



National Wildlife Refuge Visitor Survey 2010/2011: Individual Refuge Results for Alaska Maritime National Wildlife Refuge

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I try to visit this refuge annually; it is a favorite family spot! The volunteers and staff are friendly and knowledgeable and their enthusiasm for their mission is contagious!—Survey comment from visitor to Alaska Maritime National Wildlife Refuge.



Alaska Maritime National Wildlife Refuge. Photo credit: U.S. Fish and Wildlife Service.

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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 Alaska Maritime 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):** 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.

| | |
|---|--|
| Pacific Region (R1) | |
| 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) | |
| Southwest Region (R2) | |
| 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) | |
| Great Lakes-Big Rivers Region (R3) | |
| 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) |
| Southeast Region (R4) | |
| 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) |
| Northeast Region (R5) | |
| 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) |
| Mountain-Prairie Region (R6) | |
| 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) | |
| Alaska Region (R7) | |
| Alaska Maritime National Wildlife Refuge (AK) | Kenai National Wildlife Refuge (AK) |
| California and Nevada Region (R8) | |
| 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^{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 Alaska Maritime 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 Alaska Maritime National Wildlife Refuge

Alaska Maritime NWR is spread across five units in Alaska, with most of the refuge lands in the Alaska Peninsula and Aleutian Islands units. The Alaska Peninsula unit extends more than 400 miles along the southern coast of the Alaska Peninsula from Kodiak Island to the southern tip of the peninsula. The Aleutian Islands unit extends more than 1,100 miles in a chain of volcanic islands. The 200 islands of the Aleutians are tips of 57 submarine volcanoes, 27 of which are active.

In 1980, the Alaska National Interest Lands Conservation Act combined 11 previously established refuges covering about 3.4 million acres to form the Alaska Maritime NWR. Alaska Maritime NWR was created to conserve the area's animal populations and habitats in their natural biodiversity; fulfill international treaty obligations; provide opportunities for continued subsistence uses by local residents; conduct national and international scientific research on marine resources; and to ensure water quality and quantity within the refuge.

Alaska Maritime NWR attracts over 150,000 visitors annually (based on 2008 RAPP database; U.S. Fish and Wildlife Service, 2011, written comm.). Visitors enjoy environmental education and interpretive programs, fishing, hunting, wildlife observation and photography. Both subsistence and sport hunting are available at the refuge. Alaska Maritime NWR is home to nearly 40 million seabirds, or 80% of seabirds in North America. The Aleutians are home to six subspecies of Rock Ptarmigan that can be found nowhere else in the world. Alaska Maritime NWR is perhaps the best place for viewing sea lions and fur seals from land, not to mention the abundant salmon streams in the area. Visitors are intrigued by the possibility of running into species that are yet to be found among the remote and rugged 2,500 rocks, reefs and islands of Alaska Maritime NWR. Figure 1 displays a map of Alaska Maritime NWR. For more information, please visit <http://alaska.fws.gov/nwr/akmar/index.htm>.



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

Sampling at Alaska Maritime National Wildlife Refuge

A total of 313 visitors agreed to participate in the survey during the two sampling periods at the identified locations at Alaska Maritime NWR (table 2). In all, 217 visitors completed the survey for a 71% response rate and $\pm 5\%$ margin of error at the 95% confidence level.¹

Table 2. Sampling and response rate summary for Alaska Maritime NWR.

| Sampling period | Dates | Locations | Total contacts | Undeliverable addresses | Completed surveys | Response rate |
|-----------------|------------------------------|--|----------------|-------------------------|-------------------|---------------|
| 1 | 4/30/2011 to 5/14/2011 | Alaska Islands and Oceans Visitor Center | 106 | 2 | 77 | 74% |
| 2 | 7/2/2011 to 7/16/2011 | Alaska Islands and Oceans Visitor Center | 207 | 5 | 140 | 69% |
| Total | | | 313 | 7 | 217 | 71% |

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 Alaska Maritime 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 (81%) and that the Refuge System has the mission of conserving, managing, and restoring fish, wildlife, plants and their habitat (87%). 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 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 (80%; see Appendix B for visitor comments on “What Makes National Wildlife

¹ 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).

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 Alaska Maritime NWR had been to at least one other National Wildlife Refuge in the past year (66%), with an average of 4 visits to other refuges during the past 12 months.

Visiting This Refuge

Most surveyed visitors (64%) had only been to Alaska Maritime NWR once in the past 12 months, while others had been multiple times (36%). These repeat visitors went to the refuge an average of 6 times during that same 12-month period. Visitors used the refuge during only one season (78%), during multiple seasons (13%), and year-round (9%).

Most visitors first learned about the refuge from signs on the highway (40%), friends/relatives (38%), or people in the local community (29%; fig. 2). Key information sources used by visitors to find their way to this refuge include signs on highways (50%), previous knowledge (41%), or directions from friends/family (14%; fig. 3).

Few visitors (15%) lived in the local area (within 50 miles of the refuge), whereas 85% were nonlocal visitors. For most local visitors, Alaska Maritime NWR was the primary purpose or sole destination of their trip (58%; table 3). For most nonlocal visitors, the refuge was one of many equally important reasons or destinations for trip (47%). Local visitors reported that they traveled an average of 9 miles to get to the refuge, while nonlocal visitors traveled an average of 1244 miles. Figure 4 shows the residence of visitors travelling to the refuge. About 49% of visitors travelling to Alaska Maritime NWR were from Alaska.

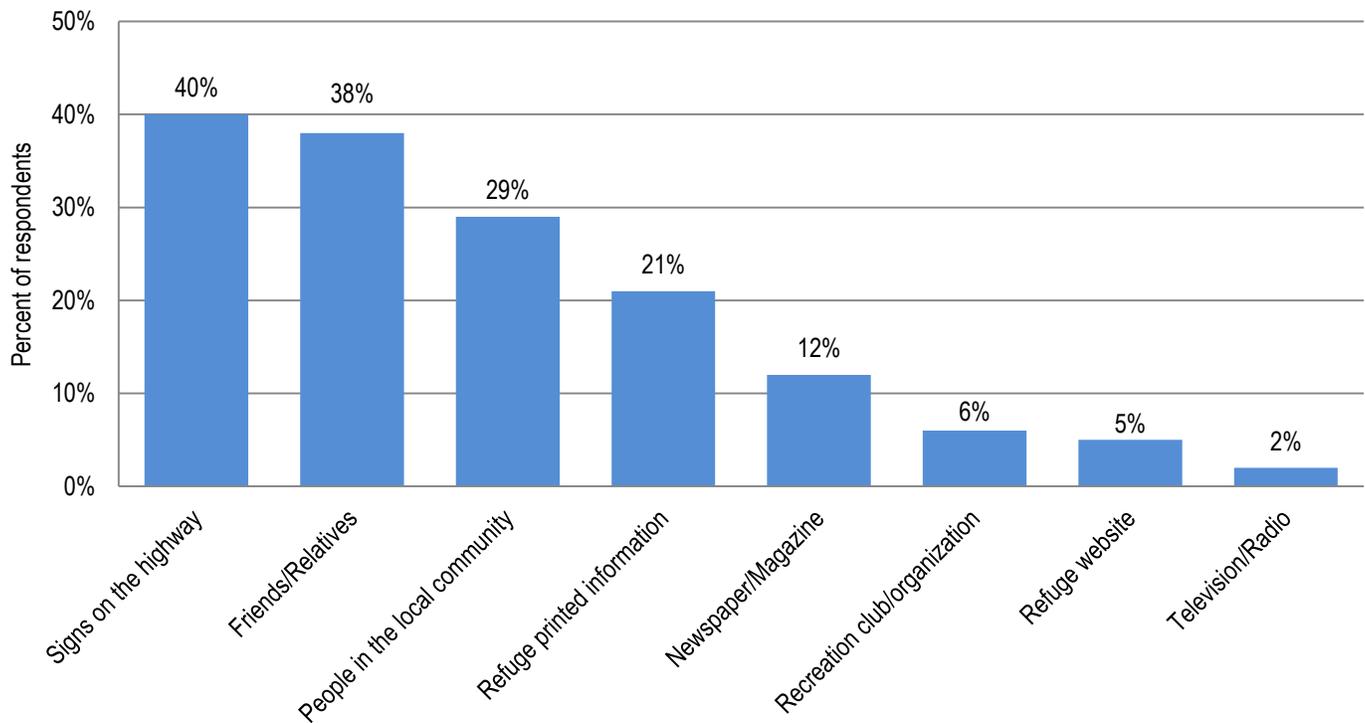


Figure 2. How visitors first learned or heard about Alaska Maritime NWR (n = 213).

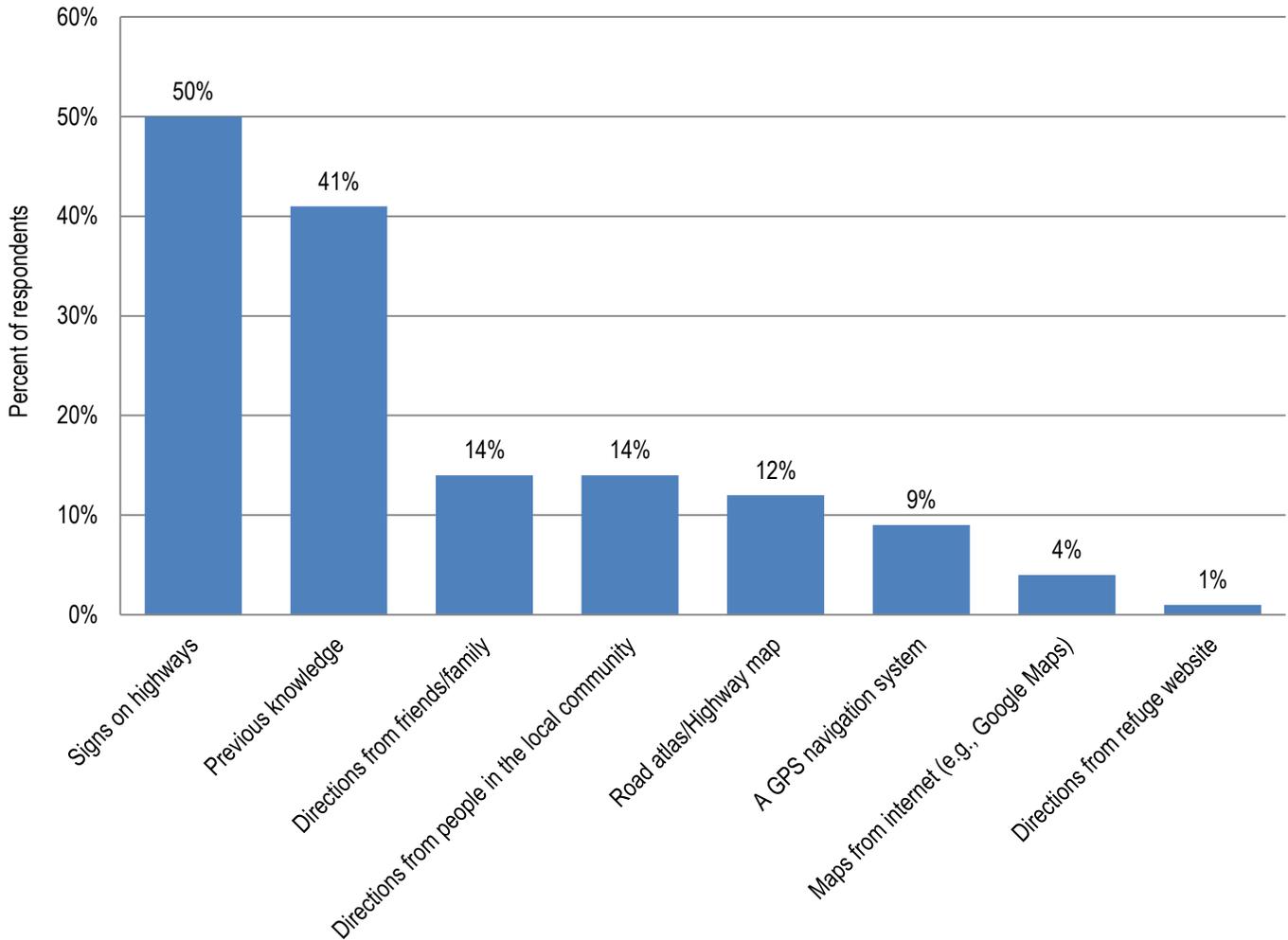


Figure 3. Resources used by visitors to find their way to Alaska Maritime NWR during *this* visit (n = 214).

