



CHAPTER 23

VISITOR MANAGEMENT

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Convention on
Biological Diversity

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TITLE PAGE PHOTO

Visitors, Yosemite Falls, Yosemite National Park, USA

Source: Graeme L. Worboys

Introduction

There are many different types of visitors to protected areas. They may be official guests to a national park; researchers working in a strict nature reserve; volunteers assisting with a national park work program; educational groups learning about special natural or cultural heritage; or people who conduct their business within a protected area including contractors and shop owners. Importantly, visitors also include tourists and recreationists. In this chapter, we briefly examine the types of visitors protected area managers may need to deal with and management considerations associated with such visitor use. We, however, provide a focus on tourism and its management in this chapter. Depending on the International Union for Conservation of Nature (IUCN) protected area category, tourism and recreation are common visitor uses of most protected areas and important contributors to local and national economies. As part of managing protected areas for tourists, we describe a management framework for providing a range of recreation opportunities within reserves, the provision of visitor services and facilities and management responses to visitor impacts.

The conservation imperative

The International Union for Conservation of Nature (IUCN) facilitated the development of an internationally accepted definition of protected areas. This definition states that a protected area is '[a] clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values' (Dudley 2008:8).

Every word of the definition is important (see Chapter 2) and provides strong guidance for the management of tourism within protected areas. Specifically, 'dedicated' means a binding commitment to the conservation of nature for the long term for the protected area and 'managed' means active steps are being taken to conserve the natural (and possibly other) values for which the protected area was established. In addition, 'long term' recognises protected areas should be managed in perpetuity and not as a short-term or temporary management strategy, and 'nature' always refers to biodiversity, at genetic, species and ecosystem levels, and often also refers to geodiversity, landform and broader natural values (Dudley 2008). 'Cultural values' include those that do not interfere with the principal biodiversity conservation outcome (Dudley 2008).

This definition guides visitor and tourism management in protected areas, and, drawing on Dudley (2008), the following principles apply:

- conservation of biodiversity and other nature has primacy in decisions
- any exploitation or management practice that will be harmful to the objectives of designation must be prevented or eliminated where necessary
- visitor and tourism management must operate under the guidance of a management plan and a monitoring and evaluation program that supports adaptive management.

Visitor use of protected areas is an integral part of the day-to-day operation of protected areas (Tables 23.1 and 23.2). Visitor use provides educational opportunities, delivers recreational benefits, develops public support for protection and may deliver benefits to resident and local communities consistent with the other objectives of management (Dudley 2008). Such use may be in the form of low-impact scientific research activities and ecological monitoring related to and consistent with the values of the protected area for all IUCN protected area categories (Dudley 2008). For some protected area categories, tourism provides critical economic benefits. IUCN Category II protected areas in particular provide opportunities for visitor and tourism uses. The IUCN provides strong guidance for visitor use of Category II protected areas, and the supplementary objectives of management for this category are '[t]o manage visitor use for inspirational, educational, cultural and recreational purposes at a level which will not cause significant biological or ecological degradation to the natural resources', and '[t]o contribute to local economies through tourism' (Dudley 2008:16).

There is regularly a tension for protected area managers and protected area agencies in managing these two objectives for Category II areas and some other protected area categories. Getting the balance right can be very difficult, especially in the context of an often demanding, pro-development and well-connected tourism industry. The tension can include two world views. One is to retain the natural condition of a destination for future generations (supported by the purpose for establishing the protected area) and the other is a tourism industry perspective that believes it is 'obvious' for such a prime, spectacular location to be developed for tourism. Often, there can be no compromise if the intergenerational natural condition of a destination is to be retained.

Pro-development lobbyists seeking access to prime locations sometimes have described protected areas as being 'locked up'. Opposing an aspect of this claim of



Visitors, Banff National Park, Canada

Source: Graeme L. Worboys



Geology students visiting and researching the Jurassic Coast World Heritage Property and its Triassic, Jurassic and Cretaceous geological sequences, Dorset and East Devon Coast, United Kingdom

Source: Graeme L. Worboys

course are the multi-million visits annually to protected areas all around the world such as the Galápagos Islands, Yellowstone National Park, Victoria Falls, Kruger National Park and the Great Barrier Reef. Australia, for example, with a population of 20.3 million people in 2005, had 108 million visits to its protected areas (Worboys 2007). 'Locked up' may also be a euphemism for developments not being permitted in favour of retaining natural values, which is of course the very purpose of a protected area. In addition to being special because they are undeveloped, protected areas' natural values actively and positively contribute to society in multiple ways other than tourism every year (see Chapter 6). Under effective management (see Chapter 28) and sustainable use, these benefits will not diminish; they will contribute in perpetuity.

Visitor management

Types of visitors

Protected areas have been set aside to achieve the long-term conservation of nature and the conservation of ecosystem services and cultural values (Chapter 2). Managers need to respond to and accommodate the needs of official visitors to the protected area (Table 23.1) for

they typically will have special needs. This may include special support services such as access, transport, utilities, security and special administration needs. In addition to such 'official use' by indigenous and local communities and protected area agencies responsible for protected area management (Table 23.1), visitor use of protected areas, including tourism, helps managers to protect, conserve and appreciate the values for which a protected area is established (Table 23.2). Use of protected areas is a cultural consideration (see Chapters 4 and 22) and a number of types of use are considered appropriate. The IUCN recognises six categories of protected areas, the management objectives of which help to define the purpose of each reserve (see Chapters 2 and 8). This in turn helps to identify the types of visitor use that are most appropriate for a particular protected area (Table 23.2) (Dudley 2008). Tourism, for example, is typically a special feature of IUCN Category II protected areas though it is subordinate to the principal heritage conservation objectives of these areas. Tourism itself includes a wide range of uses (Table 23.2).

Table 23.1 Types of official visitors to protected areas (including Indigenous Peoples' and Community Conserved Territories and Areas, and Private Protected Areas)

| Visitors | Purpose of visit | IUCN Protected Area Categories | | | | | |
|---|---|--------------------------------|----|-----|----|---|----|
| | | I | II | III | IV | V | VI |
| Community members responsible for a protected area | All aspects of conservation management of a community conserved area and indigenous lands | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Local community members, indigenous peoples or private operators involved in a protected area | Potential ancestral or traditional community or a private tourism venture with official and approved sustainable use of natural resources from (respectively) an indigenous area or a community conserved area or a private protected area. This may include reindeer herding, fishing and hunting (with agreed levels of fish catch) or private hunting quotas | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Protected area manager | Planning, monitoring, research, response to threats, response to incidents, law enforcement, visitor management | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Protected area worker | Work program implementation such as pest animal control including hunting, weed control, fire control and soil erosion restoration | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Protected area contractor | Delegated work program implemented on behalf of a protected area organisation | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Military personnel | Delegated program to protect heritage conservation resources | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Community service personnel | Officials from organisations such as police, fire brigade or ambulance who have an official role within the protected area | | ✓ | ✓ | | ✓ | ✓ |
| Lessee | Person or company with the legal right to undertake certain use of a protected area such as accommodation or guiding | | ✓ | ✓ | | | |
| Licensee | Person or company with the legal right to provide services within a protected area such as visitor transport or waste disposal | | ✓ | ✓ | | | |
| Very important persons | Official guest(s) of a government, of the protected area organisation or of the protected area administration | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

Source: Adapted from Dudley (2008)

Table 23.2 Indicative visitor use of protected areas

| Type of visitor | Type of visitor use | IUCN Protected Area Categories | | | | | |
|--|--|--------------------------------|----|-----|----|---|----|
| | | I | II | III | IV | V | VI |
| Volunteers (officially recognised and supported) | Firefighters and search and rescue personnel | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Historic site maintenance and restoration | | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Walking track maintenance | | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Introduced plant removal | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Fauna protection such as seasonal bird nesting site protection surveillance | ✓ | ✓ | ✓ | ✓ | | |
| | Visitor service support such as volunteer campground wardens or guides | | ✓ | ✓ | | ✓ | ✓ |
| | Researchers—such as those conducting a biodiversity assessment | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Researchers (officially permitted) | All aspects of natural heritage research including baseline condition measurement, trends in condition and ecosystem processes and social and cultural heritage research | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

| Type of visitor | Type of visitor use | IUCN Protected Area Categories | | | | | |
|--|---|--------------------------------|----|-----|----|---|----|
| | | I | II | III | IV | V | VI |
| Commercial users (officially permitted) | Nature-based filmmakers | | ✓ | | | ✓ | ✓ |
| | Visitor access services including pack animals, bicycle, taxi, bus, aircraft, motor launch, snowmobile and others | | ✓ | | | ✓ | ✓ |
| Tourists and recreationists (sustainable use) | Education-focused visitors | | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Car-based sightseers, cycling, photography, painting | | ✓ | ✓ | | ✓ | ✓ |
| | Picnicking, walking, bushwalking, camping | | ✓ | ✓ | | ✓ | ✓ |
| | Nature study and cultural awareness | | ✓ | | | ✓ | ✓ |
| | Orienteering, cross-country running | | ✓ | | | ✓ | ✓ |
| | Use of official horseriding, mountain biking, 4WD and motorcycle routes | | ✓ | | | ✓ | ✓ |
| | Sustainable use (such as management-approved hunting in private protected areas and fishing) | | | | | | ✓ |
| | Approved non-powered flight, hang-gliding, paragliding, hot-air ballooning | | ✓ | | | ✓ | ✓ |
| | Water-based activities, fishing, swimming, sunbaking, canoeing, boating, sailing, white-water rafting | | ✓ | | | ✓ | ✓ |
| | Snow and ice-based skiers, snowboarders, ice climbers | | ✓ | | | ✓ | ✓ |
| | Mountaineering and caving | | ✓ | ✓ | | ✓ | ✓ |
| Spiritual and cultural users (officially endorsed and supported) | Formal access to protected areas for spiritual, ceremonial and cultural reasons such as traditional access routes | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Commemorative users (officially endorsed and supported) | Access to protected areas for commemorative purposes such as visitors returning to sites of cultural significance within a protected area | | ✓ | ✓ | | ✓ | ✓ |

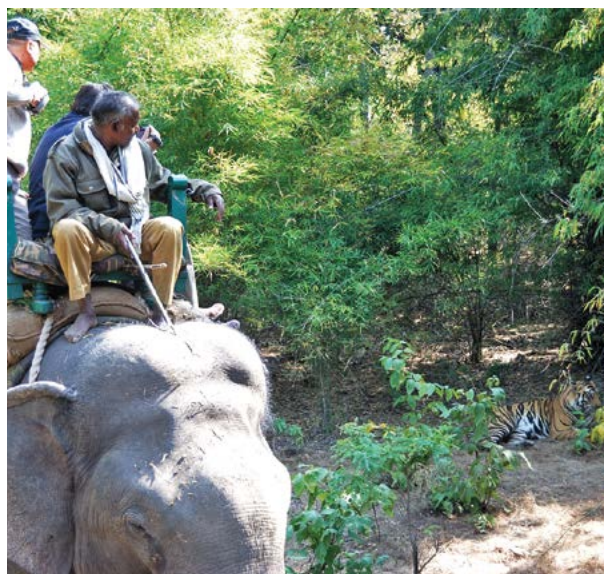
Source: Adapted from Dudley (2008)

‘Under the radar’ people

Some people visiting protected areas are not authorised and do not want to be detected while present, including those engaged in illegal and criminal activities. Such activities include the unauthorised harvesting of natural resources from protected areas (poaching, timber harvesting, farming), the cultivation of drug crops such as marijuana, and unauthorised people using the area as somewhere to live.

Management considerations

There is wide variation in the official and visitor use of protected areas. This immediately introduces a range of management considerations (Table 23.3). Identifying such visitor use management needs also exposes a key principle: protected areas should always be the protected natural destination where possible, with limited and low-key infrastructure for visitors or other uses. Category V protected areas of course are managed differently (see Chapter 8). Exceptions may also occur for Category I–IV protected areas for safety or logistical reasons such as accommodation within some of the very large African wildlife protected areas.



Safety considerations for visitors are critical. Wild Bengal tiger (*Panthera tigris*) observation from elephants (*Elephas maximus*), Bandhavgarh National Park, India

