

Social Science Program National Park Service U.S. Department of the Interior

Visitor Services Project



Fire Island National Seashore Visitor Study

Summer 2008



Park Studies Unit Visitor Services Project Report 203



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March 2009

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Visitor Services Project Fire Island National Seashore Report Summary

- This report describes the results of a visitor study at park facilities within Fire Island National Seashore (NS) during July 19-27, 2008. A total of 1,135 questionnaires were distributed to visitor groups. Of those, 636 questionnaires were returned resulting in a 56% response rate.
- This report profiles a systematic random sample of visitors at park facilities within Fire Island NS. Most results are presented in graphs and frequency tables. Summaries of visitor comments are included in the report and complete comments are included in the Visitor Comments Appendix.
- Thirty-three (33%) percent of visitor groups were in groups of two (2) and 30% were in groups of five (5) or more. Forty-six (46%) percent of visitor groups were in family groups.
- United States visitors comprised 97% of total visitors, from New York (84%) and 37 other states and Puerto Rico. International visitors represented 3% of total visitation, with 34% from Canada, 11% from Australia, and 12 other countries.
- Fifty-four (54%) percent of visitors were ages 36-65 years, 7% were 66 years or older, and 18% were ages 15 years or younger. Six (6%) percent of visitor groups reported physical conditions that made it difficult to access or participate in park services or activities.
- Forty-three (43%) percent of visitors had visited the park once in the past 12 months, while 34% had visited five (5) or more times.
- Prior to this visit, 80% of visitor groups were aware that Fire Island NS is a unit of the National Park System and 67% were aware of the difference between Fire Island NS and other public beaches.
- Prior to this visit, most visitor groups obtained information about Fire Island NS through previous visits (72%) and friends/relatives/word of mouth (48%). Most visitor groups (91%) obtained the information they needed. Nine (9%) percent of visitor groups did not obtain any information about the park prior to their visit.
- Most visitor groups (88%) were residents of the local area (within 45 miles of any park entry point). Visiting Fire Island NS was the primary reason that brought 59% of the non-resident visitor groups to the park area, while 19% came to visit friends and relatives in the area.
- Of visitor groups that spent less than 24 hours visiting the park, 42% spent five (5) or more hours. For those who visited for more than 24 hours, 38% spent four (4) or more days. The average length of stay, including those who spent less then 24 hours and those who spent more, was 27 hours (1.1 days).
- Of the sites operated by the National Park Service, 60% of visitor groups visited the beaches, and 41% visited the Fire Island Lighthouse. Among sites not operated by the National Park Service, Robert Moses State Park was the most common destination, receiving 50% of visitor groups.
- Of the activities in which visitors engaged on *past* trips to Fire Island NS, beach activities was the most common (90%), followed by spending time with family and friends (80%). The most common activities on *this* trip were also beach activities (76%) and spending time with family and friends (68%).
- Most visitor groups (89%) rated the overall quality of facilities services, and recreational
 opportunities at Fire Island NS as "very good" or "good." One (1%) percent of visitor groups
 rated the overall quality as "very poor" or "poor."

For more information about the Visitor Services Project, please contact the Park Studies Unit at

the University of Idaho at (208) 885-7863 or the following website http://www.psu.uidaho.edu.

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INTRODUCTION

"Rhythmic waves, high dunes, ancient maritime forests, historic landmarks and glimpses of wildlife— Fire Island has been a special place for diverse plants, animals and people for centuries. Far from the sounds and pressures of nearby big-city life, Fire Island National Seashore's dynamic barrier island beaches offer solitude and camaraderie, and spiritual renewal to civilization-weary people." (Fire Island National Seashore, National Park Service, Department of the Interior website: www.nps.gov/fiis January, 2009)

This report describes the results of a visitor study at park facilities within Fire Island National Seashore during July 19-27, 2008 by the National Park Service (NPS) Visitor Services Project (VSP), part of the Park Studies Unit (PSU) at the University of Idaho.

Organization of the report

The report is organized into three sections.

- <u>Section 1</u>: **Methods**. This section discusses the procedures, limitations, and special conditions that may affect the results of the study.
- <u>Section 2</u>: **Results**. This section provides summary information for each question in the questionnaire and includes a summary of visitor comments. The presentation of the results of this study does not follow the same order of questions in the questionnaire.

Section 3: Appendices

Appendix 1: The Questionnaire. A copy of the questionnaire distributed to groups.

- Appendix 2: *Additional Analysis*. A list of options for cross-references and cross comparisons. These comparisons can be analyzed within park or between parks. Results of additional analyses are not included in this report as they may only be requested after the results of this study have been published.
- Appendix 3: *Decision rules for checking non-response bias.* An explanation of how the non-response bias was determined.
- Appendix 4: *Visitor Services Project Publications.* A complete list of publications by the PSU. Copies of these reports can be obtained by visiting the website:

http://www.psu.uidaho.edu/vsp/reports.htm or contacting the PSU office at (208) 885-7863.

Visitor Comments Appendix: A separate appendix provides visitor responses to open-ended questions. It is bound separately from this report due to its size.

1

Presentation of the results

Results are represented in the form of graphs (see example below), scatter plots, pie charts, tables, or text.

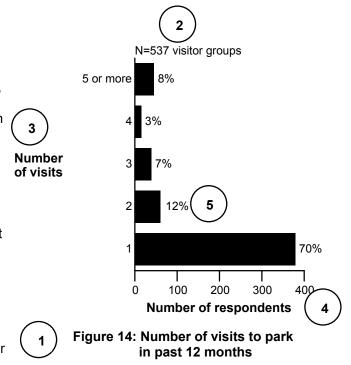
SAMPLE ONLY

- 1: The figure title describes the graph's information.
- Listed above the graph, the "N" shows the number of individuals or visitor groups responding to the question. If "N" is less than 30, "CAUTION!" is shown on the graph to indicate the results may be unreliable.

*appears when total percentages do not equal 100 due to rounding.

**appears when total percentages do not equal 100 because visitors could select more than one answer choice.

- 3: Vertical information describes the response categories.
- Horizontal information shows the number or proportions of responses in each category.
- 5: In most graphs, percentages provide additional information.



METHODS

Survey Design

Sample size and sampling plan

All VSP questionnaires follow design principles outlined in Don A. Dillman's book *Mail and Internet Surveys: The Tailored Design Method* (2007). Using this methodology, the sample size was calculated based on the park visitation statistics of previous years.

Brief interviews were conducted with a systematic, random sample of visitor groups that visited park facilities within Fire Island National Seashore during July 19-27, 2008. During this survey, 1,240 visitor groups were contacted at seven national park locations; 1,135 of these groups (91.5%) accepted questionnaires (average acceptance rate for 183 VSP visitor studies is 90.9%). Table 1 shows the numbers of questionnaires distributed and the return rate at each location. Questionnaires were completed and returned by 636 visitor groups resulting in a 56.0% response rate for this study. The average response rate for the 183 VSP visitor studies conducted from 1988 through 2007 was 74.9%.

Table 1: Questionnaire distribution N₁=number of guestionnaires distributed N₂=number of questionnaires returned Distributed Returned % Sampling site (NPS-operated) % N₁ N_2 351 208 31 33 Fire Island Lighthouse 275 24 156 25 Sailors Haven 35 3 25 4 Talisman 297 22 26 138 Watch Hill 12 1 10 2 Old Inlet 113 9 61 10 Wilderness VC 52 5 38 6 William Floyd Estate 636 102* Total 1,135 100

*total percentages do not equal 100 due to rounding

Questionnaire design

The Fire Island National Seashore questionnaire was developed at a workshop held with park staff to design and prioritize the questions. Some of the questions were comparable with VSP studies conducted at other parks while others were customized for Fire Island National Seashore. Many questions asked visitors to choose answers from a list of responses, often with an open-ended option, while others were completely open-ended.

No pilot study was conducted to test the Fire Island National Seashore questionnaire. However, all questions followed OMB guidelines and/or were used in previous surveys. Thus, the clarity and consistency of the survey instrument have been tested and supported.

Survey procedure

Visitor groups were greeted, briefly introduced to the purpose of the study, and asked to participate. If visitors agreed, they were asked which member (at least 16 years of age) had the next birthday. The individual with the next birthday was selected to complete the questionnaire for the group. An interview, lasting approximately two minutes, was conducted with that person to determine group size, group type, and the age of the member completing the questionnaire. The individual was asked for their name, address, and telephone number in order to mail them a reminder/thank you postcard and follow-ups. Visitors were asked to complete the questionnaires were pre-addressed and affixed with a U.S. first class postage stamp.

