



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

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*This refuge is unique because of the opportunity to see migrating gray whales in the spring and winter; learning about the history of this Lighthouse; seeing what the largest Sitka spruce in the state looks like; seeing and wondering about the mystery of the "Octopus Tree"; seeing the rocky Oregon coast on a clear day; and, maybe catching sight of a Peregrine falcon.—Survey comment from visitor to Cape Meares National Wildlife Refuge.*



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

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

## **Methods**

### **Selecting Participating Refuges**

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

### **Developing the Survey Instrument**

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

### **Contacting Visitors**

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

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

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

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

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

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

## Interpreting the Results

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

Herein, the sample of visitors who responded to the survey are referred to simply as "visitors." However, when interpreting the results for Cape Meares 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 Cape Meares National Wildlife Refuge

Cape Meares NWR is located on the northwestern Oregon coast. Cape Meares NWR, one of six in the Oregon Coast National Wildlife Refuge Complex, covers about 140 acres of vertical coastal cliffs, rock outcroppings, and rolling headlands with old-growth forest dominated by Sitka spruce and western hemlock. Adjacent to Three Arch Rocks and Oregon Islands NWRs, “The Cape” is the only place in the United States where three refuges can be seen at once. Cape Meares NWR was established in 1938 to protect one of the last stands of old-growth forest in Oregon. The vertical seacliffs support nesting seabird populations including tufted puffins, common murre, pigeon guillemots, pelagic cormorants, as well as for peregrine falcons and bald eagles.

Cape Meares NWR attracts over 480,000 visitors annually (based on 2008 RAPP database; U.S. Fish and Wildlife Service, 2011, written comm.). Visitors can enjoy interpretive programs, wildlife observation and photography. Visitors can also hike through the old-growth forest to the panoramic views of the Pacific Ocean, while learning from the interpretive panels along the way. Figure 1 displays a map of Cape Meares NWR. For more information, please visit <http://www.fws.gov/oregoncoast/capemeares/>.

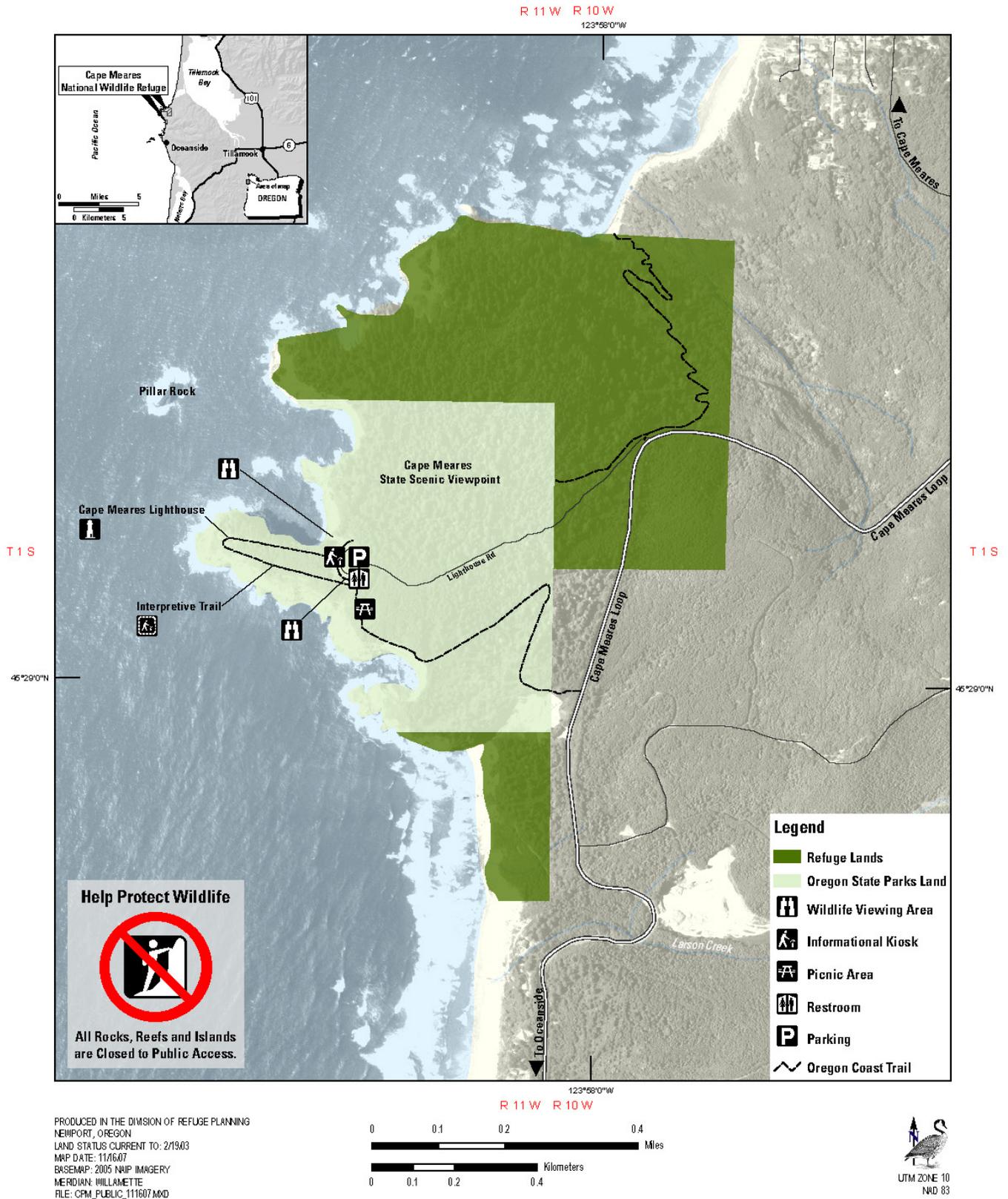


Figure 1. Map of Cape Meares NWR, courtesy of U.S. Fish and Wildlife Service.

## Sampling at Cape Meares National Wildlife Refuge

A total of 279 visitors agreed to participate in the survey during the two sampling periods at the identified locations at Cape Meares NWR (table 2). In all, 205 visitors completed the survey for a 74% response rate and  $\pm 5\%$  margin of error at the 95% confidence level.<sup>1</sup>

**Table 2.** Sampling and response rate summary for Cape Meares NWR.

Sampling period	Dates	Locations	Total contacts	Undeliverable addresses	Completed surveys	Response rate
1	3/19/2011 to 4/2/2011	Cape Meares Parking Lot and Viewing Deck	138	2	104	76%
2	7/9/2011 to 7/23/2011	Cape Meares Parking Lot and Viewing Deck	141	1	101	72%
<b>Total</b>			<b>279</b>	<b>3</b>	<b>205</b>	<b>74%</b>

## Selected Survey Results

### Visitor and Trip Characteristics

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

### Familiarity with the Refuge System

While we did not ask visitors to identify the mission of the National Wildlife Refuge System or the U.S. Fish and Wildlife Service, visitors to Cape Meares 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 (71%) and that the Refuge System has the mission of conserving, managing, and restoring fish, wildlife, plants and their habitat (80%). 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 (86%; see Appendix B for visitor comments on “What Makes National Wildlife

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

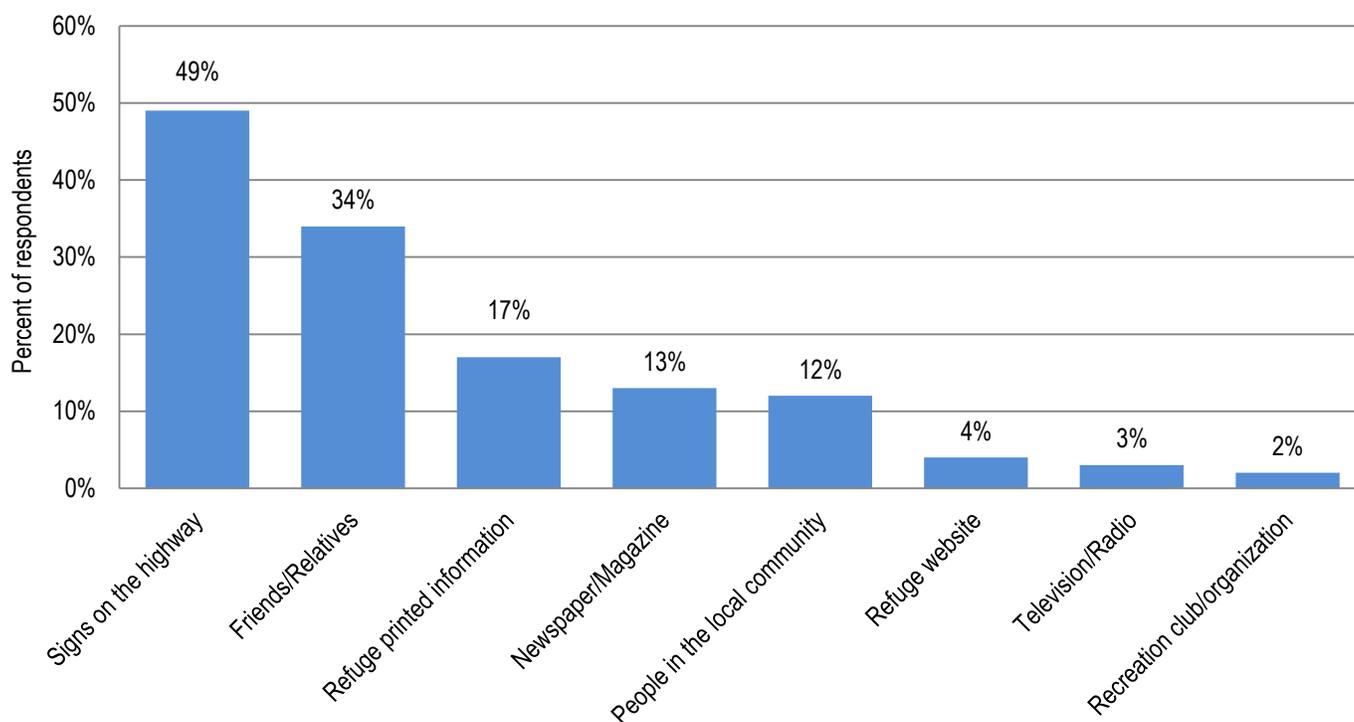
Refuges Unique?"); however, reasons for why visitors find refuges unique are varied and may not directly correspond to their understanding of the mission of the Refuge System. Most visitors to Cape Meares NWR had been to at least one other National Wildlife Refuge in the past year (71%), with an average of 4 visits to other refuges during the past 12 months.

### Visiting This Refuge

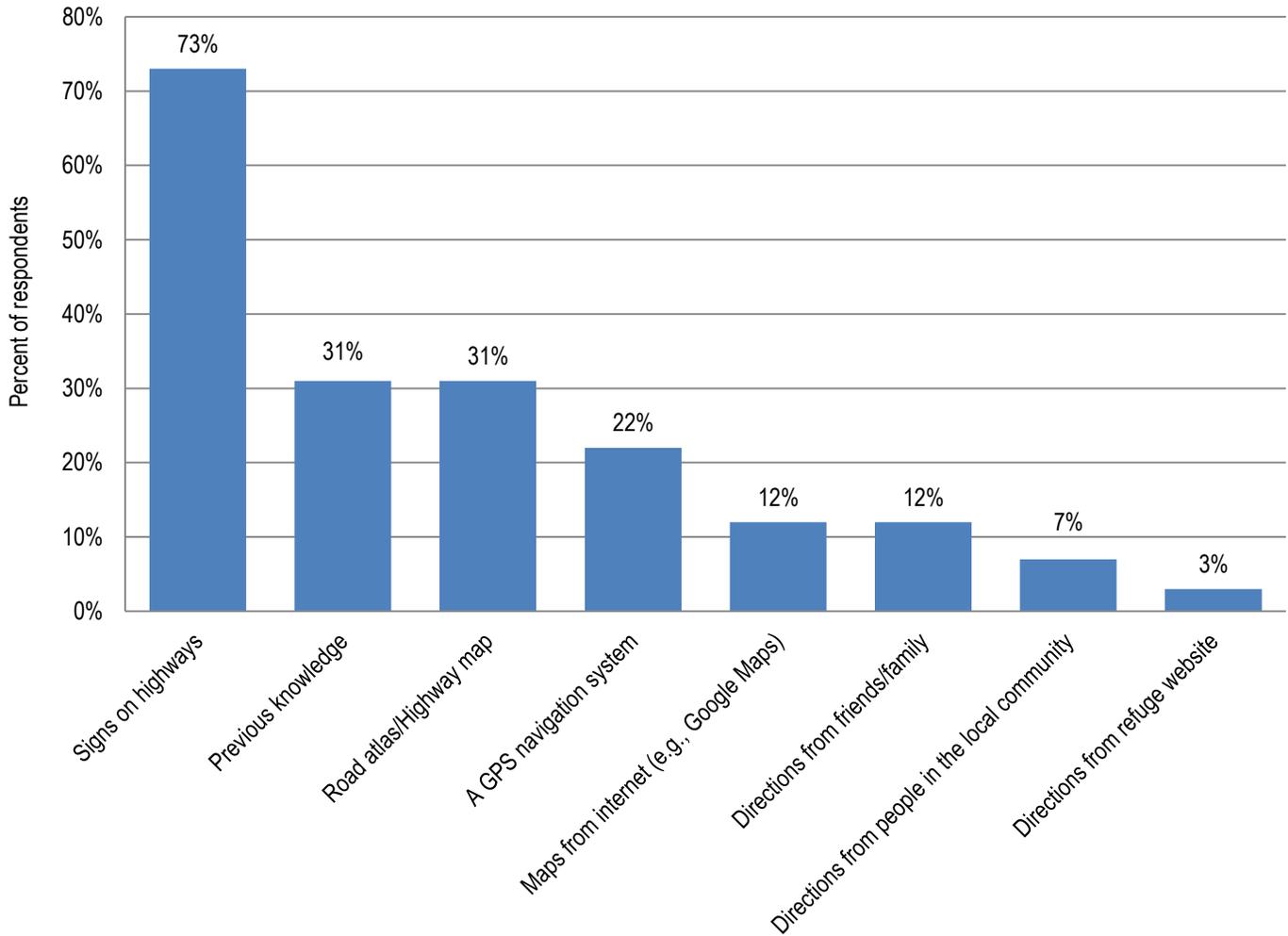
Most surveyed visitors (75%) had only been to Cape Meares NWR once in the past 12 months, while others had been multiple times (25%). These repeat visitors went to the refuge an average of 12 times during that same 12-month period. Visitors used the refuge during only one season (83%), during multiple seasons (13%), and year-round (5%).

