

13

Protected Areas

Introduction

There are a significant number of protected areas in the world today, but their creation has occurred only relatively recently. The designation of protected areas can be linked back to the Romantic Movement in England and continental Europe (Mason, 2016). A related movement in the USA also contributed significantly to the establishment of protected areas there. As indicated in Chapter 3, until the latter part of the 18th century, large areas of the natural landscape were not looked upon as having much potential for human use. So mountain regions, such as the Alps, were viewed as a barrier to communication and transport, and similarly uplands and mountain areas in the UK were viewed as offering little scope for economic use, except possibly sheep farming.

This chapter indicates that the first protected areas were established in the USA, provides a case study of the very first national park, Yellowstone Park, and discusses the issues that can arise when the designation as a park acts as form of marketing and leads to increasing numbers of visitors with the related impacts. The chapter also discusses changing concepts of the term 'wilderness', the implications of this and provides a case study of the largest and most remote wilderness on earth, Antarctica.

Protected areas

Although for hundreds of years in Europe, wild areas such as mountains and high moorlands were viewed as undesirable places for almost any form of human activity, towards the end of the 1700s, and partly in response to the Industrial Revolution which used large areas of land in towns and generally created an unattractive human/urban landscape, as well as putting pressure on land adjacent to cities, 'natural' landscapes including mountain ranges were being viewed for the probably first time as attractive and the word 'beauty' was being attached to them (Holden, 2013). This was the results of a number of influential writers (such as Wordsworth and Coleridge in Britain, and Catlin in the USA) who extolled the beauty of such areas as the English Lake District and Yosemite in the USA. For example, Wordsworth's famous poem, 'I

wandered lonely as a cloud' with the lines 'I wandered lonely as a cloud that floats on high o'er vales and hills, when all at once I spied a crowd, a host of golden daffodils' was about Ullswater, a remote lake hemmed in by steep mountains, in the English Lake District.

Within a relatively few years of this change in view on natural and wild areas, there were the first attempts to protect them. By the early 21st century, protecting such landscapes was a common approach in many countries. Hence today, there are many protected areas that have been set up by governments around the world for a number of related reasons. According to Holden (2013) there are several different types, differentiated partly by what they allow and how strict the regulations and laws concerning them are. These are shown in Table 13.1.

In Table 13.1, based on Holden (2016), eight types of protected area are indicated. Those with the most restrictive in terms of use are shown at the top, and then there is a descending order of restrictions on use.

Table 13.1: Types of protected areas

- Scientific reserve/ strict nature reserve
 - National parks
 - Natural monuments/landmarks
 - Managed nature reserve/wildlife sanctuary
 - Protected landscapes
 - Resource reserve
 - Naturally biotic areas/anthropological reserve
 - Multiple use management area/managed resources
-

In relation to Table 13.1, in the *scientific reserve/strict nature reserve*, the main aim is to protect the ecological balance for scientific research and also to provide opportunities for environmental education. Commercial activities in such areas would be seriously restricted. *National parks*, which have been set up to protect landscape and scenic values, have similar aims to *scientific reserves*, but have a wider remit as they also include recreational use, whilst *natural monuments/landmarks* have the aim of protecting nationally significant natural features, defined in terms of their especially significant characteristics, or their uniqueness.

A *managed nature reserve/wildlife sanctuary* will involve human intervention to manage some aspects of the landscape or ecosystem. This could involve, for example, the culling of a specific predator to enable a rare/endorsed species to survive. *Protected landscapes*, as shown in Table 13.1, are important natural or semi-natural areas where it is recognised that there is a harmonious relationship between humans and the landscape. The emphasis here, however, is on economic viability, as much as landscape protection, and the economic activity in the area is protected.

Resource reserves and *naturally biotic areas/anthropological reserves* are in some ways similar to each other, as they are set up in an attempt to protect or sustain resources or areas for future use, by prohibiting certain development activities that threaten them, but to permit ways of life for societies living in harmony with the environment, to continue, without interruption, by modern technology or damaging human activities. *Multiple use management area/managed resources* allow a range of activities to take place, but these should be planned and managed for the sustainable use of, for example, wildlife, forests, timber, water, pasture land and outdoor activities.

