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# Understanding the Birder as Tourist: Segmenting Visitors to the Texas Hummer/Bird Celebration

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*Many rural communities are examining nature tourism options, such as birdwatching (birding), as an economic development strategy. Unfortunately, public media stories, tourism professionals, and biologists often describe birders as a homogeneous group of serious, dedicated, and even fanatical visitors willing to spend large sums of money in their pursuit. Consistent with past research, we contend that birders constitute a heterogeneous group of recreationists. Using recreational specialization as a conceptual framework, we identified four groups of visitors to a popular birding festival and show that the groups also differ in terms of level of behavioral involvement and setting preferences. Findings from this study will aid community leaders and event organizers in their efforts to target programs, amenities, and promotional materials to distinct segments of the birdwatching population.*

**Keywords** *Wildlife watching, birdwatching, nature tourism, recreational specialization*

## Introduction

Tourism, especially nature tourism (or eco-tourism) is receiving attention from conservation leaders, land managers, business leaders, and the national press as

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a viable option for enhancing local economic and activity protecting natural resources. One group of nature tourists that has received a great deal of attention is birdwatchers (or birders). Approximately 69 million American adults (or 33% of the adult population) view, identify, or photograph birds (National Survey on Recreation and the Environment [NSRE], 2000–2002). The number of people who regard themselves as birdwatchers has increased 27% since 1995 and a staggering 225% since 1982. The literature suggests that birders have a substantial economic impact on communities located near birding "hot spots." Approximately 38,000 people who visited two such areas in southeast Arizona (Ramsey Canyon and San Pedro Riparian National Conservation Area) spent about $1.6 million from July 1991 to June 1992 (Crandall, Leones, & Colby, 1992). More than 100,000 birders visited Cape May, New Jersey in 1993 and spent over $10 million (Kerlinger & Wiedner, 1994). American visitors to Costa Rica spend an estimated $400 million on birdwatching annually (Sekercioglu, 2002).

Unfortunately, many local efforts to attract birders have been guided by a monolithic image of birders. An article in the Wall Street Journal (Miller, 1995), for example, characterized birders as "pilgrims with binoculars around their necks and cash in their pockets." While some organizers of birding tours recognize that birders are not all alike and develop and promote tours accordingly, the image of the monolithic birder persists. Community leaders and land managers must cut through this rhetoric if they are to better serve the birdwatching public and develop birding as part of a sound economic development strategy. This is particularly true among organizers of birdwatching festivals. There now exists over 200 of these events throughout the United States and Canada (American Birding Association, 2001). One of these events is the Annual Hummer/Bird Celebration, in Rockport, Texas, a four-day event that attracts thousands of visitors annually. Rockport is located on the Gulf of Mexico and is internationally known as a birding "hot spot" as over 500 different species have been recorded there.

Little is known about the characteristics of participants in these events. As a starting point, we can surmise that visitors are likely to vary in terms of (a) their skills and commitment to birdwatching, and (b) the importance they ascribe to amenities and activities available on site. These hypotheses are in conformity with the recreational specialization framework which has been used effectively to segment birders and wildlife watchers into discreet groups (e.g., Cole & Scott, 1999; Hvenegaard, 2002; Martin, 1997; McFarlane, 1994). Using the recreational specialization as a conceptual framework, our study develops a typology of visitors who attended the Hummer/Bird Celebration and compares the visitor segments in terms of behavioral involvement, demographics, and preferred destination attributes.

## Literature Review

Scholarly research paints a different picture of the birdwatching market than the popular press. Elite birders probably comprise a very small fraction of all people

who enjoy watching birds. Kellert and Brown (1985) estimated that "committed" birders (individuals who could identify more than 40 birds without a field guide) comprised only three percent of the birdwatching population. More recently, McFarlane (1994) estimated that serious or advanced birders comprised about seven percent of birders in Alberta, Canada. Birders are a heterogeneous group of recreationists, exhibiting a diversity of skills and interests.

### *The Nature of Recreational Specialization*

Bryan (1979) introduced the recreational specialization construct to help researchers and practitioners explore within-activity differences among outdoor recreationists. He 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. 29). Bryan argued that along the continuum there are characteristic styles of participation that can be represented in the form of a typology (a system of classification). These styles of involvement tend to reflect typical stages of involvement that people progress through the longer they participate in an activity. Anglers, for example, "typically start with simple, easily mastered techniques which maximize chances of a catch, then move to more involved and demanding methods the longer they engage in the sport" (p. 182). Bryan believed that as people progressed from one stage to another, their motivations, resource preferences, and attitudes about management practices would change as well.

Since Bryan's early writings, the construct has been applied to a variety of outdoor recreation activities. Researchers have regarded recreational specialization as an indicator of intensity of involvement and have used it to assess differences among participants in terms of attitudes toward depreciative behaviors (Wellman, Roggenbuck, & Smith, 1982), information used to make trip decisions (Ditton, Loomis, & Choi, 1992), motivations and expected rewards (McFarlane, 1994), setting preferences (Cole & Scott, 1999), place attachment (Bricker & Kerstetter, 2000), perceptions about crowding (Kuentzel & McDonald, 1992), and a variety of other variables of interest (Scott & Shafer, 2001). Collectively, findings from various studies confirm that specialization is a useful framework for examining differences among individuals involved in the same recreation activity.

