





National Wildlife Refuge Visitor Survey 2012: Individual Refuge Results for National Bison Range

By Alia M. Dietsch, Natalie R. Sexton, Lynne Koontz, and Shannon J. Conk

My husband and I live only a few miles from the National Bison Range and spend many content hours observing the wildlife. He is a fisherman/hunter and I am a photographer, so we can both enjoy the activity. Often, we take a picnic with us. Thank you for keeping your rates low and allowing us to enjoy the beauty and diversity of wildlife that is Montana! We always take out-of-town and out-of-state guests to the range, also, to show off the best wildlife around.

— Survey comment from a visitor to National Bison Range



National Bison Range. Photo credit: U.S. Fish and Wildlife Service.

Contents

| Acknowledgments | . 1 |
|---|--------|
| | _ |
| Introduction | . 2 |
| Methods | . 3 |
| Selecting Participating Refuges | . 3 |
| Developing the Survey Instrument | |
| Contacting Visitors | . 3 |
| Contacting Visitors | . 5 |
| Refuge Description | . 5 |
| Sampling at This Refuge | . 8 |
| Selected Survey Results | . ç |
| Visitor and Trip Characteristics | |
| Visitor Spending in Local Communities | |
| Visitor Opinions about This Refuge | |
| Visitor Opinions about National Wildlife Refuge System Topics | |
| Conclusion | |
| References Cited | |
| Appendix A: Survey Frequencies for This Refuge | |
| | -1 |

Figures

| 1. | Map of this refuge | 7 |
|------|--|----|
| 2. | How visitors first learned or heard about this refuge | 10 |
| 3. | Resources used by visitors to find their way to this refuge during this visit | 10 |
| 4. | Number of visitors travelling to this refuge by place of residence | 12 |
| 5. | Modes of transportation used by visitors to this refuge during this visit | 13 |
| 6. | Activities in which visitors participated during the past 12 months at this refuge | 14 |
| 7. | The primary activity in which visitors participated during this visit to this refuge | |
| 8. | Visitor center activities in which visitors participated at this refuge | |
| 9. | Overall satisfaction with this refuge during this visit | |
| 10. | Opinions about fees at this refuge | 19 |
| 11. | Importance-satisfaction ratings of services and facilities provided at this refuge. | 22 |
| 12. | Importance-satisfaction ratings of recreational opportunities provided at this refuge | 23 |
| 13. | Importance-satisfaction ratings of transportation-related features at this refuge | |
| 14. | Visitors' likelihood of using alternative transportation options at refuges in the future | 26 |
| 15. | Visitors' personal involvement with climate change related to fish, wildlife and their habitats | 28 |
| 16. | Visitors' beliefs about the effects of climate change on fish, wildlife and their habitats | |
| Tabl | es | |
| 1. | Refuges participating in the 2012 national wildlife refuge visitor survey | 4 |
| 2. | Sampling and response rate summary for this refuge | |
| 3. | Influence of this refuge on visitors' decisions to take their trips | |
| 4. | Type and size of groups visiting this refuge | |
| 5 | Total visitor expenditures in local communities and at this refuge expressed in dollars per person per day | 17 |

Acknowledgments

This study was commissioned by the U.S. Fish and Wildlife Service Division of Visitor Services and Communications Headquarters Office and the Department of Transportation Federal Lands Highways Program, both of Arlington, Virginia. The study design and survey instrument were developed collaboratively with representatives from U.S. Fish and Wildlife Service and researchers from the Policy Analysis and Science Assistance Branch (PASA) of the 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 National Bison Range who assisted with the implementation of this survey 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 would also like to especially acknowledge Holly Miller of PASA for her various and critical contributions throughout the entire survey effort, and Andrew Don Carlos of Colorado State University for his expertise in sampling design and overall contributions during the 2010–2011 phase of this project. Furthermore, we must thank the following PASA team members for their dedicated work in a variety of capacities throughout the 2012 survey effort: Halle Musfeldt, Jessie Paulson, Addy Rastall, Dani Sack, Adam Solomon, and Margaret Swann.

National Wildlife Refuge Visitor Survey 2012: Individual Refuge Results for National Bison Range

By Alia M. Dietsch, Natalie R. Sexton, Lynne Koontz, and Shannon J. Conk

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 specifically dedicated to the conservation of fish, wildlife, and their habitats. There are 560 national wildlife refuges (refuges) and 38 wetland management districts nationwide, including possessions and territories in the Pacific and Caribbean, encompassing more than 150 million acres (U.S. Fish and Wildlife Service, 2013). As stated in the National Wildlife Refuge Improvement Act of 1997, 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 the diversity and interconnectedness of fish, wildlife, and plants, and their habitats" and the goal "to provide and enhance opportunities to participate in compatible wildlife-dependent recreation" (U.S. Fish and Wildlife Service, 2006, p. 2). The Refuge System attracts nearly 45 million visitors annually, including 34.8 million people who observe and photograph wildlife, 9.6 million who hunt and fish, and nearly 675,000 teachers and students who use refuges as "outdoor classrooms" (U.S. Fish and Wildlife Service, 2012). Understanding visitor perceptions of refuges and characterizing their experiences on 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 refuges. The purpose of the survey was to better understand visitor experiences and trip characteristics, to gauge visitors' levels of satisfaction with existing recreational opportunities, and to garner feedback to inform the design of programs and facilities. The survey results will inform performance, planning, budget, and communications goals. Results will also inform Comprehensive Conservation Plans (CCPs), visitor services, and transportation planning processes.

Organization of Results

These results are specific to visitors who were contacted at National Bison Range (this refuge) during the specified sampling periods and are part of USGS Data Series 754. All refuges participating in the 2012 survey 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 survey effort.
- **Methods:** The procedures for the national survey 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 Refuge System topics
- Conclusion
- References Cited
- Survey Frequencies (Appendix A): The survey instrument with frequency results for this refuge.
- **Visitor Comments (Appendix B):** The verbatim responses to open-ended survey questions for this refuge.

Methods

Selecting Participating Refuges

The national visitor survey was conducted from January–December 2012 on 25 refuges across the Refuge System (table 1). Each refuge was selected for participation by the Refuge Transportation Program National Coordinator in conjunction with regional office Visitor Services Chiefs. Selection was based on the need to inform transportation planning processes at the national level and to address refuge planning and transportation needs at the individual refuge level.

Developing the Survey Instrument

Researchers at the USGS 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 (one 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 at which to sample, 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 the 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 3–5 hour (hr) time bands, stratified across AM and PM as well as weekend and weekdays. In coordination with refuge staff, any necessary customizations were made to the standardized schedule to accommodate the identified sampling locations and to address specific spatial and temporal patterns of visitation.

Twenty visitors (18 years of age or older) per sampling shift were systematically selected, for a total of 320 willing participants per refuge (or 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. Refuges participating in the 2012 national wildlife refuge visitor survey.

Pacific Region (R1)

Ridgefield National Wildlife Refuge (WA)

Southwest Region (R2)

Balcones Canyonlands National Wildlife Refuge (TX)

Hagerman National Wildlife Refuge (TX)

Kofa National Wildlife Refuge (AZ)

Santa Ana National Wildlife Refuge (TX)

Tishomingo National Wildlife Refuge (OK)

Great Lakes-Big Rivers Region (R3)

La Crosse District, Upper Mississippi River National Wildlife and Fish Refuge (WI)

Minnesota Valley National Wildlife Refuge (MN)

Southeast Region (R4)

Crystal River National Wildlife Refuge (FL)

Eufaula National Wildlife Refuge (AL)

Felsenthal National Wildlife Refuge (AR)

Lacassine National Wildlife Refuge (LA)

National Key Deer Refuge (FL)

Savannah National Wildlife Refuge (GA/SC)

Northeast Region (R5)

Assabet River National Wildlife Refuge (MA)

Back Bay National Wildlife Refuge (VA)

Chincoteague National Wildlife Refuge (VA)

Edwin B. Forsythe National Wildlife Refuge (NJ)

Rachel Carson National Wildlife Refuge (ME)

Mountain-Prairie Region (R6)

Bear River Migratory Bird Refuge (UT)

Lee Metcalf National Wildlife Refuge (MT)

Rocky Mountain Arsenal National Wildlife Refuge (CO)

National Bison Range (MT)

California and Nevada Region (R8)

Don Edwards San Francisco Bay National Wildlife Refuge (CA)

San Luis National Wildlife Refuge (CA)

Refuge staff and/or volunteers (survey recruiters) contacted visitors onsite following a protocol provided by the USGS that was designed to obtain a representative sample. Instructions included contacting visitors across the entire sampling shift (for example, every nth visitor for dense visitation, as often as possible for sparse visitation) and contacting only one person per group. Visitors were informed of the survey effort, given a token incentive (for example, a small magnet or 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 were also instructed to record any refusals and then proceed with the sampling protocol.

All visitors that agreed onsite to fill out a survey received the same sequence of correspondence regardless of their preference for survey mode. This approach allowed for an assessment of visitors' likelihood of completing the survey by their preferred survey mode (see Sexton and others, 2011). Researchers at the USGS sent the following materials to all visitors agreeing to participate who had not yet completed a survey at the time of each mailing (Dillman, 2007):

- A postcard mailed within 10 days of the initial onsite contact thanking visitors for agreeing to participate in the survey and inviting them to complete the survey online.
- A packet mailed 9 days later consisting of a cover letter, survey, and postage paid envelope for returning a completed paper survey.
- A reminder postcard mailed 7 days later.
- A second packet mailed 14 days later consisting of another cover letter, survey, and postage paid envelope for returning a completed paper survey.

Each mailing included instructions for completing the survey online, so visitors had an opportunity to complete an online survey with each mailing. 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 packet to determine any differences between respondents and nonrespondents at the aggregate level. Online survey data were exported and paper survey data were entered into Microsoft Excel using a standardized survey codebook and data entry procedure. All survey data were analyzed using *Statistical Package for the Social Sciences* (SPSS, v.20) software¹.

Interpreting the Results

The extent to which these results accurately represent the total population of visitors to this refuge is dependent on the number of visitors who completed the survey (sample size) and the ability of the variation

¹ Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

resulting from that sample to reflect the beliefs and interests of different visitor user groups (Scheaffer and others, 1996). 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 unique to each refuge. Spatially, the geographical layout and public-use infrastructure varies widely across refuges. Some refuges can be accessed only 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 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, which may result in certain survey measures such as visitors' self-reported "primary activity during their visit" reflecting a seasonality bias. Results contained within this report may not apply to visitors during all times of the year or to visitors who did not visit the survey locations.

In this report, visitors who responded to the survey are referred to simply as "visitors." However, when interpreting the results for National Bison Range, any potential spatial and temporal sampling limitation specific to this refuge needs 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 (mi) 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). 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, visitors who paid a fee) is too low (n < 30), a warning is included in the text. Finally, the term "this visit" is used to reference the visit during which people were contacted to participate in the survey.

Refuge Description for National Bison Range

National Bison Range is located 50 mi from Missoula in western Montana, and covers nearly 18,500 acres of native Palouse prairie, Douglas fir and Ponderosa pine forests, and wetlands and streams. The refuge provides a home for between 350-500 bison, as well as elk, deer, pronghorn, bighorn sheep, black bear, coyote, and ground squirrels. The refuge also provides habitat for over 200 species of birds including eagles, hawks, meadowlarks, bluebirds, ducks, and geese.

Established in 1908 with the first ever Congressional appropriations allowing the purchase of lands for a national wildlife refuge, National Bison Range is one of the oldest wildlife refuges in the nation. As its name suggests, the refuge was created to provide habitat for and establish a population of American bison which thrive in the open grasslands. The refuge is a part of the Bison Range Complex which also includes the Ninepipe, Pablo, and Lost Trail National Wildlife Refuges and the Northwest Montana Wetlands Management District.

The refuge has a wide range of opportunities for the 122,000 people who come visit each year (2011 Refuge Annual Performance Plan measures; Rob Miller, U.S. Fish and Wildlife Service, 2012, written

commun.), including environmental education, auto tour routes, hiking trails, fishing, interpretation, photography, and wildlife observation. The Visitor Center offers informative displays and handouts, restrooms, videos, and staff members to answer questions. Figure 1 displays a map of National Bison Range. For more information, please visit http://www.fws.gov/refuge/national_bison_range/.

