

The article introduces the dossier on ecotourism and protected areas featured in this special issue (*Bois et forêts des tropiques*, BFT, n° 290) and the next (BFT 291).

Le présent article introduit le dossier écotourisme et aires protégées, réparti dans ce numéro spécial (Bois et forêts des tropiques, BFT, n° 290) et dans le numéro suivant (BFT 291).

Douglas WILLIAMSON

Forestry Department
Food and Agriculture Organization
of the United Nations
Viale delle Terme di Caracalla
00100 Rome, Lazio
Italy

Ecotourism and protected areas: making the most of the opportunities

The aim of the present paper is to provide a concise overview of what is required to enable ecotourism to make a positive contribution to protected area management. To achieve this aim, ecotourism is defined and discussed, the requirements for its implementation are described, the benefits, and the costs and impacts that it can generate are analysed, and some tentative conclusions are presented.

Xiaozhaiziguo Nature Reserve.
Sichuan, China.
Photo D. Williamson.



RÉSUMÉ

ÉCOTOURISME ET AIRES PROTÉGÉES: TIRER LE MEILLEUR PROFIT DES OPPORTUNITÉS

Cet article propose un bref aperçu des conditions nécessaires pour que l'écotourisme puisse contribuer de façon positive à la gestion des zones protégées. Nous examinons la définition de l'écotourisme avant de décrire les prérequis pour réussir sa mise en place. Nous analysons ensuite les avantages, les coûts et les impacts pouvant être générés par l'écotourisme. Nous en concluons que l'écotourisme, à condition d'être bien planifié et bien géré, permet souvent de contribuer durablement au financement des aires protégées et que le tourisme en général dans ces aires protégées, y compris l'écotourisme, facilite la reconnaissance de leur valeur et améliore de ce fait leur protection.

Mots-clés : écotourisme, aire protégée, gestion.

ABSTRACT

ECOTOURISM AND PROTECTED AREAS: MAKING THE MOST OF THE OPPORTUNITIES

The aim of this paper is to provide a concise overview of what is required to enable ecotourism to make a positive contribution to protected area management. To achieve this aim, ecotourism is defined and discussed, the requirements for its implementation are described, and the benefits, costs and impacts that it can generate are analysed. It is concluded that ecotourism which is well planned and well managed can often contribute to sustainable financing of a protected area and that tourism, including ecotourism, in protected areas can facilitate recognition of their value and enhance their protection.

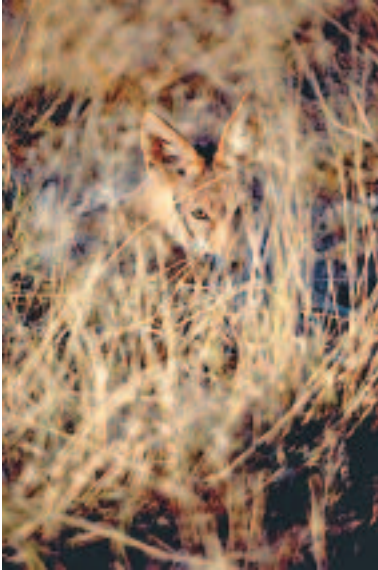
Keywords: ecotourism, protected area, management.

RESUMEN

ECOTURISMO Y ÁREAS PROTEGIDAS: SACAR EL MEJOR PARTIDO DE LAS OPORTUNIDADES

Este artículo ofrece una breve visión de las condiciones necesarias para que el turismo ecológico pueda contribuir de manera positiva a la gestión de las zonas protegidas. Se analiza la definición de ecoturismo antes de describir los requisitos previos para lograr implantarlo con éxito. A continuación, se examinan las ventajas, costos e impactos que puede generar el ecoturismo. La conclusión que sacamos es que el ecoturismo, siempre y cuando esté bien planificado y gestionado, suele permitir una contribución duradera a la financiación de las áreas protegidas y que, en estas áreas protegidas, el turismo en general, incluido el ecoturismo, facilita el reconocimiento de su valor y, por lo tanto, mejora su protección.

Palabras clave: ecoturismo, área protegida, gestión.