Table 3. Influence of Alaska Maritime 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 | 9% | 47% | 44% |
| Local | 58% | 30% | 12% |
| Total | 16% | 44% | 40% |

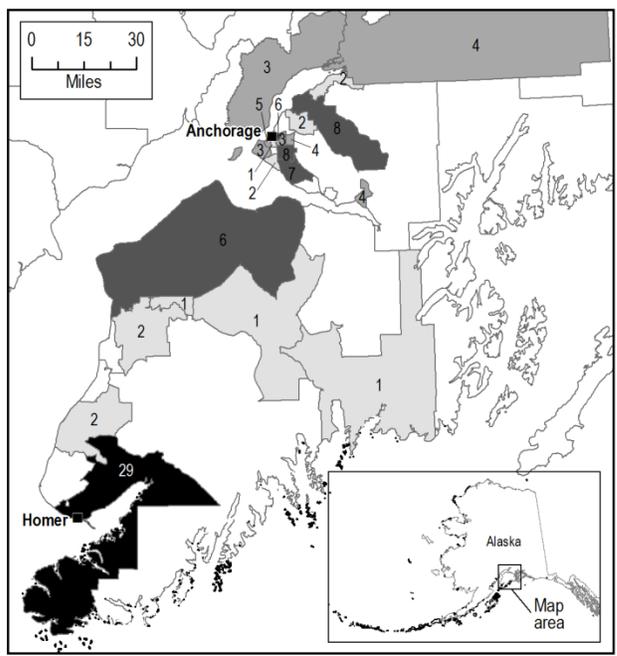
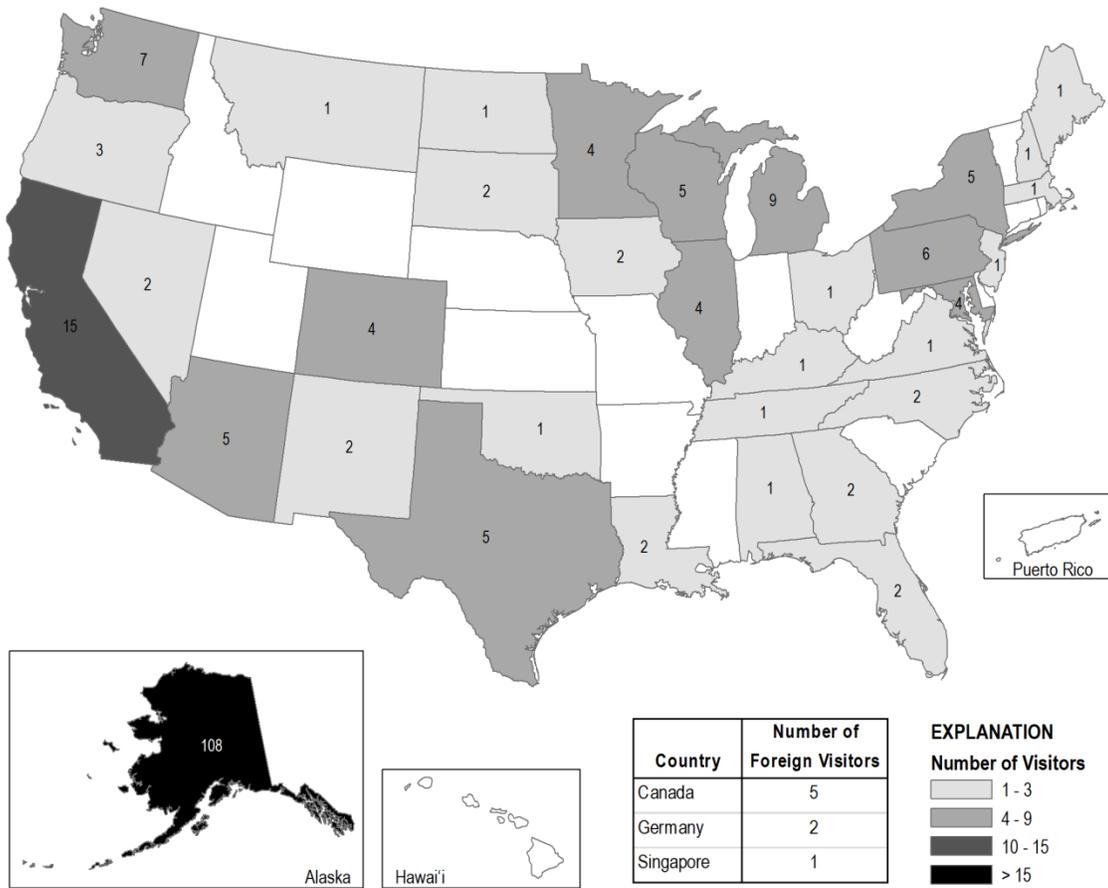


Figure 4. Number of visitors travelling to Alaska Maritime NWR by residence. Top map shows residence by state and bottom map shows residence by zip codes near the refuge (n = 220).

Surveyed visitors reported that they spent an average of 4 hours at Alaska Maritime 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 (32%). The key modes of transportation used by visitors to travel around the refuge were private vehicle (76%), walking/hiking (28%), and recreational vehicle (RV; 12%; fig. 5). Most visitors indicated they were part of a group on their visit to this refuge (64%), travelling primarily with family and friends (table 4).

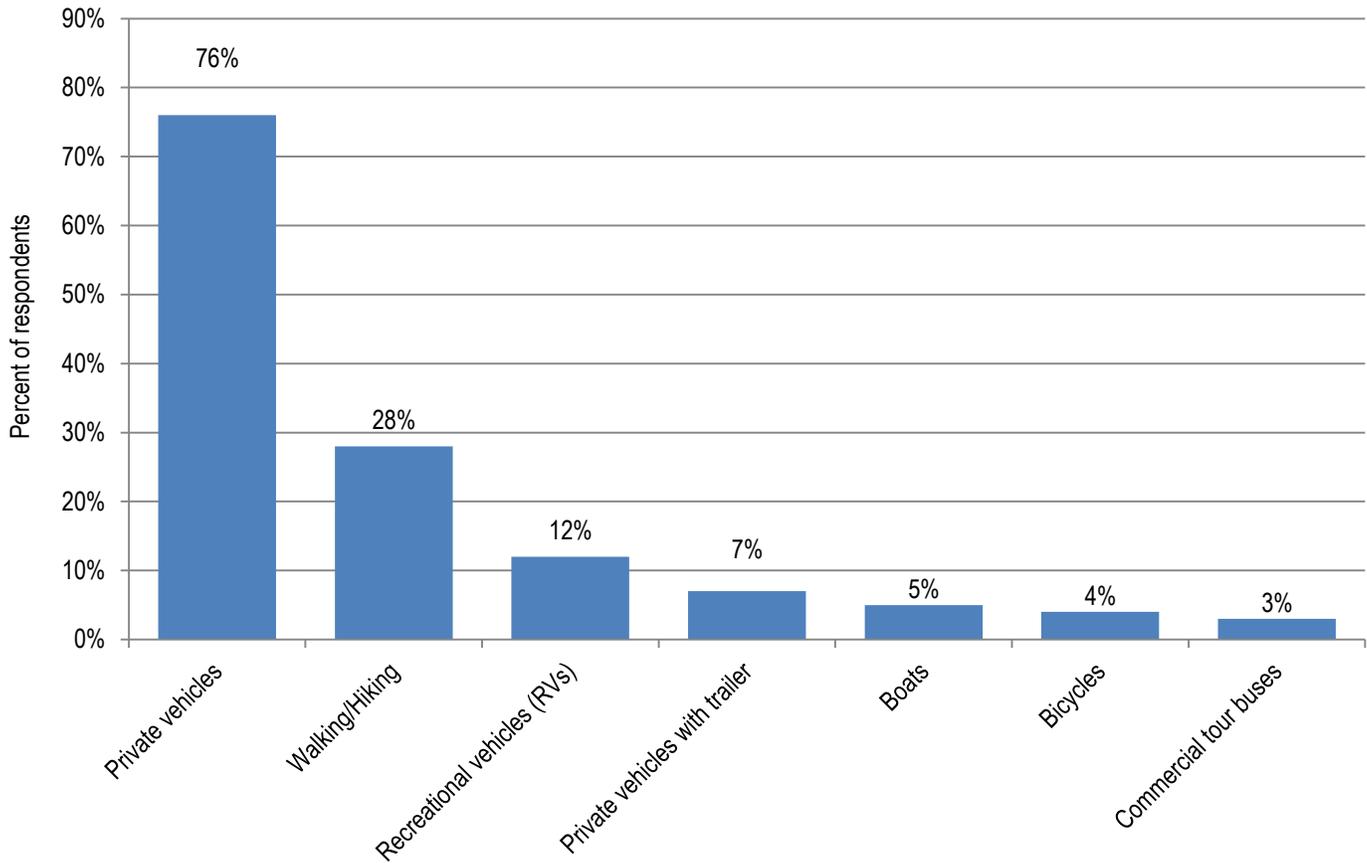


Figure 5. Modes of transportation used by visitors to Alaska Maritime NWR during *this* visit (n = 218).

Table 4. Type and size of groups visiting Alaska Maritime NWR (for those who indicated they were part of a group, n = 140).

| Group type | Percent (of those traveling in a group) | Average group size | | |
|-----------------------------|---|--------------------|--------------------|------------------|
| | | Number of adults | Number of children | Total group size |
| Family/Friends | 89% | 3 | 1 | 4 |
| Commercial tour group | 4% | 15 | 1 | 16 |
| Organized club/School group | 4% | 11 | 30 | 41 |
| Other group type | 3% | 2 | 1 | 3 |

Surveyed visitors participated in a variety of refuge activities during the past 12 months (fig. 6); the top three activities reported were interpretation (60%), wildlife observation (57%), and bird watching (56%). The primary reasons for their most recent visit included interpretation (32%), bird watching (13%), and wildlife observation (13%; fig. 7). The visitor center was used by 98% of visitors, mostly to view the exhibits (95%), visit the gift shop/bookstore (83%), and watch a nature talk/video/presentation (73%; fig. 8).

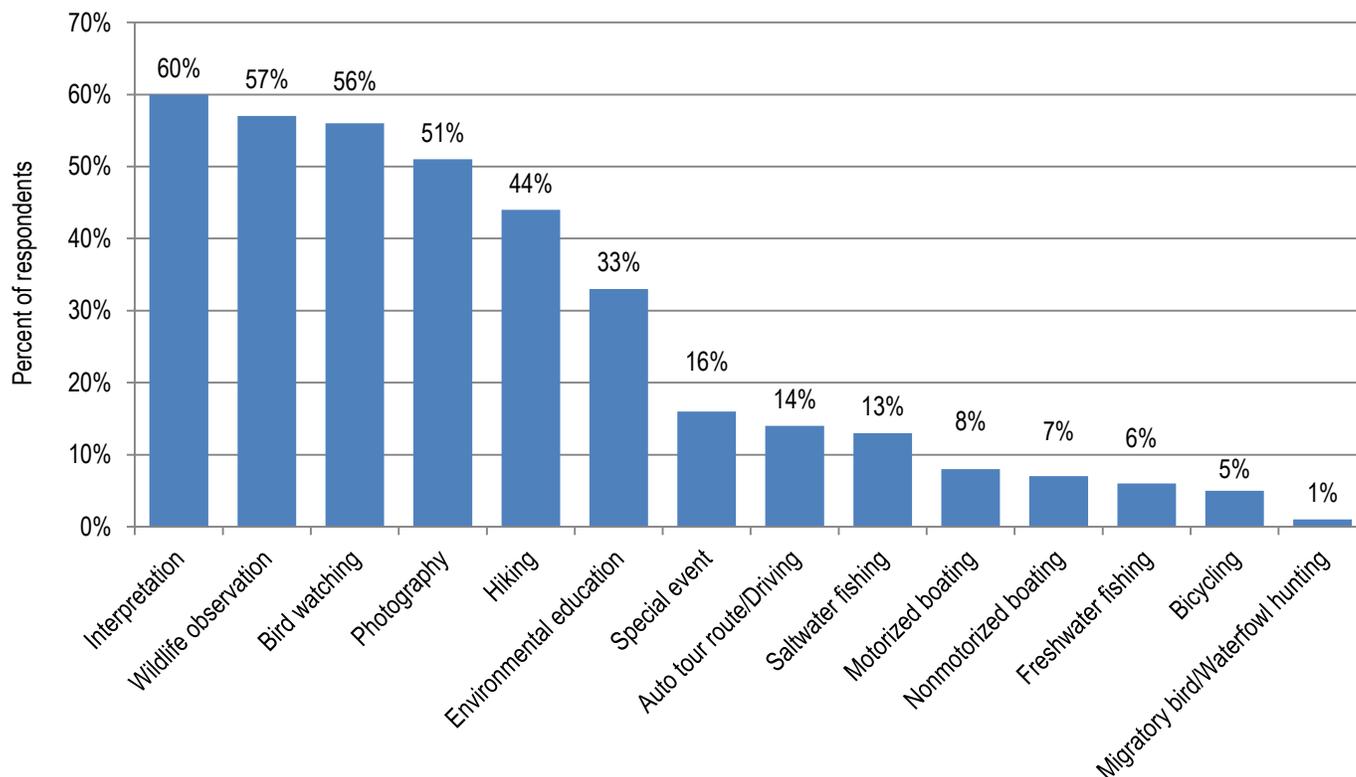


Figure 6. Activities in which visitors participated during the past 12 months at Alaska Maritime NWR (n = 217). See Appendix B for a listing of “other” activities.

Visitor Characteristics

Nearly all (95%) surveyed visitors to Alaska Maritime 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 35% male with an average age of 54 years and 65% female with an average age of 51 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).

