



# National Wildlife Refuge Visitor Survey 2012: Individual Refuge Results for Edwin B. Forsythe National Wildlife Refuge

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

Refuges are unique because of the sheer majesty of places not overrun by technology and expansionism. They remind us of the simple beauty of the world around us and how close it can be to home.

— *Survey comment from a visitor to Edwin B. Forsythe National Wildlife Refuge*



Edwin B. Forsythe 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 Edwin B. Forsythe National Wildlife Refuge (NWR) (this refuge) during the specified sampling periods and are part of USGS Data Series 754. All refuges participating in the 2012 survey effort will receive individual refuge results specific to the visitors to that refuge. Each set of results is organized by the following categories:

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

## **Methods**

### **Selecting Participating Refuges**

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

### **Developing the Survey Instrument**

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

### **Contacting Visitors**

Refuge staff identified two separate 15-day sampling periods, and one or more locations at which to sample, that best reflected the diversity of use and specific visitation patterns of each participating refuge. Sampling periods and locations were identified by refuge staff and submitted to the USGS via an internal website that included a customized mapping tool. A standardized sampling schedule was created for all refuges that included eight randomly selected sampling shifts during each of the two sampling periods. Sampling shifts were 3–5 hour (hr) time bands, stratified across AM and PM as well as weekend and weekdays. In coordination with refuge staff, any necessary customizations were made to the standardized schedule to accommodate the identified sampling locations and to address specific spatial and temporal patterns of visitation.

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

**Table 1.** Refuges participating in the 2012 national wildlife refuge visitor survey.

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



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

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

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

Each mailing included instructions for completing the survey online, so visitors had an opportunity to complete an online survey with each mailing. Those visitors indicating a preference for Spanish were sent Spanish versions of all correspondence (including the survey). Finally, a short survey of six questions was sent to nonrespondents four weeks after the second survey packet to determine any differences between respondents and nonrespondents at the aggregate level. Online survey data were exported and paper survey data were entered into Microsoft Excel using a standardized survey codebook and data entry procedure. All survey data were analyzed using *Statistical Package for the Social Sciences* (SPSS, v.20) software<sup>1</sup>.

## Interpreting the Results

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

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

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 Edwin B. Forsythe 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.

We would like to further note that the planned survey methodology at Edwin B. Forsythe NWR was substantially impacted by the occurrence of Hurricane Sandy in 2012. In particular, the second sampling period was delayed by a month and a half due to the impacts of the hurricane. We were unable to specifically target fishermen and beach-buggy users at Holgate, because the beach was closed. We were also unable to survey visitors to Wildlife Drive because the drive was closed. We attempted to obtain a good subset of the deer hunter population, but were constrained by time and space (e.g., finding hunters near their car first thing in the morning or as they were coming out of the field, and over such a wide expanse of land and roads). To make up for numbers from the other three spots, we made additional contacts at the Visitor Center. Thus, we believe that fishermen and hunters are underrepresented in the survey results. Additionally, many of the comments from the second survey period pertain to the hurricane and its effects on the refuge.

## **Refuge Description for Edwin B. Forsythe National Wildlife Refuge**

Edwin B. Forsythe NWR consists of multiple areas or units across southern New Jersey along the Atlantic Coast. The Brigantine and Barnegat sections of the refuge were their own refuges until 1984 when they were combined to create the Edwin B. Forsythe NWR. Named after the late conservationist Congressman from New Jersey, the refuge plays a critical role in protecting tidal wetland and shallow bay habitat for migratory water birds. Edwin B. Forsythe NWR encompasses approximately 47,000 acres, 80% of which is tidal salt meadow and marsh mixed with shallow coves and bays. The remainder of refuge habitat

is forests, swamps, fields, and barrier beaches. Over 6,000 acres within the refuge are designated as the Brigantine Wilderness Area, including Holgate and Little Beach – two of the few remaining undeveloped barrier beaches in the state. Wilderness Area designation signifies stricter measures regarding public access and use in order to protect unique habitat and animal populations.

Situated along the Atlantic Flyway, the refuge is an important area for migratory birds. Refuge staff pay close attention to species such as the American black duck, Atlantic brant, and the piping plover, all of which have suffered from habitat loss and human development along the Atlantic Coast. Over 350 species of birds have been observed within the refuge boundaries, and numerous mammal, reptile, amphibian, insect, and fish species call the refuge home. While many visitors come to the refuge to witness the abundant birdlife, other visitors come to enjoy boating, fishing, wildlife observation, hunting, photography, and the use of the Visitor Center for environmental education, interpretation, and special events. Each year the refuge draws 250,000 visitors (2011 Refuge Annual Performance Plan measures; Rob Miller, U.S. Fish and Wildlife Service, 2012, written commun.). Figure 1 displays a map of the refuge. For more information, please visit <http://www.fws.gov/northeast/forsythe/>.

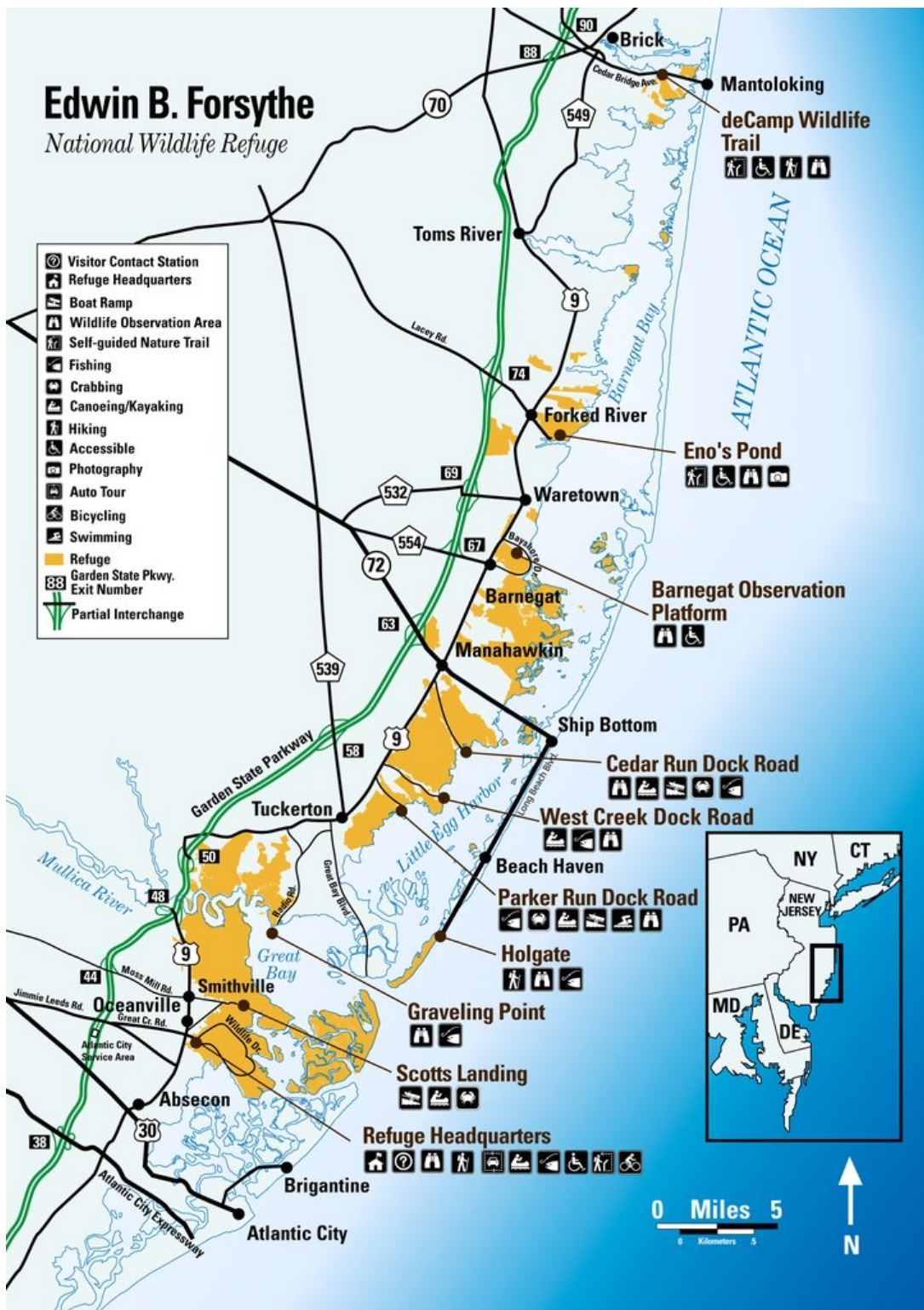


Figure 1. Map of Edwin B. Forsythe NWR, courtesy of U.S. Fish and Wildlife Service.

## Sampling at Edwin B. Forsythe National Wildlife Refuge

A total of 270 visitors agreed to participate in the survey during the two sampling periods at the identified locations at Edwin B. Forsythe NWR (table 2). In all, 211 visitors completed the survey for a 78% response rate, and  $\pm 5.4\%$  margin of error at the 95% confidence level.<sup>2</sup>

**Table 2.** Sampling and response rate summary for Edwin B. Forsythe NWR.

Sampling period	Dates	Locations	Total contacts	Undeliverable addresses	Completed surveys	Response rate
1	5/5/2012 to 5/19/2012	Visitor Center	60	0	50	83%
		deCamp Wildlife Trail	10	0	6	60%
		Barneгат Observation Platform	10	0	8	80%
		Scott’s Landing Boat Launch	9	0	6	67%
		Wildlife Drive	68	0	54	79%
SP1 Totals			157	0	124	79%
2	11/24/2012 to 12/8/2012	Scott’s Landing Boat Launch	23	1	16	73%
		Visitor Center	90	0	71	79%
SP2 Totals			113	1	87	78%
Combined Totals			270	1	211	78%

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

## Selected Survey Results

### Visitor and Trip Characteristics

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

#### Familiarity with the Refuge System

Many visitors to Edwin B. Forsythe 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 (91%). It is important to note that we did not ask visitors to identify the mission of the Refuge System or the Service, and positive responses to these questions concerning the management and mission of the Refuge System do not necessarily indicate that these visitors fully understand the day-to-day management practices of individual refuges, only that visitors feel they have a basic knowledge of who manages refuges and why.

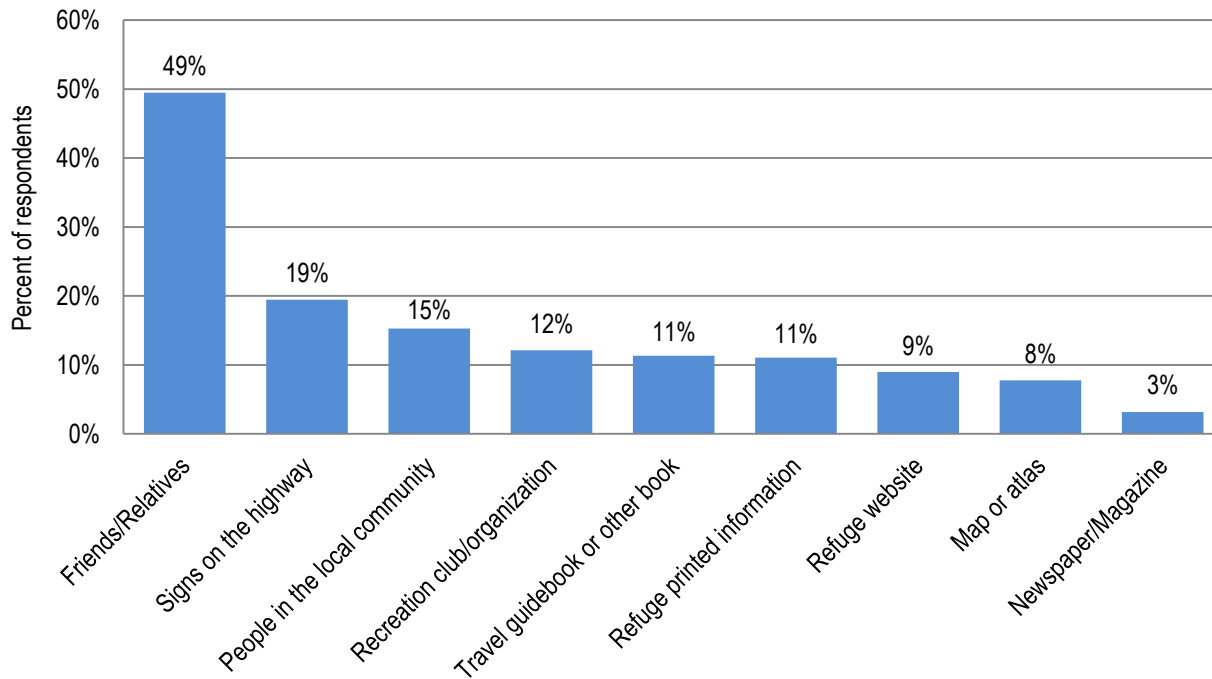
Most visitors (91%) feel that refuges, compared to other public lands, provide a unique recreation experience (see Appendix B for visitor comments on “What Makes National Wildlife Refuges Unique?”); however, reasons for why visitors find refuges unique are varied and may not directly correspond to their understanding of the mission of the Refuge System.

A majority of visitors to Edwin B. Forsythe NWR had been to at least one *other* national wildlife refuge in the past year (65%), with an average of 8 visits to *other* refuges during the past 12 months.

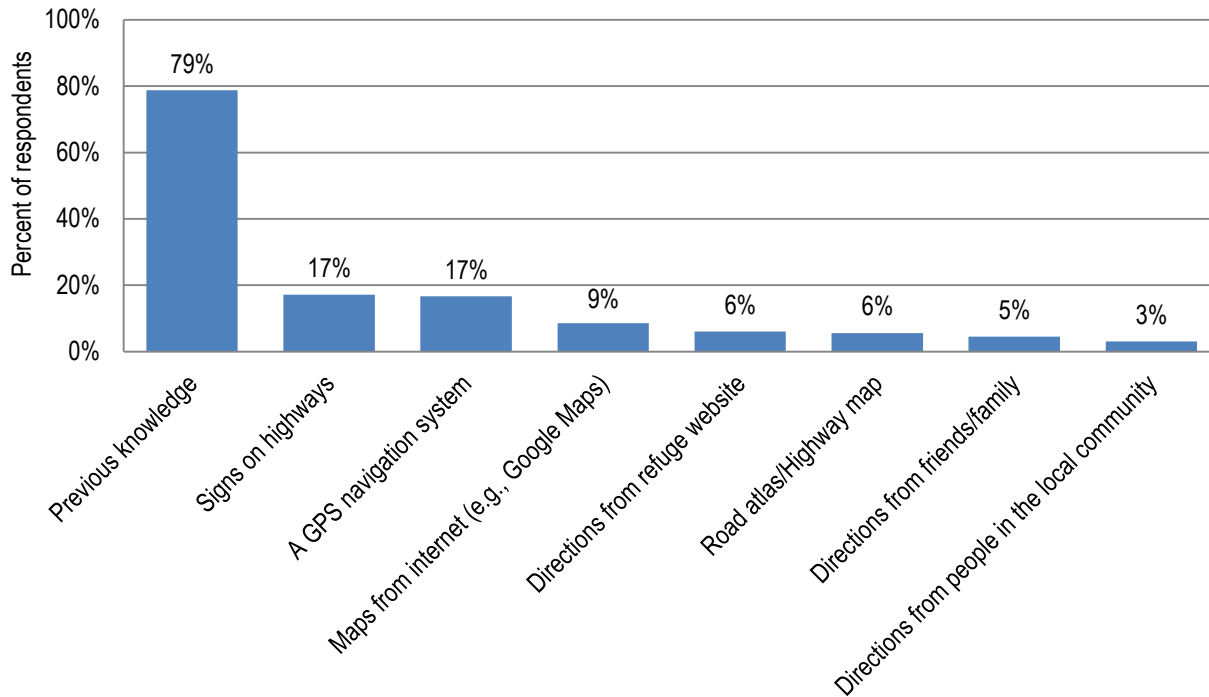
#### Visiting This Refuge

Some surveyed visitors (26%) had only been to Edwin B. Forsythe NWR once in the past 12 months, while many had been multiple times (74%). These repeat visitors went to the refuge an average of 19 times during that same 12-month period. Visitors used the refuge during only one season (28%), during multiple seasons (30%), and year-round (42%).