Tourism is prohibited in some of these designated areas, allowed in others and is likely to be promoted in a number of them (Mason, 2020). Hence in *scientific reserves*, tourism will usually be prohibited. Tourism will usually be allowed in *national parks* and in many such parks, will be actively promoted (Holden, 2016). This situation will also be the case in relation to *natural monuments/landmark* areas. In *managed nature reserves/wildlife sanctuaries*, tourism may be allowed but not if it is likely to cause disruption or damage to the area. In relation to *protected landscape* designated areas, tourism will often be promoted, but as the emphasis is on ensuring economic viability, tourism must be seen to not come in conflict with other economic activities. Tourism may also be important in *resource reserves* and *biotic reserves*, as well as *multiple use management areas*.

The very first area in the world that was put forward for protected status was Yosemite National Park in the USA. This was in 1864, but it took some time for the status to be confirmed and it was not established until 1872. However, it had the two key aims that remain very important today in such areas, of conserving the landscape and environment, but also allowing visitors to enjoy this landscape. As Holden (2013:276) argues this causes: “*dilemmas of how to best deal with the interaction of tourism and conservation in protected areas*”.

Holden (2013) considers that national parks are landscapes that have special status. Many of these have been created in relation to national laws, so they may differ from country to country. However, the International Union of Conservation of Nature (IUCN) definition is as follows:

A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long terms conservation of nature, with associated ecosystem services and cultural values (IUCN, 2011).

Although Yosemite National Park was the first to be put forward for special protected status, it was another US area that can claim to be the very first national park in the world. This is Yellowstone Park, which is located in the state of Wyoming. It has distinct geological features, including geysers, the most famous of which is Old Faithful. It also has wildlife that has traditionally attracted large numbers of tourists, in particular bears. Wolves and wolverine are also animal species that can be seen in Yellowstone Park. Hence it is a combination of unusual geological landscape features, coupled with wildlife that led to the designation as a national park.

As Holden (2016) argues, it was no coincidence that Yellowstone and Yosemite National Parks were set up in the second half of the 19th century, as this was a time in US history of increasing urbanisation. This movement to develop cities meant more pressure on the rural areas of the US, as is clear in the aims of Yellowstone Park, which included the intention to provide places for urban dwellers to enjoy recreational spaces beyond the city (Holden, 2016). Hall and Lew (1998) claim that the drive to establish national parks in the US was also related to a desire that Americans should be reminded of the pioneering mentality of those (modern immigrants) who initially 'created' the country. The intention here was that people should stay, at least metaphorically, in close contact with nature, despite increasingly living in cities. The promotion of the desire to visit wild areas, or wilderness in the USA, was partly the result of the American John Muir, who believed, in a similar way to the English Romantics, that visiting mountains and nature was good for one's soul (Eagles *et al.*, 2002).

MacCannell (1992) believes there was a very different and a less positive reason for the creation of national parks in the US in the late 19th century. He argued that there was a feeling of guilt at the destruction of nature across the whole of the USA, and that the setting up of the parks was an attempt to show that human society could also value the landscape for its intrinsic and aesthetic qualities, rather than regarding it as simply a resource to be exploited, with little regard for the long-term consequences.

Given the time at which the two parks of Yellowstone and Yosemite were created, it is perhaps not surprising that the interests of the indigenous peoples were largely ignored, and preference was given to the perceived desires of settlers who had arrived from Europe from the mid-1800s (Holden, 2016). However, in a similar vein to MacCannell's views on the concern of some at the destruction of nature, as early as the 1830s, the American poet Catlin was expressing guilt at the destruction of aboriginal cultures and arguing that national parks should be set up in areas where this destruction was occurring, to preserve these cultures.

By the 1980s, national parks had become very important recreation and tourist attractions in many countries. In these areas, it was perceived that visitors could get close to nature and observe flora and fauna that was frequently unusual and often endangered and likely to be unique. The geology and human geography of the landscape of many national parks was frequently aesthetically pleasing and perceived as 'natural', or at least semi-natural, as national parks in many countries, including the UK, have at least part of their landscapes that are farmed or forested – in other words they have significant human activity where commercial land use is prevalent.