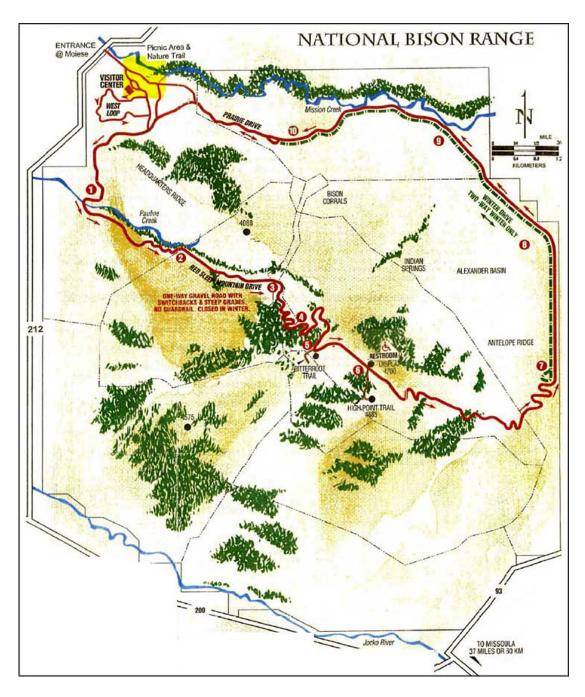


Figure 1. Map of National Bison Range, courtesy of U.S. Fish and Wildlife Service.

Sampling at National Bison Range

A total of 293 visitors agreed to participate in the survey during the two sampling periods at the identified locations at National Bison Range (table 2). In all, 211 visitors completed the survey for a 74% response rate, and $\pm 95\%$ margin of error at the 95% confidence level.²

Table 2. Sampling and response rate summary for National Bison Range.

| Sampling period | Dates | Locations | Total contacts | Undeliverable addresses | Completed surveys | Response rate |
|------------------|--|--------------------------|----------------|----------------------------|-------------------|---------------|
| 8/4/2012 1 to | Visitor Center Red Sleep Mountain Drive | | | | | |
| | to 8/13/2012 | Day Use Area | | | | |
| | | SP1 Totals | 170 | 3 | 125 | 75% |
| | | Visitor Center | | | | |
| 2 | 9/22/2012 | Red Sleep Mountain Drive | | | | |
| 2 | to 10/6/2012 | Mission Creek | | | | |
| | | Corrals | | | | |
| | | SP2 Totals | 123 | 5 | 86 | 73% |
| | | Combined Totals | 293 | 8 | 211 | 74% |

_

 $^{^2}$ A margin of error of \pm 5% at a 95% confidence level, for example, means that, if a reported percentage is 55%, then 95 out of 100 times, that sample estimate would fall between 50% and 60% if the same question was asked in the same way. The margin of error is calculated with an 80/20 response distribution, assuming that for a given dichotomous choice question, approximately 80% of respondents would select one choice and 20% would select the other choice (Salant and Dillman, 1994).

Selected Survey Results

Visitor and Trip Characteristics

A solid understanding of visitor characteristics and details about their trips to refuges can inform communication and outreach efforts, inform managers about desired types of visitor services and modes of transportation used on refuges, and help forecast use and gauge demand for services and facilities.

Familiarity with the Refuge System

Many visitors to National Bison Range reported that before participating in the survey, they were aware of the role of the Service in managing refuges (81%) and that the Refuge System has the mission of conserving, managing, and restoring fish, wildlife, plants, and their habitats (88%). It is important to note that we did not ask visitors to identify the mission of the Refuge System or the Service, and positive responses to these questions concerning the management and mission of the Refuge System do not necessarily indicate that these visitors fully understand the day-to-day management practices of individual refuges, only that visitors feel they have a basic knowledge of who manages refuges and why.

Most visitors (91%) feel that refuges, compared to other public lands, provide a unique recreation experience (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.

Almost half of visitors to National Bison Range had been to at least one *other* national wildlife refuge in the past year (48%), with an average of 3 visits to *other* refuges during the past 12 months.

Visiting This Refuge

A majority of surveyed visitors (76%) had only been to National Bison Range once in the past 12 months, while some had been multiple times (24%). These repeat visitors went to the refuge an average of 6 times during that same 12-month period. Visitors used the refuge during only one season (81%), during multiple seasons (17%), and year-round (2%).

Visitors first learned about the refuge from friends/relatives (47%), a travel guidebook or other book (20%), or signs on the highway (20%; fig. 2). Key information sources used by visitors to find their way to this refuge include their own previous knowledge (42%), signs on the highways (42%), or a road atlas/highway map (29%; fig. 3).

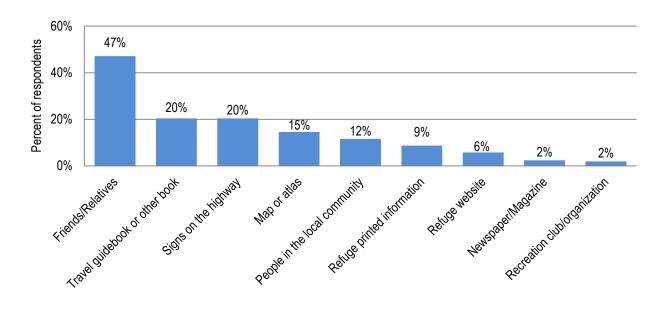


Figure 2. How visitors first learned or heard about National Bison Range (n = 206).

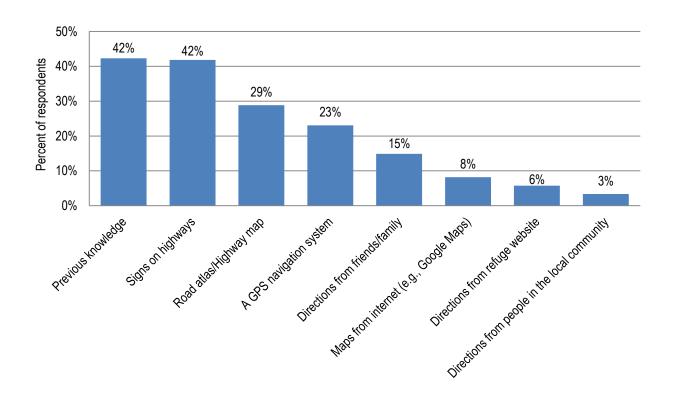


Figure 3. Resources used by visitors to find their way to National Bison Range during this visit (n = 208).

Some visitors (21%) lived in the local area (within 50 mi of the refuge), whereas 79% were nonlocal visitors. For most local visitors, National Bison Range was the primary purpose or sole destination of their trips (83%; table 3). For almost half of nonlocal visitors, the refuge was one of many equally important reasons or destinations for their trips (46%).

Local visitors reported that they traveled an average of 34 mi to get to the refuge, while nonlocal visitors traveled an average of 820 mi. The average distance traveled for all visitors to this refuge was 647 mi, while the median was 200 mi. Figure 4 shows the residences of visitors traveling to this refuge. About 29% of visitors traveling to National Bison Range were from Montana.

Table 3. Influence of National Bison Range on visitors' decisions to take their trips.

| | Visiting this refuge was | | | | |
|--------------|-----------------------------|--|-----------------------|--|--|
| Visitors | the primary reason for trip | one of many equally important reasons for trip | an incidental stop | | |
| Nonlocal | 21% | 46% | 33% | | |
| Local | 83% | 14% | 2% | | |
| All visitors | 34% | 39% | 27% | | |

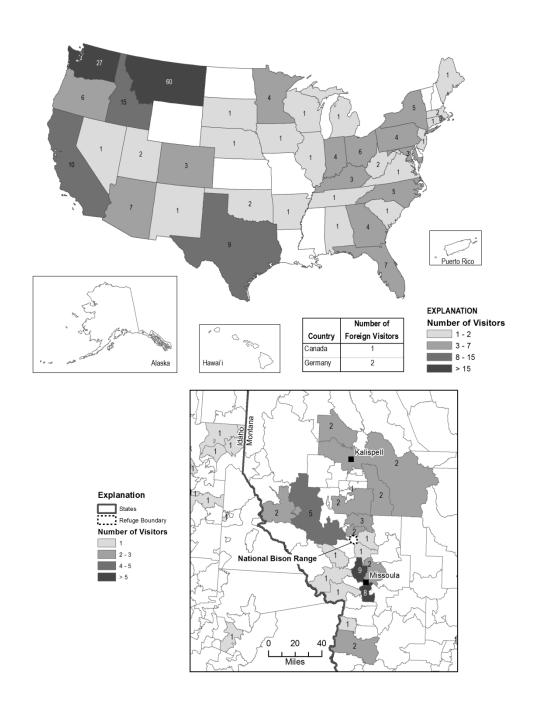


Figure 4. Number of visitors travelling to National Bison Range by place of residence. The top map shows visitors residence by state and the bottom map shows residence by zip codes near the refuge (n = 212).

Surveyed visitors reported that they spent an average of 4 hr at National Bison Range during one day there, while the most frequently reported length of a day visit, the modal response, was 3 hr (29%). Most visitors indicated they were part of a group on their visit to this refuge (92%). Of those people who indicated they traveled with a group, visitors primarily traveled with family/friends (table 4).

Table 4. Type and size of groups visiting National Bison Range (for those who indicated they were part of a group, n = 194).

| One to | Percent | Average group size | | | |
|-----------------------------|---------------------------------|--------------------|--------------------|------------------|--|
| Group type | (of those traveling in a group) | Number of adults | Number of children | Total group size | |
| Family/Friends | 98% | 3 | 0 | 3 | |
| Commercial tour group | 0% | 0 | 0 | 0 | |
| Organized club/School group | 2% | 14 | 31 | 45 | |
| Other group type | 1% | 14 | 18 | 32 | |

The key mode of transportation used by visitors to travel around the refuge was private vehicles (97%; fig. 5).

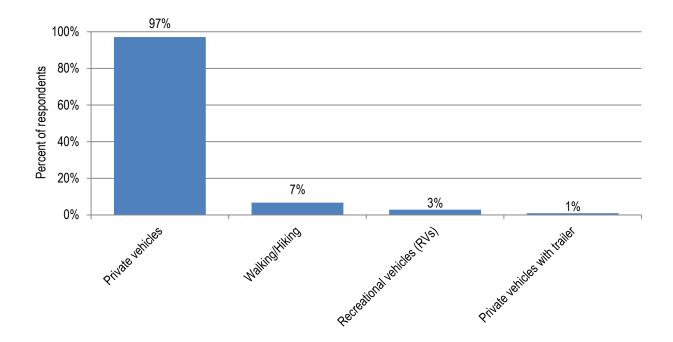


Figure 5. Modes of transportation used by visitors to National Bison Range during this visit (n = 208).

Surveyed visitors participated in a variety of refuge activities during the 12 months prior to completing the survey (fig. 6); the top three activities in which people reported participating were wildlife observation (88%), auto tour route/driving (80%), and photography (66%). The primary reasons for visitors' most recent visits included wildlife observation (66%), auto tour route/driving (19%), and photography (10%; fig. 7). Many visitors also used the Visitor Center during their trips (95%), mostly to view the exhibits (85%), ask information of staff or volunteers (79%), and stop to use the facilities (77%; fig. 8).

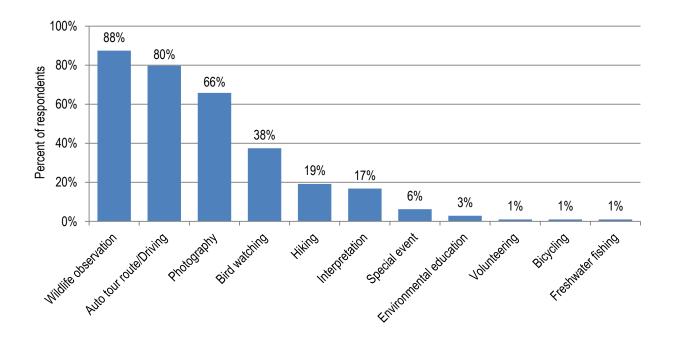


Figure 6. Activities in which visitors participated during the past 12 months at National Bison Range (n = 208). See Appendix B for a listing of "other" activities.

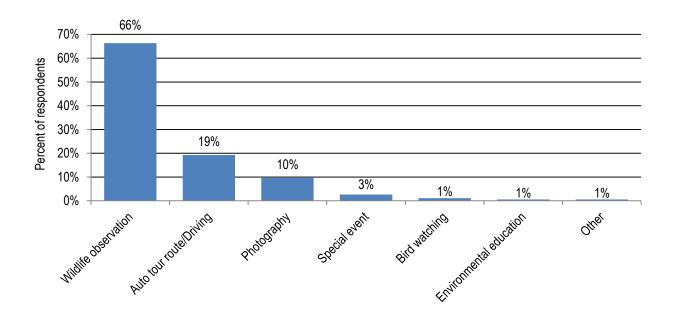


Figure 7. The **primary** activity in which visitors participated during this visit to National Bison Range (n = 187). See Appendix B for a listing of "other" activities.

