



Ecotourism and ecological restoration

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Summary

The fast pace of tourism development around the world is causing untold damage to some of the most endangered ecological systems. From Dubai to Honolulu and from Cancun to Beijing, the environmental impacts of tourism are alarming. Ecological restoration (ER) of disturbed lands should be an important approach to sensitive tourism planning. This paper addresses the need for restoring biodiversity and how ecotourism has shown to be a strong force in the field of ER. Two examples (one each of private and community based ecotourism) incorporating ER will be highlighted in this paper: Phinda Game Reserve, South Africa and the Baboon Sanctuary in Belize. We call for greater dialogue across disciplines, notably ER, conservation science and ecotourism.

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Introduction

Over the past 15 years, ecotourism has become one of the fastest growing sectors of the tourism industry, growing three times faster than the industry as a whole. At the same time, ecotourism is being increasingly viewed by local and indigenous communities as an important tool for promoting sustainable livelihoods, cultural preservation, and biodiversity conservation (Honey, 2006). The Inter-

national Ecotourism Society (TIES, 2006) defines ecotourism as “responsible travel to natural areas that conserves the environment and improves the well-being of local people”. Ecotourism has, in essence, three core tenants. It holds that, done well, it can (1) protect and enhance the environment, (2) respect local cultures and provide tangible benefits to host communities, and (3) be educational as well as enjoyable for the traveller (Honey, 2006).

Conventional tourism impacts the environment both physically and culturally. Tourism has increased by more than 100% between 1990 and 2000 in the world’s biodiversity hotspots, regions richest in species and facing extreme threats

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(Christ, Hillel, Matus, & Sweeting, 2003). The adverse effects of tourism stem from tourists themselves, as well as from infrastructure and accommodation facilities. Although, these impacts cannot be eliminated, by establishing a framework that emphasises proper planning and monitoring, they can be managed properly and kept to a bare minimum. To mitigate or avoid negative impacts, part of the ecotourism planning strategy often consists in restoring impacted land and affected resources, while actively publicising such efforts. Many lodge owners, indigenous communities and governments, are increasingly practicing ecological restoration (ER) on their private properties, communal land, and national parks. In some cases, like the Il Ngwesi tribe in Kenya, it has even been one of the main motivations for indigenous communities to start a tourism business (Mehta, 2006). Tourism revenues and cooperative, volunteer labour can serve to finance and carry out restoration programmes. Part of lodge owners' marketing campaign may mention reforestation, eradication of exotic species, reintroduction of native species, as well as organic gardening, etc. (Mehta, Baez, & O'Loughlin, 2002). This paper focuses on private sector and community efforts towards ER.

Ecolodge guidelines and ecological restoration techniques

With the rapid growth of nature-based tourism has come the development of numerous lodges in biologically rich, diverse areas. Such developments often have had detrimental ecological and social impacts. The increase in numbers of lodging facilities being inevitable, a set of guidelines have been written by a team of TIES members and provide a framework for the design, development and operations of ecolodges. An ecolodge is a "5–75 room low-impact nature based financially sustainable accommodation facility that helps protect sensitive neighbouring areas; involves and benefits local communities; offers tourists an interpretative and interactive participatory experience; provides a spiritual communion with nature and culture and is planned, designed, constructed, and operated in an environmentally and socially sensitive manner" (Mehta, 2006).

In the International Ecolodge Guidelines book, ER is mentioned as a possibility and highly encouraged. "The success of an ecolodge pivots on the initial process of site evaluation, selection, planning, and design. A fundamental goal for an "eco"-oriented project is that the development of the site must

leave the site better off after development than before. Reforestation, water resource enhancements, soil enrichment, and wildlife protection and restoration programmes should be planned from the very beginning. However, funds are often limited and restoration is still based on the availability of voluntary help".

Recommendations in the guidelines revolve around several principles: "select a site just outside a nature reserve", or "select a site whereby the ecolodge itself would not directly affect the focal (or flagship) ecotourism attractions of the area or visually compete with these attractions". "Concentrate development in less sensitive areas". "Whenever possible, develop in previously disturbed sites. Redevelopment requires minimal disturbance of natural systems since the disturbed area may already be impacting the site. Conversion of old existing facilities is one of the lowest impact techniques. Ecolodges can be a driver of ER on damaged sites. Habitat restoration helps to provide homes and safety zones for wildlife displaced by development".