However, a major issue in the early part of the 21st century, is that the very designation of a landscape as a 'protected area' can lead to increased interest from tourists, and an even greater desire to visit. Hence, the marketing of such areas, whether overtly or implicitly, could be summarised as: 'Come and see the last remaining..., before it disappears!' Therefore, within this marketing concept are, potentially, the

seeds of destruction for the object of the visitors' attention, in that the invitation to visit will lead to tourists, in their desire to see whatever it is that is fast disappearing, damaging even more quickly what they have to come to see!

The following case study, which focuses on the Yellowstone National Park, considers the attractions of the park and the impacts of increasing numbers of visitors on the landscape and wildlife.

Case Study: Tourism in Yellowstone National Park

In the early 1990s, a U.S. senator from Wyoming, set out on a summer drive with friends in Yellowstone National Park. It wasn't long before they were in a traffic jam that extended for miles. The cause: a road construction project and countless "wild-life jams."

The notion that gave birth to America's first national park in 1872, "a public park or pleasuring-ground for the benefit and enjoyment of the people," was an important concept then and remains so today. Today it involves the idea of loading up the car, before making a pilgrimage to commune, peacefully, in nature. But what the senator experienced was closer to the reality, and embodies one of the biggest problems in Yellowstone today: wilderness contained, nature under management, wild animals obliged to abide by human rules. The senator sought a way to solve the problem. He received \$300,000 in federal funds so that the National Park Service could study the feasibility of erecting monorails in America's first national park. He called for the potential use of "air trains, magnetic levitation transportation" and other "environmentally cautious" ways to move people smoothly and safely through Yellowstone Park. "We should look at how Disney World moves vast numbers of people, the senator argued in 1991. "One thing Disney has been able to do that national parks haven't is separate Americans from their cars and make them enjoy it."

The senator's vision of an alternative to motor tourism won praise from the leaders of several conservation organisations. But Park Service planners declared the price tag—between \$15 and \$25 million a mile for a monorail—too high. In 1990, the cost for repairs of each crumbling mile of Yellowstone's 380-mile, two-lane highway system was one million dollars. With the benefit of hindsight, the monorail may have been a bargain! Today, a quarter century later, traffic problems have only worsened during the height of the summer holiday season, and Yellowstone's roads are once again crumbling. The estimated cost for required maintenance of Yellowstone structures and roads in 2016 was a massive \$633 million. For Yellowstone's neighbour to the south, Grand Teton National Park, the cost was over \$200 million.

Travellers from near and far have come to both parks in record numbers, last year – over four million – and the same was expected in 2017. Here's the good news: Government and independent economists have placed the combined value of nature-based tourism in Yellowstone and Grand Teton at close to one billion dollars,

annually. The main attraction has always been bears, although as wildlife numbers declined through the first half of the 20th century, geothermal features, such as Old Faithful geyser became the main draw.



Old Faithful erupting, Yellowstone National Park (Photo by blary54, <http://www.freeimages.com/photo/old-faithful-geyser-1402701>)

Since the 1990s, with the re-introduction of wolves and a rebounding population of grizzly bears, Yellowstone and Grand Teton as destinations for American wildlife safaris have once again become highly sought after. One study showed that visitors coming from outside the Greater Yellowstone region spent \$35.5 million annually, specifically to see wolves. Another recent study showed that visitors to Yellowstone would be willing to pay an additional \$41 on top of the \$25 vehicle entrance fee to see roadside bears. In fact, hypothetically, if tourists had no chance of glimpsing bears along the roadside, annual visitation proceeds could drop by \$10 million.

Some economists have suggested that the total value of nature-related commerce across the entire Greater Yellowstone area may actually be two or even three times greater than that generated in just the Parks. This rise in outdoor recreation has occurred at the same time that logging, mining, and livestock production have waned. Property at the base of major downhill ski resorts has yielded billions of dollars in sales. Another attraction of Yellowstone Park is elk shooting, in the state of Wyoming which extends beyond Yellowstone, revenue from elk licenses reached \$10 million, and guides, hotels, and restaurants yielded millions more, in 2015.

The negative consequences are that 'too much love' has its downsides. "*Last year's visitation tested the capacity of Yellowstone National Park,*" said one Park superintendent. "*We are looking at ways to re-prioritize in order to protect resources, provide additional ranger programs, and keep facilities clean.*" The superintendent indicated that the day might be approaching when the number of people allowed into Yellowstone at any one time will need to be limited, a tactic he was aware that would meet with stiff resistance.