Most visitors first learned about the refuge from signs on the highway (49%), friends/relatives (34%), or refuge printed information (17%; fig. 2). Key information sources used by visitors to find their way to this refuge include signs on highways (73%), previous knowledge (31%), or a road atlas/highway map (31%; fig. 3).

Few visitors (12%) lived in the local area (within 50 miles of the refuge), whereas 88% were nonlocal visitors. For most local visitors, Cape Meares NWR was the primary purpose or sole destination of their trip (42%; table 3). For most nonlocal visitors, the refuge was one of many equally important reasons or destinations for trip (58%). Local visitors (n = 24) reported that they traveled an average of 23 miles to get to the refuge, while nonlocal visitors (n = 178) traveled an average of 467 miles. ***It is important to note that summary statistics based on a small sample size (n < 30) may not provide a reliable representation of the population.*** Figure 4 shows the residence of visitors travelling to the refuge. About 49% of visitors travelling to Cape Meares NWR were from Oregon.



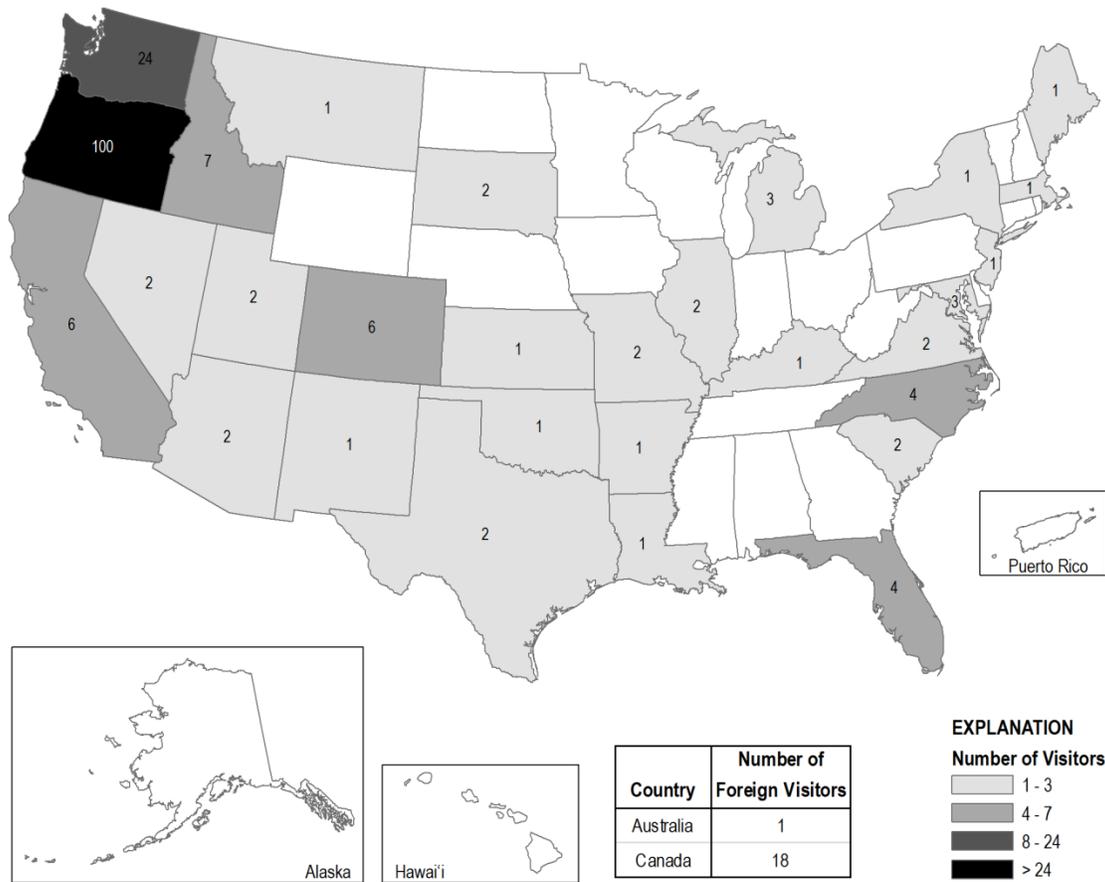
**Figure 2.** How visitors first learned or heard about Cape Meares NWR (n = 199).



**Figure 3.** Resources used by visitors to find their way to Cape Meares NWR during *this* visit (n = 201).

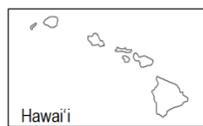
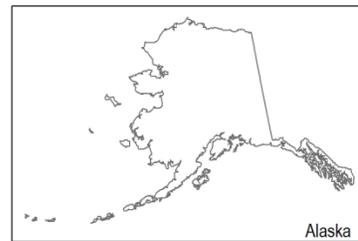
**Table 3.** Influence of Cape Meares NWR on visitors' decision to take *this* trip.

Visitors	Visiting this refuge was...		
	the primary reason for trip	one of many equally important reasons for trip	an incidental stop
Nonlocal	8%	58%	34%
Local	42%	37%	21%
Total	12%	56%	32%

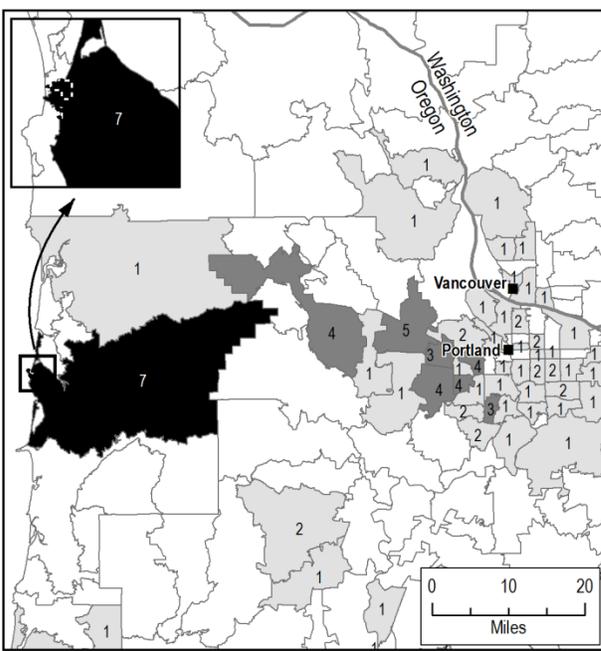


Country	Number of Foreign Visitors
Australia	1
Canada	18

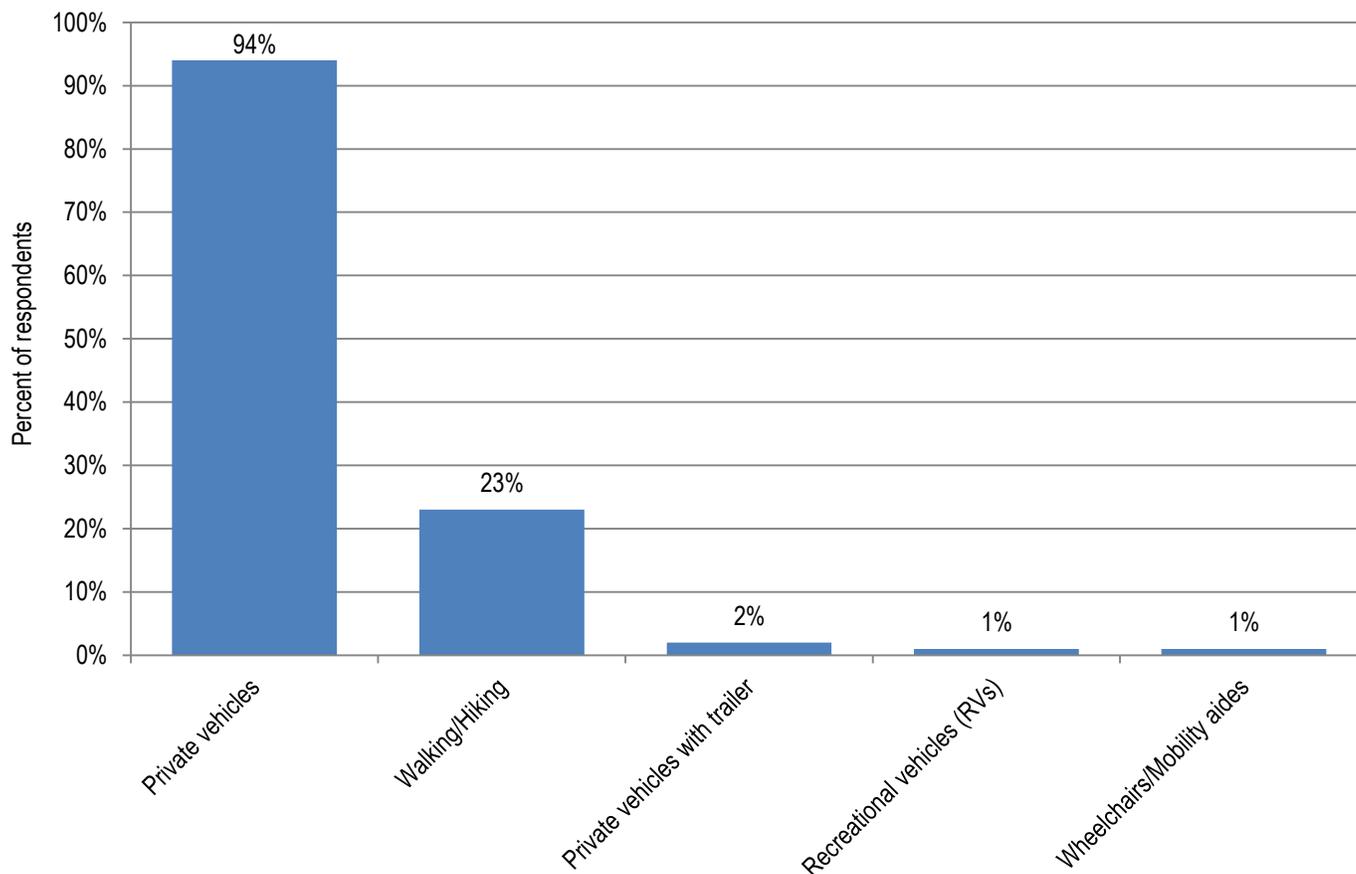
**EXPLANATION**  
**Number of Visitors**  
 1-3  
 4-7  
 8-24  
 > 24



**EXPLANATION**  
 - - - - - Refuge Boundary  
**Number of Visitors**  
 1-2  
 3-5  
 > 5



Surveyed visitors reported that they spent an average of 2 hours at Cape Meares 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 1 hour (41%). The key modes of transportation used by visitors to travel around the refuge were private vehicle (94%), walking/hiking (23%; fig. 5). Most visitors indicated they were part of a group on their visit to this refuge (77%), travelling primarily with family and friends (table 4).