Still, there is little agreement among researchers about how best to measure the construct. Studies have varied markedly in terms of their inclusion of attitudinal and behavior measures. Scott and Shafer (2001) argue 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. However, people are unlikely to progress in all three domains in a lock step fashion. Some recreationists, for example, may participate in activities on a regular basis and accrue commitments but exhibit little evidence of skill development. Other individuals may participate in leisure

activities infrequently but demonstrate a high level of skill development and personal commitment. Similarly, Kuentzel and McDonald (1992) found virtually no relationship among level of experience, commitment, and a lifestyle dimension among experienced canoeists and kayakers. These results raise serious concerns about measuring specialization by creating composite indices that combine scores across disparate indicators. An alternative approach would create groupings that do not assume linearity among behavior, skill, and commitment indicators.

Researchers have noted people's preferences for recreational settings vary by level of specialization. Setting preferences include those attributes of a destination that are valued because they facilitate particular types of experiences (Manfredo & Larson, 1993). Understanding setting preferences provides insight into potential conflict among visitors, substitution decisions, and visitor satisfaction. There is no consensus among researchers, however, about how to measure setting preferences. Some studies have measured setting preference in terms of the importance of seeing specific types of flora and fauna and the types of information that are useful in locating wildlife (Cole & Scott, 1999; Manfredo & Larson, 1993; Martin, 1997). Other studies examine setting preferences in terms of general physical, social, and management attributes (Kuentzel & McDonald, 1992; Virden & Schreyer, 1988). Studies have also assessed visitors' preferences activities and amenities nearby that complement participation in activities pursued onsite (Cole & Scott, 1999).

### *Specialization Among Birders and Wildlife Watchers*

A number of studies have examined specialization among birders and wildlife watchers. McFarlane (1994), for example, examined birders in Alberta and measured 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. Casual and novice birders made up a combined 81% of the birders in her sample. The four groups differed in terms of their motivations for birdwatching. Over half (55%) of advanced birdwatchers reported achievement factors as a primary motive, compared to 37% of intermediate birders, 25% of novice birders, and only 17% of casual birders.

Hvenegaard (2002) provides additional insight into the relationship between specialization and birdwatching motives. Like McFarlane (1994), Hvenegaard used cluster analysis, based on past experience, economic commitment, and centrality to lifestyle, to categorize birders into three distinct groups: advanced-experienced (10%), advanced-active (50%), and novices (40%). Advanced-experienced birders expressed more interest than advanced-active and novice birders in seeing as many bird species as possible and seeing bird species they had never seen before. Novice birders, in contrast, were significantly more likely than other birders to report wanting to visit areas of cultural and historic significance.

Scott, Baker, and Kim (1999) examined motives among participants in the first annual Great Texas Birding Classic. The event entailed three nonconsecutive 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 respondents participated in the event because they enjoyed searching for birds, being with friends, and contributing to wildlife conservation. Although competition motives were relatively unimportant among participants as a whole, individuals high in personal commitment were more likely than others to ascribe importance to them.

Two studies have examined the relationship between level of specialization and setting preferences among birders and wildlife watchers. Martin (1997) categorized visitors into three groups of wildlife watchers: novices (69%), intermediates (21%), and specialists (10%). These groups were created using an additive index, based on reported frequency of wildlife-viewing trips, tendency to take notes of animal behavior and habitat while in the field, use of specialized equipment, and participation in organized wildlife counts or surveys. The groups differed somewhat in terms of desired setting attributes. Novices, for example, were more likely than intermediates and specialists to desire a visitor setting and picnic facility at their ideal wildlife viewing site. Specialists, in contrast, were more likely to prefer settings where there are nature trails and where vehicles are not allowed.

The other study (Cole & Scott, 1999) examined differences in setting preferences between two segments of the wildlife watching population: casual wildlife watchers and serious birders. Texas Conservation Passport holders and members of the American Birding Association were used to represent the views of these two groups. Consistent with the specialization framework, these two groups differed in terms of skill level at identifying birds, frequency of participation, expenditures, and birdwatching behavior close to home. Casual wildlife watchers gave almost equal weight to sites that afforded opportunities to observe birds and offered a variety of other wildlife and native plants. Serious birders, on the other hand, valued sites that provided opportunities to observe birds more than those with a variety of wildlife and native plants. Casual wildlife watchers were more likely than serious birders to ascribe importance to sites that provided interpretive and structured activities and facilitated participation in activities other than birdwatching (e.g., visiting historic sites and shopping).

