

## **CHAPTER IV**

### **RESEARCH METHODS**

This research used a self-administered Web-based survey and follow-up case studies.

Specific tasks included:

Task 1. Identify the survey participants and the states with nature tourism policies.

Task 1A: Conduct the search for nature tourism Web sites.

Task 1B: Evaluate the Web sites for nature tourism content and location.

Task 1C: Identify the states with policies or programs promoting or supporting nature tourism development.

Task 2: Develop the survey instrument.

Task 3: Pre-test the survey.

Task 4: Conduct the survey.

Task 5: Analyze the survey data.

Task 6: Refine the case study topics, procedures, and identify potential participants.

Task 6A: Identify the case study topics.

Task 6B: Finalize the case study interview format and procedures.

Task 6C: Identify the case study participants.

Task 7: Conduct the case studies

Task 8: Analyze and interpreting the case study data and presenting the results.

The remainder of this chapter describes each of these tasks in detail.

### **Task 1: Identify the Quantitative Survey Participants and the States with Nature Tourism Policies**

#### **Task 1A: Conduct the Search for Nature Tourism Web Sites**

This step involved gathering a group of nature tourism Web sites. Several search engines were used, MSN, GoTo, Exite, HotBot, Looksmart, Lycos, Google, and Dogpile

The “hits” returned from conducting searches with search engines varied significantly. This is because each search engine uses different methods to locate resources (William et al. 1996; Ciolek 1997; Maxwell n.d.) and these methods are constantly being modified (Sweeney 2000). The general strategies in getting a Web site highly ranked with the most popular search engines requires a combination of using “meta tags” and establishing links to Web sites that receive high ranking from the Search engines. Meta tags are keywords that are coded into the HTML code that the search engines scan for as they search the Internet. There are many other strategies by which search engines develop their ranking algorithms, but these two criteria are the most notable (Sweeney 2000).

Properly coding with meta tags and associating with highly ranked Web sites is a complex process. To further complicate the issue, search engine companies constantly upgrade their Web site evaluation algorithms in order to prevent abuse of search engine ranking (Sweeney 2000). Thus, smaller Web sites may not be able to adapt to these changes on an ongoing basis. Although there is no way to determine without a much

more extensive evaluation, it appeared from the limited success of my initial searches that this was likely the case. As the searches were conducted using a number of search engines and the terms specified, there were very few “hits” for Web sites representing smaller nature tourism businesses which were the focus of this research.

Previously, I used the Center for Nature and Heritage Tourism (the Center) Web site as a “target” to identify search engines that were most effective at finding nature tourism related Web sites. It appears that using the Center’s Web site might not have been appropriate. This is because the Web site has the proper nature tourism/ecotourism meta tags, and links to numerous larger tourism Web sites, state agencies and other prominent Web sites. Many small tourism operators’ Web sites might not include these meta tags and links that would help them rank well with the search engines.

My prior experience searching for nature tourism Web sites revealed that the following terms would be effective for finding Web sites: *nature tourism*, *ecotourism*, *nature-based tourism*, *agritourism*, and *farm tourism*. By using these search terms I was able to identify a number of larger community, regional, and state organizations. These Web sites were not the focus of this research. However, many of them had links to affiliated, smaller Web sites that did represent the level of nature tourism business that I was interested in.

Therefore, an additional step of evaluation was added to the searching process for nature tourism Web sites. This step involved (1) finding a number of these larger Web sites, (2) evaluating these Web sites to determine if they could lead me to the Web sites in which I was interested. Four hundred twenty-two Web sites were found that were potentially suitable for this research.

### Task 1B: Evaluate the Web Sites for Nature Tourism Content and Location

The 422 Web sites were visited and evaluated for their geographic location and nature tourism content. Only Web sites that are located in the U.S. were included in this research. The evaluation for a nature tourism Web site was based on the definition: *a Web site that is being used by an organization that is organizing or conducting activities that are based on natural environmental amenities, or qualities, that potentially stimulate nature conservation activities.*

By visiting each of the Web sites some were removed from the list because of duplication, not being served, or bad links. At the same time, e-mail addresses were collected for the people most appropriate for completing the survey (business owner, manager, etc.). After conducting the evaluation for each of these criteria the total number of Web sites to be surveyed reduced to 277, still well above the 100 minimum specified in the research proposal.