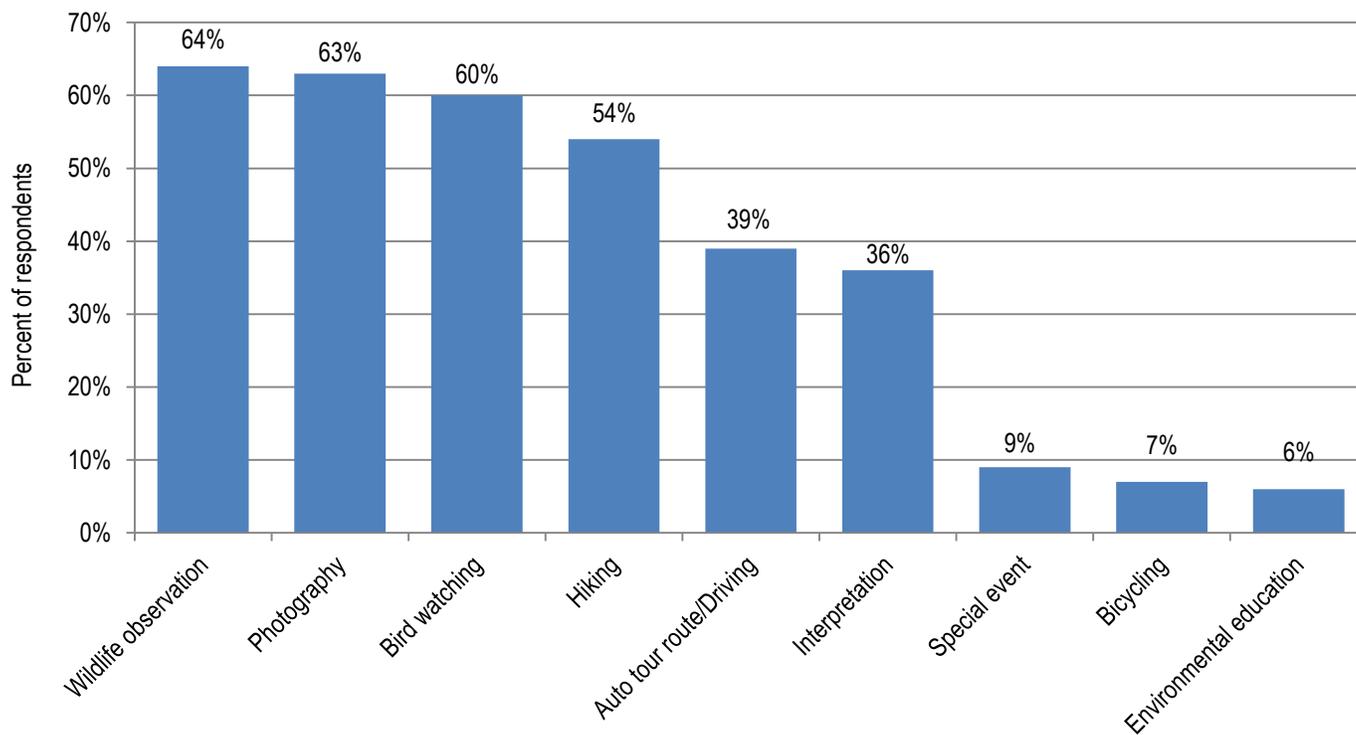


**Figure 5.** Modes of transportation used by visitors to Cape Meares NWR during *this* visit (n = 202).

**Table 4.** Type and size of groups visiting Cape Meares NWR (for those who indicated they were part of a group, n = 155).

Group type	Percent (of those traveling in a group)	Average group size		
		Number of adults	Number of children	Total group size
Family/Friends	99%	3	1	4
Commercial tour group	1%	20	0	20
Organized club/School group	0%	0	0	0
Other group type	0%	0	0	0

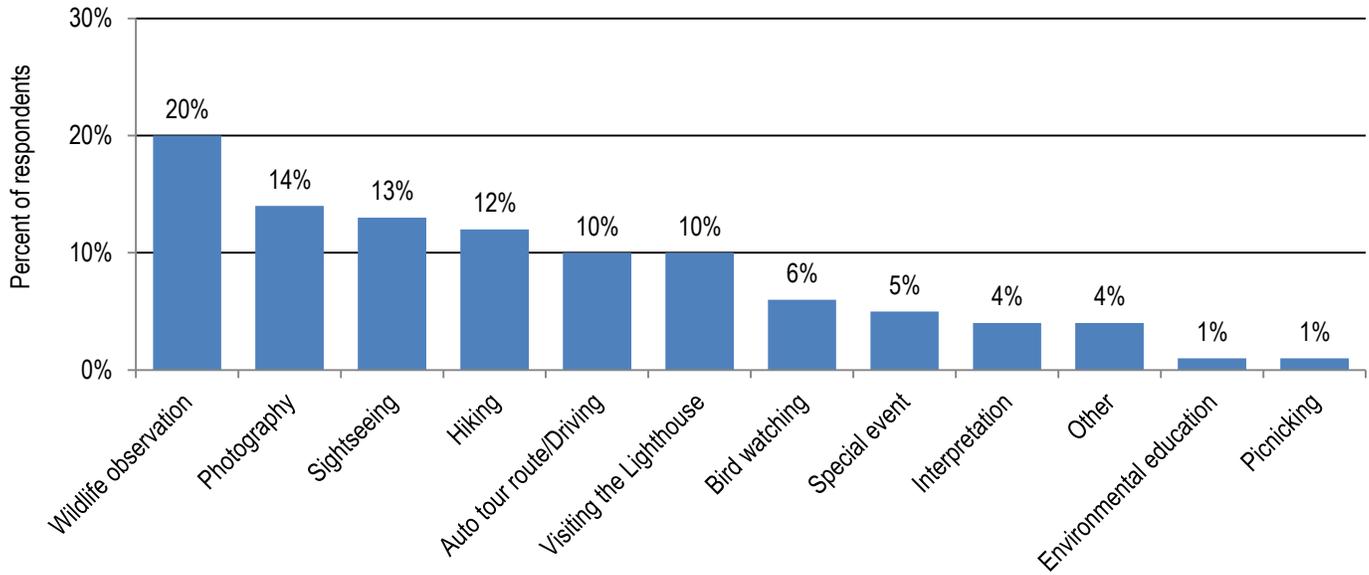
Surveyed visitors participated in a variety of refuge activities during the past 12 months (fig. 6); the top activities reported were wildlife observation (64%), photography (63%), bird watching (60%), and hiking (54%). The primary reasons for their most recent visit included wildlife observation (20%), photography (14%), and sightseeing (13%; fig. 7). The visitor center was used by 49% of visitors, mostly to view the exhibits (83%), ask information of staff/volunteers (67%), and visit the gift shop/bookstore (57%; fig. 8).



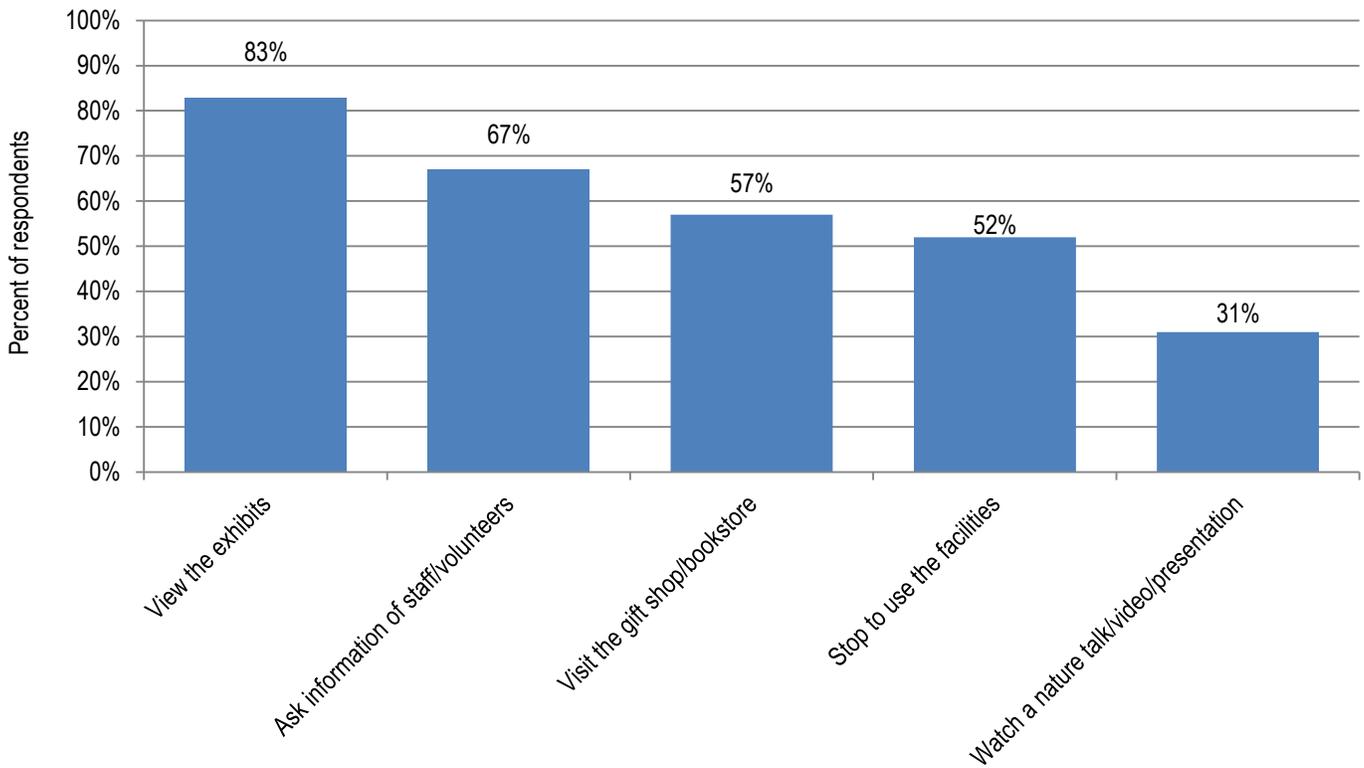
**Figure 6.** Activities in which visitors participated during the past 12 months at Cape Meares NWR (n = 199). See Appendix B for a listing of “other” activities.

### Visitor Characteristics

Most (89%) surveyed visitors to Cape Meares 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 44% male with an average age of 53 years and 56% female with an average age of 50 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 Cape Meares NWR (n = 189). See Appendix B for a listing of “other” activities.



**Figure 8.** Use of the visitor center at Cape Meares NWR (for those visitors who indicated they used the visitor center, n = 98).

## 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, 12% of surveyed visitors to Cape Meares NWR indicated that they live within the local area. Nonlocal visitors (88%) stayed in the local area, on average, for 3 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 \$83 per person per day and local visitors spent an average of \$68 per person per day in the local area. Several factors should be considered when estimating the economic importance of refuge visitor spending in the local communities. These include the amount of time spent at the refuge, influence of refuge on decision to take this trip, and the representativeness of primary activities of the sample of surveyed visitors compared to the general population. Controlling for these factors is beyond the scope of the summary statistics presented in this report. Detailed refuge-level visitor spending profiles which do consider these factors will be developed during the next phase of analysis.

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

Visitors	n <sup>1</sup>	Median	Mean	Standard deviation	Minimum	Maximum
Nonlocal	160	\$61	\$83	\$77	\$0	\$450
Local	19	\$33	\$68	\$83	\$0	\$313

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

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

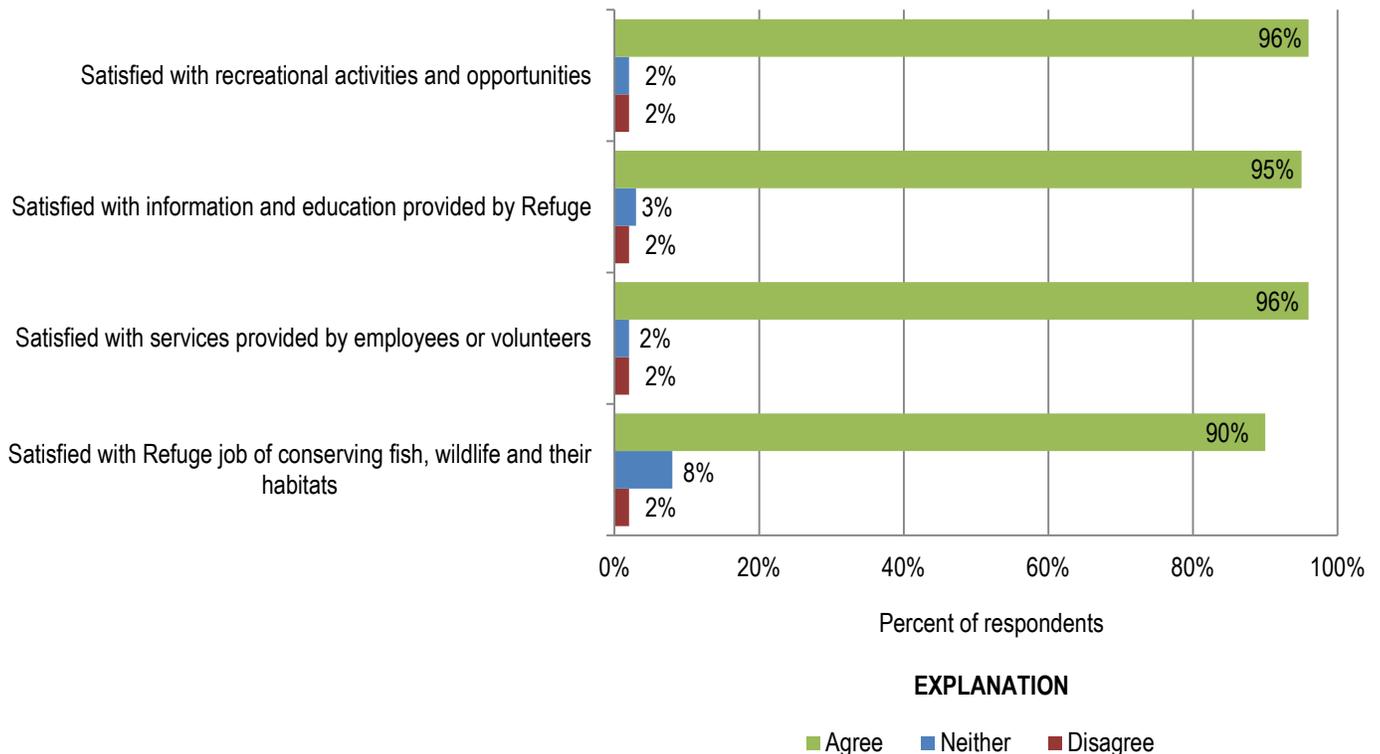
## Visitor Opinions about This Refuge

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

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

- 96% were satisfied with the recreational activities and opportunities,
- 95% 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
- 90% were satisfied with the refuge's job of conserving fish, wildlife and their habitats.