### *Purpose of Study*

The Hummer/Bird Celebration in Rockport, Texas is the oldest festival of its kind in the United States. Thousands of people participate annually and the event has been a prototype for other birding festivals. Little is known, however, about the behavior and attitudes of people who attend this event or ones like it. Using the

specialization framework, we seek to answer two questions. First, what types of birders attend the festival? We develop a typology of visitors based on indicators of recreational specialization. Second, do groups of visitors vary in terms of setting preferences? We examine the extent to which groups of visitors express interest in a variety of wildlife (e.g., places to observe birds) and nonwildlife (e.g., places to shop, dine, etc.) destination attributes.

## Methods

Data were collected in September of 1995 at The Seventh Annual Hummer/Bird Celebration in Rockport/Fulton, Texas. Festival organizers reported that the four-day event attracted approximately 4,500 visitors. Visitors participated in workshops, seminars, and field trips led by expert birders. Festival organizers compiled a list of 4,000 of visitors. From this, 831 visitors were randomly selected to participate in the study.

The survey design was a modified Dillman's (1978) method with four stages of data collection. First, a postcard was sent to individuals on the sampling frame, alerting them that they would be receiving a survey in the mail. One week later, the first mailing was sent to participants, which included the survey, a self-addressed, postage-paid envelope, and a cover letter explaining the purpose of the study. A week after this, we sent postcard reminders to individuals who had not returned a completed survey. Finally, two weeks later we sent a replacement survey to people who still had not returned a completed questionnaire. Each mailing included an incentive for responding (a raffle to win prizes). The four mailings resulted in 517 usable surveys being returned, a 64% response rate.

Consistent with Scott and Shafer (2001), specialization was measured in terms of behavior, level of skill, and commitment (Table 1). We measured behavior by asking respondents how many birding trips and how many days they had gone birding during the last 12 months using an open-ended format. Skill was measured by asking respondents to indicate how many birds they were able to identify by

**TABLE 1** Indicators of Recreational Specialization

| |
|---|
| Focusing of behavior |
| Total number of birding trips in the last 12 months |
| Total number of days birding in the last 12 months |
| Level of skill |
| Number of birds able to identify by sight |
| Number of birds able to identify by sound |
| Commitment |
| Importance/pleasure (5 items), alpha = 0.91 |
| Centrality to lifestyle (9 items), alpha = 0.91 |

sight and sound. These two items were also presented in an open-ended format. Two multiple-item scales were used to measure commitment. One scale, derived from Laurent and Kapferer (1985), measured the importance and pleasure respondents derived from birding. The scale included five items such as "For me, birding is really a pleasure," and "I attach great importance to birding." The second scale included 9 items and measured centrality of birding to an individual's lifestyle. This scale combined elements of personal dedication (e.g., "I would rather go birding that do most anything else") and side bets (e.g., "If I stopped birding, I would probably lose touch with a lot of my friends"). Response categories for items in the commitment scales ranged from 1 (strongly disagree) to 7 (strongly agree). Both commitment scales had high reliability (alphas exceeded 0.90). These two scales are described in greater detail by Kim, Scott, and Crompton (1997).

Respondents were classified into groups on the basis of their responses to the six specialization indicators (Table 1). Individuals' scores across the indicators were standardized for ease of interpretation (mean = zero; standard deviation = 1). Using SPSSx (1988), a series of K-means cluster analysis was performed, ranging from two to nine clusters. The goal was to discover a cluster solution that made both intuitive sense and had neither too few nor too many cases. We deleted eight cases (outliers) that had average scores on items that far exceeded those of other groups. Ultimately, a four-cluster solution was deemed most suitable. This solution yielded meaningful groupings and enough cases in each group to perform statistical analyses.

The four birder groups were compared in terms of their responses to the original (nonstandardized) six indicators of specialization. Next, we examined the groups in terms of eight aspects of behavioral involvement that were not included in the cluster analysis (e.g., years involved in birdwatching), demographic characteristics, and setting preferences. Setting preferences were measured by asking respondents to indicate how important different destination features were when they selected a place to visit. Response categories for these attributes fell along a seven-point scale, ranging from "not at all important" (1) to "neutral" (4) to "very important" (7). Items included a range of physical, social, and activity setting attributes which we grouped into the following categories: (a) opportunities to observe flora and fauna; (b) availability of heritage recreation activities; (c) availability of outdoor recreation activities; (d) access to water recreation; (e) escape from urban areas; (f) availability of comfort amenities; and (g) ease of access.

## Results

Respondents were disproportionately female (74%), over 46 years of age (66%), married (75%), graduates of college (57%), and came from middle to upper income households (66% reported annual household incomes of $40,000 or

more). More than one-third (34%) were retired (35%) and nearly 90% were Texas residents.

### *Results of Cluster Analysis*

Table 2 compares the four birder groups in terms of the six specialization indicators. We have labeled the four groups as follows: *casual birders*, *involved birders*, *active birders*, and *skilled birders*. The groups differed most in terms of their ability to identify birds by sight (F = 224.37) and the level of importance/pleasure they attached to birding (F = 180.68). The two groups also differed in terms of the number of trips (F = 127.75) and days (F = 123.75) they had gone birding during the previous 12 months. The groups differed somewhat less in terms of their ability to identify birds by sound (F = 54.92) and centrality to birding (F = 60.39). A brief description of the birding types is provided in terms of their responses to the six specialization indicators.