### Task 1C: Identify the States with Policies or Programs Promoting or Supporting Nature Tourism Development

State programs/policies supporting nature tourism were identified by visiting the Web sites for each of the state agencies responsible for managing the state's park systems. In addition, Web searches were conducted for state economic development agencies and tourism agencies. A listing of Web addresses for both the fifty state park systems and the economic development/tourism organizations was created. Each site was then visited and examined for any reference to nature tourism or ecotourism. Notes were taken about these Web sites and the resources that were found. These states are the basis for conducting the geographical analysis of the relationship between nature tourism

businesses and states' with nature tourism policies and programs. These activities were conducted to answer research question 3: Are the nature tourism ICSs located in states that have policies/programs aimed at promoting nature tourism development and promote and facilitate the use of the Web? This process turned out to be very involved because of the wide variation in the design and functionality of these various institutions' Web sites.

### **Task 2: Develop the Survey Instrument**

The survey portion of the research primarily aimed to address the following research questions:

1. Are the Internet Web hosting businesses (ICBs) proximate to the actual location of the nature tourism Internet content sponsors (ICSs)?
2. What is the geography of the nature tourism sponsors (ICSs) – are they urban, urban fringe, or rural? and
3. What are the characteristics of the nature tourism businesses/organizations and how have/do they use the Web?

Because no previous research had been done about nature tourism Web sites and their content sponsors, it was important for this research to characterize them initially in a general way. There was no prior knowledge of the group of Web sites that were identified, such as the Web sites' characteristics, their business types, and how they are operated. Thus, the survey was exploratory in nature. The survey consisted of a combination of nominal and ordinal questions. A concluding open comment area was included to allow respondents to provide additional information if they felt that a topic had not been adequately addressed in the survey. The survey instrument was developed

using current social science standards for question design (Dillman 2000; Fowler 1995; Erdos 1983, Dillman 1978). In case issues were revealed during the Web site search, evaluation, and screening process, the final survey was completed after the search and evaluation for nature tourism Web sites. No major alterations were made to the survey instrument as a result of the Web site searches and evaluation. Finally, in order to perform the geographical analyses, the survey requested that the respondents provide postal Zip codes, city and state information for the location of the ICBs and the ICSs. Table 4.1 illustrates the questions that were included in the survey to address each of the topic areas previously identified in the section entitled *research questions and hypothesis*.

The survey instrument used clear and simple terms (Appendix A). Topics covered in the survey were not complex in nature and did not include any sensitive topics. Most of the topic areas mentioned above are straightforward; however, careful consideration was given to avoid question ambiguity and survey bias. The following list of considerations for designing the survey instrument was derived from Babbie (1995).

- Survey consisted of an appropriate combination of nominal, ordinal, closed-ended and open-ended questions.
- Questionnaire items were short in length whenever possible.
- Negative items and terms were avoided.
- Bias was avoided.
- Question wording and questionnaire format were given careful consideration.
- Clear instructions were included for completing the questionnaire.
- Definitions for unusual or complex concepts or terms were provided.
- Ambiguity was avoided.

TABLE 4.1

Survey questions related to each of the topic areas of the research questions.

General Survey Topic Areas	Item # and Survey questions
<p>Topic 1: What are the characteristics of the nature tourism business/organization.</p>	<ol style="list-style-type: none"> <li data-bbox="870 380 1435 485">1. Which of the following terms best describes the business that is associated with this Web site?</li> <li data-bbox="870 520 1435 632">2. What is the location of the nature tourism business associated with this Web site? Zip code City State</li> <li data-bbox="870 667 1435 779">3. How long has the nature tourism business associated with this Web site been in business?</li> <li data-bbox="870 814 1435 884">4. Why was this nature tourism business started?</li> <li data-bbox="870 919 1435 989">5. Is there a written business plan for your nature tourism business?</li> <li data-bbox="870 1024 1435 1136">6. Is there a way to determine how customers find out about your nature tourism business?</li> <li data-bbox="870 1171 1435 1241">6a. If Yes to question 6, how is this determined</li> <li data-bbox="870 1276 1435 1346">7. How many people are on staff in your nature tourism business?</li> <li data-bbox="870 1381 1435 1451">8. Are you satisfied with the size of your nature tourism business?</li> <li data-bbox="870 1486 1435 1556">9. What is your role with this nature tourism business?</li> <li data-bbox="870 1591 1435 1703">10. Please estimate what portion of the gross income of the total business comes from the nature tourism activities?</li> <li data-bbox="870 1738 1435 1850">11. What kind of nature tourism activities are promoted at this Web site?</li> </ol>