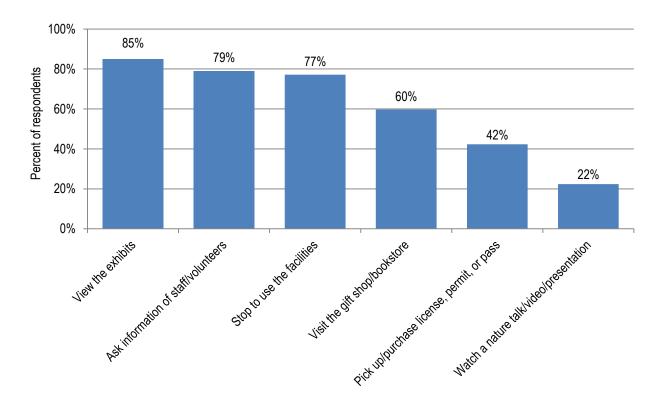


Figure 8. Visitor Center activities in which visitors participated at National Bison Range (n = 201).

Visitor Characteristics

All visitors who participated in the survey at National Bison Range indicated that they were citizens or permanent residents of the United States. These visitors were a mix of 48% male (with an average age of 59 years) and 52% female (with an average age of 55 years). Visitors, on average, reported they had 16 years of formal education (equivalent to four years of college or technical school). The median level of income was \$75,000-\$99,999. See Appendix A for more demographic information.

In comparison to these results, the 2006 National Survey of Fishing, Hunting and Wildlife-Associated Recreation (U.S. Fish and Wildlife Service, 2007) found that participants in wildlife watching and hunting on public lands were 55% male and 45% female with an average age of 46 years, an average level of education of 14 years (equivalent to an associate degree or two years of college), and a median income of \$50,000–74,999 (Anna Harris, U.S. Fish and Wildlife Service, 2011, written commun.). Compared to the U.S. population, participants in wildlife-related recreation are more likely to be male, and tend to be older with higher education and income levels (U.S. Fish and Wildlife Service and U.S. Census Bureau, 2007).

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 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 to local communities of visitor activities on refuges. Visitor expenditure information also can be used to analyze the economic impact of proposed refuge management alternatives.

Visitors that live within the local 50-mi area of a refuge typically have different spending patterns than those that travel from longer distances. During the two sampling periods, 21% of surveyed visitors to National Bison Range indicated that they live within the local 50-mi area while nonlocal visitors (79%) stayed in the local area, on average, for 3 days. Table 5 shows summary statistics for local and nonlocal visitor expenditures in the local communities and at the refuge, with expenditures reported on a per person per day basis. During the two sampling periods, nonlocal visitors spent an average of \$69 per person per day and local visitors spent an average of \$33 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 factors include the amount of time spent at the refuge, influence of the refuge on the visitors' 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.

Table 5. Total visitor expenditures in local communities and at National Bison Range expressed in dollars per person per day.

| Visitors | n¹ | Median | Mean | Standard deviation | Minimum | Maximum |
|----------|-----|--------|------|--------------------|---------|---------|
| Nonlocal | 134 | \$50 | \$69 | \$69 | \$0 | \$455 |
| Local | 35 | \$25 | \$33 | \$34 | \$0 | \$145 |

 $^{^{1}}$ 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 number 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 in the local community, 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 in which people participated), and may not be representative of the total population of visitors to this refuge.

Visitor Opinions about this Refuge

Refuges provide visitors with a variety of services, facilities, and wildlife-dependent recreational opportunities. Understanding visitors' perceptions of refuge offerings is a key component of the Refuge System's mission. In particular, a baseline understanding of visitor experiences provides a framework from which the Refuge System can monitor trends in visitor experiences overtime, which is increasingly useful in the face of changing demographics and wildlife-related interests. Some studies on wildlife-related recreation trends have indicated declines in participation over the latter part of the 20th century in traditional activities such as hunting (for example, U.S. Department of the Interior and others, 2007), while others highlight a need to connect the next generation of people to nature and wildlife (for example, Charles and Louv, 2009). These types of factors highlight a need to better understand visitors' opinions of their refuge experiences and to monitor trends in these opinions over time.

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

- 90% of visitors were satisfied with the recreational activities and opportunities,
- 93% of visitors were satisfied with the information and education about the refuge and its resources,
- 97% of visitors were satisfied with the services provided by employees or volunteers, and
- 94% of visitors were satisfied with the refuge's job of conserving fish, wildlife and their habitats.

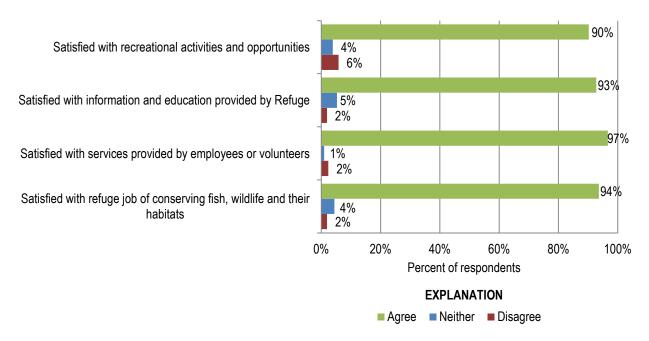


Figure 9. Overall satisfaction with National Bison Range during this visit ($n \ge 204$).

Of the 60% of visitors who indicated that they paid a fee to enter the refuge, 91% agreed that the opportunities and services were at least equal to the fee they paid. Additionally, 72% of visitors felt the appropriateness of the fee was about right, whereas 28% felt the fee was too low and 0% felt it was too high (fig. 10).

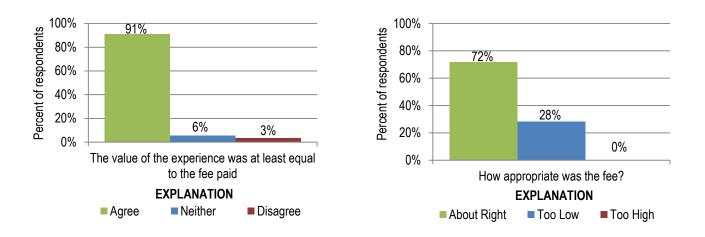


Figure 10. Opinions about fees at National Bison Range (for those visitors who indicated they paid a fee, n = 124).

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 examines the importance of an attribute to visitors in relation to their satisfaction with that attribute (Martilla and James, 1977). Drawn from marketing research, this tool has been applied to outdoor recreation and visitation settings (for example, Tarrant and Smith, 2002). Results for the attributes of interest are segmented into one of four quadrants (modified slightly for this 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 different visitor groups regarding their expectations and levels of importance (Vaske and others, 1996; Bruyere and others, 2002; Wade and Eagles, 2003); 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. This consideration is especially important when reviewing any attribute that falls 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 or 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 their satisfaction with) the attribute may be much higher than the overall importance (and satisfaction) would be for the sample of visitors summarized in this report.

Figures 11–13 depict surveyed visitors' importance-satisfaction ratings for refuge services and facilities, recreational opportunities, and transportation-related features at National Bison Range. Results are summarized as follows:

- All refuge services and facilities fell in the "Keep Up the Good Work" quadrant (fig. 11).
- All *recreational opportunities* that are offered/allowed at the refuge fell in the "Keep Up the Good Work" quadrant except for volunteer and fishing opportunities, which fell into the "Look Closer" quadrant (fig. 12). The average importance of the activities in the "Look Closer" quadrant is likely higher among visitors to National Bison Range who actually participated in the activities than the

scores reported here. For example, hunters, as part of the 2010-2011 national visitor survey, had an average importance score of 4.6 for hunting, while the average importance score of this activity across all visitors was lower.

• All transportation-related features fell in the "Keep Up the Good Work" quadrant (fig. 13).

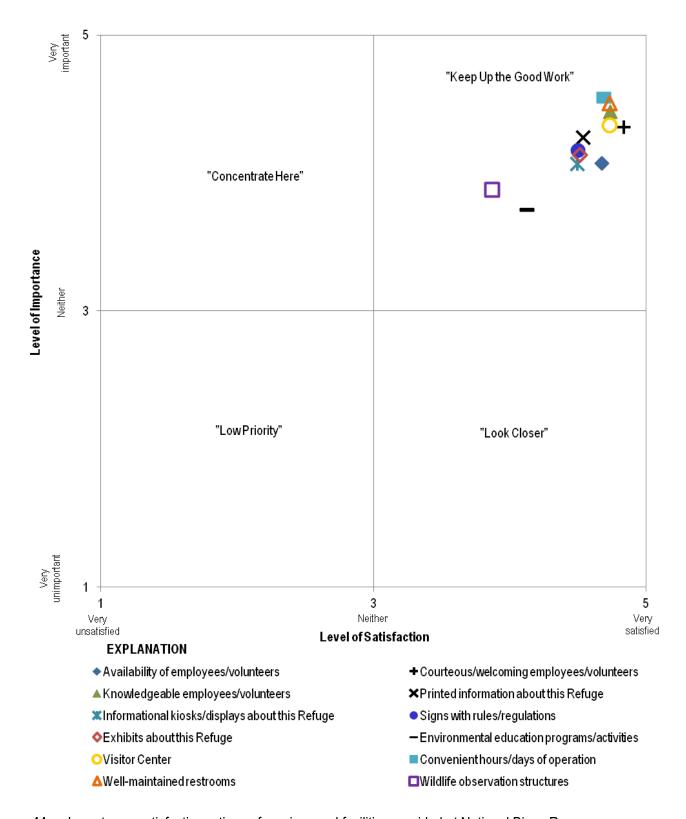


Figure 11. Importance-satisfaction ratings of services and facilities provided at National Bison Range.

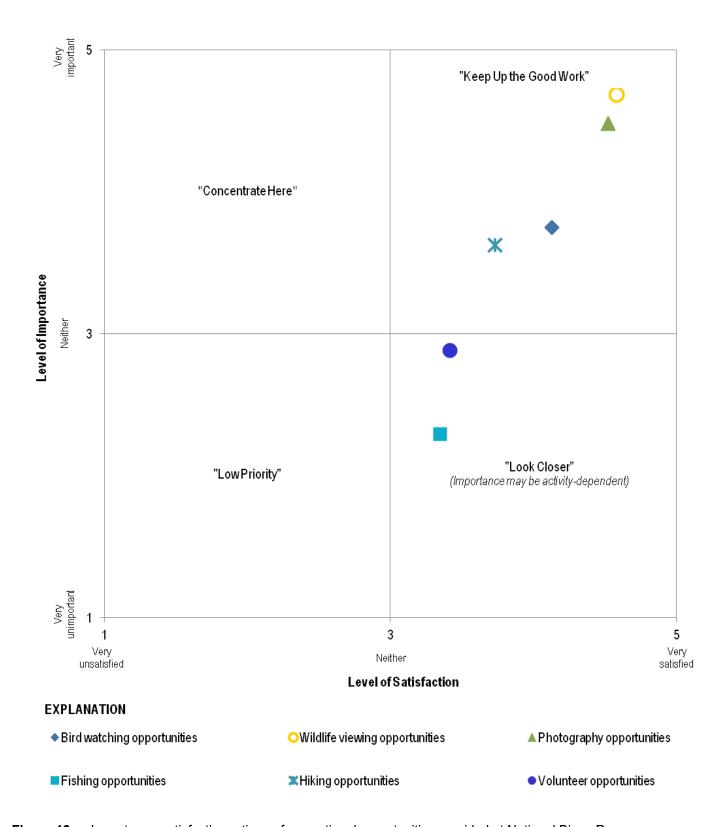


Figure 12. Importance-satisfaction ratings of recreational opportunities provided at National Bison Range.

