Understanding Great Salt Lake Bird Festival Visitors: Applying the Recreational Specialization Framework

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Introduction

The growth of birdwatching over the last two decades has been staggering. According to the recent *National Survey of Recreation and the Environment* (NSRE) (2000-2002), one-third (33%) of American adults said they went birdwatching at least once during the previous 12 months. According to NSRE data, the number of people who regarded themselves as birdwatchers increased 27% between 1995 and 2001 and an incredible 225% between 1982 and 1991. Although most people watch birds exclusively in their yards, 40% of birdwatchers leave their homes to look at birds (U.S. Department of Interior, Fish and Wildlife Service and U.S. Department of Commerce, U.S. Census Bureau, 2002). The economic impacts of birdwatching are remarkable as well, with thousands of birders visiting birding "hotspots" and collectively spending millions of dollars during such outings, resulting in significant economic benefits locally (Crandall, Leones, & Colby, 1992; Kerlinger & Wiedner, 1994; Kim, Scott, Thigpen, & Kim, 1997; Eubanks, Kerlinger, & Payne, 1993). This has spurred community development and conservation leaders to develop festivals and special events attractive to birdwatchers. Today, there are approximately 200 birdwatching and wildlife-watching festivals held throughout the United States and Canada (American Birding Association, 2001). One of these is the Great Salt Lake Bird Festival, which was established in 1999 and has experienced growth over the years in the number of visitors attending, with approximately 3,000 visitors attending in 2002 and 3,500 attending in 2003 (N. Roundy, personal communication, July 15, 2003).

It is important to note birdwatchers have diverse skills and experiences. Likewise, visitors to birding festivals are heterogeneous (Scott & Thigpen, 2003). In order to provide enjoyable and satisfying birding festival experiences, which will help ensure the success of such events in the future, organizers must better understand the characteristics and motivations of their visitors. Recreational specialization is a useful framework for examining differences among individuals involved in the same recreation activity, and may assist festival organizers and researchers understand why people attend birding festivals and special events in general.

Literature Review

Successful marketing of festivals requires knowledge of visitor characteristics, motivations, and satisfaction. This process is aided by market segmentation, defined as: "dividing a heterogeneous market into a number of smaller, more homogenous submarkets" (Zikmund & d'Amico, 1996, p. 232). The objective of market segmentation is to group individuals together who are seeking similar benefits or experiences. Studies of festivals and events have sought to group individuals on the basis of demographic variables, repeat visitation, place of residence, (Backman, Backman, Uysal, & Sunshine, 1976; Formico & Uysal, 1996; Scott, 1996). To understand visitors to a birdwatching festival, it may be more appropriate to segment visitors in terms of their attachment to and experience with birdwatching. To this end, we sought to understand visitors' motivations and event satisfaction using the recreational specialization framework.

The Recreational Specialization Framework

The recreational specialization framework was created by Hobson Bryan (1977, 1979) to provide natural resource managers and researchers a conceptual framework for investigating diversity among recreationists involved in the same activity. Bryan (1977) defined recreational specialization as "a continuum of behavior from the general to the particular, reflected by equipment and skills used in the sport, and activity setting preferences" (p. 175). Bryan argued that along the continuum there were characteristic styles of participation, that reflected typical stages of involvement through which people progressed the longer they participated in an activity. Bryan further claimed as people progressed from one stage to another, their motivations, resource preferences, and attitudes about management practices would change as well. The specialization framework has been applied effectively to a variety of recreational activities and has been used to assess differences among participants in terms of various facets of involvement, including motivations, attitudes about management practices, preferences for physical and social settings attributes, and use of information to make trip

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decisions (Scott and Shafer, 2001).

Despite its usefulness, researchers have not always agreed how best to measure recreational specialization. Studies have varied markedly in terms of their inclusion of affective and behavioral measures. Scott and Shafer (2001) provided a critical examination of the construct and argued that specialization should be understood as a developmental process that entails *progression* in terms of 1) a focusing of behavior, 2) the acquiring of skills and knowledge, and 3) personal and behavioral commitment. They observed, however, that recreationists were unlikely to progress in behavior, skill, and commitment concurrently. Some individuals, they noted, may evince a high degree of skill and commitment but participate infrequently; others may participate often but demonstrate little in the way of skill. Kuentzel and McDonald (1992) made the same observation in their study of canoeists and kayakers. Among experienced paddlers, they found there was little relationship among level of experience, commitment, and a lifestyle dimension.