Table 4.1—*Continued*

General Survey Topic Areas	Item # and Survey questions
<p>Topic 2: Descriptive information about the businesses/organizations' Web site.</p>	<p>12. What is the primary purpose of your nature tourism Web site?</p> <p>13. Do you know what company is hosting the Web site?</p> <p>14. How long has this nature tourism business had a Web site?</p> <p>15. Are visitors asked to complete a survey when they visit your Web site?</p> <p>16. Do you have visitors complete a survey after they visit the "actual-physical" nature tourism business?</p>
<p>Topic 3: What was the process of developing the Web site, from initial motivations to ultimate implementation?</p>	<p>17. What were the reasons for developing the nature tourism Web site?</p> <p>18. Are you (or someone employed by the business) knowledgeable about Web site design and development?</p> <p>19. Who developed the Web site?</p> <p>20. Did you (or someone in the organization) conduct research using the Internet to design or develop this Web site?</p> <p>20a. If Yes to question 20, estimate how much time was spent?</p> <p>21. If you (or someone in your organization) did not design the Web site, did you tell the Web developer specifically what you wanted on the Web site?</p>

Table 4.1—*Continued*

General Survey Topic Areas	Item # and Survey questions
Topic 4: How well is the Web site performing – is it worth their time and money?	22. Are you satisfied with the Web site overall?  23. Has developing a Web site for your nature tourism business fulfilled your expectations?  24. Has the Web site helped your business grow?  24a. If No to question 24, do you think it will help your business grow in the future?  25. Has the Web site been a cost effective way to promote your business?  26. Do you have a specific vision (your overall goals for the future) for this Web site?  27. Have you had problems revising and updating this Web site?
Topic 5: What do they wish the site would do that it doesn't do now?	43. Would you like to redesign your nature tourism Web site?  44. Would you like to add new features to your Web site?  45. Do you want to expand the use of the Web site for other purposes?  46. Do you intend to keep this Web site on-line?
Topic 6: How much did/does the Web site cost in terms of start-up and maintenance?	47. How much does it cost to maintain this Web site on a monthly basis?  48. Who maintains your Web site?

Table 4.1—*Continued*

General Survey Topic Areas	Item # and Survey questions
Topic 7: Are nature tourism ICSs attempting to depict “place” on their Web site?	<p>28. When this Web site was developed, was a specific "place" depicted, (e.g. such as where the nature tourism activity is located)?</p> <p>29. Do you think including “place-related” information enhances the effectiveness of this Web site?</p>
Topic 8: Do these ICSs perceive they are part of a community, either on the Internet or in the “real world?”	<p>30. Has the Internet (email and world wide web) created a nature tourism community/association that you are a part of?</p> <p>If Yes to question 30, please answer question 31a through 31e.</p> <p>31a. Can you please provide the name of this community/association?</p> <p>31b. Is this community associated with a specific location (e.g. region, state, country)?</p> <p>If Yes to 31b, please identify where</p> <p>31c. Do you participate in this community/association by using the Internet (email or other methods)?</p> <p>31d. Do you participate in this community/association in any other way than using the computer?</p> <p>31e. Is this community/association important to you?</p> <p>32. If you are not part of a community/association on the Internet, would you like to be?</p>

Table 4.1—*Continued*

General Survey Topic Areas	Item # and Survey questions
Topic 8: <i>continued</i>	<p>33. Are you a part of a nature tourism community/association outside of the Internet?</p> <p>33a. If Yes to question 33 how often do you participate?</p> <p>33b. How do you communicate with members of this community/association?</p> <p>34. How often do you use (email) to communicate with people in the nature tourism industry?</p> <p>35. How often do you use information that is available on the Internet for your work with this nature tourism business?</p> <p>35a. If Never to question 35 are you curious about what information is available to assist nature tourism businesses on the Internet?</p> <p>36. Would you be interested in a Web site designed to assist or inform nature tourism organizations and businesses?</p>
Topic 9: What are the ICSs perceptions and experience with the World Wide Web?	<p>37. How often do you use the Internet for personal reasons?</p> <p>38. How often do you use the Internet for business reasons?</p> <p>39. Would information about Web site development be useful to you?</p> <p>40. What do you expect to happen with the Internet?</p> <p>41. Do you think the Internet is a good thing?</p>

