

PLANNING FOR SUSTAINABLE ECOTOURISM IN THE GALÁPAGOS ISLANDS:  
EXPLORING GALÁPAGOS TOURISTS' PROFILES AND THEIR INTEGRATION INTO  
COMMUNITY-BASED TOURISM

By

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To my parents Jenny and David

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Abstract of Theses Presented to the Graduate School  
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Ecotourism as defined by the International Ecotourism Society (1998) is “responsible travel to natural areas, which conserves the environment and sustains the well-being of the local people” and, therefore, should result in important benefits for local communities and the environment. Even though the Galápagos Islands have been categorized as one of the best examples of a worldwide ecotourism destination, the current tourism model has shown not to enhance ecological conservation or improve the economic benefits to local communities. To change the current tourism model in the Galápagos, it is important to first understand the people who are driving the tourism process –Galápagos visitors.

The purpose of this project is to explore the integration of tourists into conservation and local tourism activities by studying Galápagos foreign visitors' profiles, their willingness to accept ecotourism measures, and some of the factors that may influence their behavior. Results showed that: 1) distinctive hard and soft ecotourist segmentation was perceived for the Galápagos visitors revealing differences in terms of their ecotourism behavior, travel method, lodging services, and travel activities; 2) on average, foreign tourists were willing to accept ecotourism policies that directly benefit the environment and community in the Galápagos; 3)

biodiversity protection was prioritized by Galápagos ecotourists; and 4) differences in travel preferences among Galápagos foreign tourists represented factors that greatly influence the acceptability of ecotourism policies.

The study incorporates management implications and recommendations for local and foreign tour operators, and policy makers as a way to create an ecotourism planning framework and move the Galápagos tourism model towards a socially and environmentally responsible approach. The project provides new alternatives to better integrate all Galápagos foreign visitors into community-based tourism and conservation activities, and improve the quality of life of the Galápagos residents.

CHAPTER 1  
PLANNING FOR SUSTAINABLE ECOTOURISM IN THE GALÁPAGOS ISLANDS:  
EXPLORING GALÁPAGOS TOURISTS' PROFILES AND THEIR INTEGRATION INTO  
COMMUNITY-BASED TOURISM

**Introduction**

Nature-based tourism is one of the fastest growing sectors and largest industries in the world (Ceballos-Lascuráin, 1996). The Ecotourism Society (TIES 1998) defines *ecotourism* as “responsible travel to natural areas, which conserves the environment and sustains the well-being of the local people.” This brief, generic definition has been often applied to a wide range of nature tourism activities and services, which has created confusion as to what constitutes this segment of the nature tourism market (Vincent and Thompson, 2002).

Even though the ecotourism term has been used as a marketing tool (Thomlinton and Getz, 1996), scholars have agreed that real ecotourism should embody a sustainability approach that starts from, and accounts for the needs, concerns, and welfare of local host communities (Grenier, 2007, Sheynes, 1999). “From a development perspective, ecotourism ventures should only be considered ‘successful’ if local communities have some measure of control over them and if they share equitably in the benefits emerging from ecotourism activities” (Scheyvens, 1999, p.245). This is in contrast to tourism models controlled mostly by outside operators and where the economic benefits of tourism accrue to the large-scale national and international tourism companies.

Consumer demand for ecotourism appears to be strong and continues to grow, and tourists have reported to have an increasing interest in conserving the environment at tourism destinations and contributing either economically or voluntarily to host communities (Chafe, 2007). Similarly, consumers’ demand to visit remote, exotic, and natural areas is increasing,

which has generated an expansion in tourism ventures, particularly in developing countries (Cater, 1993).

Ecuador is a developing country with great tourism potential due to its strategic situation and great biodiversity. The Galápagos archipelago is part of Ecuador, and it is categorized as one of the best examples of a worldwide ecotourism destination that will continue to experience tourism growth (Boo 1990, and Ceballos-Luscarian, 1996).

One would imagine that a successful ecotourism model should be exemplified by social and environmental responsibility, delineated by: “(1) an evolving commitment to environmental protection and conservation, (2) a generation of financial resources to support and sustain ecological and sociocultural resources, (3) an active involvement and cooperation of local residents as well as tourists in enhancing the environment, and (5) economic and social benefits to the host community” (Vincent and Thompson, 2002, p. 153). However, tourism growth in the Galápagos cannot be conceded to reflect true ecotourism since it does not effectively incorporate active commitment and involvement of tourists in conserving the environment and directly contributing to the economic and social benefits of the local communities. The current tourism model in the Galápagos Islands involves traditional navigable tours supplied by national and international tour operators. This type of tourism diminishes interaction between tourists and locals, does not promote active participation of visitors into conservation activities, and creates economic leakage from the Galápagos communities (Grenier, 2007).

Empowering local residents and ensuring they attain an equitable supply of benefits requires a change to current tourism planning in the Galápagos. To change the existing tourism model, it is essential to first understand the people who are driving the tourism process, and

investigate the possibility of increasing participation of foreign visitors into community-based tourism services and activities.

### **Research Objectives**

The purpose of this research is to explore the Galápagos foreign visitors' profiles and their possible active involvement into community-based tourism and conservation activities.

Specifically, the objectives of the two studies described here are to: 1) segment Galápagos visitors on the basis of their ecotourism behavior, trip characteristics, and travel preferences; and 2) study tourists' willingness to increase their local service usage, participate in conservation activities, and support local development. Each study provides implications to shift the current tourism model of the Galápagos in order to provide real ecotourism opportunities in the islands.

The first chapter investigates the Galápagos foreign tourists' profiles and identifies potential differences in terms of demographics, travel patterns, ecotourism behavior, and environmental and social values among the different types of visitors. Understanding and accounting for these differences will help to identify what types of tourists might be valuable partners in sustainable tourism development and how to best direct marketing strategies and promotion efforts.

In the second chapter, Galápagos foreign tourists' willingness to accept ecotourism policy measures is analyzed, and some of the factors that could influence this behavior are explored. Understanding the level of support of conservation activities and the degree to which the foreign visitors are willing to increase their participation in local tourism services, is highly important when planning for sustainable development. Potential management actions to shift the current tourism model can be generated if trip itineraries, tourists' concerns, and level of acceptance of ecotourism policy measures are taken into account.

To ensure successful ecotourism management practices, a study of the ecotourism demand needs to be incorporated into a planning framework. The results, management implications, and recommendations are directed to shift the Galápagos tourism model and provide new alternatives to better integrate all Galápagos foreign visitors into community-based tourism and conservation activities, and improve the quality of life of Galápagos residents.

## CHAPTER 2 EXAMINING ECOTOURISM PROFILES: HARD AND SOFT SEGMENTATION OF THE GALÁPAGOS ECOTOURISTS

### **Introduction**

Ecotourism, according to The International Ecotourism Society (TIES), “is responsible travel to natural areas that conserves the environment and sustains the well-being of local people” (TIES, 2008). It is widely acknowledged that ecotourism should entail management practices that adhere to the principles of ecological, sociocultural and economic sustainability (Blamey, 2001; Fennell, 1999; Weaver, 2001 a,b).

Nature-based tourism (tourism to natural areas that might not adhere to ecotourism principles) is growing more rapidly than tourism in general (Fennell, 1999; Weaver, 1998), and much research is directed to studying the management and marketing of this type of tourism (Weaver, 2002). Specifically, researchers are continually looking to identify and define nature-based tourism market segments. An improved understanding of these market segments help develop effective and valid marketing strategies and improve the management of visitors at nature-based tourism destinations.

For the purpose of this research, nature based tourism is used interchangeably with ecotourism. Researchers have used many different ways to categorize and understand ecotourists, generating a number of ecotourism segment profiles. A study by Galloway (2002) in Ontario Parks, Canada, segmented ecotourists on the basis of their motivation to seek sensation (e.g. stress escapers, active nature enjoyers, sensation seekers); Palacio and McCool’s (1997) segmentation of ecotourists in Belize was based on ecotourism benefits (e.g. comfortable naturalists, passive players, nature escapists, and ecotourists); Twynnam and Robinson’s (1997) segmentation of Ontario Parks, Canada was based on ecotourism activity preferences (e.g. enthusiasts, adventures, naturalists and escapists); Blamey and Braithwaite’s (1997)

segmentation of Australian ecotourism market was based on their social values (e.g. Ideological Greens, Relativists, Dualists and Libertarians); and Zografos and Allcroft's (2007) segmentation of potential ecotourists in Scotland was based on their environmental values and human attitude towards nature (e.g. disapprovers, concerners, approvers, and scepticals). Nonetheless, these studies have not yet considered the ecotourism behavior in its totality; they classified tourists based only on one ecotourism characteristic (e.g. ecotourism motivations, benefits, values, or ecotourism activity preferences).

Recent research, however, has used a more comprehensive concept of ecotourism classifying visitors based on their ecotourism activities, preferences, and attitudes. For example, a study by Weaver & Lawton's (2002) segmented visitors of Lamington National Park (Australia) based on the ecotourism behavior in the park. The resulting groups were identified as hard and soft ecotourists.

The concept of a spectrum that describes visitors as "hard" on one end of the spectrum to "soft" on the other end is receiving more attention and has served as the basis for ecotourist market segmentation. It involves a combination of associated ecotourism motivations, behaviors, and travel preferences. The "hard" and "soft" ecotourist segmentation has categorized the visitor behavior based on their interest for nature, their learning experience, and their support for sustainable activities (Weaver, 2002), which in turn, better integrate visitors' behavior within the ecotourism concept. Pioneers of such a concept have introduced a spectrum that progresses from biocentric to anthropocentric tendencies within the ecotourism market. However, research has only focused on studying customers of tour operators. Little is known about tourists who do not rely on tour operator or travel agents for their visits.

In terms of accommodation and travel preferences, research has shown that hard ecotourists “are far more likely to camp and patronize private residences, backpackers’ accommodations, recreational vehicles and homestays” than other ecotourists, who in turn are more likely to use more developed lodging (e.g., resorts and hotels) (Weaver, 2002, p.30). However, it is impossible for any Galápagos tourist (regardless of their ecotourist classification) to visit the islands at their discretion. The Galápagos Islands are one of the more strictly managed national parks in the world. For example, no tourist, regardless of their previous knowledge or experience, can visit the Galápagos National Park without a certified tour guide (Galápagos National Park Service, 2008). This stresses the importance of visiting national park areas with a broad knowledge of the Galápagos ecology and knowledge of the park’s specific rules and regulations. Therefore, hard ecotourists who like to travel by themselves would not be able to visit the islands without the help and reliance of a tour guide. The behaviors tourists adopt when visiting the Galápagos Islands is not a matter of choice or preference but a matter of order, norms, and conservation.

This project attempts to generate a valid profile segmentation of Galápagos Islands visitors, by including those tourists who visit the islands without travel agencies. National and foreign tourists from all around the world visit the Galápagos Islands every year. However, unlike national tourists, it is not yet clear what the main travel preferences and ecotourism behaviors are for Galápagos foreign visitors, especially for foreign volunteer and students who have been under researched in tourism studies. Specifically, this study seeks to: 1) segment Galápagos foreign visitors on the basis of their ecotourism behavior, and 2) compare visitor and trip characteristics/ preferences for each ecotourist segment.

**Soft and Hard Ecotourism:** According to Fennel and Weaver (2005), ecotourism follows a spectrum that goes from “hard” to “soft” ecotourism. These are ideal types and have very distinct characteristics. Hard ecotourism involves strong environmental commitment, specialized visits, and long trips for small groups, while soft ecotourism indicates a strong connection to conventional mass tourism with higher reliance on the formal travel industry.

People who are under the hard ecotourism category are usually considered free and independent travelers (FITs) who seek a physical challenge and, therefore, are physically active (Fennel and Weaver, 2005). They emphasize personal experiences, have a deep interaction with nature, and expect few if any services. Therefore, this group generally does not rely on travel agencies for planning their trip, and they plan the details of their trip on their own. On the other hand, soft ecotourism implies a superficial environmental commitment, with multi-purpose visits and short trip with larger groups. Visitors under the soft ecotourism category are physically passive and prefer physical comfort and extensive services and facilities, but only a shallow interaction with nature, with emphasis on interpretation. They usually rely on travel agents and tour operators for their visit. This “high level of reliance on the formal travel industry (e.g. tour operators, travel agents) indicates a strong connection to a conventional mass tourism industry that may not always place a high priority on environmentally sustainable management or client awareness” (Fennel and Weaver, 2005, p.378).

Ecotourist market segmentation studies have been conducted to develop effective marketing strategies and product viability. A factor of ecotourist market segmentation that is receiving increasing attention is the concept of hard-to-soft spectrum that considers a combination of motivations and behavior. Laarman and Durst (1987) appear to be the first authors who pioneered such a concept. Following the same line, Lindberg (1991), introduced

four categories of ecotourists based on their ecotourism behavior and motivations: “hard core”, “dedicated”, “mainstream” and “casual”. Similarly, the Queensland Ecotourism Plan (Queensland, 1997), acknowledged the categories of: “self-reliant”, “small group”, and “popular” ecotourism, and Weaver & Lawton’s (2002) segmented visitors of Lamington National Park (Australia) based on the ecotourism behavior in the park. The resulting groups were identified as hard-core and soft ecotourists.

All these studies have one thing in common—the spectrum progresses from strong biocentric (i.e. environment-oriented) to more anthropocentric (i.e. human-oriented) tendencies within the ecotourist market. However, these studies only surveyed customers of tour operators and these categories are only applicable to those types of tourists. Little is known about the profile of tourists who visit ecotourism sites without the reliance on tour operator or travel agents.

This project aims to investigate hard and soft ecotourism behaviors of tourists visiting the Galápagos Islands, a well recognized example of a world-wide ecotourism destination (Boo, 1990; Ceballos-Luscarian, 1996). In addition, this project will broaden ecotourism market profiles by including free independent travelers (FITs) into the study, therefore, integrating not only the tourists who visit the islands with travel agencies, but those who make their own travel arrangements and do not rely on tour operators to plan their tourism trips.

## **Methods**

### **Study Area**

Located about six hundred miles off Ecuador’s coast, the Galápagos Islands are formed by 13 major islands—Santa Cruz, Floreana, San Cristóbal, Isabela, Santa Fe, Santiago, Darwin, Roca Redonda, Marchena, Pinta, Espanola, Genovesa, and Fernandina—and a large number of smaller islands and islets (Acosta, 1979) (Figure 2-1). The Galápagos Islands are known by its



examples of a worldwide ecotourism destination, and are often cited as the place where ecotourism originated (Honey, 2008).

