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Tourism

A COMPARISON OF TOURISTS AND LOCAL VISITORS TO NATIONAL ESTUARINE RESEARCH RESERVE SITES

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Abstract: The National Estuarine Research Reserve system serves as a laboratory and classroom where the effects of both natural and human activity can be monitored and studied. Visitors to twelve National Estuarine Research Reserve system sites were surveyed to obtain information about demographics, participation, experience with the system, activities, and opinions. Comparisons were made between local respondents and tourists based on distance traveled to the sites. About 26% of the respondents were tourists. Almost all of the respondents were white, non-Hispanic and most were female with females slightly more prevalent in the local group. Tourists were slightly younger than locals and were more likely to work full time. About 48% of the tourists attended graduate school versus 35% of the local respondents.

Tourists visited the sites less frequently but spent more time per visit and spent more time at the site per year. The study sites were the primary destination for 66% of the locals and only 19% of the tourists, indicating that tourists were on multipurpose trips. Although more tourists (9%) made the decision to visit the site at least three months in advance (versus 3.2% of locals), 33% decided to visit the site on the day of the visit (versus 28% of locals).

In general, levels of satisfaction with the sites and likelihood of future visits were similar for both groups. Interest in education program topics was similar between groups except that tourists were significantly more interested in environmental issues and environmental ethics. Both groups considered it important to understand nature and the role of wildlife. Tourists placed significantly greater importance on the role played by wildlife and the existence of wildlife. Neither group placed much importance on hunting or trapping wildlife. Activities were similar between groups except that tourists were more likely to take photos, beach comb, swim, and bike, while locals were more likely to canoe and be involved with organized group programs. Both groups observed the same animals but tourists were more likely to observe marine mammals.

Introduction

Approximately 63 million people sixteen and older, participated in wildlife watching in 1996, spending about $29.2 billion in the process (USDI, 1997). Money was spent on trip-related items such as food, lodging, and transportation, equipment such as binoculars and cameras and camping equipment, memberships in wildlife organizations, as well as books, magazines, dues, contributions, and land ownership and leasing. Spending for wildlife watching recreation increased 21% since 1991, although the actual number of American wildlife watchers decreased. (USDI, 1997).

As a result of the ongoing interest in observing wildlife, national, state, and local tourism marketing has evolved. The National Watchable Wildlife Program is a result of individual, community, nongovernment organizations and wildlife management agencies interest in observing wildlife. The program is a nationwide cooperative effort to combine wildlife conservation with America's interest in wildlife related outdoor recreation. The program was founded on the notion that people, given the opportunities to enjoy and learn about wildlife in a natural setting, will become advocates for conservation in the future (Great Outdoor Recreation Pages (GORP), 1997). The National Watchable Wildlife Program seeks to provide wildlife observation opportunities by establishing a nationwide network of quality viewing areas, complemented by uniform directional signing, and a companion series of state wildlife associated recreation guides known as the Watchable Wildlife Series. The goals of the Watchable Wildlife program are to provide enhanced opportunities for the public to enjoy wildlife on public and private lands, to contribute to local economic development, to promote learning about wildlife and habitat needs, and to enhance active public support for resource conservation (Hudson, 1996).

The National Estuarine Research Reserve (NERR) System is a national system of sites including estuarine waters, wetlands, and uplands, facilitated by a network of federal, state, and local partnerships. Through programs of stewardship, education, and research, the System enhances informed management and scientific understanding of the Nation=s estuarine and coastal habitats. Through the System, the importance of estuaries are recognized and protected.

Although NERR educators have been successful in the development and delivery of educational programs, little is known about the general or independent visitors to NERR sites. Specifically, are they nearby residents using the sites for locally based outdoor recreation, or are they tourists from outside the area?

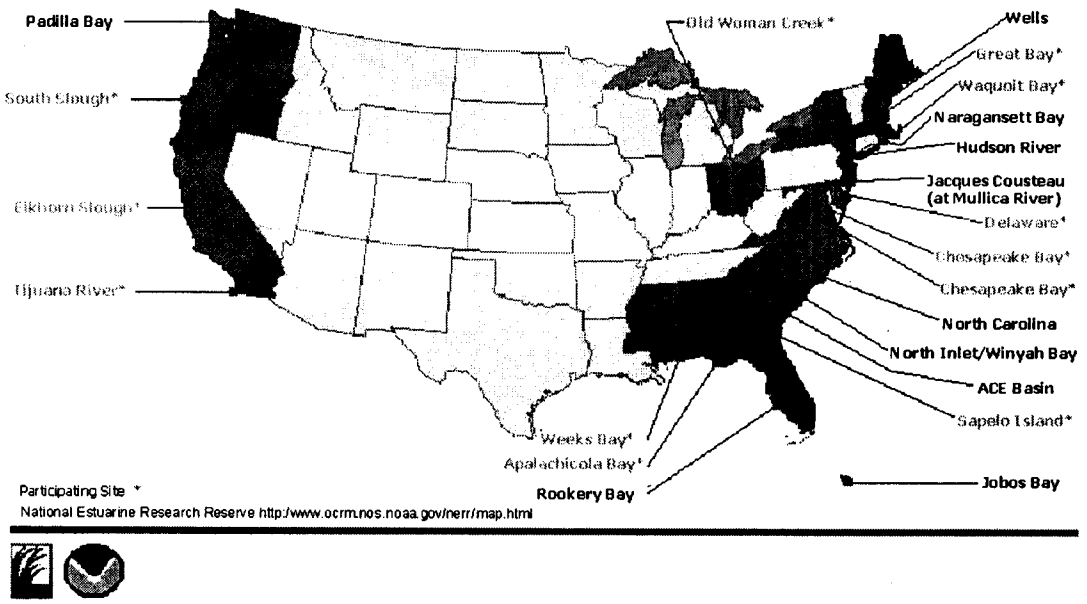
Recreation resource educators and planners are interested in identifying and profiling recreationists who visit areas such as NERR sites so that they can learn more about this population. The knowledge gained can be used to help meet the needs of current local residents and tourists participating in activities, to project future use and needs, and to implement marketing programs aimed at each group. The objective of this study is

to compare tourists and local visitors to NERR sites in terms of demographics, participation, and attitudes. For the purpose of this study, tourists were defined as visitors who traveled 100 or more miles to the site.

Study Area

The NERR system is vast and many locations are remote. They are located on coasts around the country and in Puerto Rico. The NERR system serves as a laboratory and classroom where the effects of both natural and human activity can be monitored and studied. NERR sites contain protected acreage that cover varieties of natural resource environments. These natural resource environments include uplands, fresh marshes, salt marshes, forested wetlands, tidelands, sub tidal meadows, and open channels. Some NERR sites have interpretive centers, trails, research buildings or labs, and other interpretive structures such as boardwalks, observation platforms, signs, historic buildings, and classrooms (USDC, 1996). All sites have some on-site programs such as school programs that go from the kindergarten level to the graduate school level. Some sites also provide off-site programs for school education and interpretive education. All sites provide on-site research opportunities and most provide off-site research opportunities (USDC, 1996). The 22 NERR sites that existed at the time of the study as well as those that participated are found in Figure 1.

Figure 1. National Estuarine Research Reserve System



Methods

Due to the geographic distribution of NERR sites and the variability of resources at each site, a mail survey was used to collect data. Education coordinators at the 22 NERR sites were contacted by e-mail and asked to supply names and addresses of individuals who visited that particular NERR site in 1997. Of the 22 NERR sites, 12 could provide names and addresses of visitors by way of registration books.

A total of 3,766 names and addresses of individuals who were not part of an organized program or group were submitted by the education coordinators. Of those, 1,086 names and addresses were legible and complete. A goal of approximately 400 completed questionnaires was set due to the needs of NERR coordinators and the research budget and time constraints. The 1,086 names and addresses were reduced to 886 names based on an anticipated response rate of fifty percent.

A field pilot study of questionnaire items was conducted in the Spring of 1998. Other questions were pilot tested in the field in June of 1998. The mail survey was conducted next. Then, a nonresponse survey was conducted.

A modified version of the Dillman's (1978) ATotal Design Method (TDM) was used to administer the questionnaire. This consisted of an initial first class mailing, which contained a cover letter, an eight-page questionnaire, and a

self-addressed, stamped return envelope. A reminder post card was mailed one week later. Two weeks following the post card, a second cover letter, survey instrument and postage-paid envelope were mailed. There was no incentive included and the respondents were given the opportunity to receive a copy of the study results if they wished by signifying so on the return envelope when they mailed the questionnaire back.

The total number of questionnaires completed and returned was 383. The response rate (adjusted for incomplete returned questionnaires and underage respondents) was 46.7%. A total of 53 respondents asked for results of the study. The Statistical Package for the Social Sciences (SPSS) 8.0 was used for statistical analysis.

The results of the nonresponse followup indicated no difference between respondents and nonrespondents in most respects. However, nonrespondents were significantly more likely than respondents to prefer to view wildlife from a distance and in a natural environment. Respondents preferred to be as close as possible to wildlife. As a result, some caution should be used in interpreting the results.

Results

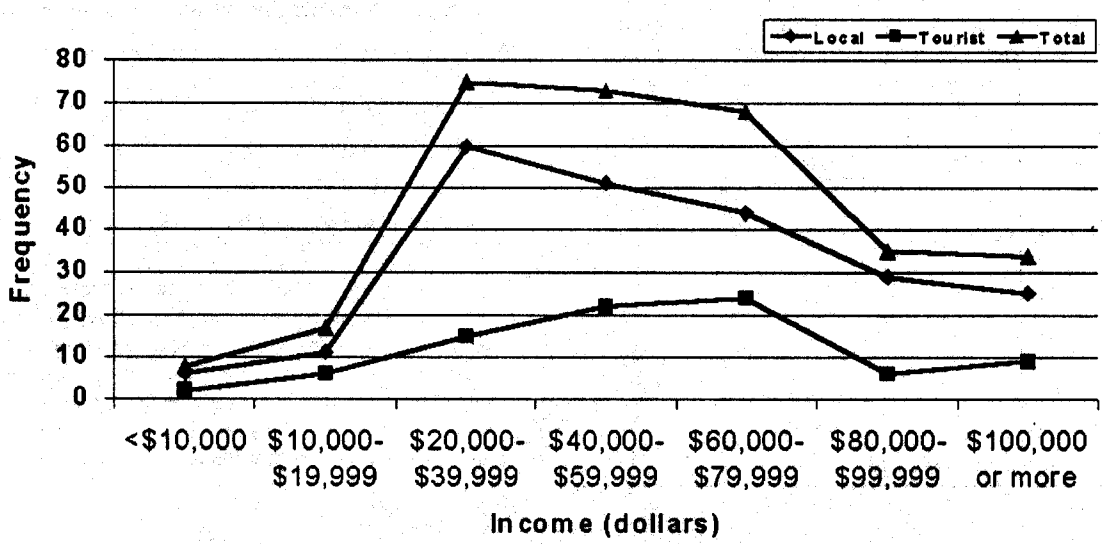
Local respondents (traveled less than 100 miles to the NERR site) and tourists differed in many respects. Locals were slightly older and more likely to be female (Table 1). Almost all respondents were white (non Hispanic).. Although the mean education level was about the same, tourists were more likely to have attended graduate school. Tourists were also more likely to be employed full time and less likely to be retired. The household income of locals peaked at $20,000-$39,999 while that of tourists peaked at $60,000-$79,999 (Fig. 2).

