



National Wildlife Refuge Visitor Survey 2012: Individual Refuge Results for Chincoteague National Wildlife Refuge

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

I realize there is a lot of work that goes into maintaining the wildlife refuge and I want to let you know that it is appreciated. This has been the primary choice for my family to vacation once a summer for the past 25 years and it is the only vacation we can usually manage a year. The children enjoy it as much as we do, if for different reasons. The people who work there have always done a great job. This is indeed a national treasure and I am grateful for it. Thank you.

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



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

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Introduction

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

Pacific Region (R1)
Ridgefield National Wildlife Refuge (WA)
Southwest Region (R2)
Balcones Canyonlands National Wildlife Refuge (TX)
Hagerman National Wildlife Refuge (TX)
Kofa National Wildlife Refuge (AZ)
Santa Ana National Wildlife Refuge (TX)
Tishomingo National Wildlife Refuge (OK)
Great Lakes-Big Rivers Region (R3)
La Crosse District, Upper Mississippi River National Wildlife and Fish Refuge (WI)
Minnesota Valley National Wildlife Refuge (MN)
Southeast Region (R4)
Crystal River National Wildlife Refuge (FL)
Eufaula National Wildlife Refuge (AL)
Felsenthal National Wildlife Refuge (AR)
Lacassine National Wildlife Refuge (LA)
National Key Deer Refuge (FL)
Savannah National Wildlife Refuge (GA/SC)
Northeast Region (R5)
Assabet River National Wildlife Refuge (MA)
Back Bay National Wildlife Refuge (VA)
Chincoteague National Wildlife Refuge (VA)
Edwin B. Forsythe National Wildlife Refuge (NJ)
Rachel Carson National Wildlife Refuge (ME)
Mountain-Prairie Region (R6)
Bear River Migratory Bird Refuge (UT)
Lee Metcalf National Wildlife Refuge (MT)
Rocky Mountain Arsenal National Wildlife Refuge (CO)
National Bison Range (MT)
California and Nevada Region (R8)
Don Edwards San Francisco Bay National Wildlife Refuge (CA)
San Luis National Wildlife Refuge (CA)

Refuge staff and/or volunteers (survey recruiters) contacted visitors onsite following a protocol provided by the USGS that was designed to obtain a representative sample. Instructions included contacting visitors across the entire sampling shift (for example, every n^{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) software¹.

Interpreting the Results

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

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

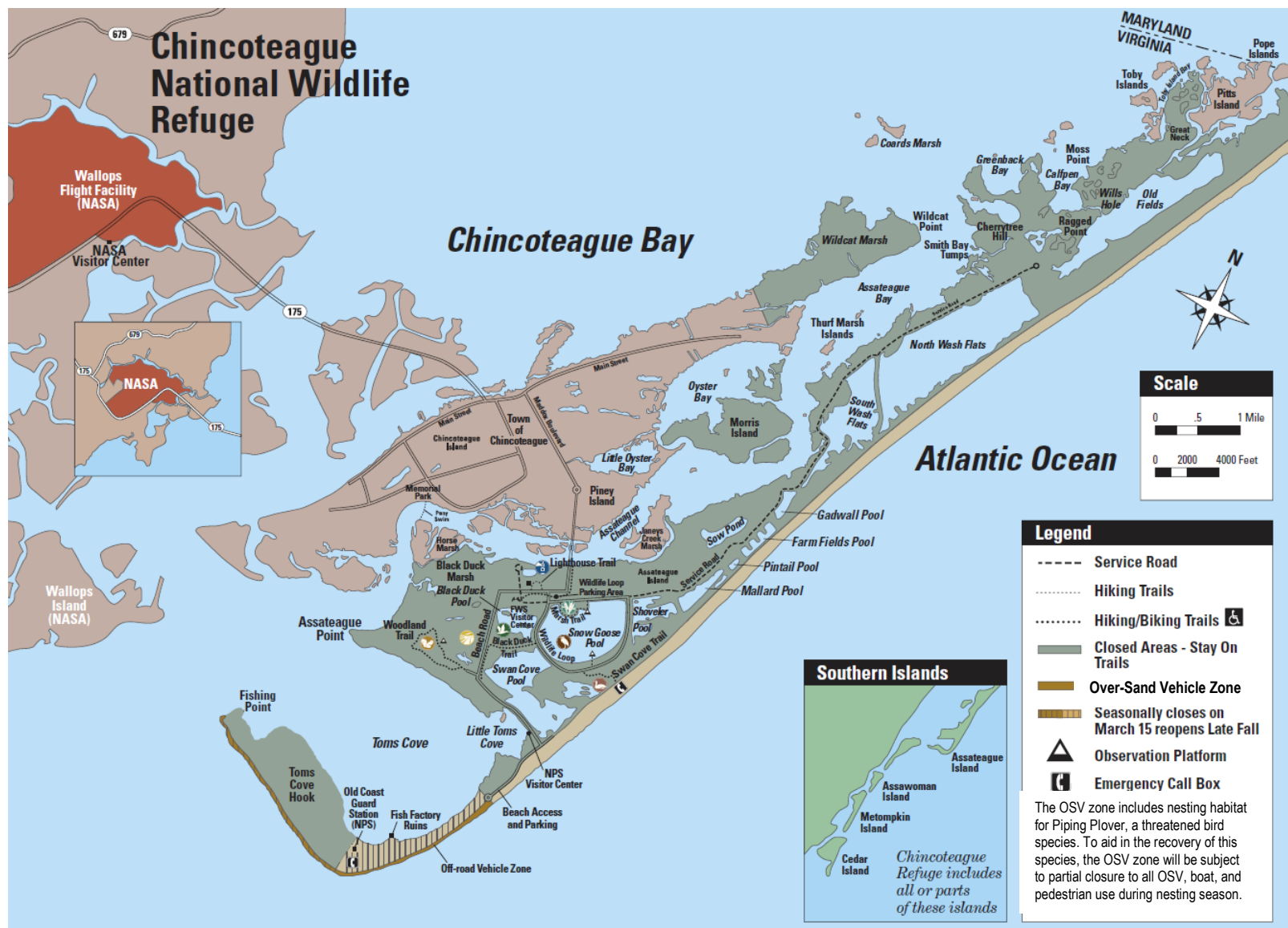
protocol for this study to account for the spatial and temporal patterns of visitor use unique to each refuge. Spatially, the geographical layout and public-use infrastructure varies widely across refuges. Some refuges can be accessed only through a single entrance, while others have multiple unmonitored 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 Chincoteague 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 Chincoteague National Wildlife Refuge

Chincoteague NWR consists of over 14,000 acres of beach, dunes, marsh, and maritime forest. Most of the refuge is located on Assateague Island, Virginia, with an additional 418 acres located on the Maryland side of Assateague island, 427 acres on Morris Island, and 546 acres of Wildcat Marsh on the northern tip of Chincoteague Island. Additionally, the boundaries of Chincoteague NWR extend south and encompass all or part of the following barrier islands: Assawoman, Metompkin, and Cedar. The barrier island habitat and location along the Atlantic Flyway make the refuge a prime location for wildlife observation.

Due to its proximity to major population centers, Chincoteague NWR is one of the most visited refuges in the country; approximately 1.4 million people visit each year (2011 Refuge Annual Performance Plan measures; Rob Miller, U.S. Fish and Wildlife Service, 2012, written commun.). The refuge was created in 1943 to provide habitat for migratory birds, particularly greater snow geese. Over 320 bird species have been spotted at the refuge, as well as other types of wildlife such as rabbit, raccoon, fox, white-tailed deer, and sika deer. Visitors often come to the refuge to visit the family-friendly beach area and lighthouse, view the famous "Chincoteague Ponies," participate in fishing and crabbing opportunities, and explore the Visitor Center. Other activities include hiking a network of trails, hunting, over-sand vehicle use on permitted beach areas, wildlife observation and photography, as well as educational programs. For more information, please visit <http://www.fws.gov/northeast/chinco/>.



Sampling at Chincoteague National Wildlife Refuge

A total of 408 visitors agreed to participate in the survey during the two sampling periods at the identified locations at Chincoteague NWR (table 2). In all, 302 visitors completed the survey for a 77% response rate, and $\pm 4.5\%$ margin of error at the 95% confidence level.²

Table 2. Sampling and response rate summary for Chincoteague NWR.

Sampling period	Dates	Locations	Total contacts	Undeliverable addresses	Completed surveys	Response rate
1	4/28/12 to 5/12/12	Fee Booths				
		Black Duck Trail & Wildlife Loop				
		Over-Sand Vehicle Zone and Traffic Circle				
		Visitor Center				
		SP1 Totals	247	8	184	77%
2	06/30/12 to 07/14/12	Visitor Center				
		Recreation Beach				
		Assateague Lighthouse				
		SP2 Totals	161	4	119	76%
		Combined Totals	408	12	303	77%

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

Selected Survey Results

Visitor and Trip Characteristics

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

Familiarity with the Refuge System

Many visitors to Chincoteague NWR reported that before participating in the survey, they were aware of the role of the Service in managing refuges (87%) and that the Refuge System has the mission of conserving, managing, and restoring fish, wildlife, plants, and their habitats (90%). 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 (86%) 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.

Less than half of visitors to Chincoteague NWR had been to at least one *other* national wildlife refuge in the past year (42%), with an average of 3 visits to *other* refuges during the past 12 months.

Visiting This Refuge

Almost half of surveyed visitors (48%) had only been to Chincoteague NWR once in the past 12 months, while slightly more than half had been multiple times (52%). These repeat visitors went to the refuge an average of 25 times during that same 12-month period. Visitors used the refuge during only one season (58%), during multiple seasons (27%), and year-round (15%).

Most visitors first learned about the refuge from friends/relatives (74%), while others learned about the refuge from a travel guidebook/other book (17%) or refuge printed information (11%; fig. 2). Key information sources used by visitors to find their way to this refuge include previous knowledge (66%), a GPS navigation system (25%), or signs on the highways (19%; fig. 3).

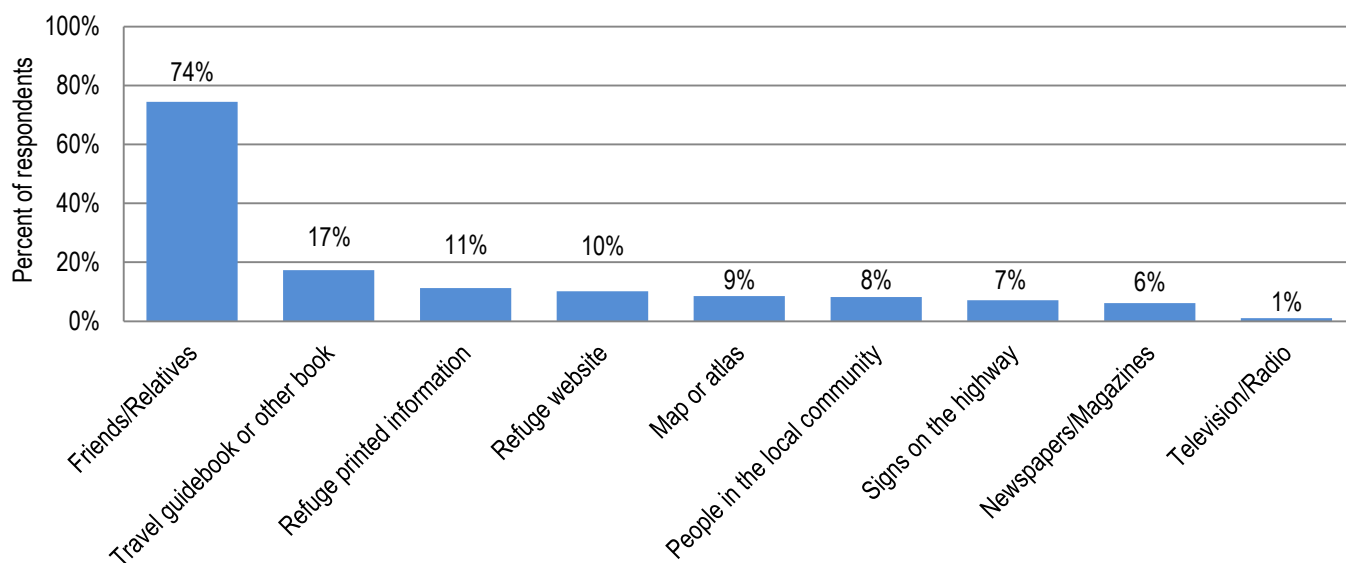


Figure 2. How visitors first learned or heard about Chincoteague NWR (n = 294).

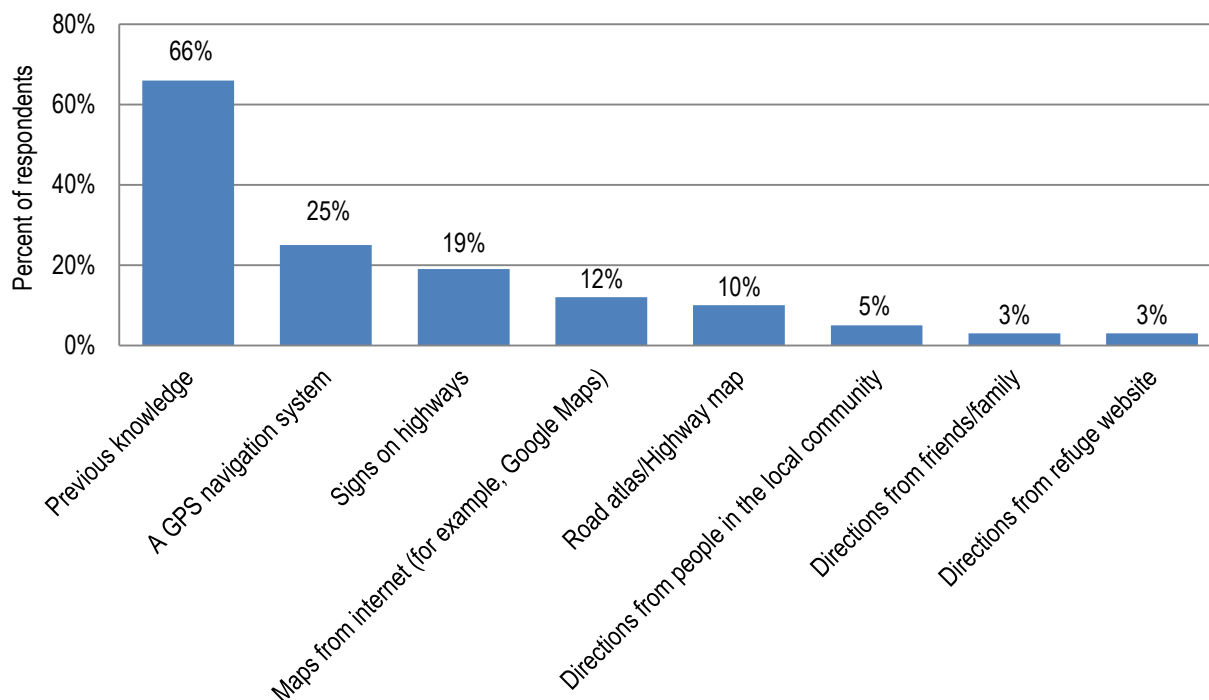


Figure 3. Resources used by visitors to find their way to Chincoteague NWR during this visit (n = 298).

Few visitors (12%) lived in the local area (within 50 mi of the refuge), whereas 88% were nonlocal visitors. For most local visitors, Chincoteague NWR was the primary purpose or sole destination of their trips (71%; table 3). For most non-local visitors, the refuge was the primary purpose or sole destination of their trips (47%) or one of many equally important reasons for their trips (44%).

Local visitors reported that they traveled an average of 17 mi to get to the refuge, while nonlocal visitors traveled an average of 313 mi. The average distance traveled for all visitors to this refuge was 281 mi, while the median was 200 mi. Figure 4 shows the residences of visitors traveling to this refuge. About 31% of visitors traveling to Chincoteague NWR were from Virginia.