*Casual Birders.* This cluster comprised 34.6% (N = 108) of all respondents. Individuals in this group reported far lower frequency of involvement, skill, and commitment to birding than others. On average, casual birders averaged less than

**TABLE 2** Specialization Indicators by Birder Groups

| | Casual birders (N = 108) *Mean* | Interested birders (N = 132) *Mean* | Active birders (N = 42) *Mean* | Skilled birders (N = 30) *Mean* | *F-value* |
|---|---|---|---|---|---|
| Total number of trips | 2.8[a] | 6.0[a] | 45.9[b] | 15.7[c] | 127.75*** |
| Total number of days | 5.3[a] | 10.9[a] | 56.8[b] | 31.2[c] | 123.75*** |
| Birds identified by sight | 25.1[a] | 41.7[a] | 124.8[b] | 326.7[c] | 224.37*** |
| Birds identified by sound | 9.2[a] | 11.0[a] | 24.0[b] | 52.9[c] | 54.92*** |
| Importance/ pleasure | 4.4[a] | 6.1[b] | 6.6[c] | 6.3[bc] | 180.68*** |
| Centrality to lifestyle | 2.1[a] | 3.0[b] | 4.2[c] | 3.5[d] | 60.39*** |

***$p < .001$.

[abcd]Groups with different superscripts are significantly different at .05 level of confidence.

3 birding trips during the last 12 months and spent only 5 days birdwatching during that time. Casual birders could identify only 25 bird species by sight and only 9 by sound. They expressed relatively low levels of importance/pleasure ($M = 4.4$) and centrality ($M = 2.1$) to birding.

*Interested Birders.* This largest cluster included 42.3% of visitors to the Hummer/Bird Celebration (N = 132). In many ways interested birders are like casual birders in that they reported relatively low levels of frequency of involvement and skill. Interested birders reported taking only 6 birding trips and spent 11 days birding during the previous year. Moreover, they could identify only 42 bird species by sight and 11 by sound. Involved birders, however, reported significantly more importance/pleasure ($M = 6.1$) and centrality ($M = 3.0$) to birdwatching than casual birders. Furthermore, only active birders reported significantly higher levels of importance/pleasure than interested birders.

*Active Birders.* This cluster comprised 13.5% of respondents (N = 42). Individuals in this group reported significantly higher frequency of importance/pleasure and commitment than birders in the other three groups. Active birders said they averaged nearly 46 birding trips during the last 12 months and spent nearly 57 days birding during that time. They also expressed very high levels of importance/pleasure ($M = 6.6$) and centrality to lifestyle ($M = 4.2$). Although active birders also reported a relatively high level of skill at identifying birds—they were able to identify nearly 125 birds by sight and 24 birds by sound—their ability to recognize birds was significantly lower than that of skilled birders.

*Skilled Birders.* This group included only 9.6% of visitors to the Hummer/Bird Celebration (N = 30). What makes individuals in this group distinctive is their expertise at identifying birds. They could identify over 325 birds by sight and over 50 birds by sound. These averages are more than twice as high as those reported by active birders. What is striking is that skilled birders averaged considerably fewer trips ($M = 16$) and days ($M = 31$) birding compared to active birders. They also expressed significantly lower levels of centrality ($M = 4.2$) to birding. Skilled birders, however, expressed a high degree of importance/pleasure ($M = 6.3$) to birding and this was not significantly different from that reported by active birders.

### *Behavioral Involvement by Birder Groups*

Both skilled and active birders reported having traveled significantly more miles to go birding than casual and interested birders (Table 3). Skilled and active birders also intended to take more birding trips and visit birding sights along the Great Texas Coast Birding Trail. These results confirm that active and skilled birders are more intensely involved in birding than casual and interested birders. Skilled birders were significantly more likely than others to report that they had

**TABLE 3** Behavioral Involvement by Birder Groups

| | Casual birders *Mean* | Interested birders *Mean* | Active birders *Mean* | Skilled birders *Mean* | *F-value* |
|---|---|---|---|---|---|
| Years involved in birdwatching[#] | 12.9[a] | 15.0[a] | 12.0[a] | 24.3[b] | 4.65** |
| Number of field guides owned[#] | 2.0[a] | 3.0[a] | 5.8[a] | 14.3[b] | 11.77*** |
| Total number of miles traveled birding[#] | 581[a] | 1050[a] | 4371[b] | 3579[b] | 28.13*** |
| Amount of money spent birding[#] | $588[a] | $780[a] | $1,357[b] | $2,193[b] | 5.02** |
| Number of birds on life list[#] | 12.2[a] | 43.8[a] | 203.1[c] | 344.6[b] | 56.37*** |
| Number of days intending to go birding next year[#] | 11.6[a] | 23.5[a] | 79.3[b] | 50.0[b] | 26.56*** |
| Number of sites intend to visit along Great Texas Coastal Birding Trail (GTCBT) [##] | 4.4[a] | 6.6[a] | 11.0[b] | 12.1[b] | 18.42*** |
| Likeliness of attending Hummer/Bird Celebration in next three years[###] | 4.1 | 4.4 | 4.4 | 4.6 | 3.45 |