### **Study Participants**

The theoretical population for the study was foreign (non-Ecuadorian) tourists who visit the Galápagos Islands. The accessible population was non-Ecuadorian tourists visiting the islands of San Cristóbal and Santa Cruz, the most visited islands that offer a large number of diverse local tourism services and activities.

This project focused on foreign Galápagos visitors since their ecotourism behavior has not been studied in its totality. Recent studies have identified the travel preferences of the national tourists and have stressed their importance as boosters of the local economy (Honey, 2008; Epler B., 1993). Most Ecuadorian visitors stay in land-based hotels in Puerto Ayora or Puerto Baquerizo Moreno, and use day boats to visit national park sites on other islands, contributing directly to improve local economy. However, the main travel characteristics and behaviors are not yet clear for FITs especially foreign students and volunteers, whose travel methods and purpose of visit may be different from those of tourists who use navigable tours, but are still part of the Galápagos tourism market.

### **Sampling Approaches**

A systematic random sampling approach was used to recruit tourists in San Cristóbal. The sampling frame consisted of tourists at San Cristóbal airport at time of departure from May to July of 2008. Tourists at the departure lounge were picked systematically (a starting participant is chosen at random, and thereafter at regular intervals). Once selected, participants were asked to consent to participate in the study. Researchers collected data every other day of the week during the time period of May to July of 2008.

Transportation costs and time required to get to the Santa Cruz airport made it difficult to survey tourists at that airport at time of departure. Consequently, tour guides from Santa Cruz were asked to provide questionnaires to tourists on their last day of stay. As in San Cristóbal, tourists were asked to consent to participate in the study. Only people who wished to participate completed the survey. To ensure heterogeneity of the sample, tourists from different cruises/travel agencies were surveyed every other day of the week, for approximately one month between June and July of 2008.

To broaden the sample so it would include all types of foreign tourists, researchers worked with representatives from universities or organizations to recruit students, volunteers, researchers, scientists, or other tourists who stayed for long periods of time. The number of volunteers, scientists, and researchers present in the islands of San Cristóbal and Santa Cruz during May to July of 2008 was relatively small, and all of them were recruited. With the help of local municipalities and community leaders, researchers were able to identify all the organizations and universities that were in charge of bringing these types of visitors to both islands. Researchers then contacted representatives of these organizations to find the number of visitors already present in the islands and those who were coming between the months of May and July of 2008. Researchers and representatives then set up a time and meeting place to survey participants. Once identified, participants were asked to consent to participate in the study.

The survey was given orally and at convenient times, and 97.5% of people who were asked to fill out the survey participated (464 out of 467). A total of 213 tourists were sampled in San Cristóbal airport through systematic random sampling. One hundred fifty-five tourists were sampled in Santa Cruz through the intervention of tour guides. And a total of 96 students,

volunteers, and researchers were surveyed in both islands through the help of representatives from universities and local organizations.

### **Data Collection**

A survey (see Appendix) was designed to achieve the study objectives:

#### *1) Segment Galápagos visitors on the basis of their ecotourism behavior*

Several statements were taken from Weaver's (2002) ecotourism behavior index (Section A) to develop a 16-item index, which was then tested for internal reliability ( $\alpha=0.941$ ). The 16-item index reflects various facets of actual or intended ecotourism behavior including those cited by Blamey (2001) as the three ecotourism criteria (i.e. nature-based, learning or education oriented and environmentally and socioculturally sustainable).

Two out of the 16 final items correspond to *nature-based criteria*; three items relate to *learning criteria*; another three items refer to *sustainability criteria*; and eight items were placed in the *other* category (Table 1). Participants were asked to rate their level of agreement with the 16 ecotourism statements from "Strongly Disagree" to "Strongly Agree".

Based on Weaver's (2002) ecotourism classification, ten out of the sixteen statements included in the questionnaire fall into the hard-core ecotourism classification; and the remaining six items correspond to the soft-ecotourism behavior (Table 2-1). Weaver (2002) suggested that hard-ecotourism statements display higher level of biocentrism, apparent commitment to enhancement sustainability, preference for the quality of environment over the quality of accommodations, lower dependence on tour guides or interpretation, and self reliance when traveling. On the other hand, soft-ecotourism statements show higher dependence on tour guides, higher level of tourism services, and higher expectations for comfortable accommodations.

Segmentation studies use statistical methods and in particular cluster analysis to formulate market segments (Dolnicar, 2002). In line with previous tourism profile segmentations of tourists

(Zografos and Allcroft, 2007), this project also applied the k-means cluster method to classify visitors into different segments. The 16 ecotourism statements were used as the basis for the cluster analysis of respondents, while subsequent sections on visitor and trip characteristics, travel methods, etc., were used as independent variables to compare the resulting clusters.

Table 2-1. Classification of behavioral statements

Statement	Criteria	Hard / Soft Ecotourism Classification
1. I prefer to see wildlife in its natural habitat	Nature-based	Hard
2. My ideal ecotourism destination is a wilderness setting	Nature-based	Hard
3. I do my best to leave the site or area in better condition than when I arrive	Sustainability	Hard
4. I support the local economy of places that I visit	Sustainability	Hard
5. The quality of a destination's natural environment is more important to me than the quality of the accommodations that I use	Sustainability	Hard
6. I would go on a long hike in miserable weather if this was my only opportunity to see a unique animal or plant species	Other	Hard
7. I like to be as self-reliant as possible when I travel	Other	Hard
8. I like to arrange my own tourism trips	Other	Hard
9. I like my ecotourism experiences to be physically challenging	Other	Hard
10. I like to engage in physically challenging activities	Other	Hard
11. I learn more about the natural environment on an escorted tour than through traveling on my (or our) own	Learning	Soft
12. I prefer ecotourism sites in which the natural attractions are interpreted or explained to me	Learning	Soft
13. I prefer to visit tourism areas with a professional tour guide	Learning	Soft
14. National parks should provide adequate services for those who want to go there	Other	Soft
15. Comfortable accommodations are a priority for me	Other	Soft
16. I like ecotourism but I also enjoy spending time at a beach resort	Other	Soft

*2) Compare visitor and trip characteristics/ preferences for each group.*

Demographic data such as gender, age, place of residence, education attained, and employment status were used to examine visitor characteristics. Three variables were used to

help examine the trip characteristics: 1) travel activities, 2) length of the trip, and 3) main lodging service(s) used (questions 7, 8, and 9 in the survey). Specifically, study participants were asked to check all the travel activities they have participated in during their visit to the Galápagos Islands, provide the number of days of their stay, and report the lodging service (s) they used on their visit.

To measure travel preferences, two variables were used: 1) travel method(s) used to visit the Galápagos, and 2) participants' attitudes towards those methods (question 6). In order to compare visitor and trip characteristics, and travel preferences for each category, tests of central tendency (Mann-Whitney U tests and Chi-square tests) were performed.

## **Results**

### **First Objective: Ecotourist Segmentation**

After running the cluster analysis, a two-cluster solution revealed distinctive hard and soft ecotourism segmentations among the Galápagos visitors. Hard ecotourists visiting the Galápagos revealed higher level of agreement on nine out of the ten hard-core ecotourism statements, and Galápagos soft ecotourists showed higher level of agreement to all 6 soft-ecotourism statements (Table 2-2).

Similarly to Weaver's (2002) classification of ecotourists in Lamington National Park (Australia), the Galápagos tourists also present characteristics and behaviors proper of hard and soft ecotourists. As expected, hard ecotourists who numbered 243 (52.4% of the sample), displayed higher level of biocentrism, apparent commitment to enhancement sustainability, preference for the quality of environment over the quality of accommodations, self reliance when traveling, and higher engagement in physically challenging activities. On the other hand, soft ecotourists, who numbered 221 (47.6% of the sample), showed higher dependence on tour

guides, higher preference for interpretation and escorted tours, and higher expectations for adequate tourism services and comfortable accommodations (Table 2-2).

In general, both hard and soft ecotourists reported high level of agreement with most of the *sustainability* and to all the *nature-based* criteria statements. Both groups strongly agreed that they prefer to see wildlife in its natural setting (hard ecotourist mean = 4.93, soft ecotourist mean = 4.73). In addition, they agreed that: 1) the ideal ecotourism destination is a wilderness setting (hard ecotourist mean = 4.30, soft ecotourist mean = 4.00), 2) they do their best to leave the site in better condition than when they arrived (hard ecotourist mean = 4.50, soft ecotourist mean = 4.35), and that 3) they support the local economy of the places that they visit (hard ecotourist mean = 4.45, soft ecotourist mean = 4.35). Even though both ecotourist groups rated these statements with a strong levels of agreement, hard ecotourists revealed significantly higher scores ( $p \leq 0.05$ ) in each one of them, except for the statement of “I support the local economy of the places I visit”. This was the only statement that did not reveal significant difference in the agreement scores among hard and soft ecotourists ( $p = 0.12$ ).

Participants did not agree with the learning and other criteria statements as much as they did with the nature-based and sustainability criteria, but a notable difference between the ecotourist segments was perceived. Soft ecotourists had higher priorities on comfortable accommodations (mean 3.78) than hard ecotourists (mean 2.81). In addition, soft ecotourists remained neutral to arranging their own trips, engaging in physically challenging activities, and being self-reliant when traveling (means = 2.95, 3.38, and 3.20 respectively). Hard ecotourists, on the other hand, revealed higher preferences to arrange their own tourism trips (mean = 3.93), engage in physically challenging activities (mean = 4.28), and to be as self-reliant as possible when traveling (mean = 4.10). Hard ecotourists stated that it is more important for them the

Table 2-2. Behavioral statement means by hard and soft ecotourists <sup>a</sup>

Statement	Hard Ecotourists	Soft Ecotourists	<i>U</i>	<i>p</i> -level	Cat. <sup>b</sup>
1. I prefer to see wildlife in its natural habitat	<u>4.93</u>	<u>4.73</u>	22374.0	<0.001	N
2. I do my best to leave the site or area in better condition than when I arrive	<u>4.50</u>	<u>4.35</u>	24202.5	0.039	S
3. The quality of a destination's natural environment is more important to me than the quality of the accommodations that I use	<u>4.46</u>	<u>3.62</u>	11865.0	<0.001	S
4. I support the local economy of places that I visit	4.45	4.35	24662.5	0.091	S
5. I would go on a long hike in miserable weather if this was my only opportunity to see a unique animal or plant species	<u>4.45</u>	<u>3.61</u>	13972.0	<0.001	O
6. My ideal ecotourism destination is a wilderness setting	<u>4.30</u>	<u>4.00</u>	21732.0	<0.001	N
7. I like to engage in physically challenging activities	<u>4.28</u>	<u>3.38</u>	11810.0	<0.001	O
8. I like to be as self-reliant as possible when I travel	<u>4.10</u>	<u>3.20</u>	11934.5	<0.001	O
9. I like my ecotourism experiences to be physically challenging	<u>3.98</u>	<u>3.20</u>	13681.5	<0.001	O
10. I like to arrange my own tourism trips	<u>3.93</u>	<u>2.95</u>	11934.5	<0.001	O
11. I learn more about the natural environment on an escorted tour than through traveling on my (or our) own	<u>3.84</u>	<u>4.36</u>	17693.0	<0.001	L
12. I prefer ecotourism sites in which the natural attractions are interpreted or explained to me	<u>3.79</u>	<u>4.16</u>	20104.0	<0.001	L
13. National parks should provide adequate services for those who want to go there	<u>3.74</u>	<u>4.10</u>	20579.0	<0.001	O
14. I prefer to visit tourism areas with a professional tour guide	<u>3.43</u>	<u>4.09</u>	16698.0	<0.001	L
15. I like ecotourism but I also enjoy spending time at a beach resort	<u>3.12</u>	<u>3.39</u>	23694.5	0.023	O
16. Comfortable accommodations are a priority for me	<u>2.81</u>	<u>3.78</u>	12338.0	<0.001	O

<sup>a</sup> 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree

<sup>b</sup> Categories: N = nature-based criteria; L = learning criteria; S = sustainability criteria; O = other

*Note:* Double underline indicates that the mean agreement score for that statement is significantly different between each group of ecotourists at the 0.01 level. Underline indicates that the mean agreement score for that statement is significantly different between each group of ecotourists at the 0.05 level.

quality of a destination's natural environment than the quality of the accommodations that they use (mean = 4.46), compared to soft ecotourists who had lower agreement to that statement (mean = 3.62). Hard ecotourists presented a higher willingness to go on a long hike in miserable weather to see a unique animal or plant species (mean = 4.45) than soft ecotourists (mean = 3.61). Finally, soft ecotourists revealed higher preferences for interpretation and escorted tours (mean = 4.36) than hard ecotourists (3.84).

## **Second Objective: Hard and Soft Ecotourists' Characteristics and Travel Preferences**

### **1) Visitor characteristics**

The variable age was not normally distributed for hard ecotourists (Shapiro-Wilk = 0.830,  $df = 239$ ,  $p < 0.001$ ) or soft ecotourists (Shapiro-Wilk = 0.929,  $df = 217$ ,  $p < 0.001$ ). Therefore, Mann-Whitney  $U$  test was conducted to compare the age of each group. Participants categorized as hard ecotourists were significantly younger than soft ecotourists (Mann-Whitney  $U = 18746.5$ ,  $p < 0.001$ ). The mean ages for hard and soft ecotourists were 34 years and 45 years, respectively.

Chi-square tests indicated significant differences between the ecotourist segments in terms of visitors' nationalities, employment status, and educational attainment (Table 2-3). However, no significant differences between the groups in terms of gender were found. Even though the majority of soft and hard ecotourists were coming from the USA, a significantly higher percentage of soft ecotourists resided in the USA. There were more hard ecotourists coming from Europe, Canada, and Australia than soft ecotourists. Soft ecotourists' main nationalities were USA and England.

Chi-square tests (Table 2-3) revealed that there was a significantly larger percentage of soft ecotourists as full time employees than hard ecotourists (45% vs. 38%, respectively). On the other hand, the percentage of hard ecotourists who were full time students was higher than that of soft ecotourists (27% vs. 15%, respectively), and significantly larger percentages of hard

ecotourists were unemployed compared to soft ecotourists (14.5% vs. 3.7%, respectively).

Finally, soft ecotourists were more likely to be retired (19.2% vs. 5.4 % respectively).

