



# National Wildlife Refuge Visitor Survey 2010/2011: Individual Refuge Results for Kenai National Wildlife Refuge

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*...Seeing bald eagles in their natural habitat in all their regal splendor is something I will never forget. Grasslands, trees, marshes, insects, fish, mushrooms, and beavers are all so incredibly beautiful and yet still wild and untouched. It simply must be protected and cannot be lost in the trenches of a balanced budget somewhere. I hope we can always enjoy what I saw just in that one day.—Survey comment from visitor to Kenai National Wildlife Refuge.*



Kenai National Wildlife Refuge. Photo credit: Steve Hillebrand/U.S. Fish and Wildlife Service.

## Contents

Acknowledgments .....	iv
Introduction .....	1
Organization of Results .....	1
Methods .....	2
Selecting Participating Refuges.....	2
Developing the Survey Instrument .....	2
Contacting Visitors .....	2
Interpreting the Results .....	4
Refuge Description.....	5
Sampling at This Refuge .....	7
Selected Survey Results .....	7
Visitor and Trip Characteristics.....	7
Visitor Spending in Local Communities .....	14
Visitor Opinions about This Refuge .....	15
Visitor Opinions about National Wildlife Refuge System Topics.....	20
Conclusion .....	24
References.....	24
Appendix A: Survey Frequencies for This Refuge.....	A-1
Appendix B: Visitor Comments for This Refuge .....	B-1

## Figures

1.	Map of this refuge.....	6
2.	How visitors first learned or heard about this refuge.....	8
3.	Resources used by visitors to find their way to this refuge during this visit.....	9
4.	Number of visitors travelling to this refuge by residence.....	10
5.	Modes of transportation used by visitors to this refuge during this visit. ....	11
6.	Activities in which visitors participated during the past 12 months at this refuge. ....	12
7.	The primary activity in which visitors participated during this visit.....	13
8.	Use of the visitor center at this refuge.. ....	13
9.	Overall satisfaction with this refuge during this visit.....	15
10.	Importance-satisfaction ratings of services and facilities provided at this refuge.....	17
11.	Importance-satisfaction ratings of recreational opportunities provided at this refuge.....	18
12.	Importance-satisfaction ratings of transportation-related features at this refuge.....	19
13.	Visitors' likelihood of using alternative transportation options at national wildlife refuges in the future.....	21
14.	Visitors' personal involvement with climate change related to fish, wildlife and their habitats.....	22
15.	Visitors' beliefs about the effects of climate change on fish, wildlife and their habitats.....	23

## Tables

1.	Participating refuges in the 2010/2011 national wildlife refuge visitor survey. ....	3
2.	Sampling and response rate summary for this refuge. ....	7
3.	Influence of this refuge on visitors' decision to take this trip. ....	9
4.	Type and size of groups visiting this refuge.....	11
5.	Total visitor expenditures for this refuge expressed in dollars per person per day. ....	14

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## Introduction

The National Wildlife Refuge System (Refuge System), established in 1903 and managed by the U.S. Fish and Wildlife Service (Service), is the leading network of protected lands and waters in the world dedicated to the conservation of fish, wildlife and their habitats. There are 556 national wildlife refuges (NWRs) and 38 wetland management districts nationwide, including possessions and territories in the Pacific and Caribbean, encompassing more than 150 million acres. The mission of the Refuge System is to “administer a national network of lands and waters for the conservation, management and, where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.” Part of achieving this mission is the goal “to foster understanding and instill appreciation of fish, wildlife, and plants, and their conservation, by providing the public with safe, high-quality, and compatible wildlife-dependent public use” (Clark, 2001). The Refuge System attracts more than 45 million visitors annually, including 25 million people per year to observe and photograph wildlife, over 9 million to hunt and fish, and more than 10 million to participate in educational and interpretation programs (Uniack, 1999; U.S. Fish and Wildlife Service, 2007). Understanding visitors and characterizing their experiences on national wildlife refuges are critical elements of managing these lands and meeting the goals of the Refuge System.

The Service contracted with the U.S. Geological Survey (USGS) to conduct a national survey of visitors regarding their experiences on national wildlife refuges. The survey was conducted to better understand visitor needs and experiences and to design programs and facilities that respond to those needs. The survey results will inform Service performance planning, budget, and communications goals. Results will also inform Comprehensive Conservation Plan (CCPs), Visitor Services, and Transportation Planning processes.

## Organization of Results

These results are for Kenai NWR (this refuge) and are part of USGS Data Series 643 (Sexton and others, 2011). All refuges participating in the 2010/2011 surveying effort will receive individual refuge results specific to the visitors to that refuge. Each set of results is organized by the following categories:

- **Introduction:** An overview of the Refuge System and the goals of the national surveying effort.
- **Methods:** The procedures for the national surveying effort, including selecting refuges, developing the survey instrument, contacting visitors, and guidance for interpreting the results.
- **Refuge Description:** A brief description of the refuge location, acreage, purpose, recreational activities, and visitation statistics, including a map (where available) and refuge website link.
- **Sampling at This Refuge:** The sampling periods, locations, and response rate for this refuge.
- **Selected Survey Results:** Key findings for this refuge, including:
  - Visitor and Trip Characteristics
  - Visitor Spending in the Local Communities
  - Visitors Opinions about This Refuge
  - Visitor Opinions about National Wildlife Refuge System Topics
- **Conclusion**
- **References**
- **Survey Frequencies (Appendix A):** A copy of the survey instrument with the frequency results for this refuge.
- **Visitor Comments (Appendix B):** The verbatim responses to the open-ended survey questions for this refuge.

## **Methods**

### **Selecting Participating Refuges**

The national visitor survey was conducted from July 2010 – November 2011 on 53 refuges across the Refuge System (table 1). Based on the Refuge System’s 2008 Refuge Annual Performance Plan (RAPP; U.S. Fish and Wildlife Service, 2011, written comm.), 192 refuges with a minimum visitation of 25,000 were considered. This criterion was the median visitation across the Refuge System and the minimum visitation necessary to ensure that the surveying would be logistically feasible onsite. Visitors were sampled on 35 randomly selected refuges and 18 other refuges that were selected by Service Regional Offices to respond to priority refuge planning processes.

### **Developing the Survey Instrument**

USGS researchers developed the survey in consultation with the Service Headquarters Office, managers, planners, and visitor services professionals. The survey was peer-reviewed by academic and government researchers and was further pre-tested with eight Refuge System Friends Group representatives from each region to ensure readability and overall clarity. The survey and associated methodology were approved by the Office of Management and Budget (OMB control #: 1018-0145; expiration date: 6/30/2013).

### **Contacting Visitors**

Refuge staff identified two separate 15-day sampling periods and one or more locations that best reflected the diversity of use and specific visitation patterns of each participating refuge. Sampling periods and locations were identified by refuge staff and submitted to USGS via an internal website that included a customized mapping tool. A standardized sampling schedule was created for all refuges that included eight randomly selected sampling shifts during each of the two sampling periods. Sampling shifts were three- to five-hour randomly selected time bands that were stratified across AM and PM, as well as weekend and weekdays. Any necessary customizations were made, in coordination with refuge staff, to the standardized schedule to accommodate the identified sampling locations and to address specific spatial and temporal patterns of visitation.

Twenty visitors (18 years or older) per sampling shift were systematically selected, for a total of 320 willing participants per refuge—160 per sampling period—to ensure an adequate sample of completed surveys. When necessary, shifts were moved, added, or extended to alleviate logistical limitations (for example, weather or low visitation at a particular site) in an effort to reach target numbers.

**Table 1.** Participating refuges in the 2010/2011 national wildlife refuge visitor survey.

<b>Pacific Region (R1)</b>	
Kilauea Point National Wildlife Refuge (HI)	William L. Finley National Wildlife Refuge (OR)
Deer Flat National Wildlife Refuge (ID)	McNary National Wildlife Refuge (WA)
Cape Meares National Wildlife Refuge (OR)	Turnbull National Wildlife Refuge (WA)
Malheur National Wildlife Refuge (OR)	
<b>Southwest Region (R2)</b>	
Bitter Lake National Wildlife Refuge (NM)	Aransas National Wildlife Refuge (TX)
Bosque del Apache National Wildlife Refuge (NM)	San Bernard/ Brazoria National Wildlife Refuge (TX)
Wichita Mountains Wildlife Refuge (OK)	
<b>Great Lakes-Big Rivers Region (R3)</b>	
DeSoto National Wildlife Refuge (IA)	McGregor District, Upper Mississippi River National Wildlife and Fish Refuge – (IA/WI)
Neal Smith National Wildlife Refuge (IA)	
Muscatatuck National Wildlife Refuge (IN)	Big Muddy National Fish and Wildlife Refuge (MO)
Rice Lake National Wildlife Refuge (MN)	Horicon National Wildlife Refuge (WI)
Tamarac National Wildlife Refuge (MN)	Necedah National Wildlife Refuge (WI)
<b>Southeast Region (R4)</b>	
Wheeler National Wildlife Refuge (AL)	Banks Lake National Wildlife Refuge (GA)
Big Lake National Wildlife Refuge (AR)	Noxubee National Wildlife Refuge (MS)
Pond Creek National Wildlife Refuge (AR)	Cabo Rojo National Wildlife Refuge (Puerto Rico)
Merritt Island National Wildlife Refuge (FL)	Pea Island National Wildlife Refuge (NC)
St. Marks National Wildlife Refuge (FL)	Cape Romain National Wildlife Refuge (SC)
Ten Thousand Islands National Wildlife Refuge (FL)	Reelfoot National Wildlife Refuge (TN)
<b>Northeast Region (R5)</b>	
Stewart B. McKinney National Wildlife Refuge (CT)	Moosehorn National Wildlife Refuge (ME)
Bombay Hook National Wildlife Refuge (DE)	Great Swamp National Wildlife Refuge (NJ)
Monomoy National Wildlife Refuge (MA)	Montezuma National Wildlife Refuge (NY)
Parker River National Wildlife Refuge (MA)	Wertheim National Wildlife Refuge (NY)
Patuxent Research Refuge (MD)	Occoquan Bay/ Elizabeth Hartwell Mason Neck National Wildlife Refuge (VA)
<b>Mountain-Prairie Region (R6)</b>	
Monte Vista National Wildlife Refuge (CO)	Sand Lake National Wildlife Refuge (SD)
Quivira National Wildlife Refuge (KS)	National Elk Refuge (WY)
Charles M. Russell National Wildlife Refuge (MT)	
<b>Alaska Region (R7)</b>	
Alaska Maritime National Wildlife Refuge (AK)	Kenai National Wildlife Refuge (AK)
<b>California and Nevada Region (R8)</b>	
Lower Klamath/Tule Lake National Wildlife Refuge (CA)	Ruby Lake National Wildlife Refuge (NV)
Sonny Bono Salton Sea National Wildlife Refuge (CA)	

Refuge staff and/or volunteers (survey recruiters) contacted visitors on-site following a protocol provided by USGS to ensure a diverse sample. Instructions included contacting visitors across the entire sampling shift (for example, every  $n^{\text{th}}$  visitor for dense visitation, as often as possible for sparse visitation), and only one person per group. Visitors were informed of the survey effort, given a token incentive (for example, a small magnet, temporary tattoo), and asked to participate. Willing participants provided their name, mailing address, and preference for language (English or Spanish) and survey mode (mail or online). Survey recruiters also were instructed to record any refusals and then proceed with the sampling protocol.

Visitors were mailed a postcard within 10 days of the initial on-site contact thanking them for agreeing to participate in the survey and inviting them to complete the survey online. Those visitors choosing not to complete the survey online were sent a paper copy a week later. Two additional contacts were made by mail during the next seven weeks following a modified Tailored Design Method (Dillman, 2007): 1) a reminder postcard one week after the first survey, and 2) a second paper survey two weeks after the reminder postcard. Each mailing included instructions for completing the survey online and a postage paid envelope for returning the paper version of the survey. Those visitors indicating a preference for Spanish were sent Spanish versions of all correspondence (including the survey). Finally, a short survey of six questions was sent to nonrespondents four weeks after the second survey mailing to determine any differences between respondents and nonrespondents at the national level. Online survey data were exported and paper survey data were entered using a standardized survey codebook and data entry procedure. All survey data were analyzed by using SPSS v.18 statistical analysis software.

## Interpreting the Results

The extent to which these results accurately represent the total population of visitors to this refuge is dependent on 1) an adequate sample size of those visitors and 2) the representativeness of that sample. The adequacy of the sample size for this refuge is quantified as the margin of error. The composition of the sample is dependent on the ability of the standardized sampling protocol for this study to account for the spatial and temporal patterns of visitor use specific to each refuge. Spatially, the geographical layout and public use infrastructure varies widely across refuges. Some refuges only can be accessed through a single entrance, while others have multiple unmonitored access points across large expanses of land and water. As a result, the degree to which sampling locations effectively captured spatial patterns of visitor use will likely vary from refuge to refuge. Temporally, the two 15-day sampling periods may not have effectively captured all of the predominant visitor uses/activities on some refuges during the course of a year. Therefore, certain survey measures such as visitors' self-reported "primary activity during their visit" may reflect a seasonality bias.

Herein, the sample of visitors who responded to the survey are referred to simply as "visitors." However, when interpreting the results for Kenai NWR, any potential spatial and temporal sampling limitations specific to this refuge need to be considered when generalizing the results to the total population of visitors. For example, a refuge that sampled during a special event (for example, birding festival) held during the spring may have contacted a higher percentage of visitors who traveled greater than 50 miles to get to the refuge than the actual number of these people who would have visited throughout the calendar year (that is, oversampling of nonlocals). In contrast, another refuge may not have enough nonlocal visitors in the sample to adequately represent the beliefs and opinions of that group type. If the sample for a specific group type (for example, nonlocals, hunters, those visitors who paid a fee) is too low ( $n < 30$ ), a warning is included. Additionally, the term "*this* visit" is used to reference the visit on which people were contacted to participate in the survey, which may or may not have been their most recent refuge visit.

## Refuge Description for Kenai National Wildlife Refuge

Located on the southern peninsula of Alaska, Kenai NWR was established on December 16, 1941 by Franklin Delano Roosevelt. The highest elevations at Kenai NWR exhibit glaciers thousands of years old. Lower elevations consist of boreal forests and numerous lakes, including Tustumena Lake spanning nearly 74,000 acres. The lowest elevations expose a salt water estuary home to many migratory birds and aquatic animals, such as seals and beluga whales.

Alaska's Kenai Peninsula is, in geologic terms, still quite "young," since its entire land mass was covered by glacial ice as recently as 10,000 years ago. Much of that frozen blanket still exists today in the form of the more than 800-square mile Harding Ice Field. Today, the refuge includes examples of every major Alaska habitat type. The refuge is an Alaska in miniature in its diversity of wildlife, as well. Sport fish bring hundreds of thousands of visitors to the peninsula each year. Eager anglers can pursue Chinook, sockeye, Coho and pink salmon; as well as Dolly Varden char, rainbow trout, and arctic grayling. With nearly two million acres, this refuge is also home to brown and black bears, caribou, Dall sheep, mountain goats, wolves, lynx, wolverines, eagles and thousands of shorebirds and waterfowl, not to mention the mighty Alaska-Yukon moose that the refuge was originally established to protect.

With nearly 500,000 visitors each year (based on 2008 RAPP data; U.S. Fish and Wildlife Service, 2011, written comm.), this refuge offers numerous activities and features such as waterfowl, upland game, and big game hunting; freshwater and saltwater fishing; hiking; wildlife observation; photography; environmental education and interpretation; canoeing; camping and cabins; and a Visitor Center and historical sites. The refuge offers numerous outdoor and leadership programs for local school groups and scouts. Since 1983, more than 1,800 teachers and youth leaders have participated in refuge-sponsored environmental education orientations, credit courses, and workshops. See Figure 1 for a map of Kenai NWR. For more information, visit <http://alaska.fws.gov/nwr/kenai/index.htm>.