Table 1. Characteristics of Respondents

Characteristic[1]	Local	Tourist
Age (mean years)	49	46
Female (%)	65	58
Married (%)	67	72
White, not Hispanic (%)	96	97
Education (mean years)	17	18
Graduate School (%)	35	46
Employed Full Time (%)	50	69
Retired (%)	21	14

[1] no significant differences. Individual cells of frequency tables not tested.

Figure 2. 1997 annual household income before taxes



Tourists traveled an average of 646 miles to the NERR site while locals traveled an average of 28 miles (Table 2). Although these distances are significantly different, this would be expected because distance was used to segment the data. Tourists spent more time at the site, but the differences were not significant. However, tourists spent significantly more time (days) per trip and made significantly fewer trips per year. These results are in keeping with other studies, which have shown that those who live farther from a site tend to stay longer at the site and spend more days on a trip. The bottom part of Table 2 was created by multiplying the top three lines in the table by the fourth line (visits per year) resulting in estimates of totals for the year. Although locals take more trips per year, tourists spend more days per trip and per year.

Table 2. Distance traveled and time spent at sites by respondents.

Category	Local	Tourist
Distance to site (miles)*	28	646
Time at site (hours)	3.7	10.8
Time per trip (days)*	1.5	6
Visits per year (visits)*	2.2	1.4
Distance per year (miles)	62	904
Time at site per year (hours)	8	15
Total trip time for year (days)	3	8

* significant at .05

About two thirds of the locals and only about one fifth of the tourists considered the site to be their primary destination (Table 3). This means that 81% of the tourists are on multipurpose trips when they visit the site and that, for 81% of the tourists, the site is not the primary purpose of the trip. Tourists are more likely to travel with family and less likely to travel with friends. More tourists plan their visit to the site more than three months in advance, but more tourists decide to visit on the day of the visit.

Table 3. Trip Related Decisions. (Percent)

Decision	Local	Tourist
Site is primary destination*	66	19
Group type		
Family	46	57
Friends	16	12
Decided to visit		
Day of visit	28	33
More than 3 months prior to visit	3	9

*significant at 0.05

Locals were significantly more likely to obtain trip information by calling the site, referring to a site newsletter, or through the media (Table 4). In fact, few tourists obtained trip information form any of the listed means. Respondents were not asked about the Internet as a source of site information.

Table 4. How Respondents Obtained Trip Information. (Percent)

Method	Local	Tourist
Called the site for information~	9	3
Requested information be mailed	4	3
Referred to information collected in past	11	7
Referred to newsletter from site*	14	4
Heard about site through media~	13	6

*significant at 0.05 ~significant at 0.10

Both tourists and locals were about equally satisfied with their visit and both expressed about the same likelihood of making another visit in the future (Table 5). The scale used for this and other tables ranges from 1 through 5 with 5 being the highest or best level and 1 the lowest or worst. Thus 3 can be thought of as average or mid-range. Respondents= satisfaction with observing and/or photographing wildlife is lower than that for the entire trip (Tables 5 and 6), but it is above the mid-range. The likelihood of returning to observe and/or photograph wildlife (Table 6) is about the same as the likelihood of a future visit (Table 5). Locals and tourists were almost identical in their views of observing and/or photographing wildlife.

Table 5. Respondent expectations and satisfaction regarding visit. (Mean of scale 1-5)

Category	Local	Tourist
Visit met expectations	4.0	4.1
Overall satisfaction with visit	4.0	4.0
Likelihood of future visit	3.8	3.7

Table 6. Observing/Photographing wildlife. (Mean of scale 1-5)

Category	Local	Tourist
Importance of activity	3.2	3.2
Met expectations	3.6	3.5
Satisfaction	3.5	3.5
Likelihood of returning for activity	3.6	3.6

Locals and tourists shared about the same levels of interest in most topics at the sites (Table 7). Tourists expressed a significantly higher level of interest in environmental ethics and issues and in the cultural history of the area. Locals might be expected to be less interested in the cultural history of the area because they are likely to be exposed to the cultural aspects of the area on an almost daily basis.

Table 7. Interest in Topics. (Mean of scale 1-5)

Topic	Local	Tourist
Estuary ecology	3.5	3.6
Threatened and endangered species	3.8	3.9
Plant identification	3.5	3.5
Animal identification	3.7	3.7
Environmental ethics*	3.3	3.6
Environmental issues*	3.5	3.7
Prescribed burning	2.9	2.9
Habitat restoration	3.7	3.9
Water pollution	3.7	3.8
Natural history of area	3.8	3.9
Cultural history of area¨	3.5	3.8

*significant at 0.05 ¨significant at 0.10

Respondents were asked about the importance of various aspects of wildlife. Non-consumptive aspects are listed in Table 8. There were very few significant differences between locals and tourists, and those that were significant were relatively weak (.10 level). Appreciation for the role and existence of wildlife are very important (4.5-4.6). Tolerance of the nuisance, safety hazards, and damage aspects of wildlife are lower, but still above the mid-range (3.4-3.9). Benefit from wildlife recreation to local economies is just above the mid-range.

Table 8. Importance of Wildlife. (Mean of scale 1-5)

It is important to me that	Local	Tourist
I appreciate the role of wildlife¨	4.5	4.6
I know wildlife exists in nature¨	4.5	4.6
I tolerate most wildlife nuisance problems	3.6	3.5
I tolerate most levels of property damage by wildlife	3.5	3.6
I tolerate personal safety hazards associated with	3.7	3.9
I understand more about the behavior of wildlife	4.1	4.2
Local economies benefit from wildlife recreation	3.3	3.4

¨significant at 0.10

The other end of the importance scale can be seen in Table 9. Consumptive activities such as hunting and trapping are not important to locals or tourists at these sites. Although the activities are unimportant, respondents do not appear to be against the activities as evidenced by the higher score given to the management of game animals for harvest.

Table 9. Importance of Consumptive Activities. (Mean of scale 1-5)

It is important to me that	Local	Tourist
I hunt game animals for recreation	1.8	1.7
I hunt game animals for food	1.8	1.7
I trap fur bearing animals/sale¨	1.5	1.3
Game animals are managed for harvest	3.4	3.4

¨significant at 0.10

Tourists were more likely to participate in photography, bicycling, beach combing, and swimming, and less likely to participate in canoeing(Table 10). The most popular activities for tourists and locals at the sites were observing wildlife and walking. These were the only activities in which over half of the respondents of both groups participated. Riding and photography were the next most popular activities for locals but slightly fewer than one third of the locals participated in these. Half of all responding tourists participated in photography and about one third took pleasure drives.

Table 10. Participation in Activities. (Percent)

Activity	Local	Tourist
Observed wildlife	61	53
Photography*	30	50
Birding	31	28
Walking	60	60
Hiking	23	20
Pleasure drive	27	32
Canoeing*	10	2
Bicycling*	2	7
Beach combing¨	16	26
Swimming*	3	11
Picnic	11	8
Meditated	7	7

*significant at 0.05 ¨significant at 0.10

Sightseeing was the most common primary reason for visiting the site for both locals and tourists (Table 11). Locals were considerably more likely than tourists to visit the site in order to be in a natural environment (the individual rows in this table were not tested for significance). Tourists would logically be less likely to visit these sites for the primary purpose of being in a natural environment. For locals, these sites are convenient natural environments. Tourists who simply wish to get away to a natural environment probably find convenient alternatives closer to home.

Table 11. Primary Purpose of Trip to Site. (Percent)

Purpose of Trip	Local	Tourist
Sightseeing	34	35
Participate in educational	13	10
Observe or photograph wildlife	13	15
Learn more about estuaries	10	11
Be in a natural environment	19	13

Summary and Conclusions

This study compared tourists and local visitors to NERR sites. Demographically, tourists are slightly younger, have higher incomes, are more likely to be male, to have graduate education, to be employed full time, and less likely to be retired. Tourists take fewer, but longer trips, and spend more time on site per trip. On an annual basis, tourists spend almost three times as many days on trips, travel over 10 times as far, and spend almost twice as much time on site. Although the study did not address monetary expenditures, it is likely that tourists spend more money on food, lodging, and transportation, and that some of these expenditures occur while in the local area. Expenditures by tourists in the local area would likely be of interest to local planners and policy makers and would be a logical avenue for future research.

Tourists appear to be more interested than locals in environmental issues and ethics. Both have similar attitudes and values regarding the importance of wildlife. Neither appear to hunt, but neither appear to be against hunting. On-site activities are similar for each group except tourists are more likely to participate in beach combing, photography, swimming, and bicycling while locals are more likely to participate in canoeing, self-guided nature walks, and organized group programs.

Tourists and local visitors appear about equally satisfied with the site and equally likely to return. They visit sites for similar reasons. For most tourists, the site visit is part of a longer trip and for many, the decision to visit is made on the day of the visit, presumably while they are in the area. This indicates that those wishing to attract more tourists may be able to do so through local marketing means such as signs, and brochures at welcome stations, hotels, and restaurants. More tourists than locals plan their trips over three months in advance. This study did not address the Internet as a source of information or marketing tool. However, the proliferation of NERR web sites will likely assist trip planners. The study found that locals are more likely to obtain trip information from printed information from sites, contact with sites, and the media. This indicates that, although this information is available and accessible, it is not reaching the tourists as well as it could.

This study has provided NERR educators and managers with information about visitors who are not affiliated with educational groups. By better understanding the characteristics of both tourists and local residents, managers and educators can better develop education and recreation programs and opportunities for both groups.

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INDIVIDUALS' INTERPRETATION OF CONSTRAINTS: A NEW PERSPECTIVE ON EXISTING THEORY

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Abstract: The travel decision-making process is influenced by a number of factors. One of the most important yet infrequently studied factors is "perceived constraints." Nearly a decade ago Crawford, Jackson and Godbey (1991) developed a framework to guide constraints research. Numerous authors have utilized this framework but results have suggested that individuals' perceptions of constraints differ based on study setting and method of data collection (e.g., questionnaire vs. interview). Hence, the purpose of this study was to use a multi-method approach (both quantitative and qualitative) to assess perceived constraints to visitation among a sample of Pennsylvania residents. Results indicated that individuals' are not consistent in their response to constraint questions and that their interpretation of a constraining item varies. The information presented in this paper will challenge traditional notions about constraints.

Why Study Constraints?

