



# National Wildlife Refuge Visitor Survey 2010/2011: Individual Refuge Results for Charles M. Russell National Wildlife Refuge

By Natalie R. Sexton, Alia M. Dietsch, Andrew W. Don Carlos, Lynne Koontz, Adam N. Solomon and Holly M. Miller

*There are so many opportunities here: boating, wildlife observations, camping - a unique place! We are so fortunate to live near this refuge. Thanks to USFWS for maintaining such a wonderful place. When we take visitors there, especially in the fall, they are amazed at all they see. The elk are magnificent.*—Survey comment from visitor to Charles M. Russell National Wildlife Refuge.



Charles M. Russell National Wildlife Refuge. Photo credit: U.S. Fish and Wildlife Service.

## Contents

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

## Figures

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

## Tables

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

## Acknowledgments

This study was commissioned by the U.S. Fish and Wildlife Service Division of Visitor Services and Communications Headquarters Office, Arlington, Virginia. The study design and survey instrument were developed collaboratively with representatives from U.S. Fish and Wildlife Service and researchers from the PASA Branch, U.S. Geological Survey. For their support and input to the study, we would like to thank Kevin Kilcullen, Chief of Visitor Services; Steve Suder, National Transportation Coordinator; Regional Office Visitor Services Chiefs and Transportation Coordinators; and the staff and any volunteers at Charles M. Russell NWR who assisted with the implementation of this surveying effort. The success of this effort is largely a result of their dedication to the refuge and its resources as well as to the people who come to explore these unique lands. We also would like to thank the following PASA team members for their hard work throughout the surveying effort, which has included (among *many* things) the arduous tasks of stuffing more than 20,000 envelopes, managing multiple databases, and preparing numerous reports: Shannon Conk, Halle Musfeldt, Phadrea Ponds, Gale Rastall, Margaret Swann, Emily Walenza, and Katie Walters.

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

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

## **Methods**

### **Selecting Participating Refuges**

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

### **Developing the Survey Instrument**

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

### **Contacting Visitors**

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

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

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

<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 Charles M. Russell 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 Charles M. Russell National Wildlife Refuge

Charles M. Russell NWR extends 125 miles from Fort Peck Dam in north-central Montana to the west along the Missouri River. The refuge covers approximately 1.1 million acres, and includes the 245,000-acre Fort Peck Reservoir. Given the remoteness and the sheer size of the refuge, the area has remained relatively unchanged since the historic voyage of the Lewis and Clark expedition. Habitats within the refuge are diverse, including native prairies, forested coulees, river bottoms, and “breaks” badlands.

The refuge was first established in 1936 as the Fort Peck Game Range in an effort to conserve pronghorn antelope and sharp-tailed grouse. Drought, domestic livestock grazing and loss of native prairie due to agricultural cultivation led to sharp declines in grouse populations. Since the area was designated a refuge in 1976, domestic livestock has been reduced and native vegetation has improved habitat for grouse, as well as many other wildlife species.

Over 250,000 visitors travel to the refuge annually (based on 2008 RAPP database; U.S. Fish and Wildlife Service, 2011, written comm.) to participate in a variety of activities that the refuge offers. The entire refuge is open to camping, as well as hiking and horseback riding. Boating in the Missouri River and Fort Peck Reservoir are also popular activities. In addition, the refuge also offers environmental education and interpretive programs, fishing, hunting, wildlife observation and photography. Hunting opportunities include big game, upland bird, waterfowl, turkey, and migratory bird hunts. Figure 1 displays a map of the refuge. For more information, please visit <http://www.fws.gov/cmr/>.

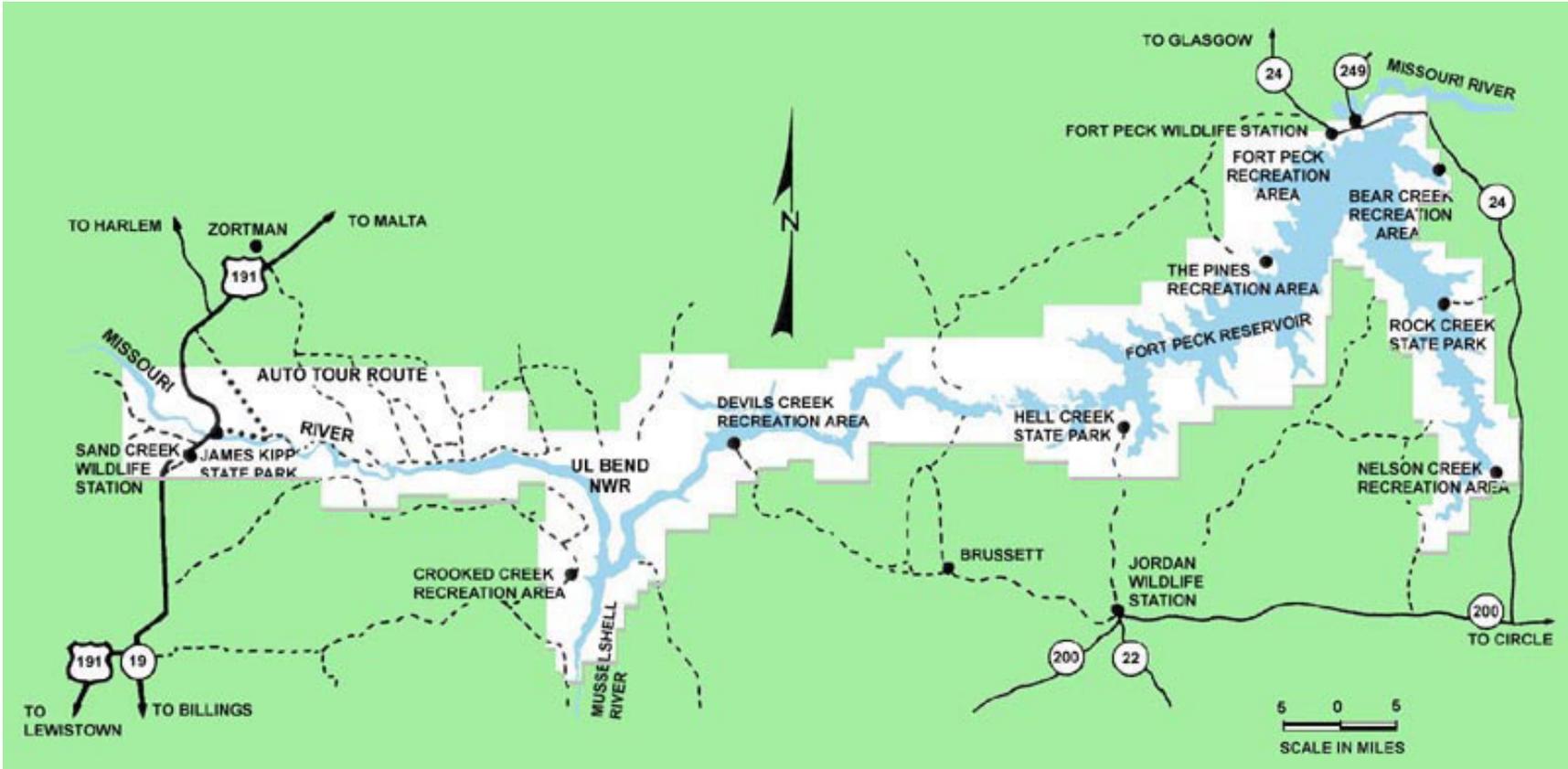


Figure 1. Map of Charles M. Russell NWR, courtesy of U.S. Fish and Wildlife Service.

## Sampling at Charles M. Russell National Wildlife Refuge

A total of 311 visitors agreed to participate in the survey during the two sampling periods at the identified locations at Charles M. Russell NWR (table 2). In all, 196 visitors completed the survey for a 66% response rate and  $\pm 6\%$  margin of error at the 95% confidence level.<sup>1</sup>

**Table 2.** Sampling and response rate summary for Charles M. Russell NWR.

Sampling period	Dates	Locations	Total contacts	Undeliverable addresses	Completed surveys	Response rate
1	9/18/2010 to 10/2/2010	Fall Archery Season Area HD 622 Archery Season Area	168	4	120	73%
2	5/14/2011 to 5/28/2011	Spring Fishing on the Big Dry Arm Spring Fishing at Forchette and Devils Creek Recreation Sites Spring Paddlefish Season	143	9	76	57%
<b>Total</b>			<b>311</b>	<b>13</b>	<b>196</b>	<b>66%</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 Charles M. Russell 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 (92%) and that the Refuge System has the mission of conserving, managing, and restoring fish, wildlife, plants and their habitat (92%). 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-

<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).

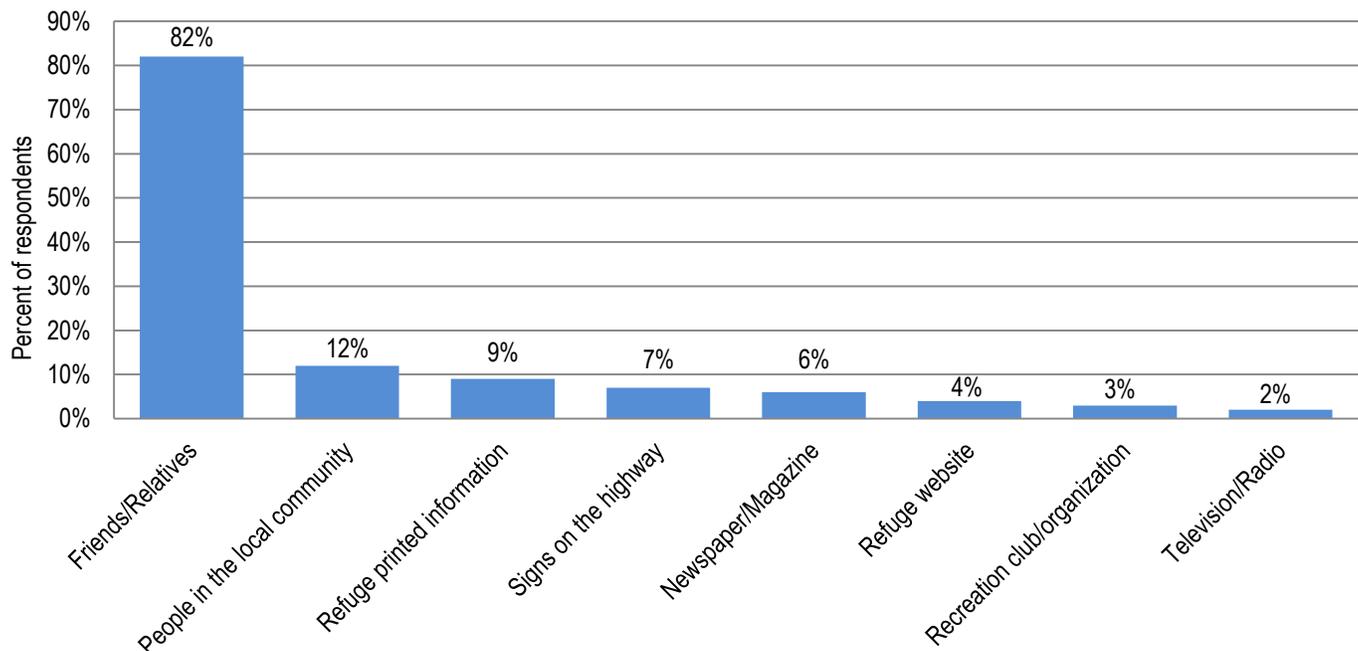
day management practices of individual refuges, only that visitors feel they have a basic knowledge of who manages refuges and why. Compared to other public lands, many visitors feel that refuges provide a unique recreation experience (82%; see Appendix B for visitor comments on “What Makes National Wildlife Refuges Unique?”); however, reasons for why visitors find refuges unique are varied and may not directly correspond to their understanding of the mission of the Refuge System. Some visitors to Charles M. Russell NWR had been to at least one other National Wildlife Refuge in the past year (45%), with an average of 2 visits to other refuges during the past 12 months.

### Visiting This Refuge

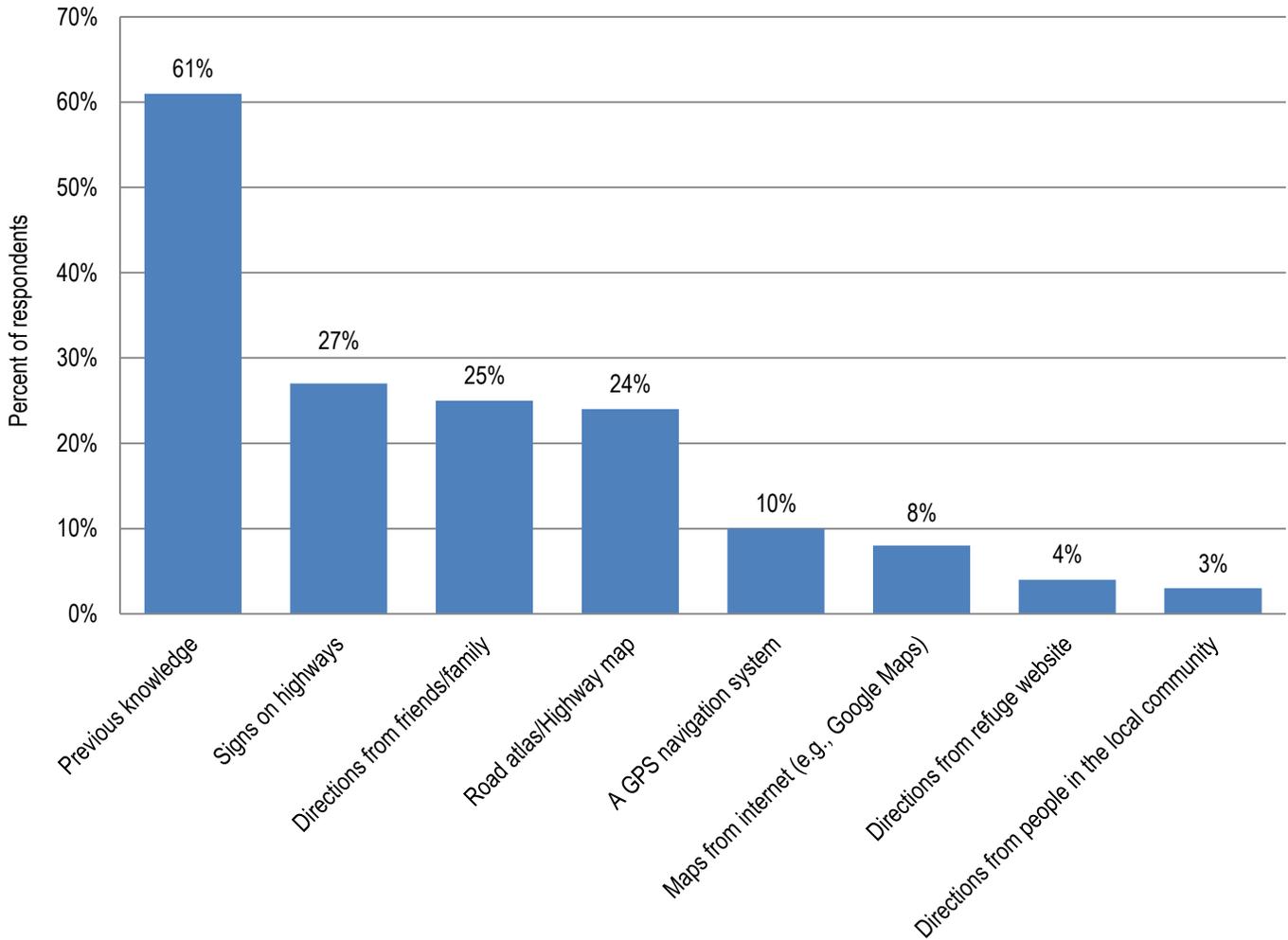
Half of surveyed visitors (50%) had only been to Charles M. Russell NWR once in the past 12 months, while the other half had been multiple times. These repeat visitors went to the refuge an average of 9 times during that same 12-month period. Visitors used the refuge during only one season (68%), during multiple seasons (26%), and year-round (6%).