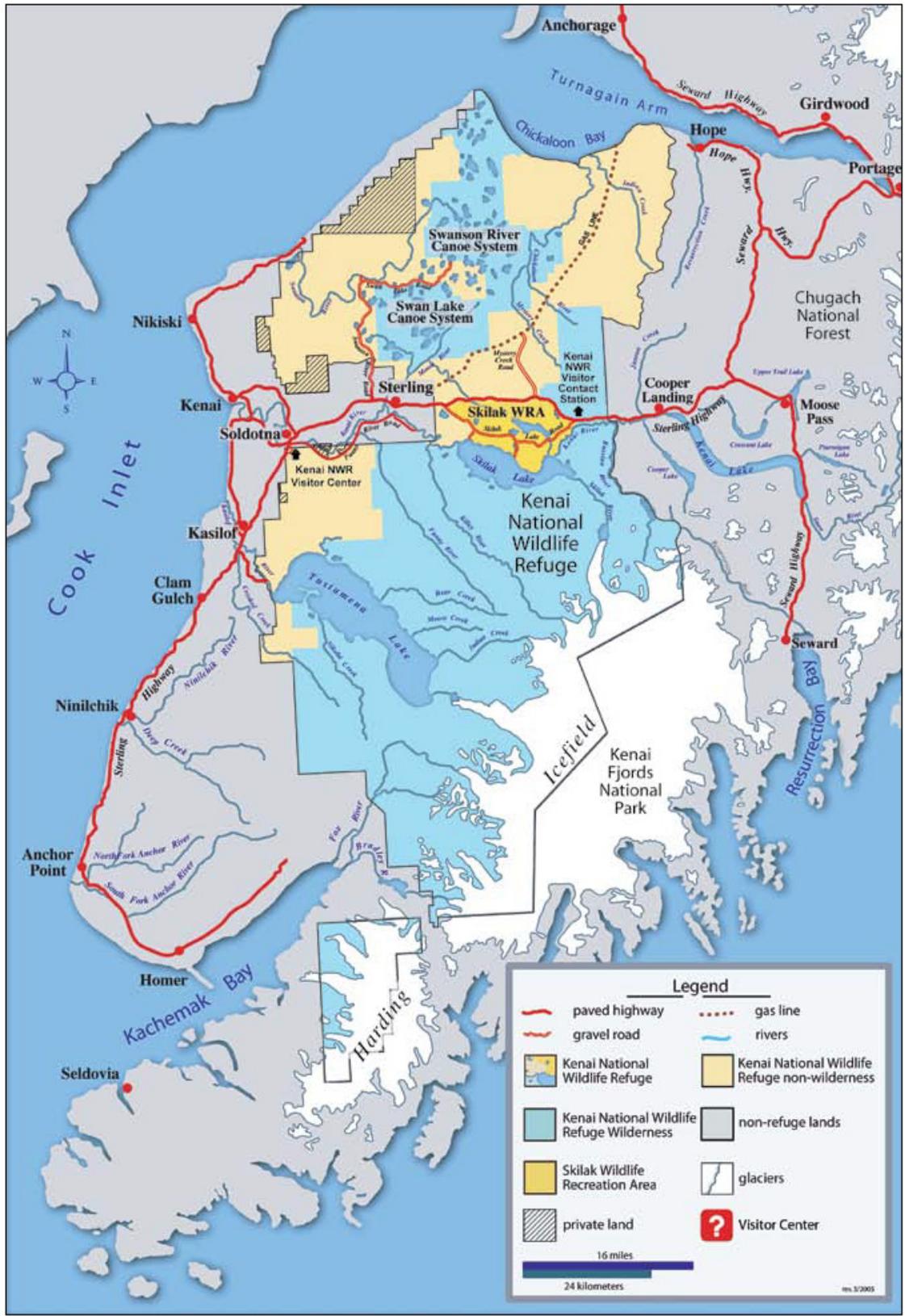


Figure 1. Map of Kenai NWR, courtesy of U.S. Fish and Wildlife Service.

## Sampling at Kenai National Wildlife Refuge

A total of 316 visitors agreed to participate in the survey during the two sampling periods at the identified locations at Kenai NWR (table 2). In all, 213 visitors completed the survey for a 71% response rate and  $\pm 5\%$  margin of error at the 95% confidence level.<sup>1</sup>

**Table 2.** Sampling and response rate summary for Kenai NWR.

Sampling period	Dates	Locations	Total contacts	Undeliverable addresses	Completed surveys	Response rate
1	07/10/10 to 07/24/10	Hidden Lake Campground Visitor Contact Station Upper Skilak Campground and Boat Launch Kenai/Russian River Confluence	160	7	107	70%
2	08/07/10 to 08/21/10	Jim's Landing Mystery Creek Road Swanson River Road Visitor Center	156	10	106	73%
<b>Total</b>			<b>316</b>	<b>17</b>	<b>213</b>	<b>71%</b>

## Selected Survey Results

### Visitor and Trip Characteristics

*A solid understanding of refuge visitors and details about their trips to refuges can inform communication outreach efforts, inform visitor services and transportation planning, forecast use, and gauge demand for services and facilities.*

### Familiarity with the Refuge System

While we did not ask visitors to identify the mission of the National Wildlife Refuge System or the U.S. Fish and Wildlife Service, visitors to Kenai NWR reported that before participating in the survey, they were aware of the role of the U.S. Fish and Wildlife Service in managing national wildlife refuges (84%) and that the Refuge System has the mission of conserving, managing, and restoring fish, wildlife, plants and their habitat (88%). Positive responses to these questions concerning the management and mission of the Refuge System do not indicate the degree to which these visitors understand the day-to-day management practices of

<sup>1</sup> The margin of error (or confidence interval) is the error associated with the results related to the sample and population size. A margin of error of  $\pm 5\%$ , for example, means if 55% of the sample answered a survey question in a certain way, then 50–60% of the entire population would have answered that way. The margin of error is calculated with an 80/20 response distribution, assuming that for any given dichotomous choice question, approximately 80% of respondents selected one choice and 20% selected the other (Salant and Dillman, 1994).

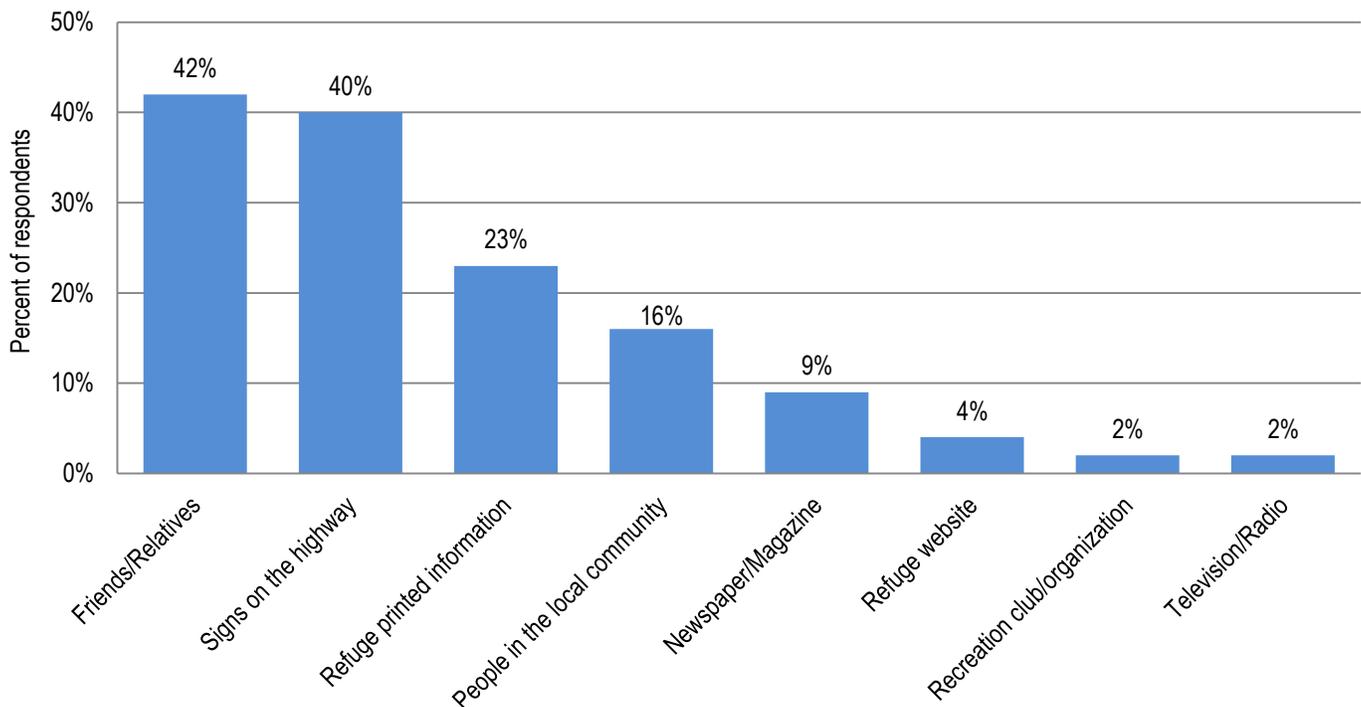
individual refuges, only that visitors feel they have a basic knowledge of who manages refuges and why. Compared to other public lands, many visitors feel that refuges provide a unique recreation experience (74%; see Appendix B for visitor comments on “What Makes National Wildlife Refuges Unique?”); however, reasons for why visitors find refuges unique are varied and may not directly correspond to their understanding of the mission of the Refuge System. Most visitors to Kenai NWR had been to at least one other National Wildlife Refuge in the past year (71%), with an average of 4 visits to other refuges during the past 12 months.

### Visiting This Refuge

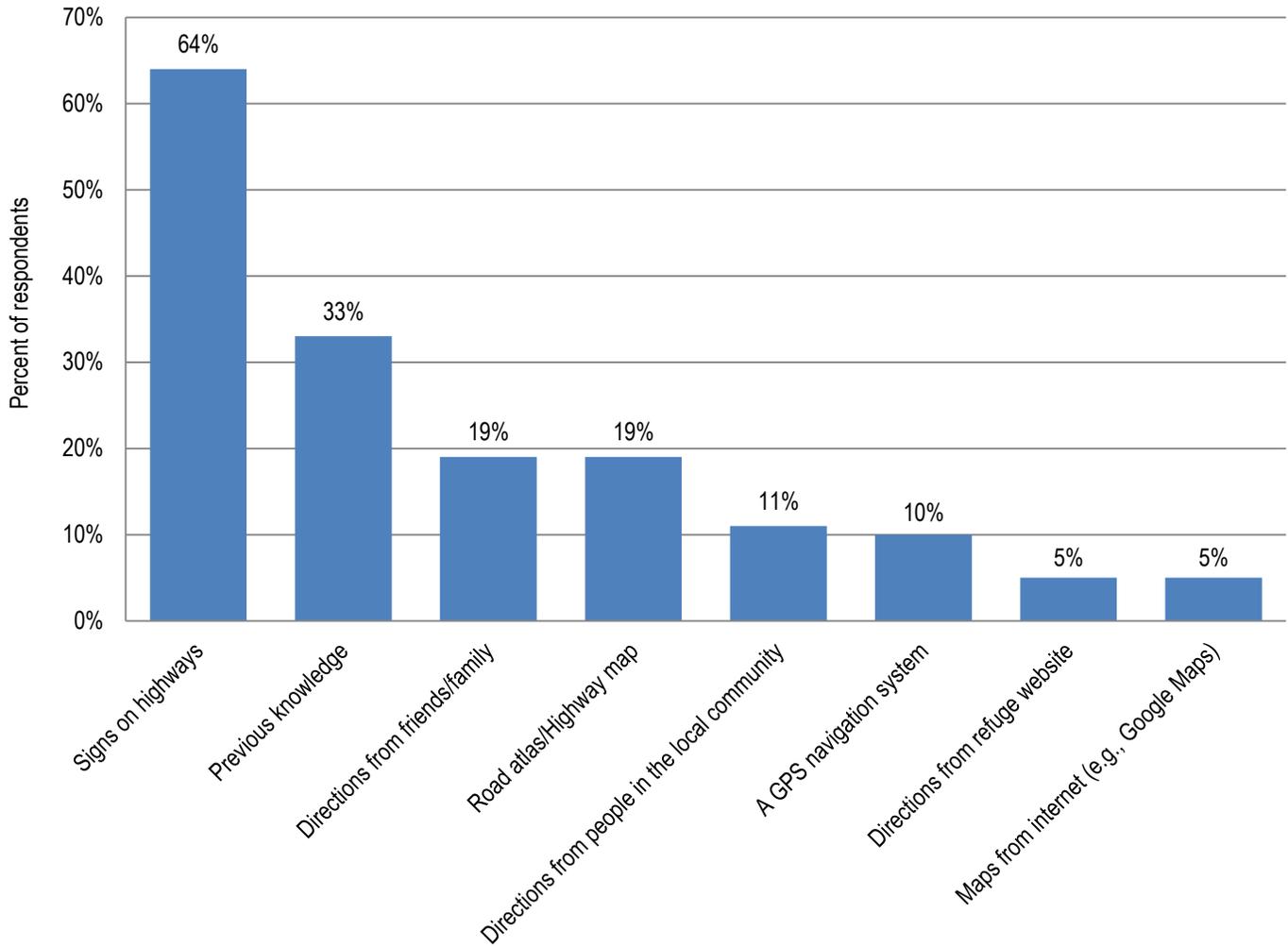
Most surveyed visitors (60%) had only been to Kenai NWR once in the past 12 months, while others had been multiple times (40%). These repeat visitors went to the refuge an average of 9 times during that same 12-month period. Visitors used the refuge during only one season (76%), during multiple seasons (17%), and year-round (8%).

Most visitors first learned about the refuge from friends/relatives (42%), signs on the highway (40%), or refuge printed information (23%; fig. 2). Key information sources used by visitors to find their way to this refuge include signs on highways (64%), previous knowledge (33%), directions from friends/family (19%), or a road atlas/highway map (19%; fig. 3).

Some visitors (20%) lived in the local area (within 50 miles of the refuge), whereas 80% were nonlocal visitors. For most local visitors, Kenai NWR was the primary purpose or sole destination of trip (80%; table 3). For most nonlocal visitors, the refuge was one of many equally important reasons or destinations for trip (40%). Local visitors reported that they traveled an average of 20 miles to get to the refuge, while nonlocal visitors traveled an average of 991 miles. Figure 4 shows the residence of visitors travelling to the refuge. About 40% of visitors travelling to Kenai NWR were from Alaska.



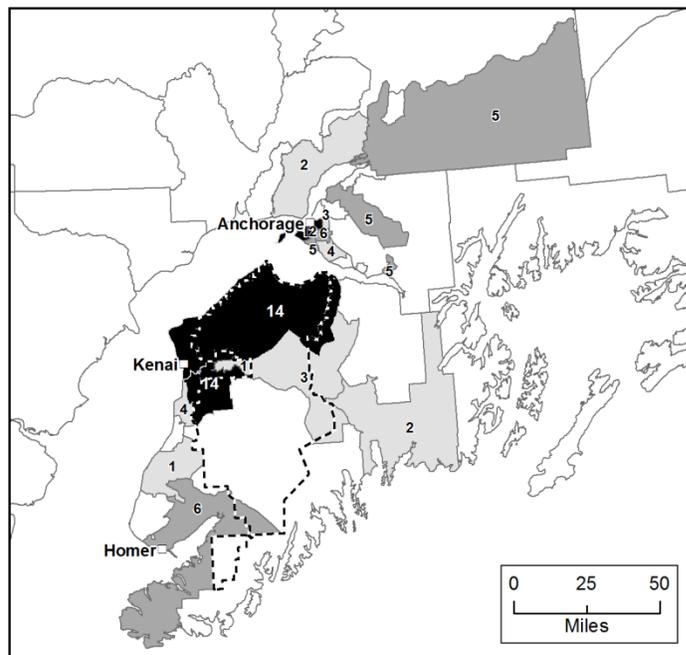
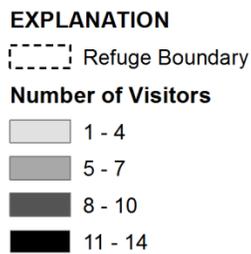
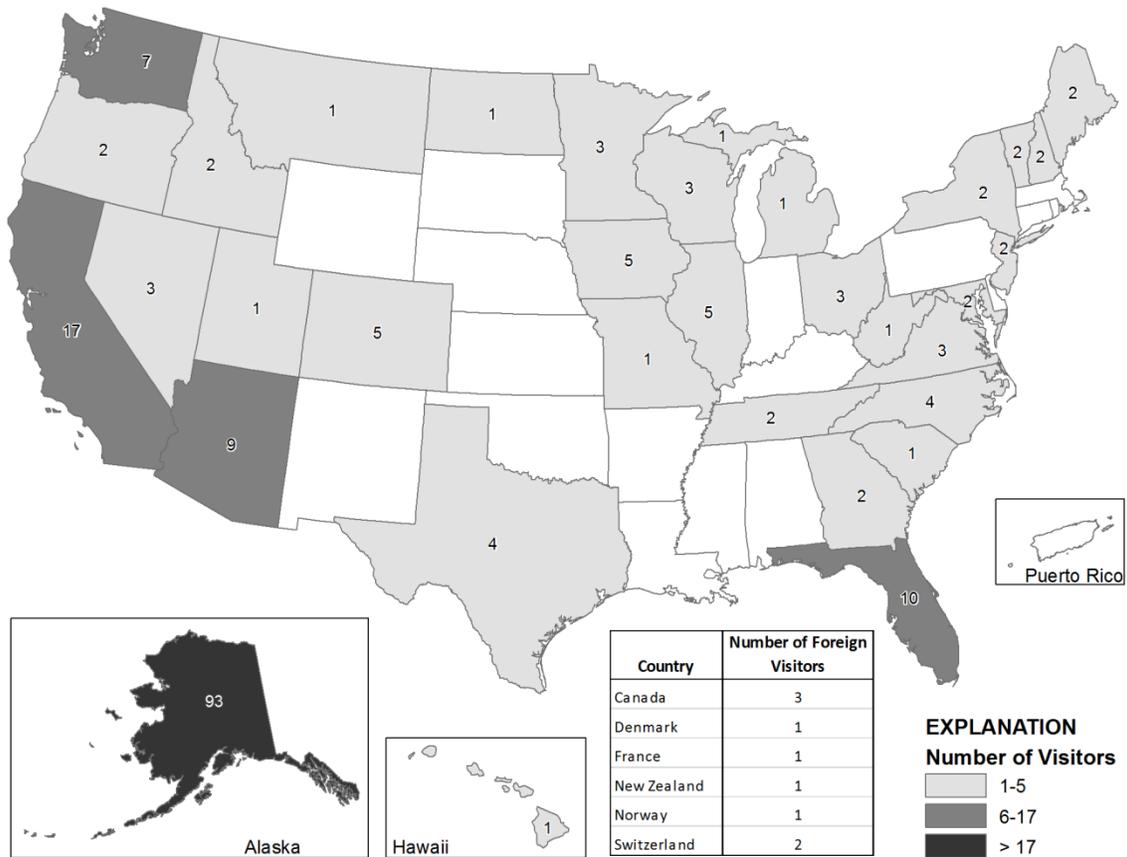
**Figure 2.** How visitors first learned or heard about Kenai NWR (n = 208).