Table 4.1—*Continued*

General Survey Topic Areas	Item # and Survey questions
Topic 9: <i>continued</i>	42. Are you concerned about security on the Internet?
Additional questions included to capture information not related specifically to the research questions.	<p data-bbox="870 390 1435 491">49. Would you be willing to participate in a short telephone interview about your responses to this survey?</p> <p data-bbox="870 529 1435 596">50. Would you be interested in receiving the results of this research</p> <p data-bbox="870 634 1435 735">51. If there are any additional comments that you would like to make, please type them in the space provided.</p>

### **Task 3: Pre-Test the Survey Instrument**

The survey instrument was pre-tested on three individuals who operated nature tourism businesses and six colleagues familiar with nature tourism and survey development to determine if there were any problems or ambiguities. A draft of the survey was submitted to these people for their evaluation. Through this process minor adjustments were made to the wording for question 1, question 5, and question 16.

### **Task 4: Conduct the Survey**

As mentioned previously, while locating the nature tourism Web sites, the e-mail address was identified for each Web site. These addresses were used to send an e-mail message inviting people to participate in the survey.

Careful consideration was given to the content of the invitation. The e-mail explained the research with a compelling message about the value of the results of this research for nature tourism enterprises and organizations (Appendix B). Reference to this research's affiliation with both Southwest Texas State University and Texas A&M University was included. In addition, careful consideration was given to the subject line of the email. This was considered to be a critical factor for whether people actually opened the email. A nature tourism business owner and a colleague provided suggestions about this matter.

The e-mail also included a link to the Web site for completing the on-line survey. The survey form and the Microsoft Access database that was used to store the survey responses were hosted on a server located at Texas A&M University in the Department of Recreation, Park and Tourism Sciences.

Two follow-up e-mail reminders were sent to the survey participants to solicit the most responses possible. The first follow-up occurred five days after the first e-mail messages were sent out to provide a quick reminder about the survey. In an attempt to boost participation, the second follow-up provided an incentive for the survey respondents. Invitees were informed in the e-mail invitation that survey respondents would be included in a drawing for a book by Sweeney (2000) entitled *Internet Marketing for Your Tourism Business*. Sweeney is a recognized expert on Web site marketing techniques. Table 4.2 outlines the schedule for the email messages that were sent out.

I expected to get a fairly high response rate to this survey because the information to be derived from this survey should be useful to nature tourism organizations and individuals that have a presence on the Web. However, this expectation was based on some assumptions: 1) The e-mail addresses were reliable, 2) the nature tourism ICSs located were still active on the Web, and 3) that smaller organizations would be more inclined to participate in a research project like this.

The level of response to this survey helped me understand better the potential challenges of conducting unsolicited research using email. As mentioned above a high level of interest with this audience was expected. After the 291 Web sites had been located the anticipated participation was at least 100 responses. This was not the case. After the first request there were 32 responses. After the second email the total was 45. The final request resulted in an additional 23 more responses for a total of 69. One of these responses was invalid because the respondent had only filled the last portion of the survey.

TABLE 4.2

Schedule of email invitations sent to nature tourism ICS

Email Date	Number Sent
<i>First Invitation e-mail</i>	
November 8, 2001	139
November 9, 2001	138
Total	277
<i>Second Invitation e-mail</i>	
November 13, 2001	100
November 14, 2001	91
November 16, 2001	83
Total	274
<i>Third Invitation e-mail</i>	
December 12, 2001	214
December 13, 2001	60
Total	274

Using email to conduct research such as this has important limitations. There is no way to determine if the potential respondents actually received the email. In order to try to track the requests I set my email program to provide an automatic reply that would be generated when the addressee opened the email. Based on the information provided by this technique the response rate for people who actually opened the email is high. Table 4.3 overviews both the number of replies and their dates and also the email messages returned because of bad addresses. The discrepancy in numbers either means that the majority of my emails either a) never got to the respondents “mailbox,” b) the email was discarded without being opened, or c) the automatic reply function of the sending email program is not compatible with other email programs.