Source: Ashish Kothari

Table 23.3 Visitor management considerations for protected areas

| Management considerations Notes | |
|---------------------------------------|--|
| Policy and planning | |
| Appropriate use | There is a minimum acceptable standard for the respectful visitor and official use of each protected area consistent with its values, purpose and objectives. This needs to be articulated and communicated. It is especially relevant where there are official residents within protected areas. |
| Diversity of recreation opportunities | Ideally there will be a range of recreation opportunities available for a Category II protected area. Some of these will deliberately include non-developed natural destinations. |
| Levels of service | Protected area organisations need to identify the level of service they will provide for visitor destinations. This typically will be linked to a risk-management assessment, the recreation opportunity spectrum categories and the limits of the available budget. |
| Supply and demand management | Visitor marketing strategies and their influence on demand need to be directly linked to the ability to supply a reliable, high-quality destination. |
| Compatible economic development | Protected areas play an important role in local economies. The challenge is to maintain the quality of the protected destination so that the local areas always benefit from use. |
| Operational | |
| Site quality | Clean, well-designed, waste-free, weed-free, well-maintained, non-vandalised and safe destinations are an integral part of protected areas that host visitors. This requires constant work and investment by protected area organisations. |
| Information for visitors | Basic information for visitors prior to their arrival to a protected area, information during their visit and information after their visit are important investments. This could be accommodation information for visiting researchers; map information for hikers; wildlife observation location information for nature enthusiasts; fire trail location signs for volunteer brigade members; and a range of other information. The information may be delivered via a range of media. |
| Information about visitors | Basic data about visitor use are critical for management. This may include basic presence and absence data; volunteer hour contributions; customer service feedback; visitor attitudes; and other data. |
| Quarantine requirements | Strict quarantine requirements may be required for many protected areas and especially Category Ia protected areas. This will help protect protected areas from the spread of pathogens, weeds and pest animals. |
| Access | A range of access may be provided in protected areas. Typically, it is carefully planned. Access may be on foot, by support animals, by vehicle, by aircraft, by boats and submersible vehicle and by a range of structures such as paths, walkways, roads, tunnels and bridges. |
| Facilities | A range of recreation facilities appropriate for a protected area and guided by a planning framework may be provided. Typically, these are low key, and often reflect the cultural and social environment of their setting. Many protected areas (or zones within them such as wilderness zones) will retain facility-free settings as a basis for retaining a diversity of recreation opportunities. |
| Staff support | Well-informed, trained and uniformed entrance station attendants, information officers, field officers and rangers provide invaluable guidance and communication that assist visitors to enjoy their time within a protected area. Learning about the natural and cultural values of an area is a key feature of ecotourism and highly valued by these visitors. |
| Quiet enjoyment | With a focus on biodiversity conservation and nature, there is a basic expectation that protected area visitors can participate and enjoy an environment that is respectful of nature. Managers need to be sensitive to visitor enjoyment impacts that include air pollution and noise. |

| Management considerations | Notes |
|---------------------------|---|
| Crowd management | Crowding may occur at popular destinations during peak times. Planned and enforced visitor use limits for protected areas support ecologically sustainable levels of use, and help to provide safe conditions by enabling access by emergency responders. For those who prefer uncrowded areas, it offers a degree of social comfort. |
| Tensions between groups | On some occasions tensions may arise between two or more people or between groups of people. Recreational opportunity planning and zoning can help to minimise these situations. Booking systems for site use can help minimise tension between groups. |
| Safety | Visitor safety is paramount and vigilance is mandatory. Protected areas would be expected to complete risk-management assessments, to ensure their staff are adequately trained to deal with safety incidents and to ensure necessary equipment or support is available, serviced and on standby. |
| Toilet facilities | Toilet facilities are typically necessary within protected areas. They may range in their sophistication; however, they always need to be clean and adequately maintained. |
| Administration | |
| Revenue management | Revenue management such as the collection of entrance or camping fees will necessitate the handling of cash and other revenue and will bring with it security and audit requirements. |
| Accommodation management | Accommodation may be provided for tourists, visiting researchers and for protected area workers. Accommodation management brings with it responsibilities for booking, revenue management, cleaning, servicing, maintenance and safety considerations. |
| Food and beverage | Restaurant and self-catering facilities may be provided, either by the administration or by a concessionaire or lessor. These can provide a rental to protected area administrators, and provide a route for local employment and procurement. |
| Retail facilities | Shops selling craft, gifts, maps, guidebooks, wildlife viewing equipment and food items can be operated within protected areas. Such facilities will require support services including utilities, security and health inspections. |

Tourism management

Active tourism management in protected areas is crucial to ensure that the natural and cultural resources they protect can be enjoyed by future generations. It is important to learn about the tourism industry and the interests and behaviour of visitors to better plan facilities and activities in protected areas and define the right management strategies. Similarly, it is critical to understand the range, types and intensities of impacts from tourism and ways to prevent, minimise and ameliorate them.

Tourism management in protected areas is crucial because nature tourism can only be sustainable if the natural and cultural assets are conserved. There are many examples throughout the world of how tourism can be beneficial by providing motivation and support for environmental conservation. Indeed, without the financial incentive for conservation derived from tourism, many public sector bodies would probably pay less attention to the protection of the natural environment (Swarbroke 1988).

The major risk of nature tourism is that it also threatens to destroy the resources on which it depends. Therefore, the impacts of visitation on these resources must be carefully managed, directed and mitigated, and the key issue is to determine what impacts are acceptable (Eagles et al. 2002; Newsome et al. 2002). Learning more about the tourism industry and the interests and behaviours of these and other visitors is important for planning tourism in protected areas and identifying the right management strategies.

Definition of tourism

The United Nations World Tourism Organisation (UNWTO 2014a) provides the following definitions.

- **Travel/tourism:** Travel refers to the activity of travellers. A traveller is someone who moves between different geographic locations, for any purpose and any duration. The visitor is a particular type of traveller and consequently tourism is a subset of travel.

- **Tourist:** A visitor (domestic, inbound or outbound) is classified as a tourist (or overnight visitor) if his/her trip includes an overnight stay.
- **Visitor:** A visitor is a traveller taking a trip to a main destination outside his/her usual environment, for less than a year, for any main purpose (business, leisure or other personal purpose) other than to be employed by a resident entity in the country or place visited. A visitor (domestic, inbound or outbound) is classified as a tourist (or overnight visitor) if his/her trip includes an overnight stay, or as a same-day visitor (or excursionist) otherwise.

In relation to protected areas, in this chapter, we use a more specific definition wherein a tourist refers to someone who travels overnight from home for recreation or pleasure and the activities that go with this, and includes industries and services that aim to satisfy the needs of tourists (Worboys et al. 2005).

Sustainable tourism

One of the outcomes of the Rio Earth Summit in 1992 was a global action plan called Agenda 21. In relation to tourism, Agenda 21 promoted the formulation of environmentally sound and culturally sensitive tourism programs as a strategy for sustainable development (UN 1992). The United Nations stressed the need for a balanced approach to sustainable development, and suggests that economic development, social development and environmental protection are three interdependent and mutually reinforcing components of sustainable development (UN 1997). Elkington (1997) referred to this simultaneous pursuit of economic prosperity, environmental quality and social equity as the 'triple bottom line' of sustainable development. As such, sustainable tourism is defined as '[t]ourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities' (UNEP and UNWTO 2005:11–12).

Socially sustainable tourism in protected areas

Socially sustainable use may also have a heightened sensitivity in protected areas, especially where there is the potential for impacts to communities within protected areas or where crowding may result in a less satisfying visitor experience. Special attention needs to be given to host communities such as in World Heritage sites with a desire to retain the cultural integrity of these communities.

Financially sustainable tourism in protected areas

The importance of sustaining tourism revenue for an individual protected area and to a protected area organisation ideally will be to help underpin quality customer service, and safe and clean destinations. Protected area managers need to be sensitive to business needs—for example, the timing of management operations such as burning off, pest animal control, weed control and maintenance tasks can be scheduled to avoid negative experiences for visitors.

Ecologically sustainable tourism in protected areas

Some interpretations of 'environmentally sustainable use' focus on considerations such as air quality, water quality, waste disposal and energy consumption. 'Ecologically sustainable use' focuses attention on ecosystems and biodiversity (CoA 1991). Tourism in protected areas needs to be managed for environmentally and ecologically sustainable outcomes. The World Heritage Convention and associated *Operational Guidelines* (UNESCO 2011) prescribe ecologically sustainable use for its natural World Heritage properties in order to protect the inscribed outstanding universal values. Operational Guideline 119 advises that the World Heritage properties may support ecologically sustainable use provided that such use does not impact adversely on the Outstanding Universal Values (UNESCO 2011). Many such World Heritage properties are protected areas.

The contribution of protected area management to ecologically sustainable tourism (hereinafter described as sustainable tourism) potentially includes:

- advising visitors of the special sustainable care being implemented in the protected area and how they are assisting with sustainable management
- providing special low-impact visitor use opportunities such as assisting researchers with their data collection in protected areas
- minimising impacts to natural destinations through planning for recreation opportunities, determining the nature of facilities to be provided (such as no facilities in some locations) and establishing visitor use planning limits for sites
- through good design and effective planning, harmonising any facilities to the environmental and social contexts of the protected area setting, and if appropriate, maximising energy efficiency and the use of renewable energy sources
- minimising impacts to native flora and fauna through research, monitoring and adaptive visitor use management and limits of use

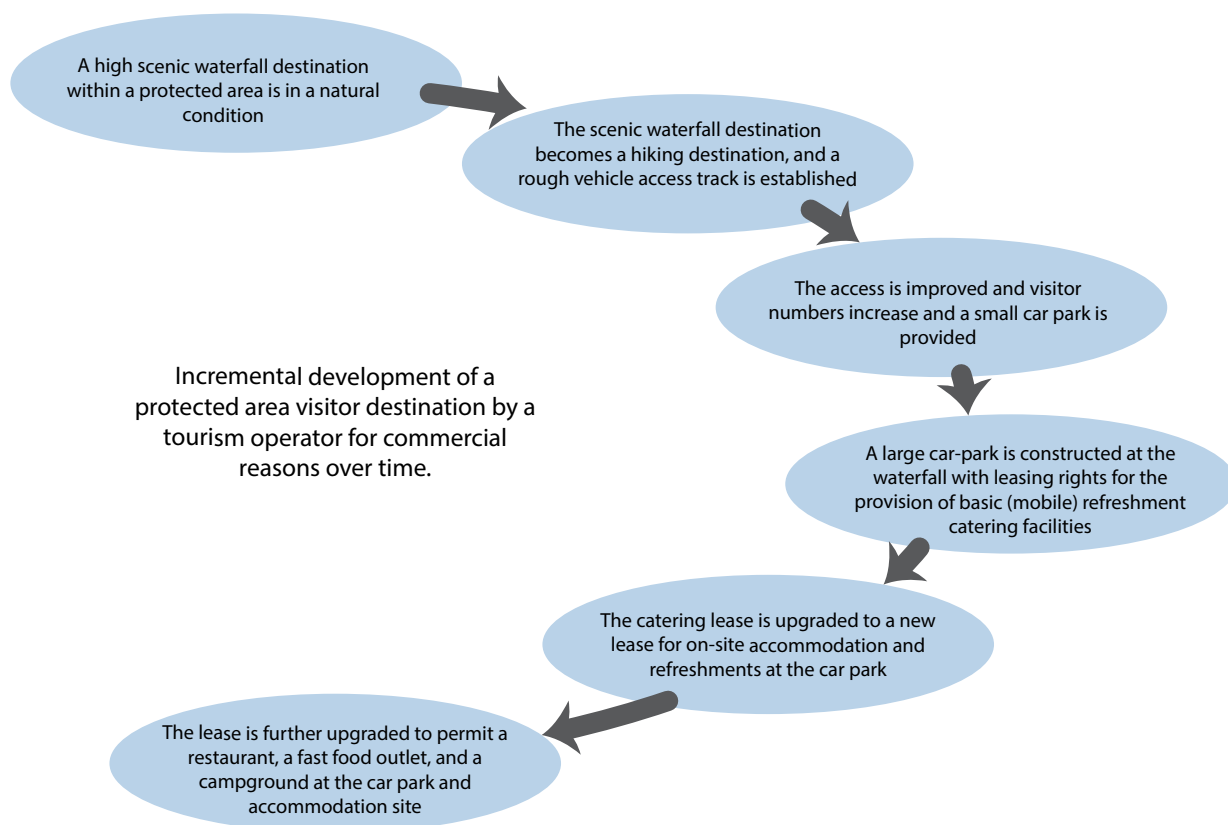


Figure 23.1 Illustration of incremental, tourism operator-driven developments within protected areas, for a hypothetical waterfall attraction

- minimising energy consumption that contributes to greenhouse gas emissions
- minimising, reusing and recycling solid and liquid waste
- minimising the consumption of freshwater resources
- with the tendering of licensed tourism opportunities, providing preference to tourism operators who have appropriate, recognised sustainable tourism industry credentials (such as industry eco-certification or awards for environmental management excellence)
- consistent with the protected area plan of management, providing economic opportunities for local communities and enterprises, including in the ownership of tourism businesses, the provision of products and services to the protected area and its visitors, and employment within the protected area
- sensitive commercialisation of cultural attractions, particularly those that are of interest to both tourists and residents.

Protected areas are preferred destinations for millions of people worldwide and of great interest to the tourism industry. For many tourism operators, they are a prime destination in which to secure revenue and achieve profits for shareholders. Profits are the focus, with the destination normally being a revenue resource. In the

absence of clear management guidelines, gaining legal access to a protected area through a tourism lease or licence can, over time, lead to incremental commercial developments. Conscious, strategic and incremental commercial decisions can transform a former natural protected site to an urbanised site (Figure 23.1). Such overcommercialisation of land and water in Category II protected areas, for example, is creating challenges in many parts of the world (Dudley 2008). The management response is to ensure that the initial leases or licences are rigorous and help to protect the natural destination for the long term.

A way of considering protected area destinations over time is Butler's model of a tourist product life cycle (Butler 1980). Butler conceptualised a tourism product life cycle in which products go through various stages during their evolution including development, consolidation, stagnation and potentially ending in decline (Figure 23.2). The relevance of the destination life cycle to protected areas is in developing sustainable destinations and tourism products. This aim incorporates an objective of avoiding the potential stagnation and decline phases of the life cycle by emphasising stable tourism use from economic, environmental, social and cultural perspectives.

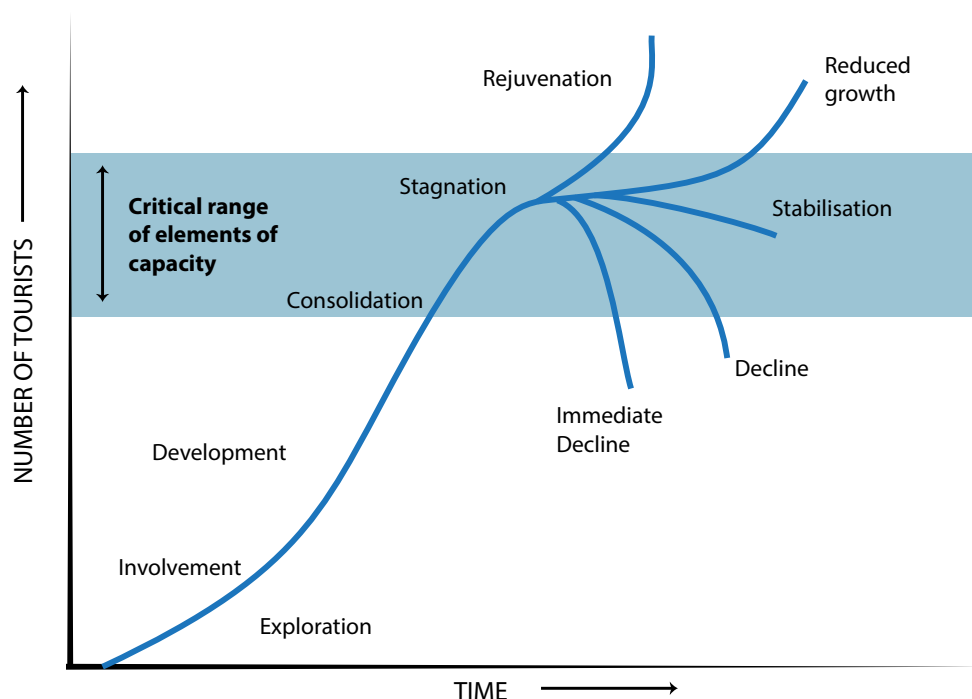


Figure 23.2 Butler's tourism destination lifecycle

Source: Adapted from Butler (1980)

Types of tourism operators

Working with tourism operators within protected areas is a critical part of achieving sustainable tourism outcomes. Every protected area tourism operation is different, and while all operations are typically respectful of their lease or licence requirements, protected area management experience has shown that operators deal with the protected status of the tourism destination in different ways. Three paradigms of tourism operator approaches to protected areas have been recognised and are described here (adapted from Worboys et al. 2005). Understanding these differences is especially important for protected area managers who may be negotiating legal agreements with tourism operators.