**Figure 3.** Resources used by visitors to find their way to Kenai NWR during *this* visit (n = 211).

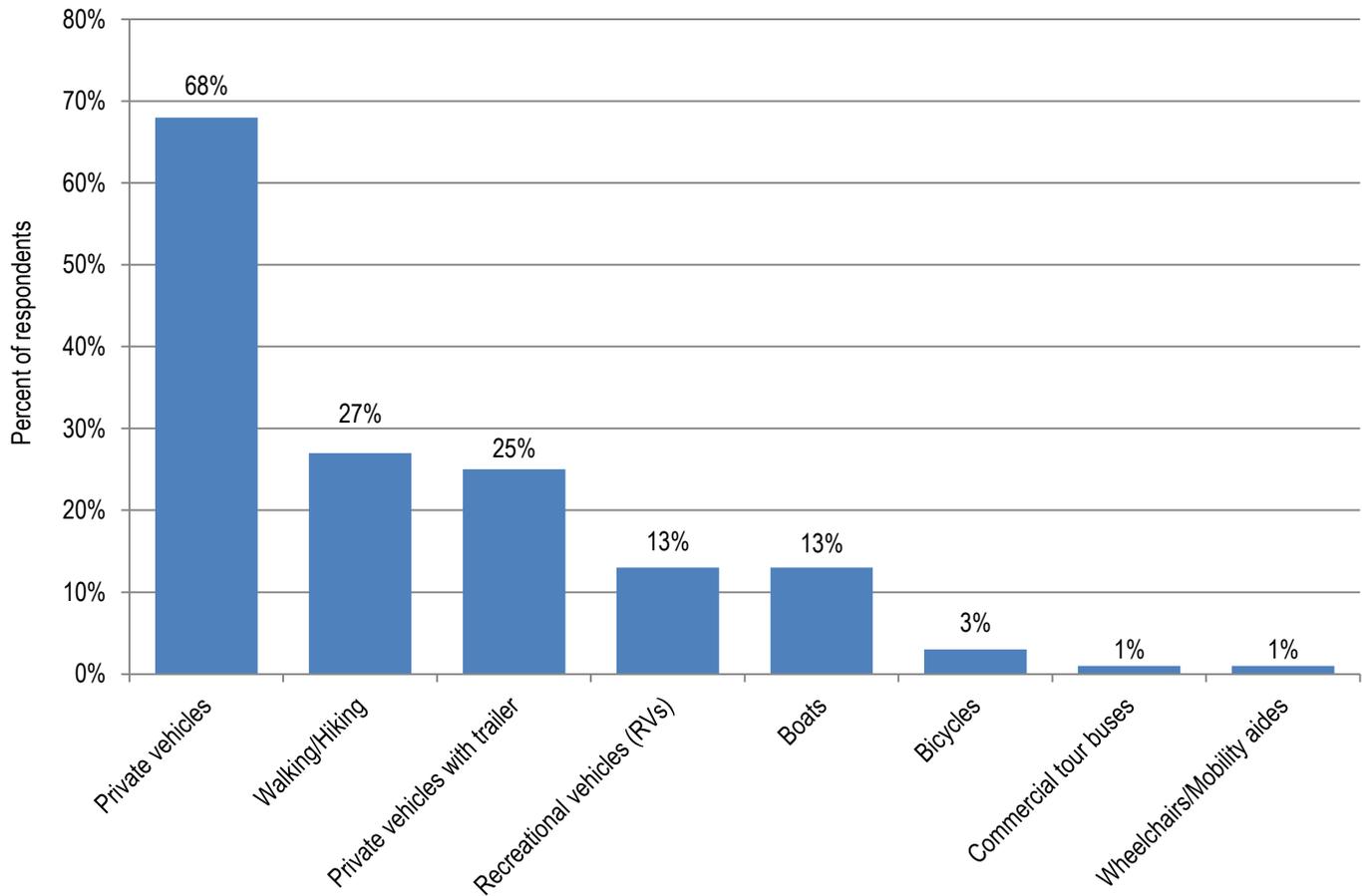
**Table 3.** Influence of Kenai NWR on visitors' decision to take *this* trip.

Visitors	Visiting this refuge was...		
	the primary reason for trip	one of many equally important reasons for trip	an incidental stop
Nonlocal	29%	41%	30%
Local	76%	19%	5%
Total	38%	37%	25%



**Figure 4.** Number of visitors travelling to Kenai NWR by residence. Top map shows residence by state and bottom map shows residence by zip codes near the refuge (n = 212).

Surveyed visitors reported that they spent an average of 5 hours at Kenai NWR during one day there (a day visit is assumed to be 8 hours). However, the most frequently reported length of visit during one day was actually 8 hours (54%). The key modes of transportation used by visitors to travel around the refuge were private vehicle (68%), walking/hiking (27%), and private vehicle with trailer (25%; fig. 5). Most visitors indicated they were part of a group on their visit to this refuge (73%), travelling primarily with family and friends (table 4).

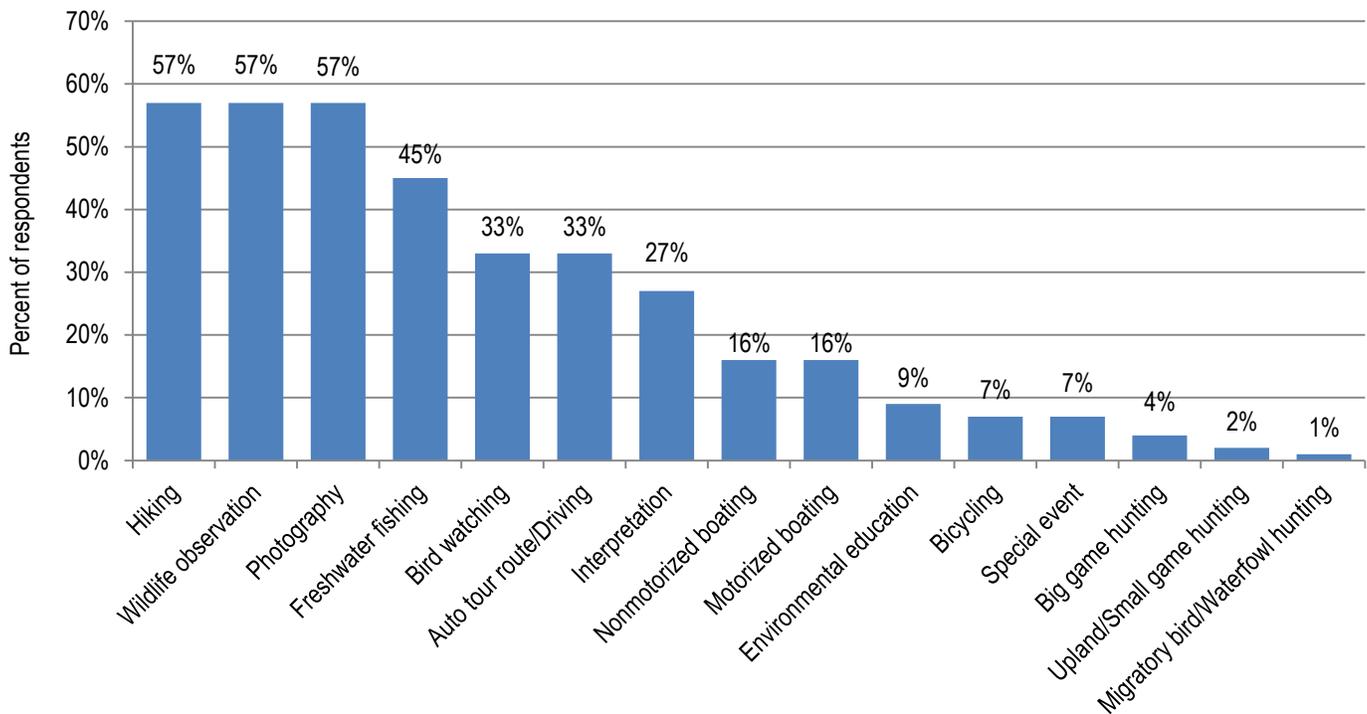


**Figure 5.** Modes of transportation used by visitors to Kenai NWR during *this* visit (n = 211).

**Table 4.** Type and size of groups visiting Kenai NWR (for those who indicated they were part of a group, n = 153).

Group type	Percent (of those traveling in a group)	Average group size		
		Number of adults	Number of children	Total group size
Family/Friends	93%	3	1	4
Commercial tour group	4%	9	1	10
Organized club/School group	0%	0	0	0
Other group type	3%	16	0	16

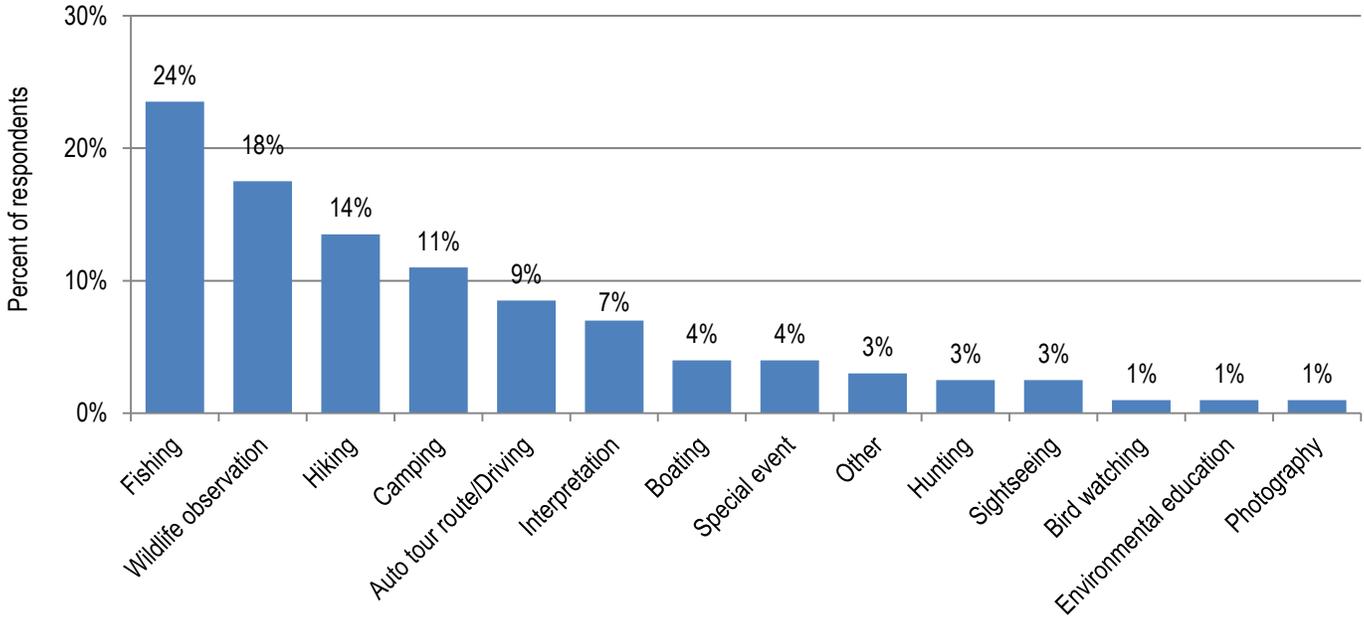
Surveyed visitors participated in a variety of refuge activities during the past 12 months (fig. 6); the top activities reported were hiking (57%), wildlife observation (57%), photography (57%), and freshwater fishing (45%). Though saltwater fishing is not an activity provided at Kenai NWR, 10% of visitors indicated they participated in this activity. Because saltwater fishing is offered nearby the refuge, it may be that visitors were unaware that they were not on the refuge when participating in this activity. The primary reasons for their most recent visit included fishing (24%), wildlife observation (18%), and hiking (14%; fig. 7). The visitor center was used by 62% of visitors, mostly to ask information of staff/volunteers (79%), view the exhibits (78%), and stop to use the facilities (68%; fig. 8).



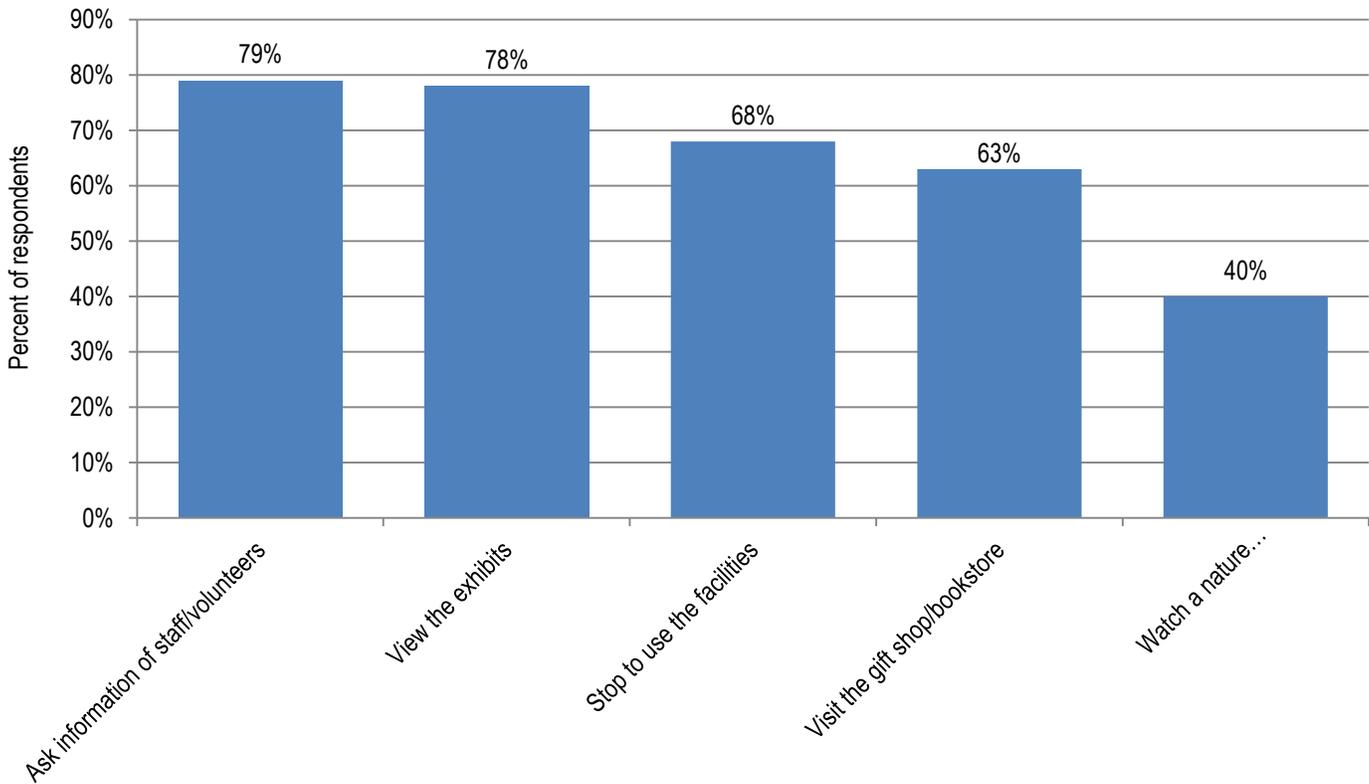
**Figure 6.** Activities in which visitors participated during the past 12 months at Kenai NWR (n = 211). See Appendix B for a listing of “other” activities.

### Visitor Characteristics

Nearly all (96%) surveyed visitors to Kenai NWR indicated that they were citizens or permanent residents of the United States. Only those visitors 18 years or older were sampled. Visitors were a mix of 50% male with an average age of 53 years and 50% female with an average age of 52 years. Visitors, on average, reported they had 16 years of formal education (college or technical school). The median level of income was \$75,000–\$99,000. See Appendix A for more demographic information. In comparison, the 2006 National Survey of Fishing, Hunting and Wildlife-Associated Recreation found that participants in wildlife watching and hunting on public land were 55% male and 45% female with an average age of 46 years, an average level of education of 14 years (associate degree or two years of college), and a median income of \$50,000–\$74,999 (Harris, 2011, personal communication). Compared to the U.S. population, these 2006 survey participants are more likely to be male, older, and have higher education and income levels (U.S. Department of the Interior and U.S. Department of Commerce, 2007).



**Figure 7.** The primary activity in which visitors participated during *this* visit to Kenai NWR (n = 200). See Appendix B for a listing of “other” activities.



**Figure 8.** Use of the visitor center at Kenai NWR (for those visitors who indicated they used the visitor center, n = 131).