Table 3. Influence of Chincoteague 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	47%	44%	9%
Local	71%	20%	9%
All visitors	50%	41%	9%

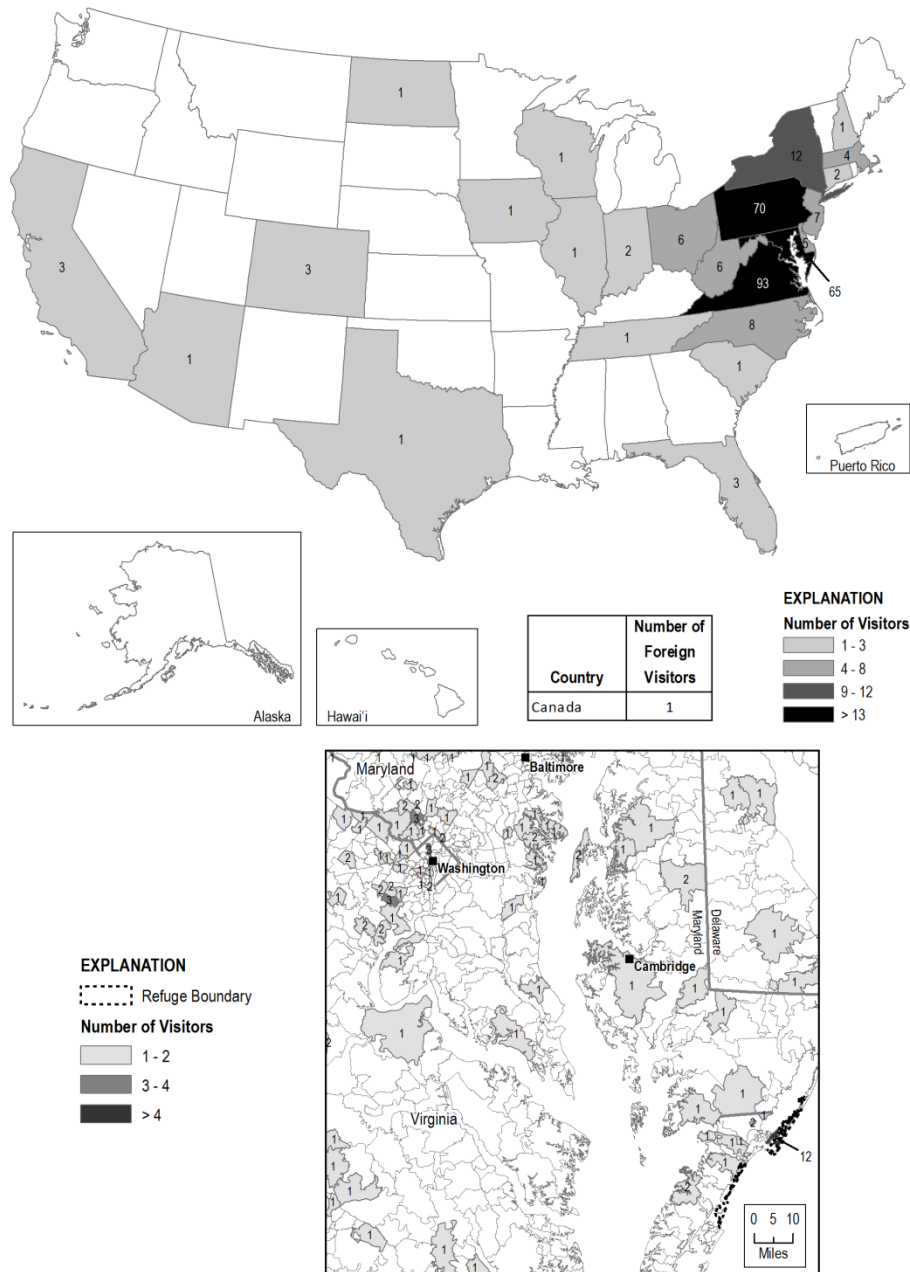


Figure 4. Number of visitors travelling to Chincoteague NWR by place of residence. The top map shows visitors residence by state and the bottom map shows residence by zip codes near the refuge (n = 302).

Surveyed visitors reported that they spent an average of 7 hr at the refuge during one day there, while the most frequently reported length of a day visit, the modal response, was 8 hr (72%). Most visitors indicated they were part of a group on their visit to this refuge (92%). Of those people who indicated they traveled with a group, visitors primarily traveled with family/friends (table 4).

Table 4. Type and size of groups visiting Chincoteague NWR (for those who indicated they were part of a group, n = 272).

Group type	Percent (of those traveling in a group)	Average group size		
		Number of adults	Number of children	Total group size
Family/Friends	99%	3	1	4
Commercial tour group	0%	30	0	30
Organized club/School group	0%	22	0	22
Other group type	1%	12	0	12

The key modes of transportation used by visitors to travel around the refuge were private vehicles (94%), walking/hiking (36%), and bicycling (26%; fig. 5).

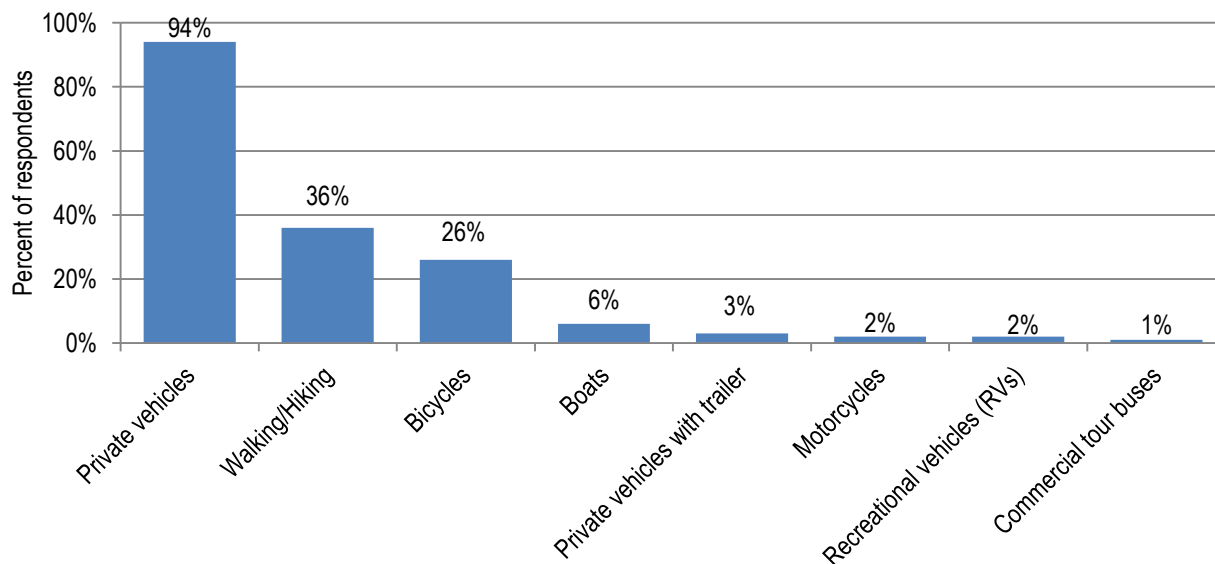


Figure 5. Modes of transportation used by visitors to Chincoteague NWR during this visit (n = 297).

Surveyed visitors participated in a variety of refuge activities during the 12 months prior to completing the survey (fig. 6); the top four activities in which people reported participating were wildlife observation (73%), photography (55%), hiking (49%), and birdwatching (48%). The primary reasons for visitors' most recent visits included fishing (20%), wildlife observation (18%), and beach activity (17%; fig. 7). Many visitors also used the Visitor Center during their trips (77%), mostly to view the exhibits (90%), stop to use the facilities (66%), ask information of staff or volunteers (61%), and visit the gift shop/bookstore (60%; fig. 8).

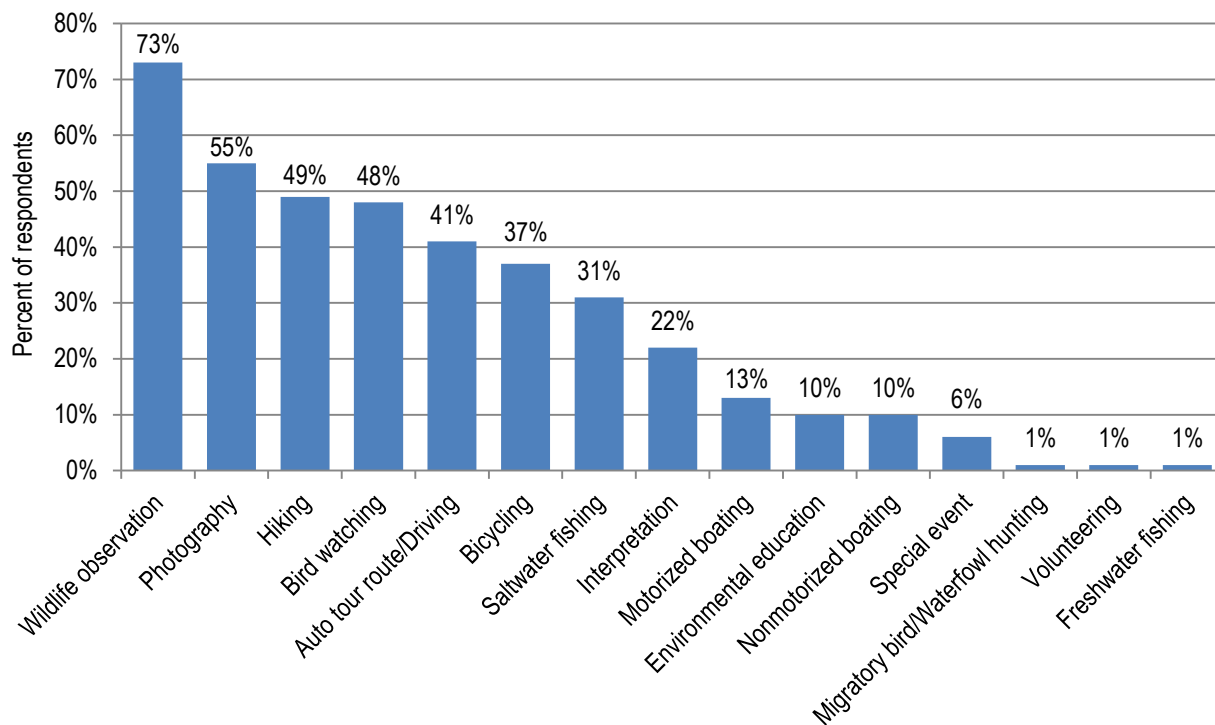


Figure 6. Activities in which visitors participated during the past 12 months at Chincoteague NWR (n = 297). See Appendix B for a listing of “other” activities.

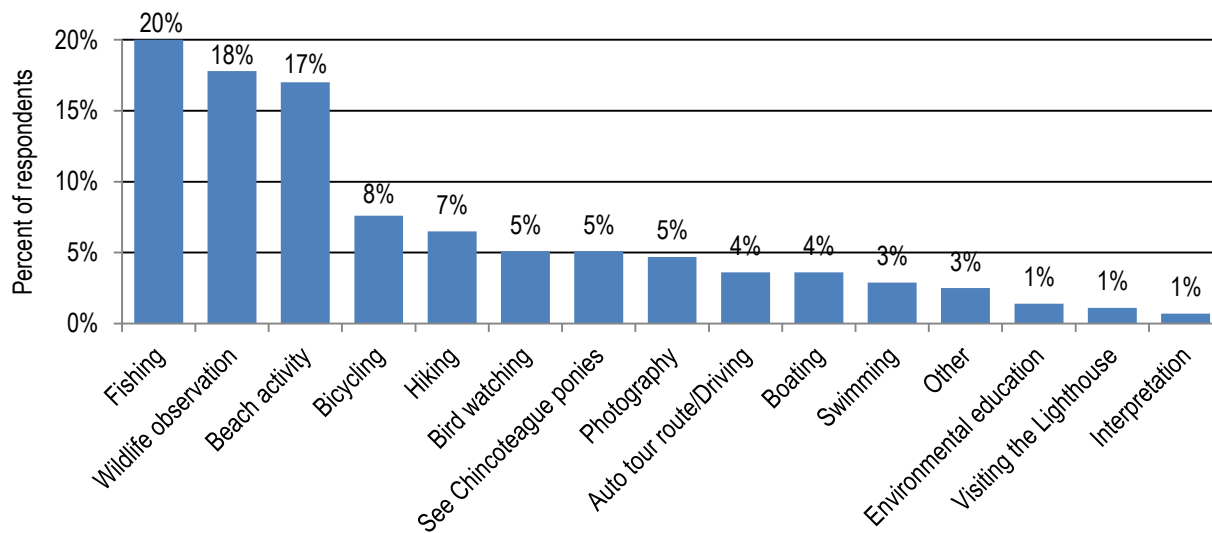


Figure 7. The **primary** activity in which visitors participated during this visit to Chincoteague NWR (n = 276). See Appendix B for a listing of “other” activities.

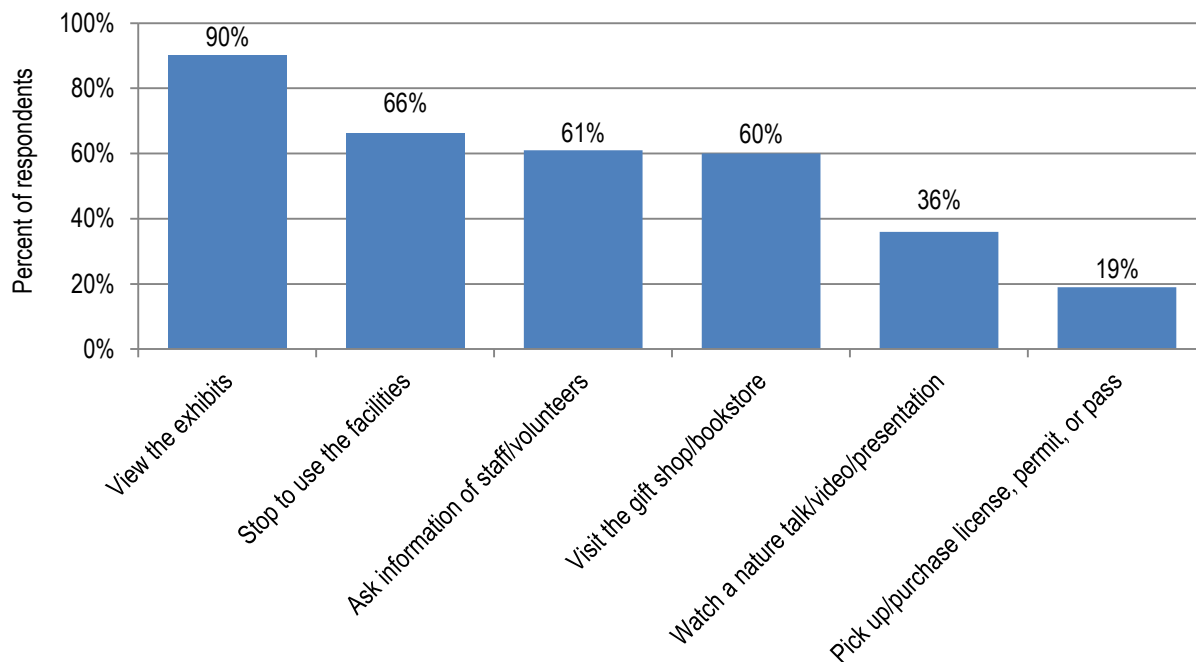


Figure 8. Visitor Center activities in which visitors participated at Chincoteague NWR (n = 229).

Visitor Characteristics

Nearly all (99%) visitors who participated in the survey at Chincoteague NWR indicated that they were citizens or permanent residents of the United States. These visitors were a mix of 54% male (with an average age of 54 years) and 46% female (with an average age of 50 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, 13% of surveyed visitors to Chincoteague NWR indicated that they live within the local 50-mi area while nonlocal visitors (87%) stayed in the local area, on average, for 5 days. Table 5 shows summary statistics for local and nonlocal visitor expenditures in the local communities and at the refuge, with expenditures reported on a per person per day basis. During the two sampling periods, nonlocal visitors spent an average of \$95 per person per day and local visitors spent an average of \$69 per person per day in the local area. Several factors should be considered when estimating the economic importance of refuge-visitor spending in the local communities. These factors include the amount of time spent at the refuge, influence of the refuge on the visitors' decision to take this trip, and the representativeness of primary activities of the sample of surveyed visitors compared to the general population. Controlling for these factors is beyond the scope of the summary statistics presented in this report.

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

Visitors	n ¹	Median	Mean	Standard deviation	Minimum	Maximum
Nonlocal	231	\$81	\$95	\$74	\$0	\$425
Local	33	\$40	\$69	\$90	\$0	\$373

¹n = number of visitors who answered both locality *and* expenditure questions.

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

Visitor Opinions about this Refuge

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

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

- 95% of visitors were satisfied with the recreational activities and opportunities,
- 94% of visitors were satisfied with the information and education about the refuge and its resources,
- 95% of visitors were satisfied with the services provided by employees or volunteers, and
- 94% of visitors were satisfied with the refuge's job of conserving fish, wildlife and their habitats.

