

Nebraska's Sandhill Crane Migration: Opportunities for Additional Economic Activity

Each year in March and April, thousands of visitors come to Nebraska's central Platte River Valley to witness a true wonder of the natural world: the annual migration of sandhill cranes.

Several hundred thousand cranes gather annually along the Platte River to feed, court and gather energy before traveling further north to breed. Their numbers and fame are estimated to attract over 70,000 visitors who spend on average 1.3 days in the region (Edwards and Thompson, 2010).

The scale of this wildlife event and the economic potential of bringing so many visitors to a relatively small region have attracted the attention of both the environmental and economic development communities. Four conservation research and education centers now operate in the area, each drawing thousands of visitors during the migration. Researchers have employed several methodologies to identify the economic impact of those who come to view the birds.

The most recent economic study estimates that crane related tourism in 2009 generated \$8.08 million in direct economic impact by visitors in central Nebraska (Edwards and Thompson, 2010). For those interested in economic development, this raises an obvious and interesting question: Could the economic impact of visitors to central Nebraska's crane migration be increased if other activities and attractions were available?

In order to explore that question, the Nebraska Nature and Visitor Center and the University of Nebraska Rural Initiative conducted a survey of visitors at several locations during the crane migration of 2010. A short, two-page survey was offered to visitors at multiple locations including research and education centers, lodging establishments, and roadsides. The survey could either be completed and collected on-site or returned by pre-paid mail. The effort resulted in 204 returned usable surveys.

Since this was not a random sample of visitors, but rather an opportunity sample, the results cannot be interpreted as being representative of all visitors to the 2010 crane migration in central Nebraska. They are, however, an interesting portrayal of how this particular group views their experience with the crane migration and what other activities might interest them.

Characteristics of the Respondents and their Companions

Respondents to the 2010 survey represented 27 states. One Canadian also responded. Just under half (49.3%) of those responding indicated that their home state was Nebraska. An additional 22.9% of those responding indicated that they resided in a bordering state (CO, IA, KS, MO, SD or WY). The only non-bordering state to supply more than 5% of responding visitors was Minnesota (5.5%).

Most respondents were female (65.0%).

A majority of those responding (65.8%) had completed college or graduate training, with over one-third (37.6%) reporting having attained a postgraduate or professional degree.

The respondents and their traveling companions represented a total of 742 visitors. The average party size for those responding was 3.6. However, several respondents reported being part of groups too large to travel in the average automobile (seven to 26 in the group). When those respondents are excluded from the analysis, the average size of a visiting party was 2.7. Among all respondents, the most frequently reported party size was two (42.2%), followed by three and four (17.2% each).

Respondents most often indicated that their traveling party included members between the ages of 56 and 70-years (61.3%). Respondents also commonly indicated that their party included member age 40 to 55-years (40.7%) and over 70-years (20.1%). Younger visitors were much less likely to be reported, with respondents being least likely to indicate that their party included members age 18 to 25-years (6.4%).

Not surprisingly, given the age structure of those responding, visitors most often described their households as having no resident children (75.3%). Households with resident children under the age of 18 comprised only 17.2% of those responding.

Age Structure of Visitor Parties				
Age Group	# of Parties Reporting Members in Age Group	% of Parties Reporting Members in Age Group	Total # of Visitors in Age Group	% of Total Visitors in Age Group
<12	26	12.7	39	5.6
12 to 17	14	6.9	21	3.0
18 to 25	13	6.4	28	4.0
26 to 39	30	14.7	40	5.7
40 to 55	83	40.7	147	21.1
56 to 70	125	61.3	346	49.6
70+	41	20.1	103	14.8
n reporting: 204				

For most respondents (54.9%) this was the first time that they had viewed the crane migration. For those who reported that they had previously visited the region for crane viewing, the average number of previous visits was 4.3. The most frequently reported number of previous visits was one (36.8%) or two (25.0%).

Nebraskans were the group most likely to be repeat visitors (63.6%) and on average had made the most visits to the region for crane viewing (5.3). By comparison, 72.5% of respondents from out of state reported this to be their first crane viewing experience. Among repeat visitors from outside of Nebraska, the average number of previous visits was 2.6.