## Visitor Spending in Local Communities

*Tourists usually buy a wide range of goods and services while visiting an area. Major expenditure categories include lodging, food, supplies, and gasoline. Spending associated with refuge visitation can generate considerable economic benefits for the local communities near a refuge. For example, more than 34.8 million visits were made to national wildlife refuges in fiscal year 2006; these visits generated \$1.7 billion in sales, almost 27,000 jobs, and \$542.8 million in employment income in regional economies (Carver and Caudill, 2007). Information on the amount and types of visitor expenditures can illustrate the economic importance of refuge visitor activities to local communities. Visitor expenditure information also can be used to analyze the economic impact of proposed refuge management alternatives.*

A region (and its economy) is typically defined as all counties within 50 miles of a travel destination (Stynes, 2008). Visitors that live within the local 50-mile area of a refuge typically have different spending patterns than those that travel from longer distances. During the two sampling periods, 20% of surveyed visitors to Kenai NWR indicated that they live within the local area. Nonlocal visitors (80%) stayed in the local area, on average, for 6 days. Table 5 shows summary statistics for local and nonlocal visitor expenditures in the local communities and at the refuge, with expenditures reported on a per person per day basis. During the two sampling periods, nonlocal visitors spent an average of \$63 per person per day and local visitors spent an average of \$68 per person per day in the local area. Several factors should be considered when estimating the economic importance of refuge visitor spending in the local communities. These include the amount of time spent at the refuge, influence of refuge on decision to take this trip, and the representativeness of primary activities of the sample of surveyed visitors compared to the general population. Controlling for these factors is beyond the scope of the summary statistics presented in this report. Detailed refuge-level visitor spending profiles which do consider these factors will be developed during the next phase of analysis.

**Table 5.** Total visitor expenditures in local communities and at Kenai NWR expressed in dollars per person per day.

Visitors	n <sup>1</sup>	Median	Mean	Standard deviation	Minimum	Maximum
Nonlocal	144	\$40	\$63	\$62	\$0	\$298
Local	31	\$30	\$68	\$80	\$0	\$255

<sup>1</sup>n = number of visitors who answered both locality *and* expenditure questions.

Note: For each respondent, reported expenditures were divided by the number of persons in their group that shared expenses in order to determine the spending per person per trip. This was then divided by the number of days spent in the local area to determine the spending per person per day for each respondent. For respondents who reported spending less than one full day, trip length was set equal to one day. These visitor spending estimates are appropriate for the sampling periods selected by refuge staff (see table 2 for sampling period dates and figure 7 for the primary visitor activities). They may not be representative of the total population of visitors to this refuge.

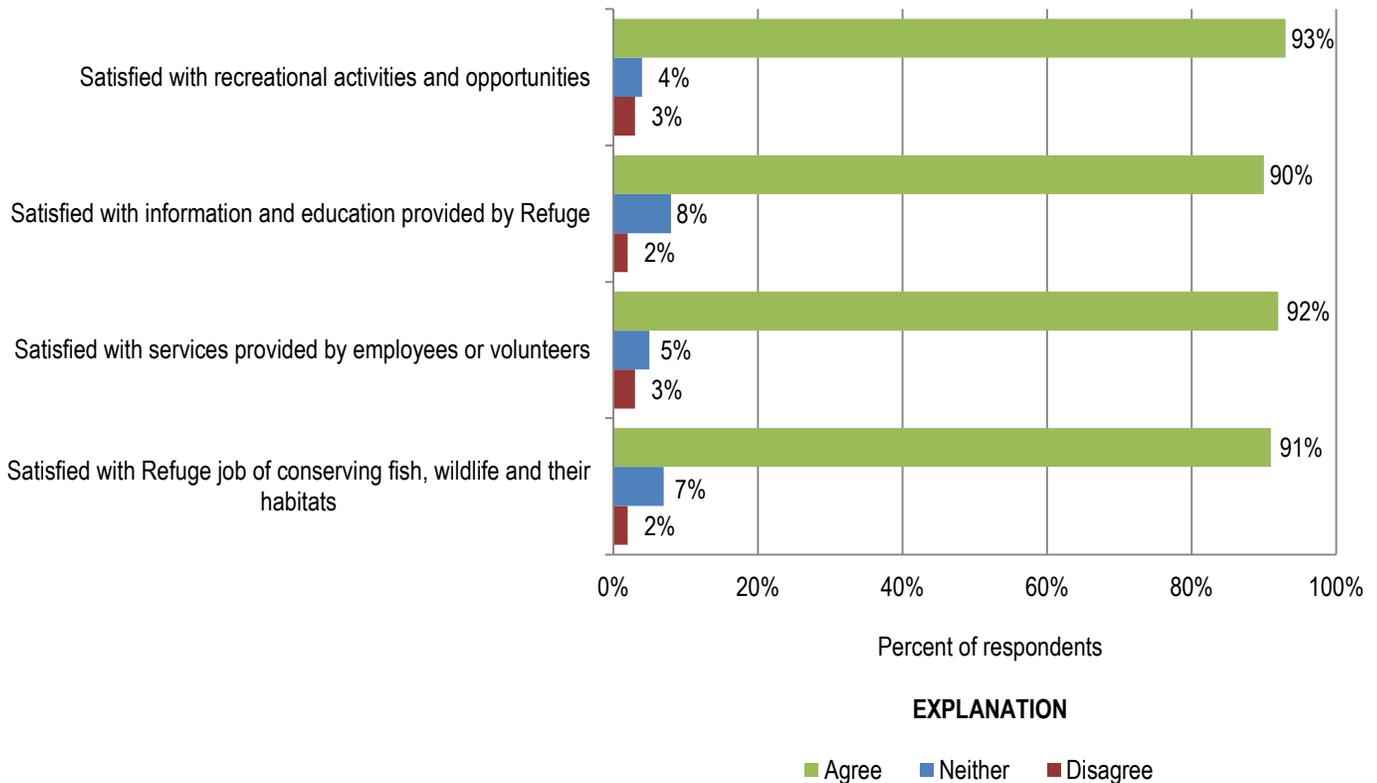
## Visitor Opinions about This Refuge

National wildlife refuges provide visitors with a variety of services, facilities, and wildlife-dependent recreational opportunities. Understanding visitors' perceptions of their refuge experience is a key component of the Refuge System mission as it pertains to providing high-quality wildlife-dependent recreational opportunities. Having a baseline understanding of visitor experience can inform management decisions to better balance visitors' expectations with the Refuge System mission. Recent studies in outdoor recreation have included an emphasis on declining participation in traditional activities such as hunting and an increasing need to connect the next generation to nature and wildlife. These factors highlight the importance of current refuge visitors as a key constituency in wildlife conservation. A better understanding is increasingly needed to better manage the visitor experience and to address the challenges of the future.

Surveyed visitors' overall satisfaction with the services, facilities, and recreational opportunities provided at Kenai NWR were as follows (fig. 9):

- 93% were satisfied with the recreational activities and opportunities,
- 90% were satisfied with the information and education about the refuge and its resources,
- 92% were satisfied with the services provided by employees or volunteers, and
- 91% were satisfied with the refuge's job of conserving fish, wildlife and their habitats.

Although 51% of visitors (n = 96) indicated they paid a fee to enter Kenai NWR, the refuge does not charge an entrance fee. It may be that some of these visitors were referencing campground or public-use cabin fees.



**Figure 9.** Overall satisfaction with Kenai NWR during *this* visit (n ≥ 201).

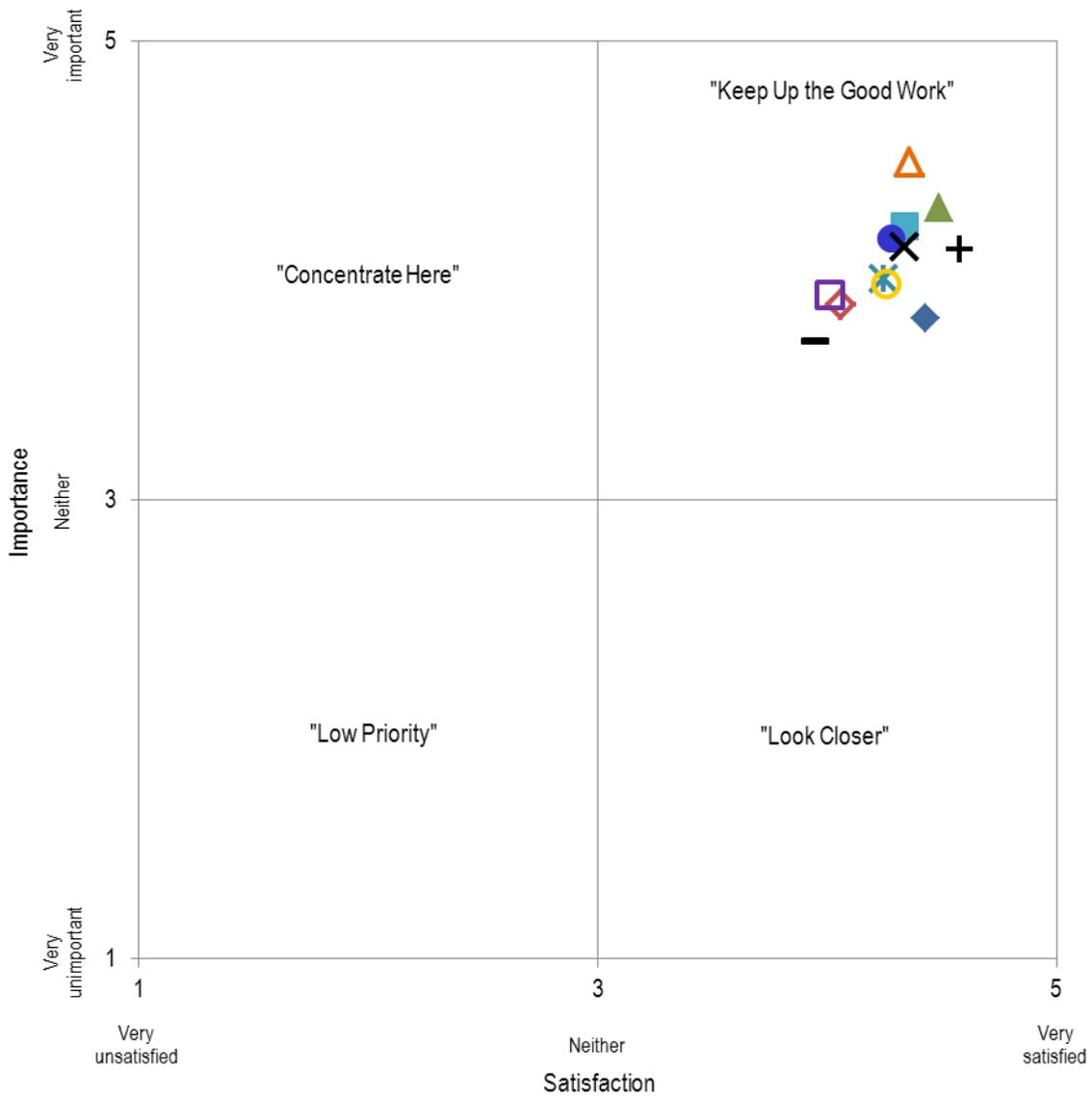
## Importance/Satisfaction Ratings

*Comparing the importance and satisfaction ratings for visitor services provided by refuges can help to identify how well the services are meeting visitor expectations. The importance-performance framework presented in this section is a tool that includes the importance of an attribute to visitors in relation to their satisfaction with that attribute. Drawn from marketing research, this tool has been applied to outdoor recreation and visitation settings (Martilla and James, 1977; Tarrant and Smith, 2002). Results for the attributes of interest are segmented into one of four quadrants (modified for this national study):*

- Keep Up the Good Work = high importance/high satisfaction;
- Concentrate Here = high importance/low satisfaction;
- Low Priority = low importance/low satisfaction; and
- Look Closer = low importance/high satisfaction.

*Graphically plotting visitors' importance and satisfaction ratings for different services, facilities, and recreational opportunities provides a simple and intuitive visualization of these survey measures. However, this tool is not without its drawbacks. One is the potential for variation among visitors regarding their expectations and levels of importance (Vaske et al., 1996; Bruyere et al., 2002; Wade and Eagles, 2003), and certain services or recreational opportunities may be more or less important for different segments of the visitor population. For example, hunters may place more importance on hunting opportunities and amenities such as blinds, while school group leaders may place more importance on educational/informational displays than would other visitors. This potential for highly varied importance ratings needs to be considered when viewing the average results of this analysis of visitors to Kenai NWR. This consideration is especially important when reviewing the attributes that fall into the "Look Closer" quadrant. In some cases, these attributes may represent specialized recreational activities in which a small subset of visitors participate (for example, hunting, kayaking) or facilities and services that only some visitors experience (for example, exhibits about the refuge). For these visitors, the average importance of (and potentially the satisfaction with) the attribute may be much higher than it would be for the overall population of visitors.*

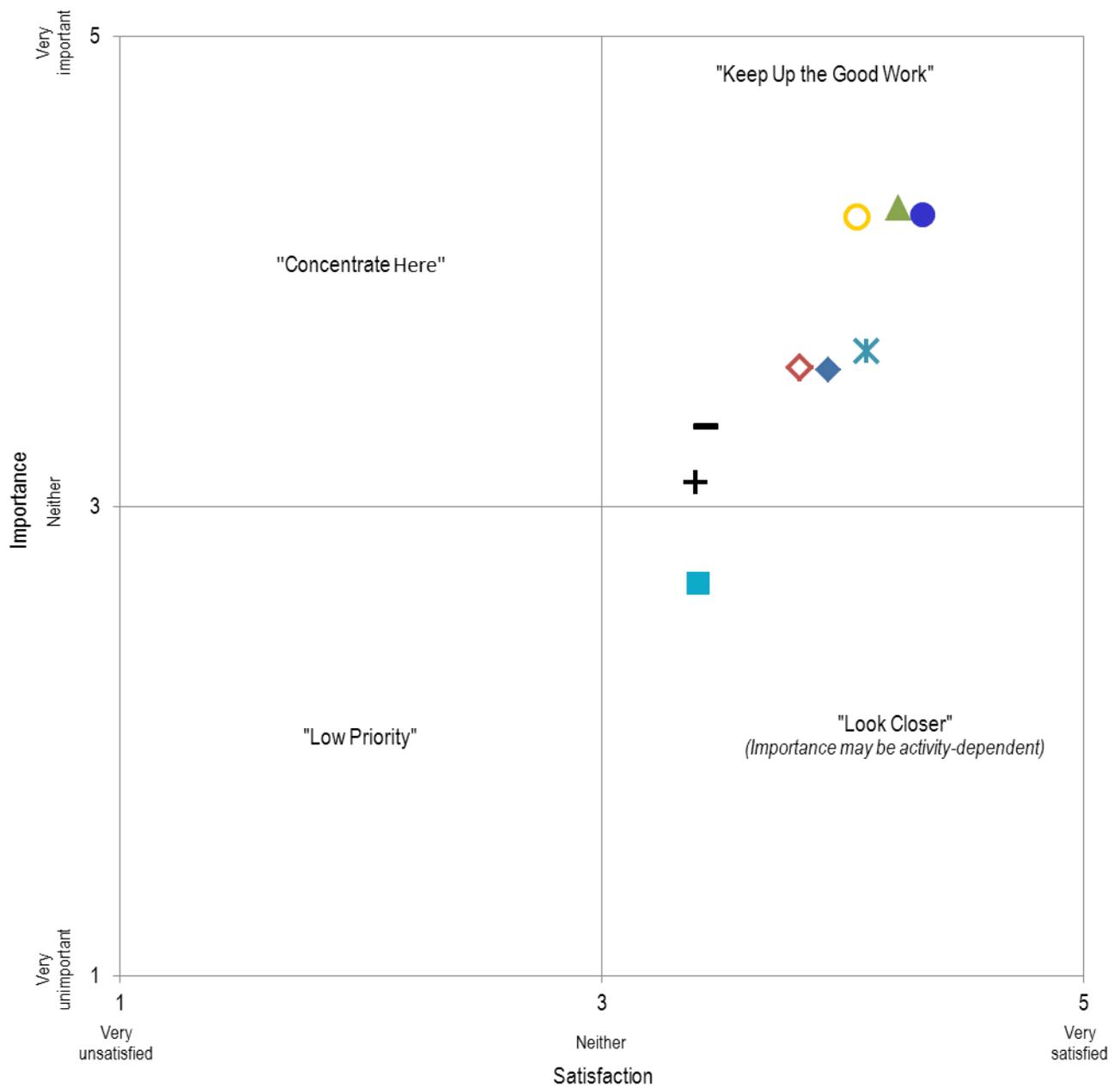
Figures 10-12 depict surveyed visitors' importance-satisfaction results for refuge services and facilities, recreational opportunities, and transportation-related features at Kenai NWR, respectively. All refuge services and facilities fell in the "Keep Up the Good Work" quadrant (fig. 10). All refuge recreational opportunities fell in the "Keep Up the Good Work" quadrant except hunting opportunities, which fell into the "Look Closer" quadrant (fig. 11). The average importance of hunting in the "Look Closer" quadrant may be higher among visitors who have participated in these activities during the past 12 months; however, there were not enough individuals in the sample to evaluate the responses of such participants. All transportation-related features fell in the "Keep Up the Good Work" quadrant (fig. 12).