Researchers have also noted different measures of recreational specialization are likely to diverge in their relationship to other facets of involvement. In their study of canoeists and kayakers, Kuentzel and McDonald (1992) found past experience was *negatively* related to motives pertaining to taking chances and excitement; commitment, in contrast, was *positively* related to these motives. In their study of whitewater recreationists, Bricker and Kerstetter (2000) found place dependence was *negatively* related to perceived level of skill but *positively* related to enduring involvement and centrality. These findings point to the necessity of conceiving specialization as a multidimensional construct and that different dimensions are likely to vary in their association to motives and level of satisfaction.

Specialization Among Birdwatchers

A handful of published studies have examined specialization among birdwatchers and wildlife watchers. McFarlane (1994) used the framework to understand motivations of birdwatchers in Alberta. She measured recreational specialization in terms of respondents' past experience, centrality to lifestyle, and economic commitment. Using cluster analysis, McFarlane identified four groups of birdwatchers: casual, novice, intermediate, and advanced birders. These four groups differed in terms of motivations to participate in the activities. Advanced birdwatchers, for example, were far more likely than others to accentuate factors related to achievement and skill development. In contrast, casual, novice, and intermediate birders were more likely to emphasize motives related to appreciation and conservation.

Hvenegaard (2002) used the specialization framework to predict motivations among birders visiting Doi Inthanon National Park (DINP) in Thailand. Drawing from McFarlane (1994), Hvenegaard measured specialization in terms of past experience, economic commitment, and centrality to lifestyle. Cluster analysis segmented three groups of visitors: advanced-experienced, advanced-active, and novices. Advanced-experienced birders expressed far more interest than other visitors in seeing bird species they had never seen before. In contrast, novice birders were significantly more likely than others to report wanting to visit areas in Thailand that were of cultural and historic significance.

Two studies have actually employed specialization in the context of birding events. One of these was a study of participants in the First Annual Great Texas Birding Classic (Scott, Baker, & Kim, 1999). The event involved three non-consecutive days of birding along three sections of the Texas coast and attracted elite or "hard core" birders. The majority of participants (72%) maintained "life lists" of all the birds they had identified and these lists averaged 1,139 species. Most participants said they participated in the event because they enjoyed searching for birds, being with friends, and contributing to wildlife conservation.

The other was a study reported by Scott and Thigpen (2003) of visitors to a large birding festival in Texas—the Annual Hummer/Bird Celebration in Rockport, Texas. They measured specialization in terms of frequency of participation, skill at identifying birds, and personal and behavioral commitment. They used cluster analysis and identified four types of visitors: casual birders, interested birders, active birders, and skilled birders. These visitors differed significantly in terms of preferred physical, social, and activity setting attributes. *Casual birders*, for example, were less likely than others to ascribe importance to settings where they could see a variety of birds and where they could go on nature walks. *Casual* and *interested birders*, in contrast, were far more likely than *active* and *skilled birders* to express interest in places where they could visit historic sites, shop, and look at local crafts and antiques. These results indicate visitors to birding festivals can be arranged along the recreational specialization continuum and, consequently, have different motives and interests

Purpose and Study Area

The Great Salt Lake Bird Festival (GSLBF) was first held in 1999 and organized by Davis County Tourism, a part of Davis County Department of Community and Economic Development, with the goal: "To increase awareness and conservation of the Great Salt Lake ecosystem through education and tourism" (GSLBF, 1999). Objectives associated with this goal include: 1) to increase public awareness and pride for birds found on and near the Great Salt Lake; 2) to

increase the economic contribution to Davis County and surrounding communities; 3) to educate the public to the values of the Great Salt Lake; 4) to initiate a project to give back to the community; and 5) to coordinate agency efforts concerning awareness of the Great Salt Lake ecosystem.