Ecotourism operation

An ecotourism operation within a protected area:

- is licensed to operate
- provides basic services such as accommodation, access, transport and food
- runs on a commercial basis; some profits may be returned to the protected area and to local communities
- has a corporate policy that affirms a commitment to the environment, society, culture and the local economy
- has appropriate industry (or other) sustainable tourism credentials

- has a pro-environment focus
- provides high-quality environmental education to visitors, and also to local residents
- employs local people and purchases local products and services to support the local economy
- invests in environmental management improvements
- works closely with managers to help protect the protected area.

Routine tourism operation

A routine tourism operation within a protected area typically:

- is licensed to operate
- provides basic services such as accommodation, access, transport and food
- is professional in working with the protected area organisation
- runs a 'for profit' operation
- provides some basic support information for visitors
- is not necessarily pro-protected area or pro-environment
- may make some occasional positive contribution to the protected area
- has no permanent staff with environmental qualifications.

Development-oriented tourism operation

A development-oriented tourism operation within a protected area typically:

- has a lease or licence to operate
- provides basic services such as accommodation, access, transport and food
- has a pro-commercial and profit-centred ideological approach
- provides lease or licence payments and undertakes mandatory (legal) works
- utilises high-level legal and political support to facilitate pro-commercial decisions within a protected area
- views protected areas as a destination property for the purposes of commercial gain only
- has low tolerance for environmental management considerations and requests for conservation actions
- provides tourism-based employment
- provides an efficient service for visitors
- has no permanent employee expertise in environmental management.

Tourism operations (businesses) within protected areas are typically bought and sold over time. When negotiating longer-term leases for tourism operations, protected area managers must always negotiate terms and conditions as if they are dealing with a development-oriented tourism operation.

Numbers and types of tourists

The UNWTO has forecast annual growth in international tourism arrivals of 4 per cent per annum from 2013 to 2020. In 2013, there were 1.087 billion international arrivals (UNWTO 2014b). This forecast growth has direct ramifications for protected area managers around the world who will need to actively manage tourism within protected areas.

There is a wide range of tourism sectors that relate to protected areas including mass tourism, nature-based tourism, adventure tourism, ecotourism, conservation tourism, cultural tourism, volunteer tourism, educational tourism and religious tourism.

Mass tourism is synonymous with large numbers of visitors undertaking activities with limited differentiation and limited immersion in authenticity. Visitors typically 'switch off' and become ambivalent to their surroundings and any host expectations. Consequently, mass tourism is less likely to achieve protected area management objectives than some of the niche tourism sectors outlined below.



Ecotourists and guides on a rainforest guided tour, Amazon headwaters, Ecuador

Source: Graeme L. Worboys

Nature-based tourism is described as all forms of tourism that 'use natural resources in a wild or undeveloped form—including species, habitat, landscape, scenery and salt and fresh-water features. Nature tourism is travel for the purpose of enjoying undeveloped natural areas or wildlife' (Goodwin 1996:15).

Adventure tourism is a form of nature tourism that incorporates an element of risk, higher levels of physical exertion and often the need for specialised skills—for example, white-water rafting in Grand Canyon National Park, USA (Buckley 2006).

Ecotourism is a subset of nature tourism with stronger ethics. It has been defined by The Ecotourism Society as responsible travel to natural areas that conserves the environment and improves the wellbeing of local people (TIES 1990), and by Frangialli (2001:4) as 'all forms of tourism in which the tourists' main motivation is the observation and appreciation of nature, that contributes to the conservation of, and that generates minimal impacts upon, the natural environment and cultural heritage'.

Conservation tourism takes some of the ethics of ecotourism even further, and has been defined as tourism that operates as a conservation tool—making an ecologically significant net positive contribution to the effective conservation of biological diversity (Buckley 2010). Conservation tourism involves the tourist in conservation activity for part or most of their experience. It can be offered by tour operators, accommodation operators and attraction operators. One of the best-known examples is where land

with high conservation significance and a historical use for grazing or agriculture is purchased, rehabilitated and managed for protected area conservation such as game reserves in Africa and Australian Wildlife Conservancy properties in Australia.

Cultural tourism is a tourism segment that focuses on the culture of a country including history, art, architecture and religion. It had its origins as part of the 'grand tour' of the European continent by the aristocracy in the 17th, 18th and 19th centuries (Chee et al. 1997). It can also include tourism in rural areas and protected areas that showcase cultural heritage such as ancient art sites, historic buildings and intangible heritage. Intangible cultural heritage comprises 'those practices, expressions, knowledge and skills as well as associated objects and cultural spaces that communities and individuals recognise as part of their cultural heritage' (UNWTO 2012:2).

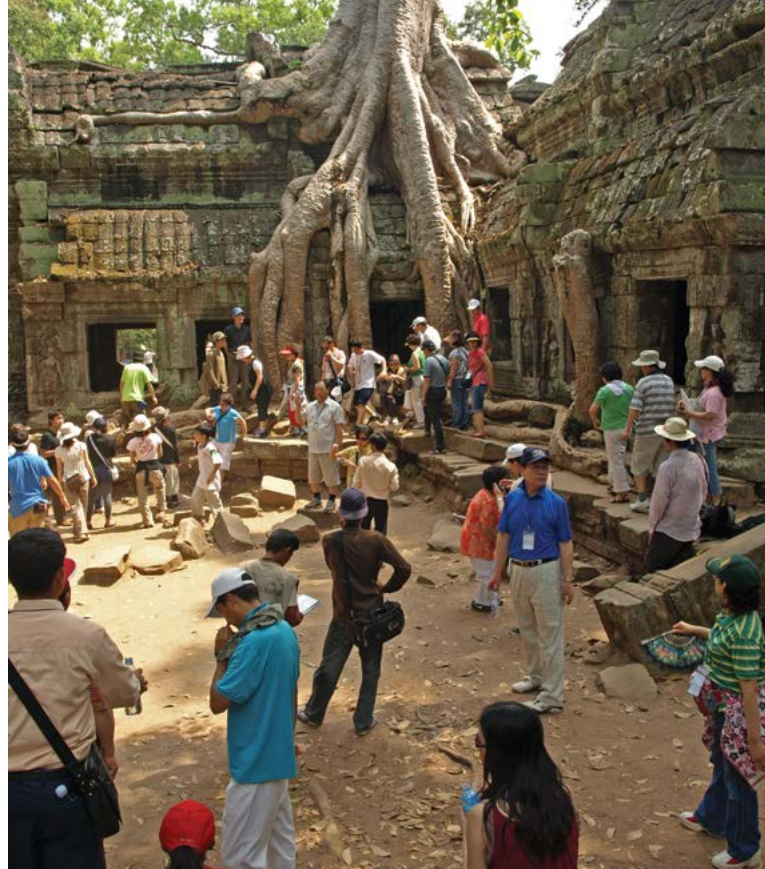
Any type of holiday that includes voluntary service in the destination is considered volunteer tourism. The tourist does not receive any type of financial compensation while undertaking various types of work, and in many cases, must provide financial contributions. Volunteers at Montague Island Nature Reserve in New South Wales, for example, pay a fee to assist with volunteer work on the island (Pacey 2013).

Educational tourism involves travel to participate in educational experiences locally and overseas, but not enrolment in a study program abroad for credit. Many volunteer organisations that are mission driven offer learning trips for school groups (at all educational levels, and in some cases for adults) in which they gain practical experience in some cultural, scientific or community development fields including protected areas. The private Monteverde Cloud Forest Reserve in Costa Rica, for example, has a major educational focus (TSC 2014), as do most Category II protected areas.

Religious tourism, or faith tourism, is where people travel for pilgrimage, missionary or leisure purposes, such as access to important sites within the Great Himalayan National Park of India in respect of important religious ceremonies (Weaver and Lawton 2002).

Other types of tourism that may involve private protected areas and Category V and VI protected areas in particular include rural tourism, agrotourism and consumptive tourism (where wildlife or plants are collected, hunted or fished on a managed and sustainable use basis).

Recreation is activity voluntarily undertaken primarily for pleasure and satisfaction, during leisure time, and is a regular feature of protected areas (Worboys et al. 2005). For the purposes of this chapter, the term tourism is taken to also refer to recreation.



Visitors, Ta Prohm Temple, Angkor, Cambodia

Source: Graeme L. Worboys

Domestic versus foreign tourists

According to the UNWTO (2014a), inbound tourism comprises the activities of a non-resident visitor within the country of reference on an inbound tourism trip. Internal tourism comprises domestic tourism plus inbound tourism, encompassing the activities of resident and non-resident visitors within the country of reference as part of domestic or international tourism trips. Outbound tourism includes the activities of a resident visitor outside the country of reference, either as part of an outbound tourism trip or as part of a domestic tourism trip. Finally, international tourism comprises inbound tourism plus outbound tourism, including the activities of resident visitors outside the country of reference, as part of either domestic or outbound tourism trips and the activities of non-resident visitors within the country of reference on inbound tourism trips.

Same-day versus overnight tourists

Overnight tourists and day visitors will engage in different types of activities in protected areas, depending on their time availability and the facilities or products offered by the destination. Knowing how many visitors are same-day or overnight is important to help assess the types of accommodation, infrastructure and services that should be provided outside protected areas and for day destinations within parks.

Organised tours versus independent travellers

Tourists can be part of organised tours or independent travellers. Potential protected area visitors could purchase a tour package from a local tour operator or travel agent, or through their hotel or all-inclusive resort or increasingly via the internet. Protected areas offer tourism companies the opportunity of adding value to the excursions they offer, and for many specialist tour operators, visits to high-quality sites with global recognition can be important for sales. Organised group tours will usually be led by licensed tour operators who are often responsible for clearly conveying to travellers information about their rights and obligations when visiting a protected area.

Some visitors may be free independent travellers who have made arrangements based on word-of-mouth, online social network recommendations or suggestions from a local hotel, guidebook, tourist information office and/or official websites. In some cases, it can be harder to manage the actions of individual tourists than those on organised tours in protected areas.

Working with the tourism industry

Setting the context

Protected area managers' work with the tourism industry typically starts with understanding needs, expectations and opportunities. Working together requires clear recognition that tourism in protected areas must be consistent with the goals of the protected areas, including the primacy of conservation objectives and recognition of the costs and benefits associated with tourism in protected areas. Costs include providing and maintaining tourism infrastructure and the environmental impacts of tourism (including the costs of minimising impacts and restoring damage once it occurs). Benefits include social and economic outcomes—for example, local employment and procurement, and local social service benefits.

What tourism operators need from protected area managers

The tourism industry needs safe, reliable, clean, accessible, well-managed and customer-friendly tourism destinations for their customers. They need the administration of their leases and licences to be orderly with long lead times for any changes (for example, to fees) to be respected. Protected area operations that could impact on tourism, such as roadworks, fire fuel reduction programs and pest animal and weed control programs, could be undertaken during times of low visitor use if

possible. Such courtesies would form part of a healthy and positive partnership with tourism operators. Beyond these key needs are many more related and supporting requirements, such as to provide and maintain access-based infrastructure; basic visitor facilities to enjoy the protected area, such as shelter and amenities; and relevant and interesting information and interpretation about the protected area for visitors.

What protected area managers need from tourism operators

Protected area managers have multiple responsibilities and are focused on a range of issues. They are assisted if tourism operators within the park can help with management by:

- communicating to their guests a message of the importance of the protected area and the work done behind the scenes by the managers that keeps the area special
- identifying any special help from guests that could protect the area—for example, not touching cave paintings
- identifying how their business is positively contributing to the improved management of the protected area
- respecting requests for protection of the reserve.

Benefits of well-managed tourism to protected areas

Well-managed tourism can contribute to protected area management by:

- raising the profile of the protected area at local, national and international levels
- bringing visitors to the protected area, particularly people needing services and facilities to make the journey
- interpreting the values, conservation issues and management issues for visitors
- providing economic justification for declaring and managing the protected area (generating visitor spending, employment and investment in the protected area or surrounding community)
- providing financial support to protected areas through payment of charges and fees
- providing human resource support through conservation tourism activity
- providing political support for the conservation of the protected area, and the resourcing needed to do this effectively.



Figure 23.3 Scales of tourism businesses

Source: Adapted from UNEP (2005)

Planning collaboration with the tourism industry

The broad range of travel and tourism enterprises and tourists means that protected area managers will need to consider an array of strategies for collaborating with the tourism industry—there is not one standard model for developing such relationships, and each case needs to be considered in context (UNEP 2005). Because of the way the tourism industry is organised, outbound tour operators (or international tourism companies such as cruise lines) do not often have direct links with protected areas. While inbound tour operators generally have some links, locally based companies are likely to have the closest links with any nearby protected areas (Figure 23.3).

Strategies and activities for connecting protected area managers with the tourism industry will also be determined by how visits to a specific protected area are organised and how tourists learn about the area. The following three scenarios are a starting point for considering which strategies may be most suitable for working with the tourism industry (UNEP 2005).

1. If tourists come as part of a package bought abroad then connections with international tour operators—initially by making links with the local inbound operators that international companies use—are likely to be important.
2. If travellers purchase their trip or tours locally, links with local tour operators and travel agents will be more suitable.
3. If tourists are organising their own trip, links with local hotels, tourism information offices, visitors' centres, websites, social media and traveller web forums will be most important.