The surge in new forms of recreation is bringing with it a whole set of other impacts on wildlife: skiers fly down backcountry slopes where rare wolverines live; hikers, mountain bikers, and boating enthusiasts frighten animals away from their habitats. Tourism also means that animal migration routes are blocked, and this can cause accidents. In Jackson Hole, where wildlife must navigate across landscapes criss-crossed with roads, at least 377 animals (including moose, elk, deer, and bears) were killed on highways in 2015, prompting calls for special wildlife crossings, such as bridges over roads or tunnels beneath them.

The northwest corner of Greater Yellowstone, which contains the headwaters of three famous trout-fishing streams – the Madison, Yellowstone, and Gallatin – has attracted so many anglers that quotas on numbers of fishermen have been considered for certain stretches of the streams. Catch-and-release regulations, meaning anglers must put back the trout they catch, already exist on those rivers.

Tourism dollars represent a mighty engine for the regional economy, but so does people's desire to play, work, and live close to protected public lands. One study found that for every 100,000 acres of protected public land in Greater Yellowstone and other non-major metropolitan areas in the West, there has been a corresponding rise of \$4,360 in per capita income.

In western rural counties with more than 30% of land safeguarded as national parks, federal wilderness, or national forests, job creation increased collectively by 345% over the past 40 years, compared with an increase in employment of 83% in similar counties with little or no protected federal land.

"The thing we need to figure out," the Park Superintendent indicated when addressing the problems that arise when nature is threatened even as it drives economic growth, *"is how to deal with an unprecedented wave of newcomers, without turning Greater Yellowstone into the places people fled from – and want to leave behind."*

Source : Adapted from Wilkinson (2016), National Geographic.

The case study of Yellowstone National Park clearly indicates the dilemma raised by Holden (2016), discussed at the beginning of this chapter, of trying to balance the need for conservation of protected areas with the aim of allowing recreationists and tourist to visit, and as suggested in the paragraph preceding the case study, the possibility that too many tourists may damage and disrupt the very thing they wish to see.

Wilderness

In addition to the types of protected area referred to by Holden (2016), there is another very special landscape that in many countries has protected status, and that is *wilderness*. Once regarded of little value to humans, wilderness is now viewed by

individuals and recognised by large numbers of countries as a key resource for tourism and recreation. This section discusses the history of the concept of wilderness, before a consideration of major issues in relation to the current use of wilderness for tourism experiences.

The modern concept of wilderness is closely linked to European perspectives dating back at least 1,000 years. In the past, European culture (which subsequently contributed significantly to American culture) held that wild nature, or what can be termed 'wilderness', was an alien landscape, which was feared and had to be tamed (Holden, 2013). As Hall and Page (2014) state, the 18th century European concept of wilderness, is a very good example of what can be termed 'the other'. For the majority of Europeans at this time, wilderness was regarded as unlike the controlled rural landscapes, where farming and forestry were major activities or, the recently human created urban landscapes, and hence regarded as an alien landscape.

Nevertheless, wilderness is a difficult concept to define. This is partly because it has not been a static concept, having changed over several hundred years (Hall and Page, 2014). It is also as Nash (1967) indicated, the case that wilderness is not so much a place, as a quality that produces a feeling in an individual about a place. Whilst agreeing that it is difficult to define, Saarinen (2013; 145), nevertheless suggests that the term wilderness "conjures up meanings and images referring to wild, remote, rough, free and untrammelled natural areas".

The attitude to wilderness prevalent up to around 1800 in much of Europe and also in the emerging USA was based very much on Northern European Judaeo-Christian concepts, derived largely from religious sources, particularly the Bible (Hall and Page, 2014). The main idea of wilderness in this Judaeo-Christian context, was that it was a 'place' where those who had committed some form of sin were sent to pay the penalty for their misdemeanour. This could be for a period of weeks, months or even years and the wilderness was usually viewed as a hostile environment, with the possibility or even likelihood of savage animals, disease, drought or floods – in other words it was a very unpleasant environment where no one would willingly choose to go. For those who were compelled to go into the wilderness, in Biblical stories, it was a place to test one's abilities (e.g. resist, or even fight the devil) and through this testing to get closer to God.