Table 2-3. Visitor characteristics between clusters (in %)

		Hard Ecotourists	Soft Ecotourists
<b>Nationality</b>			
$\chi^2 = 22$ $df = 6$ $p = 0.001$	USA	<u>61.6</u>	<u>69.2</u>
	Europe	<u>13.6</u>	<u>6.8</u>
	Canada	<u>10.3</u>	<u>6.3</u>
	England	<u>6.6</u>	<u>13.6</u>
	Australia	<u>4.5</u>	<u>0.5</u>
	South and Central America	<u>2.5</u>	<u>3.2</u>
	Other	<u>0.8</u>	<u>0.5</u>
<b>Gender</b>			
$\chi^2 = 0.235$ $df = 1$ $p = 0.628$	Male	45.7	43.4
	Female	54.3	56.6
<b>Employment Status</b>			
$\chi^2 = 49.1$ $df = 10$ $p < 0.001$	Employed Full Time	<u>37.6</u>	<u>45.2</u>
	Full Time Student	<u>26.9</u>	<u>15.1</u>
	Unemployed	<u>14.5</u>	<u>3.7</u>
	Employed Part Time	<u>7.9</u>	<u>10.5</u>
	Retired	<u>5.4</u>	<u>19.2</u>
	Full Time Homemaker	<u>1.7</u>	<u>0.9</u>
	Part Time Student	<u>0.8</u>	<u>0</u>
	Employed Part time and Full Time Student	<u>4.1</u>	<u>5.0</u>
	Other combinations of employment status	<u>1.2</u>	<u>0.5</u>
<b>Education Attained</b>			
$\chi^2 = 19.35$ $df = 6$ $p = 0.004$	Less than High School or Secondary	<u>0.4</u>	<u>0.9</u>
	Some High School or Secondary	<u>2.5</u>	<u>1.8</u>
	High School or Secondary Graduate	<u>6.6</u>	<u>11.8</u>
	Some University	<u>31.7</u>	<u>18.1</u>
	University Graduate	<u>25.1</u>	<u>24.4</u>
	Some Graduate School	<u>5.3</u>	<u>2.7</u>
	Graduate Degree or Beyond	<u>28.4</u>	<u>40.3</u>

Note: Underline indicates that the percentages are significantly different between each group of ecotourists at the 0.05 level

The majority of hard and soft ecotourists have completed at least some university education. However, Chi-square tests showed significant differences in terms of the education level attained for each ecotourist segment. A significantly larger percentage of soft ecotourist

segment members attained a graduate degree or beyond compared to the hard ecotourist segment members (40% vs. 28%, respectively). Although hard ecotourists include many members with a university degree (around 25%), they also include a considerable number (nearly 32%) of people who have attained some university but has not graduated yet. On the contrary, there were many more members of the soft ecotourist segment with a university degree (about 24%), compared to those who have attained some university education (18%).

## **2) Trip characteristics**

Overall, the survey indicated that the lodging service predominantly used by soft ecotourists was cruises/boats (Table 2-4). Seventy-one percent of the soft ecotourists stayed in cruises/boats as their main lodging service. A second lodging service used by soft ecotourists was hotels in local towns (13%).

Hard ecotourists also showed a predominance of cruise/boats as their main lodging services (around 48%), but this was significantly lower than soft ecotourists. Nonetheless, hard ecotourists also tended to use other lodging services such as hotels in local towns (nearly 18%), local homes (14%), and a mixture of cruise/boat and other lodging services mostly in local towns (around 18%).

The most popular activities for all visitors were national park visits, wildlife viewing, snorkeling, nature photography, guided trail walks, swimming, hiking, bird watching, and shopping. Over 50% of the members of each ecotourist segment participated in those activities. However, results of the Chi-square tests revealed that significantly higher percentages of hard ecotourists participated in wildlife viewing, snorkeling, swimming, and hiking. A larger number of soft ecotourists went shopping in the islands. There were no significant differences in the participation levels for national park visits, nature photography, guided trail walks, and bird watching between the ecotourist segments.

Table 2-4. Trip characteristics between clusters (in %)

		Hard Ecotourists	Soft Ecotourists
<b>Lodging Service</b>			
	Cruise/Boat	<u>48.1</u>	<u>71.0</u>
	Hotel in local towns	<u>17.7</u>	<u>13.1</u>
	With local home	<u>14.0</u>	<u>4.1</u>
$\chi^2 = 42.23$	Cruise/Boat + hotel in local towns	<u>9.9</u>	<u>3.6</u>
df = 9	Hotel in local towns + with local home	<u>2.9</u>	<u>0.9</u>
$p < 0.001$	Other	<u>2.5</u>	<u>0.5</u>
	Cruise/Boat + Other	<u>3.7</u>	<u>2.3</u>
	Hotel in local towns + Other	<u>1.2</u>	<u>4.5</u>
<b>Participation in travel activities</b>			
$\chi^2 = 0.042$	National Park Visits	96.3	95.9
df = 1 $p = 0.837$	Wildlife Viewing	<u>95.5</u>	<u>89.6</u>
$\chi^2 = 5.89$	Snorkeling	<u>91.8</u>	<u>76.9</u>
df = 1 $p = 0.015$	Nature Photography	89.3	83.3
$\chi^2 = 19.68$	Guided Trail Walks	87.2	92.3
df = 1 $p < 0.001$	Swimming	<u>85.2</u>	<u>66.1</u>
$\chi^2 = 3.6$	Hiking	<u>80.7</u>	<u>70.6</u>
df = 1 $p = 0.058$	Bird Watching	74.1	73.8
$\chi^2 = 3.2$	Shopping	<u>57.6</u>	<u>66.5</u>
df = 1 $p = 0.074$	Meeting Local People	<u>56.8</u>	<u>38.5</u>
$\chi^2 = 22.25$	Sunbathing on the Beach	<u>54.3</u>	<u>39.4</u>
df = 1 $p < 0.001$	Horse Back Riding	<u>26.3</u>	<u>17.6</u>
$\chi^2 = 6.41$	Scientific Study	<u>20.6</u>	<u>13.6</u>
df = 1 $p = 0.011$	Kayaking	<u>15.2</u>	<u>6.3</u>
$\chi^2 = 0.006$	Scuba Diving	14.0	10.9
df = 1 $p = 0.938$			
$\chi^2 = 3.89$			
df = 1 $p = 0.049$			
$\chi^2 = 15.58$			
df = 1 $p < 0.001$			
$\chi^2 = 10.39$			
df = 1 $p = 0.001$			
$\chi^2 = 5.06$			
df = 1 $p = 0.024$			
$\chi^2 = 3.98$			
df = 1 $p = 0.046$			
$\chi^2 = 9.35$			
df = 1 $p = 0.002$			
$\chi^2 = 1.04$			
df = 1 $p = 0.308$			

Table 2-4. Continued

		Hard Ecotourists	Soft Ecotourists
<hr/>			
Participation in travel activities			
$\chi^2 = 0.143$ df = 1 p = 0.705	Sailing	11.5	12.7
$\chi^2 = 5.15$ df = 1 p = 0.023	Camping	<u>11.9</u>	<u>5.9</u>
$\chi^2 = 7.42$ df = 1 p = 0.006	Cycling	<u>8.6</u>	<u>2.7</u>
$\chi^2 = 4.6$ df = 1 p = 0.032	Fishing	<u>2.1</u>	<u>0</u>
$\chi^2 = 1.83$ df = 1 p = 0.177	Canoeing	<u>0.8</u>	<u>0</u>
$\chi^2 = 5.54$ df = 1 p = 0.019	Other Travel Activities	<u>5.3</u>	<u>1.4</u>

*Note:* Underline indicates that the percentages for that activity are significantly different between each group of ecotourists at the 0.05 level

Results of the Chi-square tests also revealed notable differences in the participation of activities such as meeting local people, sunbathing on the beach, horseback riding, and scientific study between the two ecotourist groups. Just over 56% of hard ecotourists participated in meeting local people, as opposed to 39% of soft ecotourists. Fifty-four percent of hard ecotourists and 39% of soft ecotourists reported to have sunbathed on the beach during their trip to the islands. Twenty-six percent of hard ecotourists and only 18% of soft ecotourists reported to have engaged in horseback riding on the Galápagos Islands. Finally, 21% of hard ecotourists reported to have participated in scientific study during their stay in the islands compared to only 14% of soft ecotourists.

Activities such as kayaking, scuba diving, sailing, camping, cycling, fishing, and canoeing had the lowest participation in both groups. However, significantly larger percentages of hard ecotourists participated in kayaking, camping, cycling, fishing, and canoeing than soft ecotourists.

Length of stay presented a non-normal distribution for hard ecotourists (Shapiro-Wilk = 0.574,  $df = 239$ ,  $p < 0.001$ ) and soft ecotourists (Shapiro-Wilk = 0.855,  $df = 217$ ,  $p < 0.001$ ). Therefore, Mann-Whitney  $U$  test was run to compare the length of stay for each group. Results of the test showed that hard ecotourists stayed longer periods of time visiting the islands, compared to soft ecotourists (Mann-Whitney  $U = 18334.5$ ,  $p < 0.001$ ). Hard ecotourists stayed, on average, 11 days in Galápagos, while soft ecotourists visited the islands for an average of 8 days.

### 3) Travel preferences

Hard ecotourists chose study abroad programs (27%) and travel agencies (31%) as their main travel methods to travel to the Galápagos (Table 2-5). On average, they “really liked” their participation in those methods (Table 2-6). On the other hand, a higher preference of soft ecotourists chose travel agencies (59%) as their main travel method. Only 13% of soft ecotourists chose to engage in study abroad programs to visit the Galápagos. Soft ecotourists, on average enjoyed visiting through travel agencies and study abroad programs (means = 4.66 and 4.61, respectively) (Table 2-6).

Table 2-5. Travel method(s) chosen between clusters (in %)

		Hard Ecotourists	Soft Ecotourists
$\chi^2 = 62.85$ $df = 10$ $p < 0.001$	Travel Agency	31.4	58.9
	Study Abroad	27.3	13.2
	Self Planned Visit	18.6	7.8
	Travel Agency + Self Planned Visit	8.3	3.2
	Volunteer	4.1	0
	Study Abroad + Travel Agency	4.1	4.6
	Other	3.3	9.6
	Study Abroad + Self Planned Visit	1.7	0.9
	Other combinations of travel methods	1.2	1.9

There were more hard ecotourists who engaged in self-planned visits than soft ecotourists (19% vs. 8%, respectively), and, on average, they stated that they “really liked” that method

(Table 2-6). A low percentage of hard ecotourists engaged in volunteer programs (4%) to visit the islands, and stated that, on average, they “liked” their engagement in these programs (mean = 4.36) (Table 2-6). However, no soft ecotourists engaged in volunteer work when coming to the islands.

Table 2-6. Mean attitudes towards methods chosen between clusters

Travel Method <sup>a</sup>	Mean		Std. Deviation	
	Hard	Soft	Hard	Soft
Study Abroad	4.67	4.61	0.57	0.72
Travel Agency	4.54	4.66	0.67	0.59
Self Planned Visit	4.77	4.60	0.51	0.50
Volunteer	4.36	0	1.08	0
Other	4.83	4.33	0.58	0.637

<sup>a</sup>1= Really don't like, 2 = Don't like, 3 = Don't care, 4 = Like, 5 = Really like

### Analysis of the Sample

According to the Galápagos National Park Service (GNPS), the nationalities of visitors of the Galápagos Islands during 2007 were: USA (43.9%), Europe (18%), England (13.3%), Canada (5.5%), South and Central America (5%), Australia (3%), and other countries (11.3%). The nationalities and the proportion of participants from the study sample from these countries were somewhat similar to those of the GNPS study's population. Sample participants came from USA (65%), England (10%), Canada (8%), Europe (10%), South America and Central America (3%), Australia (2%), and other countries (2%). Therefore, compared to the entire year of 2007, this study oversampled USA visitors, which may bias the percentage of hard and soft ecotourist present in the islands. Therefore, this may limit the ability to generalize descriptive statistics regarding the visitors' characteristics (such as age, employment status, or education level) of each ecotourist segment. However, this difference in terms of nationality among tourists does not represent a constraint in classifying visitors as hard and soft ecotourists.

There are no annual data, however, about travel methods, lodging services, and length of stay for the true Galápagos foreign population. The 2008 Galápagos Demand Report surveyed

tourists only between the months of November and December of 2007. For this 2007 sample, the majority (55%) of tourists used cruise/boats as their main lodging service, and 30% of the sample used land hotels only as their main lodging service. The results of the present project showed a very similar percentage of tourists staying in cruise ships or on boats only (59 %), but just 16% of respondents reported to use hotels in local towns. Without annual data about the lodging service of all type of tourists, the present project's descriptive statistics regarding trip characteristics (lodging service and participation in travel activities) cannot yet be generalized to all Galápagos foreign tourists.

Similarly, there are no data about the true percentages of Galápagos foreign tourists who come to the islands through a study abroad program, self-arranged trips, or through travel operators/agents. One reason for this is that students and volunteers have been under-researched in tourism studies in the Galápagos since they represent a low and incipient market demand. Due to this lack of information about the true population's travel method, the present project's descriptive statistics regarding visitors' travel preferences or methods cannot yet be generalized to all Galápagos foreign tourists.

### **Discussion**

The two-cluster solution explored in this study revealed distinctive hard and soft ecotourist segmentation for the Galápagos visitors. The ecotourist segmentation for Galápagos visitors resembles Fennel and Weaver's (2005) ideal ecotourist types. According to Fennel and Weaver, the soft ecotourist segment indicates a strong connection to conventional mass tourism with higher reliance on the formal travel industry and emphasis on interpretation. Soft ecotourists are physically passive, prefer physical comfort and extensive services and facilities, and usually have a shallow interaction with nature.

Similarly, the Galápagos' soft ecotourists showed higher dependence on tour guides, higher preference for interpretation and escorted tours, and higher expectations for adequate tourism services and comfortable accommodations. Soft ecotourism behaviors are also indicated by the visitors' preferences for lodging services and travel methods. Most Galápagos soft ecotourists used cruise/boat as their main lodging service, preferred visiting the islands through travel agencies, and stayed for an average of eight days in the islands. Since the travel agency and cruise/boat are the main travel method and lodging service used by soft ecotourists, it can be inferred that they have a strong connection to conventional mass tourism and prefer physical comfort through high quality of accommodations. There were just a few soft ecotourists who came to the Galápagos through a study abroad program and none of them engaged in volunteer work when coming to the islands.

Similar to the hard ecotourist behavior proposed by Fennel and Weaver (2005), the Galápagos hard ecotourists displayed higher levels of biocentrism, apparent commitment to enhancement sustainability, preference for the quality of environment over the quality of accommodations, self reliance when traveling, and higher engagement in physically challenging activities. Even though a significant percentage of Galápagos hard ecotourists used cruise/boats as their main lodging service, there were also a considerable number of them who used local hotels and homes and a mixture of cruise/boat and local hotels for their stay in the islands. In addition, Galápagos hard ecotourists tend to visit the islands through study abroad programs, travel agencies and self-planned visits and stay for an average of 11 days in the islands. A very small proportion of hard ecotourist engaged in volunteer programs with the local community when visiting the islands.

