

1-1-2007

## **Beyond ecotourism: the environmentally responsible tourist in the general travel experience**

Sara Dolnicar

*University of Wollongong, s.dolnicar@uq.edu.au*

P. Long

*University of Colorado at Boulder, USA*

Follow this and additional works at: <https://ro.uow.edu.au/commpapers>



Part of the [Business Commons](#), and the [Social and Behavioral Sciences Commons](#)

---

### **Recommended Citation**

Dolnicar, Sara and Long, P.: Beyond ecotourism: the environmentally responsible tourist in the general travel experience 2007.

<https://ro.uow.edu.au/commpapers/309>

---

# Beyond ecotourism: the environmentally responsible tourist in the general travel experience

## Abstract

A shift of attention from the dominant product-orientation in environmentally sustainable tourism to a demand-orientation has been suggested as a way of minimising the effects of the inherent trade-offs the tourism industry faces between maximization of profits and investment in environmental sustainability. The success of such an approach depends on the existence of a class of tourists who are motivated to take care of the natural surroundings of the host destination, whether they are travelling in an ecotourism or general tourism context. Consequently, the aim of this study is to investigate whether there is empirical evidence for the existence of such a segment among the wider tourism population and if so, how it can be characterised and thus marketed to. Willingness to pay is used as a criterion to define this segment, as it implicitly accounts for the trade-off that suggests that environmental protection comes at a price.

## Keywords

environmentally responsible tourists, sustainable tourism, green tourism, a priori segmentation, profiling

## Disciplines

Business | Social and Behavioral Sciences

## Publication Details

This conference paper was originally published as Dolnicar, S and Long, P, Beyond ecotourism: the environmentally responsible tourist in the general travel experience, in Proceedings of the Travel and Tourism Research Association Europe 2007 Annual Conference, 283-290.

# Beyond Ecotourism: The Environmentally Responsible Tourist in the General Travel Experience

***Sara Dolnicar***

*School of Management & Marketing, University of Wollongong, Northfields Avenue,  
Wollongong, New South Wales 2522, Australia*

sarad@uow.edu.au

**Deleted:** Sara need to eliminate  
worldexpeditions reference!!!¶

***Patrick Long***

*Leeds School of Business, University of Colorado at Boulder, Boulder, Colorado,  
USA, 80309-0419*

Patrick.long@colorado.edu

## Abstract

A shift of attention from the dominant product-orientation in environmentally sustainable tourism to a demand-orientation has been suggested as a way of minimising the effects of the inherent trade-offs the tourism industry faces between maximization of profits and investment in environmental sustainability. The success of such an approach depends on the existence of a class of tourists who are motivated to take care of the natural surroundings of the host destination, whether they are travelling in an ecotourism or general tourism context. Consequently, the aim of this study is to investigate whether there is empirical evidence for the existence of such a segment among the wider tourism population and if so, how it can be characterised and thus marketed to. Willingness to pay is used as a criterion to define this segment, as it implicitly accounts for the trade-off that suggests that environmental protection comes at a price.

**Keywords:** environmentally responsible tourists, sustainable tourism, green tourism, a priori segmentation, profiling

## INTRODUCTION

The environmental sustainability of tourism is a concept that has not only been widely studied by academics but has also attracted significant attention among government authorities and those business owners and managers dependent upon the condition of the destination's natural resources. The latter are acutely aware of the importance of protecting the resource upon which their profits most fundamentally depend.

Despite this high level of attention, the underlying paradigm driving measures that are put in place to assure sustainability has been product-oriented, resulting in approaches typically practical such as the introduction of capacity limits at tourist sites, increased awareness- building in traveller education, or effective management of nature-based companies and destinations.

The demand-driven side of environmentally sustainable tourism has received little attention beyond that given to ecotourism to date although a few authors in the past have pointed out its importance. Ataljevic and Doorne (2000) claim the existence of a new tourism segment that is truly environmentally responsible. They support this claim by having examined New Zealand entrepreneurs who entered the tourism industry after having themselves been environmentally responsible tourists. However, the potential of such segments is not elaborated in their study, as this was not the research aim.