Two weeks following the survey, a reminder/thank you postcard was mailed to all participants who provided a valid mailing address. Replacement questionnaires were mailed to participants who provided valid mailing addresses and who had not returned their questionnaires four weeks after the survey. Seven weeks after the survey, a second round of replacement questionnaires was mailed to visitors who had not returned their questionnaires.

Data Analysis

Returned questionnaires were coded and the information was entered into a computer using custom and standard statistical software applications—Statistical Analysis Software (SAS®) and a custom designed FileMaker Pro® application. Descriptive statistics and cross-tabulations were calculated for the coded data and responses to open-ended questions were categorized and summarized. The data were entered twice—by two independent data entry staff—and validated by a third staff member.

4

Limitations

Like all surveys, this study has limitations that should be considered when interpreting the results.

- 1. This was a self-administered survey. Respondents completed the questionnaire after the visit, which may have resulted in poor recall. Thus, it is not possible to know whether visitor responses reflected actual behavior.
- The data reflect visitor use patterns to the selected sites during the study period of July 19-27, 2008. The results present a 'snapshot-in-time' and do not necessarily apply to visitors during other times of the year.
- 3. Caution is advised when interpreting any data with a sample size of less than 30, as the results may be unreliable. Whenever the sample size is less than 30, the word "CAUTION!" is included in the graph, figure, table, or text.
- 4. Occasionally, there may be inconsistencies in the results. Inconsistencies arise from missing data or incorrect answers (due to misunderstood directions, carelessness, or poor recall of information). Therefore, refer to both the percentage and N (number of individuals or visitor groups) when interpreting the results.

Special Conditions

Weather during the survey period varied, with sunny and humid conditions, or occasional clouds and rain showers. Several days during the survey period, ferries could not approach the island due to heavy rains and strong wind. This resulted in fewer ferries to and from the island during the day. The weather conditions greatly affected the number of visitors to park sites as well as activities that visitors could engage in during these periods.

Checking Non-response Bias

The three variables used to check non-response bias were group type, age of the group member who actually completed the questionnaire, and group size.

Table 2: Comparison of respondents and non-respondents group type Total

Group type	Respondent	Non-respondent	i otai surveyed
Alone	53	80	133
Family	286	261	547
Friends	126	94	220
Family and friends	155	40	195
Other	8	11	19
Total	628	486	1114

Chi-square = 62.487 df =4 p-value <0.001

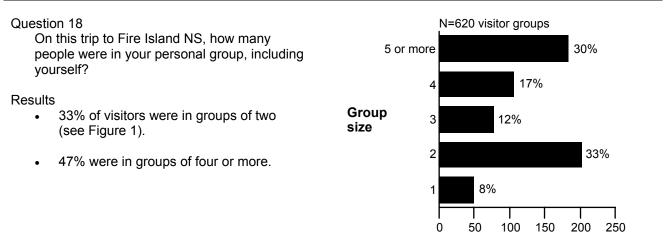
Table 3: Comparison of respondents and non-respondents age and group size					
Variable	Respondent e N Average		Non-respondent N Average		p-value (t-test)
Group size	622	4.27	495	3.74	0.112
Age	629	49.01	499	42.30	<0.001

The test results show that while there was no significant difference in group size, there were significant differences between respondents and non-respondents in term of average age and group types. Since the unit of analysis was a visitor group, non-response bias was detected. Information pertaining visitor demographic should be interpreted with caution.

RESULTS

Visitor and Group Characteristics

Visitor group size





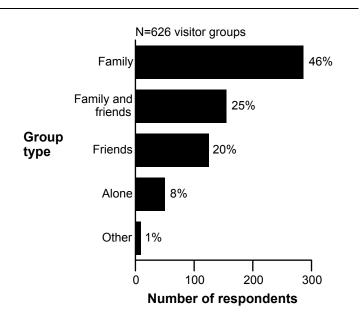
Visitor group type

Question 17

On this trip, what kind of personal group (not guided tour/school group/other organized group) were you with?

Results

- 46% of visitor groups were made up of family members (see Figure 2).
- 25% were with family and friends.
- "Other" groups (1%) were:
 - Colleagues/coworkers Friends of Watch Hill Foreign guest Kayaking club Business



Number of respondents

Figure 2: Group type

*total percentages do not equal 100 due to rounding

Visitors with organized groups

Question 16a

On this trip, were you and your personal group with a commercial guided tour group?

Results

Fewer than 1% of visitor groups • were with a commercial guided tour group (see Figure 3).

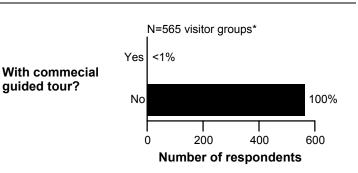


Figure 3: Visitors with a commercial guided tour group

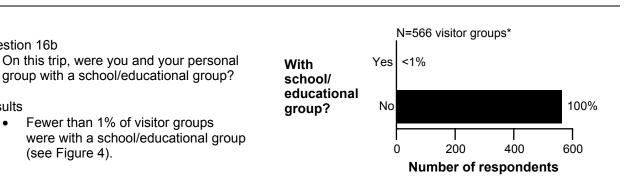


Figure 4: Visitors with a school/educational group

Question 16c

(see Figure 4).

Question 16b

Results

٠

On this trip, were you and your personal group with an other organized group (such as business group, scout group, etc.)?

Results

2% of visitor groups were with an • other organized group (see Figure 5).

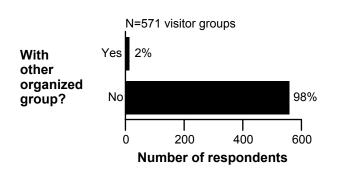


Figure 5: Visitors with an other organized group

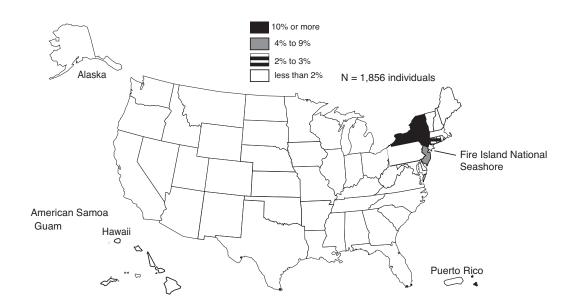
*total percentages do not equal 100 due to rounding

United States visitors by state of residence

Question 19b For you and your personal group on this trip, what is your state of residence?	Table 4: United	Number	Percent of U.S. visitors N=1,856	Percent of total visitors N=1,909
Note: Response was limited to	State	of visitors	individuals	individuals
seven members from each visitor group.	New York New Jersey Connecticut	1,550 67 49	84 4 3	81 4 3
Results	Florida	26	1	1
U.S. visitors	California	24	1	1
were from 38 states and Puerto	Maryland	14	1	1
Rico and comprised 97% of	Massachusetts	13	1	1
total visitation to the park during	Pennsylvania	13	1	1
the survey period.	Indiana	10	1	<1
84% of U.S.	29 other states and Puerto Rico	90	4	5

visitors came from New York (see Table 4 and Map 1).

Smaller proportions of U.S. visitors came from 37 other states.



Map 1: Proportions of United States visitors by state of residence

^{*}total percentages do not equal 100 due to rounding

International visitors by country of residence

Question 19b	Table 5: Interna	tional visitor	s by country of	residence *
For you and your personal group on this trip, what is your country of residence?			Percent of international visitors	Percent of total visitors
Note: Response was limited to seven		Number	N=53	N=1,909
members from each visitor group.	Country	of visitors	individuals	individuals
	Canada	18	34	1
Results	Australia	6	11	<1
International	Cayman Islands	5	9	<1
visitors were from 14 countries	Germany	5	9	<1
and comprised 3% of total	Belgium	4	8	<1
visitation to the park during the	United Kingdom	4	8	<1
survey period (see Table 5).	Portugal	2	4	<1
	Spain	2	4	<1
34% of	Taiwan	2	4	<1
international visitors came from	Brazil	1	2	<1
Canada (see Table 5).	Guatemala	1	2	<1
	Italy	1	2	<1
11% came from	Japan	1	2	<1
Australia.	Russia	1	2	<1
	-			

Smaller proportions came from 12 other countries.