Based on the number of return receipts it appears that the vast majority of email messages were discarded before they were opened. It is impossible to clarify the exact reasons for the lower participation. Therefore, a question was included in the case study interviews asking those respondents if they had any idea why people might not have opened my email or responded to the request to participate in the research. The results of this is case study question are presented in Appendix I.

### **Task 5: Analyze the Survey Data**

The survey responses were analyzed by frequency of response. The data were then examined for overall patterns and regularity, and for deviations from those patterns for further investigation in the case study portion of this research. The survey was intended to be exploratory in nature. The questions were grouped into topical areas as outlined in Task 2. These topical areas determined the questions that were investigated in

TABLE 4.3

Summary of dated e-mail return receipts, non-delivery messages

Date	Return Receipt-- Responses	No Delivery-- Email Error
November 8, 2001	23	5
November 9, 2001	32	5
November 10, 2001	8	1
November 11, 2001	3	
November 12, 2001	2	
November 13, 2001	22	4
November 14, 2001	17	1
November 16, 2001	17	
November 17, 2001	2	
November 18, 2001	1	
November 19, 2001	2	
November 20, 2001	1	
December 12, 2001	28	5
December 13, 2001	15	2
December 14, 2001	2	
December 15, 2001	2	
December 16, 2001	2	
December 18, 2001	1	
December 27, 2001	1	
December 28, 2001	1	
Total	187 for three email invitations	24

greater depth in the case study part of this research. Frequency tables and graphics were used to report the survey results.

The geographic data were analyzed to examine the spatial relations between geographical locations of ICBs and ICSs, and to identify any spatial clustering characteristics. The spatial relationships of the locations of the nature tourism businesses and states that have nature tourism policies/programs were also examined. The software packages used for these spatial analyses were CrimeStat and Arcview 3.2.

CrimeStat is a spatial statistics program for the analysis of incident locations, developed by Ned Levine & Associates under grants from the National Institute of Justice in 1999. It requires that point data be reported in latitude and longitude. Using the Zip codes provided by the survey respondents, Arcview 3.2 software was used to identify the ICS's and ICB's geographical coordinates. The latitude and longitude coordinates were keyed into a spreadsheet file that was then used in CrimeStat for analysis.

Several statistical techniques are available in CrimeStat to identify spatial distribution characteristics of location points. Distance analysis provided statistics about the distances between point locations. Because CrimeStat supports primary and secondary files, it was used to conduct a distance analysis between point locations of ICSs and ICBs. "Hot spot" (or cluster) analysis was used to identify groups of incidents that are clustered together. It was useful for identifying the degree of clustering of point locations for the nature tourism ICSs. The result of these spatial analyses was then exported to Arcview for mapping.

### **Task 6: Finalize the Case Study Topics, Procedures, and Participants**

Case studies involved conducting telephone interviews with fourteen Internet Content Sponsors (ICS) selected from the survey respondents. Cases were non-randomly selected to provide predictably different (systematic) replications (Yin 1984). Selection was based on providing (1) a broad geographic distribution of cases, and (2) wide variations for types of businesses. The unit of analysis was the individual ICS identified during the previous quantitative survey. The case studies mostly focused on issues that arose from the survey results. However, a number of questions were added to address topics being investigated at the Department of Recreation, Park and Tourism Sciences at Texas A&M University and the Center for Nature and Heritage Tourism at Southwest Texas State University. In addition, the topic about assistance (question 6, section 6A) was designed to answer questions raised by a national collaborative effort with the United States Department of Agriculture to develop a tourism Web site to assist rural communities, policy-makers, practitioners and citizens with their tourism efforts.

#### 6A: Identify the Case Study Topics

The topics for the case studies were derived from an assessment of the responses to the quantitative survey questions. Six broad topic issues were identified from the survey. Those topics are:

1. How nature tourism businesses define their business
2. Marketing
3. Depicting a place
4. Perspectives about the Web

5. Involvement with Web based communities
6. Areas of assistance needed.

These issues provided the framework and the flow of the conversation. A script was developed to guide the conversations for the case study interviews (See Appendix C).