Dolnicar (2004a) profiles sustainable tourists in Austria finding that those who claim they care about maintaining an unspoilt environment demonstrate a distinctly different profile worth investigating as a potential target segment. Middleton (1998) outlines a number of market trends that are potentially interesting for those studying

increased nature-protection but does not suggest how to harvest this potential to the benefit of the destination's resources. Knowles *et al.* (1999), who have conducted a study among hotels in London and found explicit evidence of the trade-off between revenue-maximization and the implementation of measures of environmental sustainability, conclude that it is worthwhile to investigate ways of giving the tourism industry market incentives for nature protection by choosing a demand-driven approach. They state that "Even though the ideas of conservation and protection of nature and its resources are encouraged, actual practice cannot overlook the fact that the foundation of the industry is consumerism" (p. 257), and that "[...] industry's response has been [...] effective in responding to [...] environmental concerns [...] to create competitive advantage. There is no indication that these programmes are conducted for philanthropic motives." (p. 263).

Getz (1994) reveals paradoxical responses in a longitudinal study of residents' attitudes towards environmental protection. While, in two surveys, residents agreed that environmental protection is more important than tourism development, they claimed to support the construction of more skiing facilities and development of easier access to nature reserves. This response behaviour makes evident the trade-off between revenue-maximization and nature protection. Sustainable principles were studied of small tourism businesses in Sussex by Berry and Ladkin (1997) who reveal that the industry perceives implementation of regulations on sustainable tourism as too expensive. Also, the "willingness to be involved in developments" is only given "provided they will not absorb a great deal of time because this would not be affordable" (p. 438). Bramwell and Lane (2002) find that many international bodies, governments and businesses, the tourism industry and tourists themselves, accept the concept of sustainable tourism and believe it to be as relevant as ever if not more so.

However, they recognize some of the major problems, including greenwashing (the use of ecological labels for marketing without actually providing ecologically superior services) and the gap between attitudes and actual behaviour and the “pressure of balance sheets” (p. 2).

Demand-orientation has, however, been the preferred perspective taken by research in the area of ecotourism. Utilizing this approach is a valuable step in the search for individuals among the wider tourist population who are intrinsically driven to protect the environment in the host destination. The limitation of past efforts to outline targeted marketing activities towards ecotourists within the tourism industry in general, however, has been the narrow focus on nature-based tourism, which is either explicitly part of the ecotourists’ definition (Ballantine and Eagles, 1994; Blamey, 1997; Blamey and Braithwaite, 1997; Caballos-Lascurain, 1991; Eagles, 1992; Khan, 2003; Kretchman and Eagles, 1990) or implicitly assumed through their operationalisation (Kerstetter, Hou and Lin, 2004; Wight, 1996).

Ecotourism is also the area in which the market-oriented view is reflected in the use of the most fundamental strategic marketing tools for matching supply and demand in competitive markets, that being market segmentation. Most of the segmentation studies (for instance, Palacio and McCool, 1997; Pearce and Wilson, 1995; McCool and Reilly, 1993; Ryan and Huyton, 2000; Kerstetter, Hou and Lin, 2004) did not focus on environmental protection and did not aim to develop insight into the self-motivation of tourists to protect the environment they were visiting beyond the range of nature-based tourism. Blamey and Braithwaite (1997) made a step in this direction by segmenting 3500 Australian citizens according to their social values. With the main emphasis being the study of attitudes, little can be directly deduced for tourism marketing. But the authors did come to the conclusion that “little

is known about the profile of individuals who are [...] driving this apparently lucrative market” and “Individual operators will clearly need to complement the results of broad-based segmentation studies [...] with studies that are more specific to the particular experiences they offer,” thus acknowledging the importance of understanding the market segment that is willing to protect the host country’s natural resources. Kerstetter, Hou and Lin (2004) make a major contribution to the investigation of ecotourists’ intentions to behave pro-environmentally, finding that segment constructed on the basis of motivational patterns that differed significantly with respect to their willingness to accept control policies not to enter wetlands or touch fauna and flora to maintain the quality of the local environment and join the conservation association.