As consumers go through the decision-making process they are influenced by a number of factors. According to Norman (1995), one of the most important yet infrequently studied factors is "perceived constraints." Constraints, according to Jackson (1988), are "a subset of reasons for not engaging in a particular behavior." Further, he suggested that the value of leisure constraints research may be summarized into two main areas: improving the understanding of participation by classifying non-participants, describing their characteristics and documenting their constraints; and improving constraints measurement techniques. Constraints research can also provide benefits such as policy development and program planning to recreation practitioners (Searle & Jackson, 1985b). Norman (1995) concluded that incorporating perceived constraints into market segmentation/tourism research offers researchers and practitioners a better understanding of the complex nature of the travel decision process.

What is a Constraint?

Constraints are factors that inhibit or prohibit individuals' participation and enjoyment in leisure (Jackson, 1991). Norman (1995) defined travel constraints as constraints, inhibitors, obstacles, or restraining factors, perceived or real, that influence an individual's preference for and participation in a leisure activity. Dishman (1994) stated that perceived constraints might have a stronger influence on leisure activity participation than true constraints. Jackson (1988), in a survey of past research on leisure constraints, found that all researchers agreed in principle that constraints inhibit people's ability to participate in leisure activities. However, individuals do overcome and cope with constraints when participating in leisure activities (Mannell & Kleiber, 1997). In fact, some researchers believe that leisure participation is dependent not on the absence of constraints but on negotiation through them (Jackson, Crawford, & Godbey, 1993).

Constraints and Travel

Constraints are important factors in the travel decision making process (Tian, Crompton, & Witt, 1996; Um & Crompton, 1992). McIntosh and Goeldner (1990) listed constraints to travel as cost, lack of time, health limitations, family stage, lack of interest, fear and safety. If the motivation to travel is sufficiently strong, they argued, any of the above constraints may be overcome and travel will take place. However, the perception of or actual travel constraints will affect the destination selection process (McIntosh & Goeldner, 1990). Um and Crompton (1992), in their study of perceived inhibitors and facilitators in pleasure travel destination decisions, indicated that travel decision making is constraints driven rather than benefits driven. Norman (1995), in his research of perceived constraints as a basis for travel market segmentation, identified groups of respondents that were considered relatively "high level constrained" but continued to participate at an unconstrained level. Similarly, interview respondents in Kay and Jackson's (1991) study reported that perceived constraints did not reduce their level of participation.

The Hierarchical Constraint Model

In 1991 Crawford et al. proposed that individuals negotiate their way through three types of constraints (i.e., structural, intrapersonal and interpersonal). These constraints are hierarchical in nature, with intrapersonal constraints (e.g., stress, depression, anxiety, perceived self-skill) being the first and most difficult level of constraints to negotiate. At the second level, represented by interpersonal constraints (e.g., constraints resulting from interrelationships such as finding a suitable activity partner), constraints intercede between preference and participation in leisure activities. If this type of constraint is overcome, structural constraints (e.g., family life-cycle stage, family financial resources, season, climate, work scheduling, availability of opportunity) begin to be encountered. This model is hierarchical in terms of the order in which constraints are encountered, but also with respect to level of importance.

Empirical verification of the hierarchical constraints model by Crawford et al. (1991) is lacking, however (Alexandris & Carroll, 1997). Hawkins, Peng, Hsieh and Eklund (1999) conducted a replication and extension of their work and verified that the constraint categories can be replicated and extended with subtle distinctions. Six years earlier, Raymore, Godbey, Crawford and von Eye (1993) documented that the three categories of constraints did exist when studied with an adolescent population.

Study Objectives

Numerous authors (see Backman & Wright, 1990; Dunn, 1990; Jackson, 1993; Kay & Jackson, 1991; Scott & Jackson, 1991; Searle & Jackson, 1985a, 1985b) have utilized the framework presented by Crawford et al. (1991) but results have suggested that individuals' perceptions of constraints differ based on study setting and method of data collection (e.g., questionnaire vs. interview). Hence, the purpose of this study was to use a multi-method approach, quantitative and qualitative, to assess perceived constraints to visitation among a sample of residents of southwestern Pennsylvania.

Methodology

The data for this study came from a much larger study focused on awareness of area tourist attractions, attitudes towards tourism, information seeking and travel behavior regarding area sites and attractions, and constraints to visitation. In order to address the issue of perceived constraints, individuals were asked to indicate to what extent they agreed that the following constrained their visitation to area sites and attractions: lack of interest, lack of information, being physically unable, overcrowding at area sites and attractions, lack of things for kids to do, lack of time, cost, lack of companion, lack of transportation, or the fact that they had visited before.

A total of 1,844 phone interviews were completed with residents of southwestern Pennsylvania. Telephone interviews were conducted between 4pm and 9pm on weekdays, and between 10am and 9pm on weekends. Upon completion of the phone interview/survey individuals were invited to participate in a follow-up mail-back survey seeking more detailed information about their perceptions of southwestern Pennsylvania and the factors influencing their visitation patterns within the area. A total of 1,378 individuals (75%) agreed to complete the follow-up survey. Six hundred sixteen completed follow-up surveys were received for a final response rate of approximately 45%.

On both the surveys (phone and mail-back), respondents were asked to indicate to what extent they agreed with the 10 constraint items. On the phone survey they did this using a 5-point Likert type scale ranging from 1 = strongly disagree to 5 = strongly agree. The response format on the mail-back survey was modified to 1= agree and 2=disagree. If respondents agreed that an item was constraining they were asked to explain why. On the phone survey, the constraint items were randomly listed to limit the influence of placement bias.

Results

The constraint items respondents most strongly agreed with were: "Not enough time," "Too expensive" and "Not enough information" (Table 1). It is worth noting, however, that respondents did not perceive any of the items to be highly constraining. The mean scores on the 10 constraint items ranged from 1.51 (disagree) to 2.98 (neutral) (Table 1).

Table 1. Response to the constraint items: The phone survey

CONSTRAINTS	Mean	(S.D.)
Not enough time	2.98	(1.51)
Too expensive	2.54	(1.28)
Not enough information	2.52	(1.43)
Visited them before	2.17	(1.29)
Overcrowded	2.15	(1.24)
Not enough for children to do	2.00	(1.08)
No people to go with	1.96	(1.33)
Not interested	1.76	(1.14)
Physically unable	1.53	(1.11)
No transportation	1.51	(1.04)

Note: 5 point Likert Scale: 1= strongly disagree and 5 = strongly agree

In the follow-up mail survey, participants were again asked to indicate their level of agreement with the 10 constraint items. If they agreed that an item was constraining they were asked to indicate why. Little more than two-thirds (39%) of the respondents agreed they did not have "time" to visit area sites and attractions. And, almost one-fourth were constrained by "not enough information" (Table 2).

Table 2. Response to the constraint items: The follow-up survey

CONSTRAINTS	Agree	Disagree
Not enough time	38.70%	61.30%
Not enough information	24.90%	75.10%
Too expensive	13.30%	86.70%
No people to go with	11.00%	89.00%
Physically unable	7.60%	92.40%
Not interested	5.10%	94.90%
Visited them before	4.90%	95.10%
No transportation	4.80%	95.20%
Overcrowded	3.80%	96.20%
Not enough for children to do	3.70%	96.30%

Note: This was a dichotomous variable in the mail survey.

In order to compare the results of the phone and mail surveys, responses to the strongly agree (5) and agree (4) categories on the phone survey were combined. This allowed the researchers to determine whether the percentage of respondents who agreed that an item was constraining was consistent across methods (i.e., phone survey vs. mail-back survey).

As noted in Table 3 there were differences in response to the constraint items depending on method. The largest difference was with the constraint item, "overcrowded." Only 3.8% of the respondents to the mail-back survey agreed that it is overcrowded in area sites and attractions. Yet, more than 20% of the respondents indicated that overcrowding was a constraint when asked the same question during the phone survey. Additionally, individuals were more inclined to agree that an item was constraining when asked about it during the phone survey.

Table3. Differences in response to the 10 constraint items by percent of respondents who agreed that the constraint existed

	Mail-back	Phone*
Not enough time	38.7%	48.2%
Not enough information	24.9%	35.0%
Too expensive	13.3%	29.9%
No people to go with	11.1%	18.3%
Physically unable	7.6%	10.7%
Not interested	5.1%	11.9%
Visited them before	4.9%	20.6%
No transportation	4.8%	8.6%
Overcrowded	3.8%	20.8%
Not enough for children to do	3.7%	9.8%

**In order to compare the percentage of respondents who agreed with the constraint item, the "strongly agree" and "agree" categories were combined to create an overall "agree" category.*

We also wanted to determine how individuals interpreted the constraint items. Thus, a content analysis of the open-ended responses to the top three constraint items (i.e., not enough time, not enough information, too expensive) was conducted. This was done with the responses to the constraint items in the mail survey, only. Several themes emerged. For example, in terms of the constraint item, "not enough time," individuals interpreted this to mean work or family responsibilities as well as a substitution of activities. With respect to the constraint item, "too expensive," the open-ended responses were informative as well. Respondents interpreted expensive to mean value for money and reasonableness of charges.

Table 4. Qualitative responses to top three open-ended constraint questions in the mail-back survey

Constraint Items		
Not enough time	Not enough information	Too expensive
Work	I have never received any information	Entertainment fees are too expensive
Have more important things to do	I did not go get the information	Do not have enough money
Business travel	Needs to be displayed at more locations	Charges are not good value for money (unreasonable charges)
Public transportation takes time	Not advertised enough	It is expensive for a family
Family bonding		
Too old to get around	I do not know where to go	

Discussion and Implications

One important finding in this study is that people are not consistent in their response to questions regarding constraints. The fact that level of agreement with every constraint item went down when asked about it again on the mail-back survey is intriguing. Does this finding suggest that method influences response? Or, could this finding be a function of the environment in which the person was operating when responding to the surveys. For example, when on the phone the individual may have been less relaxed and as such wanted to get through the survey as quickly as possible. In addition, could this finding suggest that perception of constraints is situational? If so, researchers must begin to conduct longitudinal studies in an effort to validate our knowledge of constraints.

These study results also suggested that people do not interpret constraint questions or items similarly. For example, time to one person can mean "work time" while for another it may mean "time for travel," suggesting that quantitative scales may not be accurately assessing what is a constraint to an individual. This is problematic if program policy, marketing or program planning is being predicated on such findings.

The fact that constraints do not appear to be an overwhelming issue in this study leads to several questions. First, didn't we identify factors that were truly constraining individuals from visiting area sites and attractions? Second, have people negotiated through some of the constraints and as such do not deem them to be an issue? Or are people simply not constrained? This study focused on visitation behavior that has not been studied in any depth by travel and tourism researchers. Hence, answers to the previous questions will not be available until further research is conducted.

We also found that the most constraining factors are structural in nature. Intra- and inter-personal constraints were the least constraining. Is this true in all tourism settings? When individuals recognize a need for travel have they already negotiated through the constraints of not having the skills to travel or someone with whom they can travel, for example? Is this negotiation based on past experience?

