



# National Wildlife Refuge Visitor Survey 2012: Individual Refuge Results for Ridgefield National Wildlife Refuge

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

This refuge has been my own personal place to seek refuge when there are disturbances in my life. I don't know what I would do without it.

— *Survey comment from a visitor to Ridgefield National Wildlife Refuge*



Ridgefield National Wildlife Refuge. Photo credit: Chris Bidleman, 2012 Refuge Photo Contest.

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## **Introduction**

The National Wildlife Refuge System (Refuge System), established in 1903 and managed by the U.S. Fish and Wildlife Service (Service), is the leading network of protected lands and waters in the world 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 Ridgefield National Wildlife Refuge (NWR) (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.

| <b>Pacific Region (R1)</b>   |
|--|
| Ridgefield National Wildlife Refuge (WA)   |
| <b>Southwest Region (R2)</b>   |
| 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)   |
| <b>Great Lakes-Big Rivers Region (R3)</b>  |
| La Crosse District, Upper Mississippi River National Wildlife and Fish Refuge (WI) |
| Minnesota Valley National Wildlife Refuge (MN)                                     |
| <b>Southeast Region (R4)</b>   |
| 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)  |
| <b>Northeast Region (R5)</b>   |
| 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)  |
| <b>Mountain-Prairie Region (R6)</b>  |
| Bear River Migratory Bird Refuge (UT)  |
| Lee Metcalf National Wildlife Refuge (MT)  |
| Rocky Mountain Arsenal National Wildlife Refuge (CO)                               |
| National Bison Range (MT)  |
| <b>California and Nevada Region (R8)</b>   |
| 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  $n^{\text{th}}$  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) software<sup>1</sup>.

## 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

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<sup>1</sup> 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 Ridgefield NWR, 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 Ridgefield National Wildlife Refuge**

Ridgefield NWR consists of 5,218 acres of habitat, including marshes, grasslands, and woodlands along the Columbia River Gorge. Ridgefield NWR was established to provide critical winter habitat for dusky Canada geese and other wintering waterfowl after a devastating earthquake in Alaska during 1964 that decimated a significant amount of nesting area. Year-round residents include mallards, hawks, herons, black-tailed deer, coyote, raccoon, skunk, beaver, river otter, and brush rabbits. The Ridgefield National Wildlife Refuge Complex includes three other refuges (Franz Lake, Pierce and Steigerwald Lake NWRs), all protecting the Columbia River floodplain and its habitat for numerous animals other than migratory birds.

Ridgefield attracts approximately 118,000 visitors per year who participate in the many activities and opportunities offered by the refuge (2011 Refuge Annual Performance Plan measures; Rob Miller, U.S. Fish and Wildlife Service, 2012, written commun.). Activities include an auto tour route, hiking trails, waterfowl hunting, fishing, wildlife observation, an observation blind, and educational information at the visitor contact station. Figure 1 displays a map of the refuge. For more information please visit <http://www.fws.gov/ridgefieldrefuges/>.



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

## Sampling at Ridgefield National Wildlife Refuge

A total of 243 visitors agreed to participate in the survey during the two sampling periods at the identified locations at Ridgefield NWR (table 2). In all, 179 visitors completed the survey for a 76% response rate, and  $\pm 5.9\%$  margin of error at the 95% confidence level.<sup>2</sup>

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

| Sampling period | Dates                          | Locations   | Total contacts | Undeliverable addresses | Completed surveys | Response rate |
|-----------------|--------------------------------|---|----------------|-------------------------|-------------------|---------------|
| 1               | 5/5/2012<br>to<br>5/19/2012    | Headquarters/Plankhouse<br>Auto Tour Entrance             |                |                         |                   |               |
| SP1 Totals      |                                |   | 147            | 3                       | 110               | 76%           |
| 2               | 10/13/2012<br>to<br>10/27/2012 | Headquarters /Plankhouse/Carty Unit<br>Auto Tour Entrance |                |                         |                   |               |
| SP2 Totals      |                                |   | 96             | 4                       | 69                | 75%           |
| Combined Totals |                                |   | <b>243</b>     | <b>7</b>                | <b>179</b>        | <b>76%</b>    |

<sup>2</sup> 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 Ridgefield NWR reported that before participating in the survey, they were aware of the role of the Service in managing refuges (88%) and that the Refuge System has the mission of conserving, managing, and restoring fish, wildlife, plants, and their habitats (91%). 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.

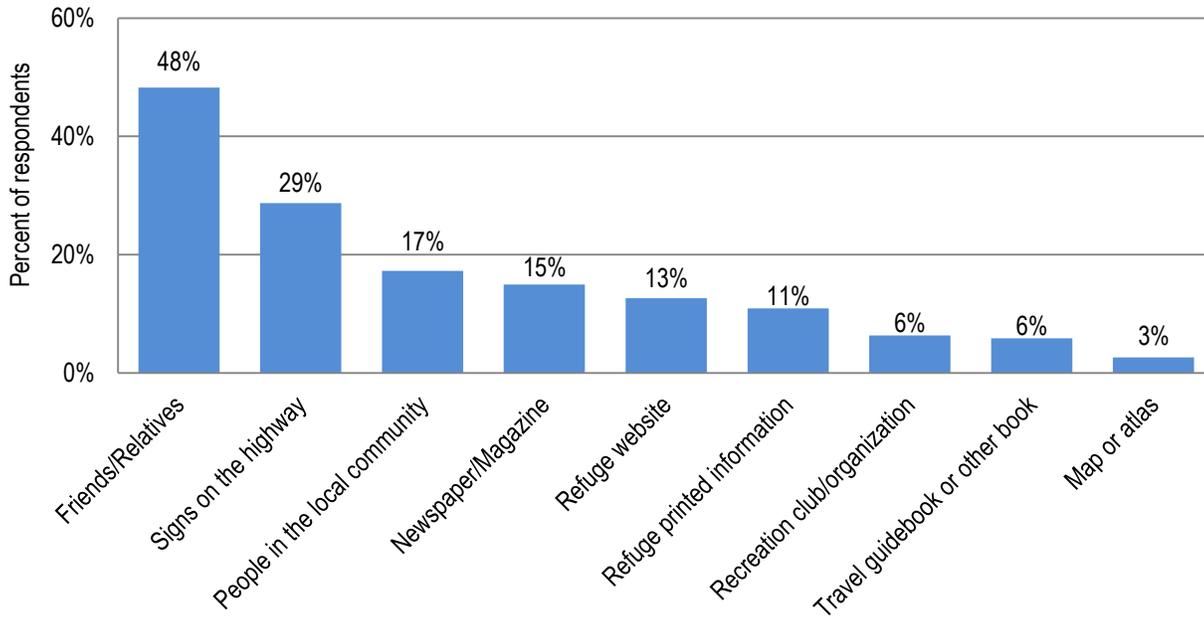
Most visitors (93%) feel that refuges, compared to other public lands, provide a unique recreation experience (see Appendix B for visitor comments on “What Makes National Wildlife Refuges Unique?”); however, reasons for why visitors find refuges unique are varied and may not directly correspond to their understanding of the mission of the Refuge System.

More than half of visitors to Ridgefield NWR had been to at least one *other* national wildlife refuge in the past year (67%), with an average of 7 visits to *other* refuges during the past 12 months.

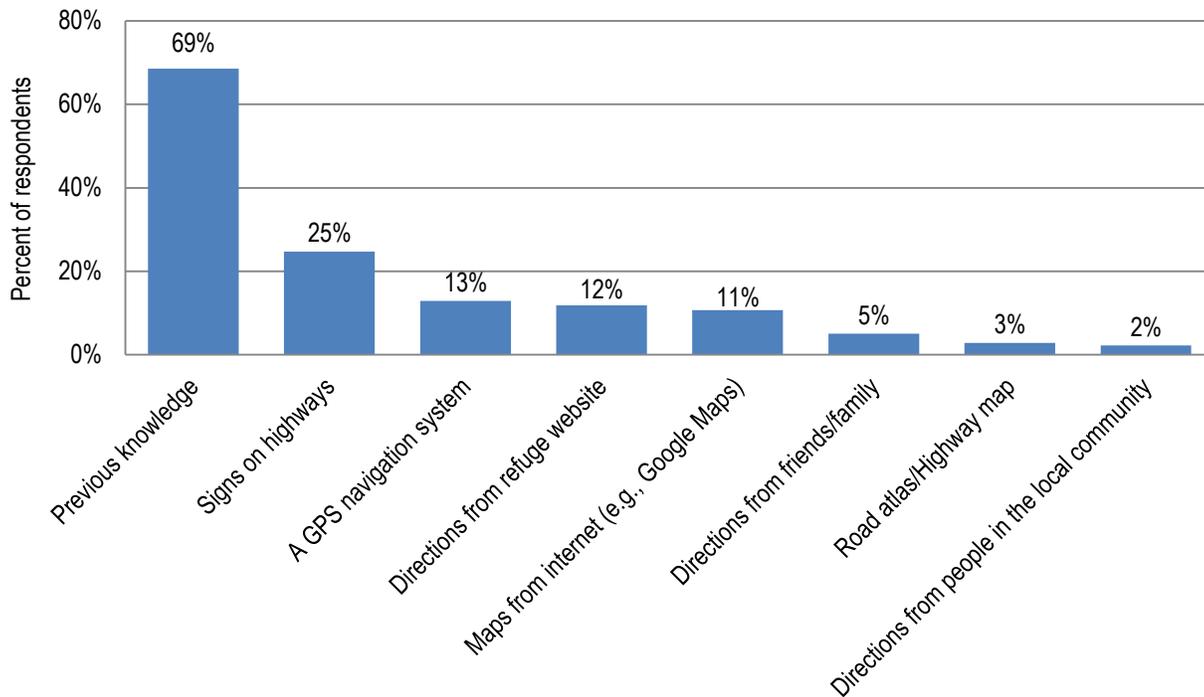
#### Visiting This Refuge

Some surveyed visitors (27%) had only been to Ridgefield NWR once in the past 12 months, while many had been multiple times (73%). These repeat visitors went to the refuge an average of 14 times during that same 12-month period. Visitors used the refuge during only one season (39%), during multiple seasons (22%), and year-round (39%).

Visitors first learned about the refuge from friends/relatives (48%), signs on the highway (29%), or people in the local community (17%; fig. 2). Key information sources used by visitors to find their way to this refuge include their own previous knowledge (69%), and to a lesser degree, signs on the highways (25%) or a GPS navigation system (13%; fig. 3).



**Figure 2.** How visitors first learned or heard about Ridgefield NWR (n = 174).



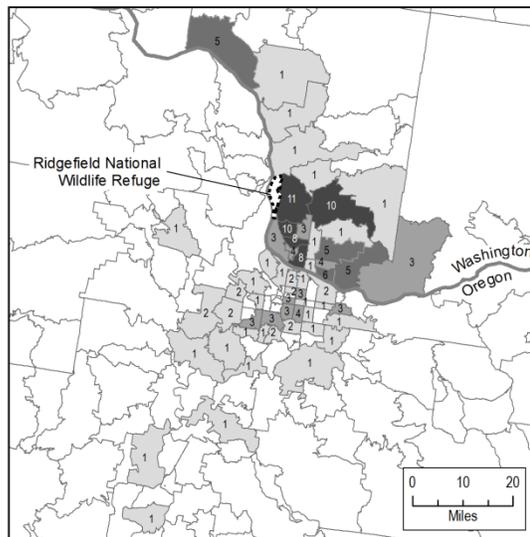
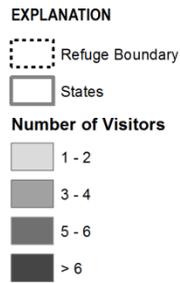
**Figure 3.** Resources used by visitors to find their way to Ridgefield NWR during this visit (n = 178).

Most visitors (82%) lived in the local area (within 50 mi of the refuge), whereas 18% were nonlocal visitors. For most local visitors, Ridgefield NWR was the primary purpose or sole destination of their trips (91%; table 3). For most nonlocal visitors, the refuge was also the primary purpose or sole destination of their trips (66%).

Local visitors reported that they traveled an average of 24 mi to get to the refuge, while nonlocal visitors traveled an average of 154 mi. The average distance traveled for all visitors to this refuge was 41 mi, while the median was 25 mi. Figure 4 shows the residences of visitors traveling to this refuge. About 62% of visitors traveling to Ridgefield NWR were from the state of Washington.