However, there was an alternative to this view of wilderness in Europe, in the ideas of St. Francis of Assisi and several other medieval thinkers, who believed that wildlife was placed on earth not for human use, but for God's use. This was a revolutionary idea when first suggested, and removed the emphasis on people in an anthropocentric world that most supporters of Christianity and Judaism believed in. Eventually this revolutionary idea underpinned the ideas of the English and American 18th and 19th century Romantic movements where nature, not man, was placed centre stage (Hall and Page, 2014).

Unlike Christianity and Judaism, eastern religions and philosophical ideas did not regard nature as something hostile that needed to be tamed. Instead, religions

such as Shinto and Taoism venerated the wild and 'fostered love of nature not hatred' (Nash, 1982:21). As early as the fourth century AD, people in China were finding an aesthetic appeal in mountain areas, almost 1,500 years before a similar belief in Europe and North America began to take hold. This view of wilderness, without fear of the wild, meant there was a potential for recreation in such areas.

The varied perceptions of wilderness in different parts of the world indicates that the concept has important cultural dimensions. Until only about 200 years ago, as noted above, 'wild nature' was largely feared in many European countries, which largely precluded use for recreation purposes. This perception of nature was also held by many of the European settlers who migrated to North America, Australia and New Zealand. This view was partly reflected in the rationale for the establishment of the first national parks in the USA. However, the pioneering spirit that was important in the settling of the USA also featured in the attitudes to the establishment of national parks there. This view was that nature was awe-inspiring, need not invoke fear in observers, but could still be tamed.

Not only has there been significant geographical variations in the concept of wilderness, but even a brief reflection on the current attitudes to wilderness, suggests how much the concept has changed over time. In European culture, by the middle of the 19th century, once feared mountain and moorland areas were becoming chosen locations for the wealthy to take their holidays. Many of the visitors were international tourists and they were involved in sporting activities such as skiing, as well as rock climbing and hiking. By the late 19th century, as more and more people travelled to mountain areas for tourism activities, there was the first real concern about the impacts that visitors would have on the landscape and this contributed to a drive towards protection and conservation and hence the establishment of protected areas, particularly national parks.

It is in the USA, particularly, that attitudes to wilderness reveal the complexity of the evolution of the concept. In particular, they indicate how links to changing views in other western societies influenced US views, how the history of settlement of the USA influenced developing concepts of wilderness there, and then, in turn, how this led to these ideas influencing other countries views on wilderness. Also very importantly, consideration of US attitudes to wilderness, reveals how these new concepts provided greater scope for recreation and tourism opportunities. This evolution of the US concept of wilderness is discussed below.

Early European settlers in the USA saw wilderness in Biblical terms, as uninhabitable and of little use. It was not until the late 18th century that there was the beginnings of a positive response to, and admiration of, American nature. Part of the appreciation of nature was a reaction against the old European colonial masters (Britain, France and Spain, in particular) and a desire to extol the virtues of a landscape 'pure' in terms of it being free from the control of any European power (Hall and Page, 2014). It was the American Romantic movement that was particularly important in asserting the importance of American wildlands. A combination of artistic, literary and

political perceptions of the need for contact by US citizens with wild lands, provided a stimulus to positive attitudes to wilderness. Over time, societies were established that had as their chief aim to preserve wilderness and individuals influential in political and cultural circles promoted concepts of landscape protection.

However, in the USA, it was the extremely 'wild lands' that tended to be preserved, as the pioneering spirit of American settlers meant that it was only the areas that were viewed as having little or no commercial potential for e.g. farming or forestry, that were designated as wilderness. This meant that high mountains, with steep valleys and also desert areas became the first wilderness areas that were protected. However, such areas, although having no apparent commercial use at the time, usually had major aesthetic qualities which were soon to be exploited for recreation and tourism usage. In this way, these wild areas began to have commercial value, and the realisation of the potential, or actual commercial value of such areas in terms of tourism, was a further spur to protecting them.