Most visitors first learned about the refuge from friends/relatives (82%), people in the local community (12%), or refuge printed information (9%; fig. 2). Key information sources used by visitors to find their way to this refuge include previous knowledge (60%), signs on highways (27%), directions from friends/family (24%), or a road atlas/highway map (24%; fig. 3).

Few visitors (8%) lived in the local area (within 50 miles of the refuge), whereas 92% were nonlocal visitors. For most local visitors, Charles M. Russell NWR was the primary purpose or sole destination of their trip (87%; table 3). For most nonlocal visitors, the refuge was also the primary purpose or sole destination of their trip (89%). Local visitors (n = 16) reported that they traveled an average of 32 miles to get to the refuge, while nonlocal visitors (n = 178) traveled an average of 369 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. Approximately 80% of visitors travelling to Charles M. Russell NWR were from Montana.



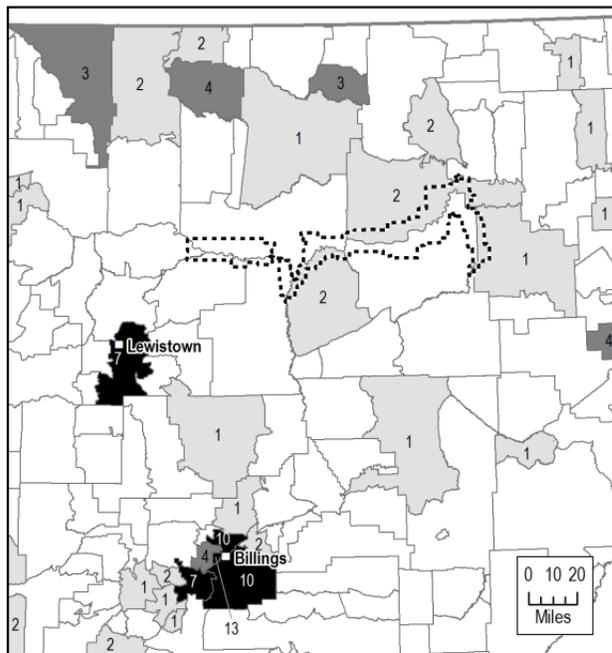
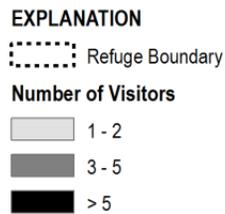
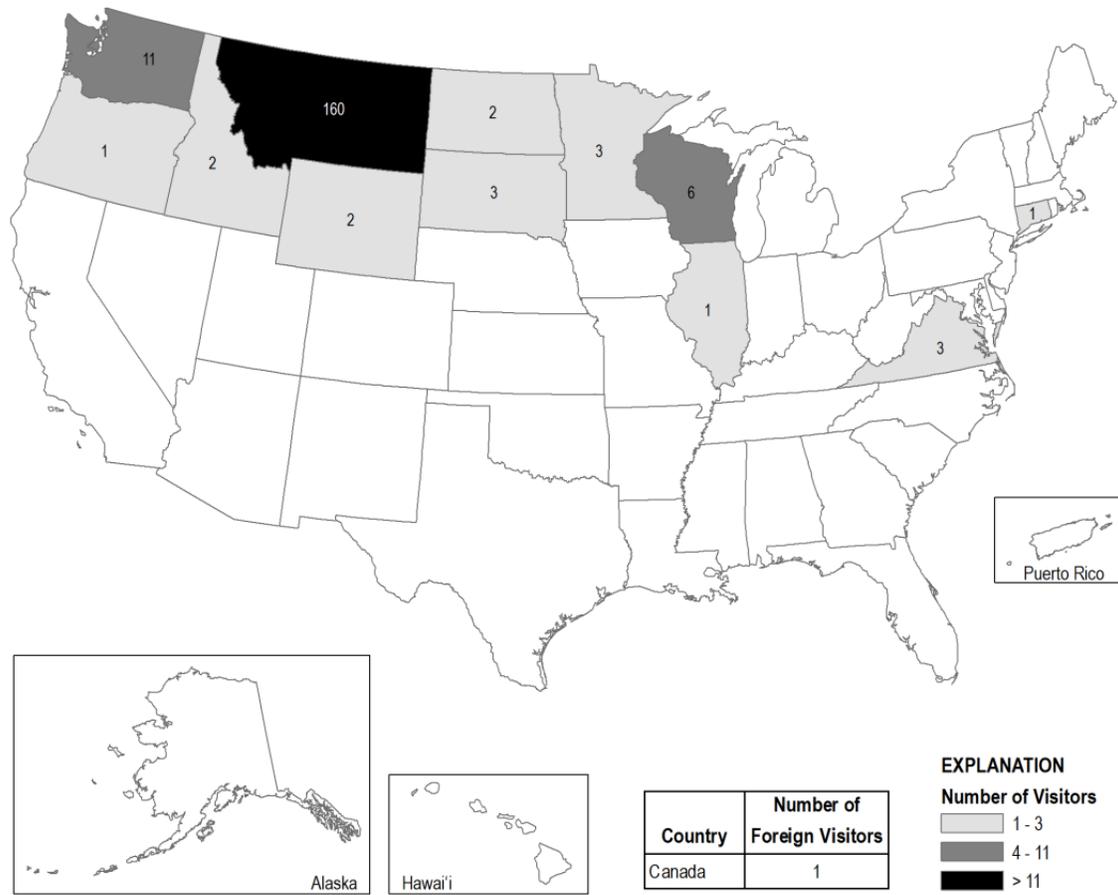
**Figure 2.** How visitors first learned or heard about Charles M. Russell NWR (n = 186).



**Figure 3.** Resources used by visitors to find their way to Charles M. Russell NWR during *this* visit (n = 192).

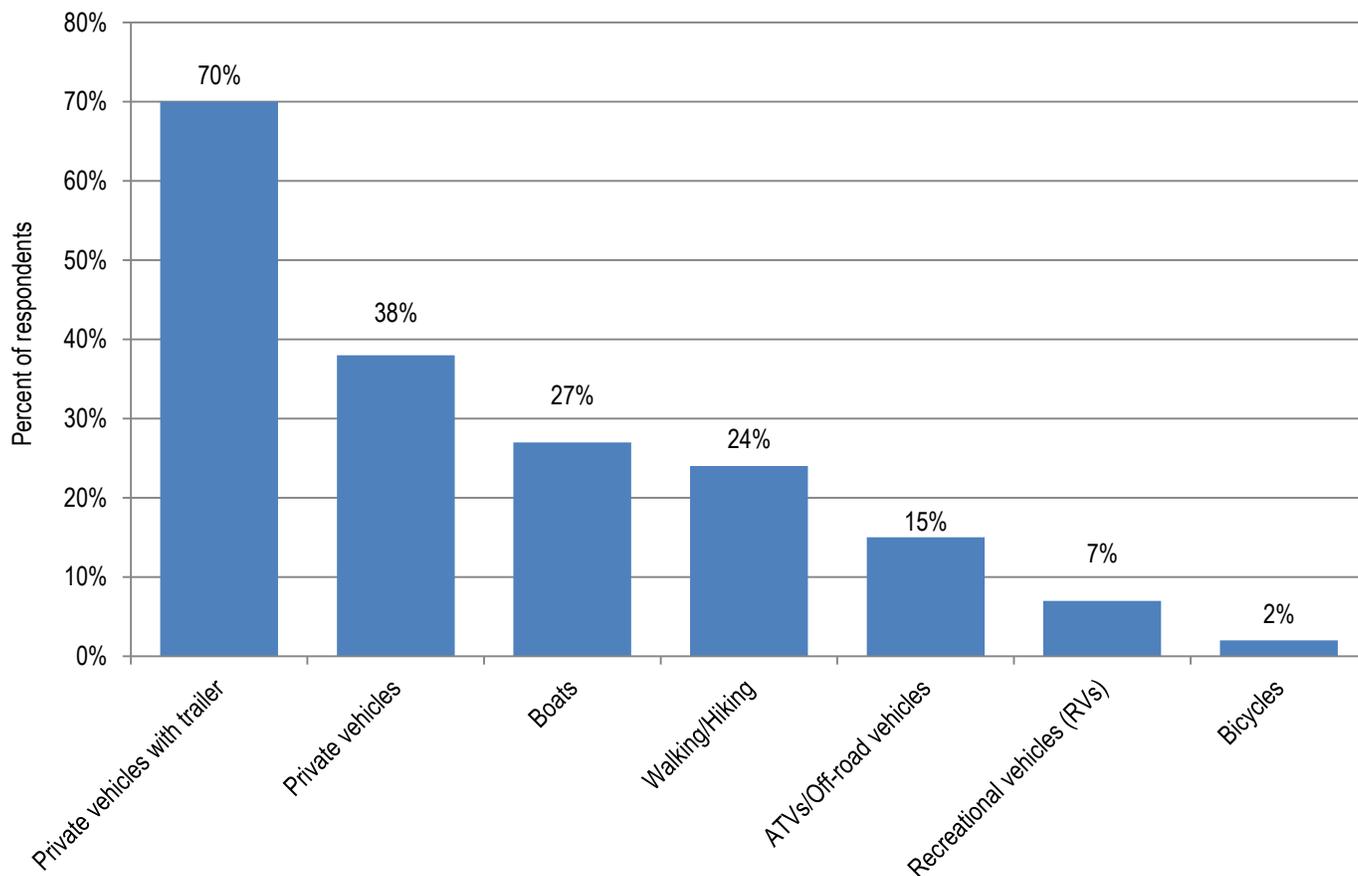
**Table 3.** Influence of Charles M. Russell NWR on visitors' decision to take *this* trip.

Visitors	Visiting this refuge was...		
	the primary reason for trip	one of many equally important reasons for trip	an incidental stop
Nonlocal	89%	9%	2%
Local	87%	13%	0%
Total	89%	9%	2%



**Figure 4.** Number of visitors travelling to Charles M. Russell NWR by residence. Top map shows residence by state and bottom map shows residence by zip codes near the refuge (n = 195).

Surveyed visitors reported that they spent an average of 8 hours at Charles M. Russell NWR during one day there (a day visit is assumed to be 8 hours), which was also the most frequently reported length of visit (97%). The key modes of transportation used by visitors to travel around the refuge were private vehicle with trailer (70%), private vehicle (38%), and boat (27%; fig. 5). Most visitors indicated they were part of a group on their visit to this refuge (81%), travelling primarily with family and friends (table 4).

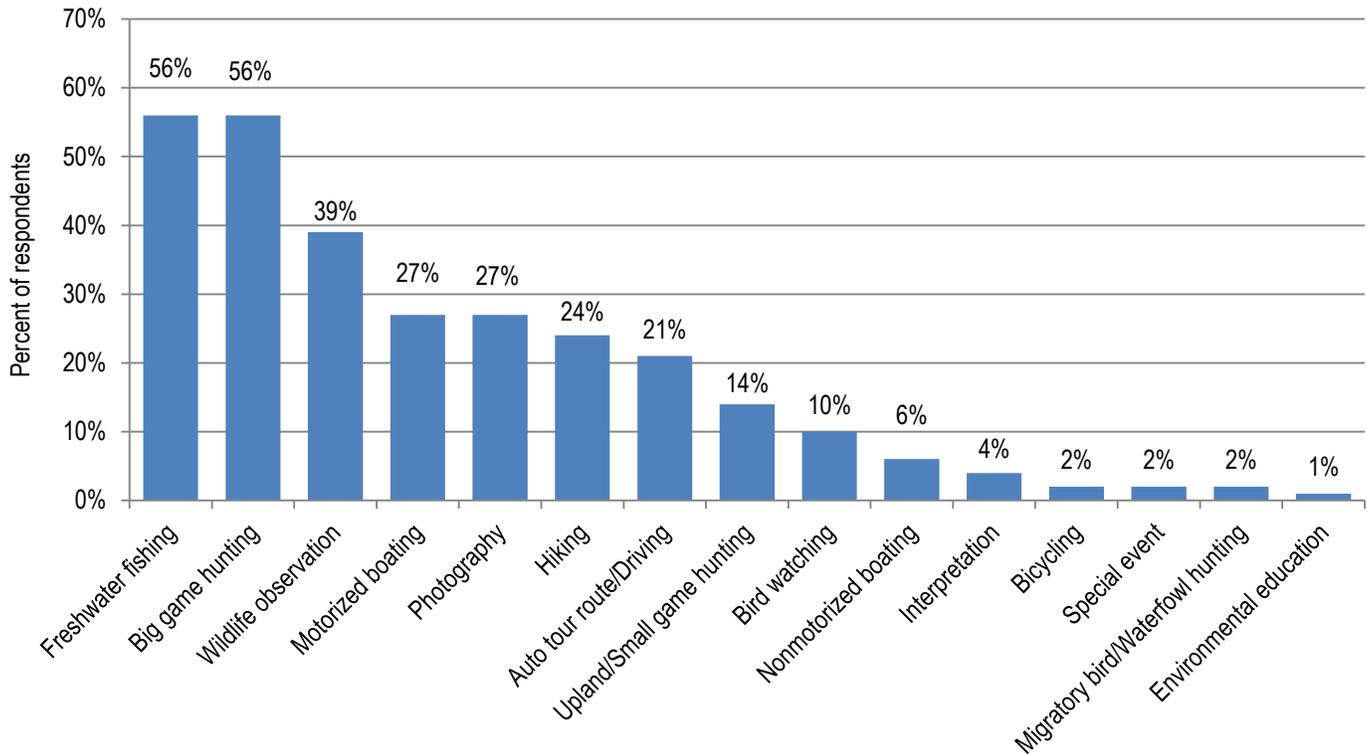


**Figure 5.** Modes of transportation used by visitors to Charles M. Russell NWR during *this* visit (n = 193).

**Table 4.** Type and size of groups visiting Charles M. Russell NWR (for those who indicated they were part of a group, n = 158).