Davis County is located in northern Utah, directly north of Salt Lake City, "squeezed in" between the expanse of Great Salt Lake and the towering Wasatch Mountains. Although Davis County is the smallest county in the state, containing slightly over 193,000 acres, it is a highly urbanized county with a 2001 population estimated at almost 245,000 people. Davis County has a diversified economy that is not necessarily dependent on tourism, although in 2001 traveler spending in the county was over $277 million and over 5,500 residents were working in travel and tourism related businesses (Utah Division of Travel Development, September 2002).

Since 1999, there has been a growing interest and participation in the GSLBF. The festival offers a variety of seminars and workshops (some specifically identified for "expert" birders) and field trips focused specifically on birdwatching and bird species found in the Great Salt Lake ecosystem. The festival also provides children's activities, music and entertainment, a Fun Run/Walk & Bike Ride, arts and crafts booths, food and drink concessionaires, and a Festival Dinner with a keynote speaker.

The Great Salt Lake has become somewhat of a birding "hotspot." According to the Great Salt Lake Bird Festival Organizing Committee's (2003) promotional materials, the September 2002 issue of *Audubon Magazine* listed the Great Salt Lake Birding Trails as some of America's best. The September/October 2002 issue of *Bird Watcher's Digest* named the Great Salt Lake as one of the 25 North American birdwatching sites to visit. *Sunset Magazine* of November 2002 highlighted the U.S. Fish & Wildlife Service's Bear River Migratory Bird Refuge, one of the field trip sites for the GSLBF, as one of the "Fantastic Five" top western birding destinations. The same issue also identified Antelope Island State Park, also one of the field trip sites for the GSLBF, as one of the top five wildlife areas in the Rocky Mountain region.

Although the numbers and diversity of visitors to the Great Salt Lake Bird Festival has been growing over the years, little is known about the motivations of people who attend this event (and other birding festivals for that matter). While Scott and Thigpen (2003) examined specialization among visitors to the Hummer/Bird Celebration, they did not use the framework to predict visitors' motivations. The recreational specialization framework can be applied to a nature tourism-based festival, such as the GSLBF, since the target population is individuals interested in birds and birdwatching. This study seeks to answer two questions:

1. Is level of specialization related to motives for attending the festival?
2. Is level of specialization related to visitors' satisfaction with the event?

Findings from this study will further our understanding of birders and help festival organizers develop specific programs and promotional materials that will be of interest to specific segments of the birdwatching population.

Methods

Collection of Data

Data for this study were collected during the Third Annual Great Salt Lake Bird Festival (GSLBF) held from May 12-19, 2001. The method for data acquisition involved both a visitor intercept survey and a mail back survey. The main location for the Saturday opening day of the festival is the Davis County Fairpark where the children's activities, music and entertainment, arts and crafts booths, food and drink concessionaires, and seminars and workshops are held. In addition, a number of field trips also take place that day where visitors are transported by van or bus accompanied by an "expert" guide to a variety of sites surrounding the Great Salt Lake, such as Farmington Bay Wildlife Management Area, Antelope Island State Park, Ogden Bay Wildlife Management Area, and The Nature Conservancy Layton Preserve. Throughout the following week additional field trips take place to a variety of the same and other sites, including the U.S. Fish & Wildlife Service's Bear River Migratory Bird Refuge and the South Shore of the Great Salt Lake, and the festival culminates with the Great Bear River Bird Festival held the following Saturday at the Bear River Migratory Bird Refuge.

Researchers affiliated with Utah State University's Institute for Outdoor Recreation and Tourism (IORT) designed both the visitor intercept survey and the mail back survey. The two-page, eleven question intercept survey was the initial phase of a larger effort designed to measure visitor motivations, satisfaction, spending, and economic impact. Through this intercept survey, basic demographic information was gathered, along with information about where visitors learned about the festival, with whom they attended, and their attitudes toward the Great Salt Lake ecosystem, information of value to the organizers of the festival. Respondents were also asked if they were willing to receive and complete a more detailed mail back survey, and if so were asked to provide their name and mailing address.