Number of visits to the park

Question 19c

For you and your personal group, how many times have you visited Fire Island NS in the past 12 months (including this visit)?

Note: Response was limited to seven members from each visitor group.

Results

- 43% of visitors had visited once in the past 12 months (see Figure 6).
- 34% of visitors had visited the park five or more times.

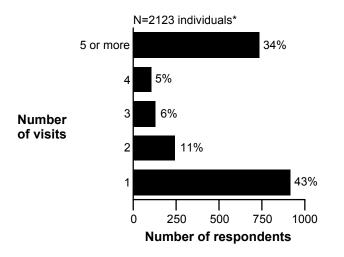


Figure 6: Number of visits to park in past 12 months

*total percentages do not equal 100 due to rounding

Months visited

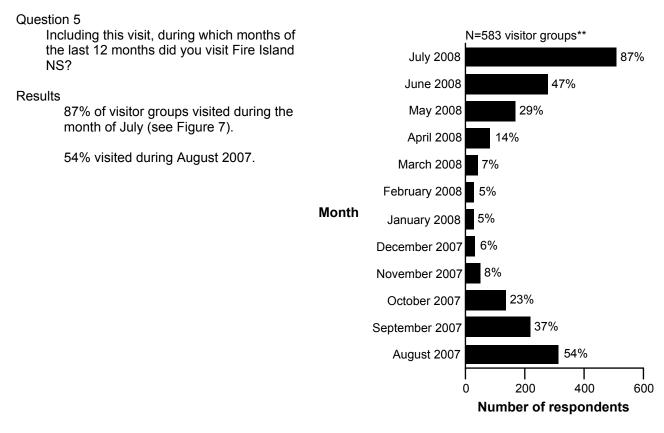


Figure 7: Months visited

Visitor age

Question 19a		N=2	101 individuals*
For you and your personal group member on this trip, what is your current age?		76 or older	2%
		71-75	2%
Note: Response was limited to seven members from each visitor group.		66-70	3%
Results		61-65	6%
• Visitor ages ranged from 1 to 95 years.		56-60	8%
 54% of visitors were between 36-65 years of age (see Figure 8). 		51-55	9%
• 18% were 15 years or younger.		46-50	12%
• 7% were 66 or older.	Age group	41-45	11%
• 7% were 66 61 61der.	(years)	36-40	8%
		31-35	5%
		26-30	7%
		21-25	4%
		16-20	4%
		11-15	6%
	10) or younger	12%
		0	100 200 300
		N	umber of respondents

Figure 8: Visitor age

Visitor ethnicity

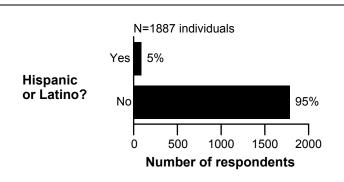
Question 21a

Are you or members of your group Hispanic or Latino?

Note: Response was limited to seven members from each visitor group.

Results

 5% of visitors were Hispanic or Latino (see Figure 9).





Visitor race

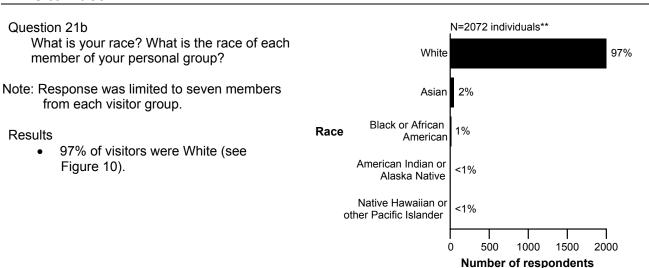


Figure 10: Race

*total percentages do not equal 100 due to rounding

Language used for speaking

Question 20a

When using an area such as Fire Island NS, which one language do you and most members of your personal group prefer to use for speaking?

Results

- 95% of visitors groups preferred to use English for speaking (see Figure 11).
- Table 6 shows languages other than English (5%) used for speaking – Interpret results with **CAUTION!**

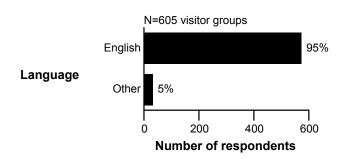


Figure 11: Preferred language for speaking

Table 6: Language other than English used for speaking		
N=14 visitor groups – CAUTION!		
Language N Percentage		
Duccion	2	01

Language	N	Percentage
Russian	3	21
Chinese	1	7
French	1	7
German	1	7
Japanese	1	7
Spanish	1	7
Bilingual group		
English/Spanish	3	17
English/French	1	17
English/German	1	17
English/Polish	1	17

*total percentages do not equal 100 due to rounding

Language used for reading

Question 20b

When using an area such as Fire Island NS, which one language do you and most members of your personal group prefer to use for reading?

Results

- 96% of visitors groups preferred to use English for reading (see Figure 12).
- Table 7 shows languages other than English (4%) used for reading – Interpret results with **CAUTION**!

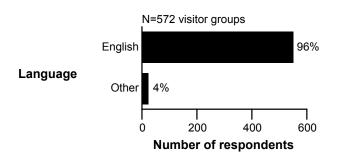


Figure 12: Preferred language for reading

Table 7: Language other than English used for reading N=8 visitor groups – CAUTION!		
Language	Ν	Percentage
Chinese	1	7
Russian	1	7
Spanish	1	7
Bilingual group		
English/Spanish	2	22
English/French	1	11
English/Polish	1	11
Spanish/Portuguese	1	11

*total percentages do not equal 100 due to rounding

Services needed in other languages

Question 20c

In your opinion, what services in the park need to be provided in languages other than English?

Results

- 11% of visitors groups needed services provided in languages other than English (see Figure 13).
- Table 8 shows the services needed in other languages.

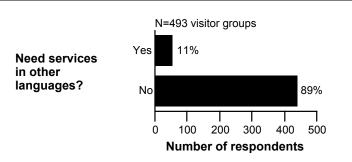


Figure 13: Need for services in other languages

Table 8: Services needed in languages other than English N=93 comments

Service	Number of times mentioned
Emergency/safety information	13
Directions	10
Restrooms	9
Signs	7
Maps	6
General information	5
All services	4
Exhibits	4
Tours	4
Park rules/regulation	3 3
Printed materials	3
Directional signs	2
Facilities	2
Food	2
Website	2
Access information	1
Assistance from park staff	1
Beach	1
Descriptions	1
Ferry dock information	1
Ferry schedule	1
Lifeguarded areas	1
Lighthouse information	1
Parking	1
Phone	1
Public health information	1
Schedules	1

*total percentages do not equal 100 due to rounding

Service	Number of times mentioned
Tick warnings	1
Trails	1
Visitor center	1
Visitor Center orientation (DVD)	1
Water conditions	1

Table 8: Services needed in languages other than English (continued)

Visitors with physical conditions/impairments

Question 22a

Does anyone in your personal group have a physical condition that made it difficult to access or participate in park activities or services?

Results

 6% of visitor groups had members with physical conditions that made it difficult to access or participate in activities or services (see Figure 14).

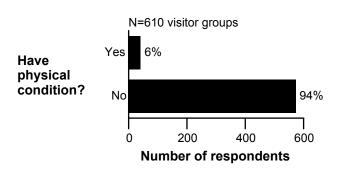


Figure 14: Visitors with physical conditions

Question 22b

If YES, what services or activities were difficult to access/participate in?

Results

- Thirty visitor groups answered this question.
- Activities or services that visitors with physical conditions had difficulty accessing or participating in were:
 - Access to facilities Beach access Boat access Boat dock Lighthouse climb/tour Ramps Restroom lines Stairs Sunken Forest Trail Walking

*total percentages do not equal 100 due to rounding

Awareness of NPS management

Question 2a

Prior to this trip to Fire Island, were you and your personal group aware that Fire Island NS is a unit of the National Park System?

Results

80% of visitor groups were aware, prior to their visit, that Fire Island NS is a unit of the National Park System (see Figure 15).

NOTE: All surveys were distributed at park facilities within Fire Island National Seashore.