In summary, researchers need to carefully interpret individuals' responses to questions about constraints. To interpret "time" as something that is uncontrollable, for example, may be an invalid inference. The results of the present study suggest that researchers need to validate findings through repeating studies with similar populations; build in checks (e.g., follow-up phone calls) to the data; conduct focus groups or some other type of interview to determine whether there are constraints to travel previously not identified; and, if constraints are not an issue in the context of travel, to document if and how people have negotiated through constraints.

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CULTURE, HERITAGE AND TOURISM DESTINATION CHOICES

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Abstract: An important question often asked in trying to develop information for marketing activities is whether it is necessary to develop separate programs for the customers, clients, or visitors you are involved with. In other words, are there any differences that we should be aware of? This is particularly true in the area of tourism where we observe all types of marketing approaches, some of which seem to suggest homogeneity, while others show a sensitivity to diversity.

In the 12 years that the Pleasure Travel Markets to North America surveys have been in place, this question has become a critical one for action. A substantive way that these data have been used to examine travelers has been to separate out the tourist groups by destination (for example U.S. and Canada bound groups), and then describe and compare them. This paper extends that analysis and examines what happens in comparing destination based travelers from the United Kingdom that have an interest in culture and heritage based opportunities.

Factor analysis revealed that three categories of cultural and heritage attributes are important considerations in the choice of the US and Canada as destinations, by UK travelers:

Historic and natural heritage attractions (natural ecological sites, and cultural and historic sites); experiencing cultural lifestyles (meeting people of different ethnicities, trying new foods, and experiencing different lifestyles); and learning new/exotic things about the destination (educational component). The implications of these results are presented.

Introduction

The concepts of heritage and cultural tourist attractions as motivation factors for travel have been the focus of a number of research studies (World Tourism Organization, 1986; Swarbrooke, 1994; Tighe, 1986; Makens, 1987; Formica and Uysal, 1998). Heritage tourism attractions encompass tourist assets of historic significance such as archaeological, military, or religious sites, monuments, buildings and cradles of civilizations (Tuly, 1997; Stevens, 1989; Vanhove, 1984). These may have played important roles in creating the identity of the destination (Prentice, 1993; Fowler, 1992), by defining its perennial and unique characteristics. On the subject of cultural tourism, a society's culture may be described as the way of life that has largely been passed down to the present generation from the past (Fragola, 1986). The cultural tourism attractions of a destination would therefore refer to the less tangible elements of the lifestyles of the people, such as values, customs, music, language, traditional folklore, artifacts, gastronomy and pageantry that the people use to express their world view (Sharpley, 1994). The institutions that serve as custodians of the unique cultural practices and lifestyles of the area, such as museums and political or religious organs would also form a part of the cultural attractions of a destination (Evans and Leslie, 1995). These lifestyle characteristics which tend to arouse the curiosity of strangers to the area, constitute its cultural attractions (Hall and Zeppel, 1990; Formica and Uysal, 1998).

Cultural and Heritage Tourism Today: Culture and heritage are major 'pull' factors in international tourism (Cossons, 1989), attracting tourists to cultural and heritage sites and events. These aspects of tourism have seen an increase in demand by tourists in the last few decades (Hitchcock et al., 1997). Some of the possible explanations for the continued growth of heritage and cultural tourism include the higher levels of education of the general public; media representations (especially on television) of worldwide heritage and cultural themes such as monuments, lifestyles and special events; the status-symbol value of heritage tourism; and the growing desire of tourists to make their holiday experience also a learning experience (Swarbrooke, 1994).

Consequently, the late 1980's and the 1990's have seen a shift in tourism tastes from a more materialistic market-driven mass tourism toward a quest for tourism products of an experiential nature (Swarbrooke, 1994). The attraction of heritage objects and 'exotic' cultural experiences have tended to play a major role in satisfying some of these changing tourism tastes.

Beside the educational and entertainment value that cultural and heritage attractions provide to visitors, they are also often valued by destinations as less finite economic resources. In some economically depressed areas, cultural entertainment, archaeological attractions, and historic buildings have been used in development schemes aimed at regenerating run down neighborhoods (Cohen, 1991; Lanfant, 1995; Worden, 1996). Rural traditions, cultures and gastronomy have become tourist attractions for urban dwellers trying to escape momentarily the tumultuous lifestyle of the cities.

There has been criticism that in these roles, heritage and cultural attractions are sometimes misused to validate myths and articulate 'masculinized' notions of place and identity that are male and elite-dominated versions of past and present 'pseudo-reality', but which bear little

resemblance to fact (Ranger, 1989; Kinnaird and Hall, 1994; Worden, 1996). However, another significant development in modern heritage and cultural tourism is the growth of interest in the heritage of 'the Common Man', in addition to that attributed to Kings and Queens (Swarbrooke, 1994).

Research Problem

The long tradition in Europe of interest in foreign cultures and historic attractions has been evident among UK travelers to the North American continent as well. While UK visitors to the southern and western parts of the U.S. were more interested in personally active pursuits like beach and warm weather activities, amusement/theme parks, shopping, access to large modern cities, nightlife and entertainment; it was the desire for educational experiences connected with cultural, heritage and natural experiences that were the major attractions to those visiting the central parts of the country (PTAMS UK 1989). Historical sites, native peoples, the great outdoors and wildlife appeared to be the principal attractions for these latter visitors to the U.S.

The interest of some of these visitors in the cultural and heritage aspects of the attractions of the continent therefore make an examination of these factors of the market a necessity.

Objectives of the Study: The principal objective of this study was to determine the importance of cultural and heritage attractions and activities in the trips of UK visitors to Canada and the U.S. The U.K. visitors to the two destinations would be compared to determine the differences and similarities that may exist on the cultural and heritage dimensions of tourism between them. The results of the study could be helpful in planning complementary and/or competitive marketing strategies for cultural and heritage attractions and activities in Canada and the U.S.

Methodology

The PTAMS Data: Since 1986, the PTAMS data have been gathered on tourism flows from important international travel markets to North America, and most recently, this has been done by Coopers & Lybrand Consulting, as part of a research program sponsored by the governments of Canada, the United States and Mexico. The visitors to the two destinations was statistically significant. part of the data set that had information on the destination choice factors and trip activities for the most recent trip by UK visitors to either the United States or Canada was examined.

Factor analysis was performed on a motivational scale which contained variables or destination attributes that may have been important influences on respondents in planning and selecting the destination of their most recent long-haul trip. Factors which suggested preference for cultural/heritage activities during the most recent long-haul trip of respondents were extracted.

Once the cultural and heritage-oriented factors were identified, t-tests were done on their constituent variables in order to find out the extent to which their means differed between UK visitors to Canada and the U.S. T-tests were also done on a number of other salient variables, including demographics, length of stay, important sources of pre-trip information, expenditures and main purpose of the trip. The variables which showed significant differences between UK visitors to the two destinations were then crosstabulated with cultural and heritage variables to determine the importance of various cultural and heritage variables in different categories of demographic and other important variables. For example, since the variables representing both 'age categories' and the cultural motivation of 'experiencing a simpler lifestyle' were significantly different among UK visitors to Canada and the U.S., a crosstabulation of the two variables could shed some light on whether the difference in the mean age of the two groups of visitors was a factor in the disparity between their preference for, or aversion to 'experiencing a simpler lifestyle'.

Analysis of the Study

Characteristics of U.K. Cultural/Heritage Visitors to the U.S. and Canada: Among U.K. cultural/heritage visitors to the U.S., pleasure and vacation were found to be the principal motivations for the trip (Table 1). The next most important reason for their trip was to visit friends and relatives.

With U.K. cultural/heritage visitors to Canada, the most important purpose for the trip was to visit friends and relatives, followed by pleasure and vacation. A chi-square test indicates that the difference in main purpose for the trip between the cultural/heritage

Table 1.
Purpose of Trip Among Cultural/Heritage U.K. Visitors to Canada and the U.S.

	Pleasure or Vacation Travel purpose	Visiting Friends and Relatives
U.S. Cultural/ Heritage	61.9%	22.0%
Canada Cultural/ Heritage	39.2%	51.4%

Source: PTAMS, U.K. (1996)
Canada: N=181
U.S.: N=236
Chi-Square Significance for both: .000

Comparing the results in Table 1 to the trend data in Figure 1, one discovers that the percentage of U.K. visitors to the U.S. whose main purpose for the trip was vacation was high throughout the decade studied, in spite of some fluctuations during the period.

The trend data presented in Figure 1 also suggests an inverse relationship between vacations as the main purpose of trips and the amount of air travel undertaken within the U.S. destination. It appears that when the proportion of vacations grows as compared to other purposes of trips, then the amount of air travels within the destination drops. A similar relationship occurs between package tours and business as the main purpose of the trip. Again, as business trips increase, the package tour trip-type declines.

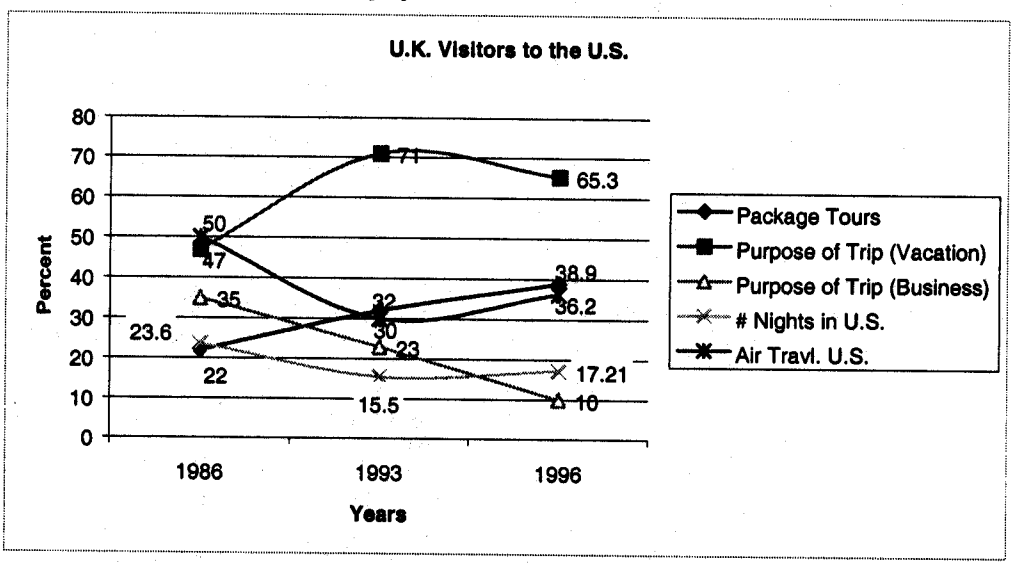


Figure 1. Trends in the U.K. Tourism Market to the U.S.