Attendance at the Fairpark on the opening day of the festival was estimated at approximately 550 visitors. The intercept survey was administered face-to-face to a random sample of these festival visitors as they were leaving the Fairpark and to field trip participants after their disembarking from their van or bus. Additionally, other field trip participants were randomly surveyed throughout the following week. At the Fairpark, 127 surveys were completed, while 186 were completed on the various field trips, for a total of 313 useable surveys. Of these, 133 visitors agreed to receive and complete the mail back survey. The mail back surveys were sent out in June of 2001, and over the course of two months, utilizing a modified Dillman (1978) method, 101 of these were returned resulting in a response rate of 76%.

Measurement of Variables

Consistent with Scott and Shafer's (2001) recent work, recreational specialization was measured on the basis of behavior, level of skill, and commitment. Behavior was measured by asking visitors to indicate how many trips they had taken that included birdwatching during the previous 12 months. Response categories were open-ended. Skill was measured by asking respondents to rate, on a seven-point scale, their ability to identify birds. Response categories ranged from *low skill level* (1) to *intermediate* (4) to *high skill level* (7). Commitment was measured by asking visitors to rate their level of involvement in birdwatching activities. Seven response categories were provided which ranged from *very casual* (1) to *very committed* (7).

Motives were measured using 10 items. Items covered a range of desired experiences (e.g., have fun, enjoy being with friends, provide a quality experience for the family) people seek when attending festivals. Of these items four were included specific to birdwatching (e.g., see a specific bird species, view as many different birds as I can). For each item, five response categories were provided (1 = *not at all important*, 2 = *somewhat important*, 3 = *moderately important*, 4 = *very important*, and 5 = *extremely important*).

Visitor satisfaction was measured using six Likert-type items. Five response categories were provided (1 = *strongly disagree*, 2 = *disagree*, 3 = *undecided*, 4 = *agree*, 5 = *strongly agree*). A high score on some items reflected a high degree of *satisfaction* (e.g., "I thoroughly enjoyed the festival"). On other items, a high core reflected a high degree of *dissatisfaction* ("I was disappointed with some aspects of the festival").

Analysis

Regression analyses were performed to test the significance of the relationships of specialization indicators to the motivation and satisfaction items. Standardized Beta coefficients are reported. A standardized Beta coefficient signifies the amount of change in a dependent variable after controlling for the effects of other variables. In general, variables with the highest standardized Beta coefficients (positive or negative) are the most predictive of a given dependent variable. R-square coefficients are also reported that summarize the total amount of variance explained by each of three specialization variables.

Results

Table 1 provides a summary of the characteristics of visitors to the GSLBF. Visitors were disproportionately female (70%), over 40 years of age (81%), graduates of college (68%), and came from middle to upper income households (55% reported annual household incomes of $60,000 or more). Over half (53%) lived 20 or fewer miles from the location of the festival, 23% lived between 21 to 30 miles, and 24% lived 31 or more miles away.

Table 1 - Characteristics of Visitors to the GSLBF

Gender (N=101)	
Female	70%
Male	30%
Age (N=100)	
Under 30 years	6%
31-40 years	13%
41-50 years	23%
51-60 years	36%
61-70 years	17%
Over 70 years	5%

Table 1 (cont.)

Education Level (N=101)	
High school diploma or less	3%
Some college or technical school	29%
Bachelors degree	29%
Graduate or professional degree	39%
Income Level (N=90)	
Less than $40,000	18%
$40,000-$59,999	27%
$60,000-$79,999	22%
$80,000-$99,999	13%
$100,000-$119,999	10%
$120,000 or more	10%
How many miles from your residence to the GSLBF? (N=97)	
10 or less	27%
11 to 20	26%
21 to 30	23%
31 or more	24%

Table 2 summarizes the indicators of level of recreational specialization among visitors to the GSLBF. The number of birding trips ranged from zero to 200, with a median of 10 trips. A majority (54%) of respondents indicated they had taken 10 or fewer, and 45% indicated they had taken 11 or more trips. When respondents were asked to rate their ability to observe and identify birds, almost 72% rated themselves as intermediate or lower, with a mean of 3.6 on the seven-point scale, close to an intermediate level. Just three percent of respondents rated themselves as having a high skill level. With regard to their personal involvement in birdwatching activities, respondents were fairly spread out over the seven-point commitment scale, with a mean of 4.3 (four being the middle of the scale), and with 38% rating themselves below 4 and 51% rating themselves above 4.