Other recommendations lead to more specific measures. "When reforesting, combine different native species and avoid straight-line or square grid patterns. Whenever possible, plant native fruit bearing trees to attract wildlife and provide food for your guest. Restore the native plantings by reintroducing the same species. Resist the temptation to introduce exotic species. In restoring a disturbed landscape, speed up the process of natural succession by planting many complimentary native species at once, and letting them play out their natural evolution".

The ecolodge guidelines were inspired by the experience of various stakeholders in the ecotourism industry including ecolodge owners. They have gained international recognition and are widely used by developers, planners, landscape architects, architects, and engineers all around the world for developing ecotourism facilities. They have influenced several of the most recent projects in countries such as China, Bali, Sri Lanka, Rwanda, Uganda, Kenya, and Mexico.

Not all ecolodges can afford to implement ER programmes. However, many of them do support conservation strategies that may permit or contribute to passive restoration. In a study conducted by TIES, it was found that 80% of the lodge owners said that they support conservation efforts, do not purchase rare or threatened species, and actively encourage guests to participate in conservation initiatives (Bricker, Honey, Inamdar, & Placht, 2004). While very few lodges address feral animal and weed control, many focus on consolidating an

existing protected area or creating a completely new private reserve adjacent to a national park which can serve as an extension of habitat or even as a wildlife corridor.

Conservation Corporation Africa (www.ccafrica.com/vision/cca_vision.asp) is an exemplary private tourism company based in South Africa which actively promotes restoration of land, protecting wilderness areas, and protecting biodiversity. At Phinda Private Game Reserve, situated in northern KwaZulu–Natal, and bordering the Greater St. Lucia Wetland Park – a World Heritage Site – they consolidated over 17,000 ha of degraded land, ravaged by decades of inappropriate cattle management, combined with pineapple, sisal, and cotton farming, and restored it to its pre-disturbance state. More than 2000 head of wildlife were reintroduced, including lion, leopard, elephant, black and white rhino, and buffalo. It is one of the biggest game restocking exercises undertaken on private land in South Africa. Care was also taken for the landscape – for example, during the building of Phinda Forest ecolodge in a rare sand forest, not a single tree was uprooted. And, in a very short space of time, the neighbours were benefiting directly from Phinda. This was achieved through employment and community development projects implemented – in consultation with the communities – by CC Africa's Rural Investment Fund, now an independent, non-governmental not-for-profit organisation called the Africa Foundation.

Community based ecotourism and ecological restoration

Several communities have the goal of restoring their degraded land when starting a tourism project. Ecotourism is developed primarily to provide the financial resources for rehabilitating overgrazed areas by long-term cattle breeding or for relocating endangered and poached wildlife. It follows a successful land reclamation procedure or a resolved conflict with a logging or mining company.

Over the 180 case studies of community based tourism featured in the recently published *Le guide des destinations indigènes* (Blangy, 2006), no less than 50 have developed an ER programme. These are generally a mix of reforestation, plant eradication, and restocking programmes. The guide book describes how tourism funds ambitious projects in ER and how the economic benefits of tourism help a local community to develop a better appreciation

of the multiple values of conservation and restoration, since tourists are eager to support such efforts, e.g. direct financial contributions or eco-volunteering.