The most popular activities for both groups were national park visits, wildlife viewing, snorkeling, nature photography, guided trail walks, swimming, hiking, bird watching, and shopping. These activities are typical of the conventional mass tourism in the Galápagos. The itineraries for navigable tours (i.e. cruises/boats) include most of these activities and are usually performed in specific areas within the national park designed for tourism purposes (2008 Galápagos Tourism Demand Report, GNP). On the other hand, cycling, fishing, and canoeing were activities mostly offered by the local community, but were rated as the least common activities. Since a significantly larger percentage of hard ecotourists stayed in local towns and planned their own trip and travel activities, they revealed higher participation in these least popular activities, compared to soft ecotourists.

In addition, a significantly larger percentage of hard than soft ecotourists participated in activities like meeting local people, sunbathing on the beach, horseback riding, scientific study, kayaking, and camping. These activities are also mainly offered by the Galápagos local community, indicating a higher participation of hard than soft ecotourists in local tourism services. The participation of hard ecotourists in these types of activities may be closely related to the longer periods of stay and the usage of a combination of cruises/boats and land hotels when visiting the islands. According to the 2008 Galápagos Tourism Demand Report, tourists who use a combination of cruise/boats and land hotels as their lodging services, start with a navigable tour and then decide to stay additional time in the islands and use land hotels for the remaining of their stay. This implies that the visitors who stay for additional days in Galápagos use more local services and participate more in local tourism activities such as horseback riding, camping and kayaking than soft ecotourists.

Each ecotourist group also presented different visitor characteristics. Soft ecotourists were, on average, older than hard ecotourists, and were mainly full-time employees. Hard ecotourists, on the other hand, were mostly full-time employees and full-time students. Although soft and hard ecotourists resided mainly in USA, more hard ecotourists visited the islands from different parts of Europe and Australia.

Most members of both groups have completed some university education, but a significant larger percentage of soft ecotourists had a graduate degree. This may be explained by age and employment status differences between these groups—on average, hard ecotourists were younger than soft ecotourists and a higher percentage of hard ecotourists were full time students pursuing a bachelor's degree.

### **Theoretical Implications**

This study confirms distinctive hard and soft ecotourists in the Galápagos. However, the hard and soft continuum theory is unique for the type of tourists who visit the Galápagos Islands. Galápagos attracts tourists because of its unique history and biodiversity. Regardless of their ecotourism behavior classification, tourists who visit the islands exhibit specific characteristics in terms of their travel methods, activities and preferences. Tourists in the Galápagos must follow the relatively strict rules and regulations of the Galápagos National Park Service and cannot behave as they would in many other parts of the world.

Hard ecotourists also showed a predominance of cruise/boats as their main lodging service. Nonetheless, hard ecotourists also tended to use other lodging services such as hotels in local towns local homes, and a mixture of cruise/boat and other lodging services mostly in local towns. Even though Galápagos hard ecotourists do not possess the freedom they would have in other nature-based destinations, they have figured out a way to plan a more individual visit by using a combination of navigable tours and stays in local hotels. By doing this they have

increased their interaction with the local community and directly participated in local tourism activities such as horseback riding, kayaking, canoeing, etc. Unlike hard ecotourists in other nature-based destinations, where they have the freedom to choose where they want to go, who they go with, or how they get to those places, the Galápagos hard ecotourists start by choosing the most common lodging service offered (cruises/boats) and then detaching themselves from the fixed schedules of navigable tours through the usage of more local tourism services and activities.

Unlike soft ecotourists from other nature-based destinations, who are used to a life of luxury, are physically passive, prefer physical comfort and have a shallow interaction with nature, the Galápagos soft ecotourists spend hours on land, visiting different areas of the national park, hiking, and observing nature and wildlife. This behavior might be expected because people's main focus to visit the islands is to get to know the history of the islands and experiencing the uniqueness of the Galápagos wildlife. However, this might help us rethink what soft ecotourists are in a strictly managed park like the Galápagos.

### **Management Implications and Recommendations for Enhancing the Galápagos Ecotourism Model**

This study explored the market niche for ecotourism in the Galápagos Islands by means of conducting a market segmentation of potential ecotourists. Based on respondents' ecotourism behavior, hard and soft ecotourist groups emerged. Those groups differ in some of their sociodemographic and trip characteristics, as well as their travel preferences.

In general, Galápagos visitors who fit under the hard ecotourist profile have a strong environmental commitment and an apparent responsibility to enhance the local sustainability. This study showed that there is a significant number of hard ecotourists who visit the islands as volunteers, scientists, students, and free independent travelers (who rely minimally on travel

agents), compared to soft ecotourists, who are mainly part of a tour package and visit the islands through the conventional mass tourism (i.e. cruises). Hard ecotourists in the Galápagos have a greater tendency than soft ecotourists to spend more time in local towns, use more local tourism lodging services, and presumably interact in a larger degree with the local community.

Therefore, Galápagos should increase marketing to those types of visitors.

Since hard ecotourists tend to be younger, fairly well educated, and use cruises/tour packages as well as study abroad programs, tourism marketing efforts should primarily target people such as students, volunteers, scientists, and people developing a more specific activity in the islands. This market of tourists tend to stay longer periods in the islands, appear to use local tourism services (e.g. lodging in local hotels and homes) and participate in a larger degree in tourism activities offered by the local community. In addition, promotion should also focus on USA, Europe, Canada and Australian markets, since those were reported to be the main places of residence of hard ecotourists.

Soft ecotourists in the Galápagos tend to participate in less proportion in tourism activities and services offered by local communities. This may be explained by the low interaction between the navigable tour operators and the local tourism community. The time scheduled to be spent on the local towns is very limited (e.g. morning or afternoon). Results show, however, that larger proportions of soft ecotourists tend to go shopping, which may imply that they do spend money and time in local stores or souvenirs shops. This could be explained by two reasons. First, because most soft ecotourists are full-time employees or retirees, they have more money to spend when traveling. Second, most tourism ships' itineraries and schedules are built close to the pier where tourists are dropped off for their limited stay on the islands. Therefore, shopping is the most available opportunity for these tourists.

One alternative to better integrate the Galápagos soft ecotourist into the local tourism is to consider the sale of local-based activities as “complementary” to the itinerary of visitors using navigable tours. For example, instead of staying the usual five to seven days in Galápagos, tourists engaged in navigable tours can stay for additional time (e.g. two to four days) exclusively on land hotels, and participate in tourism activities offered by locals. That way these tourists will have the opportunity to learn about the Galápagos culture and local towns, and interact more with the Galápagos community. For this tourism model shift to happen, it would be essential that travel agents/operators promote in a coordinated way the complementary activities offered by local towns.

The lodging preferences are associated with the navigable tourism modality. In other words, the preference by most tourists in the Galápagos is to use cruises or boats. In consequence, it is important to improve the service quality in local hotels and restaurants to a level similar or superior to those offered in the cruises/boats with the aim of attracting additional stays in the local towns. Long-term training of local personnel would be needed in order to be able to offer a high quality customer service to the Galápagos tourists.

### **Future Research**

Since the present project only sampled tourists in the months of May to July of 2008, future research should develop an adequate yearly recruitment and sample of students, volunteers, and free independent travelers to properly account for all foreign visitors. In order to completely assess the characteristics of the true foreign Galápagos tourist population and make valid generalizations of the present study, an annual sample of all foreign visitors’ travel characteristics and methods is needed. Annual information about travel methods and lodging services used by this group of tourists is needed to correctly determine the true profile of visitors who travel the islands without tour packages.

To promote the complementary activities offered by local towns with the navigable tour itineraries, it would be necessary to first establish a record of all of the activities currently offered by the local community, their costs, and the level of satisfaction and acceptance by tourists. In addition, research should focus on investigating the potential demand of new local activities that are most adequate to be offered in the Galápagos. It would be necessary to investigate the demand level for these new activities and the visitors' willingness to participate in the activities as a complementary service.

CHAPTER 3  
INTEGRATING GALÁPAGOS VISITORS INTO CONSERVATION AND COMMUNITY-  
BASED TOURISM: VISITORS' WILLINGNESS TO SUPPORT ECOTOURISM POLICY  
MEASURES

**Introduction**

Ecotourism, according to The International Ecotourism Society (TIES), “is responsible travel to natural areas that conserves the environment and sustains the well-being of local people” (TIES website, 2008). This definition suggests that ecotourism must result in important benefits for the local community and environment, which implies systematic and holistic planning that incorporates both ecological and social processes. If ecotourism, as defined by TIES, is taking place in the Galápagos Islands, one would expect ecological conservation successes and improved economic benefits to the local communities. However, this is not the case in the Galápagos Islands. The tourism model in the Galápagos since 1960 implies tourism managed by large-scale national and international tourism operators, which negatively impacts the Galápagos ecology and local residents. This tourism model is now referred to as Network Tourism (Grenier, 2007), and uses cruise ships as their main transportation means.

The direct ecological impact of network tourism is relatively small in the terrestrial part of the Galápagos National Park (GNP), thanks to the GNP Service administration. However, the remarkable tourism growth<sup>1</sup> has a great ecological impact on the sea—more tourists result in more ships, consequently more contamination of the coastal areas by fuel and waste water. Additionally, this direct impact increases in relationship with the size and accommodation level of the ships. If cruise ships and boats operating in the GNP continue to get bigger (the average

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<sup>1</sup> The number of tourists increased 3.6 times between 1992 (39,510) and 2006 (142,600)<sup>1</sup>. In 30 years, the number of visitors increased 22.5 times more. There were 6,300 tourists in the GNP in 1976. Estimate is based on the 16.4 % growth between the 6 first months of 2005 and the first semester of 2006 (Grenier, 2007)

number of beds per cruise ship was 17 in 1996 and 21 in 2004<sup>2</sup>), faster and more luxurious boats will generate even more contamination on the marine reserve. For example, the oil spill of cargo ship *Jessica* on the Galápagos Marine reserve in 2001 illustrates one of the consequences of maintaining huge cruise ships in operation: the *Jessica* was bringing gasoline for the *Galápagos Explorer*, a cruise ship with more than 100 beds (Ospina and Falconí, 2007).

There are also indirect ecological impacts caused by the massive tourism growth in the Galápagos. In order to work economically, big cruise ships need great quantity of “cheaper” resources such as fuel, food, souvenirs, and even laborers brought from the mainland, and this requires maritime and aerial transport from the Ecuador mainland to the islands. This transport of food and people to the islands implies the introduction of new invasive species, altering the ecological functioning and stability of the endemic ones (Grenier, 2007).

Not only is the Galápagos ecology impacted by network tourism, the Galápagos local economy is also affected. The objective of network tourism is to keep the tourists inside the system that the enterprise manages or operates (Ospina and Falconí, 2007). Tourists are immediately embarked onto cruise ships after their arrival in the islands; therefore, they spend little time on the populated islands, which limits their use of local tourism services (Ospina and Falconí, 2007). This situation has created a high rate of economic leakage from Galápagos communities. Both island residents and researchers generally agree that little of the income generated by tourism enters the local economy (de Miras, 1995). In fact, Epler B. (2007) and Taylor’s (2006) estimates for 2006 about the distribution of tourism expenses report that of the \$156 million spent on tourism activities in Galápagos, \$12 million (7.5%) go to local-based services and activities, \$11 million (7%) to hotels, \$12 million (7.5%) to management, control,

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<sup>2</sup> Data taken from the Galápagos National Park Service tourism statistics from Ospina, 2007, p.136)

and basic service for tourism in local towns, and the difference of \$121 million (78%) to the cruise ships/boat operators.

Recent research and reports about Galápagos tourism demand has focused on the socio-economic situation of the Galápagos human community (Ospina and Falconí, 2007; Edward et al., 2003) and has stressed the importance of a shift in the tourism model promoting “a real ecotourism” in the Galápagos Islands (Grenier, 2007; 2008 Galápagos Tourism Demand Report, GNP). If the Galápagos Islands were to reflect “ecotourism” as defined by TIES, tourism would be better integrated into the local communities, enabling local residents to participate in, and the benefit from the tourism business.

To change the current tourism model in the Galápagos, it is important to first understand the people who are driving the tourism process –foreign tourists. Non-Ecuadorian foreign tourists visiting the Galápagos represent the target market of the network tourism model—most of them use travel agencies and cruise ships when visiting the islands. In addition, they pay the highest entrance-fee to access the islands, generating most of the economic benefits for the Galápagos National Park (Kerr, 2005, 515)—twice as many foreigners visit Galápagos as domestic tourists<sup>3</sup> and pay an entrance fee of 100 U.S. dollars compared to 6 U.S. dollars for national tourists (Galápagos National Park Service, 2008).

However, the fact that foreign visitors are present in larger proportions in Galápagos and pay higher entrance fees to enter the park does not imply that they are directly spending their money in the Galápagos community and utilizing local tourism services. Willen and Stewart (2000) showed that foreigners were spending on average 3.5 times more than Ecuadorians (\$3,676 and \$936 per person, respectively) to tour the Galápagos, but a far larger percentage of

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<sup>3</sup> 97,396 foreign tourists and 47,833 national tourists visited Galápagos in 2006. Galápagos National Park data

the money spent by national tourists stays in the local economy. In fact, just 15.1% of the foreign expenditures stayed in the Galápagos local economy, compared to 95.2% of the money spent by Ecuadorians. This may be explained by the fact that domestic tourists usually stay in local land hotels, participate more in local tourism services, and have more interactions with Galápagos residents than foreign tourists (Honey, 2008, p.130).

Although much research has occurred in the Galápagos Islands, not much research has systematically examined the islands' *foreign* visitors and how tourism policies and planning frameworks could work better with these tourists to ensure more equitable distribution of tourism benefits and promote greater community involvement and ecosystem preservation.

The purpose of this project is to explore the integration of foreign tourists into conservation and local tourism activities. More specifically this research seeks to investigate: 1) Galápagos foreign visitors' willingness to accept ecotourism measures directed to increase tourists' local service usage, support local welfare, and enhance participation in conservation activities; 2) Galápagos foreign visitors' travel preferences, and concerns for the environment and human beings; and 3) how these factors may influence the willingness to support ecotourism measures.

### **The Value Belief Norm Theory**

The Value Belief Norm (VBN) theory of environmentalism will serve as a base to understand the tourists' values towards the Galápagos' ecosystem and local community, and explain the visitors' willingness to support ecotourism measures. This theory was successful in explaining various environmental behaviors (i.e. consumer behavior, environmental citizenship, willingness to reduce car use, and acceptability of energy policies) (Stern et al., 1999; Nordlund and Garvill, 2003; Steg et al., 2005), suggesting that biospheric or environmental values are the

most responsible ones for adopting pro-environmental behaviors (Steg, 2006, Nordlund and Garvill, 2003).