It is also relevant for managers to take into account whether they want to be 'actively' engaged in tourism by creating and managing tourism products and services themselves, or more 'passively' involved by hosting activities that are operated by others (for example, using concessions and managing contracts in outsourcing).

Leases and licences

A structured and clear framework for tourism within a protected area helps set expectations and creates space for opportunities. At the most basic level are legal contractual tools that a manager uses to approve a tourism operator accessing the protected area. Examples of these include concessions, permits, licences and leases. These contracts set the expectations for operation and any fees required. They have fixed time frames and may be extended with a simple payment or may require regular reviews and updates.

Tourism policy and plans

At a more advanced level are tourism policies and plans for protected areas. These shift management from reactive to proactive management by introducing strategic approaches to making tourism more sustainable. These can be integrated within management plans for a protected area or may be stand-alone documents.

Tourism policies can address:

- the rationale for permitting tourism in protected areas
- the types of tourism and activities permitted
- sustainable tourism elements, including conservation and local economic impact
- preferred types of tourism and activities
- contractual requirements
- fee collection.

Tourism plans can address:

- current and forecast visitation
- current visitor profiles and desired target markets
- current tourism impacts and ways to minimise them
- improvements to tourism infrastructure and services
- improvements to interpretation
- zoning for different forms and levels of tourism development
- locations for new tourism investment, facilities or activities
- ideas for new tourism experiences.

Tourism revenue

Many protected area management agencies lack the funds to properly respond to tourism needs and management (Emerton et al. 2006a). Funds are typically larger in developed than developing countries, and often funds are greater where tourism activity and development are concentrated. The cost to manage these areas is, however, higher—typically cancelling out the gain. Under the principle of user pays, funds to manage tourism can be raised from direct and indirect sources.

Entry fees

The most common revenue from tourism is a direct entry fee to enter the protected area (Font et al. 2004), though revenue is also raised from activity fees. Protected areas with significant tourism concentration areas can attract 40–60 per cent of their funds from user fees (UNWTO 1995; Emerton et al. 2006b).

A major challenge is ensuring that the funds are reinvested into protected area management. Many governments transfer the collected funds into their centralised revenue management and do not equate redistributions to original income, so at best, one protected area pays for another, and at the greater extreme, protected area revenue may contribute to unrelated whole-of-government services, such as defence. Other governments use the fees to reduce their traditional allocation to the protected area, so if visitor fees decrease, management is left significantly underfunded. Park agencies permitted to manage their own funds are typically more autonomous, entrepreneurial and efficient (Phillips 2000; Lockwood et al. 2006). One protected area organisation, the NSW National Parks and Wildlife Service of Australia, for example, negotiated a formula with the NSW Government by which they retained revenue raised and were not overtly penalised for new revenue collection.



Exuma Cays, Bahamas, marine protected replenishment area: visitor fees collection box

Source: Simon McArthur

The second major challenge with collecting entry fees is to ensure the cost of collection is significantly lower than the revenue generated. It is often uneconomical to collect fees in remote areas, while in seasonal areas, it is often economical to charge in the peak period and not in the low season. If the profit margin is small, it is difficult to show where the revenue has been invested, reducing stakeholder support for the charge.

The third challenge is to set fees that reflect levels of use and subsequent management costs. A flat entry fee is often not seen as fair, because some visitors use the area more than others, create greater negative impacts than others or create more demand on management than others. Some alternatives to a standard entry fee are provided (Table 23.4).

Though more complex to manage, a user fee is more effective than an entrance fee because the price is better matched to use and subsequent management.

Table 23.4 Alternative methods for entry charges

| Alternative | Explanation | Example |
|---|---|--|
| Charging for time | Charging a day rate, with more for an overnight stay | A car park with time-based parking charges |
| Charging different amounts to use different areas | Charging more for costly management areas and less for low-cost areas, or more for visiting or using highly desirable areas | Higher pricing for beachfront camping than inland camping |
| User fee | Charging more for activities requiring more infrastructure and management | Higher pricing for snow skiing entry compared with summer visitors |
| Higher price for those who can afford more | Higher price for international visitors, discounted fee for nationals, free entry for locals | Charging more for international visitors than for national or local visitors |
| Charging for peak and off-peak use | Charging higher rates for entry during the most popular time of the year | Higher fees during holiday periods, or for skiers, during winter months |

Table 23.5 Methods for collecting revenue from the tourism industry

| Operator charge | Explanation | Ideal tourism sector |
|------------------------------|---|---|
| Permit fees | A small charge is levied annually or as needed | For irregular operations, such as events and functions, and very small seasonal businesses and activities |
| Concessions and licence fees | A modest charge is levied on an annual basis as part of a licence that documents how the operation can occur within the protected area. Often this can be provided with exclusivity provisions, thus providing opportunities for higher returns | For regular small to medium-sized operations, such as transport and tour operators |
| Lease-based rental | A fixed amount of rent is charged on a monthly or quarterly basis, usually increased with inflation. Often this can be provided with exclusivity provisions, thus providing opportunities for higher rentals | For businesses with fixed operations drawing significant revenue and requiring significant management support, such as accommodation (resort, lodge, tented camp), food and beverage (restaurant, function centre, cafe), attraction (adventure park, cable car) and major fixed transport (airport, port, marina and trains) |
| Turnover charge/overage | Once turnover is higher than an agreed amount, the operator pays a proportion of the additional turnover to the protected area manager | For businesses with potential to grow — particularly through cooperative ventures with protected area management |
| Shared service agreements | The operator agrees to undertake roles that would otherwise be done by the protected area manager, in exchange for lower financial charges | For businesses that can provide services more cost-effectively through multi-tasking employee roles, sharing infrastructure and equipment—for example, road and trail maintenance, amenity cleaning and maintenance, interpretation provision and basic conservation activities |

Operator charges

Tourism businesses operate within and make money from using protected areas. Protected area managers, therefore, have a legitimate right to charge the operator for their use of the area. Some of the ways that revenue can be drawn from operator charges are described (Table 23.5).

Many operators will gladly consider shared agreements to reduce costs they would otherwise pay to the protected area manager. Greater use of this approach would jointly benefit tourism and protected area management. Most tourism businesses accept being charged, but like visitors, they expect to see the funds reinvested in protected area management and services where the revenue is raised. When the protected area organisation increases operator fees with less than a year's notice, there

are significant impacts on business. Operators have long lead times for third-party bookings, so they have already set pricing and received payment for products sold and any increase in charges cannot be recouped.

Protected area agency commercial businesses

Some protected area management agencies choose to run their own commercial tourism business and collect revenue through business profit such as SANParks in South Africa (SANParks 2011). Protected area agencies can operate anything that the tourism industry does, including equipment hire, sale of food and beverages and merchandise, and guiding. Agencies usually choose to operate the business because:

- they believe they can make more revenue than the operator (due to them having a competitive advantage)
- there is little interest or capacity from the industry
- the agency wants to maximise control over the product or service.

Clear policy and procedures and strong management are needed to ensure a transparent, fair and non-corrupt operating environment (Font et al. 2004).

Marketing

Marketing of protected areas needs to be actively managed by a protected area organisation. Through such management, the important relationship between the supply of destinations within a protected area system and the demand for their use can be professionally managed. It is one important way in which protected area organisations ensure that destinations are not overrun by too many tourists with consequent impacts on biodiversity values and site degradation. It can also assist the long-term social and financial aspects of a sustainable tourism industry by guaranteeing the supply of high-quality visitor experiences. How, when and where protected area destinations are marketed should not be just delegated to the tourism industry; there needs to be a positive and active working partnership between tourism organisations and protected area organisations.

Marketing is one of the most powerful tools for effective visitor and tourism management. Marketing is much more than promotion and sales; it is the task of creating, promoting and delivering goods and services to consumers and businesses (Kotler 2003). Conventional marketing is based on the five 'Ps' (Aaker 1995).

1. What services and experiences to offer to whom (product).
2. How much to charge, to whom and under what terms and conditions (price).
3. Where to offer the product (place).
4. Who will deliver the product and how will they treat the customer (people).
5. How to raise awareness and interest in the product (promotion).

We focus here on the following strategic elements to effective marketing:

- visitor and market research
- market segments
- destination branding and positioning
- effective promotion.

Visitor and market research

No two visitors are the same in respect of who they are, what they want, what they did, what they thought of the protected area and whom they told about it. Visitor research is designed to answer these questions and subsequently empower managers with the knowledge of what to offer to whom and why. Without this knowledge, protected area managers end up trying to be 'all things to all people', impressing few people and becoming totally frustrated themselves. Some of the visitor research tools available to protected area managers are presented (Table 23.6). Visitation counting and straightforward questionnaires are typically completed by the protected area manager, while the other more sophisticated tools are typically completed by tourism and market research consultants. In choosing a tool, managers need to weigh up the typical trade-off between cost-effectiveness and the degree of insight and revelation that can be reliably generated. Getting expertise to help determine this is a small but often worthwhile investment.

Table 23.6 Visitor research tools

| Visitor research tool | Strengths | Limitations |
|--------------------------|---|--|
| Visitation counting | Counting visitor numbers provides indications of the level of use, and to some extent the nature of use (timing, length of stay, group size) Visitation counting provides baseline data to identify historical trends, forecasts and for economic and financial modelling | If used on its own, a reliance on visitor numbers can be dangerous, because it encourages thinking that all visitors are the same Counting is rarely accurate and has generated some huge misperceptions (for example, visitation can seem to increase when in fact the increase is due to the introduction of more counters) |
| Behavioural observations | Very useful at exploring what is unknown, for another research tool to use as a frame of reference to formulate its structure. Generally used to map where a person goes, what they do and for how long they do it. Structured observations anticipate behaviour and log data into tables that can be further quantitatively analysed. Unstructured observations regard whatever happens and may use qualitative analysis | Generally human resource dependent, which makes it expensive, particularly when there are few visitors about and the observer still needs to be paid. Requires careful analysis afterwards and qualitative analysis skills are more difficult to access |
| Questionnaires | Preset questions are typically administered on paper, online or face-to-face, providing a high degree of control over the data and the ability to easily analyse and compare results, including statistical testing | Poorly written questionnaires generate poor and unreliable results. Results can be affected by incorrect question order, irrelevant optional choice answers and poorly phrased questions. Results can be manipulated or misinterpreted to suit the researcher's objectives |
| Face-to-face interviews | Similar to a face-to-face questionnaire, but generally uses fewer questions. The objective is to get the respondent talking more freely and therefore discover more in-depth information, such as the underlying cause of issues or how a solution could be developed and implemented | Generally human resource dependent, which makes it expensive, particularly for time spent travelling to each respondent for an interview. Dependent on selection process choosing the most appropriate interviewees, which are not always those in power or with a high profile |
| Focus groups | Building on the face-to-face interview, having a group of people can generate greater discussion and revelation, as people add value to each others' contributions | Much more expensive than questionnaires, and requires considerable preparation to structure the discussion, considerable facilitation expertise and considerable time afterwards to analyse the results |
| Social media | Analysis of social media data about protected area destinations is an important information source | User and recommendation data are available, for example, from software applications such as Yelp |

Sources: Adapted from Hall and McArthur (1998); Yeo (2005)

Market research samples non-visitors or past visitors to a protected area. Some of these people could be persuaded to become visitors, and some may even be a better match to the protected area than some of the existing visitors. Protected area managers use market research to identify profiles for these non-visitors (particularly their needs and wants) and then determine which profiles could be considered potential visitors for whom to design experiences and attract to the protected area. Since non-visitors are more difficult to find and interact with, market research typically uses online questionnaires to identify potential markets and then focus groups to

further research needs and test new ideas. This work is sometimes done by tourism and market research consultants contracted by the protected area manager.

Market segments and target markets

Mass marketing is where there is mass production, mass distribution and mass promotion of one product to everyone (Tynan and Drayton 1987). Mass marketing creates the largest potential market, which leads to the lowest potential costs, which in turn can lead to lower prices or higher margins (Aaker 1995; Dibb and Simkin 2009). Mass marketing does not work for protected areas because their legislation prevents them

from being ‘all things to all people’. Mass marketing can result in some people coming to a protected area wanting to undertake activities that can compromise the place and other visitors.

The alternative is to break the mass market down into market segments, and choose the segments whose needs best match the product—the target markets (Hunt and Arnett 2004; Yeo 2005). Beyond this, the manager can focus experiential development, promotion and pricing on the needs of the target market. Visitor monitoring can then include questions to identify respondents, reflecting the characteristics of the target markets, and then treat their responses to other questions with greater importance (such as satisfaction and likelihood to return or refer a visit).

A market segment is a group of people with similar characteristics—especially a similar set of needs (Yankelovich and Meer 2006). Market segments are typically broken into:

- geographic (residence and workplace by local area, region, State, country or continent)
- demographic (age, gender, family size, life cycle, income, occupation, education, and so on)
- psychological (attitudes, risk, motivation, and so on)
- psychographic characteristics (lifestyle, activities, interests, opinions, needs and values)
- behavioural (brand loyalty, usage rate, benefits sought and used).

The tourism industry typically uses segmentation based on geographic and demographic characteristics, because they are simple and cheap to use. These characteristics, however, have limited value when developing a protected area's brand, positioning, product or experience, because they are too generic. Market segmentation offers a number of practical uses for the protected area manager, including being able to:

- define the market from a consumer's point of view
- rationalise policies for existing brands and products (to improve competitiveness and market share)
- position a range of brands and products
- identify gaps in the market that offer new opportunities (Lunn 1978, cited in Tynan and Drayton 1987).

It is possible to develop a questionnaire to determine which market segments visitors to a protected area come from. Another practical way to use market segments is to monitor the representation of target markets versus other markets within the visitors to a protected area.

Destination branding and positioning

A brand is the source of a distinctive promise for customers from a product, service or place (Baker 2012). Determining a brand for a protected area is more complex than most managers anticipate and it is also an initiative whose appropriateness needs to be carefully considered. Fundamentally, any brand developed for a protected area needs to be consistent with its protected area status. For a specific destination within a protected area, the brand also includes how people interpret the destination for themselves (Aaker 1997), so considerable consultation and market research are needed to understand how people perceive an area and the brand.