### ***How nature tourism businesses define their business***

The first topic of the case study interviews specifically referred to Question 1 of the quantitative survey, which stated “Which of the following terms best describes the business associated with this Web site? The respondents were then given a choice of twelve items and an open field entitled “other.” This question specifically was intended to provide clarity about how these nature tourism businesses “define” their business (See Chapter V for the results of the quantitative survey).

An issue with this question first arose during the pre-test of the survey instrument. It was obvious that there was a lack of a clear definition of the term “nature tourism.” The list of nature tourism business terms originally compiled was derived from the literature and from an assessment of the types of businesses that were identified while locating the nature tourism Web sites for this research (Task 1A).

Confusion about how to describe nature tourism seems to exist for both the business operators and customers. A discussion with one of the nature tourism business owner pre-test respondents revealed that nature tourism business operators are challenged with what to call their business. A few of the nature tourism professional pre-test

respondents said that the question was not entirely clear. Four of the evaluators made suggestions or additions to the categories that were listed.

This issue was further substantiated from the actual survey responses. Even though there are twelve categories to choose from in this question, many of the respondents did not identify their business with these categories and used the “other” category, while others selected one of the terms listed but added another business descriptor in the open ended field. Of 68 respondents 24 used this other category to provide a description or additional clarification of how they described their business.

In the literature there has been considerable discussion about how to define nature tourism, ecotourism and other terms that have been used to describe these types of tourism activities. Meador (2001) stated the challenge is not only what to call a business but also for business owners to identify their product for their business marketing efforts. There are no standards or clear definitions about the terms that are used to describe the various types of businesses in this arena (Meador 2001).

### ***Marketing***

Marketing was the second issue examined in the case studies. This issue arose initially from an informal correspondence with one of the first survey respondents. He pointed out that it is difficult for small enterprises to be effective with their Internet marketing efforts because of cost and other factors. His strategy was to identify non-profit and other businesses that were willing to collaborate and establish informal networks with links between Web sites.

In addition, the results of the survey also suggest that marketing should be further examined. The results of the quantitative survey suggest that nature tourism businesses on the Internet do not understand the importance of evaluating and understanding a customer market using an established evaluation methodology. (See Chapter V for the results of the quantitative survey.) Question 2 of the case study interviews addressed this issue (Appendix C).

### ***Depicting a place***

The third area to be examined further in the case studies is related to “place.” Two questions in the online survey were specifically concerned with the geographic concept of “place.” These questions intended to examine the respondents’ attitudes about place. The strong positive response to these questions suggests that “place” and nature tourism are highly related. The results from the quantitative survey indicate that nature tourism businesses rely on the concept of “place” to market their attraction (See Chapter V for results of the quantitative survey). Thus, question 3 in the case study focused on this issue (See Appendix C).

### ***Perspectives about the Web***

The fourth area of inquiry was about the respondents’ perspectives about the Web, in general. There were two groups of the survey questions that addressed this issue. These questions received overwhelming positive responses.

A group of five questions examined whether or not the survey respondents were satisfied with their Web site and another four questions asked about attitudes about the

Web, in general. Due to the overwhelmingly positive responses to these questions, it was important to discuss this issue more in depth. (See Chapter V for results of the quantitative survey). Thus, question 4 in the case study focused on this issue (See Appendix C).

### ***Involvement with Web based communities***

The fifth area of investigation was related to the questions about these business owners involvement in a Web based community/organization or association. Collaborative efforts are an important issue for regional tourism development. Thus, it is one of the objectives of this research to understand the evolution of a network of people who use the Internet to conduct business. In addition, there was some concern during the survey development and pre-test process about confusion regarding the use of the term community. As a result, the term “association” was added to the series of questions on this topic. Even so, only about half of the respondents said they were associated with a community/association. It is important to determine the reason for the low positive responses through case studies. (See Chapter V for results of the quantitative survey). Thus, question 5 in the case study focused on this issue (See Appendix C).

### ***Areas of assistance needed***

The final area that was investigated in the case studies was to find out what kind of assistance these business owners need for their businesses, or to improve their Web sites for business purposes. The responses to these questions suggested that a majority of business owners were interested in modifying their Web sites but most were fairly

satisfied with the design of their Web sites. From these questions and others in the survey about these business owners' attitudes about the Web and how it helps their businesses, it will be important to investigate in more detail how they want to improve their Web sites and what assistance they need. (See Chapter V for results of the quantitative survey).