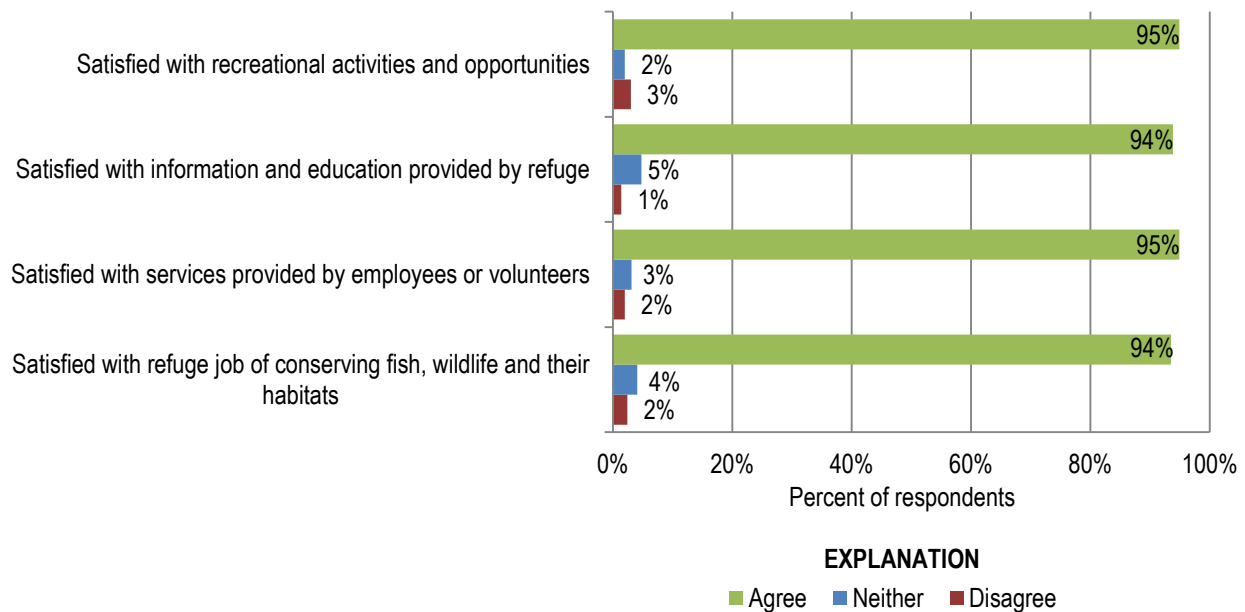


Figure 9. Overall satisfaction with Chincoteague NWR during this visit (n ≥ 290).

Of the 82% of visitors who indicated that they paid a fee to enter the refuge, 88% agreed that the opportunities and services were at least equal to the fee they paid. Additionally, 79% of visitors felt the appropriateness of the fee was about right, whereas 12% felt the fee was too low and 9% felt it was too high (fig. 10).

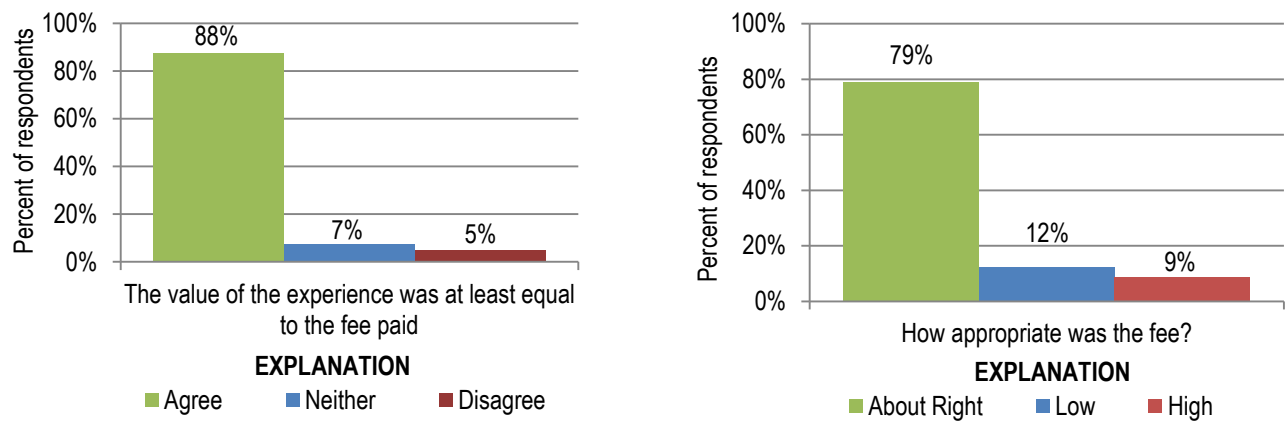


Figure 10. Opinions about fees at Chincoteague NWR (for those visitors who indicated they paid a fee, n = 243).

Importance/Satisfaction Ratings

Comparing the importance and satisfaction ratings for visitor services provided by refuges can help to identify how well the services are meeting visitor expectations. The importance-performance framework presented in this section is a tool that examines the importance of an attribute to visitors in relation to their satisfaction with that attribute (Martilla and James, 1977). Drawn from marketing research, this tool has been applied to outdoor recreation and visitation settings (for example, Tarrant and Smith, 2002). Results for the attributes of interest are segmented into one of four quadrants (modified slightly for this study):

- Keep Up the Good Work = high importance/high satisfaction;
- Concentrate Here = high importance/low satisfaction;
- Low Priority = low importance/low satisfaction; and
- Look Closer = low importance/high satisfaction.

Graphically plotting visitors' importance and satisfaction ratings for different services, facilities, and recreational opportunities provides a simple and intuitive visualization of these survey measures. However, this tool is not without its drawbacks. One is the potential for variation among different visitor groups regarding their expectations and levels of importance (Vaske and others, 1996; Bruyere and others, 2002; Wade and Eagles, 2003); certain services or recreational opportunities may be more or less important for different segments of the visitor population. For example, hunters may place more importance on hunting opportunities and amenities such as blinds, while school-group leaders may place more importance on educational/informational displays than would other visitors. This potential for highly varied importance ratings needs to be considered when viewing the average results of this analysis. This consideration is especially important when reviewing any attribute that falls into the "Look Closer" quadrant. In some cases, these attributes may represent specialized recreational activities in which a small subset of visitors participate (for example, hunting or kayaking) or facilities and services that only some visitors experience (for example, exhibits about the refuge). For these visitors, the average importance of (and potentially their satisfaction with) the attribute may be much higher than the overall importance (and satisfaction) would be for the sample of visitors summarized in this report.

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

- All refuge *services and facilities* fell in the "Keep Up the Good Work" quadrant (fig. 11).
- All refuge *recreational opportunities* fell in the "Keep Up the Good Work" quadrant except hunting activities, which fell into the "Look Closer" quadrant (fig. 12). The average importance of this activity is likely higher among visitors to Chincoteague NWR who actually participated in the activity during the 12 months prior to taking the survey than the score 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. 13).

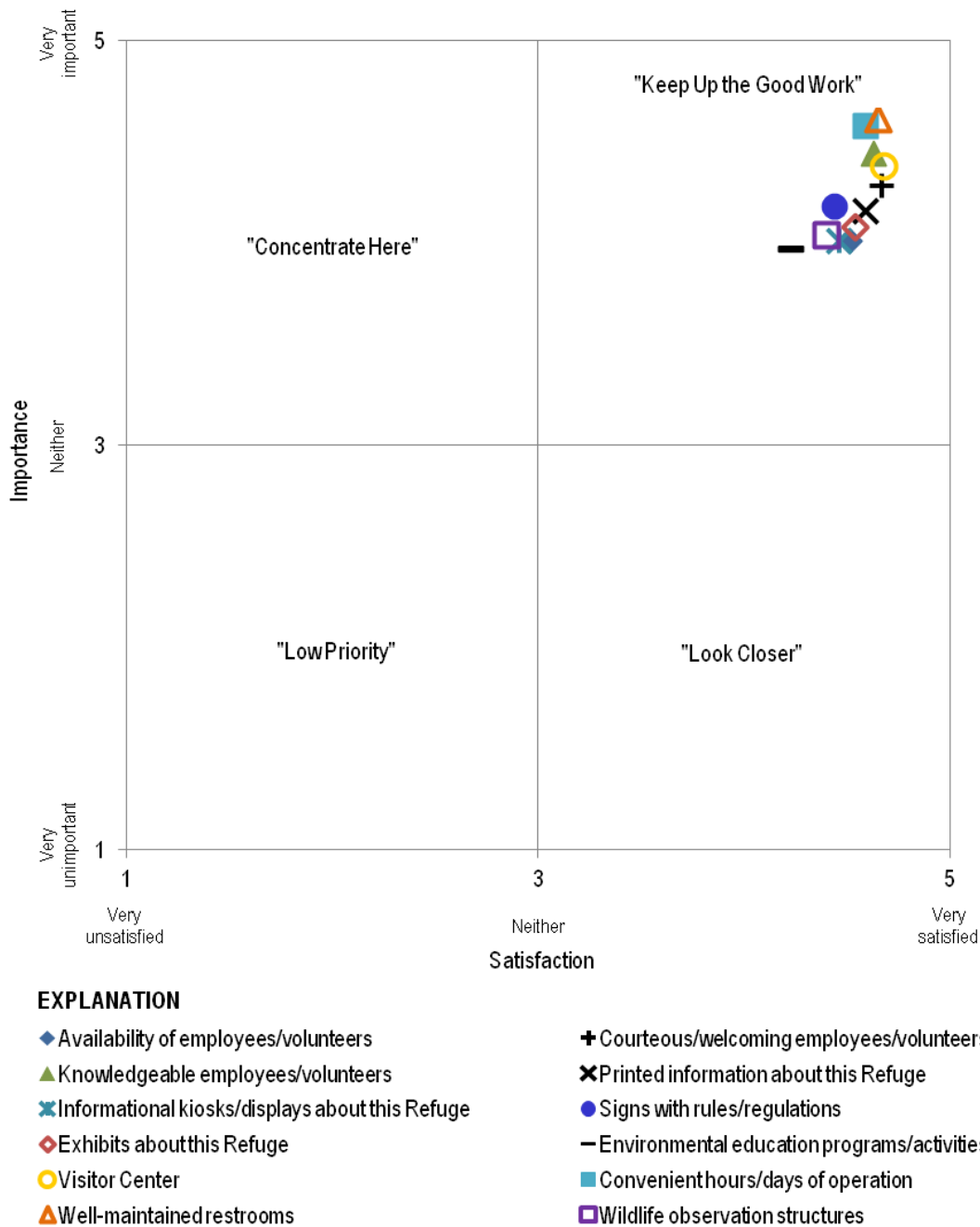
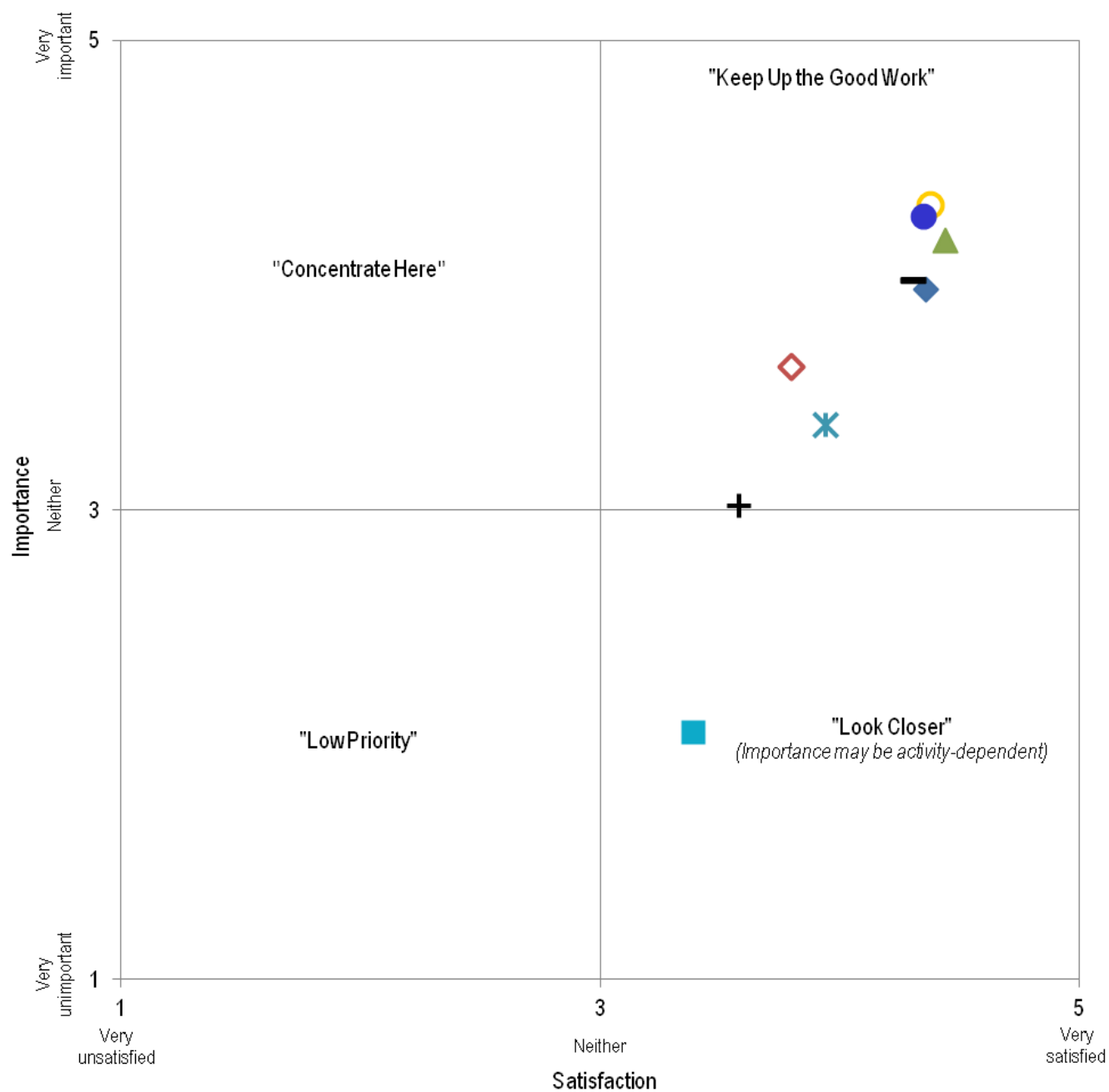


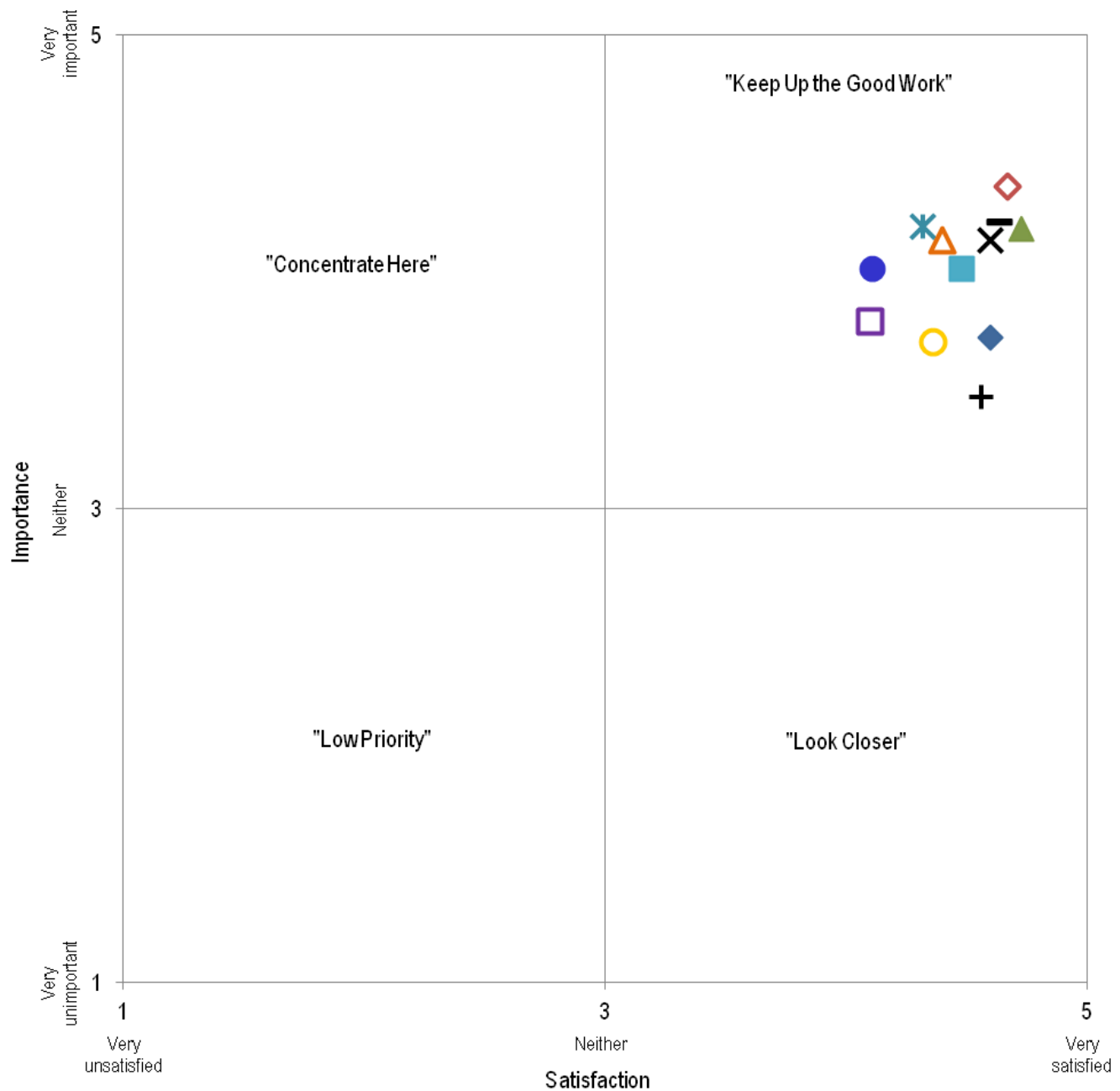
Figure 11. Importance-satisfaction ratings of services and facilities provided at Chincoteague NWR.