Group type	Percent (of those traveling in a group)	Average group size		
		Number of adults	Number of children	Total group size
Family/Friends	95%	5	1	6
Commercial tour group	0%	0	0	0
Organized club/School group	1%	8	0	8
Other group type	4%	5	0	5

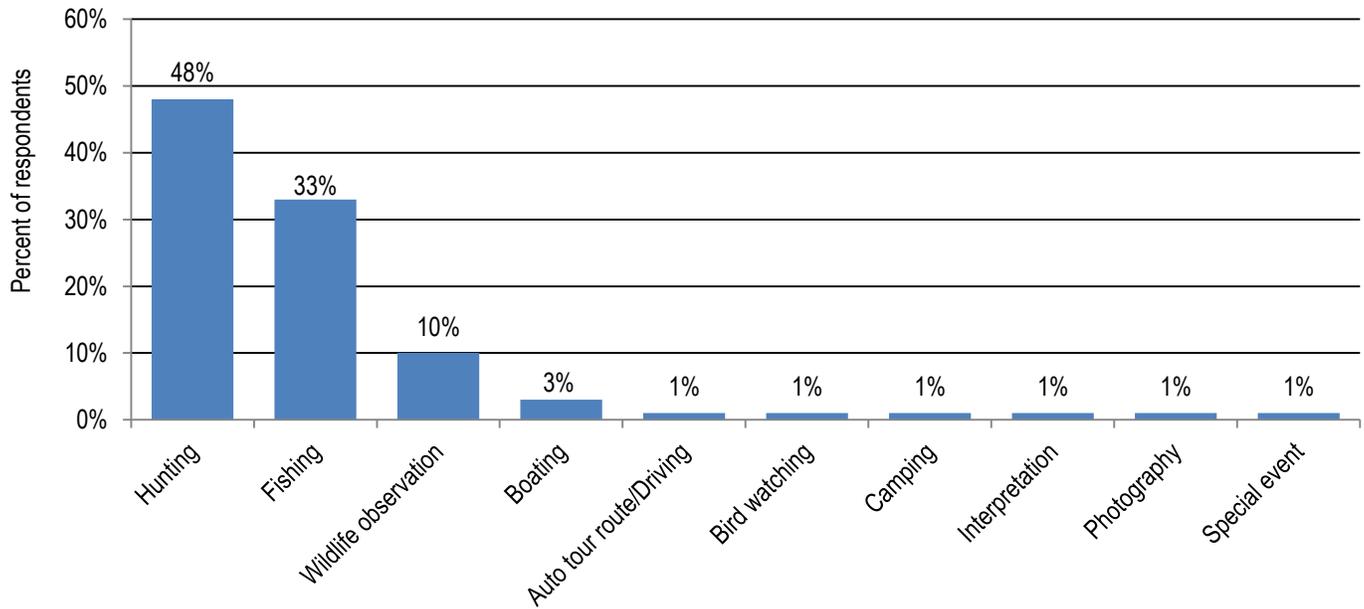
Surveyed visitors participated in a variety of refuge activities during the past 12 months (fig. 6); the top three activities reported were big game hunting (56%), freshwater fishing (56%), and wildlife observation (39%). The primary reasons for their most recent visit included hunting (48%), fishing (33%), and wildlife observation (10%; fig. 7). The visitor center was used by 21% of visitors, mostly to ask information of staff/volunteers (78%), stop to use the facilities (for example, get water, use restroom; 48%), and view the exhibits (28%; fig. 8).



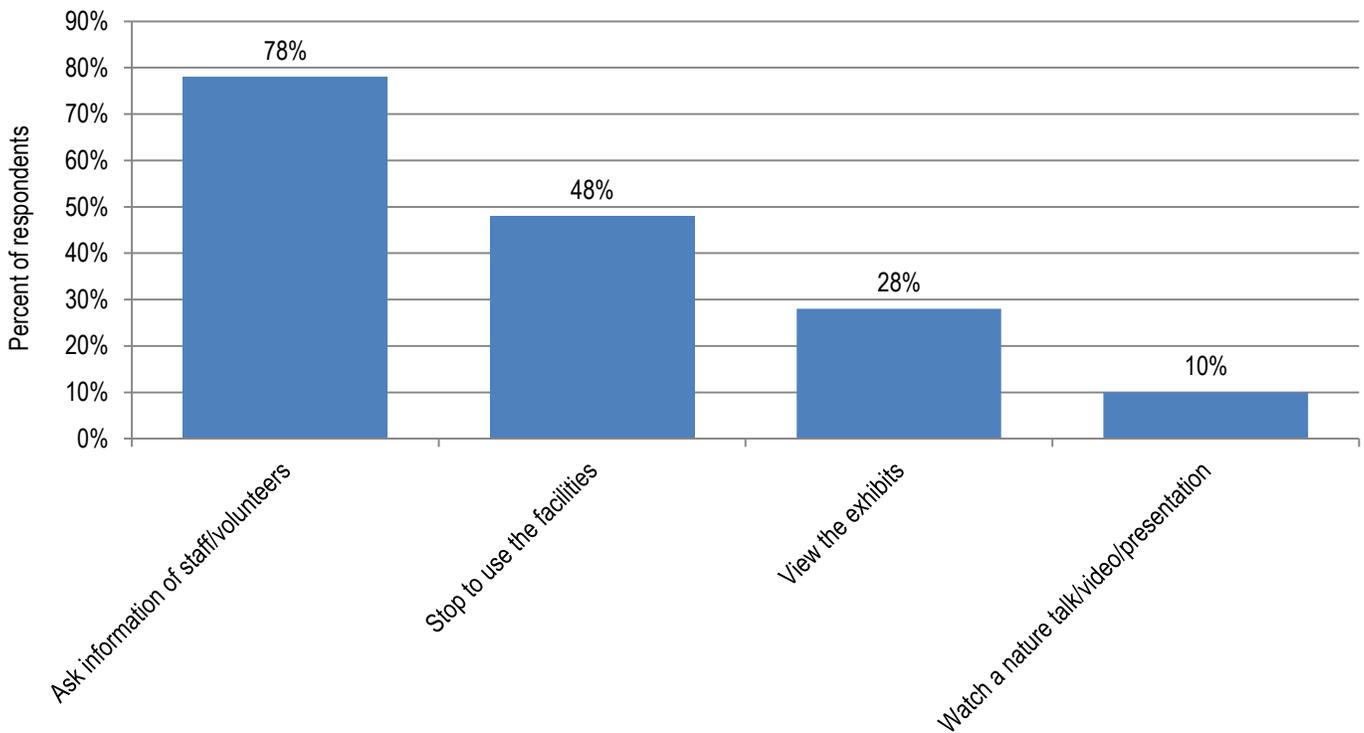
**Figure 6.** Activities in which visitors participated during the past 12 months at Charles M. Russell NWR (n = 195). See Appendix B for a listing of “other” activities.

### Visitor Characteristics

Nearly all (99%) surveyed visitors to Charles M. Russell 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 93% male with an average age of 50 years and 7% female with an average age of 50 years. Visitors, on average, reported they had 14 years of formal education (college or technical school). The median level of income was \$50,000–\$74,999. 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 Charles M. Russell NWR (n = 182). See Appendix B for a listing of “other” activities.



**Figure 8.** Use of the visitor center at Charles M. Russell NWR (for those visitors who indicated they used the visitor center, n = 40).

## 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, 8% of visitors to Charles M. Russell NWR indicated that they live within the local area. Nonlocal visitors (92%) stayed in the local area, on average, for 1 day. 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 \$37 per person per day and local visitors spent an average of \$37 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 Charles M. Russell NWR expressed in dollars per person per day.

Visitors	n <sup>1</sup>	Median	Mean	Standard deviation	Minimum	Maximum
Nonlocal	165	\$24	\$37	\$41	\$0	\$203
Local	12	\$27	\$37	\$21	\$10	\$77

<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.

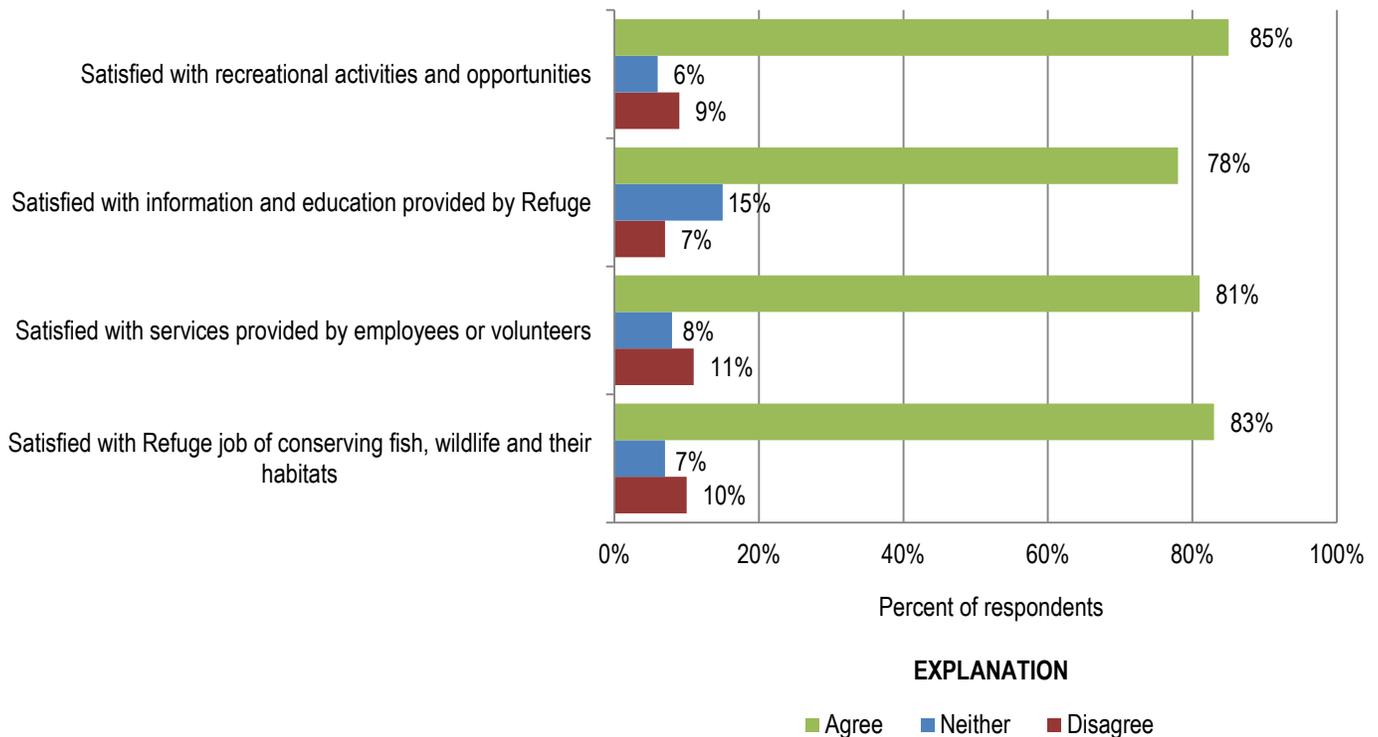
## Visitor Opinions about This Refuge

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 Charles M. Russell NWR were as follows (fig. 9):

- 85% were satisfied with the recreational activities and opportunities,
- 78% were satisfied with the information and education about the refuge and its resources,
- 81% were satisfied with the services provided by employees or volunteers, and
- 83% were satisfied with the refuge's job of conserving fish, wildlife and their habitats.

Although 21% of visitors (n = 40) indicated they paid a fee to enter Charles M. Russell NWR, the refuge does not have an entrance fee. It may be that some visitors were referencing hunting or fishing license fees paid to Montana Fish, Wildlife and Parks.



**Figure 9.** Overall satisfaction with Charles M. Russell NWR during *this* visit (n ≥ 176).

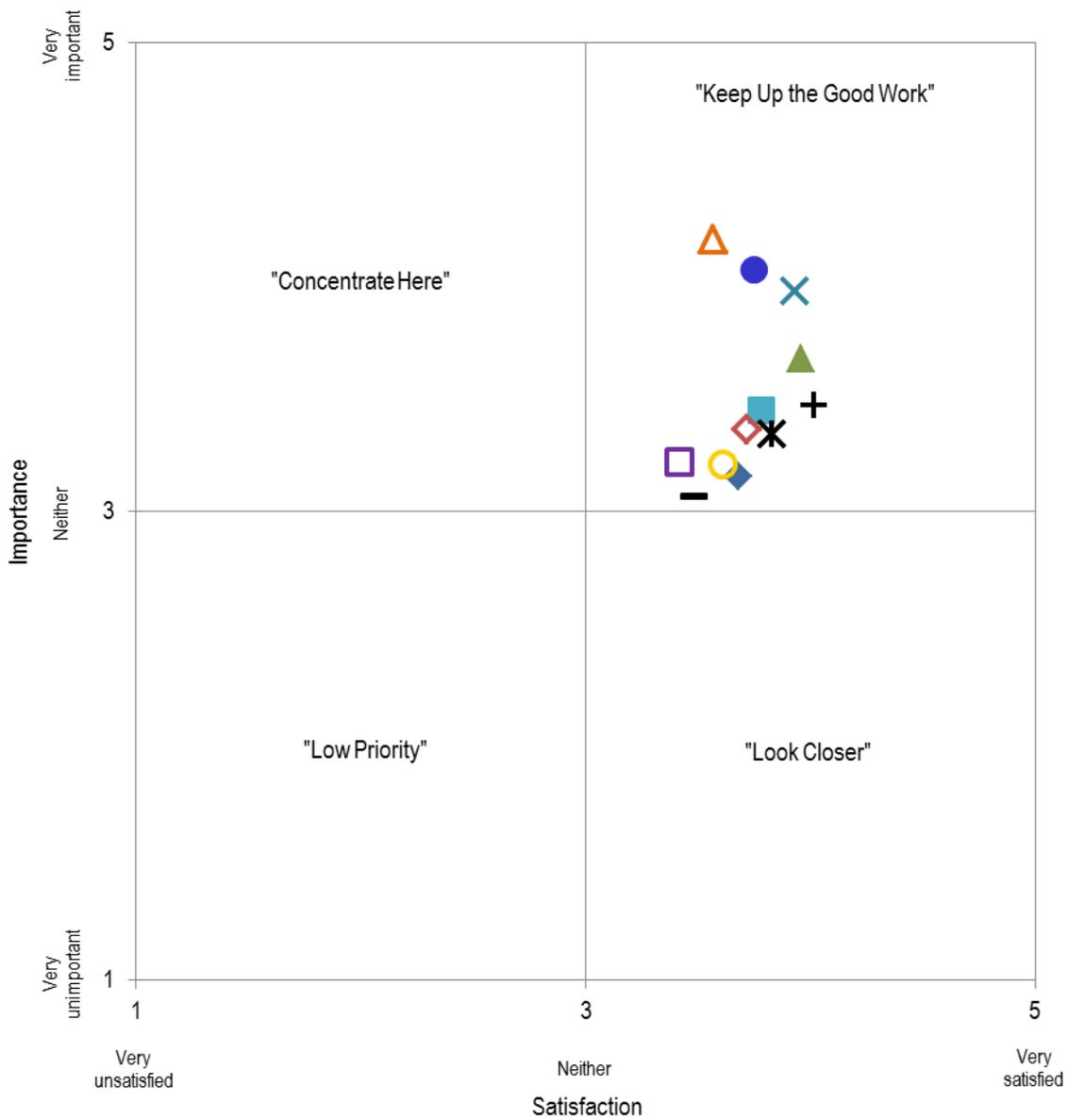
## Importance/Satisfaction Ratings

*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 Charles M. Russell 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.*