Jackal. Central Kalahari Game Reserve, Botswana.
Photo D. Williamson.

Introduction

Ecotourism has been strikingly successful in some countries. Costa Rica, for example, has a tourism industry, much of it based on ecotourism, which generates more than a billion dollars of business a year (<http://www.american.edu/TED/costa-rica-tourism.htm>). But ecotourism is not a panacea for the difficulties of financing protected areas and it is neither simple nor easy to implement in a successful and sustainable manner.

Ecotourism

Ecotourism has, not surprisingly, a strong environmental focus. CEBALLOS-LASCURÁIN (1996) defines it as: “environmentally responsible travel and visits to relatively undisturbed natural areas, in order to enjoy and appreciate nature (and any accompanying cultural features – both past and present) – that promote conservation, have low visitor impact, and provide for beneficially active socio-economic involvement of local populations”. Similarly, The Ecotourism Society (now known as The International Ecotourism Society, TIES) has defined it as: “responsible travel to natural areas that conserves the environment and sustains the well-being of local people” (LINDBERG, HAWKINS, 1993).

In comparison to broadly defined nature-based tourism, it is “more exclusively purposeful and focused on the enhancement or maintenance of natural systems” (CEBALLOS-LASCURÁIN, 1996). In comparison to traditional tour operators, ecotourism operators are more principled. “The former show no commitment to conservation or natural area management, merely offering clients an opportunity to experience exotic places and people before they change or disappear. Ecotourism operators, on the other hand, have begun to form partnerships with protected area managers and local people, with the intention of contributing to the long term protection of wild lands and local development and in the hope of improving mutual understanding between residents and visitors” (*op. cit.*).

CEBALLOS-LASCURÁIN (1996) proposes a rigorous prescription for an activity to qualify as ecotourism, which perhaps not everybody would subscribe to, but which nevertheless



Mountain forest in the Baimaxueshan Reserve. Yunnan, China.
Photo D. Williamson.



Mountain stream in spate. Yunnan, China.
Photo D. Williamson.

has heuristic value. His proposal is that to qualify as ecotourism, an activity must possess nine attributes. These are presented below in a slightly modified form.

▪ **It promotes positive environmental ethics and fosters “appropriate” behaviour among its participants.**

Appropriate behaviour would be motivated by informed and responsible attitudes and values and would include, for example, avoiding needless disturbance of wildlife or damage to plants, keeping to designated trails and roads, leaving “only footprints” and taking “only pictures”.

▪ **It does not degrade the focal resource.** In other words, it does not involve consumptive depletion of the natural environment through, for instance, sport hunting or fishing, which are more akin to adventure tourism than to ecotourism.

▪ **It concentrates on intrinsic rather than extrinsic values.** Amenities and services may facilitate the encounter with the intrinsic resource, but should neither become attractions in their own right, nor detract from the resource. Tourist accommodation should thus be modest and in harmony with the environment, rather than gratuitously conspicuous and grandiose.

▪ **It focuses on the environment in question and not on man.** Ecotourists accept the environment as it is, having no expectation that it will either change or be modified for their convenience or pleasure. They therefore do not expect to be provided with facilities for sports, shopping, entertainment, or other extraneous diversions.

▪ **It must benefit biodiversity and the environment.** The question of whether or not the environment (not just people) has “benefited” can be measured socially, economically, scientifically, managerially, and politically. At the very least, there must be a net benefit for the environment, contributing to its sustainability and ecological integrity. If, for example, habitat has to be sacrificed to provide facilities for tourists, managers and researchers, it should be carefully selected to minimize ecological and aesthetic losses and should not detract from the conservation status of adjacent habitats.

▪ **It must provide a first-hand encounter with the natural environment** and with any accompanying cultural elements found in undeveloped areas. In these terms, viewing nature through the window of a tourist coach is mass tourism, while going on a wilderness trail is ecotourism.

▪ **It actively involves local communities in the tourism process** so that they may benefit from it, thereby promoting a higher valuation of the natural resources in that locality. Ways in which local people can benefit from ecotourism include: direct employment as guides, lodge staff or managers, providing services such as catering and laundry, sales of fresh foods and handicrafts.