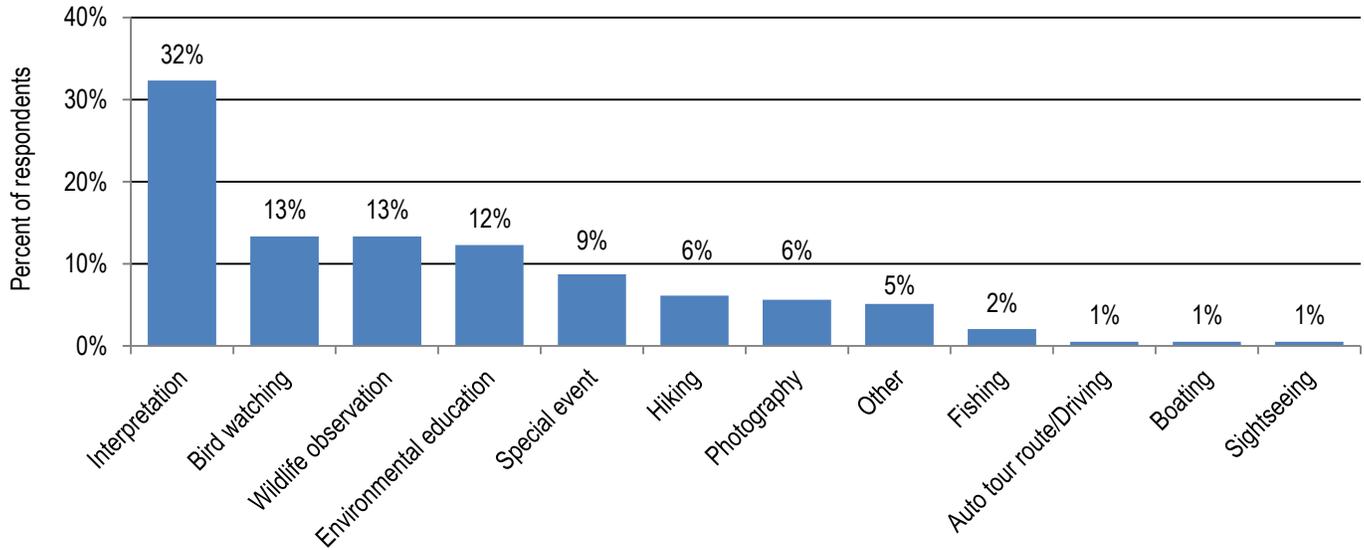


Figure 7. The primary activity in which visitors participated during *this* visit to Alaska Maritime NWR (n = 195). See Appendix B for a listing of “other” activities.

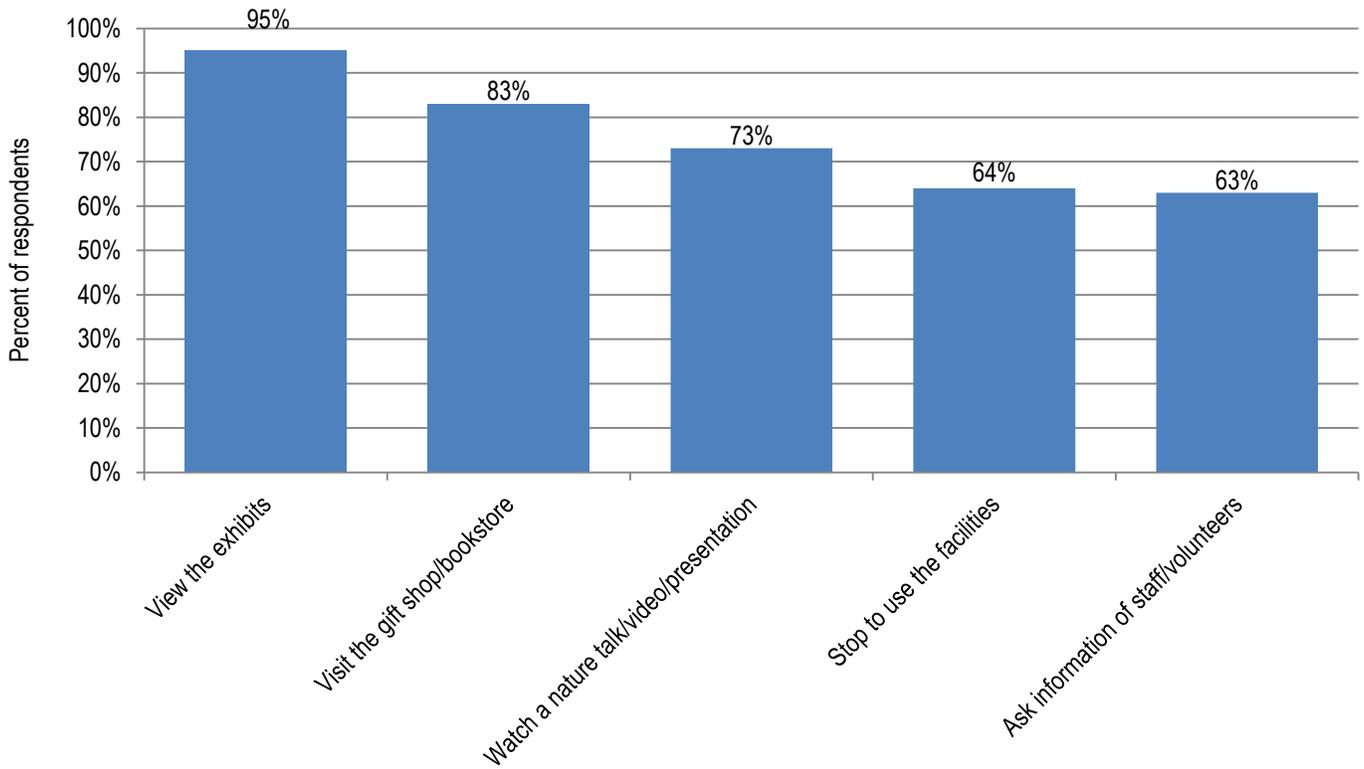


Figure 8. Use of the visitor center at Alaska Maritime NWR (for those visitors who indicated they used the visitor center, n = 216).

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, 15% of visitors to Alaska Maritime NWR indicated that they live within the local area. Nonlocal visitors (85%) stayed in the local area, on average, for 4 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. ***It is important to note that summary statistics based on a small sample size ($n < 30$) may not provide a reliable representation of that population.*** During the two sampling periods, nonlocal visitors spent an average of \$100 per person per day and local visitors spent an average of \$53 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 Alaska Maritime NWR expressed in dollars per person per day.

| Visitors | n ¹ | Median | Mean | Standard deviation | Minimum | Maximum |
|----------|----------------|--------|-------|--------------------|---------|---------|
| Nonlocal | 167 | \$71 | \$100 | \$97 | \$0 | \$538 |
| Local | 23 | \$30 | \$53 | \$66 | \$0 | \$290 |

¹n = 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 Alaska Maritime NWR were as follows (fig. 9):

- 94% were satisfied with the recreational activities and opportunities,
- 96% were satisfied with the information and education about the refuge and its resources,
- 96% were satisfied with the services provided by employees or volunteers, and
- 92% were satisfied with the refuge's job of conserving fish, wildlife and their habitats.

Although 20% of visitors (n = 43) indicated they paid a fee to enter Alaska Maritime NWR, the refuge does not have an entrance fee. While it is not known why some visitors thought they paid a fee, there are other marine interpretation venues (such as the Pratt Museum) nearby that visitors may have been referencing when they answered this question.

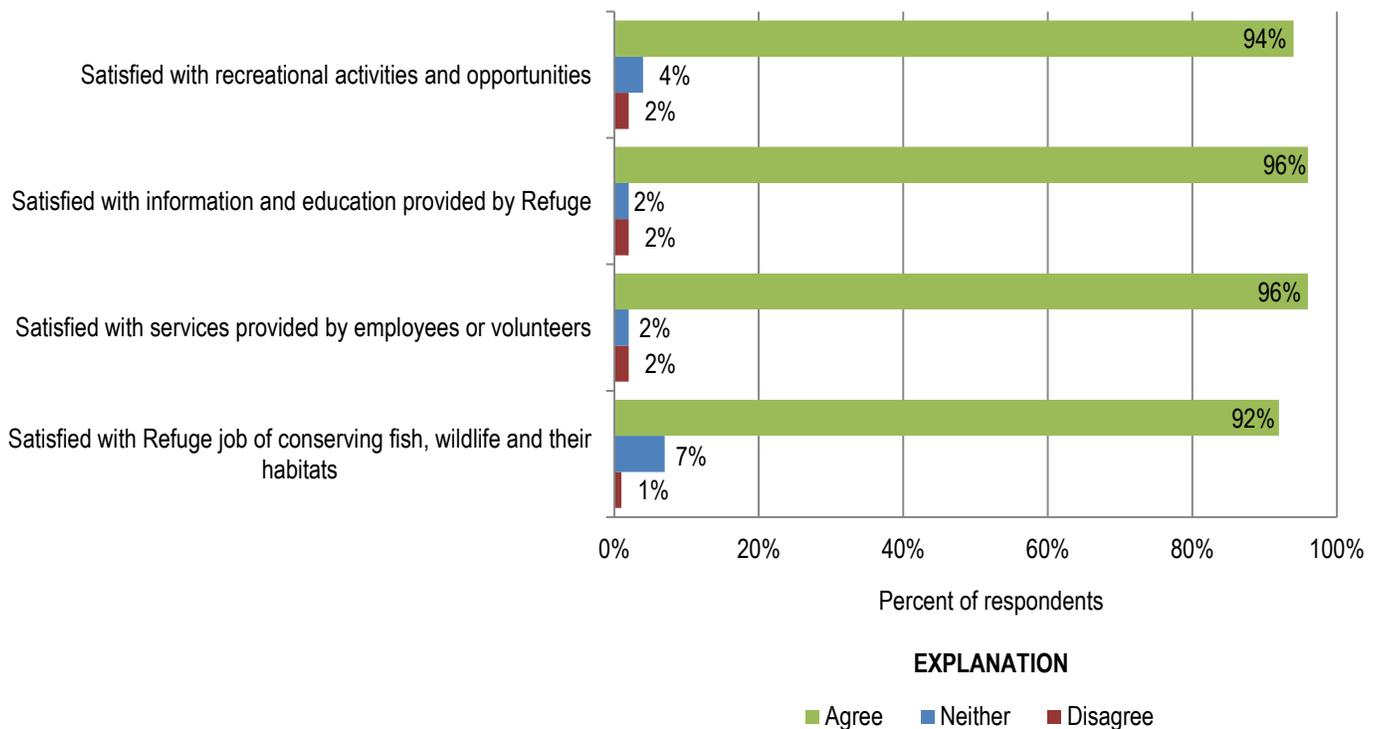


Figure 9. Overall satisfaction with Alaska Maritime NWR during *this* visit (n ≥ 201).

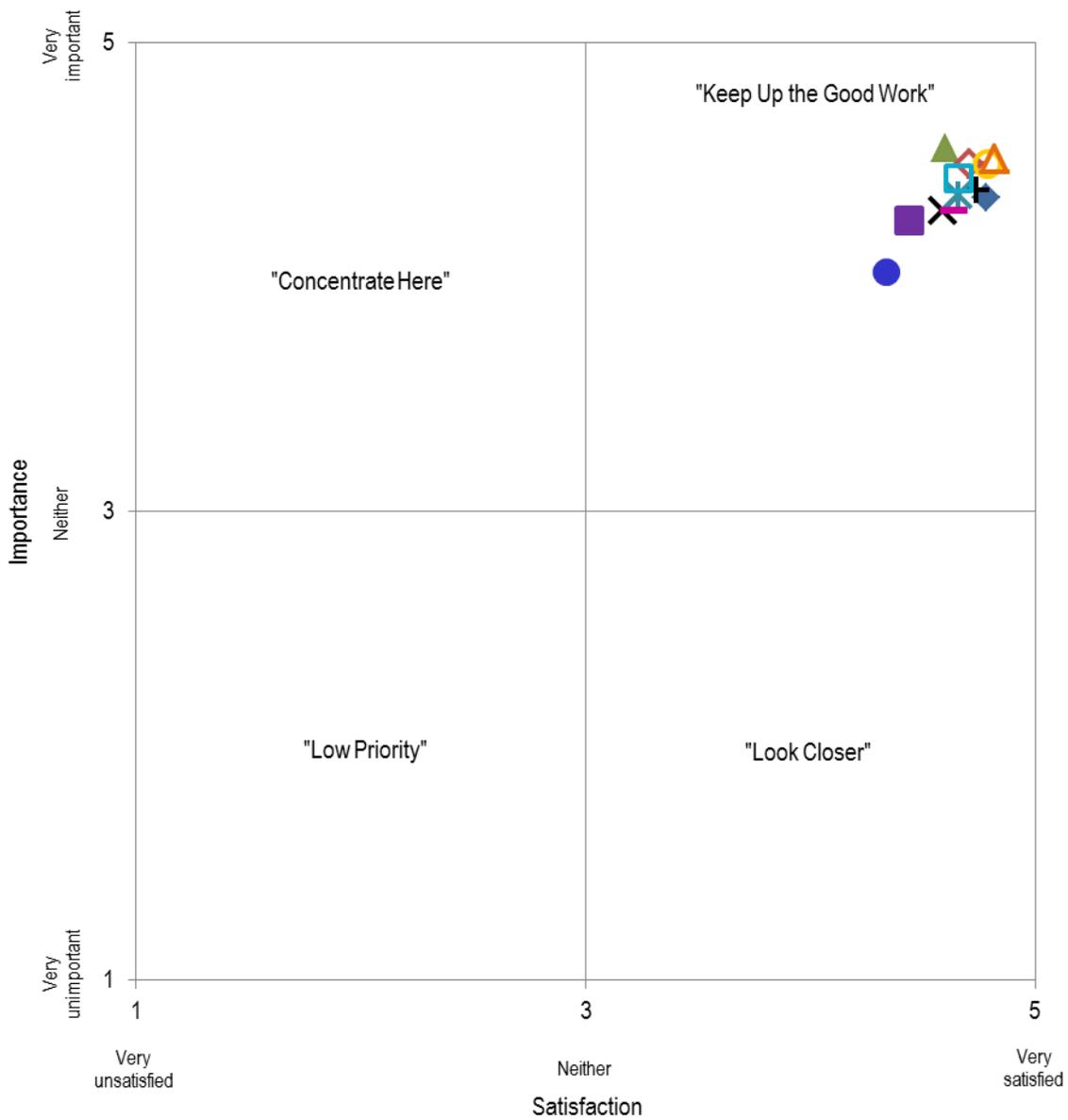
Importance/Satisfaction Ratings

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 Alaska Maritime 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.