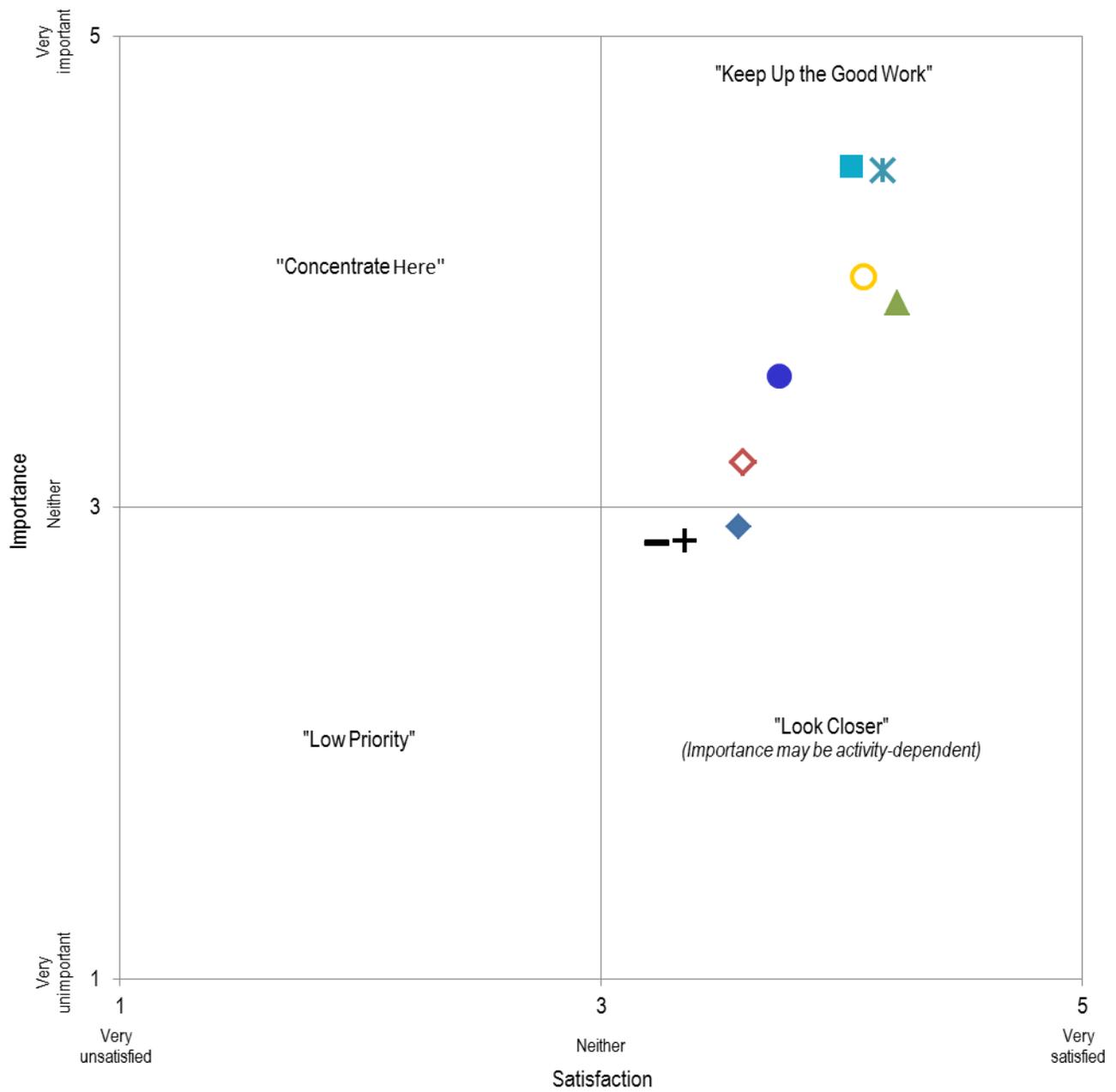
Figures 10-12 depict surveyed visitors' importance-satisfaction results for refuge services and facilities, recreational opportunities, and transportation-related features at Charles M. Russell NWR, respectively. All refuge services and facilities fell in the "Keep Up the Good Work" quadrant (fig. 10).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



**EXPLANATION**

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

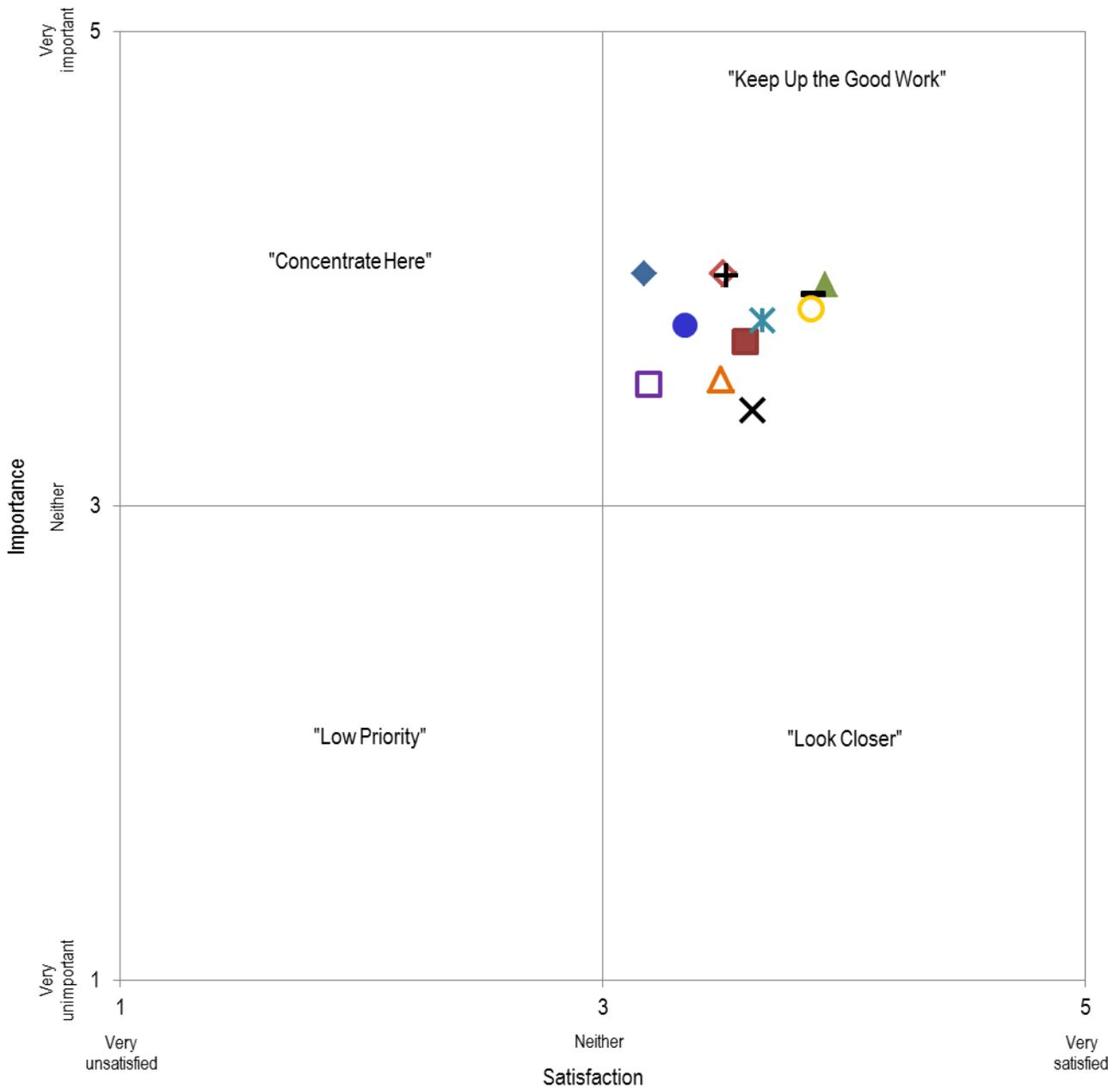
**Figure 10.** Importance-satisfaction ratings of services and facilities provided at Charles M. Russell NWR.



**EXPLANATION**

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

**Figure 11.** Importance-satisfaction ratings of recreational opportunities provided at Charles M. Russell 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 Charles M. Russell NWR.

## Visitor Opinions about National Wildlife Refuge System Topics

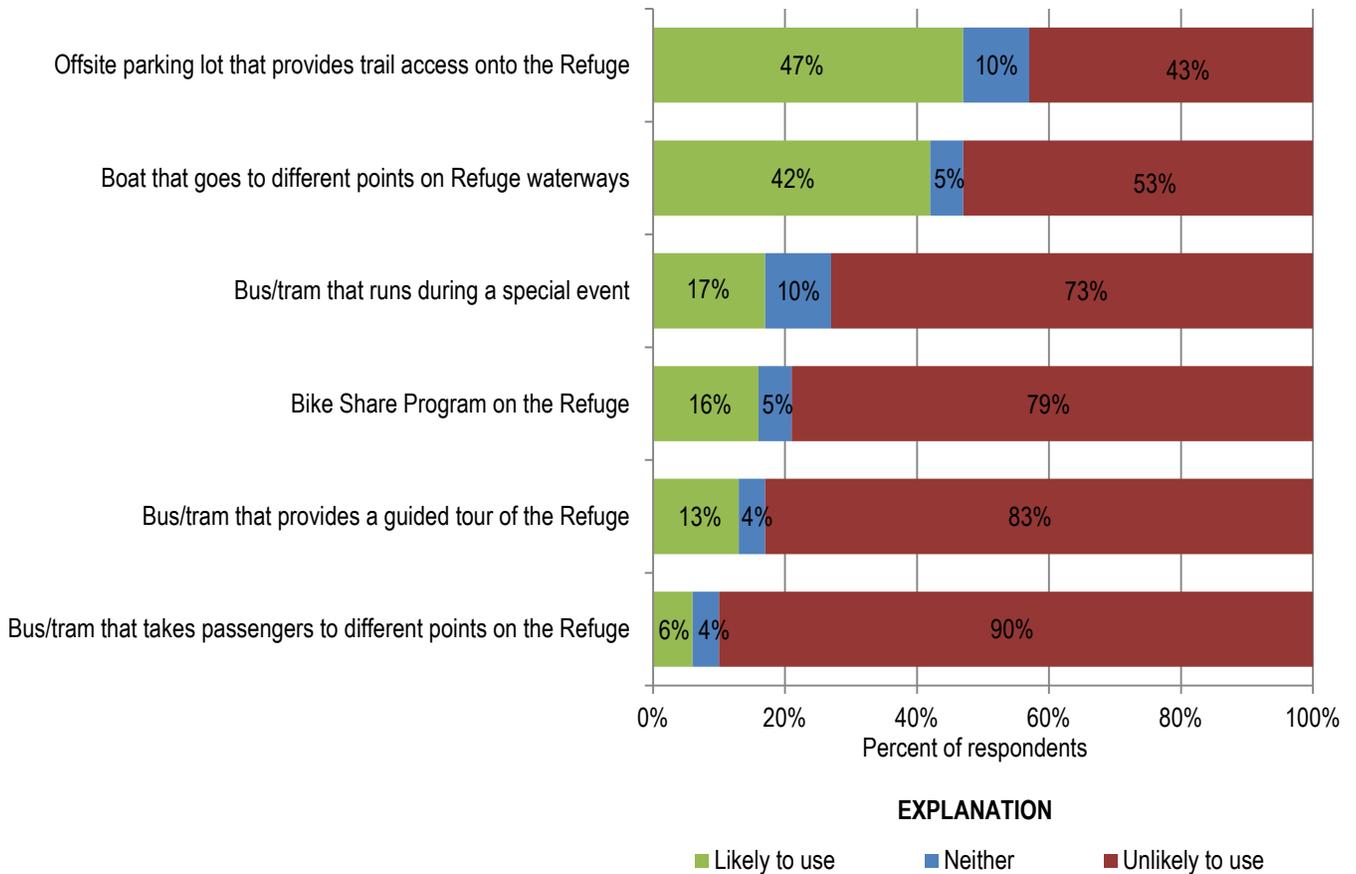
*One goal of this national visitor survey was to identify visitor trends across the Refuge System to more effectively manage refuges and provide visitor services. Two important issues to the Refuge System are transportation on refuges and communicating with visitors about climate change. The results to these questions will be most meaningful when they are evaluated in aggregate (data from all participating refuges together). However, basic results for Charles M. Russell 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 Charles M. Russell NWR visitors who were surveyed were *unlikely* to use any of the options, *except* an offsite parking lot that provides access to national wildlife refuges in the future (fig. 13).

When asked about using alternative transportation at Charles M. Russell NWR specifically, 25% of visitors indicated they were unsure whether it would enhance their experience; however, some visitors thought alternative transportation would enhance their experience (9%) and others thought it would not (66%).