Source: United States Travel and Tourism Administration, (1993) and PTAMS U.K. (1996)

Differences in Cultural and Heritage Activity Participation Among U.K. Visitors to North America

According to the "In-Flight Survey" data (1993), 'Visiting historical places' was one of the more popular activities for U.K. visitors to the U.S. in 1993, with 35% of visitors participating. By 1996, 42.9% were participating in this activity (Table 2). Seven of the activities identified through factor analysis as being associated with cultural and heritage activities had significantly different participation levels among U.K. visitors to Canada and the U.S. (in bold in Table 2).

Participation in Cultural Activities: Eight activities were considered to represent cultural activities. They were: Sampling local foods, getting to know local people, interest in local crafts and handiwork, seeing or experiencing

people from a number of different ethnic backgrounds or nationalities such as Spanish and French-speaking North Americans, seeing or experiencing unique or different native groups such as Native Americans, enjoying ethnic culture and events such as music and neighborhoods, visiting museums and galleries, and experiencing the arts and cultural manifestations like live theatre, ballet and opera.

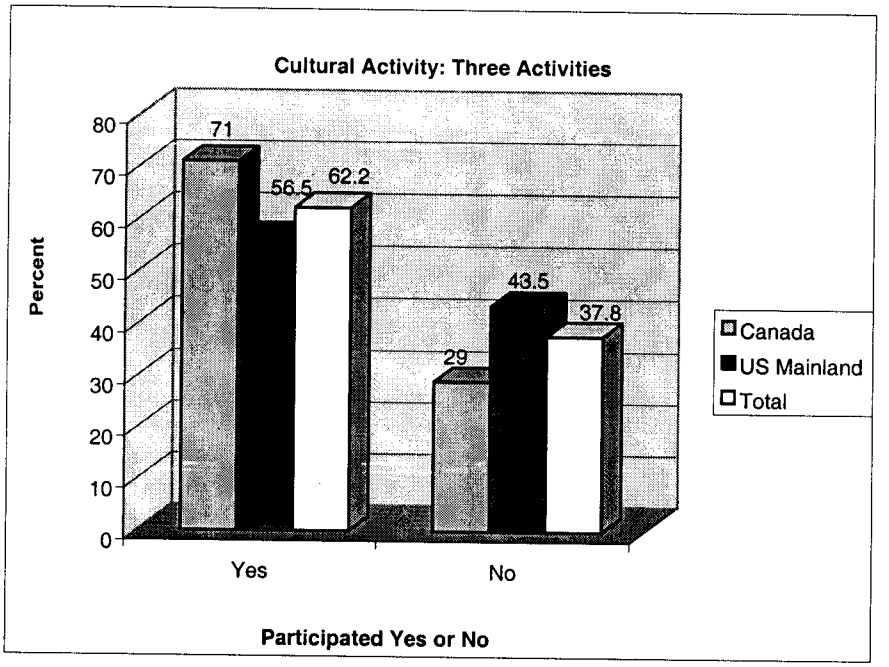
Since the composite cultural activity variable was a combination of 8 of the original variables on the activity scale, participation in three cultural activities during a single trip was subjectively chosen as the threshold, indicating a commitment to cultural activity. Considering visitor participation in three or more of the listed cultural activities, 71% of visitors to Canada and 56.5% of the visitors to the US were committed cultural tourists. This difference was statistically significant. Figure 2 illustrates the participation levels in the aggregate cultural activity variable among U.K. visitors to Canada and the U.S. It shows that, generally speaking, cultural tourists to Canada (those who participated in three or more cultural activities), participated in more cultural activities than cultural tourists who visited the U.S.

Table 2. Cultural and Heritage Activities in which U.K. visitors participated on their trip to Canada or the U.S.

Activities in which U.K. visitors participated on their trip	1996 U.S. Mainland % of Participation	1996 Canada % of Participation
Local crafts and handiwork[ab]	**40.7**	**57.5**
Getting to know local people[ab]	**56.5**	**71.5**
See or experience people from a number of different ethnic backgrounds or nationalities[ab]	**34.3**	**40.7**
Enjoying ethnic culture/events[ab]	**33.4**	**41.6**
Visiting museums/galleries[ab]	**39.5**	**46.7**
Attending local festivals/fairs/other special events[ac]	**33.4**	**29.0**
Visiting small towns and villages[a]	**49.8**	**69.2**
Visits to appreciate natural ecological sites[a]	**38.9**	**45.3**
Sampling local foods[b]	78.4	77.1
See or experience unique or different native groups[b]	16.4	19.6
Arts and cultural attractions[b]	25.2	22.4
Visiting places of historic interest[c]	42.9	47.2
Visiting places of military significance[c]	14.6	14.5
Visiting sites commemorating important people[c]	24.0	17.3
Visiting places with religious significance[c]	19.8	20.1
Visiting places of archaeological interest[c]	16.4	16.8
Visiting friends or relatives[a]	**42.2**	**70.1**

[a]Participation levels in activities in bold were significantly different among U.K. visitors to the U.S. and Canada. [b]Cultural variables. [c]Heritage variables.

Figure 2. Trips Involving Participation in at Least Three Cultural Activities



Source: PTAMS, 1996. Significance: .002 (two-tail)

The cultural activity variables of interest in 'Local crafts and handiwork' and 'Getting to know local people' also had statistically different participation levels between U.K. visitors to the U.S. and Canada. In each case, the U.K. visitors to Canada participated more in the activities, and the difference was significant.

Participation in Heritage Activities: The heritage activity factor extracted through factor analysis was made up of 6 component variables: Visiting places of historic interest, visiting places of military significance, visiting sites commemorating important people, visiting places with religious significance, visiting places of archaeological interest, and attending local festivals/fairs/other special events.

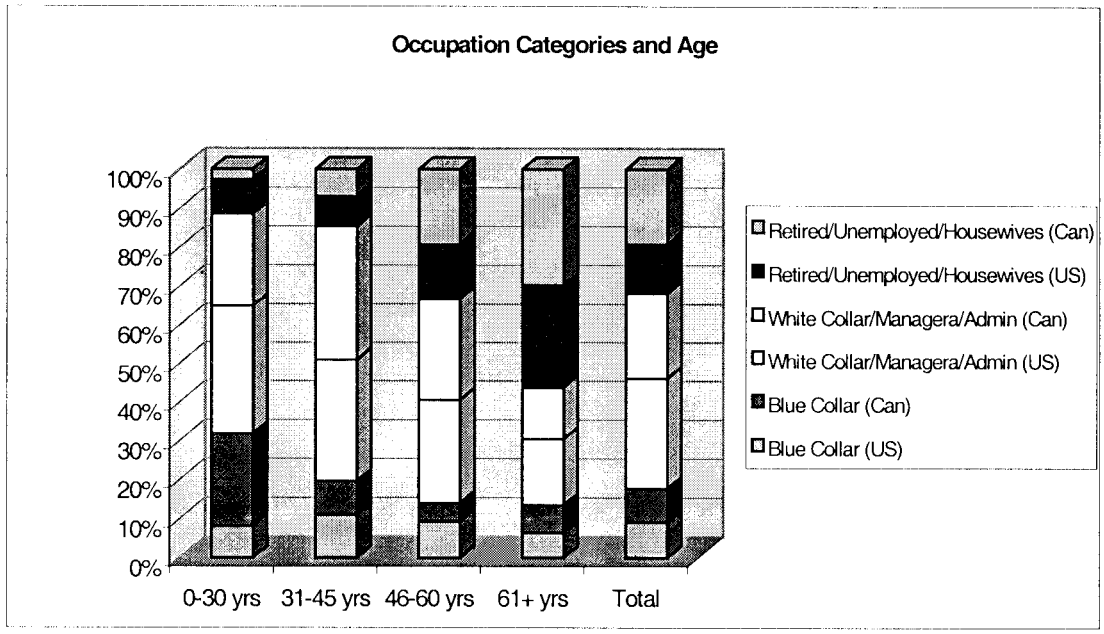
A comparison of the heritage activity factor between U.K. visitors to the U.S. and Canada did not show any significant differences in participation levels between the two destinations. Individual comparisons of the 6 component variables of the heritage factor revealed that the difference in participation levels for the heritage variable 'Attending local festivals/fairs/other special events' was significant. In this case, participation was higher among U.K. heritage tourists visiting the U.S.

Other Characteristics of Cultural/Heritage Tourists Visiting Canada and the U.S.: There were proportionally more singles among the group of U.K. visitors to the U.S. (which was younger, on average, than the group visiting Canada), and proportionally more divorced/separated/widowed visitors among those visiting Canada. These differences were statistically significant. The other marital categories were more similar between the two groups.

Among U.K. cultural/heritage tourists visiting Canada, 27.6% belonged to the category of retired/non-working housewife/unemployed, compared to 17.8% for those visiting the U.S.

There were no significant differences in gender distribution between the visitors to the two destinations. Even though it is not easy to make accurate comparisons based on different data sets using different methodologies, this shows a leveling up of the gender distribution of U.K. visitors to the U.S. between 1993 and 1996. The "In-Flight Survey" data (1993) statistics indicated that the average British visitor to the U.S. in 1992 was a male (62%).

Figure 3. Occupation Categories and Age Among Cultural/Heritage Tourists



Source: PTAMS, 1996 Significance: .000

Characteristics of U.K. Visitors Committed to Cultural and Heritage Activities

With the threshold at which visitors in this study were considered cultural and heritage tourists pegged at participation in at least three of the activities that were identified through factor analysis as being associated with cultural/heritage tourism, the characteristics of the visitors so identified were compared with the average U.K. visitors to the U.S. or Canada, with the following results:

Table 3. Average U.K. Visitors Who Participated in Three or More Cultural or Heritage Activities

	Average U.K. Visitor to Canada Who Participated in 3 or More Cultural/ Heritage Activities	*Average U.K. Visitor to the U.S. Who Participated in 3 or More Cultural/ Heritage Activities*	*Average U.K. Visitor to the U.S.A. or Canada*
Age	*51.34 (N=152)*	*42.79 (N=186)*	*45.70*
Number of nights spent at destination	*19.66 (N=152)*	*18.00 (N=178)*	*18.41*
Total expenditure per traveler	*£1163.11 (N=129)*	*£1165.49 (N=164)*	*£1104.73*
Took a package tour	*24.3% (N=181)*	*36.0% (N=236)*	*32.8% (N=543)*
Party size	*2.52 (N=180)*	*2.91 (N=236)*	*2.8 (N=416)*
Have close friends or relatives living at the destination	*74.0% (N=181)*	*57.7% (N=234)*	*

Source: PTAMS, 1996

*Each destination was assessed separately in terms of availability of friends and relatives

U.K. cultural/heritage visitors to Canada (N=152) and the U.S. (N=178) spent a mean of slightly less than three weeks at their destinations. Table 3 shows other general differences that were statistically significant between the two groups. The average cultural/heritage U.K. tourist to Canada (N=152), was much older than his or her counterpart who visited the U.S (N=186).

