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## Education in Ecolodges in Panama and Costa Rica

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### ABSTRACT

*Education of tourists at nature-based lodges can significantly affect their awareness, understanding, appreciation, and appropriate values and behaviors regarding the natural environment and the local community. This research seeks to explicate and synthesize theories and best practices in environmental education in the context of ecotourism. Using data from interviews and participant observation, it describes, classifies and compares the educational efforts directed toward guests of 14 leading ecolodges in Costa Rica and Panama. Relationships among educational goals and tourists' satisfaction and views of the educational performance of nature guides are uncovered. Managerial recommendations are provided, including ways to improve the effectiveness of guides in educating lodge guests.*

**Keywords:** *ecotourism, nature-based tourism, education, sustainable tourism, nature guides, tourist behavior.*

### INTRODUCTION

Ecotourism is nature-based travel that embraces principles of sustainability, and thus is managed to conserve the natural environment on which it depends, provide economic benefits to the local community and the industry, and to *educate and satisfy the tourists* (Osland and Mackoy 2004; Weaver 2008.) Education of tourists can play a significant role in affecting their awareness, understanding, appreciation, and appropriate values and behaviors regarding the natural environment and the local community, thus, helping to accomplish the ideals of ecotourism. We review the literature on education in ecotourism and other nature-based tourism, present a framework for thinking about education in this context, and then apply the framework to data collected from visits to 14 ecolodges in Costa Rica and Panama. We focus on the educational practices of nature guides as the primary facilitators of visitors' learning.

### LITERATURE REVIEW

Education is a widely-recognized element of ecotourism; many authors and organizations assert that education and learning are integral and essential elements (Blamey 1997; Gilbert 2003; Marion and Reid 2007; Osland and Mackoy 2004; The International Ecotourism Society 1993; United Nations World Summit on Ecotourism 2002). One of the first discussions of ecotourism places education at the center of this type of tourism (Ceballos-Lascurain 1991). In fact, the use of nature tours as a product offering of a lodge can be a criterion in determining if a lodge is an ecolodge (Batta 2006; Osland and Mackoy 2004).

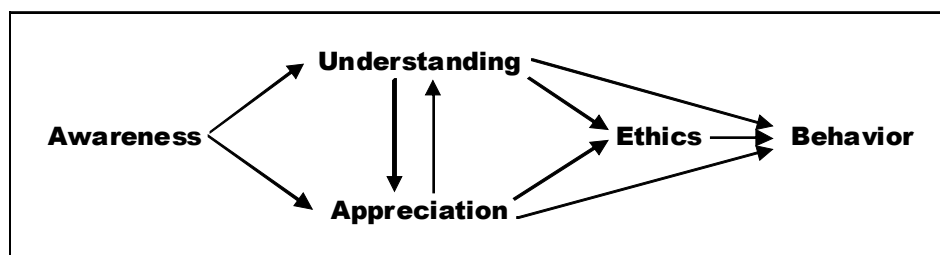
Education is an important element in ecotourism for several reasons. Environmental education helps tourists gain greater awareness and understanding of natural phenomena (Ham 1992; Palmer 1998), often as an organism-focused view of education. Ecotourism education also offers fruitful opportunities for emotional elements of learning (Kimmel 1999). Guides become facilitators for tourists to experience nature and to gain a deeper appreciation for natural phenomena. This can become a process of facilitating awe and wonder (Ryan, Hughes, and Chirgwin 2000), helping learners connect with nature in body, mind, and spirit (Moore 2008). Education can also be a key element in helping overcome negative impacts of tourism on the natural environment. Tourists do impact natural areas and can harm wildlife (Sekercioglu 2002). Education could enhance environmental ethics and facilitate self-directed modification of the visitor's personal behavior (Marion and Reid 2007).

Despite the rather large conceptual literature on environmental education, relatively little empirical work has been done on educational practices and outcomes in ecotourism. Most empirical studies have found that ecotourism education centers on the identification and explanation of particular species (e.g. Ballantyne and Hughes 2001). Most of the studies are based on one site or case. Moreover, the topic of education in ecotourism is a largely atheoretical domain with no widely accepted framework. We seek to integrate the disparate literatures and to develop a framework that can help to classify and understand this important phenomenon. We synthesize the disparate environmental education literature into the following goals and outcomes:

- \* Cognitive (awareness, understanding of nature and local cultures)
- \* Emotional (appreciation/awe, enjoyment, affection for nature and cultures)
- \* Ethical (values, ideals, norms in interactions with nature and local cultures)
- \* Volitional (produce minimal negative impact, conserve nature around the world)

Figure 1 integrates and shows likely relationships between the key goals and outcomes of ecotourism education. We use this model to organize both our data collection, and our discussion of results.

**Figure 1 – Model of Education Goals and Outcomes**



## METHODS

To explore the role of education in ecolodges, we selected two representative nations in Central America that have extensive, but threatened natural areas, and significant yet different levels of ecotourism development – Costa Rica and Panama. To create our sample we selected lodges that met three criteria for classification as an ecolodge. We attempted to include a range

of different types of ecolodges to gain a broad perspective on issues, and, thus, implemented a judgmental, quota sample. The exploratory research design included on-site analyses of 14 ecolodges in the two nations, using in-depth personal interviews in both English and Spanish with 14 ecolodge owners and/or managers. The educational content, goals, and activities of 18 guides were analyzed from 20 nature-based tours directly sponsored or arranged by the ecolodges, and by interviews with guides after the tours were completed. Further, tourists' and the lead author's assessments of four elements of performance - satisfaction with the tour and with the guide, and evaluations of the guide's educational and overall performance - were recorded, while using participant observer techniques (Bowen 2002; Marshall and Rossman 1989).