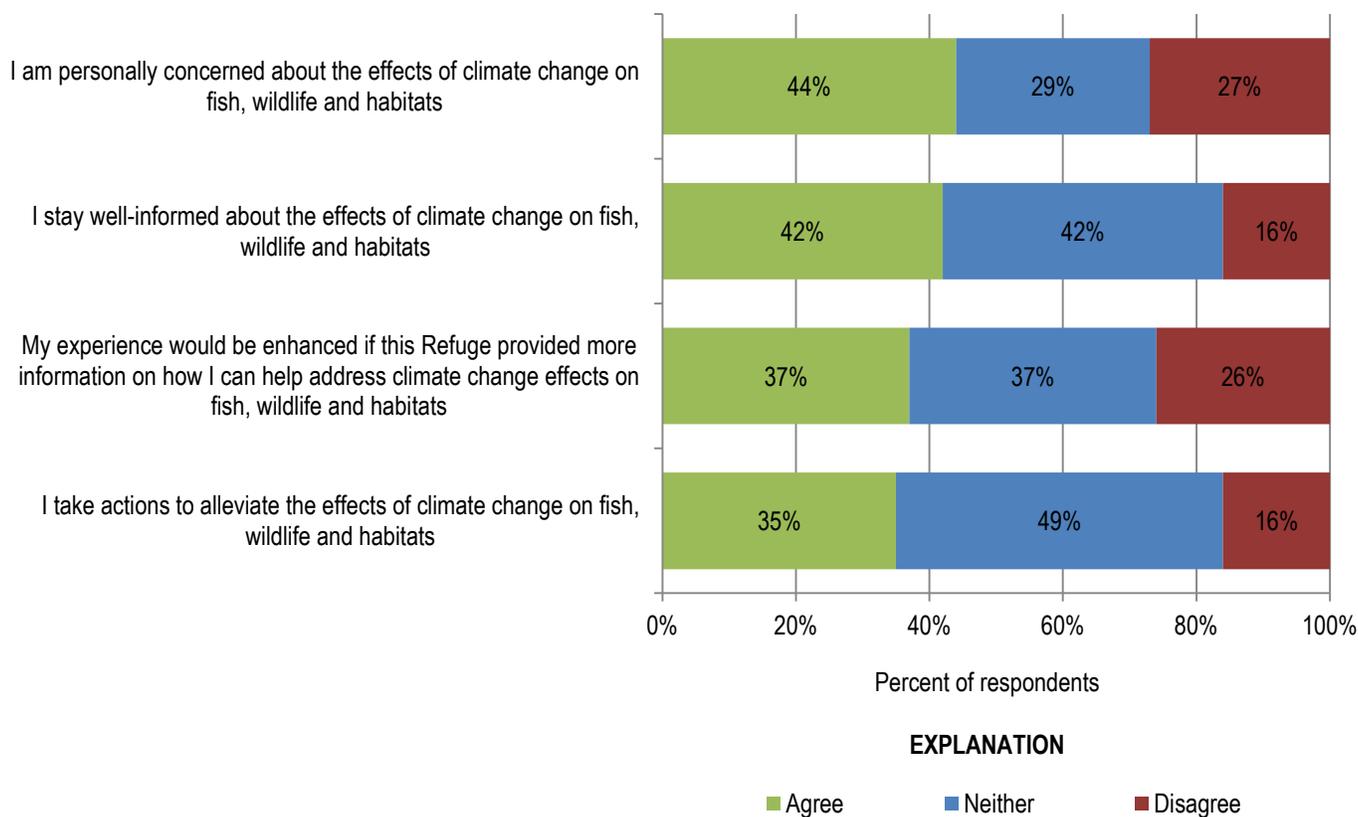
**Figure 13.** Visitors’ likelihood of using alternative transportation options at national wildlife refuges in the future (n ≥ 187).

### 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 Charles M. Russell NWR did not agree or disagree with any of the statements in figure 14.



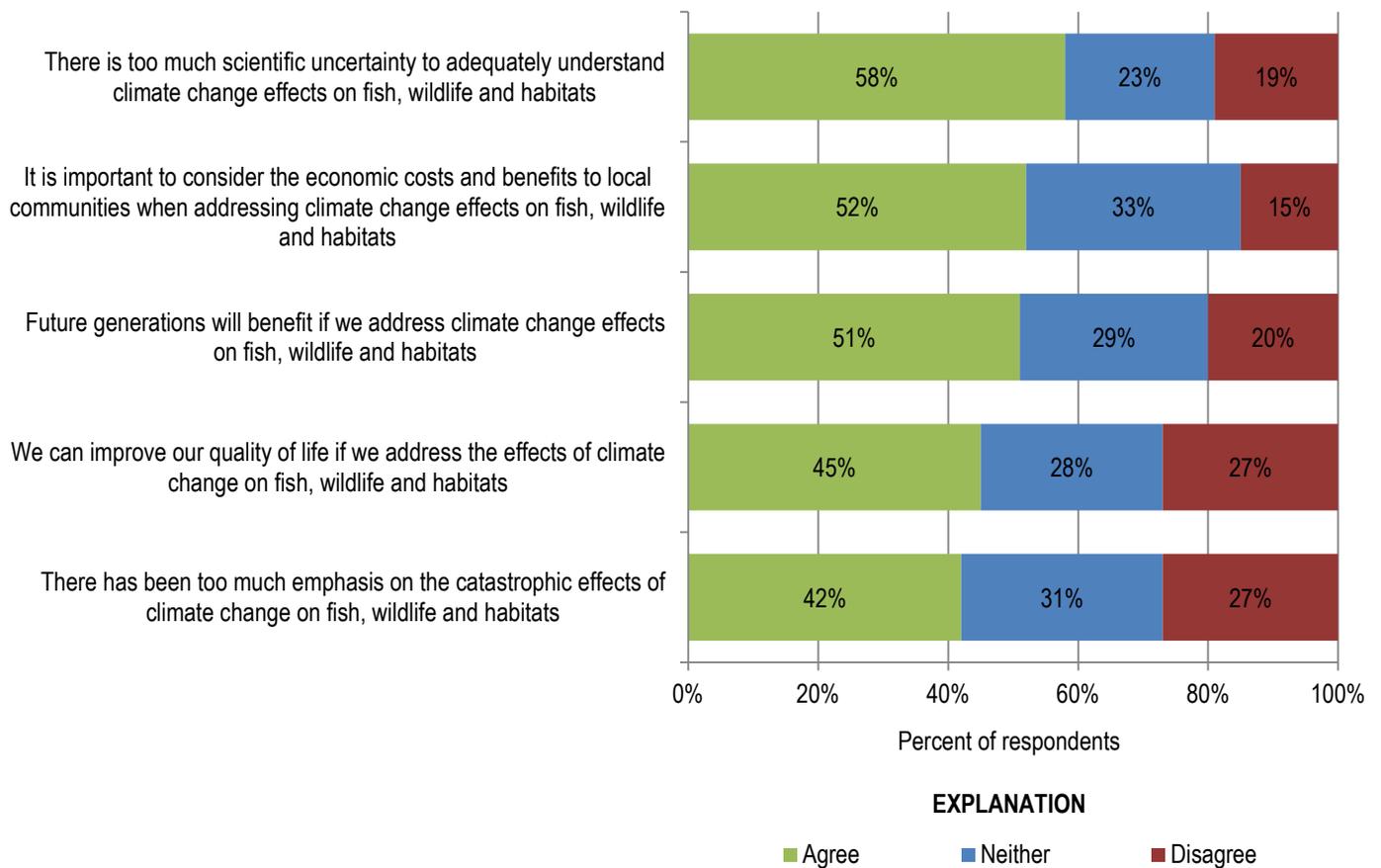
**Figure 14.** Visitors’ personal involvement with climate change related to fish, wildlife and their habitats (n ≥ 185).

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

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

Such information suggests that certain beliefs resonate with a greater number of visitors than other beliefs do. This information is important to note because some visitors (37%) indicated that their experience would be enhanced if Charles M. Russell 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 ≥ 185).

## Conclusion

These individual refuge results provide a summary of trip characteristics and experiences of a sample of visitors to Charles M. Russell 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.

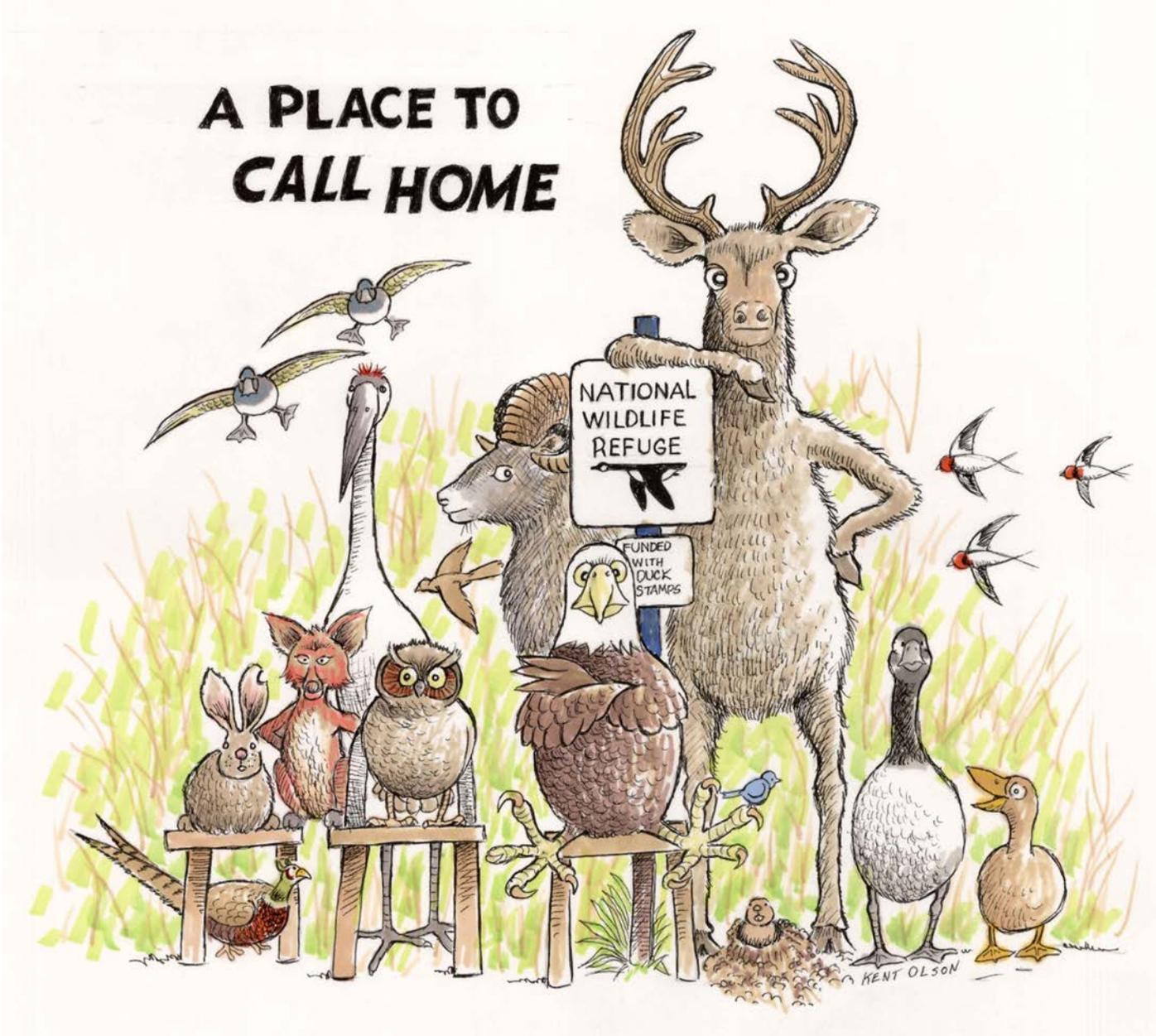
## References

- Bruyere, B.L., Rodriguez, D.A., and Vaske, J.J., 2002, Enhancing importance-performance analysis through segmentation: *Journal of Travel and Tourism Marketing*, v. 12, no. 1, p. 81-95.
- Carver, E., and Caudill, J., 2007, Banking on nature 2006: The economic benefits to local communities of National Wildlife Refuge visitation: U.S. Fish and Wildlife Service, Division of Economics, Washington, D.C., 372 p., accessed September 30, 2011, at [http://www.fws.gov/refuges/about/msWord/BankingonNature\\_2006\\_11-23.doc](http://www.fws.gov/refuges/about/msWord/BankingonNature_2006_11-23.doc).
- Clark, J.R., 2001, Mission and Goals (National Fish and Wildlife Service Director's Order #132–601 FW1), accessed November 18, 2011 at [http://www.fws.gov/refuges/policiesandbudget/HR1420\\_missionGoals.html](http://www.fws.gov/refuges/policiesandbudget/HR1420_missionGoals.html).
- Dillman, D.A., 2007, Mail and Internet surveys: The tailored design method. (2nd ed.): Hoboken, N.J., John Wiley and Sons, Inc., 523 p.
- Krechmer, D., Grimm, L., Hodge, D., Mendes, D., and Goetzke, F., 2001, Federal lands alternative transportation systems study – Volume 3 – Summary of national ATS needs: prepared for Federal Highway Administration, and Federal Transit Administration in association with National Park Service, Bureau of Land Management, and U.S. Fish and Wildlife Service, 80 p. (Also available at [http://www.fta.dot.gov/documents/3039\\_study.pdf](http://www.fta.dot.gov/documents/3039_study.pdf).)
- Leiserowitz, A, Maibach, E., and Roser-Renouf, C., 2008, Global warming's six Americas: An audience segmentation: New Haven, Conn., Yale University.
- Martilla, J.A., and James, J.C., 1977, Importance-performance analysis: *Journal of Marketing*, v. 41, p. 77–79.
- Nisbet, M.C., 2009, Communicating climate change: Why frames matter for public engagement: *Environment*, v. 51, p. 12-23.
- Salant, P., and Dillman, D.A., 1994, How to conduct your own study: New York, N.Y., John Wiley and Sons, Inc.

- Sexton, N.R., Dietsch, A.M., Don Carlos, A.W., Koontz, L., Solomon, A. and Miller, H., 2011, National wildlife refuge visitor survey 2010/2011: Individual refuge results: U.S. Geological Survey Data Series 643.
- Stynes, D.J., 2008, National Park visitor spending and payroll impacts, 2007: East Lansing, Mich., Michigan State University, Department of Community, Agriculture, Recreation and Resource Studies.
- Tarrant, M.A., and Smith, E.K., 2002, The use of a modified importance-performance framework to examine visitor satisfaction with attributes of outdoor recreation settings: *Managing Leisure*, v. 7, no. 2, p. 69–82.
- Uniack, T., 1999, The citizen's wildlife refuge planning handbook: Charting the future of conservation on the National Wildlife Refuge near you: Defenders of Wildlife, Washington, D.C., accessed April 2010 at [http://www.defenders.org/resources/publications/programs\\_and\\_policy/habitat\\_conservation/federal\\_lands/citizen's\\_wildlife\\_refuge\\_planning\\_handbook.pdf](http://www.defenders.org/resources/publications/programs_and_policy/habitat_conservation/federal_lands/citizen's_wildlife_refuge_planning_handbook.pdf).
- U.S. Department of the Interior, Fish and Wildlife Service and U.S. Department of Commerce, U.S. Census Bureau, 2007, 2006 National survey of fishing, hunting, and wildlife-associated recreation: U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C., 168 p.
- U.S. Fish and Wildlife Service, 2007, America's national wildlife refuges, Fact Sheet, last updated July 31, 2007.
- U.S. Fish and Wildlife Service, 2010, Rising to the urgent challenge: Strategic plan for responding to accelerating climate change: U.S. Fish and Wildlife Service, Division of Refuges, Washington, D.C., 32 p., accessed April 2011 at <http://www.fws.gov/home/climatechange/pdf/CCStrategicPlan.pdf>.
- Vaske, J.J., Beaman, J., Stanley R., and Grenier, M., 1996, Importance-performance and segmentation: Where do we go from here?: *in* Fesenmaier, D.R., O'Leary, J.T., and Uysal, M., eds., *Recent advances in tourism marketing research*: New York, The Haworth Press, Inc., p. 225-240.
- Wade, D.J. and Eagles, P.F.J., 2003, The use of importance-performance analysis and market segmentation for tourism management in parks and protected areas: An application to Tanzania's National Parks: *Journal of Ecotourism*, v. 2, no. 3, p. 196-212.

This page left intentionally blank.