Literature has identified many different theories that influence individual behavior, since human activities and actions impact the environment and other human beings. The VBN theory offers a way to understand individuals' environmentally significant behavior. This theory states that there is a direct relationship between values, beliefs, norms and behavior. The VBN theory has distinguished three general value orientations: an egoistic value orientation, in which people try to maximize individual outcome; an altruistic value orientation, which reflects concern for the welfare of other human beings; and a biospheric value orientation reflecting concern with non-human species or the biosphere (Stern, Dietz, and Kalof, 1993). These three value orientations have been considered the foundation stone when predicting environmental behavior (Figure 3-1) and will be the basis for this research in determining and measuring tourists' concerns for the Galápagos environment and welfare of local people.

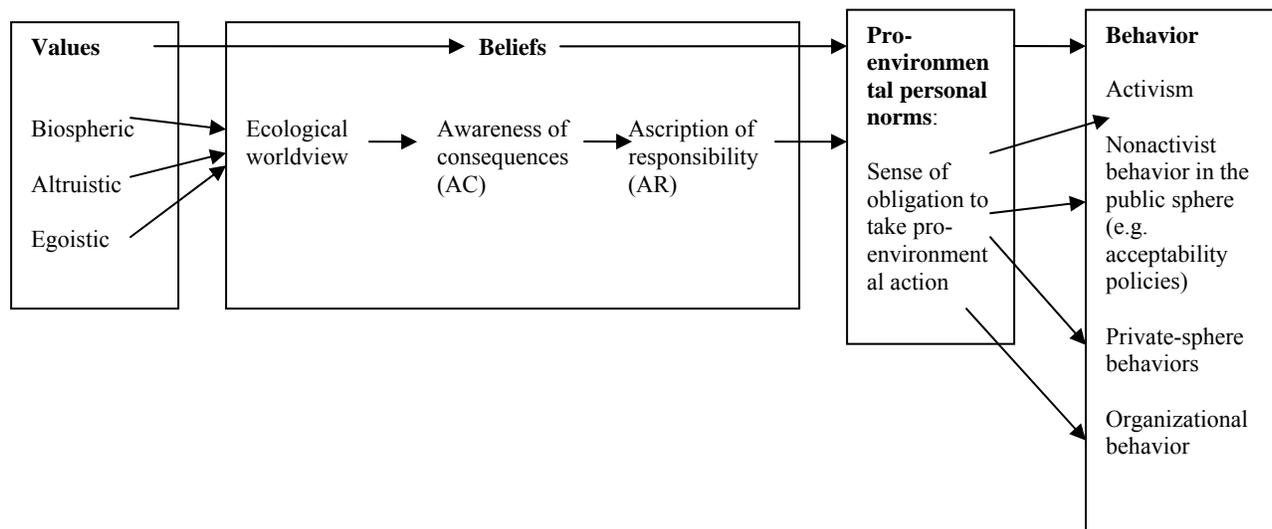


Figure 3-1. The VBN Theory. Adapted from Stern P. C. (2000). Toward a coherent theory of environmentally significant behavior. *Journal of Social Issues*, 56(2).

## **Personal Values**

Rokeach (1968) defined values as “centrally held and enduring beliefs that guide actions and judgments across specific situations and beyond immediate goals to more ultimate end-states of existence” (p.159). More recently, Schwartz and Bilsky (1987) and Schwartz (1992, 1994) have moved forward the understanding of values in the field of social psychology. Schwartz (1994) defines values as ‘desirable trans-situational goals, varying in importance, that serve as guiding principles in the life of a person or other social entity’ (p.21). There are many definitions of values, but Schwartz and Bilsky (1987) identified that most of them incorporate five key dimensions: “values are concepts or beliefs, relate to desirable end states or behaviors, transcend specific situations, guide selection or evaluation of behaviors and events, and are ordered by relative importance” (Schwartz & Bilsky 1987, p. 551).

Values, therefore, form the basis upon which behaviors are grounded (Higham and Carr, 2002). However, it is important to differentiate values from attitudes. Values are distinct from attitudes, as Lawson et al. (1996) explain, because ‘values work at a higher level of abstraction and are deeper seated more pervasive influences on behavior’ (p.81). This means, that values influence the attitudes that tourists may hold towards specific objects and situations, and are likely to bear directly upon visitor behavior (Higham and Carr, 2002).

Specifically in the tourism sector, social, cultural and environmental values have been used as the basis of market segmentation (Higham and Carr, 2002). For example studies have used personal values (Madrigal, 1995; Muller, 1991), social values (Blamey & Braithwaite, 1997), and cultural values (Blamey & Braithwaite, 1997; Diamantis, 1999) as the basis for studying the profiles of tourists, generally ecotourists.

Recent research suggests that potential ecotourists’ concern for biodiversity conservation ranks higher than their concern for the wellbeing of local people (Zografos and Allcroft, 2007,

p.58). Authors such as Nilsson et al. (2004, p.274) suggest that environmental values, but not altruism values (such as equality and social justice) were successful to predict the acceptance of environmental policy measures at the organizational level. However, if the objective is to analyze the acceptance of ecotourism policy measures, the concerns for the environment and for the local welfare should be closely related. Ecotourism not only has the objective to conserve the environment but to sustain the well-being of local communities.

The ecotourism policy measures presented in the research aim to directly benefit environmental conservation and local residents, through regulation proposals intended to increase tourists' local tourism service usage, support local welfare, and enhance visitors' participation in conservation activities. Therefore, it is expected that tourists' environmental values and altruistic concerns would positively influence acceptance of ecotourism policies.

## **Methods**

### **Study Area**

Located about six hundred miles off Ecuador's coast, the Galápagos Islands are formed by 13 major islands—Santa Cruz, Floreana, San Cristóbal, Isabela, Santa Fe, Santiago, Darwin, Roca Redonda, Marchena, Pinta, Espanola, Genovesa, and Fernandina—and a large number of smaller islands and islets (Acosta, 1979) (Figure 3-2). The Galápagos Islands are known for their unique flora and fauna, and were declared a World Heritage site by the UNESCO<sup>4</sup> in 1979. Ninety-seven percent of its total area was declared national park, limiting three percent for human habitation. There are more than 18,000 people living in the remaining 3% of Galápagos' land area. The total population is distributed among San Cristóbal, Santa Cruz, Isabela and Espanola islands in towns and places designated for human development. San Cristóbal and

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<sup>4</sup> United Nations Educational, Scientific and Cultural Organization

Santa Cruz are the main populated islands; they both offer diverse tourism services, and have commercial airports, which represent ports of entry and exit for tourists visiting the Galápagos Islands

“Ecuador has been a well-known nature tourism destination for over 20 years because of the early popularity of the Galápagos Islands” (Epler W., 1998, p.12). Scientists such as Boo (1990) and Ceballos-Luscarian (1996) have categorized the Galápagos as one of the best examples of a worldwide ecotourism destination, and they are often cited as the place where ecotourism originated (Honey, 2008).



Figure 3-2. Map of the Galápagos Islands

### Galápagos Entrance Fee

Several ecotourism policies examined in this project explore the acceptance level of an increase in the Galápagos Islands entrance fee. This increase aims to directly benefit the local residents and support conservation efforts. Fifty percent of the entrance fee goes towards local safety, regional planning, establishment of policies, and coordination and management of actions

with different social, economic, cultural, and environmental actors. The entities designated to coordinate these actions are the national navy, Galápagos National Institute (INGALA), provincial government, and local municipalities (Table 3-1). On the other hand, the Galápagos National Park, Marine Reserve, and Quarantine and Inspection Service receive the other 50% of the entrance fee. These entities are responsible for the conservation of the terrestrial and marine protected areas, and for the avoidance of introduced species into the islands. In sum, the entrance fee for visitors to the park aims to support environmental conservation efforts and Galápagos regional planning, and improve the functioning of the local government structure.

Table 3-1. Distribution of Galápagos Islands entrance fees, year 2007

Recipient	Distribution of entrance fees (%)
Galápagos National Park	40
Galápagos municipalities ( <i>municipios</i> )	25
Galápagos provincial government	10
Galápagos National Institute (INGALA)	10
Galápagos Marine Reserve	5
Quarantine and Control System (SICGAL)	5
Ecuador National Navy	5
<b>TOTAL</b>	<b>100</b>

Source: Galápagos National Park Service. 2008 Galápagos tourism demand report

### Sampling Approaches

The theoretical population for this study was non-Ecuadorian (foreign) tourists who visit the Galápagos Islands. The accessible population was non-Ecuadorian tourists visiting the islands of San Cristóbal and Santa Cruz, the most visited islands that offer a large number of diverse local tourism services and activities.

A systematic random sampling approach was used to recruit tourists in San Cristóbal. The sampling frame consisted of tourists at San Cristóbal airport at time of departure from May to July of 2008. Tourists at the departure lounge were picked systematically (a starting participant is chosen at random, and thereafter at regular intervals). Once selected, participants were asked

to consent to participate in the study. Researchers collected data every other day of the week during the time period of May to July of 2008.

Transportation costs and time required to get to the Santa Cruz airport made it difficult to survey tourists at that airport at time of departure. Consequently, tour guides from Santa Cruz were asked to provide questionnaires to tourists on their last day of stay. As in San Cristóbal, tourists were asked to consent to participate in the study. Only people who wished to participate completed the survey. To ensure heterogeneity of the sample, tourists from different cruises/travel agencies were surveyed every other day of the week, for approximately one month between June and July of 2008.

To broaden the sample so it would include all types of foreign tourists, researchers worked with representatives from universities or organizations to recruit students, volunteers, researchers, scientists, or other tourists who stayed for long periods of time. The number of volunteers, scientists, and researchers present in the islands of San Cristóbal and Santa Cruz during May to July of 2008 was relatively small, and all of them were recruited. With the help of local municipalities and community leaders, researchers were able to identify all the organizations and universities that were in charge of bringing these types of visitors to both islands. Researchers then contacted representatives of these organizations to find the number of visitors already present in the islands and those who were coming between the months of May and July of 2008. Researchers and representatives then set up a time and meeting place to survey participants. Once identified, participants were asked to consent to participate in the study.

The survey was given orally and at convenient times, and 97.5% of people who were asked to fill out the survey participated (464 out of 467). A total of 213 tourists were sampled in San Cristóbal airport through systematic random sampling. One hundred fifty-five tourists were

sampled in Santa Cruz through the intervention of tour guides. And a total of 96 students, volunteers, and researchers were surveyed in both islands through the help of representatives from universities and local organizations.

### **Data Collection**

A survey (see Appendix) was designed to achieve the three objectives of the project:

1) *Study Galápagos visitors' willingness to accept ecotourism measures directed to increase tourists' local service usage, support local welfare, and enhance participation in conservation activities*

To measure visitors' willingness to accept ecotourism measures a seven-item index (Question 11 in the survey) was developed. The ecotourism policies were directed to increase tourists' local service usage (first, second, and seventh policy), support local welfare (third and fifth policy), and enhance participation in conservation activities (fourth and sixth policy). Ecotourism policy items were created with the help of Galápagos National Park representatives and local community members. The items selected were tested for validity and reliability ( $\alpha=0.867$ ). Participants were asked to rate the seven ecotourism policy statements from "Certainly oppose" to "Certainly accept".

2) *Study Galápagos visitors' travel preferences, and concerns for the environment and human beings*

The variables of biospheric, altruistic and egoistic values introduced by Stern *et al.* (1993) were used in the study with the objective of measuring the visitors' concerns for personal well-being, the welfare of others, and the ecosystem, respectively (question 12 in the survey). The biospheric value orientation reflects concern with non-human species or the biosphere; the altruistic value orientation reflects concern for the welfare of other human beings; and the egoistic value orientation reflects concerns for self-interest and personal well-being; this is,

concerns that are based on a person's valuing himself or herself above other people and above other living things (Stern *et al.*, 1993).

Three indices were developed to measure each of the value orientations. Index items were taken from Steg *et al.* (2005) Value Index, and their response format ranges from “Not at all important” to “Very important”. Three items were selected for the biospheric value orientation (“Protection of wildlife,” “Respecting non-human beings,” and “Preventing contamination of the environment”), four for the altruistic value orientation (“Equal opportunity for all,” “Correcting injustice,” “Care for the weak and poor,” and “Working for the welfare of others”), and three items for the egoistic value orientation (“My financial security,” “Control over others,” and “The amount of money I have in my bank account”).

The lodging service used, length of stay in the islands, and method (s) chosen to visit the Galápagos were used to study the visitors’ travel preferences (survey questions 9, 7, and 6, respectively). Specifically, study participants were asked to check all the accommodation services and travel methods used, as well as the duration of their stay.

*3) Investigate how these factors may influence the willingness to support the ecotourism measures.*

Correlation tests were performed to analyze the relationship between values and the acceptability of ecotourism policies. Biospheric, altruistic, and egoistic values were not normally distributed (Table 3-2). Therefore, Spearman’s rho correlation coefficient was used to measure the strength and direction between egoistic, biospheric, and altruistic values and the level of acceptance of ecotourism policies. Acceptability of ecotourism policies did present a normal distribution (Table 3-2). Hence, ANOVA tests were used to test the relationship between lodging

service used, method (s) chosen to visit the Galápagos, demographic data, and acceptability of ecotourism policy measures.

Table 3-2. Test of normality

Variables	Shapiro-Wilk		
	Statistic	Df	Sig.
Biospheric values	0.794	464	<0.001
Altruistic values	0.952	464	<0.001
Egoistic values	0.971	464	<0.001
Acceptability of ecotourism policies	0.988	464	0.108

Post-hoc ANOVA analysis was conducted to look for or control for patterns that were not specified *a priori* that may affect the outcomes of the research. A priori analysis implies the sample and creation of groups according to specific characteristics thought about ahead of time (de Vaus, 2001). In this case, post-hoc comparison groups were generated, if possible, for demographic data (i.e. gender, age, place of residence, education attained, and employment status), lodging service used, travel method, and length of stay.

### Results

The average age of respondents was 39 years old, and ranged between 18 and 86 years old. The age distribution is skewed to the right—the majority of the distribution is located between 18 and 33 years old. Approximately, 44.6% were male and 55.4% female. Almost 65% of respondents resided in the USA, 10% in England, 8% in Canada, 10% in Europe, 3% in South America and Central America, 2% in Australia, and the remaining 2% in other countries. Forty-one percent of participants were employed full time, 21% were full time students, and approximately 12% were retired (Figure 3-3). Thirty-four percent of respondents achieved a graduate degree or beyond, 25% were university graduates, 25% attained some university, and the remaining 12% of respondents attained high school or less than high school (Figure 3-4).