From consultation and research, a brand pyramid is created (Figure 23.4). The bottom two levels of the pyramid are the obvious attributes of the destination and the visitor benefits. Then the distillation starts and a brand personality is created. From this brand personality come brand value and subsequently the brand essence. The brand essence is the heart and soul of the brand, and is often reflected by a concise phrase or tagline. For example, the brand essence for Parks Victoria (Australia) is ‘Healthy Parks, Healthy People’. Other elements include a logo, photographic image, writing style, fonts and colours.

Helping to communicate the brand is a unique set of visual, auditory and other stimuli that shape market perceptions. Two of the most useful communication elements for a protected area are the tagline and a single photograph, both of which need to be used relentlessly and consistently. A logo is not critical to marketing a protected area (but it is important for branding the agency). Everything a protected area manager does in collaboration with their partners and stakeholders should be designed to constantly deliver this marketing perception. The more people are aware of a brand, the more value or equity it has, and therefore the more an agency can use it to drive their own objectives. The brand can also be very useful as a frame of reference for considering the development of new visitor experiences by asking: does it reflect or dilute our brand?

Once the manager has developed the brand, they need to position it. For the protected area manager, positioning is the art of developing and communicating meaningful differences between the offerings of their area and those of their competitors serving similar markets (Baker 2012). Alternative ways to position a protected area are described (Table 23.7). The key to deciding on position is the alignment between sustainable protected area tourism opportunities and the needs of the market.

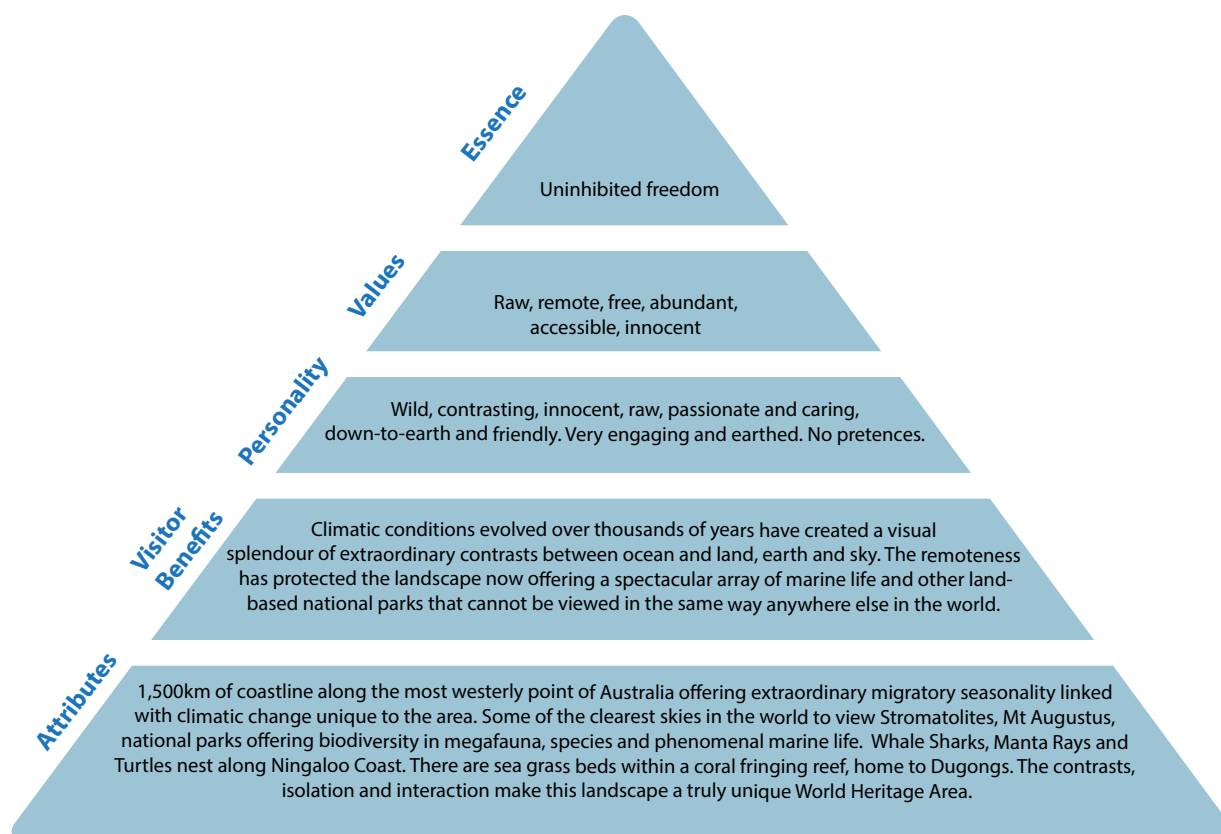


Figure 23.4 Brand positioning pyramid, Ningaloo–Shark Bay, Australia

Source: Adapted from Tourism Australia (2010)

Table 23.7 Positioning a protected area

| Positioning alternative | Example for a protected area |
|--|--|
| Uniqueness attribute | A feature that is the biggest, smallest, highest, shortest, oldest, fastest, most prolific, most dangerous, most venomous or an excellent representative of its class, and so on |
| Scarcity | Rare, vulnerable, endangered Under attack, disappearing |
| Product class | Use local, regional or national significance listing Use World Heritage inscription |
| User need or benefit | Clean air or water, lack of crowds, sense of freedom, connection to family heritage |
| Lifestyle association | Adventurer, confident, risk-taker |
| Famous contemporary association with the product | Location of a well-known film shoot or event Location where well-known personality lived or did something significant |
| Value for money | Compare interpretative experience and price to that of a movie in the cinema or entry to an amusement park |
| Positive feedback | Use high level of positive feedback to suggest if it worked so well for previous visitors it should for future ones |

Source: Hall and McArthur (1998)

Promoting a visitor experience

The tourism industry has traditionally seen its role as the provider of saleable tourism products, such as tours, attractions, accommodation or restaurants. Most protected area managers have traditionally seen their role as the acceptance of certain activities and

the provision of visitor infrastructure and facilities supporting them. Over the past decade there has been a move for both sectors to put more effort into the creation, marketing and occasional reinvigoration of tourism experiences (Wearing et al. 2007).

A tourism experience is much more than an activity or product; it is the combination of activity, setting, social interaction and the personal connection that arises (Tourism Australia 2012). An experience engages the senses; it is physical, emotional or spiritual (or all three). An experience offers discovery and learning, and creates strong memories. Experiences go beyond nice places and good views; instead they connect visitors to the place—the environment and the culture (Tourism Australia 2012). A way to enhance these experiences is by creating a sense of place based on ‘genius loci’. Tourists and visitors will learn and appreciate a protected area more when they can connect to the place they are visiting. This is called ‘creating a sense of place’ and is based on the natural and cultural resources and the ‘spirit’ of the area. It is based on the people, local communities living in the area, their ‘knowhow’ and their traditions.

To make a protected area an effective tourism destination, it should have:

- signature experience(s), often referred to in the tourism sector as a heroic or iconic experience because it stands out as totally reflecting the brand and leading the way in attracting visitor interest and satisfying visitors
- supporting visitor experiences, ideally reflecting parts or all of the brand, and offering opportunities complementary to the signature experience
- ancillary goods, services, products and infrastructure accessible to a protected area such as airports and access roads, service stations, car parks and visitor information.

If marketing of a protected area is done effectively, it can predominantly attract target markets rather than mass markets, and it can set the expectations of these people prior to their arrival (Hall and McArthur 1998; Reid et al. 2008). It is much easier and more proactive to set realistic expectations within marketing than it is to unnecessarily regulate, harden a site or try to change visitor behaviour on site.

The marketing of a protected area for tourism purposes should lead with the target market doing the signature experience, competitively positioned and reflecting the tagline and personality of the brand. Photographs need to be powerful in demonstrating these elements. They need to reflect the essence of the experience and the emotional impact it has on the target market. Unfortunately, most imagery used lacks power, so the promotional collateral is lost among other competitors or even other promotion. Figures 23.5a and 23.5b compare the traditional landscape-driven approach to marketing a protected area with a contemporary experience-based

marketing image. Ideally, protected area managers should engage a tourism marketing consultant to scope a photo shoot that captures all the elements. After this, the leading image of the signature experience needs to be slavishly featured and used in as much promotion as possible.



Figure 23.5a Uluru-Kata Tjuta National Park and World Heritage Property Australia: standard image

Source: Simon McArthur (1999)



Figure 23.5b Uluru-Kata Tjuta National Park and World Heritage Property Australia: ‘Uluru experience’

Source: Melbourne Business Community (2013)

Recreation opportunities management

A key tool for planning and managing recreation opportunities is the ‘recreation opportunity spectrum’ (ROS). The ROS focuses on the protected area setting in which recreation occurs (Clark and Stankey 1979). A setting is the combination of physical, biological, social and managerial conditions that give value to a place. Thus, an opportunity includes qualities provided by nature (vegetation, landscape, topography, scenery), qualities provided by the sociocultural setting, qualities associated with recreational use (levels and types of use) and conditions provided by management (developments, roads, regulations). Multiple opportunities imply a choice for recreationists; people must be aware of the

opportunities, and the opportunities must comprise conditions desired by recreationists. Thus, opportunities are a function of user preference and a product of management actions designed to provide desired settings and make people aware of their existence.

The basic assumption underlying the ROS is that quality in outdoor recreation is best assured through provision of a diverse set of opportunities (Clark and Stankey 1979). A wide range of tastes and preferences for recreational opportunities exists among potential visitors. Providing diverse settings varying in level of development, access and so forth insures that the broadest segment of potential visitors will find quality recreational/tourism experiences. People vary enormously in what they desire from their recreational pursuits, even for specific categories of recreationists; not all campers, hikers or wilderness users are alike. Building management programs around average tastes can miss the mark as they may not adequately account for variation in tastes (Shafer 1969).

Diversity ensures the flexibility necessary to mitigate changes or disturbances in the recreation system stemming from such factors as social change (such as changing age structure of a population) or technological change (such as increased availability of outdoor recreation vehicles). But diversity is only a means to an end. Quality recreation, producing desired satisfaction and benefits for participants, is the objective and concern of both managers and recreationists.

In managing for a diversity of recreation opportunities within a protected area, often the hardest long-term management task for protected area managers is to keep natural settings natural. Site hardening is often an intuitive managerial response to damage at a visitor destination but often it is exactly the wrong response. The more natural settings that are hardened, the fewer natural settings remain and the greater is the diminishment in a diversity of recreation settings in a protected area. As we move further into the 21st century, the untouched recreation settings will be the ones that become the rarest and most valuable. There are other ways to manage impacts that retain the untouched values—this includes professionally rejecting constant calls for development. Actions could include establishing limits to visitor numbers and frequency of use for a site, precluding access on wet days, rotating the use of sites and other actions (Box 23.1). A danger is a shift in focus when the tour of duty of one protected area manager ends and a new manager starts. This danger can be minimised by clear and precise ROS planning for all tourist destinations within a protected area system and thorough induction and briefing for new staff members.

Box 23.1 Reducing impacts at visitor destinations

In general, there are four strategic approaches that can be used to reduce the negative impacts of visitors on protected areas.

1. Managing the supply of tourism or visitor opportunities—for example, establishing quotas, by efficiently using the space or the time available to accommodate more use.
2. Managing the demand for visitation—for example, through restrictions on length of stay, the total numbers or type of use.
3. Managing the resource capabilities to handle use—for example, through hardening the site or specific locations, or developing facilities.
4. Managing the impact of use—for example, reducing the negative impact of use by modifying the type of use, or dispersing or concentrating use.

The principal question is to determine what degree of impact is acceptable.

Visitor services and facilities

Before providing visitor services and facilities for a protected area, managers must be sure why they are doing so. Service and facility provision should depend in large measure on desired visitor experience opportunities, which in turn emerge from underlying management objectives. Such objectives include protection, conservation, education, public relations, research, fundraising and recreation, among others.

While most managers recognise that tourists require a range of services and facilities to experience a site, other kinds of visitors also must partake of visitor services and facilities to experience the same site. School children need food, bathrooms and a place to eat; scientists need guides, laboratory facilities, food, trails, library resources and internet connections; reporters need to be attended by knowledgeable park staff; politicians obtain VIP attention and highly skilled information managers.

Frequently, the contributions visitors deliver in support of park objectives depend on whether they have enjoyed their stay. If they have a positive experience, their disposition to participate soars (Ham 2013). If they have a negative experience, not only would any sense of cooperation potentially plummet, but also their provoked inclination to spread negative recommendations could damage park public relations (Priskin and McCool 2006; Cole and Williams 2012).

Recreation managers have been calling for greater diversity of recreational opportunities since the mid 20th century (Driver et al. 1987) to increase quality, meet the demands of a greater variety of visitors, leave them more satisfied and induce greater visitor support for management objectives (Manning 1985; Kohl 2007). Managers, however, cannot guarantee personal experiences, only opportunities for visitors to have experiences. An experience is highly personal, created in the mind of the visitor but dependent on numerous factors. Pine and Gilmore (1999) define an experience as follows: (EVENT [situation + activity + resources] → REACTION → MEMORY) = EXPERIENCE.

Not only do visitors increasingly seek authenticity in the marketplace (for example, an experience that is more primitive than or different to their lifestyles), but also the degree of authenticity varies significantly, affecting the quality of their experience. For this reason, managers must understand both how authenticity influences visitor experiences and how to manage for it to improve those opportunities.

The experience, and hence services provided (or planned lack of services provided), is initiated long before the visitor arrives on site. The visitor fashions expectations based on information from websites, social media, promotional materials and word-of-mouth. The experience continues after the visitor returns home as they reflect on what happened to them as well as on any follow-up materials or communications received from service providers or people they met along the way. Once again, protected area managers can offer pre and post-trip information to round out the visitor experience. Other service providers also court travellers by offering information, transportation, accommodation and other services that can also influence the quality of the experience.