Visitors first learned about the refuge from friends/relatives (49%), signs on the highway (19%), or people in the local community (15%; fig. 2). Key information sources used by visitors to find their way to this refuge include their own previous knowledge (79%), and, to a lesser degree, signs on the highways (17%) and a GPS navigation system (17%; fig. 3).



**Figure 2.** How visitors first learned or heard about Edwin B. Forsythe NWR (n = 190).



**Figure 3.** Resources used by visitors to find their way to Edwin B. Forsythe NWR during this visit (n = 198).

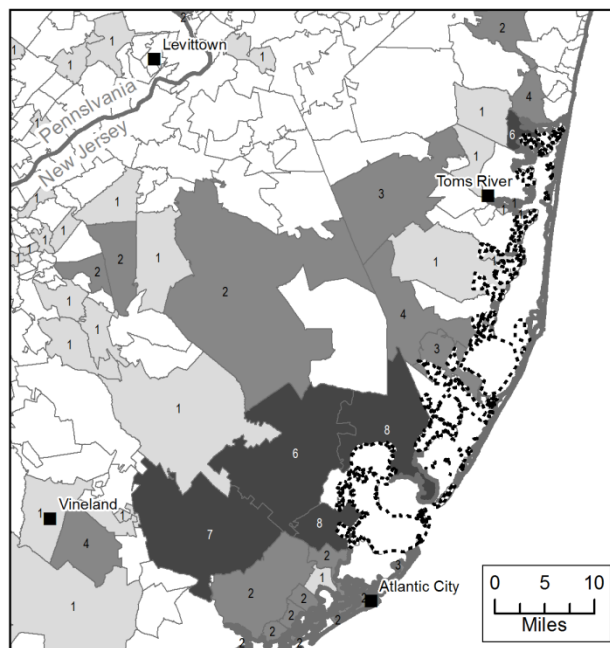
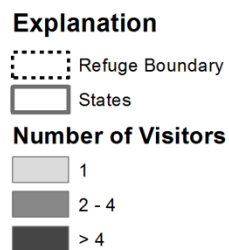
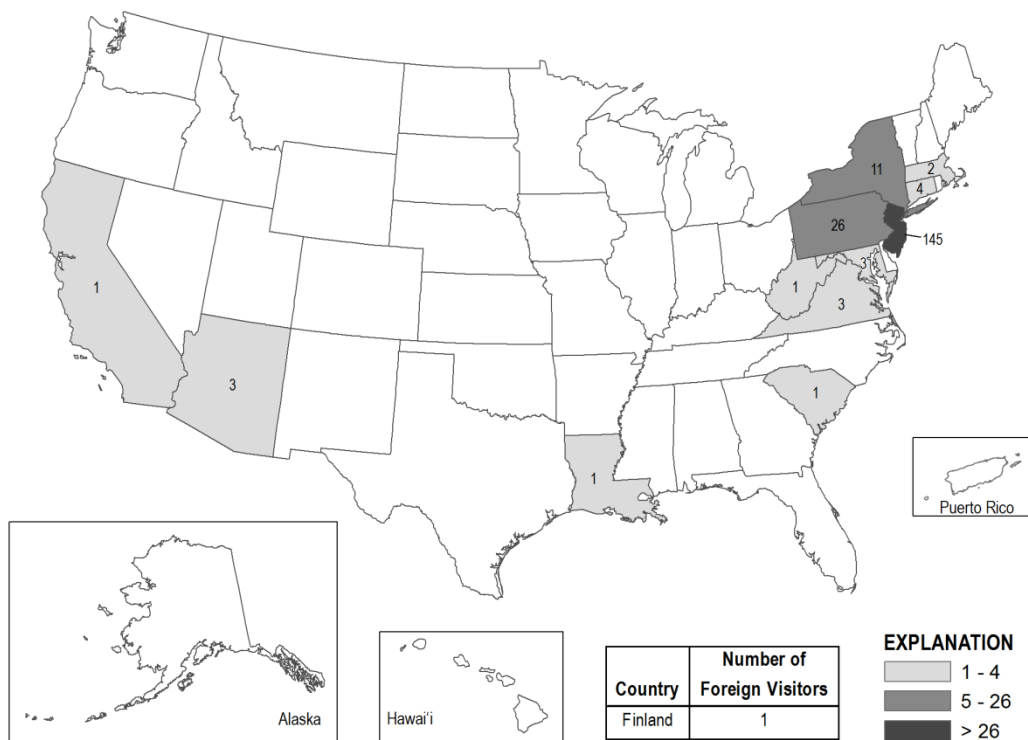
Over half of visitors (54%) lived in the local area (within 50 mi of the refuge), whereas 47% were nonlocal visitors. For most local visitors, Edwin B. Forsythe NWR was the primary purpose or sole destination of their trips (80%; table 3). For most nonlocal visitors, the refuge was also the primary purpose or sole destination of their trips (53%).

Local visitors reported that they traveled an average of 22 mi to get to the refuge, while nonlocal visitors traveled an average of 189 mi. The average distance traveled for all visitors to this refuge was 91 mi, while the median was 42 mi. Figure 4 shows the residences of visitors traveling to this refuge. About 72% of visitors traveling to Edwin B. Forsythe NWR were from New Jersey.

**Table 3.** Influence of Edwin B. Forsythe 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	53%	37%	10%
Local	80%	12%	9%
All visitors	67%	24%	9%





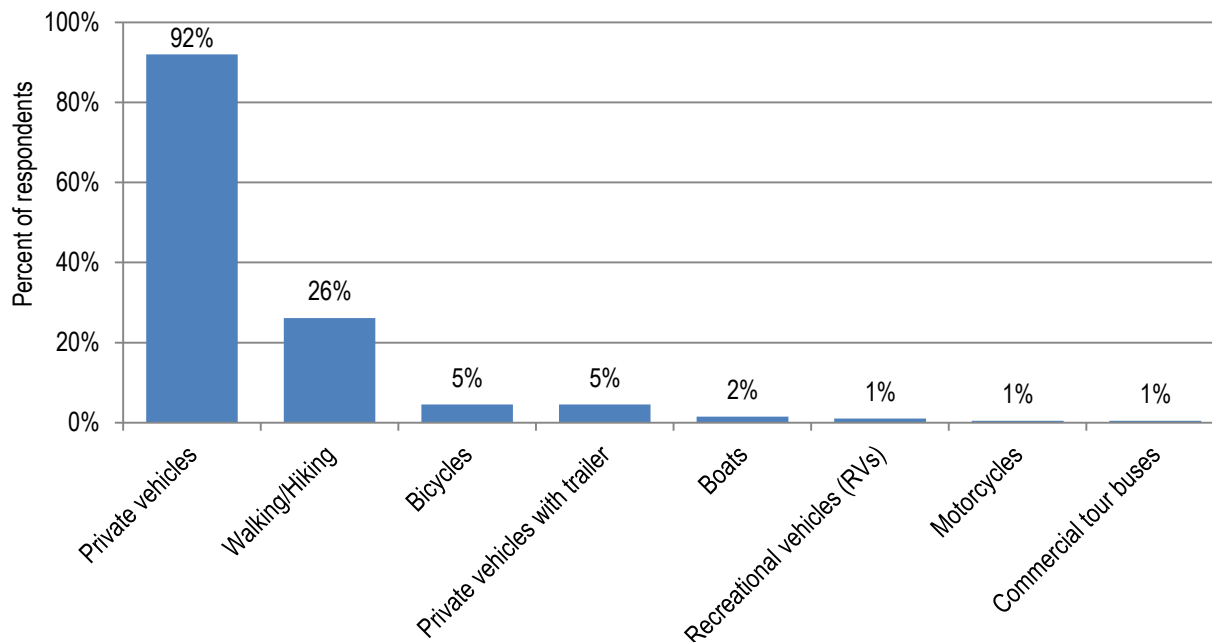
**Figure 4.** Number of visitors travelling to Edwin B. Forsythe NWR by place of residence. The top map shows visitors residence by state and the bottom map shows residence by zip codes near the refuge (n = 202).

Surveyed visitors reported that they spent an average of 4 hr at the refuge during one day there, while the most frequently reported length of a day visit (the modal response) was 2 hr (20%). Most visitors indicated they were part of a group on their visit to this refuge (73%). Of those people who indicated they traveled with a group, visitors primarily traveled with family/friends (table 4).

**Table 4.** Type and size of groups visiting Edwin B. Forsythe NWR (for those who indicated they were part of a group, n = 143).

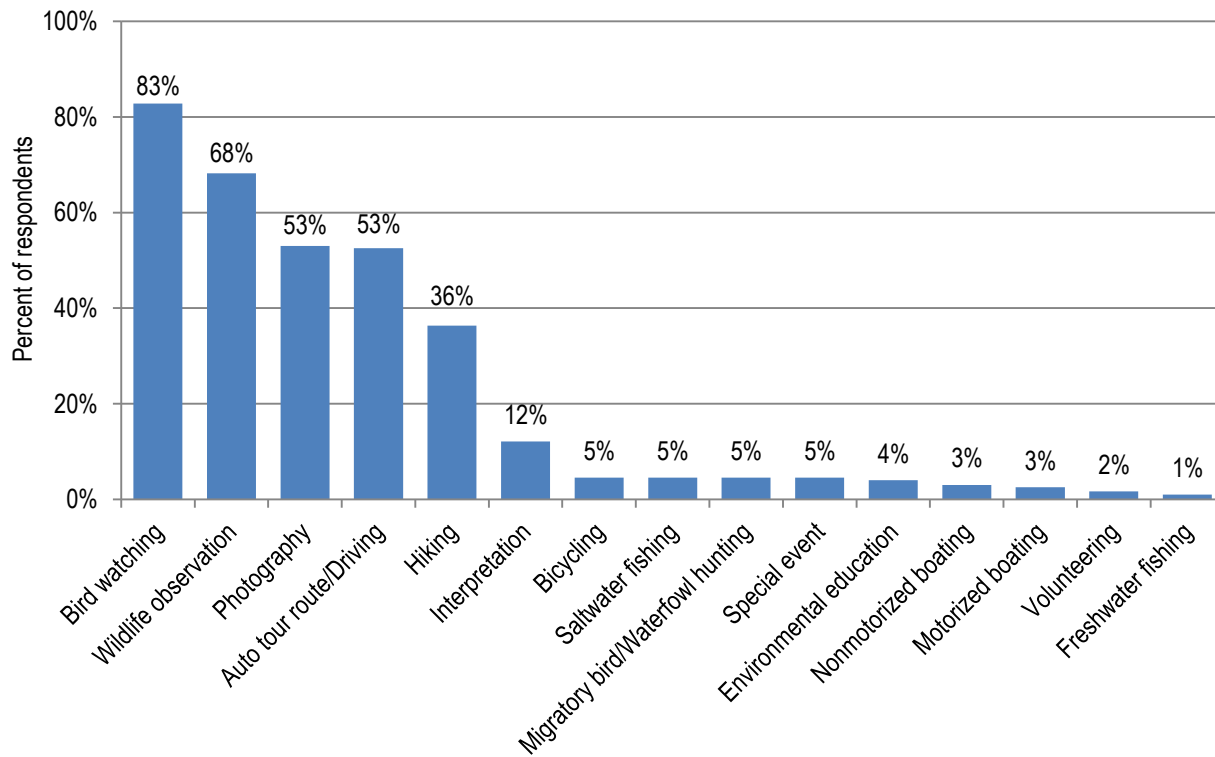
Group type	Percent (of those traveling in a group)	Average group size		
		Number of adults	Number of children	Total group size
Family/Friends	92%	2	0	2
Commercial tour group	0%	0	0	0
Organized club/School group	6%	13	0	13
Other group type	1%	3	0	3

The key modes of transportation used by visitors to travel around the refuge were private vehicles (92%), and to a lesser degree, walking/hiking (26%; fig. 5).