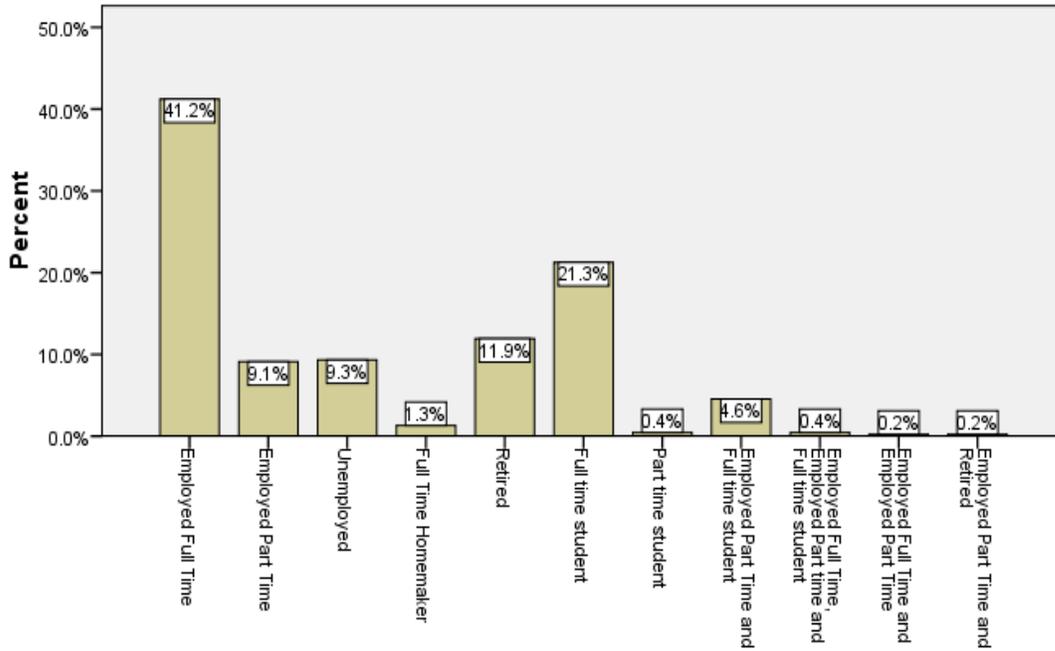


Figure 3-3. Relative frequency distribution of employment status for sampled Galápagos foreign visitors

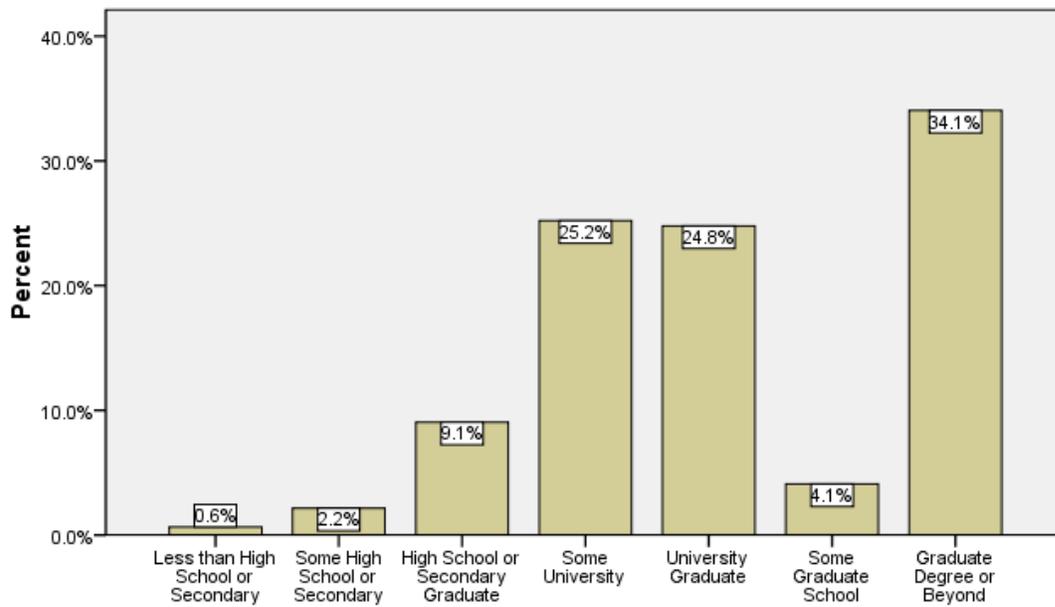


Figure 3-4. Relative frequency distribution of highest level of education attained for sampled Galápagos foreign visitors

### **First Objective: Acceptability of Ecotourism Policies**

Results show that, on average, tourists were willing to accept ecotourism policies in the Galápagos (Table 3-3). Participants showed the highest level of acceptance to an increase in the entrance fee if the increase is directed to environmental conservation activities (mean = 4.38). However, they had a lower level of acceptance of paying higher entrance fees if this increase is conditioned by a higher participation in conservation activities (mean = 3.33). In other words, tourists did not agree or disagree that the entrance fee should be based on the level of participation in conservation activities during their trip.

Two out of the three ecotourism policies directed to increase tourists' local service usage were moderately accepted by the respondents (means = 3.91 and 3.90). On average, respondents were willing to increase their use of local tourist services; however, they were less enthusiastic about the entrance fee being based on the amount of time and money spent on local services (mean = 2.85).

The ecotourism policies directed to support local welfare were also moderately accepted. Tourists had a positive attitude about directing an increase in the entrance fee towards the improvement in drinking water quality (mean = 3.66) and Galápagos community quality of life (mean = 3.84). On average, the four policies related to increasing participation in local tourism services and increasing the entrance fee to improve conservation efforts and well-being of local residents were accepted by respondents (tourists should increase their usage of local tourists services; tourists should increase their usage of local lodging services; if there is an increase in the entrance fee for tourists it should be directed to improve the quality of drinking water in Galápagos; if there is an increase on the entrance fee for tourists it should be directed to environmental conservation activities). However, tourists in general neither accepted nor opposed paying higher entrance fees if this increase is conditioned by a higher participation in

conservation activities (mean = 3.33) and a larger amount of time and money spent on local tourism services (mean = 2.85) (Table 3-3).

Table 3-3. Descriptive statistics of each ecotourism policy

Ecotourism Policy Measures	N	Mean <sup>a</sup>	Std. Deviation	Std. Error Mean
If there is an increase in the entrance fee it should be directed to environmental conservation activities	464	4.38	.74	.034
Tourists should increase their usage of local tourists services	464	3.91	.80	.037
Tourists should increase their usage of local lodging services	464	3.90	.80	.037
If there is an increase on the entrance fee it should be directed to improve the quality of life of the Galápagos community	464	3.84	.92	.043
If there is an increase in the entrance fee it should be directed to improve the quality of drinking water	464	3.66	.96	.045
Tourists who do not participate in conservation activities should pay higher entrance fees	464	3.33	1.13	.052
Tourists who do not spend much time and money using community services should pay higher entrance fees	464	2.85	1.10	.051

<sup>a</sup> 1= Certainly oppose, 2 = Oppose, 3 = Neutral, 4 = Accept, 5= Certainly accept

### **Second Objective: Travel Preferences, Biospheric, Altruistic, and Egoistic Values**

The average length of stay in the islands was nine days and ranged between three and eighty-seven days. The length of stay distribution, however, is highly skewed to the left since the majority of the distribution is located between six and eighty days. Fifty-nine percent of the respondents used only cruise ships or boats as their main lodging service. Almost 16% stayed in hotels in local towns only, 9% stayed in local family homes, 6% used hotels in local towns and another type of lodging service, and the remaining 10% used boats and hotels in local towns (Figure 3-5). Twenty-one percent of the respondents chose to visit the islands through a study abroad program. Approximately 45% of the respondents used travel agencies, 13% did their own travel arrangements, 9% engaged in other travel methods, 7% used both travel agencies and study abroad programs, and the remaining 6% of the respondents chose a combination of travel agencies and self planned visits when coming to Galápagos (Figure 3-6).

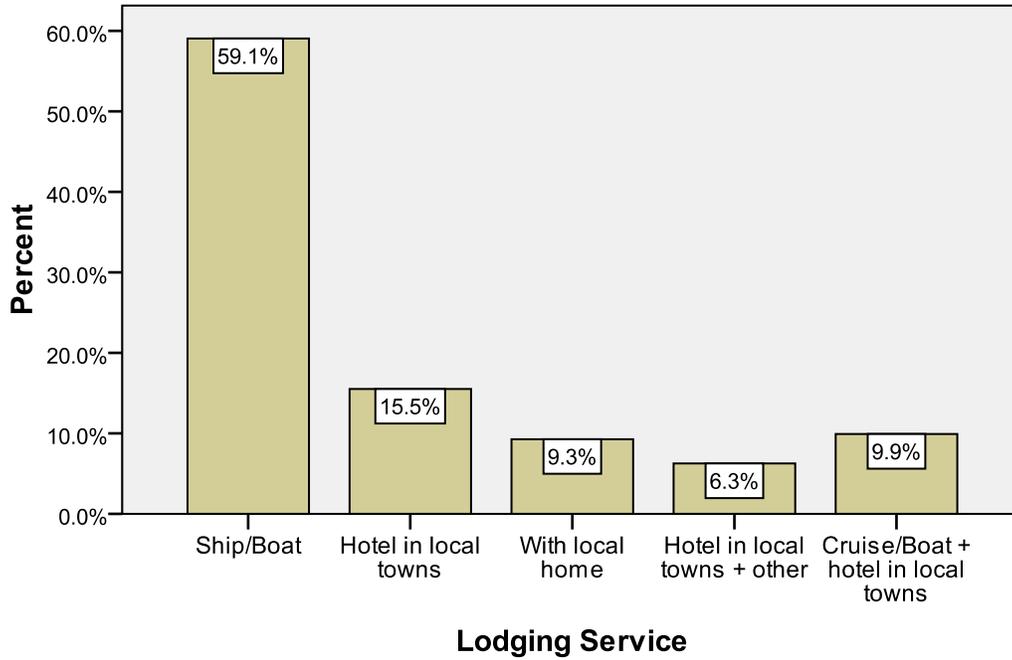


Figure 3-5. Relative frequency distribution of main lodging service used by sampled Galápagos foreign visitors

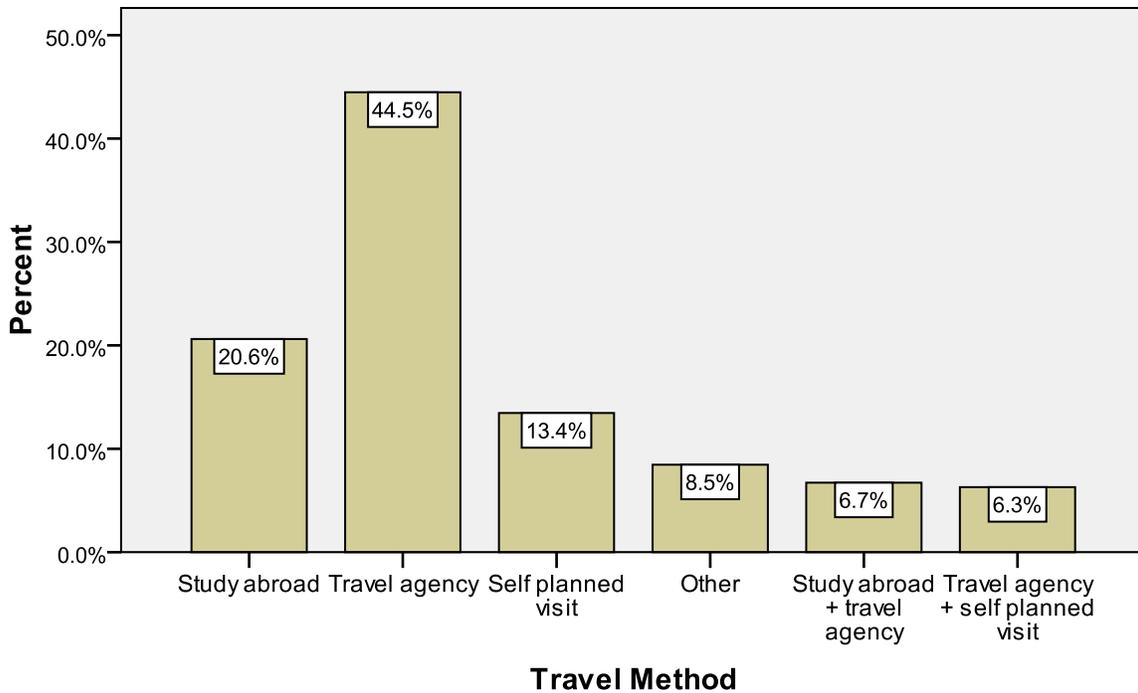


Figure 3-6. Relative frequency distribution of travel method used by Galápagos foreign visitors

Study participants reported their highest priority for biospheric values. This means that respondents reflected higher concerns for the protection of wildlife and prevention of environment contamination than they did for other values. Altruistic values were scored with a moderate importance and were not rated as important as the concerns for nature. Finally, egoistic values presented the lowest score, and one egoistic value (control over others) was rated as the least important (mean = 2.53) (Table 3-4).

Table 3-4. Descriptive statistics of each biospheric, altruistic, and egoistic value

Biospheric, Altruistic, and Egoistic Values	N	Mean <sup>a</sup>	Std. Deviation	Std. Error Mean
Protection of wildlife (Biospheric Value )	464	4.77	.46	.021
Preventing contamination of the environment (Biospheric Value )	464	4.65	.57	.026
Respecting non human beings (Biospheric Value )	464	4.52	.64	.030
Equal opportunity for all (Altruistic Value )	464	4.29	.78	.036
Care for the weak and poor (Altruistic Value )	464	4.15	.71	.033
Correcting injustice (Altruistic Value )	464	4.08	.77	.036
Working for the welfare of others (Altruistic Value )	464	3.99	.82	.038
My financial security (Egoistic Value)	464	3.99	.84	.039
The amount of money I have in my bank account (Egoistic Value )	464	3.38	1.02	.047
Control over others (Egoistic Value )	464	2.53	1.02	.047

<sup>a</sup> 1= Not at all important, 2 = Not important, 3 = Neutral, 4 = Important, 5= Very important

### Third Objective: Factors Influencing Willingness to Support Ecotourism Policies

The correlations between biospheric, altruistic values, and acceptability of ecotourism policies, were statistically significant, weak, and positive. On the other hand, the correlation between egoistic value and acceptability of policies was negative but not significant (Spearman's rho = -0.76,  $p = 0.103$ ). The correlation between altruistic values and the acceptability of policies was stronger (Spearman's rho = 0.30,  $p < 0.001$ ) than the correlation between biospheric values and acceptability of policies (Spearman's rho = 0.20,  $p < 0.001$ ). This means that tourists who had

higher concerns for the welfare and well-being of others were slightly more willing to support ecotourism policies than those who presented higher concerns for the environment.