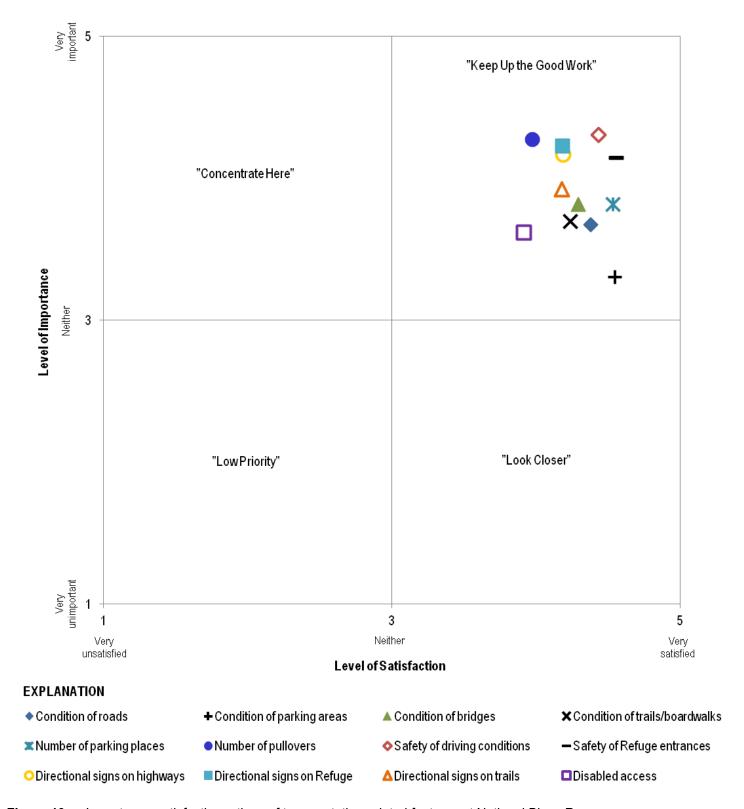


Figure 13. Importance-satisfaction ratings of transportation-related features at National Bison Range.

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 of these questions will be evaluated in aggregate form (data from all participating refuges together) to better address national-level goals. Basic results for National Bison Range are reported here.

Alternative Transportation and the Refuge System

Visitors use various types of transportation to access and enjoy refuges. While many visitors arrive at the refuge in private vehicles, 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 and others, 2001), and recent efforts are beginning to characterize the use of transit and non-motorized transportation modes for visitor access to refuges (Volpe Center, 2010). However, less is known about how visitors perceive 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 refuges in the future.

Of six alternative transportation options listed on the survey, a majority of National Bison Range visitors were likely to use the following at refuges in the future (fig. 14):

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

A majority of visitors indicated they were *not* likely to use a bike share program or a bus/tram that takes passengers to different points on the refuge.

When asked specifically about using alternative transportation at National Bison Range, some visitors thought alternative transportation would enhance their experience (23%) while others thought it would not (41%). An additional 35% of surveyed visitors indicated they were unsure whether alternative transportation would enhance their experiences.

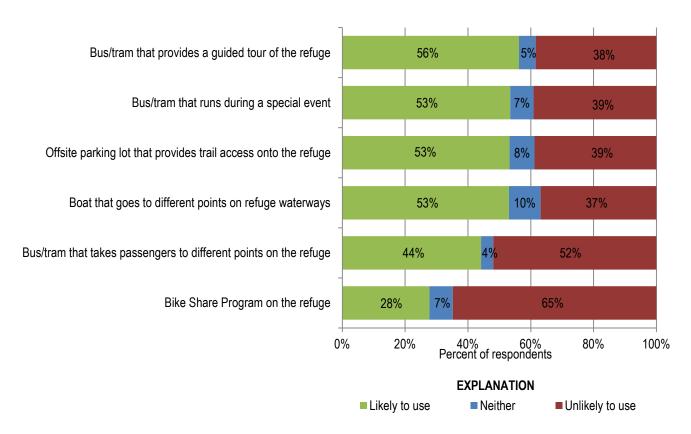


Figure 14. Visitors' likelihood of using alternative transportation options at refuges in the future ($n \ge 198$).

Climate Change and the National Wildlife Refuge System

Climate change represents a growing concern for refuge management. The Service's climate-change strategy, titled "Rising to the Urgent Challenge," establishes a basic context for the agency to work within a larger conservation community to 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 the topic of climate change. Previous research suggests that human thought about climate change is influenced by individuals' levels of concern, levels of involvement, preferences for policies, and associated behaviors (Maibach and others, 2009). The results presented below provide baseline information on these factors in relation to the effects of climate change on fish, wildlife, and their habitats.

These results are most useful when coupled with responses to belief statements, 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 does not alter the overall message, but rather places the issue in a context in which different audience groupings can relate (Nisbet, 2009). 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 or supporting economic growth through new jobs/technology). Framing information in ways that resonate with visitors' beliefs may result in more engaged audiences who support strategies aimed at alleviating climate-change pressures. Data will be analyzed further at the national level to inform the development of a comprehensive climate change communication and engagement strategy.

The majority of visitors to National Bison Range agreed with the following statements related to their own *personal involvement* with the topic of climate change as it relates to fish, wildlife, and habitats (fig. 15):

- I am personally concerned about the effects of climate change on fish, wildlife and habitats; and
- I stay well-informed about the effects of climate change (fig. 15).

The majority of visitors also agreed with the following *belief statements* regarding climate change effects on fish, wildlife and their habitats (fig. 16):

- Future generations will benefit if we address climate change effects;
- We can improve our quality of life if we address the effects of climate change; and
- It is important to consider the economic costs and benefits to local communities when addressing climate change effects.

Results regarding such beliefs are important to consider when communicating with visitors about this topic, since some visitors (34%) indicated their experiences would be enhanced if National Bison Range provided information about how visitors can help to address climate change impacts on fish, wildlife, and their habitats (fig. 15).

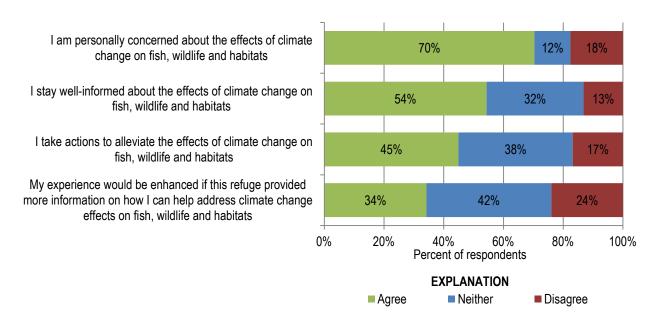


Figure 15. Visitors' personal involvement with climate change related to fish, wildlife and their habitats ($n \ge 196$).

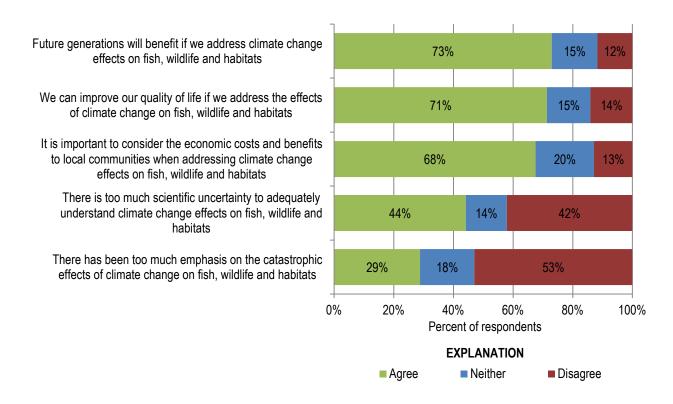


Figure 16. Visitors' beliefs about the effects of climate change on fish, wildlife and their habitats ($n \ge 194$).

Conclusion

These individual refuge results provide a summary of trip characteristics and experiences of a sample of visitors to National Bison Range during 2012 and are intended to inform decision-making efforts related to visitor services and transportation at the refuge. Additionally, the results from this survey can be used to inform planning efforts, such as a refuge's Comprehensive Conservation Plan. With an understanding of visitors' trip and activity characteristics, visitor-satisfaction ratings with existing offerings, and opinions regarding fees, refuge managers are able to make informed decisions about possible modifications (whether reducing or enhancing) to visitor facilities, services, or recreational opportunities. This information can help managers 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 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 and its resources, 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/754/. For additional information about this project, contact the USGS researchers at national_visitor_survey@usgs.gov or 970.226.9205.

References Cited

- 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: Washington, D.C., U.S. Fish and Wildlife Service, Division of Economics, 372 p., accessed September 30, 2011, at http://www.fws.gov/refuges/about/msWord/BankingonNature_2006_11-23.doc.
- Charles, C., and Louv, R., 2009, Children's nature deficit—What we know and don't know: Santa Fe, N.M., Children & Nature Network, 28 p., accessed November 15, 2012, at http://www.childrenandnature.org/downloads/CNNEvidenceoftheDeficit.pdf.
- Dillman, D.A., 2007, Mail and internet surveys—The tailored design method (2d 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: Cambridge Systematics, Inc., and BRW Group, Inc., 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., accessed March 23, 2010, at http://www.fta.dot.gov/documents/3039 study.pdf.
- Maibach, E., Roser-Renouf, C., and Leiserowitz, A., 2009, Global warming's six Americas 2009—An audience segmentation analysis: New Haven, Conn., Yale University, 144 p.
- 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, John Wiley and Sons, Inc., 256 p.
- Scheaffer, R.L., Mendenhall, W., III, and Ott, R.L., 1996, Elementary survey sampling (5th ed): Belmont, Calif., Duxbury Press, 324 p.
- Sexton, N.R., Miller, H.M., and Dietsch, A.D., 2011, Appropriate uses and considerations for online surveying in human dimensions research: Human Dimensions of Wildlife, v. 16, no. 3, p. 154–163.
- 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.

- U.S. Fish and Wildlife Service and U.S. Census Bureau, 2007, 2006 National survey of fishing, hunting, and wildlife-associated recreation: Washington, D.C., U.S. Department of the Interior and U.S. Department of Commerce, 168 p.
- U.S. Fish and Wildlife Service, 2006, National Wildlife Refuge System Mission and Goals and Refuge Purposes (601 FW 1), 7 p., accessed May 31, 2011 at http://www.fws.gov/policy/601fw1.pdf.
- U.S. Fish and Wildlife Service, 2007, Final strategic plan for the National Wildlife Refuge System FY 2006–2010: U.S. Fish and Wildlife Service, Washington, D.C., 53 p.
- U.S. Fish and Wildlife Service, 2010, Rising to the urgent challenge—Strategic plan for responding to accelerating climate change: Washington, D.C., U.S. Fish and Wildlife Service, Division of Refuges, 32 p., accessed April 2, 2011 at http://www.fws.gov/home/climatechange/pdf/CCStrategicPlan.pdf.
- U.S. Fish and Wildlife Service, 2012, FWS Budget Proposal: Washington, D.C., U.S. Fish and Wildlife Service, 48 p.
- U.S. Fish and Wildlife Service, 2013, National Wildlife Refuge System: Overview: Washington, D.C., U.S. Department of the Interior, 1 p., accessed April 2013 at http://www.fws.gov/refuges/about/pdfs/OverviewFactSheetApril2013.pdf.
- U.S. Fish and Wildlife Service, 2013, National Wildlife Refuge System: Overview: Washington, D.C., U.S. Department of the Interior, 1 p., accessed April 2013 at http://www.fws.gov/refuges/about/pdfs/OverviewFactSheetApril2013.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.
- Volpe Center, 2010, Transit and trail connections—Assessment of visitor access to national wildlife refuges: The U.S. Department of Transportation Volpe National Transportation Systems Center and the U.S. Fish and Wildlife Service, 47 p., accessed October 1, 2011, at http://www.fta.dot.gov/documents/Transit_Trails_Layout_Final_123010.pdf.
- 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.

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.