Percentage-wise, Table 3 demonstrates that more than a third of the people visiting the U.S. (N=236) chose a tour package as their trip-type while slightly less than a quarter of those visiting Canada (N=181) did likewise.

Cultural/heritage travel groups to the U.S. (N=164) made significantly more total travel-party expenditures at the destination than those visiting Canada (N=129). This is not surprising since the travel-party size favored visitors to the U.S. The mean party size of 2.91 for U.K. cultural/heritage visitors to the U.S. (N=236) was significantly higher than the party size of 2.52 for those visiting Canada (N=180). This compares with the party size of 3.02 (N=329) for the average U.K. travel group to the U.S., and 2.46 (N=213) for the average U.K. travel group to Canada (PTAMS U.K., 1996).

Table 3 also shows that the percentage of U.K. cultural/heritage visitors to the U.S. (N=234) who had friends or relatives at the destination was 57.7, compared with 74.0% for those who visited Canada (N=181). The difference was significant. The comparable percentages for average visitors to Canada and the U.S. were 74.8 (N=214) and 53.5 (N=327) respectively.

There was an indication in Table 3 that U.K. cultural/heritage tourists to both destinations spent more per trip, (approximately £1160, including airfare), than the average U.K. tourist visiting the same destinations (£1104.73).

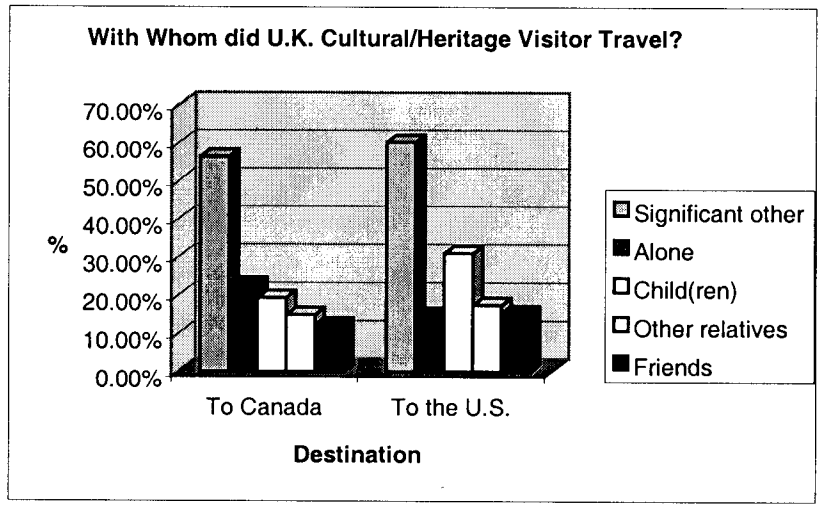
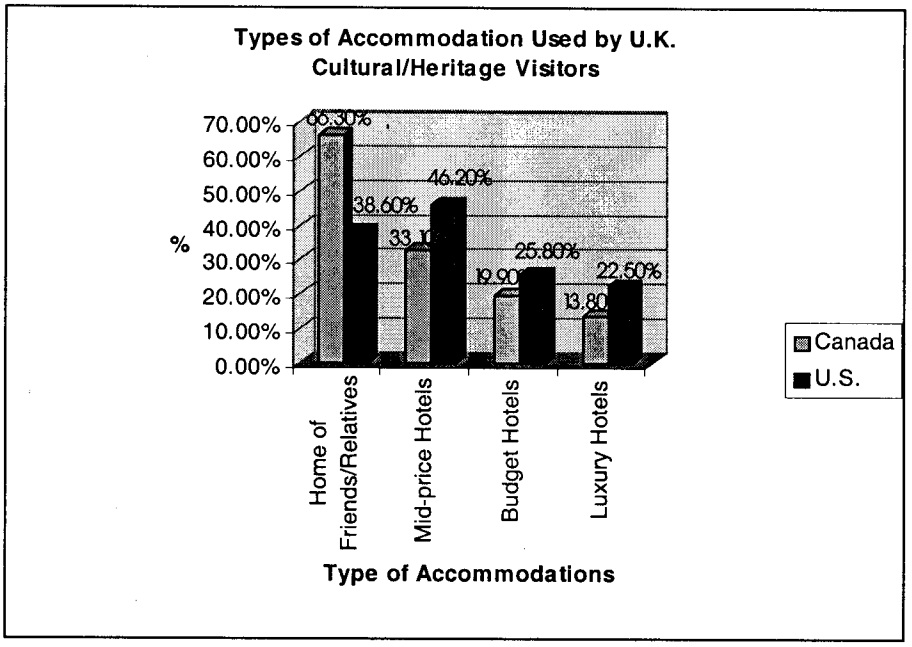


Figure 4. Travel Companions
Source: PTAMS, 1996
Canada: N= 181 U.S.: N= 236

More cultural/heritage U.K. visitors to Canada traveled alone (Figure 4) than those who visited the U.S., even though generally, travelers to both destinations were more likely to be accompanied. Combining travel companions who were family members or significant others, one discerns a higher family orientation among travel-parties who visited the U.S.

In Figure 5, nearly double the proportion of U.K. cultural/heritage visitors to Canada (two-thirds) spent some time in the homes of friends or relatives compared to the proportion of the visitors to the U.S. (a little over a third). Generally, the visitors to the U.S. tended to stay more often in commercial accommodations.

Figure 5. Types of Accommodations Used



Source: PTAMS, 1996
Canada: N= 181 U.S.: N=236

Discussion

Characteristics of U.K. *Cultural/Heritage* Travelers to Canada and the U.S.: A major distinguishing characteristic between U.K. travelers to Canada and the U.S. is the difference in trip-types. More than half of U.K. cultural/heritage tourists go to Canada principally to visit friends and relatives, and 74% had close friends or relatives at the destination. This compares with For those visiting the U.S., 57.7% had close friends or relatives at the destination. The dominance of this trip-type at the Canadian destination appears to have had an impact on the pattern of use of commercial accommodations by U.K. cultural/heritage visitors to Canada, as two-thirds of them stayed in the homes of their friends and relatives for at least part of the time. They tended to use commercial accommodations less often.

Among cultural/heritage U.K. visitors to the U.S. on the contrary, 62% made the trip principally for pleasure and vacations. The fewer family and friends attachments that this group had at the destination is likely one of the contributing factors to their greater use of commercial accommodations and package tours.

Cultural and heritage activities such as festivals, fairs and special events need therefore to be planned in the U.S. to coincide with vacation periods in order to capture U.K. tourists. Marketing the cultural and heritage attractions of Canada to U.K. tourists, such as the opportunity to mix with the local people and to experience ethnic culture and events, should be easier than similar efforts by tourism authorities in the U.S., because of the greater emphasis on visits to friends and relatives by U.K. visitors to Canada.

While the snapshots of three different years presented in Figure 1 may not be enough to establish a clear trend of U.K. tourist behavior in the U.S., the inverse relationship between air travel within the destination and vacations as the main purpose of the trip suggests that U.K. vacation tourists to the U.S. do not travel much by air once they arrive at their principal destination. Consequently, local airlines may have needed to target U.K. tourists with some incentives in order to benefit form that market.

Less than a quarter of the U.K. cultural/heritage visitors to Canada used package tours, compared with more than a third of those visiting the U.S. The Travel Industry Association of America (1997) study had established a pattern among U.S. adult travelers which suggested that, generally, older travelers tended to patronize package tours more than younger ones. The findings here suggest that U.K. travelers may differ from their U.S. counterparts, since the older U.K. visitors to Canada take fewer package tours than the younger visitors to the U.S. Part of the explanation for the lower appeal of package tours to U.K. visitors to Canada could be related to the fact that more of the visitors have close friends and relatives at the destination. These may serve as their local guides, making package tours less attractive.

Additionally, it has been said that the British market is a mature and sophisticated one in which travelers are more confident traveling independently and straying from the package offerings on the beaten path. Therefore, they are

said to be far less dependent on tour package travel than Asian markets for example (PTAMS, U.K. 1997). This could be part of the reason why Canada, which is quite familiar to U.K. tourists, could inspire a desire for independent exploration rather than managed package tours.

Besides, package tours to Canada are very structured and are short on flexibility, to the extent that only 6% of them include car rental, compared to 27% for the average long-haul destination (PTAMS, U.K. 1997). Consequently, the types of offerings of package tour products in Canada may help explain why its packages are not very attractive even among the most likely clients.

Business travel was also shown in Figure 1 to have an inverse relationship with the use of package tours. One would normally expect business visitors to be less likely to select package tours as a component of their trip. However, the decrease in the use of package tours in relation to an increase in business trips in this case could suggest a need for additional information about business travel for package tour operators. Is it still possible to capture the transaction of engaging in leisure activities during a business trip, or is the decline related to other changes in business travel behavior?

Developing innovative and flexible tour products that meet the needs of various types of travelers, including business travelers, may improve the tour package market in Canada for U.K. travelers. Such improvements could include greater emphasis on fly-drive packages, culture/history tours and special interest holidays. In the meantime, this is an area where the U.S. could siphon off potential visitors to Canada.

Differences in shopping expenses among cultural/heritage visitors to Canada and the U.S. were significant, with the visitors to the U.S. spending on average £150 more. The analysis showed that U.K. cultural/heritage tourists to the U.S. or Canada spend more than the average U.K. traveler to both destinations. Hence the cultural/heritage tourist is a premium client in terms of expenditure and should be targeted in marketing messages over and above the average tourist. Canada may need to include discount techniques and coupons in its advertisements targeted at cultural/heritage tourists in the U.K. in order to encourage them to spend more when they visit.

Given that the mean age of the visitors to Canada was higher than that of those going to the U.S., and that older visitors tended to value cultural/heritage attractions more than younger ones, the development of cultural/heritage programs in Canada will need to be sensitive to the needs and abilities of older travelers and retirees.

There was a significant difference in average travel-party size between U.K. cultural/heritage travelers to the U.S. (2.91, N=236), and to Canada (2.52, N=181). The travel-party size has implications for planning the capacity of tourists facilities at the destination, by managers. Additionally, the travel-party of U.K. cultural and heritage visitors to the U.S. appeared to be more family-oriented than their counterparts visiting Canada. The lower mean age of U.K. cultural/heritage visitors to the U.S. means that they were more likely to have children in their households, and their travel-parties were also more likely to be larger. U.S. tourism businesses should therefore plan cultural/heritage programs for larger U.K. travel-groups and families. Visits to museums, festivals, fairs and special events as well as visits to small towns and villages and other family-friendly cultural/heritage activities should therefore be given close attention when creating programs for U.K. travel-parties visiting the U.S.

Business travel-parties were not an important component of the cultural and heritage visitors' activities at either destination.