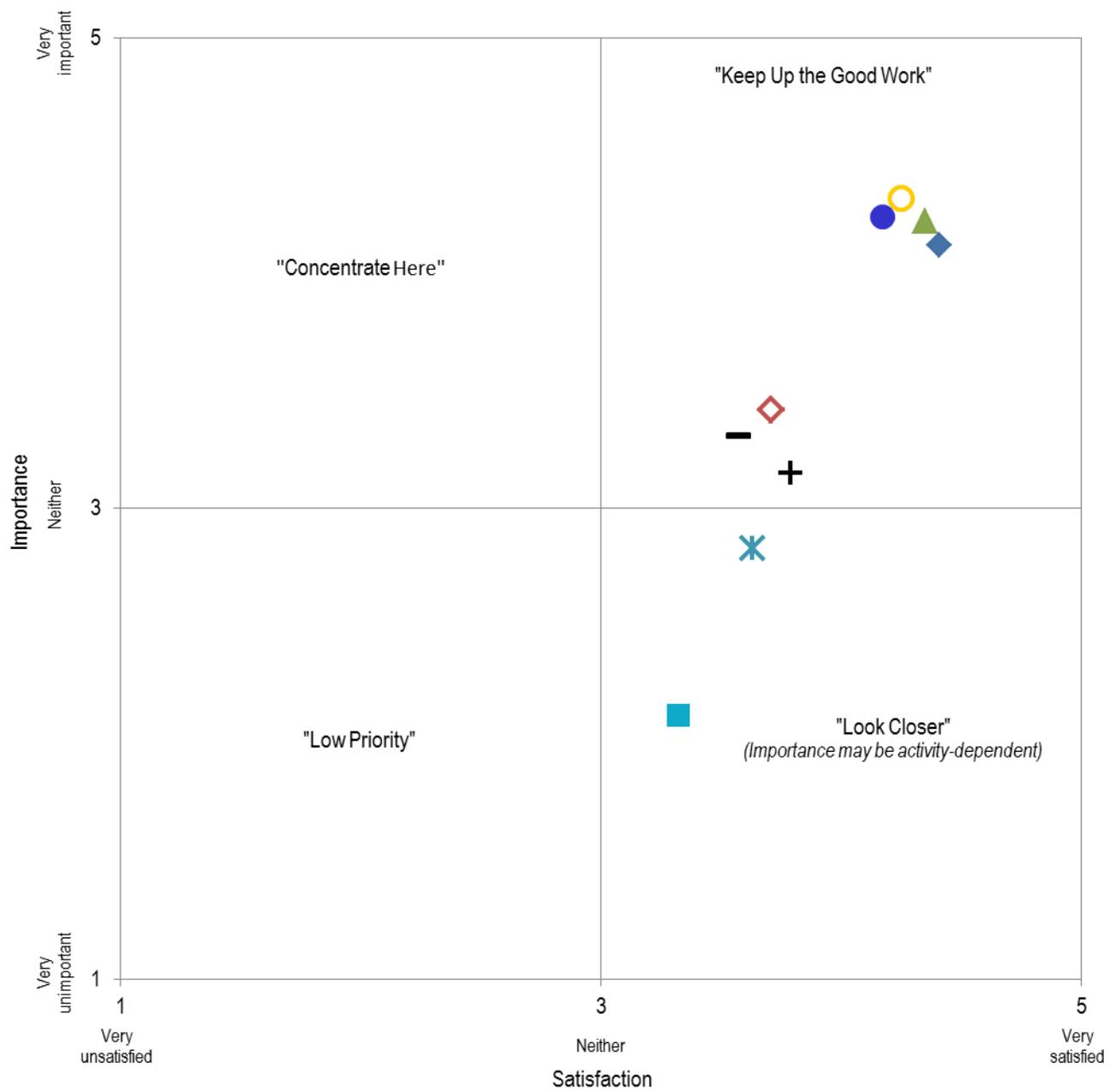
Figures 10-12 depict surveyed visitors' importance-satisfaction results for refuge services and facilities, recreational opportunities, and transportation-related features at Alaska Maritime NWR, respectively. All refuge services and facilities fell in the "Keep Up the Good Work" quadrant (fig. 10). Nearly all refuge recreational opportunities fell in the "Keep Up the Good Work" quadrant except hunting and fishing opportunities, which fell into the "Look Closer" quadrant (fig. 11). The average importance of hunting and fishing 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
- ⊠ Informational kiosks/displays about this Refuge
- ◇ Exhibits about this Refuge
- Visitor Center
- △ Well-maintained restrooms
- ✦ Courteous/welcoming employees/volunteers
- ✕ Printed information about this Refuge
- Signs with rules/regulations
- Environmental education programs/activities
- Convenient hours/days of operation
- Wildlife observation structures

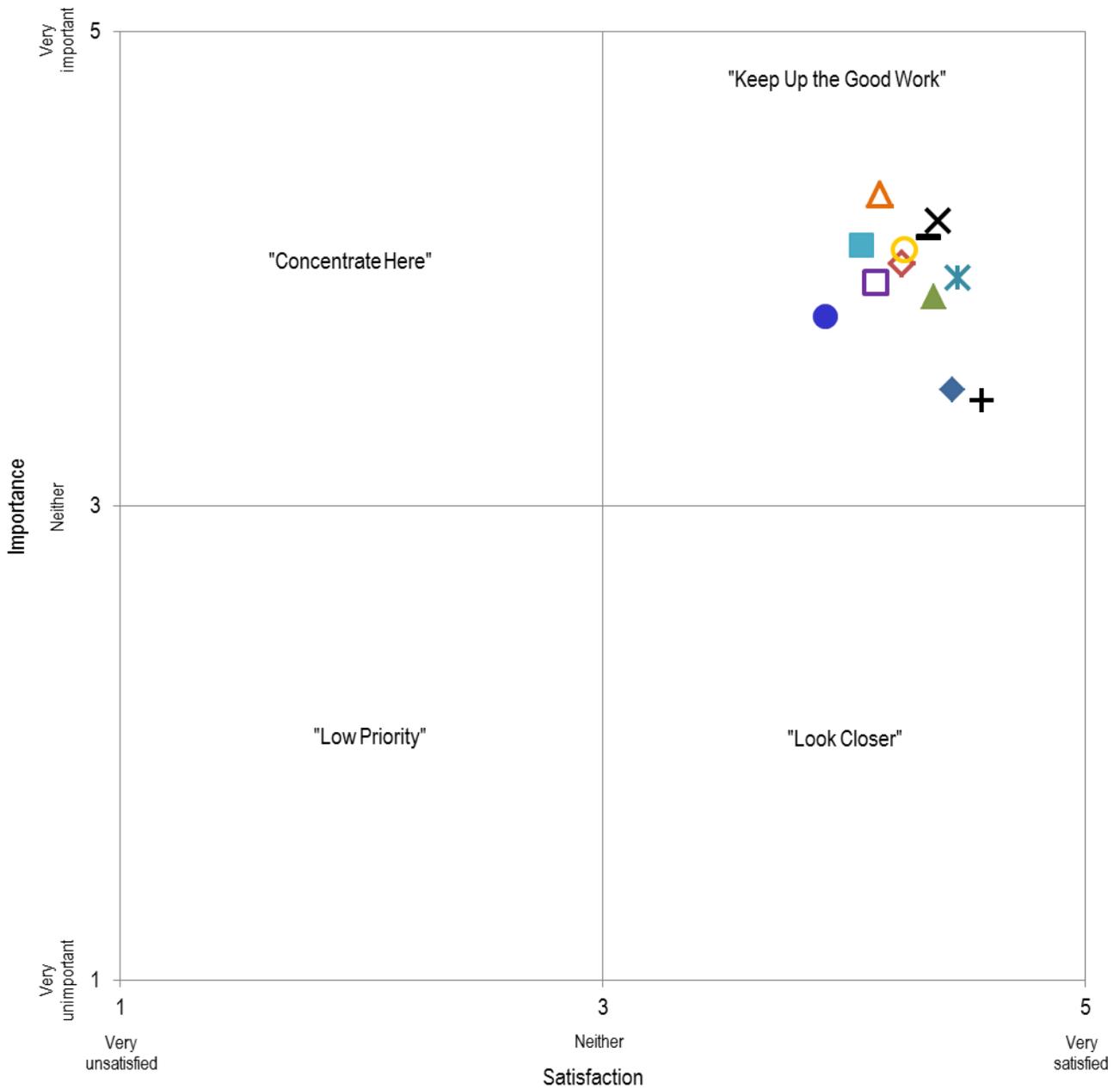
Figure 10. Importance-satisfaction ratings of services and facilities provided at Alaska Maritime NWR.



EXPLANATION

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

Figure 11. Importance-satisfaction ratings of recreational opportunities provided at Alaska Maritime NWR.



EXPLANATION

- ◆ Condition of roads
- ⊕ Condition of parking areas
- ▲ Condition of bridges
- ✕ Condition of trails/boardwalks
- ⊗ Number of parking places
- Number of pullovers
- ◇ Safety of driving conditions
- Safety of Refuge entrances
- Directional signs on highways
- Directional signs on Refuge
- △ Directional signs on trails
- Disabled access

Figure 12. Importance-satisfaction ratings of transportation-related features at Alaska Maritime 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 Alaska Maritime 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 Alaska Maritime 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;
- a bus/tram that runs during a special event;
- a bus/tram that takes passengers to different points on the Refuge;
- a bus/tram that provides a guided tour; and
- a bike share program.

When asked about using alternative transportation at Alaska Maritime NWR specifically, 42% of visitors indicated they were unsure whether it would enhance their experience; however, some visitors thought alternative transportation would enhance their experience (26%) and others thought it would not (32%).

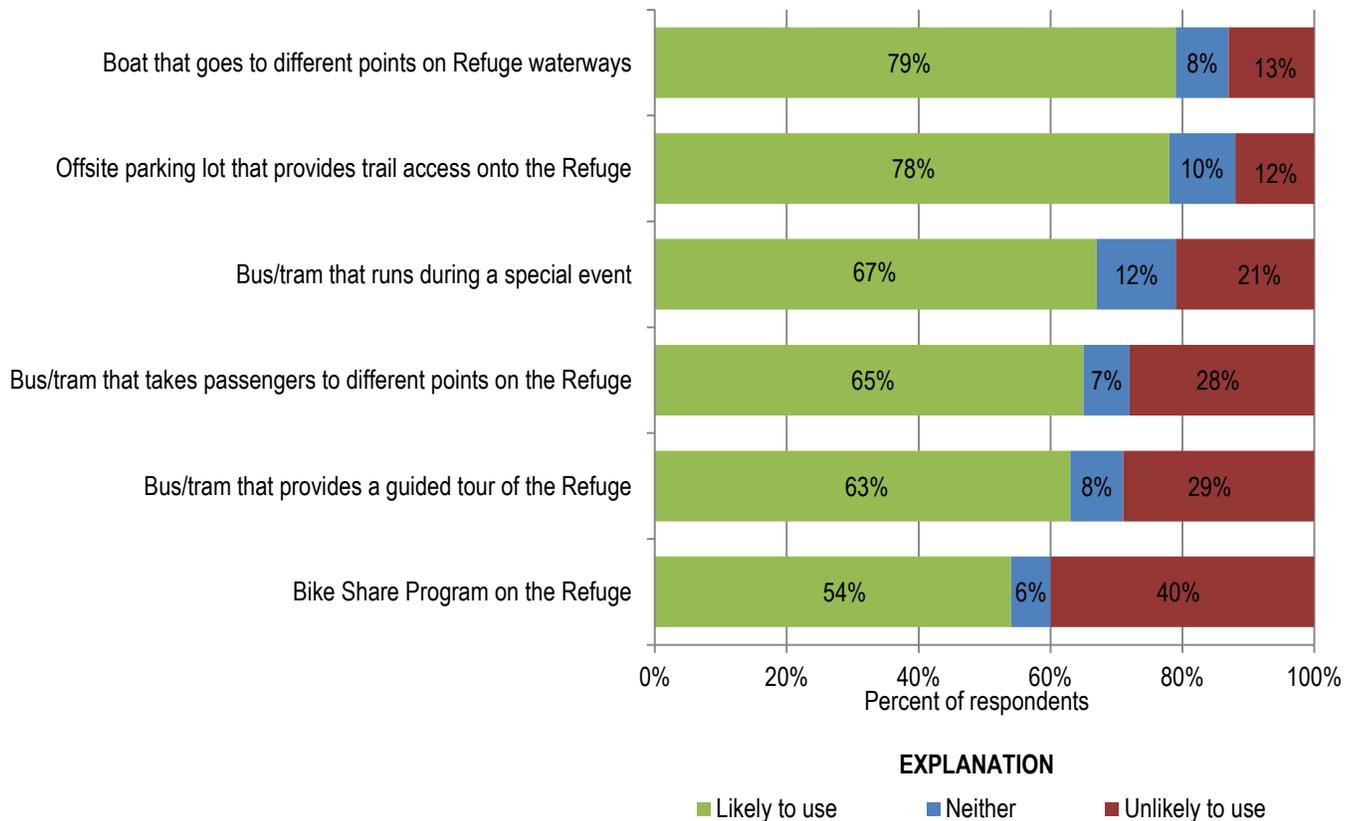


Figure 13. Visitors’ likelihood of using alternative transportation options at national wildlife refuges in the future (n ≥ 209).