Visitors traveling in larger groups (7 or more) were also likely to be first time visitors (70.0%). Repeat visitors traveling in larger groups averaged 1.3 previous visits.

Visitor Characteristics	% Repeat Visitors	Average Number of Previous Visits
Nebraskans	63.6	5.3
Out of State	27.5	2.6
Larger Groups (>6)	30.0	1.3
n responding: 204		

Characteristics of the Visit

Spending the Night

Most respondents (75.5%) indicated that they would spend at least one night in central Nebraska as part of their crane viewing trip, with the average stay being 2.2 nights. Visitors spending the night were most likely to do so in a hotel or motel (64.5% - 2.1 nights), bed and breakfast (19.4% - 1.7 nights) or home of a friend or relative (9.6% - 4.1 nights). A very small number of respondents (5.2%) indicated that they would spend the night in a resort or RV or even camping (1 respondent).

First time visitors were somewhat more likely to indicate that they would spend one or more nights in the region (81.3%), while out of state visitors almost universally planned on spending a night in the region (98.1%), with an average planned stay of 2.6 nights. Hotels, motels and bed and breakfast facilities accounted for 82.6% of those nights.

A majority (51.1%) of Nebraskans indicated that they would spend one or more nights in the region, with an average planned stay of 1.5 nights. Hotels, motels and bed and breakfast facilities dominated their lodging plans (87.0%).

Just over half (53.1%) of visitors traveling with children planned on spending at least one night in the region, with the average planned stay being 1.9 nights. Most of those visitors (81.3%) planned to lodge in a hotel or motel.

Most (85.0%) visitors traveling in larger groups (more than 6) planned on spending at least one night in the region, with the average planned stay being 2.8 nights. Hotels and motels accounted for 75% of such plans, with the remainder planning on staying in a resort or bed and breakfast facility.

Purpose of the Trip

Crane viewing was reported to be the only purpose of their trip to central Nebraska by 44.1% of those responding, while 39.7% indicated that they would visit other Nebraska attractions in the central Nebraska region. Visitors indicated that they would visit attractions in other parts of Nebraska 16.2% of the time, and 13.2% indicated that they would visit attractions in other states.

Reported Purpose of the Trip					
Visitor Characteristic	Percent Responding				n responding
	Crane Viewing Only	Visit Other Central Nebraska Attractions	Visit Attractions in Other Nebraska Regions	Visit Attractions in Other States	
All Visitors	44.1	39.7	16.2	13.2	204
First Time Visitors	42.0	41.1	13.4	16.1	112
Repeat Visitors	46.7	38.0	19.6	9.8	92
Out of State Visitors	35.2	42.9	18.1	21.9	105
Nebraska Visitors	53.5	36.4	14.1	4.0	99
Likely or Certain to Return	45.9	42.5	17.8	8.9	146
Overnight Visitors	35.1	46.1	17.5	16.2	154
One Day Visitors	72.0	20.0	12.0	4.0	50
Visitors With Children	53.1	37.5	18.8	3.1	32
Visitors in Larger Groups	35.0	50.0	20.0	5.0	20
Multiple responses were allowed and percentages do not sum to 100.					

Over half (53.5%) of Nebraskans indicated that crane viewing was the only purpose of their trip, while 36.4% of Nebraskans indicated that they would visit other regional attractions and 14.1% indicated that they would visit attractions in other regions of the state. Only 4.0% of Nebraskans indicated that they intended to visit attractions in other states during their trip.

For out of state visitors, crane viewing was reported to be the only purpose of their trip 35.2% of the time. Out of state visitors reported that they would visit other attractions in the region 42.9% of the time. They were less likely to indicate that they would visit attractions in other Nebraska regions (18.1%) or visit other states (21.9%).

For 72.0% of visitors not planning on spending the night in the region, crane viewing was the only reported purpose of their trip, while 20.0% indicated that they would visit other regional attractions and 12.0% indicated that they would travel to other Nebraska regions or other states.

Among visitors who did plan on spending a night in the region, 35.1% reported that crane viewing was the only purpose of their trip, while 46.1% reported that they planned to visit other attractions in the region. Another 17.5% indicated that they would visit attractions in other parts of Nebraska and 16.2% indicated that they would travel to other states.