EXPLANATION

- | | | |
|-------------------------------|----------------------------------|-----------------------------|
| ◆ Bird watching opportunities | ○ Wildlife viewing opportunities | ▲ Photography opportunities |
| ■ Hunting opportunities | ✕ Fishing opportunities | ● Hiking opportunities |
| ◇ Kayak/Canoe opportunities | — Bicycling opportunities | + Volunteer opportunities |

Figure 12. Importance-satisfaction ratings of recreational opportunities provided at Chincoteague 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 13. Importance-satisfaction ratings of transportation-related features at Chincoteague 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 Chincoteague 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 Chincoteague NWR visitors were likely to use the following at refuges in the future (fig. 14):

- a boat that goes to different points on refuge waterways;
- a bike share program; and
- an offsite parking lot that provides trail access.

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 Chincoteague NWR, some visitors thought alternative transportation would enhance their experience (21%) while others thought it would not (47%). An additional 32% of surveyed visitors indicated they were unsure whether alternative transportation would enhance their experiences.

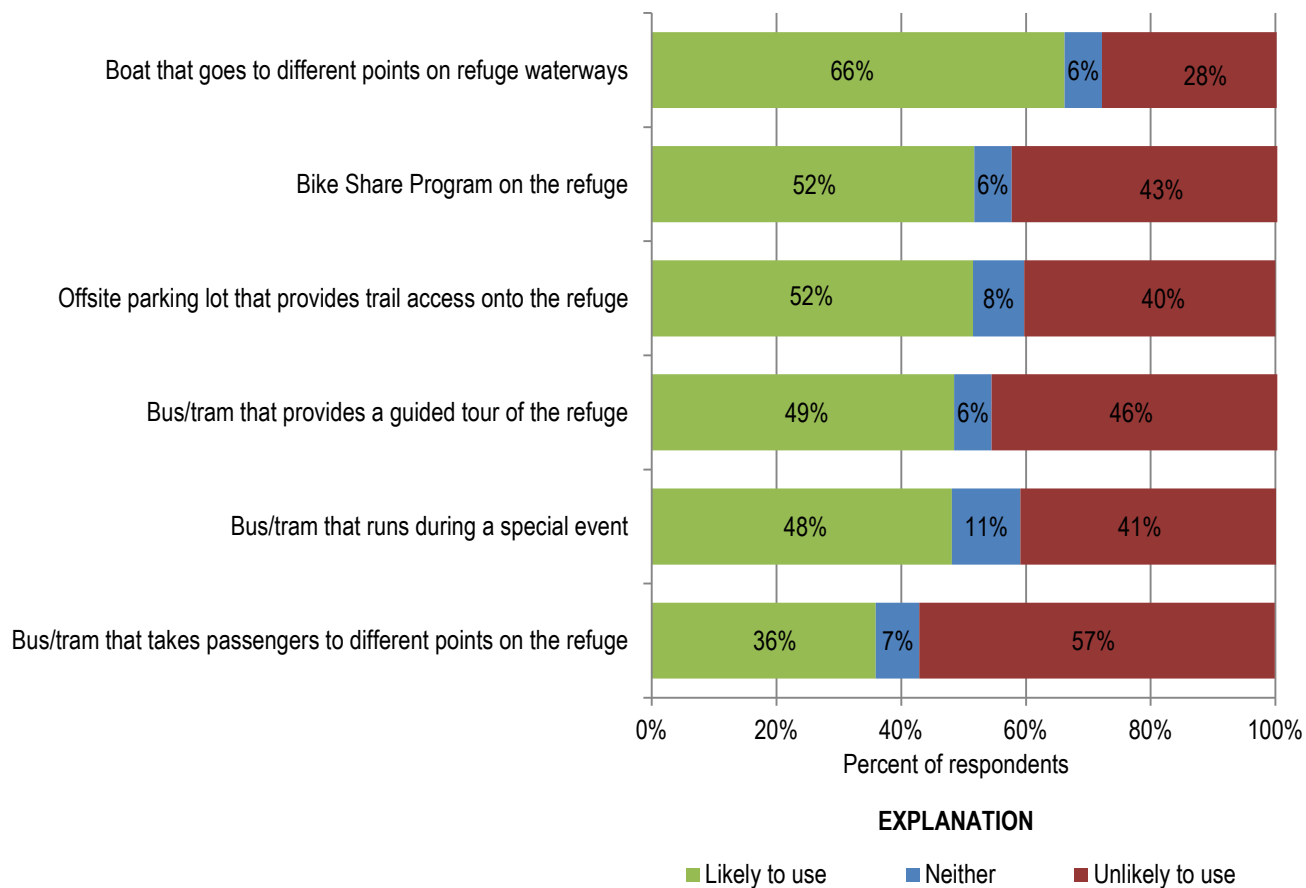


Figure 14. Visitors' likelihood of using alternative transportation options at refuges in the future (n ≥ 292).

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 Chincoteague 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. 15):

- 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. 16):

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

Results regarding such beliefs are important to consider when communicating with visitors about this topic, since the majority of visitors (51%) indicated their experiences would be enhanced if Chincoteague NWR provided information about how visitors can help to address climate change impacts on fish, wildlife, and their habitats (fig. 15).

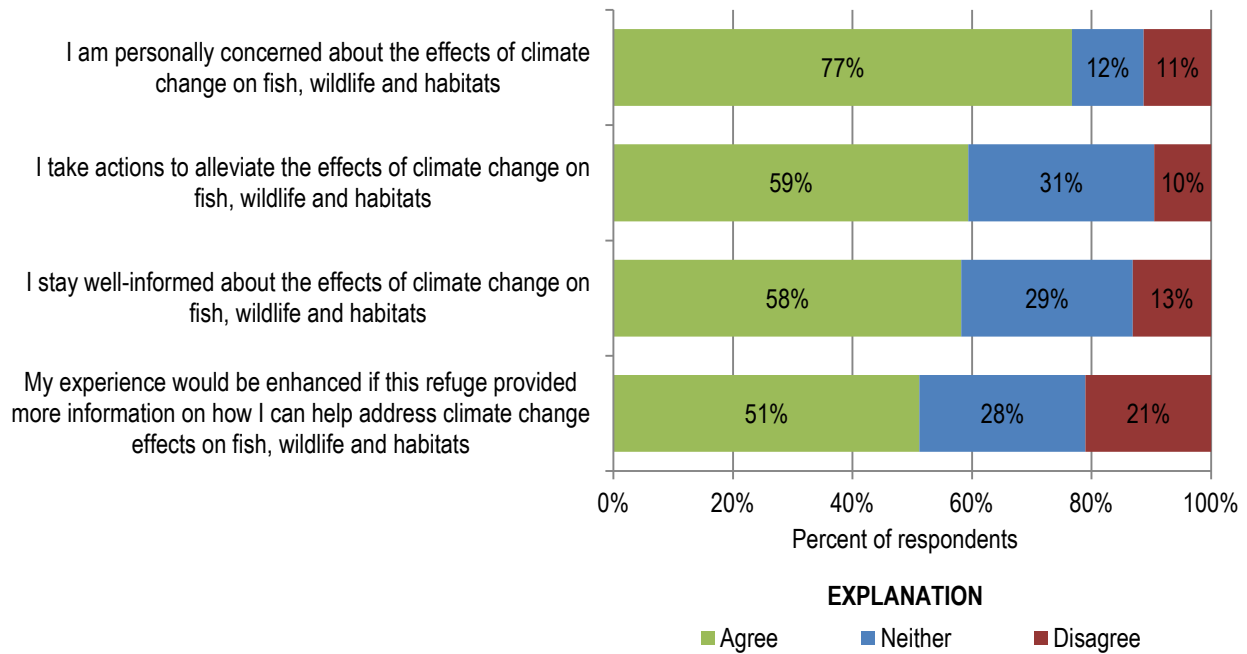


Figure 15. Visitors' personal involvement with climate change related to fish, wildlife and their habitats (n ≥ 281).

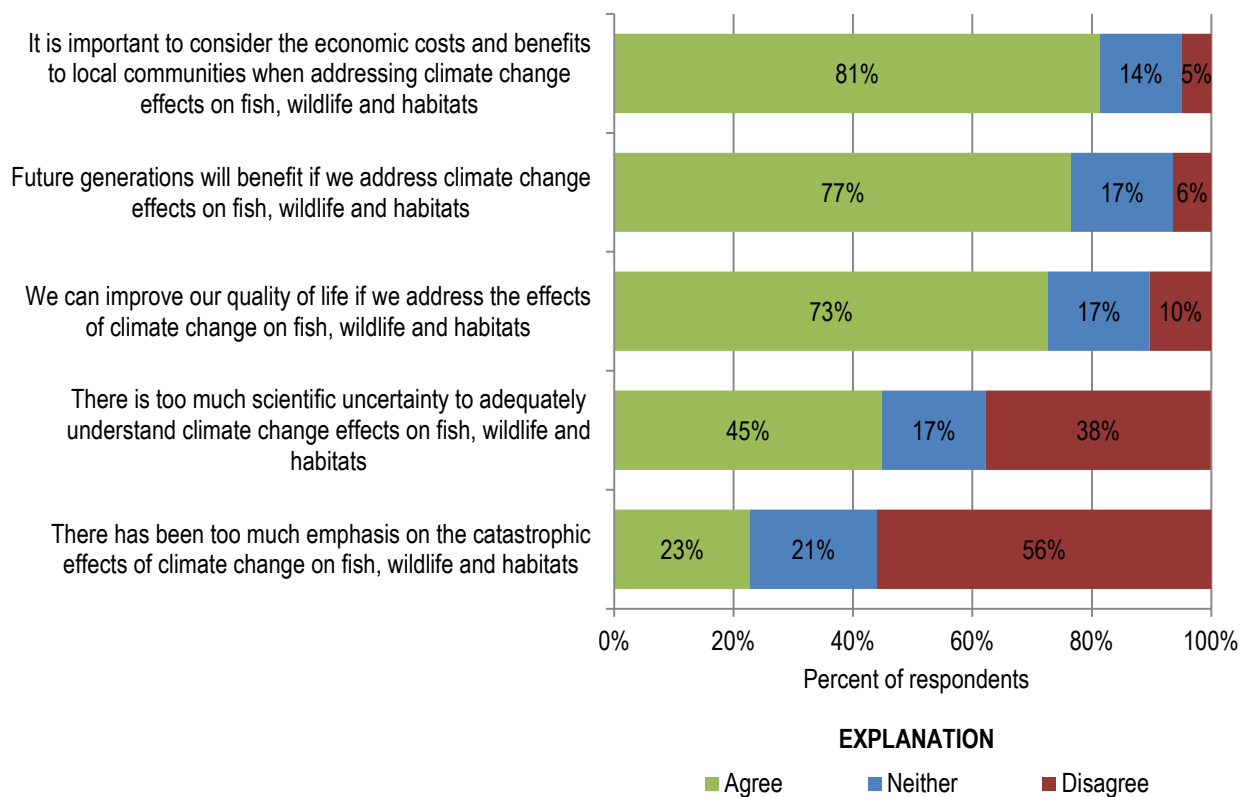


Figure 16. Visitors' beliefs about the effects of climate change on fish, wildlife and their habitats (n ≥ 281).

Conclusion

These individual refuge results provide a summary of trip characteristics and experiences of a sample of visitors to Chincoteague 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 are available for downloading at <http://pubs.usgs.gov/ds/754/>. For additional information about this project, contact the USGS researchers at national_visitor_survey@usgs.gov or 970.226.9205.

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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.)

<input type="checkbox"/> 0% Big game hunting	<input type="checkbox"/> 49% Hiking	<input type="checkbox"/> 22% Environmental education (for example, classrooms or labs)
<input type="checkbox"/> 0% Upland/Small game hunting	<input type="checkbox"/> 37% Bicycling	
<input type="checkbox"/> 1% Migratory bird/Waterfowl hunting	<input type="checkbox"/> 41% Auto tour route/Driving	<input type="checkbox"/> 10% Interpretation (for example, exhibits, kiosks, videos)
<input type="checkbox"/> 73% Wildlife observation	<input type="checkbox"/> 13% Motorized boating	
<input type="checkbox"/> 48% Bird watching	<input type="checkbox"/> 10% Nonmotorized boating (including canoes/kayaks)	<input type="checkbox"/> 6% Refuge special event (<i>please specify</i>) See Appendix B
<input type="checkbox"/> 1% Freshwater fishing		
<input type="checkbox"/> 31% Saltwater fishing	<input type="checkbox"/> 1% Volunteering	<input type="checkbox"/> 23% Other (<i>please specify</i>) 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?

<input type="checkbox"/> 23% No	
<input type="checkbox"/> 77% Yes → If yes, what did you do there? (Please mark <u>all that apply</u> .)	
<input type="checkbox"/> 60% Visit the gift shop or bookstore	<input type="checkbox"/> 19% Pick up/purchase a license, permit, or pass
<input type="checkbox"/> 90% View the exhibits	<input type="checkbox"/> 66% Stop to use the facilities (for example, get water, use restroom)
<input type="checkbox"/> 61% Ask information of staff/volunteers	
<input type="checkbox"/> 36% Watch a nature talk/video/presentation	<input type="checkbox"/> 11% Other (<i>please specify</i>) See Appendix B

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

Nonlocal	Local	All visitors	
<input type="checkbox"/> 47%	<input type="checkbox"/> 71%	<input type="checkbox"/> 50%	It was the primary purpose or sole destination of my trip.
<input type="checkbox"/> 44%	<input type="checkbox"/> 20%	<input type="checkbox"/> 41%	It was one of many equally important reasons or destinations for my trip.
<input type="checkbox"/> 9%	<input type="checkbox"/> 9%	<input type="checkbox"/> 9%	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?

Nonlocal	<u>5</u> Hours	<u>17</u> Minutes	and	<u>313</u> Miles
Local	<u>1</u> Hours	<u>6</u> Minutes	and	<u>17</u> Miles
All visitors	<u>4</u> Hours	<u>49</u> Minutes	and	<u>281</u> Miles

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

☐ 8% None, I visited this Refuge alone

(Below responses are of those indicating they visited with a group)

☐ 99% Family and/or friends

☐ 0% Organized club or school group (for example, Boy/Girl Scouts, hiking club, bird watching group)

☐ 0% Commerical tour group

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

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

3 number 18 years and over

1 number 17 years and under

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

☐ 74% Family and/or friends

☐ 10% Refuge website

☐ 7% Signs on highway

☐ 2% Other website (*please specify*) See Appendix B

☐ 0% Recreation club or organization

☐ 1% Television or radio

☐ 8% People in the local community

☐ 6% Newspaper or magazine

☐ 11% Refuge printed information (brochure, map)

☐ 17% Travel guidebook or other book

☐ 9% Map or atlas

☐ 3% 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.*)

☐ 64% Spring
(March-May)

☐ 65% Summer
(June-August)

☐ 38% Fall
(September-November)

☐ 19% Winter
(December-February)

10. How many times have you visited...

...this Refuge (including this visit) in the last 12 months? 14 number of visits

...other National Wildlife Refuges in the last 12 months? 1 number of visits

SECTION 2. Transportation and access at this Refuge

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

<input type="checkbox"/> 94%	Private vehicle without a trailer	<input type="checkbox"/> 1%	Refuge shuttle bus or tram	<input type="checkbox"/> 26%	Bicycle
<input type="checkbox"/> 3%	Private vehicle with a trailer (for boat, camper or other)	<input type="checkbox"/> 2%	Motorcycle	<input type="checkbox"/> 36%	Walk/Hike
<input type="checkbox"/> 1%	Commercial tour bus	<input type="checkbox"/> 1%	ATV or off-road vehicle	<input type="checkbox"/> 2%	Other (<i>please specify below</i>)
<input type="checkbox"/> 2%	Recreational vehicle (RV)	<input type="checkbox"/> 6%	Boat	<u>See Appendix B</u>	
		<input type="checkbox"/> 0%	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"/> 66%	Previous knowledge/I have been to this refuge before	<input type="checkbox"/> 12%	Maps from the Internet (for example, MapQuest or Google Maps)
<input type="checkbox"/> 19%	Signs on highways	<input type="checkbox"/> 3%	Directions from Refuge website
<input type="checkbox"/> 25%	A GPS navigation system	<input type="checkbox"/> 5%	Directions from people in community near this Refuge
<input type="checkbox"/> 10%	A road atlas or highway map	<input type="checkbox"/> 3%	Directions from friends or family
		<input type="checkbox"/> 2%	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"/> 44%	<input type="checkbox"/> 13%	<input type="checkbox"/> 7%	<input type="checkbox"/> 25%	<input type="checkbox"/> 11%
...a bike that was offered through a Bike Share Program for use while on the Refuge?	<input type="checkbox"/> 30%	<input type="checkbox"/> 12%	<input type="checkbox"/> 6%	<input type="checkbox"/> 28%	<input type="checkbox"/> 24%
...a bus or tram that provides a guided tour of the Refuge with information about the Refuge and its resources?	<input type="checkbox"/> 32%	<input type="checkbox"/> 13%	<input type="checkbox"/> 6%	<input type="checkbox"/> 27%	<input type="checkbox"/> 21%
...a boat that goes to different points on Refuge waterways?	<input type="checkbox"/> 18%	<input type="checkbox"/> 10%	<input type="checkbox"/> 6%	<input type="checkbox"/> 35%	<input type="checkbox"/> 31%
...a bus or tram that runs during a special event (such as an evening tour of wildlife or weekend festival)?	<input type="checkbox"/> 28%	<input type="checkbox"/> 13%	<input type="checkbox"/> 11%	<input type="checkbox"/> 30%	<input type="checkbox"/> 18%
...an offsite parking lot that provides trail access for walking/hiking onto the Refuge?	<input type="checkbox"/> 31%	<input type="checkbox"/> 10%	<input type="checkbox"/> 8%	<input type="checkbox"/> 27%	<input type="checkbox"/> 25%
...some other alternative transportation option? (<i>please specify</i>) <u>See Appendix B</u>	<input type="checkbox"/> 14%	<input type="checkbox"/> 3%	<input type="checkbox"/> 5%	<input type="checkbox"/> 35%	<input type="checkbox"/> 43%