**EXPLANATION**

- ◆ Availability of employees/volunteers
- ▲ Knowledgeable employees/volunteers
- ◊ Exhibits about this Refuge
- Visitor Center
- Signs with rules/regulations
- ▲ Well-maintained restrooms
- ✚ Courteous/welcoming employees/volunteers
- ✕ Informational kiosks/displays about this Refuge
- Environmental education programs/activities
- Convenient hours/days of operation
- ✕ Printed information about this Refuge
- ◻ Wildlife observation structures

**Figure 10.** Importance-satisfaction ratings of services and facilities provided at Kenai NWR.



**EXPLANATION**

- ◆ Bird watching opportunities
- Hunting opportunities
- ◇ Kayak/Canoe opportunities
- Wildlife viewing opportunities
- ✕ Fishing opportunities
- Bicycling opportunities
- ▲ Photography opportunities
- Hiking opportunities
- + Volunteer opportunities

**Figure 11.** Importance-satisfaction ratings of recreational opportunities provided at Kenai NWR.



## Visitor Opinions about National Wildlife Refuge System Topics

*One goal of this national visitor survey was to identify visitor trends across the Refuge System to more effectively manage refuges and provide visitor services. Two important issues to the Refuge System are transportation on refuges and communicating with visitors about climate change. The results to these questions will be most meaningful when they are evaluated in aggregate (data from all participating refuges together). However, basic results for Kenai NWR are reported here.*

### Alternative Transportation and the National Wildlife Refuge System

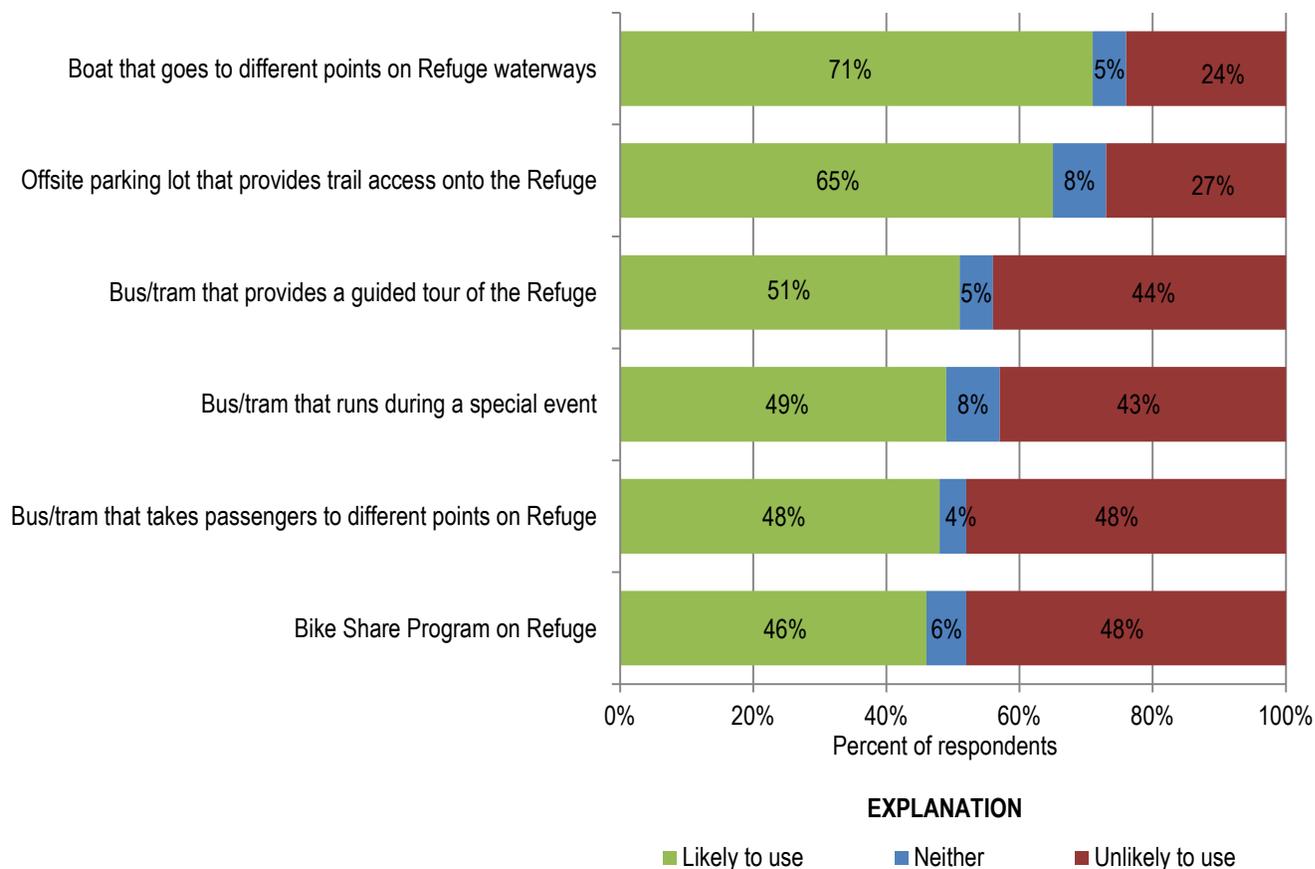
*Visitors use a variety of transportation means to access and enjoy national wildlife refuges. While many visitors arrive at the refuge in a private vehicle, alternatives such as buses, trams, watercraft, and bicycles are increasingly becoming a part of the visitor experience. Previous research has identified a growing need for transportation alternatives within the Refuge System (Krechmer et al., 2001); however, less is known about how visitors perceive and use these new transportation options. An understanding of visitors' likelihood of using certain alternative transportation options can help in future planning efforts. Visitors were asked their likelihood of using alternative transportation options at national wildlife refuges in the future.*

Of the six Refuge System-wide alternative transportation options listed on the survey, the majority of Kenai NWR visitors who were surveyed were likely to use the following options at national wildlife refuges in the future

(fig. 13):

- a boat that goes to different points on Refuge waterways;
- an offsite parking lot that provides trail access; and
- a bus/tram that provides a guided tour.

When asked about using alternative transportation at Kenai NWR specifically, 43% of visitors indicated they were unsure whether it would enhance their experience; however, some visitors thought alternative transportation would enhance their experience (25%) and others thought it would not (33%).



**Figure 13.** Visitors’ likelihood of using alternative transportation options at national wildlife refuges in the future (n ≥ 201).

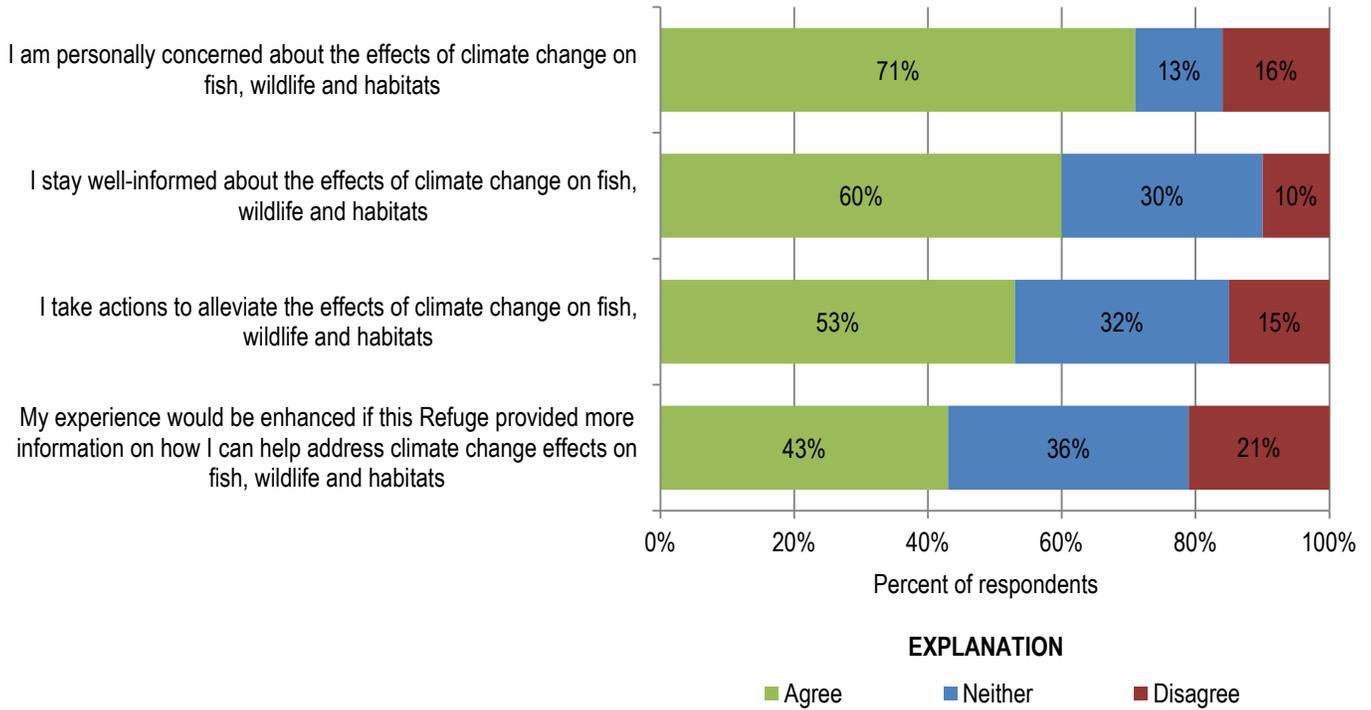
### Climate Change and the National Wildlife Refuge System

*Climate change represents a growing concern for the management of national wildlife refuges. The Service’s climate change strategy, titled “Rising to the Urgent Challenge,” establishes a basic framework for the agency to work within a larger conservation community to help ensure wildlife, plant, and habitat sustainability (U.S. Fish and Wildlife Service, 2010). To support the guiding principles of the strategy, refuges will be exploring options for more effective engagement with visitors on this topic. The national visitor survey collected information about visitors’ level of personal involvement in climate change related to fish, wildlife and their habitats and visitors’ beliefs regarding this topic. Items draw from the “Six Americas” framework for understanding public sentiment toward climate change (Leiserowitz, Maibach, and Roser-Renouf, 2008) and from literature on climate change message frames (e.g., Nisbet, 2009). Such information provides a baseline for understanding visitor perceptions of climate change in the context of fish and wildlife conservation that can further inform related communication and outreach strategies.*

Factors that influence how individuals think about climate change include their basic beliefs, levels of involvement, policy preferences, and behaviors related to this topic. Results presented below provide baseline information on visitors’ levels of involvement with the topic of climate change related to fish,

wildlife and their habitats. The majority of surveyed visitors to Kenai NWR agreed with the following statements (fig. 14):

- “I am personally concerned about the effects of climate change on fish, wildlife and habitats;”
- “I stay well-informed about the effects of climate change;” and
- “I take actions to alleviate the effects of climate change.”



**Figure 14.** Visitors’ personal involvement with climate change related to fish, wildlife and their habitats (n ≥ 204).

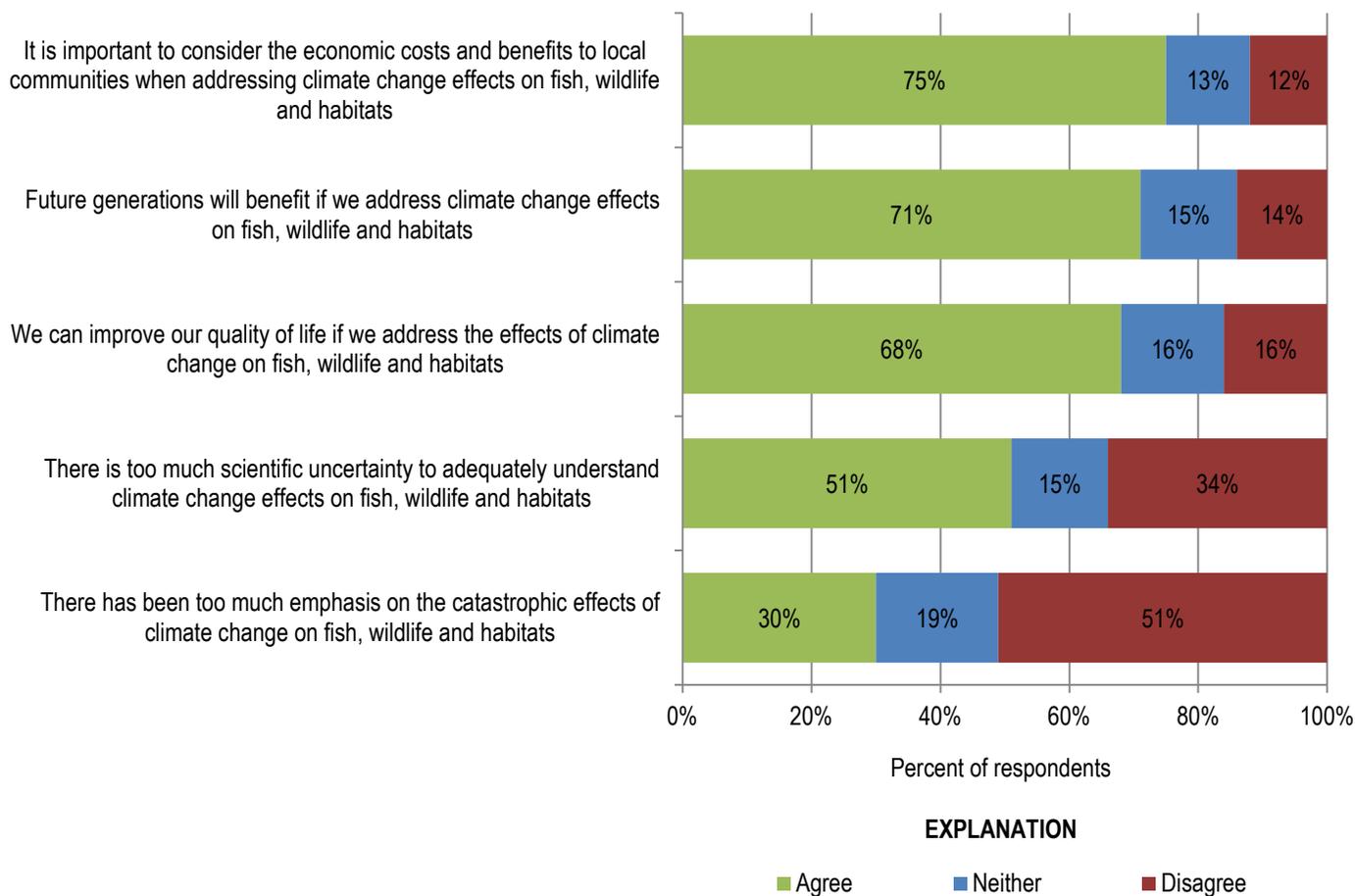
These results are most useful when coupled with responses to belief statements about the effects of climate change on fish, wildlife and their habitats, because such beliefs may be used to develop message frames (or ways to communicate) about climate change with a broad coalition of visitors. Framing science-based findings will not alter the overall message, but rather place the issue in a context in which different audience groupings can relate. The need to mitigate impacts of climate change on Refuges could be framed as a quality-of-life issue (for example, preserving the ability to enjoy fish, wildlife, plants, and their habitat) or an economic issue (for example, maintaining tourist revenues, supporting economic growth through new jobs/technology).

For Kenai NWR, the majority of visitors believed the following regarding climate change related to fish, wildlife and their habitats (fig. 15):

- “It is important to consider the economic costs and benefits to local communities when addressing climate change effects;”
- “Future generations will benefit if we address climate change effects;”
- “We can improve our quality of life if we address the effects of climate change;” and
- “There is too much scientific uncertainty to adequately understand climate change effects.”

The majority of visitors did *not* believe “There has been too much emphasis on the catastrophic effects of climate change.”

Such information suggests that certain beliefs resonate with a greater number of visitors than other beliefs do. This information is important to note because some visitors (43%) indicated that their experience would be enhanced if Kenai NWR provided information about how they could help address the effects of climate change on fish, wildlife, and their habitats (fig. 14), and framing the information in a way that resonates most with visitors may result in a more engaged public who support strategies aimed at alleviating climate change pressures. Data will be analyzed further at the aggregate, or national level, to inform the development of a comprehensive communication strategy about climate change.



**Figure 15.** Visitors’ beliefs about the effects of climate change on fish, wildlife and their habitats (n ≥ 204).

## Conclusion

These individual refuge results provide a summary of trip characteristics and experiences of a sample of visitors to Kenai NWR during 2010–2011. These data can be used to inform decision-making efforts related to the refuge, such as Comprehensive Conservation Plan implementation, visitor services management, and transportation planning and management. For example, when modifying (either minimizing or enhancing) visitor facilities, services, or recreational opportunities, a solid understanding of visitors' trip and activity characteristics, their satisfaction with existing offerings, and opinions regarding refuge fees is helpful. This information can help to gauge demand for refuge opportunities and inform both implementation and communication strategies. Similarly, an awareness of visitors' satisfaction ratings with refuge offerings can help determine if any potential areas of concern need to be investigated further. As another example of the utility of these results, community relations may be improved or bolstered through an understanding of the value of the refuge to visitors, whether that value is attributed to an appreciation of the refuge's uniqueness, enjoyment of its recreational opportunities, or spending contributions of nonlocal visitors to the local economy. Such data about visitors and their experiences, in conjunction with an understanding of biophysical data on the refuge, can ensure that management decisions are consistent with the Refuge System mission while fostering a continued public interest in these special places.

Individual refuge results are available for downloading at <http://pubs.usgs.gov/ds/643/> as part of USGS Data Series 643 (Sexton and others, 2011). For additional information about this project, contact the USGS researchers at [national\\_visitor\\_survey@usgs.gov](mailto:national_visitor_survey@usgs.gov) or 970.226.9205.

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# National Wildlife Refuge Visitor Survey



**PLEASE READ THIS FIRST:**

Thank you for visiting a National Wildlife Refuge and for agreeing to participate in this study! We hope that you had an enjoyable experience. The U.S. Fish and Wildlife Service and the U.S. Geological Survey would like to learn more about National Wildlife Refuge visitors in order to improve the management of the area and enhance visitor opportunities.