Visitors traveling with children indicated that the only purpose of their trip was crane viewing 53.1% of the time, while over one-third (37.5%) reported that they would visit other attractions in the area and 18.8% reported that they would visit attractions in other Nebraska regions or in other states.

People traveling in groups larger than 6 indicated that the only purpose of their trip was crane viewing 35.0% of the time and that they would visit other regional attractions 50.0% of the time. Such visitors indicated that they would visit attractions in other Nebraska regions 20.0% of the time.

Planning the Trip

Respondents were asked what information resources they utilized in learning about the crane migration and planning their trip. Responses were recorded on a five-point scale of importance, ranging from no importance to very important.

The most frequently identified resource was the Internet, which was reported to be important or very important by 63.3% of all visitors, and by 68.7% of first time visitors. Birding, wildlife and nature organizations were identified as important or very important resources by 50.0% of all respondents, and by 53.8% of first time visitors. These sources were especially important to out of state visitors.

Previous visits to the region (without regard to purpose) were cited as being important or very important by 48.8% of the respondents and not surprisingly by 75.3% of repeat visitors. Previous visits were also noted to be important or very important by 22.4% of “first time” visitors. Since those individuals also indicated that this was their first crane viewing experience, we expect that they had traveled through the region or visited attractions in central Nebraska previously for purposes unrelated to the crane migration.

Other information resources identified by the total respondent population as having been important or very important in learning about the crane migration were news stories and documentaries (48.2%),

friends and relatives (47.1%), state tourism information (39.8%), area chamber or visitor information (37.8%) and magazine or newspaper advertising (31.6%).

	% Indicating Important or Very Important			
	All Visitors	First Time Visitors	Return Visitors	Out of State Visitors
Previous Visits	48.8	22.4	75.3	36.1
Friends and Relatives	47.1	46.8	47.3	42.5
News Stories Documentaries	48.2	52.7	42.4	48.8
Magazine Newspaper Advertising	31.6	38.3	23.6	27.9
Radio/TV	22.7	25.6	19.5	13.4
Area Chamber Tourist Information	37.8	42.4	31.9	32.9
State Tourism	39.8	41.3	37.9	36.4
Sport Show	10.9	11.6	10.0	8.6
Internet	63.3	68.7	56.2	70.6
Wildlife, Birding, Nature Organizations	50.0	47.1	53.8	63.0
n responding	204	112	92	105

Planning to Return

Visitors were asked if they intended to return to the region to view the crane migration at sometime during the next five years. Over two-thirds (67.5%) of those who responded indicated that such a return visit was “likely” or “certain.” Only 1.0% of those surveyed indicated that they definitely would not return, while another 5.0% indicated that returning was unlikely.

Nebraskans almost universally indicated that they would be likely or certain to return (91.8%) and none stated that they definitely would definitely not return. A majority of out of state visitors (54.9%) also indicated that it was likely or certain that they would return, with 11.8% reporting that returning was unlikely or definitely would not happen.

Most first time visitors (57.6%) indicated that they were likely or certain to return during the next five years, with only 9.9% indicating that they definitely would not return or that their return was unlikely.

Visitors traveling in groups larger than six reported that their return is likely or certain 63.2% of the time, while 81.3% of those traveling with children indicated that they were likely or certain to return.

Table 5	
Intention to Return to View the Crane Migration	
Visitor Characteristics	% Indicating Likely or Certain to Return
All Visitors	67.5
First Time Visitors	57.6
Nebraskans	91.8
Out of State	54.9
With Children	81.3
n responding: 204	

Budgets

Respondents were asked about their estimated budgets for their trip to central Nebraska. More than one in five respondents either did not answer this question (a common occurrence with what is sometimes seen as an intrusive question) or indicated that they had no budget for the trip. Large groups (more than 6 in a party) were excluded from this portion of the analysis because responding individuals tended to attempt to provide a budget for the entire group.

Table 6	
Average Reported Budget for Visitors to the Central Nebraska Crane Migration	
Visitor	Average Budget
All Visitors	\$461
Overnight Visitors	\$592
Nebraskans	\$187
Out of State Visitors	\$761
Repeat Visitors	\$386
First Time Visitors	\$524
n responding: 130	

For the 130 respondents for whom answers were retained, the average estimated budget for their central Nebraska trip was \$461. Understandably, out of state visitors reported the highest average budget (\$761), reflecting their travel costs, while Nebraskans reported the lowest average budget (\$186).