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

☐ 21% Yes ☐ 47% No ☐ 32% 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 <i>Circle one for each item.</i>						Satisfaction <i>Circle one for each item.</i>					
Very Unimportant	Somewhat Unimportant	Neither	Somewhat Important	Very Important		Very Unsatisfied	Somewhat Unsatisfied	Neither	Somewhat Satisfied	Very Satisfied	Not Applicable
5%	13%	10%	46%	25%	Surface conditions of roads	5%	1%	3%	14%	78%	NA
7%	17%	15%	43%	17%	Surface conditions of parking areas	4%	1%	4%	18%	73%	NA
4%	6%	7%	36%	47%	Condition of bridges	2%	0%	3%	12%	83%	NA
4%	5%	7%	41%	43%	Condition of trails and boardwalks	2%	1%	5%	18%	74%	NA
4%	6%	6%	35%	49%	Number of places for parking	3%	6%	5%	26%	60%	NA
3%	7%	9%	47%	34%	Number of places to pull over along Refuge roads	1%	11%	9%	32%	46%	NA
4%	3%	5%	31%	58%	Safety of driving conditions on Refuge roads	1%	1%	3%	18%	76%	NA
3%	4%	10%	35%	48%	Safety of Refuge road entrances/exits	2%	1%	4%	17%	76%	NA
6%	11%	17%	36%	30%	Signs on highways directing you to the Refuge	1%	2%	15%	22%	59%	NA
4%	6%	12%	42%	37%	Signs directing you around the Refuge roads	1%	1%	8%	27%	62%	NA
4%	5%	9%	36%	46%	Signs directing you on trails	2%	3%	7%	27%	60%	NA
5%	9%	23%	27%	35%	Access for people with physical disabilities or who have difficulty walking	0%	4%	24%	29%	43%	NA

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

See Appendix B

SECTION 3. Your expenses related to your Refuge visit

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

☐ 88% Yes

☐ 12% 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: 6 day(s)

only If you spent less than one day in the local area, enter the number of hours: 7 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: 5 day(s)

If you spent less than one day at this Refuge, enter the number of hours: 5 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	Amount Spent in <u>Local Communities & at this Refuge</u> (within 50 miles of this Refuge)
Motel, bed & breakfast, cabin, etc.	
Camping	
Restaurants & bars	
Groceries	
Gasoline and oil	
Local transportation (bus, shuttle, rental car, etc.)	
Refuge entrance fee	
Recreation guide fees (hunting, fishing, wildlife viewing, etc.)	
Equipment rental (canoe, bicycle, kayak, etc.)	
Sporting good purchases	
Souvenirs/clothing and other retail	
Other (<i>please specify</i>) _____	

See Report for Results

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
4%	6%	7%	5%	16%	4%	27%	1%	6%	10%	15%

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**.)*

☐ 18% Did not pay a fee *(skip to Section 4)*

☐ 2% Far too low ☐ 10% Too low ☐ 79% About right ☐ 8% Too high ☐ 1% 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.

☐ 3% Strongly disagree ☐ 2% Disagree ☐ 7% Neither agree or disagree ☐ 41% Agree ☐ 47% Strongly agree

SECTION 4. Your experience at this Refuge

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

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Not Applicable
Overall, I am satisfied with the recreational activities and opportunities provided by this Refuge.	<input type="checkbox"/> 0%	<input type="checkbox"/> 3%	<input type="checkbox"/> 2%	<input type="checkbox"/> 39%	<input type="checkbox"/> 56%	NA
Overall, I am satisfied with the information and education provided by this Refuge about its resources.	<input type="checkbox"/> 0%	<input type="checkbox"/> 1%	<input type="checkbox"/> 5%	<input type="checkbox"/> 36%	<input type="checkbox"/> 58%	NA
Overall, I am satisfied with the services provided by employees or volunteers at this Refuge.	<input type="checkbox"/> 0%	<input type="checkbox"/> 2%	<input type="checkbox"/> 3%	<input type="checkbox"/> 31%	<input type="checkbox"/> 64%	NA
This Refuge does a good job of conserving fish, wildlife and their habitats.	<input type="checkbox"/> 1%	<input type="checkbox"/> 1%	<input type="checkbox"/> 4%	<input type="checkbox"/> 31%	<input type="checkbox"/> 63%	NA

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

Importance						Satisfaction					
Circle one for each item.						Circle one for each item.					
Very Unimportant	Somewhat Unimportant	Neither	Somewhat Important	Very Important	Refuge Services, Facilities, and Activities	Very Unsatisfied	Somewhat Unsatisfied	Neither	Somewhat Satisfied	Very Satisfied	Not Applicable
2%	9%	6%	51%	32%	Availability of employees or volunteers	2%	3%	9%	15%	71%	NA
3%	4%	6%	39%	49%	Courteous and welcoming employees or volunteers	2%	1%	4%	14%	79%	NA
3%	3%	3%	34%	59%	Knowledgeable employees or volunteers	1%	2%	3%	19%	74%	NA
4%	4%	8%	39%	44%	Printed information about this Refuge and its resources (for example, maps and brochures)	2%	1%	6%	19%	72%	NA
3%	4%	13%	46%	33%	Informational kiosks/displays about this Refuge and its resources	1%	1%	11%	25%	62%	NA
2%	4%	8%	44%	41%	Signs with rules/regulations for this Refuge	1%	4%	9%	23%	63%	NA
3%	5%	8%	49%	35%	Exhibits about this Refuge and its resources	1%	2%	6%	23%	67%	NA
3%	7%	16%	40%	35%	Environmental education programs or activities	1%	2%	22%	23%	52%	NA
2%	2%	5%	37%	54%	Visitor Center	1%	2%	4%	14%	79%	NA
1%	3%	1%	27%	68%	Convenient hours and days of operation	1%	4%	2%	21%	72%	NA
2%	0%	3%	25%	70%	Well-maintained restrooms	3%	2%	1%	15%	78%	NA
3%	6%	14%	40%	38%	Wildlife observation structures (decks, blinds)	1%	2%	12%	29%	57%	NA
4%	6%	19%	35%	36%	Bird-watching opportunities	0%	1%	18%	24%	57%	NA
2%	3%	7%	40%	48%	Opportunities to observe wildlife other than birds	2%	4%	6%	30%	58%	NA
5%	3%	12%	32%	48%	Opportunities to photograph wildlife and scenery	2%	2%	12%	22%	63%	NA
54%	6%	27%	7%	6%	Hunting opportunities	3%	1%	70%	5%	21%	NA
22%	7%	18%	17%	36%	Fishing opportunities	3%	5%	27%	25%	40%	NA
3%	4%	11%	28%	54%	Trail hiking opportunities	2%	2%	11%	29%	56%	NA
7%	6%	30%	32%	25%	Water trail opportunities for canoeing or kayaking	2%	4%	37%	25%	32%	NA
7%	3%	17%	29%	44%	Bicycling opportunities	1%	3%	19%	19%	59%	NA
15%	11%	45%	17%	13%	Volunteer opportunities	1%	2%	62%	10%	26%	NA

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

See Appendix B

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

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

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

☐ 87% Yes

☐ 13% No

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

☐ 90% Yes

☐ 10% No

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

☐ 86% Yes

☐ 14% No

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

See Appendix B

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%	7%	12%	42%	35%
We can improve our quality of life if we address the effects of climate change on fish, wildlife and their habitats.	4%	7%	17%	37%	35%
There is too much scientific uncertainty to adequately understand how climate change will impact fish, wildlife and their habitats.	12%	25%	17%	31%	14%
I stay well-informed about the effects of climate change on fish, wildlife and their habitats.	1%	12%	29%	46%	12%
It is important to consider the economic costs and benefits to local communities when addressing the effects of climate change on fish, wildlife and their habitats.	1%	4%	14%	53%	28%
I take actions to alleviate the effects of climate change on fish, wildlife and their habitats.	2%	8%	31%	43%	17%
There has been too much emphasis on the catastrophic effects of climate change on fish, wildlife and their habitats.	22%	34%	21%	13%	9%
Future generations will benefit if we address the effects of climate change on fish, wildlife and their habitats.	2%	5%	17%	37%	39%
My experience at this Refuge would be enhanced if this Refuge provided more information about how I can help address the effects of climate change on fish, wildlife and their habitats.	6%	15%	28%	32%	19%

SECTION 6. A Little about You

**** Please tell us a little bit about yourself. Your answers to these questions will help further characterize visitors to National Wildlife Refuges. Answers are not linked to any individual taking this survey. ****

1. Are you a citizen or permanent resident of the United States?

99% Yes 1% No → If not, what is your home country? See Figure 2 in Report

2. Are you? 54% Male 46% Female

3. In what year were you born? 1959 (YYYY)

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

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
(elementary)					(junior high or middle school)			(high school)				(college or technical school)				(graduate or professional school)			
					<input type="text" value="1%"/>			<input type="text" value="14%"/>				<input type="text" value="41%"/>				<input type="text" value="44%"/>			

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

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

<input type="text" value="4%"/> American Indian or Alaska Native	<input type="text" value="1%"/> Black or African American	<input type="text" value="95%"/> White
<input type="text" value="3%"/> Asian	<input type="text" value="0%"/> Native Hawaiian or Pacific Islander	

7. How many members are in your household? 3 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="text" value="0%"/> Less than \$10,000	<input type="text" value="13%"/> \$35,000 - \$49,999	<input type="text" value="26%"/> \$100,000 - \$149,999
<input type="text" value="3%"/> \$10,000 - \$24,999	<input type="text" value="15%"/> \$50,000 - \$74,999	<input type="text" value="9%"/> \$150,000 - \$199,999
<input type="text" value="4%"/> \$25,000 - \$34,999	<input type="text" value="20%"/> \$75,000 - \$99,999	<input type="text" value="9%"/> \$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.)?

16 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?

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 Chincoteague 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
Archery activities (for kids, lessons)	5
Blueberry Festival, Bird/Decoy Festival, Daffodil Festival, Bird Migratory Festival	1
Circle of Life Run/Walk	1
Coastal Cleanup Day	1
Lighthouse Climb	1
Pony Swim & Roundup	2
Ranger Beach Campfire	1
Ranger Beach Campfire, 2012 Annual Pony Swim	1
Tour by bus/van	4
Wild Waterfowl Week	1

Other Activity	Frequency
Appreciation of nature	1
Assateague Ponies	1
Beach - Assateague Island	1
Beach activities	20
Beach activities (swimming and surfing)	3
Beach activity (crabbing)	2
Beach activity (horseback riding)	1
Beach activity (shelling)	1
Beach activity (swimming)	23
Beach activity (walking)	3
Just for fun	1
Native plants	1
Observing the eagle cam, beach activities (swimming)	1
Pony watching/Beach	1
Purchase books	1
Ranger Alex provided a lesson in crabbing; also, we visited the beach.	1

Visited the lighthouse	6
Watching rocket launch	1
Wild horses, lighthouse, beach	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
Appreciation of nature	1
Just to see the refuge	1
Vacation	2
Van tour with naturalist guide	1
Visit with kids	1
Weekend get away	1

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

Other Visitor Center Activity	Frequency
Archery	3
Check the list of wildlife sightings	2
Checked exhibit/nestcam for status of eagles	1
Get cancellation stamp	1
Handled the horseshoe crab	1
Lighthouse tour	1
Meet for van tour	2
Observe bird feeders from window	1
Observe eagle cam	2
Observed eagle nest	1
Parking	1
Pick up info for the refuge area	1
Pick up tickets for bus tour	1
Purchase Assateague Lighthouse glass medallion at Visitor Center	1
Report an unprotected plover's nest on the beach	1
Take class	1
Use air compressor/fish cleaning station	1
Watched the movies	1
We wanted to walk around the lake, but it was dried up! So sad.	1

Question 6: "Were you part of a group on your visit to this Refuge?; If Yes, "What type of group were you with on your visit?"

Other Group Type	Frequency
Church group	1
Community trip	2

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

Other Website	Frequency
Chincoteague Area - Chamber of Commerce	1
Google	2
stripersonline.com	1
Tripadvisor	1

Other Ways Heard about This Refuge	Frequency
Book "Misty of the Chincoteague"	3
Hearing about the wild ponies	1
Job travel	1
Movie "Misty of the Chincoteague"	1
Research	1
Virginia Living Museum	1

Survey Section 2

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

Other Forms of Transportation	Frequency
Airplane	1
Church bus	1
Commercial boat tour	1
Drive on beach due to disability and unable to walk	1
Refuge bus tour	1
Scooter	1

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

Other Ways Found This Refuge	Frequency
Brochure	1
Directions on National Seashore pamphlet	1
The town Visitor Center	1
Virginia Tourist	1
Visitor Center	1

Question 3: "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
Added parking lot	1
Any way to bring my horse.	1
ATV	1
Bike tours	1
Bike	4
Boat or kayak	2
Canoe	1
Car	9
Electric scooters/mopeds/segway	2
Golf cart	2
Handicapped accessible	1
Horseback riding	1
Jet pack, seriously I would not go to this refuge without my car.	1
Kayaks	1
No busing to the beach.	1
Offsite parking to the beach	1
Open access by personal vehicle	1
ORV	1
Please DON'T change the current access to this refuge!!!!	1
Rental scooters	1
Scooter	1
Segway	1
Self-guided tour by foot or private car.	1
Tricycle for two adults + child	1
Wheelchair accessible tour bus or tram	1
Zipline	2

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 = 79)

A chain fell off the bicycle of someone in my group while returning to town after dark. There were no lights on the road and no shoulder at all, so I had to fix the chain in the dark on the grass on the side of the road on a curve and cars couldn't see us well.

As a bird watcher and wildlife observer, I think it is very important for visitors to be able to drive and park in the areas where they currently can. Going in a bus or van would greatly diminish the experience.

Beautiful and well maintained refuge!!

Bridge/covert at the pony pen needs attention: poor pavement, washout potential, congested area.

Busing to the refuge is simply not an option for me or my family.

Do most all of my touring through the refuge by bicycle or walking, so driving is not that important.

During the past two years while visiting the refuge, there has been much speculation about future access to Assateague. It is our family's position that a balance can, should, and needs to be maintained between people and wildlife at the refuge. Both should co-exist and enjoy the benefits of the island. The idea of off-site parking and a bus service would negatively impact our experience and deter us from visiting. Our family currently visits the refuge every summer.

Happy vehicles are restricted from beach. Happy to have visited in May when attendance was low. Happy with toilet facilities near parking.

I am against public transportation to the refuge's beach.

I don't think a trolley or shuttle bus would be good for the refuge. I think it would discourage a lot of people from visiting the refuge and the surrounding areas.

I feel that riding a bus to the beach is unrealistic as my family carries boogie boards, umbrellas, games, coolers, etc. to the beach. How, with small children, can adults carry all this? Also, where would we go if a sudden thunderstorm appears?

I go to the beach, and weekends have become overcrowded. There is no available parking from 10:00 to 3:00. Cars are lined up waiting for another car to leave. I think an offsite parking lot with bus rides to the beach and/or more parking (probably both) are necessary. Most likely a second parking lot north of the existing area.

I hate the shuttle bus idea.

I like it the way it is.

I love Assateague the way it is...

I love how much bike access is available on the refuge!

I stay on the island a few months each year and often bike to the refuge. I would use public trams if necessary when family is with me.

I strongly believe the proposed bus shuttle is a very bad idea and waste of money. Keep open access. Even if the entrance fee must be raised.