**Table 3.** Influence of Ridgefield NWR on visitors' decisions to take their trips.

| Visitors     | Visiting this refuge was... |  |                    |
|--------------|-----------------------------|--|--------------------|
|              | the primary reason for trip | one of many equally important reasons for trip | an incidental stop |
| Nonlocal     | 66%                         | 22%  | 13%                |
| Local        | 91%                         | 8%   | 1%                 |
| All visitors | 86%                         | 10%  | 3%                 |



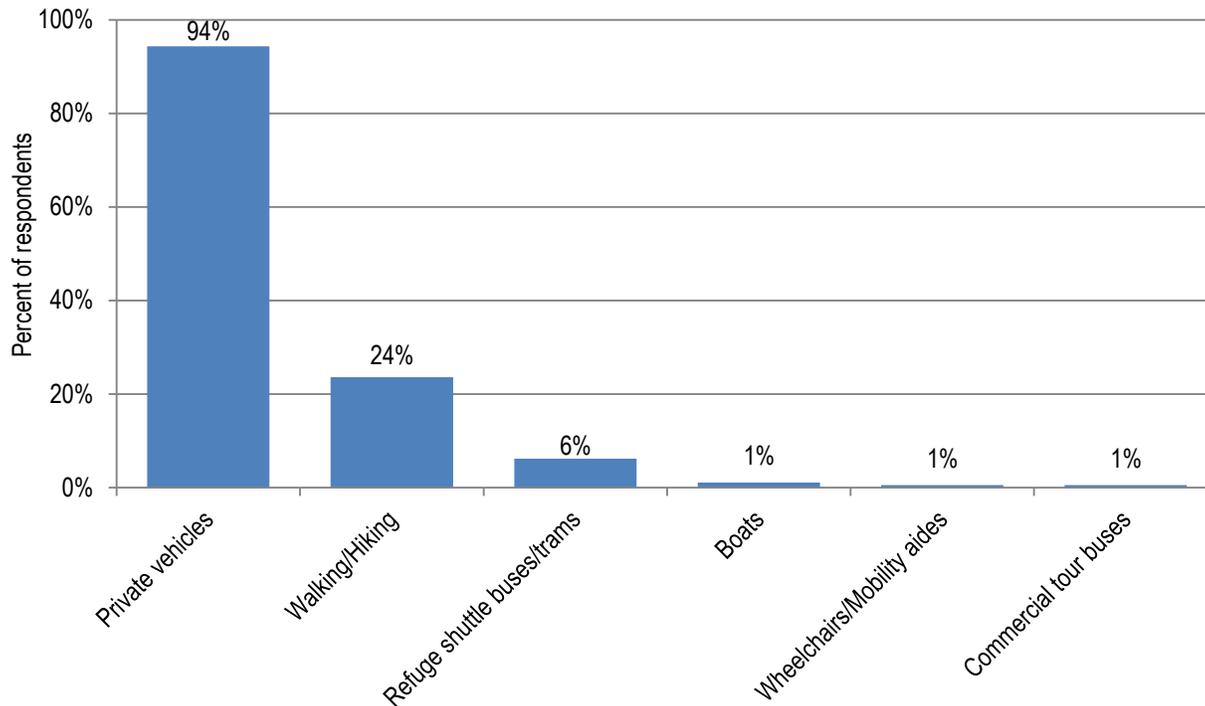
**Figure 4.** Number of visitors travelling to Ridgefield NWR by place of residence. The top map shows visitors residence by state and the bottom map shows residence by zip codes near the refuge (n = 179).

Surveyed visitors reported that they spent an average of 4 hr at the refuge during one day there, while the most frequently reported length of a day visit (the modal response) was 3 hr (26%). Most visitors indicated they were part of a group on their visit to this refuge (73%). 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 Ridgefield NWR (for those who indicated they were part of a group, n = 176).

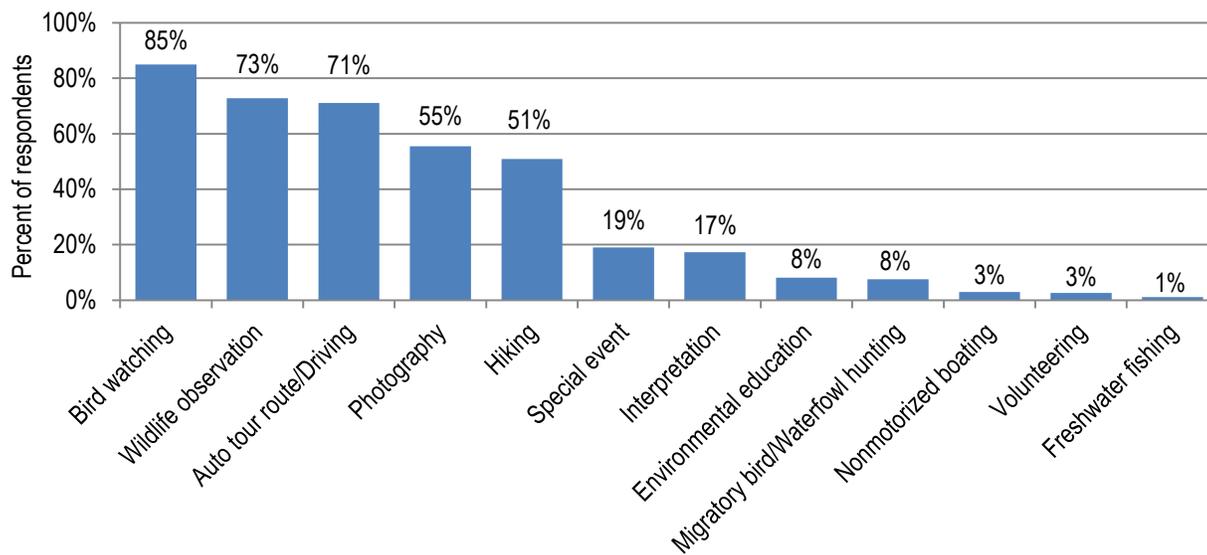
| Group type                  | Percent<br>(of those traveling<br>in a group) | Average group size |                    |                  |
|-----------------------------|---|--------------------|--------------------|------------------|
|                             |   | Number of adults   | Number of children | Total group size |
| Family/Friends              | 91%   | 2                  | 0                  | 3                |
| Commercial tour group       | 1%  | 6                  | 0                  | 6                |
| Organized club/School group | 5%  | 7                  | 31                 | 38               |
| Other group type            | 3%  | 2                  | 1                  | 3                |

The key mode of transportation used by visitors to travel around the refuge was private vehicles (94%; fig. 5).

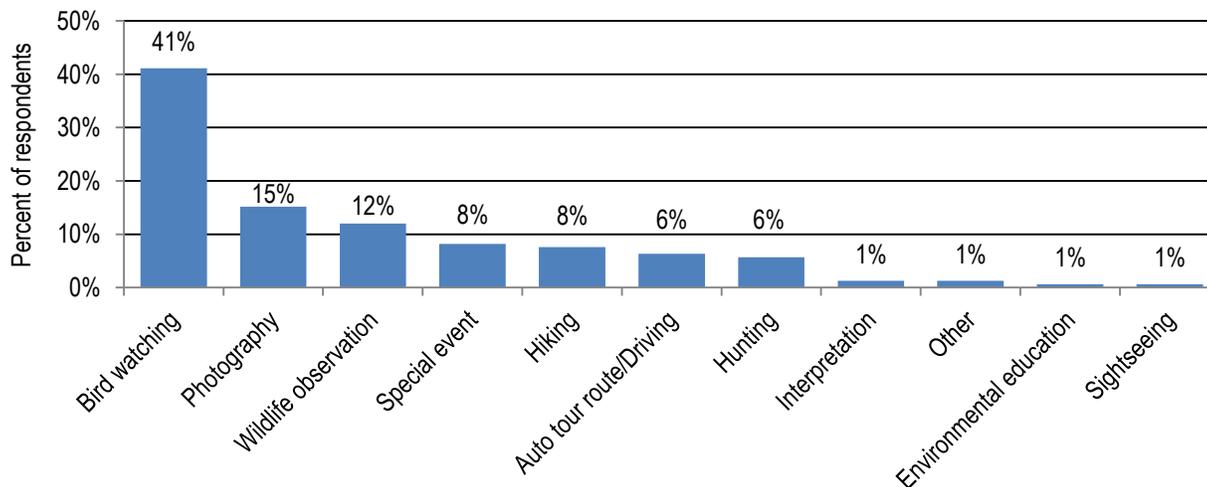


**Figure 5.** Modes of transportation used by visitors to Ridgefield NWR during this visit (n = 178).

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 bird watching (85%), wildlife observation (73%), and auto tour route/driving (71%). The primary reasons for visitors' most recent visits included bird watching (41%), and to a lesser degree, photography (15%) and wildlife observation (12%; fig. 7).



**Figure 6.** Activities in which visitors participated during the past 12 months at Ridgefield NWR (n = 173). See Appendix B for a listing of “other” activities.



**Figure 7.** The **primary** activity in which visitors participated during this visit to Ridgefield NWR (n = 158). See Appendix B for a listing of “other” activities.

## Visitor Characteristics

All visitors who participated in the survey at Ridgefield NWR indicated that they were citizens or permanent residents of the United States. These visitors were a mix of 45% male (with an average age of 54 years) and 55% female (with an average age of 54 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, 82% of surveyed visitors to Ridgefield NWR indicated that they live within the local 50-mi area while nonlocal visitors (18%) 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 (n = 25) spent an average of \$53 per person per day and local visitors spent an average of \$18 per person per day in the local area. ***It is important to note that summary statistics based on a small sample size (n < 30) may not provide a reliable representation of that population.*** 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 Ridgefield NWR expressed in dollars per person per day.

| Visitors | n <sup>1</sup>   | Median | Mean | Standard deviation | Minimum | Maximum |
|----------|--|--------|------|--------------------|---------|---------|
| Nonlocal | <i>The sample size of nonlocals (n=25) was too low to adequately represent this visitor group.</i> |        |      |                    |         |         |
| Local    | 115  | \$13   | \$18 | \$20               | \$0     | \$118   |

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

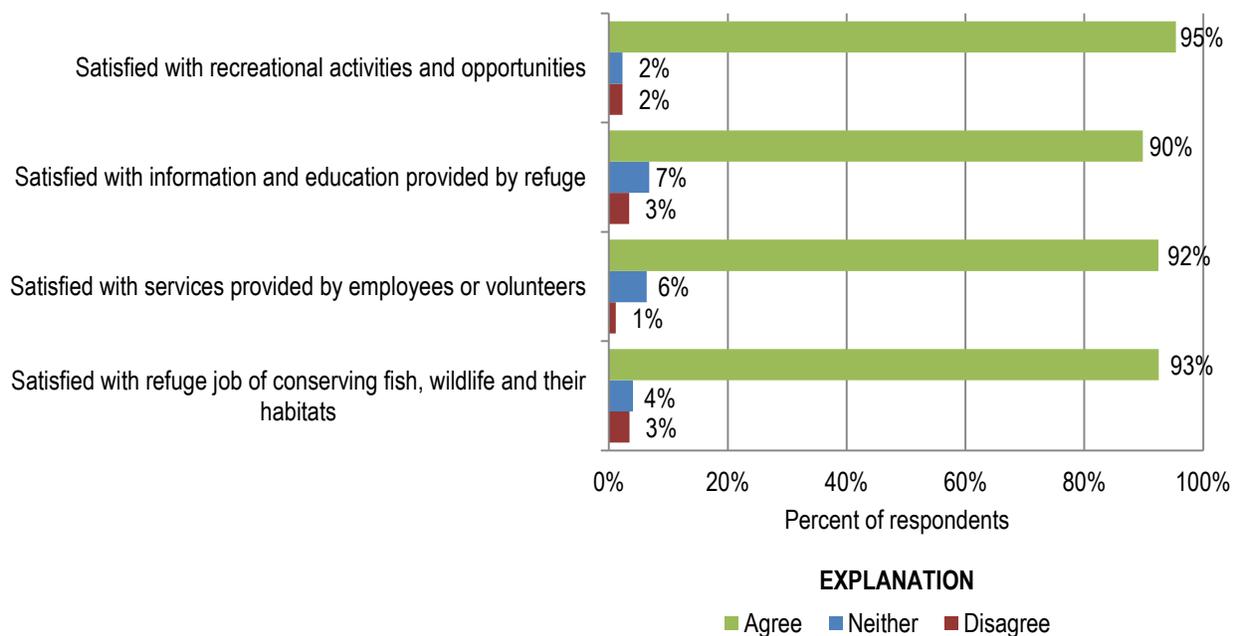
Note: For each respondent, reported expenditures were divided by the number of persons in their group that shared expenses in order to determine the spending per person per trip. This number was then divided by the number of days spent in the local area to determine the spending per person per day for 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 20<sup>th</sup> 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.

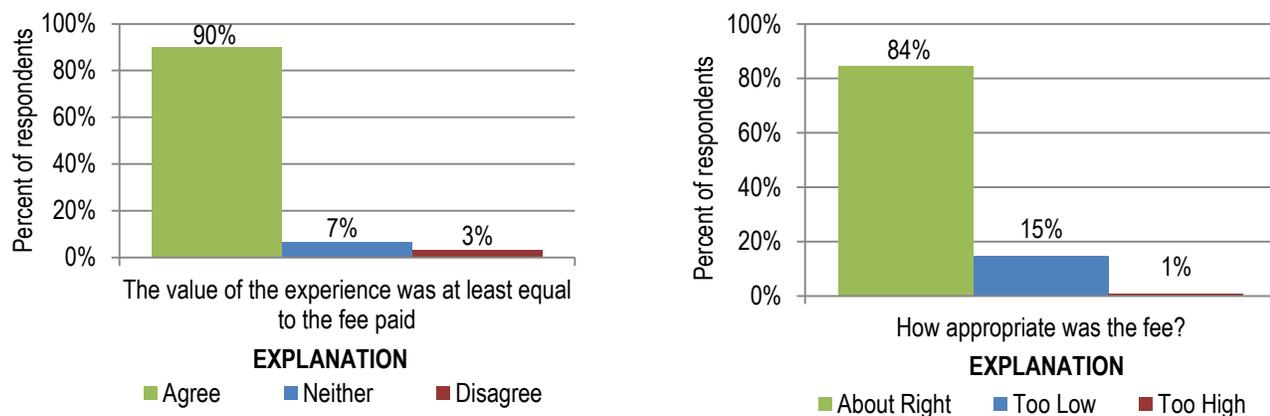
Surveyed visitors' overall satisfaction ratings with the services, facilities, and recreational opportunities provided at Ridgefield NWR were as follows (fig. 8):

- 95% of visitors were satisfied with the recreational activities and opportunities,
- 90% of visitors were satisfied with the information and education about the refuge and its resources,
- 92% of visitors were satisfied with the services provided by employees or volunteers, and
- 93% of visitors were satisfied with the refuge's job of conserving fish, wildlife and their habitats.



**Figure 8.** Overall satisfaction with Ridgefield NWR during this visit (n ≥ 173).

Of the 70% of visitors who indicated that they paid a fee to enter the refuge, 90% agreed that the opportunities and services were at least equal to the fee they paid. Additionally, 84% of visitors felt the appropriateness of the fee was about right, whereas 15% felt the fee was too low and 1% felt it was too high (fig. 9).