Although 19% (n = 37) of visitors indicated they paid a fee to enter Cape Meares NWR, the refuge does not have an entrance fee. It is unknown why some visitors thought they paid a fee to enter the refuge.



**Figure 9.** Overall satisfaction with Cape Meares NWR during *this* visit (n ≥ 190).

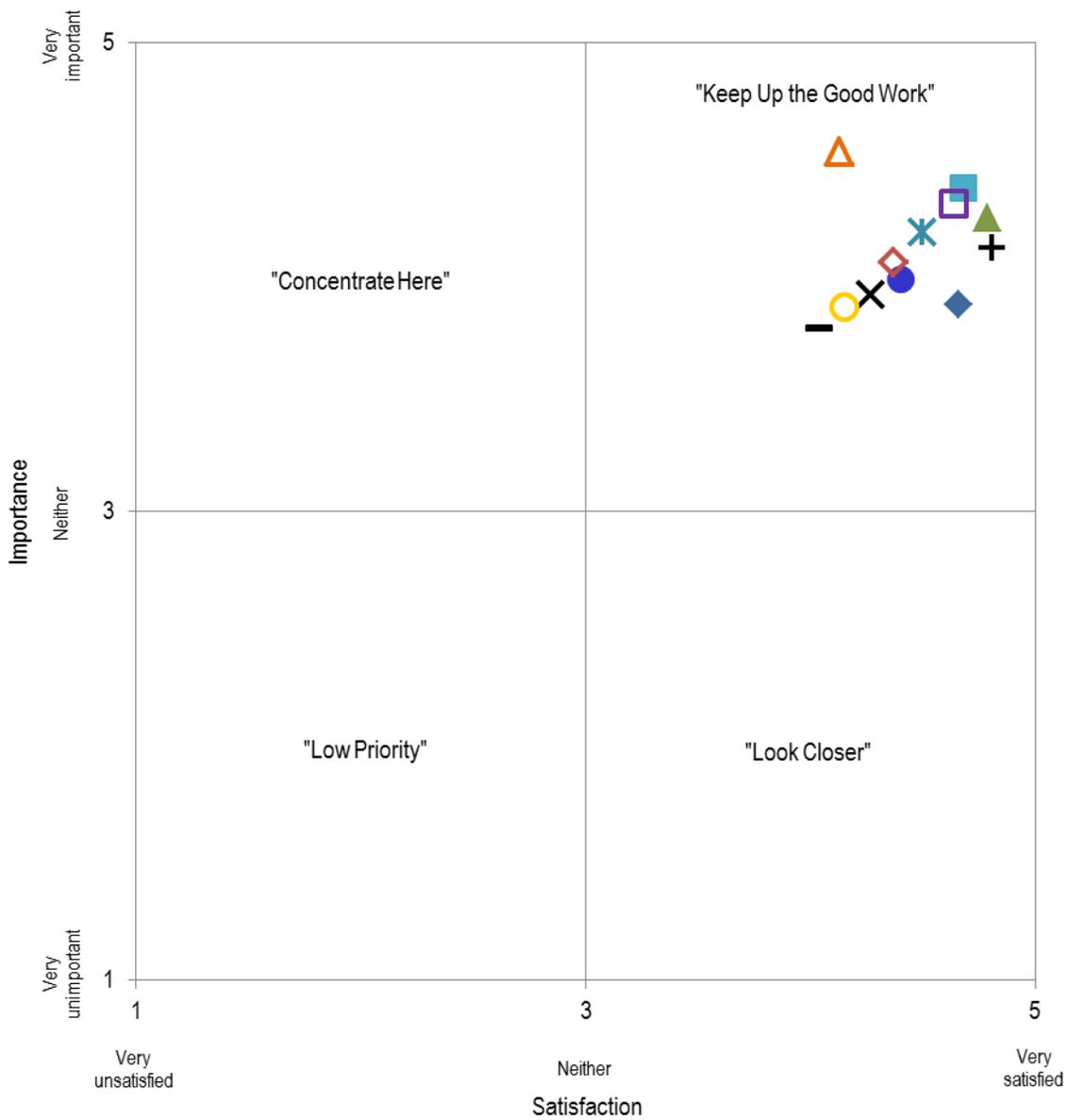
## Importance/Satisfaction Ratings

*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 Cape Meares 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.*

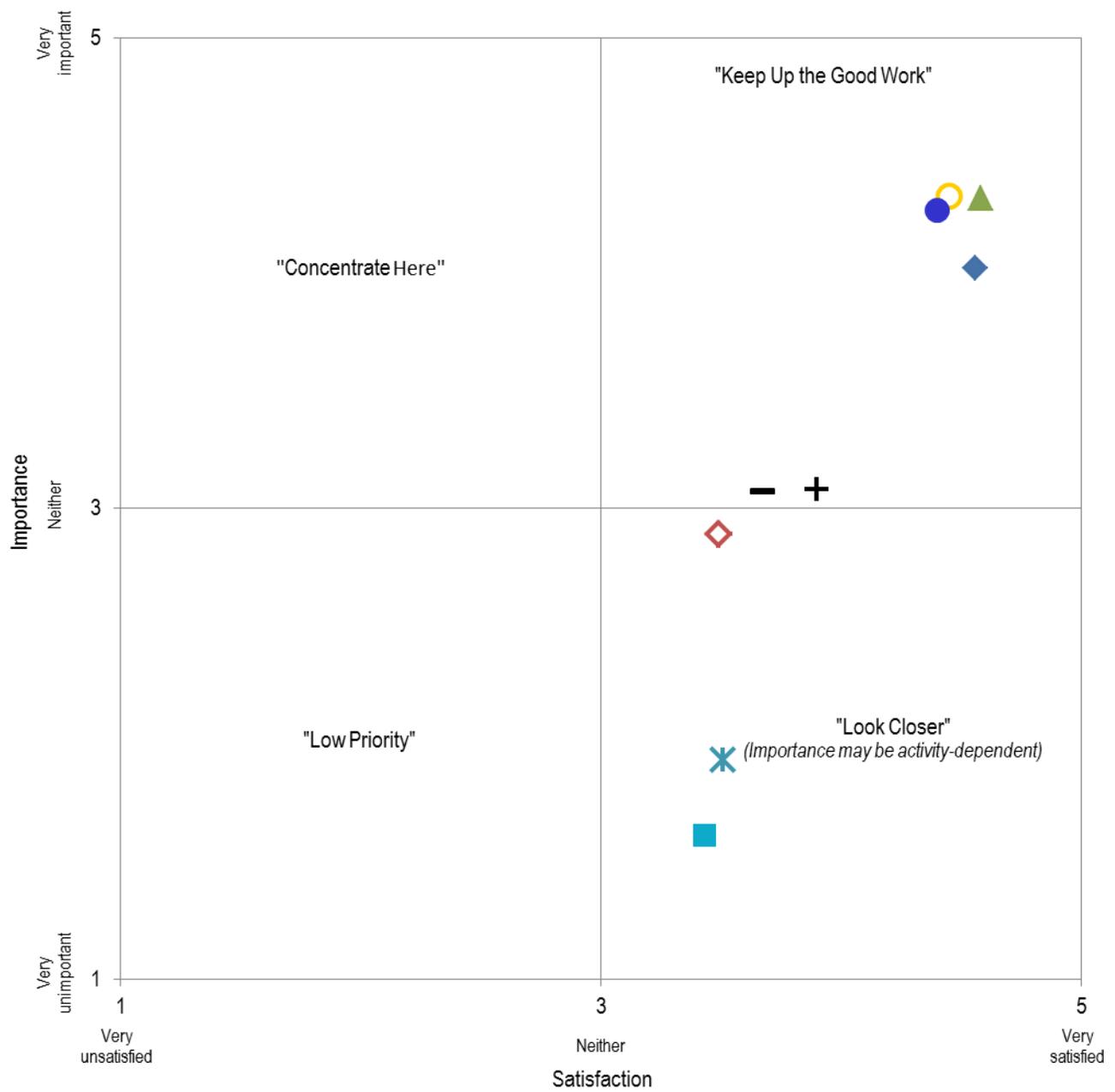
Figures 10-12 depict surveyed visitors' importance-satisfaction results for refuge services and facilities, recreational opportunities, and transportation-related features at Cape Meares NWR, respectively. All refuge services and facilities fell in the "Keep Up the Good Work" quadrant (fig. 10). Nearly all refuge recreational opportunities fell in the "Keep Up the Good Work" quadrant except hunting, fishing, and kayak/canoe opportunities, which fell into the "Look Closer" quadrant (fig. 11). The average importance of these activities in the "Look Closer" quadrant may be higher among visitors who have participated in them 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

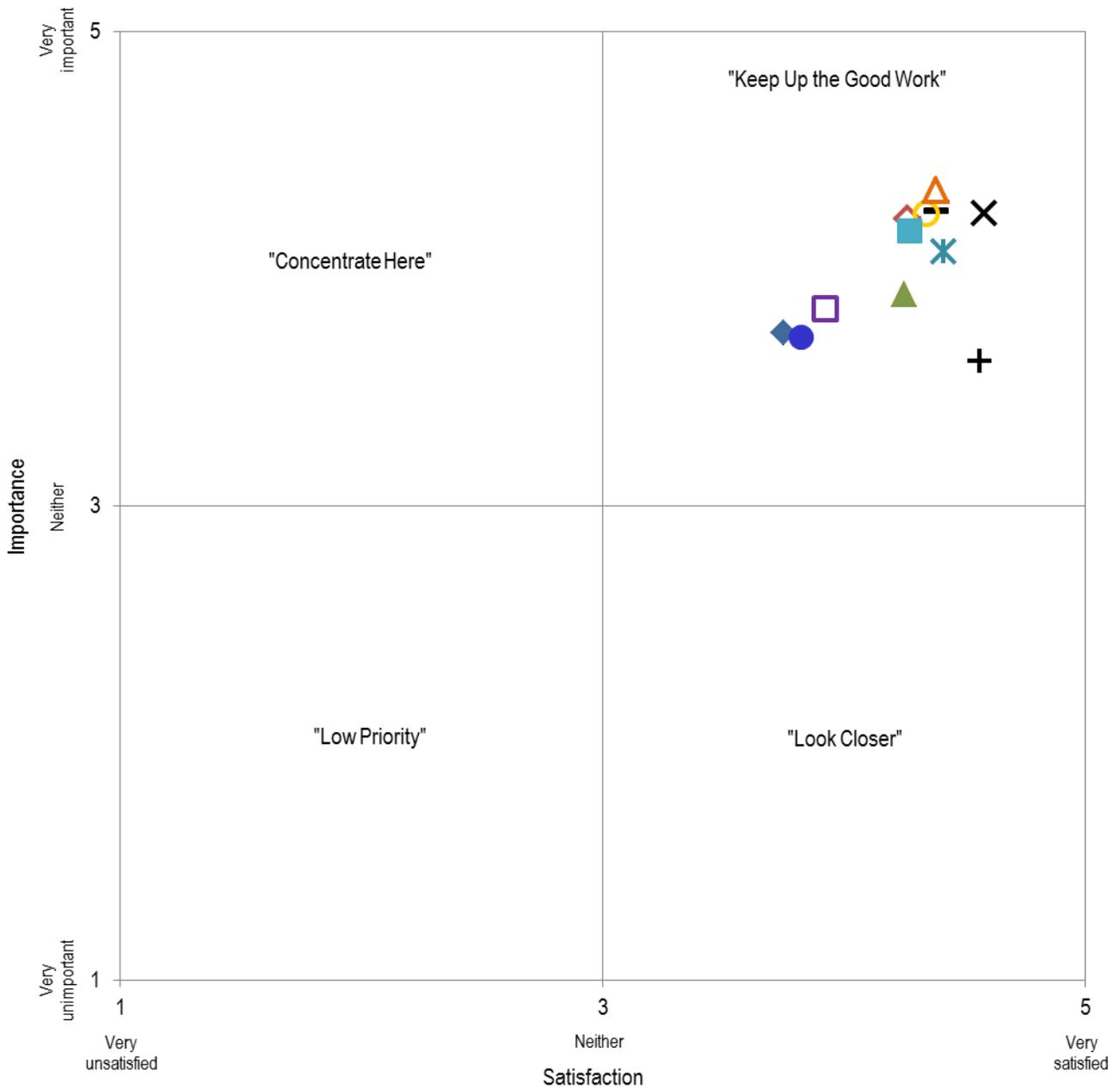
**Figure 10.** Importance-satisfaction ratings of services and facilities provided at Cape Meares NWR.