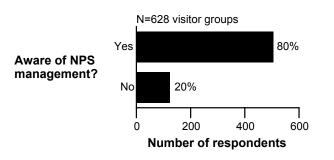


Figure 15: Awareness that Fire Island NS is a unit of the National Park System



Prior to this trip to Fire Island, were you and your personal group aware of the difference between Fire Island NS and other public beaches on the island, such as Smith Point County Park and Robert Moses State Park?

Results

67% of visitor groups were aware, prior to their visit, of the difference between Fire Island NS and other public beaches (see Figure 16).

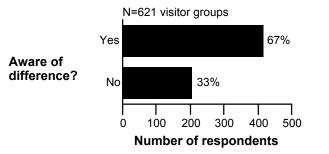


Figure 16: Awareness of difference between Fire Island NS and other public beaches

*total percentages do not equal 100 due to rounding

Trip/Visit Characteristics and Preferences

Information sources prior to visit

Question 1a

Prior to this trip, how did you and your personal group obtain information about Fire Island National Seashore (NS)?

Results

91% of visitor groups obtained information about Fire Island NS prior to their visit (see Figure 17).

• As shown in Figure 18, of those who obtained information prior to their visit, the most common sources were:

72% Previous visits 48% Friends/relatives/word of mouth

- Park partners from which visitors obtained information (4%) were: Appalachian Mountain Club Fire Island Lighthouse Preservation Society
 Friends of Fire Island National Seashore
- Special interest groups from which visitors obtained information (2%) were: 4H/Girl Scouts Adirondrock Mountain Club, Mohican Chapter American Association for Nude Recreation (AANR) Amityville Historical Society Tour Art group Deer over-population group Nassau Hiking and Outdoor Club N. Atlantic Canoes and Sea Kayak Skills and Adventures Yacht Club
- "Other" sources (3%) were: Diamond Tours Discover Life in America Internship Information/visitor center Leadership Blount Locals National Park listing Park ranger

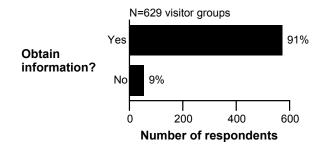


Figure 17: Visitor groups that obtained information about the park prior to visit

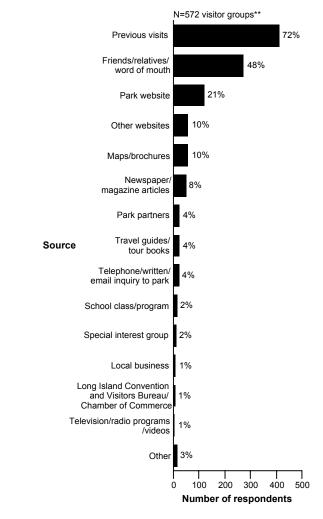


Figure 18: Sources of information used by visitors prior to visit

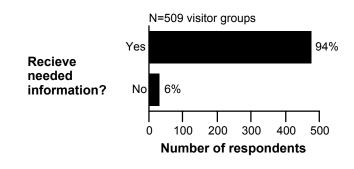
*total percentages do not equal 100 due to rounding

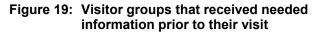
Question 1b

From the sources marked above, did you and your personal group receive the type of information about the park that you needed?

Results

94% of visitor groups received needed information prior to their visit (see Figure 19).





Question 1c

If NO, what type of park information did you and your personal group need that was not available?

Results

- Twenty-four visitor groups answered this question.
 - Additional information that visitor groups needed was:

Activities Areas available to visit Assistance for docking Directions Directions to ferry Dock space fee Facilities Facilities at each ferry stop Fees Ferry address Flora and fauna identification GPS system address Location of nude beaches Maps Walking tour of Sunken Forest What park has to offer What to expect

*total percentages do not equal 100 due to rounding

Primary reason for visiting Fire Island NS area

Question 3

On this trip, what was your primary reason for visiting the Fire Island NS area (within 45 miles of any entry point to Fire Island National Seashore)?

Results

88% of visitor groups were residents of the local area (see Figure 20).

Of the non-resident visitor groups, 59% visited the area primarily to visit Fire Island NS (see Figure 21).

Table 9 shows the "other" primary reasons (12%) for visiting the Fire Island NS area.

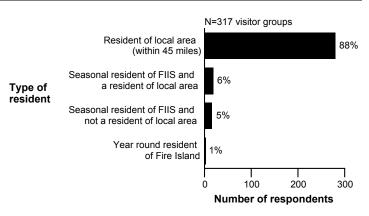


Figure 20: Resident status

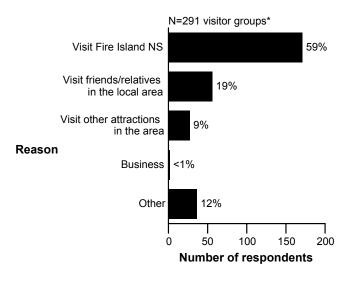


Figure 21: Primary reason for visiting the Fire Island NS area

*total percentages do not equal 100 due to rounding

Reason	Number of times mentioned
Beach	7
Vacation	5
Camping	5
Boating	4
Surfing	3
Art show	2
Wedding	2
Camp group from Saltaire	2
Close to home	2
Dock boat	1
Lighthouse volunteer	1
Mitch's Run	1
Research	1
Running	1
Terracaching	1
Walk	1
Watch Hill dockage	1
Weekly rental	1

Table 9: "Other" reasons for visiting the Fire Island NS areaN=41 comments

Place stayed on night before arrival

Question 4a

Where did you spend the night before you arrived at Fire Island NS? If you stayed at home, please write the name of your hometown and state.

Results

Table 10 shows the cities/towns in which visitor groups stayed on the night prior to their arrival at Fire Island NS.

Citu/town	Number of times mentioned
City/town	
New York City, NY	40
Oakdale, NY	25
Sayville, NY	25
Brooklyn, NY	24
Babylon, NY	22
Patchogue, NY	16
Massapequa, NY	13
West Islip, NY	13
Shirley, NY	12
Bay Shore, NY	11
Bayport, NY	11
Mastic Beach, NY	10
Smithtown, NY	10
Holbrook, NY	9
Lindenhurst, NY	9
Davis Park, Fire Island, NY	8
Melville, NY	8
Brookhaven, NY	7
East Islip, NY	7
Dix Hills, NY	6
Holtsville, NY	6
Manorville, NY	6
Medford, NY	6
West Sayville, NY	6
Bellport, NY	5
Blue Point, Fire Island, NY	5
Coram, NY	5
Fair Harbor, Fire Island, NY	5
Islip, NY	5
Lake Ronkonkoma, NY	5
Ridge, NY	5
Ronkonkoma, NY	5
Seaford, NY	5
Shoreham, NY	5
Brentwood, NY	4
Deer Park, NY	4
East Moriches, NY	4

Table 10: Places stayed on night before arrivalN=624 comments

*total percentages do not equal 100 due to rounding

City/town	Number of times mentioned
Floral Park, NY	4
Hauppauge, NY	4
Huntington, NY	4
Mastic, NY	4
Miller Place, NY	4
North Babylon, NY	4
Ocean Beach, Fire Island, NY	4
Port Washington, NY	4
Wantagh, NY	4
Amityville, NY	3
Bellmore, NY	3
Bohemia, NY	3
Bronx, NY	3
Center Moriches, NY	3
Cherry Grove, Fire Island, NY	3
Copiague, NY	3
	3
East Patchogue, NY	3
Great Neck, NY Great River, NY	3
	3
Manhattan, NY	3
Northport, NY	3
Ocean Bay Park, Fire Island, NY	
Port Jefferson, NY	3
Queens, NY	3
Rockville Centre, NY	3
Rocky Point, NY	3
Saltaire, Fire Island, NY	3
Selden, NY	3
West Babylon, NY	3
Westbury, NY	3
Atlantique, Fire Island, NY	3
Astoria, NY	2
Baldwin, NY	2 2
Bayside, NY	
Centereach, NY	2
Central Islip, NY	2
Commack, NY	2
Cos Cob, CT	2
Dunewood, Fire Island, NY	2
East Setauket, NY	2
Eastport, NY	2
Farmingville, NY	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Forest Hills, NY	2
Freeport, NY	2
Glen Cove, NY	2
Glen Head, NY	2
Huntington Station, NY	2
Island Park, NY	2

Table 10: Places stayed on night before arrival (continued)