▪ **Its level of gratification is measured in terms of education and/or appreciation** rather than thrill-seeking or physical achievement. An ecotourist might be educated by, for example, learning about a dimension of the natural world of which they were previously ignorant, geology for example, and might appreciate experiencing the natural world with increased knowledge and understanding.

▪ **It involves considerable preparation and demands in-depth knowledge on the part of both leaders and participants.** The satisfaction derived from the experience is felt and expressed strongly in emotional and spiritual ways. Leaders can prepare themselves by planning an experience that encompasses all the particular attributes of the location and can help participants to prepare by giving them a reading list which provides the essential information about the location. Participants can prepare themselves by reading what is suggested to them.

Because ecotourism is an increasingly popular and lucrative form of tourism, the problem of “green-washing” is common. It arises when opportunistic tour operators who make no attempt to conform to the ideals of ecotourism, nevertheless sell their products as ecotourism. One of the ways in which this type of practice is being addressed is through certification initiatives, such as Green Globe 21, an industry accreditation scheme to promote and market environmentally sound tourism (EAGLES *et al.*, 2002).

Implementing ecotourism in protected areas

Before thinking about the implementation of ecotourism in protected areas, it is helpful to understand what they are.

Definition of a protected area

Many countries, institutions and organizations have adopted the IUCN's definition of a protected area and its system of protected area categories, which is based on management objectives that range from complete protection (Category 1) to managing landscapes for sustainable use (Category VI). In the context of this system, a protected area is defined as: "an area of land and/or sea especially dedicated to the protection and maintenance of biodiversity and other natural and associated cultural resources, and managed through legal or other effective means" (IUCN, 1994).

Protected areas are widely recognized as a crucial mechanism for the maintenance of biodiversity and now cover around 12% of the earth's terrestrial surface. IUCN's World Commission on Protected Areas (WCPA) is the principal source of technical information and advice on all activities relating to the planning, establishment and management of systems of protected areas.

Preparatory planning of ecotourism activities

The prospects of developing sustainable and successful ecotourism activities are greatly improved if careful preparatory planning that involves all stakeholders in the industry is undertaken. As noted by EAGLES and HIGGINS (1998): "The slow and thoughtful development of a country's ecotourism industry can lead to policies that are suitable to a broader sector of society. Rapid development and



Gorilla infant. Congo Brazzaville.
Photo D. Williamson.

entrenched tourism businesses can lead to individual priorities overwhelming the larger societal objectives of environmental protection and community development."

Planning of ecotourism is advantageous at regional level and is essential at national level and in individual protected areas. The success of tourism and the benefits that it generates can be increased by regional cooperation between countries which share ecosystems, such as the Serengeti in East Africa, or have the potential to develop a regional tourist circuit, such as the one that is emerging in Southern Africa.

At all levels, governments have an important role to play in creating policy, legal, institutional, economic and infrastructural arrangements which facilitate and sustain successful tourism operations. These requirements apply to all forms of tourism and in the case of ecotourism, "it cannot be

stressed enough that collaboration between officials from the national tourism bureau (or other body), the protected areas/parks service, and the treasury is particularly important if the policies and structures that will enable successful tourism development are to be put in place" (CEBALLOS-LASCURÁIN, 1996). In practice, there are many actors who need to be involved in planning for ecotourism. These include, for example: protected area staff, local communities, tourist operators, NGOs, funding agencies such as banks, private investors and international donors, and of course the tourists themselves, who are ultimately the engine of the entire enterprise.

At the level of individual protected areas, there is much that needs to be done if the development of ecotourism is to be sustainable and successful. Broadly speaking, three clusters of activities need to be implemented.

Creation of a tourist management strategy

One of these involves the creation of a tourist management strategy. This might involve a number of steps. CEBALLOS-LASCURÁIN (1996), for example, describes a four-step process:

- 1. Assess the current tourism situation by looking into the status of natural resources, the level of tourism demand, the facilities available, the identity of beneficiaries, costs, relationships with park neighbours and existing and potential tourist activities.
- 2. Determine the most desirable tourism scenario by asking what situation one would like to be in with regard to tourism, how tourism management could be improved, what could be done differently, how the tourist experience could be enriched, how the impact of tourism could be minimized, what opportunities are being missed, and what message the park would like visitors to take home with them.