Similar trends to those in the US development of the concept of wilderness can also be discerned in Canada, Australia and New Zealand, although the national parks in each of these countries tended not to have the same status and perceived importance in the minds of inhabitants as those in the USA (Hall and Page, 2014). It is also important to note that in northern European countries, in particular Norway, Finland and Sweden there was a similar Romantic movement in the 18th and 18th century to that in the UK and later the USA, and wilderness was perceived as of high value, which contributed to its use then and increasingly later for tourism purposes.

Despite the evolving concept and growing importance of wilderness, it was not until the mid-1960s that a legislative framework defining the nature and purpose of wilderness, and how it was to be protected, was established in the USA. The definitions of wilderness in the US 1964 Wilderness Act are set out below as they embody key components of such an area that still remain important today and also give an indication of the significance of wilderness for recreation and tourism. The Act indicates that such areas:

- generally appear to be affected by the force of nature, with the evidence of human activity to a great extent unnoticeable
- have outstanding opportunities for solitude or for 'primitive' forms of recreation
- are large enough spatially (the figure in the Act is at least 5000 acres) to make preservation possible
- may also contain features of ecological, and/or geological, and/or scientific, and/or educational and/or scenic and/or historical value.

By the early part of the 21st century there were over 100,000 protected areas around the globe (IUCN, 2003). The most important protected area in terms of numbers of such areas was managed nature reserve areas with over 27,000 of these, followed by national monuments of which there were over 19,000. There were nearly 4,000

national parks and 1,300 wilderness areas at this time and national parks accounted for 4.4 million square kilometres, amounting to almost 24% of all protected areas, whilst wilderness areas covered over 1 million square kilometres which was just over 5% of all protected areas (IUCN, 2003).

Arguably the most important wilderness left on earth is Antarctica. Its remoteness in relation to other inhabited regions and its inhospitable climate have resulted in it being the only continent that does not have a long history of human settlement and hence resource exploitation. The continent was only 'discovered' at the end of the 19th century and there have only ever been a few hundred people resident there in the last hundred or so years, and most of these are scientists. The combination of its remoteness, extreme climate which has produced a unique environment, combined with fact that around the edges of the continent there is a large number and range of wildlife species means that in the last 50 years there has been a small, but growing, tourism industry (Mason and Legg, 1999).

The following case study considers Antarctica as a tourist attraction and the importance of this wilderness area in its potential to inform and educate visitors about not just its unique environment, but also how it may develop more heightened and general awareness and concern for environmental issues on earth.

Case study: Tourism in the Antarctic Wilderness

Antarctica is probably the last terrestrial tourism frontier. It is a remote, unique wilderness environment. The land-based ecosystems on the continent are limited because of the almost permanent snow cover which accompanies the very low temperatures. Unlikely as it may seem, Antarctica is one of the driest places on earth as it has very little rainfall – its precipitation is mainly in the form of snow. However, the continent is a huge island, and the marine ecosystems are rich in wildlife. So, it is the very edge of this continent, around its coastline, that is relatively rich in biodiversity. The periphery of Antarctica is the breeding ground for seabirds and a number of species of penguins. Killer whales are also found, as well as seals and walrus. The interior landscape is mountainous with active volcanoes, but also ice sheets and glaciers. At the edge of the continent, glaciers fall into the sea, creating huge icebergs. It is only the very edge of the continent that loses its snow cover during the brief Antarctic summer, which last for only a few weeks, whilst the interior remains permanently snow covered, and underneath this is a very deep ice sheet.

The continent is unique by global human standards in terms of never having any permanent inhabitants, and substantial human contact with the continent has only occurred since the early 20th Century. Its remoteness and inhospitable climate limited attempts to travel to it until only just over 100 years ago. This means that its geography throughout much of history was almost unknown. Its short period of contact with humans has given it a unique political status – it is the only continent that is one political entity; but does not belong to one nation. It is administered by

a very unusual process using what is known as the Antarctic Treaty System (ATS). This unique form of government involves representatives from countries that have an interest in Antarctica, which includes the USA, the UK, France, Germany and Russia, but also China, Malaysia and India. These countries, which over the past 100 years have had major political differences and in some cases fought wars against each other 'back home', work together to administer the ATS and disputes over, for example, fishing are resolved through the ATS.