The aim of this study is to investigate whether there is empirical evidence to suggest that a sub-segment of environmentally responsible tourists exists who represent an attractive market segment for the tourism industry beyond the narrow area of nature-based tourism. Should this be the case, the inherent trade-off of environmental sustainability and profit maximization the tourism industry continually faces could be minimised through effective target marketing aimed at these newly identified environmentally responsible tourists.

Identifying segments that are intrinsically motivated to protect the host country’s natural resources is, to the author’s knowledge, a sustainable strategy which has received little mention in a tourism industry setting. It is not claimed that the dominant product-oriented paradigm of sustainable tourism is obsolete. Rather, the proposed market-driven approach would support product-oriented activities by attracting more appropriate customers for these efforts. Thus, if such segments can be identified, ecological sustainability becomes a by-product without additional product-

oriented efforts from the host destination (reports on rules and rule enforcement for product-oriented measures illustrate the effort required both in time and financial resources to assure compliance with sustainable tourism standards) and the trade-off situation host countries typically face is diminished. It would therefore no longer be necessary to “sell the natural resources for foreign currency”, and thus sacrifice the natural resources of the destination in order to enable the tourism industry to flourish and generate continued or higher revenues for individual enterprises.

Underlying the investigation of the existence and measurability of environmentally responsible tourists is thus the potential for a paradigm shift in the area of environmentally sustainable tourism through making increased use of natural market forces to protect destinations’ environments rather than emphasizing the product (supply) side (for instance, by limiting the number of tourists allowed to visit a region) and trying to impose rules on unwilling consumers (maximizing the pleasure of the experience) and unwilling industry (maximizing revenues).

## IN SEARCH OF ENVIRONMENTALLY RESPONSIBLE TOURISTS

### Survey instrument and administration.

The data was collected between July and October of 2004 in cooperation with an Australian tour operator offering vacations both in Australia and overseas. The tour operator’s email list, consisting of approximately 6,000 addresses including both customers and other subscribers interested in the operator’s information distributed in the form of a regular travel newsletter, was used to invite study participants. This invitation explained the purpose of the study and provided an internet homepage link where an online survey was accessible. The main purpose of the study was to determine if a sub-segment of environmentally responsible tourists exists who



represent an attractive market segment for the tourism industry beyond the narrow area of nature-based tourism.

The questionnaire was developed after an extensive exploratory research phase during which short questionnaires and focus groups were used to extract the relevant dimensions and answer categories to be included in the study; it took study participants about 20 minutes to complete. A generous incentive was offered: from among all participants in the research project as a participant's name would be drawn to win a vacation worth AU\$4000 for two travellers. Based on the earlier focus group responses, the evidence indicated that this incentive would be very effective.

The final version of the questionnaire solicited socio-demographic data, information on the respondents' vacation-planning and information-seeking behaviour, travel and destination preferences, willingness to pay for particular aspects of a trip, concern over potentially perceived risks, and a small number of questions directed at the offer of the collaborating tour operator in particular. Most of the questions were presented in binary format and participants were asked to respond by stating whether they agreed or disagreed. This format was chosen because the intermediate levels of typical rating scales were not deemed sufficiently informative for the problem at hand to compensate for the susceptibility to response styles (Baumgartner and Steenkamp, 2001), the lower time requirements of binary format, and the explicit recommendations emerging from reliability and validity-related research work on response scales by Peabody (1962) and Matell and Jacoby (1971).

#### Operationalisation of "environmentally responsible tourists".

A typical *a priori* segmentation approach (Mazanec, 2000; Dolnicar, 2004b) was chosen to investigate the research question at hand. The Splitting Criterion used

was the answer of respondents to the question about their willingness to pay a premium price for the environmental initiatives of the tour operator. This information captures the utility tourists assign to the environmental responsibility demonstrated by the tour operator they choose to travel with. The application of this criterion is atypical for studies in ecologically sustainable tourism.