Thus, question 6 in the case study focused on this issue (See Appendix C).

One final question that was posed to the case study participants was about their opinion of the level of response to the survey. They were asked if they had any idea why people did not respond, and what might have been done differently to solicit a higher response.

#### Task 6B: Finalize the Case Study Interview Format and Procedures

The case studies were conducted on the telephone. The interview format was pre-tested with three ICSs identified from the quantitative survey. Some minor adjustments were made to one part of the marketing question as a result of the pre-test.

#### Task 6C: Identify the Case Study Participants

The case selection was non-random, and was derived from an evaluation of the survey results. Thirty-four of the sixty-eight total survey respondents answered "yes" to the question that asked if they would be willing to participate in a phone interview about their responses to the survey. Only twenty-three provided a telephone number. The cases that were selected provide a sufficient cross section of the survey respondents by the types of businesses they represented (Table 4.4), and by the variety of responses that they provided to the quantitative survey.

The mapping of the respondents' geographical location using Arcview also revealed that these cases represented a broad geographical distribution across the country.

TABLE 4.4

Case study participants by business type.

Business type	Number of quantitative survey responses	Number of interviews in case studies
Ecotourism business	11	3
Rafting outfitter	10	3
Working ranch and nature retreat	5	2
Ecotourism business—website coordinating ecotourism opportunities	1	1
Farm vacation	1	1
Hotel/Backpacker Hostel with own eco/adventure	1	1
Mountain bike touring company	1	1
Nature retreat	1	1
Working guest ranch	1	1

This was the most important determinant of the interview case selection in order to represent the geographic areas of interest from the cluster analysis.

### **Task 7: Conduct the Case Studies**

Because the questions and discussion were open ended, the length of the interview varied substantially, ranging from 20 minutes to 1 ¾ hours. Generally, the survey respondents were informative, cooperative, and interested in this research project.

### **Task 8: Analyze and Interpret the Case Study Data**

To get the recorded phone conversations into analyzable text units, the conversations were transcribed into a Microsoft Excel spreadsheet. Each survey respondent's name was listed as a row heading; and the question category was listed in the column. Having the responses in the Excel spreadsheet allowed for a simple evaluation of the comments either by each respondent or by comment category. Preliminary topic categories could easily be discerned by perusing the responses. Following the method described by Chauvin (1998), responses were then converted to a comma-delimited format to form individual text units (comments), and imported into a Microsoft Word document (Chauvin 1998). Individual text units (comments) from the interviews were then organized into topical areas. Text units consisted of a single word, sentence or two sentences. Once in Microsoft Word, the comments were categorized with the cut and sort technique as suggested by Bickman and Rog (1998).

The data were coded into categories as described by Strauss and Corbin (1990) by adding a two-three letter code that was inserted into the Microsoft Word file in front of

each of the statements. The gross set of categories--terms, marketing, place, community, assistance and participation, were from the case study interview topics described in Task 6A. The more refined categories were derived from a detailed evaluation of all of the individual comments that were transcribed from the telephone interview tape recordings. The method for coding the data is the constant comparative method described by Maykut and Morehouse (1994, 134):

The constant comparative method of analyzing qualitative data combines inductive category coding with simultaneous comparison of all units of meaning obtained . . . As each new unit of meaning is selected for analysis, it is compared to all other units of meaning and subsequently grouped (categorized and coded) with similar units of meaning. If there are no similar units of meaning, a new category is formed. In this process there is room for continuous refinement; initial categories are changed, merged, or omitted; new categories are generated; and new relationships can be discovered . . .

The constant comparative method led to an identification of relationships and patterns across categories, thus leading to a more complete understanding of the issues being studied as described by (Maykut and Morehouse 1994). With this approach it was possible to clarify the issues that arose in the early stages of the research process. Through the use of these methods it was possible to examine the issues more closely that led to insights about nature tourism on the Web as they relate to the two theoretical perspectives. The in-depth analysis of the case study responses illuminated the co-evolutionary process (Graham 1998). Finally, combining the quantitative survey with the case studies was an initial attempt to follow the actors (Latour 1991) that helped determine if the actor-network theory helps to explain nature tourism activities on the Web and the motivations and visions of Internet Content Sponsors.