Table 2 - Recreational Specialization Level Among Visitors to the GSLBF

Number of Trips that Included Birdwatching (N=90)*	
0-10 trips	54%
11-20 trips	18%
21-40 trips	14%
41 or more trips	13%
Skill at Identifying Birds (N=92)*	
1 Low skill level	12%
2	15%
3	16%
4 Intermediate	28%
5	15%
6	10%
7 Expert	3%
Commitment (N=100)	
1 Very casual	9%
2	15%
3	14%
4	11%
5	20%
6	11%
7 Very committed	20%

*Percentages do not add up to 100% due to rounding error.

Table 3 summarizes the regression analysis for the relationships of recreational specialization to motivations. Skill and commitment were generally good predictors of visitor motivations. Behavior, in contrast, was not significantly related to any of the motivation items. Furthermore, skill was negatively related to four non-activity specific motives: provide a quality experience for the family (β = -.354), develop my skills and abilities (β = -.510), experience something new and different (β = -.313), and learn something new (β = -.374). Skill was also negatively related to two activity specific motives: learn more about birds (β = -.394) and interact with other birders (β = -.210).

Commitment was positively related to only one non-activity specific motive: develop my skills and abilities (β = .476). On the other hand, commitment was positively related to all four of the activity specific motives included in the study: to view as many different birds as I can (β = .307), to see a specific bird species (β = .368), to learn more about birds (β = .498), and to interact with other birders (β = .669).

Similar results were found when we examined the relationship between level of specialization and visitor satisfaction (Table 4). Behavior was not significantly related to any of the visitor satisfaction items. High level of skill was associated with visitor *dissatisfaction*: I thoroughly enjoyed the festival (β = -.590); I don't want visit any more festivals like this one (β = .647); The festival was worth the money I spent (β = -.524); I was disappointed with some aspects of the festival (β = .309); and I would recommend the festival to friends (β = -.566). A high level of commitment, in contrast, was associated with visitor satisfaction: I thoroughly enjoyed the festival (β = .264); I don't want visit any more festivals like this one (β = -.289); The festival was worth the money I spent (β = .361); and I would recommend the festival to friends (β = .399).

Table 3 - Regression Analyses for Predicting Level of Specialization to Motivations for Attending Festival

	Behavior **Beta**	Skill **Beta**	Commitment **Beta**	**R-Square**
Provide a quality experience for the family	-.024	-.354**	.179	.109**
To develop my skills and abilities	.200	-.510****	.476****	.282****
To enjoy being with friends	.106	-.191	.086	.026
To experience something new and different	.032	-.313**	-.030	.096 *
To have fun	.092	-.271	.002	.055
To learn something new	.061	-.374***	.192	.103 *
To view as many different birds as I can	.056	-.115	.307**	.087 *
To see a specific bird species	.137	.056	.368***	.223****
To learn more about birds	.034	-.394***	.498****	.234****
To interact with other birders	.062	-.210 *	.669****	.393****

* p < .10, ** p < .05, *** p < .01, **** p < .0001

Table 4 - Regression Analyses for Predicting Level of Specialization to Visitor Satisfaction

	Behavior **Beta**	Skill **Beta**	Commitment **Beta**	**R-Square**
I thoroughly enjoyed the festival	.149	-.590****	.264**	.241****
The festival was not as enjoyable as I expected it to be	-.157	.314	-.029	.066
I don't want to visit any more festivals like this one	-.197	.647***	-.289**	.286****
The festival was worth the money I spent to visit	.069	-524****	.361***	.226****
I was disappointed with some aspects of the festival	.008	.309**	-.031	.091 *
I would recommend the festival to friends	.178	-.566****	.399****	.263****

* p < .10, ** p < .05, *** p < .01, **** p < .0001

Discussion and Implications

In this study, the recreational specialization framework was an effective tool for predicting motivations and satisfaction among visitors to the GSLBF. Following the work of Scott and Shafer (2001), we operationalized recreational specialization in terms of behavior, skill, and commitment. Interestingly, behavior was completely unrelated to motivations and satisfaction, but skill and commitment were highly related to both sets of dependent variables *but in very different ways*. In short, unskilled but highly committed birders were the most satisfied with the event and were motivated by a variety of factors that go way beyond just identifying and observing birds. These findings corroborate those reported by others who have argued it is important to look at how different indicators of specialization relate to different facets of involvement (Kuentzel & McDonald, 1992).