I think the beach parking area should be maintained since I tend to come and go during the day (as most do, I think). Busing into the park is inconvenient. Also, being bused to the beach would ruin the beach experience.

I think the price of the permit to drive on the beach is a bit excessive, especially if you are only going to do it 3 or 4 times a year. Love this park for shelling and the beach!

I truly appreciate natural areas. I would not like to see anything spoiled for the sake of transportation improvements.

I understand the beach keeps eroding due to storms, but busing little children and families seems like it would be hard for them with beach chairs, toys, etc. For me, my children are grown so I can easily bike to the refuge.

I was impressed with how well maintained the refuge was. Even though it was a busy time with lots of visitors, the refuge was still very nice.

I was disappointed that we were unable to drive the length of the island. It was not clear to me from the website and AAA Guide that only a small portion of the island was accessible by car. We hoped for more chances to view the wild horses.

I would hate to see people bused into the refuge. We enjoy the freedom of moving around on our own. I don't know how crowded it might be in the summer, but that doesn't seem like the answer. The refuge is a wonderful place to visit.

I would like to see more handicapped parking at the beach.

I would never return if I couldn't park at the beach in my own car. I would never take a bus or tram to the beach. I would not spend my money in the area if I had to bus to the beach; I would go elsewhere.

I would not change a thing.

I would not feel safe exploring the refuge without my vehicle close-by. The mosquitos and ticks are a concern, as is water and sunscreen, and with children, there is way too much stuff you need on hand to be able to carry it. There is the issue of trash, which I can easily take away in my car. And the weather: the thunderstorms come up quickly and I would not want to wait for a bus under stormy conditions. I realize the roads are subject to wash out during strong storms, especially the parking lots at the beach, but it is great to be able to get yourself to the water for sunrise and see the wildlife. There is no way I am walking or even riding a bike that early, and I could not safely carry my tripod and camera equipment to the locations throughout the refuge in a timely manner. I have no desire to ride a bus or a tram car and would probably stop coming to the refuge, this after 25 years of enjoying the same. The parking lots have been rearranged, some of the roads have become walking trails and the bath houses have washed away, but compared to the alternatives along the coast, this refuge is one of the best. Plus, you can take great pictures from your car without scaring the birds away.

I would stop visiting Chincoteague National Wildlife Refuge if beach parking for private vehicles was no longer available and a shuttle was installed. I would also stop visiting this refuge if ORV access was changed or further restricted!

If a bus, tram, or other way to visit this refuge is the only way to visit the refuge, I will stop visiting this refuge. The same goes for my friends and family.

If I am not allowed to take my personal vehicle, I will no longer visit this area or Chincoteague, Virginia, nor will any member of my family or friends.

If I had to take a bus to the refuge, I would not go.

If I have to use alternative transportation, my surf fishing days are over! Why were the dunes that used to protect the parking lot removed? Bad enough, I can't fish two miles of beach because of a couple Piping Plovers. We can go to the moon, but we can't save a beach? Go figure!

If the beach is considered part of the refuge, then you need to be able to drive a personal car to the beach. I heard rumors from shopkeepers about public transportation being the only option soon - not a good option. With 2 kids, we bring too much stuff (chairs, umbrellas, buckets, towels, coolers, fishing poles). It would be impossible with 2 small children. You need to be able to park the car nearby when we are on the beach.

If the parking lot is removed from the beach area, we will not come back. The bus/tram is an option with all the beach gear - i.e. fishing rods, coolers, chairs, etc.

If the refuge plans on doing what they want with the parking, I will be unable to use this refuge at all. The main reason I like this refuge is the over-the-sand driving, which allows me access to fish due to my disabilities. Off refuge parking and shuttle service will destroy this area of VA.

If there is no access beach by personal vehicle, I would go to Myrtle Beach or elsewhere. We have been coming here for 30 years.

In the past, parking and beach access has been adequate, however the recent attitude of the wildlife manager has been anti-people. Assateague is 37 miles long. The Maryland end is people friendly and VA end is anti-use. The National Park Service is hindered by wildlife management to deliver a public beach access that is necessary for the surrounding area. A National Wildlife Refuge should be natural. Treating local species and animals as "pest" to be gassed and driven off so that they can experiment with unnatural species that are brought in from other areas of the country should not be allowed. The ponies have been here for over 400 years. They are more natural than the Sika brought in or falcons or coyotes on the eastern shore. Another example of big government knows best.

It is fine the way it is.

More access to ORV.

My mother uses a wheelchair so access is very important. It would be nice to have a place at the sand that we could have gotten her out of the car. The visitor center was excellent for access.

Need more onsite parking at beach.

No alternative transportation was offered and there was a lot of ground to cover with limited access for your own vehicle.

Offsite parking as a secondary backup to beach parking is OK. However, substituting offsite parking and eliminating beach parking totally is not practical and unappealing.

On Thanksgiving weekend in 2011, we did not want to walk around the main pond because it was open to cars all day. Although we appreciated driving to the northern part that day, the walk around the pond is a major attraction for us.

Open up more complete bike lanes on the beach. Do not stop car parking near the beach. Do not use trams, buses, etc. to gain beach access.

ORV zone should be open year round.

Our family would discontinue visiting the refuge if it became necessary to use offsite parking or use alternative transportation to access the beach or any other part of the refuge. We would also consider selling our home on Chincoteague Island should this occur.

Permits that allow vehicles onto designated sections of the beach for fishing purposes are very important.

PLEASE DO NOT CHANGE CURRENT ACCESS TO ANY OF THE BEACHES AND TRAILS!!!! We love how things are now and proposed changes would ruin our enjoyment and make us reconsider this location as a getaway. We consider this area our "home away from home."

Please maintain the beach access parking lots.

Please stop micro-managing wildlife. There are now no swans because they tried to eliminate one species. Also, stop harassing natural predators, such as foxes. They are necessary to control overpopulation of rodents, etc. Thank you.

Please work towards a solution to keep parking on the refuge - not on the nearby town island.

Separate ORV traffic from non-ORV/parking facilities.

Shuttle would be very painful to use. Really pay attention - what would you do with your family if you did not work for the Refuge System?

Spending money on alternative transportation or overflow parking in this economic time is ludicrous.

Staff was readying the areas for summer, so it was a work in progress.

The ability to drive through the park and visit the beach is very important. Safety of people is very important and trams and other ways to deliver people will not work well.

The beach is important, and it is unlikely that public transportation to the beach will work - people would be crowding with lots of stuff.

The deep sand trail was difficult to walk on to get to the lighthouse.

The parking lots for Memorial Day weekend were fantastic! So happy to see the parking lots repaired.

The refuge was not crowded on my visits (except at the beach), so it was very convenient to use our own vehicle. Also, it was extremely hot and bug infested, so it was nice to stay in the car for some of the sightseeing. The access and conditions were exceptionally good in my opinion!

The road from the entrance to the beach parking area needs repairing of the center line.

The walking trail did not have the colored markers to guide you during hikes and we were a bit lost.

There was no bus tour offered during the week we visited at the end of April. It would have been nice to have a narrated tour.

This refuge has been doing a very difficult, but tremendous job of maintaining all transportation related items.

This refuge is extensively used by families. Restricting access by private vehicle will severely reduce the number of visitors and the educational and recreational opportunities that can be enjoyed.

This refuge is the singular ocean beach access on the Virginia portion of the Delaware peninsula. People only have approximately 900 parking spaces that provide beach access. This is not adequate considering the Virginia portion of the peninsula is 90 miles long. Perhaps for the nearest 3 miles of beach that taxpayers are restricted to, we should be given adequate private vehicle parking.

We are senior citizens and spend about 2 to 3 months per year at Chincoteague. During that time we go to and from the refuge several times a day. Alternative transportation would be unacceptable.

We have been coming to this refuge for over 30 years. Direct access by our personal vehicle is extremely important to us. Adequate parking should be supplied for all who drive their personal vehicle. If you eliminate direct access to the beach/ refuge, we will vacation somewhere else.

We liked the small groups (8-10) in the van with the naturalist. Car occupants learned about each other - which was nice.

We love coming to this refuge, but they need more parking at the beach.

We went to the pony overlook and it wasn't clear how far the overlook was. I have trouble walking and I wasn't able to make the long walk after the ranger told me it was short.

When on the point, caution is required because pedestrians struggle everywhere on the road. Maybe a walkway on the side of the road to guide pedestrians with a couple designated crosswalks.

With the amount of gear that a family has to bring to a day at the beach, alternate transportation would likely make us pick a new vacation spot and we love it here!

With wildlife and waterfowl, sometimes they are at places where you can only pull over on the edge of the road (or in the grass), which sometimes results in cars backing up and blocking the road. Refuge entrance and exit is on curves surrounded with trees and is sometimes dangerous due to not seeing what is approaching. This is a dangerous area. Driving conditions on the road are good, but since bicyclists and walkers share the road and there are no bike paths, it can be dangerous at times, especially with young children on bikes. 3 Mile Refuge loop is a one way drive, but left side of entrance is a two way drive for tourist buses, rangers, and maintenance personnel. This two way portion of the 3 mile loop is dangerous for anyone unfamiliar with the two way section of the road; who thinks it is still one way. Two way section of the road is dangerous to walkers, bicyclists and anyone who has a hearing impairment who may not know a vehicle is approaching from behind them. Recommend for safety: all motor vehicles drive the full one way 3 mile loop even if their destination is taking the two way portion of the loop to get to the gate to the 7 mile drive. If there's a valid, necessary reason for motor vehicles to drive the 2 way section, vehicles should have flashing lights (e.g. yellow for maintenance or red/blue for emergency vehicles).

You need a better way for people with disabilities to be able to get on the beach.

You ought to have horseback guided tours!

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 = 80)

All employees and volunteers are very knowledgeable, helpful, and courteous.

Although I visited the refuge primarily for birding, I feel it is imperative to continue to offer opportunities for the hunting and fishing to the public. These activities are a primary incentive to maintain and create habitat on private lands which can offer a buffer to refuges and other public lands.

As noted previously, we hoped for more opportunity to view and photograph wild horses.

Assateague beach and parking as it was, was wonderful. I hope it can be restored. Why is fishing no longer included with the refuge fee?

Assateague NWR was wonderful. It is well-maintained and the staff is very good.

Chincoteague refuge is one of the most pleasant, comfortable, interesting and positive experiences my family and I have ever enjoyed. Our first visit back in 1998 was so remarkable that we purchased a vacation home on Chincoteague Island the same week we were there. The refuge and beach were a major part of that decision. We love this island and the refuge. If it were to change, I would probably sell my vacation home on Chincoteague. We're beach people.

Employees are very knowledgeable and courteous. Great events and activities at the education center.

Enjoyable visit.

Great experience! Wonderful weekend!

Great service! Keep it going! Thanks.

I am mainly concerned about beach access for 4x4 trucks and surf fishing. My wife is concerned about bicycling the refuge areas and trails.

I am very appreciative of the wheel chairs made by the volunteer fire department for the dunes. It allowed my wife access to the beach 11 years ago. Thanks, it was the last experience for her on the ocean front. Thank you.

I feel that the gift store could have had more interesting, educational materials and items related to the horses.

I have had problems with fisherman casting hooks and sinkers into an area of surfers and then demanding the surfers stay clear (and swimmers too). I think restrictions are not good, however, during the summer swimming seasons, fisherman should be limited to areas away from those in the water. A short walk north, or maybe open an area along the water south toward the inlet (the area is roped off in the summer, maybe rope off the area in front of the dunes and open a short stretch along the water to allow fishing only).

I know it would be prohibitively expensive, but I'd love to see the Bateman Center open later than 4 pm. I have often seen visitors arrive after 4pm and leave disappointed.

I love it as it is being managed now.

I love the refuge. When the Education Center was looking for funds, I gave \$2,000 under the name of Michael J. Manning (deceased husband) and one of the view-finders in the Center was dedicated to him.

I mostly come for beach walking but enjoy the birds and bicycling.

I really like the new Visitor Center and the re-paving job on the woodland trail was great!

I understand that "No Pets" even in cars is a rule. I am a pet lover but understand why this is important. What I do not understand is why I saw pets. I think this should be better enforced!

I visited about 10 years ago and saw horses around every bend. That's why I brought my family back. Now I know they are fenced, and probably won't come back (with little interaction with people). That was the fun part - looking for up-close observations of ponies.

I wish there were more talks.

I wish you had water for sale at the Tower.

I was very happy there was a mini-archery range set up behind the Visitor Center. It was fun! There was nowhere to get food so we rode our bicycles from Chincoteague around the Assateague NWR and then had to ride back to town for lunch (we brought lunch, but it was insufficient) and ride back to the refuge again. Needless to say, we fell asleep on the beach later in the afternoon and after seeing the wild ponies once more at dusk, rode home in the dark.

I would have appreciated more "observation platforms" for the ponies. Also, since I did not have a bike, I would like to have had the opportunity to rent one at the refuge.

I would like to see more parking spaces at Chincoteague Refuge. Sometimes the traffic backs up because there aren't enough parking spots at the beach!

I would like to see water provided when the loop is closed to traffic on hot days.

I would restrict surf fishing within the swimming areas.

It has better access for kayakers.

It is somewhat of a hassle to not be able to purchase an ORV permit other than the "VA only" one.

It was great that the bike trail was open to cars after 3:00pm, as my husband was recovering from knee surgery and not able to hike long distances.

It was great.

Keep the beach parking as it is; 967 spaces.

Large island south of Maryland with very little access to areas other than parking lot for beach access. Should be more access to coast guard station and north of parking lot. Bike trails and water access to other areas.

Maintaining appropriate parking at the ocean beach is critical. We are deeply disturbed to know that the maintenance of dunes was deliberately abandoned for such a small stretch of beach - 1 mile!

My disability prohibits me from really assessing some of the features of this refuge.

Nice beach and very nice restrooms. Horses were hiding a bit.

Nice place, good facilities, well maintained, and friendly staff.

No kayak accessibility on Assateague from Chincoteague. While paved paths are excellent, we found limited footpaths.

No restrooms and changing rooms close enough to the beach.

Outstanding 3 mile loop and great trail to remote area of beach. On extremely hot mornings while out walking 3 mile loop, I was impressed that rangers were monitoring visitors walking and bicycling loop, checking to see if they had water, offering water and rides back to parking lot if visitor needed assistance. Was fine, but appreciated knowing they cared and were checking the loop at intervals. For two years, we followed an eagle family at the refuge with binoculars. The Visitor Center also had a webcam we could visit to see the nesting area close up and the eaglets. Rare experience to see them in the wild close up. Really appreciated the Visitor Center for this wonderful experience and updated information about the eagles. Were periods of time when view to canals to observe waterfowl from the road were obstructed by high grass; frustrated then at end of summer that many areas were cut - did not understand why do it then, when after Labor Day most of the summer crowd had left.

Overall, the few refuge employees we saw were at the Visitor Center and were very helpful. There was a trail we entered on bike that had a sign we had not seen and the employee who told us was fairly rude. When we tried to explain the sign was not very obvious, he did not take us very serious. The volunteer who signed me up for the survey was very nice and explained about the issues.

Parking lots and roads need to be maintained. Beach needs to be replenished and maintained along with dunes. Beach needs to be open to vehicles, not birds.

Rate the refuge "excellent" on managing the physical requirements such as parking lots. Very tidy, although too few. Also "excellent" on number and location of toilet facilities. Would be nice to be able to more safely pull off the road to view wildlife. We were very happy when we were there in May; a peaceful time before summer visitors filled the beaches, parking and roads. This park would quickly feel crowded. Sum up: Very well done, refuge management.

The activities are nice for those who choose to participate in them. The Visitor Center is well kept and has good displays. The "outhouses" are fine and well-maintained. We enjoy the non-commercialization at the refuge.

The best kept restrooms, clean beach, roads and parking are commendable.

The Chincoteague Refuge Visitor Center is excellent. We particularly enjoy the eagle's nest.

The facilities are adequate for someone with a private vehicle. If I had to take a different form of transportation, I would rather a full bath house at the beach. The activities like bird walks are very good. I was pleased with how knowledgeable the staff were at the refuge.

The Fish and Wildlife Dept. on this refuge can't wait to shut down the over-the-sand use every year, and this eliminates me from being able to enjoy the beach. I THOUGHT THIS BEACH BELONGED TO THE PEOPLE OF THIS COUNTRY, NOT THEM.

The only item that was disappointing was that we saw no wild ponies during our 2-3 hour visit. We were really looking forward to seeing them and saw nothing.

The only refuge employees seen are at the fee booth and they know very little. Park service employees at the beach are available, friendly, and very knowledgeable. Park service employees pick up their litter in the refuge but the refuge does nothing to help the park service at the beach.

The purpose of our visit is the beach, ocean, suit activities, and photography. We can be alone at beach; miles of quiet beach is rare.

The rangers working at Chincoteague do a great job!

The refuge does a great job! The staff is terrific!

The restrooms should be available at the gift shop near the beach.

The Visitor Center was a beautiful center but was let go and not kept up. You should not charge for a yearly pass when it can only be used part time. Close for the birds; love the birds but dislike the fee. Charge for what and when it is permitted to be used.