A review of past ecotourism studies reveals that the major components of operationalisation contain some or all of the following criteria: having undertaken an ecotrip recently (Kretchman and Eagles, 1990; Khan, 2003), having visited pristine or remote or protected natural areas (Kerstetter, Hou and Lin, 2004), and being interested in nature (Ballantine and Eagles, 1994; Wright, 1996; Blamey and Braithwaite, 1997). The willingness to pay for an item was chosen because it is believed to be a more discriminating criterion than most of those typically used since it implicitly tests the trade-off tourists are willing to make in terms of personal expense. By comparison, criteria such as interest in learning about nature or visiting pristine environments are fairly general and do not imply a strong motivation to protect nature.

Optimally, from a tourism industry perspective, a group of environmentally responsible tourists exists beyond the context of nature-based tourism that differs significantly in as many characteristics as possible. In this case the potential economic attractiveness of environmentally responsible tourists could not only be evaluated but a clear marketing action plan could ultimately be developed, including how best to identify and reach environmentally responsible tourists during their information search stage.

As mentioned earlier, an *a priori* segmentation approach has been chosen with the willingness to pay for environmental initiatives offered by the tour operator as a grouping criterion. The resulting segments are compared with regard to socio-

demographic and travel behaviour variables. Chi-squared tests are used for these comparisons. Bonferroni-Correction assures that resulting p-values from significance tests are not overestimated. This procedure is typically used in tourism research to profile subgroups of the total tourist population, such as light and heavy users, large and small spenders, or tourists at different stages of their lifecycles.

### Sampling Procedure

The optimal sampling strategy of course depends on the research question under study. The aim of the present study is to determine whether a specific segment exists, that of environmentally responsible tourists, within a larger framework of general tourists. Given that the proportion of tourists willing to pay for environmental initiatives is likely to be low, a non-representative sampling strategy is required to assure that a sufficient number of respondents in the sample are environmentally responsible to conduct the statistical tests needed to profile this segment. For this reason the sampling strategy chosen was to send out an invitation to participate through a tour operator who positions himself as being an environmentally and ethically responsible company. This tour operator pledges to maximise the positive effects of tourism on the host communities including the employment of local staff, using local suppliers and developing sustainable businesses. The operator also pledges to minimize the negative effects of tourism such as assuring that tourism does not divert resources away from local communities or drive up the prices of local resources. The operator also provides opportunities for cultural exchange, to share and learn from the local communities and to contribute towards host community welfare by providing support for health, education or environmental protection matters (www.worldexpeditions.com).

Six hundred and forty-nine completed questionnaires were returned, leading to a response rate of 11 percent. Three main reasons contributed to the relatively low response rate despite the attractive incentive: first, not all of the emails sent could be delivered to the addresses in the database because subscribers do not necessarily update their data on a regular basis. Second, it was unclear how many of the recipients of the newsletter were highly involved customers of this product. It is likely that some of the recipients of the newsletter do not actually study it each time when they receive an issue (this is not clear to me better?). Finally, no follow-ups were sent in order to keep to a minimum any possible annoyance at the undertaking of this market research through the newsletter which might reflect negatively on the company. The relatively low response rate is, however, not of concern for the investigation of the research question as sample representivity is not required.

Four hundred and thirty-four respondents were selected for the *a priori* segmentation analysis. These tourists were selected on the basis of answering the question about their willingness to pay a premium price for environmental initiatives of the company with either yes or no only. By selecting only these tourists it is assured that an unblurred profile of the two groups can be drawn without contamination of data by respondents who are not sure about their willingness to pay. Among these, 187 stated their willingness to pay a premium price, 247 stated their unwillingness to do so. This indicates that the sampling strategy has achieved its aim of providing a sufficiently large number of respondents who are willing to pay for environmental initiatives thus enabling comparative statistical testing of the two *a priori* segments. All analyses were based on comparing these self-declared environmentally responsible tourists representing 43 percent of the sample with those who indicated an unwillingness to pay a premium price (57 percent of the sample).