For example, in Belize, the Community Baboon Sanctuary (CBS) was created along the Belize River to conserve one of the last healthy populations of the endangered Black Howler monkey (*Alouatta pigra*) (Bruner Lash, 2003). Founded in 1985, this sanctuary is completely made up of private lands, protected on a voluntary basis. Each owner pledged (1) to keep the forests intact alongside the Belize River, (2) to preserve fruit trees and other trees important to the howler monkeys on his or her rural lands, and (3) to keep the trees and vegetation along property lines, creating an aerial corridor for the monkeys to travel from one property to another. Large farms sprawl alongside the river's edge, making this picturesque waterway a primary attraction for canoe trips, horse riding, monkey viewing, bird watching, and relaxing in thatch-roofed cabanas. Local vegetable farms, as well as cattle and pig ranching, are still the main use of the land; however, more residents are becoming involved in ecotourism. The number of pledged lands has grown over the years, and the CBS has become an integral part of the fabric of this rural society. CBS has been awarded several grants that have helped to build new facilities, train staff, and run the training workshops for community residents in tourism, business, leadership, crafts, computers, and reforestation. Ecotourism has brought a new way of life – a blending of the old and the new. It has offered livelihood opportunities in a rural area and thus provides an alternative to people who otherwise would emigrate to overcrowded Belize City (Bruner Lash, 2003).

Discussion and conclusions

ER is increasingly occupying an important role in ecotourism which has been a rapidly growing sector of the tourism industry. However, apart from the ecolodge guidelines described above, ER is rarely mentioned in other existing ecotourism guidelines developed by communities, national park bodies, conservation NGOs or developing agencies. Unfortunately best practice manuals do not focus on ER processes and certification programmes rarely add ER criteria in their scheme.

As demonstrated in this paper, ER is recognised as a useful tool by ecolodge planners and indigenous communities. Even though ER is mentioned in the

International Ecotourism Guidelines (Mehta et al., 2002) and is illustrated by several case studies described in the recently published guide on indigenous destinations (Blangy, 2006), the impact of ecotourism on ER programmes has not been well researched and is not adequately addressed in the ecotourism literature. We feel that the two approaches need to be merged as ER deserves specific attention within the ecotourism community. A great source for ER is the Indigenous Peoples' Restoration Network (IPRN) of SER International which is compiling and featuring successful ER stories (<http://www.ser.org/iprn/default.asp>). Additionally, the IPRN Resource Centre features annotated links to organisations and communities advocating traditional ecological knowledge principles and applying them in their restoration projects and ongoing environmental practices.

ER needs to be emphasised and further investigated and ER research programmes should incorporate ecotourism projects in their field sites. Additionally, developing agencies should develop manuals on ER with best practice and specific guidelines directed to practitioners in the field.

We recommend that SER International's Science and Policy Working Group consider ecotourism as a promising new field for exploring ER practices and candidate for synergistic linkages. We offer the following ideas as starting place for discussions – that should also include conservation ecologists and protected area managers: ecotourism, private reserves and public parks should become laboratories to explore and experiment new ER, and conservation techniques; not only conservation but also ER criteria should be introduced in certification schemes as obligatory standards; ER should be enhanced in responsible marketing and ecotourism campaigns. Finally, architects, landscape archi-

ects, and planners should be trained or at least familiarised with the concepts and practices in both ER and conservation science.

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References

- Blangy, S. (2006). *Le guide des destinations indigènes*. Indigène éditions. France: Montpellier 384pp.
- Bricker, K., Honey, M., Inamdar, N., Placht, M. (2004). *Ecotourism footprint and justification for biodiversity conservation*. IFC, International Finance Corporation (IFC)/GEFSME Program. The Environmental Business Finance Program (EBFP). http://www.ifc.org/ifcext/enviro.nsf/Content/EBFP_Ecotourism.
- Bruner Lash, G. (2003). *Sustaining our spirit: Ecotourism on privately owned rural lands and protected areas*. Dissertation, Doctor of Philosophy, University of Georgia, Athens, GA, USA.
- Christ, C., Hillel, O., Matus, S., & Sweeting, J. (2003). *Tourism and biodiversity: Mapping tourism's global footprint*. Washington, DC: Conservation International.
- Honey, M. (2006). *Foreword in "Le guide des destinations indigènes"*. Indigène éditions. France: Montpellier.
- Mehta, H. (2006). Towards an international ecotourism certification. In R. Black, & A. Crabtree (Eds.), *Quality control and certification in ecotourism*. Wallington: Cabi Publishing.
- Mehta, H., Baez, A., & O'Loughlin, P. (2002). *International ecotourism guidelines*. Washington, DC: TIES.
- The International Ecotourism Society (TIES). (2006). <http://www.ecotourism.org/index2.php?what-is-ecotourism>.