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 (for example, 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 Alaska Maritime NWR agreed with the following statements (fig. 14):

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

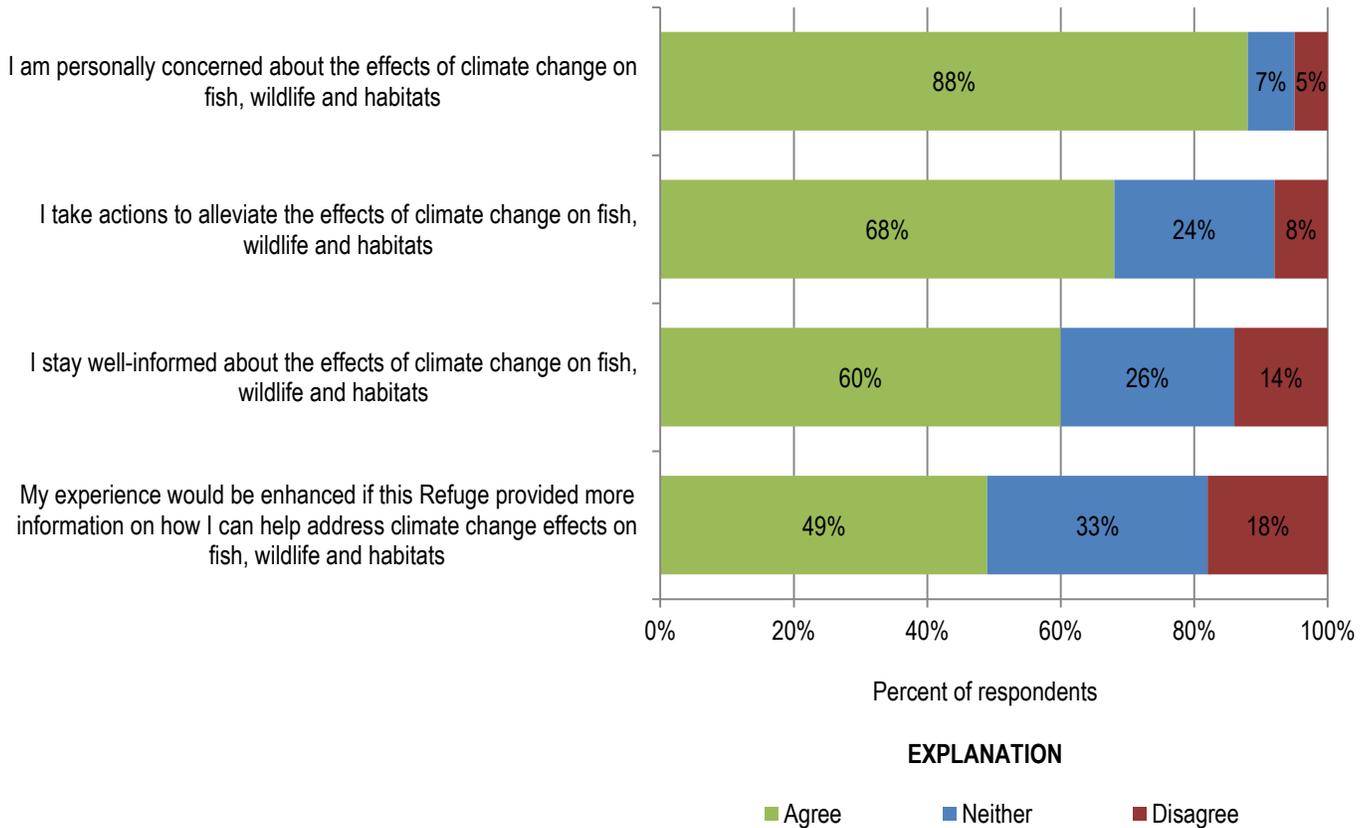


Figure 14. Visitors’ personal involvement with climate change related to fish, wildlife and their habitats (n ≥ 208).

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

- “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
- “It is important to consider the economic costs and benefits to local communities when addressing climate change effects.”

The majority of visitors did *not* believe:

- “There has been too much emphasis on the catastrophic effects of climate change;” and
- “There is too much scientific uncertainty to adequately understand climate change effects.”

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 (49%) indicated that their experience would be enhanced if Alaska Maritime 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.

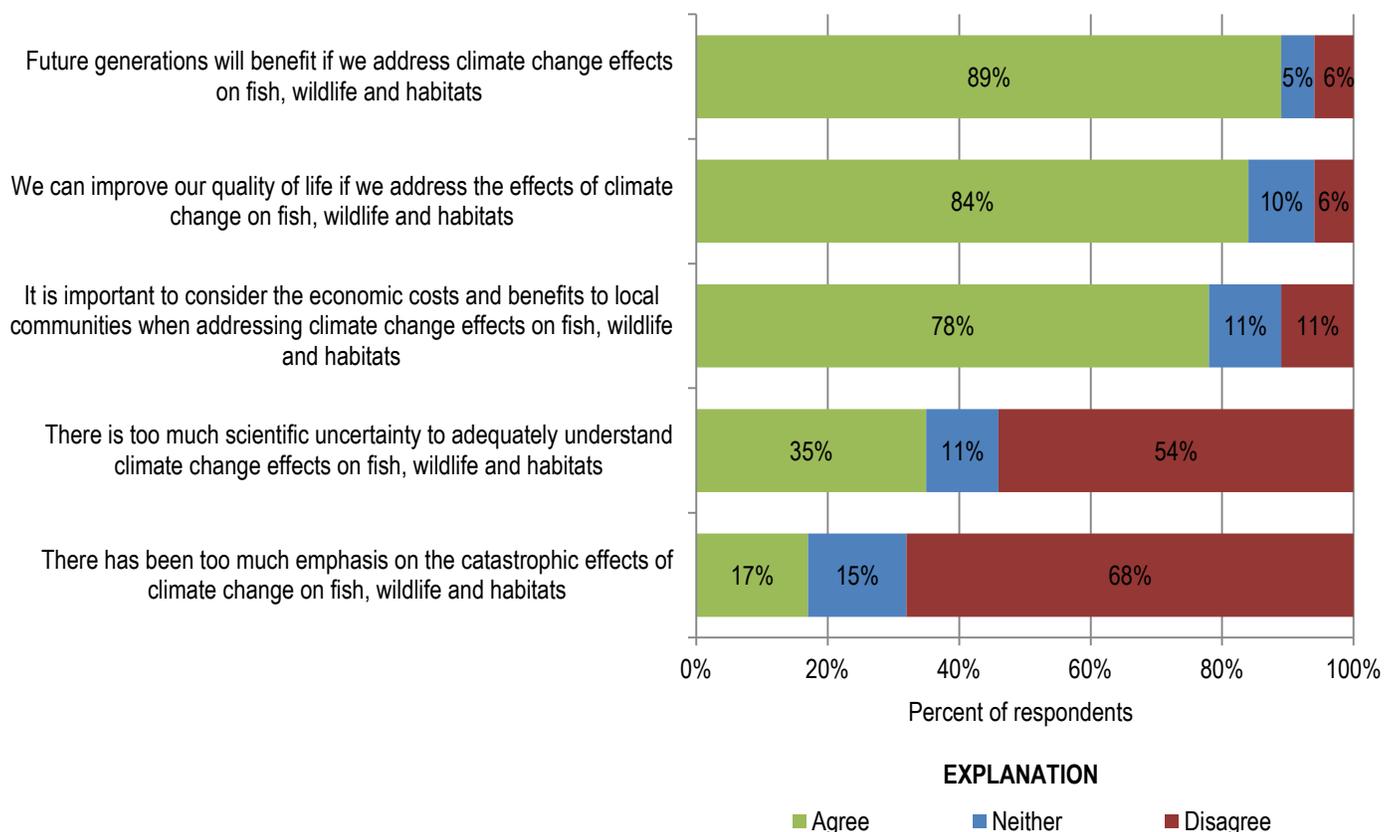


Figure 15. Visitors’ beliefs about the effects of climate change on fish, wildlife and their habitats (n ≥ 211).

Conclusion

These individual refuge results provide a summary of trip characteristics and experiences of a sample of visitors to Alaska Maritime 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 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"/> 0% Big game hunting | <input type="checkbox"/> 44% Hiking | <input type="checkbox"/> 33% Environmental education (for example, classrooms or labs, tours) |
| <input type="checkbox"/> 0% Upland/Small-game hunting | <input type="checkbox"/> 5% Bicycling | |
| <input type="checkbox"/> 1% Migratory bird/Waterfowl hunting | <input type="checkbox"/> 14% Auto tour route/Driving | <input type="checkbox"/> 16% Special event (<i>please specify</i>) <u>See Appendix B</u> |
| <input type="checkbox"/> 57% Wildlife observation | <input type="checkbox"/> 8% Motorized boating | |
| <input type="checkbox"/> 56% Bird watching | <input type="checkbox"/> 7% Nonmotorized boating (including canoes/kayaks) | <input type="checkbox"/> 10% Other (<i>please specify</i>) <u>See Appendix B</u> |
| <input type="checkbox"/> 6% Freshwater fishing | | |
| <input type="checkbox"/> 13% Saltwater fishing | <input type="checkbox"/> 60% Interpretation (for example, exhibits, kiosks, videos) | <input type="checkbox"/> 0% Other (<i>please specify</i>) <u>See Appendix B</u> |
| <input type="checkbox"/> 51% 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?

- 2% No
- 98% Yes → If yes, what did you do there? (Please mark **all that apply.**)
- | | |
|--|---|
| <input type="checkbox"/> 83% Visit the gift shop or bookstore | <input type="checkbox"/> 73% Watch a nature talk/video/presentation |
| <input type="checkbox"/> 95% View the exhibits | <input type="checkbox"/> 64% Stopped to use the facilities (for example, get water, use restroom) |
| <input type="checkbox"/> 63% Ask information of staff/volunteers | <input type="checkbox"/> 13% 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 | |
|----------|-------|-------|---|
| 9% | 58% | 16% | It was the primary purpose or sole destination of my trip. |
| 47% | 30% | 44% | It was one of many equally important reasons or destinations for my trip. |
| 45% | 12% | 40% | 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 1244 number of miles

Local 9 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?

36% No (*skip to question #9*)

64% Yes → What **type of group** were you with on your visit? (*Please mark **only one.***)

89% Family and/or friends

4% 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

2 number 17 years and under

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

38% Friends or relatives

5% Refuge website

40% Signs on highway

1% Other website (*please specify*) See Appendix B

6% Recreation club or organization

2% Television or radio

29% People in the local community

12% Newspaper or magazine

21% Refuge printed information (brochure, map)

16% 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.***)

40% Spring
(March-May)

79% Summer
(June-August)

14% Fall
(September-November)

12% Winter
(December-February)

11. How many times have you visited...

...this Refuge (including this visit) in the last 12 months? 3 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"/> 76% | Private vehicle without a trailer | <input type="checkbox"/> 2% | Refuge shuttle bus or tram | <input type="checkbox"/> 4% | Bicycle |
| <input type="checkbox"/> 7% | Private vehicle with a trailer (for boat, camper or other) | <input type="checkbox"/> 0% | Motorcycle | <input type="checkbox"/> 28% | Walk/Hike |
| <input type="checkbox"/> 3% | Commercial tour bus | <input type="checkbox"/> 0% | ATV or off-road vehicle | <input type="checkbox"/> 3% | Other (<i>please specify below</i>) |
| <input type="checkbox"/> 12% | Recreational vehicle (RV) | <input type="checkbox"/> 5% | Boat | <u>See Appendix B</u> | |
| | | <input type="checkbox"/> 0% | 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"/> 50% | Signs on highways | <input type="checkbox"/> 1% | Directions from Refuge website |
| <input type="checkbox"/> 9% | A GPS navigation system | <input type="checkbox"/> 14% | Directions from people in community near this Refuge |
| <input type="checkbox"/> 12% | A road atlas or highway map | <input type="checkbox"/> 14% | Directions from friends or family |
| <input type="checkbox"/> 4% | Maps from the Internet (for example, MapQuest or Google Maps) | <input type="checkbox"/> 41% | Previous knowledge/I have been to this Refuge before |
| | | <input type="checkbox"/> 6% | 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"/> 19% | <input type="checkbox"/> 9% | <input type="checkbox"/> 7% | <input type="checkbox"/> 37% | <input type="checkbox"/> 27% |
| ...a bike that was offered through a Bike Share Program for use while on the Refuge? | <input type="checkbox"/> 25% | <input type="checkbox"/> 15% | <input type="checkbox"/> 6% | <input type="checkbox"/> 37% | <input type="checkbox"/> 17% |
| ...a bus or tram that provides a guided tour of the Refuge with information about the Refuge and its resources? | <input type="checkbox"/> 15% | <input type="checkbox"/> 14% | <input type="checkbox"/> 8% | <input type="checkbox"/> 30% | <input type="checkbox"/> 33% |
| ...a boat that goes to different points on Refuge waterways? | <input type="checkbox"/> 8% | <input type="checkbox"/> 5% | <input type="checkbox"/> 8% | <input type="checkbox"/> 37% | <input type="checkbox"/> 41% |
| ...a bus or tram that runs during a special event (such as an evening tour of wildlife or weekend festival)? | <input type="checkbox"/> 12% | <input type="checkbox"/> 9% | <input type="checkbox"/> 12% | <input type="checkbox"/> 39% | <input type="checkbox"/> 28% |
| ...an offsite parking lot that provides trail access for walking/hiking onto the Refuge? | <input type="checkbox"/> 7% | <input type="checkbox"/> 6% | <input type="checkbox"/> 10% | <input type="checkbox"/> 39% | <input type="checkbox"/> 39% |
| ...some other alternative transportation option? (<i>please specify</i>) <u>See Appendix B</u> | <input type="checkbox"/> 0% | <input type="checkbox"/> 10% | <input type="checkbox"/> 5% | <input type="checkbox"/> 33% | <input type="checkbox"/> 52% |