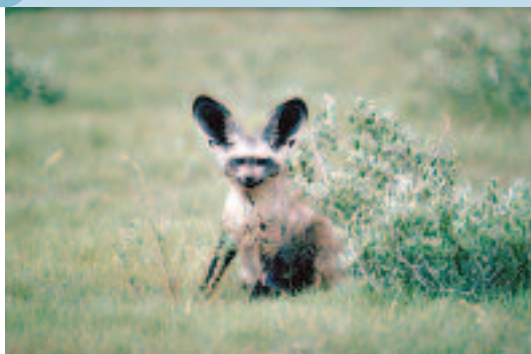
Deciding on the optimum tourism scenario is a site-specific exercise and will require awareness and consideration of a range of issues, including the need for sustainable financing and the need to engage with and provide benefits to park neighbours. Stable financing will be facilitated by exploring all the marketing opportunities and involving the private sector. EAGLES *et al.* (2002) contend that “there is no such thing as the ‘average protected area visitor’”. In reality, markets comprise many segments, each of which has somewhat different characteristics, expectations, activity participation and spending patterns. Marketing exploits these visitor segments by comparing and matching them with the biophysical and cultural attributes of the park, and then sensitively promoting appropriate protected

area attributes to the targeted segment. This reduces adverse impacts on the protected area, increases economic benefits and makes it more likely that visitors are satisfied.”

The Madikwe Game Reserve in South Africa is an example of ecological restoration designed and paid for by tourism. The development of the reserve included the largest restocking exercise ever undertaken. More than 10 000 animals of 28 species were reintroduced to the reserve, including elephant, rhino, buffalo, lion and so on. Tourism is paying for development and running costs. The private sector finances the building of game lodges and their management, as well as a range of tourist activities in the reserve, including trophy hunting. Operators pay concession fees to the reserve for operating rights and these fees provide the park’s finances (EAGLES *et al.*, 2002).

The Kakum National Park in the Guinea Forest region of Ghana is an example of a successful community-based approach to tourism in a forest protected area. Its community-based approach to tourism development “is an excellent example of local community development, carefully structured to create an economic ecotourism alternative to resource exploitation” (EAGLES *et al.*, 2002). Benefits to local people include sales of food supplies to restaurants, sales of crafts and services, training as ecotourism guides and full-time direct or indirect employment.

- 3. Having decided on the optimum tourism scenario, the next step is to embark on the strategic thinking required to reach a decision on how the ideal scenario is to be implemented in practice. This process will need to identify what needs to be done, what skills will be needed to do it, how much time will be needed, how it will be financed, what the priorities are. It will generate a list of priority activities that might include, for example, training needs, creation of facilities and infrastructure, publicity



Bat-eared fox. Central Kalahari Game Reserve, Botswana.
Photo D. Williamson.



Brown hyen—rare and shy desert specialist. Kalahari, Botswana.
Photo D. Williamson.



Lion—ecotourism superstar. Kalahari, Botswana.
Photo D. Williamson.



Marico flycatcher in the Kalahari woodland, Botswana. Birdwatching is the most important global ecotourism speciality.
Photo D. Williamson.

material, engaging with local communities, identifying and working with tourist operators, establishing an ecological monitoring system, and so on.

▪ 4. The final step is to produce, publish and disseminate the formal tourism strategy. In addition to providing the basis for tourism management, this can be used to raise finance and inform potential partners and collaborators.

The practical implementation of the tourism strategy requires the formulation of a tourism management plan specifying operational details and responsibilities. Each plan will be site-specific, but there are generic issues that nearly always need to be addressed.