[#] The first six items included open-ended response categories.
[##] The seventh item was measured by asking respondents to indicate, with a check, their intentions to visit 25 different birdwatching sites along the GTCBT in the next three years. Responses for the variable were created by summing the total number of sites checked.
[###] Response categories for the last variable ranged from "will definitely not visit" (1) to "not sure" (3) to "will definitely visit" (5).
** $p < .01$, *** $p < .001$.
[abcd] Groups with different superscripts are significantly different at .05 level of confidence.

been birdwatching for more years, owned more field guides, spent more money on birdwatching, and had recorded more bird species on their life lists. These differences suggest that skilled birders at the Hummer/Bird Celebration had a longer history of birding than others and may be highly oriented to listing. Interestingly, the groups differed little in terms of their intentions to visit the Hummer/Bird Celebration in the years ahead.

### *Demographic Characteristics by Birder Groups*

The groups did not differ significantly in terms of gender, age, level of income, and place of residence (Table 4). They did differ significantly, however, in terms of level of education, marital status, and whether or not they were retired. Skilled birders were more likely than others to report that they had a graduate education. A greater proportion of active birders reported being divorced. Finally, casual birders were more likely than others to say they were retired.

### *Preferred Destination Attributes by Birder Groups*

All four groups of visitors placed a great deal of importance on destination attributes that facilitate opportunities to observe flora and fauna (Table 5). Each of the four groups had average scores of 5.0 or higher (on a scale of 1 to 7) for variety of birds to see and/or hear, places to view other wildlife, places to go on nature walks, and places to observe wildlife. The groups differed significantly in the importance ascribed to the variety of birds likely to be seen and/or hear and places to go on nature walks. Casual birders were less likely than others to rate these as important when planning trips. Interestingly, however, casual and interested birders were somewhat more likely than others to assign importance to destinations where they can photograph wildlife.

All four groups of visitors attached great importance to destinations that provided a contrast to urban areas—clean air, crime-free communities, and scenic beauty along the way. Groups, however, differed significantly in terms of the amount of importance they attached to scenic beauty along the way. Interested birders were significantly more likely than others to be attracted to destinations that provide this attribute. Groups differed only slightly in terms of issue pertaining to access—good roads, ease of parking, and driving time. In this case, skilled birders ascribed comparatively less importance than others in terms of ease of parking.

Where groups of visitors really differed was the importance they assigned to localities that provided access to heritage recreation. Casual and interested birders were far more likely than active and skilled birders to desire visiting quaint small towns and other alluring places. They also expressed significantly more interest in places where they could visit historic sites, shop, and look at local crafts and antiques. Interested birders were also more likely than others (particularly skilled

**TABLE 4** Demographic Characteristics by Interested Groups

| | Casual birders % | Involved birders % | Active birders % | Skilled birders % | *Chi-Square* |
|---|---|---|---|---|---|
| Gender | | | | | |
| Males | 27.1 | 23.8 | 21.4 | 40.0 | |
| Females | 72.9 | 76.2 | 78.6 | 60.0 | 3.87 |
| Age | | | | | |
| 45 years or less | 29.4 | 33.1 | 50.0 | 28.6 | |
| 46 to 55 | 18.6 | 28.3 | 16.7 | 35.7 | |
| 55 to 65 | 28.4 | 19.7 | 21.4 | 21.4 | |
| Over 65 years | 23.5 | 18.9 | 11.9 | 14.3 | 13.36 |
| Level of Education | | | | | |
| High school graduate or less | 49.4 | 47.3 | 33.3 | 13.3 | |
| College graduate | 23.1 | 21.4 | 21.4 | 16.7 | |
| Graduate school | 27.8 | 31.3 | 45.2 | 70.0 | 22.63*** |
| Level of Income | | | | | |
| Under $40,000 | 38.0 | 26.5 | 51.2 | 22.2 | |
| $40,000 to $59,999 | 26.1 | 38.1 | 24.4 | 29.6 | |
| $60,000 to $79,999 | 16.3 | 17.7 | 12.2 | 22.2 | |
| $80,000 or more | 19.6 | 17.7 | 12.2 | 25.9 | 12.98 |
| Marital Status | | | | | |
| Single | 12.1 | 13.7 | 9.5 | 13.8 | |
| Married | 78.5 | 70.2 | 61.9 | 75.9 | |
| Divorced/separated | 5.6 | 7.6 | 23.8 | 0.0 | |
| Widow/widower | 3.7 | 8.4 | 4.8 | 10.3 | 20.04* |
| Retired | | | | | |
| Yes | 44.4 | 31.1 | 23.8 | 30.0 | |
| No | 55.6 | 68.9 | 76.2 | 70.0 | 7.80* |
| Place of Residence | | | | | |
| Out of state | 13.5 | 9.9 | 9.5 | 6.9 | |
| Texas away from festival | 65.4 | 81.7 | 69.0 | 79.3 | |
| Texas near festival | 21.1 | 8.4 | 21.5 | 13.8 | 11.18 |