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

- 26% Yes 32% No 42% 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 |
| 9% | 13% | 18% | 39% | 21% | Surface conditions of roads | 5% | 0% | 7% | 19% | 68% | NA |
| 9% | 17% | 14% | 43% | 18% | Surface conditions of parking areas | 5% | 1% | 3% | 14% | 77% | NA |
| 6% | 6% | 18% | 35% | 35% | Condition of bridges | 5% | 2% | 10% | 19% | 65% | NA |
| 3% | 6% | 4% | 43% | 44% | Condition of trails and boardwalks | 4% | 5% | 3% | 23% | 64% | NA |
| 4% | 6% | 10% | 49% | 30% | Number of places for parking | 4% | 6% | 2% | 16% | 73% | NA |
| 5% | 4% | 24% | 39% | 28% | Number of places to pull over along Refuge roads | 2% | 9% | 22% | 28% | 39% | NA |
| 6% | 3% | 15% | 32% | 43% | Safety of driving conditions on Refuge roads | 5% | 1% | 12% | 28% | 54% | NA |
| 6% | 3% | 10% | 34% | 47% | Safety of Refuge road entrances/exits | 6% | 1% | 5% | 26% | 61% | NA |
| 4% | 5% | 7% | 49% | 36% | Signs on highways directing you to the Refuge | 4% | 7% | 5% | 28% | 56% | NA |
| 4% | 5% | 11% | 38% | 42% | Signs directing you around the Refuge roads | 6% | 5% | 12% | 32% | 46% | NA |
| 3% | 2% | 5% | 40% | 50% | Signs directing you on trails | 3% | 6% | 10% | 35% | 46% | NA |
| 7% | 4% | 17% | 31% | 41% | Access for people with physical disabilities or who have difficulty walking | 2% | 8% | 13% | 28% | 49% | NA |

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

See Appendix B

SECTION 3. Your expenses related to your Refuge visit

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

15% Yes

85% No → How much time did you spend **in local communities** on this trip?
 6 number of hours OR 5 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 & at this Refuge</u> (within 50 miles of this Refuge) |
|--|---|
| 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?

 4 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 |
| 10% | 11% | 9% | 6% | 15% | 3% | 16% | 3% | 4% | 7% | 17% |

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**.)*

| | | | | | | | | | | | |
|----|-------------|----|---------|-----|-------------|----|----------|----|--------------|-----|---|
| 5% | Far too low | 7% | Too low | 84% | About right | 5% | Too high | 0% | Far too high | 80% | Did not pay a fee <i>(skip to Section 4)</i> |
|----|-------------|----|---------|-----|-------------|----|----------|----|--------------|-----|---|

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 | 2% | Disagree | 9% | Neither agree or disagree | 40% | Agree | 47% | Strongly agree |
|----|-------------------|----|----------|----|---------------------------|-----|-------|-----|----------------|

SECTION 4. Your experience at this Refuge

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. | 1% | 1% | 4% | 41% | 53% | NA |
| Overall, I am satisfied with the information and education provided by this Refuge about its resources. | 1% | 1% | 2% | 29% | 66% | NA |
| Overall, I am satisfied with the services provided by employees or volunteers at this Refuge. | 1% | 1% | 2% | 28% | 68% | NA |
| This Refuge does a good job of conserving fish, wildlife and their habitats. | 0% | 0% | 7% | 31% | 61% | 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% | 2% | 1% | 45% | 48% | Availability of employees or volunteers | 2% | 1% | 2% | 9% | 87% | NA |
| 2% | 3% | 4% | 38% | 53% | Courteous and welcoming employees or volunteers | 2% | 2% | 2% | 9% | 85% | NA |
| 4% | 1% | 1% | 28% | 68% | Knowledgeable employees or volunteers | 3% | 2% | 2% | 19% | 74% | NA |
| 4% | 1% | 6% | 43% | 47% | Printed information about this Refuge and its resources (for example, maps and brochures) | 2% | 1% | 4% | 22% | 71% | NA |
| 3% | 2% | 5% | 39% | 52% | Informational kiosks/displays about this Refuge and its resources | 2% | 1% | 5% | 15% | 78% | NA |
| 1% | 7% | 17% | 38% | 37% | Signs with rules/regulations for this Refuge | 1% | 2% | 14% | 28% | 55% | NA |
| 3% | 1% | 2% | 36% | 59% | Exhibits about this Refuge and its resources | 2% | 1% | 3% | 15% | 80% | NA |
| 4% | 3% | 6% | 36% | 51% | Environmental education programs or activities | 2% | 1% | 3% | 20% | 74% | NA |
| 3% | 3% | 2% | 27% | 65% | Visitor Center | 2% | 1% | 1% | 12% | 85% | NA |
| 3% | 1% | 2% | 38% | 55% | Convenient hours and days of operation | 1% | 2% | 3% | 18% | 76% | NA |
| 2% | 4% | 2% | 27% | 65% | Well-maintained restrooms | 2% | 0% | 2% | 7% | 89% | NA |
| 3% | 5% | 7% | 32% | 52% | Wildlife observation structures (decks, blinds) | 2% | 3% | 9% | 23% | 64% | NA |
| 3% | 5% | 14% | 34% | 45% | Bird-watching opportunities | 1% | 2% | 11% | 25% | 60% | NA |
| 2% | 2% | 8% | 38% | 50% | Opportunities to observe wildlife other than birds | 2% | 3% | 10% | 38% | 47% | NA |
| 4% | 4% | 8% | 35% | 49% | Opportunities to photograph wildlife and scenery | 2% | 1% | 10% | 34% | 53% | NA |
| 51% | 9% | 25% | 9% | 7% | Hunting opportunities | 6% | 2% | 63% | 11% | 17% | NA |
| 32% | 7% | 23% | 23% | 15% | Fishing opportunities | 1% | 4% | 53% | 16% | 26% | NA |
| 3% | 3% | 8% | 41% | 46% | Trail hiking opportunities | 1% | 4% | 13% | 43% | 40% | NA |
| 12% | 7% | 24% | 41% | 16% | Water trail opportunities for canoeing or kayaking | 1% | 1% | 43% | 35% | 20% | NA |
| 13% | 10% | 25% | 34% | 17% | Bicycling opportunities | 2% | 6% | 46% | 24% | 22% | NA |
| 20% | 6% | 32% | 23% | 19% | Volunteer opportunities | 2% | 1% | 43% | 23% | 31% | 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

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

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?

81% Yes

19% No

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

87% Yes

13% No

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

80% Yes

20% No

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

See Appendix B

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. | 2% | 3% | 7% | 36% | 52% |
| We can improve our quality of life if we address the effects of climate change on fish, wildlife and their habitats. | 2% | 3% | 10% | 33% | 51% |
| There is too much scientific uncertainty to adequately understand how climate change will impact fish, wildlife and their habitats. | 22% | 32% | 11% | 27% | 7% |
| I stay well-informed about the effects of climate change on fish, wildlife and their habitats. | 2% | 12% | 26% | 47% | 13% |
| 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. | 2% | 9% | 11% | 54% | 23% |
| I take actions to alleviate the effects of climate change on fish, wildlife and their habitats. | 3% | 5% | 25% | 47% | 21% |
| There has been too much emphasis on the catastrophic effects of climate change on fish, wildlife and their habitats. | 35% | 33% | 15% | 11% | 6% |
| Future generations will benefit if we address the effects of climate change on fish, wildlife and their habitats. | 1% | 4% | 5% | 37% | 52% |
| 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. | 5% | 13% | 33% | 35% | 14% |

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?

95% Yes 5% No → If not, what is your home country? See Figure 4 in Report

2. Are you? 35% Male 65% Female

3. In what year were you born? 1959 (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% | | | 6% | | | | 47% | | | | 47% | | | |

5. What ethnicity do you consider yourself? 3% Hispanic or Latino 97% Not Hispanic or Latino

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

- 4% American Indian or Alaska Native 1% Black or African American 97% 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"/> 2% Less than \$10,000 | <input type="checkbox"/> 11% \$35,000 - \$49,999 | <input type="checkbox"/> 22% \$100,000 - \$149,999 |
| <input type="checkbox"/> 4% \$10,000 - \$24,999 | <input type="checkbox"/> 20% \$50,000 - \$74,999 | <input type="checkbox"/> 11% \$150,000 - \$199,999 |
| <input type="checkbox"/> 2% \$25,000 - \$34,999 | <input type="checkbox"/> 20% \$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 Alaska Maritime 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 |
|---------------------------------|-----------|
| Bird festival | 1 |
| Homer Sea Week | 1 |
| Homer Shorebird Festival | 4 |
| Kachemak Bay Shorebird Festival | 9 |
| Lab | 1 |
| Lecture | 1 |
| Refuge 100 year celebration | 1 |
| Shorebird Demos | 1 |
| Shorebird Festival | 12 |
| Shorebird lectures | 1 |
| Wildlife Hotspot Hike | 1 |
| Total | 33 |

| Other Activity | Frequency |
|--|-----------|
| Beach Hike, Discovery Labs | 1 |
| Bowman Open Option Elementary School trip | 1 |
| Christmas Crafts | 1 |
| Film in Theater | 1 |
| Info Movies, history of the area, area information | 1 |

| | |
|---|----|
| Information about the local region | 1 |
| Interest | 1 |
| Lab | 1 |
| Learn about local wildlife, tides, etc. | 1 |
| Lecture - mammoth on Kenai Peninsula | 1 |
| Lectures and labs | 1 |
| Plant observation | 1 |
| Recreation | 1 |
| Shorebird art activities | 1 |
| To learn more | 1 |
| Tour with kids | 1 |
| Travel/Tourism | 1 |
| Vacation | 1 |
| Vacationing in Alaska | 1 |
| Video and exhibit | 1 |
| Visit Homer and see the town | 1 |
| Visitor Center | 1 |
| Total | 22 |

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 |
|--|-----------|
| 5th grade field trip | 1 |
| Afternoon outing | 1 |
| Area Information | 1 |
| Eagle viewing | 1 |
| General vacation | 1 |
| Homer Sea Week | 1 |
| Information about the local region | 1 |
| Interest | 1 |
| Kids | 1 |
| Lab | 1 |
| Lecture | 1 |
| Lecture - mammoth on Kenai Peninsula | 1 |
| Recreation | 1 |
| Take granddaughter to labs | 1 |
| Tour | 1 |
| Tour with kids | 1 |
| Travel/Tourism | 1 |
| Vacation | 1 |
| Visit Homer and see the town | 1 |
| Wildlife | 1 |
| Total | 20 |

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

| Other Visitor Center Activity | Frequency |
|--|-----------|
| Attended a speech and a meet and greet. | 1 |
| Big Spit awards - part of Shorebird Festival | 1 |
| Binocular demonstration and purchase | 1 |
| Child earned a Junior Marine Biologist patch | 1 |
| Classroom/Labs | 1 |
| Crafts and lab session | 1 |
| Enjoyed the free coffee. | 1 |
| Guest speakers, shore bird festival activity | 1 |
| Guide for tourists | 1 |
| Hike/Walk | 1 |
| Hogtie my preschooler | 1 |
| Lab exhibit | 1 |
| Marine Research Lab with classes and projects in progress. | 1 |
| Participate in Shorebird Festival Event and activities | 1 |
| Photography and the setting were beautiful! | 1 |
| Received a Birding Award | 1 |
| See a specific exhibit made by a friend. | 1 |
| Sold sports optics | 1 |
| Tide pool walk, wildlife hotspot tour, and discovery labs | 1 |
| Took a bird watching tour. | 1 |
| Tour | 1 |
| Used Nature Trail behind Visitor Center | 1 |
| Visit with former colleague | 1 |

| | |
|--|----|
| Visited a demonstration lab with students | 1 |
| Visited classroom/lab & outdoor trails | 1 |
| Walked nature trails and listened to key note speakers, community fair | 1 |
| Went on a nature walk with a guide. | 1 |
| Wonderful facility. | 1 |
| Total | 28 |