Though all visitors generate an experience, they do not all specifically seek them. Different visitors can be thought of as demanding opportunities at different levels. The lower the level on a 'hierarchy of visitor demands', the greater is the visitor's self-awareness (Driver and Brown 1978). This model posits that visitors demand activities (hiking, canoeing, birding) in certain settings (unmodified natural areas, places with some or total modification) to achieve certain experiences (solitude, insights), ultimately to benefit from specific social-psychological outcomes (improve family relationships, fitness, nature appreciation, self-confidence). In light of such diversity, we can identify no such person as the 'average visitor'. Rather, each visitor pursues differing configurations of demand (Cole and Williams 2012).

Whether one categorises visitor experience opportunities using the ROS, market segmentation or some other classification, different visitors require different kinds of experiences and hence different combinations of services to meet their needs for quality, comfort, security, environmental settings and levels of authenticity.

Types of services and facilities

Support services and facilities

These are the types of services and facilities provided to help support, maintain and restore the 'basic' needs of visitors. What constitutes a 'basic' need is obviously context-dependent, with the 'basic' needs of some seen as 'luxuries' by others, or in other contexts. Therefore, basic support services and facilities could be a pit toilet and 'luxury' could be access to water that is safe to drink. Support services and appropriate facilities can be complex and encompass a diversity of services and facilities, as seen in some visitor centres. It is important for managers to know what types of needs, desires and expectations visitors might arrive with and how to match them to the reality of what appropriate facilities can be provided. This is why Recreational Opportunity Spectrum-based planning and zoning are so important in protected areas.

Orientation services and facilities

It is essential for managers to know what types of orientation services and facilities tourists may require. These types of services and facilities could include directional signage, informational brochures (prices, operating hours, procedures, ticketing, contact information, and so on), rangers and guides, designated meeting points, websites, maps, information hotlines, apps and other techniques that can help keep visitors oriented in time and space.

Security services and safety facilities

This category of services and facilities allows people to access places they would otherwise avoid due to danger and physical or social impediments. Often they go unseen and undervalued by visitors—such as the provision of park guards and perimeter controls—yet they must be calculated into overall costs. Examples include electronic security systems such as surveillance cameras, signage that explains rules and safety recommendations and visitor educational materials.

Interpretation services and facilities

Interpretation is a communication approach that connects people intellectually and emotionally with interpreted objects to deepen their appreciation of that object. In the



Rock graffiti in a natural boulder-strewn mountain landscape, Dolomites World Heritage Property, Italy

Source: Graeme L. Worboys

context of protected areas, the object is a site's heritage. With deeper appreciation emerge caring and a disposition to assist in the fulfilment of management objectives. Interpretative services and facilities include all educational and other services and facilities that enhance and maintain the visitor experience not already mentioned. Examples include interpretative guides, signage, exhibitions, videos, educational printed materials, automated guides, theatre performances, radio shows, living history demonstrations and roving interpretation. Many protected areas have a strong focus on education including programs directly related to and involved in school curriculums.

Multiple services and facilities

Frequently, the services and facilities provided overlap and occur in the same media and spaces. For example, visitor centres often combine all areas by offering interpretative exhibits (interpretation), information desks (orientation), bathrooms and food sales (restorative), disabled facilities (for example, trails for the blind or wheelchairs often emanate from visitor centres), shops (interpretative and restorative), and access to staff.

Visitor impact management

The growing numbers of visitor impact issues that confront protected area managers today are characterised by an array of complexities and uncertainties and occur

in a context of changing environmental conditions and varying levels of organisational capacity. As a result, protected area managers are challenged to understand the nature of the issues and the potential solutions. In this section, we consider a range of visitor impacts and explore the variety of frameworks for assessing and managing these impacts. Social and community impacts of tourism are an important consideration in planning and responding to the impacts of visitors on protected areas.

Visitor impacts on the environment

Visitors in protected areas have a wide range of environmental impacts including on soils, plants, animals and aquatic systems (Liddle 1997; Newsome et al. 2002). For animals, impacts can include:

- changes to animal behaviour and physiology such as triggering flight responses in birds
- changes to breeding patterns and success such as damage to ground-nesting birds
- introduction of novel animals (domesticated animals including grazing and feral animals)
- damage and removal of habitat
- killing animals either deliberately (fishing, hunting) or accidentally (road kill).

Impacts on plants may include:

- direct damage from trampling
- removal of vegetation during the construction of infrastructure
- changes in composition as a result of the introduction of novel species (weeds, garden plants)
- changes in the abiotic environment that affect plants (soil, light, wind, nutrients, and so on)
- habitat fragmentation from trails and other infrastructure
- landscape-level fires started deliberately (arsonists) or accidentally (campfires) by visitors.

Impacts on aquatic systems include changes to oxygen content, turbidity, flow, run-off, pollution and water harvesting, as well as changes in nutrients from activities in the water (swimming, boating, and so on) and in areas around rivers, creeks and lakes (camping, trampling, and so on). Impacts on soils include soil compaction, changes in nutrients including nitrification, run-off, soil erosion and loss, through to large-scale changes such as landslides.

The types and degree of impacts vary with the nature of activities, seasonal use, intensity of use, behaviour of users and resilience of ecosystems. For example, some types of activities such as horseriding have been demonstrated to have a greater range and intensity of impacts than others such as hiking. Visitor activities at some times of the year have more impact than at others. For example, noise and light pollution can have a greater impact on animal behaviour during the breeding season than at other times. Similarly, trampling damage to vegetation can be greater during the flowering season than when plants are dormant.

Greater use tends to cause more damage, but the form of this relationship can vary (Monz et al. 2013). For example, the relationship can be curvilinear, where most damage occurs with first use, and after a certain amount of use there is limited additional damage. It can be linear, where damage is consistently related to the amount of use. It can be sigmoidal, with limited damage at low levels of use, then rapidly increasing, and then flattening out again. Which form this relationship takes is very important for managers, as it affects which management options will be most effective, such as choosing between dispersed and concentrated use (Monz et al. 2013). Due to differences in behaviour, some visitors can cause more damage than others. Visitors can vary in their knowledge of and capacity and willingness to comply with minimum impact practices.

Infrastructure provided for visitors also has a wide range of impacts including during construction, maintenance and use. These impacts can be short-term and localised, but can also be severe, long-term and widespread. Careful selection, design and maintenance of infrastructure can dramatically reduce its environmental impact. A key issue for protected area managers is how to minimise and ameliorate these visitor environmental impacts (see, for example, Case Study 23.1).

Social and cultural impacts of visitors

Local communities are often seen as the intended beneficiaries of tourism, especially in terms of economic benefits derived from employment and the provision of services and products to protected area visitors. Tourism to protected areas, however, often presents negative social impacts, such as changes in economic and social status, daily routines, the quality of life, traffic, noise, safety and access to traditional areas. Working with or through local communities to identify and address the nature of the impacts of tourism on the protected area can be a complex undertaking (see Case Study 23.2). Social and

environmental impact assessments are useful tools for helping to understand, predict and address potential impacts of tourism on protected areas and related developments. Social impact assessment focuses on the potential impacts of different scenarios on individuals and communities (Brown et al. 2006). Environmental impact assessment is often carried out with a wider focus to include the potential negative and positive effects of developments in protected areas on natural, cultural, social and economic components (Ontario Parks 2005). This more holistic approach recognises that all of these components are interrelated and should therefore be considered simultaneously.

Social impacts are not limited to local communities but also occur among visitors. The activities, behaviour and infrastructure provided for some visitors can affect the experience of other visitors—both positively and negatively. A major challenge for managers is dealing with potential conflict among different types of visitors. Conflict among visitors often revolves around issues such as the appropriateness of an activity, its environmental impacts, its social impacts and the danger it may pose for other users. In some cases, allowing one type of activity results in some visitors avoiding the protected area. Bird watching and hunting in a private protected area, for example, are not highly compatible activities, and permitting hunting may result in the displacement of other visitors.

Responding to visitor impacts

The array of possible environmental and social impacts arising from visitor use presents challenges that require management attention. These impacts may (Farrell and Marion 2002):

- compromise the realisation of the protected area's mandate and goals
- negatively affect natural and cultural values, and several impacts may be additive in their effect and cumulative over time
- lead to unintended consequences such as diminished visitation and economic benefits; this in turn may affect the welfare of local communities.

A number of proactive measures may be taken to avoid unintended impacts. These revolve around elements of the adaptive management approach—that is: undertake good planning at the outset, implement the prescribed actions, monitor the values for positive and negative effects, evaluate and learn from the results, and adjust management actions to further improve and fine tune the necessary interventions (see Chapters 8 and 13).

Case Study 23.1 Zero-waste initiative on the trekking trail of Sikkim Himalaya, India

The Government of Sikkim created Khangchendzonga National Park in 1977. With an area of 1784 square kilometres, bordering Nepal and Tibet, the park has an elevation range of 1829 to 8586 metres above sea-level and includes Mt Khangchendzonga, the third-highest mountain in the world. It is a biodiversity hotspot and conserves endangered species including snow leopards (*Uncia uncia*). It is also a sacred landscape, with local communities considering it a protector deity. All the rivers, lakes, hills and caves are considered sacred and it is believed they were blessed by the Buddhist guru Padma Sambhava. It is for this reason that local communities have consistently opposed proposals to construct hydro-electricity projects in the region.

The park was opened to tourists in 1982 to promote adventure tourism and generate local employment. Initially, there were few organised groups visiting the park, as it was very difficult to obtain permits. In 1992, the permit system was relaxed, resulting in increased visitation. During this period, however, there was less concern for conservation among some tourists and operators. This resulted in a range of impacts, including the accumulation of garbage; deforestation for firewood for cooking, heating and campfires; overgrazing by pack animals; biopiracy by visitors collecting medicinal plants, alpine flowers, seeds and insects; haphazard camping in high-altitude meadows; poaching and hunting of wild animals by trekking staff; and pollution of high-altitude wetlands. Local people resented the consequent desecration of the sacred landscape.

To tackle these problems, a community-based non-governmental organisation (NGO), the Khangchendzonga Conservation Committee, was formed in 1996 at Yuksam, the base for trekking in the park. This committee mobilised the local community and tourism stakeholders to undertake a range of conservation activities. This included the promotion of community-based ecotourism activities such as trekking trail clean-up campaigns, conservation education, training of tourism stakeholders, garbage management, monitoring

of biopiracy and a ban on use of fuel wood inside the park. A code of conduct for conservation was developed, and strategies to minimise grazing impacts by pack animals and proper camping sites introduced. Homestays (amongst India's first) were also developed as a way for local families to earn more revenue.

To address the problem of garbage in the park in 2007 a clean-up campaign was organised along the popular trekking trail and campsites. Tourism staff, including porters, pack-animal operators, guides and cooks, along with community members and schoolteachers and students, were involved. Thereafter, several trail clean-up campaigns were organised by the Tourism Department, travel agents and some individuals.

Realising, however, that this alone was not a long-term solution, the committee conceptualised a new system called 'Zero Waste Trekking Trail'. Under this initiative, all the visitors to the park have to bring back all the non-biodegradable waste declared on their entry form. At Yuksam, where they exit the trekking trail, officials, after satisfying that indeed all such waste has been brought out of the park, separate the garbage into tins, batteries and medicinal waste, cloth, silver foils and noodle packets, plastics, and paper and cartons.

This garbage is then taken to a nearby 'resource recovery centre' where it is cleaned and further segregated. All the recyclable items are sold, while items such as biscuit and chips packets, which are not recyclable, are shredded and used for making cushions or other products. Some recycled paper is made from the waste paper and cartons. The centre has itself become a popular visitor destination, providing a strong message that trekking must not be at the cost of the environment and local communities. Due to these efforts, the park's trails, which are used by about 6500 visitors annually, are virtually garbage free.

— Pema Gyaltsan Bhutia, Khangchendzonga Conservation Committee

Actively managing visitor impacts can help minimise their effect (Farrell and Marion 2002). There have been a number of management frameworks introduced to help support protected area managers with minimising visitor impacts. An effective management framework is a step-wise process that enables protected area managers and planners to interpret and explain the issues at hand (McCool et al. 2007). A framework helps managers:

- identify trade-offs between the provision of recreation opportunities with the resulting local economic impacts and the protection of biodiversity values
- appreciate and address complexity
- accommodate the array of stakeholders with interests in the area or issue.

Decision-makers must evaluate the suitability of the frameworks for the specific use. Researchers have provided five criteria to assess the suitability of a framework for resolving issues of visitor management, and describe the enabling conditions for their successful application (McCool et al. 2007).

1. *Salient*: Not all frameworks were designed to address all issues. They should provide a process for working through the specific issues at hand.
2. *Conceptually sound*: Based on current science and theory.
3. *Practical*: In the context of the organisation's capacity, staff require the right set of technical skills and knowledge to use and apply the framework. Staff need to think at the systems level to consider the regional consequences or effects at different time scales.

Case Study 23.2 Tourism development principles of an indigenous group: an example from British Columbia, Canada

The Gitga'at First Nation Community of Hartley Bay on the north coast of British Columbia, Canada, and the Natural Resources Institute, University of Manitoba, collaborated on research examining community views on tourism development. A community-led proposal to move forward with tourism development provided a platform for community members to reflect upon their experiences with existing tourism developments, and discuss and identify a set of principles to guide future developments. We found that community members consider tourism developments appropriate and desirable, but only where they sustain and enhance the health of their lands, people and way of life.

Gitga'at see that their wellbeing depends on the ecological health of their land and water, sustained through their stewardship of land and sea. For those relationships to be strong, opportunities must be created to allow working people and their families to remain in the territory, rather than move to off-reserve urban centres. As one community member expressed, 'there are a number of things that are Gitga'at—that are precious to the Gitga'at—and none of them can be compromised'. As a result, a fine balance must be sought between cultural, community and ecological integrity when considering the types of local economic development activities that are desirable. From this, principles for tourism development were distilled—all gravitating around a simple, powerful theme: 'we want to live here.'

- Cultural integrity: Traditional leadership and clans must be involved in decision-making, and commercial use of resources is best when linked with traditional practices and ways of life.
- Community integrity: Low-impact economic opportunities should be pursued, but the maximum benefits from development should be for Gitga'at and should be distributed equitably within the community.
- Ecological integrity: Other species should be respected and the ecological impacts of development must be minimised.