Zoning of the protected area

Zoning of the protected area is important, because it facilitates conservation and management and because it increases the scope for tourist activity. Zoning is usually based on intensity of use and management functions. There may be a strictly protected zone in which no visits are permitted, a zone in which low impact visits, such as wilderness trails, are permitted and a different zone for higher impact tourist activities. There will also need to be areas for visitor accommodation, staff quarters and management and administration offices. Parks Canada, for example, has a zoning system with five classes:

- I. Special preservation: usually no or very limited access;
- II. Wilderness: only non-motorised access;
- III. Natural environment: limited motorised access and modest facilities;
- IV. Recreation: opportunities for education and recreation in harmony with the natural landscape;
- V. Park services, accommodation and facilities for visitors and staff (http://www.pc.gc.ca/pn-np/nt/aulavik/docs/plan2/sec6/index_e.asp).

From a conservation point of view, zoning provides a mechanism to meet the protection needs of fragile or especially rare and valuable habitats and the animals which depend on them. In the context of tourism, zoning makes it possible to cater for different tastes and needs in relatively small protected areas. By using spatial and temporal zoning, i.e. allowing specific activities at specific times and in specific places, it is, for example, possible to conduct mass tourism, wilderness trails and trophy hunting in a relatively small protected area and by so doing to contribute significantly to its financial sustainability. Operations of this type are currently running in a number of South African reserves, both public and private.

Other aspects of implementation

▪ **Accommodation and facilities**, such as tourist information or interpretation centres, need to be appropriately designed, located and managed in order to contain their impact on the landscape.

▪ **Information and interpretation services** that cater for a wide range of needs and interests must be planned and provided. At the most basic level, visitors need information on facilities, fees, opening and closing times and so on. "Interpretation and education go beyond simply informing, towards developing an understanding and appreciation" (EAGLES *et al.*, 2002).

▪ **An in-depth tourism study** (CEBALLOS-LASCURÁIN, 1996) to establish the baseline from which future development and management will begin. This should address aspects such as visitor profiles, current visiting patterns and their impact on the park, visitor expectations and how far they are being met, monitoring and evaluation of the nature and quality of the visitor experience.

▪ **Training** needs must be assessed and measures to meet these needs must be planned and implemented.

▪ **Financing mechanisms** need to be identified and developed with the



Hoodia. Central Kalahari Game Reserve, Botswana.
Photo D. Williamson.

ultimate aim of achieving financial sustainability. This issue has been the subject of much thought and discussion in recent years and the number of mechanisms that have been identified for raising funds is steadily increasing. The role of the private sector is particularly important because in many countries, government funding for protected areas is declining rather than increasing. The KwaZulu-Natal Conservation Trust (KZNT) in South Africa is an example of an innovative Trust. KZNT "is an independently registered capital fund, which was established in 1989 to allow public and corporate donations to conservation, due to ongoing reductions in public funding of protected areas ... The Trust has an emblem, which is licensed for use on a range of clothing, equipment and accessories, in return for a royalty" (EAGLES *et al.*, 2002).

Table I.
Potential negative impacts of tourism (EAGLES *et al.*, 2002).

Type of impact	Examples	Comments
Financial and economic	Increased demand for goods, services and facilities	Can attract foreign entrepreneurs, leading to increased foreign ownership
	Increased demand for public services – e.g. health care, policing, fire-fighters, etc.	May increase tax burden of local people – even to the point where they have to move away
	Increased costs of protected area management due to need for additional staff and facilities	Park must have a mandate to use the income from tourism to meet the cost of its impacts
	Local economy and PA heavily dependent on tourism	Can result in increased vulnerability to external factors beyond local control, e.g. currency fluctuations, natural disasters, conflict
Social	Tourists may spend their money outside the PA, local community, or country	If local people do not benefit they may turn to land uses that benefit them more
	Tourists compete with locals for use of special sites	Needs and wishes of locals need to be ascertained through consultation before tourism is implemented
	Poor planning may result in congestion, littering, vandalism and crime	Careful planning is essential
	Commercialisation of local traditions – e.g. traditional dancing may become a form of tourist entertainment	Ensure that local people are aware of and understand the implications of what they are doing
	Large gaps between wealth of tourists and poverty of locals can result in exploitation	Local people must be involved in deciding what form of tourism will be developed
Environmental impacts	Ecosystems and habitats may be disrupted or degraded by construction of roads and other infrastructure	Environmental impact assessments and careful planning can reduce negative impacts
	Soil compaction or erosion may result from use of an area	Soil degradation needs to be monitored and managed
	Vegetation may be altered or damaged by, for example, high demand for fuelwood or highly concentrated use	Monitoring and management are essential
	Local water supply may be depleted by excessive demand or polluted by waste	Planning, monitoring and appropriate measures are all called for
	Motor vehicles cause air pollution	Regulate use of motor vehicles
	Disturbance of wildlife	Careful planning and management of tourist activities and facilities



Saddlebill stork in the Okavango Delta, Botswana.
 Photo D. Williamson.