*$p < .05$, ***$p < .001$.

birders) to be attracted to places where they could attend nature education programs. Simultaneously, visitors differed some in the importance they assigned to different comfort amenities. In this case, interested birders were significantly more likely than casual and skilled birders to ascribe importance to places with

**TABLE 5** Preferred Destination Attributes by Birder Groups

| | Casual birders *Mean* | Interested birders *Mean* | Active birders *Mean* | Skilled birders *Mean* | *F-value* |
|---|---|---|---|---|---|
| Opportunities to Observe Flora and Fauna | | | | | |
| Variety of birds to see and/or hear | 5.4[a] | 6.0[b] | 6.4[b] | 6.1[b] | 10.29*** |
| Places to view other wildlife | 5.5 | 5.7 | 5.3 | 5.3 | 1.67 |
| Places to photograph wildlife | 5.0 | 5.0 | 4.3 | 4.3 | 2.65 |
| Places to go on nature walks | 5.4[a] | 5.8[ab] | 6.0[b] | 5.7[ab] | 3.71* |
| Places to observe wildflowers | 5.6 | 5.8 | 5.3 | 5.2 | 2.34 |
| Escape from Urban Areas | | | | | |
| Clean air | 5.8 | 6.1 | 6.1 | 5.6 | 2.48 |
| Crime-free communities | 5.8 | 6.0 | 6.0 | 5.8 | 0.49 |
| Scenic beauty along the way | 5.4[ac] | 5.9[b] | 5.3[abc] | 5.0[a] | 6.80*** |
| Ease of Access | | | | | |
| Good roads | 4.8 | 5.1 | 4.8 | 4.4 | 2.49 |
| Ease of parking | 5.0[a] | 5.2[a] | 5.1[a] | 4.1[b] | 4.82** |
| Driving time | 5.0 | 5.2 | 5.1 | 4.6 | 1.67 |
| Availability of Heritage Recreation Activities | | | | | |
| Interesting places to visit | 5.4[a] | 5.5[a] | 4.2[b] | 4.4[b] | 13.39*** |
| Quaint small towns | 4.7[a] | 4.7[a] | 4.1[ab] | 3.3[b] | 7.92*** |
| Availability of historic sites | 4.5[a] | 4.5[a] | 3.5[b] | 3.2[b] | 9.56*** |
| Availability of nature education programs | 4.7[ab] | 5.1[a] | 4.6[ab] | 4.2[b] | 3.83** |
| Availability of local crafts | 4.3[a] | 4.2[a] | 3.9[a] | 2.6[b] | 8.26*** |
| Availability of antique dealers | 3.6[a] | 3.2[a] | 2.7[ab] | 2.0[b] | 6.56*** |
| Places to shop | 4.2[a] | 4.1[a] | 3.4[ab] | 2.7[b] | 8.24*** |

**TABLE 5** Preferred Destination Attributes by Birder Groups (*Continued*)

| | Casual birders *Mean* | Interested birders *Mean* | Active birders *Mean* | Skilled birders *Mean* | *F-value* |
|---|---|---|---|---|---|
| Availability of Comfort Amenities | | | | | |
| Friendly and helpful people | 5.2[a] | 5.7[b] | 5.2[abc] | 4.7[ac] | 6.40*** |
| Good restaurants | 5.0 | 5.1 | 4.5 | 4.5 | 2.37 |
| Availability of bed and breakfasts | 3.4[a] | 3.6[a] | 2.8[ab] | 2.1[b] | 6.32*** |
| Availability of motels | 4.5 | 5.1 | 4.7 | 4.3 | 3.32* |
| Availability of 24-hour banking | 3.4 | 3.3 | 3.3 | 2.9 | 0.55 |
| Access to Water Recreation | | | | | |
| Places to go fishing | 3.6[a] | 3.0[ab] | 2.3[b] | 2.5[ab] | 5.04** |
| Close to the water | 4.2[ab] | 4.2[ab] | 4.6[a] | 3.3[b] | 2.95* |
| Availability of marine life tours | 4.3[a] | 4.2[a] | 3.3[b] | 3.0[b] | 7.39*** |
| Availability of Outdoor Recreation Activities | | | | | |
| Availability of primitive camping | 2.3 | 2.3 | 2.9 | 2.9 | 2.00 |
| Availability of recreational vehicle camping | 3.1[a] | 2.1[b] | 2.6[ab] | 2.3[ab] | 4.96** |
| Places to canoe and/or kayak | 2.2 | 2.1 | 1.9 | 2.1 | 0.28 |
| Places to golf | 1.9 | 1.6 | 1.6 | 1.1 | 2.74 |

*$p < .05$, **$p < .01$, ***$p < .001$.

[abc] Groups with different superscripts are significantly different at .05 level of confidence.

friendly and helpful people. Both casual and interested birders were more likely than others to be attracted to places where there were bed and breakfast accommodations available.