**EXPLANATION**

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

**Figure 11.** Importance-satisfaction ratings of recreational opportunities provided at Cape Meares 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 Cape Meares 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 Cape Meares NWR are reported here.*

### Alternative Transportation and the National Wildlife Refuge System

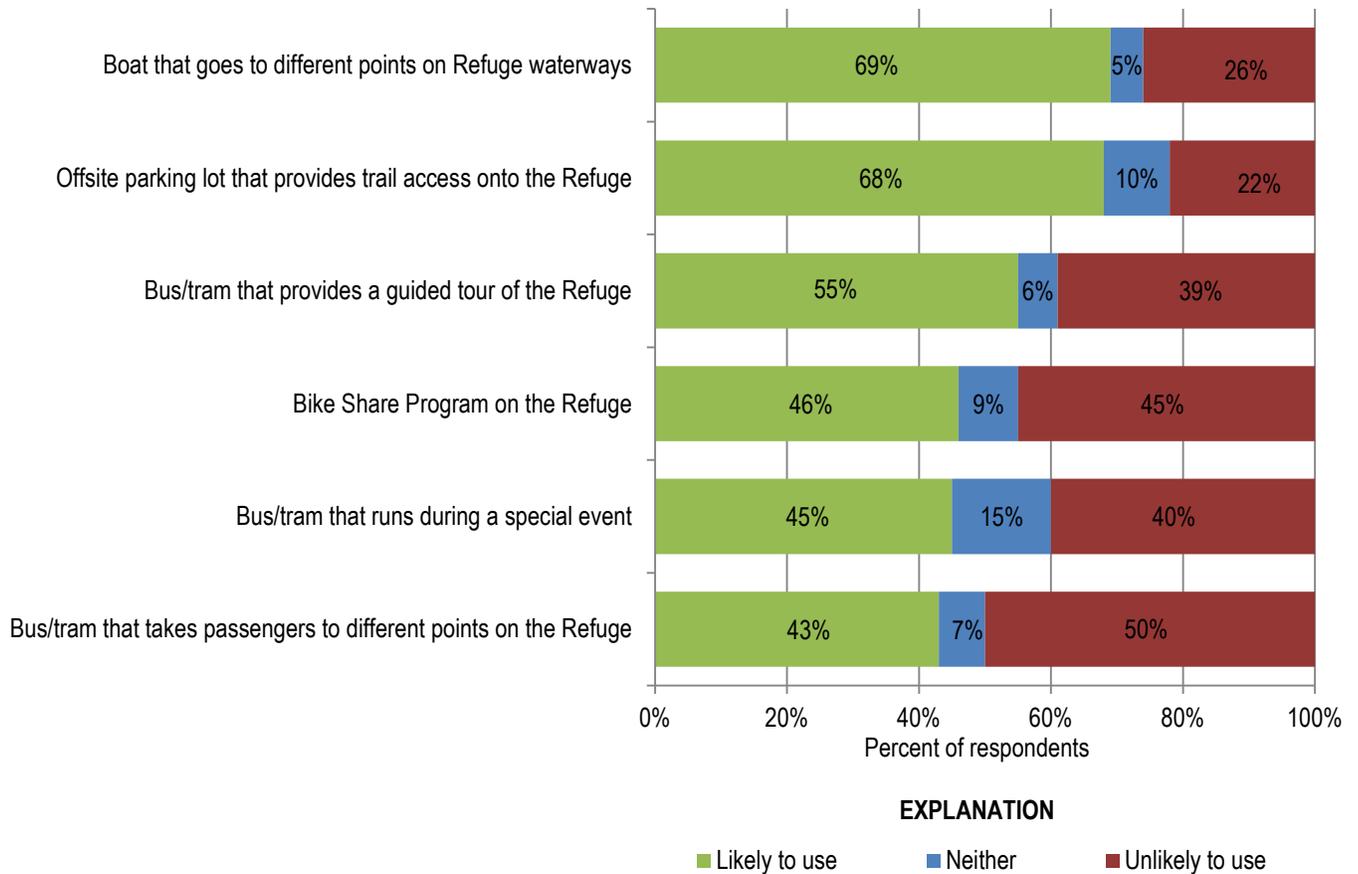
*Visitors use a variety of transportation means to access and enjoy national wildlife refuges. While many visitors arrive at the refuge in a private vehicle, alternatives such as buses, trams, watercraft, and bicycles are increasingly becoming a part of the visitor experience. Previous research has identified 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 Cape Meares NWR visitors who were surveyed were likely to use the following options at national wildlife refuges in the future (fig. 13):

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

The majority of visitors were *not* likely to use a bus/tram that takes passengers to different points on national wildlife refuges in the future (fig. 13).

When asked about using alternative transportation at Cape Meares NWR specifically, 43% of visitors indicated they were unsure whether it would enhance their experience; however, some visitors thought alternative transportation would enhance their experience (14%) and others thought it would not (43%).



**Figure 13.** Visitors' likelihood of using alternative transportation options at national wildlife refuges in the future (n ≥ 188).

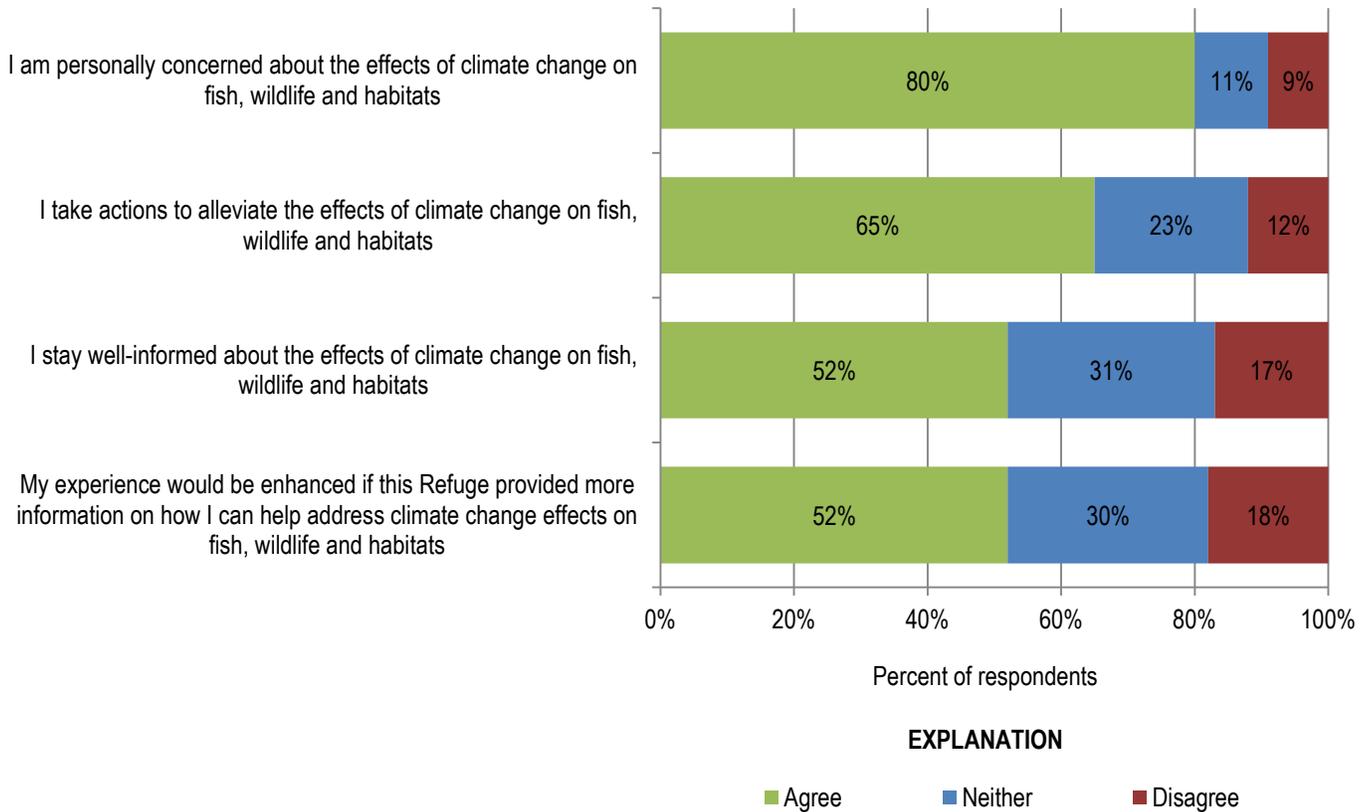
## Climate Change and the National Wildlife Refuge System

*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 Cape Meares 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;”
- “I stay well-informed about the effects of climate change;” and
- “My experience would be enhanced if the Refuge provides information about how I can help address climate change effects.”



**Figure 14.** Visitors’ personal involvement with climate change related to fish, wildlife and their habitats (n ≥ 187).

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).

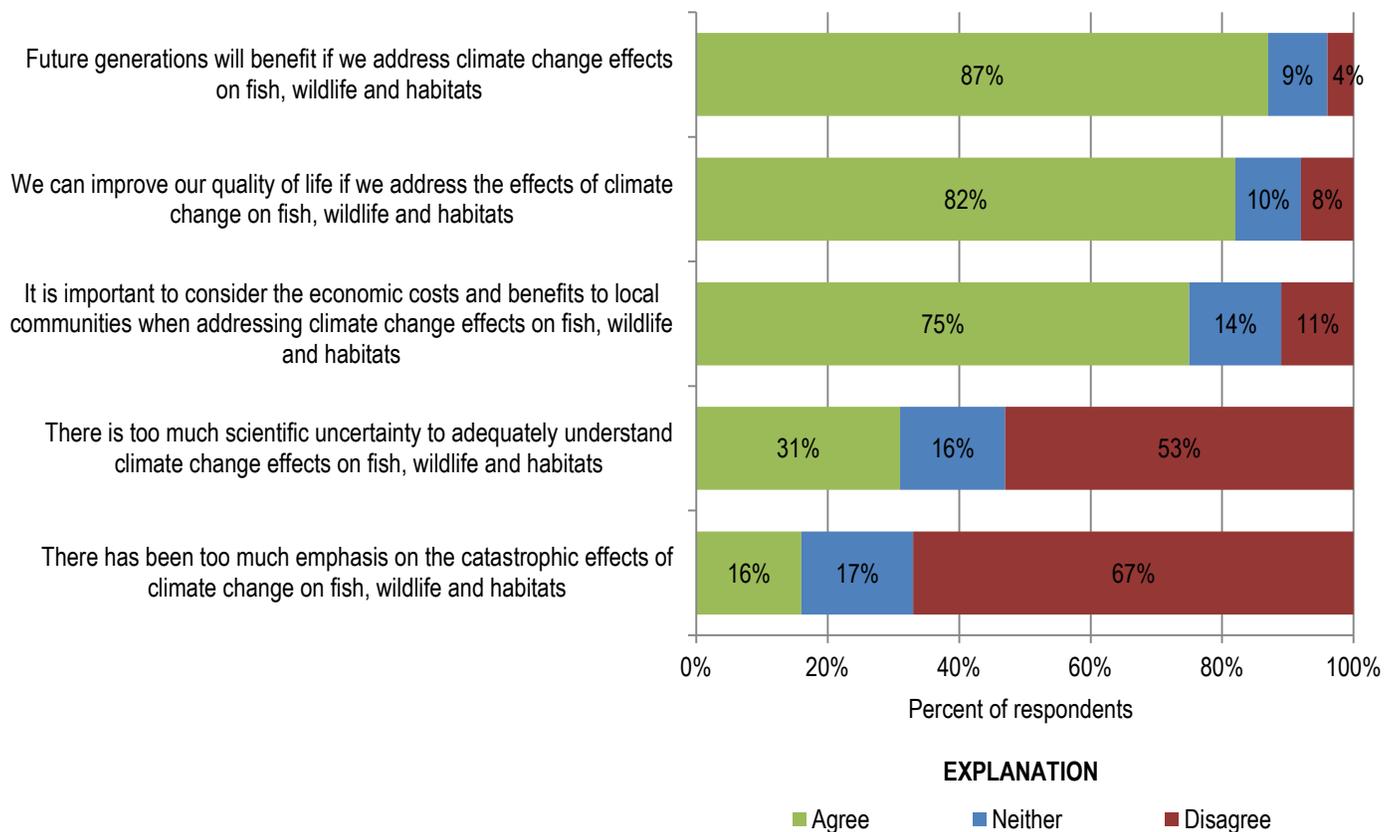
For Cape Meares NWR, the majority of visitors believed the following regarding climate change related to fish, wildlife and their habitats (fig. 15):

- “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 over half of visitors (52%) indicated that their experience would be enhanced if Cape Meares 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 ≥ 186).

