A Statement for the World Ecotourism Summit, May 19-22, 2002; Quebec City, Canada

VISITOR IMPACT KNOWLEDGE IS BASIC

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[Thematic Session: D – Monitoring Costs and Benefits of Ecotourism]

Abstract

This statement addresses the World Ecotourism Summit’s theme on ‘monitoring benefits and costs of ecotourism’. The objective is to demonstrate that information and knowledge about visitor impacts in protected areas are basic to the environmental sustainability of these prime ecotourism destinations. We contend that while ecotourism may have many potential benefits, environmental consequences should never be overlooked if ecotourism is to be sustainable. Some examples of environmental impacts caused by ecotourists are provided, followed by a discussion on the significance of such impacts. We suggest (1) an increasing focus on visitor impact research and (2) the establishment of visitor impact monitoring programs at ecotourism destinations, particularly those that have recently been or will be opened to visitors. The statement ends with six specific recommendations for ecotourism operators, managers, researchers and related government bodies.

Statement

One major criterion for evaluating ecotourism is its environmental sustainability (Wood 2002). This Summit’s theme of ‘monitoring benefits and costs of ecotourism’ is indeed very timely as ecotourism activities are expanding in many countries, particularly within or near protected areas (UNEP 2001). In celebrating the potential benefits of ecotourism we must not overlook the possible environmental costs of ecotourism (UNEP 2002).

Ecotourism may be a more environmentally benign option than other more extractive resource uses. However, without sufficient planning and management, ecotourism may also result in significant environmental impacts. Some impacts of ecotourism are associated with infrastructure, facility development and services, while other impacts are caused by ecotourist activities. Similar to outdoor recreation activities, ecotourism activities can generate a variety of impacts to the resource base on which the activities depend. Examples include vegetation and tree damage, soil compaction or erosion, wildlife harassment and water quality impacts (Buckley 2001; Leung and Marion, 2000). In Costa Rica’s Carrara Biological Reserve, feeding of wildlife commonly occur around picnic tables near the ranger station, resulting in pest problems for park staff. Poorly maintained and designed trails at Braulio Carrillo National Park in Costa Rica resulted in increased safety concerns. Dispersed hiking on gypsum dunes at Zapaliname National Park in Mexico resulted in death of fragile plants on dunes, and dune shifting. Inexperienced snorkelers and divers have been found to break off coral in Belize.
Visitor impacts are an important parameter in the ecotourism equation as they tend to compromise the conservation guidelines or principles of ecotourism (Wood 2002). If unchecked, these impacts could degrade the resource quality of ecotourism destinations and have concomitant social and economic consequences. Compared to conventional mass tourism, ecotourist impacts could have more serious ecological consequences as most visitor activities occur in environmentally sensitive or ecologically significant communities. For many protected areas in developing countries, unfortunately, visitor impacts are not a high priority as compared to other management concerns like poaching and squatters. Many of these areas have no or very limited staff and they often lack awareness of current conditions and information about what to do with impacts. Visitors may be concerned, but only if they correctly perceive impacts. For example, visitors at the Community Baboon Sanctuary in Belize took cashew fruit from a local guide to feed howler monkeys with. As a result, managers tend to be reactive rather than proactive in their decision-making.

As ecotourism continues to expand globally, it is imperative that the issue of visitor impacts be addressed, examined and monitored sufficiently. We contend that the knowledge of visitor impacts is basic to the environmental sustainability of ecotourism. This knowledge includes the types, intensity, extent of visitor impacts and their influential factors. It also includes an understanding of alternative management actions and their relative effectiveness. Such knowledge is basic yet critical for managers and administrators of ecotourism destinations who must plan for and manage visitors, and who must plan for, develop and manage ecotourism sites and facilities.

Visitor impact knowledge must be grounded in science. The field of recreation ecology has been generating a body of scientific literature that has enhanced our understanding of visitor impacts and their management (Liddle 1997; Marion and Farrell 1998; Cole 2000; Leung and Marion 2000). The methodologies of visitor impact monitoring have also been refined. Some of this information is being transferred to ecotourism managers. In Central and South America, for instance, trail development and impact assessment seem to be more common and in greater demand. Trail and campsite impact monitoring manuals and programs for Torres del Paine National Park in Chile have been developed. Comparative trail impact analysis in Braulio Carrillo National Park in Costa Rica has also been conducted (Farrell and Marion 2001).

While progress has been made, much more attention is needed for visitor impacts. For example, observations recorded guide and tourist feeding of howler monkeys in the Community baboon sanctuary in Belize, but little information was available about the effects of feeding these animals on individual and population viability. Similar lack of information exists in many other ecotourism destinations. Therefore, one urgent need for ecotourism destinations is the establishment of visitor impact monitoring programs that yield impact data useful in management decision-making processes (Eagles 2001). We suggest that visitor impact monitoring be a routine part of ecotourism destination management, although the complexity and types of monitoring will vary among different protected areas.

There are constraints that prevent many ecotourism destinations from developing elaborate monitoring programs. However, we believe that expedient monitoring programs with a limited number of good indicators are feasible for many situations. Background research that examines impact indicators can be supported by international organizations such as UNEP, IUCN and/or WTO. Through IUCN World Commission on Protected Areas (WCPA), for example, visitor impact monitoring protocols and standards could be developed for each region. Such knowledge can then be transferred to managers of individual protected areas through training workshops or information dissemination.
To conclude, we offer the following six specific recommendations:

1. Develop visitor impact monitoring program for ecotourism destinations, particularly those that have recently been or will soon be opened for ecotourism visitors;
2. Develop region-specific core sets of visitor impact indicators with standardized monitoring procedures;
3. Develop visitor impact management training workshops and materials in multiple languages;
4. Train key staff in non-profit organizations and government agencies as well as from tour operator/guiding associations in visitor impact monitoring and management; develop mechanisms within these organizations so that information is shared among staff;
5. Offer exchange programs for protected area faculty in developing countries to gain experience in protected areas with extensive visitor impact monitoring and management programs;
6. Develop and provide databases and literature reviews of recreation ecology and visitor impact knowledge to larger-scale organizations that support ecotourism and protected area management such as the International Ecotourism Society, IUCN, UNEP, WTO and the Conservation International.

Seventeen years ago Kuss (1986) argued that impact ecology knowledge is basic to wilderness management and he lamented the fact that ‘a few of us can afford the luxury of devoting a professional career to recreation-related impact ecology research’. As we entered the 21st century with ever-growing ecotourism, Kuss’s argument is still valid and should be broadened to include ecotourism destinations. Only equipped with visitor impact knowledge can we hope to formulate effective and efficient visitor and site management strategies and actions to ensure that ecotourism will be sustained environmentally.

References Cited


**Biographical Note**

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