Groups of visitors also differed somewhat in terms of the importance assigned to sites that facilitated involvement in various types of water and outdoor recreation activities. Casual birders were significantly more likely than active and skilled birders to express interest in places where they could go fishing. Compared to active and skilled birders, casual and interested birders were more likely to be drawn to places where they could go on marine life tours. Interestingly, active birders were far more likely than skilled birders to ascribe importance to localities that are close to the water. Casual birders expressed somewhat more interest than others (particularly interested birders) in places that accommodated RV camping.

## Discussion

Birding, as a form of nature tourism, is receiving much publicity as an economic development strategy for rural communities. This publicity, often mistakenly, portrays all birders as a group of highly committed enthusiasts who are eager to add birds to their life lists. This study explored the diversity among visitors to a well-known birding festival, first in terms of level of specialization, and then in terms of behavioral involvement, demographic characteristics, and preferred destination attributes. Using cluster analysis based on indicators of specialization, we identified four groups of visitors: (1) casual birders, (2) interested birders, (3) active birders, and (4) skilled birders. These groups differed markedly in terms of various indicators of behavioral involvement and setting preferences. They differed only somewhat in terms of demographic characteristics. Findings from this study advance our understanding of recreational specialization among birders. Results also may assist community leaders, natural resource managers, and event organizers in better understanding the diversity of individuals who attend birding festivals such as the Hummer/Bird Celebration.

Consistent with research on birdwatchers in general (Kellert & Brown, 1985; McFarlane, 1994), findings from this study indicate that visitors to the Hummer/Bird Celebration are not a homogeneous group of hardcore birders. Over three-quarters (77%) of visitors were casual and interested birders. These individuals participated infrequently, were relatively unskilled at birding, and were keenly interested in destination attributes that go beyond observing or watching birds. This means that a relatively small fraction of visitors participate intensely in birdwatching. These results are consistent with McFarlane's (1994) study of birders in Alberta. She reported that 80% of the people in her sample were casual or novice birders. In contrast, Hvenegaard (2002) reported that a relatively small proportion (40%) of birders visiting Thailand were novices. Hvenegaard explained that many birders were foreign born and visited Thailand specifically to see birds. Collectively, findings from this and other studies show that the nature of the event and birding destination may well influence the kinds of birders that

are likely to attend. If results from this study can be generalized, most visitors to events like the Hummer/Bird Celebration are likely to be less specialized or nonserious birders (e.g., casual and interested birders).

Moreover, results of the cluster analysis suggests that visitors have not progressed in behavior, skills, and commitment in a lock step fashion (Scott & Shafer, 2001). Active birders, for example, participated far more often and reported higher levels of commitment than skilled birders. The latter, on the other hand, had participated longer and had far more skill at identifying birds than active birders. These results, along with those reported by Hvenegaard (2002) and by Kuentzel and McDonald (1992), point to the necessity of characterizing specialization as something other than a "continuum of behavior from the general to the particular" (Bryan, 1979, p. 29). Participants in birding and other recreational activities cannot be arranged neatly along a continuum from low to high without obscuring how their participation changes over time. Perhaps the utility of the specialization framework lies in its ability to elucidate different styles of involvement within a given leisure activity system.

From a promotion and marketing standpoint, the four groups of birders differ markedly in terms of specialization, behavioral involvement, and preferences for community destination attributes. Casual birders comprised more than one-third of all visitors. Compared to other attendees, these individuals take few birding trips and exhibit little skill, commitment, and interest in birding. They own few birding field guides, spend relatively little money annually on birding, do not keep extensive life lists, and do not intend to take many birding trips in the future. Interestingly, however, a majority reported they would probably attend the Hummer/Bird Celebration again in the future. Compared to other birder groups, casual birders evince as much interest in heritage recreation as they do birding and wildlife. Many of these visitors are also attracted to shopping, RV camping, and water-based activities such as marine life tours and fishing. Importantly, casual birders are relatively new to birding and more likely than others to be retired. These facts suggest that an event like the Hummer/Bird Celebration may be one of many different venues or activities that are attractive to the casual birder.

Interested birders made up over 40% of visitors to the Hummer/Bird Celebration. Like casual birders, they take relatively few birding trips and spend few days actively birdwatching. They also are relatively unskilled at identifying birds. What separates involved birders from casual birders is the amount of importance and pleasure they ascribe to birding. They reported strong attitudinal attachment to birdwatching and, compared to casual birders, reported higher intentions to take birding trips and visit sites along the Great Texas Coastal Birding Trail. They were also more likely than *casual birders* to ascribe importance to sites where they can go on nature walks and that have a variety of birds to see and/or hear. Nevertheless, they too appear to blend birding and wildlife watching with other activities. Interested birders like visiting quaint small towns, meeting

friendly people along the way, visiting historic sites, shopping, and exploring local crafts and antiques. They also enjoy looking at scenery en route to the destinations they visit.