**If you have recently visited more than one National Wildlife Refuge or made more than one visit to the same Refuge, please respond regarding only the Refuge and the visit when you were asked to participate in this survey. Any question that uses the phrase “this Refuge” refers to the Refuge and visit when you were contacted.**

**SECTION 1. Your visit to this Refuge**

1. Including your most recent visit, which activities have you participated in during the past 12 months at this Refuge?  
(Please mark **all that apply.**)

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> 4% Big game hunting                 | <input type="checkbox"/> 57% Hiking   | <input type="checkbox"/> 9% Environmental education (for example, classrooms or labs, tours) |
| <input type="checkbox"/> 2% Upland/Small-game hunting        | <input type="checkbox"/> 7% Bicycling   |  |
| <input type="checkbox"/> 1% Migratory bird/Waterfowl hunting | <input type="checkbox"/> 33% Auto tour route/Driving                                | <input type="checkbox"/> 7% Special event ( <i>please specify</i> )<br><u>See Appendix B</u> |
| <input type="checkbox"/> 57% Wildlife observation            | <input type="checkbox"/> 16% Motorized boating                                      |  |
| <input type="checkbox"/> 33% Bird watching                   | <input type="checkbox"/> 16% Nonmotorized boating (including canoes/kayaks)         | <input type="checkbox"/> 18% Other ( <i>please specify</i> )<br><u>See Appendix B</u>        |
| <input type="checkbox"/> 45% Freshwater fishing              |   |  |
| <input type="checkbox"/> 0% Saltwater fishing                | <input type="checkbox"/> 27% Interpretation (for example, exhibits, kiosks, videos) | <input type="checkbox"/> 2% Other ( <i>please specify</i> )<br><u>See Appendix B</u>         |
| <input type="checkbox"/> 56% Photography                     |   |  |

2. Which of the activities above was the ***primary*** purpose of your visit to this Refuge?  
(Please write **only one activity** on the line.) See report for categorized results; see Appendix B for miscellaneous responses

3. Did you go to a Visitor Center at this Refuge?

- 38% No
- 62% Yes → If yes, what did you do there? (Please mark **all that apply.**)
- |  |   |
|--|---|
| <input type="checkbox"/> 63% Visit the gift shop or bookstore    | <input type="checkbox"/> 40% Watch a nature talk/video/presentation                               |
| <input type="checkbox"/> 78% View the exhibits                   | <input type="checkbox"/> 68% Stopped to use the facilities (for example, get water, use restroom) |
| <input type="checkbox"/> 79% Ask information of staff/volunteers | <input type="checkbox"/> 14% Other ( <i>please specify</i> ) <u>See Appendix B</u>                |

4. Which of the following best describes your visit to this Refuge? (*Please mark **only one.***)

Nonlocal	Local	Total	
30%	80%	40%	It was the primary purpose or sole destination of my trip.
40%	20%	40%	It was one of many equally important reasons or destinations for my trip.
30%	0%	30%	It was just an incidental or spur-of-the-moment stop on a trip taken for other purposes or to other destinations.

5. Approximately how many **miles** did you travel to get to this Refuge?

**Nonlocal**   992   number of miles  
**Local**     20   number of miles

6. How much time did you spend at this Refuge on your visit?

See Report for Results

7. Were you part of a group on your visit to this Refuge?

27% No (*skip to question #9*)

73% Yes → What **type of group** were you with on your visit? (*Please mark **only one.***)

93% Family and/or friends

0% Organized club or school group

4% Commercial tour group

3% Other (*please specify*) See Appendix B

8. How many people were in your group, including yourself? (*Please answer each category.*)

  4   number 18 years and over

  1   number 17 years and under

9. How did you **first learn or hear about** this Refuge? (*Please mark **all that apply.***)

42% Friends or relatives

4% Refuge website

40% Signs on highway

2% Other website (*please specify*) See Appendix B

2% Recreation club or organization

2% Television or radio

16% People in the local community

9% Newspaper or magazine

23% Refuge printed information (brochure, map)

11% Other (*please specify*) See Appendix B

10. During which seasons have you visited this Refuge in the last 12 months? (*Please mark **all that apply.***)

16% Spring  
(March-May)

98% Summer  
(June-August)

22% Fall  
(September-November)

10% Winter  
(December-February)

11. How many times have you visited...

...this Refuge (including this visit) in the last 12 months?   4   number of visits

...other National Wildlife Refuges in the last 12 months?   3   number of visits

**SECTION 2. Transportation and access at this Refuge**

1. What **forms of transportation** did you use on your visit to this Refuge? (*Please mark **all that apply.***)

- |                              |   |                              |                                  |                              |                                       |
|------------------------------|---|------------------------------|----------------------------------|------------------------------|---------------------------------------|
| <input type="checkbox"/> 68% | Private vehicle without a trailer                             | <input type="checkbox"/> 0%  | Refuge shuttle bus or tram       | <input type="checkbox"/> 3%  | Bicycle                               |
| <input type="checkbox"/> 25% | Private vehicle with a trailer<br>(for boat, camper or other) | <input type="checkbox"/> 0%  | Motorcycle                       | <input type="checkbox"/> 27% | Walk/Hike                             |
| <input type="checkbox"/> 1%  | Commercial tour bus   | <input type="checkbox"/> 0%  | ATV or off-road vehicle          | <input type="checkbox"/> 5%  | Other ( <i>please specify below</i> ) |
| <input type="checkbox"/> 13% | Recreational vehicle (RV)                                     | <input type="checkbox"/> 13% | Boat                             | <u>See Appendix B</u>        |                                       |
|                              |   | <input type="checkbox"/> 1%  | Wheelchair or other mobility aid |                              |                                       |

2. Which of the following did you use to find your way to this Refuge? (*Please mark **all that apply.***)

- |                              |  |                              |   |
|------------------------------|--|------------------------------|---|
| <input type="checkbox"/> 64% | Signs on highways  | <input type="checkbox"/> 5%  | Directions from Refuge website                        |
| <input type="checkbox"/> 10% | A GPS navigation system  | <input type="checkbox"/> 11% | Directions from people in community near this Refuge  |
| <input type="checkbox"/> 19% | A road atlas or highway map                                      | <input type="checkbox"/> 19% | Directions from friends or family                     |
| <input type="checkbox"/> 5%  | Maps from the Internet (for example,<br>MapQuest or Google Maps) | <input type="checkbox"/> 33% | Previous knowledge/I have been to this Refuge before  |
|                              |  | <input type="checkbox"/> 7%  | Other ( <i>please specify</i> ) <u>See Appendix B</u> |

3. Below are different alternative transportation options that could be offered at some National Wildlife Refuges in the future. Considering the different Refuges you may have visited, please tell us **how likely you would be to use each transportation option.** (*Please circle one number for each statement.*)

How likely would you be to use...	Very Unlikely	Somewhat Unlikely	Neither	Somewhat Likely	Very Likely
...a bus or tram that takes passengers to different points on the Refuge (such as the Visitor Center)?	<input type="checkbox"/> 35%	<input type="checkbox"/> 13%	<input type="checkbox"/> 4%	<input type="checkbox"/> 34%	<input type="checkbox"/> 14%
...a bike that was offered through a Bike Share Program for use while on the Refuge?	<input type="checkbox"/> 35%	<input type="checkbox"/> 13%	<input type="checkbox"/> 6%	<input type="checkbox"/> 30%	<input type="checkbox"/> 16%
...a bus or tram that provides a guided tour of the Refuge with information about the Refuge and its resources?	<input type="checkbox"/> 31%	<input type="checkbox"/> 13%	<input type="checkbox"/> 5%	<input type="checkbox"/> 36%	<input type="checkbox"/> 15%
...a boat that goes to different points on Refuge waterways?	<input type="checkbox"/> 16%	<input type="checkbox"/> 8%	<input type="checkbox"/> 5%	<input type="checkbox"/> 43%	<input type="checkbox"/> 27%
...a bus or tram that runs during a special event (such as an evening tour of wildlife or weekend festival)?	<input type="checkbox"/> 30%	<input type="checkbox"/> 12%	<input type="checkbox"/> 8%	<input type="checkbox"/> 33%	<input type="checkbox"/> 16%
...an offsite parking lot that provides trail access for walking/hiking onto the Refuge?	<input type="checkbox"/> 17%	<input type="checkbox"/> 11%	<input type="checkbox"/> 8%	<input type="checkbox"/> 37%	<input type="checkbox"/> 28%
...some other alternative transportation option? ( <i>please specify</i> ) <u>See Appendix B</u>	<input type="checkbox"/> 13%	<input type="checkbox"/> 0%	<input type="checkbox"/> 6%	<input type="checkbox"/> 19%	<input type="checkbox"/> 63%

4. If alternative transportation were offered at *this* Refuge, would it enhance your experience?

- 25% Yes       33% No       43% Not Sure

5. For each of the following transportation-related features, first, **rate how important** each feature is to you when visiting this Refuge; then **rate how satisfied** you are with the way this Refuge is managing each feature. *If this Refuge does not offer a specific transportation-related feature, please rate how important it is to you and then circle NA "Not Applicable" under the Satisfaction column.*

Importance						Satisfaction					
Circle one for each item.						Circle one for each item.					
Very Unimportant	Somewhat Unimportant	Neither	Somewhat Important	Very Important		Very Unsatisfied	Somewhat Unsatisfied	Neither	Somewhat Satisfied	Very Satisfied	Not Applicable
5%	12%	12%	46%	25%	Surface conditions of roads	6%	13%	6%	31%	43%	NA
8%	16%	14%	47%	16%	Surface conditions of parking areas	5%	6%	8%	23%	58%	NA
7%	4%	16%	35%	37%	Condition of bridges	4%	4%	15%	23%	55%	NA
4%	6%	8%	42%	40%	Condition of trails and boardwalks	4%	4%	6%	25%	61%	NA
3%	4%	9%	49%	35%	Number of places for parking	3%	8%	6%	26%	57%	NA
3%	8%	11%	48%	30%	Number of places to pull over along Refuge roads	4%	8%	16%	39%	34%	NA
4%	2%	8%	35%	53%	Safety of driving conditions on Refuge roads	5%	7%	8%	30%	50%	NA
4%	2%	9%	38%	48%	Safety of Refuge road entrances/exits	3%	8%	7%	31%	51%	NA
5%	5%	8%	35%	47%	Signs on highways directing you to the Refuge	4%	7%	10%	32%	47%	NA
4%	4%	10%	43%	38%	Signs directing you around the Refuge roads	3%	6%	13%	39%	39%	NA
3%	4%	12%	30%	51%	Signs directing you on trails	2%	6%	11%	37%	43%	NA
7%	6%	27%	34%	26%	Access for people with physical disabilities or who have difficulty walking	5%	8%	31%	28%	28%	NA

6. If you have any comments about transportation-related items at this Refuge, please write them on the lines below.

See Appendix B

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**SECTION 3. Your expenses related to your Refuge visit**

1. Do you live in the local area (within approximately 50 miles of this Refuge)?

20% Yes

80% No → How much time did you spend **in local communities** on this trip?  
                     3   number of hours      OR        9   number of days

2. Please record the amount that **you and other members of your group** with whom you shared expenses (for example, other family members, traveling companions) spent in the local 50-mile area during **your most recent visit** to this Refuge. *(Please enter the amount spent to the nearest dollar in each category below. Enter 0 (zero) if you did not spend any money in a particular category.)*

Categories	<u>Amount Spent in Local Communities &amp; at this Refuge</u> <i>(within 50 miles of this Refuge)</i>
Motel, bed & breakfast, cabin, etc.	
Camping	
Restaurants & bars	
Groceries	
Gasoline and oil	
Local transportation (bus, shuttle, rental car, etc.)	
Refuge entrance fee	
Recreation guide fees (hunting, fishing, wildlife viewing, etc.)	
Equipment rental (canoe, bicycle, kayak, etc.)	
Sporting good purchases	
Souvenirs/clothing and other retail	
Other <i>(please specify)</i> _____	

See Report for Results

3. Including yourself, how many people in your group shared these trip expenses?

  3   number of people sharing expenses

4. As you know, some of the costs of travel such as gasoline, hotels, and airline tickets often increase. If your total trip costs were to increase, what is the maximum extra amount you would pay and still visit this Refuge? *(Please circle the highest dollar amount.)*

\$0	\$10	\$20	\$35	\$50	\$75	\$100	\$125	\$150	\$200	\$250
13%	13%	14%	6%	13%	2%	17%	3%	4%	4%	13%

5. If you or a member of your group paid a fee or used a pass to enter this Refuge, how appropriate was the fee? *(Please mark **only one**.)*

0%	Far too low	2%	Too low	78%	About right	19%	Too high	1%	Far too high	49%	Did not pay a fee <i>(skip to Section 4)</i>
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6. Please indicate whether you disagree or agree with the following statement. *(Please mark **only one**.)*

**The value of the recreation opportunities and services I experienced at this Refuge was at least equal to the fee I paid.**

2%	Strongly disagree	7%	Disagree	11%	Neither agree or disagree	44%	Agree	35%	Strongly agree
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#### SECTION 4. Your experience at this Refuge

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1. Considering your visit to this Refuge, please indicate the extent to which you disagree or agree with each statement. *(Please circle one number for each statement.)*

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Not Applicable
Overall, I am satisfied with the recreational activities and opportunities provided by this Refuge.	0%	2%	4%	40%	53%	NA
Overall, I am satisfied with the information and education provided by this Refuge about its resources.	0%	1%	8%	44%	46%	NA
Overall, I am satisfied with the services provided by employees or volunteers at this Refuge.	0%	2%	5%	31%	61%	NA
This Refuge does a good job of conserving fish, wildlife and their habitats.	0%	1%	7%	37%	54%	NA

2. For each of the following services, facilities, and activities, first, **rate how important** each item is to you when visiting this Refuge; then, **rate how satisfied** you are with the way this Refuge is managing each item.  
*If this Refuge does not offer a specific service, facility, or activity, please rate how important it is to you and then circle NA "Not Applicable" under the Satisfaction column.*

Importance					Refuge Services, Facilities, and Activities	Satisfaction					
Circle one for each item.						Circle one for each item.					
Very Unimportant	Somewhat Unimportant	Neither	Somewhat Important	Very Important		Very Unsatisfied	Somewhat Unsatisfied	Neither	Somewhat Satisfied	Very Satisfied	Not Applicable
4%	11%	15%	40%	29%	Availability of employees or volunteers	3%	2%	13%	17%	66%	NA
6%	4%	10%	34%	46%	Courteous and welcoming employees or volunteers	1%	3%	8%	14%	74%	NA
5%	3%	9%	29%	55%	Knowledgeable employees or volunteers	2%	2%	9%	20%	67%	NA
4%	4%	13%	38%	41%	Printed information about this Refuge and its resources (for example, maps and brochures)	2%	3%	13%	26%	57%	NA
4%	5%	16%	44%	32%	Informational kiosks/displays about this Refuge and its resources	1%	3%	17%	30%	49%	NA
3%	3%	10%	46%	38%	Signs with rules/regulations for this Refuge	1%	4%	13%	31%	51%	NA
2%	7%	23%	41%	27%	Exhibits about this Refuge and its resources	1%	2%	25%	34%	38%	NA
6%	7%	28%	30%	29%	Environmental education programs or activities	0%	3%	38%	22%	38%	NA
5%	6%	18%	34%	37%	Visitor Center	1%	1%	20%	26%	51%	NA
3%	1%	15%	37%	44%	Convenient hours and days of operation	1%	3%	14%	24%	57%	NA
2%	1%	7%	29%	61%	Well-maintained restrooms	4%	4%	5%	28%	60%	NA
3%	7%	20%	38%	32%	Wildlife observation structures (decks, blinds)	0%	7%	24%	30%	39%	NA
6%	8%	31%	32%	23%	Bird-watching opportunities	1%	4%	33%	27%	36%	NA
2%	2%	14%	35%	47%	Opportunities to observe wildlife other than birds	1%	6%	15%	41%	36%	NA
3%	3%	12%	32%	51%	Opportunities to photograph wildlife and scenery	1%	2%	13%	41%	43%	NA
34%	7%	31%	16%	13%	Hunting opportunities	4%	5%	57%	17%	17%	NA
14%	8%	13%	26%	38%	Fishing opportunities	2%	5%	22%	23%	48%	NA
3%	3%	11%	35%	49%	Trail hiking opportunities	1%	2%	12%	32%	52%	NA
6%	8%	31%	30%	25%	Water trail opportunities for canoeing or kayaking	2%	6%	35%	24%	33%	NA
11%	7%	36%	29%	17%	Bicycling opportunities	4%	5%	50%	26%	15%	NA
13%	7%	46%	24%	9%	Volunteer opportunities	3%	4%	61%	18%	15%	NA

3. If you have any comments about the services, facilities, and activities at this Refuge, please write them on the lines below.

See Appendix B

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**SECTION 5. Your opinions regarding National Wildlife Refuges and the resources they conserve**

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1. Before you were contacted to participate in this survey, were you aware that National Wildlife Refuges...

...are managed by the U. S. Fish and Wildlife Service?

84%

Yes

16%

No

...have the primary mission of conserving, managing, and restoring fish, wildlife, plants and their habitat?

88%

Yes

12%

No

2. Compared to other public lands you have visited, do you think Refuges provide a unique recreation experience?

74%

Yes

26%

No

3. If you answered "Yes" to Question 2, please briefly describe what makes Refuges unique. \_\_\_\_\_

See Appendix B

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4. There has been a lot of talk about climate change recently. We would like to know what you think about climate change as it relates to fish, wildlife and their habitats. To what extent do you disagree or agree with each statement below? (Please circle one number for each statement.)