City/town	Number of times mentioned
Islip Terrace, NY	2
Kings Park, NY	2
Levittown, NY	2
Long Island, NY	2
Mamaroneck, NY	2
Middle Island, NY	2
Mineola, NY	2
Mount Sinai, NY	2
Nesconset, NY	2
New Hyde Park, NY	2
Ridgewood, NJ	2
Ridgewood, NY	2
St. James, NY	2
Stamford, CT	2
Stony Brook, NY	2
White Plains, NY	2
Yonkers, NY	2
Baltimore, MD	1
Bayside/Queens, NY	1
	1
Brairwood, NY Brightwatora, NY	1
Brightwaters, NY	1
Brooklyn/Harlem, NY	
Buffalo, NY	1
Butler, NJ	1
Cedar Beach Marina, NY	1
Centerport, NY	1
Chappaqua, NY	1
Chatham, NJ	1
Chester, NY	1
Cutchogue, NY	1
Denver, CO	1
Douglaston, NY	1
East Northport, NY	1
East Rockaway, NY	1
Farmingdale, NY	1
Fire Island Pines, Fire Island, NY	1
Flushing, NY	1
Greenlawn, NY	1
Groton, CT	1
Hamden, CT	1
Harrington Park, NJ	1
Hempstead, NY	1
Hicksville, NY	1
Hoboken, NJ	1
Holmes, NY	1
Huntley, IL	1
Katonah, NY	1

Table 10: Places stayed on night before arrival (continued)

City/town	Number of times mentioned
Kismet, Fire Island, NY	1
Lido Beach, NY	1
Lincoln, MA	1
Lonelyville, Fire Island, NY	1
Long Beach, NY	1
Lynbrook, NY	1
Mahopac, NY	1
Mansfield Center, CT	1
Marisheid Center, Ch Maplewood, NJ	1
•	1
Massapequa Park, NY	1
Merrick, NY	
Milford, CT	1
Montauk, NY	1
Moriches, NY	1
Myrtle Beach, SC	1
Nesponsit, NY	1
New Brunswick, NJ	1
New Paltz, NY	1
New Rochelle, NY	1
Newtown, PA	1
North Bellmore, NY	1
North Massapequa, NY	1
North Plainfield, NJ	1
North Woodmere, NY	1
Oakland, NJ	1
Old Bethpage, NY	1
Omaha, NE	1
Ossining, NY	1
Palisades, NY	1
Pelham, NY	1
Plainview, NY	1
Point O' Woods, Fire Island, NY	1
Port Chester, NY	1
Queensbury, NY	1
Redding, CT	1
Rhinebeck, NY	1
Ridgefield, CT	1
Riverhead, NY	1
Robbins Rest, Fire Island, NY	1
Rockledge, FL	1
Rye, NY	1
Saint James, NY	1
Setauket, NY	1
Staten Island, NY	1
	•
Syosset, NY	1
Union, NJ West Cilgo, NY	1
West Gilgo, NY	1 1
Westchester County, NY	1

Table 10: Places stayed on night before arrival (continued)

Table 10: Places stayed on night before arrival
(continued)

	Number of times
City/town	mentioned
Westhampton, NY	1
Woodburg, NY	1
Woodhaven, NY	1
Woodstock, NY	1

Place stayed on night after departure

Question 4b

Where did you spend the night after your departure from Fire Island NS? If you stayed at home, please write the name for your hometown and state.

Results

Table 11 shows the cities/towns in which visitor groups stayed on the night after their departure from Fire Island NS.

	Number of times
City/town	mentioned
New York City, NY	40
Oakdale, NY	24
Sayville, NY	24
Brooklyn, NY	23
Babylon, NY	20
Patchogue, NY	16
West Islip, NY	12
Bayport, NY	11
Massapequa, NY	11
Shirley, NY	11
Bay Shore, NY	10
Smithtown, NY	10
Davis Park, Fire Island, NY	9
Holbrook, NY	9
Lindenhurst, NY	9
Mastic Beach, NY	9
Melville, NY	8
Brookhaven, NY	7
East Islip, NY	7
Cherry Grove, Fire Island, NY	6
Dix Hills, NY	6
Holtsville, NY	6
Manorville, NY	6
Medford, NY	6
West Sayville, NY	6
Bellport, NY	5
Blue Point, Fire Island, NY	5
Islip, NY	5
Lake Ronkonkoma, NY	5
North Babylon, NY	5
Shoreham, NY	5
Brentwood, NY	4
Coram, NY	4
Dunewood, Fire Island, NY	4
East Moriches, NY	4
Fair Harbor, Fire Island, NY	4
Freeport, NY	4

Table 11: Places stayed on night after departureN=609 comments

*total percentages do not equal 100 due to rounding

City/town	Number of times mentioned
Hauppauge, NY	4
Huntington, NY	4
Mastic, NY	4
Miller Place, NY	4
Northport, NY	4
Ocean Beach, Fire Island, NY	4
Port Washington, NY	4
Ridge, NY	4
Ronkonkoma, NY	4
Saltaire, Fire Island, NY	4
Seaford, NY	4
Wantagh, NY	4
Amityville, NY	3
Bellmore, NY	3
Bronx, NY	3
Center Moriches, NY	3
Centereach, NY	3
Copiague, NY	3
Deer Park, NY	3
East Patchogue, NY	3
Floral Park, NY	3
Great Neck, NY	3
Great River, NY	3
Port Jefferson, NY	3
	3
Queens, NY	3
Rockville Centre, NY	3
Rocky Point, NY	3
Selden, NY	
West Babylon, NY	3
Baldwin, NY	2
Bayside, NY	2
Central Islip, NY	2
Commack, NY	2
Cos Cob, CT	2
East Setauket, NY	2
Eastport, NY	2
Farmingville, NY	2
Forest Hills, NY	2
Glen Cove, NY	2
Glen Head, NY	2
Island Park, NY	2
Islip Terrace, NY	2
Kings Park, NY	2
Levittown, NY	2
Mamaroneck, NY	2
Manhattan, NY	2

Table 11: Places stayed on night after departure (continued)

o	Number of times		
City/town	mentioned		
Middle Island, NY	2		
Mineola, NY	2		
Mount Sinai, NY	2		
Nesconset, NY	2		
New Hyde Park, NY	2		
Ocean Bay Park, Fire Island, NY	2		
Ridgewood, NJ	2		
Ridgewood, NY	2		
St James, NY	2		
Stamford, CT	2		
Stony Brook, NY	2		
Westbury, NY	2		
Westhampton	2		
White Plains, NY	2		
Yonkers, NY	2		
Albany, CA	1		
Astoria, NY	1		
Atlantic City, NJ	1		
Atlantique, Fire Island, NY	1		
Baltimore, MD	1		
Bayside/Queens, NY	1		
Bohemia, NY	1		
Boonton, NJ	1		
Briarwood, NY	1		
Brightwaters, NY	1		
Brooklyn/Harlem, NY	1		
Buffalo, NY	1		
Butler, NJ	1		
Centerport, NY	1		
Chappaqua, NY	1		
Cherry Hill, NJ	1		
Clarks Summit, PA	1		
Douglaston, NY	1		
East Northport, NY	1		
East Rockaway, NY	1		
Everett, WA	1		
Farmingdale, NY	1		
Flushing, NY	1		
Fresh Meadows, NY	1		
Greenlawn, NY	1		
Groton, CT	1		
Heckscher State Park, NY	1		
Hicksville, NY	1		
Hoboken, NJ	1		
Holmes, NY	1		
Huntington Station, NY	1		
Katonah, NY	1		
	I		

Table 11: Places stayed on night after departure (continued)

	Number of times		
City/town	mentioned		
Kingston, NY	1		
Kismet, Fire Island, NY	1		
Lido Beach, NY	1		
Lincoln, MA	1		
London, England	1		
Lonelyville, Fire Island, NY	1		
Long Beach, NY	1		
Long Island, NY	1		
Lynbrook, NY	1		
Mahopac, NY	1		
Mansfield Center, CT	1		
Maplewood, NJ	1		
Marblehead, MA	1		
Massapequa Park, NY	1		
Merrick, NY	1		
Milford, CT	1		
Montreal, Canada	1		
Moriches, NY	1		
Myrtle Beach, SC	1		
Nesponsit, NY	1		
New Rochelle, NY	1		
Newtown, PA	1		
North Bellmore, NY	1		
North Massapequa, NY	1		
North Plainfield, NJ	1		
North Woodmere, NY	1		
Oakland, NJ	1		
Omaha, NE	1		
Orient, NY	1		
Ossining, NY	1		
Palisades, NY	1		
Park City, UT	1		
Peekskill, NY	1		
Pelham, NY	1		
Plainview, NY	1		
Point O' Woods, Fire Island, NY	1		
Port Chester, NY	1		
Queensbury, NY	1		
Redding, CT	1		
Ridgefield, CT	1		
Robbins Rest, Fire Island, NY	1		
Rye, NY	1		
Saint James, NY	1		
Salem, NH	1		
Schenectady, NY	1		
Setauket, NY	1		
Severn, MD	1		