As mentioned earlier, it is likely that the addressees of the tour operator's newsletter are not representative of the entire Australian tourism population due to past positioning efforts by the tour operator as an environmentally responsible organisation. This explains the high proportion of respondents who express their willingness to pay a higher price for environmental practices of the company and confirms that the research design was successful in attracting sufficient representatives of each of the two a priori segments to enable the comparison originally intended.

### Research Results.

The results show that **socio-demographic information** is not highly informative with regard to understanding environmentally responsible (ER) tourists. No significant differences were detected between ER tourists and other tourists with regard to gender, age, income and hours of paid work. On the one hand, this is not a desirable finding from a managerial perspective because it makes it more difficult to identify ER tourists during their information search stage. But, the fact that ER tourists are not as easy to identify is probably the reason that demand-oriented approaches are so rare in the tourism industry. Thus, if an effective means of identifying ER tourists can be found, destinations may seek to gain a competitive advantage by targeting ER tourists in their marketing strategy.

While socio-demographic factors do not discriminate between ER tourists and other tourists, the **information search behaviour** was found to be a significant discriminator. As Bonferroni-corrected Chi-squared test results indicate (see Table 1, last column; tests are Bonferroni corrected because computing a number of independent tests on the same data sets would overestimate significance, the corrected

values are thus more conservative), ER tourists make significantly more use of two of the listed information sources in the questionnaire those being prior experience and the use of the Lonely Planet guidebooks. The use percentages for all information sources included in the questionnaire for both the ER and other tourists are provided in Table 1. As can be seen, newspapers, slide show nights, and information from other travellers are more frequently used by ER tourists as well. The use of these information sources is significantly different using the uncorrected p-values, but these differences turn out to be insignificant when the conservative correction for multiple testing is applied (see last column in Table 1). These should certainly be further investigated as they could represent a strong avenue to attracting ER tourists.

----- insert Table 1 about here -----

During the decision-making phase tourists face a number of tradeoffs which force them to decide how important certain components of a trip are to them. One indirect measure of such importance is the **willingness to pay**. The pattern revealed regarding the ER tourists' willingness to pay for different components of a vacation is provided in Table 2. The groups under comparison differ significantly in their willingness to pay a price premium in half of the factors listed in the questionnaire. Between 60 and 83 percent of the ER tourists are willing to pay a higher price than other tourists for travel to remote areas, a high level of operator expertise, smaller groups, a good local network, and access to areas with visitor capacity restrictions. On the other hand significantly lower proportions of ER tourists – four percent or fewer – would want to spend extra money on a higher level of comfort or a high standard of accommodation.

----- insert Table 2 about here -----

Interestingly, classical marketing aspects – as, for instance, having an excellent reputation or being the leading [Australian] tour operator - are not directly paid for by the customer. It consequently seems important from a marketing point of view to assure that the actual benefit (for instance, good local network) is expressed explicitly.

Between the information search and travel behaviour phase, the **destination preference** represents an important piece of information for destinations and the tourism industry in general. In the questionnaire used, respondents were asked to state whether or not they would like to visit listed destinations in the future. The percentages of ER and other tourists who state that they prefer the destinations provided in the questionnaire are listed in Table 3.

----- insert Table 3 about here -----

Given that preferred destinations represent a very obvious potential classification criterion, the interest of the respondents to travel to different continents was used to conduct a discriminant analysis. If classification of tourists based on their preferred destination functions effectively as an indicator of their level of environmental responsibility, the tourism industry would potentially be able to use self-selection as a tool to attract ER tourists. For instance, an environmentally responsible outbound tour operator could strategically include destinations in the portfolio that attract ER tourists and could thus benefit from being able to charge a premium price.