How is it level of skill and commitment, two dimensions underlying recreational specialization, were related to visitor motivations and satisfaction in such different ways? It is important to note our measure of skill emphasized individuals' ability to identify a variety of birds. This measure assumes specialization in birding entails, in part, an orientation to maintaining life lists and traveling to see new, uncommon, and rare birds. In truth, many individuals may evince a great deal of commitment to birding but have little interest in developing their identification skills. Likewise, they may possess skills that are very different from birders who maintain life lists. Individuals who "specialize" in backyard birds or a specific bird species (e.g., hummingbirds, purple martins, bluebirds) may have detailed knowledge about a small number species and the life history of these birds. On the other hand, they may know little or nothing about a variety of species, even ones close to home. Our data suggests visitors to the GSLBF were committed birdwatchers but not oriented to listing or expanding their identification skills. Indeed, while 55% of festival visitors said they kept a list of bird species they had identified in their own yard, only 38% of visitors reported keeping a list of all the North American bird species they had seen.

A major management implication of this study is that the GSLBF attracts many people who are likely to combine birdwatching with other leisure activities. Many of these individuals are not highly skilled at identifying birds and may not be interested in attending programs or field trips in which the goal is to see uncommon or distinctive bird species. These individuals enjoy birds and birdwatching, but at the festival they also enjoy the entertainment, the artisans, educational activities, and even learning about other animals. Likewise, the GSLBF may not be attractive to "high end" birders. According to Scott and Thigpen (2003), skilled birders are more narrowly focused than other birders in terms of their interests—they often have very specific "target" birds they want to see and may lack patience with those birders who have difficulty identifying common birds.

It is not all that surprising that the GSLBF attracted birders who are relatively unskilled, as the goal of the festival was "To increase awareness and conservation of the Great Salt Lake ecosystem through education and tourism" (GSLBF, 1999). GSLBF organizers seem to be having success in increasing awareness and conservation among local residents with rudimentary skills and interests in birdwatching. However, GSLBF organizers have developed and offered several programs that target skilled birders (e.g., "Expert Workshops" on gulls, shorebirds, flycatchers, and waterfowl). It is not

clear why the event was not more attractive to visitors who were highly skilled. If the future goal is to attract and nurture loyalty among a highly skilled segment of the birdwatching population, festival organizers will have to better understand their needs and interests, develop more and exciting birdwatching venues, and effectively promote these programs.

We do not suppose results from this study can be generalized to the 200 or so birdwatching and wildlife-watching festivals held annually throughout North America. These study results indicated the GSLBF attracted a disproportionate number of females, people who lived within close proximity of the event, and individuals who are not highly oriented to listing different bird species nor developing their birdwatching abilities. Other events may attract a higher proportion of males, visitors from afar, and individuals who enjoy listing and improving their identification skills. Additional studies are needed to provide greater understanding into the range of motives, behaviors, and interests of people who attend birdwatching and wildlife watching festivals.

However, we do contend the recreational specialization framework can be readily applied to understanding the characteristics, motives, and interests of people who attend such festivals. Likewise, the framework can used effectively to better understand visitors to a variety of festivals and events organized around one or more leisure activities. The strength of the framework is its ability to segments visitors in terms of behavior, skill, and commitment. We foresee the recreational specialization construct being applied in studies of other festivals and events in general, such as sporting events, music festivals, auto events, and other nature-based festivals and events. However, it may be necessary to develop alternative indicators of specialization dimensions than the ones we used in this study. In sum, the framework can assist researchers and festival and event organizers to understand visitor characteristics, motivations, and satisfaction, and use this information to better target festivals to future visitors.