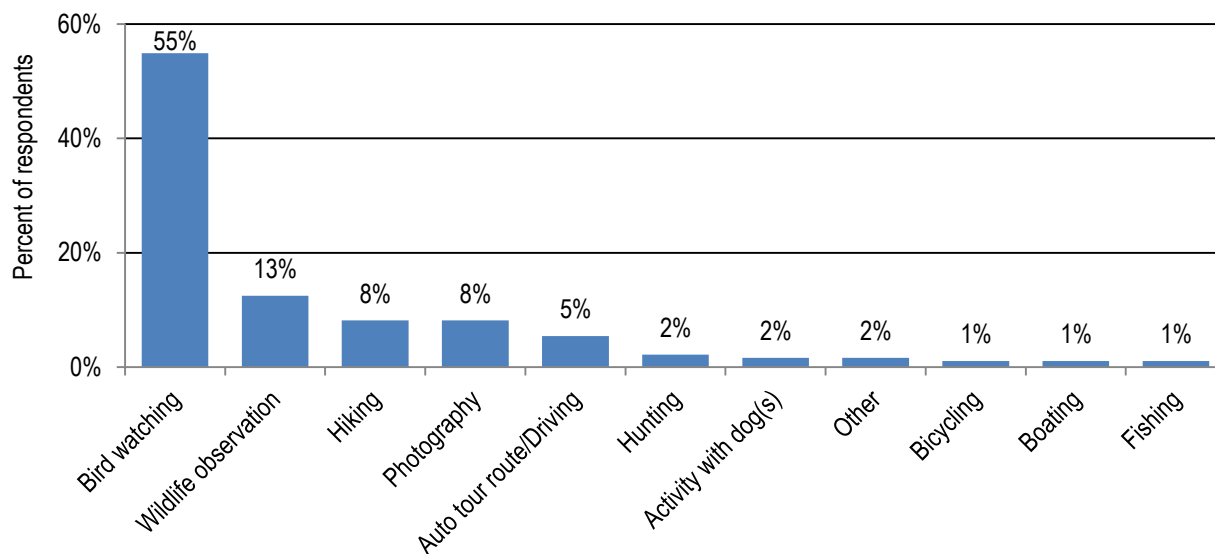


**Figure 5.** Modes of transportation used by visitors to Edwin B. Forsythe NWR during this visit (n = 199).

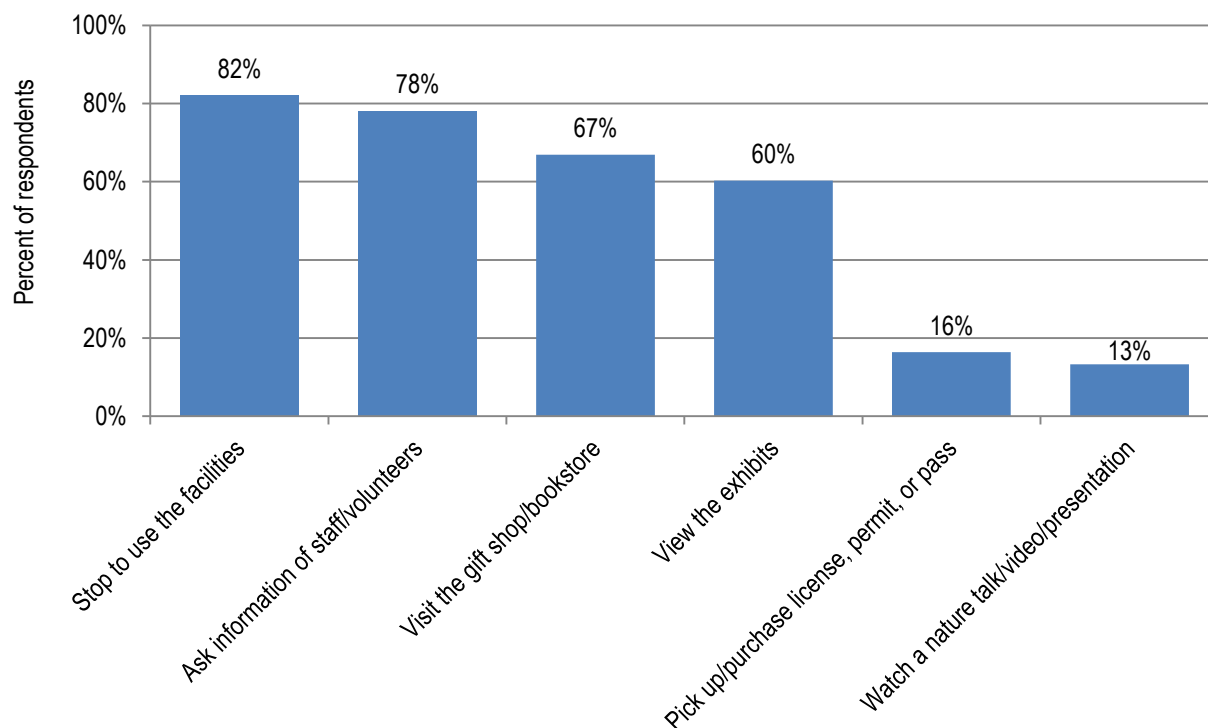
Surveyed visitors participated in a variety of refuge activities during the 12 months prior to completing the survey (fig. 6); the top four activities in which people reported participating were bird watching (83%), wildlife observation (68%), photography (53%), and auto tour route/driving (53%). The primary reason for visitors' most recent trips was largely bird watching (55%; fig. 7). Many visitors also used the Visitor Center during their trips (76%), mostly to stop to use the facilities (82%), ask information of staff or volunteers (78%), and visit the gift shop/bookstore (67%; fig. 8).



**Figure 6.** Activities in which visitors participated during the past 12 months at Edwin B. Forsythe NWR (n = 198). See Appendix B for a listing of “other” activities.



**Figure 7.** The **primary** activity in which visitors participated during this visit to Edwin B. Forsythe NWR (n = 184). See Appendix B for a listing of “other” activities.



**Figure 8.** Visitor Center activities in which visitors participated at Edwin B. Forsythe NWR (n = 151).

## Visitor Characteristics

Nearly all (99%) visitors who participated in the survey at Edwin B. Forsythe NWR indicated that they were citizens or permanent residents of the United States. These visitors were a mix of 52% male (with an average age of 58 years) and 48% female (with an average age of 57 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, 53% of surveyed visitors to Edwin B. Forsythe NWR indicated that they live within the local 50-mi area while nonlocal visitors (47%) stayed in the local area, on average, for 2 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 \$61 per person per day and local visitors spent an average of \$41 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 Edwin B. Forsythe NWR expressed in dollars per person per day.

Visitors	n <sup>1</sup>	Median	Mean	Standard deviation	Minimum	Maximum
Nonlocal	71	\$49	\$61	\$53	\$0	\$225
Local	79	\$25	\$41	\$47	\$0	\$250

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

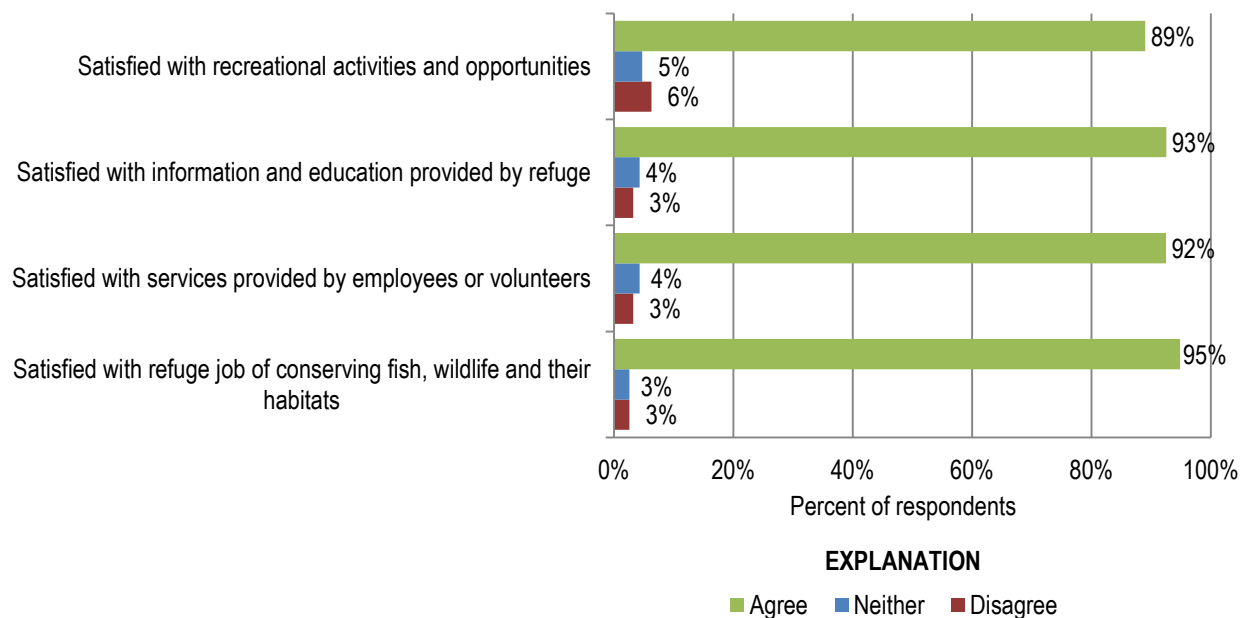
Note: For each respondent, reported expenditures were divided by the number of persons in their group that shared expenses in order to determine the spending per person per trip. This number was then divided by the number of days spent in the local area to determine the spending per person per day for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

## Visitor Opinions about this Refuge

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

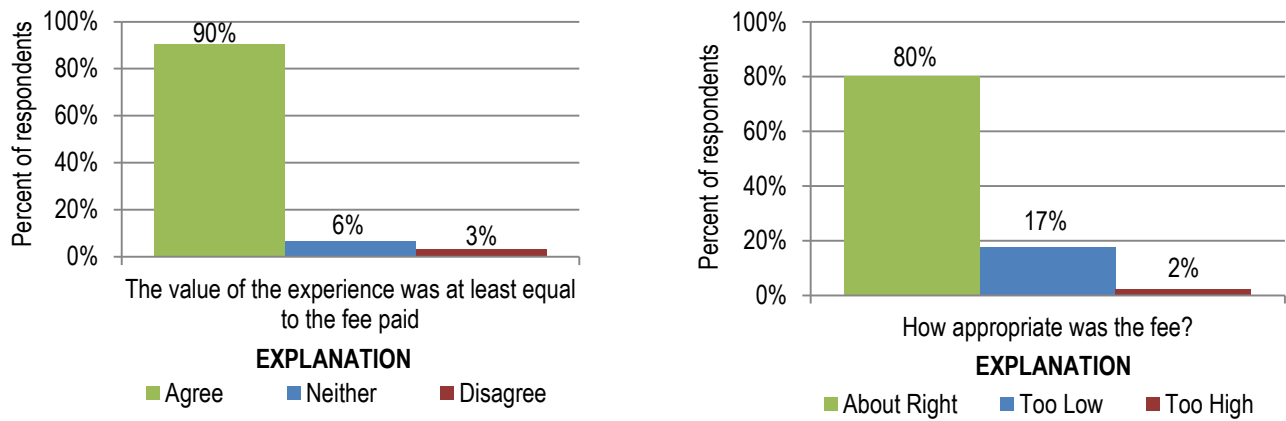
Surveyed visitors' overall satisfaction ratings with the services, facilities, and recreational opportunities provided at Edwin B. Forsythe NWR were as follows (fig. 9):

- 89% of visitors were satisfied with the recreational activities and opportunities,
- 93% of visitors were satisfied with the information and education about the refuge and its resources,
- 92% of visitors were satisfied with the services provided by employees or volunteers, and
- 95% of visitors were satisfied with the refuge's job of conserving fish, wildlife and their habitats.



**Figure 9.** Overall satisfaction with Edwin B. Forsythe NWR during this visit (n ≥ 186).

Of the 64% of visitors who indicated that they paid a fee to enter the refuge, 90% agreed that the opportunities and services were at least equal to the fee they paid. Additionally, 80% of visitors felt the appropriateness of the fee was about right, whereas 17% felt the fee was too low and 2% felt it was too high (fig. 10).



**Figure 10.** Opinions about fees at Edwin B. Forsythe NWR (for those visitors who indicated they paid a fee, n = 126).



## 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.

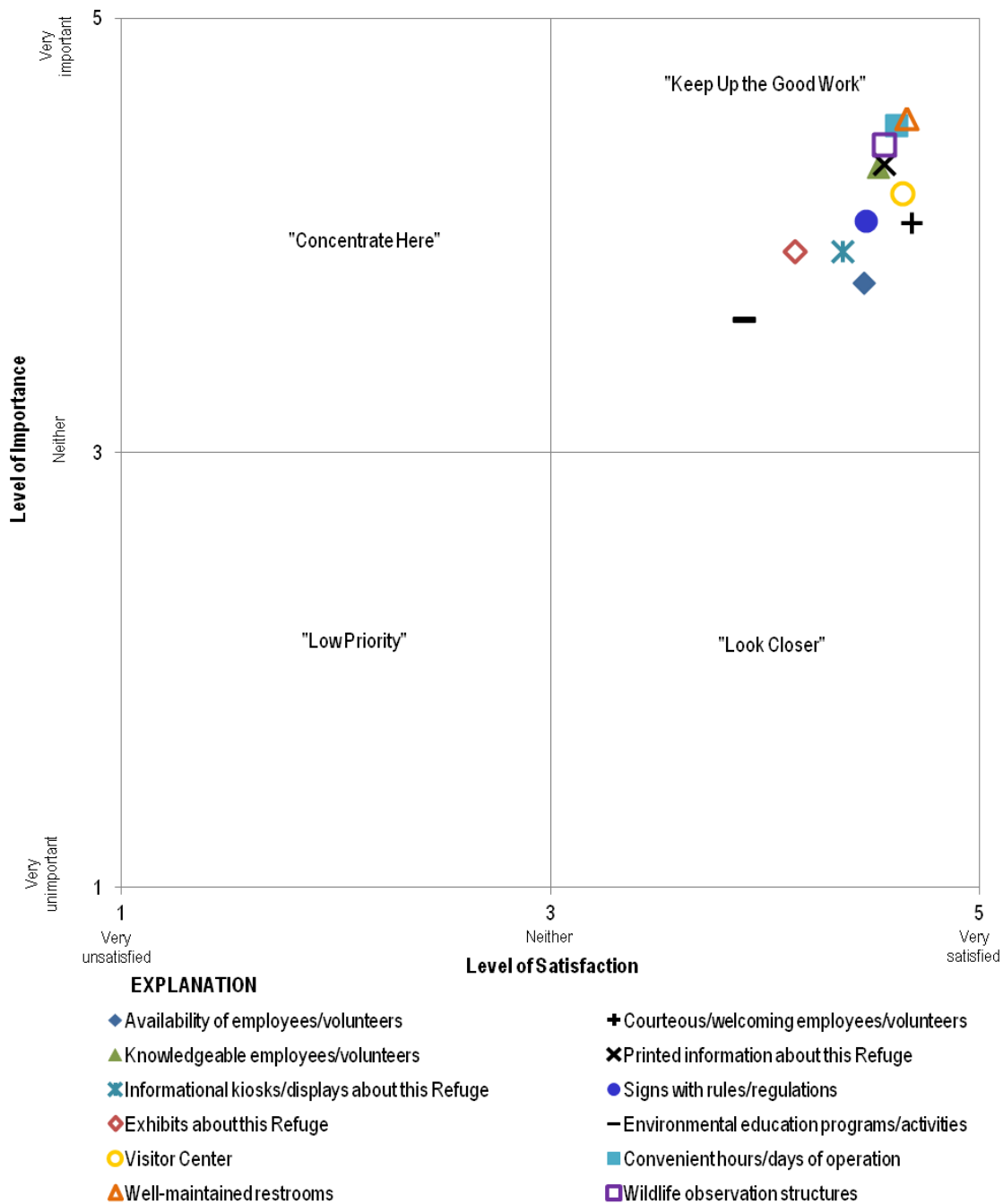
*Graphically plotting visitors' importance and satisfaction ratings for different services, facilities, and recreational opportunities provides a simple and intuitive visualization of these survey measures. However, this tool is not without its drawbacks. One is the potential for variation among different 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 Edwin B. Forsythe NWR. Results are summarized as follows:

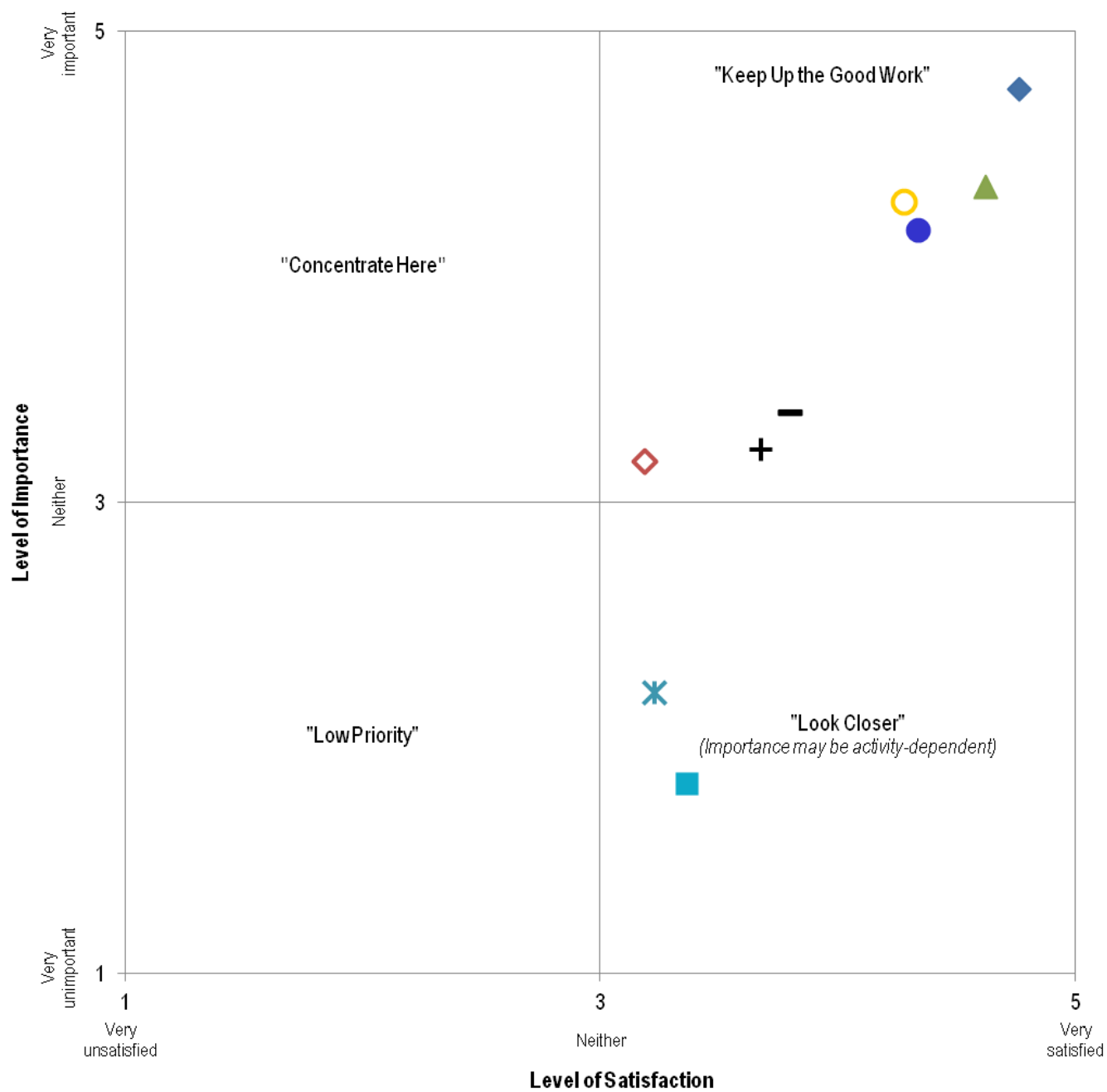
- All refuge *services and facilities* fell in the "Keep Up the Good Work" quadrant (fig. 11).
- All refuge *recreational opportunities* fell in the "Keep Up the Good Work" quadrant except hunting and fishing opportunities, which fell into the "Look Closer" quadrant (fig. 12). The average importance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

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

- All *transportation-related features* fell in the “Keep Up the Good Work” quadrant (fig. 13).



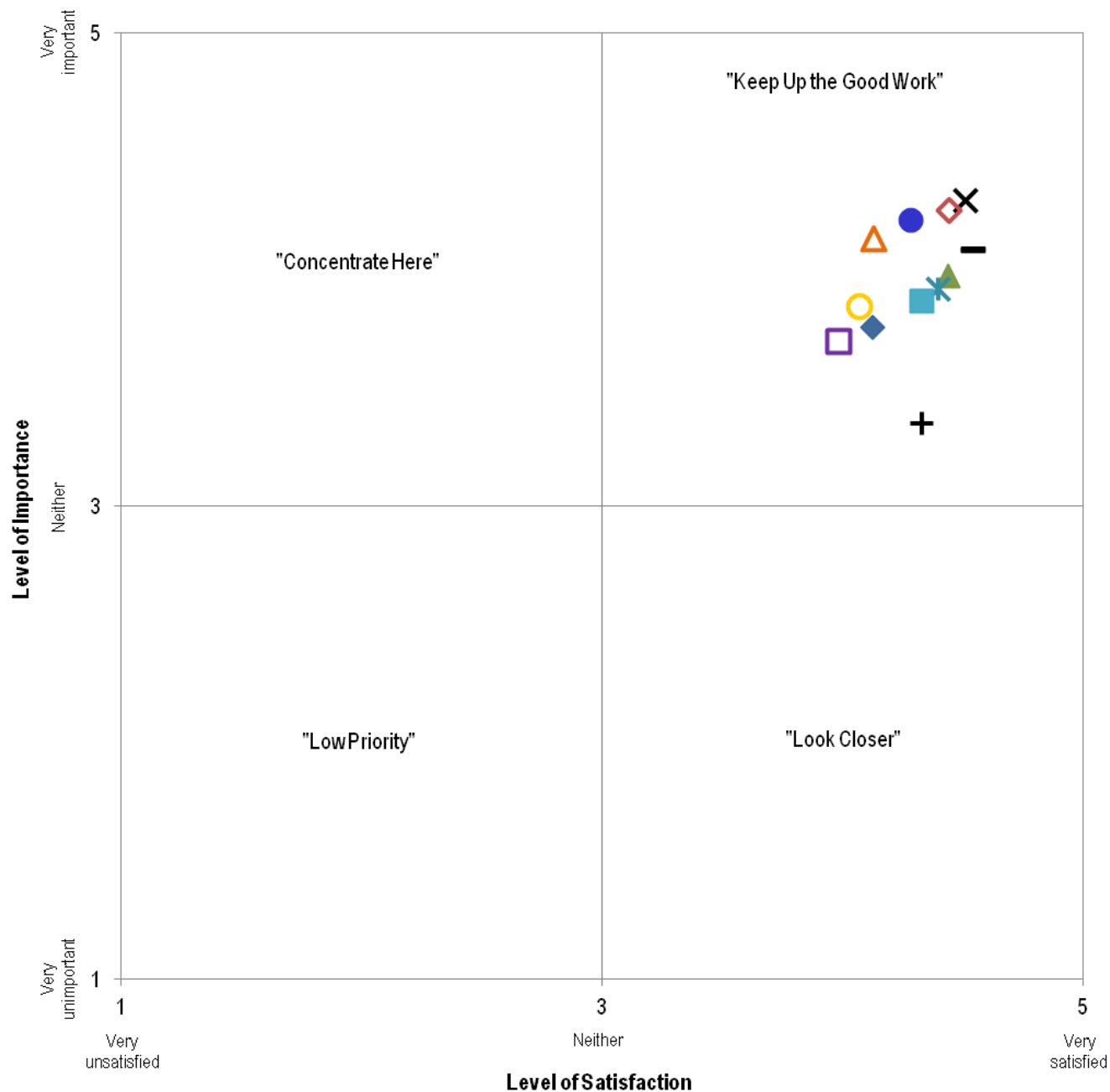
**Figure 11.** Importance-satisfaction ratings of services and facilities provided at Edwin B. Forsythe NWR.



#### 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 Edwin B. Forsythe 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 Edwin B. Forsythe 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 Edwin B. Forsythe NWR are reported here.*

### Alternative Transportation and the Refuge System

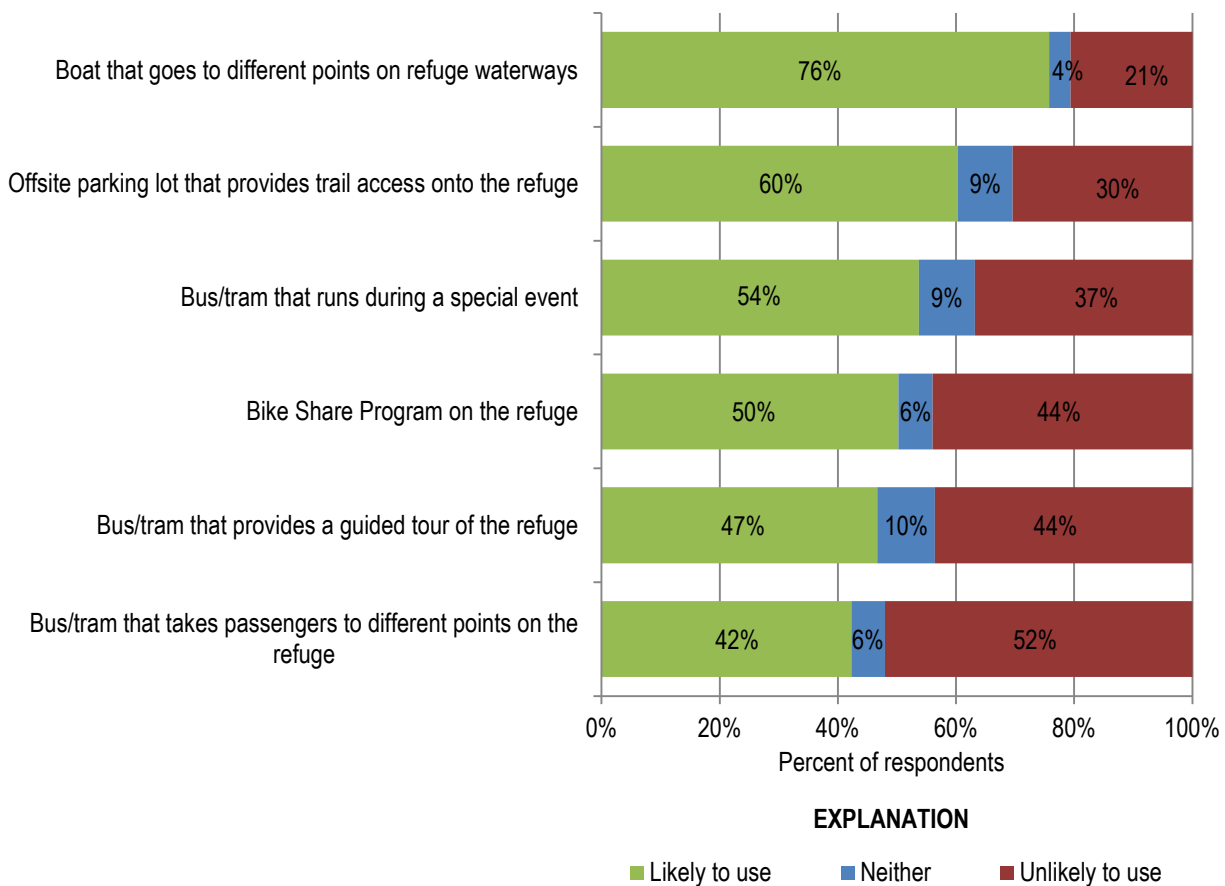
*Visitors use various types of transportation to access and enjoy refuges. While many visitors arrive at the refuge in private vehicles, alternatives such as buses, trams, watercraft, and bicycles are increasingly becoming a part of the visitor experience. Previous research has identified a growing need 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 Edwin B. Forsythe 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;
- an offsite parking lot that provides trail access;
- a bus/tram that runs during a special event; and
- a bike share program.

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 Edwin B. Forsythe NWR, some visitors thought alternative transportation would enhance their experience (21%) while others thought it would not (46%). An additional 34% 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 ≥ 190).

## 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 Edwin B. Forsythe 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):

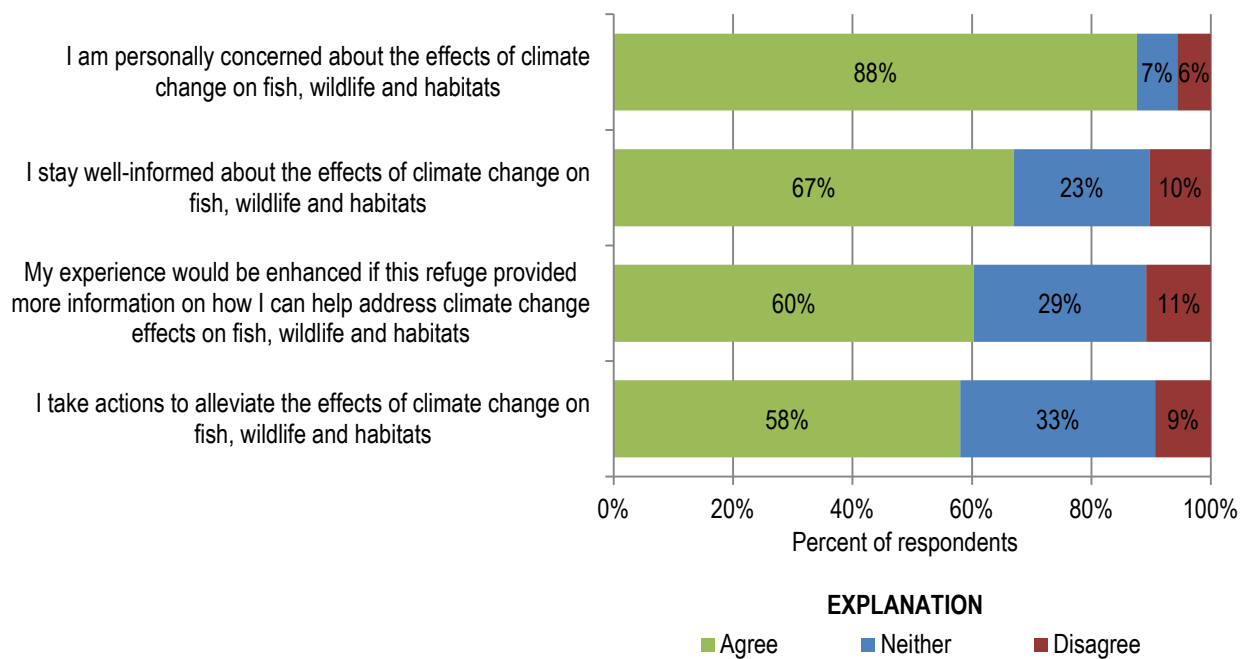
- I am personally concerned about the effects of climate change on fish, wildlife and habitats;
- I stay well-informed about the effects of climate change;
- My experience would be enhanced if the refuge provides information about how I can help address climate change effects; and
- I take actions to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