Even 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 for any question that uses the phrase "this Refuge." Please reference the cover letter included with this survey if you are unsure of which refuge you visited.

| SECTION 1. Your visit to this Refuge | | | | | | | |
|---|---|---|--|--|--|--|--|
| Including your most recent visit, which (Please mark <u>all that apply</u>.) (* indic | | In during the past 12 months at this Refuge? owed at National Bison Range) | | | | | |
| * Big game hunting * Upland/Small game hunting * Migratory bird/Waterfowl hunting 88% Wildlife observation 38% Bird watching 12% Freshwater fishing * Saltwater fishing 66% Photography | 19% Hiking 1% Bicycling 80% Auto tour route/Driving * Motorized boating * Nonmotorized boating (including canoes/kayaks) 1% Volunteering | 3% Environmental education (for example, classrooms or labs) 17% Interpretation (for example, exhibits, kiosks, videos) 6% Refuge special event (please specify) See Appendix B 1% Other (please specify) See Appendix B | | | | | |
| Which of the activities above was the particle (Please write only one activity) on the last only one you go to a Visitor Center at this Factor No 95% Yes → If yes, what did you do there | See report for categorized res | nis Refuge? sults; see Appendix B for miscellaneous responses | | | | | |
| 60% Visit the gift shop or bookstore 85% View the exhibits 77% Stop to use the facilities (for example, get water, use restroom) 22% Watch a nature talk/video/presentation 3% Other (please specify) See Appendix B | | | | | | | |
| | was the primary purpose or sole d | estination of my trip. | | | | | |
| 33% 2% 27% It v | | nt reasons or destinations for my trip. he-moment stop on a trip taken for other | | | | | |

| 5. Approximately h | now many hours / | minutes <i>a</i> | and miles (or | ne-way) did y | you travel from your home to this Refu | ıge? |
|-----------------------------------|-------------------------|------------------|----------------|------------------------|---|-------|
| Nonlocal | 11 Hours | 52 | Minutes | and | 820Miles | |
| Local | 1 Hours | 7 | Minutes | and | 34 Miles | |
| All visitors | 9 Hours | 33 | Minutes | and | 647 Miles | |
| | | | | | | |
| (What tyme of arrays | | | uit ta thia Da | £1.00? | | |
| 6. What type of group | | | sit to this Re | ruge? | | |
| | I this Refuge alon | e | | | | |
| | ng with a group) | | | Organizad al | lub or sahaal araun (far ayamula Day | /Cinl |
| 98% Family and/or | menus | | 2% | | lub or school group (for example, Boy king club, bird watching group) | /GIII |
| 0% Commerical to | our group | | 1% | Other (please | se specify) See Appendix B | |
| | | | | | | |
| 7. Including yourself | ` how many neon | e were in | vour groun? |) (Please ansv | wer each category.) | |
| | per 18 years and o | | | • | ears and under | |
| | or 10 years and 0 | 701 | | namoer 17 y | curs and under | |
| 8. How did you first | learn or hear ab | out this R | efuge? (Plea | ase mark <u>all t</u> | that apply.) | |
| 47% Family and/or f | riends | | 6% Refu | ige website | | |
| 20% Signs on highwa | ay | | 3% Othe | r website (ple | ease specify) See Appendix B | |
| 2% Recreation club | or organization | | 0% Tele | vision or radi | io | |
| People in the lo | cal community | | 2% New | spaper or mag | gazine | |
| 9% Refuge printed i | information (broc | hure, map |) 20% Trav | el guidebook | or other book | |
| 15% Map or atlas | | | 4% Othe | er (please spe | ecify) See Appendix B | |
| | | | | | | |
| a D : 1:1 | 1 . | '. 1.1 ' T | 5 C : 4 | 1 . 10 | 4 9 (D) 1 H 4 4 1) | |
| 9. During which sea 14% Spring | <u> </u> | nmer | | e iast 12 moni Fall | tths? (<i>Please mark <u>all that apply.</u></i>) 3% Winter | |
| (March-May) | | e-August) | | (September-N | | ary) |
| | | | | | | |
| 10. How many times | have you visited. | | | | | |
| - | Refuge (includin | | t) in the last | 12 months? | number of visits | |
| othe | er National Wildli | fe Refuge | s in the last | 12 months? | number of visits | |

SECTION 2. Transportation and access at this Refuge

| What forms of transportation did you use on your visit to this Refuge? (Please mark all that apply.) | | | | | | | |
|--|--|--|--|--|--|--|--|
| 97% Private vehicle without a trailer | Refuge shuttle bus or tram OM Bicycle (limited access) | | | | | | |
| 1% Private vehicle with a trailer | 0% Motorcycle 7% Walk/Hike | | | | | | |
| (for boat, camper or other) | Offer (please specify below) | | | | | | |
| 0% Commercial tour bus | * Boat (not allowed on this refuge) See Appendix B | | | | | | |
| Recreational vehicle (RV) | 0% Wheelchair or other mobility aid | | | | | | |
| Which of the following did you use to find Previous knowledge/I have been to to Refuge before | your way to this Refuge? (<i>Please mark <u>all that apply.</u></i>) his 8% Maps from the Internet (for example, MapQuest or Google Maps) | | | | | | |
| 42% Signs on highways | 6% Directions from Refuge website | | | | | | |
| 23% A GPS navigation system | Directions from people in community near this Refuge | | | | | | |
| 29% A road atlas or highway map | Directions from friends or family | | | | | | |
| | 1% Other (please specify) See Appendix B | | | | | | |
| 2. Below are different alternative transpor | tation options that could be offered at some National Wildlife Refuges in the | | | | | | |

2. 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)? | 29% | 23% | 4% | 31% | 13% |
| a bike that was offered through a Bike Share Program for use while on the Refuge? | 53% | 12% | 7% | 20% | 8% |
| a bus or tram that provides a guided tour of the Refuge with information about the Refuge and its resources? | 23% | 16% | 5% | 34% | 22% |
| a boat that goes to different points on Refuge waterways? | 29% | 8% | 10% | 38% | 15% |
| a bus or tram that runs during a special event (such as an evening tour of wildlife or weekend festival)? | 25% | 14% | 7% | 36% | 17% |
| an offsite parking lot that provides trail access for walking/hiking onto the Refuge? | 25% | 13% | 8% | 33% | 20% |
| some other alternative transportation option? (please specify) See Appendix B | 0% | 0% | 19% | 50% | 31% |

| 3. | If alternative transpor | tation were offered | at <i>this</i> Refuge, would | l it enhance your | experience? |
|----|-------------------------|---------------------|------------------------------|-------------------|-------------|
| | | | | | |

23% Yes

41% No

35% Not Sure

4. 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 Not |
| 5% 17% 10% 43% 26% Surface conditions of roads | 3% 6% 4% 25% 63% NA |
| 9% 20% 36% 16% Surface conditions of parking areas | 4% 1% 7% 13% 75% NA |
| 7% | 5% 1% 15% 21% 59% NA |
| 6% 11% 18% 37% Condition of trails and boardwalks | 3% 1% 18% 24% 54% NA |
| 4% 14% 9% 45% 28% Number of places for parking | 3% 2% 6% 16% 73% NA |
| 4% 3% 41% 48% Number of places to pull over along Refuge roads | 4% 14% 3% 37% 41% NA |
| 4% 5% 6% 30% 56% Safety of driving conditions on Refuge roads | 2% 3% 5% 30% 60% NA |
| 4% 5% 42% 42% Safety of Refuge road entrances/exits | 2% 0% 6% 23% 68% NA |
| 5% 4% 8% 39% 45% Signs on highways directing you to the Refuge | 3% 7% 33% 50% NA |
| 5% 5% 35% 51% Signs directing you around the Refuge roads | 4% 10% 3% 31% 53% NA |
| 8% 5% 17% 27% 43% Signs directing you on trails | 3% 4% 15% 29% 49% NA |
| 8% 9% 25% 28% 30% Access for people with physical disabilities or who have difficulty walking | 3% 4% 30% 23% 40% NA |

| 5. | 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

| L | No \rightarrow How much time did you spend in the local area on the <i>Nonlocals</i> If you spent one day or <u>more</u> in the local area, enter the local area, enter the local area. | • |
|---------|--|--|
| | only If you spent <u>less</u> than one day in the local area, enter t | the number of hours:4 hour(s) |
| Н | ow much time did you spend at this Refuge during your most reco | ent visit? |
| | If you spent one day or <u>more</u> at this Refuge, enter the number or | f days: day(s) |
| | If you spent <u>less</u> than one day at this Refuge, enter the number of | of hours:3 hour(s) |
| ot R | lease record the amount that you and other members of your gro ther family members, traveling companions) spent in the local 50-refuge. (<i>Please enter the amount spent to the nearest dollar in each pend any money in a particular category</i> .) | mile area during your most recent visit to to a category below. Enter 0 (zero) if you did n |
| | Categories | Amount Spent in Local Communities & at this Refuge |
| | | (within 50 miles of this Refuge) |
| | Motel, bed & breakfast, cabin, etc. | |
| | | |
| | Camping | |
| | Camping Restaurants & bars | |
| | * * | |
| | Restaurants & bars | ssults |
| | Restaurants & bars Groceries | , for Results |
| | Restaurants & bars Groceries Gasoline and oil | seport for Results |
| | Restaurants & bars Groceries Gasoline and oil Local transportation (bus, shuttle, rental car, etc.) | See Report for Results |
| | Restaurants & bars Groceries Gasoline and oil Local transportation (bus, shuttle, rental car, etc.) Refuge entrance fee | See Report for Results |
| | Restaurants & bars Groceries Gasoline and oil Local transportation (bus, shuttle, rental car, etc.) Refuge entrance fee Recreation guide fees (hunting, fishing, wildlife viewing, etc.) | See Report for Results |
| | 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.) | See Report for Results |

| 5. | 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 |
|-----|------|------|------|------|------|-------|-------|-------|-------|-------|
| 7% | 18% | 14% | 7% | 19% | 4% | 14% | 1% | 1% | 5% | 9% |

6. 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.*)

Did not pay a fee (*skip to Section 4*)

| 10% Far too low | 19% Too low | 72% About right | 0% Too high | 0% Far too high |
|-----------------|-------------|-----------------|-------------|-----------------|
|-----------------|-------------|-----------------|-------------|-----------------|

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

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

| 2% Strongly disagree | 2% Disagree | 6% Neither agree | 33% Agree | 58% Strongly agree |
|----------------------|-------------|------------------|-----------|--------------------|
| | | or disagree | | |

SECTION 4. Your experience at this Refuge

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

| | Strongly Disagree | Disagree | Neither | Agree | Strongly Agree | Not Applicable |
|---|----------------------|----------|---------|-------|-------------------|-------------------|
| Overall, I am satisfied with the recreational activities and opportunities provided by this Refuge. | 1% | 5% | 4% | 34% | 56% | NA |
| Overall, I am satisfied with the information and education provided by this Refuge about its resources. | 1% | 1% | 5% | 37% | 56% | NA |
| Overall, I am satisfied with the services provided by employees or volunteers at this Refuge. | 0% | 2% | 1% | 34% | 63% | NA |
| This Refuge does a good job of conserving fish, wildlife and their habitats. | 0% | 2% | 4% | 27% | 67% | 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 | Satisfaction |
|---|---|
| Circle one for each item. | Circle one for each item. |
| Very Chrimportant | Very Unsatisfied Somewhat Unsatisfied Neither Somewhat Satisfied Very Satisfied Not Not |
| 3% 7% 47% 36% Availability of employees or volunteers | 1% 3% 5% 13% 79% NA |
| 3% 6% 35% Courteous and welcoming employees or volunteers | 0% 0% 4% 9% 87% NA |
| 4% 2% 3% 62% Knowledgeable employees or volunteers | 1% 1% 4% 14% 81% NA |
| 5% [1%] [6%] [39%] Printed information about this Refuge and its resources (for example, maps and brochures) | 0% 4% 6% 22% 68% NA |
| 4% 5% 9% 46% 37% Informational kiosks/displays about this Refuge and its resources | 0% 3% 8% 26% 63% NA |
| 4% 3% 9% 38% 45% Signs with rules/regulations for this Refuge | 1% 2% 9% 21% 66% NA |
| 3% 3% 7% 52% 35% Exhibits about this Refuge and its resources | 0% 3% 10% 21% 66% NA |
| 3% 10% 25% 37% 26% Environmental education programs or activities | 1% 2% 25% 28% 44% NA |
| 4% 2% 3% 54% Visitor Center | 0% 1% 2% 21% 77% NA |
| 3% 1% 25% 68% Convenient hours and days of operation | 1% 3% 2% 17% 78% NA |
| 3% 1% 29% 64% Well-maintained restrooms | 1% 1% 2% 15% 81% NA |
| 5% 4% 21% 39% 31% Wildlife observation structures (decks, blinds) | 5% 8% 26% 18% 43% NA |
| 7% 20% 37% 29% Bird-watching opportunities | 1% 3% 25% 23% 48% NA |
| 3% 1% 2% 15% 80% Opportunities to observe wildlife other than birds | 2% 4% 1% 22% 72% NA |
| 3% 3% 27% 65% Opportunities to photograph wildlife and scenery | 1% 6% 2% 23% 69% NA |
| * * Hunting opportunities | * * * * 100% |
| 44% 8% 31% 11% 7% Fishing opportunities | 6% 4% 58% 10% 21% NA |
| 10% 5% 20% 42% 23% Trail hiking opportunities | 4% 10% 29% 24% 34% NA |
| * * * Water trail opportunities for canoeing or kayaking | * * * * 100% |
| * * Bicycling opportunities | * * * * 100% |
| 21% 7% 42% 21% 9% Volunteer opportunities | 0% 3% 67% 13% 16% 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 |
| | |
| | |
| | |
| | |
| | |
| SE | CTION 5. Your opinions regarding National Wildlife Refuges and the resources they conserve |
| | |
| | |
| 1. | Before you were contacted to participate in this survey, were you aware that National Wildlife Refuges |
| | |
| | are managed by the U. S. Fish and Wildlife Service? [81%] Yes [19%] No |
| | |
| | have the primary mission of conserving, managing, and restoring fish, wildlife, plants and their habitat? |
| | |
| | |
| | |
| 2. | Compared to other public lands you have visited, do you think Refuges provide a unique recreation experience? |
| ۷. | Compared to other public lands you have visited, do you think Keruges provide a unique recreation experience? |
| | 91% Yes 9% No |
| | |
| | |
| | |
| 2 | |
| 3. | If you answered "Yes" to Question 2, please briefly describe what makes Refuges unique. |
| | See Appendix B |
| | |
| | |
| | |

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. | 7% | 11% | 12% | 32% | 38% |
| We can improve our quality of life if we address the effects of climate change on fish, wildlife and their habitats. | 6% | 8% | 15% | 37% | 34% |
| There is too much scientific uncertainty to adequately understand how climate change will impact fish, wildlife and their habitats. | 20% | 22% | 14% | 31% | 13% |
| I stay well-informed about the effects of climate change on fish, wildlife and their habitats. | 1% | 12% | 32% | 42% | 12% |
| 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. | 4% | 9% | 20% | 52% | 15% |
| I take actions to alleviate the effects of climate change on fish, wildlife and their habitats. | 6% | 11% | 38% | 32% | 13% |
| There has been too much emphasis on the catastrophic effects of climate change on fish, wildlife and their habitats. | 32% | 21% | 18% | 17% | 12% |
| Future generations will benefit if we address the effects of climate change on fish, wildlife and their habitats. | 5% | 7% | 15% | 31% | 42% |
| 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. | 11% | 13% | 42% | 26% | 8% |

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?