The volunteer at the Visitor Center gift shop was so rude to my wife when my 2-year old child dropped a book on the floor that she decided not to buy the book, the 2 t-shirts, and other items she had picked out. The staff at the front desk was great, but the gift shop guy needs to work on his customer service.

The volunteers were very helpful.

The walking and biking trails were great.

The wildlife trail did not open at a convenient time for vehicles.

There are not enough accessible trails.

There have been too many times access to the beach has been prohibited.

There is limited access to Tom's Cove area due to the renting of the area to commercial fishermen to culture clams. All this area should remain open to the public. Also the hook of the beach is off limits to people due to Piping Plover nests. There are acres and miles of barrier islands for them to nest and ways to hatch eggs that would not necessitate closing off the hook (one of only two ocean beach accesses in Virginia).

They were out of bug spray. I should have brought some, but it would have been nice to be able to buy.

This particular refuge has allowed too much hunting. Deer have disappeared, horses are scared of people, and almost all the ducks are killed.

Very well done - superior to most similar areas I've visited.

Very well done in general! Liked all the beach parking, lighthouse, and seeing wild horses. Tom's Cove Visitor Center could use bathrooms and the lighthouse trail needs more mosquito/bug treatment.

We choose to use the beach at Chincoteague National Wildlife Refuge because we can park on the beach. A shuttle bus alternative would not appeal to us at all!

We enjoy taking our vehicle to the beach and the refuge. I am handicap and it's very convenient to be able to drive myself.

We enjoyed our visit. We requested a video and the staff set it up immediately. Good exhibits.

We enjoyed the Visitor Center very much. Too much development near the refuge is dangerous and unattractive. We saw few ponies and not as many birds as we hoped to see. We did see one Delmarva Squirrel.

We enjoyed this refuge. The Visitor Centers were great and the staff was friendly and very helpful. The two people working (volunteers?) at the light house took time to tell us some history, and pointed out wildlife in the distance.

We have had a trailer in a campground nearby for 30 years and enjoy coming to the refuge and watching the horses, birds, and other wildlife.

We have visited regularly since 2003 and things (services, roads, center) have strongly improved. God blessed Chincoteague and Assateague with natural beauty.

We love it the way it is and we hope it never changes. We have been coming for over 40 years.

We loved the bird habitat class, the archery provided, and the refuge.

We only come for bicycling and the beach - we like to drive with all our needs to the beach for the day. It's a family vacation - and we have a lot of things to bring to the beach with a party of 17 and 7 of our children.

We were all very impressed with the cleanliness of the restrooms!

Well-mannered and knowledgeable employees.

You need complete bike lanes along the road to the beach. Encourage private horse use at the beach or in the refuge.

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 = 198)

A person can experience an entire ecosystem inside a relatively small area.

Access to education and the ability to apply that education while relaxing, strolling, and enjoying the beaches and trails.

Amazing ability to view animals undisturbed in their habitat and have very little impact on them while enjoying them; fosters appreciation of wildlife, habitats, and conservation unlike traditional recreation areas.

As well as enjoying the natural beauty, NWRs also teach us how to visit and live in harmony with local wildlife.

Assateague is an incredibly beautiful and pristine place...that should be experienced by everyone.

Assateague Ponies

Assateague Refuge is unique for ponies. Many activities for hiking, the beach, and animal observation are all in a safe environment.

At Chincoteague, being able to drive on the beach with an ORV permit helps me greatly as I am slightly disabled and cannot walk long distances.

Availability for all to access and enjoy.

Availability to surf fish.

Backwoods feel to hiking experiences.

Beach, marsh, wildlife and peace and quiet to reflect and enjoy nature.

Beautiful but delicate coastal lands made available to visitors while still protected.

Beautiful, peaceful, very clean and a well-maintained refuge!

Besides setting aside open space for wildlife resources it allows for hunting as needed.

Clean nature, almost no predation, empty beaches, birds, excellent birding opportunities.

Combination of hiking, biking paths, beaches, and lighthouse, with nature and wildlife all around you.

Condition of and access to the Refuge.

Ease of access, non-commercialization, and family oriented.

Ease of entry and observation is not complicated and doesn't require special gear, etc. It is a unique place that would have been devastated without protection.

Easy access to beach.

Educational aspects.

Educational facilities coupled with hiking/kayaking opportunities.

Emphasis on wildlife habitat protection.

Emphasis on wildlife.

Employees and the police there to protect habitat and the lives of other humans make it unique.

Everybody obeys the rules.

Everyone has the opportunity to explore the entire area - walking, hiking, driving, boating, and the abundance of wildlife in a natural setting. Driving on the 4x4 beach access is a large part of my family's activities. Surf fishing! All seasons!

Focus on opportunities to view wildlife.

For city people, this is a very valuable resource to reach kids about animals and things they won't normally see.

Gain an understanding of how we interact with wildlife and influence their habitat.

Great beach access combined with access to recreation and wildlife.

Great opportunity to preserve unique places and teach about nature.

Great place.

I am a mobile, handicapped surf fisherman.

I believe it's the preservation of land and wildlife for future generations to enjoy and savor that makes it unique.

I enjoy the ability to enjoy nature, while it is being protected and preserved for tourists.

I enjoyed the unique wildlife and setting on the refuge.

I have a National Park Annual pass and usually stop at just about anything that it will get me into. I find every one of these places is unique.

I like it when the employees are interested in the refuges themselves instead of just as another job. It makes it more interesting for the visitors.

I liked that some areas were left for the wildlife with just a road and you could look to the left and right and see the birds and horses without all the people that were at the beach.

I think the wild horse at the National Wildlife Refuge makes this place unique; it's nice to view them.

I've been coming here ever since I can remember. I love biking through the refuge; it is so beautiful and peaceful.

If it were not for wildlife refuges where would migrating birds be able to stop and rest?

In general, you are wildlife in its "natural" habitat. Every different time of the year has many different sightings in most areas.

In preserving the refuge, the refuge is still under the influence of nature. It is incredible to see changes from year to year!

Informative, knowledgeable staff, quality upkeep of lands.

Instead of mainly focusing on recreation, preservation of wildlife plays a much more important role.

It could be made more unique by having more opportunities to have a close encounter with the ponies.

It gives us the opportunity to observe nature.

It has so much you can do.

It is a beautiful and peaceful place to go.

It is a beautiful location, and wonderfully maintained. We always enjoy going to Chincoteague.

It is a good opportunity to view a variety of wildlife.

It is a place preserved in its natural state and not ran by commercialism.

It is a quiet and low-key environment.

It is a unique area because of the biodiversity, water ways, and horses. The Visitor Center was wonderful and very informative.

It is a unique, well-maintained habitat with friendly personnel and opportunities to enjoy wildlife.

It is an intimate encounter with the outdoors and wildlife.

It is serene and a pleasure to visit especially in the off-season.

It is such a joy to visit a national treasure, such as the ocean, and yet enjoy the beauty of the natural habitat and wildlife, including the variety of birds and the ponies.

It is unique because of the educational information provided on ecological preservation.

It is unspoiled by private for-profit corporations. They have professional staff that educate the public about refuges. It is a national heritage and history of our parks.

It is very well maintained, more informative, and there are more various types of plants and animals.

It is well-maintained and the staff is very nice and it has an educational visitor center.

It makes visiting the public land like visiting a staged experience. Chincoteague is so heavily managed that it is no longer a true wildlife experience. It seems that humans are the more unique species and are more and more under strict management and control. This is our land. Our taxes pay for you to manage the land. Listen to us, please. Our access to the bay and beach has been reduced by 50% in the last 20 years. Unacceptable.

It provides an affordable opportunity for the public to become knowledgeable and appreciative of nature. Without refuges many of us would have no access to this, which could be very detrimental to the future of our wildlife & natural environment. We need to educate young children to love and protect this part of our world.

It's a beautiful place.

It's a nice balance between giving wildlife a natural environment to live in, while giving people the opportunity to enjoy the same area without their interfering with the habitat.

Just the pure nature situation and the beauty of the land is awesome!

Knowledge and interest shown by employees and volunteers.

Lack of commercialism!

Large areas of habitat; access.

Less infrastructure than national parks. Less of an amusement park-like atmosphere than at national parks.

Loved the trails and loop through the bird areas.

More nature and less commercially oriented.

My parents taught us to value nature and we have been visiting (my mom lives on the island) since I was a small child (I'm in my 50s). The nature and the refuge are amazing and peaceful. In this crazy, mixed-up world, the refuge brings us all back to what is really important - the balance of nature. It keeps us well!

National seashore/beach access and the adjacent town of Chincoteague make the refuge a special place. The activities such as bird migration and other events are a great bonus. The special wild ponies are a crowd pleaser.

National Wildlife Refuges protect and help preserve our wildlife and waterfowl. The Refuges provide educational and wonderful opportunities for people to experience wildlife, birds and waterfowl in their natural habitats.

National Wildlife Refuges provide the opportunity to learn about and observe specific habitats that may be endangered or home to specific animals and plants not found elsewhere.

Natural habitat for hundreds of birds of many different varieties makes it unique.

Nature kept in wild state.

Nice chance to get to nature.

Nice place to be.

Nominal fee and the wildlife is federally protected.

Non-commercial, natural and an easy-going pace.

Not often do we get the opportunity to be completely surrounded by nature to truly marvel at how diverse and undisturbed wildlife is. National Wildlife Refuges do this.

Not only is there recreation, there is also a learning experience. The model illustration of the habitats of wildlife is a really effective way for visitors to learn how wildlife conduct their lives.

Ocean and wildlife in the same area.

Ocean beach access by personal vehicle to an unspoiled, non-commercial beach. The area known as Assateague or Chincoteague National Wildlife Refuge should be turned over to the National Park Service.

Opportunity to experience flora and fauna in their most 'natural' of conditions and environments.

Opportunity to observe animals in their natural habitat; other visitors have similar interests as mine.

Peace and quiet.

Ponies.

Ponies, wildlife, lighthouse, and many trails.

Protecting open lands and opportunities for public to experience these wild places and interact with nature.

Provides you the opportunity to get up close with animals without disturbing them and the way they live.

Quiet and better maintained.

Recreation is protected and encouraged for public use.

Sights that you do not usually see like unique birds and wild ponies. But where have all the ponies gone? Friends and families fishing, clamming, and crabbing together makes it unique.

Small quiet area, yet includes ponies, birds, and the beach.

So many young people have a great experience seeing nature and visiting the seashore. There is no other public park like this with hundreds of miles on the east coast. We as a society need this natural setting to communicate with nature. What is learned about wildlife is so important.

Surf fishing! It is getting more popular every year!

Swimming, fishing, and biking.

The abundance of flora and fauna in undisturbed, natural settings enhanced by man and the continuing focus to ensure these things are around for future generations.

The abundance of wildlife and educational opportunities about it makes it unique.

The access to ocean front beaches makes it unique.

The amount of wildlife and fishing opportunities are far greater on the refuges.

The amount of woodland and marsh hiking/biking trails, the seashore and beach, and bird/wildlife observation opportunities are unique.

The availability of access and use while preservation and conservation of nature is insured. The ability to access areas for the public is extremely important and must be maintained while the preservation of nature must continue. This difficult balance is what makes our National Wildlife Refuge unique. The loss or limitation of access to the refuge would be almost as destructive as elimination of conservation. This balance must be maintained.

The balance of so many diverse activities and features present at the refuge. The migratory birds make every visit different. I am not a big fan of daytime beach activities so the refuge provides a great place for both me and my children.

The beach!

The care of wildlife and conservation makes it unique.

The care that is given in regards to the wildlife is very impressive and important.

The Chincoteague refuge is very small and unique in that it has the wild pony. I think it is over-managed when it comes to the piping plover.

The Chincoteague wild ponies and beaches are kept in their natural state. Respect and care for our natural resources and native animals for future generations. The areas feel safe and well maintained.

The employees and volunteers are able to recommend the best place to go on the refuge to photograph and see specific types of wildlife.

The exhibit with the fish tank and with specimens was fantastic. The access to trails and public beaches and diverse ecosystems was amazing.

The fact that they are there for wildlife and let people enjoy it, rather than being designed for the comfort of only people. It makes for a more real and natural experience.

The focus on biological conservation; i.e. recreational opportunities with (theoretically) the minimal amount of disturbance.

The focus on conservation is very important.

The immense opportunity to observe wildlife in their own habitats.

The light house; we were disappointed we didn't get to see any of the horses.

The mission of the refuge.

The opportunity to assist the public in making a part of God's creation accessible in unique ways like tours, kayaking, and educational opportunities makes it unique.

The opportunity to be so close to nature and the ocean on Assateague Island is very important to me. And one I hope to share with future generations.

The opportunity to bring your family, beach gear, and fishing equipment by driving right on the beach makes it unique. A vehicle also provides a place to warm up in the colder weather.

The opportunity to share a habitat with all living creatures, and to experience nature in a non-commercial environment. One of the best aspects is that there is no commercial boardwalk!

The opportunity to view herons and other waterfowl and to see the Chincoteague horses makes it unique.

The opportunity to view wildlife in natural habitat and leaving that habitat virtually undisturbed.

The ponies at Assateague Island and the beach.

The ponies make it unique

The ponies we did not see make it unique.

The preservation of plants and animals makes it unique.

The programs offered were great.

The refuge is great for hiking, biking, and bird watching; however the ocean and the beach are the number one draw. Beach parking should be a high priority.

The refuge is laid out very nicely, it has lots of fun activities for the whole family to enjoy together as well as, of course being able to see all the wild horses. That is our main goal of the trip: to see and photograph the wild horses.

The refuges are unique because they educate the public about the need to nurture our wildlife.

The refuges provide a unique opportunity for children to learn about conservation of local animals and the wild spaces needed to sustain them.

The staff works hard to provide a rewarding experience for visitors and maintains a good environment for wildlife.

The unique ecosystem that exists there, and access to the beach.

The unique wildlife, woodlands, sea coast and recreational opportunities make it unique.

The way everything can live and grow in a natural way is so nice.

The way people react with the nature, how close we can get to the wildlife, and how convenient and nice it is to be able to drive through the refuge makes it unique.

The well maintained environment is obvious with every visit.

The wild horses are very unique.

The wild ponies and birds. There is no construction, power lines, gas stations, salesmen, business, or marinas- just nature.

The wildlife makes it unique.

The wonderful beaches and the ponies.

The zones and associated microhabitats - freshwater marsh, saltwater water, brackish water, Lobby Lollie Forest, ocean, Back Bay, access roads, bike and hiking trails, and wildlife habitat preservation make it unique.

Their focus and presentation on specific conservation programs, projects, and activities throughout the year.

There are always opportunities to see animals and unique habitats.

There are more activities one can participate in and also there is more contact between employees of the refuge and visitors. At Chincoteague Refuge, we also have the ocean.

There are no homes or private access.

There are places within the refuges that are off limits to visitors and are for wildlife only.

There is a unique shoreline and marsh habitat. The ponies are also plus.

There is just no other place like Assateague and Chincoteague! I have been going there for forty years, and it has stayed the same. Please keep beach parking open for us that are disabled and served our country.

There isn't any commercialization and everything is kept just as nature intended it to be.

They are available at more localities than National Parks and each I have visited preserved a special ecosystem that is unlike any other.

There was a lot more variety of things to do than I was expecting. I didn't realize there would be all of the opportunities for activities and learning for the kids. I thought we would just be on our own in nature and was pleased with all of the information and activities available.

They are dedicated to the protection of wildlife, the natural environment, and education of people as to why it is so important.

They are much more natural and less commercial than state and national parks.

They are protecting many animals' habitats.

They preserve a special aspect of the habitat and wildlife in their area.

They provide a unique opportunity to observe, photograph, draw, and otherwise enjoy being in a relatively uncrowded, pristine wildlife preserve.

They remember that we are visiting the home of the wildlife and respect their needs first and foremost vs. our comfort or convenience as visitors. The environment is not manipulated to disturb how the animals and plants need to thrive and survive.

They respect an effort to preserve some of the most critical and unique habitats across the country.

This and all refuges are treasures! Every citizen in the U.S. should be able to freely use and access them in the way I did, with my own car at my leisure. If the refuge is full I would visit another day or time! Access is what makes this island unique. Maintenance is made more affordable by increased usage.

This is Nature with a capital N, preserving unique environments and providing wonderful opportunities to experience them without the "Disney Land" effect.

This island has no houses, very little human development, and the area has remained natural. I enjoy the seasonal changes.

This one had wild ponies! Who wouldn't love to see them?

This particular refuge offers various opportunities to observe wildlife in its natural habitat as well as biking and hiking trails, plus a beautiful national seashore.

This place is in great condition and the staff is very nice. Thank you.

This refuge is unique because very little has changed. I only come here because it is NOT like Ocean City, Maryland. I own a second home on Chincoteague so my family and friends are able to come to this refuge. Raise the yearly access fee to whatever you want, it's way too cheap - \$100 - \$150.

To be able to observe wildlife and to be in nature makes it unique.