# National Wildlife Refuge Visitor Survey



**PLEASE READ THIS FIRST:**

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

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

---

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

---

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

<input type="checkbox"/> 56%	Big game hunting	<input type="checkbox"/> 24%	Hiking	<input type="checkbox"/> 1%	Environmental education (for example, classrooms or labs, tours)
<input type="checkbox"/> 14%	Upland/Small-game hunting	<input type="checkbox"/> 2%	Bicycling	<input type="checkbox"/> 2%	Special event ( <i>please specify</i> ) <u>See Appendix B</u>
<input type="checkbox"/> 2%	Migratory bird/Waterfowl hunting	<input type="checkbox"/> 21%	Auto tour route/Driving	<input type="checkbox"/> 7%	Other ( <i>please specify</i> ) <u>See Appendix B</u>
<input type="checkbox"/> 39%	Wildlife observation	<input type="checkbox"/> 27%	Motorized boating	<input type="checkbox"/> 1%	Other ( <i>please specify</i> ) <u>See Appendix B</u>
<input type="checkbox"/> 10%	Bird watching	<input type="checkbox"/> 6%	Nonmotorized boating (including canoes/kayaks)		
<input type="checkbox"/> 56%	Freshwater fishing	<input type="checkbox"/> 4%	Interpretation (for example, exhibits, kiosks, videos)		
<input type="checkbox"/> 0%	Saltwater fishing				
<input type="checkbox"/> 27%	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?

<input type="checkbox"/> 79%	No		
<input type="checkbox"/> 21%	Yes → If yes, what did you do there? (Please mark <b><u>all that apply.</u></b> )		
<input type="checkbox"/> 0%	Visit the gift shop or bookstore	<input type="checkbox"/> 10%	Watch a nature talk/video/presentation
<input type="checkbox"/> 28%	View the exhibits	<input type="checkbox"/> 48%	Stopped to use the facilities (for example, get water, use restroom)
<input type="checkbox"/> 78%	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	
89%	87%	89%	It was the primary purpose or sole destination of my trip.
9%	13%	9%	It was one of many equally important reasons or destinations for my trip.
2%	0%	2%	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**   368   number of miles

**Local**   32   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?

19% No (*skip to question #9*)

81% Yes → What **type of group** were you with on your visit? (*Please mark **only one.***)

95% Family and/or friends

1% Organized club or school group

0% Commercial tour group

4% Other (*please specify*) See Appendix B

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

  5   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.***)

82% Friends or relatives

4% Refuge website

8% Signs on highway

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

3% Recreation club or organization

2% Television or radio

12% People in the local community

6% Newspaper or magazine

9% Refuge printed information (brochure, map)

6% 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.***)

48% Spring  
(March-May)

27% Summer  
(June-August)

73% Fall  
(September-November)

7% Winter  
(December-February)

11. How many times have you visited...

...this Refuge (including this visit) in the last 12 months?   5   number of visits

...other National Wildlife Refuges in the last 12 months?   1   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"/> 38% | Private vehicle without a trailer                             | <input type="checkbox"/> 0%  | Refuge shuttle bus or tram       | <input type="checkbox"/> 2%  | Bicycle                               |
| <input type="checkbox"/> 70% | 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"/> 16% | ATV or off-road vehicle          | <input type="checkbox"/> 2%  | Other ( <i>please specify below</i> ) |
| <input type="checkbox"/> 7%  | Recreational vehicle (RV)                                     | <input type="checkbox"/> 27% | 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"/> 27% | Signs on highways  | <input type="checkbox"/> 4%  | Directions from Refuge website                        |
| <input type="checkbox"/> 10% | A GPS navigation system  | <input type="checkbox"/> 3%  | Directions from people in community near this Refuge  |
| <input type="checkbox"/> 24% | A road atlas or highway map                                      | <input type="checkbox"/> 24% | Directions from friends or family                     |
| <input type="checkbox"/> 8%  | Maps from the Internet (for example,<br>MapQuest or Google Maps) | <input type="checkbox"/> 60% | Previous knowledge/I have been to this Refuge before  |
|                              |  | <input type="checkbox"/> 1%  | 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"/> 83%	<input type="checkbox"/> 7%	<input type="checkbox"/> 4%	<input type="checkbox"/> 5%	<input type="checkbox"/> 1%
...a bike that was offered through a Bike Share Program for use while on the Refuge?	<input type="checkbox"/> 68%	<input type="checkbox"/> 11%	<input type="checkbox"/> 5%	<input type="checkbox"/> 14%	<input type="checkbox"/> 2%
...a bus or tram that provides a guided tour of the Refuge with information about the Refuge and its resources?	<input type="checkbox"/> 75%	<input type="checkbox"/> 8%	<input type="checkbox"/> 4%	<input type="checkbox"/> 11%	<input type="checkbox"/> 2%
...a boat that goes to different points on Refuge waterways?	<input type="checkbox"/> 43%	<input type="checkbox"/> 10%	<input type="checkbox"/> 5%	<input type="checkbox"/> 31%	<input type="checkbox"/> 10%
...a bus or tram that runs during a special event (such as an evening tour of wildlife or weekend festival)?	<input type="checkbox"/> 62%	<input type="checkbox"/> 12%	<input type="checkbox"/> 10%	<input type="checkbox"/> 15%	<input type="checkbox"/> 2%
...an offsite parking lot that provides trail access for walking/hiking onto the Refuge?	<input type="checkbox"/> 36%	<input type="checkbox"/> 7%	<input type="checkbox"/> 10%	<input type="checkbox"/> 30%	<input type="checkbox"/> 18%
...some other alternative transportation option? ( <i>please specify</i> ) <u>See Appendix B</u>	<input type="checkbox"/> %	<input type="checkbox"/> 4%	<input type="checkbox"/> 8%	<input type="checkbox"/> 27%	<input type="checkbox"/> 62%

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

- 9% Yes       66% No       25% 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
10%	7%	5%	31%	47%	Surface conditions of roads	19%	22%	5%	32%	22%	NA
9%	10%	14%	35%	31%	Surface conditions of parking areas	10%	13%	14%	33%	30%	NA
12%	1%	15%	28%	45%	Condition of bridges	5%	8%	13%	38%	36%	NA
10%	5%	37%	29%	18%	Condition of trails and boardwalks	5%	7%	36%	23%	28%	NA
9%	9%	12%	34%	36%	Number of places for parking	8%	11%	16%	39%	27%	NA
7%	8%	17%	38%	30%	Number of places to pull over along Refuge roads	9%	17%	25%	31%	18%	NA
7%	7%	12%	30%	44%	Safety of driving conditions on Refuge roads	12%	12%	14%	37%	25%	NA
7%	6%	15%	35%	37%	Safety of Refuge road entrances/exits	6%	5%	18%	38%	33%	NA
7%	5%	20%	34%	34%	Signs on highways directing you to the Refuge	5%	5%	22%	34%	34%	NA
8%	3%	11%	38%	40%	Signs directing you around the Refuge roads	7%	15%	18%	39%	21%	NA
10%	8%	26%	31%	25%	Signs directing you on trails	8%	7%	31%	37%	17%	NA
10%	7%	32%	26%	26%	Access for people with physical disabilities or who have difficulty walking	8%	9%	49%	22%	12%	NA

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

See Appendix B

---



---



---



---

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

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

8% Yes

92% No → How much time did you spend **in local communities** on this trip?  
             3   number of hours      OR        3   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
12%	3%	4%	1%	13%	4%	28%	2%	5%	10%	18%

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

0%	Far too low	5%	Too low	83%	About right	5%	Too high	8%	Far too high	79%	Did not pay a fee <i>(skip to Section 4)</i>
----	-------------	----	---------	-----	-------------	----	----------	----	--------------	-----	---

6. Please indicate whether you disagree or agree with the following statement. *(Please mark **only one**.)*

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

5%	Strongly disagree	3%	Disagree	21%	Neither agree or disagree	51%	Agree	21%	Strongly agree
----	-------------------	----	----------	-----	---------------------------	-----	-------	-----	----------------

---

#### SECTION 4. Your experience at this Refuge

---

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

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Not Applicable
Overall, I am satisfied with the recreational activities and opportunities provided by this Refuge.	3%	6%	6%	43%	43%	NA
Overall, I am satisfied with the information and education provided by this Refuge about its resources.	3%	5%	15%	52%	26%	NA
Overall, I am satisfied with the services provided by employees or volunteers at this Refuge.	7%	4%	8%	50%	31%	NA
This Refuge does a good job of conserving fish, wildlife and their habitats.	4%	6%	7%	35%	48%	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
17%	12%	24%	34%	13%	Availability of employees or volunteers	5%	5%	36%	26%	28%	NA
13%	8%	24%	32%	23%	Courteous and welcoming employees or volunteers	2%	2%	31%	26%	40%	NA
10%	7%	16%	42%	25%	Knowledgeable employees or volunteers	2%	3%	28%	31%	36%	NA
8%	6%	10%	38%	39%	Printed information about this Refuge and its resources (for example, maps and brochures)	3%	10%	17%	29%	40%	NA
12%	11%	25%	38%	15%	Informational kiosks/displays about this Refuge and its resources	1%	5%	31%	35%	28%	NA
7%	4%	6%	43%	39%	Signs with rules/regulations for this Refuge	5%	11%	18%	37%	29%	NA
11%	10%	28%	36%	15%	Exhibits about this Refuge and its resources	0%	6%	39%	31%	24%	NA
14%	11%	42%	24%	10%	Environmental education programs or activities	0%	3%	59%	23%	14%	NA
14%	9%	32%	31%	14%	Visitor Center	2%	2%	45%	31%	19%	NA
10%	7%	35%	26%	22%	Convenient hours and days of operation	0%	3%	41%	31%	25%	NA
5%	4%	10%	32%	49%	Well-maintained restrooms	17%	9%	9%	33%	33%	NA
12%	9%	38%	26%	14%	Wildlife observation structures (decks, blinds)	2%	7%	53%	23%	15%	NA
17%	11%	43%	19%	9%	Bird-watching opportunities	1%	2%	58%	21%	19%	NA
8%	2%	14%	38%	39%	Opportunities to observe wildlife other than birds	1%	3%	22%	32%	41%	NA
7%	5%	14%	43%	31%	Opportunities to photograph wildlife and scenery	1%	3%	17%	32%	47%	NA
4%	3%	9%	11%	73%	Hunting opportunities	5%	6%	12%	36%	42%	NA
4%	1%	10%	20%	66%	Fishing opportunities	3%	4%	13%	33%	47%	NA
10%	6%	31%	25%	28%	Trail hiking opportunities	1%	4%	40%	34%	22%	NA
14%	8%	39%	23%	16%	Water trail opportunities for canoeing or kayaking	2%	1%	55%	23%	20%	NA
17%	15%	44%	16%	8%	Bicycling opportunities	6%	3%	66%	15%	11%	NA
19%	10%	49%	12%	10%	Volunteer opportunities	2%	1%	70%	15%	12%	NA

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

See Appendix B

---

---

---

---

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

---

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

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

92% Yes

8% No

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

92% Yes

8% No

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

82% Yes

18% No

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

See Appendix B

---

---

---

---

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

Statements about climate change	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
I am personally concerned about the effects of climate change on fish, wildlife and their habitats.	16%	11%	29%	29%	14%
We can improve our quality of life if we address the effects of climate change on fish, wildlife and their habitats.	16%	11%	28%	31%	14%
There is too much scientific uncertainty to adequately understand how climate change will impact fish, wildlife and their habitats.	8%	11%	23%	39%	19%
I stay well-informed about the effects of climate change on fish, wildlife and their habitats.	6%	9%	42%	34%	8%
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.	6%	9%	33%	40%	12%
I take actions to alleviate the effects of climate change on fish, wildlife and their habitats.	9%	6%	50%	28%	7%
There has been too much emphasis on the catastrophic effects of climate change on fish, wildlife and their habitats.	8%	19%	31%	25%	17%
Future generations will benefit if we address the effects of climate change on fish, wildlife and their habitats.	11%	9%	29%	35%	16%
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.	17%	10%	36%	30%	7%

## 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?

99% Yes  1% No → If not, what is your home country? See Figure 4 in Report

2. Are you?  93% Male  7% Female

3. In what year were you born? 1961 (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)			
					1%			34%				52%				12%			

5. What ethnicity do you consider yourself?  1% Hispanic or Latino  99% Not Hispanic or Latino

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

7% American Indian or Alaska Native  0% Black or African American  97% White  
 0% Asian  0% Native Hawaiian or Pacific Islander

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

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

<input type="checkbox"/> 2% Less than \$10,000	<input type="checkbox"/> 14% \$35,000 - \$49,999	<input type="checkbox"/> 18% \$100,000 - \$149,999
<input type="checkbox"/> 4% \$10,000 - \$24,999	<input type="checkbox"/> 27% \$50,000 - \$74,999	<input type="checkbox"/> 5% \$150,000 - \$199,999
<input type="checkbox"/> 10% \$25,000 - \$34,999	<input type="checkbox"/> 18% \$75,000 - \$99,999	<input type="checkbox"/> 2% \$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.)?

15 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

This page left intentionally blank.

## Appendix B: Visitor Comments to Open-Ended Survey Questions for Charles M. Russell 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
Adult education/DIG field school	1
Family events	1
Ferret count	1
Total	3

Other Activity	Frequency
ATV riding/4-wheeling	3
Camping	4
Camping with other hunters	1
Guide fishing and hunting	1
Paddle fishing	4
Total	13

2 <sup>nd</sup> Other Activity	Frequency
Camping	2

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

Other Visitor Center Activity	Frequency
Get maps	1
We went, but no one was there.	1
Total	2

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
Hunting group	7

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

Other Ways Heard about This Refuge	Frequency
Hunting	1
Hunting map	1
Hunting regulations	3
I looked it up on a map out of curiosity.	1
Map on big game hunting	1
Montana Fish, Wildlife and Parks	2
Montana game regulations	1
MT Outdoor Radio	1
Stumbled upon it	1
Total	12

## Survey Section 2

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

Other Forms of Transportation	Frequency
Canoe	1
State of MT vehicle	1
Vendor van	1
Total	3

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

Other Ways Found This Refuge	Frequency
BLM map	1
Books	1
Total	2

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
ATV	11
ATV, Snowmobile	1
Boat or off-road vehicle	1
Float plane	1
Horseback	6
Hovercraft	1
Mountain biking	1

Private boat	1
Private boat or balloon concession	1
Private vehicle	4
Private vehicle on designated routes	1
Total	29

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 = 58)

Access to the refuge is very important, but roads within are very unimportant. Refuge needs to be kept as primitive as possible.

Accessing the lake (Fort Peck) from the boat ramps only during the winter for ice fishing would be nice. I would like to see it so you could pull off the lake at times to go around pressure ridges and the like. With such a big lake, with limited boat ramps and long travels, it can be very unsafe at times.

Based on weather conditions, the roads are either good or not traversable. Access to hunting areas is severely limited when rains hit. We planned on staying ten days, but because access was very limited, our trip ended prematurely. In fact, I am contemplating not returning next hunting season.

Better signage stating that unimproved roads are impassable when wet and that you should be prepared to get stuck for a few days.

Boat tours on the river would be my first choice for addition.

Camping spots are limited and are not kept up. Roads are not maintained and access to the lakes is very limited. The trees planted, the solar watering system, and the fencing around trees were left to die because they were never maintained. Taxpayer money is again ignored and wasted.