Table 11: Places stayed on night after departure (continued)

City/town	Number of times mentioned
Shrewsburg, VT	1
Staten Island, NY	1
Syosset, NY	1
Union, NJ	1
Woodburg, NY	1
Woodhaven, NY	1
Woodstock, NY	1

Table 11: Places stayed on night after departure (continued)

Forms of transportation

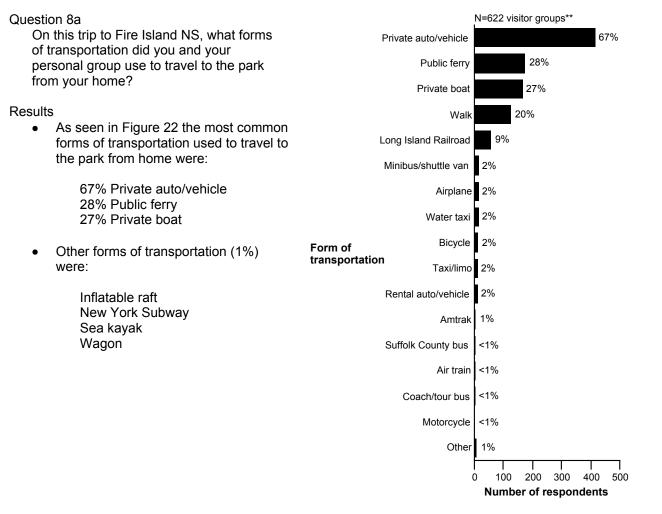


Figure 22: Forms of transportation used to travel to park from home

*total percentages do not equal 100 due to rounding

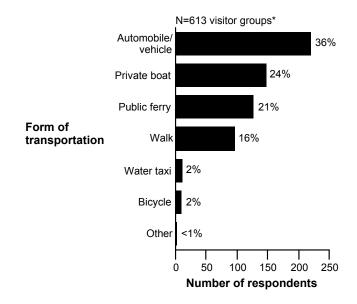
Question 8b

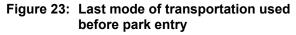
What was the last mode of transportation that you and your personal group used before entering the park?

Results

- 36% of visitor groups used an automobile/vehicle as their last mode of transportation before entering the park (see Figure 23).
- 24% used a private boat.
- 21% used a public ferry.
- Other modes of transportation (<1%) were:

Sea kayak





*total percentages do not equal 100 due to rounding

Overnight stay

Question 6a

On this trip, did you and your personal group stay overnight, away from your permanent residence, on Fire Island or in the area (off the island, but within 45 miles of any entry point to Fire Island)?

Results

 43% of visitor groups stayed overnight away from home, on Fire Island or in the area (see Figure 24).

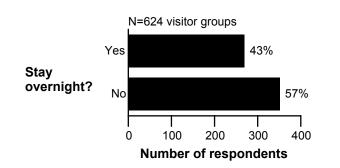


Figure 24: Overnight stay on Fire Island or in the area

Question 6b

Please list the number of nights you and your personal group stayed on Fire Island or in the area (off the island, but within 45 miles of any entry point to Fire Island)?

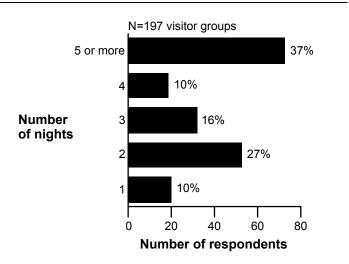
Results

Number of nights on Fire Island (including island communities)

- 37% of visitor groups spent five or more nights on Fire Island (see Figure 25).
- 43% spent two or three nights.

Number of nights in Fire Island NS area (off island, but within 45 miles)

- 45% of visitor groups stayed five or more nights in Fire Island NS area (see Figure 26).
- 40% spent one or two nights.





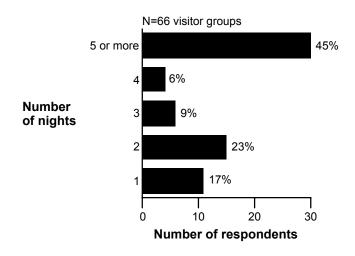


Figure 26: Number of nights stayed in the Fire Island NS area, within 45 miles

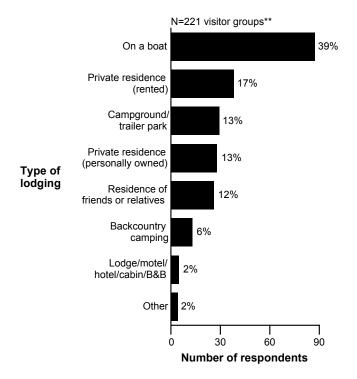
*total percentages do not equal 100 due to rounding

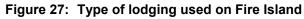
Question 6c and 6d In what type of lodging did you and your personal group spend the night(s)?

Results

Type of lodging on Fire Island

- 39% of visitor groups stayed on a boat (see Figure 27).
- 17% stayed in a rented private residence.
- "Other" types of lodging (2%) were:
 - Ranger's cottage Village-owned housing in Saltaire





Type of lodging off Fire Island (but within 45 miles)

- 38% of visitor groups stayed at the residence of friends or relatives (see Figure 28).
- 31% stayed in a private, personally owned residence.
- "Other" type of lodging (1%) was not listed.

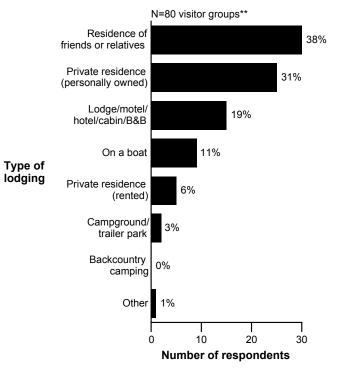


Figure 28: Type of lodging used off Fire Island (but within 45 miles)

*total percentages do not equal 100 due to rounding

Length of visit

Question 9b

For the sites you visited on this trip, please list the amount of time spent at each location in hours OR days.

Results

Hours spent if less than 24 hours

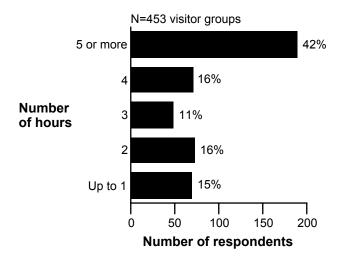
- 42% of visitor groups spent five or more hours visiting park sites (see Figure 29).
- The average time spent for visitor groups that stayed less then 24 hours was 4.8 hours.

Days spent if more than 24 hours

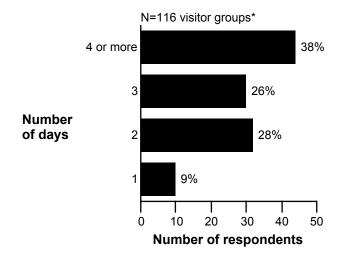
- 38% of visitor groups spent four or more days visiting park sites (see Figure 30).
- The average time spent for visitor groups that stayed more then 24 hours was 4.1 days.

Average time spent

• The average time spent in the park for all visitor groups was 27 hours, or 1.1 days.









^{*}total percentages do not equal 100 due to rounding

Sites visited

Question 9a

During this trip to Fire Island NS, which of the following sites did you and your personal group visit?

Results

• 96% of visitor groups visited sites in Fire Island NS (see Figure 31).