**Figure 9.** Opinions about fees at Ridgefield NWR (for those visitors who indicated they paid a fee, n = 122).

## 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 10–12 depict surveyed visitors' importance-satisfaction ratings for refuge services and facilities, recreational opportunities, and transportation-related features at Ridgefield NWR. Results are summarized as follows:

- All refuge *services and facilities* fell in the "Keep Up the Good Work" quadrant (fig. 10).
- All refuge *recreational opportunities* fell in the "Keep Up the Good Work" quadrant except hunting and fishing opportunities, which fell into the "Look Closer" quadrant (fig. 11). The average importance of these activities is likely higher among visitors to Ridgefield NWR who actually participated in the activities during the 12 months prior to taking the survey 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 this recreational opportunity, while the average importance score of hunting activities across all visitors was lower.

- All *transportation-related features* fell in the “Keep Up the Good Work” quadrant (fig. 12).

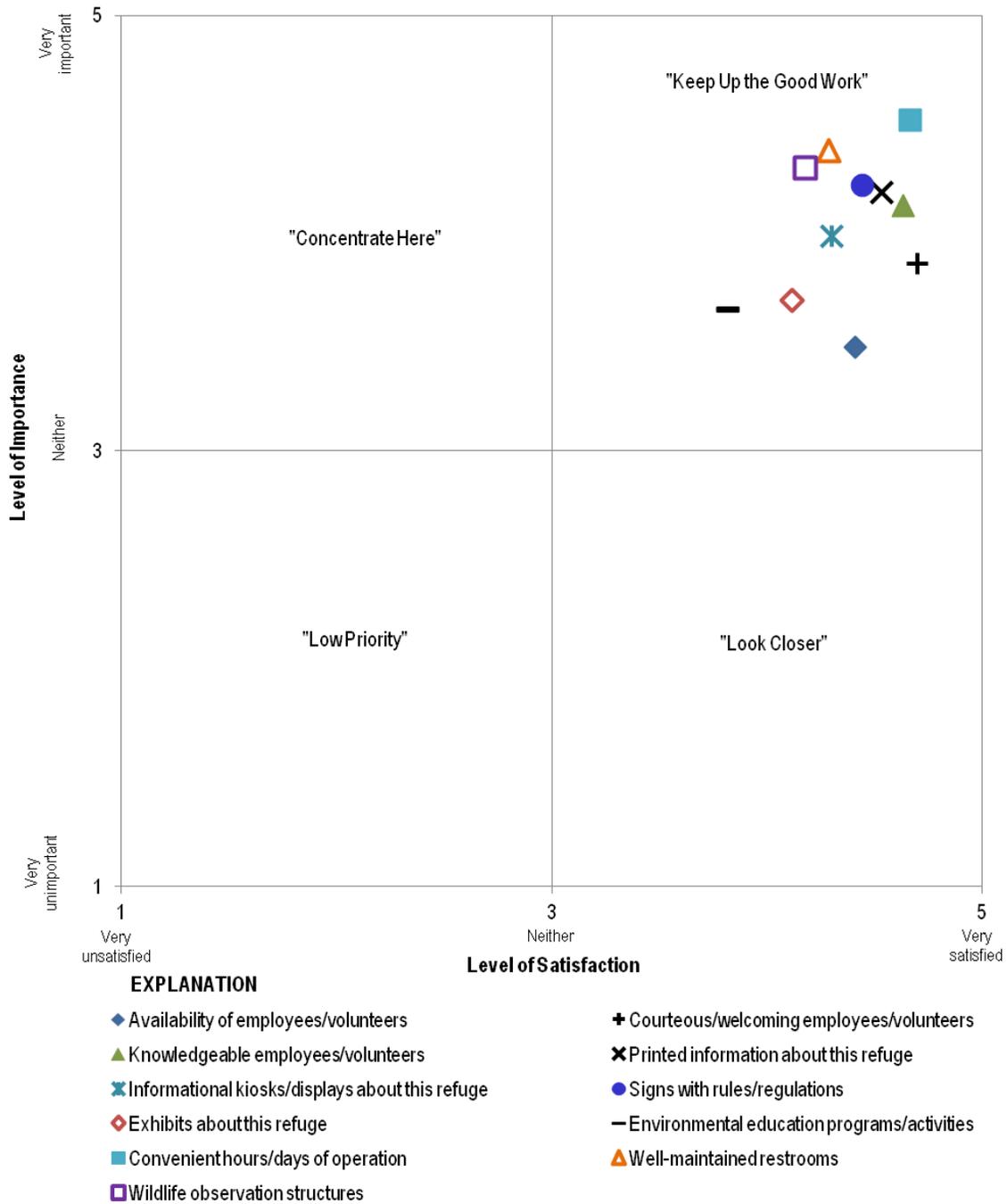
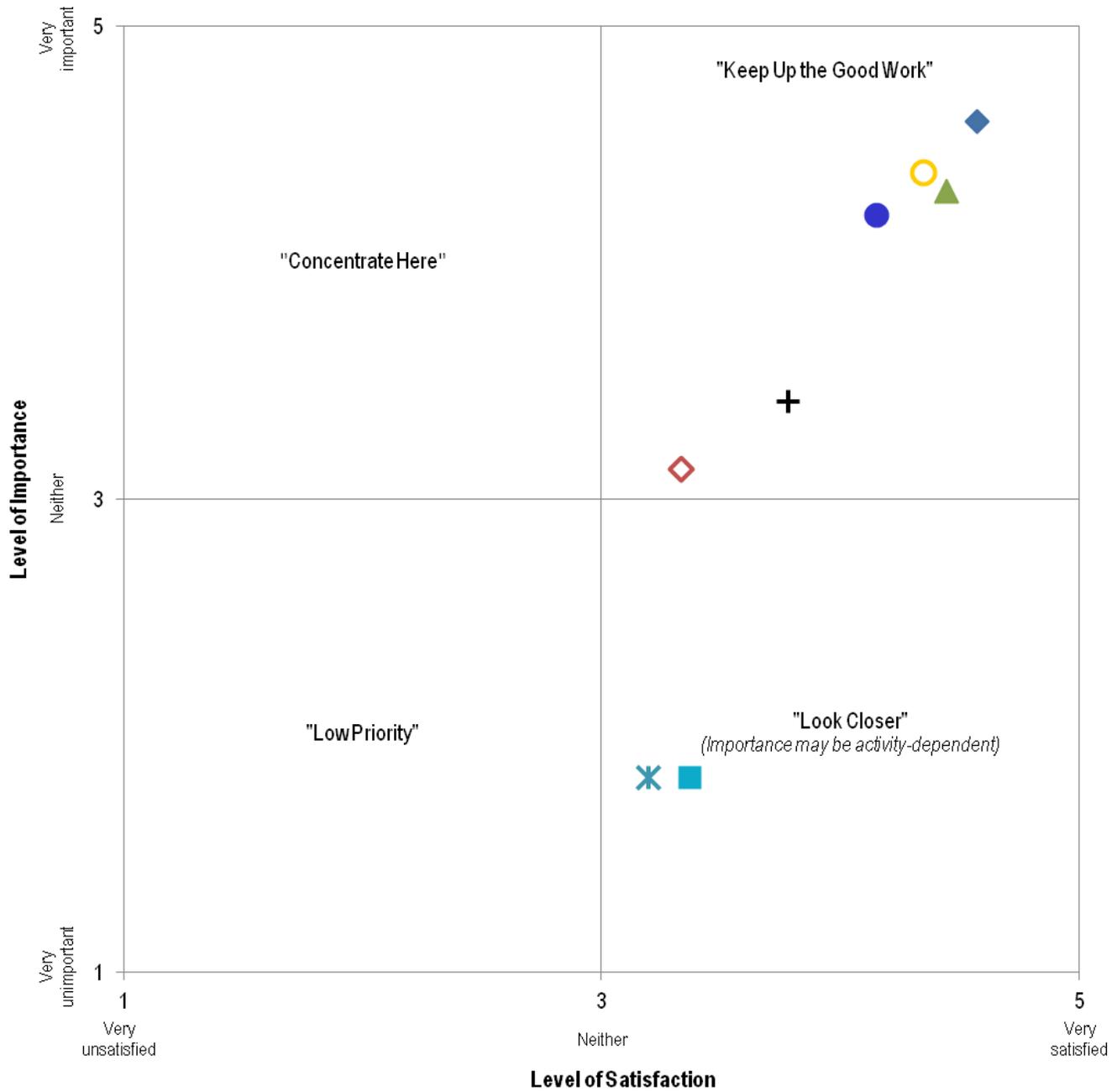


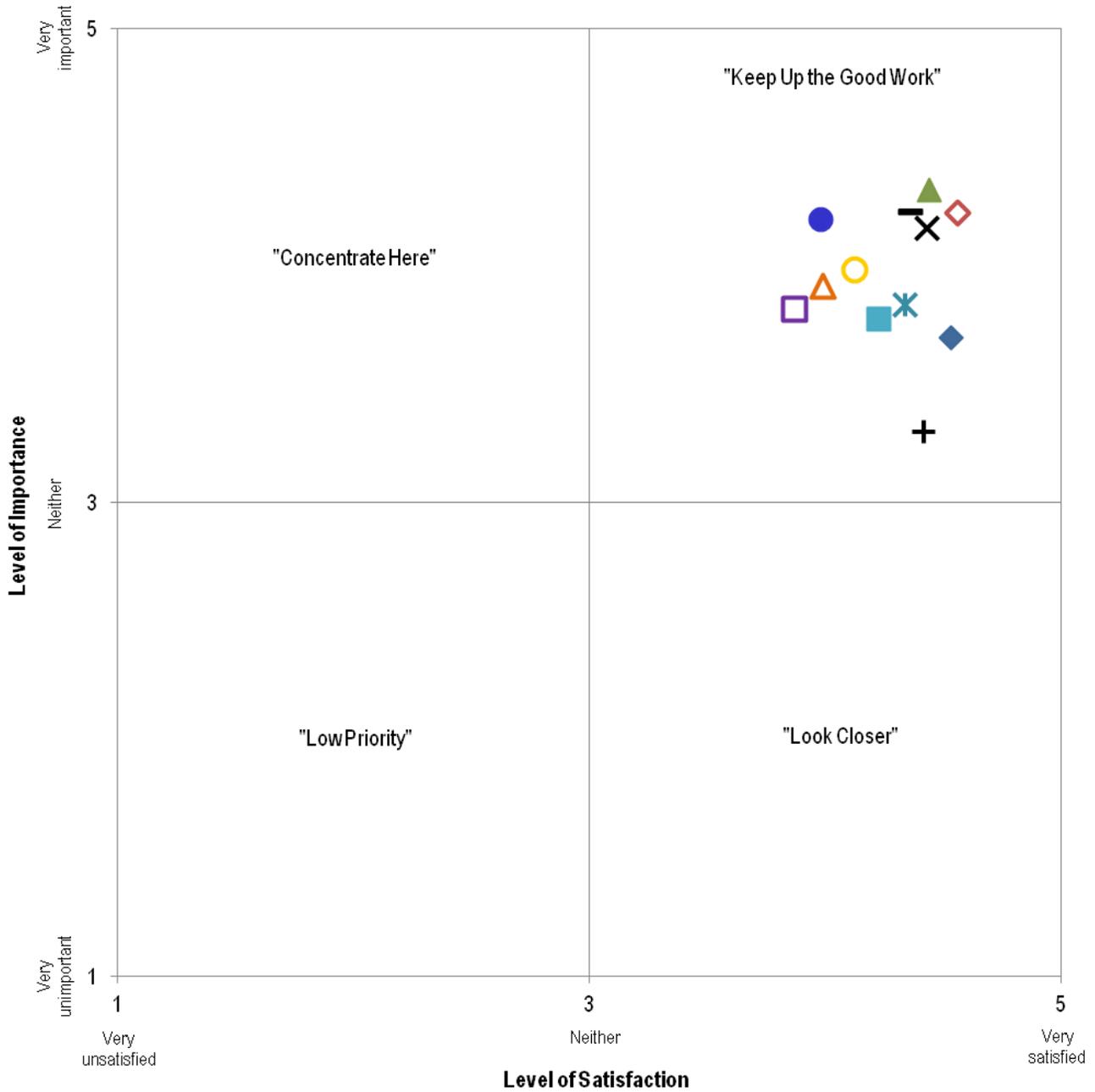
Figure 10. Importance-satisfaction ratings of services and facilities provided at Ridgefield NWR.