Elk viewing at Slippery Ann is bad. Widen the roads or make better parking spaces. Maintain one east/west route in the refuge.

Fix the roads please.

Gravel on the roads eat the car. They are very dangerous and it makes the visits in wet conditions scary to travel.

I came to the refuge to bow hunt. I want the traffic to continue to be controlled off of the main roads. It is important to me that off road vehicles are not ruining the backcountry and the hunting environment.

I feel that if it rains, they need to put up gates to keep idiots from trying to drive off of the main roads. Signs don't seem to make a difference.

I had to drive to Lewistown for groceries and at least 50 miles for fuel. That is too far. Too bad we couldn't get it closer. It would be a good investment to have stores and fuel closer.

I haven't looked on the CMR refuge website, but there needs to be a section related to road use and essential items you need, in case you get stuck in the gumbo.

Improved road access on the refuge north of the river and east of Fred Robinson Bridge. One or two more improved gravel roads are needed with access to the river, as weather conditions often make most roads not passable and can strand visitors until conditions improve, sometimes for days. Those that do try to travel these roads cause severe damage to them. This would also spread out visitor density in the refuge.

It is a very primitive refuge. Nothing else is needed here. It is just the way I like it for a place like this.

It would be good to gate more roads when they are wet or not traversable, but I realize it would be tough to do, as it might trap some vehicles already behind the gates. Some idiots just can't stay out until roads dry out.

It's rustic and scenic. Lewis and Clark didn't use a bus.

It's time you people quit closing all the roads just so someone can think he or she is a big shot. It's just stupid to close the roads. Who's going to see the place if you jack\*\*\*\*\* close the roads? Not my grandma that's for sure. (name and address)

Keep the refuge road-less with no motorized vehicle roads.

Make the road names on your map match the names of the roads on BLM and Block Management Area maps.

Make the roads more accessible and try grading them.

Many roads are not traversable when wet, which limits access.

More trails need to be opened for the handicapped and elderly to travel throughout the CMR.

My responses were based on my personal experience this past year. Please consider that it rained 6 of the 10 days that we were on the refuge. The road conditions were very treacherous. Please consider the circumstances.

Need to add more gravel and/or road base, as the roads become unsafe/impassable with rain.

Not enough open roads.

Numbered roads could at least be graded, as in the past. Not everyone has the means or physical ability to hike or backpack.

People just have to use their heads when traveling in remote areas. You just can't fix stupid.

Remember that there are several types of refuges, some remote and some not. It might be a good idea to manage transportation on popular refuges, but universal control of our transportation could limit already remote areas.

Roads should have more gravel on them so you don't get stuck when traveling through.

Sand Creek area roads were terrible.

Some access roads are impassable when wet.

The campground roads are really bad. They need to be graded so the water doesn't stand on them. They are very rough with deep ruts.

The CMR NWR is a remote and rugged area. I do not expect 1st class roads there, only that serious hazards and traps be dealt with. High clearance and 4-wheel drive only roads should be marked.

The elk viewing area is a circus; trying to navigate along the road when the tour buses are there, with their little wine tables and the people who use them, is a hazard and should not be allowed.

The numbered roads on the refuge need better drainage in some areas. Most of these areas that I have driven through in the past 15 years could drain down coulees and not make mud holes in the road, which then get torn up by traffic.

The road in the camping area at Slippery Ann Meadow needs improvement.

The road to Rock Creek Marina needs to be upgraded.

The roads and trails need to be graveled for access in and out. Any moisture and these become next to impossible to travel.

The roads are not marked and are very primitive--no gravel, no grading. Every low spot has a two foot mud hole. People should be able to travel around!

The roads had large mud holes from a wet summer, and nothing appeared to be done about them. Fall is a very busy time and taking three years to draw a tag for this area, I was disappointed.

The roads were really bad, especially when it rained. The roads turn to an absolute muddy mess. This makes it almost impossible to get around and forces you to camp near the main road or be stuck for long periods of time.

The roadway needs gravel, so you can get around during the times when it rains.

There are many mudholes on the roads, so visitors try to drive around them and get stuck and then the next guy drives further out on the prairie; the next thing you know, the driving trail is 100 feet off the road. If the mudholes could be drained and fixed, I think it would cause less environmental damage than driving around the mudholes.

There are too many elk viewers. They drive too fast and they have no respect for other drivers. The viewer traffic is ruining the road. The camp host causes traffic jams, because he stops in the middle of the road.

There is an old creek bed crossing on 420 just off of 201 that had water this year and cut off river access and parking areas. That is very important access. You need a low water bridge. That was our destination the whole trip, and we could not get there, even after everything was dried up.

There needs to be at least one road that is graveled from the refuge to the BLM land. Some more areas to camp when the weather is bad would be nice.

There's a safety hazard of getting stuck when there is no help.

This is a very rural area. The road conditions have improved over the last 15 years, but the progress is very slow.

We are very satisfied with using our own transportation. We have taken a bus tour through Denali in Alaska and I will never do it again!

We were canoeing. We were dropped off and picked up; we're not sure if the roads were on the refuge or not.

We've been going here for over 20 years and it would be nice to have some place to ride our ATVs. We can't ride anywhere now unless it's on the main road, which is dumb because we'd be in other vehicle's ways.

Wilder trail was not accessible for 3-days due to rain, so we missed 2 days of hunting. But, if the road was gravel, there would be too many hunters, so it's probably fine the way it is.

You need more signs marking the routes to Fourchette Bay, especially at the forks in the road. Mile and destination signs would be nice.

You need to better maintain roads, so when it rains or snows, people can still use the park.

You need to open all the trails you have closed to allow the handicapped access by motor vehicle so they can see the refuge. You close all the roads so that no one can enjoy it!

You need to open more roads during the hunting season for older people to access.

You should post that backcountry roads are impassible in wet weather.

---

## Survey Section 4

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

---

### Comments on Services, Facilities, and Activities at This Refuge (n = 70)

As a rider of ATVs, I believe you should not allow them on the refuge, because people are not following the rules and law enforcement cannot be everywhere.

Bathrooms are never kept up, and with more and more people, this is an issue with only one bathroom. More camping spaces are needed, if there's going to be so many tags allowed.

Clean the restrooms better, make boat docks that are handicap friendly, and make access to hunting on the road for the handicapped.

Consider no wake zones for boats traveling past designated or traditional camping areas along waterways.

Cut back on cow elk tags issued for the area. Every year we go out there (during rifle season), we see fewer and fewer elk.

Due to a shorter paddle fishing season, it is harder to find a place to camp due to restraints! Everyone is more competitive when finding a camping spot. People used to have more time to relax (that's why we are there). In my words, it's getting to be more like combat camping and fishing. There used to be fewer people at one time, but now everyone goes earlier to make sure they get to catch paddle fish.

Due to the extreme heat and bug problems (mosquitoes and gnats), the campground is barely bearable in the summer months. Electricity in the campgrounds to run air conditioning would be worth paying a lot more for a campsite. Spraying for insects would help, too.

Electrical hookups at the boat launch would be nice, as would a paved boat launch. You need drainage on most roads.

Fees for camping doubled two years ago with no visible increase in services or facilities. It is not necessary for the area. Reservations via computer should never be required.

Fix the Turkey Joe boat ramp. Get rid of the out-of-state hunters.

FWS staff at CMR is extraordinary.

Game and Fish were very helpful!

Great job on restrooms. We don't need the camping guy coming around every time we come into camp. We don't like the new reservation system.

---

---

I am disappointed in the management of the lake water levels and campsite boat and deck maintenance. The road and campsites in the McGuire Creek area are in poor condition. You need more campsites there.

I love the CMR! It's so cool and so remote! Please don't change it.

I would like to see a clear explanation of the refuge rules along the main road. Some sort of brochure explaining the hunting regulations would also be great. Either of these could be available somewhere at the refuge or on the website. I had called about a hunting pack and was told through an email to the refuge website that I would be sent one, yet I never received one.

I would like to see the No Wake Law in effect for a couple days all hunting season, so canoers wouldn't get swamped by big jet boats.

In the camping area where RVs are parked, you need better gravel. It would be great if there were electric hookups for campers.

It has a well maintained campground and a friendly and informed camp host.

It is very important to have people manage this recreation area, but I rarely run into any of these individuals. I use a camper, so I feel that a necessary service is consistent access to clean water and trailer dumping services. I did get water at the Kipp recreation area, but it was not clean. In fact, they closed the service two days after we arrived.

It should be "no elk refuge."

It was welcoming to have clean restrooms with toilet paper along the route.

It's a primitive refuge; everything needed is here.

It's a very large refuge with good local facilities. Leave the rest rustic!

It's an awesome place to visit.

Kill mosquitoes.

Law enforcement on the refuge is a joke.

MFWP have way too many cow tags in this area. The refuge is just that, a refuge for people and game. Get rid of the MFWP. Let more elk and deer live there.

More pit toilets at canoe campsites would have been nice. Willing to pay a higher fee for those.

More toilets are needed.

Motorized boat opportunities was left off this list. This is very important to me and many other people I know that visit the CMR refuge every year.

My car was stuck for over a week and no one from the refuge had the right tools to get me out and did not pull my car out of the mud.

Need more restrooms and more cleaning!

Need more trash, restroom, and drinking water facilities. Also need road improvement (road base/gravel), as most roads are not able to be traveled after rain.

No one checked us for hunting permits on the north or south side of the river, as required. Group hunting was common.

---

---

Offer an extended camping permit for a fee like other places do in that state.

Open the closed roads for retrieval of big game. Keep this area a refuge, not a wilderness. Have a re-growth program for trees. There could be signs with phone numbers to turn in rule violations to keep everyone honest.

Peddle bikes should be allowed for off road travel.

Poor signage. You need more signs marking the route into Fourchette Bay. Roads need to be improved with more gravel base. Dumpsters at the bay are needed. Campgrounds would be nicer with more bathrooms, and they should be cleaned daily during busy seasons.

Restrooms could be improved at Rock Creek and Slippery Ann campgrounds.

Restrooms need more cleaning and main roads need better surfaces. More boat ramps and access would be nice.

Service roads need to be open to bicycling, as it would greatly help access to areas. Also you need to be able to use a game cart without a motor to retrieve game.

Slippery Ann needs new fish scales and less harassment by the law.

The bathroom by Slippery Ann was in very poor condition and needed cleaning very bad!

The bathroom was very dirty.

The camp hosts and biologists are very friendly.

The campground at the bridge was great. It was clean and quiet. Being able to watch elk was great also.

The CMR wants all ranchers and their cattle off the refuge. If all the money you have to operate was the grazing fees, then you would operate the refuge a lot better than you do now.

The hunting opportunities on the refuge need to be protected. Mountain lion populations are too thick and need to be hunted.

The outhouse was the most disgusting outhouse I've entered in quite some time. It wasn't even hot out and I was repulsed.

The paper and other things were sticking out of the hole in the outhouse. Very bad!

The personnel were friendly and helpful.

The refuge is a great place to see nature at work. The restrooms are good to have. Tours that take idiots to see elk is BS.

The restrooms and campgrounds are well maintained.

The restrooms need to be cleaned more often.

The restrooms were extremely unhealthy, dirty, and unclean. The US Fish and Wildlife person could not have cared less (get rid of him). The grass was not mowed. Roads around the camp were not maintained. It's a typical Federal Government operation; blaming others for why they don't keep things up!

The roads are bad and there is too much boat traffic for the shore.

---

---

The toilets are filthy and need to be cleaned more often.

There should be a place to buy firewood.

We love the elk viewing area in the fall; it's a great place for a relaxing drive. We have had some great big game hunts on the refuge.

We met a ranger in the backcountry who worked for the refuge. He was knowledgeable and very friendly. I wish I could remember his name; he asked us if we would take the survey. He should get a raise in pay.

We visited the DNR office in Lewistown and did not visit any centers on the refuge. The DNR employee was very helpful.

We would like to see more camping areas close to the face of the dam.

What a great place to visit and recreate. I enjoy the more primitive areas.

When the campgrounds are mostly empty, please relax the 15-day stay rule.

You need a better boat launch at Turkey Joe campground and regular cleaning of toilets/facilities. Extend the length of stay rules on the refuge.

You need more opportunities made available for people with disabilities.

You need more restrooms and to maintain the ones that are there. Roads and camping spots need to be kept up better with surface area.

You need more restrooms, more gravel on more roads, more places to park campers on the north and south side, and more gravel at Slippery Ann campground.

You need to install a trailer dump.

---

## Survey Section 5

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

---

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

1) The amount and quality of animals. 2) Foot traffic only.

A lot more area to explore, with lots of variety as well.

Abundance of wildlife, and remoteness of area. Limited roads.

Big game hunting access.

Big game hunting and fishing opportunities and allowing people to access public lands.

Bigger concentration of wildlife.

---

For the most part they offer a less congested, less touristy opportunity to experience wildlife and the outdoors in a minimally disturbed setting than national parks.

Good fishing and hiking opportunities, but not as crowded as National Parks.

Great outdoor recreation areas.

I believe refuges are unique in that they protect every living thing. Someone can't just go killing unprotected species on the refuge, and I love that.

I don't have experience with many refuges, but I like how the CMR is not overdeveloped. I prefer the natural/primitive environments.

I have never seen so many people elk hunting like I have on this refuge.

I love to go hunting in the backcountry and not be interfered with by ATVs. I enjoy being able to walk 3 plus miles to hunt big game and not have the hunt compromised by off road vehicles. The refuge is just beautiful; it's great to go to a place that hasn't been overdeveloped. The refuge is a great chance to see land and nature as it was years and years ago.

I think it is a very nice place to go to have plenty of fish and wildlife viewing opportunities and excellent big game hunting. I plan on making the trip a couple times a year for the rest of my life.

I think that it is unique because they have a focus like this one. It makes them unique from other public lands.

In addition to any state regulation, there are also federal regulations concerning hunting.

It gives everyone an opportunity to observe, photograph, and hunt various wildlife on the refuge and to fish and enjoy the river and its scenery.

It gives everyone the opportunity to enjoy God's country, no matter what your economic status is in life. It has some of the best things ever done by man to preserve humanity.

It has vast areas.

It is a beautiful piece of property that I think everyone should experience. The wildlife and the Missouri River are what make this refuge unique.

It is a unique location compared to other lands, and they take better care of the natural resources.

It has a wilderness character to it. This makes a unique and very appealing experience.

It is the best place in Montana to see that many elk. There are no wolves! It's a great place to come to bow hunt elk. I have been coming here for 20 years. When it's wet, you need more graveled places to park campers and a few more restrooms. The traffic during the rut at the viewing area was just huge. More people would stay if there were more places to camp! Thanks (name).

It is the largest of its kind and is very well managed.

It keeps a block of land from being broken up and sold, which keeps people from being able to enjoy them in the primitive way it should be, but it still allows access to see a great place.

It takes some special areas with an increase in wildlife habitat and controls some as a sanctuary and allows some for outdoor recreation. Keep it wild and keep it accessible.

It was a nice place to enjoy the wildlife in their mating season.