The unusual status means that Antarctica is frequently viewed as a barometer of human use of the global environment, and activities here are often compared with what goes on elsewhere on the planet. This reflection on activities here and comparison with the other parts of earth is often expressed in the following manner: 'if we cannot get it right in Antarctica, there is little chance of success anywhere else on earth!'

In an attempt to prevent conflict and exploitation, it is the only continent devoted primarily to scientific activity and it is a neutral de-militarised zone. Scientists from many countries work together investigating, for example, glacial activity, ancient climate records stored in the ice, geology and marine biology. The scientists live on the continent for weeks, months, or in some case years, but there are still very few permanent inhabitants. Most commercial activity on the continent is banned, particularly mining and oil extraction. However, tourism has the very unusual status of being not only allowed, but actually promoted.

Why would tourists come to, what at first glance appears to be, a very inhospitable place for visitors? The landscape is an important attraction, particularly when it is accompanied by the significant amount and variety of wildlife in the margins of Antarctica. There are also a small number of heritage attractions in the form of the huts of the early explorers such as Scott, Shackleton and Mawson. Unusually, scientists and the work that they do are a very significant attraction for tourists. This is partly because the work in which many scientists are engaged, has global importance, particularly that to do with climate change. As science is the major activity of Antarctica and the scientists are funded by taxpayers from the countries of many of the visitors, it also provides an opportunity for these people to see how their taxes are being spent! Some tourists want to see what they regard as a unique environment (perhaps before it is irrevocably changed!). Some may also come to experience the 'otherness' of place and what some regard as the last remaining true wilderness on earth.

The tourist season is short, taking place during the short Antarctic summer from November to February. Tourism is also very concentrated in the coastal margins and particularly the area known as the Antarctic Peninsula, where many of the huts of the explorers are located. This area receives about 90% of all visitors, with the South Pole itself also being significant for tourist visits. Almost all of the tourists arrive by cruise ship – they come from several countries, particularly Chile, Australia and New

Zealand and the ships anchor offshore from the landmass. Visitor numbers appeared to have peaked at just over 30,000 per year in 2008, but have fluctuated since and have been generally lower than this at about 25,000 per year. During the COVID-19 pandemic visitor numbers actually fell, but since 2022 visitor numbers have recovered and appear to be heading towards 50,000 per year.

The reaction of tourists to their experience of Antarctica was investigated by Maher (2011). Maher was particularly interested in whether the experience was such that visitors were so affected that they became 'ambassadors for Antarctica'. What he meant by this was that tourists would be so impressed and even overawed by the Antarctic environment that they would have three reactions:

- They would believe that Antarctica is a unique environment, and tell their friends/family about Antarctica's attractions.
- They would tell their friends and family about the need to conserve the continent.
- They would become much more aware, generally about the importance of 'natural environments' and the need for their conservation.

Maher suggested that there are three phases of a tourist's experience:

- 1 Travel to the site – this is the anticipation phase.
- 2 The on-site experience – which Maher considered was likely to be an 'extraordinary experience' for the visitors because of what Antarctica has to offer.
- 3 The travel back from Antarctica – which involves memory and recollection. This process involves the on-site experience interacting with the pre-visit (anticipation) and post-visit (recollection/memory). Maher considered that this third stage (memory and recollection) would be most likely to contribute to the possible 'ambassador' role.

Maher examined the different phases of the experience, but concentrated on the 'anticipation' and the 'recollection/memory phase'. He used a sample of both 'ordinary' tourists to Antarctica, but also included 'VIPs to Antarctica' who comprised scientists, politicians, writers, artists and photographers, who are able to travel to the continent as a result of grants from countries such as New Zealand and Australia. Maher used questionnaire surveys, interviews and personal narratives. In total there were 87 respondents in phase 1 of the field research (as indicated above as phase 1 of the 'experience') and 75 of these in phase 2 of the field research (phase 3 of 'experience' above).

In relation to the potential role as ambassadors for Antarctica, all the respondents indicated that they had shared the experience after the visit with friends and family; some respondents also shared this with other groups; and all respondents regarded this as a very important activity. Respondents suggested that they had done this sharing mainly via informal discussion. However, some had also given

formal speeches about their experiences. Respondents suggested that the motivations for sharing their experience was to make Antarctica 'come alive', 'bring it closer to the listeners' and 'whet their appetite'. In terms of what they had learned during the visit, respondents indicated that they had found out more about the impacts of humans on Antarctica, the vulnerability of Antarctica, dealing with litter/pollution, and specific wildlife information.