Describing the Experience

Respondents were given a series of positive statements describing the experience of viewing the crane migration, and asked to indicate their agreement with those statements using a five-point scale that ranged from strong disagreement to strong agreement.

Descriptions of the Crane Viewing Experience						
	% Indicating Agreement or Strong Agreement					
	All Visitors	First Time Visitors	Repeat Visitors	Out of State Visitors	Nebraskans	
Outdoor Adventure	71.2	69.9	72.8	73.4	68.9	
Wildlife Education	78.0	77.6	78.5	84.6	71.3	
Pleasant Getaway	76.8	72.8	81.9	77.9	75.9	
Scenic Drive	69.9	69.2	70.8	72.9	66.6	
Unique Wildlife	83.4	84.8	81.7	88.7	77.8	
n responding	204	112	92	105	99	

Respondents were overwhelmingly in agreement with the positive statements offered for their consideration, with between 69% and 89% indicating that they either agreed or strongly agreed with the statements. This was true across all visitor characteristics, with one exception. One-third of visitors who indicated that they were not likely to return or definitely would not return either disagreed or strongly disagreed with the descriptive phrase “Pleasant getaway,” indicating that they had not enjoyed the experience.

Other Interests

The primary purpose of this survey was to identify activities that visitors to central Nebraska might find interesting in addition to watching cranes during their annual migration. Respondents were provided with a list of nine activities, and asked to rate their interest in those activities on a five-point scale ranging from “Not interested” to “Very interested.”

The most interest was shown in “Other wildlife viewing.” Among all visitors surveyed, 86.2% (89.4% of overnight visitors) indicated that they were interested or very interested in such opportunities.

Strong interest was similarly shown in hiking or walking, with 69.4% of respondents reporting that they would be interested or very interested in such activities. More than 60% of those responding indicated that they would be interested or very interested in visiting historical sites (67.4%) and rural sights (64.0%).

More than one-third of those responding indicated that they would be interested or very interested in dining out (58.4%), guided tours of attractions (42.8%), events or festivals (41.6%) or visiting a farm or ranch (36.9%).

Activity	% Indicating "Interested" or "Very Interested"								
	All Visitors	First Time Visitors	Repeat Visitors	Out of State Visitors	Nebraska Visitors	Likely or Certain to Return	Overnight Visitors	Crane Viewing Only Visitors	
Other Wildlife Viewing	86.2	84.5	88.2	88.8	83.3	86.7	89.4	81.0	
Hiking or Walking	69.4	70.3	68.3	71.4	67.4	73.1	71.7	66.7	
Rural Sights	64.0	58.5	70.5	64.0	63.9	66.4	65.9	51.4	
Shopping	20.7	18.0	24.0	17.9	23.8	22.5	20.5	20.8	
Events or Festivals	41.6	38.7	45.2	41.4	41.8	46.6	40.8	40.8	
Dining Out	58.4	57.4	59.5	55.1	61.9	61.1	60.8	50.7	
Visiting Historical Sites	67.4	65.3	70.0	64.6	70.6	70.9	71.7	55.8	
Visiting a Farm or Ranch	36.9	45.7	26.3	35.6	38.3	37.2	38.9	31.1	
Guided Tours of Attractions	42.8	46.4	38.2	41.9	43.8	44.7	42.7	40.5	
n responding	204	112	92	105	99	146	154	90	

Respondents did not demonstrate strong interest in shopping opportunities; with only 20.7% reporting that they would be interested or very interested in that activity.

Responses to these questions did not vary greatly by visitor characteristic. Even among visitors whose stated sole purpose of visiting was crane viewing and who intended to do nothing else during their visit expressed an interest in other activities, if at a somewhat lower rate than did other visitors.

References

Edwards, Richard and Eric Thompson, "The Economic Impact of the Rowe Sanctuary and Sandhill Crane Migration on the Central Nebraska Region." University of Nebraska – Lincoln Bureau of Business Research, 2009.

Available at: <http://www.bbr.unl.edu/documents/52009-Rowe%20Report%202009.08.pdf>