Yes $\boxed{0\%}$ No \rightarrow If not, what is your home country? See Figure 2 in Report

- 2. Are you? 48% Male 52% Female
- 3. In what year were you born? 1954 (YYYY)

| 4. | What i | s your high | est year | r of formal | schooli | ng? | (Please | circle (| one n | umber | :) | | | | | | |
|----|-----------------|---|-----------|---------------------------|-----------------------|----------------|---|------------|--------|----------|----------|----------------------------|---------|--------------------|----------|---------|-------|
| 1 | 2 | 3 4 | 5 | 6 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20+ |
| | (ele | mentary) | | (junior hi | gh or | | (high s | chool) | | | (colle | ge or | | | (gradı | uate or | r |
| | | | | middle sc | hool) | | | | | te | chnical | school | ol) | pro | fessior | nal sch | nool) |
| | | | 0% | 6 | | | 12% | | ' | | 44% | | | | 44% | 6 | |
| 5. | What et | hnicity do y | you con | sider yours | elf? | 3% |] Hispan | ic or L | atino | 97% | 6 Not | Hispai | nic or | Latino | ı | | |
| | | rican India | - ' | do you con Iska Native | o% | Bla | elf? (<i>Pl</i> ck or Af ive Haw | frican A | Ameri | ican | | 97% | 6 Wh | ite | | | |
| 7. | How ma | ny membe | rs are ir | n your hous | ehold? | | 2 pe | ersons | | | | | | | | | |
| 8. | How ma | ny membe | rs of yo | ur househo | ld contr | ribute | e to payi | ng the | house | ehold | expens | es? | 2 | pers | sons | | |
| | year? Less 1 | g these me than \$10,00 00 - \$24,99 00 - \$34,99 |)0)9 | <u></u> | 13% \$3 23% \$5 | 5,000 0,000 | mate hou 0 - \$49,9 0 - \$74,9 0 - \$99,9 | 999 999 | l inco | me fro | 19% | \$100, \$150, \$200, | 000 - S | \$149,9 \$199,9 | 99 99 | t | |
| 10 | | any outdoo g, etc.)? | | ntion trips d | id you t ber of tr | | in the la | st 12 m | onths | s (for a | activiti | es sucl | n as hu | unting, | fishin | g, wil | dlife |
| | | | | T | hank y | you f | for com | ıpletir | ng th | e sur | vey. | | | | | | |

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

Comments?

| | See Appendix B for Comments |
|------------------------------------|---|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| vill ise por iver Coll | PERWORK REDUCTION ACT STATEMENT: The Paperwork Reduction Act requires us to tell you why we are collecting this information, how we leave it, and whether or not you have to respond. The information that we collect in this survey will help us understand visitor satisfaction with and of National Wildlife Refuges and to make sound management and policy decisions. Your response is voluntary. An agency may not conduct or nsor and you are not required to respond to a collection of information unless it displays a valid OMB Control Number. We estimate it will take an rage of 25 minutes to complete this survey. You may send comments concerning the burden estimate or any aspect of the survey to the Information election Clearance Officer, Fish and Wildlife Service, 4401 North Fairfax Drive, MS 222–ARLSQ, Arlington, VA 22203. OMB CONTROL #1018-15 EXPIRATION DATE 6/30/2013 |

Appendix B: Visitor Comments to Open-Ended Survey Questions for National Bison Range

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 |
|------------------|-----------|
| Bison Roundup | 10 |
| Boyscouts | 1 |
| Watched a movie. | 1 |

| Other Activity | Frequency |
|---|-----------|
| Family reunion | 1 |
| Picnic | 1 |
| Spoke with the Education Manager in reference to student education opportunities. | 1 |

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

| Other Visitor Center Activity | Frequency |
|---|-----------|
| Bought a book on Glacial Lake Missoula. | 1 |
| Bought books and talked with people just starting on the road. | 1 |
| Pickup a map. | 1 |
| Standing there looking pitiful and sad because the Ten Sleep Loop was closing for the season. | 1 |
| Talked at length with the staff, who were very pleasant and knowledgeable. | 1 |
| Took a grandchild for the first time to experience what we enjoy. | 1 |

Question 6: "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 |
|------------------|-----------|
| Church group | 1 |

Question 8: "How did you first learn or hear about this Refuge?"

| Other Website | Frequency |
|-------------------------------------|-----------|
| Missoula, MT visitor guide webpage. | 1 |
| Noticed it on Google maps. | 1 |
| Things to do in Montana. | 1 |
| tripadvisor.com, AAA | 1 |
| tripadvisor.com | 1 |

| Other Ways Heard about This Refuge | Frequency |
|---|-----------|
| AAA, I think. | 1 |
| Bison Range horse ride | 1 |
| Former park ranger (RET) | 1 |
| Nugget RV Park in Saint Regis recommended it. | 1 |
| Photo class in Missoula, MT | 1 |
| School field trip | 1 |
| University of Montana classes, University of Idaho field camp | 1 |

Survey Section 2

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

| Other Forms of Transportation | Frequency |
|---|-----------|
| Motorhome towing jeep for actual use at refuge. | 1 |

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

| Other Ways Found This Refuge | Frequency |
|--|-----------|
| Brochure picked up at Welcome Center on highway. | 1 |
| Travel books | 1 |

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 tour | 1 |
| Bike share | 1 |
| Boat | 1 |
| Horse/mule | 1 |
| Horseback riding | 4 |
| I have a child who has a disability and is in a wheelchair. We would need some handicap accessible trails and transportation. | 1 |
| Off road | 1 |
| Private vehicle | 5 |
| Quads | 1 |
| Self guided electric vehicle with point of interest tour. | 1 |
| Walking | 1 |
| Wheelchair accessibility | 1 |

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 = 39)

Although I understand that refuges are established for critters (and I am a huge wildlife and wilderness advocate), I generally avoid and am disappointed in refuges because they do not offer sufficient walking/ hiking/ canoeing opportunities. More viewing areas during breeding/sensitive times would be great - in appropriate locations, of course. Additional info on websites letting me know when/where and how I can use the property would be awesome and definitely lead to more use... if that is or is becoming a FWS priority.

At the buffalo round-up there was not enough accessible parking.

At this site, viewing was done by car.

Bitterroot trail needs to be clearly defined and surfaced to protect the unique plant community on both sides of the trail. Current use is trampling bitterroot plants and degrading the quality of the area. Signing and trail definition would alleviate this problem.

Consider more pull-offs although due to environment understand difficulty. :)

Do not overdevelop. I'm handicapped and still feel this way.

Enjoyed the trails!

Good graded roads - thank you!!

I come here expressly for wildlife photography (I'm a wildlife artist). No group transport (ex, bus or tram) could possibly meet my needs in this regard - I stop when I need and stay as long as I need in one spot (which could be an hour or more).

I found some of the hairpin turns/drop offs to be a bit hair raising but we loved the facility.

I like that we can use our own vehicle rather than have a tour bus, etc. We generally go early or late for the best wildlife viewing. Part of the challenge is spotting game. One idea I have had is that it would be interesting to have an occasional day where the direction of traffic is reversed; it would be interesting to see the range from the reverse perspective! My husband is disabled and has difficulty walking. The range offers a great opportunity to view wildlife without having accessibility issues.

I think the roads were very well managed and they took us right by the bison and pronghorn. It was quite fantastic.

I was extremely unsatisfied with the highway/road signage directing me to the park and you must develop and install a large and well lit entrance to the park. I thought that aspect was pathetic. I also thought that the signage inside the refuge's road trails couldn't be worse. There were several junctions and it was very hard to determine which way to go - especially under pressure with cars traveling behind me. All around, you need to make drastic upgrades to the signage to help direct your "guests" and most importantly "customers."

I'm glad you oil the road but you should let people know when it has been freshly done.

In general, I enjoyed the self guided tour. However, it would be great if there were more places to pull over to observe the wildlife. During the tour, there were often a number of cars behind us which created situations where cars were trying to pass.

Need more and bigger pull-overs for photo and viewing opportunities.

Need time to stop, set up a tripod, and take pictures. Either more turnouts, two lane roads, or shuttles where I can get out, take my pictures, then catch the next one. I realize being left behind by a shuttle would be difficult in some refuges due to the size and demeanor of the wildlife. With cameras, lenses, filters, and tripods, it would be easier to be in my own vehicle and pull over when an opportunity presents itself.

Next time I look forward to touring the upper section of the road, which was closed for the bison round up (late September), understandable. I'd also like to do a few hikes off the same section of road - next time!

Not enough foot trails.

Often, signs directing people to refuges are lacking, or there will be one sign for an exit and then no additional signs at future turns.

People do not follow speed limit! We pull over to let other cars pass because they are going fast and they litter! Need somewhat of a patrol to make sure people follow the rules, and respect the Bison Range! :)

Photographers need to stay by their vehicles, not block the view of others.

Pullouts permitting wildlife viewing enhance the experience. A self guided tour with audio at points of interest (like an art museum) could be an enhancement.

Road along creek should be two way starting Sep 1.

Road conditions were terrible and somewhat terrifying.

Signs at cross roads directing back to Visitor Center would be helpful. There was some question as to which way to go after finishing the main loop.

The Bison Range park staff were preparing for the annual bison "round-up"- so the upper loop was closed. I was disappointed, of course, but certainly understand. We'll visit another time when the upper loop is open!

The entrance is far off the normal traffic pattern which flows from Missoula to Kauspel. If it were relocated to the east side of the refuge and adjacent to the north south highway to glacier park and transiting through the wildlife refuge north of St. Ignatius, it would no doubt receive many more visitors. Presently you must go out of your way to the west of the refuge to get in! Yuck.

The gravel roads enhanced the rustic feel.

The map given out at the Visitor Center was a bit confusing. I should have taken more time to ask questions of the very helpful staff.

The terrain was rugged, the road was well maintained gravel, one way travel made our visit enjoyable as we did not have to worry about on-coming traffic.

There is a very short route to take if you do not have 2 hours to see the refuge. The road around the refuge does not allow seeing part of the area and turning back, so it requires that you spend 2 hours, which we did not have. The road to the refuge took 45 minutes to get there without an indication of that.

Viewing from own vehicle with opportunity to spend as much time with binoculars is crucial for this refuge, could not see all the species besides bison on a bus or public transit.

We did not bring my daughter's adaptive stroller (she is handicapped) and only had the wheelchair. This prevented us from taking the trails as it is difficult to push the chair on rough ground.

We did not realize how steep and how far the decline was at this refuge. Ruined our tracks.

We enjoyed the ability to tour at our own pace (which is very slow) and there were plenty of pull off spaces to allow other cars to go around. I would not want to see buses, etc. in this particular refuge as it would change the experience and possibly keep the wildlife from being viewed.

We like to take our time and really look for animals, birds, and wild flowers. We're always amazed at the cars who hurry through because they'll miss a lot. They either shouldn't have taken the time or they just don't understand.