Sites operated by the National Park Service

• As shown in Figure 32, the most commonly visited National Park Service sites were:

60% Beaches 41% Fire Island Lighthouse

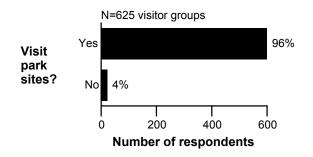
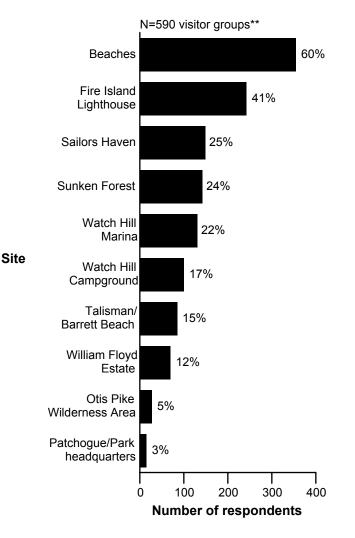


Figure 31: Visitors that visited sites in the park





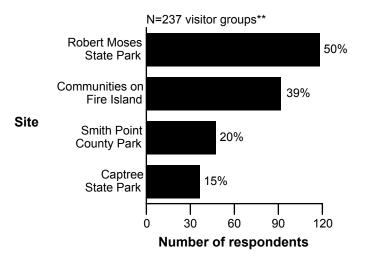
Sites not operated by the National Park Service

• As shown in Figure 33, the most commonly visited sites not operated by the National Park Service were:

50% Robert Moses State Park 39% Communities on Fire Island

Tables 12a and 12b show the time spent at each location (listed in Question 9a), in hours and days.

- 69% of visitor groups spent four or more hours at Talisman/Barrett Beach.
- 42% spent four or more days at Sailors Haven.





*total percentages do not equal 100 due to rounding

	Number of hours (%)*			
	Up to			4 or
Ν	1	2	3	more
11	81%	9%	0%	9%
176	57%	34%	7%	4%
98	29%	13%	10%	46%
111	43%	32%	11%	15%
30	20%	7%	3%	69%
50	58%	12%	4%	26%
17	48%	12%	24%	18%
227	21%	11%	14%	54%
11	36%	27%	10%	27%
30	0%	70%	20%	10%
20	55%	25%	10%	10%
47	24%	25%	19%	32%
89	37%	14%	11%	37%
32	41%	19%	3%	38%
	11 176 98 111 30 50 17 227 11 30 20 47 89	Up to N 1 11 81% 176 57% 98 29% 111 43% 30 20% 50 58% 17 48% 227 21% 11 36% 30 0% 227 21% 11 36% 30 0% 20 55% 47 24% 89 37%	Up to N 1 2 11 81% 9% 176 57% 34% 98 29% 13% 111 43% 32% 30 20% 7% 50 58% 12% 17 48% 12% 227 21% 11% 11 36% 27% 30 0% 70% 20 55% 25% 47 24% 25% 89 37% 14%	$\begin{tabular}{ c c c c c c } \hline Up to & & & & \\ \hline N & 1 & 2 & 3 \\ \hline 11 & 81\% & 9\% & 0\% \\ 176 & 57\% & 34\% & 7\% \\ 98 & 29\% & 13\% & 10\% \\ 111 & 43\% & 32\% & 11\% \\ 30 & 20\% & 7\% & 3\% \\ 50 & 58\% & 12\% & 4\% \\ 17 & 48\% & 12\% & 24\% \\ 227 & 21\% & 11\% & 14\% \\ 11 & 36\% & 27\% & 10\% \\ 30 & 0\% & 70\% & 20\% \\ \hline \\ \hline 20 & 55\% & 25\% & 10\% \\ 47 & 24\% & 25\% & 19\% \\ 89 & 37\% & 14\% & 11\% \\ \hline \end{tabular}$

Table 12a: Number of hours spent at sites on this visitN=number of visitor groups

Table 12b: Number of days spent at sites (in last 12 months) N=number of visitor groups

		Number of hours (%)*			
		Up to			4 or
Location (NPS site)	Ν	1	2	3	more
Fire Island Lighthouse – CAUTION!	2	50%	50%	0%	0%
Sailors Haven	33	12%	27%	18%	42%
Sunken Forest – CAUTION!	7	29%	43%	14%	14%
Talisman/Barrett Beach – CAUTION!	3	0%	67%	33%	0%
Watch Hill Marina	53	6%	23%	34%	39%
Watch Hill Campground – CAUTION!	19	11%	58%	21%	10%
Beaches – CAUTION!	1	100%	0%	0%	0%
Otis Pike Wilderness Area – CAUTION!	12	25%	33%	17%	25%
Location (non-NPS operated site)					
Captree State Park – CAUTION!	3	67%	33%	0%	0%
Communities on Fire Island	32	9%	9%	9%	72%
Robert Moses State Park – CAUTION!	1	100%	0%	0%	0%
Smith Point County Park – CAUTION!	2	100%	0%	0%	0%

Communities/housing areas visited

Question 10

Which Fire Island communities or housing areas did you and your personal group visit?

Results

- 54% of visitor groups did not visit any Fire Island communities or housing areas (see Figure 34).
- As shown in Figure 35, the communities or housing areas that were most commonly visited were:

29% Davis Park 26% Kismet 25% Ocean Beach 25% Cherry Grove

- "Other" areas (8%) visited were:
 - Smith's Point Old Inlet Talisman Barrett Pines Ranger cottage

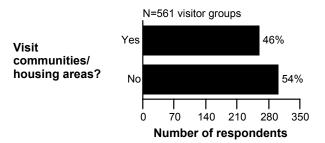


Figure 34: Visited communities/housing areas

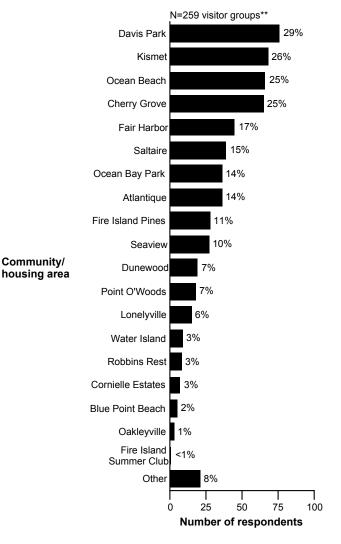


Figure 35: Visited Fire Island communities or housing areas

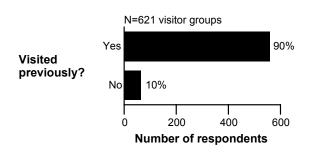
Activities on past trips

Question 12a

On past trips, in which activities did you and your personal group participate while at Fire Island NS?

Results

- 90% of visitor groups had visited Fire ٠ Island NS previously (see Figure 36).
- As shown in Figure 37, the most common • activities in which visitor groups participated on past trips were:
 - 90% Beach activities (beachcombing, swimming, sunbathing, etc.) 80% Spending time with family/friends 61% Experiencing solitude
- "Other" activities (6%) in which visitor groups had participated were:
 - Art show Biking Canoe trip Car shows Children's park Church Clamming Cleaning beach Crabbing Hiking Horseshoes Jogging/running Kayaking Lighthouse Lantern Walk NPS visitor center at Smith Point Picnicking School trips Share house Stargazing Surfing Visiting Cherry Grove Beach Visiting Lighthouse beach Visiting Ocean Bay Park Visiting Sunken Forest Visiting surrounding towns Walking



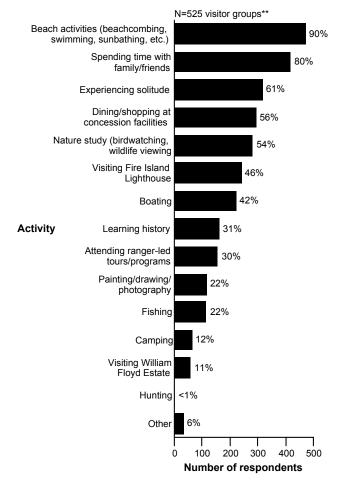




Figure 37: Past activities

*total percentages do not equal 100 due to rounding

Activities on this trip

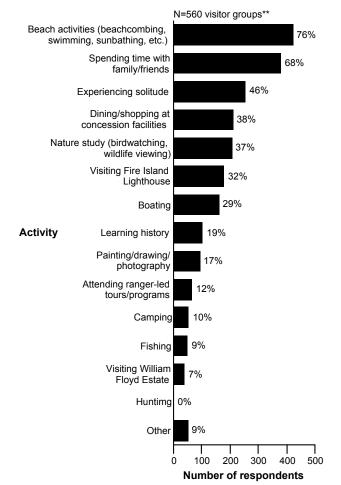
Question 12b

On this trip, in which activities did you and your personal group participate while visiting Fire Island NS?