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

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

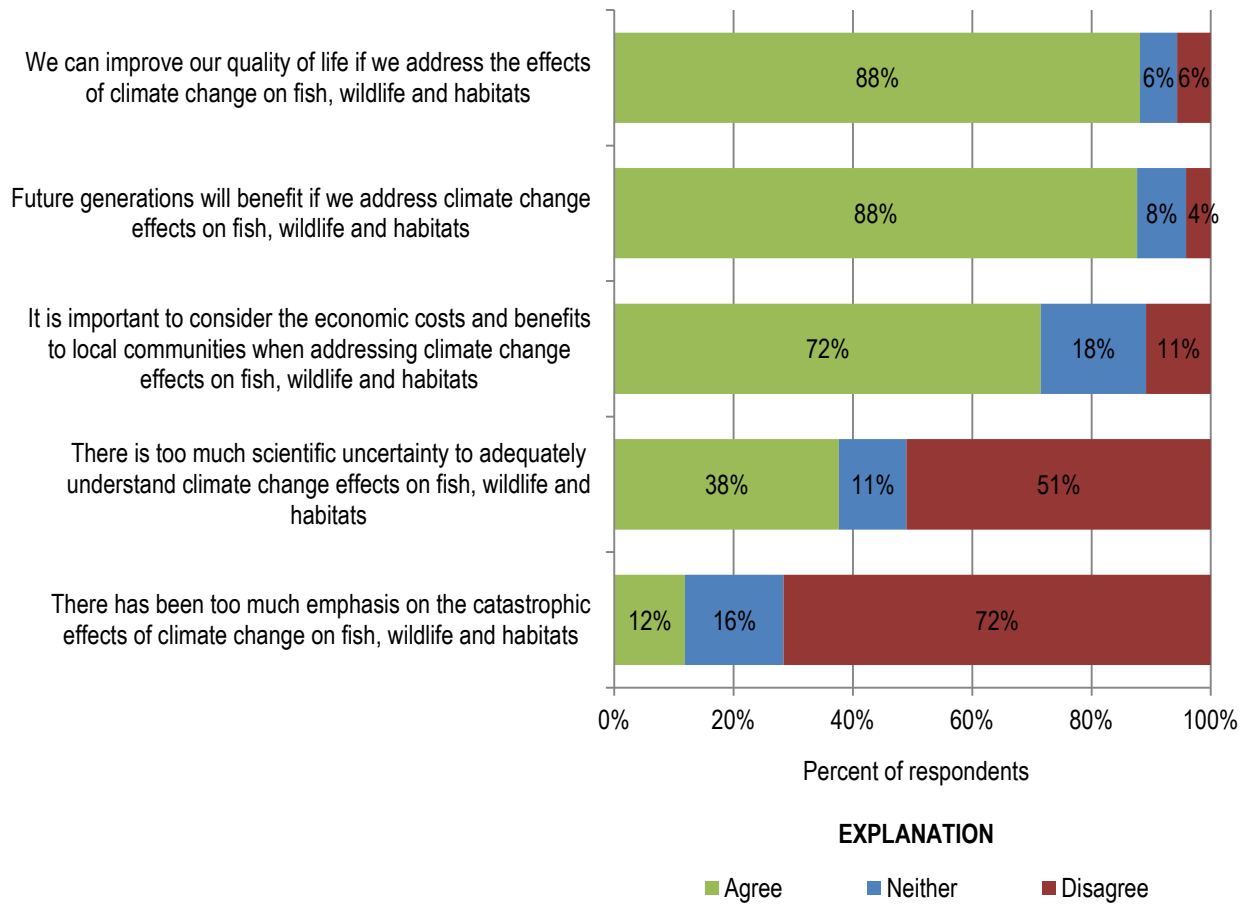
A majority of visitors *disagreed* that there has been too much scientific uncertainty to adequately address the effects of climate change on fish, wildlife and habitats and that there has been too much emphasis on the catastrophic effects of climate change (fig. 16).

Results regarding such beliefs are important to consider when communicating with visitors about this topic, since more than half of visitors (60%) indicated their experiences would be enhanced if Edwin B. Forsythe 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 ≥ 193).





**Figure 16.** Visitors' beliefs about the effects of climate change on fish, wildlife and their habitats (n ≥ 193).

## Conclusion

These individual refuge results provide a summary of trip characteristics and experiences of a sample of visitors to Edwin B. Forsythe 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](mailto:national_visitor_survey@usgs.gov) or 970.226.9205.

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# National Wildlife Refuge Visitor Survey



## PLEASE READ THIS FIRST:

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

Even if you have recently visited more than one National Wildlife Refuge or made more than one visit to the same Refuge, please respond regarding only the Refuge and the visit when you were asked to participate in this survey for any question that uses the phrase “this Refuge.” Please reference the cover letter included with this survey if you are unsure of which refuge you visited.

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### SECTION 1. Your visit to this Refuge

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

<input type="checkbox"/> 0% Big game hunting	<input type="checkbox"/> 36% Hiking	<input type="checkbox"/> 4% Environmental education (for example, classrooms or labs)
<input type="checkbox"/> 0% Upland/Small game hunting	<input type="checkbox"/> 5% Bicycling	
<input type="checkbox"/> 5% Migratory bird/Waterfowl hunting	<input type="checkbox"/> 53% Auto tour route/Driving	<input type="checkbox"/> 12% Interpretation (for example, exhibits, kiosks, videos)
<input type="checkbox"/> 68% Wildlife observation	<input type="checkbox"/> 3% Motorized boating	
<input type="checkbox"/> 83% Bird watching	<input type="checkbox"/> 3% Nonmotorized boating (including canoes/kayaks)	<input type="checkbox"/> 5% Refuge special event ( <i>please specify</i> ) See Appendix B
<input type="checkbox"/> 12% Freshwater fishing		
<input type="checkbox"/> 5% Saltwater fishing	<input type="checkbox"/> 2% Volunteering	<input type="checkbox"/> 5% Other ( <i>please specify</i> ) See Appendix B
<input type="checkbox"/> 53% 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"/> 24% No	
<input type="checkbox"/> 76% Yes → If yes, what did you do there? (Please mark <u>all that apply</u> .)	
<input type="checkbox"/> 67% Visit the gift shop or bookstore	<input type="checkbox"/> 16% Pick up/purchase a license, permit, or pass
<input type="checkbox"/> 60% View the exhibits	<input type="checkbox"/> 82% Stop to use the facilities (for example, get water, use restroom)
<input type="checkbox"/> 78% Ask information of staff/volunteers	
<input type="checkbox"/> 13% Watch a nature talk/video/presentation	<input type="checkbox"/> 8% 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"/> 53%	<input type="checkbox"/> 80%	<input type="checkbox"/> 67%	It was the primary purpose or sole destination of my trip.
<input type="checkbox"/> 37%	<input type="checkbox"/> 12%	<input type="checkbox"/> 24%	It was one of many equally important reasons or destinations for my trip.
<input type="checkbox"/> 10%	<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?

<b>Nonlocal</b>	<u>2</u> Hours	<u>32</u> Minutes	and	<u>189</u> Miles
<b>Local</b>	<u>0</u> Hours	<u>38</u> Minutes	and	<u>22</u> Miles
<b>All visitors</b>	<u>1</u> Hours	<u>25</u> Minutes	and	<u>91</u> Miles

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

☐ 27% None, I visited this Refuge alone

*(of those visiting with a group)*

☐ 92% Family and/or friends

☐ 6% 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

0 number 17 years and under

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

☐ 49% Family and/or friends

☐ 9% Refuge website

☐ 19% Signs on highway

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

☐ 12% Recreation club or organization

☐ 0% Television or radio

☐ 15% People in the local community

☐ 3% Newspaper or magazine

☐ 11% Refuge printed information (brochure, map)

☐ 11% Travel guidebook or other book

☐ 8% Map or atlas

☐ 13% 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.*)

☐ 88% Spring  
(March-May)

☐ 53% Summer  
(June-August)

☐ 71% Fall  
(September-November)

☐ 59% 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? 5 number of visits

## SECTION 2. Transportation and access at this Refuge

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

<input type="checkbox"/> 92%	Private vehicle without a trailer	<input type="checkbox"/> 0%	Refuge shuttle bus or tram	<input type="checkbox"/> 5%	Bicycle
<input type="checkbox"/> 5%	Private vehicle with a trailer (for boat, camper or other)	<input type="checkbox"/> 1%	Motorcycle	<input type="checkbox"/> 26%	Walk/Hike
<input type="checkbox"/> 1%	Commercial tour bus	<input type="checkbox"/> 0%	ATV or off-road vehicle	<input type="checkbox"/> 1%	Other ( <i>please specify below</i> )
<input type="checkbox"/> 1%	Recreational vehicle (RV)	<input type="checkbox"/> 2%	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"/> 79%	Previous knowledge/I have been to this Refuge before	<input type="checkbox"/> 9%	Maps from the Internet (for example, MapQuest or Google Maps)
<input type="checkbox"/> 17%	Signs on highways	<input type="checkbox"/> 6%	Directions from Refuge website
<input type="checkbox"/> 17%	A GPS navigation system	<input type="checkbox"/> 3%	Directions from people in community near this Refuge
<input type="checkbox"/> 6%	A road atlas or highway map	<input type="checkbox"/> 5%	Directions from friends or family
		<input type="checkbox"/> 3%	Other ( <i>please specify</i> ) <u>See Appendix B</u>

2. Below are different alternative transportation options that could be offered at some National Wildlife Refuges in the future. Considering the different Refuges you may have visited, please tell us **how likely you would be to use each transportation option.** (*Please circle one number for each statement.*)

How likely would you be to use...	Very Unlikely	Somewhat Unlikely	Neither	Somewhat Likely	Very Likely
...a bus or tram that takes passengers to different points on the Refuge (such as the Visitor Center)?	<input type="checkbox"/> 39%	<input type="checkbox"/> 13%	<input type="checkbox"/> 6%	<input type="checkbox"/> 29%	<input type="checkbox"/> 13%
...a bike that was offered through a Bike Share Program for use while on the Refuge?	<input type="checkbox"/> 32%	<input type="checkbox"/> 12%	<input type="checkbox"/> 6%	<input type="checkbox"/> 27%	<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"/> 12%	<input type="checkbox"/> 10%	<input type="checkbox"/> 28%	<input type="checkbox"/> 19%
...a boat that goes to different points on Refuge waterways?	<input type="checkbox"/> 16%	<input type="checkbox"/> 4%	<input type="checkbox"/> 4%	<input type="checkbox"/> 39%	<input type="checkbox"/> 37%
...a bus or tram that runs during a special event (such as an evening tour of wildlife or weekend festival)?	<input type="checkbox"/> 25%	<input type="checkbox"/> 12%	<input type="checkbox"/> 9%	<input type="checkbox"/> 32%	<input type="checkbox"/> 22%
...an offsite parking lot that provides trail access for walking/hiking onto the Refuge?	<input type="checkbox"/> 23%	<input type="checkbox"/> 8%	<input type="checkbox"/> 9%	<input type="checkbox"/> 32%	<input type="checkbox"/> 28%
...some other alternative transportation option? ( <i>please specify</i> ) <u>See Appendix B</u>	<input type="checkbox"/> 7%	<input type="checkbox"/> 0%	<input type="checkbox"/> 0%	<input type="checkbox"/> 50%	<input type="checkbox"/> 43%

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

☐ 21% Yes      ☐ 46% No      ☐ 34% Not Sure



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

Importance						Satisfaction					
Circle one for each item.						Circle one for each item.					
Very Unimportant	Somewhat Unimportant	Neither	Somewhat Important	Very Important		Very Unsatisfied	Somewhat Unsatisfied	Neither	Somewhat Satisfied	Very Satisfied	Not Applicable
5%	14%	9%	44%	28%	Surface conditions of roads	8%	8%	3%	25%	56%	NA
9%	21%	11%	47%	13%	Surface conditions of parking areas	5%	1%	7%	29%	58%	NA
6%	5%	18%	28%	43%	Condition of bridges	5%	2%	8%	18%	68%	NA
3%	4%	4%	37%	51%	Condition of trails and boardwalks	3%	3%	4%	22%	69%	NA
6%	6%	5%	53%	29%	Number of places for parking	4%	3%	7%	22%	65%	NA
4%	4%	7%	38%	47%	Number of places to pull over along Refuge roads	2%	8%	5%	31%	54%	NA
4%	3%	5%	37%	50%	Safety of driving conditions on Refuge roads	3%	4%	4%	22%	67%	NA
5%	5%	8%	38%	43%	Safety of Refuge road entrances/exits	2%	3%	4%	23%	69%	NA
6%	10%	15%	31%	38%	Signs on highways directing you to the Refuge	2%	7%	16%	30%	44%	NA
5%	10%	13%	39%	34%	Signs directing you around the Refuge roads	2%	5%	11%	25%	58%	NA
5%	5%	10%	32%	48%	Signs directing you on trails	3%	9%	10%	29%	49%	NA
7%	9%	21%	32%	31%	Access for people with physical disabilities or who have difficulty walking	3%	3%	25%	31%	38%	NA

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

See Appendix B

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

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

☐ 54% Yes

☐ 47% 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: 3 day(s)

*only* If you spent less than one day in the local area, enter the number of hours: 4 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: 1 day(s)

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

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

Categories	Amount Spent in Local Communities & at this Refuge (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
8%	20%	23%	10%	17%	4%	10%	1%	3%	2%	2%

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**.*)

☐ 36% Did not pay a fee (*skip to Section 4*)

☐ 5% Far too low   ☐ 13% Too low   ☐ 80% About right   ☐ 1% Too high   ☐ 2% Far too high

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

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

☐ 1% Strongly disagree   ☐ 2% Disagree   ☐ 6% Neither agree or disagree   ☐ 25% Agree   ☐ 65% Strongly agree

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

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

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Not Applicable
Overall, I am satisfied with the recreational activities and opportunities provided by this Refuge.	<input type="checkbox"/> 2%	<input type="checkbox"/> 5%	<input type="checkbox"/> 5%	<input type="checkbox"/> 23%	<input type="checkbox"/> 66%	NA
Overall, I am satisfied with the information and education provided by this Refuge about its resources.	<input type="checkbox"/> 2%	<input type="checkbox"/> 2%	<input type="checkbox"/> 4%	<input type="checkbox"/> 33%	<input type="checkbox"/> 59%	NA
Overall, I am satisfied with the services provided by employees or volunteers at this Refuge.	<input type="checkbox"/> 2%	<input type="checkbox"/> 1%	<input type="checkbox"/> 4%	<input type="checkbox"/> 26%	<input type="checkbox"/> 66%	NA
This Refuge does a good job of conserving fish, wildlife and their habitats.	<input type="checkbox"/> 2%	<input type="checkbox"/> 1%	<input type="checkbox"/> 3%	<input type="checkbox"/> 23%	<input type="checkbox"/> 72%	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 <i>Circle one for each item.</i>					Refuge Services, Facilities, and Activities	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
3%	9%	18%	44%	25%	Availability of employees or volunteers	2%	1%	11%	22%	65%	NA
2%	7%	11%	44%	36%	Courteous and welcoming employees or volunteers	1%	1%	6%	12%	79%	NA
1%	3%	9%	38%	49%	Knowledgeable employees or volunteers	2%	2%	6%	20%	69%	NA
2%	6%	5%	34%	54%	Printed information about this Refuge and its resources (for example, maps and brochures)	1%	3%	4%	24%	68%	NA
1%	9%	14%	50%	27%	Informational kiosks/displays about this Refuge and its resources	1%	3%	10%	31%	55%	NA
3%	4%	12%	44%	37%	Signs with rules/regulations for this Refuge	2%	2%	7%	24%	64%	NA
2%	6%	16%	49%	27%	Exhibits about this Refuge and its resources	2%	5%	15%	35%	43%	NA
4%	9%	29%	36%	21%	Environmental education programs or activities	2%	5%	31%	24%	37%	NA
3%	5%	7%	40%	45%	Visitor Center	1%	1%	6%	18%	74%	NA
2%	1%	4%	29%	63%	Convenient hours and days of operation	0%	2%	6%	23%	70%	NA
2%	1%	3%	29%	65%	Well-maintained restrooms	1%	2%	3%	18%	76%	NA
3%	2%	3%	34%	58%	Wildlife observation structures (decks, blinds)	1%	1%	5%	29%	64%	NA
1%	0%	4%	12%	83%	Bird-watching opportunities	0%	1%	3%	15%	81%	NA
1%	4%	6%	45%	44%	Opportunities to observe wildlife other than birds	1%	3%	13%	34%	49%	NA
2%	4%	8%	31%	55%	Opportunities to photograph wildlife and scenery	1%	0%	6%	24%	70%	NA
67%	2%	21%	5%	6%	Hunting opportunities	5%	2%	63%	10%	20%	NA
53%	6%	22%	8%	11%	Fishing opportunities	10%	1%	58%	15%	15%	NA
3%	5%	9%	39%	44%	Trail hiking opportunities	2%	4%	10%	27%	57%	NA
15%	12%	29%	28%	16%	Water trail opportunities for canoeing or kayaking	12%	11%	46%	11%	21%	NA
11%	9%	26%	37%	17%	Bicycling opportunities	2%	5%	33%	31%	29%	NA
14%	9%	34%	24%	18%	Volunteer opportunities	2%	2%	48%	23%	25%	NA