**EXPLANATION**

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

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



**EXPLANATION**

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

**Figure 12.** Importance-satisfaction ratings of transportation-related features at Ridgefield NWR.

## Visitor Opinions about National Wildlife Refuge System Topics

*One goal of this national visitor survey was to identify visitor trends across the Refuge System to more effectively manage refuges and provide visitor services. Two important issues to the Refuge System are transportation on refuges and communicating with visitors about climate change. The results of these questions will be evaluated in aggregate form (data from all participating refuges together) to better address national-level goals. Basic results for Ridgefield NWR are reported here.*

### Alternative Transportation and the Refuge System

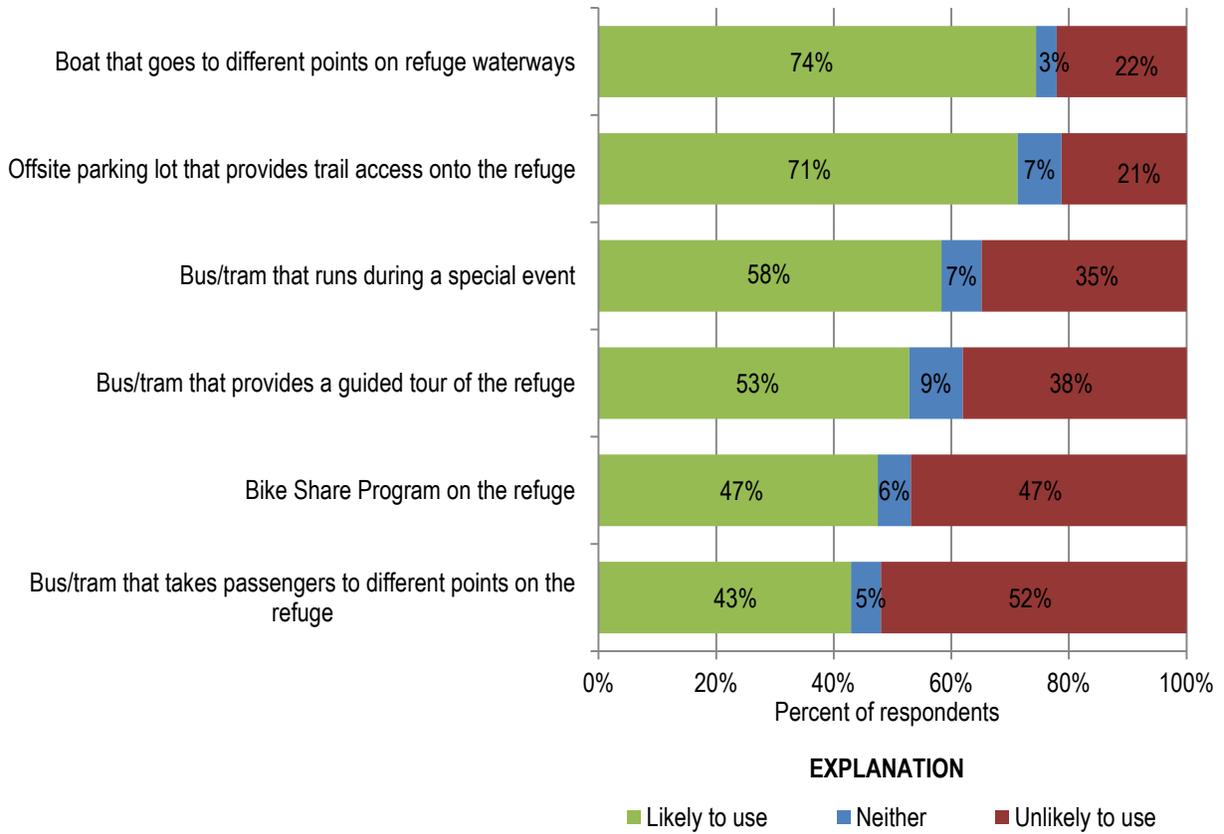
*Visitors use various types of transportation to access and enjoy refuges. While many visitors arrive at the refuge in private vehicles, alternatives such as buses, trams, watercraft, and bicycles are increasingly becoming a part of the visitor experience. Previous research has identified a growing need 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 Ridgefield NWR visitors were likely to use the following at refuges in the future (fig. 13):

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

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

When asked specifically about using alternative transportation at Ridgefield NWR, some visitors thought alternative transportation would enhance their experience (17%) while others thought it would not (42%). An additional 42% of surveyed visitors indicated they were unsure whether alternative transportation would enhance their experiences.



**Figure 13.** Visitors' likelihood of using alternative transportation options at refuges in the future (n ≥ 172).

## 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.*

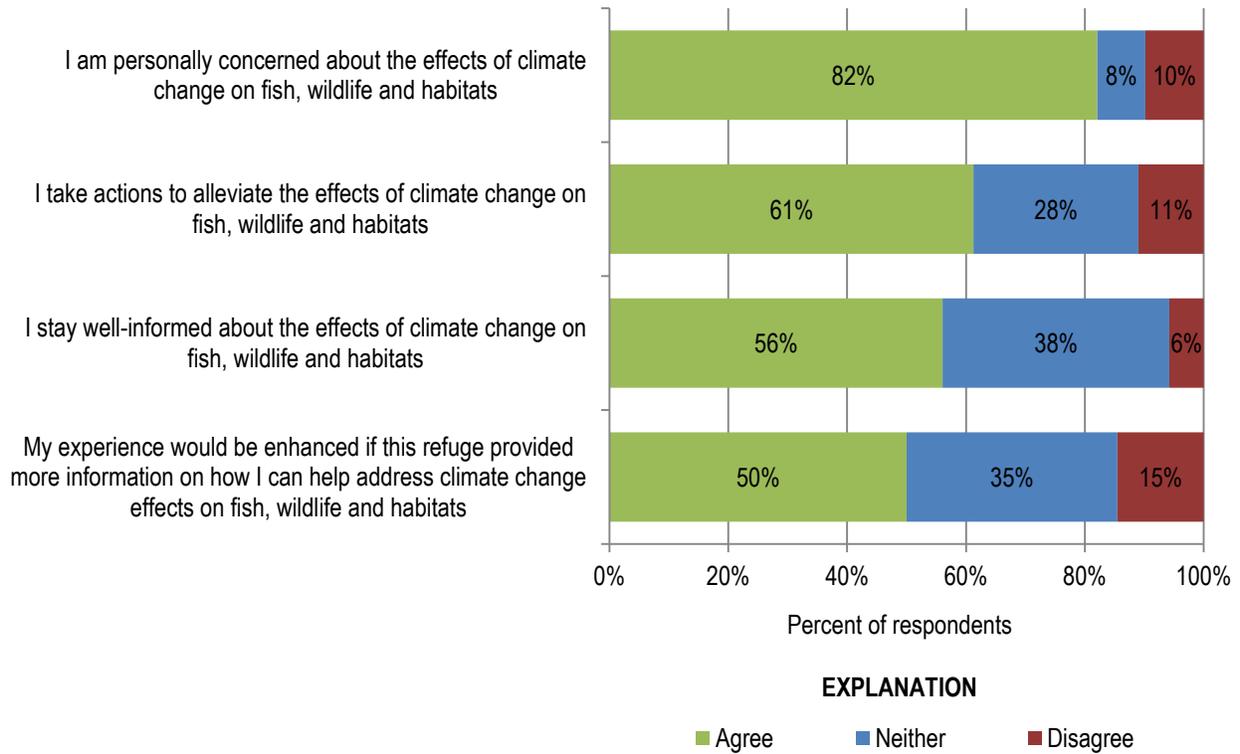
The majority of visitors to Ridgefield NWR agreed with the following statements related to their own *personal involvement* with the topic of climate change as it relates to fish, wildlife, and habitats (fig. 14):

- I am personally concerned about the effects of climate change on fish, wildlife and habitats;
- I take actions to alleviate the effects of climate change;
- I stay well-informed about the effects of climate change; and
- My experience would be enhanced if the refuge provides information about how I can help address climate change effects.

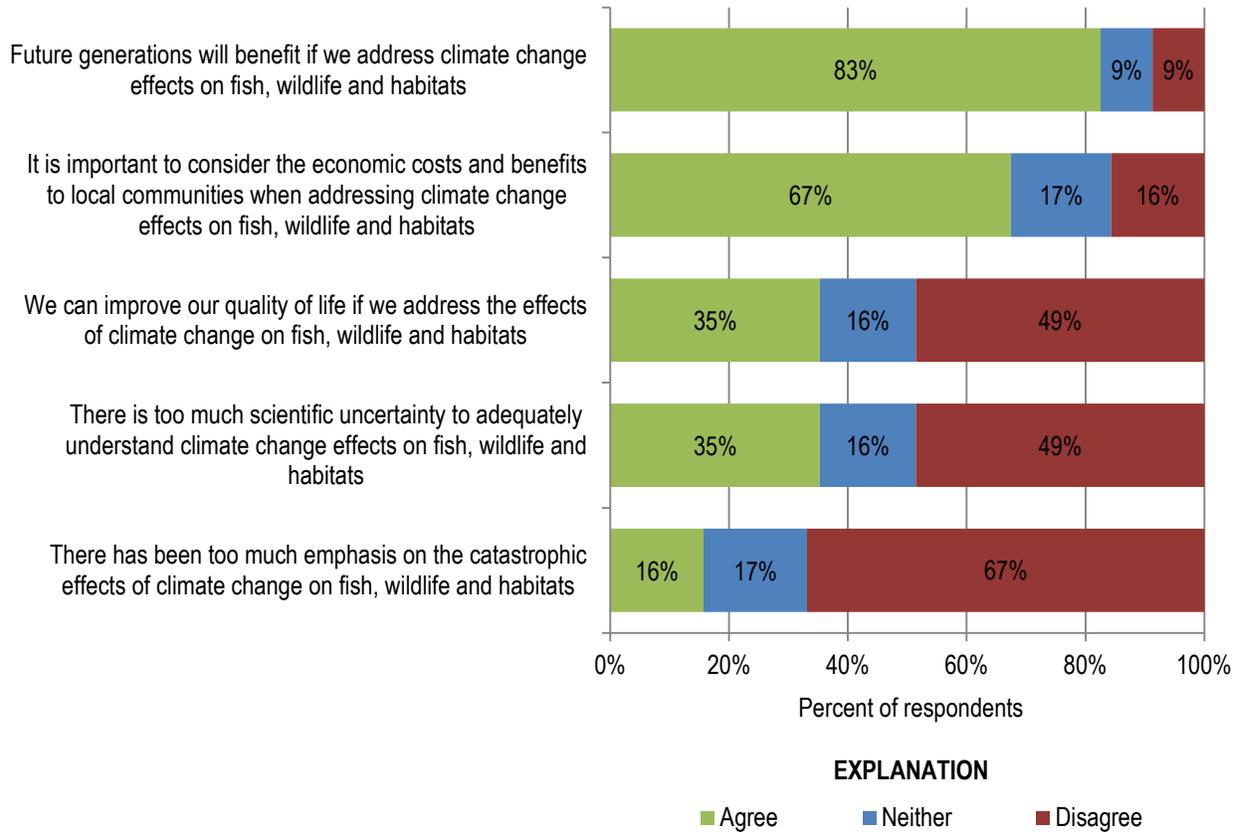
The majority of visitors also agreed with the following *belief statements* regarding climate change effects on fish, wildlife and their habitats (fig. 15):

- Future generations will benefit if we address climate change effects; 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 half of visitors (50%) indicated their experiences would be enhanced if Ridgefield NWR provided information about how visitors can help to address climate change impacts on fish, wildlife, and their habitats (fig. 14).



**Figure 14.** Visitors' personal involvement with climate change related to fish, wildlife and their habitats (n ≥ 172).



**Figure 15.** Visitors' beliefs about the effects of climate change on fish, wildlife and their habitats (n ≥ 172).

## Conclusion

These individual refuge results provide a summary of trip characteristics and experiences of a sample of visitors to Ridgefield NWR 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 will be 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](mailto:national_visitor_survey@usgs.gov) or 970.226.9205.

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# National Wildlife Refuge Visitor Survey



**PLEASE READ THIS FIRST:**

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

**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**

1. Including your most recent visit, which activities have you participated in during the past 12 months at this Refuge?  
 (Please mark **all that apply.**) (\* indicates the activity is not offered at Ridgefield National Wildlife Refuge)

|  |  |   |
|--|--|---|
| <input type="checkbox"/> 0% Big game hunting                 | <input type="checkbox"/> 51% Hiking  | <input type="checkbox"/> 8% Environmental education (for example, classrooms or labs)         |
| <input type="checkbox"/> 0% Upland/Small game hunting        | <input type="checkbox"/> * Bicycling                                       |   |
| <input type="checkbox"/> 8% Migratory bird/Waterfowl hunting | <input type="checkbox"/> 71% Auto tour route/Driving                       | <input type="checkbox"/> 17% Interpretation (for example, exhibits, kiosks, videos)           |
| <input type="checkbox"/> 73% Wildlife observation            | <input type="checkbox"/> 0% Motorized boating                              |   |
| <input type="checkbox"/> 85% Bird watching                   | <input type="checkbox"/> 3% Nonmotorized boating (including canoes/kayaks) | <input type="checkbox"/> 19% Refuge special event ( <i>please specify</i> )<br>See Appendix B |
| <input type="checkbox"/> 12% Freshwater fishing              |  |   |
| <input type="checkbox"/> 0% Saltwater fishing                | <input type="checkbox"/> 3% Volunteering                                   | <input type="checkbox"/> 3% Other ( <i>please specify</i> )<br>See Appendix B                 |
| <input type="checkbox"/> 55% Photography                     |  |   |

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

3. Did you go to a Visitor Center at this Refuge?  
 100% No **Ridgefield National Wildlife Refuge does not have a Visitor Center. This question does not apply.**

0% Yes → If yes, what did you do there? (Please mark **all that apply.**)

|   |  |
|---|--|
| <input type="checkbox"/> * Visit the gift shop or bookstore       | <input type="checkbox"/> * Pick up/purchase a license, permit, or pass                       |
| <input type="checkbox"/> * View the exhibits                      | <input type="checkbox"/> * Stop to use the facilities (for example, get water, use restroom) |
| <input type="checkbox"/> * Ask information of staff/volunteers    |  |
| <input type="checkbox"/> * Watch a nature talk/video/presentation | <input type="checkbox"/> * Other ( <i>please specify</i> ) See Appendix B                    |

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

| <b>Nonlocal</b>              | <b>Local</b>                 | <b>All visitors</b>          |   |
|------------------------------|------------------------------|------------------------------|---|
| <input type="checkbox"/> 66% | <input type="checkbox"/> 91% | <input type="checkbox"/> 86% | It was the primary purpose or sole destination of my trip.  |
| <input type="checkbox"/> 22% | <input type="checkbox"/> 8%  | <input type="checkbox"/> 10% | It was one of many equally important reasons or destinations for my trip.   |
| <input type="checkbox"/> 13% | <input type="checkbox"/> 1%  | <input type="checkbox"/> 3%  | It was just an incidental or spur-of-the-moment stop on a trip taken for other purposes or to other destinations. |

5. Approximately how many **hours/minutes and miles** (one-way) did you travel from your home to this Refuge?

|                     |                    |                       |            |                    |
|---------------------|--------------------|-----------------------|------------|--------------------|
| <b>Nonlocal</b>     | <u>  2  </u> Hours | <u>  58  </u> Minutes | <i>and</i> | <u> 154 </u> Miles |
| <b>Local</b>        | <u>  0  </u> Hours | <u>  45  </u> Minutes | <i>and</i> | <u>  24 </u> Miles |
| <b>All visitors</b> | <u>  1  </u> Hours | <u>  2  </u> Minutes  | <i>and</i> | <u>  41 </u> Miles |

6. What type of group were you with on your visit to this Refuge?

27% None, I visited this Refuge alone

*(of those visiting with a group)*

91% Family and/or friends

5% Organized club or school group (for example, Boy/Girl Scouts, hiking club, bird watching group)

