about culture(s)	2.34	3.64	2.50
Opportunities to view animals	2.38	3.08	2.47
Opportunities to view plants	4.85	4.78	4.94
Recreational opportunities that offer a physical challenge	2.72	2.79	2.41

Note: Means were based on a scale ranging from 1 indicating 'ineffective' to 5 indicating 'very effective'.

settings, which are heterogeneous and most often readily accessible to urban/semi-urban environments, deserve consideration as sites for ecotourism. While perceptions of botanic gardens as scientific, educational and cultural institutions with 'captive nature' may have limited their consideration for ecotourism to date, it is important to acknowledge that individual preferences for natural settings, as well as different ways of seeing nature, vary widely within a complex modern society (Tuan, 1990, p. 114). Furthermore, technology and urbanization have changed many people's understanding of nature and their relationship with nature, for example 'physical contact with one's natural environment is increasingly indirect and limited to special occasions' (Tuan, 1990, p. 95; also see Dodd & Jones, 2010). Consequently, the tourist perspective will be one of the determining factors as to whether a botanic garden setting and associated experiences have the potential for ecotourism.

The research in South Africa, Cuba and Belize has shown little doubt that many tourists perceive botanic gardens as modified settings. However, being modified settings do not negate their ability to provide a nature experience, one of the key ingredients of ecotourism. This case study research revealed that while few tourists see botanic gardens as natural landscapes, they are perceived by the majority to be excellent quality nature experiences that effectively provide opportunities to view and learn about flora, wildlife and nature. Between one third and one half of the tourists interviewed were motivated to visit the case study botanic gardens for nature-related reasons.

In addition to natural areas, an ecotourism setting has been often associated with 'remote' locations (Honey, 1999, p. 22; Wight, 1997, p. 218), in particular protected areas. Remote has been defined as a location that is 'situated far from the main centres of population' (Pearsall, 1999, p. 1211). This research found that tourists' interpretation of 'remote' was subjective and challenged Pearsall's definition and the stereotype of botanic gardens as 'captive nature' in urban constructed environments.

Ecotourism commonly focuses on the wildlife aspect of nature and biodiversity, with plants taking a lesser focus. A vast range of wildlife, including birds, reptiles, insects and amphibians, make use of botanic gardens and a good proportion of tourists visiting

KNBG and JBNC expected wildlife in botanic garden settings (Table 36.2). With vast urbanization in many countries, botanic gardens have an increasing role as biodiversity havens that conserve fauna diversity (Willis & Morkel, 2007). While botanic gardens less commonly attract the charismatic fauna that often interest ecotourists, there are numerous examples of gardens that have fauna of great interest to tourists, for example, the 300 birds sighted at Belize Botanic Gardens include the ruby-throated hummingbird and the keel-billed toucan (Belize Botanic Gardens, n.d.); baboons can be spotted at the Harold Porter National Botanical Gardens in South Africa; and the Eastern water dragons are a popular and common sighting at the Australian National Botanic Gardens.

Another consideration for ecotourism sites is their potential to provide recreational opportunities that offer a physical challenge. Few tourists perceived botanic gardens to be effective in doing this (Table 36.4). As to whether this is a requirement of every ecotourism experience, or dependent on the type of ecotourism, is a matter for debate. 'Hard' and 'soft' dimensions of ecotourism are defined in terms of the level of physical rigour and effort involved where the 'soft' ecotourist is less prepared for physical hardship or discomfort (Laarman & Durst, 1987, cited in Orams, 2001; Weaver, 2005a). Therefore, 'soft' ecotourism opportunities could be developed by those botanic gardens that cannot offer physically challenging recreation. In contrast, gardens such as Kirstenbosch, with access paths through physically challenging ravines to Table Mountain, have the potential to cater for a 'hard' ecotourist. Furthermore, the sheer size of the JBNC, with its 600 ha, offers possibilities as well.

While not all ecotourism requires tourists to undergo physically challenging activities, many would argue that all ecotourism must have an experience linked to learning. With the increasing role of botanic gardens in informal learning, as evidenced within Botanic Gardens Conservation International's education review *Roots*, this key criterion offers the potential for ecotourism for botanic gardens. Nevertheless, there are a range of challenges to be overcome to enhance the role of botanic gardens as ecotourism sites.

Within ecotourism paradigms, education and learning have been viewed either in a passive way as part of the tourism experience to enhance satisfaction and enjoyment and/or in an active way to contribute to protecting resources by modifying tourist behaviour and attitudes (Ritchie, Carr & Cooper, 2003, p. 33–4). Weaver's (2005a) discussion on the comprehensive and minimalist dimensions of ecotourism highlights the variations in real-life ecotourism and this is reflected in the botanic garden case studies. The majority of tourist education activities at KNBG, JBNC and BBG are primarily modelled on ecotourism paradigms with low responsibility, as described by Ritchie et al. (2003, p. 33), and are non-outcomes-based programmes. However, analysis of the education programmes in the case study botanic gardens using Weaver's (2005a) minimalist and comprehensive ecotourism categories, and associated descriptions, reveals some variation in the approach taken to learning within the botanic gardens.