---

It was fairly open to access; however, you are forced to walk a long ways to get into the heart of it. Most of the roads are closed to ATVs and vehicles, which is ok, but since the fire forced a lot of hunters to hunt in the same area, it is a bit discouraging because of the overconcentration of hunters in one area.

It's a fantastic place to bring your family generation after generation!

It's a place a person can be with friends and family and enjoy the outdoors and preserve it for our future.

It's a place to get away from the hustle and bustle of everyday life, except for this past spring. If things don't change about combat camping and putting up with drunks, then I don't know how much longer we will be coming back up here. Like I said before, the family wants to get away, but when you have to camp five feet away from another camper and other people are not respectful, then it changes the perspective on camping. Fee areas for camping are bad, since you spend so much money just getting to the place you want to go, and they're always booked up. Non fee areas are where we try to go, since we go in large groups to get away from more people.

It's a place where visitors can observe wildlife in their natural habitat.

It's a pristine place to observe birds and elk; it's one of my favorite places to go. There are many opportunities to photograph wildlife and birds.

It's a wild river.

It's just neat!

It's more than just public land, it's special and managed that way. Keep up the good work!

It's open space where you can go without having 100 people around you all the time.

It's rugged, vast, and not developed too much.

It's unique--like visiting the zoo.

Its remote setting and the wildlife. It DOES NOT need further commercialization.

Its wildlife and unique location.

Keeping it as wild and free as possible (non commercial).

Limited roads.

Maintains wilderness setting and avoids commercialization.

More regulations for OHV, which makes for better habitat and hunting opportunities. I am an avid OHV rider, but appreciate a balance in use and no use areas.

More wildlife is observable.

Nature can take its course and still be able to host man, who can be a part of it and enjoy everything you can see.

No motorized vehicle access makes greater foot hunting opportunities.

Paddle fishing, ease of use with or without a boat, and viewing of wildlife such as elk (an animal that usually you wouldn't get to see much of).

---

We saw a lot of elk.

Preservation for public use.

Protected wildlife can be observed in a natural habitat.

Refuges provide a wilderness experience. There are very few places you can go in this country and experience the freedom that wildlife refuges offer. We are people who seek this out.

The amount of wildlife; I've never seen such a variety of animals. I even saw a scorpion.

The area and the congregation of the elk.

The badlands are beautiful, and I love paddle fishing.

The CMR is a vast, undeveloped wilderness. Motorized access restrictions are vital to keeping it wild and bountiful. The fact that people have to get out of a vehicle and hike to see wildlife is what keeps it so rewarding year after year.

The elk hunting opportunities; "the unmaintained outback wilderness adventures" offered for hunters and hikers.

The elk, fish, sheep, and water make it unique.

The elk.

The fact that it hasn't changed for centuries. To see it the way Lewis and Clark did is very cool. Other places we have been to have been built up and commercialized.

The fact that they are managed primarily for the benefit of wildlife.

The geography, wildlife, and plant life, and the vast and remote landscape.

The hunting opportunities.

The inaccessibility of it. It's nice to have to work at getting away. P.S. Make people camp where it is designated and not in the habitat.

The lack of people makes it unique.

The limited access during the hunting season, keeping a lower stress level for game, and keeping game in the area makes it unique.

The Missouri River is very beautiful.

The opportunity to see wildlife, native plants, fossils, and old buildings that have not been molested.

The protection of wildlife and their habitat.

The refuge is large and awesome. There are not any changes necessary other than controlling the lion population.

The Refuges are less abused by off-road travel on nondesignated trails.

---

The remoteness of the refuge makes it unique. I like the fact that it is not so commercialized. The more primitive, the better.

The Slippery Ann area is unique, because you can view elk.

The terrain, history, and the night sky from light pollution.

The vast area you have to recreate on, the diversity, and the large numbers of game to view make it unique.

The viewing makes it unique.

The viewing of the elk on the reserve and the bugling in the fall makes it unique.

The wildlife and everything that surrounds it makes it unique.

The wildlife and fishing make it unique.

The wildlife opportunities.

The wildlife this refuge has is wonderful, but if there are too many cow tags issued, then the elk will be gone like the rest of the state. Cut cow tags by one eighth.

The wildlife, scenery, and camping areas.

The wildlife.

Their mission of habitat makes it unique.

There are a lot of outdoor activities to do.

There are better opportunities for viewing and observing wildlife in their habitat.

There are big game animals and open spaces.

There are elk and private lands that are close by and accessible.

There are equal hunting opportunities for everybody, and this is getting harder and harder to find.

There are excellent elk hunting opportunities, when access is available. Due to excess rain, the roads were terrible and we had no access.

There are excellent hunting and fishing opportunities, and wildlife observing is great.

There are good facilities for easier access to wildlife observation.

There are great elk hunting opportunities.

There are lots of animals.

There are not too many people. You seldom see any refuge people, and if you do, they're very professional. I was born and raised in Blaine and Philips County, so I enjoy the Missouri River and brooks.

---

---

There are so many opportunities here: boating, wildlife, observations, camping - a unique place! We are so fortunate to live near this refuge. Thanks to USFWS for maintaining such a wonderful place. When we take visitors there, especially in the fall, they are amazed at all they see. The elk are magnificent.

There is an abundance of wildlife, hunting and viewing opportunities, a road and trail system, no fees, scenery, and a proximity to home.

There is an elk bugle watch.

There is an opportunity to fish and not as many people that time of the year.

There is fishing in Fort Peck.

There is hunting, wildlife viewing, isolation, and a huge landscape.

There is more of an opportunity to see wildlife.

There is mud!

There is no entrance fee and there is elk watching and hunting opportunities.

There is no other place where you can be that close to elk. It's pretty cool to see.

There is paddle fishing.

There is wildlife, mostly elk, big hills, and it is good to hike and hunt in.

They allow better and more access to areas that would not be accessible on public lands, which allows you to see and experience more.

They are kept the same and left the way mother nature, not humans, wants it.

They are remote. Has hunting, fishing and photographing opportunities.

They get you closer to nature without infringing upon it too much.

They seem to be the last wild places.

They seem to house really unique animal environments and they seem to be just full of animals. It is fun to see that many animals in such an amazing place. Thanks for preserving it!

The way your people manage wildlife and fisheries for all walks of life. It was a very good experience; we really enjoyed ourselves.

This particular refuge allows us to view elk bugling up close.

To be able to watch the elk in the rut in the fall is awesome.

USFWS should not discriminate against handicapped and elderly or close so many trails. Take some pointers from the local ranchers; they are way better conservationists than the so-called wildlife biologists!

Usually managed as their own thing.

---

We always visit the elk refuge during rutting season. It's a very special experience that anyone who enjoys wildlife should experience. We have done it many times and still look forward to it every year.

We have been visiting the refuge for 22 years and just love that it still looks the same and is still available for us to camp and visit.

We viewed the elk in the fall and it was better than Yellowstone NP because of the absence of the wolf population. The wolves in Yellowstone have depleted the elk population. We very much enjoyed seeing the elk.

Wilderness type habitat and low numbers of people.

Wildlife populations and recreational opportunities are exceptional compared to surrounding areas.

Wildlife.

You get away from the public and experience the outdoors.

You have the chance to see elk.

You see animals more frequently that you would rarely see in other places.

---

#### Additional Comments (n = 42)

A camping spot should require physical occupancy, not just a fee paid. Primitive areas should be left as they are. Requiring reservations should be unnecessary.

Again, my thanks for all USFWS does to preserve our refuges and the birds, fish, and wildlife!

Bird hunting in season and bird watching are most important to this survey participant.

Changes in management that deal with access for people need to consider that the people who spend the most time here, and many that use places like these, are over 60 years old.

Even though I am a bow hunter and enjoy the almost guarantee of an elk bow tag, I am concerned that all the pressure will ruin the elk population. 1800 tags are permitted for the 410 area, and there are people everywhere! Although most are unsuccessful, the presence is disturbing the elk in their most important season (breeding). I feel some limits should be increased on the amount of tags issued for bow season. If I only drew every third year on average, I would be satisfied, especially if it meant alleviating some hunting pressure on the herd. I am thoroughly satisfied with the management on the roads and map availability. Roads are fixed within a timely fashion, and I always seem to have access to a map (the boxes of them are always full). The CMR is one of the last, best public hunting accesses I have found, and I will continue to help keep it up that way.

Fix the roads. Also, address private landowners locking the public out of access points on the refuge. We can't use it, if we can't get to it!!

Hunting on the refuge for the first time was an interesting experience. The hunting was just ok, although there were very few animals taken. I believe this was due to the fire, which forced the hunters to have to concentrate into one small area. The fire and very poor roads due to mud put a lot of pressure on a very small area to hunt without having to hike in a very long way. This will turn me away from applying again for that tag. There were too many tags given out and not enough area to hunt. The fire was devastating to the area and the mud roads made the experience not so good.

I believe that climate change is a naturally occurring event we have very little or no control over. I also believe there is no conclusive evidence

---

---

relating climate change to human activity.

I don't know who was responsible for looking after the camp spots around Fort Peck Reservoir, but nobody took the time to move picnic tables and other moveable items from the rising waters. That left a very negative impression on a lot of people about the management of Fort Peck recreation area.

I don't want wolves on the CMR Refuge. The elk I enjoy on Slippery Ann would all leave. This would be devastating to me and my experience on the Charles M. Russell Refuge.

I have hunted five times for elk there. In 2010, the roads were in the worst shape. In past years, rain would just dry out in about one day and roads would firm up and would be usable again. This year no maintenance to large puddles limited access to prime hunting. It forced people to camp together and limited hunting opportunities with three years to draw an out of state license. It's a question worth sending to Montana again. Despite that there's good hunting with no wolves or boars. I have always been a self guided hunter and spend all of my spare time hunting, fishing, and recreating outdoors. Great place (signature)

I love visiting the refuge; the wildlife was awesome. My trip was great and I will be back several more times. Thanks and keep up the good work. (signature)

I loved my time at the refuge.

I think game management is important. Please keep open spaces such as CMR accessible to the public, including hunters and fishers. Thank you.

I went to fish and that is all.

I would like to see the CMR open up an opportunity to harvest some of the increasing number of mountain lions in the area.

If there was more gravel in the camping areas and roads, plus electric service at each camp area, this place would be excellent.

Let Montana control our land use and keep the "out of state people out of our business." Open up Montana again and let the tax payers enjoy their lands again!

More roads should be graveled so that rain does not have such a negative impact on access.

My family, friends, and I thoroughly enjoy the hunting, fishing, and motorized boat recreation opportunities on the CMR. It would be devastating if any of these were lost, not only to the visitors that enjoy these opportunities, but to the communities surrounding the CMR that benefit from those visiting.

Needs more camping spaces, and the campgrounds that are available need to be better maintained when it is wet. Possibly make roads better into the campgrounds.

Not all trips were on this refuge.

People should be able to shoot an elk with a gun, if they don't get one with a bow and they are from out-of-state. My tag was \$800.00.

Please open lion hunting on the refuge before they kill all of the elk and deer.

Roads are getting better; however, there are those that can't get out of their campground when it's dangerous to do so, yet they have to work. They shouldn't get charged for leaving when their campers are still there. It's better to be safe than sorry. You're putting lives on the line when you do this, and it shows poorly on you. No, I'm not one dumb enough to go back where I can't get out, however we've all been in a situation where it's safer to leave than to stay. As far as the paddle fishing tags, why have a 500 limit and put out a ton on tags? Why not just have 500 tags that are in a pool you put in for? If they use them great, if not there's a larger population of fish. It's a win-win. There are too many people

trying to pack in the campgrounds the first couple weeks of fishing, which makes it a mess for everyone! It's proactive instead of reactive! The biologists you've had up there the last 10 years or so have been great! They've really made the trip worth it. Because my kids were young they've learned a lot from them. Simply by taking the time out of their busy days to show them something about a fish my kids have learned a lot. We usually have them come to our annual fish fry up there as well. It would be nice to see more game wardens as we've been having issues with people stealing gas and other things. Thanks for listening and hope this helps. (Signature)

Thanks for allowing us to hunt and fish. Please make sure that we always can! Let us sportsmen know what we can do to ensure the continuation of this rich heritage.

Thanks for what you do!

Thanks for your hard work. I hope this helps.

The CMR is a great place to visit, hunt, fish, and observe wildlife in a remote and primitive setting. It is well-managed under current policies and there is little or no reason to change the way the area is being operated.

The CMR is a great place, don't let politics and BS ruin it. It is a place where one can connect with the mother, and it is a magical place where one can be close to the spirit of the land and old ones of the past!

The CMR is one of the most vast and beautiful country I have seen. It holds lots of wild game and good hunting opportunities, but road access gives me an uneasy feeling when I go there. I have spent many hours worrying whether or not I would be able to get out of an area when the rains come. If I take two weeks of vacation and get only two good days of hunting, it will most definitely deter me from hunting there in the future. Thank you.

The elk viewers ought to be charged a fee since there are so many of them. Traffic should be managed. Speeders need to be fined. The dust from one to two hundred cars per day is very thick. If they drove at a decent speed, then it would not be as thick. I can understand moving your camp after 14 days, but I don't think you should have to move completely off the CMR, especially if there are only two camps in the campground. The camp host is very rude, ignorant, and not good with the public; he cannot speak to people. He does not do his job of taking plate numbers; he tries to leave it to memory and then wants to argue about how long someone has been there. He parks in the middle of the road and will not move for other traffic. He watches four or five campers and does not bother other people. I think he should be replaced and instructed that he is not a good warden.

The lady from Roy at James King Park was always very good. There were some people on weekends that had a little power problem.

There is a sign on the east end of the campground that says "you are in a no hunting zone." I wouldn't camp there again.

There is too much road and vehicle access on CMR. Less vehicle access is critical to wildlife security and expansion. More walk-in areas would help the refuge.

There needs to be a change on the time that a person can camp in these campgrounds. Who wants to travel several miles every day to leave this campground after 14 days so they can still hunt? This rule of staying 14 days in a 30 day period is crazy. If a person could just move to another campground after 14 days it would be a lot better. There are only one or two camps in the three campgrounds the last week and a half of hunting this year.

This is a unique experience. The campground was wonderful, and the worker was knowledgeable and helpful.

This was my second trip in 3 years to Charles M. Russell. I really enjoy the place. I would go every year if I could. Thank you.

We live in Glenville, MT. To get to the lake, we drive over 100 miles. We find camp spaces very limited and the spots are not maintained. The McGuire area is very primitive. The access roads to the lake are blocked and there are very few spots for camping. The lake is changing, give us more access to the lake. For the first time in 30 some years we are considering going to lakes in national parks; they have wonderful camping and have fish you can actually catch. Don't get me wrong, I love Fort Peck. My family grew up boating and playing on the beaches so I compare it to the way it was. You've gone backwards. Why?

---

We would like to see more camping areas to camp using a 5th wheel around the face of the dam at Fort Peck.

You could learn a lot from North Dakota Fish and Game on how they upkeep their fishing access (e.g., level campsites, mowed grass, garbage pickup and trailer dump sites, toilet paper stocked in restrooms).

You need more deer, the numbers are really low.

---