1% Commerical tour group

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

7. Including yourself, how many people were in your group? (*Please answer each category.*)

  2   number 18 years and over

  2   number 17 years and under

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

48% Family and/or friends

13% Refuge website

29% Signs on highway

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

6% Recreation club or organization

1% Television or radio

17% People in the local community

15% Newspaper or magazine

11% Refuge printed information (brochure, map)

6% Travel guidebook or other book

3% Map or atlas

5% Other (*please specify*) See Appendix B

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

78% Spring  
(March-May)

51% Summer  
(June-August)

72% Fall  
(September-November)

47% Winter  
(December-February)

10. How many times have you visited...

...this Refuge (including this visit) in the last 12 months?   11   number of visits

...other National Wildlife Refuges in the last 12 months?   5   number of visits

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

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

- |                              |   |                             |                                  |                              |                                       |
|------------------------------|---|-----------------------------|----------------------------------|------------------------------|---------------------------------------|
| <input type="checkbox"/> 94% | Private vehicle without a trailer                             | <input type="checkbox"/> 6% | Refuge shuttle bus or tram       | <input type="checkbox"/> 0%  | Bicycle                               |
| <input type="checkbox"/> 0%  | Private vehicle with a trailer<br>(for boat, camper or other) | <input type="checkbox"/> 0% | Motorcycle                       | <input type="checkbox"/> 24% | Walk/Hike                             |
| <input type="checkbox"/> 1%  | Commercial tour bus   | <input type="checkbox"/> 0% | ATV or off-road vehicle          | <input type="checkbox"/> 2%  | Other ( <i>please specify below</i> ) |
| <input type="checkbox"/> 0%  | Recreational vehicle (RV)                                     | <input type="checkbox"/> 1% | Boat                             | <u>See Appendix B</u>        |                                       |
|                              |   | <input type="checkbox"/> 1% | Wheelchair or other mobility aid |                              |                                       |

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

- |                              |  |                              |   |
|------------------------------|--|------------------------------|---|
| <input type="checkbox"/> 69% | Previous knowledge/I have been to this Refuge before | <input type="checkbox"/> 11% | Maps from the Internet (for example, MapQuest or Google Maps) |
| <input type="checkbox"/> 25% | Signs on highways                                    | <input type="checkbox"/> 12% | Directions from Refuge website                                |
| <input type="checkbox"/> 13% | A GPS navigation system                              | <input type="checkbox"/> 2%  | Directions from people in community near this Refuge          |
| <input type="checkbox"/> 3%  | A road atlas or highway map                          | <input type="checkbox"/> 5%  | Directions from friends or family                             |
|                              |  | <input type="checkbox"/> 3%  | Other ( <i>please specify</i> ) <u>See Appendix B</u>         |

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)?          | <input type="checkbox"/> 38% | <input type="checkbox"/> 14% | <input type="checkbox"/> 5% | <input type="checkbox"/> 28% | <input type="checkbox"/> 15% |
| ...a bike that was offered through a Bike Share Program for use while on the Refuge?                            | <input type="checkbox"/> 33% | <input type="checkbox"/> 14% | <input type="checkbox"/> 6% | <input type="checkbox"/> 28% | <input type="checkbox"/> 20% |
| ...a bus or tram that provides a guided tour of the Refuge with information about the Refuge and its resources? | <input type="checkbox"/> 28% | <input type="checkbox"/> 10% | <input type="checkbox"/> 9% | <input type="checkbox"/> 30% | <input type="checkbox"/> 23% |
| ...a boat that goes to different points on Refuge waterways?  | <input type="checkbox"/> 16% | <input type="checkbox"/> 6%  | <input type="checkbox"/> 3% | <input type="checkbox"/> 40% | <input type="checkbox"/> 35% |
| ...a bus or tram that runs during a special event (such as an evening tour of wildlife or weekend festival)?    | <input type="checkbox"/> 25% | <input type="checkbox"/> 10% | <input type="checkbox"/> 7% | <input type="checkbox"/> 29% | <input type="checkbox"/> 29% |
| ...an offsite parking lot that provides trail access for walking/hiking onto the Refuge?                        | <input type="checkbox"/> 13% | <input type="checkbox"/> 9%  | <input type="checkbox"/> 7% | <input type="checkbox"/> 33% | <input type="checkbox"/> 38% |
| ...some other alternative transportation option?<br>( <i>please specify</i> ) <u>See Appendix B</u>             | <input type="checkbox"/> 8%  | <input type="checkbox"/> 0%  | <input type="checkbox"/> 8% | <input type="checkbox"/> 58% | <input type="checkbox"/> 25% |

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

- 17% Yes       42% No       42% 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 Applicable |
| 3%                        | 15%                  | 12%     | 51%                | 19%            | Surface conditions of roads   | 2%                        | 4%                   | 4%      | 21%                | 70%            | NA             |
| 8%                        | 22%                  | 13%     | 44%                | 12%            | Surface conditions of parking areas   | 3%                        | 4%                   | 4%      | 25%                | 64%            | NA             |
| 2%                        | 5%                   | 6%      | 35%                | 53%            | Condition of bridges  | 2%                        | 5%                   | 7%      | 20%                | 67%            | NA             |
| 4%                        | 3%                   | 8%      | 43%                | 42%            | Condition of trails and boardwalks  | 3%                        | 4%                   | 6%      | 19%                | 68%            | NA             |
| 6%                        | 9%                   | 10%     | 47%                | 28%            | Number of places for parking  | 1%                        | 6%                   | 8%      | 30%                | 56%            | NA             |
| 5%                        | 1%                   | 9%      | 38%                | 47%            | Number of places to pull over along Refuge roads                            | 1%                        | 14%                  | 7%      | 41%                | 37%            | NA             |
| 4%                        | 6%                   | 8%      | 31%                | 52%            | Safety of driving conditions on Refuge roads                                | 1%                        | 2%                   | 5%      | 22%                | 69%            | NA             |
| 2%                        | 5%                   | 8%      | 37%                | 48%            | Safety of Refuge road entrances/exits                                       | 2%                        | 4%                   | 9%      | 27%                | 58%            | NA             |
| 7%                        | 6%                   | 9%      | 38%                | 40%            | Signs on highways directing you to the Refuge                               | 4%                        | 9%                   | 8%      | 30%                | 49%            | NA             |
| 5%                        | 10%                  | 17%     | 36%                | 31%            | Signs directing you around the Refuge roads                                 | 1%                        | 7%                   | 13%     | 26%                | 53%            | NA             |
| 8%                        | 6%                   | 12%     | 36%                | 38%            | Signs directing you on trails   | 3%                        | 9%                   | 16%     | 30%                | 43%            | NA             |
| 7%                        | 7%                   | 19%     | 32%                | 35%            | Access for people with physical disabilities or who have difficulty walking | 4%                        | 7%                   | 24%     | 30%                | 36%            | NA             |

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

See Appendix B

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

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

82% Yes

18% No → How much time did you spend **in the local area** on this trip?

*Nonlocals* If you spent one day or more in the local area, enter the number of days: 5 day(s)

*only* If you spent less than one day in the local area, enter the number of hours: 5 hour(s)

2. How much time did you spend **at this Refuge** during your most recent visit?

If you spent one day or more at this Refuge, enter the number of days: 2 day(s)

If you spent less than one day at this Refuge, enter the number of hours: 3 hour(s)

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

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

See Report for Results

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

2 number of people sharing expenses

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 |
| 6%  | 33%  | 26%  | 10%  | 15%  | 4%   | 4%    | 0%    | 0%    | 1%    | 1%    |

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**.)*

30% Did not pay a fee *(skip to Section 4)*

1% Far too low     14% Too low     84% About right     1% 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.**

1% Strongly disagree     2% Disagree     7% Neither agree or disagree     41% Agree     49% Strongly agree

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

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

|   | Strongly Disagree           | Disagree                    | Neither                     | Agree                        | Strongly Agree               | Not Applicable |
|---|-----------------------------|-----------------------------|-----------------------------|------------------------------|------------------------------|----------------|
| Overall, I am satisfied with the recreational activities and opportunities provided by this Refuge.     | <input type="checkbox"/> 1% | <input type="checkbox"/> 2% | <input type="checkbox"/> 2% | <input type="checkbox"/> 36% | <input type="checkbox"/> 60% | NA             |
| Overall, I am satisfied with the information and education provided by this Refuge about its resources. | <input type="checkbox"/> 1% | <input type="checkbox"/> 3% | <input type="checkbox"/> 7% | <input type="checkbox"/> 44% | <input type="checkbox"/> 46% | NA             |
| Overall, I am satisfied with the services provided by employees or volunteers at this Refuge.           | <input type="checkbox"/> 1% | <input type="checkbox"/> 1% | <input type="checkbox"/> 6% | <input type="checkbox"/> 38% | <input type="checkbox"/> 55% | NA             |
| This Refuge does a good job of conserving fish, wildlife and their habitats.                            | <input type="checkbox"/> 2% | <input type="checkbox"/> 1% | <input type="checkbox"/> 4% | <input type="checkbox"/> 31% | <input type="checkbox"/> 61% | NA             |

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

| Importance                |                      |         |                    |                | Refuge Services, Facilities, and Activities   | Satisfaction              |                      |         |                    |                |                |
|---------------------------|----------------------|---------|--------------------|----------------|---|---------------------------|----------------------|---------|--------------------|----------------|----------------|
| Circle one for each item. |                      |         |                    |                |   | Circle one for each item. |                      |         |                    |                |                |
| Very Unimportant          | Somewhat Unimportant | Neither | Somewhat Important | Very Important |   | Very Unsatisfied          | Somewhat Unsatisfied | Neither | Somewhat Satisfied | Very Satisfied | Not Applicable |
| 5%                        | 19%                  | 14%     | 47%                | 15%            | Availability of employees or volunteers   | 0%                        | 5%                   | 11%     | 24%                | 61%            | NA             |
| 6%                        | 8%                   | 14%     | 36%                | 35%            | Courteous and welcoming employees or volunteers   | 1%                        | 1%                   | 6%      | 13%                | 79%            | NA             |
| 3%                        | 8%                   | 8%      | 35%                | 46%            | Knowledgeable employees or volunteers   | 0%                        | 1%                   | 5%      | 23%                | 71%            | NA             |
| 4%                        | 3%                   | 9%      | 40%                | 45%            | Printed information about this Refuge and its resources (for example, maps and brochures) | %                         | 3%                   | 6%      | 25%                | 65%            | NA             |
| 1%                        | 8%                   | 13%     | 46%                | 32%            | Informational kiosks/displays about this Refuge and its resources                         | 0%                        | 5%                   | 11%     | 33%                | 51%            | NA             |
| 2%                        | 4%                   | 7%      | 44%                | 43%            | Signs with rules/regulations for this Refuge  | 1%                        | 3%                   | 8%      | 28%                | 60%            | NA             |
| 4%                        | 10%                  | 19%     | 48%                | 19%            | Exhibits about this Refuge and its resources  | 0%                        | 5%                   | 18%     | 38%                | 39%            | NA             |
| 6%                        | 7%                   | 25%     | 39%                | 23%            | Environmental education programs or activities  | 3%                        | 5%                   | 33%     | 25%                | 34%            | NA             |
| *                         | *                    | *       | *                  | *              | Visitor Center <i>(not offered at this refuge)</i>  | *                         | *                    | *       | *                  | *              | 100%           |
| 1%                        | 2%                   | 4%      | 31%                | 62%            | Convenient hours and days of operation  | 0%                        | 1%                   | 4%      | 22%                | 73%            | NA             |
| 2%                        | 3%                   | 5%      | 36%                | 54%            | Well-maintained restrooms   | 1%                        | 5%                   | 9%      | 35%                | 50%            | NA             |
| 1%                        | 4%                   | 5%      | 44%                | 46%            | Wildlife observation structures (decks, blinds)   | 1%                        | 5%                   | 12%     | 37%                | 44%            | NA             |
| 4%                        | 2%                   | 1%      | 17%                | 76%            | Bird-watching opportunities   | 1%                        | 2%                   | 4%      | 26%                | 67%            | NA             |
| 2%                        | 4%                   | 4%      | 33%                | 57%            | Opportunities to observe wildlife other than birds  | 1%                        | 3%                   | 8%      | 39%                | 50%            | NA             |
| 3%                        | 6%                   | 8%      | 25%                | 58%            | Opportunities to photograph wildlife and scenery  | 1%                        | 3%                   | 9%      | 27%                | 61%            | NA             |
| 69%                       | 4%                   | 14%     | 4%                 | 9%             | Hunting opportunities   | 5%                        | 2%                   | 60%     | 15%                | 17%            | NA             |
| 64%                       | 6%                   | 19%     | 9%                 | 3%             | Fishing opportunities   | 4%                        | 3%                   | 74%     | 9%                 | 11%            | NA             |
| 4%                        | 4%                   | 10%     | 34%                | 48%            | Trail hiking opportunities  | 0%                        | 6%                   | 12%     | 44%                | 38%            | NA             |
| 18%                       | 8%                   | 25%     | 40%                | 9%             | Water trail opportunities for canoeing or kayaking  | 2%                        | 6%                   | 61%     | 17%                | 14%            | NA             |
| *                         | *                    | *       | *                  | *              | Bicycling opportunities <i>(not offered at this refuge)</i>                               | *                         | *                    | *       | *                  | *              | 100%           |
| 8%                        | 8%                   | 34%     | 33%                | 16%            | Volunteer opportunities   | 0%                        | 0%                   | 50%     | 21%                | 29%            | NA             |

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

See Appendix B

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

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

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

88% Yes

12% No

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

91% Yes

9% No

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

93% Yes

7% No

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

See Appendix B

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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.  | 5%                | 5%       | 8%      | 32%   | 50%            |
| We can improve our quality of life if we address the effects of climate change on fish, wildlife and their habitats.   | 5%                | 4%       | 13%     | 31%   | 47%            |
| There is too much scientific uncertainty to adequately understand how climate change will impact fish, wildlife and their habitats.  | 25%               | 24%      | 16%     | 26%   | 9%             |
| I stay well-informed about the effects of climate change on fish, wildlife and their habitats.   | 0%                | 6%       | 38%     | 39%   | 17%            |
| It is important to consider the economic costs and benefits to local communities when addressing the effects of climate change on fish, wildlife and their habitats.                     | 6%                | 10%      | 17%     | 52%   | 16%            |
| I take actions to alleviate the effects of climate change on fish, wildlife and their habitats.  | 2%                | 9%       | 28%     | 46%   | 16%            |
| There has been too much emphasis on the catastrophic effects of climate change on fish, wildlife and their habitats.   | 40%               | 27%      | 17%     | 9%    | 6%             |
| Future generations will benefit if we address the effects of climate change on fish, wildlife and their habitats.  | 3%                | 5%       | 9%      | 30%   | 52%            |
| My experience at this Refuge would be enhanced if this Refuge provided more information about how I can help address the effects of climate change on fish, wildlife and their habitats. | 7%                | 8%       | 35%     | 34%   | 16%            |

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## SECTION 6. A Little about You

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**\*\* 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?