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 |
|-------------------------------------|-----------|
| Cruise ship guide | 1 |
| Homer Shorebird Festival activities | 1 |
| Kachimak Bay Shorebird Festival | 1 |
| Shorebird Festival | 1 |
| Total | 4 |

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

| Other Website | Frequency |
|-------------------------------------|-----------|
| Kachemak Shorebird Festival website | 1 |
| Things to do in Homer | 1 |
| Total | 2 |

| Other Ways Heard about This Refuge | Frequency |
|---|-----------|
| AAA tour book | 1 |
| Alaska Brochure/Travel Book | 1 |
| Alaska Ferry Adventures | 1 |
| Alaska's Kenai Peninsula Wildlife Viewing Trail Guide | 1 |
| Backroads tour group | 1 |
| Cruise Shore Excursion Desk | 1 |
| Eagle optics | 1 |
| Fromer's Alaska Day by Day | 1 |
| Great Alaska Adventure Lodge | 1 |
| Guidebook | 3 |
| Homer Visitor Centre | 4 |
| Leaders of Country Walkers | 1 |
| Local tourism booklets | 1 |
| Lonely Planet Alaska guidebook | 1 |
| Milepost | 2 |
| School field trip in 2008 | 1 |
| Shorebird Festival material | 1 |
| Student Conservation Association volunteer catalog | 1 |
| The Visitor Center and shorebird festival literature | 1 |
| Through work | 1 |
| Tourist Info | 1 |
| Travel guidebook (Moon) | 1 |
| Travel guidebook | 4 |

| | |
|---|----|
| Travel guidebooks like Fodor's or Frommer's | 1 |
| Visitor Center | 1 |
| Total | 34 |

Survey Section 2

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

| Other Forms of Transportation | Frequency |
|--|-----------|
| Airplane | 2 |
| Cruise ship | 1 |
| Pickup truck | 1 |
| Rental 13 passenger van as part of the AGLP 2011 Group | 1 |
| School bus | 1 |
| Tourist shuttle | 1 |
| Total | 7 |

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

| Other Ways Found This Refuge | Frequency |
|--|-----------|
| Address from travel guidebook (e.g., Fodor's, Frommer's) | 1 |
| Driver | 1 |
| Guide of Country Walkers | 1 |
| Lonely Planet | 1 |
| Milepost | 2 |
| The Milepost | 1 |
| Tour book provided address | 1 |

| | |
|------------------------------------|----|
| Town visitor's map | 1 |
| Trail Guide/Alaska Kenai Peninsula | 1 |
| Train | 1 |
| Travel publications | 1 |
| Total | 12 |

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 |
|--|-----------|
| Airplane | 1 |
| Airplane tour | 1 |
| As part of the annual AGLP environmental studies tour plan with van rentals. | 1 |
| Bike group or hike group | 1 |
| Bus guided tour | 1 |
| Driving | 1 |
| Free shuttle from cruise ship | 1 |
| Holland America Line Cruise Shore Excursion | 1 |
| Horseback guided trails tours | 1 |
| Kayak | 1 |
| Kayaking whenever possible | 1 |
| My car on refuge roads | 1 |
| My own bicycle or boat | 1 |
| Narrated flight seeing, perhaps 1 hour in length to keep cost down | 1 |
| Personal bicycle or kayak (boat) | 1 |

| | |
|-------------------------------|----|
| Plane or helicopter | 1 |
| Private vehicle | 1 |
| Rickshaws pulled by antelope! | 1 |
| Sega | 1 |
| Skiing, dogsled | 1 |
| To fly with a helicopter | 1 |
| Walk | 1 |
| Total | 22 |

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 = 21)

As a person that lives in Alaska, I always am equipped with the proper shoes and proper vehicle to visit the wildlife refuge; therefore, I don't feel that it is important to improve the roads. I like the rustic nature of the center. I think any effort to pave the roadway would just make it like an amusement park in the lower 48. This wildlife refuge had a very nice Alaskan feel and I had no issues with the trails or dirt roads.

Clearly delineate refuge boundaries to visitors. Maps are nice!

Dirt path to beach was icy. I fell down on it in December.

Exit was okay to right, but not to the left.

I visited the Islands & Oceans Center in Homer, Alaska, which is a mostly indoor display with a small observation trail.

I was in Homer for the shorebird festival - I'm not sure the Homer Spit Road or other roads are USFWS roads. I've visited many other refuges as an active birder - my answers reflect both my past experience, and my specific visit to Homer.

I would like rafting/boat tours. Availability of private, off campus, flight seeing.

I'm not aware of any relevant roads for the Alaska Maritime National Wildlife Refuge.

Marine refuge, vast majority of it is boat accessible only.

My family has several wheelchair users and I was pleased that this facility provided them full accommodations.

Promote walking/hiking/biking over cars, RVs, etc. The point of a refuge is to get out into it.

Relying on modes of transportation other than my own vehicle costs valuable time that I sometimes do not have. That costs me the opportunity to see all I can see within my time constraints.

Remote parts of refuge are "out of sight, not of mind" to refuge staff!

Similar to other Alaskan Parks/Refuges, having affordable water transportation (similar to shuttle buses for hikers) that would permit users to visit different parts of the refuge for a 1/2 or full day.

The Alaska Maritime National Wildlife Refuge consists of many islands. I visited the Visitor Center in tour. I also saw some of the islands from a commercial boat.

The directions to the beach walk were nonexistent in terms of outdoor signage. We received fair verbal instructions.

There are an excessive number of parking spaces that are reserved for handicapped vehicles. Most of these spaces are unused when the parking lot is otherwise full, and people have to park elsewhere just in case more handicapped people might come along.

This is a marine island refuge accessible only by boat or plane. There is a Visitor Center and refuge headquarters in the local community, but not in the refuge.

This refuge is huge.

We live close by, so we have no transportation issues.

We only visited the Visitor Center.

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."

Comments on Services, Facilities, and Activities at This Refuge (n = 48)

Appreciative, excellent staff; extraordinary offerings at Island and Oceans.

Boating excursions would be great!

End of the road, start of the refuge. Wonderful facilities.

Everyone was kind and we enjoyed our visit.

Having knowledgeable rangers and volunteers is critical. When I have much more information than the ranger in a uniform working in the refuge, I am skeptical about the accuracy of any answers that person provides. Visitor Centers are critical and the workers (uniformed parties, whether employees or volunteers) MUST have more information than where the restroom is and the hours of operation.

I found the facilities to be well done, attractive, accessible, clean and well maintained. The Visitor Center exhibits were beautifully done, relevant, informative, and creative, and the staff was welcoming and informative. Exploring the refuge and its Visitor Center was an excellent experience.

I liked how there were kids' stuff spread out more. It would be great if Thursdays/ Fridays there were drawing classes and whatnot for

homeschool kids. There are a lot in this town, and we would love more fun things for kids on those days.

I really enjoyed my visit. The staff was very knowledgeable and friendly, and the exhibits were great. The wildlife is gorgeous. Thanks so much for saving it!

I wish more of the refuge were more accessible. Maybe a refuge watercraft you can pay to cruise with a ranger would be a good idea.

I wish the entrance fee for Alaskan residents was lower, so I could visit the facility more often. It's the only thing that keeps me from not visiting it often.

Islands and Ocean is a wonderful facility with wonderful exhibits and educational information presented in an interactive format. It has something for people of all ages and I look forward to visiting it again every time I visit my son and family who reside in Homer. A unique type of refuge. Thank you for managing this refuge and making it available to the public to enjoy.

Islands and Oceans is a beautiful facility - we love it.

It is beautiful.

It was great and very informative. It was beautiful to look at and engaging. The employees at the Visitor Center were very nice. Great use of money!

It would have been nice if my family was able to do a kayaking trip with a volunteer or ranger. The refuge in Homer seems like it would lend itself to that fairly easily.

It's a great place to learn about the refuge. Maybe guided tours in the museum; one every hour would be nice.

It's a wonderful place - one of the best we have ever seen.

It's great.

It's incredible! We really enjoyed the Visitor Center.

Left my sunglasses on the boat tour and they called me to let me know.

More crafts, food, coffee, tea, and snacks! #1 hands on!

More kid friendly activities would be good.

Most of the staff were very helpful and have good knowledge of the materials they are presenting.

My understanding is that the Visitor Center is in Homer, but that the refuge lands are beyond the area that I visited during the Shorebird Festival. I visit many refuges to go birding. Birding opportunities are critically important.

Need more emphasis in Pribilof Islands.

Needs more labeling - had to be almost done before each bird was identified separately.

Park rangers were knowledgeable and passionate about their opportunities to serve and teach.

Really great staff at the Visitor Center. Thanks!

Since this Visitor Center covers remote islands spread over thousands of miles, this survey about facilities on the refuge was not very applicable.

Staff does an excellent job; very knowledgeable and energetic crew.

Staff were exceptional in knowledge and interaction. I appreciated the information about how such a spread out refuge works.

The exhibits are wonderful. The staff was outstanding and friendly.

The exhibits were the best and most imaginative I've seen. The staff was welcoming and informative. I could have spent many hours there.

The hiking opportunities were limited.

The staff is especially helpful with kids. It is a great place. I love the surroundings of wildlife, its sounds, etc. This community is fortunate to have it here!

The talk on various birds was interesting and the presenter was very knowledgeable and courteous.

The volunteer guide who took us on the wildlife hotspot tour of the area was very knowledgeable and excellent - she really knows the birds! Also, the person who took us on the beach hike was excellent as well and also knew her stuff! I also really enjoyed the discovery lab!

The volunteer that helped me was great!

The volunteers and staff were most friendly and helpful. They provided information and answered questions willingly. It was a wonderful experience for all my party. The facility was easy to use and very scenic.

The volunteers were very helpful. The maps to get around were very confusing; I got lost and was very unhappy with that.

The working individuals were extremely helpful and made you feel welcome. Asked questions about our experiences and where we were from. Encouraged us to view the videos and walk through the exhibits. Made sure that we took advantage of the hiking trails.

They need clearer signage on boardwalks along with description of wildlife that is along the trail.

This facility portrays the people of this area who are so important to development.

This is a very educational facility. The hands on learning for students is very important.

We got more information from the Alaska Maritime National Wildlife Refuge than any other interpretive center we visited. It was a delightful stop.

We love our Visitor Center and staff!

We should all be proud of Islands and Ocean. Wish all of my friends could visit!

We were limited by time. We would've enjoyed being there longer.

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 = 132)

1) the opportunity to observe wildlife in natural settings 2) educational opportunities that this presents 3) introduction and support by the Visitor Center and staff 4) quality and relevance of educational exhibits within the Visitor Center and available but not distracting, supporting information along the trail. 5) Accessibility of the center and the trails for visitors 6) overall excellence of the experience it offers.

A great staff. Educational experience. Incredible opportunity to see one of the most beautiful places on earth and protect it.

A lot of info in a small area.

A person can see wildlife that occurs naturally in that region and it's not as disturbed by humans as in other places. We really like the conservation efforts.

A very unique and beautiful place and admission to the exhibits was free.

Actually kind of liked them better when they were more about habitat conservation, hunting and fishing.

Alaska hosts unparalleled wildlife.

Alaska wildlife and ocean life.

Alaskan marine life.

All refuges are unique.

Always have information and guides available to answer questions.

America's exploring history of creating parks and refuges. Refuges offer environmental education opportunities and programs. Overall, it's the lack of being overly developed. Trying to maintain a balance between access for recreation and conservation. Public access is very important.

An excellent way to learn specific facts, historical references and the importance of the areas being visited first hand. Beautifully crafted displays along with informative videos of the local area were readily available. A VERY enjoyable experience!

At least on the remote island refuge, the lands are managed for the benefit of the wildlife and not to produce wildlife for human use (like on the duck farm refuges).

Beach access along with the costal lake environment. Also, an incredible view of glaciers, mountains, and ocean.

Because it is in my hometown and its helping the wildlife, which I love.

Because there are family activities and labs quite often. The displays, interpretive areas, and films are wonderful. It is never boring. The uniqueness is also due to its proximity to the ocean, Kachemak Bay, and its wildlife, plants, and habitat. Awesome.

Being able to see the animals in their habitat and having guides to tell you about them makes it unique.

Coastal zones are unique wildlife viewing (both large and small) and unlike scenic National Parks.

Cooperation with private tours for entrance.

Everything is closed by regulation, unless specifically opened - that's unique. You generally get a better "recreation" experience on other public lands.

Extensiveness and marine habitat.

Generally lower number of visitors than National Parks, making for a more personal visit. Also, vs. National Forests (where I do most of my recreation) a refuge doesn't have to face the trade-offs/compromises that can interfere with the quality of the visit.

Gives an out of state opportunity for the "Alaskan" experience: hiking on the beach, paths, and seeing the displays in the refuge building.

Homer is not dirt roads anymore! Keep Homer and all refuges as pure as possible. My prayers keep refuges heaven like.

I absolutely love seeing things in their natural environment. We live in a big city and the only real opportunity for us to enjoy nature is a zoo or forest.