One significant discriminating function ( $p\text{-value} < 0.003$ ) allows a correct classification of 61 percent of cases into ER or other tourists with coefficients indicating that interest in Latin and South America is the strongest predictor for being

an ER tourist, followed by travel to Australia, Europe and the Middle East. Tourists who prefer North America are less likely to be ER tourists. This finding is supported by the frequencies given in Table 3 with 73 percent of ER tourists expressing interest in Latin America as opposed to only 55 percent of other tourists. On the other hand, the USA is of interest to only 16 percent of ER tourists whereas 27 percent of the other tourists name it as a destination they want to visit.

Further information provided from the respondents regarding their preferred tourism product included the **activity level** of their choice. ER tourists are found to be more interested in higher levels of activity during the vacation. The Pearson Chi-squared test is significant at the 99 percent significance level and indicates that more than half of the ER tourists want to walk between four and eight hours a day during their adventure holiday. Less than 40 percent of the remaining tourists share this view, although these travellers are also expected to see themselves as adventure tourists, given membership in the newsletter mailing list.

## CONCLUSIONS, LIMITATIONS AND FUTURE WORK

The aim of this study was to investigate whether there is evidence of the existence of a market segment of ER tourists beyond the special interest niche of ecotourism. The results of the study indicate that this is in fact, the case. ER tourists, operationalised by their willingness to pay for environmental initiatives taken on by the tour operator they are travelling with, demonstrate a profile that differs significantly from other tourists in areas such as travel information seeking, destination preferences, travel behaviour and willingness to pay. Some of the characteristics revealed are of benefit to destinations or tourism businesses. For



instance, willingness to pay premium prices for specific components of a trip, could be used in product development and pricing strategies.

These findings indicate that targeting this segment of ER tourists is an attractive alternative to mass tourism marketing if there is genuine interest in environmentally sustainable tourism and if the trade-off of profit versus long-term sustainability is taken into consideration. From a managerial viewpoint, general tourism businesses committed to sustainable practices and attempting to attract an environmentally responsible clientele, but hindered by a small promotional budget, can utilize these findings to more effectively target the company's marketing efforts. By more clearly understanding the information search behaviour, the critical factors of willingness to pay, destination preferences, and the desired level of activity of returning and potential clients, tourism business owners and operators can be more discriminating in reaching an appropriate clientele.

Additionally, environmentally friendly consumers, much more proactive and discriminating today in their travel purchasing behaviours, are attempting to link to those companies supporting sustainability and sustainable practices. Mullis and Krahenbuhl (2006) and Carter and Narasimham (1998) identify this important linkage of environmentally conscious consumer to environmentally friendly providers. Carter and Narasimhan identified that within the environmental supply chain, synergy between a company's environmental image and reputation, and environmentally sensitive products is important. In addition, they suggested that setting aggressive and progressive environmental goals was critical for the company and that having top management committed to environmental issues (as indicated by a high position for the environmental and safety department in an organization chart) is important to program success and commitment. Mullis and Krahenbuhl organize their thinking around

eleven categories of sustainable practices appropriate to both the consumer and the provider. These categories range from behaviors relating to energy, water, and climate to responsible purchasing and public policy. With a better understanding of who the environmentally friendly consumer is within the broad range of travel experiences, the match of consumer to provider can be both more likely and efficient but also more economically beneficial.

Given the promising findings of this preliminary study into the existence and characteristics of ER tourists, further research into this segment should be undertaken to 1) learn more about the differences throughout the buying decision making process which will enable maximum efficiency in targeting ER tourists and 2) developing the most attractive product bundle for their vacation. This is essential since socio-demographics factors were found not to be strong predictors of ER tourist behaviour. Also, the study of ER tourists should be extended into the area of actual observable behaviour once at the destination. Furthermore, it would be highly desirable to develop a more sophisticated instrument to operationalise ER tourists for future studies of this segment.