100% Yes  0% No → *If not, what is your home country?* See Figure 2 in Report

2. Are you?  45% Male  55% Female

3. In what year were you born? 1957 (YYYY)

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

|              |   |   |   |                                |    |   |   |               |    |    |     |                               |    |    |    |                                   |     |    |     |  |  |  |     |
|--------------|---|---|---|--------------------------------|----|---|---|---------------|----|----|-----|-------------------------------|----|----|----|-----------------------------------|-----|----|-----|--|--|--|-----|
| 1            | 2 | 3 | 4 | 5                              | 6  | 7 | 8 | 9             | 10 | 11 | 12  | 13                            | 14 | 15 | 16 | 17                                | 18  | 19 | 20+ |  |  |  |     |
| (elementary) |   |   |   | (junior high or middle school) |    |   |   | (high school) |    |    |     | (college or technical school) |    |    |    | (graduate or professional school) |     |    |     |  |  |  |     |
|              |   |   |   |                                | 0% |   |   |               |    |    | 10% |                               |    |    |    |                                   | 47% |    |     |  |  |  | 43% |

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

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

|  |   |                                    |
|--|---|------------------------------------|
| <input type="checkbox"/> 5% American Indian or Alaska Native | <input type="checkbox"/> 1% Black or African American           | <input type="checkbox"/> 96% White |
| <input type="checkbox"/> 5% Asian                            | <input type="checkbox"/> 1% Native Hawaiian or Pacific Islander |                                    |

7. How many members are in your household? 2 persons

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

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

|   |  |  |
|---|--|--|
| <input type="checkbox"/> 1% Less than \$10,000  | <input type="checkbox"/> 12% \$35,000 - \$49,999 | <input type="checkbox"/> 26% \$100,000 - \$149,999 |
| <input type="checkbox"/> 3% \$10,000 - \$24,999 | <input type="checkbox"/> 24% \$50,000 - \$74,999 | <input type="checkbox"/> 8% \$150,000 - \$199,999  |
| <input type="checkbox"/> 7% \$25,000 - \$34,999 | <input type="checkbox"/> 18% \$75,000 - \$99,999 | <input type="checkbox"/> 2% \$200,000 or more      |

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

22 number of trips

**Thank you for completing the survey.**

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

## Comments?

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See Appendix B for Comments

PAPERWORK REDUCTION ACT STATEMENT: The Paperwork Reduction Act requires us to tell you why we are collecting this information, how we will use 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 use of National Wildlife Refuges and to make sound management and policy decisions. Your response is voluntary. An agency may not conduct or sponsor 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 average of 25 minutes to complete this survey. You may send comments concerning the burden estimate or any aspect of the survey to the Information Collection Clearance Officer, Fish and Wildlife Service, 4401 North Fairfax Drive, MS 222-ARLSQ, Arlington, VA 22203. OMB CONTROL #1018-0145 EXPIRATION DATE 6/30/2013

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

### Survey Section 1

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

| Special Event   | Frequency |
|---|-----------|
| Birdfest  | 24        |
| Birdfest, Sandhill Crane tour   | 1         |
| Free visiting day   | 1         |
| Native American gathering   | 1         |
| Native American tribal education                                      | 1         |
| Plankhouse interpretive presentation                                  | 1         |
| Presentation on American Indian Women's role in history of local area | 1         |
| Ridgefield Days   | 1         |
| Sandhill Crane tour   | 2         |

| Other Activity  | Frequency |
|---|-----------|
| Landscape painting  | 1         |
| Scattered some of my husband's ashes at the refuge.                       | 1         |
| Visit the Cathlapotle Plankhouse  | 2         |
| Watching the trains, and playing in the streams with two young grandsons. | 1         |

Question 2: "Which of the activities above was the primary purpose of your visit to this Refuge?"

*Primary activities are categorized in the main report; the table below lists the "other" miscellaneous primary activities listed by survey respondents.*

| Other Miscellaneous Primary Activities | Frequency |
|--|-----------|
| Being in a quiet, lovely place.        | 1         |
| Enjoy nature and animals.              | 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 |
|----------------------------------|-----------|
| Birdfest                         | 1         |
| Birdfest and bluegrass           | 1         |
| Festival tour group              | 1         |
| Washington Waterfowl Association | 1         |

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

| Other Website   | Frequency |
|---|-----------|
| Birdwatching/photography message boards found during internet surfing.                                | 1         |
| Google maps   | 1         |
| Google search/surfing   | 1         |
| <a href="http://ridgefieldbirds.com/image_index.html">http://ridgefieldbirds.com/image_index.html</a> | 1         |
| Mountaineers website for great places for photography   | 1         |
| naturephotographers.net - PWN forums  | 1         |
| Oregon Birders Online (OBOL) Listserv   | 1         |
| Photos posted on Facebook   | 1         |
| The tweeters list   | 1         |
| Wife saw it on some website, unknown  | 1         |

| Other Ways Heard about This Refuge              | Frequency |
|---|-----------|
| A canvasser from a local environmental group    | 1         |
| Brochures at Portland Audubon Sanctuary         | 1         |
| Columbia Basin Basketry Guild                   | 1         |
| Knowledge of guide                              | 1         |
| Library flyer                                   | 1         |
| Migratory bird festival                         | 1         |
| Other birders                                   | 1         |
| Our optometrist; he was also a photography buff | 1         |
| Professional conference field trip              | 1         |

## Survey Section 2

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

| Other Forms of Transportation | Frequency |
|-------------------------------|-----------|
| School bus                    | 2         |

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

| Other Ways Found This Refuge     | Frequency |
|----------------------------------|-----------|
| A guide drove our van.           | 1         |
| Directions from Birdfest flyer   | 1         |
| Guidebook                        | 1         |
| Refuge brochure                  | 1         |
| Trail signs                      | 1         |
| Vehicle provided for group - bus | 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 |
|---|-----------|
| A guided walk                                       | 1         |
| A walk into the driving route option would be cool. | 1         |
| Auto tour   | 1         |
| Bike  | 1         |
| Canoe or kayak                                      | 1         |
| Drive my truck responsibly on marked roads.         | 1         |
| Electric zoo wagon                                  | 1         |
| Hovercraft  | 1         |
| Let us use our quads.                               | 1         |
| Share electric vehicles.                            | 1         |
| Walking   | 1         |
| X-country skis in winter                            | 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 = 36)

Been going to Ridgefield for a long time. Very disappointed in the road change. Although it was explained why the changes were made, it took away from the experience of seeing birds and wildlife that we have seen many times before. Now it's just a big empty space with nothing.

Easier access to some of the blinds. Number 19 is pretty far from a parking lot. Use of a quad would be very appreciated.

Entry road needs to be wider or have more pullouts.

Existing transportation is satisfactory. I would like to see more alterations to personal autos and would use them if available (I am less likely to use a bike share if offered, only because I would bring my own bike).

I prefer to keep people and transportation to a minimum in wildlife areas. The less invasive we can be, the better for the wildlife.

I prefer to use my own vehicle so I can drive through at my own pace and photograph when I want.

I was a little disappointed that they closed a half mile stretch of the auto tour at Ridgefield. Management apparently had their reasons but the road used to take us closer to where Lazuli Buntings were often seen. Now it's a miracle if we see one.

I was not able to take a bus tour of the refuge in the morning or evening. I cut short my visit and left Sunday morning. All the bus tours had filled up.

I wasn't driving and there were few visitors on the day I visited, so I saw no problems. The driver knew the refuge well, so I left everything up to him. He never mentioned any problems.

I would like to see more access to the currently out-of-bounds access to this refuge. Years ago (20?) I used to be able to go places on the refuge that are now not allowed.

I'm handicapped and would like to see more areas for wheel chair access to see critters close up.

In the portion of the refuge I visited, one is only allowed to drive (not walk or bike) with the exception of one tiny trail to a bird blind.

It would be good to have more places in the River S unit to get out of the car during winter months.

Long term effects on wetlands due to high volumes of automobiles on such a small area.

Most of the time, this is a mostly drive-only refuge, however, I have not had a chance to visit the area for the walk that is available only a few months of the year.

My opinion - people should stay in their cars at all times at the drive-thru area of Ridgefield except for visiting the bird blind and the hiking trail. People walking the roadway are dangerous because drivers are looking at the wildlife and not for people walking in front of your car. People who dart out behind trees and bushes especially young children. Also the wildlife is used to the cars but not people walking so close to their homes/nests. Then there are the walkers who pick flowers and wade into the ponds to catch something.

My wife and I like to visit as many refuges as we can during the year. We compare all the others to the Ridgefield National Wildlife Refuge. To us, it is the best there is.

Need to expand the auto tour route at Ridgefield Wildlife Refuge - to Camble Lake and Post Office Lake.

On the Oaks-to-Wetlands Trail in the McCarty Unit, the 'seasonal' portion of the loop trail (furthest from the trailhead) has not been maintained in any season in the past couple of years and is almost impassable. It's very easy to accidentally go off trail in this area, and other sections require bushwhacking through heavy vegetation.

Open the road up that goes back further on the refuge that seems to be only opened for hunters.

Refuge appears to be very well managed- a real plus to have so close to home.

Signage directing to refuge very, very poor.

Signage on auto tour route might be improved to indicate where 2-way traffic is allowed and not allowed; consider driver courtesy signs to minimize visitors exceeding speed limit, stopping in middle of road to take pictures without regard of cars behind them, going the wrong way on 1-way loop, and not using pullouts. On Carty Unit, pedestrian bridge over railroad tracks needs to be replaced with something that has safe tread and grade, AND allows more easy accessibility to people with limited mobility. Would like more trails or at least mapped hiking discovery routes.

Some of the duck blinds can be very physically demanding for older patrons to use. The access difficulty level should be rated and the trails need to be marked more clearly. While hunting blind 18 with an older friend I was quite amazed at how hard it was for him to get out to the blind. The trail was not well marked and through already difficult passage we had to back track a long way to cross a fence. This was not easy for an older gentleman with bad knees. It became quite physically demanding for me to get him out there as well. Perhaps a rating system could be established to let folks know what they are getting themselves into before they choose a blind.

The bridge accessing the River S unit, where I usually bird, is a one lane plank bridge of uncertain structural integrity. While the refuge has done what they can, they clearly don't have enough funds to replace the bridge. The roads are gravel, which is OK, but often potholed and have been bladed at inappropriate times (conditions too dry so road didn't seal itself back together well).

The bridge leading into the auto-tour route part of the refuge is very unsafe. It is a one way bridge with blind spots for incoming and outgoing traffic. I've had to back up to let others through numerous times. It should be a two lane bridge.

The difficulty with buses, even small ones, is that there are birds all along the road. If you stopped for the birdwatchers, you'd drive the more casual visitors nuts. If you stopped occasionally, birders would feel they'd missed a lot. Bikes are more flexible and we've used them at Hoge Veluwe National Park in Netherlands. However, they have miles of asphalt paths for the bikes along with several hundred bikes of all sizes. They're white so that it's obvious if someone steals one because everyone's personal bike is black. Yours might need to be some unique color and/or have a prominent logo.

The driving tour is fantastic and perfect for my father who can't walk very far. We enjoyed it so much that we've made plans to visit again. The tour allowed both my dad and I to enjoy birdwatching and photography. The turnouts helped a lot and wide-roads were great.

The one lane bridge looks very old - unsure whether it has been tested for safety. Also on the auto drive tour, probably more places to pull over, sometimes it is really hard to pass other cars since the road is really narrow and usually there is a waterway or creek on the other side.

The roads have really improved over the last eight years I have been visiting this refuge.

The walking bridge over the railroad tracks is a little slippery.

This auto tour is one way, yet hunters come from another area and are traveling the opposite way during the first leg of the tour. While I was pulled over as far as I could quietly observing water fowl, a hunter came from the other direction and honked his horn. This is the specific reason for my being very unsatisfied in the safety of refuge road entrances/exits question. Also the sign in town is quite small and faded.

This last year they have made very good improvements to the roads and turnouts.

Those people with disabilities participate only to the limit of their physical abilities. Sometimes Canal Road can get somewhat washed out. Not a good thing. I enjoy the somewhat wild and unstructuredness of this refuge. It provides possibility of large variety of things to see.

Trails at the oaks to wetlands area could be better marked.

We almost missed the left turn off the road to town because it is not well marked or maybe hidden by tree branches. Sorry I can't remember what the problem was.

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## 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 = 56)

An additional viewing blind on the east side of Reast Lake would be nice especially if it elevated the viewer above the grasses on the dike.

Birds are more active at dawn and dusk. That is when the refuge opens and closes. A little more time before or after dawn and dusk would be nice. We can't walk very far, so more short loops to walk and more blinds would be nice. I would pay for a supervised tour of the closed off areas. I love this place. The auto tour is wonderful for people of limited mobility like us.

Bridge going into park very steep. Not easily accessible for handicapped.

Could use longer hours to be able to see owls at night. Needs a real Visitor Center with knowledgeable folks, which now is hit or miss. Bikes would be great. Would be nice if the Kiwa Trail was open all year.