## Conclusion

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

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

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# National Wildlife Refuge Visitor Survey



**PLEASE READ THIS FIRST:**

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

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

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

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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"/> 54% Hiking   | <input type="checkbox"/> 6% Environmental education (for example, classrooms or labs, tours) |
| <input type="checkbox"/> 0% Upland/Small-game hunting        | <input type="checkbox"/> 7% Bicycling   |  |
| <input type="checkbox"/> 0% Migratory bird/Waterfowl hunting | <input type="checkbox"/> 39% Auto tour route/Driving                                | <input type="checkbox"/> 9% Special event ( <i>please specify</i> )<br><u>See Appendix B</u> |
| <input type="checkbox"/> 64% Wildlife observation            | <input type="checkbox"/> 0% Motorized boating                                       |  |
| <input type="checkbox"/> 60% Bird watching                   | <input type="checkbox"/> 0% Nonmotorized boating (including canoes/kayaks)          | <input type="checkbox"/> 15% Other ( <i>please specify</i> )<br><u>See Appendix B</u>        |
| <input type="checkbox"/> 0% Freshwater fishing               |   |  |
| <input type="checkbox"/> 0% Saltwater fishing                | <input type="checkbox"/> 36% Interpretation (for example, exhibits, kiosks, videos) | <input type="checkbox"/> 0% Other ( <i>please specify</i> )<br><u>See Appendix B</u>         |
| <input type="checkbox"/> 63% 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?

- 51% No
- 49% Yes → If yes, what did you do there? (Please mark **all that apply.**)
- |  |   |
|--|---|
| <input type="checkbox"/> 57% Visit the gift shop or bookstore    | <input type="checkbox"/> 31% Watch a nature talk/video/presentation                               |
| <input type="checkbox"/> 83% View the exhibits                   | <input type="checkbox"/> 52% Stopped to use the facilities (for example, get water, use restroom) |
| <input type="checkbox"/> 67% Ask information of staff/volunteers | <input type="checkbox"/> 5% 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	
8%	42%	13%	It was the primary purpose or sole destination of my trip.
58%	38%	55%	It was one of many equally important reasons or destinations for my trip.
34%	21%	32%	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**   467   number of miles

**Local**   23   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?

23% No (*skip to question #9*)

77% Yes → What **type of group** were you with on your visit? (*Please mark **only one.***)

99% Family and/or friends

0% Organized club or school group

1% Commercial tour group

0% Other (*please specify*) See Appendix B

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

  3   number 18 years and over

  1   number 17 years and under

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

34% Friends or relatives

4% Refuge website

49% Signs on highway

6% Other website (*please specify*) See Appendix B

2% Recreation club or organization

3% Television or radio

12% People in the local community

13% Newspaper or magazine

17% Refuge printed information (brochure, map)

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

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

55% Spring  
(March-May)

57% Summer  
(June-August)

13% Fall  
(September-November)

10% Winter  
(December-February)

11. How many times have you visited...

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

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

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

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

- |                              |   |                             |                                  |                              |                                       |
|------------------------------|---|-----------------------------|----------------------------------|------------------------------|---------------------------------------|
| <input type="checkbox"/> 94% | Private vehicle without a trailer                             | <input type="checkbox"/> 0% | Refuge shuttle bus or tram       | <input type="checkbox"/> 0%  | Bicycle                               |
| <input type="checkbox"/> 2%  | Private vehicle with a trailer<br>(for boat, camper or other) | <input type="checkbox"/> 0% | Motorcycle                       | <input type="checkbox"/> 23% | Walk/Hike                             |
| <input type="checkbox"/> 0%  | Commercial tour bus   | <input type="checkbox"/> 0% | ATV or off-road vehicle          | <input type="checkbox"/> 0%  | Other ( <i>please specify below</i> ) |
| <input type="checkbox"/> 1%  | Recreational vehicle (RV)                                     | <input type="checkbox"/> 0% | 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"/> 73% | Signs on highways  | <input type="checkbox"/> 3%  | Directions from Refuge website                        |
| <input type="checkbox"/> 22% | A GPS navigation system  | <input type="checkbox"/> 7%  | Directions from people in community near this Refuge  |
| <input type="checkbox"/> 31% | A road atlas or highway map                                      | <input type="checkbox"/> 12% | Directions from friends or family                     |
| <input type="checkbox"/> 12% | Maps from the Internet (for example,<br>MapQuest or Google Maps) | <input type="checkbox"/> 31% | Previous knowledge/I have been to this Refuge before  |
|                              |  | <input type="checkbox"/> 2%  | 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"/> 34%	<input type="checkbox"/> 16%	<input type="checkbox"/> 7%	<input type="checkbox"/> 28%	<input type="checkbox"/> 16%
...a bike that was offered through a Bike Share Program for use while on the Refuge?	<input type="checkbox"/> 32%	<input type="checkbox"/> 13%	<input type="checkbox"/> 9%	<input type="checkbox"/> 32%	<input type="checkbox"/> 14%
...a bus or tram that provides a guided tour of the Refuge with information about the Refuge and its resources?	<input type="checkbox"/> 27%	<input type="checkbox"/> 12%	<input type="checkbox"/> 6%	<input type="checkbox"/> 37%	<input type="checkbox"/> 18%
...a boat that goes to different points on Refuge waterways?	<input type="checkbox"/> 20%	<input type="checkbox"/> 6%	<input type="checkbox"/> 5%	<input type="checkbox"/> 43%	<input type="checkbox"/> 26%
...a bus or tram that runs during a special event (such as an evening tour of wildlife or weekend festival)?	<input type="checkbox"/> 27%	<input type="checkbox"/> 14%	<input type="checkbox"/> 14%	<input type="checkbox"/> 31%	<input type="checkbox"/> 14%
...an offsite parking lot that provides trail access for walking/hiking onto the Refuge?	<input type="checkbox"/> 13%	<input type="checkbox"/> 9%	<input type="checkbox"/> 10%	<input type="checkbox"/> 39%	<input type="checkbox"/> 29%
...some other alternative transportation option? ( <i>please specify</i> ) <u>See Appendix B</u>	<input type="checkbox"/> 25%	<input type="checkbox"/> 0%	<input type="checkbox"/> 0%	<input type="checkbox"/> 50%	<input type="checkbox"/> 25%

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

- 14% Yes       43% No       43% Not Sure

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

Importance					Satisfaction						
Circle one for each item.					Circle one for each item.						
Very Unimportant	Somewhat Unimportant	Neither	Somewhat Important	Very Important	Very Unsatisfied	Somewhat Unsatisfied	Neither	Somewhat Satisfied	Very Satisfied	Not Applicable	
4%	14%	11%	47%	24%	Surface conditions of roads	10%	20%	1%	25%	45%	NA
4%	15%	17%	45%	20%	Surface conditions of parking areas	4%	1%	5%	15%	75%	NA
8%	5%	16%	30%	41%	Condition of bridges	4%	2%	13%	24%	56%	NA
3%	5%	4%	44%	44%	Condition of trails and boardwalks	2%	1%	3%	23%	70%	NA
4%	4%	11%	45%	37%	Number of places for parking	3%	5%	5%	24%	63%	NA
5%	10%	20%	40%	25%	Number of places to pull over along Refuge roads	4%	7%	23%	36%	31%	NA
7%	2%	10%	28%	54%	Safety of driving conditions on Refuge roads	3%	6%	6%	30%	55%	NA
5%	2%	5%	37%	50%	Safety of Refuge road entrances/exits	3%	3%	6%	31%	58%	NA
4%	2%	6%	41%	47%	Signs on highways directing you to the Refuge	3%	4%	6%	32%	55%	NA
4%	3%	9%	38%	45%	Signs directing you around the Refuge roads	2%	3%	11%	36%	49%	NA
3%	2%	7%	36%	52%	Signs directing you on trails	1%	2%	7%	36%	53%	NA
8%	4%	19%	33%	36%	Access for people with physical disabilities or who have difficulty walking	2%	10%	19%	34%	35%	NA

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

See Appendix B

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

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

12% Yes

88% No → How much time did you spend **in local communities** on this trip?  
                     4   number of hours      OR        4   number of days

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

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

See Report for Results

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

  3   number of people sharing expenses

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

\$0	\$10	\$20	\$35	\$50	\$75	\$100	\$125	\$150	\$200	\$250
6%	14%	18%	6%	19%	2%	21%	1%	3%	3%	7%

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**.)*

3%	Far too low	14%	Too low	84%	About right	0%	Too high	0%	Far too high	81%	Did not pay a fee <i>(skip to Section 4)</i>
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6. Please indicate whether you disagree or agree with the following statement. *(Please mark **only one**.)*

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

3%	Strongly disagree	0%	Disagree	11%	Neither agree or disagree	51%	Agree	35%	Strongly agree
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#### SECTION 4. Your experience at this Refuge

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

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Not Applicable
Overall, I am satisfied with the recreational activities and opportunities provided by this Refuge.	2%	0%	3%	45%	51%	NA
Overall, I am satisfied with the information and education provided by this Refuge about its resources.	2%	1%	4%	35%	60%	NA
Overall, I am satisfied with the services provided by employees or volunteers at this Refuge.	2%	0%	2%	22%	74%	NA
This Refuge does a good job of conserving fish, wildlife and their habitats.	2%	1%	8%	31%	59%	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%	6%	15%	48%	27%	Availability of employees or volunteers	1%	1%	6%	16%	76%	NA
4%	5%	11%	36%	44%	Courteous and welcoming employees or volunteers	1%	1%	3%	8%	87%	NA
3%	4%	8%	37%	49%	Knowledgeable employees or volunteers	0%	1%	4%	11%	84%	NA
2%	8%	14%	47%	29%	Printed information about this Refuge and its resources (for example, maps and brochures)	1%	4%	13%	31%	51%	NA
2%	3%	8%	49%	38%	Informational kiosks/displays about this Refuge and its resources	1%	1%	7%	32%	60%	NA
3%	6%	14%	45%	33%	Signs with rules/regulations for this Refuge	0%	1%	12%	33%	54%	NA
2%	3%	13%	48%	33%	Exhibits about this Refuge and its resources	0%	3%	8%	37%	52%	NA
3%	10%	19%	43%	25%	Environmental education programs or activities	0%	2%	30%	29%	38%	NA
2%	6%	20%	44%	27%	Visitor Center	0%	3%	22%	33%	43%	NA
2%	0%	8%	40%	51%	Convenient hours and days of operation	0%	0%	5%	21%	74%	NA
2%	1%	2%	31%	64%	Well-maintained restrooms	3%	11%	4%	32%	49%	NA
3%	1%	7%	40%	49%	Wildlife observation structures (decks, blinds)	1%	0%	5%	22%	72%	NA
3%	6%	16%	36%	39%	Bird-watching opportunities	1%	0%	12%	18%	70%	NA
1%	3%	4%	47%	46%	Opportunities to observe wildlife other than birds	1%	1%	7%	37%	55%	NA
1%	2%	8%	41%	48%	Opportunities to photograph wildlife and scenery	0%	0%	8%	26%	66%	NA
69%	6%	22%	2%	1%	Hunting opportunities	2%	0%	70%	7%	20%	NA
53%	12%	26%	8%	1%	Fishing opportunities	0%	2%	66%	11%	21%	NA
2%	2%	6%	45%	45%	Trail hiking opportunities	0%	1%	8%	42%	49%	NA
21%	11%	35%	22%	10%	Water trail opportunities for canoeing or kayaking	0%	4%	61%	18%	18%	NA
18%	12%	26%	34%	10%	Bicycling opportunities	1%	1%	47%	31%	20%	NA
16%	8%	41%	20%	15%	Volunteer opportunities	0%	1%	48%	11%	40%	NA