Literature Cited

American Birding Association. (2001). *2001 directory of birding and nature festivals*. Colorado Springs, CO: Author.

Backman, K. F., Backman, S. J., Uysal, M., & Sunshine, K. M. (1996). Event tourism: An examination of motivations and activities. *Festival Management & Event Tourism, 3*, 15-24.

Bricker, K., & Kerstetter, D. L. (2000). Level of specialization and place attachment: An exploratory study of whitewater recreationists. *Leisure Sciences, 22*, 233-257.

Bryan, H. (1977). Leisure value systems and recreational specialization: The case of trout fishermen. *Journal of Leisure Research, 9*, 174-187.

Bryan, H. (1979). *Conflict in the great outdoors*. Birmingham, AL: The Birminghan Publishing Co.

Crandall, K., Leones, J., & Colby, B. G. (1992). *Nature-based tourism and the economy of Southeastern Arizona: Economic impacts of visitation to Ramsey Canyon Preserve and San Pedro Riparian National Conservation Area*. Tucson: University of Arizona.

Dillman, D. A. (1978). *Mail and telephone surveys: The total design method*. New York: John Wiley & Sons.

Formico, S., & Uysal, M. (1996). A market segmentation of festival visitors: Umbria Jazz Festival in Italy. *Festival Management & Event Tourism, 3*, 175-182.

Eubanks, T., Kerlinger, P., & Payne, R. H. (1993). High Island, Texas. *Birding, 25*, 415-420.

GSLBF. (1999). Great Salt Lake Bird Festival goals and mission statement. Davis County, UT: Great Salt Lake Bird Festival Organizing Committee.

Great Salt Lake Bird Festival Organizing Committee. (2003). *Fifth Annual Great Salt Lake Bird Festival* [Brochure]. Farmington, UT: Author.

Hvenegaard, G. T. (2002). Birder specialization differences in conservation involvement, demographics, and motivations. *Human Dimensions of Wildlife, 7*(1), 21-36.

Kerlinger, P., & Wiedner, D. S. (1994, November). America's favorite birding sites. *Bird Watcher's Digest*, pp. 76-91.

Kim, C., Scott, D., Thigpen, J., & Kim, S. (1998). Economic impact of a birding festival. *Festival Management & Event Tourism, 5*, 51-58.

Kuentzel, W. F., & McDonald, C. D. (1992). Differential effects of past experience, commitment, and lifestyle dimension on river use recreation. *Journal of Leisure Research, 24*, 269-287.

McFarlane, B. L. (1994). Specialization and motivations of birdwatchers. *Wildlife Society Bulletin, 22*, 361-370.

National Survey on Recreation and the Environment. (2000-2002). The Interagency National Survey Consortium, Coordinated by the USDA Forest Service, Recreation, Wilderness, and Demographics Trends Research Group, Athens, GA and the Human Dimensions Research Laboratory, University of Tennessee, Knoxville, TN.

Scott, D. (1996). A comparison of visitors' motivations to attend three urban festivals. *Festival Management & Event Tourism, 3*, 121-128.

Scott, D., Baker, S. M., & Kim, C. (1999). Motivations and commitments among participants in the Great Texas Birding Classic. *Human Dimensions of Wildlife, 4*(1), 50-67.

Scott, D., & Shafer, C. S. (2001). Recreational specialization: A critical look at the construct. *Journal of Leisure Research, 33*, 319-343.

Scott, D., & Thigpen, J. (2003). Understanding the birder as tourist: Segmenting visitors to the Texas Hummer/Bird Celebration. *Human Dimensions of Wildlife, 8.*

U.S. Department of Interior, Fish and Wildlife Service and U.S. Department of Commerce, U.S. Census Bureau. (2002). *2001 National survey of fishing, hunting and wildlife-associated recreation.* Washington, D.C.: U.S. Government Printing Office.

Utah Division of Travel Development, Department of Community & Economic Development. (2002, September). *2002 state and county economic & travel indicator profiles*. Salt Lake City, UT: Author.

Zikmund, W. G. & d'Amico, M. (1996). *Marketing*. Minneapolis/St. Paul, MN: West Publishing.