Excellent.

First visit, after seeing festival signs on the freeway. I will return.

Hearing hunters and gunshots in the near distance was a bit distracting to observing wildlife undisturbed.

I am unaware of a Visitor Center at the Ridgefield National Wildlife Refuge. I know there is a Long House. Is this the Visitor Center? It would be really good to have a Visitor Center at this refuge. Also, more places for cars to pull out to observe wildlife and a few more trails as well. I know that duck hunters are allowed in certain areas of the refuge, so why not allow non-hunters to canoe or kayak in certain areas too?

I can't believe that there are only two looping hiking trails in such a huge refuge.

I dislike the shooting during hunting season. Don't like hunting near the refuge. It's sad and distracting.

I love the refuge. The refuge has been my refuge especially since my husband passed from cancer.

I need a better understanding about the connection of the units and where hunting will disturb my birdwatching. More information is needed in general about resources. We are most likely to visit on the spur of the moment instead of planning a visit. Thanks.

I realize it's a constant challenge to keep roads up in a wetland. So far our experience has been quite good in this refuge.

I really enjoy the Ridgefield Refuge - both entrances. I just really enjoy being able to go out there and walk around with my grandsons or by myself and I don't need a lot of services. The River S Unit is nice to drive through occasionally.

I really enjoy visiting Ridgefield. It's a very peaceful and relaxing experience for me.

I tend to do the driving bird loop. Ridgefield has a long house and other facilities available, but I don't know much about them. I answered respective to the driving bird loop only.

I think this refuge is great! I saw so many animals for the first time. Very impressed, will definitely continue visiting despite the 3 hour one way commute to get there. :)

I wasn't sure about some of the questions and just put "not applicable" since I didn't know enough to make a judgment.

Isn't there a disconnect between "hunting" activities and "wildlife refuge"?

It is a very beautiful refuge. I love the silence and the tranquility. Will visit many more times if it stays that way.

It is hard to comment on some of these as I very rarely see employees at the refuge I visit. I am not sure when they are there, what they do, etc. I assume they must be there during the week as restrooms, etc. have to be taken care of. My only comment is that some of the roads are a bit narrow. I'm not sure if any could be widened.

It would be great to see into areas where the Sandhill Cranes winter, for example, without disturbing them.

It would be nice if there were more directional signage on the trails.

It would be nice to have more trails and a good trail map.

Less is better - what already has been done looks great. Too much development makes me nervous.

Loved the crane viewing, the friendliness of everyone we met in town and on the refuge, and for a small town, you have some wonderful restaurants.

More areas to pull off and get out to sit and view. Boardwalks for wheelchairs.

More parking places for viewing and photography.

My only complaint, though I understand the difficulties, is the large patches of Himalayan blackberry blocking much of the scenery and the unmarked stinging nettle right next to the hiking path could easily touch someone without them realizing it.

My traveling companion is a volunteer at the refuge. I depended on him for information and for spotting birds. So, I did not use any education programs that might have been available.

Overall this refuge works hard to meet the needs of all its users in a balanced way and continues to look for opportunities to benefit its users. I have visited this refuge for 35 years and am very appreciative for the opportunities it has provided not only for me but others I have shared the experience with.

Please open up more waterfowl hunting opportunities, Clark County has very limited access to hunting and this refuge covers/controls a lot of the potential hunting areas.

Signs identifying plants need to be reviewed. In some cases plants they refer to are no longer there. It would be nice to have more of these signs or kiosks that go into greater detail about the birds and the plants or brochures that do the same. It would be nice to have better control of the poison oak at the trail edges so we could bring grandchildren with less fear of them walking into it.

Signs should make it clear that the auto tour road is not for walkers/joggers.

Some trails were closed during the birdfest. Exhibits with volunteers were wonderful and loved the plants. Saw a Wapato and learned how nature harvested it. Didn't see many birds. I've never been here before and I'm sure I missed many facilities, signs, and opportunities. I hope to come back and hike and camp nearby.

The activities for birdfest are great, but I don't know of anything going on the rest of the year.

The audio CD would have been more educational and helpful to have tracks coordinating with the refuges sites around the refuge.

The bathrooms need to be cleaned more often. Need garbage cans in bathrooms.

The best place for bird/animal photography from car.

The day that we visited, there were not many other animals out to photograph. At other times of the day, there is probably more opportunity. The hike we took was very easy, and short. The other trails looked longer but we didn't have time to complete them. Very nice place.

The hunting rules and check-in procedures in the refuge need to be clearly posted. I have personally been kicked out of the refuge for not properly signing in. I had no idea that I had made a mistake and was treated as though I did something dishonest. On another occasion when I was checking out after the hunt the refuge employee gave me a verbal warning for shooting outside the blind. She stated that she clearly stated prior to check-in that you could not hunt outside the blind. I took this as sitting outside the blind waiting for birds which was not what I had done at all. I had followed a crippled bird and taken a second shot to kill it which to me is a moral obligation to the animal. After the incident I have chosen not to take my gun when I am following a cripple. I have lost more ducks this way but have not been accosted when checking in. If the interpretation of the rules had been clearly posted I would have never shot outside the blind. I follow the laws of the land and always do what's right. I was very insulted in both cases. I did however decide to return to the refuge and have enjoyed it very much since.

The kiosk and displays at the Carty Unit have some incorrect information (such as having a display about the endangered San Francisco Garter Snake, for some reason, which is not native or present in this area). I have seen numerous species at the refuge for which there is no information on display. I would love to see better quality plant and wildlife information (not just birds) and better trail maps.

The opportunities for viewing birds in the winter are limited on the River S Unit. There should be more blinds available where we can leave our cars to view and photograph birds.

The refuge does a great job on all accounts. We have been visiting here at least 15-18 times a year for the last 6 years and always enjoy our time there.

This refuge has no Visitor Center, just an informational kiosk irregularly staffed by volunteers. The only trail in the River S Unit is closed in winter. I know hunting occurs, but no fishing. Hunters can go places on the refuge that other visitors cannot. It has but a single blind and 2 restrooms - one at the entrance and one at the parking area for the blind.

This refuge is nicely maintained and accessible during the year and is very important as such since it is easily reached from a city. I'm concerned about the urban encroachment though.

This refuge is very low-key and I would like it to remain this way. Quiet and natural.

This refuge mostly needs a decent bathroom with flushing toilets. And a Visitor Center/store for souvenirs, books, etc., would be very nice. Other refuges have them (e.g., Anahuac). Why not Ridgefield?

Trail signage could be clearer (more abundant).

Very friendly staff!

Very much appreciate the toilets at the refuge, but toilet service frequency is not sufficient to maintain clean and sanitary conditions. Would like to see more alternatives to auto tours (hiking, biking), and would like USFWS to encourage/welcome low impact visitors (foot/bike/etc.) as much as they do hunters/anglers, and consider where those uses could be accommodated. I have to admit I have always resented the wide and extensive access hunters/anglers are often allowed while non-motorized foot traffic is absolutely not allowed in very many areas. I don't get it. Even though hunting provides some funding to refuges, now with FLREA fees, other refuge visitors (and supporters) are also helping sustain and support refuges.

Very well managed.

Having a Visitor Center in Ridgefield would be great!

We love going to Ridgefield National Wildlife Refuge and go almost weekly to birdwatch and take pictures. The volunteers there are good dedicated people that help care for the facility.

We three seniors were very satisfied with our tour of this refuge - starting with the very welcoming lady at the contact station.

Would really like the opportunity to purchase annual passes.

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## 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 = 144)

A natural experience! Of nature!

A place to observe wildlife in a normal and natural habitat.

Access to the Columbia River. The trains running along the refuge.

Access.

Allow for observing and hunting waterfowl.

Animals in their native environment and settings.

Animals.

Appropriate management of inappropriate usage such as motorized trail vehicles, domestic/pet animals, picnicking, running, etc. Focus on education and information for public. Conservation.

As the cities grow and animals are displaced, it is wonderful to have a refuge for them. What makes this one unique to me is the number of migratory birds that use this refuge all year round. This refuge is not only for birds passing through but for breeding as well. This year I was able to observe both Great Horned Owls and Bald Eagles with their nest and young. We watched as the babies grew and then learned to hunt on their own. This was probably the best year for us personally for observing the wildlife that inhabits this refuge or uses it as a stop during migration.

At Ridgefield National Wildlife Refuge you know that I can get a blind to hunt in and do not have to fight the crowds at public sites.

Auto tour is top notch.

Because of the primary focus on specific wildlife and their habitat.

Because the refuge is truly a refuge and protects wildlife, there is more wildlife present and therefore more opportunities to see birds and animals more reliably and in closer range.

Because they are as they are called - refuges - for birds, for animals, and for ourselves. I go to Ridgefield almost weekly, and it provides a refuge for me from the business of my life. A refuge is quiet and beautiful, and a place to go to reflect, to slow down, and to winnow life down to its basics. Ridgefield does that for me.

Being able to observe nature and wildlife in its natural, undisturbed state.

Being able to see the wildlife in their natural habitat to the best that we can offer.

Being able to stay in your car and being able to see many different types of birds and water fowl.

Best place to view waterfowl and shorebirds.

Better interpretive resources.

Chance of seeing large variety of plants and animals. Walks are usually quiet and peaceful.

Concentration of birds.

Different animals and birds that we see. We can get out and walk around - we enjoy that.

Each one is unique.

Easy access to view wildlife.

Easy, safe access, restrooms and abundant wildlife.

Emphasis on education and preserving wildlife and plants.

Emphasis on preserving habitat for continuation of diverse wildlife presence.

Everything is pretty much kept in natural state.

Excellent opportunities for wildlife observation and photography, plus a strong conservation mission.

For the most part they have been maintained in their natural state without trying to make them look like city parks. The focus is on nature instead of gift shops and diners.

Geared toward wildlife viewing opportunities.

Get to see different wildfowl during migrating seasons.

Gives one an opportunity to experience wildlife in a practical manner.

Gives us a chance to watch ducks and geese at close range. Not too far from our house. Gets us back to nature.

Guides, sign information, recently seen bird species whiteboard, and historical preserves that educate and let you know what to look for that makes the visit all that more successful and rewarding.

Habitat is particularly friendly to the needs of the birds and animals.

Has some of the best wildlife diversity in the region.

Having the refuge close to home has allowed us to provide our children and now grandchildren in observing the wonder of wildlife.

Hunting opportunities.

I like the fact that it has the multi use opportunities (conservation and hunting). While on the surface these things seem to be at odds, it really is important to control populations to have a healthy environment.

I love the wildlife refuges. I think they are very important and provide an excellent way to educate the public and preserving wildlife and plants and their habitats.

I loved the opportunity the Plankhouse gave my students to learn about the ways of the Native Americans.

I really enjoy going to this refuge. It connects me to nature and lots of opportunities for nature and wildlife photography.

I'm able to observe wildlife in their natural habitat or as close as possible. I'm also able to learn about the area, wildlife, and other natural resources. NWRs are places I go to get away from the world; they are places at peace and serenity.

I'm struck by its apparent emphasis on hunting in the National Wildlife Refuges. This seems to be a unique emphasis among federally protected areas.

If we don't advocate national preservation, key species may fail. We will lose irreplaceable species and gene pool that keeps ecosystem functioning. Thank you, thank you, thank you for your service and devotion. You are so appreciated and worth more than what sometimes the budgets will allow.

It allows kids to see our land and environment in a way with less pollution, fewer buildings, and less busy than their neighborhoods.

It gives you a safe place to hunt.

It highlighted the special features of this area.

It is a natural oasis. An opportunity to be in nature, to learn, and to breathe fresh air, relax and get excited about the beauty (landscape, birds, and other wildlife).

It is a place that the focus is on wildlife only. It doesn't need to be for exercise, hunting etc. Just viewing wildlife is the goal.

It is a place where people have little impact on wildlife.

It is a very diverse area with a close proximity to town.

It is well maintained, the driving route is exceptional. Since the route change, I miss seeing the fence area where the cows were kept sometimes and the coyote babies traveled. Every visit is different.

It provides a unique opportunity for those who are less mobile to get close to a wide variety of birds.

It was interesting to hear about animals and their habitat.

It's a good place to watch and photograph wildlife with like minded people. You don't have to worry about navigating through people who are there for recreational reasons.

It's nice having some place local to shoot ducks.

It's wonderful to see wildlife in a natural setting besides birds and ducks, raccoons and coyotes are great to watch and take pictures. This refuge is great to see all the wildlife.

Its effort to conserve/protect wildlife habitats and educate the public.

Lots of types of birds. First time seeing native turtles sunning themselves in the water. I didn't realize we had native turtles!

Managed for mixed uses- people, wildlife, and environment. Large areas of bird habitat optimized for waterfowl and recreation.

More opportunity to view wildlife in lands that are not hunted on.

More wildlife viewing opportunities and fewer people.

Much effort is put into creating an environment that encourages wildlife to live in the refuge.

Much more "natural" feeling than National Parks (not as commercial or developed) and without the commercial forestry aspect of National Forests.

Much more things to see! I love the turtles!

National Wildlife Refuges are unique in the sense that they provide areas of land that are restricted to human traffic so that the wildlife can flourish, undisturbed by people. They also offer information about the wildlife that you cannot get at other public places.

Not as crowded as parks, offers better opportunities for wildlife and bird viewing, protects interesting habitats that are important for biodiversity.

Not overly developed, exist just for preservation of nature, rather than camping and recreation.

Numerous bird and wildlife watching opportunities.

NWRs are authentic opportunities to experience nature in a non-produced environment.

NWRs are managed to retain the wild habitats and are free of frills and glitz. They therefore provide an atmosphere to quietly observe the natural world. The exception is hunting season.

Opportunities to view wildlife usually not otherwise possible.

Opportunity to get up close to nature and historically important sites.

Opportunity to see a variety of wildlife in a concentrated area.

Oriented waterfowl management that contributes to a vibrant ecosystem.

Peacefully quiet places to spend a day.

Preservation of birds and wildlife, and opportunity to observe them.

Preservation of natural assets of the local flora and fauna of the area.