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

See Appendix B

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

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

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

☐ 87% Yes

☐ 13% No

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

☐ 91% Yes

☐ 9% No

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

☐ 91% Yes

☐ 9% No

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

See Appendix B

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

Statements about climate change	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
I am personally concerned about the effects of climate change on fish, wildlife and their habitats.	3%	3%	7%	35%	53%
We can improve our quality of life if we address the effects of climate change on fish, wildlife and their habitats.	4%	2%	6%	38%	51%
There is too much scientific uncertainty to adequately understand how climate change will impact fish, wildlife and their habitats.	23%	28%	11%	26%	11%
I stay well-informed about the effects of climate change on fish, wildlife and their habitats.	2%	8%	23%	51%	16%
It is important to consider the economic costs and benefits to local communities when addressing the effects of climate change on fish, wildlife and their habitats.	3%	8%	18%	55%	17%
I take actions to alleviate the effects of climate change on fish, wildlife and their habitats.	3%	6%	33%	42%	16%
There has been too much emphasis on the catastrophic effects of climate change on fish, wildlife and their habitats.	36%	36%	16%	9%	3%
Future generations will benefit if we address the effects of climate change on fish, wildlife and their habitats.	2%	2%	8%	30%	57%
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.	5%	6%	29%	44%	16%

## SECTION 6. A Little about You

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

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

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

2. Are you? 52% Male 48% Female

3. In what year were you born? 1953 (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="0%"/>			<input type="text" value="14%"/>				<input type="text" value="44%"/>				<input type="text" value="42%"/>			

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="1%"/> American Indian or Alaska Native	<input type="text" value="1%"/> Black or African American	<input type="text" value="98%"/> White
<input type="text" value="2%"/> Asian	<input type="text" value="0%"/> Native Hawaiian or Pacific Islander	

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

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

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

<input type="text" value="0%"/> Less than \$10,000	<input type="text" value="9%"/> \$35,000 - \$49,999	<input type="text" value="20%"/> \$100,000 - \$149,999
<input type="text" value="2%"/> \$10,000 - \$24,999	<input type="text" value="25%"/> \$50,000 - \$74,999	<input type="text" value="12%"/> \$150,000 - \$199,999
<input type="text" value="3%"/> \$25,000 - \$34,999	<input type="text" value="21%"/> \$75,000 - \$99,999	<input type="text" value="7%"/> \$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.)?

32 number of trips

**Thank you for completing the survey.**

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

## Comments?

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See Appendix B for Comments

PAPERWORK REDUCTION ACT STATEMENT: The Paperwork Reduction Act requires us to tell you why we are collecting this information, how we will use it, and whether or not you have to respond. The information that we collect in this survey will help us understand visitor satisfaction with and use of National Wildlife Refuges and to make sound management and policy decisions. Your response is voluntary. An agency may not conduct or sponsor and you are not required to respond to a collection of information unless it displays a valid OMB Control Number. We estimate it will take an average of 25 minutes to complete this survey. You may send comments concerning the burden estimate or any aspect of the survey to the Information Collection Clearance Officer, Fish and Wildlife Service, 4401 North Fairfax Drive, MS 222-ARLSQ, Arlington, VA 22203. OMB CONTROL #1018-0145 EXPIRATION DATE 6/30/2013



## Appendix B: Visitor Comments to Open-Ended Survey Questions for Edwin B. Forsythe 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
Birding Festival - Santee NWR	1
Birdwatching with naturalist	1
Cleanup	1
Earth Day, Friends of Forsythe Saturday morning bird walks	1
Photo club meeting	1
Photo club monthly meetings	1
Photographers of Forsythe Meetup Group	1
Raptor public presentation	1
Volunteer day, Refuge cleanup	1

Other Activity	Frequency
Always visit Visitor Center to purchase bird brochures as gifts.	1
Dog walking, letting the dogs run and play in water	1
Enjoying the scenery.	1
Hard clam aquaculture	1
Jogging	1
Picnicking	1
Run with dogs.	1
Running	1
Wanted to do auto tour, but roads were washed out due to damage caused by Hurricane Sandy.	1
Wildflower identification	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
Enjoying the scenery	1
Hard clam aquaculture	1
Wildflower identification	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
Borrowed binoculars for my guest	1
Check bird sightings	6
Record the unusual birds we observed into the bird sightings list	1
Showed us the killdeer babies in the landscaping	1
Update of Hurricane Sandy damage restoration	2
Volunteered	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
Cape May Birding Festival	1
Clam harvest/lot maintenance	1

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

Other Website	Frequency
Ebird reports on internet	1
Google	1
Google maps	1
<a href="http://birdingonthe.net/maillinglists/NJBD.html">http://birdingonthe.net/maillinglists/NJBD.html</a>	1
<a href="http://www.njaudubon.org/SectionCalendar/AllEvents.aspx">http://www.njaudubon.org/SectionCalendar/AllEvents.aspx</a>	1
<a href="http://www.visitnj.org/">http://www.visitnj.org/</a>	1
"Jerseybirder" listserve email.	1
Macaroni Kid	1
Photographers of Forsythe Meetup Group	1
Rare bird alerts on internet, Jerseybirds list serve	1
Website	1

Other Ways Heard about This Refuge	Frequency
A diorama at the American Museum of Natural History.	1
Art museum in area	1
As a student at Stockton College in marine science program	1
Bayfest in Somers Point, NJ	1
Cape May Bird Observatory printed literature	1
Cape May Birding Festival	1
Cape May hawk watch	1
Co-worker and members of Jacques Cousteau Estuarine Research Center	1
From Cornell Lab of Ornithology, Ithaca, NY	1
Hotel where we stayed recommended it.	1
I'm a volunteer at Wallkill River NWR, heard about it from others.	1
NJ Audubon Associates, on trips with them	1
Ornithology class in college	1
Other birdwatchers	5
Photography community word of mouth.	1
State map	1
Stockton College	1
The Tuckerton Decoy Show in 1982	1
Visited Noyes Museum, which is close by.	1

## Survey Section 2

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

Other Forms of Transportation	Frequency
Rental van	1

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

Other Ways Found This Refuge	Frequency
Audubon Society website	1
Directions from hotel staff	1
Directions provided by festival coordinators	1
Group	1
I called.	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
A drop-off/pick-up shuttle that allows individuals to be picked up every half hour and dropped at different points on the refuge.	1
Available wheelchair	1
Bicycle	1
Car sharing	1
Golf carts	2
Horseback	4
Kayak	2
Monorail	1
Personal vehicle	1
Scooters/motorized	1

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

Comments on Transportation-related Items at This Refuge (n = 51)

All seems satisfactory.

Damage from Sandy needs to be repaired. Guided bus/tram tour would be great.

Driving dike breached by Hurricane Sandy. Hope that they are repaired by early spring.

Eagerly awaiting the repair and reopening of the wildlife drive!

Felt the trails were overgrown with grass and became very confusing.

Given the layout of the Brigantine Wildlife Refuge, I think the current layout is the best. It allows more access to birds for people in cars or on foot.

Great refuge for birdwatchers. Don't overdevelop it!

Hurricane Sandy caused damage to road in preserve so could not navigate the road.

Hurricane Sandy extensively damaged the eight mile driving road that allowed close-up duck watching. It is so important to quickly get this road repaired.

Hurricane Sandy had destroyed the auto route. Looking forward to its repair. Great that you could still walk to tower at Gull Pond.

I am sure that it is a great expense, but paved roads would be an asset. I would enjoy the refuge more if there was less dust. I have to wash my car every time I am go there, which is usually once a week.

I have brought my bike down and rode around the refuge, though the unpaved gravel and sometimes rutted roads make cycling difficult and dangerous at times.

I understand that the roads and bridges at this refuge were recently damaged by Hurricane Sandy and were under repair. I was sad that we couldn't access the closed roads and bridges when we visited, but I understand that this was unavoidable, and I trust that the refuge is doing what it can to bring these features back into usable condition soon.

I visit Scott's Landing on a daily basis. The dirt road could be better maintained. Most of the daily "clammers" usually do hard work and cut down dead trees.

I visited the refuge right after Hurricane Sandy and all roadways were closed. Could only walk to one area.

I would like to see mile markers on the trails.

I'm handicapped, walk with cane. Had no map to show how far the bay was from the entrance.

I'm very unsatisfied that the November storm washed everything out.

In the past, the 8-mile drive through the refuge was a delight to travel either by foot or by car. Hurricane Sandy devastated the drive in multiple places so it is no longer passable.

It is very important to repair the damaged road around the refuge as soon as possible so that it can once again be enjoyed.

Like to have limited guided access to closed off roads for birding migration viewing.

Love being able to drive my own car so I can stop where and when I need to observe or take photos.

Mileposts would be helpful. Identifying the bodies of water would be helpful.

My friends and daughter love the park just the way it is. Many people in the community use it to run their dogs, bike it, or a jog with their dog. The only time it's hard going is if there has been a lot of rain, huge puddles in low areas making it hard to pass. Pieces of wood and boards are laid across and you take your own chance crossing them. I think it's all part of the adventure. There is no clear signs except one pointing to one path. After that you're on your own.

My primary use of EBF Refuge is Scott's Landing. Road and parking conditions are horrible. Signs not maintained. Boat dock not maintained. Litter controlled by volunteers. Oversight nonexistent.

Not much this refuge can do about inconsiderate people that visit. These are people that drive fast on the auto trail kicking up dust and stones that disrupts the experience for everyone else.

Overall experience excellent. Only improvement could be on Rt. 9 signage. We knew the location, but others could easily miss the obscure sign directing one to turn off the highway.

People drive through sometimes very quickly, raising dust, disturbing wildlife and visitors. This can be very annoying.

Provide means of slowing down speeding cars on the road dikes.

Refuge is wholly satisfactory in terms of accessibility and road conditions. No improvements are needed. Trams and buses would only degrade the experience and force every group of visitors to proceed on a pace they may find unsatisfactory, too slow or too fast depending on wildlife viewing objectives and experience. Personal cars fill this need perfectly now.

Road system destroyed by Sandy-washed out and over.

Roads were closed due to Hurricane Sandy damage. We have been here dozens of times and love the refuge. A lot of work has been done. We understand the conditions at this time. The new Visitor Center is extremely nice. Thank you!

Scott's Landing boat ramp needs to be dug out of mud. Bulkhead needs to be replaced. Sand is washing in after rain. Dock needs to be replaced.

Some parts of the road are soft and difficult to bicycle on.

Spend your money on wildlife not people.

The drive through the water areas is well maintained and would be dangerous if it were not.

The Edwin B. Forsythe NWR was hit hard by major Storm Sandy and many breaches in the roadway occurred. My wife and I look forward to them being fixed and the park totally reopened. For now we can walk parts of the park weather permitting. The refuge is a great source of peace.

The road into the bay is great!

The roads were unavailable because of damage due to the storm (Sandy).

This facility is peaceful. I don't believe that additional motorized transport would be beneficial, due to noise and wear on infrastructure.

Tour route was closed when I last visited because of Hurricane Sandy.

Unfortunately, due to damage from Hurricane Sandy, the 8-mile "Wildlife Drive" is currently closed. My wife and I are hoping that the roadway repairs will be completed soon. We are looking forward to being able to drive along this wonderful "Wildlife Drive" again. We would go on this drive at least once a month prior to the damage caused by Hurricane Sandy.

Very disappointed to see that repair work from the hurricane has not even started yet. Forsythe is one of our weekly events during the winter months when there is a large variety of migratory birds in the area, we will miss it sorely.

Very satisfactory in its access to stop on the side of the road to watch the animals. I love this place.

Visit was after Sandy. Driving road closed. Some trails were open but I was not the decision maker of the group.

Visitors travel too fast past stopped or slowly moving cars on the one way road.

We are old and the only thing we do is drive the 8 mile loop in our own car. We absolutely love all of the birds that migrate through here.

We visited the Brigantine part of the Forsythe NWR in November 2012. My family and I have been coming to this refuge a couple of times a year since the 1970s. This time, the 8 mile car trail along the earthen dike had been breached in about 8 places by the Hurricane Sandy storm surge. So we couldn't drive out on to the dike as planned, but we were able to walk some of the trails near the Visitor Center. The folks at the Visitor Center were delightful and told us all about the storm damage. We hope that the breaches can be repaired soon.

We visited the refuge after "Sandy" hit, so the road conditions were due to that storm, not to poor management. The main drive around the refuge was closed due to damage by Sandy.

We visited this refuge (Edwin B Forsythe) a few days after super storm Sandy. Some of the roads and dykes had been breached. Therefore the refuge road was closed to vehicular traffic. However hiking trails were open and we took full advantage of that. In speaking with the volunteer at the Visitor Center we were informed that no firm date had been set for the re-opening of the road. In spite of our disappointment we spent over an hour hiking trails and observing birds. Due to the fact that the road was closed there was no fee that day.

We're anxious that repairs, following Hurricane Sandy, be made as quickly as possible.

## 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."

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### Comments on Services, Facilities, and Activities at This Refuge (n = 81)

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A couple of the scopes on the birdwatching platforms did not work well.

A list of different months and birds to be seen on the website would help.

A young lady, originally from Wisconsin, but now a service ranger asked us to do this survey. She was friendly and knowledgeable. She is a great asset to your program.

An excellent facility for an "at your own pace and at your own level" experience.

As a birder I've travelled to many parks, refuges, and wildlife management. This is by far my favorite. I loved the song bird trail. So much so that I walked it in the rain(no umbrella). It was my only day to go do the trail so I couldn't not do it. Was rewarded with many birds. I will be back!

Be more clear on where you can and can't hunt waterfowl. Very confusing.

Canoe/kayak rental would be wonderful. The staff has been very helpful and informed; I greatly appreciate their services!

Clean, safe, and no frills refuge. Very enjoyable to visit. Basic facilities. A quiet and relaxing time.

Could use more benefits like a map of area.

Desk staff was very helpful.

During this visit, the refuge had been impacted severely by Hurricane Sandy and so were roads/trails used by cars.

Excellent facility and refuge.

Excellent services.

Excellent!