Conclusion

While U.K. visitors to Canada and the U.S. have a lot in common, they also differ in substantial ways. Generally, vacations and pleasure-seeking are the main purposes of the visits of those who go to the U.S., while visits to friends and relatives tend to dominate as the principal reason for trips by U.K. visitors to Canada.

Participation in cultural and heritage activities is more widespread among the visitors to Canada, who happen to be an older group of visitors. The younger visitors to the U.S. take tours more often and they travel in larger family groups.

This analysis shows that, while the two destinations differ, they complement each other in many ways in the eyes of U.K. visitors, and could therefore constitute a single regional destination catering to a varied clientele, especially at the border regions. Competition among businesses in the two destinations for clients is inevitable, but joint targeted marketing could bring in more U.K. tourists who would travel between the two destinations to experience their varied attractions.

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A MEASUREMENT OF THE EXPERIENCE PREFERENCES OF CENTRAL APPALACHIAN MOUNTAIN BICYCLISTS

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Abstract: As the sport of mountain biking has grown in popularity, many localities have begun to develop facilities and promote cycling based tourism. Unfortunately, these promotional efforts often occur with little knowledge of the characteristics and preferences of mountain bikers. This study was an initial effort to collect descriptive data on the riding, travel and spending behavior of mountain bicyclists in the Central Appalachian region.

Introduction

As the sport of mountain biking has grown and developed over the past twenty years, many areas of the country have been identified by off-road cyclists as good places to ride and therefore desirable destinations for mountain biking vacations. These "good places" tend to be recognized by cyclists as desirable locations because of a variety of factors including public access, trail infrastructure, topography and scenery. Communities that have some of the factors (particularly the uncontrollable factors of topography and scenery) are recognizing that they may able to improve mountain bike based tourism by improving the controllable factors such as public access and trail infrastructure. In addition, many of these suitable locations have begun to recognize the benefits of hosting cycling oriented special events (Bradley, 1997). The development of trails and facilities has also begun to be recognized as an important quality of life factor for local residents (NBPC, 1995). For these reasons, areas identified as desirable destinations have begun to develop trail systems, specialize their amenities and market themselves nationally to mountain bikers. As yet, much of this marketing and development is not supported by research on the participation habits and travel behavior of mountain bikers. Existing research on riding habits and travel preferences has tended to be regionally oriented (Holmes & Schuett, 1995) or to focus on biking in specific management settings (Hollenhorst, Schuett, Olson & Chavez, 1993). As tourism marketing is typically approached on a community or regional basis, it is important to obtain assessments of the preferences of cyclists on a regional basis. This study focused on mountain bikers in the central Appalachian region.

Methods

An on-site survey was administered to 230 mountain bikers in southern West Virginia and southwestern Virginia. Respondents were approached at trailheads or bicycle shops at random intervals. The survey included items that measured the typical riding preferences of cyclists, their motives for riding and their criteria for trail selection. In addition, respondents were questioned about their vacation patterns, lodging preferences and mountain bike related spending. The analysis presented here is descriptive in nature.

Results

Usable surveys were obtained from 226 respondents. The sample consisted of 74% male and 24% female respondents. The mean age of respondents was 26.4 years with a range from 18 to 52 years of age. The sampled respondents had a mean of 5.1 years of experience in mountain biking (SD = 4.20), with a range of less than one year's experience to more than 20 years of experience. Also, 16% of the sample reported belonging to a cycling club or organization. Of the respondents, 67.7% reported that often or occasionally plan vacations or weekend trips for the purpose of mountain biking while 32.3% reported that they did not plan trips based on the sport.

Riding Preferences The ride time preferred by the largest number of respondents was one to two hours although a significant number (19.5%) stated a preference for rides of more than three hours duration (See Table 1). A majority of the respondents (48.7%) indicated preferences for single-track trails as their preferred riding venue. Unmaintained roads (ie logging roads etc) were the second choice, preferred by 38.1% of the respondents (See Table 1). A majority of respondents (71.2%) preferred to ride in social groups with one or two other riders, while 17.3% preferred to ride alone and 11.1% preferred to ride with three or more other riders (See Table 1). Preferences for riding frequency in non-vacation situations varied widely (See Table 1).

Table 1. Riding Preferences

Typical Riding Time	Frequency	Valid Pct
less than 1 hour	30	13.3
1 to 2 hours	99	44.0
2 to 3 hours	52	23.1
more than 3 hours	44	19.6
Total	225	100.0
Missing	1	
Trail Preference		
gravel roads	27	12.1
unmaintained (ie logging) roads	86	38.6
singletrack trails	110	49.3
Total	223	100.0
Missing	3	
Riding Group Preference		
alone	39	17.3
with 1 or 2 others	161	71.6
with 3 or more others	25	11.1
Total	225	100.0
Missing	1	
Riding Frequency		
1 or more times per week	83	37.2
2 to 3 times per month	59	26.5
once per month	31	13.9
less than once per month	50	22.4
Total	223	100.0
Missing	3	

Respondents were also asked to choose their primary criteria for selecting a trail from a battery of nine options. The primary motivation for trail selection was physical challenge (33.2%), followed by scenic beauty (27.4%) and convenience (17.4%). Trail characteristics that allowed high-speed riding were the primary selection criteria for a notable minority (9.4%) of the riders (See Table 2). The availability of additional tourism related services was not a factor in the respondents' decision criteria for trails.

Table 2. Trail Selection Preferences

Selection Criteria	Frequency	Valid Pct
convenience	39	17.3
scenery	62	27.4
challenge	75	33.2
prior knowledge of trail	17	7.5
others services nearby	3	1.3
ability to ride fast/trail quality	10	4.4
ability to ride fast/ few users	11	4.9
ability to plan long complex rides	8	3.5
other	1	.4
Total	226	100.0

Travel and Spending Behavior

A majority of the respondents (67.7%) reported that they either often or occasionally planned vacations or weekend trips for the purpose of off-road biking. An additional 32.3% of the respondents reported taking a bike along on trips that were primarily for family or business purposes. The primary lodging preference is campgrounds, preferred by 48.2% of the sample. Hotels or motels were preferred by 20.3% of the respondents while 8% would stay with friends or family, 6.2% would prefer a resort setting, 5.8% prefer a bed & breakfast and 7% prefer an "other" arrangement. The respondents reported spending a mean of $39.00 per day while on cycling trips. The respondents reported a spending a mean of $400.00 per year on mountain biking equipment, clothing and accessories.

Most people who travel for pleasure tend to incorporate multiple activities into an outing. The mountain bikers in this survey also stated that they are likely to participate in additional activities on their trips. They report a preference to incorporate hiking and visits to scenic or historic areas into their mountain biking vacations. Swimming and eating out at restaurants were also popular (See Table 3).

Table 3. Additional Activities Preferred by Mountain Biking Travelers
(measured on a 5 point scale with "1" indicating lowest preference)

Activity	N	Mean	Std Dev
Hiking	225	3.928	1.099
Fishing	225	2.857	1.36
Golf	222	1.936	1.326
Canoe or Kayak	224	2.767	1.27
Visit Scenic Areas	225	4.093	.988
Visit Historic Areas	225	3.61	1.22
Swim	225	3.568	1.201
Rafting	225	3.106	1.368
Shopping	225	2.65	1.412
Restaurants	224	3.573	1.472

Conclusion

As more Appalachian communities attempt to lure mountain bikers as potential tourists, it becomes important to develop a better understanding of the unique preferences that these recreationists. While the findings of this study are largely descriptive in nature, it does provide a starting point in the development of a usable profile of mountain biker as a user of recreational facilities and tourism services. This profile may help to develop trail infrastructure and tourism amenities that are appropriate for the targeted market.

The respondents in this study are likely to engage in tourism behavior based on mountain biking. They prefer to ride in dyads or triads, choose trail systems based on challenge and scenery and incorporate visits to scenic and historic sites into their agenda. many prefer low cost accommodations such as campgrounds. Campgrounds may also be preferred because of close proximity to trails.

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EFFECT OF BALANCED INFORMATION ON ATTITUDES TOWARDS OPEN OCEAN AQUACULTURE DEVELOPMENT IN NEW ENGLAND

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Abstract: Assessing public support for natural resource management initiatives requires an understanding of how information will affect public attitudes. Using the development of marine aquaculture in New England as a case study, an experimental design was used to investigate the effects of balanced information on attitudes. The moderating effects of familiarity on attitudes were also examined. Results indicate that balanced information has a negative effect on attitudes, especially among individuals who are unsure of their level of familiarity with the issue.

Introduction

Global seafood demand is expected to grow by 70% in the next 35 years as the global population increases. At the same time, worldwide wild catches of many fish species are declining or have leveled off at maximum sustainable yield. For example, the near collapse in the stocks of cod, halibut, and a number of other species has caused the U.S. and Canadian governments to impose severe harvesting cutbacks in the Georges Bank fishing area of the northern Atlantic (Wirth & Luzar, 1999). As a result, the United States and Canada have placed increased priority on cultivating these species (U.S. Department of Agriculture, ERS 1995). To meet worldwide seafood demand, it is projected that aquaculture production will have to increase seven-fold, from 11 to 77 million metric tons by the year 2025 (U.S. Department of Agriculture, CSRS 1994).

The United States government is actively supporting the commercial development of open ocean aquaculture. The potential benefits of an open ocean aquaculture industry also include increased regional economic development, improved balance of trade, new employment opportunities, and the replenishment of wild stocks of commercially and recreationally important aquatic species (Royal, 1993). Opponents of aquaculture, in attempt to slow its development, have identified issues such as coastal water rights, jurisdictional conflicts, ecological disruption, processing plant pollution and conflicts with traditional users groups (Weeks, 1992). The scientific community is on the fence with respect to the costs and benefits associated with open ocean aquaculture and the general public is unaware of the issues associated with the development of open ocean aquaculture. There is a need for research that documents what the public knows about open ocean aquaculture and what their attitudes towards aquaculture development are.

A planned program of social science research should allow for the integration of the social dimensions with information from the natural sciences. This research when available will allow the public to be more involved in activities associated with the management and development of marine resources. This heightens the need for managers to improve the way that they communicate with the public to obtain informed public involvement and acquire support for proposed plans and programs (Bright & Manfredo, 1997). Information campaigns are often prescribed for situations in which the public is uninformed on a topic. In these situations, managers set out to provide the public with the different sides of the issue without persuading them to either side. A balanced two-sided message provides arguments for two conflicting sides of an issue without refuting either side. However, the actual effect of these campaigns is largely unknown (Bright & Manfredo, 1997). To data, little research has examined the effect of balanced information about natural resource issues on public attitudes. No research has been completed with a focus on the effects of balanced information on attitudes towards open ocean aquaculture. Likewise, little research has been completed that looks at the potential moderating effects of familiarity on the impacts of information on attitudes (Manfredo & Bright, 1991).