A number of mechanisms to support these principles were also identified:

- ensuring local control and management of any venture
- organising benefit sharing in a fair, reasonable and transparent manner

- establishing protocols and other agreements, particularly with visiting researchers, to protect Gitga'at resources and knowledge
- undertaking careful, regular monitoring and evaluation of the social and ecological impacts of any tourism activities alongside a meaningful, ongoing process of local consultation
- facilitating respectful cross-cultural relationships between visitors and community members through interpretation and visitor support from Gitga'at guides
- establishing 'off-limits' areas for visitors to protect community privacy and better ensure the safety of local resources, including knowledge (for example, information concerning medicinal plants) and physical spaces (for example, harvesting locations and special places, such as gravesites).

Researchers identified these mechanisms as important ways to safeguard the wellbeing of Gitga'at people and territory, which includes maintaining the flow of information and dialogue necessary to adapt tourism services to better reflect community needs and interests. When considering these principles, many people in the community drew on their experience with past or existing tourism ventures in the area, including wildlife viewing, cultural tours of the Hartley Bay Village, sportfishing and eco-lodges. Low ecological impact, community member involvement and employment, and businesses operating in accordance with Gitga'at cultural protocols, including respect for the decision-making authority of traditional and local leadership, were considered desirable features of some of these examples. The ability to generate more cultural, economic and ecological benefits for the Gitga'at through local controls, however, emerged as a priority for future tourism.

The project found that many Gitga'at see such principle-based tourism as a forum, coupled with a new type of motivation, in which young people and other community members learn about the Gitga'at culture and ways of life, including the Sm'algyax language, food harvesting and processing skills, traditional ecological knowledge, and other culturally important skills. As one community member explained: 'You need somebody to be able to tell the story about our people ... And that is the same thing—that expertise that could be developed—could be used here when we have tourists come.'

— Katherine L. Turner

4. *Ethical*: Discussions should enable an understanding of who benefits from decisions and who may be paying the cost. The process must be open and deliberative to enable participants to engage in the discussions, in a safe environment.
5. *Pragmatic*: To enable efficient and effective results so that human and financial resources can be allocated to address the priority issues, and importantly, so that impacts can actually be addressed.

While the focus is on these formal frameworks, it is recognised that ground staff and local communities often apply informal frameworks and practices that allow them to understand the dynamic relationships at play. These include making daily observations that are recorded or reported back informally, occasional feedback to and from local communities and staff, thinking about and discussing alternative approaches to carrying out projects with consideration of the pros and cons, and other practices. In this chapter, we consider seven visitor management frameworks:

Table 23.8 Carrying capacity definitions

| Focus | Definition |
|-------------|---|
| Recreation | The level of use beyond which the recreation resource or recreation experience deteriorates |
| Biophysical | The maximum number of people who can use a given area for a specified period without reducing that area's ability to sustain use |
| Social | The maximum number of people who can use a given area for a specified period without reducing the level of satisfaction received by any of those persons in the area |
| Managerial | The maximum number of people who can be accommodated on a given area for a specified period and: a) not degrade the environment beyond a given level of acceptability; b) not cause unacceptable sociocultural and economic impacts on local people; c) provide a given level of satisfaction for a given percentage of the users, as set by the recreation manager's objectives for the area |

Source: British Columbia Ministry of Forests (1991)

- carrying capacity
- limits of acceptable change
- visitor activity management process and appropriate activity assessment
- visitor impact model
- visitor experience and resource protection
- tourism optimisation management model
- values–threats framework.

Carrying capacity

The concept of carrying capacity dates to the 1950s and 1960s when American wilderness areas were experiencing large increases in outdoor recreation and concern was growing about crowding and the appropriate levels of use. Carrying capacity has been defined in many different ways (Table 23.8).

Carrying capacity is a central concept that underlies many visitor impact frameworks. It is an easy concept to understand, and can be simpler, less expensive and more feasible to implement than other frameworks (Farrell and Marion 2002). It continues to receive the attention of academic researchers and public land management agencies today. This approach, however, has serious limitations. It is basically a restrictive concept, founded on limits and constraints. Though this may be suitable for very specific matters such as managing wildlife breeding areas, caves and other sensitive areas, it can also be seen as working against protected area objectives designed to encourage appropriate visitor enjoyment and valuation of protected areas. Researchers have identified significant issues in its formulation, conceptual validity and managerial utility:

- carrying capacity requires specific objectives, but agencies are often reluctant to develop those objectives

- because carrying capacity is a function of objectives, there are many carrying capacities for a site; if there are many, the concept loses its utility
- for most recreation management situations, impact issues are more a function of visitor behaviour or development actions than numbers
- there is often confusion in the literature about the nomenclature: carrying capacity, use-limit policies and processes such as limits of acceptable change
- the conditions needed to establish a carrying capacity are often not present on a recreation site
- because carrying capacity is a technical approach to fundamentally value-laden problems, there is little room for public engagement (McCool et al. 2007:40–3).

In addition, a major premise underlying the notion of carrying capacity is that the natural area of concern is stable and unchanging (McCool et al. 2007). It is recognised, however, that biological and social systems are dynamic, complex and filled with uncertainty. The human-induced changes that are the focus of carrying capacity can be hidden by natural variations such as those caused by climate, fire and floods. Therefore, when fixed carrying capacities are established in a state of flux, their validity is called into question.

Other researchers conclude that carrying capacity has been oversimplified in practice, places too much emphasis on limiting visitor use when other parameters could be adjusted, has failed to minimise visitor impacts in some cases and has not incorporated public involvement or local resource needs (Farrell and Marion 2002).

Limits of acceptable change

The 'limits of acceptable change' (LAC) framework (Stankey et al. 1984) builds upon the ROS concept. Similar to ROS, it identifies a variety of recreation experiences in different settings, but unlike ROS, it is

problem-oriented (Haider and Payne 2009). It features the involvement of stakeholders who participate in the whole process, including setting the standards for the amount and extent of human-induced change that are believed to be acceptable for an area. The process also identifies the remedies that managers should provide. The selection of indicators and measurable standards—and the follow-up monitoring—is a key step as it provides the basis for judging whether a condition is acceptable or not. These are, however, challenging tasks that require technical capacity and time, and as a result can be costly to implement (Brown et al. 2006; de Lacy and Whitmore 2006). Depending upon the management objectives, physical, biological and social indicators may be selected.

LAC has been applied worldwide; it is more appropriately used at a landscape scale, and has been integrated into the 'visitor experience and resource protection' (VERP) framework (Haider and Payne 2009). LAC comprises nine steps towards deciding the most important and acceptable resource and social conditions.

1. Identify area concerns and issues.
2. Define and describe opportunity classes (based on the concept of ROS).
3. Select indicators of resource and social conditions.
4. Inventory existing resource and social conditions.
5. Specify standards for resource and social indicators for each opportunity class.
6. Identify alternative opportunity class allocations.
7. Identify management actions for each alternative.
8. Evaluate and select preferred alternatives.
9. Implement actions and monitor conditions (Stankey et al. 1984).

Visitor activity management process and appropriate activity assessment

The 'visitor activity management process' (VAMP) was developed by Parks Canada in the late 1980s. It combines social science principles with those of marketing to focus on the analysis of opportunity, rather than visitor impact. It is particularly useful for making strategic and operational decisions about target markets and market position, and for identifying appropriate interpretative and recreational activities, and service facilities (Brown et al. 2006). The steps in the VAMP process are as follows.

1. Produce project terms of reference.
2. Confirm existing park purpose and objectives statements.

3. Organise a database describing park ecosystems and settings, potential visitor educational and recreational opportunities, existing visitor activities and services, and the regional context.
4. Analyse the existing situation to identify heritage themes, resource capability and suitability, appropriate visitor activities, the park's role in the region and the role of the private sector.
5. Produce alternative visitor activity concepts for these settings, experiences to be supported, visitor market segments, levels of service guidelines, and roles of the region and the private sector.
6. Create a park management plan, including the park's purpose and role, management objectives and guidelines, regional relationships, and the role of the private sector.
7. Establish priorities for park conservation and park service planning and then implement the plan (Brown et al. 2006).

VAMP has exceptional capability and has been used to understand and manage human use, assess and manage risks, and identify appropriate activities in Canada's national parks (Haider and Payne 2009). VAMP has transitioned into 'appropriate activity assessment' (AAA), which recognises that not all types of activities are appropriate in protected areas. Through the following principles of AAA, recreational activities in Canada's national parks, national historic sites and national marine conservation areas will:

- sustain or enhance the character of place
- respect natural and cultural resources
- facilitate opportunities for outstanding visitor experiences
- promote public understanding and appreciation
- value and involve local communities (Haider and Payne 2009).

VAMP is based on ROS and is designed for regional planning. It can readily incorporate the principles of LAC, VIM and VERP.

Visitor impact management

'Visitor impact management' (VIM) was developed by researchers with the American-based National Parks and Conservation Association. It addresses three issues related to visitor impact—namely: 1) problem conditions; 2) potential causal factors; and 3) potential management strategies (Nilsen and Tayler 1998). The process employs both science and, importantly, professional judgment, and emphasises the need to understand the causal factors

when identifying management strategies. In addressing visitor impacts, VIM is linked to ecological and social carrying capacity. As shown in the steps, managers must specify ecological standards and monitoring for protected areas (Haider and Payne 2009). There are eight key steps associated with the VIM process.

1. Conduct pre-assessment database review.
2. Review management objectives.
3. Select key impact indicators.
4. Select standards for key impact indicators.
5. Compare standards and existing conditions.
6. Identify probable causes of impacts.
7. Identify management strategies.
8. Implement the strategy (Nilsen and Tayler 1998).

VIM is a variant of LAC and has been incorporated into the VERP process (Brown et al. 2006). It is more suitable for use when there are fewer resources available for monitoring research.

Visitor experience and resource protection

Developed by the US National Park Service, the 'visitor experience and resource protection' (VERP) method integrates social and ecological carrying capacity issues with indicators and standards of quality (Haider and Payne 2009). The process includes a focus on spatial zoning to integrate resource and social conditions, which can be a challenging undertaking. VERP builds on LAC and VAMP frameworks and comprises nine steps.

1. Assemble an interdisciplinary project team.
2. Develop a public involvement strategy.
3. Develop statements of park purpose, significance and primary interpretative themes; identify planning mandates and constraints.
4. Analyse park resources and existing visitor use.
5. Describe a potential range of visitor experiences and resource conditions (potential prescriptive zones).
6. Allocate the potential zones to specific locations within the park (prescriptive management zoning).
7. Select indicators and specify standards for each zone; develop a monitoring plan.
8. Monitor resource and social indicators.
9. Take management actions (Haider and Payne 2009).

Tourism optimisation management model

The 'tourism optimisation management model' (TOMM) was developed in Australia in the 1990s for regional tourism planning that included protected areas (McArthur 1999). It aims to monitor and quantify the benefits and impacts of tourism activities and to assess emerging issues and alternatives for future sustainable tourism (Brown et al. 2006). While the model is based on the LAC process, the name de-emphasises the perceived negative connotation of 'limits'. TOMM extends the concept of LAC to parks and gateway communities by considering the commercial and community interests in all stages of implementation and monitoring (Haider and Payne 2009). Key strengths of this model include its application in the context of the economic, political and social environments in which tourism operates, as well as the involvement of stakeholders throughout the process. Given the wider coverage, it is information intensive, and therefore requires significant resourcing for data management and long-term commitment from a wide range of stakeholders. The TOMM framework comprises five dimensions:

- economic (financial contributions of tourism activity)
- market opportunities (key market profile characteristics and marketing activity)
- experiential (the nature of the core visitor experience provided)
- community (the quality-of-life of local residents and indigenous people with a connection to the area)
- environmental (the biophysical environment, ranging from biodiversity and wildlife status to energy consumption patterns) (McArthur 1999).

TOMM comprises six steps.

1. Plan the process and commence stakeholder involvement by identifying stakeholders and generating tourism scenarios.
2. Compile and write a context description to define the current situation. Review planning and policy documents for the region. Continue stakeholder involvement, and begin engagement by conducting a briefing with stakeholders.
3. Develop the monitoring program that identifies what and how to measure, and defines reporting standards. Draft a set of optimal conditions and investigate associated indicators.

4. Refine the context description and monitoring program through a workshop process with stakeholders. Narrow the number of indicators, determining the acceptable range and benchmark for each indicator.
5. Prepare draft and final versions of a TOMM plan, and brief stakeholders.
6. Implement and refine the model. Commence monitoring. After the first cycle, identify indicators outside the acceptable range; identify potential cause and effect relationships to develop management responses. The iterative process continues with ongoing refinement of indicators, optimal conditions and ranges (McArthur 1999).

Values–threats framework

An alternative approach to addressing visitor impacts is through the application of values–threats approaches, where the protected area's natural values are the basis for examining threats against their viability. The Open Standards for the Practice of Conservation (CMP 2013) provide a robust, broad-based framework for results-based planning, management and monitoring. They are rooted in the concepts of adaptive planning and management (see Chapter 13). Paleczny (2010) adapted and applied this framework in a wider context in Egypt

to explicitly address non-biodiversity values—that is, cultural, recreational, tourism and local community wellbeing values. The 'protected areas visitor impact management framework' (Farrell and Marion 2002) employed elements of the open standards framework in Central and South America.

Conclusion

Visitor use and official use of protected areas are integral parts of protected area management. Common types of visitor use of the six different IUCN protected area categories have been identified along with implications for the management of such use. Tourism is perhaps the single greatest use of protected areas, and the many aspects of the management of tourism in these special areas have been described. Working in partnership with the tourism industry is very important, and a basis for protected area managers working with the tourism industry and the potential benefits have been described. The key focus of this chapter has been to provide a range of tools and guidance for protected area managers to help look after the long-term natural condition of protected area visitor destinations as a basis for biodiversity and heritage conservation, and consequently, for truly sustainable visitor use.



Visitors viewing the spectacular Liwu River gorge Taroko National Park, Taiwan. This is also known as 'The Marble Gorge' because of the river's incision into metamorphosed limestone rock.