Most of Maher's research questions were indirectly concerned with the role of ambassador for the Antarctic, and these did not make overt references to this role. However, Maher also asked a direct question about the role and just over 80% of respondents indicated that they felt they had become ambassadors for the continent as a result of their experience. However, Maher also injected a note of caution in relation to his results, when he stated that they should be interpreted carefully, as Antarctic tour operators would naturally be pleased to regard tourists as 'ambassadors', as this would be a very good marketing device for them.

(Based on Mason and Legg, 1999 and Maher, 2011, with more recent updates)

Summary

Protected areas have been established for a number of reasons in many countries around the world. A major motivating factor behind their establishment has been the desire to protect landscape and flora and fauna that have important aesthetic and scientific dimensions, but are threatened by potentially damaging human activity. Some protected areas allow tourism, but others do not.

One of the major types of protected area is the national park. Most parks have as an aim to protect the landscape, but also the intention to allow recreation and tourism activities. However, a significant issue is that these two activities do not always sit well together, and tourism can damage the very thing that tourists have come to visit.

Wilderness as a special kind of protected area is still found in certain areas on earth, but is threatened by human activity. Nevertheless in the case of the Antarctic wilderness, there is evidence that those who have visited not only believe strongly in the need to protect the entire continent, but have developed increased awareness and concern for environmental conservation in general.

Student activities

- 1 Holden (2016) indicates that a key issue is how to best deal with the interaction of tourism and conservation in protected areas. What do you understand by this issue and how can it be resolved?
- 2 What factors contributed to the introduction of national parks in the USA in the 19th century?
- 3 In relation to the case study of Yellowstone Park, what are the major problems here and what can be done about these?
- 4 In small groups discuss why wilderness is a difficult concept to define.
- 5 Why is wilderness important in relation to tourism today?
- 6 What attracts tourists to Antarctica?
- 7 Why could tourists become 'ambassadors for Antarctica'?

References

- Eagles, P., McCool, S. and Haynes, C (2002) *Sustainable Tourism in Protected Areas: Guidelines for Planning and Management*, Cambridge: IUCN
- Hall, C.M. and Lew, A (2009) *Understanding and Managing Tourism Impacts: An Integrated Approach*, London: Routledge
- Hall, C.M. and Page, S. (2014) *The Geography of Tourism and Recreation*, 4th ed., London: Routledge
- Holden, A (2013) Protected areas and tourism, in Holden, A. and Fennel, D. (eds) *Routledge Handbook of Tourism and the Environment*, pp 276-284, London: Routledge
- Holden, A (2016) *Environment and Tourism*, 3rd ed., London: Routledge
- IUCN (2003) *Guidelines for Protected Area Management Categories*, Gland, Switzerland
- IUCN (2011) *IUCN Protected Areas Category System* www.iucn.org accessed May 5 2017
- McCannell, D. (1992) *Empty Meeting Grounds, The Tourist Papers*, London: Routledge
- Maher, P (2011) Antarctic human dimensions: Ambassadors for the experience, in Maher, P., Stewart, E. and Luck, M. (eds) *Polar Tourism: Human, Environmental and Governance Dimensions*, New York: Cognizant Communications, 121-141.
- Mason, P. (2020) *Tourism Impacts, Planning and Management*, 4th ed., London, Routledge
- Mason, P. and Legg, S. (1999). Antarctic tourism: activities, impacts, management issues and a proposed research agenda. *Pacific Tourism Review*, 3, 71-84.
- Nash, R (1967) *Wilderness and the American Mind*, Newhaven CT: Yale University Press
- Nash, R. (1982) *Wilderness and the American Mind* (3rd ed) Newhaven: Yale University Press
- Saarinen, J. (2013) Tourism into the wild: the limits of tourism in wilderness, in Holden, A. and Fennel, D. (eds) *Routledge Handbook of Tourism and the Environment*, pp 145-154, London: Routledge
- Wilkinson, T. (2016) Booming tourism becomes a stress test for Yellowstone, *National Geographic Magazine*, May.