Statements about climate change	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
I am personally concerned about the effects of climate change on fish, wildlife and their habitats.	8%	8%	13%	35%	36%
We can improve our quality of life if we address the effects of climate change on fish, wildlife and their habitats.	8%	8%	16%	34%	34%
There is too much scientific uncertainty to adequately understand how climate change will impact fish, wildlife and their habitats.	12%	22%	15%	30%	21%
I stay well-informed about the effects of climate change on fish, wildlife and their habitats.	2%	7%	30%	50%	10%
It is important to consider the economic costs and benefits to local communities when addressing the effects of climate change on fish, wildlife and their habitats.	5%	7%	13%	51%	23%
I take actions to alleviate the effects of climate change on fish, wildlife and their habitats.	7%	8%	32%	39%	14%
There has been too much emphasis on the catastrophic effects of climate change on fish, wildlife and their habitats.	23%	27%	19%	16%	14%
Future generations will benefit if we address the effects of climate change on fish, wildlife and their habitats.	8%	6%	16%	31%	40%
My experience at this Refuge would be enhanced if this Refuge provided more information about how I can help address the effects of climate change on fish, wildlife and their habitats.	10%	11%	36%	30%	13%

## SECTION 6. A Little about You

**\*\* Please tell us a little bit about yourself. Your answers to these questions will help further characterize visitors to National Wildlife Refuges. Answers are not linked to any individual taking this survey. \*\***

1. Are you a citizen or permanent resident of the United States?

96% Yes  4% No → If not, what is your home country? See Figure 4 in Report

2. Are you?  50% Male  50% Female

3. In what year were you born? 1958 (YYYY)

4. What is your highest year of formal schooling? *(Please circle one number.)*

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
(elementary)					(junior high or middle school)			(high school)				(college or technical school)				(graduate or professional school)			
					0%			10%				53%				38%			

5. What ethnicity do you consider yourself?  2% Hispanic or Latino  98% Not Hispanic or Latino

6. From what racial origin(s) do you consider yourself? *(Please mark **all that apply.**)*

- 6% American Indian or Alaska Native   
 0% Black or African American   
 96% White  
 1% Asian   
 0% Native Hawaiian or Pacific Islander

7. How many members of your household contribute to paying the household expenses? 2 persons

8. Including these members, what was your approximate household income from all sources (before taxes) last year?

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> 0% Less than \$10,000             | <input type="checkbox"/> 7% \$35,000 - \$49,999             | <input checked="" type="checkbox"/> 28% \$100,000 - \$149,999 |
| <input checked="" type="checkbox"/> 3% \$10,000 - \$24,999 | <input checked="" type="checkbox"/> 23% \$50,000 - \$74,999 | <input type="checkbox"/> 10% \$150,000 - \$199,999            |
| <input checked="" type="checkbox"/> 3% \$25,000 - \$34,999 | <input checked="" type="checkbox"/> 18% \$75,000 - \$99,999 | <input type="checkbox"/> 8% \$200,000 or more                 |

9. How many outdoor recreation trips did you take in the last 12 months (for activities such as hunting, fishing, wildlife viewing, etc.)?

13 number of trips

**Thank you for completing the survey.**

**There is space on the next page for any additional comments you may have regarding your visit to this Refuge.**

See Appendix B for Comments

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## Appendix B: Visitor Comments to Open-Ended Survey Questions for Kenai National Wildlife Refuge

### Survey Section 1

Question 1: "Including your most recent visit, which activities have you participated in during the past 12 months at this Refuge?"

Special Event	Frequency
Berry day	1
Berry festival	1
Berry identification	1
Blueberry picking exhibit (we were on the wrong weekend)	1
Critter camp, Get out and get dirty camp	1
Dragon Fly day	1
Fall open house, 30th anniversary	1
Family Reunion - Boat Tours, Fishing, Dining & Fun!	1
Kenai Peninsula State Fair	1
Little Peeps Program	1
Native berries	1
Tot time	1
Wild Berry Fun Day	1
Wildberry Tour	1
Wilderness Camp, berry identifying hike	1
Total	15

Other Activity	Frequency
Bathroom visit	1
Berry Walk	1
Camping	21
Climate change lecture	1
Cross country skiing	2
Engineer Lake Cabin Rental	1
Flight seeing	1
Flying small airplane	1
Looking for wildflowers	1
Sightseeing	1
Staying at refuge cabins	1
Tour the area	1
Trail stroll	1
Traveling through	1
We were able to have a picnic at the refuge	1
Total	36

2 <sup>nd</sup> Other Activity	Frequency
Cook-Out	1
Historical cabin tour	1
Total	2

Question 2: "Which of the activities above was the primary purpose of your visit to this Refuge?"  
*Primary activities are categorized in the main report; the table below lists the "other" miscellaneous primary activities listed by survey respondents.*

Other Miscellaneous Primary Activities	Frequency
Bathroom visit	1
Cabin Rental	1
Enjoying the nature	1
Obtain information	1
Rest stop and relax	1
Sight-seeing	4
Sleep overnight	1
Vacation	1
Total	11

Question 3: "Did you go to a Visitor Center at this Refuge?"; If Yes, "What did you do there?"

Other Visitor Center Activity	Frequency
5th grader filled out paper work regarding exhibits.	1
Berry tour	1
Get map	1
Hiked the improved trails.	1
Inquired about camping in the area.	1
Inquired about renting Engineer Lake cabin.	1
Obtain literature	1
Participate in tot nature walk and presentation.	1
Picked up my disability hunting permit.	1
Purchased a senior pass.	1
Purchased books for my pre-school grandchildren to hear the voices and sounds of the wildlife in Alaska.	1
Registration	1
So surprised to see office staffed - 1st time in 25 years	1
Stamp in my National Wildlife Refuge Passport	1
Tell staff that Engineer Lake cabin door would not close.	1
Went for a short hike	1
Total	16

Question 7: "Were you part of a group on your visit to this Refuge?; If Yes, "What type of group were you with on your visit?"

Other Group Type	Frequency
Airstream Caravan	3
Business work group	1
Co-workers	1
Total	5

Question 9: "How did you first learn or hear about this Refuge?"

Other Website	Frequency
Google map	1
<a href="http://www.themilepost.com/">http://www.themilepost.com/</a>	2
Web searches on fishing Kenai river	1
Total	4

Other Ways Heard about This Refuge	Frequency
AAA	1
AAA, map	1
Alaska Outdoors	1
Found on Road Atlas.	1
From resort we were staying at.	1
Guide book	2
Guidebook Lonely Planet	1
Hiking guide	1
Mile post book	1
Milepost	2
Our visit to Alaska meant we could see and learn all we could about its natural beauty.	1
Public lands map and information	1
Pull boat off the Kenai River	1
Recommended from caravan leader	1
Recreation maps	1
Soldotna Visitor Center	1
Soldotna Visitor Guide	1

Sportsman's Warehouse	1
Tour group	1
Travel book	1
Travel guide book	1
Total	23

## Survey Section 2

Question 1: "What forms of transportation did you use on your visit to this Refuge?"

Other Forms of Transportation	Frequency
Air taxi service	1
Airplane	1
Commercial van	1
Commercial van with a trailer	1
Plane	1
Small airplane	1
Total	6

Question 2: "Which of the following did you use to find your way to this Refuge?"

Other Ways Found This Refuge	Frequency
Alaska Geographic Society maps	1
Area maps	1
Directions from Milepost	1
Directions from Refuge personnel	1
Guide book	1
Information received at Ranger Station	1
Mile post book for Alaska	1
Milepost	2
Someone else drove who knew how to get there.	1
The Milepost publication	1
Tour group	1
Tour guide	1
Travel book	1
USGS maps	1
Visitor Center	1
Total	16

Question 5: "Below are different alternative transportation options that could be offered at some National Wildlife Refuges in the future...please tell us how likely you would be to use each transportation option."

Other Transportation Option Likely to Use	Frequency
Aircraft	1
Boat rental	1
Boating and rafting	1
Canoe trip	1
Canoes or kayaks to borrow on the refuge	1
Cheaper rates for parking and crossing on a bridge or something other than that ferry.	1
City bus from home to refuge	1
Drift boat	1
Golf Cart	1
I use my wheelchair for hunting on the refuge.	1
My boat	1
My own personal anything	1
Open IOL service roads to bicycle use.	1
Personal vehicle	1
Plane	1
Private transportation	1
Private vehicle	1
Zip line or hand tram	1
Total	18

Question 6: "If you have any comments about transportation-related items at this Refuge, please write them on the lines below."

Comments on Transportation-related Items at This Refuge (n = 31)

Because we used them to check out the barge, never unseeing and fishermen and wildlife (including flowers!) we decided to not use car park and just parked on a small no one allowed area.

Boat trailer/ truck parking at the raft pullout is minimal. It is always crowded and shuffling vehicles.

Denali has bus transportation into the park and stops at specific campgrounds/areas at specific times. We arrived 5 minutes before our scheduled pick up spot at the Savage River Campground and found out that we had missed our bus into the park. We had to wait for three buses to pass before there was room for us (4) to be taken into the park. We did not appreciate the bus arriving earlier than scheduled and leaving us behind.

I believe personal watercrafts should be allowed on hidden lake.

I have young children and many of the refuge staff do not allow infant strollers on the trails. I consider this an ADA issue and infants should be allowed in strollers on the refuge (at least near the visitor's center).

I want to thank the refuge for allowing my disability hunting permit. I hunted on the refuge prior to my disability and I look forward to hunting on the refuge each fall. One thing I'd like to add: if there were other areas opened to my permit that would be great. This year walk in hunters were camped in the only areas I'm allowed to hunt in. If areas in the Swanson River oil field were opened up to w/c hunters we may be able to get away from walk in hunters. When walk in hunters and oil field workers seem mad I'm able to drive my w/c van out into the hunting area. I don't like people mad at me all the time. Before my injury I walked in these areas. A car/moose accident was the cause of my disability. Being able to hunt on the refuge does in fact help me harvest a moose for my family. I'm very grateful for the opportunity the refuge has given me, I just don't like people, other hunters, or oilfield workers jealous or mad because I'm allowed to drive and hunt moose on the refuge. So my main point is: Does the refuge have the ability to add areas where my permit allows me to hunt away from the walk in and oil field hunters, maybe on the center or north end of the oil field/ refuge? In conclusion, I do appreciate the opportunity you allow me to hunt on the refuge in my w/c. I love seeing the swans, sand hill cranes, beavers, ducks, spawning salmon, moose that are legal and not. This refuge holds a soft spot in my heart. Thank you, [name]

I was very pleased with the number of walking paths and the great condition they were in. A great help to those walking and the environment!

Kenai Wildlife Refuge has highways that run through it, but otherwise few roads. I would rather a wildlife refuges continue to be for the wildlife, rather than see more or improved roads built through them.

Least disturbance to wildlife is most important!

Leave McNeil refuge ALONE!

Maintain Skilak Loop Road in the summer and keep it plowed in the winter.

Making sure access is decent is important but this refuge is on the main highway system.

More parking for bigger events would be nice. For everyday visits the parking is adequate but when there is a class or event the parking can be limited.

My husband has one leg. There needs to be available transport access to help him.

Need to improve all the portages, including signs for the portages on the lake, within the canoe trails. Need to at least remove heavy overgrowth in the Swanson River above McLain Lake.

Needs benches along foot paths.

Parking is limited at Jim's Landing.

Please consider opening more locations within the Refuge to wheel equipped plane operations. Particularly opening more of the gas line strips and Chickaloon Flats areas would be very helpful. Also a safety item to address is the approach and departure overgrowth at the Big Indian Strip as well as increasing its width.

Signs about refuge sites were too close to the turns, leaving very little time to make the turn.

The access roads are dangerous to travel on as well as unmaintained. Parking pads are unlevel but paved nicely. Access to the river from the campgrounds is inadequate to nonexistent. However, the attempt to place disabled fishermen on the river and at the ferry is appreciated. The ferry has always been overly expensive. If anything it should allow you an all day pass instead of just one trip.

The amount of low level aircraft operations (private, air taxi, etc.) over wilderness areas creates significant noise pollution and intrusion on the backcountry experience.

The refuge sign on highway is hard to see. Needs to be moved closer to the highway so we know where to turn. We guessed and didn't see the sign until we were in the refuge road. More visibility please. Thank you.

The road conditions are very poor, the roadway is over capacity. There are too many multipurpose users and not enough roadway to handle exiting vehicles with boats. There are too many blind corners and poorly managed speed zones. The bottom line is the area needs support.

The road is poorly maintained, needs parking for vehicles with trailers and a bigger place to pull your boat at Jim's Landing.

The road is very washboard and could use a grader, however it slows down the traffic on the gravel road.

The road we took was gravel and was like a washboard, not great for RVs.

This refuge is very far off the main road and has almost no signage. Very hard to find!! This has always been a problem in our area. We live here and no one knows where the refuge office is.

Unsatisfied that no roads led into the refuge- only to the Visitor Center, thus reducing viewing opportunities of animals and birds. More a wilderness designation. Many visitors unable to hike many miles- didn't see any opportunity to hike even.

Walking trails for this site are the best for most teens and adults. Transportation in the future would be for those with children who are worried about coming upon a bear and for the elderly and handicapped.

We were driving from Seward to Anchorage and needed to use the bathroom. We saw an exit sign for the refuge so we exited. After that exit there are no signs telling you how much farther the actual entrance is. If I didn't have to use the bathroom so bad, we would have turned around.

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## Survey Section 4

Question 6: "If you have any comments about services, facilities, and activities at this Refuge, please write them on the lines below."

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### Comments on Services, Facilities, and Activities at This Refuge (n = 55)

"Alone in the Wilderness" was fascinating. Please keep showing this video.

A young man at the visitor center at Denali gave us our shuttle tickets for the following day but kept raising his shoulders indicating he didn't know answers to our common questions asked since this was our first visit to Denali. He was not receptive and should not have been placed in that position with his lack of people skills and information on the park.

Again, one employee was VERY rude about a stroller on the trail near the refuge. Give me a break! I can understand the rule in the outlying areas (maybe), but if the idea is to get people out there using the refuge, a stroller should be allowed. ADA issue!

Camp host was unknowledgeable of emergency/rescue procedures-resources.

Camp hostess at Skilak Lake was very friendly and helpful.

Facilities are great, however the dirty unkempt young men that run the ferry and work the campground are a bit unsettling.

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I appreciated the improvement in the display area of the Visitor Center. I enjoyed the film. I am thankful that it remains one of the few places we can enjoy nature and learn and it's free!

I found it rather confusing- I really appreciate the fear of bear attacks and the signs were very good and informative. A book perhaps offering a river guide to discuss personnel. My husband was keen to see the famous Russian River, the best salmon fishing river in the world!

I was disappointed in the camping areas and how unlevel the spots were to park the camper. To me somewhat level parking is 5.

I was there with Alaska Outdoors. I didn't realize it was a refuge until we talked to a volunteer. Unsure of shower situation. We were there two nights. Would have loved to have taken a shower. Very well kept.

I would like to see a change in the regulations to allow mountain biking in the refuge. I don't understand why that activity is not allowed on at least some trails.

I would like to see more Cabins built. Some for Hike in or Canoe in only.

I've noticed the rental prices on cabins in Kodiak NWR are going up with not much improvement done to the facilities. In-state residents should get discounts on home state refuge prices.

It would be great to have more bicycling opportunities...say allowing their use on Mystery Creek Road throughout the summer.

It would be nice to have a restaurant or a cafeteria nearby.

It would be wonderful if we were able to rent a canoe or boat while visiting. We drove from Texas and were unable to bring ours.

Keep up the good work.

Lower the volume of hosts this summer at Upper Skilak Lake campground.

More trails, need bike accessibility.

My family is extremely pleased with the opportunities given at the refuge. The staff is outstanding and the educational value is priceless!

My husband and I both are avid anglers. We read up on the rules and regulations before we arrived. We were very surprised by the number of people fishing who had no clue what they could keep and what they couldn't. Maybe give a simple copy of rules and regulations to people coming into the RV parks? Just a thought.

Need additional parking at Jim's landing

Not bad-overnight parking was not allowed but we found a place to park... (not sure if it was a legal place to park) while we rafted overnight.

Please develop ways so elderly and disabled persons can sit while fishing and give a discount in June, over Kenai - allow them to break and come back.

Please leave this refuge as it is. No more building, it must remain wild to work.

Restrooms smelly and dirty - the parking at Jim's Landing.

Services are important for education and therefore the continued conservation of wildlife. Facilities should allow opportunities to see wildlife, but not impinge on their wildness.

Signs indicated that fish carcasses be thrown into river... they were all over the shore. Very nervous about bears!

Staff was very nice, very helpful, and a delight. Thank you so much! We all enjoyed the trail hike and facilities tremendously!

Thank you for the information.

Thanks for the moose pen.

The camp hosts were the best we found in 3 weeks of Alaska travel..very informative and friendly. The lady went on a wildflower hike with the ranger and group. On other campgrounds we never saw the host at all. This man helped us find a spot on a busy weekend..we were at Hidden Lake.

The employee that asked us if we would participate with this survey was very informative and pleasant. It was a pleasure talking to her.

The existing level of facilities in the backcountry areas is fine. Stop building backcountry cabins, roads, etc.. Please keep the wilderness wild. The Visitor Center should be the focus of upgrade/development to educate new refuge users.

The host was both friendly and knowledgeable.

The Hosts were genuine and available, knowledgeable and friendly. The Camp area was clean and restrooms were sparkling. Milt and his wife are an asset to this refuge.