Objectives

This study sought to determine what effect, if any, balanced information on potential advantages and disadvantages of aquaculture has on public attitudes towards aquaculture and how prior familiarity of aquaculture moderates the effect of information. Specifically, the following questions were considered:

- How familiar are the participants with aquaculture?
- What are their attitudes towards open ocean aquaculture development?
- Does the inclusion of balanced information in a survey effect participant response to attitude questions?
- Does the level of prior familiarity with the issue interact with the effect of information on attitudes?
- If balanced information does have an effect on attitudes, what is the nature of that effect?

Methodology

Sampling and Data Collection. An onsite survey of visitors to the 10th Annual Hampton Beach Seafood Festival was completed. Survey participants were asked to volunteer in the seafood survey as they passed by a booth space located

among restaurant vendors. Incentives for participation included a bottle of cold water, a seat in the shade, and the opportunity to taste test two seafood products; wild caught summer flounder and aquaculture summer flounder. The four-page questionnaire collected information on seafood consumption behaviors, self-reported knowledge of marine aquaculture and marine fisheries, and attitudes towards marine aquaculture development in New England.

Participants filled out the self-administered questionnaire while seated at the booth space. The first page provided a general description of the study being conducted and a definition of marine aquaculture. It also asked some general questions about the participants' seafood consumption patterns. The second page measured self-reported knowledge by asking the participants to indicate their familiarity with marine aquaculture and New England marine fisheries. Personal relevance on the importance of marine aquaculture and fisheries issues was also measured. The third page included balanced information (on half of the surveys) and three attitudinal questions. The last page collected information on preferences for the two seafood samples and demographic information.

An experimental design was used to determine the effect of balanced information on attitudes. Balanced information was provided to half of the participants prior to the attitudinal measurements in the form of several statements on the potential advantages and disadvantages of aquaculture (Table 1). The statements were developed with experts in aquaculture management and were intended to provide equal weight by providing an equal number of statements on the advantages and disadvantages. The order of the statements was alternated so that half of the participants were presented with the advantages first and half were presented with the disadvantages first. A total of 232 surveys were completed, 113 with balanced information and 119 surveys without information.

Table 1: Balance Information

Open-ocean aquaculture is defined as the cultivation (or farming) of certain fish species in containment structures, in the open ocean, away from the protection of land.

Some people believe we <u>should</u> develop marine aquaculture in New England for the following reasons:

a. improves the condition of the fisheries
b. provides jobs for displaced fishermen
c. provides economic development for coastal communities
d. helps meet the global demand for fish products
e. restores wild fish stocks
f. provides a safer, higher quality product
g. makes seafood products more affordable and readily available
h. preserves the cultural heritage of New England fishing communities
i. helps the United States compete in the global marketplace

Some people believe we <u>should not</u> develop marine aquaculture in New England for the following reasons:

a. causes pollution from feed and fish wastes
b. causes marine mammal entanglements
c. spreads disease to wild fish stocks
d. threatens the genetic makeup of wild fish stocks, when cultivated fish escape into the wild
e. introduces non-native species into the ecosystem
f. requires lethal control of predatory animals who seek the easy prey of farmed fish
g. privatizes what should remain a free, open-access resource
h. is aesthetically undesirable
i. negatively impacts commercial fisherman and New England coastal communities

Three attitude questions were asked to both the information and the no information group to test the effect of balanced information on attitudes; the three dimensions of attitudes were used to provide a more complete and reliable measure of attitudes. Participants were asked to indicate their responses to each of the following questions: (1) "Do you think developing marine aquaculture in New England is a GOOD or BAD idea?" (2) "Do you think developing marine aquaculture in New England is a BENEFICIAL or HARMFUL idea?" (3) "Do you think developing marine aquaculture in New England is a WISE or FOOLISH idea?" Responses were measured using five-step Likert scale ranging from "extremely bad" (or harmful or foolish), "moderately bad" (or harmful or foolish, "neither", "moderately good" (or beneficial or wise), and "extremely good" (or beneficial or wise).

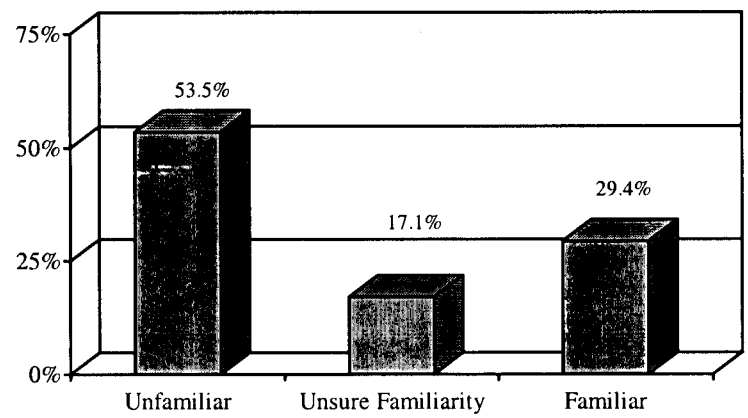
As noted earlier, participants were asked their familiarity with marine aquaculture prior to answering the attitude questions. Familiarity was used as a proxy measure of self-

reported knowledge to determine whether prior information or knowledge had a moderating effect on the change in attitudes. Participants were asked to indicate their level of familiarity of aquaculture using a five-step Likert scale of "very unfamiliar", "unfamiliar", "unsure", "familiar", and "very familiar". For analysis, the participants were divided into three groups representing three levels of familiarity that included "not familiar", "unsure of familiarity", and "familiar". The data were analyzed using the Statistical Package for Social Scientists (SPSS). One-way analysis of variance was used to determine the effect of balanced information and prior familiarity of the issue on attitudes.

Results and Discussion

Familiarity was used to get an idea of how knowledgeable participants believed they were about marine aquaculture issues. Figure 1 provides the percentage of participants in each of the three categories of familiarity: unfamiliar, unsure of familiarity, and familiar. A majority of participants (53.6%) were unfamiliar with aquaculture, while 29.4% were familiar with aquaculture. The remaining participants, approximately seventeen percent, indicated that they were unsure of how familiar they were. The mean familiarity score was 2.63 and no significant difference in familiarity was found between the no information and information groups.

Figure 1: Familiarity with Aquaculture (n=228)



Participants showed favorable attitudes towards marine aquaculture in each of the three attitude questions (Figure 2). The results indicate that over 70% of participants had positive attitudes towards aquaculture development across all three dimensions (GOOD or BAD mean = 4.09, BENEFICIAL or HARMFUL mean = 3.98, WISE or FOOLISH mean = 4.05). Using the three attitude measures, a scale variable was calculated with a mean of 4.06 and an alpha number of 0.92. This variable was used in comparisons of means to determine the effect of information and familiarity on attitudes.

The relationship between familiarity and attitudes is shown in Table 2. The results indicate that familiarity does have an effect on attitudes, with participants who were familiar with aquaculture having more positive attitudes towards it than those who are unfamiliar or unsure of their familiarity.

The results of measurements of ANOVA indicate that the information group had less positive attitudes than the no information groups (Table 3). A significant difference in attitudes between the information and no information group was found for all three of the attitude measurements, GOOD or BAD, BENEFICIAL or HARMFUL, and WISE or FOOLISH. Similarly, the scaled attitude variable also indicated that the balanced information provided in the questionnaire had a negative effect on attitudes.

The interactive effect of information and familiarity on attitudes was measured across the three levels of familiarity. Using univariate analysis of variance on the scaled attitude variable relative to familiarity and balanced information, the marginal means of attitude across the no information group and information group indicate that information had a negative effect on all participants (Figure 3). The negative effect on attitudes was found to be greatest among those participants who were unsure of their familiarity with aquaculture.

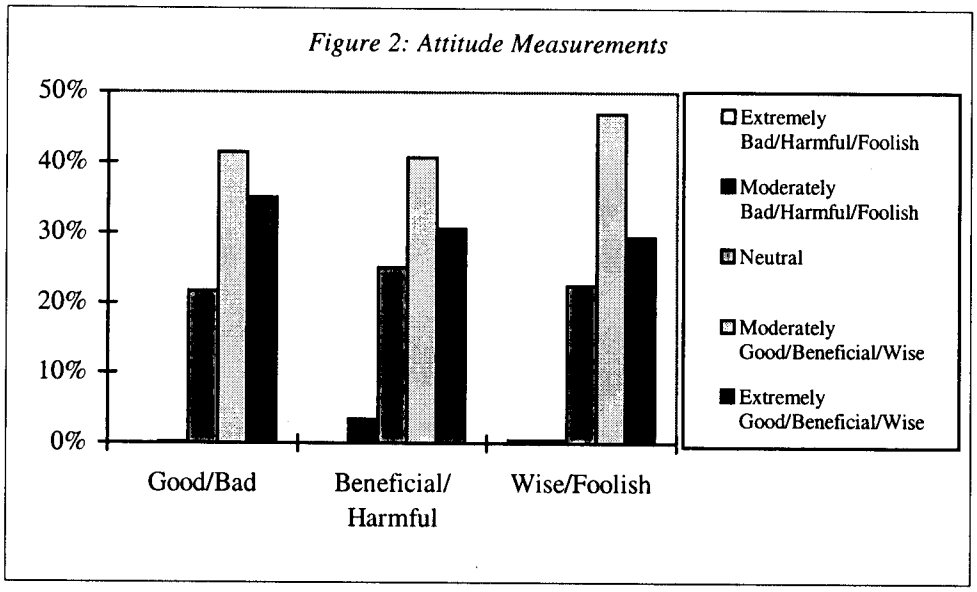


Table 2: Bivariate Relationship Between Familiarity and Attitudes

Level of Familiarity	Mean	Sig.
Not Familiar	3.8776	.000
Unsure Familiarity	3.8687	
Familiar	4.4570	

Table 3: The effect of balanced information on the attitudes towards marine aquaculture development in New England

Attitude	Group	Mean	F #	Sig.
good/bad	info	3.9537	7.279	.008
	no info	4.2526		
beneficial/ harmful	info	3.8333	8.007	.005
	no info	4.1648		
wise/foolish	info	3.9439	4.074	.045
	no info	4.1613		
scaled variable	info	3.9333	6.877	.009
	no info	4.2051		

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Implications

As a new and emerging issue in New England, the public's attitudes towards marine aquaculture development are generally unknown. The results of this study show that participants had favorable attitudes towards aquaculture, suggesting that the public is supportive of aquaculture development in New England. These favorable attitudes were held almost despite the fact that they were unfamiliar with aquaculture. Although attitudes may be positive at this time, a lack of familiarity with aquaculture can have an impact public opinion in the future. The results suggest that persons provided with balanced information on the positive and negative aspects of open ocean aquaculture development were less likely to believe that the development of aquaculture was a good idea. This finding points to the importance of effective communication between open ocean aquaculture developers and the public. The attitudes towards aquaculture of participants who were unsure of their familiarity with aquaculture were the most effected by information. This really points to the importance of understanding what the public knows about aquaculture prior to developing information campaigns. Understanding the complex relationship between information, familiarity, and attitudes requires further study.

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