Glossy starling in the Kalahari woodland, Botswana.
 Photo D. Williamson.



Tortoise. Deception Valley, Kalahari Woodland.
 Photo D. Williamson.

Benefits, costs and impacts of ecotourism in protected areas

Ecotourism generates both benefits and costs.

Benefits

EAGLES *et al.* (2002) identify three clusters of potential benefits.

Enhancing economic opportunity through, for example, increased employment, increased income, commercial opportunities for local suppliers, local manufacture of goods, new markets and foreign exchange, improved living standards, tax revenues, new skills, funding for protected areas and communities.

Protecting the natural and cultural heritage conserves the biodiversity of genes, species and ecosystems, brings out the value of biodiversity, propagates conservation values, contributes to protected area financing and so on.

Enhancing the quality of life promotes aesthetic, ethical and spiritual values, provides environmental education for locals as well as tourists, improves intercultural understanding, encourages the development of culture, crafts and the arts, increases the educational level of local people and helps local people to value their own culture and environment.

Costs

The overall costs of ecotourism include economic, social and environmental costs (Table I).

Economic costs arise from increased demand for public services, such as health, law and order, which result from the presence of large numbers of foreign visitors. The cost of protected area management is also increased by the need to service, manage and monitor tourism.

Social costs are due to a number of factors, including, *inter alia*: excessive numbers of visitors who disturb and disrupt local activities, governments that give priority to short-term economic gain and ignore the needs of local people, denying local people access to resources and locations in the protected area that have traditionally been important to them, large wealth gaps between tourists and local people, causing exploitation of local people and indifference to their concerns and needs.

There are literally dozens of different ways in which tourism can harm the environment. Negative effects may include ecosystem disruption by infrastructure development, soil degradation, damage to vegetation and habitats, overuse, air and water pollution and disturbance or injury to wildlife.

Conclusions

If it is well planned and well managed, ecotourism can often make a substantial contribution to the sustainable financing of a protected area and can also generate a range of ecological and socio-economic benefits.

Good planning and management require both inclusiveness and innovation. Inclusiveness depends on meaningful involvement in planning and management of all groups with a legitimate interest in ecotourism activities within a given protected area. Local people living in and around the protected area are especially important stakeholders. Innovation requires in-depth knowledge of the protected area, of its stakeholders and of its potential to meet a range of tourist interests and expectations.

The importance of ecotourism, and other forms of tourism, should not be underrated because "Protected areas normally achieve recognition and enhanced protection when sufficient numbers of people visit them, appreciate them, and take political action to assure their survival. Park tourism is a critical component of protected area establishment and management" (EAGLES *et al.*, 2002).

References

CEBALLOS-LASCURÁIN H., 1996. Tourism, ecotourism, and protected areas. Gland, Switzerland, and Cambridge, United Kingdom, IUCN, xiv+301p.

EAGLES P.F.J., HIGGINS B.R., 1998. Ecotourism: a guide for planners and managers. Volume 2. North Bennington, Vermont, USA, The Ecotourism Society.

EAGLES P.F.J., MCCOOL S.F., HAYNES C.D.A., 2002. Sustainable tourism in protected areas: guidelines for planning and management. Gland, Switzerland, and Cambridge, United Kingdom, IUCN, xv+183p.

IUCN, 1994. Guidelines for protected area categories. Gland, Switzerland, and Cambridge, United Kingdom, IUCN.

LINDBERG K., HAWKINS D.E., 1993. Ecotourism: a guide for planners and managers. Volume 1, North Bennington, Vermont, USA, The Ecotourism Society.