ANOVA tests revealed that most demographic data (i.e. employment status, education attained, and age) do not show any significant influence on the acceptability of ecotourism policies. However, ANOVA tests showed that gender does display a relationship with the acceptability of ecotourism policies. Female respondents presented significantly higher acceptance of ecotourism policies than male respondents, ( $F(1, 462) = 4.995, p = 0.027$ ).

All the variables measuring travel preferences (i.e. lodging service used, travel method, and period of stay) do display a relationship with the acceptability of ecotourism policies. Correlations run for period of stay showed that the longer the period of stay in Galápagos, the higher the acceptability of ecotourism policies ( $r = 1.36, p < 0.01$ ).

Participants using different lodging services revealed significant differences in terms of the acceptability of ecotourism policies ( $F(9,454) = 2.429, p = 0.011$ ). Post hoc tests conducted for lodging services showed that tourists who stayed in local town hotels only, displayed a significantly higher score on the mean acceptability of policies (3.87) than the tourists who stayed only in cruise ships or boats (3.61) ( $p < 0.05$ ). No other type of lodging service revealed significant differences in terms of their level of acceptance with ecotourism policies (Table 3-5).

Travel methods also revealed significant differences in terms of the respondents' acceptability of ecotourism policies ( $F(10,450) = 2.422, p = 0.008$ ). The results of post hoc tests showed that tourists who come to the islands through a study abroad program reported significantly higher level of acceptance of policies compared to tourists who used travel agencies to visit the Galápagos ( $p < 0.05$ ) and those who arrange their trip by themselves—without travel agencies or tour operators ( $p < 0.05$ ). According to the results tourists who chose a different

method or a combination of several methods do not show significant differences in terms of their acceptability of policy measures (Table 3-6).

Table 3-5. Relationship between lodging service and acceptability of ecotourism policies

Lodging Service Used	N	Mean <sup>a</sup>	Std. Deviation
1. Ship/Boat	274	3.61 <sup>2</sup>	0.56
2. Hotel in local towns	72	3.87 <sup>1</sup>	0.58
3. With local home	43	3.77	0.62
4. Hotel in local towns + other	29	3.80	0.57
5. Cruise/Boat + hotel in local towns	46	3.70	0.55
Total	464	3.7	0.58

<sup>a</sup> 1= Certainly oppose, 2 = Oppose, 3 = Neutral, 4 = Accept, 5= Certainly accept

*Note:* The superscripts refer to a statistically significant difference ( $p < 0.05$ ), using the Tukey test, between the reported mean score and the mean score of one, or more, other categories. In this case, the mean score for category 1 is statistically significantly different from the mean of category 2.

Table 3-6. Relationship between travel method and acceptability of ecotourism policies

Travel Method	N	Mean <sup>a</sup>	Std. Deviation
1. Study abroad	95	3.90 <sup>2,3</sup>	0.6
2. Travel agency	205	3.65 <sup>1</sup>	0.57
3. Self planned visit	62	3.55 <sup>1</sup>	0.54
4. Other	39	3.70	0.65
5. Study abroad + travel agency	31	3.76	0.48
6. Travel agency + self planned visit	29	3.59	0.52
Total	461	3.69	0.58

<sup>a</sup> 1= Certainly oppose, 2 = Oppose, 3 = Neutral, 4 = Accept, 5= Certainly accept

*Note:* The superscripts refer to a statistically significant difference ( $p < 0.05$ ), using the Tukey test, between the reported mean score and the mean score of one, or more, other categories. In this case, the mean score for category 1 is statistically significantly different from the mean of category 2 and the mean of category 3.

### Analysis of the Sample

According to the Galápagos National Park Service (GNPS), the nationalities of visitors of the Galápagos Islands during 2007 were: USA (43.9%), England (13.3%), Canada (5.5%), Europe (18%), South and Central America (5%), Australia (3%), and other countries (11.3%).

The nationalities and the proportion of participants from the study sample from these countries were somewhat similar to those of the GNPS study's population. Sample participants came from

USA (65%), England (10%), Canada (8%), Europe (10%), South America and Central America (3%), Australia (2%), and other countries (2%). Even though the proportions of the different nationalities among the sample participants were not representative of that of the true population, people coming from different countries did not reveal significant differences in terms of their acceptability of ecotourism policies ( $F(6,456) = 1.897, p = 0.08$ ); their biospheric values ( $F(6,456) = 1.242, p = 0.283$ ); altruistic values ( $F(6,456) = 1.445, p = 0.196$ ); or egoistic values ( $F(5,456) = 1.286, p = 0.262$ ).

The Galápagos National Park Service data<sup>5</sup> also show that very similar percentages of females (50.87%) and males (49.13%) visited the islands during 2007. The sample proportion of male and female respondents, however, was different—44.61% were male and 55.39% were female. In this case, significant gender differences were reported in terms of the level of acceptance of ecotourism measures. According to the results, female respondents were more willing to accept ecotourism policies than male respondents. This implies that the actual mean level of acceptance of ecotourism policies (mean = 3.696) is biased towards female respondents. However, after weighting and adjusting the mean acceptability of ecotourism policies of the sample to the true gender proportions, the results reported only a slight change (mean = 3.6883).

Travel method, lodging services, and length of stay were also shown to influence the acceptability of ecotourism policies; however, there are no annual data about these characteristics for the true Galápagos foreign population. The 2008 Galápagos Demand Report surveyed tourists only between the months of November and December of 2007. Results revealed the presence of more European tourists (42.5%), followed by North American (USA

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<sup>5</sup> Galápagos National Park Service web page. Galápagos visitors statistics, 2007  
<<http://www.Galápagospark.org/png/interna.php?IDPAGINA=22&SECCIONPAS=Manejo%20Turístico&TIPOPAS=Galápagos>>

and Canada) encompassing 30.9% of the sample. For this 2007 sample, the majority (55%) of tourists used cruise/boats as their main lodging service, and 30% of the sample used land hotels only as their main lodging service. The results of the present project showed a similar percentage of tourists staying in cruise ships or on boats only, but just 16% of respondents reported to use hotels in local towns only.

Nonetheless, there are no data about the true percentage of Galápagos foreign tourists who come to the islands through a study abroad program, self-arranged trips, or through travel operators/agents. One reason for this is that students and volunteers have been under-researched in tourism studies in the Galápagos since they represent a low and incipient market demand. Due to this lack of information about the true population's travel method and lodging service proportions, the present project's descriptive statistics regarding visitors' value orientations and acceptability of ecotourism policies cannot yet be generalized to all Galápagos foreign tourists.

### **Discussion**

This study shows that foreign Galápagos visitors who participated in the study, in general, are willing to support ecotourism policies. More specifically this project shows that surveyed foreign Galápagos visitors are willing to: 1) accept an increase in the entrance fee, which suggests that the increase should be directed to support environmental conservation activities and improve the quality of life of the Galápagos community; and 2) increase their participation in local tourism services.

In addition, the project showed that differences in travel preferences among tourists represent factors that influence the acceptability of ecotourism policies. Past studies about visitors' characteristics and travel preferences showed that tourists who are part of the network tourism model visit the islands through travel agencies, use cruise ships or boats as their main lodging service, and stay, on average, six or seven days in the Galápagos. On the other hand,

tourists who visit the islands through other types of travel methods are generally free independent travelers, do not rely on travel agencies, stay mainly on local family homes or local hotels, and usually remain in the islands for longer periods of time (Honey, 2008; Epler B., 2007). This study shows that these two groups of tourists are different in terms of their level of acceptance of ecotourism policies. Tourists who stayed in land hotels, visit the islands as students or through a study abroad program, and stayed for longer periods of time tend to have the highest acceptability for ecotourism policy measures compared to tourists who use cruise ships or boats as their travel method and stay for shorter periods of time.

Two different tourist profiles emerge from this project. One group, mostly formed by students and free independent travelers, present higher willingness to interact with the community and participate in conservation activities than tourists who come to the islands through a tour package or travel agent. In general, tourists have higher academic education level higher than high school, which allows a better understanding about the ecological and social dynamics in the islands.

The lodging, length of stay, and travel method preferences are associated with the network tourism model. In other words, tourists' preferences are to engage in "navigable tours" or cruise/boat tours arranged by travel agencies and whose length ranges from five to seven days. However, there are a small percentage of tourists who stay in both cruises and land hotels, and according to the 2008 Galápagos tourism demand report, tourists who use a combination of cruise/boats and land hotels as their lodging services, start with a navigable tour and then decide to stay additional time in the islands and use land hotels for the remaining of their stay. The 2008 report revealed that the number of tourists who decide to spend additional time in the islands, after their normal cruise itineraries, appears to be increasing, and that the majority of Galápagos

foreign tourists are willing to stay for longer periods of time in the islands developing local-based tourism activities (2008 Galápagos tourism demand report, GNP)

Furthermore, this research shows that not only differences in travel preferences among Galápagos foreign tourists represent factors that influence the acceptability of ecotourism policies, but visitor value orientations can also have an effect on the level of acceptance of the ecotourism measures. The Value Belief Norm Theory introduced three potential value orientations (biospheric, altruistic, and egoistic values) that form the basis upon which behaviors are grounded (Higham and Carr, 2002). Past studies have suggested that biospheric values were the most responsible for adopting pro-environmental attitudes and behaviors (Steg, 2006, Nordlund and Garvill, 2003), including the acceptance of environmental policy measures (Nilsson et al.204). For this study in particular, it was expected that biospheric *and* altruistic values could positively influence the acceptability of ecotourism policy measures, given that ecotourism criteria incorporates both ecological and social processes. The results support the initial hypothesis of altruistic and biospheric values influencing positively the acceptability of ecotourism policies.

Similarly to Zografos and Allcroft's (2007) study about environmental values of potential ecotourists, this study's participants ranked biodiversity conservation higher than their concern for the wellbeing of local people, and even higher than the concerns to maximize individual outcomes. This may be explained by the fact that Galápagos is recognized worldwide by its distinctive biodiversity and exceptional habitats, and this natural uniqueness component is what mainly motivates tourists to visit the islands (2008 Galápagos Tourism Demand Report). Understanding tourists' main concerns and motivations to visit the islands is essential when

developing tourism products. Galápagos biodiversity and landscapes are still considered a unique attraction and highly valued by tourists

### **Management Implications and Recommendations for Enhancing the Galápagos Ecotourism Model**

Broadly speaking, the literature oriented to conservation has perceived local community development as directly conflicting with the objectives and practice of biodiversity conservation (Hulme and Murphee, 2001). In fact, development is seen as the problem and the main cause of biodiversity loss. However, some scholars have presented evidence that a shift in conservation thinking has created the idea of a “new conservation” (Hulme and Murphee, 2001), which sees people not as a conservation threat, but as potential partners in sustainable development strategies. Combining conservation and development goals has been approached in various ways. The creation of protected areas or national parks, community-managed forest enterprises (CFEs), or ecotourism projects are seen as attempts to join these two concepts.

This research shows that Galápagos Islands foreign visitors can be potential partners in sustainable development. Most are willing to increase their contribution to protect the islands and improve Galápagos residents’ welfare by: 1) accepting an increase in the entrance fee and directing it to environmental conservation and local development projects, and 2) investing more time and money using community-based tourism services. The main local-based tourism services currently offered by the Galápagos community include food and lodging, and activities such as hiking, horseback riding, cycling, sailing, kayaking, scuba diving, canoeing, camping, and fishing. Nonetheless, the majority of tourists who engage in navigable tours do not participate in local-based tourism services/activities because of their planned and short itineraries in local towns. However, as this study shows, even tourists who come through travel agencies or navigable tours have a positive attitude toward a higher usage of local services. In consequence,

the sale of local-based activities should be considered as “complementary” to the itinerary of visitors using navigable tours (the biodiversity reasons that visitors value need to be maintained as priority). For example, instead of staying the usual five to seven days in Galápagos, tourists engaged in navigable tours can stay for additional time (e.g. two to four days) exclusively on land hotels, and participate in tourism activities offered by locals. That way, these tourists will have the opportunity to interact more with the Galápagos community. For this tourism model shift to happen, it would be essential to substantially diversify the itinerary system offered by the tour operators. Travel agents/operators should promote in a coordinated way the complementary activities offered by local towns.

Tourists, in general, showed a relatively high concern for the Galápagos environment and well being of local people. Taking this into consideration, Galápagos could develop a seal to orient tourists when buying their tour or tourism products. This idea of providing an informative seal is also suggested by the 2008 Galápagos Demand Report. Such a seal could indicate environmental impacts (e.g. with representative Galápagos land and marine animals such as tortoises or sharks) and social impacts (e.g. with drawings of men/women/children). Consequently, this seal would give the tourists information regarding factors that they might consider important at the time of buying their tour package. Ecolabel and ecotourism certification for tourism products have been used as a mechanism for encouraging sustainable practices in the tourism industry (Font and Buckley, 2001). In the private sector, ecolabels are primarily seen as a marketing tool that guarantees the customer that the tourism products and services that a company sells are sustainable or are committed to improving its environmental sustainability (Font and Buckley, 2001). Despite a boom in the ecotourism industry, there is no international system to monitor the ecotourism labels and only two national certification

programs in the world: Costa Rica and Australia (Wood, and Halpenny, 2001). Therefore, a purchase orientation symbol or seal could motivate (or press on) tour operators to improve their quality performance, and address their environmental and social impacts.

People who come to the Galápagos Islands without a travel agency or tour operator (i.e. student, researcher, and free independent traveler) have a higher willingness to interact with the community and participate in conservation activities and would, therefore, provide more direct environmental and community benefits. In order to capture this tourist market, it would be necessary to promote local-based activities and services through the creation of an *official* web page that sells Galápagos as a real ecotourism destination. The web page should include information about land hotels, and tourism activities that the community can potentially offer and those that are already being offered: where to go, who to talk to, how much it costs, how to reserve, pictures, etc.

There is a large number of Galápagos websites out there whose main focus is either on ecosystem preservation to attract donations for conservation purposes, or advertisements of navigable tours only to the islands. The Ecuadorian government could force outbound travel agents to use the official website as an effort to promote local-based tourism. However, it would be crucial to improve the marketing mechanism of the complementary activities that have significantly less demand in order to increase the economic benefits of the local community.