We went to the National Bison Range in Montana. Family loved it. We plan to go back in the spring. Where else will you see all the animals in one place in the wild? Thank you.

Would like more signs indicating which roads are the correct "visitor roads".

Survey Section 4

Question 3: "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 = 67)

- 1. Bathroom facilities!! They are very disgusting! The smell is so awful it actually puts a very bad taste in your mouth!! 2. People littering, taking rattle snake tails, flowers, antlers, walking in the flower beds (natural) etc... 3. People driving too fast!!
- 1. Weeds seem to be a problem. 2. Very disappointed by all the tagging. It is becoming very difficult to find animals to photograph without a tag. This will prevent me from using the refuge in the future.

All staff was very polite. It was a free fee weekend due to part of the route being closed. Very much enjoyed what we could see.

Clean and well maintained.

Difficult to locate round-up area- no signage and map not easy to understand.

Everyone was very helpful and friendly.

Everything was fine!

Everything was very well done. Desk "help" were well informed and friendly.

Great facility. Friendly and knowledgeable staff. The Visitor Center could be improved and provide more information on the history of the area and more details on the type of wildlife.

Great place!

Great staff, very courteous and informative. Fabulous wildlife viewing.

Great visit. Bison were being moved down from mountains. Didn't get to observe many. Free fee entrance was nice gesture. Very comfortable facilities and excellent staff!

Great Visitor Center. Could use more animals, sheep, etc.

I appreciate that this refuge is here. It provides excellent opportunities for wildlife viewing and photography. Conveniently located between Glacier NP and Yellowstone NP.

I believe the annual horse and mule ride through the range was a very important opportunity to 100's of visitors each year. The manager's rational for discontinuing the ride was limited in scope and could have easily been met without eliminating the ride. For example cars bring in far more weeds than horses. Requiring diaper bags would totally eliminate a minuscule problem. No one has responded to my question as to how many weed infestations can be attributed to visiting horses.

I felt it was a nice refuge however not hardly any animals and it was a long drive. No place to pull over. Could be better marked roads.

I think the 'one way' needs to be fixed so cars cannot come in late and go the wrong way. I saw this twice in three trips. Too many kids in back of trucks also yelling at the bison.

I think the Visitor Center was dark and depressing even though the displays were okay. Then we drove a short loop in the car and I was a little disappointed there wasn't anything more to do.

I was impressed with the staff at the Bison Range. They were very informative and helpful. A very enjoyable experience. Not my first and not my last.

I wish there was a full gift shop inside the Visitor Center. There is one just outside the Bison Range that I spent 50 dollars in. I'd rather have that money go to the Bison Range directly.

I would dearly love a special "photographer" or "artist" pass to use some of the other refuge roads besides the main one; these could be limited to a few people at a time, and subject to selection/jury, but it would be wonderful to use some of the service roads to get nearer to wildlife!

I would love to see special guided opportunities for birdwatching or observing animals with staff or specialists brought in.

I'm sorry we didn't have the full experience of the bison range that we usually have. This particular visit was very late in the season, so we weren't able to see an abundance of wildlife due to the closure of the upper loop.

If somehow I could have observed the animals more closely without disturbing them - that would have been great!

Left refuge after Visitor Center closed - no place to use restrooms! Convenient store down the road only had a port-a-potty- only for paying customers.

My daughter loves animals and the outdoors so the refuge is a great place. Would be nice to have a few more areas that we could get her and the wheelchair out.

My only negative experiences at this refuge were when the tribes were managing it. The gates were opened late and the Visitor Center staff were not that interested in the visitors. Sorry to say - but true. We appreciate the refuge and are pleased to have this historic National Wildlife Refuge in our area. We hope it remains under federal, vs. tribal, management as our experiences have shown this to be the better management.

My wife and I were well satisfied with everything.

Need a more extensive foot trail system. Too many areas off limits.

One of the highlights of our visit to Montana. The staff was very nice and the Visitor Center was very informative.

Radio frequency identification of wildlife resources might help identify photography opportunities for casual visitors. (Goats are here, bison are there, for example.)

The controversy over the tribe being a part of management has troubled me. I know that I probably know very little of the insiders view but I had really hoped it could work.

The employees and facility is doing a great job with the resources that are available to them.

The refuge was terrific. I went back twice and enjoyed the wildlife and got great pictures! Keep this one open!

The services were excellent. The restrooms were spotless. The white bison in the visitors center was so impressive and the volunteers were extremely knowledgeable. I came to see bison and was disappointed that they could only be viewed as specs in the distance.

The signage and road for the short route leave a lot to be desired.

The staff I met were knowledgeable and friendly. I learned a lot of new things about bison.

The Visitor Center seems to be getting pretty "outdated." It would be nice to see some updates both outside and inside. It appeared to be exactly the same as it was when I last visited 15 years ago.

This is a great place and we enjoyed ourselves. Thank you.

This is an ideal wildlife refuge and one of my favorite places on this earth.

This refuge is perfect as is. It offers one the opportunity to view wildlife in a more natural environment.

This was a surprise! We had no idea the amount of wildlife to view other than bison. The attendant was very friendly and helpful marking up a map with recent sightings. This was a great adventure for us. Better than West Glacier!

Too often when I want to stop, observe, and photograph wildlife, I am unable to, because there is a vehicle behind me showing obvious signs of impatience. Other times I'll get a half dozen cars stopping behind me to see what I am photographing.

Upper refuge was closed for the Bison Roundup so we were restricted to the lower area.

Very informative and professional staff.

Very nice - restrooms, Visitor Center, lunch and dinner tables.

Very nice!

Very nice.

Very well maintained.

Visited during the Bison Roundup so the road was closed - but we didn't know until we got there.

Want a wider variety of books at center. More pictures and postcards.

Warning signs about snakes. Almost stepped on a Western Diamondback rattlesnake on trail. I saw many kids heading up same trail. I told parents.

Was not able to buy a stuffed bison; which the bison are the primary animal in the refuge. Very disappointed!

Was very disappointed. There were barely any bison (purpose of trip) and those that we saw were so far away they might as well have been cattle. Saw more bison on the highway through Yellowstone.

Was very good. Keep it up! Thanks!

We all loved seeing the animals.

We came at a perfect time, right when the buffalo (oops! Bison) were starting their rut. They were right next to the road! Great experience to start our location with grandkids in the flathead/glacier area. My last visit was in 1996.

We love being able to bring a picnic and sit and enjoy the beauty as we eat. We could use a few more picnic tables because it is full for some weekends, like Father's Day.

We only went here to watch the weighing and checking of the buffalo which they do each year when they sell some. We did not check out any facilities.

We really liked this experience and are planning to try and go to more refuge locations around the US to see wildlife in its native habitat. Our kids especially loved the close up viewing of the Bison and it was just such a peaceful and enjoyable ride.

We visited in late September. Temperature in the high 70's. Only decent access road to view buffalo was closed for the winter on Labor Day. Weather and road conditions should determine road access not the calendar.

We were very pleased with our visit.

Wildlife observation is great most of the year, but could be improved in the winter. I had visitors from France in late December who liked the Visitor Center but were disappointed not to see any bison. Perhaps there could be a snow coach for winter viewing throughout more of the range at least on a few days.

Wish more hiking and biking opportunities were available.

Wish we had realized that there was a shorter, 2-way traffic regiment in this refuge.

Would like more pull-offs on side of road to stop and take pictures without blocking traffic (even if this was a form of walking trail).

Would like to see more documentary wildlife video on elk and bison- also more gift shop items.

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 = 145)

A better chance to view wildlife in a shorter amount of time.

A good time with family and friends to visit and explore God's creation.

Ability to "get in close" and see the wildlife.

Ability to drive freely through the park.

Ability to see bison and other wildlife up close and at a distance. Awesome!

Ability to see large numbers of different kinds of wildlife.

Ability to see wildlife that is unique to my environment.

Able to see wildlife more in the nature.

Abundant native plants and animals and in a setting where they can be viewed by the visitors.

Access to quality habitat without degradation caused by commercial grazing, logging, or other land management activities. Concentrations of wildlife and opportunities for hunting, fishing, bird and wildlife watching.

Although I expected to see more bison (given that the area is a National Bison Range), I do believe in effective range management. Given that, the experience fits with the spirit of a National Wildlife Refuge.

Although we also saw bison in parks we visited in North Dakota and South Dakota, observing them here in a sort of "safari" like drive was even more enjoyable.

Amazing bison herds- very close!

An opportunity to observe species in their own habitat.

Animals

Animals are protected for future generations to learn about wildlife and enjoy their beauty. (People have to respect the land and need people to enforce these rules!)

Animals are used to traffic and I can better observe and photograph them acting naturally.

Animals in their natural habitat, with lots of open land.

Based on prior experience, other NWRs (not the Bison Range) are unique in providing blinds and access to waterfowl that I can't get in a National Park. That said, waterfowl in NWRs is insanely cautious due to being hunted, and it would be awfully nice if they weren't (ex: per Yellowstone, or Flat Creek outside Jackson Hole, etc.).

Beauty, majesty, great landscape, great wildlife.

Being able to observe wildlife in natural settings.

Being able to observe wildlife in their natural habitat.

Bison are great. High number of different habitat types.

Bison require large tracts of land!

Bison, other mammals.

Bison!

Buffalo

Buffalo viewing. Other wildlife were scarce because of time of visit.

Can see wildlife!

Close encounters with buffalo, deer etc. in your own car- on your own time.

Close observation of wildlife.

Close to home. Close up to animals and great drive time. Please keep roads in good shape!

Close to home. See a lot of animals. Changes with the seasons. We used to see the white buffaloes when we were kids!

Conservation and access for all Americans to enjoy wildlife.

Disappointed did not see any wildlife except buffalo and few birds.

Elk viewing before archery starts.

Everything is nice.

Excellent spots to view wildlife and for me - especially the birds. While "wild" the animals feel safe and not too wild for city slickers.

Great opportunities for birding. We see birds at refuges in northern Utah that we don't see anywhere else - and a lot of them.

Great place, lots of wildlife and great photo opportunities!

Habitat and animals aged for maximum conservation.

Habitat preservation, viewing wildlife close up in natural surroundings.

History and importance of bison in North American history. Kestrel, antelope, and deer within easy viewing of road is a rare treat.

Humans are the visitors to an area best suited to the wildlife being protected providing an experiential education for visitors.

I enjoy the opportunity to see wildlife unique to the area we are visiting. We have seen several bird sanctuaries that were extremely phenomenal.

I enjoy the refuges as they provide unique opportunities to view animals in their habitat up close.

I feel that if you are interested in wildlife and the conservation of it, you must visit these places to experience what is being done to aid in the projects...a happy experience.

I love being able to get up close to the animals while keeping them and myself safe and in their "natural" habitat! We enjoyed the variety of wildlife available! Especially the eagle!

I probably shouldn't be filling this out. We got there too late to take the auto tour. We did spend some time at the Visitor Center.

I saw so much wildlife and it was a wonderful opportunity!!

I'm not aware of many bison herds living on public lands near any place I've ever lived, so I was curious to check it out.

In my case the bison refuge maintains habitat necessary to keep the species, so important to Native Americans, alive and healthy.

It allows me to feel the freedom that animals need to perpetuate their species. I felt the freedom within myself and the peace of animals being well protected

It gives all of our citizens access to a unique outdoor experience. It is always my first place to take friends, relatives and out-of-state clients to show off Western Montana.

It gives people a chance to get up close to nature and wildlife to appreciate the opportunity in a safe way.

It is a chance to see what the land, area, and animals were like before our times. I love seeing the bison roam and then I can imagine what it must have been like to have millions surrounding the areas. I grew up in rural Montana but for people who didn't it is a chance to see wildlife not in a zoo.

It is nice to have a refuge where there are animals available for viewing on a regular basis.

It is primarily for bison.

It is unique in that one can travel through by vehicle and the wildlife viewing is entirely different with each visit. It is great for disabled people who love wildlife but cannot hike, boat, etc. It has all the animals we enjoy viewing as Montanans - plus the bison. And, we appreciate the history of this refuge that was established to preserve some of the remaining bison. The animals are very much in their natural surroundings - not like a zoo! And, we consider ourselves lucky when we see the various animals such as the baby antelope and bison. Oh - also love the Bitterroot and other wild flowers within the refuge.

It provides a wonderful opportunity to show off and observe Montana's wide range of wildlife and also some magnificent vistas.

It shows what the best practices are for managing local resources.

It was a wonderful experience watching the bison and elk. The way they had all that land to live on. Thank you. It was my first time there and I will never forget it.

It's all about the animals and the chance for humans to view them living a more normal life

It's the only place that you can see so many different kinds of wildlife in one place. Thank you.