Source: Graeme L. Worboys

References



Recommended reading

- Aaker, D. A. (1995) *Strategic Market Management*, Wiley, New York.
- Aaker, J. L. (1997) 'Dimension of brand personality', *Journal of Marketing Research* 34(1): 347–56.
- Baker, B. (2012) *Destination Branding for Small Cities: The essentials for successful place branding*, 2nd edn, Creative Leap Books, Portland, OR.
- British Columbia Ministry of Forests (1991) *Recreation Manual*, Ministry of Forests, British Columbia, Canada. <www.for.gov.bc.ca/hfp/publications/00201/>
- Brown, G., Koth, B., Kreag, G. and Weber, D. (2006) *Managing Australia's Protected Areas: A review of visitor management models, frameworks and processes*, Sustainable Tourism Cooperative Research Centre, Griffith University, Gold Coast, Queensland.
- Buckley, R. (2006) *Adventure Tourism*, CAB International, Wallingford, UK.
- Buckley, R. (2010) *Conservation Tourism*, CAB International, Wallingford, UK.
-  Buckley, R., Pickering, C. M. and Weaver, D. (eds) (2003) *Nature-Based Tourism, Environment and Land Management*, CAB International, Cambridge.
- Butler, R. W. (1980) 'The concept of a tourism area life cycle of evolution: implications for management of resources', *The Canadian Geographer* 24(1): 5–12.
- Chee, C. G., Makens, J. C. and Choy, D. J. L. (1997) *The Travel Industry*, 3rd edn, van Nostrand Reinhold, New York.
- Clark, R. N. and Stankey, G. H. (1979) *The Recreation Opportunity Spectrum: A framework for planning, management, and research*, General Technical Report PNW-98, US Department of Agriculture Forest Service, Washington, DC.
- Cole, D. N. and Williams, D. R. (2012) 'Wilderness visitor experiences: a review of 50 years of research', in D. N. Cole (ed.) *Wilderness Visitor Experiences: Progress in research and management, 2011 April 4–7; Missoula, Montana, Proceedings*, RMRS-P-66, pp. 3–20, US Department of Agriculture Forest Service, Rocky Mountain Research Station, Fort Collins, CO.
- Commonwealth of Australia (CoA) (1991) *Ecologically Sustainable Working Groups: Final report*, Commonwealth of Australia, Canberra.
- Conservation Measures Partnership (CMP) (2013) *The Open Standards for the Practice of Conservation*. <www.conservationmeasures.org/>
- de Lacy, T. and Whitmore, M. (2006) 'Tourism and recreation', in M. Lockwood, G. L. Worboys and A. Kothari (eds) *Managing Protected Areas: A global guide*, pp. 497–527, Earthscan, London.
- Dibb, S. and Simkin, L. (2009) 'Implementation rules to bridge the theory/practice divide in market segmentation', *Journal of Marketing Management* 25(3–4): 375–96.
- Driver, B. L. and Brown, P. J. (1978) 'The opportunity spectrum concept and behaviour information in outdoor recreation resource supply inventories: a rationale', in H. G. Lund, V. J. LaBau, P. F. Folliott and D. W. Robinson (eds) *Integrated Inventories of Renewable Natural Resources: Proceedings of the workshop*, General Technical Report RM-55, pp. 24–31, US Department of Agriculture Forest Service, Rocky Mountain Forest and Range Experimental Station, Fort Collins, CO.
- Driver, B., Nash, R. and Haas, G. (1987) 'Wilderness benefits: a state-of-knowledge review', in R. C. Lucas (ed.) *Proceedings: National Wilderness Research Conference issues, state-of-knowledge, future directions*, General Technical Report INT-220, pp. 294–319, US Department of Agriculture Forest Service Intermountain Research Station, Ogden, UT.
- Dudley, N. (2008) *Guidelines for Applying Protected Area Categories*, IUCN, Gland. <www.iucn.org/pa_categories>
-  Eagles, P. F. J., McCool, S. F. and Haynes, C. D. A. (2002) *Sustainable Tourism in Protected Areas: Guidelines for planning and management*, IUCN, Gland.
-  Eagles, P. and Legault, K. M. (2013) *Guidelines for the Planning and Management of Concessions, Leases, Licenses, and Permits in Parks and Protected Areas*, University of Waterloo, Ontario.
- Elkington, J. (1997) *Cannibals with Forks: The triple bottom line of 21st century business*, Capstone, Oxford.

- Emerton, L., Bishop, J. and Thomas, L. (2006a) *Best Practice Protected Area Guidelines Series*, No. 013, IUCN World Commission on Protected Areas, James Cook University, Queensland.
- Emerton, L., Bishop, J. and Thomas, L. (2006b) *Sustainable Financing of Protected Areas: A global review of challenges and options*, IUCN, Cambridge.
- Farrell, M. and Marion, J. L. (2002) 'The protected area visitor impact management (PAVIM) framework: a simplified process for making management decisions', *Journal of Sustainable Tourism* 10: 31–51.
- Font, X., Cochrane, J. and Tapper, R. (2004) *Tourism for Protected Area Financing: Understanding tourism revenues for effective management plans*, Leeds Metropolitan University, Leeds.
- Frangialli, F. (2001) 'World Tourism organization perspectives on the International Year of Ecotourism', *Industry and Environment* 24(3–4) (July–December): 4. <www.unep.org/media/review/vol24no3-4/UNEP_p1_49.pdf>
- Goodwin, H. (1996) 'In pursuit of ecotourism', *Biodiversity and Conservation* 5: 277–92.
- Haider, W. and Payne, R. J. (2009) 'Visitor planning and management', in P. Dearden and R. Rollins (eds) *Parks and Protected Areas in Canada*, 3rd edn, Oxford University Press Canada, Don Mills, Ontario.
- Hall, C. M. and McArthur, S. (1998) *Integrated Heritage Management: Principles and practice*, The Stationery Office, London.
- Ham, S. (2013) *Interpretation: Making a difference on purpose*, Fulcrum Publishing, Golden, CO.
-  Higginbottom, K., Carter, R. W., Moore, S., Rodger, K. and Narayanan, Y. (2010) *Current Practices in Monitoring and Reporting on Sustainability of Visitor Use of Protected Areas*, Sustainable Tourism Cooperative Research Centre, Griffith University, Gold Coast, Queensland.
- Hunt, S. D. and Arnett, D. B. (2004) 'Market segmentation strategy, competitive advantage, and public policy: grounding segmentation strategy in resource-advantage theory', *Australian Marketing Journal* 12(1): 7–25.
- Kohl, J. (2007) 'Dodging cuts: surviving budget cuts for heritage interpretation means becoming relevant', *Parks and Recreation Magazine*, March. <www.jonkohl.com/publications/a-m/avoid-cuts.htm>
- Kotler, P. (2003) *Marketing Management*, 11th edn, Prentice Hall, Upper Saddle River, NJ.
- Liddle, M. (1997) *Recreation Ecology*, Chapman & Hall, London.
- Lockwood, M., Worboys, G. L. and Kothari, A. (2006) *Managing Protected Areas: A global guide*, 2nd edn, Earthscan, London.
- McArthur, S. (1999) Visitor management in action: an analysis of the development and implementation of visitor management models at Jenolan Caves and Kangaroo Island, PhD thesis, University of Canberra, Canberra.
- McCool, S. F., Clark, R. N. and Stankey, G. H. (2007) *An assessment of frameworks useful for public land recreation planning*, General Technical Report PNW-GTR-705, US Department of Agriculture Forest Service, Pacific Northwest Research Station, Portland, OR.
- Manning, R. E. (1985) 'Diversity in a democracy: expanding the recreation opportunity spectrum', *Leisure Sciences* 7(4): 377–99.
- Melbourne Business Community (2013) *News: Business events in Northern Territory*. <www.melbournebusinesscommunity.com.au/2013/07/business-events-in-the-northern-territory>
- Monz, C. A., Pickering, C. M. and Hadwen, W. L. (2013) 'Recent advances in recreation ecology and implications of different relationships between recreation use and ecological impacts', *Frontiers in Ecology and Environment* 11(8): 441–6.
-  Newsome, D., Moore, S. A. and Dowling, R. K. (2002) *Natural Area Tourism: Ecology, impacts and management*, Channel View, Clevedon, UK.
- Nilsen, P. and Taylor, G. (1997) 'A comparative analysis of protected area planning and management frameworks', *Proceedings—Limits of Acceptable Change and Related Planning Processes: Progress and Future Directions*, pp. 49–57, General Technical Report INT-GTR-371, United States Department of Agriculture, Forest Service, Intermountain Research Station, Ogden, UT.

- Ontario Parks (2005) *A Class Environmental Assessment for Provincial Parks and Conservation Reserves*, Ontario Ministry of Natural Resources, Peterborough.
- Pacey, L. (2013) *The Lure of Montague*, 3rd edn, Laurelle Pacey, Narooma, NSW.
- Paleczny, D. R. (2010) Protected area assessment and reporting: an examination of current approaches and evolving needs with application of an integrated model in Egypt, PhD dissertation, University of Greenwich and International Centre for Protected Landscapes, UK.
- Phillips, A. (2000) *Financing Protected Areas: Guidelines for protected area managers*, IUCN, Cambridge.
- Pine, B. J. II and Gilmore, J. H. (1999) *The Experience Economy: Goods and services are no longer enough: Work is theatre and every business is a stage*, Harvard Business School Press, Cambridge, MA.
- Priskin, J. and McCool, S. F. (2006) 'The visitor experience challenge', [Editorial], *Parks: The International Journal for Protected Areas Managers* 16(2): 65.
- Reid, M., Wearing, S. and Croy, G. (2008) *Marketing of Protected Areas as a Tool to Influence Visitors' Pre-Visit Decisions*, Sustainable Tourism Cooperative Research Centre, Griffith University, Gold Coast, Queensland.
- Shafer, E. L. (1969) *The average camper who doesn't exist*, US Department of Agriculture Forest Service Research Paper NE-142, Northeastern Forest Experiment Station, Upper Darby, PA.
- South African National Parks (SANParks) (2011) 'Tourism sales and marketing report', in *2010–2011 Annual Report*, pp. 18–27, SANParks, Pretoria.
- Stankey, G. H., McCool, S. F. and Stokes, G. L. (1984) 'Limits of acceptable change: a new framework for managing the Bob Marshall Wilderness complex', *Western Wildlands* 103(3): 33–7.
- Swarbroke, J. (1988) *Sustainable Tourism Management*, CAB International, New York.
- The International Ecotourism Society (TIES) (2014) *What is Ecotourism?* The International Ecotourism Website. <www.ecotourism.org/what-is-ecotourism>
- Tourism Australia (2010) *Ningaloo–Shark Bay: A guide to making the most of your landscape positioning*, Australia's National Landscapes Program, Canberra.
- Tourism Australia (2012) *Experience Development Strategies: Guidelines for Australia's National Landscape Steering Committee*, 2nd edn, Australian Government Director of National Parks, Canberra.
- Tropical Science Centre (TSC) (2014) *Monteverde Cloud Forest Reserve Educational Programmes*, Tropical Science Centre, San José, Costa Rica. <www.reservamonteverde.com/programs.html#2>
- Turner, K. L., Berkes, F. and Turner, N. J. (2012) 'Indigenous perspectives on ecotourism development: a British Columbia case study', *Journal of Enterprising Communities, Special Issue: Indigenous communities, the bioeconomy and natural resource development* 6(3): 213–29.
- Tynan, C. and Drayton, J. (1987) 'Market segmentation', *Journal of Marketing Management* 2(3): 301–35.
- United Nations (UN) (1992) Agenda 21, *Earth Summit*, United Nations, New York. <www.un.org/esa/sustdev/documents/agenda21/english/agenda21chapter1.htm>
- United Nations (UN) (1997) *Agenda for Development*, United Nations, New York.
- United Nations Educational, Scientific and Cultural Organisation (UNESCO) (2011) *Operational Guidelines for the Implementation of the World Heritage Convention*, UNESCO, Paris.
- United Nations Environment Programme (UNEP) (2005) *Forging Links between Protected Areas and Tourism Sector: How tourism can benefit conservation*, UNEP, Paris.
- United Nations Environment Programme (UNEP) and United Nations World Tourism Organisation (UNWTO) (2005) *Making Tourism More Sustainable: A guide for policy makers*, UNWTO, Madrid.
- United Nations World Tourism Organisation (UNWTO) (1995) *Technical Manual. Number 2: Collection of tourism expenditure statistics*, UNWTO, Madrid.

- United Nations World Tourism Organisation
(UNWTO) (2012) *Summary: Study on tourism and intangible cultural heritage*, UNWTO, Madrid.
<dtxtq4w60xqpw.cloudfront.net/sites/all/files/docpdf/summaryview.pdf>
- United Nations World Tourism Organisation
(UNWTO) (2014a) *Understanding Tourism: Basic glossary*, UNWTO, Madrid. <media.unwto.org/en/content/understanding-tourism-basic-glossary>
- United Nations World Tourism Organisation
(UNWTO) (2014b) *World Tourism Barometer*, UNWTO, Madrid. < dtxtq4w60xqpw.cloudfront.net/sites/all/files/pdf/unwto_barom14_02_apr_excerpt.pdf>
- Wearing, S., Archer, D. and Beeton, S. (2007) *The Sustainable Marketing of Tourism in Protected Areas: Moving forward*, Sustainable Tourism Cooperative Research Centre, Griffith University, Gold Coast, Queensland.
- Weaver, D. and Lawton, L. (2002) *Tourism Management*, 2nd edn, John Wiley & Sons, Brisbane.
- Worboys, G. L. (2007) *Evaluation subjects and methods required for managing protected areas*, PhD thesis, Griffith University, Gold Coast Campus, Queensland.
- Worboys, G. L., Lockwood, M. and de Lacy, T. (2005) *Protected Area Management: Principles and practice*, Oxford University Press, Melbourne.
- Yankelovich, D. and Meer, D. (2006) 'Rediscovering market segmentation', *Harvard Business Review* 84(2): 112–31.
- Yeo, G. (2005) 'Understanding users and use: a market segmentation approach', *Journal of the Society of Archivists* 26(1): 25–53.

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