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

See Appendix B

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

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

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

71% Yes

29% No

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

80% Yes

20% No

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

86% Yes

14% No

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

See Appendix B

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

Statements about climate change	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
I am personally concerned about the effects of climate change on fish, wildlife and their habitats.	4%	4%	11%	35%	45%
We can improve our quality of life if we address the effects of climate change on fish, wildlife and their habitats.	4%	4%	10%	35%	47%
There is too much scientific uncertainty to adequately understand how climate change will impact fish, wildlife and their habitats.	28%	26%	16%	24%	7%
I stay well-informed about the effects of climate change on fish, wildlife and their habitats.	4%	13%	31%	38%	14%
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.	3%	8%	14%	57%	19%
I take actions to alleviate the effects of climate change on fish, wildlife and their habitats.	4%	8%	24%	45%	20%
There has been too much emphasis on the catastrophic effects of climate change on fish, wildlife and their habitats.	37%	30%	17%	10%	6%
Future generations will benefit if we address the effects of climate change on fish, wildlife and their habitats.	2%	2%	10%	38%	49%
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.	6%	12%	30%	36%	16%

## 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?

89% Yes  11% No → If not, what is your home country? See Figure 4 in Report

2. Are you?  44% Male  56% 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%			9%				44%				47%			

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

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

- 2% American Indian or Alaska Native  1% Black or African American  94% White  
 4% 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"/> 1% Less than \$10,000  | <input type="checkbox"/> 10% \$35,000 - \$49,999 | <input type="checkbox"/> 19% \$100,000 - \$149,999 |
| <input type="checkbox"/> 4% \$10,000 - \$24,999 | <input type="checkbox"/> 19% \$50,000 - \$74,999 | <input type="checkbox"/> 10% \$150,000 - \$199,999 |
| <input type="checkbox"/> 7% \$25,000 - \$34,999 | <input type="checkbox"/> 23% \$75,000 - \$99,999 | <input type="checkbox"/> 7% \$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.)?

12 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 Cape Meares 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
Antique Auto Tour	1
Spring Whale Watch Week	17
Total	18

Other Activity	Frequency
Birthday party	1
Enjoying the views	1
Family meeting	1
Family picnic	1
Family reunion	1
Look at vistas	1
Rock identification, regular beach use	1
Scenery	1
See the Scenic Cape	1
Showing visitors the area	1
Sightseeing	4
Talked to volunteer	1
Vacation	1
Visit Netarts, OR	1

Visit the Cape Meares Lighthouse	7
Visit the Cape Meares Lighthouse, picnic	1
Visit the Cape Meares Lighthouse, sightseeing	1
Visit the Cape Meares Lighthouse, visit the Octopus Tree	2
Visit the Octopus Tree	1
Walking along the beach	1
<b>Total</b>	<b>30</b>

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
Birthday party	1
Enjoyment	1
Family (Memorial)	1
Family day visit	1
Family reunion	1
Reconnecting with nature	1
To reinforce the love of the Oregon Coast and nature in our children.	1
Visit the Octopus Tree	1
<b>Total</b>	<b>8</b>

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

Other Visitor Center Activity	Frequency
Had a picnic and visited the Cape Meares Lighthouse.	1
Listened to a talk on the history of the Cape Meares Lighthouse and a recent story of the vandalism to it.	1
Not a Visitor Center. Read the info regarding the Cape.	1
To hike along the path.	1
Visited with the volunteer whale watcher.	1
Total	5

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
NA	

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

Other Website	Frequency
Google maps	1
<a href="http://visittheoregoncoast.com/activities/">http://visittheoregoncoast.com/activities/</a>	1
<a href="http://www.oregon.gov/OPRD/PARKS/OCT_2.shtml">http://www.oregon.gov/OPRD/PARKS/OCT_2.shtml</a>	1
Internet Oregon Coast	1
Oregon Lighthouse website	1
Oregon Parks	1
State of Oregon	1
Tourism	1
Tourist attractions website	1

Tripadvisor.com	1
Whale watching	1
Whale Watching Spoken Here site	1
Total	12

Other Ways Heard about This Refuge	Frequency
AAA tour guide	1
Bird watching guides	1
Book	1
Book about Oregon coast	1
Books	1
Chamber of Commerce	1
Fodor's, Lonely Planet, rough guide travel books	1
Guidebook to Pacific Northwest	1
Hiking guide of the area	1
Information received from the State of Oregon	1
Lonely Planet travel guide	1
Maps	1
Oregon Coast Guidebook & Pacific Lighthouses	1
Our time share condo activities director	1
Road map	2
School	1
Travel book of Oregon	2
Travel in Oregon Book by Frommer's	1

Whale Watching Program	1
Total	21

## Survey Section 2

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

Other Forms of Transportation	Frequency
NA	

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

Other Ways Found This Refuge	Frequency
Guidebooks	1
<a href="http://www.whalespoken.org/">http://www.whalespoken.org/</a>	1
Oregon Coast	1
State of Oregon Website	1
Tour Book on Oregon	1
Total	5

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
Aerial	1
Gondola for an overhead/aerial view of landscape and wildlife	1
Mopeds	1
Personal bicycle	1

Personal vehicle	1
Shuttle service from vacation condos area or town	1
Something to take you uphill from the Lighthouse	1
Trails closed to autos, connected with other green space	1
Total	8

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 = 30)

Access to the Lighthouse is downhill, but the return trip is a killer for those who are less physically capable.

As the baby boomers age, you will need better accessibility for the next 20 years - walkability and wheelchairs (motor and manual).

Cape Meares National Wildlife Refuge has always been a pleasure to visit. Well maintained and clean facilities.

Entrance roads were too narrow. Large potholes need filling. There is a need for more parking spaces.

I have walking difficulties and walk with a cane. I couldn't get to the Lighthouse.

I wish there were large parks with transportation and no private vehicles allowed. Not at all parks, but there should be options for people who would like this. Options for those with challenges, too!

It would be great to have transportation for handicapped up and down the path to the Lighthouse.

It would be nice to have a golf cart/tram for people with disabilities to get to the Lighthouse. It is too far for some to walk.

It would be nice to have wheelchairs or motorcarts for disabled to take on trails.

Keep cars at a minimal impact.

Need more parking spaces and benches to rest on.

Need transportation up and down the hill from the Lighthouse for people with disabilities and people not to use that terrain.

No alternative transportation (people need to walk). This refuge is small.

Please label and maintain walking trail.

Roads to Cape Meares Lighthouse are in need of repair/maintenance.

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Roads to Lighthouse were in terrible condition at Capes Meares.

The County 1 State Road going north at this refuge was in quite poor condition (towards Tillamook). On the day we visited, all parking spots were full and people were driving around waiting for parking.

The parking lot was reconstructed. Bathrooms/outhouses were not well maintained. Trail to Lighthouse may have been too steep for the disabled.

The road leading up the hill to the Lighthouse and lookouts was in bad shape, but is being worked on.

The road to the Lighthouse really needed some improvements. There were a lot of pot holes.

The road to the refuge was in very poor shape. Understandably, the ground underneath (slides, etc.) affects the quality. Road quality inside the refuge was good.

The roads (probably County Roads) to and from the refuge were in extremely poor condition and, at times, so rough that they were hazardous.

The roads going to the Lighthouse are very rough.

The roads were in pretty bad shape around the refuge area.

The unsatisfactory part was the road into the area. I'm not sure where the actual refuge started. The parking lot and trails were fine, but the road in was terrible.

There were a lot of potholes on the road!

There were some large potholes along the way that would be great to get patched up.

Very hard for handicapped people to visit the Lighthouse due to the steep, paved trail. Roads leading into the refuge/park are full of potholes.

Very hilly area, especially if you want to see the Lighthouse. It probably would not be very accessible for someone with a transportation disability.

When we pulled into the parking lot, we took the last available spot.

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## Survey Section 4

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

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Comments on Services, Facilities, and Activities at This Refuge (n = 42)

A coin operated telescope trained on the sea lions would have been nice.

Cape Meares State Scenic Viewpoint and National Wildlife Refuge and Cape Meares Lighthouse are well maintained and a popular place for visitors.

Clean the restrooms during busy weekends!

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Excellent volunteer interpretive staff both at the lighthouse and on the overlooks.

Great staff that was knowledgeable about birding.

Guides were very helpful and knew what they were talking about.

I did not go to the Visitor Center because I am 80 years old and my family didn't want me to walk the distance. (I could have done it, but my children wouldn't let me!)

I don't understand why there would be hunting opportunities offered in a refuge. If I knew a refuge offered hunting, I would not visit it.

I liked the volunteers from the U.S. Park Service who had telescopes set up for sea bird watching at Cape Meares.

I met a very friendly and knowledgeable volunteer who greatly enhanced our visit.

I wish the trail to the Lighthouse was more handicap accessible.

Interesting place.

It was really muddy when we were there. The dissatisfaction has more to do with the weather than the facility.

Love the observation deck to view eagles - knowledgeable volunteers!

Loved bird watching and the volunteers with scopes were terrific. Also, there was another volunteer who knew all about the plants. We also enjoyed that the refuge had no entrance fee.

Nice, friendly staff. This location is one of the few areas along the coast of Oregon which does not have built up commercial and private buildings all along the coastal area. Another area is Cape Perpetua and a third is Sand Dunes Recreation Area; however, there, the off-road vehicles are very disturbing.

Nice.

No restrooms.

Please maintain the porta potties. They were very full and not very clean.

Ranger operating the telescope was excellent.

Thanks - great volunteers and staff/employees.

The bathrooms were not open. Only porta-potties available.

The employees were very helpful and informative - we look forward to returning!

The person asking if I would like to participate in this survey was very delightful, courteous, and approachable. A great face for the refuge.

The restrooms could have been cleaner. They smelt horrible.

The two people helping visitors were most helpful. They pointed out wildlife and gave information on all the animals and birds.

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The volunteer program is excellent!

The volunteers at the viewing platform were awesome.

The volunteers at the whale watching event were wonderful and we will go back every year.

The volunteers have always been friendly and helpful, providing great information. It would be nice to have the bathrooms open; at least post a sign at the start of the trail if it is closed.

The volunteers were very helpful and nice, particularly when we were uncertain in the parking lot.

Volunteers operating the telescopes were a bit curt and rude about not moving the scopes. Understandable, given the number of times they must make that direction, but a sign would be better and would allow the volunteers time to answer questions rather than warding off well meaning, eager visitors. "Please don't move the scopes. Both scopes are aimed and focused on nesting birds."

Wanted whale watching information.

Washroom at one site was full and overflowing. Likely a local service problem.

We enjoyed talking to staff about the whale migration.

We enjoyed the visit to Cape Meares National Wildlife Refuge. The volunteers had binoculars set up and were very helpful in helping us find wildlife. In addition, we spent quite a bit of time chatting with the volunteers about the various wildlife in the area and the refuge in general.

We met a volunteer on the observation deck who was incredibly helpful, passionate about her job, and very friendly.

We thoroughly enjoyed our visit, in great part because of the knowledgeable and friendly staff and the well-kept grounds.

We visited when the Lighthouse wasn't open for the season yet. A volunteer was there (in the parking lot) to answer our questions. It made the visit much more pleasant. She was very helpful and friendly.

We were sorry that we were not able to go up into the Lighthouse since the unfortunate incident of the shooting of the lens. We love the picnic area in the old quarry, and the octopus tree.

Wonderful view - great areas to look out to the sea. Great old trees; a very special spot.

Wonderful!

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## Survey Section 5

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

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Comments on What Makes Refuges Unique? (n = 132)

A focus on the wildlife of the area.

A variety of interests to attract visitors are provided by refuges.

Ability to see the interdependence of animals and plants with their surroundings.

Access to incredible places with birds/wildlife. Also, loved the Lighthouse.

Access to wildlife and environments/ecosystems, which protect the specific species and habitat. I enjoy the opportunity to visit and not disturb the wildlife (car tours where you stay in your car).

Accessibility, guides, literature, safe driving facilities, and washrooms - mostly clean.

Animals are protected from people.

Any public land preservation is important to me.

Appreciate the mixed use opportunities to maintain wildlife habitats. Have spent a lot of time at Sauvie Island Wildlife Area with bird department tests.

Availability to public at a reasonable entry fee, maintained, quality environment for wildlife, putting wildlife first, and stressing education over profit.

Awesome volunteers; they made out visit a wonderful experience. Thank you.

Because it belongs to the Nation and is a National Treasure.

Being able to see wildlife in a natural setting and not get involved in "screwing" it up.

Cape Meares is a wonderful example on the Oregon Coast. The day we came, there were many volunteers; more than one for every group as they go there. We had to leave, as our time was limited, but we could have spent a couple days here.

Close proximity for unprecedented birding opportunities.

Dedicated to wildlife.