I also love visiting our U.S. National Parks and have a Golden Eagle membership. I have not visited, to my knowledge, other refuges and therefore do not feel I am qualified to make a comparison between the public lands. The refuge I did visit was a great experience. I don't know if this refuge is typical of other refuges managed by the U.S. Fish and Wildlife Service. Comparing this refuge to the US National Parks I have visited (Yellowstone, Glacier, Olympic); they are very different from each other and offer distinctly different and unique recreational experiences.

I haven't been to others, but they had some good videos.

I learned a lot about the native lifestyles in the area that I was not aware of. There is also interesting knowledge of bird rookeries.

I like the education aspect to the refuge.

I liked that people could see animals (such as bears) close up and the fact that the wildlife refuge's mission was to rehabilitate the animals, not necessarily to capture them and put them in captivity.

I worked two summer seasons for the USFWS as an emergency hire. They're relatively underdeveloped, providing more wild habitat for wildlife and more "wild" experience than some other public lands for those who visit.

Importance of well managed abundant wildlife with or without the presence of tourism.

Important resting areas for birds.

In an increasingly urban and technological society, a balance that allows us to retain natural areas is critical for humans as well as the protected species. There is an aspect of human health that connects with nature.

In this age of rapid depletion of resources and habitat, your refuge work is underappreciated and needs higher priority in terms of federal funding.

Information and education.

Information, beauty, friendly staff, and calming atmosphere.

It gives the chance to see wildlife that a person might never otherwise be able to see.

It gives us an opportunity to see how we as a nation value wildlife and preservation, and we work to protect and save our "wild" heritage.

It has a lot to do with information about the local wildlife, and I have lived here 40 plus years.

It is clean and well kept. I could tell lots of time and effort is used to maintain what was available.

It is informative about the area and is directly influential in my decision to spend more time and return on several days. Thank you!

It is less regulated from the user's perspective.

It is managed by U.S. Fish and Wildlife.

It is well managed, and actually taken care of with managers and volunteers onsite. It is so much better than The Nature Conservancy land that is usually unstaffed or managed onsite.

It protects our fish, wildlife, plants, and habitats, so that everyone can enjoy!

It provides a good educational opportunity.

It's in Alaska.

It's not used for multi purposes like logging.

It's so beautiful.

Its geography!

Its location in Alaska makes it different than other places I have visited in the lower 48 states.

Their missions make the refuges unique. Conserving, managing, and restoring fish, wildlife, plants and their habitats is crucial for the future of the U.S. and the world.

Labs.

Less developed than parks and that is a good thing.

Less people, noise, more fish and animals, and its peacefulness.

Low cost opportunities to engage in observation of nature/wildlife and engage in physical activity in a variety of different climates and habitats.

More of a natural habitat experience than with the Park Service.

Natural habitat.

Normally, there are more people at National Parks than here.

People are involved with the success of each center. It is not a tourist trap. Information available about the area, the wildlife in and around this part of the country and other parts of the USA, and the importance of maintaining the area's wildlife and vegetation for future generations.

Preservation of intact ecosystems with practical access for visitors.

Primary mission for wildlife.

Pristine environments with a focus on maintaining the environment.

Quality of Visitor Centers, exhibits, and volunteer staff.

Refuges are there to educate people so we can preserve the land and wildlife.

Refuges are unique because they cater to a certain species of plant or animal, offer lots of information about the subject and are often manned by a knowledgeable person to answer any questions.

Refuges offer unique birding opportunities. They're unique, because they're often remote and lightly visited. As an NPS employee, I value refuges and appreciate the different approach to providing visitor experiences.

Refuges provide a well-maintained area.

Refuges provide stewardship of fish and wildlife habitat as a primary mission while also providing opportunities to use the resources for consumptive and non-consumptive purposes.

Refuges' number one priority is wildlife, and people are number two. I think it's important that we have an agency that puts the needs of wildlife first.

Remoteness and lack of human clutter.

Safe way to observe wildlife without destroying anything. Makes me feel better, when I know where to go without doing harm to nature.

Seems to be more quiet; maybe more restrictions on motorized vehicles and more protections. The USFWS employees seem to be more excited about public lands, science, and their jobs than other agencies. They seem to be happier people.

The best thing about the local refuges is that you do not have to pay an entrance fee, and we can berry pick, hunt, and BIRDWATCH in a variety of habitats.

The birds and other animals are primary. Refuges in many states are among our favorite places to visit. We do not go during hunting season. I would like to do a long-term volunteer experience.

The displays gave good information on the local area's natural attributes.

The displays of habitats and environmental impact.

The education and orientation to wildlife and wildlife habitat.

The educational and viewing opportunities.

The educational aspects, tours, and opportunities to observe natural habitats.

The educational components make it unique.

The emphasis on wildlife habitats in that area makes it unique. There are good plans and maintenance, and we've noticed more wildlife and birds over time.

The excellent exhibit on the tides in the area was great.

The exhibits and unique setting.

The exhibits are very informational and well developed. Very thorough in their information and variety of presentations.

The guided tour, the information kiosks, and the informational movies.

The location - its sea life.

The location, exhibits, and educational value make it unique.

The one near us is Alaska Maritime NWR and healthy waters/estuaries/embankments = healthy marine life! = healthy social/emotional/physical people.

The one we went to was free!

The opportunity for an active "wildlife" experience. Enjoying wildlife in its native habitat is very special.

The opportunity to observe and learn about the specific environment.

The opportunity to view animals and nature you don't ordinarily get to see.

The people. The placement and the grand educational labs.

The refuges I have visited have done an excellent job educating visitors of all ages about their mission and about the wildlife in their areas.

The signs, people, and exhibits explaining the animals and the importance conserving them. They are "protecting the wildlife."

The state of the art exhibits and knowledgeable volunteers. Wow!

The trails and info provided about the area.

The variety of experiences, classes, and type of materials that are offered at no cost. I'm very happy to have the opportunity to do something worthwhile with my kids. We are on a very limited income, and this is something I probably would not be able to do otherwise.

The Visitor Centers are well put together and very informative.

The way refuges are organized, they make wilderness convenient and educational. They are true to the wilderness.

Their focus is to allow for the conservation of wildlife.

There is an opportunity to observe wildlife.

There is less development and less resource extractions; therefore, a generally more "natural" setting for wildlife.

They are in areas of prime habitat for particular species.

They are more educational.

They are unique because they offer a focused educational program.

They are well maintained and cheaper than National Parks. There are good tours and educational opportunities offered. From my own experience I have seen lots of wildlife in the refuge.

They educate the public.

They focus on wildlife.

They keep conservation of land, wildlife, and surrounding habitat as a first and foremost effort, allowing people to enjoy the gifts of nature given to us by God!

They lead to a road less traveled many times. There are few crowds!

They provide an important educational experience for both adults and children. Keep up the good work!

They provide an opportunity to see wildlife in natural habitats.

They provide information about conservation and research activities on each particular refuge you are visiting.

They tend to be for wildlife vs. just habitat.

This is a center that contains many exhibits about natural science.

To be able to see all kinds of animals and fish that you don't normally see.

Understanding the management is set specific and historic land uses and ownership can be vast.

Unique environment and ecosystem.

Very informative about the work of the USFWS in the Aleutians.

Very informative and first class Visitor Centers.

Very modern and compelling exhibits.

We enjoyed the tide pool opportunities and the unique Alaska info.

We traveled all over Alaska and visited a number of refuges. The fact that the wildlife is governmentally protected allows us to see animals that we wouldn't normally get to see in nature.

Well designed with little impact to environment. Allows habitat to flourish and succeed.

Well maintained and managed with the intent to preserve.

Well planned. Easy access with walking.

Wild lands for wilderness makes it unique.

Wildlife emphasis.

Additional Comments (n = 39)

[Respondent drew a landscape picture of mountains and water.]

All my answers are in relation to our experience at the Islands and Ocean Visitor Center and not the actual refuge areas. Not sure my answers are helpful. We are going to the Arctic Refuge in 3 weeks and would have a lot more to say after that trip.

An outstanding experience. Very informative and educational. Fantastic exhibits and interactive opportunities. Wonderful staff. I realize that I need to do more to protect the environment in the U.S. and around the world.

Climate change is a natural process and inevitably affects all living things, even to the point of extinction. An attempt to alter the effects of a natural process is at least daunting and perhaps unwise. The real issues are: has man's actions altered the natural process, and to what extent, and how can any change by man be mitigated? Added to the problem is the difficulty in gleaning facts from biased and deliberately distorted information. In general, I believe it is better to deal with causes than efforts.

I am aware that the cause/effect origin of global warming (chicken or egg approach) is ongoing. We know that warming exists. I'm not sure how much human intervention can change this, but we still need to use a best practices approach to saving species since everything correlates. I also know that air quality is a health issue that impacts us right now. The standards of conservation should not be lowered. The recently relaxed rules for hunting wolves, etc., seem overly destructive; over fishing, too. Please keep up your good stewardship. I regret the projected cuts in funding for all parks and wildlife.

I appreciate it when refuges provide information about how visitors can access the refuges (walking, car roads, etc.). This one did, but some do not. Thank you! (signature)

I did not realize that there was so much research and activity going on to preserve wildlife. Glad that someone is paying attention to this for future generations.

I don't understand the difference between a National Wildlife Refuge and a National Park. I like both, especially for camping, hiking, and cabin rentals!!! Thanks.

I know funds are scarce and dwindling, but I am ever grateful we in the Homer community have this wonderful refuge.

I like everything they are doing. Would be good to take note that there are lots of homeschoolers in this town and we are always looking for fun field trips.

I love it.

I try to visit this refuge annually; it is a favorite family spot! The volunteers and staff are friendly and knowledgeable and their enthusiasm for their mission is contagious!

I would like to stay informed if the wildlife refuge obtains new animals (such as bears, etc.) so I can visit them. The cost of the refuge keeps me away. I'd go more often, because I live close by.

I would visit again.

I'm an active birder and regularly visit refuges. I'm a construction engineer with NPS: [Name and number provided].

Islands and Oceans Visitor Center is great - could use more exhibit space and changes of exhibit.

It was my pleasure to assist in this survey response. Keep up the great work in providing us with the beauty of this great planet! (signature)

It was one of the most unique and fun places that I've visited.

It's a lovely Visitor Center with a very knowledgeable and friendly staff.

My visit was to the Visitor Center.

Our visit to the refuge was one of the high points of our trip to Homer. We are still talking about it.

Outstanding Visitor Center - one of the best. I don't like the modern architecture, but I like the interior and the displays. Money well spent.

Phil 4:8 Whatsoever things are true, whatsoever things are just, whatsoever things are honest, whatsoever things are pure, whatsoever things are lovely, whatsoever things are good - report; If there be any virtue and if there be any praise, think on these things. [Signed]

Please do more to reduce hunting in refuges. Reduce motorized vehicle use. A 'refuge' should be a refuge. Prioritize quiet. The Islands and Ocean Public Land Center in Homer is outstanding. The staff members are excellent. Thank you. We had a glorious experience at this refuge in Homer.

Protecting our land and wildlife is important. It is important to manage the land well for visitors.

Reach out to your local communities and get them involved.

Staff were well informed and interested in our thoughts and opinions.

Thank you for an informative, positive experience.

Thank you for the opportunity to participate in this survey. I would be interested in how one goes about volunteering at a National Wildlife Refuge. Thank you.

The refuge is very large compared to the visitor facility. This center is very clean and new. It didn't change the refuge much. It does a lot to increase awareness of the refuge around us. It doesn't increase access much.

The refuge provides excellent information on the impact of warming, pollution, etc. What is difficult is the management of sports, commercial, and subsistence fisheries. The cost of fuel for many sport fishing guides makes the price per pound of fish (especially halibut when catch is limited to one/person/day) prohibitive. Over fishing prior to regulations results in those single fish being small. For those of us without boats, the cost is too great.

The trip we were on when asked to do the survey was a 2 month visit to Alaska from Canada; we will not be doing this kind of trip very often, but it was wonderful!!!!

The Visitor Center was very informative and had marvelous exhibits. The volunteers and staff were particularly helpful and friendly.

There is an assumption that humans cause global warming. Although I am concerned about global warming and our environment, I am offended when this is presented as absolute truth when there is conflicting scientific evidence. The "inconvenient truth" is that not all the info is presented in its entirety by environmentalists. I do not understand why this is the case. I think we would be far better off presenting all the evidence and all the conflicting views and moving forward from that point.

This summer, from June 1 to August 25, we traveled throughout Alaska, hiking, fishing, and wildlife and bird watching. Whenever I travel, I always visit the wildlife refuges in the area, as they are a wealth of information and provide great wildlife and bird watching opportunities. They are a necessary and important resource of information for the public. I can't wait until I have grandchildren so I can take them to visit the refuges, not only in our state of Wisconsin, but throughout the US. It is an excellent educational resource both for adults and children. We really enjoyed the US Fish and Wildlife Service's campgrounds in Alaska - they were well developed, clean, and very affordable! Thanks for doing such a good job maintaining the site in spite of all the budget cuts. (signature)

We love the refuge! Thank you,

We loved to share our holiday in Alaska, especially at Kenai, and we will come back. Thanks for a great time at Homer.

We really enjoyed our trip to Alaska. National Wildlife Refuges are doing a good job helping to protect the wildlife and environment. It is a very important mission and that is where our tax dollars should go! Thanks a lot. (signature)

We visited the Visitor Center in Homer, Alaska only, so we can't answer transportation or other questions. The Visitor Center is super!