## REFERENCES

- Ataljevic, I., & Doorne, S. (2000). 'Staying Within the Fence': Lifestyle Entrepreneurship in Tourism. *Journal of Sustainable Tourism*, 8(5), 378-391.
- Ballantine, J. L., & Eagles, P. F. J. (1994). Defining Canadian Ecotourists. *Journal of Sustainable Tourism*, 2(1), 1-6.
- Baumgartner, H. & Steenkamp, J.-B.E.M. (2001). Response styles in marketing research: a cross-national investigation. *Journal of Marketing Research*, 38 (2), 143-56.
- Berry, S., & Ladkin, A. (1997). Sustainable Tourism: A Regional Perspective. *Tourism Management*, 18(7), 433-440.
- Blamey, R. (1997). Ecotourism: The Search for an Operational Definition. *Journal of Sustainable Tourism*, 5(2), 109-130.
- Blamey, R., & Braithwaite, V. (1997). A Social Values Segmentation of the Potential Ecotourism Market. *Journal of Sustainable Tourism*, 5(1), 29-45.
- Bramwell, B., & Lane, B. (2002). Editorial: The Journal of Sustainable Tourism: The First Ten Years. *J. Sustainable Tourism*, 10(1), 1-3.
- Carter, J., & Narasimhan, R. (1998). Environmental Supply Chain Management, Center for Advanced Purchasing Studies, Michigan State University, East Lansing, Michigan.
- Dolnicar, S. (2004a). Insight into sustainable tourists in Austria: data based a priori segmentation approach. *Journal of Sustainable Tourism*, 12(3), 209-218.

- Dolnicar, S. (2004b). Beyond “Commonsense Segmentation” – a Systematics of Segmentation Approaches in Tourism. *Journal of Travel Research*, 42(3), 244-250.
- Eagles, P. (1992). The Travel Motivations of Canadian Ecotourists. *Journal of Travel Research*, 3(2), 3-7.
- Getz, D. (1994). Residents' Attitudes Towards Tourism - A Longitudinal Study in Spey Valley, Scotland. *Tourism Management*, 15(4), 247-258.
- Kerstetter, D.L., Hou, J.-S., & C.-H. Lin (2004). Profiling Taiwanese Ecotourist Using a Behavioral Approach. *Tourism Management*, 25, 491-498.
- Khan, M. (2003). ECOSERV – Ecotourists Quality Expectations. *Annals of Tourism Research*, 30, 109-124.
- Knowles, T., Macmillan, S., Palmer, J., Grabowski, P. & Hashimoto, A. (1999). The Development of Environmental Initiatives in Tourism: Responses from the London Hotel Sector. *Int. J. Tourism Res.*, 1, 255-265.
- Kretchman, J. A., & Eagles, P. F. J. (1990) An Analysis of the Motives of Ecotourists in Comparison to the General Canadian Population. *Society and Leisure*, 13(2), 499-508.
- Matell, M.S., & Jacoby, J. (1971). Is there an optimal number of alternatives for Likert scale items? Study I: Reliability and validity. *Educational and Psychological Measurement*, 31, 657-74.
- Mazanec, J. (2000). Market Segmentation. In: *Encyclopedia of Tourism*. J. Jafari, ed. London: Routledge.