To see the wildlife in its natural settings without fences and makeshift barriers.

Variety of wildlife.

Various groups are accommodated: fisherman, bird watchers, families, etc.

Very few places in the U.S. are dedicated to preserving habitat. Refuges are invaluable in helping maintain flyways for our migrating birds and in teaching the public how important and valuable wildlife of all sorts is.

Very important in maintaining rapidly disappearing natural habitat, and encouraging public awareness of the wildlife around us.

Very quiet, relaxing, real wildlife observation.

Water conservation and recycling

Waterfowl observation and photos; beach and pleasant town only a few minutes away.

We enjoyed the lighthouse walk to the top and views, the local town and shopping and restaurants.

We love how well the refuge is maintained. The beach is so clean and healthy.

We observed eagles nesting.

We really need the beach (solo purpose of our vacation). Also, we need the ability to drive to the beach in our own vehicle because it takes a lot of room for chairs, umbrellas, towels, lunch, etc. With the beach being family friendly, we also need the option of driving to leave when needed. Small children have needs at different times. Carpooling in public transportation is not an option for us or other beach go-ers. The horses being fenced is also a natural drawback considering in Maryland they roam free. Our grandchildren never saw roaming freedom.

What makes it unique is that it is a huge tourist destination but the main goal is protecting the land and the wildlife while still offering a fun and exciting place to visit with friends and family.

What makes this wildlife refuge unique is being able to drive and park right at the ocean with family, friends, fishing gear, beach gear, etc.

What's the difference between a refuge and a national park? Our experience was exceptional. We had a great time seeing the wild ponies, many bird species, turtles, fox squirrels, rabbits, as well as swimming on the beach, cycling, and touring the lighthouse.

Wild environment, swimming and great beach.

Wild horses and the ocean setting.

Wildlife diversity through the seasons, uncrowded, relatively quiet (except for the birds - thank goodness). We like off-seasons and we like the fact that the beach is part of the park with no buildings, commerce, etc.

Wildlife viewing/photographing opportunities.

You have a different experience at the refuge. Wildlife is protected and is the most important part of the experience. And Assateague Island has so many things to do and it is exciting to share with your family. For example, Assateague has a beautiful beach, an awesome lighthouse to visit and walk through, beautiful landscapes and marshes to look at, and wild ponies that roam freely over the island, and lastly it is an island that is entirely the refuge. There is not anything disturbing its natural beauty and you can't stay there so there are no restaurants or hotels, etc.

You have both the beach area, and the wildlife refuge to enjoy.

You have managed the non-native wildlife (horses) with the native wildlife. Very well-done.

You learn all about different birds, ducks, and geese and how they live.

Additional Comments (n = 71)

Absolutely love it! I wish we could have been able to see more ponies. The ones we did see were so far away you couldn't tell that they were even ponies. I grew up coming here and am so happy to be able to share this with my family. In 2004, my sister-in-law saw a newspaper article about the pony swim from Assateague to Chincoteague (she lives in California) and this summer she was able to get out here to visit and she was so excited to be able to come here and share this experience with her draught. They had wanted to come here since 2004 and 8 years later were able to go! So excited that I was able to share it with them!

Amazing value for the entrance fee. We enjoyed having the opportunity to return several times during the refuge's hours for different activities.

As ORV access becomes more and more difficult and restricted along with increasing travel costs, I find myself visiting Chincoteague less and less.

Chincoteague is one of my favorite places to ride my bike! I would like to ride my bike down the service road off of the wildlife loop, but it's not allowed...

Climate change is something we can prevent. Habitat change is the issue. Human population growth is the problem. We are running out of natural resources. Wildlife habitat is constantly being altered by man. It is all about us, isn't it? Like maintaining sustainable fish populations to feed us by regulating the fishing industry, providing recreation opportunities for us (hunting, fishing, hiking, biking, RVing, etc.), providing jobs for (tourism, etc.). Getting the general public on board by education (environmental education), getting people interested in wildlife conservation, so that they take ownerships of what is found in their backyards. National Forests and Seashores may be the last holdout for wildlife.

Concerning climate change: please strive to keep the National Wildlife Refuges system free of political agencies and concentrate on striking the proper balance between the citizens who also enjoy the refuge and the wildlife that inhibits it.

Family has house in Accomack.

Great trip. Great memories. Glad we could take a scooter through the park vs. driving.

Have visited the Assateague Island Wildlife Refuge and National Seashore in Chincoteague Island, Virginia since 1970. These areas intertwine, there's a nice trail from the Wildlife Refuge that leads to the beach. We have witnessed dramatic changes with erosion of the shorelines: shifting sand under water at Tom's Cove Hook, sand closing a channel through which we once boated, and constant damage to the beach following storms and this spring and summer of 2012. We drove one evening to Parking Lot 4 of the beach to view the moon rise and there was an abnormal high tide - ocean water covered the beach at Parking Lot 4. The ocean water stopped at the edge of the road and bay water was on the opposite edge of the road. Where we parked, we were sandwiched, on the parking lot road, between ocean water and bay water. It was not even raining. It was a very upsetting and disturbing experience. Over the years we have wondered why sea oats or other grass were not planted on the high dunes to preserve this beach area. Dunes are gone. We have been to many beaches from north to south along the Eastern coast of the U.S. where sea oats protected many beaches. Where have all the fish gone? Over the years, there's been an obvious change. Assortments of fish were once bountiful. Today, we buy more fish than we can catch. For years, Sports fishermen have had fishing restrictions imposed to prevent overfishing. Commercial fishermen were drenching and netting tons of fish, destroying the ocean floors. Never understood the differences of why a small group had restrictions and another group could "overfish". Anyone can debate this, that's not my intentions. My intentions are to point out, not one group but everyone needs to focus on the fact if we do not protect and preserve our fish, wildlife, birds, habitats and shorelines, we will lose them!

Horses should be roaming like in Maryland. I hear many comments on this subject - people truly want to see the horses. It's sad our grandchildren don't see what our children did. Also to keep the beaches family friendly you need to be able to drive in and out in your own vehicle (not a public service). Honestly, if this privilege is taken we will find another beach.

I am a master gardener, tree steward and will train as a master naturalist this fall. I gained a better understanding of the effects of our stewardship on the Chesapeake and the wildlife of the shores. I moved to MD last year after 23 yrs. in CT and growing up on a farm in Iowa and living 3+ yrs. in Alberta Canada in the past. Even with lots of visits to Maine and coastal regions of New England and California, I better understand the use and misuse of our resources and how they directly impact my surroundings after visiting the CNWR and Assateague National Seashore.

I am disappointed with fishing opportunities and/or the amount of information on fishing and boating on the refuge (hours, species, places to fish, limits on sizes). The same goes for hunting.

I am retired and left Phoenix, AZ in April and will return in October. I have 4700 miles so far on this trip.

I do not agree with any alternative transportation plans that remove private vehicle parking at the beach of Chincoteague National Wildlife Refuge and will stop supporting this refuge if a shuttle tram is installed. I also do not agree with OSV closures for the protection of Piping Plovers. If refuge staff can drive through the closure area, why can't we? Otherwise, I love fishing there!

I am not anti-wildlife. I love all wildlife and encourage my grandchildren to participate in wildlife programs at the refuge. I love my home and am willing to share my summer with all who visit our island. It concerns me when government agencies restrict the use of public lands, parks, etc. for the purpose of non-essential programs or experiments. You cannot convince me that 2 or 3 miles of ocean beach is the only area the Piping Plovers can nest. Get real. What possible impact can the Piping Plover have on society? All over the world scientists hatch eggs; we did it with the eagles, with fish, whales and the list goes on. This is just an excuse the wildlife refuge is using to rid the island of people - visitors. They kill towns, industries, and jobs. We all do our part, we pay taxes, buy licenses, buy passes, donate to causes, conserve, volunteer just to mention a few things and yet it is not enough. The VA Marine Resources Commission has just spent over 1 million dollars at the entrance to the refuge in a 300 foot bridge to nowhere, advertised as a bike trail but we all know it will become a staging area for the refuge plans to bus visitors to the beach and deny personal vehicle access. Your questions regarding transportation were designed to back your claim that visitors won't mind. The erection of a bus stop on Assateague near Tom's Cove Visitor Center is also part of the plan even though you claim it is for bikers in care of storms. I am not stupid!

I greatly miss being able to see the Sika that used to be all over the park.

I hope that we will continue to have car access to Chincoteague. If not, we will probably limit our visit. Thank you.

I live near the refuge for 10 weeks in the winter and visit daily. I usually come for one long weekend monthly. It changes all the time so I'm never tired of visiting though I have traveled to other countries 1-3 times a year. I always plan other trips around NWRs.

I love this refuge and enjoy fishing and sea kayaking at it along with viewing nature. I strongly oppose the proposed shuttle bus system and question its legality. I believe a shuttle bus will limit recreation opportunities and will kill the local economy. Fee demo the refuge and plan a sustainable budget for maintaining the beach and public parking.

I loved it! Hope to return with bike.

I realize there is a lot of work that goes into maintaining the wildlife refuge and I want to let you know that it is appreciated. This has been the primary choice for my family to vacation once a summer for the past 25 years and it is the only vacation we can usually manage a year. The children enjoy it as much as we do, if for different reasons. The people who work at the park have always done a great job. This is indeed a national treasure and I am grateful for it. Thank you.

I understand the job of the FWS. I think Chincoteague refuge has too much diversity that conflicts with fish and wildlife policy and what the public expects from it. I would like the park service to take over. When the drive on the portion of the beach is closed for a few plover nests that when hatched are eaten by the gulls, that is overmanagement. I would really like more public access. People really come to see the ponies, use the beach and watch the migrating birds. I don't think anybody can really manage climate change when it comes to wildlife.

I visit all the time. My mom volunteers at the refuge and we partner with them on a race each year in October. I come as much as I can for many reasons.

I will come back to this refuge every year.

I would appreciate more information about the flowers that can be seen at the refuge.

I would like to see the speed limits enforced more for the safety of the animals and visitors. I did see park personnel at times monitoring this. Really enjoyed our time at Chincoteague.

Ideally, I visit once a year. It is a wonderful place.

If there comes a time we cannot access the island by our own personal vehicles, then we will go elsewhere.

In the beach access debate, I favor keeping private vehicle parking/beach access to whatever extent is practical.

It is a special place.

Keep up the good work in spite of budget cuts.

Keep up the multi-purpose use of FWS Refuges. Birders and hunters have more in common than what they disagree upon - or at least they should if they know what's truly best for respective interests.

Love it! Please continue to offer parking for the beach.

My best views of the horses were from a commercial boat trip. More tours offered in the refuge would have been good.

My wife and I have been visiting Chincoteague during the Spring and Fall for 12 years. Always has been our favorite place!

Not enough land has been preserved for the wildlife. Water levels are down and I wonder if development around the refuge has taken too much water from the underground aquifers. During drought, visitors should be limited.

Our family has visited Chincoteague and Assateague for well over 30 years. We love the family oriented community and beach experience. It's a great getaway. It is very important to us that we have personal access to the beach. We bring all of our "things" to the beach and spend the day, everyday, while we are there. We ask that you maintain parking for personal vehicles on Assateague. It is extremely important to us and to those who live and work on Chincoteague. Do not restrict access for personal vehicles.

Our time spent was very memorable, we appreciate the clean trails and facilities and the courteous help from the Park Rangers and Wildlife Officers. I think the fee for the ORV zone is way too expensive, especially when it's closed 3-4 months of the year. The Plovers have plenty of room to nest on the island.

Overall well managed.

Please - no shuttle to the beach. Do not shut down the 4x4 beach access. Do not shut down the hiking areas on trails and wildlife access.

Please do not limit visitors' ability to move about the refuge independently. I visit this refuge two or three times a year, and have done so for 26 years. Usually I visit 7 or 8 days a year.

Please don't close or relocate the beach accesses!

Please keep beach parking. I am handicapped and can't ride a bus very well with equipment such as a beach chair or a fishing tackle. Three generations of my family visit Assateague and have been doing so for forty years. Eliminating beach parking will hinder or greatly affect this tradition.

Remote areas of the beach should be clothing optional.

Since I live on Chincoteague I use the refuge on a daily basis. There is much discussion about beach parking. My feeling is it's a viable option for singles and people without kids. Basically, it would work for those who bike to and from the beach and refuge. Families need to be able to have beach parking!

Ten years ago one could see foxes, opossum, raccoons, river otters, deer, and imported elk. Now, a few white tail and elk. Wholesale killing on natural predators? Five years ago the beach road water was with white and pink marshmallow in the summer and butterfly weed in the autumn. Indiscriminate use of herbicide or poor mowing? A new vehicle or equipment for almost every employee and no monies for beach parking? The best outcome for customers and wildlife would be to turn the management of all Assateague Island over to the National Park Service.

Thank you for doing what you do!

Thanks for a great visit! I found that rangers at the lighthouse to be particularly helpful and friendly. They even lent us some binoculars to spot some wild ponies - which we did!

The lighthouse and surrounding structures need more maintenance and care to properly preserve them.

The refuge is a very nice place to visit. I am a bird watcher, so I always look forward to what I might find there. It is always clean and safe. Thank you for the good work you people do.

The Town of Chincoteague depends heavily on tourism in connection to the park. Refuge beach access parking is vital for families that plan their vacations for the beach. They bring gear, chairs/ coolers, etc. in their cars to the beach and unload accordingly. Buses and trams would be cumbersome to the vacationers and their small children, and unsafe in the event of a sudden lightning storm. There is just no way to evacuate the beach safely by bus or tram in case of an emergency. Guide visitors along - ok, but do not impede vacationers with needless hassles otherwise they won't return. The parks here for us to access and enjoy them not to deter from coming to them. Thanks.

The weather has not always been the way I would like, but, I always enjoy the trip to Assateague, Va. I am not a believer in global warming.

This is a beautiful place, which is why we return to it every year. I pray that nothing changes.

This refuge means everything to me!

To the people in charge of making decisions on the future of this refuge (i.e. new gigantic parking lots and buses running back and forth) I would like it known that if this does occur I will move my trailer from Tom's Cove Campground on Chincoteague to another location. Please, no buses in the refuge or on the island.

We are hoping that the parking will continue at the beach - and we pray the beach will stay open. If it doesn't stay open for us swimmers and fishermen, it will really hurt the town. We have talked to many that own businesses and they are worried. Also the little churches that the summer people visit and help to support them during the winter months are worried.

We are regular visitors to the refuge as we have a farmhouse at Modest town. We love our visits.

We enjoy visiting Chincoteague Refuge and think it is a well-managed facility.

We had an awesome time, and hope to make it back to this refuge soon.

We have a camper at a campground that we leave there all year and thus spend much of the spring, summer, and fall there. We enjoy the ponies and the beach.

We have had a vacation home on Chincoteague for over 35 years. We love Assateague and the Refuge and rarely go anywhere else to vacation and get away from it all. It is a refuge in so many ways!

We have visited this refuge for the past 27 years. Our four sons have grown up spending their summers at this refuge. Living in North Carolina near the Outer Banks, our family still chose to visit this refuge! We have never come away wanting anything more than spending more time! Thank you.

We loved the clean environment, the quiet and the beach.

We own a house on Chincoteague and have ample opportunity to visit the Refuge. It is a beautiful place, but we worry about management playing God by micro-managing everything. It's fine to stop the beetles from destroying all the trees, but nature has its own way of balancing itself. Any climate change (since the beginning of time) has been managed without our help. More damage has been done by human hands than by natural occurrence.

We own a vacation home 2 miles from the refuge and enjoy it every day while we are here.

We really enjoyed the beauty of this refuge.

We thoroughly enjoyed our short stay at Chincoteague/ Assateague Islands. We especially enjoyed walking on the beach, seeing the herd of ponies, going up the historic lighthouse, and learning about the historic village that used to be there. We would have loved to have had more time there, but sadly only had a short window of Saturday afternoon until midday Sunday before having to head home. We enjoyed the local flavor of a Chincoteague coffee shop on the way out. We will definitely plan a trip back in the future.

We visited during the spring to avoid crowds and had a great time hiking all the trails. We will return in a couple years.

We were there after a storm reduced the parking and created a massive traffic jam; please develop an emergency or alternative parking plan. I would like to see more life guards on the beach. I am unaware of serious problems, however, I rescued a swimmer and brought him ashore and saw a surfer do the same a different time during regular beach hours.

We were very excited about seeing the refuge again and had a very nice time. It has a good road around the lake and some short trails to take. It also has a no-car part of the bay. All this makes it a pleasant place to visit and enjoy as a quiet natural spot. I would really hate to see more development within this part of the refuge. We bicycled most days so did not need other modes of transport, but I could see having a shuttle from town to the refuge/beach as a good option (unless there already is one during peak season). Again, we go to the town of Chincoteague because of the refuge and the less developed nature of the area.

While it is somewhat curious how the refuge wants to keep the public at bay, I understand the National Park Service was established to keep the public lands accessible to the public. However Assateague Island is a National Park and I think the managing should be separate from the refuge management. Conflict of interest.