BBG's longer-term education programme for volunteer tourists caters for small numbers of tourists each year and it provides a deeper learning experience aligned with comprehensive (active) ecotourism. In addition, JBNC's ecotrail programme is also aligned to more comprehensive ecotourism, although not to the scale of BBG's immersion programme. JBNC's trails are sited through 'remote' areas of the 600 ha botanic

Figure 36.2 *The eco walk in the Jardín Botánico Nacional de Cuba gives tourists an opportunity to learn from a scientific guide about the rich flora of Mogotes; the round top hills that were present during the Jurassic period. The botanic gardens tour is often followed by a visit to the World Heritage listed Viñales Valley to see this flora in a protected area landscape*

garden and cater for one-day tours with JBNC's specialist biology and ethnobotany guides. The tours include physical activities and a deep interaction with Cuba's biodiversity.

In contrast, other programmes for tourists provided by the case study botanic gardens take a more minimalist (passive) ecotourism approach. In these programmes, tourists tend to have a guided tour from between 30 minutes and three hours and there is little opportunity for a deep interaction with nature. The educational aspect of the ecotourism paradigm, which promotes deep understanding and behavioural change, challenges these botanic gardens or individual operators to take a more active approach to their tourist education and explore opportunities for education that lead to a greater commitment to the sustainable use of biodiversity.

Botanic gardens were considered by most tourists to be effective in providing a learning experience about plants, wildlife and nature, despite, for the most part, the case study botanic gardens providing a minimalist tourism learning experience. However, opportunities to learn about culture in botanic gardens generally were only perceived by a few tourists to be effectively provided by these attractions. This is often considered to be an important aspect of ecotourism and there is great potential for botanic gardens to provide such learning opportunities. Increasingly, botanic gardens, including the case studies, are displaying and researching their local and national biodiversity in terms of its economic value and ethnobotanical use (Dennis, 2000, p. 38; Dennis & Owusus-Afriyie, 1999; Hawkins, 2008; Waylen, 2006). These collections provide interpretive opportuni-

Figure 36.3 Tours of Belize Botanic Gardens often include the Native Orchid House which is used to introduce tourists to some of the 300 species of orchids in Belize

ties that can assist tourists in learning about local cultures and play a key role in an ecotourism experience.

The educational potential for these case study botanic gardens within ecotourism was revealed when itineraries of visiting nature-based tourism and ecotourism groups were examined. Most commonly, the garden visits were scheduled at the beginning of a nature-based tour itinerary, prior to the group visiting protected areas, to educate tourists about the biodiversity that they would see in more 'natural' habitats; a type of passive approach to education. There is the potential to develop more comprehensive ecotourism programmes that raise awareness of how tourists can support the sustainable use of biodiversity through appropriate tourist behaviour when visiting natural areas, particularly those that are sensitive, and highlight factors for tourists to consider when purchasing souvenirs made of natural products.

The garden's location will determine its position in the ecotourism itinerary and, consequently, its potential contribution to learning opportunities for this market sector. Botanic gardens, such as KNBG and JBNC, are scheduled at the beginning of an ecotourism itinerary because they are based in urban or semi-urban settings, located within easy access of the international airport and city of arrival. Consequently, they could play a key role in encouraging appropriate behaviour for the sustainable use of biodiversity in natural areas. In contrast, BBG's geographical location, about two hours' drive from Belize's international airport, means that its position in the visitor trip cycle can

differ, and this will determine its educational role within the ecotourism experience. One such role could be reinforcing messages received by tourists during their experiences in Belize's natural protected areas, or adding value to such an experience through specific learning in areas of interest such as plants, birds and ethnobotany.

CONCLUSION

This chapter has presented evidence to support the argument that botanic gardens have a role as ecotourism sites. However, their potential for ecotourism may be hindered by views of botanic gardens as 'captive nature' and a limited understanding of botanic gardens as havens for biodiversity. This raises the need for careful and targeted marketing to engage tourists and the industry with the potential of botanic gardens to broaden ecotourism possibilities.

Research findings suggest that the modified space ecotourism paradigm can have a pathway that considers botanic gardens. From the perspective of some tourists, botanic gardens have aspects of settings and experiences that complement key components of ecotourism and, therefore, they have potential as sites for ecotourism. Furthermore, the botanic gardens studied in this chapter have become sites for ecotourism, albeit at a small scale. They provide tourists with easy access to a diversity of native flora and fauna and these interactions are supported by various learning opportunities.

Similar to the previously discussed earlier works on ecotourism in modified spaces, the appeal of botanic garden experiences will arguably be determined by such factors as tourist experience and demand, the cultural context, as well as individual botanic garden design features and settings and how they are perceived. Nevertheless, with the increasing focus of botanic gardens' work on conservation, sustainable development and sustainability-focused learning, a number of these attractions could assist in alleviating pressure from ecotourism on more fragile or undisturbed environments, in particular in relation to ecotourism for softer ecotourists. In addition, botanic gardens have the potential to complement and add value to the tourist's experience at other ecotourism sites through the biodiversity-focused learning opportunities they can provide, as well as the role they can play in reinforcing conservation messages that tourists may have already received during their ecotourism experience.

NOTE

1. The interviewing process with BBG tourists was an exception as most needed to be interviewed in the evening at the adjacent ecotourism lodge because of their busy tour programme.

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