The refuge closes off parking facilities too early every fall lessening opportunity for young and poor families to fish and hunt to feed their families.

The Russian River Ferry seemed overpriced. Maybe a discount for bigger parties. We probably won't use it in future trips.

The Visitor Center exposed me to information about the area we would not have known from other touring we had done.

The volunteer I spoke with at the Refuge Center was helpful, friendly, and answered my questions with a wonderful responsive attitude. My husband, sons, daughter-in-law, and I had a wonderful experience seeing bald eagles in the wild and incredible forests. We wish to come and visit Alaska again and be able to participate on a canoe or kayak ride and to be able to see the bald eagles and their habitats more closely. Thank you for giving us the opportunity with such a beautiful facility that we would wish to visit again and again.

The volunteers at the Visitor Center were very helpful and knowledgeable about the refuge and area.

They are always very nice here, I take all my visitors to this center for the exhibits and movies. Always good information and great people.

This facility needs to be expanded and fresh exhibits like full size mounts of Alaska's wildlife. Benches would be nice along foot paths. Access to the lake like a small ferry to go across and back would be nice too.

This has a busy dirt road and I don't think riding a bike is very safe. Bike/walking trail on Skilak Loop apart from the road would be much safer.

This refuge had excellent facilities and very friendly and helpful staff.

Very Clean.

Very nice people worked there.

We basically drove the gravel road off the highway from one end to the other. Much to our disappointment, we saw no wildlife or birds. Because of time constraints we were unable to check out any of the hiking trails. Hopefully, we will have another opportunity to visit the refuge.

We had a nice visit, disappointed I didn't have more time to enjoy it though. Need to come back in spring for

birds.

We really appreciated the drinking water dump.

We were thrilled to have a wonderful conversation with the young lady in charge. She was so knowledgeable! Facilities were clean and very well kept. The trail was excellent for older legs and joints!

When we parked at the one parking area, there was no sign of direction of any sort, so we followed the trail and we got lost. When we drove back, we found the entrance to the trail, but it was too late because we had no more time. Trail entrances need to be labeled with signs.

You should consider the reservation system like Forest Service has with [www.recreation.gov](http://www.recreation.gov) for some of the campsites.

## Survey Section 5

Question 3: "If you answered "Yes" to Question 2, please briefly describe what makes Refuges unique."

### Comments on What Makes Refuges Unique? (n = 131)

1) Excellent opportunity for local residents and visitors to learn about local plants and wildlife in the visitor center exhibits. 2) Trails that are accessible to all kinds of people and that pass through beautiful wilderness without having to drive far to experience them. 3) Friendly, knowledgeable staff and volunteers. 4) Nice offering of special exhibits, although more would always be better. 5) Children LOVE to stop by the visitors center to see the animals and exhibits. 6) Trails are very well-maintained and boardwalks are nicely constructed to protect the environment. 7) It's generally a great place to visit - visitors and local friends always want to go there.

A refuge works to keep a balance in natural areas that are in constant danger of the affects of man and environment. It is important that visitors learn about these affects and yet are able to observe and enjoy nature at its best.

A unique opportunity to view birds, fish and other wildlife in their natural habitat, as well as the opportunity to fish, hike, or drive through, merely to observe.

A wonderful place to camp in safe campsites.

Access to resources without "roughing it" by sloggng through the muck and mud. The access provided for disabled fishermen is long overdue and much appreciated on the Russian.

Accessibility, great fishing.

Alaska in itself is unique to the US and any recreational experience offered is VERY worthwhile.

Alaska!

Although not all State Parks strive to preserve wildlife habitat, we felt that the refuges were more apt to consider the wildlife than the visiting people. We think this is good.

Anytime you can get out of the city and experience nature, whether it be viewing wildlife or observing plants, it adds to individual well-being. Each refuge is unique because each location offers a different experience.

Because it's real and natural as opposed to simply entertaining. Seeing mounted wildlife and being able to touch exhibits of fur and horns and the like are awesome because you just can't go out and pet the wildlife. That and learning about the wildlife of your own area makes a refuge unique.

Being able to see nature in its largely untouched and "natural" state.

Berry picking! Next time we will try canoeing on the canoe trails.

Better care and maintenance of the area as well as the visitor center and personnel.

By virtue of the name and charge, they provide a sanctuary- obviously conserving and managing wildlife; however, in common vernacular, a refuge can also be applicable to people...it is a human sanctuary. People can seek "refuge." The name conjures up an image of less crowds, less commercialism than, say, a national park.

Campgrounds are destroying natural habitat whereas refuges like to leave things natural for existing wildlife.

Care of shore and ramps was excellent.

Cleaner, pride, etc.

Conserving and managing of wildlife, plants, and habitat comes before public viewing and interaction.

Conserving habitats of wildlife and plants.

Controlled access, use, and development.

Controlled, protected.

Each one is different.

Education display.

Federal land. Different interest than state agencies. Better opportunities for law enforcement and general management. Maybe they aren't as impacted by "good old boy" state traditions and mentality.

First and only bear I have seen in Alaska after two years.

First of all the word Refuge means a place of protection or safety from harm. Seeing bald eagles in their natural habitat in all their regal splendor is something I will never forget. Grasslands, trees, marshes, insects, fish, mushrooms, and beavers are all so incredibly beautiful and yet still wild and untouched. It simply must be protected and cannot be lost in the trenches of a balanced budget somewhere. I hope we can always enjoy what I saw just in that one day.

Freshwater fishing and wildlife bird watching.

Generally more "rough".

Good area to promote public use.

Great camping and fishing opportunities.

High concentration of animals.

I am not aware of what other refuge areas provide, but am thrilled with Kenai Wildlife Refuge.

I believe you're providing a place where visitors can mutually enjoy the environment and nature with comfort and little risk.

I enjoyed its beauty and serene environment in which I was able to observe nature at its best. The clean water, mountains, and fresh air always take my breath away when I visit.

I truly appreciate the ability to view birds and wildlife in an area that is largely undisturbed by hunting pressure. I have been able to watch bears, moose, and many bird species without them fleeing due to the lack of hunting in the Skilak Loop Road area. It's a great place!

Interesting film - I enjoy movies that orient one to the locality and what is available.

It is a wonderful opportunity for my children to experience nature. The trails and children's activities are superb!

It is beautiful and has a way for disabled people to camp and fish. I can support my husband and enjoy the wilderness, and see wildlife and nature with my dogs.

It is important to have wildlife areas and to be able to enjoy nature. I like the available life jackets and bear proof containers.

It is in Alaska!

It is valuable to see wildlife in their own habitat, clean and undeveloped.

It's a natural surrounding to observe wildlife and usually has less people than at parks.

Its beauty.

It's lovely and needs to stay that way, thanks much.

It's remote and roads and restrooms are taken care of.

Its beauty!

Keep many areas in natural states, provide variety of activities for people while focusing on wild life, affordable and accessible, in a wide range of habitats so it provides varied levels and types of protection and wild life enhancement and education.

Level of devotion to the environment and its inhabitants.

McNeil River is one-of-a-kind.

Minimal commercial exposure - vast uninhibited wilderness.

More emphasis on conservation and restoration.

More genuine than a lot of national parks.

More primitive, less traveled by visitors.

My family and I hosted Buck Creek & Sulphur Creek in Washington State for 3 seasons.

Nature and preserving the environment. People should be able to see the "real thing".

Nature, quiet, beautiful, relaxing, possibility to observe wildlife, hiking...

Nice education program for children.

No commercial activities.

Non commercialized natural environment where abundant wildlife is found.

Non-motorized areas are awesome! Canoe wood rule!

Not commercial.

Not too commercialized. Still has a wilderness feel and experience.

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Not too crowded- Clean, comfortable, and informative- education, short walk or hike.

Numerous travels and opportunities to view wildlife, if visitors take the time to get out of their cars and explore the landscape.

One does not have to just blunder around on one's own.

Open spaces for wildlife that are reasonably undisturbed.

Opportunity to see bears, moose, and many different mushrooms and plant varieties not found in the rest of the US.

Preservation of unique areas in Alaska.

Protected areas for fish and wildlife, and humans can get away to and enjoy.

Provides opportunities to view the variety of campsites, trails ,solitude, and chances to view wildlife in its natural habitat.

Providing information about the area; teaching conservation; protecting habitats.

Public lands would not be conserved for future generations.

Refuges are more notable for their wildlife than scenery.

Refuges are natural and real. Its ecosystem is self regulating. It is amazing to be in the middle of natural environment that gives beauty and peace of mind to us humans. Refuges need to be preserved at the same time as learned.

Refuges are places I can take my children to learn "hands on" about conservation of our natural resources, so they can learn to love and respect it. I just love the peace and beauty of them.

Refuges are preserved for wildlife primarily, unlike some other public lands that are dual purpose (camping, etc.)

Refuges are well maintained and rules and laws are enforced to protect it.

Refuges I have visited offer a lot more opportunities/programs that educate the public about the wildlife and the habitats/environments and the changes that seem to be taking place.

Refuges offer an opportunity to enjoy the natural environment and wildlife in a safer, more realistic setting.

Refuges provide a rare opportunity to escape the masses of people, have peace and quiet, observe nature, and hopefully not be disturbed by development. I was disappointed to see the planned control burn area. It was a REAL EYESORE!

Skilak Lake is beautiful!

Some of the best fishing in the world!

The ability to canoe and portage between small lakes.

The ability to get really close to the animals.

The balance between human interaction and environmental protection is great!

The beauty of the land.

The canoe trails are AWESOME!!!

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The educational component and the maintenance of land in its most natural state.

The focus on wildlife management and the opportunity to see that management in action.

The habitat and all wildlife that lives on the refuge. Some refuges are the last place for some wildlife and plants to survive in. It is these that are so very important in maintaining a refuge in a healthy atmosphere.

The learning opportunities, signs on the trails identifying plants and wildlife, community classes to learn more about the area we live in, the availability of staff to answer questions.

The main thing we like is that we usually find them less crowded.

The nature, wildlife, and camping opportunities.

The opportunities for fishing, bear viewing, camping, all with road access.

The Refuge center had great summer camps. My kids really enjoyed them.

The refuge is very peaceful.

The scenery! The wildlife.

The varied flora and fauna provides a pleasant outdoor experience.

The views of the lake and mountains along with the paved camp spaces and fire pits. I think there are way too many handicap spots that are mostly vacant.

The wildlife refuge provides a wider variety of wildlife oriented recreation while still protecting (mostly, except for oil development) the wildlife, habitat, and natural beauty. Natural Parks are beautiful but don't allow hunting and often require permits for backcountry use. Forest Service areas are often damaged by mechanized recreation, mining claims and other industrial uses like logging, over-developed lodge facilities, etc.

Their conservation efforts are very obvious. It is good to see all the effort put into conservation of plants and animals.

Their primary purpose is for wildlife, not just landscape, like parks. This being the case they are usually in an area where wildlife congregates at some time during the year. Their purpose is to preserve these places for the wild species, not the aesthetics for humans.

These offer us an opportunity to see life and country undisturbed. Quiet camping and wildlife viewing at this refuge was outstanding. The size of the camp area allows for peaceful reflection of our lives. The water from the pump was excellent. Never tasted water this good. No rules that restrict peace.

They are maintained in a pristine condition. They are a haven for wildlife, and a national treasure for future generations. They are a barrier to unchecked development and greed.

They are open to all recreations (fishing, hunting, etc.). Areas which are managed for wildlife.

They are unspoiled by development.

They are usually quiet.

They are well kept and protected.

They provide more education and hands on experience.

They provide the public opportunities to learn about the wildlife of unique areas across the USA. The visitor centers, volunteers, classes, hikes, and educational signs on trails all make the refuges into mini outdoor classrooms to explore. Protecting the animals, plants, and habitats of unique areas is also 5. There is

always the excitement of observing the wildlife in its natural habitat especially for non-local visitors.

Usually far fewer visitors - making them truly conservation sites for wildlife. They may be difficult to maneuver, but that works to the advantage of the wildlife.

Very Educational.

Very good, I am 61 years old and very pleased.

Very pretty, different than where I come from.

We fished the Russian River in 2008. This year we had 2 park rangers that were on the river making sure that fishermen followed the rules. There was a brown bear that they kept track of as it moved up and down the river. We fished on Monday Aug 9th and we saw and talked to them off and on from the Russian River (below the parking lots) to the Ferry parking lot. Then did a good job of enforcing the rules in a professional manner. Keep up this service.

We have visited the refuge for the past 25 years. So proud of the management and restoring of the banks in the sanctuary. Thank you.

We live in Illinois and this refuge had so much beautiful scenery. We were very disappointed in not seeing any moose in the refuge.

We the people own it, our job is to keep it that way!

We've been going here for years and feel very comfortable in the area. Have seen many improvements over the years.

Well maintained and close to pristine conditions.

Well maintained with excellent information.

Well maintained.

Well managed in critical habitat areas.

Wilderness.

Wildlife viewing.

Wildlife.

With the mission of conserving wildlife, we visit refuges with the expectation of viewing wildlife in their habitat from viewing areas- This refuge did not offer this opportunity except at a very limited area around the perimeter of the refuge on one side and at the Visitor Center and a short trail to the lake. Other refuges have roads through their lands.

Wonderful trails/boardwalks.

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#### Additional Comments (n = 27)

Again please consider allowing additional areas for wheel plane operations, particularly on some of the gas line strips and in the Chickaloon Flats areas.

Although we did not see any wildlife, except for birds, we thoroughly enjoyed the refuge and the beauty of the area.

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Decrease the fee on the ferry.

Great place.

I disagree that "climate change" is an issue of importance. I feel as though man cannot affect God's world in the manners suggested. Climate has always, and will always, have cycles of change. I intend to visit as many of the refuges in the US as possible, particularly those in Alaska and Florida.

I enjoyed your refuge. Thank you. Please don't send any more surveys.

I think the wildlife refuges do a great job. This refuge in particular seemed remote and under-utilized, but the staff was so friendly and helpful that we really felt welcomed.

Impressive operation.

It was one of the most beautiful areas that maintained a beautiful, carefully protected environment that I have ever visited. Thank you for your dedicated hard work. It shows.

Kenai is an amazing place, as is all of Alaska. We were so impressed by how well all the public land organizations worked together to preserve and conserve the wildness of this place. Thank you for your efforts to keep the salmon spawning and the bear eating! Keep up the great work. Let Americans now how they can help.

Kenai Wildlife Refuge appears well managed - the commercial guide fishing is maybe impacting the salmon returns.

Life in Alaska is very different than in the other states. We live for the outdoors, that is why we live here. Take that in account when reading all this.

Loved it--loved Alaska! Great trip! Thank you!

Need to manage the lower Swanson River better. Too much garbage and destruction by people floating the river. River upstream from the landing on Swanson River Road needs some deadfall removed so canoes can get through. Currently portaging around some of these areas and causing damage to the areas immediately adjacent to the deadfalls. The River is growing in from sediment deposits and they're not sure how to minimize that while keeping the nature of the refuge. It's sad to see the pike moving into the river. I caught a 12 incher 2 months ago and it tasted good...but pike need to go before they take over the trout and salmon.

Please maintain the Skilak Loop area as a no hunting area. It would also be nice if it were plowed regularly in the winter. Although I have not stayed in them, I really like the public use cabins that have been built in recent years on the refuge.

Quaint facility. Thankful it's here and for the people that work it.

Shilab Loop Road needs a much needed upgraded, Jim's Landing needs to be enlarged! And better parking!

Signage to entrance to Savage River Campground is misleading/confusing. I suspect many first time visitors to this campground actually miss the left turn off into the campground. Check it out!

Sorry this is late. Just picked up mail in B.C.! Hope it's some use. We weren't intending to use the refuge particularly - just happened to be on our route.

The wildlife refuges are great. You should allow some hunting as appropriate that maintains a healthy wildlife population. Keep up the good work and thank you all!!!

This visit was part of a three-month trip to Alaska from our home in Arizona. We spent two weeks on the Kenai Peninsula and enjoyed this refuge as part of the whole tourist experience. It is unlikely we will return to this area but we visit National Wildlife Refuges all over the USA with the purpose of learning more about an area.

We actually didn't see any wildlife at any point that we were hiking in or driving through the refuge. It was a bit disappointing. Not that we wanted to meet a bear, but information on wildlife spotting tips may have been

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helpful at the visitor center. Maybe it is? However, we stopped there our first day and didn't expect we'd need it, so it didn't cross our minds to ask.

We enjoyed it so much we are already planning to visit again. We love Alaska and its warm, friendly residents. I'd move there if the wildlife would go with.

We spend lots of time outdoors in areas close to home - evenings, weekends, lunch breaks, etc. for viewing wild life, as well as for fishing and hunting. Our 2010 trip to Alaska and the Yukon was a major trip. Wildlife refuges helped us to see natural areas that we couldn't have seen otherwise. We have enjoyed many refuges, especially in the mid-west states. The emphasis on climate change in the survey is a bit confusing since many other things, such as development and air and water pollution, are as (or more) important and can be addressed by everyone in manageable ways. I do agree that climate change is a problem, but it shouldn't exclude or overshadow work in other areas. Plans should be made for helping natural areas to adapt to a changing climate by preserving and enhancing existing resources, and anticipating how the necessities of life can be provided for wildlife even as the climate changes (e.g. keeping a supply of clean water, protecting riparian areas, planting appropriate plant species, etc.) since unfortunately most people are not willing to quickly change their level of consumption or comfort in order to protect the natural world. We have enjoyed many refuges in many states. Thank you for providing these wonderful opportunities.

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