- McCool, S.F., & Reilly, T. (1993). Benefit Segmentation Analysis of State Park Visitors Setting Preferences and Behavior. *J. Park and Recreation Administration*, 11(4), 1-14.
- Middleton, V.T.C. (1998). *Sustainable Tourism – A Marketing Perspective*. Oxford: Butterworth-Heinemann.
- Mullis, B., & Krahenbuhl, P. (2006). Sustainable Travel Reader. Sustainable Travel International, Inc. Boulder, Colorado.
- Palacio, V., & McCool, S.F. (1997). Identifying Ecotourists in Belize Through Benefit Segmentation: A Preliminary Analysis. *J. Sustainable Tourism*, 5(3), 234-244.
- Peabody, D. (1962). Two components in bipolar scales: direction and extremeness. *Psychological Review*, 69 (2), 65-73.
- Pearce, D.G., & Wilson, P.M. (1995). Wildlife-Viewing Tourists in New Zealand. *J. Travel Res.*, 34(2), 19-26.
- Roehl, W. S., & Fesenmaier, D. R. (1992). Risk Perceptions and Pleasure Travel: An Exploratory Analysis. *Journal of Travel Research*, 30(4), 17-26.
- Ryan, Ch., & Huyton, J. (2000). Who is Interested in Aboriginal Tourism in the Northern Territory, Australia? A Cluster Analysis. *J. Sustainable Tourism*, 8(1), 53-88.
- World Expeditions commercial web site at [www.worldexpeditions.com](http://www.worldexpeditions.com).
- Wight, P. (1996). North American Ecotourists: Market Profile and Trip Characteristics. *Journal of Travel Research*, 34(4), 2-10.

## TABLES

*Table 1: Comparison of information source use*

	other tourists	ER tourists	p-value	corr. p-value
airline(s)	8.0%	4.0%	0.079	1.021
exhibition(s)	11.2%	15.4%	0.211	2.744
travel agents	21.4%	23.9%	0.539	7.012
flyers/special offers	33.2%	31.6%	0.728	9.464
tour operators	29.9%	32.4%	0.587	7.631
newspaper(s)	25.7%	36.0%	0.021	0.279
slide night(s)	28.9%	39.3%	0.024	0.317
<b>prior personal experience</b>	<b>26.2%</b>	<b>42.9%</b>	<b>0.000</b>	<b>0.004</b>
magazine(s)	40.6%	49.0%	0.084	1.089
word of mouth - friends and relatives	44.4%	49.4%	0.301	3.910
<b>Lonely Planet</b>	<b>43.3%</b>	<b>57.9%</b>	<b>0.003</b>	<b>0.034</b>
word of mouth - other travellers	57.8%	68.4%	0.022	0.286
Internet	88.8%	91.9%	0.269	3.499

Table 2: Comparison of willingness to pay a price premium

	other tourists	ER tourists	p-value	corr. p-value
<b>travel to remote areas</b>	<b>59%</b>	<b>83%</b>	<b>0.000</b>	<b>0.000</b>
<b>high level of expertise</b>	<b>60%</b>	<b>76%</b>	<b>0.000</b>	<b>0.004</b>
<b>smaller groups</b>	<b>58%</b>	<b>73%</b>	<b>0.001</b>	<b>0.013</b>
<b>good local network</b>	<b>40%</b>	<b>61%</b>	<b>0.000</b>	<b>0.000</b>
<b>access to areas with visitor capacity restrictions</b>	<b>41%</b>	<b>60%</b>	<b>0.000</b>	<b>0.002</b>
excellent reputation of the company	47%	56%	0.057	0.797
safety / security	54%	51%	0.592	8.289
tour costs included	52%	49%	0.497	6.964
High hygiene / health standards / medically trained staff	44%	46%	0.714	9.996
high quality level	35%	24%	0.009	0.131
private transportation rather than public	18%	13%	0.218	3.054
an Australian leader	11%	7%	0.159	2.226
<b>higher level of comfort</b>	<b>20%</b>	<b>4%</b>	<b>0.000</b>	<b>0.000</b>
<b>high standard of accommodation</b>	<b>20%</b>	<b>2%</b>	<b>0.000</b>	<b>0.000</b>

*Table 3: Destination preferences*

	other tourists	ER tourists	p-value	corr. p-value
Africa	41%	48%	0.118	0.944
Antarctica/Arctic	48%	51%	0.534	4.272
Asia	65%	72%	0.101	0.808
Australia	52%	64%	0.019	0.155
Europe	48%	60%	0.011	0.091
<b>Latin and South America</b>	<b>55%</b>	<b>73%</b>	<b>0.000</b>	<b>0.001</b>
Middle East	15%	23%	0.028	0.221
USA	27%	16%	0.007	0.058