Each area in all public lands and wildlife refuges are unique. Because they are unique, they change with each visit. I think education of the public is very important in preserving the wildlife refuges and other public lands, as well as in aiding with the improvement of the environment. It is important that people are exposed to nature and become aware of how nature, wildlife and people need to work together.

Educational opportunities for children.

Emphasis on nature's needs, e.g. habitat.

Everyone should visit and experience these resources as often as possible.

---

Great volunteers and staff assistance, particularly on birding.

Great wildlife observation opportunities.

Higher concentration of wildlife.

Historical lighthouse preservation.

I am most familiar with wildlife refuges in Alaska, as I lived there for 30 years until last September. National Wildlife Refuges are unique, because they are usually not crowded and the opportunities for viewing wildlife and habitat are unmatched.

I believe a lot of tourists would not take the opportunity to stop at wildlife refuges if they were not made and available as they are. I hope you are able to keep up the good work.

I feel they promote wildlife and its preservation. These are things I feel strongly about and am interested in learning more about.

I like places you can shoot your camera at scenery, animals, etc., without causing harm to anyone or anything.

I loved the people there to help us identify the whales!!

I think refuges should be a refuge. I have seen overgrazed federal refuges and the wetlands turned to mush. Also, I've seen fragile areas overhunted; gun fire can stress already depleted species. Thanks.

Information provided at observation site by trained volunteers. Nice for visitors.

Information was great and we saw a lot of wildlife.

Interpretation, exhibits, and learning opportunities teaches respect for public property.

It combines history in the form of a Lighthouse, wonderful opportunities to view wildlife, and a unique flora exhibit all in one area.

It gives people a chance to see animals in their natural habitat without harming them or their surroundings.

It has an amazing view as well as important wildlife viewing and a historic Lighthouse.

It is clean, well-maintained, and you have a feeling of safety while there.

It is important to keep unique wild areas protected and preserved.

It is protected.

It provides education on the environment, history, and the background of the area.

It's a very unique environment that is in a small stretch of the pacific northwest. Precious.

It's just great - volunteers were wonderful.

Keeping the National Wildlife Refuges as natural as possible.

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Lighthouse and cliffs.

Lighthouse, ocean view, the Octopus Tree, and spruce forest.

Lighthouse.

Location, scenery, lighthouse, history, and birds.

Location. There are wildlife viewing opportunities and a beautiful historical lighthouse.

Managing and restoring habitats for wildlife is what makes it unique.

More of a focused approach to wildlife observation.

Most of them are managed for hunting, unlike National Forests and Parks and local natural areas. They typically are managed more with farming practices to improve wildlife numbers for hunters and less with native habitat enhancement for the full array of wildlife. Fortunately, this appears to be slowly changing to the benefit of rare plants and wildlife.

National Wildlife Refuges are inspiring, because you can see what a big difference it makes when people make a real effort to be good stewards of the Earth. Refuges give people an opportunity to educate themselves and their children about history and the natural world.

Natural beauty and whale watching.

Nature! Nice outdoor adventures! Rest and relaxation!

Not all other public lands seem to have the same rules and mission as a National Wildlife Refuge.

Observing wildlife in natural environments.

Ocean.

Offers a fee-free area where the public can enjoy wildlife and nature.

Often you can observe particular species you wouldn't see any other place.

Opportunity to experience/explore the land, nature, natural habitats - great for families as well as adults who enjoy the outdoors.

Places to get away from it all.

Preservation of wildlife; safe refuge.

Primitive nature. The main goal is habitat preservation.

Protected plant and animal species, supported and rebuilt ecosystems, opportunity to experience "natural" places with relative ease of access.

Pursue conservation.

Refuges focus on the wildlife first, and then focus on making viewing wildlife and the habitat possible without disturbing the wildlife.

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Refuges offer the opportunity to see nature in a natural form.

The ability to offer activities and see places not readily available to the public.

The animals are able to grow with only natural predators.

The area is beautiful as well as the Lighthouse. When we drove up to Cape Meares, there were some friendly and knowledgeable volunteers that were able to point-out various wildlife, which was great! We have been to Cape Meares four or five times over the past several years and we never get tired of it! It was sad, however, that the lighthouse had been damaged and we couldn't go up top because we always enjoy that.

The cliffs with birds were so close to the Lighthouse. It was a unique juxtaposition.

The definition of a wildlife refuge speaks loudly in my mind! They are uniquely different from the extraction based resource model for clearing all old growth timbers. Unique and worth saving for generations to come.

The different animals and scenery.

The focus is on wildlife.

The focus is primarily on conserving wildlife, so other activities (e.g., recreation opportunities and visitor services) are secondary.

The information available explaining the areas makes is more informative and educational than other areas.

The learning opportunities for the public, especially the children.

The Lighthouse and opportunity for whale watching.

The Lighthouse and the whale watching were awesome. The Lighthouse had a broken light, which made me kind of sad - I wish it could be fixed.

The Lighthouse, nesting seabirds, nesting Peregrine Falcons, and wild flowers.

The Lighthouse, Octopus Tree, and bird watching were all great.

The main endeavor for National Wildlife Refuges is to purposefully conserve so that future generations may also enjoy and appreciate nature and its beauty.

The Octopus Tree.

The opportunity to see and learn about wildlife.

The opportunity to see migrating gray whales in the spring and winter; learning about the history of this Lighthouse; seeing what the largest Sitka spruce in the state (world?) looks like; seeing and wondering about the mystery of the "Octopus Tree"; seeing the rocky Oregon coast on a clear day; and, maybe catching sight of a Peregrine falcon.

The opportunity to see scenery and wildlife not otherwise available to ordinary people.

The people helping there made all the difference.

The purpose is to provide an opportunity to view and be educated regarding the local wildlife.

The refuge was so clean! It was a joy to visit. Also, having a volunteer to answer questions or make suggestions helps when visiting a strange area.

The refuges are better maintained. People don't litter and abuse the land as much as other public lands.

The refuges offer a chance for people (especially children) to see uninterrupted natural environments and maintain history.

The terrain is spectacular. It is in the coast where we can view seals, whales, and birds and the Octopus Tree. I would like to see the Lighthouse restored to working condition.

The topography/birds, whales, trees, and rocks.

The variety of birds. The opportunity to see their nests.

The views of the coast and the seastacks.

The volunteers and/or rangers at refuges have the opportunity to educate the public on the need to conserve and take care of our natural resources!

The volunteers at the specific times of year in which there is migration.

There are usually more opportunities to see undisturbed birds and wildlife.

There is limited human access; thus, the resources remain in a less impacted environment.

There is the opportunity to whale watch.

There is usually a greater amount of wildlife to be seen in refuges, as opposed to the unique geological features that I might visit a National Park to see.

These are beautiful, well-maintained areas for all to enjoy!

They are managed to provide natural habitat for wildlife, plants and the physical environment while providing people access to experience nature in a real setting and restricting their impact to that environment.

They are protected, open to the public, free to access, and well taken care of.

They are there specifically for the wildlife. Gives people an opportunity to observe wildlife in their natural habitat.

They give a person more opportunities to view wildlife and scenery.

They help educate the public of the value and beauty and wonder of wildlife and their habitat.

They keep things simple and are oriented to the environment.

They offer opportunities to view wildlife that would not be possible without them.

They point out and make available all the unique wildlife we enjoy in our area and other areas.

They provide some educational resources beyond simple wildlife observation.

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They seem to try to teach the lesson that nature is not in the service of mankind, but is to be respected and protected and understood. The National Park's role too often can seem to be about entertainment, with concessionaires making money, etc.

They serve different purposes than other public lands.

They teach about the area and wildlife and the importance of each animal to the world.

This refuge offers breathtaking views of the ocean, plus opportunities to observe migrating whales, seals, and migratory ocean birds.

This site has a unique beauty and wildlife, which is better than most.

Traveling throughout the US on numerous occasions, I find each refuge unique to the local climate, wildlife, and personalities of the local people that work at the refuges.

Unspoiled/protected wildlife habitat, opportunities to see wildlife in the 'wild' and educational opportunities.

Very pretty.

Views of the ocean and coast. Possible whale watching. Historical significance of the Lighthouse.

Volunteers available for questions and use of their viewing equipment.

Volunteers to point out interesting wildlife.

We are from the East Coast and love it there, but the mountains and cliffs of your beautiful refuge cannot be beat!

We felt like we were guests or visitors, instead of land altering people. We fit in where little had to be done to the terrain to accommodate us; the land and the scenery and the plants and trees were the royal inhabitants, as is appropriate.

We love looking for the eagles' nests. We love hiking to the Octopus Tree.

We loved how we could whale watch (even though we didn't see any). Also, the spruce trees and Octopus Tree were unique.

We went to take part in the bird watching activities and were very pleased with the information we received from the volunteers who greeted us, gave us a summary of the activities and answered our questions.

Whale watching opportunities.

You don't need to be 'in your face' to get your point across.

You get to experience wildlife in its primal state - living the way they were created to live, without the city and all its obstacles to disrupt their way of life. It's a wonderful experience to observe all these beautiful creatures and nature.

You know that guns are not allowed.

Your volunteers are awesome!

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Additional Comments (n = 29)

As a retired Army Ranger and a combat wounded veteran in Iraq, the ability to visit our nation's parks and facilities free is monumentally and forever a great award for service rendered.

Fishing guide.

Going there actually made me feel very patriotic - I'm proud that our government has preserved these places and that this is an incredible experience that is available to everyone (as long as they can pay for gas). This is the type of government spending that I am happy and proud to contribute to.

I don't have much to say about this refuge, as we just popped by one afternoon while we were in the area. We had a spare hour or so and thought we'd explore a bit. We drove there from Oceanside. We would have biked, but one concern we always have is how safe our bikes would be. We have bike locks, but you never know if they could be safely locked up at a Visitor Center or somewhere where someone is keeping an eye on them. That would definitely encourage us not to drive. We only spent about an hour at the refuge, as that is all the time we had, so I don't feel I can really give these questions a proper answer. We just didn't have time to see everything it had to offer, but what we saw was lovely!

I encourage my fellow urban dweller friends with cars to take groups to wild areas, just to remind them that the natural world is there! That is how we came to be at Cape Meares. It was a great success, due to the beauty and the outstanding volunteers. On my own, I hike many, many times each year, nearly always with van-transported hiking groups.

I love this refuge. I always take our visitors to Cape Meares and they invariably come away in awe of this site and our coast.

I volunteer at the refuge to help people see the wild birds that frequent it in the summer months.

It is important that we, as a nation, invest in our public lands and resources to preserve them for future generations. We need more parks and better facilities!

It is such a shame that the Lighthouse was vandalized and damaged. I hope it will be possible for visitors to go up the stairs to the Lighthouse again someday.

It was beautiful and a volunteer was very informed and helpful.

It's a simple place to go. Preserving the past is important.

Keep Oregon green! Keep land for nature! Thanks! Love the outdoors! Love places to go! Love fishing and camping! Love boating!

Keep up the great work educating the public!

Really enjoyed the volunteers that had the telescopes that we could look through to see birds and starfish that they found.

The older I get, the more I am spending time in parks and wilderness.

The refuge was beautiful and the facilities were well-maintained.

The volunteer you had at Cape Meares was terrific. Knowledgeable, personable, and great with people.

The volunteers were very helpful and kind. They had set up two telescopes to view birds on the cliffs and provided information about the birds and other wildlife.

This refuge is one of our favorite places to watch birds, whales, and Stellar sea lions.

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This was one of the most beautiful places we've been to so far since moving to Washington state. We actually got engaged here on the day we visited! It was both a perfect and memorable day and experience!

Very interesting refuge and my family and I very much enjoyed our visit. Please assist in opening the Lighthouse!

We came to Cape Meares to whale watch. We were volunteers with the program at the Neahkahnie Station during spring break and wanted to visit other nearby sites. We brought along 2 granddaughters who were visiting us at Manzanita. Did not know that Capes Meares was considered a refuge until this visit.

We couldn't get over how clean the refuge was. Also, and most important, I appreciated the benches located along the paths.

We enjoyed our visit.

We have had serious illness preventing us from many trips the past two years. We have enjoyed this area many times since 1958. It has been greatly improved. We enjoyed the opportunity to view the bird life with a great deck and the volunteer's knowledge and this time getting to see a baby eagle, even if the eagles are taking their toll on the bird life in this area.

We need more places of quiet and refuge for us and the struggling wildlife.

We need to expand natural preserves! We need to attempt to bring preserves back to a more natural state. We need to use preserves as a means to create jobs that help sustain a healthy economy. Employ people to repair wildlife habitat, maintain sustainable lodging, and provide transportation (mass/public) that does not damage lands and promotes sustainable tourism.

We were thrilled to see a Blue Heron from the road as we left the Cape Meares Lighthouse area.

We were visiting our daughter and her family suggested the visit to the park. We had a very enjoyable time and took lots of pictures. Thank you.

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