Large expanses of natural habitat and the ability to get away from other visitors.

Location and number of animals.

Lots of bison, pronghorn antelope.

Loved the bears and elk.

Maintains and protects a very important part of our natural heritage and creates unique opportunities for people to get close to natural surroundings and wildlife.

Many times you are able to see wildlife/birds that you would never be able to see in "recreation" experiences. I appreciate the preservation of habitat!

Multiple use with preservation.

Never saw a buffalo round-up before the refuge.

Nice loop drive.

Nice site

Nice to see animals close up, but in their own habitat.

Not overused, wildlife great, nice getaway, educated grandchildren, very nice.

Not really enough emphasis in US on wildlife conservation.

Not so "developed".

Observation decks, roads to enhance the wildlife watching.

Observation of wildlife, bison, etc. not available for viewing elsewhere.

Observing bison in somewhat of a natural habitat is important to the culture of the Northwest!

Opportunity to see wildlife in natural habitat.

People are expected to respect wildlife.

Preservation of habitat in its natural state.

Preservation of the health of the bison. Natural place for wildlife to interact.

Preserves wildlife through enforcement by our government. Wildlife are in danger, we must provide refuges to protect the species.

Proximity to exotic animals in their habitat.

Roads to areas otherwise inaccessible which allows for wildlife viewing otherwise impossible.

Saw a lot of wildlife. More than at other parks, etc.

See wildlife.

Seeing animals in their natural habitat.

Seeing animals in their own habitat, sometimes quite close to our vehicle. We went early in the morning and never saw another vehicle until we finished the 19 mile loop on the refuge. Appreciated the opportunity to begin the tour when the gates opened and pay on our way out at the Visitor Center.

Seeing several different types of wildlife such as bears, coyotes, deer, elk, antelope, falcons, and bison. Also many other beautiful birds in their natural habitat, rather than those at a zoo locked in cages.

Seeing wildlife not indigenous to southeast U.S. Also, fulfilling lifelong desire to see unique topography that all refuges make available!

Sense of wildness.

Sometimes more wildlife viewing and photography opportunities.

The abundance of wildlife is an open range setting affording many opportunities to see and observe (vs. a heavier wooded area when the animals are mostly unseen).

The animals and the scenery and the mountains.

The availability of information, the knowledge of the service providers, upkeep of the needs and the monitoring of the habitat for all the animals by trained personnel make the natural wildlife refuges unique.

The Bison Range is one of a kind. I see bison every trip. It's a great experience for my kids.

The effort they make to maintain and foster species of animals which would otherwise disappear from the face of the earth.

The focus on specific wildlife viewing opportunities.

The management of bison, and thus our being able to see herds throughout the park, and the abundance of wildlife in each section of the park was unique. Seeing wildlife in natural habitat and within photograph range was unique and delightful.

The opportunity to see elk in natural habitat during the mating season. Also, good opportunity to view deer, antelope, and bison. Have seen bears on previous trips.

The opportunity to see rare animals not native to my area, the ability to observe at my own pace, safety and excellent drawing conditions.

The opportunity to see wildlife "in the wild".

The opportunity to see wildlife in its natural habitat at close range.

The opposite of Disney: a very pure way to experience wildlife. We like that refuges are not overdone and are true to a natural experience.

The range of wildlife ordinarily visible at close range, including bison, big horn sheep, elk, antelope, deer, turtles and birds.

The refuge was more interactive than other public lands.

The variety of wildlife available and the large amount of land set aside for the refuge. Wildlife in natural habitat.

The vastness of the refuge. All the unique animals living on the range.

The viewing of the wildlife was amazing and we all enjoyed being able to stop and just observe the bison as they ate, played with each other and walked around.

The wildlife soon learn they are "safe" and become more observable.

They are far too rare, but I visit any of them that I get a chance. We need far more of them than we have.

They are important for many reasons- i.e. study of all aspects of animal behavior, survival, food choices, health issues, etc. Also, it gives the public an opportunity to view them in a safe, protected environment.

They are often more specialized and more intimate than state/national parks.

They are places where the habitat and everything that lives there is protected. A visit to a refuge is an experience to make one appreciate and want to protect the wildlife and hopefully educate all who visit.

They generally provide access to animal and floral habitat conducive to great wildlife watching and photography opportunities that a person would not otherwise have.

They own prime land.

They provide a "natural" setting in which to view wildlife.

They provide habitat in many otherwise off limit areas. Do not argue with hunting on what are called refuges.

This experience of viewing wildlife was unique. I have never seen bison or bighorn sheep in their natural environment. You almost felt like you were on an African safari.

To drive the roads and enjoy the wildlife and scenery.

To see bison and other animals in a natural habitat.

Two things. First, regarding previous question - Umm, well, actually, this refuge has been a political see-saw between the local tribe and the USFWS and I'm kind of in the Tribal camp on this one. Regarding this question - huh? In general, my experience of refuges has been there are minimal to no recreational opportunities on refuges.

Up close and personal to wildlife and habitat.

Up close encounters with bison, elk, deer and antelope.

Very clean and well maintained, at National Bison Range we were able to see so many animals in one place, stay in our vehicle and go at our own pace which was quite slow to see it all.

Very important to pass on the knowledge and appreciation of wildlife and their habitats.

Viewing buffalo.

Visitors are able to view wildlife that are unusual to see elsewhere (if at all) like the bison.

We enjoy watching and taking pictures of animals in natural habitats.

We enjoyed the quiet, natural setting and ability to view/photograph the wildlife at our leisure in our own vehicle. This kind of wildlife in the refuge are not easily seen otherwise.

We need more areas like this, a refuge for 'all' animals, even the ones we dislike i.e. wolves.

We saw bear, elk, deer, bison, and antelope.

We saw bison, bears, elk, antelope, big horn sheep, deer, chipmunks, and hawks. What more could you ask for in one place! To see these creatures in their habitat from your vehicle was fantastic, especially since my husband uses a wheelchair. The drive even held the attention of our very active five year old daughter. Best surprise of our trip.

What you have here, we don't have in Oregon.

Wildlife

Wildlife more abundant and semi-natural.

Wildlife refuges typically focus on rare or threatened habitats and dissociated wildlife; e.g. wetland/waterfowl; bison/range.

Wildlife when accessible, in this case not which was disappointing.

With this refuge, you can see some unique animals in every natural setting.

You actually see wildlife in the flesh. It really doesn't matter if its 1912 or 2012. The bison gives us a feel in the way things have always been.

You have a better chance of seeing the wildlife.

Additional Comments (n = 54)

A delightful experience. The National Bison Range has so improved since my last visit years ago. Much better organized, so viewing was guaranteed. Years ago it was hit and miss. Might see bison; might not. The other wildlife obviously find the range a good place to be, and we saw so many other animals. Thank you for a great experience.

A very excellent time with my grown son living in Missoula. The road was good, view of animals good, walks great. I really enjoyed the refuge.

A wonderful and unique place. I spend May through October photographing and observing wildlife in the Rocky Mountain states.

Again, was very disappointed. Spent the bulk of the time on a scary road that had great views, but saw a few deer. Bison were really far away and there weren't as many as I expected from something called the National Bison Range.

Although the staff at the Visitor Center were friendly, the center itself was dark and depressing. The most interesting thing was a giant pile of antlers next to the parking lot, but it looked more like an afterthought. I know what the "whites" did to the bison and Native Americans was horrible, but perhaps more emphasis could be placed on recovery of bison or on how we should respect Native Americans and stop treating them as invisible, backward people. I grew up in a border town with Canada, and know many Canadians think our attitude toward Native Americans and wildlife is shameful compared to those in Canada!

Continue to use employees with needed experience and education!

From Southern California.

From Texas.

Had a pass.

Had summer pass for parks.

Have a yearly pass.

Have access pass.

Have Golden age pass.

Have senior pass.

Heard about the refuge from AAA.

I am generally happy with the refuge, but I would like to have the long loop road open later in the year, provided there is not snow or ice on the steep grade parts of the road.

I am very concerned about the spread of weeds in the National Bison Range. I do not remember the scientific names - so, please forgive me! However, there are two kinds of bugs that target Knapweed alone. One eats the seeds and the other eats the roots. Staff at the University of Montana could assist. However, there are also other weeds such as St. John's Wort, that seem to be taking over as well.

I don't think that people understand that the "Bison" Range has so much diversity in wildlife. We almost skipped this stop on our way to Glacier because we thought it was only bison. Thank goodness we didn't! Advertise all the wildlife to educate us. Thank you for all you do!

I flew from Alabama. Keep refuges open, educate and we can all enjoy! Thank you.

I have visited the National Bison Range 10 times over the last 30 years and this was one of the best for viewing wildlife. Thank you.

I hope you use the feedback to make the improvements I suggested and which a lot of family and friends of mine happen to agree with also!

I like this refuge a lot. I think it shows signs of overgrazing in past years. There are a lot of invasive species noted on the hillsides. However, overall it is just a great place to go. I will drive up there in the evening just to get out of Missoula and take some wildlife photos.

I think you should introduce wolves into the Bison Range ecosystem. If I am forced to put up with the wolves when I recreate on national forest and how they have effected game populations because the federal government made me, they should have to put up with them also! If you want the Bison Range to be a complete ecosystem like the rest of Montana then you won't have to do roundups and shoot or transfer the over populated elk and deer. I know this will never happen but if it is good in all the other ecosystems then why not there?

I would have never known about the National Bison Refuge had it not been for plotting the driving route for our vacation in the Dakotas and just happening to notice it on Google Maps. We thought it was a very enjoyable stop along our return drive home.

In my opinion, the National Bison Range is a national treasure. We should continue to preserve and enhance this facility for future generations.

It was my 3rd visit to this refuge over a 10 year span. So enjoyable.

Just passed through on to Yellowstone from Glacier.

Keep management in the hands of trained USFWS people NOT influenced by local Indian tribes.

Keep up the good work!

Loved it! Glad to have had the option of a short drive, as we were en route to the airport.

Loved this! Wish it was closer to home. The staff was wonderful and very helpful and friendly.

My husband and I live only a few miles from the Bison Range and spend many content hours observing the wildlife. He is a fisherman/hunter and I am a photographer, so we can both enjoy the activity. Often, we take a picnic with us. Thank you for keeping your rates low and allowing us to enjoy the beauty and diversity of wildlife that is Montana! We always take out-of-town and out-of-state guests to the range, also, to show off the best wildlife around.

Not enough animals to see.

One of the highlights of our trip to Montana. We will return again if/when in the area and anticipate a slightly different experience each time. I have recommended the refuge to friends. Thank you for all you do to preserve and educate.

Our favorite place for photographing elk in the rut.

Our party of 4 enjoyed the visit, especially since one of our party has an "eagle eye" and could spot and point out animals that were at quite a distance.

Please see prior note about "photographer" permit for the Bison Range. (This is a high priority for me!)

Really enjoy the NWR website and find extremely helpful in planning trips/visits.

Thanks to the USFWS and all departments of Natural Resource agencies for all that you make available to our country!

The Bison Range could be better advertised in tourism publications. I believe it is under-represented considering its importance in North American history. The refuge itself is a good mix between wild/rustic and approachable. The relative obscurity makes each visit a special solitary experience.

The Bison Range is really a treasure. To see five different big animals in the two hour drive is amazing. I have been telling my friends and family about the range for years.

The refuge was great!

This is my favorite place to go, and I usually spend 4-6 hours each time when the upper road is open. I go at least once a week. Even in winter, I try to go to the refuge 3-4 times/month.

Used National Park card.

Very friendly and knowledgeable staff.

Very unique experience. Very enjoyable.

Visitor Center was closed during my visit. Not sure why. It was a weekday, later afternoon. No one was around.

We came for the Bison Roundup. I did not really enjoy that. If we would have come at a time that the 20 mile loop was open, then I think it would have been better.

We had a pass that would have allowed free entry, but paid instead to do our part to keep it running.

We have a house in the area and family that live in the area. We enjoy the refuge and have a very nice time. All the wildlife is the part we enjoy best. We are in the area 5-10 times a year. Resident of Gresham, OR. Summer home in St. Regis, MT, 35 miles away.

We have recently retired and will be doing many more trips to enjoy the National Refuges and National Parks. This trip to the refuge has us anxious to enjoy many more trips of this nature.

We loved it.

We so love the Bison Range and love going as much as we can! Took our oldest grandchild for the first time - she is 2 years old. Yesterday she asked to go to Bison Range to see buffalo, mama dear, baby dear...

Wildlife viewing and photography trips we take are numerous.