Active birders are so named because of the intensity and enthusiasm with which they currently participate in birdwatching. Members of this group, which made up 14% of visitors to the Hummer/Bird Celebration, take far more trips and spend significantly more days in the field birdwatching than others. They also are significantly more committed to birdwatching, in the way of importance and centrality to lifestyle, than other attendees. Compared to casual and interested birders, active birders are also able to identify many more birds by sight and sound, have far more birds on their life list, travel more miles while birding, and intend to take more birding trips in the future. Not surprisingly, active birders are not as keen to combine birdwatching with other activities (e.g., visiting historic sites, shopping, antiquing), although they do like being close to water. Their primary focus when they take trips is on birdwatching.

Skilled birders comprised 10% of visitors to the Hummer/Bird Celebration. These individuals have superior skills at identifying birds by sight and sound. Compared to other attendees, they have longer life lists, own far more field guides, and have been birding longer than other attendees. Although they participate often and evince a relatively high level of commitment to birding, compared to active birders they take fewer trips, spend fewer days birdwatching, and are less likely to state that birding is a central life interest. Overall, skilled birders are also more narrowly focused than the other groups in terms of their preferred destination attributes. As with other attendees, they want to visit places that provide a contrast to urban areas. They also like visiting places where they can go on nature walks and that have a variety of birds to see and/or hear. Beyond that, their scores on all the other destination attributes were lower than those reported by others. These data suggest that skilled birders are selective and unambiguous in terms of their interest in birdwatching. Significantly, skilled birders also spent far more money on birding than other visitors and had the highest proportion of graduate educational attainment. These facts suggest that this group may potentially be a viable target market for scholarly bird books and other bird-related retail items at the birding festival.

For communities interested in developing birding festivals like the Hummer/Bird Celebration, it is important to develop products and promotional materials with a more complete understanding of the makeup of potential visitors. To better serve casual and interested birders, it is extremely important to recognize that these visitors are relatively unskilled at identifying birds and will probably need guides or leaders to assist them at identifying birds (even the most common birds). It is also important to understand that casual and interested birders are inclined to combine birding and wildlife watching with other leisure activities. An article in *Living Bird*, a publication of the Cornell Laboratory of Ornithology, is an interesting example of one such effort (Uhlman, 1997). The article describes

the opportunities available to Civil War enthusiasts and birders along the newly designated Virginia Civil War Trail. Thus, to attract casual and interested birders, festival organizers would do well to promote partnerships among an array of organizations and businesses involved in natural resource conservation, heritage and cultural tourism, birdwatching, and hospitality management.

To attract and better serve more specialized birders (e.g., active and skilled birders), communities must first recognize the extent to which local birding opportunities will be of interest to them. Communities located near migration routes (e.g., the upper Texas Coast) and near birding "hot spots" (Southeast Arizona) will have an advantage in attracting these groups of birders. Simultaneously, it will be important to develop products and promotional strategies that provide new and interesting venues for observing birds. Organizers, for example, may plan day trips, led by area experts, to locate rare or elusive birds (e.g., the Ferruginous Pygmy-Owl, Tropical Parula, and Clay-colored Robin in South Texas). While these birders may need less help in identifying local birds, they may be partial to programs that help them recognize subtle field marks among similar species (e.g., sandpiper species). Finally, more specialized birders may benefit from maps and brochures that provide them with detailed information about birdwatching sites within the region. The Great Texas Coastal Birding Trail (the Trail) is one such product. The Trail, which is a joint venture developed by the Texas Parks and Wildlife Department and the Texas Department of Transportation, consists of an array of birding sites along the Texas Coast, and colorful maps provide information about how to locate birding sites and the kinds of birds likely to be found at each site. Other states are in the process of developing birding trails and maps of their own.

It is highly likely that a birding event like the Hummer/Bird Celebration will attract a mix of visitors with different levels of recreation specialization. Potential conflict can be avoided by avoiding the lumping of skilled and active birders with casual and interested birders in tours or outings. More serious birders may have very specific target birds and may lack patience with those birders who are less skilled and find difficulty in identifying common birds. In some cases, there may be advantages to lumping groups together. Skilled and active birders may provide casual and interested birders instruction in bird identification beyond that provided by a tour. For their part, the latter may locate birds that might otherwise go undetected. Event organizers must clearly consider the advantages and disadvantages of mixing birders with different levels of recreational specialization.

This study has its limitations. We do not presume that results can be generalized to the birdwatching population in general or visitors to all birding festivals. First, the population characteristics differ somewhat from birders in general. About three-quarters of the sample was female. Visitor studies conducted at other birding festivals have reported like results (Baldridge, 2002; Black, 2002). Studies conducted at other birding festivals, however, reported greater proportions of male visitors (Eubanks, Stoll, & Ditton, 2002). Within the birdwatching population,

in general, there is evidence that advanced birders are disproportionately male while casual birders are more likely to be female (Hvenegaard, 2002; McFarlane & Boxall, 1996). Second, information was collected from one birding festival in Texas at a single point in time. This particular festival was oriented to hummingbirds, which may have more appeal to less experienced birders. Clearly, additional studies are needed to provide greater understanding into the full range of attitudes, behaviors, and needs of the birdwatching population, and individuals who attend birdwatching festivals and events.

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