This multinational, exploratory research design is far broader, and more representative than the more commonly-used single case study method, enabling patterns to be uncovered. Our qualitative design also goes deeper than mail surveys, uncovering factors and issues that are often overlooked in structured, descriptive research designs. We reviewed all field notes and conducted qualitative analyses as recommended by Bowen (2002). We also conducted simple correlation and difference of means analyses to help uncover relationships in our sample data.

## RESULTS

Most of the lodges visited are relatively small, with a median number of 16 rooms and capacity for 65 guests; yet the variance is large, with total number of rooms ranging from four to 198. The average number of types of educational offerings at Costa Rican ecolodges was 9.4, whereas Panamanian ecolodges in our sample only had 6.7 different types of offerings. All of the 14 ecolodges offer tours and guides, whether employed, contracted, or arranged. Costa Rican ecolodges more extensively use nature exhibits, lectures and workshops, self-guided nature trails and interpretive signs, and brochures about nature. This difference may be due to the fact that the overall ecotourism industry is more developed in Costa Rica than in Panama, and that the ecolodges in Costa Rica have been established for a longer time than those in Panama. There does not appear to be any relationship between the number of educational offering types and number of hectares of privately-held land, ecolodge size (defined in terms of maximum number of guests or number of rooms), or ecolodge prices. Thus, educational orientation is not related to scale or price-point. However, there is an interesting relationship between owner nationality and offerings; four of the top six lodges in terms of types of educational offerings are foreign-owned.

All of the eco-lodge owners, managers and guides note that nature guides are the most important educational offering. Many stated that nature guides are the most critical element for the success of the lodge. Using the model (Figure 1) that we developed from a review of the literature, five sets of content/goals/activities were organized by *awareness* (identification of species), *understanding* (human uses of species, behaviors of species, interactions of species), *appreciation* (appreciation, enjoyment), *ethics* (conservation values, personal responsibility), and *behaviors* (minimal impact on nature, help to conserve nature). For ten key goals/activities, guides' stated importance was compared to guides' actual behavior during each nature tour.

### Awareness

The primary activity of guides on the tours in our sample was finding, showing, and identifying birds and mammals. Activity was consistent with the high level of importance guides placed on identification of species. Guides' emphases on *awareness* did not correlate with high

levels of emphasis on other educational goals or with high levels of satisfaction with the tour or guide, or with high ratings of educational or overall performance of the guide.

### **Understanding**

From a learning perspective awareness is a prerequisite for understanding about nature and culture, which is an important educational goal. But guides did not spend much time helping tourists understand human uses of species, behaviors of species, or interactions between species. We found several significant relationships based on understanding, which we highlight as important propositions of this study on education in ecolodges:

P1: Guides' attempts to enhance tourists' understanding of species' behaviors and interactions leads to greater appreciation and enjoyment of nature by the tourists.

P2: Guides' attempts to enhance tourists' understanding of species' behaviors and interactions are correlated with goals to help tourists' develop environmental behaviors of minimal impact on nature and conserving nature.

P3: Guides who seek to improve tourists' understanding of species' behaviors and interactions are highly rated by tourists and produce high levels of satisfaction with the tour and the guide.

### **Appreciation**

Guides rated developing tourists' appreciation of nature and their enjoyment in nature as their two most important goals. However, the guides' actual behaviors, especially to enhance tourists' appreciation of nature, fell short of their stated intentions. When guides did focus on stimulating appreciation for nature, tourists' satisfaction with the guides, and their assessment of guides' performance appeared to be positively correlated. Guides who sought to help visitors use multiple senses to understand and experience nature appeared to be most effective in enhancing appreciation. We found a positive relationship, which we state as a proposition:

P4: Guides who seek to enhance tourists' appreciation of nature are highly rated by tourists and produce high levels of satisfaction with the guide.

### **Ethics**

Despite the high importance that most ecotour guides place on helping visitors develop conservation values, and beliefs such as personal stewardship of nature, guides actually did little to try to influence the ethics of tourists.

### **Behavior**

Guides also place a high level of importance on influencing tourists' behaviors, particularly in having a minimal impact on nature while on tours and on stimulating visitors to help to conserve nature as a long-term activity. Occasionally, guides who give pre-tour talks will mention the need to act in certain ways while on tours, such as staying on trails. But rarely were reasons given for this and for the infrequent attempts to minimize tourists' impact on nature.

## **CONCLUSIONS**

Many types of educational offerings are being used in ecolodges in Panama and Costa Rica, especially in the latter, well-developed ecotourism destination. But the educational offerings in both nations appear to be ad hoc, without a clear set of goals and plans about educating the guests. We recommend that ecolodge owners and guides use our model of five

educational goals and outcomes as a basis for evaluating what they are currently doing in their educational efforts. Further, owners and guides should focus on efforts to enhance ecotourists' understanding of the behaviors and interactions of species. These efforts are likely to have some of the largest effects on visitors' appreciation of nature, as well as on their satisfaction. Ecotourism managers should also carefully consider their efforts to recruit, train, and retain guides.

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