### **Future Research**

If tourists agree to participate in conservation activities and invest more time and money using local services, then there should be a wide range of products offered by the community. Therefore, future research should identify the activities and ecotourism services that can be potentially offered in the islands and meet the needs and expectations of the different Galápagos

tourists. In addition to addressing actual Galápagos tourism demand, these potential products should also meet the ecotourism core criteria of benefiting local communities and environments.

Besides exploring potential Galápagos tourism demand, it is also important to study its supply. It would be necessary to investigate residents' desire to get involved in the tourism business, their tourism resources, expectations of ecotourism activities in the local community, and their entrepreneurial and leadership capacity.

The present project only sampled tourists in the months of May to July of 2008. In order to completely assess the characteristics of the true foreign Galápagos tourist population and make valid generalizations of the present study, a yearly sample of all foreign visitors' travel characteristics and methods is needed. Students, volunteers, and free independent travelers should be adequately recruited and sampled to properly account for all foreign visitors. Annual information about travel methods and lodging service used by this group of tourists is needed to correctly determine the true profile of visitors who travel the islands without tour packages.

## CHAPTER 4 CONCLUSIONS

Planning for sustainable ecotourism development in the Galápagos involves fostering a tourism model that portrays ecological conservation successes and improved economic benefits to local communities. This thesis applied market segmentation processes to understand the visitors' characteristics and ecotourism behaviors to effectively direct promotion strategies to a specific group of tourists who showed stronger environmental and social commitment. In addition, this project also explored visitors' acceptance of ecotourism policies, and factors that can affect this behavior. Using consumer profiles from market studies, and examining the larger 'responsible' purchasing sector, could determine new alternatives to link this sector with the local community while accounting for their concerns and priorities. This thesis shows that tourists who engage in navigable tours represent the largest percentage of visitors to the Galápagos. By harnessing latent consumer demand for ecotourism, understanding the disposition of consumers to extend their tourism schedules and itineraries to help the environment and local communities, and creating complementary travel information sources, ecotourism has the potential to reap the benefits of conserving the environment and sustaining the well-being of local people.

### **Ecotourist Segmentation Study**

This study revealed distinctive hard and soft ecotourism segments for the Galápagos visitors. Each of the two groups has different characteristics in regards to their ecotourism behaviors, travel methods, lodging services, and travel activities. Hard ecotourists who visit the islands are mainly young visitors who come to the islands through tour packages, universities or organizations, and tend to stay for longer periods of time in Galápagos; therefore, using a variety of local services. They tend to stay in land hotels and participate in local tourism activities.

Soft ecotourists, on the other hand, have higher reliance on travel agencies and tour operators when visiting the islands. This “high level of reliance on the formal travel industry (e.g. tour operators, travel agents) indicates a strong connection to a conventional mass tourism industry that may not always place a high priority on environmentally sustainable management or client awareness” (Fennel and Weaver, 2005, p.378).

The Galápagos ecotourists, however, are certainly different from other types of ecotourists in other parts of the world. Galápagos tourists are subject to the conservation norms established by the Galápagos National Park Service. In well-managed parks like the Galápagos, hard and soft ecotourists tend to behave in a different way compared with tourists in other national parks.

### **Study About the Acceptability of Ecotourism Policy Measures**

In general, Galápagos foreign visitors are willing to accept new policy measures that will directly lead to conservation and community benefits. In particular, many are willing to pay higher entrance and direct the increase towards projects that conserve the environment and help the local welfare. Factors that affect the acceptability of the proposed ecotourism policies include differences in regards to environmental and social values, travel methods (e.g. through travel agencies, universities, or self-planned visits), lodging services used (e.g. hotel in local towns only vs. stays in cruise ships/boats), and gender. This suggests that tourists who have higher willingness to support ecotourism policy—and consequently present higher disposition to interact with locals, actively conserve the environment, and directly contribute to the local economy—have the following characteristics: 1) have higher priorities for the welfare of others and the protection of the environment, 2) visit the islands through a study abroad program, 3) stay in local town hotels, and 4) are female visitors.

This may have important implications for managers and policy-makers when trying to assess possible increases in entrance fees, exploring extensions in the period of stay, and setting

up minimum requirements for tourists in terms of their lodging services used and their participation in conservation activities.

Results indicate that biodiversity protection and wellbeing of local people are prioritized by Galápagos ecotourists. It is clear in this study that, overall, Galápagos ecotourists have strong biospheric and altruistic values. This prevalence should be recognized by tour operators and local tourism businesses seeking high levels of visitor satisfaction. One suggestion is to emphasize biodiversity protection, pollution prevention, and consideration of social impacts when promoting tourism products. Furthermore, the Galápagos National Park Service, Galápagos National Institute (INGALA) and the Galápagos municipalities and government should target these benefits when developing tourism policies and planning frameworks.

### **Conclusion**

Results also show that the large majority of ecotourists use navigable tours when visiting the islands. This means that tourists' preference is to engage in cruise/boat tours. Both studies have suggested that an alternative to integrate the majority of tourists with community-based tourism is to market the sale of local-based activities and services as “complementary”. That is, complement the itinerary of navigable tours with the offer and promotion of local activities. For example, tourists can stay for additional time (e.g. two to four days) exclusively in towns and participating in local tourism services and activities. For this to happen, the community and navigable tour operators should work cooperatively to offer local tourism activities as part of the tour package, so that tourists have an opportunity to increase their interaction with the community. It would be important to:

- Fortify the capacity of local operators that offer complementary activities so that their service quality attracts additional stays in Galápagos by tourists who engage in navigable tours;

- Establish a network of “integrative promotion” for the Galápagos tourist services, framed within the principles of conservation, sustainable development, and complementarity of the visit.
- Establish strategic agreements between navigable tour operators and local tourism entrepreneurs, so that visitors who have had their experience on board complement their visit to Galápagos developing community-based tourism activities.
- Generate an official website (between Ministry of Tourism and environment, Galápagos National Park, CAPTURGAL, etc.) that promotes Galápagos as a whole, including information on local hotels and complementary activities: where to go within which communities, who to speak with, how much it costs, how to reserve, etc. The Galápagos Tourism Chamber together with the Ecuadorian government could potentially instigate or stimulate travel agents to use this website as the main source of information about local tourism products and provide incentives for its usage.

Both studies suggested alternatives to provide ecotourism opportunities in the islands that directly benefit the Galápagos local economy, and promote visitors’ active commitment and involvement in conserving the environment, and interacting with the local communities.

Understanding differences among foreign visitors, the level of support of conservation activities, and the degree to which foreign visitors are willing to increase their participation in local tourism services, suggests that tourists are likely to become partners in developing sustainable planning and management actions that will result in successful ecotourism practices.

APPENDIX  
GALÁPAGOS TOURIST QUESTIONNAIRE

**Ecotourism Policy Measures in the Galápagos Islands**

The purpose of this survey is to better understand tourists' thoughts about ecotourism policy measures in the Galápagos Islands. This information will be used for a Master Thesis of the University of Florida (USA), and by the Galápagos Municipality and Galápagos Tourism Chamber. All information will remain confidential.

Demographics: This information will be used for statistical analysis only.

**1. What is your gender?**

Male  Female

**2. What year were you born?** 19\_\_\_\_\_

**3. Where is your permanent residence?**

City \_\_\_\_\_, State or Province \_\_\_\_\_, Country \_\_\_\_\_

**4. What is the highest level of education you have completed? (please mark one)**

- Less than High School or Secondary
- Some High School or Secondary
- High School or Secondary Graduate
- Some University
- University Graduate
- Some Graduate School
- Graduate Degree or beyond

**5. Are you presently...**

- Employed Full Time: Occupation \_\_\_\_\_
- Employed Part Time: Occupation \_\_\_\_\_
- Unemployed
- Full Time Homemaker
- Retired: Previous Occupation \_\_\_\_\_
- Full time student
- Part time student

The Galápagos trip

<b>6. How do you feel about the method (s) you chose to come to the Galápagos?</b>	Really don't like	Don't like	Don't care	Like	Really like	Didn't use it
Through a study abroad or university program						
Through a travel agency or a tour package						
It was a self planned visit						
Volunteer program						
Through a different type of program or organization (Please specify)						

**7. How long was (or will be) your stay in the Galápagos Islands?** \_\_\_\_\_ days

**8. Please check the activities you have participated (and/or will participate) in your visit to the Galápagos Islands (mark all that apply)**

- |                                                  |                                       |                                           |
|--------------------------------------------------|---------------------------------------|-------------------------------------------|
| <input type="checkbox"/> National Park visits    | <input type="checkbox"/> Hiking       | <input type="checkbox"/> Wildlife viewing |
| <input type="checkbox"/> Nature photography      | <input type="checkbox"/> Swimming     | <input type="checkbox"/> Bird watching    |
| <input type="checkbox"/> Guided trail walks      | <input type="checkbox"/> Snorkeling   | <input type="checkbox"/> Camping          |
| <input type="checkbox"/> Scientific study        | <input type="checkbox"/> Cycling      | <input type="checkbox"/> Fishing          |
| <input type="checkbox"/> Meeting local people    | <input type="checkbox"/> Sailing      | <input type="checkbox"/> Canoeing         |
| <input type="checkbox"/> Sunbathing on the beach | <input type="checkbox"/> Shopping     | <input type="checkbox"/> Kayaking         |
| <input type="checkbox"/> Horseback riding        | <input type="checkbox"/> Scuba diving |                                           |
| <input type="checkbox"/> Others (Specify) _____  |                                       |                                           |

**9. What was (were) your main lodging service(s) in the Galápagos? (Please mark all that apply)**

- On a boat/ship
- Hotel in the local towns
- With a local family home
- Bed and Breakfast program
- Stayed in a friends' house
- Other (Please specify) \_\_\_\_\_

<b>10. Visitors travel for a variety of reasons and have many trip preferences and service expectations. Please rate your level of agreement of the following statements:</b>	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I do my best to leave the site or area in better condition than when I arrived	1	2	3	4	5
I prefer to see wildlife in its natural habitat	1	2	3	4	5
I support the local economy of places that I visit	1	2	3	4	5
I learn more about the natural environment on an escorted tour than through traveling on my (or our) own	1	2	3	4	5
My ideal ecotourism destination is a wilderness setting	1	2	3	4	5
National parks should provide adequate services for those who want to go there	1	2	3	4	5
I would go on a long hike in miserable weather if this was my only opportunity to see a unique animal or plant species	1	2	3	4	5
I prefer ecotourism sites in which the natural attractions are interpreted or explained to me	1	2	3	4	5
I prefer to visit tourism areas with a professional tour guide	1	2	3	4	5
I like to be as self-reliant as possible when I travel	1	2	3	4	5
I like to arrange my own tourism trips	1	2	3	4	5
Comfortable accommodations are a priority for me	1	2	3	4	5
The quality of a destination's natural environment is more important to me than the quality of the accommodations that I use	1	2	3	4	5
I like ecotourism but I also enjoy spending time at a beach resort	1	2	3	4	5
I like my ecotourism experiences to be physically challenging	1	2	3	4	5
I like to engage in physically challenging activities	1	2	3	4	5

<b>11. Ecotourism policies are directed to improve local welfare and promote ecosystem preservation. Please rate your level of acceptance to the following ecotourism measures for the Galápagos Islands:</b>	Certainly oppose	Oppose	Neutral	Accept	Certainly accept
Tourists should increase their usage of local tourists services	1	2	3	4	5
Tourists should increase their usage of local lodging services	1	2	3	4	5
If there is an increase in the entrance fee for tourists it should be directed to improve the quality of drinking water in Galápagos	1	2	3	4	5
If there is an increase on the entrance fee for tourists it should be directed to environmental conservation activities	1	2	3	4	5
If there is an increase on the entrance fee for tourists it should be directed to improve the quality of life of the Galápagos community	1	2	3	4	5
Tourists who do not participate in conservation activities should pay higher entrance fees.	1	2	3	4	5
Tourists who do not spend much time and money using community services should pay higher entrance fees.	1	2	3	4	5

<b>12. Tourists have many concerns and priorities in life. Please rate how important the following topics are to you</b>	Not at all important	Not important	Neutral	Important	Very important
Protection of wildlife	1	2	3	4	5
Equal opportunity for all	1	2	3	4	5
My financial security	1	2	3	4	5
Respecting non-human beings	1	2	3	4	5
Control over others	1	2	3	4	5
Correcting injustice	1	2	3	4	5
Care for the weak and poor	1	2	3	4	5
Working for the welfare of others	1	2	3	4	5
Preventing contamination of the environment	1	2	3	4	5
The amount of money I have in my bank account	1	2	3	4	5

**Thank you very much for your time and participation!!**

If you have any questions regarding this project, you may contact: Jenny Basantes at [jennyb85@ufl.edu](mailto:jennyb85@ufl.edu); or Dr. Taylor Stein at [tstein@ufl.edu](mailto:tstein@ufl.edu).

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**If you have any questions or comments, please write them in the space below.**

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## BIOGRAPHICAL SKETCH

Jenny F. Basantes was born in 1985 in Guayaquil, Ecuador. During her childhood she lived in San Cristóbal, Galápagos, surrounded by its magnificent and enigmatic flora and fauna, unique landscapes and incomparable tropical weather. Her experience in Galápagos had a great impact on her love for the environment and passion to conserve the islands.

At the age of 12 years she moved to Guayaquil where she finished high school and started her undergraduate education in engineering sciences. After attaining the first two years of college, she got the opportunity to study abroad and finished her degree at the University of Florida.

As an undergraduate student she conducted a senior research project, in which she developed new nature and community based tourism products for the Galápagos Islands as a tool to involve Galápagos residents in sustainable development planning. She also volunteered for almost two months in the Galápagos National Park as an environmental educator in a recycling and solid waste management project. As a response of her interest in helping the Galápagos community she got the support of many environmental government and non government entities, such as the Spanish Organization, The WWF, the Galapagos Tourism Chamber and the San Cristóbal Municipality. Her undergraduate project installed on her the desire to continue with a superior academic education and work with the Galápagos local community to achieve a harmonic development between the residents and their surroundings.

In 2007 she graduated with honors with a Bachelor of Science in Environmental Science and a specialization in natural resource management from the University of Florida. With the help granted by the School of Natural Resource and Environment in the form of a two-year assistantship she could then start her graduate studies and become a proactive resident of the Galápagos Islands. She has continually been supporting additional planning and conservation

efforts in Galápagos and has worked in partnership with international, non-profit, and environmental organizations in Ecuador to encourage conservation programs in the Galápagos Islands.