Fish collecting rather than fishing would be of interest. Native fish aquariums are cool.

Hope the roads get fixed so I can visit again!

Hurricane Sandy washed out significant sections of the loop drive. Restoring that is very important for "The Brig". In green-head fly season, walking is out of the question! Travel by car is essential.

I am aware that some of the Osprey platforms are in poor condition. I'd like to see that taken care of. Also, 2 outdoor scopes mounted for birders are in poor shape too. That said, we love it there and we went almost weekly from January to May. Now the ticks are awful. I pulled off 18 the last time I went! Yuck.

I generally do not participate in activities at the refuge, and therefore cannot comment on the quality or effectiveness of any activities.

I hate the new bathrooms. There is nothing more disgusting than having to use a poop pit. They were poorly designed and vent into the picnic area. Now it smells like baby diapers when you want to eat. The old bathrooms were just in need of repair. Also you can use another bathroom at the entrance to Jen's trail. It would be much better than going in the woods.

I hope that you can tell by my comments that I love this place. It brings me peace of mind and allows me to refocus. I don't get there nearly as often as I'd like.

I like the minimal services. This is a small refuge, mostly for birdwatching. The only criticism I have is there could be some exhibits in the bare exhibit room for kids and adults. There was nothing. Why have a bare room?

I love the Forsythe Refuge. It's a national treasure.

I love this place and have a wonderful collection of bird photographs from my many trips there.

I love this refuge. The 16 mile loop would be perfect for a trail race to make money for the refuge! I have run the loop in winter and summer. Everyone I bring there loves it, including my last visit with family from England!

I really liked the Purple Martin nests provided for viewing in front of the Visitor Center.

I thought the staff was very helpful and courteous.

I would like some fishing opportunities.

I would like these activities to be offered to the seniors at our local centers, as most do not make the seniors aware of all services offered here. Perhaps a ranger could lecture at Dr. Weiweber Senior Center. (Number given)

I would like to know more about volunteer opportunities. Speed limit is an issue. More information about birds that migrate through and when.

I would like to see fishing allowed within the refuge as long as catch and release is practiced. There is no reason this activity should be prohibited.

I would like to see more opportunities for college student groups to interact with refuge management. Past requests for assistance received no replies.

It was great fun and a nice hiking and biking outing.

It was just what I would want it to be.

It would be great if there were trails available to public at this part of the refuge. I go to the Bayshore drive Barnegat area of the refuge and there is no public access other than the observation pavilion.

It would be helpful if a porta potty was made available. There is very little wildlife seen. Deer tracks. Not many birds for birdwatching. The kids got excited about some frogs we found in a pond this year.

It would be nice to have the restrooms open at later hours than they currently are.

It's a great place.

Love this place for birding. Best place to see migratory birds.

More blinds could be used around the waterways. Drop-off transportation could be used on the dikes and areas far from the Visitor Center.

My only complaint was I couldn't monitor walk/bike unless went through whole 8 miles. Would love to see mile markers.

Need a bathroom halfway.

Need decent restroom facilities that are open early, i.e., by 9 AM! Present facilities outside Visitor Center are appalling.

Need longer hiking trails! Also, more trails in all of the south jersey parks.

Need more staffing especially in Visitor Center. I like the upgrades in the boardwalk and handicapped ramps. Thanks!

Not much to do. More hiking trails needed.

Nothing, I mostly enjoy the fact that we are able to wander on our own.

Open up more access.

Overall, this is an amazingly efficient facility, well managed and maintained with courteous and professional staff. If I were a younger person and in better physical condition, I would not hesitate to volunteer to help in any way I could do so.

Please update the website more often, especially now after Sandy. We don't know what is going on.

Possible children's fishing pier. Catch and release. Children only with adult guidance.

Really enjoy using the picnic tables behind the Visitor Center!

Road was damaged in Hurricane Sandy. Certainly hope it can be repaired.

Scott's's Landing needs repair.

Should not allow hunting on this or any other wildlife refuge.

Some of the scopes for birdwatching need replacing.

Thank you for providing trash and recycling receptacles. I would very much appreciate a porta potty or recycling outhouse such as are at the Allaire Campground or radio-controlled airplane field off Hospital Road.

The eBird kiosk is somewhat frustrating to use as an indicator of recent bird sightings when the Visitor Center is closed. We much prefer going inside to see what people have reported in the loose-leaf binder used for sightings. It also seems that more could be done with displays inside the Visitor Center. Great Swamp is a wonderful example. Also, staff and volunteers are very pleasant and easy to talk with.



The Edwin B. Forsythe National Wildlife Refuge is a jewel in the crown of National Wildlife Refuges. A delightful place for observing birds especially. The unique dike setup makes it a perfect place for elderly citizens to stay in their car to bird watch. Also, there are trails through the woods, a boardwalk through a marsh, and spotting towers, all accessible.

The entrance fee scheme with envelopes was cumbersome. Would be better to get a ticket in the Visitor Center. Also, some people may not abide by the honor system.

The naturalist that led the birdwatching hike was excellent.

The personnel in the Visitor Center was courteous, friendly, and well informed!

The services, facilities, and activities at the refuge are great. If there's more money available, use it to conserve more habitat.

The Visitor Center is new and the exhibits are not fully installed. As described they should be excellent when ready.

There are no water trail opportunities at this refuge. I would take advantage of that if it was available. If there are educational opportunities or bird walks, I don't know how to find out about them.

There were no trail guides available the day we were there. This made it difficult to spend a large amount of time since when we came to cross roads there were no signs as to which way to go and we became fearful of getting lost. Overall a nice experience, clean and local.

They are truly great. I wish I was younger for more activities and had more time to volunteer, and a better influence on my wife to volunteer.

This facility is clean and well run.

Very clean and well kept area in all aspects.

Very nice and well maintained facilities. I like that it is not too crowded and most people visiting seem to be environmentally friendly.

Very nice staff and volunteers. Enjoy my visits.

Very well maintained refuge, easy to navigate.

Volunteers very courteous.

We love hiking here and would enjoy it more if we could have geocaches.

We love our refuge. Only thing I could suggest is placement of portable toilets somewhere along the drive. Sometimes we find ourselves rushing our visit towards the end because one of us has to go.

We visited after Hurricane Sandy. The seven mile loop was closed due to storm damage. So we visited the Visitor Center and gift shop. Had great conversation with the volunteers.

Well, this has always been a wonderful place to visit. I'm disappointed, obviously, that storm damage has closed the wildlife drive. I wish there was some way to let people further along the drive on foot in the meantime, and let people in to help with the cleanup. Thanks!

Wish speed limits were more strictly enforced, especially for walkers. Also, far too many dead creatures- frogs, turtles, and snakes on the road due to too high of speeds.

Wonderful and unique environment. I will visit again in different seasons.

Would be nice to have blinds specific for photography that could be rented at reasonable cost.

Yes, before storms there was a bridge that continued through a large area including forests, plains, and water. A small section of bridge has been reconstructed. Much more is needed to walk deeper into 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 = 149)

"Undeveloped" paths, close proximity to plants and trees. Natural surroundings.

A fragile resource that is extremely important to our environment, natural beauty, wildlife, and those of us who hold these things as important.

A no cost way to enjoy New Jersey's natural environment.

A unique ecosystem.

A wonderful place to watch migratory birds.

Access to local neighbors. I stop with grandkids. Hope to spot wildlife.

Accessibility, auto road, and diversity of observed wildlife no matter how often you visit.

Amount of game.

Amount of wildlife always available to enjoy a view. Excellent.

Beautiful surroundings to enjoy for a reasonably low cost.

Because of the focus on wildlife, and not the entertainment of the general public. This is an inexpensive way to see wildlife in its most natural state without dependency on human interaction.

Because of the location of this refuge, people will be able to see a vast array of migrating birds. It's so good that this is a safe haven for these beautiful creatures. Thank you!

Being able to drive and see the different areas like the freshwater and saltwater areas. Having a moving "blind" is great. Also, I love the way the areas are maintained like draining and flooding to allow vegetation to grow for the birds.

Birdwatching.

Chance to see wildlife in natural habitat but accessible to general population.

Concentration on preserving and the opportunity to easily view wildlife.

Dogs allowed.

Each refuge is special in its variety of wildlife and plant life.

Excellent shorebird habitat and viewing. Had great volunteer leaders, Rob and Lisa.

Extent of facilities and access to wildlife.

Focus is on the animals.

Focus more on wildlife than on human recreation.

For birdwatching and wildlife observation, they are unique.

For the 3 year old, it was nice to drive in the car to see the birds. By knowing the birds were there it made bike riding more of an adventure and less hassle.

Forsythe has birding walks led by volunteers (for a 5 dollar fee) and by Fish and Wildlife (no charge). Many times I have observed special events offered for families (though I don't participate).

Gives the public the opportunity to learn and observe at their own pace.

Gives you a place to have fun and relax for recreation and family fun.

Great conservation of wildlife and scenery.

Great example of an almost pristine waterway in an urban area. Nice oasis.

Great open habitat with good access.

Habitat preservation.

I am a walker and a birdwatcher. If I see another animal it is a plus, but I think you guys are doing a great job. The Brigantine Wildlife Refuge is a unique experience on the Atlantic flyway. It needs to be conserved with minimal human intrusion.

I appreciate the pristine nature. It reminds me of what it must have been like before man took over this planet. Sometimes I feel that man has been a bad steward of this planet.

I cannot think of another place in the area which allows you access to salt, brackish, and freshwater natural experiences in such an easy manner. The variety of birds is terrific and on the two occasions I have visited, it wasn't too crowded. This is quite a find for a place just outside of Atlantic City.

I find that National Wildlife Refuges are better taken care of than many state refuges I have visited. This is especially true with saltwater coastal areas. These national areas are also larger than state refuges and vastly important for bird migration and habitats. The states have piece-mealed their shorelines into small island habitats due to being more money in condominiums and housing. The animals and birds are losing.

I have travelled the 7 mile loop since the early 80's. Have seen much wildlife and many beautiful sunsets. After the auto tour or boardwalk tours we always enjoy a visit to Noyes Museum! Very unique area. Many other refuges we visit have raised from the marshes wonderful platforms for sightseeing and birdwatching or just listening to the sounds of the wind and reeds!

I have visited and loved this refuge for about 30 years when I came to this area. As a teacher, Forsythe has been a critical resource for myself and students.

I have visited many National Parks but there is nothing like this refuge. It is uniquely situated in bird migration routes and provides an exceptional opportunity to see dozens of species throughout the year.

I like the view of the Atlantic City skyline from some areas of the refuge. The trails vary in length and cover forest areas and water areas.

I think each place is unique and state parks are really great also.

I was very interested in the terrapins. This particular day there were many in the water.

If you enjoy the outdoors they provide a wide variety of things to enjoy, for example: plants, birds, wildlife, as well as many educational resources available to those who desire to broaden their knowledge.

It gives me the opportunity to enjoy nature and feel safe in the environment.

It gives you the opportunity to share the natural wonders with children. It is a great learning experience.

It is a genuine opportunity to see the birds and animals in their natural habitat with minimal human interference.

It is a primary stop for migratory waterfowl. It is always a thrill to see what birds are refueling. The osprey nests are very important to us. Thanks!

It is a very well kept place with many things to do. There are many different parts to see and is right on the bay, so it's beautiful. There is a lot of land for hunting, hiking, and biking, which makes it a great place to go.

It is an opportunity to see real nature.

It is extremely important to me to make sure that wildlife refuges and other open space is preserved for all. The more, the better! Being in the middle of the woods is the best place anyone can be!

It is unique because it is left alone. There aren't a lot of things going on, if there were rangers always there telling you to keep your dogs on the leash at all times I would stop coming. I travel here once a week to run my dog. We always leash up when people are seen. We pick up after our dogs and sometimes we pick up trash ignorant people have left behind. There are so few places to go and be able to let your dogs run free. There is no place in Mays Landing, so I travel and come back here for the peace and fun with being in the woods. I used to live 10 minutes away. I was here every day. You see the same people and everyone shows respect for each other. Now I come once a week. There use to be paint guns in the refuge, but haven't seen them in a long while. I'm glad they don't have them.

It was terrific to just be so near the migratory birds and be able to photograph them.

It's educational, relaxing, gives photographers like myself a place to go and photograph various species of waterfowl, fox, and various other species. Great way to spend a day.

It's great to see the migrations of waterfowl and birds.

Just to go there and see all the birds and to take pictures.

Keeping the lands managed allows a greater carrying capacity for the species and helps to provide an area where the species can come and flourish, bringing them closer for the public to see them and learn about them. Each area of the country is unique in habitat and wildlife opportunities.

Land development and population density makes it increasingly difficult to find natural areas to enjoy wildlife and peaceful surroundings. They also provide critical habitat for wildlife and flora.

Land set aside for wildlife is very important to the society and the animals, trees, and plants.

Less intense recreational activities than other 'open space' making it far better for observing wildlife and nature in general. I like the emphasis on keeping it wild. Would like to have more information on what species are being targeted for management in particular, i.e. black duck or shorebirds. Having more information would be helpful to explain to people why managers are doing what they are doing to particular areas (raising or lowering water levels etc).

Love the open wetlands and views all around.

Maintain as a safe area for the biologically diverse existing population.

Makes me proud to live in this country, but I wish the government would place more priority on conservation.

Many have diverse habitat making the experience interesting and fun.

More land.

My chief comparison would be with National Park Service sites, which are more "all things to all people" and thus have to truncate their nature teachings in order to tell the full story (historic, geologic, etc.) of the site. When I'm birding, I'd rather go to a NWR than an NPS site, because I know that the NWR will have more of a focus on the flora and fauna, and staff will be more knowledgeable if I have any questions about what I encounter. (No knock on NPS. I'm a big fan of them, too!)

My local refuge "The Brig" sprawls along the bay coast in easy view of Atlanta City. It's wonderful that such a place exists so close to a large city. Knowing how important the Jersey Coast is to migrating birds, it is good to know that these areas are protected and preserved.

My visit can be a different experience. Some days activity is very low, while others are full of different sightings.

National Wildlife Refuges are unique in that they are run primarily for the purpose of conserving wildlife. This in itself is a very important mission. As my hobby is wildlife observation, they also provide excellent (perhaps unparalleled) opportunities for the observation of birds, mammals, and other animals in the United States. For example, Aransas NWR (which I visited in April) is the only site in the US where Whooping Cranes naturally occur in large numbers. Without the important habitat conserved by that refuge, it would be very unlikely that that population could survive.

Natural exposure. Variety of birds. Numbers can be huge.

Natural habitat for birds. Also, open space for people.

Natural state as much as possible.

NWRs are well kept, user friendly, cost friendly, informative while being recreational, a nice day out, and worth visiting over and over.

NWRs offer a chance to be in nature and observe wildlife you don't ordinarily get to see. Visiting one can make you more aware of the wider (non human) world we're a part of and increases the likelihood that you'll think more critically about the effect human beings have on the habitat and well being of wildlife. Seeing is believing and hopefully, caring.

NWRs preserve and conserve wildlife habitat and allow for healthy management of wildlife which allows for wonderful viewing and also supplies opportunities for education and communication.

Opportunity to experience birdwatching in a special and natural setting.

Peaceful opportunities for photographing birds and wildlife.