Preservation to native species is important to our family.

Prime habitat managed for many users.

Provides a refuge for wildlife.

Provides access to a wide variety of experiences related to wildlife and wildlife preservation.

Refuges focus on the plants and animals, not on amenities for the people. That helps to keep the impacts of the people low.

Refuges give people a unique opportunity to teach newcomers the theory of conservation by showing them first that it works. This cannot be done anywhere else. After a trip to the refuge, I can then take my children or family friend to a public hunting location and they can see the difference between a place that is managed and cared for versus an area that is over hunted and used by those who do not practice good judgment. I personally feel that refuges not only offer a safe haven for the animals in them but also the ethics and spirit of the ones that pursue them.

Ridgefield is the largest refuge I can think of, and attracts a wide variety of birds due to its unique location. Very important to keep it.

Seeing birds and occasionally other animals in a natural environment is awesome.

So much open and protected space for wildlife, yet fairly close to populated areas.

Some place close to observe wildlife.

Staying in your car while seeing wildlife.

The ability to go to a place where you can see migratory birds in their natural habitat and that you can take an auto tour of some refuges and see a vast array of wildlife. Except during hunting season, it's a protected natural environment.

The ability to preserve wildlife and land; returning land to what it was here. Educational opportunity for the public. Opportunity for public to learn about wildlife, plants, and how to maintain nature.

The ability to see birds in their migratory paths and those that nest/raise young in the area. The safety from people is key.

The ability to see different animals throughout the year.

The ability to use all your senses and feeling connected to nature.

The ability to view birds and water fowl in their natural environment.

The abundance of wildlife and availability for photography. Especially the refuges with auto tour routes- I've never seen coyotes and American bitterns so closely, and the preservation of history was fascinating.

The auto tour is great because we have a young child who gets tuckered out on hikes.

The availability to see many different types of birds.

The care and preservation of animals and their habitats.

The fees are reasonable, the wildlife viewing is great, and the access to them (timing, locations) is very good. State Parks are too expensive and too crowded.

The focus on conservation and habitat.

The focus on wildlife habitat makes the refuges a great place to see a variety of wildlife.

The idea of the animal home is paramount, resulting in a feeling that you are indeed visiting their home.

The lack of commercial exploitation makes the experience much more pleasant.

The mission. If I want to have a high quality birding experience or other wildlife-centered experience, I will most often choose to go to a National Wildlife Refuge. After all, they are "for the birds"!

The Native American exhibits and the native house that was built.

The only sounds I want to hear are made by the animals and birds. Thanks I love it.

The opportunity to view wildlife in a natural setting.

The priority in these areas is on wildlife, fish, and natural systems rather than humans and their conveniences. Still it would have been nice to see more interpretive panels etc. to educate.

The refuge encourages wildlife to roam/fly freely which makes it a special place to photograph wildlife. You never know what you are going to see on any given day at the refuge.

The refuge is a lot more natural.

The somewhat natural feel to the environment.

There are few places to see the vast array of wildlife in nature like National Wildlife Refuges. They provide a great opportunity to see things that are not available in normal everyday life.

There are no cars; everything is just as it should be in nature. The wildlife and plants are kept safe and things are maintained.

There is a measure of supervision and regulations which can add to the enjoyability of your visit.

There is more wildlife you can see. They are much, much quieter. Everyone is very helpful. Including other people. The views are more intimate rather than spectacular. When I first began birding these refuges were an eye opener for me.

They always seem to have fewer visitors and are ideally located to observe a wonderful variety of birds/wildlife. We always see something great- eagles, hawks, stags, songbirds, or migratory geese.

They are a natural and peaceful getaway to enjoy things that are precious to my family and myself. That natural beauty and wonders of God.

They are only unique if they keep recreational activity that scares away wildlife out. The auto tour is a perfect solution for observing and photographing birds and other wildlife.

They are oriented to providing a place for the pursuit and hunting of game animals.

They have habitat that is especially attractive and suitable for a variety and abundance of wildlife.

They offer the best opportunity for wildlife viewing.

They offer the chance to access large areas where nature can be observed and in the case of my last visit hunting (waterfowl). Without the refuge this opportunity just would not exist in Clark County.

They provide an opportunity to observe wildlife in its native habitat with minimal human activity.

They're educational, informative, and provide a wonderful place to see history.

They're usually close to home.

Typically they provide a more wildlife rich environment.

Typically, the abundance of wildlife compared to other outdoor sites.

Using your car as a blind. I am able to have this experience with elderly non-mobile neighbors.

Usually well managed with good information, such as bird lists and available and welcoming staff.

Variety of wildlife, auto touring road.

Very laid back atmosphere- opportunity to enjoy birds and wildlife while not feeling rushed or pressed for time.

Very natural, not "built up" like our national park system is.

Very real-life educational opportunity.

We enjoy the opportunity to observe wildlife in its natural habitat and we know that any refuge provides that experience. The roadway allows people with mobility issues to enjoy those opportunities as well. It's the perfect outing for a family with several mobility challenges. We love visiting Ridgefield!

We visit the refuge to watch birds. The mix of managed habitat and water provides a constant and varied procession of birds. This variety brings us back several times a month.

Wetlands and grasslands.

When maintained as beautifully as RNWR is, it gives wildlife an amazing refuge and it families the unique experience to observe wildlife in their natural habitat.

Wide open space, well maintained, and not crowded.

Wonderful volunteers and unique opportunities to see wildlife.

You are made more aware of the birds and animals around you and you are glad that their habitats are being protected.

You don't have to worry that it will become inaccessible later due to development/private ownership.

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Additional Comments (n = 48)

Because of the driving loop, this refuge provides great opportunity for people with mobility constraints to view wildlife.

Being able to walk or ride bicycles would be the most important change that I would suggest for Ridgefield NWR.

Evening programs, such as the Audubon society occasionally does, would be wonderful for adults. Perhaps held in the Liberty Theater in Ridgefield. Once monthly would be great. Ideas: focus on a particular bird/waterfowl and teach about it, focus on coyote, raccoon, or deer, and their habits etc.

Gorgeous.

Got some very good video of cinnamon teal and marsh wren which I uploaded to YouTube. Also heard winnowing of snipe.

Great tour guidance.

Had a great experience that I hope to have again soon.

Had a great time. See you soon!

Have a senior pass.

Have annual pass.

I appreciated the auto tour CD ... very cool! Might make its existence a little more visible though ... I didn't know I could borrow one at the auto tour visitor contact station (which has never been staffed in the 5 years I've been visiting). If I remember correctly the fee signs were old and outdated (still referred to "Golden" Passes, which went away in 2005 with passage of FLREA). I purchase an Annual Interagency Pass every year and appreciate that it is honored at this refuge. I would be willing to make a local donation though to ensure some funding came directly to this refuge. Perhaps a voluntary donation box at the auto tour visitor contact station? Love the special tours and hikes offered during the Birdfest. Would be cool if tours and hikes at other times of year could be offered by staff or volunteer stewards. I also love that the Carty Unit is open for hiking/exploration. So unusual for a refuge! I love the opportunity for self-directed exploration, relative solitude, and first-hand experience of the environment (immersion), mosquitoes, mud, brambles and all.

I believe all people should do their part in keeping our environment clean and productive. Recycling is a must.

I enjoy going to the refuge. I have been several times in the 4 years we have lived here. I always see something new. It is a great way to teach our kids about wildlife and get them thinking about respecting their environment as well as wildlife conservation.

I enjoy the Ridgefield Wildlife Refuge very much. It is well maintained and the volunteers are always helpful and friendly. It is one of my favorites anywhere in the US.

I especially appreciate the driving tour at the refuges- both Ridgefield's and Malheur's. I liked Malheur's because there were several places to get out and take pictures of the birds and wildlife. Of course, I understand that allowing more of that at Ridgefield would defeat the purpose of having a tour route in which your vehicle acts as a blind- the Ridgefield route is much shorter. For elderly people, such as my father, the auto tour was perfect. He loved it. The abundance of wildlife made the experience more like visiting a zoo - fantastic! Google maps mention of the auto tour route was the deciding factor for my father's choice to visit.

I have visited this refuge using the Interagency Access Pass for many years. I value this pass because I visit many types of areas under different managements (i.e. State Parks, National Parks and refuges and other wilderness areas) and it allows me to easily support all the parks I visit. Unfortunately, this pass is being discontinued, and I don't know of any replacement that has its range. I urge the USFWS to cooperate with other management agencies to offer a blanket pass. I paid \$100 for my current pass, and I would pay even more than that for the convenience and value of a single pass. Please consider this.

I love this place.

I really enjoy the Ridgefield National Wildlife Refuge. I know balancing everyone's interests is tricky but please look out for waterfowling, I am sure we are a minority.

I think they are doing a good job on the whole. I would not agree with the state refuge starting to push liberal views such as global warming on patrons. I feel that people begin to distrust the intent of the refuge and label them as left wing media instead of recognize their mission.

I was surprised that hotel employees in next town did not know about birdfest weekend event. The same situation for other local people we met. This is such a wonderful event. I wish more people knew about it and about the refuge itself. When I told many people in my home town about it, they had never heard of the refuge. Such a beautiful place and such a secret.

I would like to see more walking trails and rest/pull-out areas for observing and possible photos. Also, it would be very interesting to reverse the route once in a while. You might be surprised what you see and hear, plus the lighting would change for different photo effects.

It was a nice afternoon to enjoy our friend's company and learn about the Ridgefield National Wildlife Refuge. I liked seeing the animals in a protected area.

It was a pleasant and enjoyable experience.

Keep up the good work! As an avid hunter, I must admit I have a big problem with hunting being allowed on many refuges. Philosophically it's difficult to accept, though I do understand the need to control populations of some species (i.e. deer and other large, habitat altering species).

Keep up the good work. Thank you

Love it! Please keep it natural and simple.

My trip companion is a volunteer at the refuge and he constantly pointed out the damage that beavers do to the trees. Maybe there should be fewer beavers.

Quiet and peaceful atmosphere.

Reduce hunting and provide more access for observing wildlife.

Refuge is outstanding.

Ridgefield is a perfect wildlife viewing venue, as long as people don't use the auto tour as a walking track.

Ridgefield is an invaluable resource and asset, to the surrounding communities, including Portland and Vancouver.

Ridgefield is one of my favorite refuges. To be able to see so much wildlife in the convenience of your car, and allow them to behave as they are in their habitat is exceptional. My father has muscular degenerative disease and is blind in one of his eyes. At Ridgefield, he can see wildlife without having to walk - they got close enough so he can actually see them - it is amazing. I think if the Plankhouse presented an exhibit more about the Native Americans that lived here before, it will add on to the amazing experience. Thank you for everything you have done for our family.

Ridgefield is our most used refuge. As birdwatchers we enjoy having this resource so close to our home.

Ridgefield NWR is an excellent community resource that addresses important conservation and recreation needs.

Thank you. A great way to spend the afternoon.

The sign by the high school sucks!

This is a wonderful refuge. We truly enjoy visiting it. We try to make it once a week and from January through June we try for twice a week when possible. We vary our times of day to better observe all the animals and birds the refuge has to offer.

This refuge has been my own personal place to seek refuge when there are disturbances in my life. I don't know what I would do without it.

This refuge is in deep ecological trouble as it is almost completely dominated by invasive plants - reed canary grass, Himalayan blackberry, and teasel are the worst offenders. Purple loosestrife shows up occasionally, but that seems to be the only species under some level of control. I have seen signs warning that herbicides have been used in a few areas, but apparently it's a case of too little, too late as there is no evidence the herbicides have been effective, nor is it evident that anything else is being done to control the invasives. The trees are beginning to die and it's clear seedlings cannot establish through the dense thatch created by the reed canary grass. I see where saplings have been planted with vexar tubes to protect them from deer, but nothing has been done to reduce the competition below-ground from the reed canary grass. Many of the planted trees appear to be dying as well. Over the 11 years I've been visiting this refuge, I've watched the Himalayan blackberry continue to spread into the drier uplands where the reed canary grass is absent. The refuge also has a problem with nutria that they apparently have not been able to deal with either.

This was my first visit here. I will be back in fairer weather. Hopefully, I'll hike more trails. They seem to branch in every direction without signage. I believe in maps, I collect them. The birdfest was fun and people were very helpful. I can see everybody put forth a big effort. I feel it's unfair to judge by this one event. I'm sure I missed a lot and misunderstood where to go and when. But that is the stuff of life. I had a very enjoyable time. Thanks so much. I wanted to see the cranes - next spring.

Visited refuge on 2nd day of birdfest. Shuttle bus with refuge bird host was good experience. Learned about history of the refuge and restoration projects. Have been going there for more than 10 years. We love the auto tour route. Have experienced and witnessed amazing aspects of bird life from the car during the drive. The hiking trail is super. A gem of a refuge.

Visiting Ridgefield NWR is one of the highlights of life. It is natural and untrammled and provides a relaxing and rewarding environment for a hardened birder.

We love it and always look forward to the visit. It seems like every time we visit we see something new. It is always a well spent 3-4 hours.

We love Ridgefield- it's a great place to take the kids. We always see abundant birds. We love how undeveloped and uncrowded it is.

We thoroughly enjoy RNWR! We plan many future trips!

Wildlife photography is the main reason I visit Ridgefield. It is my hope that the auto tour always remains open and available to photographers. Shooting wildlife from a vehicle is much more rewarding and efficient than shooting from a nature trail. It's also my hope that more law enforcement presence can be made at the refuge, especially in the spring when the owls are in their nests. Good efforts were made last year with the owl nest close to the road--but more needs to be done to keep visitors at a safe distance from the nest and keep them in their vehicles. Bigger and more prominent signs need to be posted at the entrance with penalties for disobeying, regarding keeping people in their cars and disturbing wildlife. Too many people disregard the rules with no consequence.

Wonderful volunteers, when they are there. A great place to walk with a unique and special history. I go there for the birds, walks, but mostly to be in a quiet, lovely, peaceful place. My senior pass serves me well. I am not a hunter and the idea of hunting in a "refuge" bothers me. I know arguments both ways.

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