Preservation of the natural habitat.

Preserving habitat, especially in urban and remote areas, while still providing access for non-extractive uses (birding, hiking, looking around). Managing to share these uses with hunting and fishing is generally well done. (Could be better at restricting states in introducing sport fish that impact native wildlife on shared projects such as Pena Blanca Lake in Arizona, where wide mouth bass reintroduction has likely extirpated a newly established Least Grebe population after lake restoration. National Forest, but it's all FWS).

Protection of wildlife and educating the public on conservation issues. Culling of wildlife to maintain a healthy balance in the species. Protecting birds in your habitat. Enforcing wildlife laws in refuges. Reaching children in your environmental educational programs. Promoting volunteers to do programs in your refuge. Managing flora and fauna. Managing invasive plants and species. Monitoring water quality. Protecting dunes for flood control. Promoting scientific research by government and private scientists.

Provides an unstructured opportunity to observe local and migratory wildlife that represents the primary goal, rather than a secondary role, of the facility.

Refuges are a special place set aside to show us nature's wonders. We are blessed to have them. In past years we have enjoyed them in many parts of our country. They were all unique and we have great memories. I had purchased Laura and William Riley's "Guide to the National Wildlife Refuge" and it was a tremendous help.

Refuges are for managing habitat for plants and animals and this is an opportunity to experience the true environment they need where a park does not. This is a more wild experience.

Relatively undisturbed areas for viewing birds and other wildlife.

Relaxing.

Saw ducks I have never seen elsewhere. Love wetland and shore birds. Thank you!

That they are "wildlife refuges" providing a buffer zone from encroaching land development for native and migratory species to rest, feed, and breed. On my last auto tour at the Brigantine Refuge I viewed a platform nest with breeding Bald Eagles! What a thrill!

The 8 mile driving loop is very unique and bodes well for people with disabilities.

The ability to observe and photograph wildlife with a nice natural setting and without the everyday noise of traffic.

The almost total focus on the wildlife and habitat almost insures that the visitors are interested and respectful.

The area for migrating birds to pass through and other wildlife to be protected.

The chance for everyone to enjoy nature.

The different species of animals you encounter, especially waterfowl.

The diversity of natural habitat and its inhabitants is well preserved and managed.

The drive around the refuge has plenty of pull-off places and signs showing various types of wildlife in that area. You drive at your own pace. The towers are great!

The drive into the bay. It's an "aquarium" for birds and you become part of it.

The emphasis is, and always should be, on the wildlife and the natural environment and ecology of the area. Keep "recreation" for the state "parks" and keep the refuges natural and wild for the animals and the humans who enjoy passively watching them and enjoying their habitat as nature intended. Hunters afoot okay; limited fishing and crabbing okay. Keep the dirt bikes, ATVs, RVs and motorized boats out.

The environment created at this refuge is a magnet for migrating birds and offers a great variety of opportunities to observe many species in a single day. Beyond the obvious bird visitors to the refuge there are many other animals found on site. I am an amateur herpetologist and have studied and photographed quite a few reptiles there. Most go unnoticed except to those willing to look a little harder.

The focus is not on games or displays, but on enjoying the outdoors.

The maintaining of the wildlife in its natural form.

The National Wildlife Refuge's mission of respect for the habitat of our vanishing wildlife separates it from public land venues, where 'amusement and relaxation' is the goal for public visitors. Humans who visit refuges seem more interested in the wildlife itself, are less concerned with personal comforts (except for bathrooms, of course), and are much more respectful of the site as well as other humans. My observations of those using other public lands have generally been quite the opposite.

The NWR provides a service not always available from the other federal lands (Nat. Forests, Nat. Parks.) such as hunting and game management. We visit all federal lands during our vacations for various reasons including birdwatching, sightseeing and general appreciation of nature in general.

The open layout is beautiful especially with the Atlantic City view across the water.

The opportunity to see birds during migration and all year long.

The range of wildlife and plants is so diverse and exciting to observe in a pristine environment that was more abundant when I was young. We need to expand these areas as well to provide a buffer from storm surge and sea level rise. Advertise for contributions and endowments to purchase more property for protection.

The refuge allows you to go on many different trails, offers two towers for birdwatching, and you have the option to drive through instead of walk. This is important for people whose mobility is limited.

The seashore habitat and snow geese gathering are unique.

The sheer majesty of places not overrun by technology and expansionism. They remind of the simple beauty of the world around us and how close it can be to home.

The simple fact a place that's open and free.

The wildlife refuges I have been on, including this one, provide great opportunities for birdwatching. In some cases superior even to the National Parks.

The year round opportunity to see the wildlife, in particular the hundreds of migrating birds. No two trips are exactly the same.

Their primary purpose is for the benefit of wildlife.

Their size and complexity and the services they offer.

There are not many natural places that are easy to get to. So this place is a real asset to the country.

There is such a wide variety of birds to view at close range. It is a beautiful natural area with Atlantic City skyline in distance.

These refuges give us opportunities to be really close to nature without the interruptions of public civilization.

They appear to preserve wildlife that I see no where else. This is beautiful.

They are kept as natural as possible, yet afford easy access for observation.

They are larger than other areas, have more varied wildlife to observe, and have good informational resources.

They are safe areas, with unique features to be seen and observed.

They are specifically managed for the protection of wildlife.

They are the only places that I know of that maintain suitable habitats for birds at specific time of the year, by draining and filling the pools. Other public parks don't do this.

They are unique because they provide the best opportunity for observing all forms of wildlife in their natural habitats.

They have the unique feature of bringing all of nature to the attention of the public.

They preserve our natural areas and provide great educational opportunities for all ages.

They provide an opportunity to observe wildlife in their natural habitat while preserving that habitat. Being able to see the return of the Ospreys every spring and then see their offspring is something you can't see everywhere.

They provide more opportunities to view wildlife because of specially provided facilities, roads, trails, Visitor Center, and management techniques.

They seem to be more accessible for observing and enjoying nature and wildlife. Their purpose seems to be to encourage users to enjoy what they offer.

This refuge has a backdrop of Atlantic City. I have a house there, but I think many families would bring their children there as a day off from the beach, or gambling, if they knew it was so close.

This refuge offers the opportunity to drive through a natural environment but still see the wildlife.

True conservation oriented to wildlife.

True dedication to preserving wildlife.

Unique opportunity to gain access to important wildlife habitats that are scarce to begin with and often otherwise inaccessible. Evermore, and perhaps more important, they provide a literal refuge for birds and other wildlife whose habitats are being encroached upon by endless residential and commercial development. Hooray for the U.S Fish and Wildlife Service and the good work they do.

Unlike National Parks, they are open to hunting, fishing, and often harvesting of other natural resources.

Very basic facilities. Clean and quiet.

Very suitable for waterfowl hunting.

We love to drive around the water to see the birds.

We need natural places dedicated to pleasing animals and not people.

We saw a bald eagle and we were very excited about that.

We travel to all 48 states and visit refuges to see wildlife from all over the country. 122 refuges have proved a great resource for bird life.

Well kept, able to observe from car or walk, and always someone to answer questions.

Well marked trails. Would have liked to drive on the road but Hurricane Sandy had them closed.

Well preserved and easily accessible.

Well taken care of and very clean.

Well, I don't have a lot to compare it to. Delaware National Recreation Area is similar, in that it is mostly wild. Really haven't been to National Parks. I feel like the mission is similar, but I don't really know!

Wild areas, undeveloped areas preserve habitat for birds and other animals. These are increasingly valuable in this increasingly developed urban and suburban society.

Wildlife and supporting habitat are the main focus.

Wildlife drives, boardwalk, places to pull car over to observe birds and other wildlife, peace and quiet!

Wildlife is the primary concern. Not people. Need more invasive plant control and grasslands.

Wildlife preservation.

You have opportunities to view wildlife in its natural environment. Also view birds you don't normally see on an everyday basis.

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Additional Comments (n = 53)

All of my trips were local. Primarily to Forsythe in Galloway and to Cape May.

As an avid scuba diver for more than 40 years I have seen personally the impact of man on the environment. We need as many areas to remain pristine as possible. For those who do not believe in the effect of man on the environment I remind them of these words of wisdom -- "You cannot touch a flower without the trembling of a star". It is not science. It is common sense.

Edwin B Forsythe Refuge is an awesome place to explore nature. I have been a member for over 2 years, but have been visiting the facility for twice as long. I go several times a year because each season brings a different experience. Migrating birds in spring and fall, nesting diamond back terrapins in the summer box turtles, painted turtles, eastern mud turtles, red bellied turtles and snapping turtles are plentiful in spring.

Enjoy the fact that the refuge is so close to where I live and I have the opportunity to visit as often as I'd like.

Fabulous!

Forsythe NWR is one of my favorite places to visit during the spring migration. I have visited there three years in a row with the "same" group from the Cornell Lab of Ornithology. At Forsythe the vast water acreage is impressive. The dikes and mud flats are my favorite. Thanks for protecting our wild environment!

Hate the hunting, personally.

I am 58 years old. Since I was a child my grandfather and father have been taking me to the back bays of the Great Bay and Brigantine. My grandfather died of a heart attack at Black Point and my father died soon after returning from fishing off of Egg Island. I was with both of them on their last day on the bay. In my early teens we discovered Scott's Landing after years launching from Brigantine and later Motts Creek. We participated in the rehab of the dock at Scott's. For many years using the Landing alongside the baymen and local fishermen and hunters, we never had problems. However, these last 10 years or so, the ramp at Scott's has been ignored by your office. The access road is terrible as well as the parking lot. The dock is falling apart. There is no enforcement of the use that I have seen and I'm there once a week throughout the year. The parking signs along the bulkhead are gone or covered with weeds, so launching a boat always is an argument. The day I agreed to do this survey, I returned to my truck being broken into with gear stolen, for the third time now. I suggest a permit system for an annual fee. I would be happy to pay for security and upgrades. If you charge for the drive-around then why not the ramp?

I am fully in favor of spending what is needed to restore the NWR to conditions prior to Storm Sandy damage. This fine example of the NWR system is an ideally located facility to support wildlife and expose the population to wildlife and its support environment. A supportive public grows out of awareness. The NWR provides experiences which produce positive awareness.

I am saddened by Sandy's destruction and hope that Forsythe can recover soon with minimal damage to the environment, for the sake of the wildlife, and selfishly, for my own. I miss the wildlife drive - seeing the birds and photographing them. Don't give up on this NWR it is extremely important to many people.

I enjoy going to this refuge and hope that the dike will be repaired soon for the benefit of the migratory birds and us birdwatchers.

I have been coming here for at least 20 years. I have learned to keep my windows up when the greenheads are in season.

I have been going to this refuge since I was 17. It is near our summer home in Brigantine.

I have been to the "Brig" every year since 1956. It needs nothing to continue to be the crown jewel of wildlife viewing on the New Jersey coast. Change nothing. Recognize and celebrate success. Don't change things for the sake of change (masquerading as progress). Thanks so much for maintaining the refuge in such splendid condition all these years!

I have been visiting the Forsythe NWR for many years and have always found it an enjoyable experience.

I hope they get the road fixed soon. The drive is nice.

I hope visitors continue to respect this place. I am an elementary teacher and would like to have seen a bit more of an exhibit about the natural environment and species of birds specifically. Kudos to the staff of Forsythe for their hospitality.

I really enjoy the Forsythe Refuge for nature observation and photography. My only complaint is the dust.

I sincerely hope the damage to the refuge will be repaired as soon as possible. I would be willing to contribute toward that end.

I think that refuges and wildlife management parks along with national and state parks are important to keep parts of the world free from construction, pollution, etc. A place where you can take your children and they can learn and respect wildlife and wildlife can thrive.



I truly wish that more money would be dedicated to this refuge. It is a truly remarkable place and I know that there are pumps that are in desperate need of fixing.

I visit Scott's Landing almost on a daily basis. I find the serenity in viewing wildlife. There are times when I refer visitors to the main part of the refuge.

Is there anything you can do as a volunteer to help repair the refuge or help with the animals? If so please have someone contact me at (e-mail given). I also would like to know how I can enter my photograph to be chosen for a duck stamp. It took first place at the duck and decoy show in Tuckerton this year.

It was a pleasant find on our trip to Cape May to see the migratory birds.

It's great having a place so close to home to just get out and look around. There's always something to report as "new". Saw the lady's slippers in bloom this spring. Last fall it was turkeys foraging about.

Keep up the good work!

Keep up the good work.

Keep up the good work. The land protected and saved in its natural state will allow my grandchildren's children to visit the woods and enjoy the peace and quiet of nature.

Keep up the great work you all do, our children and their children will surely benefit and hopefully appreciate your efforts.

Love the refuge but it was damaged a lot by the hurricane.

Mainly closed because of Sandy.

Most outdoor/recreation trips are local.

My husband and I love coming and riding through the park. Thank you.

Needs better education for people who never experience wildlife; what they are seeing along with selling good wildlife books and charts.

New Visitor Center is great. Gardens outside center are nice, could use some better signage. Love the wildness factor so near to high population areas (Atlantic City, Philadelphia, New York City). Needs to be better publicized for regional visitors to take advantage. Anyone have contacts with Atlantic City or other area tourism boards?

Our last visit to this refuge followed Hurricane Sandy which severely damaged facilities and have affected my responses.

Please fix the roads!

Please keep up the good work. I hope to visit again in late summer.

Regarding the question above. I go to the refuge in my area at least 3 times a week to photograph the egrets, swans and other shore birds seen there.

Saw lots of birds. Enjoyed the visit.

Thank you for making it available. Often I see people sitting in their cars enjoying the peaceful setting. It would be greatly enhanced by the provision of a porta potty or outhouse.

Thank you. I love thinking about Forsythe and have always brought friends to visit. My visits usually included spending time drawing.

The bulk head appears to be in disrepair at Scott's Landing Road.

The refuge is a wonderful place to spend a day hiking and observing nature but I don't think most people are aware of its existence. Even many local residents drive by with no idea of what it is.

This is an awesome refuge, so much wildlife habitat in the middle of a well developed coast.

This is my favorite place on earth. Thank you.

This refuge should not have an entry fee. I buy a yearly pass and visit often so the cost per visit is very low but it is the principle. This is a federal park and should use federal dollars and not charge for entry.

Very enjoyable refuge to visit that is close to home, friendly staff, and overall refuge is laid out well and maintained properly.

Visited when my children were younger and now I wanted to show my grandchildren.

We all had an excellent time, both with a guided bird walk and we also took the driving tour. Very enjoyable!

We are hoping that the road will be repaired soon so that the "Wildlife Drive" at the Brigantine Section of The Edwin B. Forsythe NWR will be able to be reopened.

We were so upset by the damage to the refuge from Hurricane Sandy. We were also so impressed with the speed of the staffs efforts to re-open the refuge. We moved to town from an area that we lived in last year. One of the reasons we chose the area was the distance that we were from "Brig". We used to live about 120 miles away from Brig and paid over 30 dollars in gas and tolls and still we would try to visit once a month. Brig is one of our favorite places in the state!

With Ed Jones's help, I inscribed my grandchildren's names on the boardwalk last year for Christmas. They loved it and run to see it each visit. Programs for school age kids and getting them involved in environmental issues are our only hope for the future.