Results

- As shown in Figure 38, the most common activities in which visitor groups participated on this trip were:
 - 76% Beach activities (beachcombing, swimming, sunbathing, etc.)68% Spending time with family/friends46% Experiencing solitude
- "Other" activities (9%) in which visitor groups participated were:

Art show Backcountry beach camping Berry picking Biking Block party Boardwalk Church Clamming Cleaning beach Entering artwork for lighthouse exhibit Experiencing nature's beauty Experiencing the island Furniture tour Hiking Horseshoes Jogging/running Junior Ranger Program Kayaking Obtaining National Park Service Passport Photography Picnicking Prayer and meditation Rest and relax Surfing Tennis Vacation Visiting clothing optional beach Visiting Sunken Forest Visiting surrounding towns Visiting Watch Hill Visiting Watch Hill Marina Walking Writing





*total percentages do not equal 100 due to rounding

Primary activity

Question 12c

Which one of the above activities was your primary reason for visiting Fire Island on this trip?

Results

 As shown in Figure 39, visitor groups' primary activities included:

> 40% Beach activities 15% Spending time with family/friends

- "Other" primary activities (6%) were:
 - Art exhibit Backcountry camping Biking Experience the island Furniture tour Hiking/walking Rest/relax Running See Sunken Forest Use the clothing optional beach Vacation

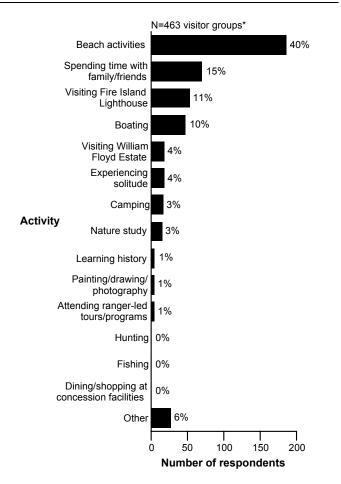
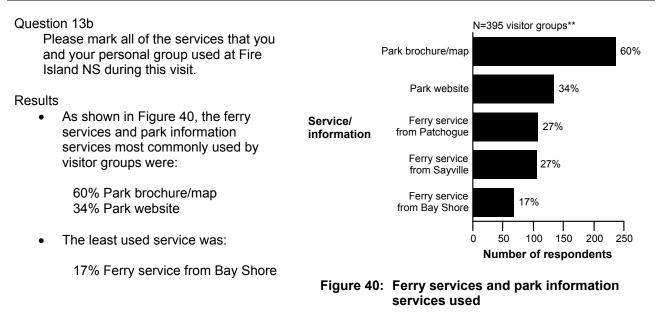


Figure 39: Primary activities

*total percentages do not equal 100 due to rounding

Ratings of Visitor Services and Facilities

Ferry services and park information services used



Note: Surveys were distributed at NPS sites only, which are not directly serviced by the Bay Shore ferries.

Importance ratings of ferry services and park information services

Question 13a

Whether or not you used them on this trip, please rate the importance from 1-5, of the Fire Island NS services to you and your personal group.

1=Not important 2=Somewhat important 3=Moderately important 4=Very important 5=Extremely important

Results

- Figure 41 shows the combined proportions of "extremely important" and "very important" ratings for the ferry and park information services that were rated by 30 or more visitor groups.
- The services receiving the highest combined proportions of "extremely important" and "very important" ratings were:
 - 52% Park brochure/map48% Park website48% Ferry service from Sayville48% Ferry service from Patchogue
- Figures 42 to 46 show the importance ratings for each service.
- Of the services rated by 30 or more visitor groups, the one receiving the highest "not important" rating was:

36% Ferry service from Bay Shore

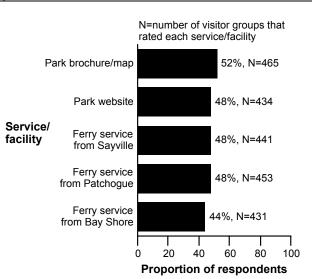


Figure 41: Combined proportions of "extremely important" and "very important" ratings of ferry services and park information services

Note: Surveys were distributed at NPS sites only, which are not directly serviced by the Bay Shore ferries.

*total percentages do not equal 100 due to rounding

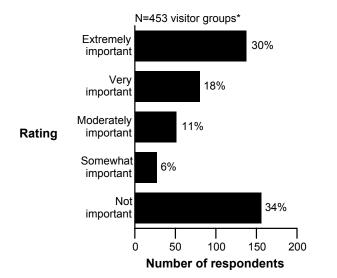
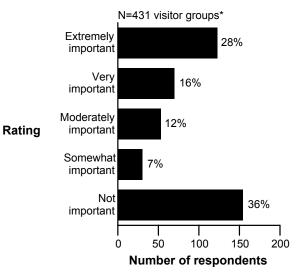
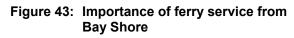


Figure 42: Importance of ferry service from

Patachogue





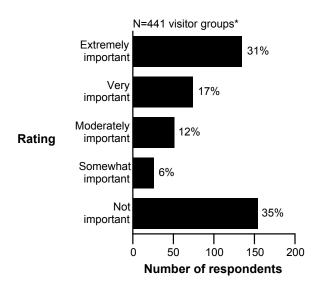
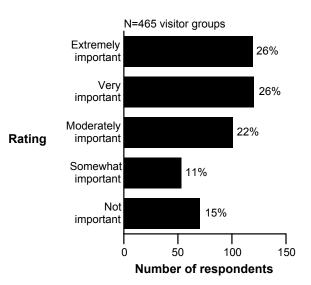
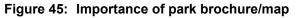


Figure 44: Importance of ferry service from Sayville





*total percentages do not equal 100 due to rounding

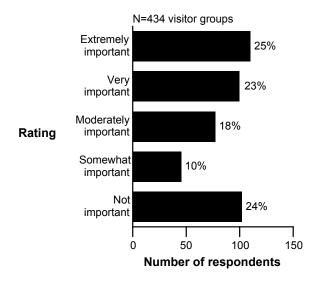


Figure 46: Importance of park website: www.nps.gov/fiis (used before or during trip)

Quality ratings of ferry services and park information services

Question 13c

Finally, for only those services that you and your personal group used during this trip, please rate their quality from 1-5.

1=Very poor 2=Poor 3=Average 4=Good 5=Very good

Results

- Figure 47 shows the combined proportions of "very good" and "good" ratings for the ferry and park information services and facilities that were rated by 30 or more visitor groups.
- The services receiving the highest combined proportions of "very good" and "good" ratings were:
 - 95% Ferry service from Sayville 87% Ferry service from Bay Shore 86% Park brochure/map
- Figures 48 to 52 show the importance ratings for each service.
- Of the services rated by 30 or more visitor groups, the one receiving the highest "poor" rating was:

3% Ferry service from Patachogue

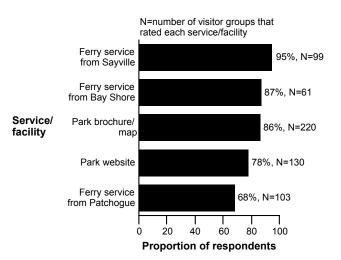
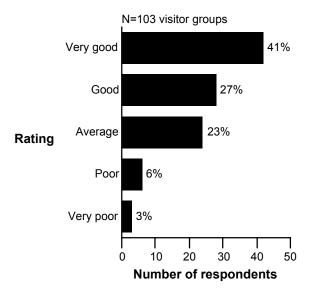
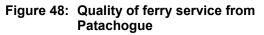


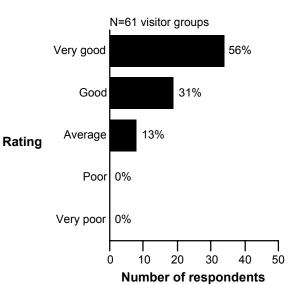
Figure 47: Combined proportions of "very good" and "good" ratings of ferry services and park information services

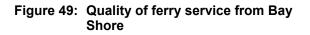
Note: Surveys were distributed at NPS sites only, which are not directly serviced by the Bay Shore ferries.

*total percentages do not equal 100 due to rounding









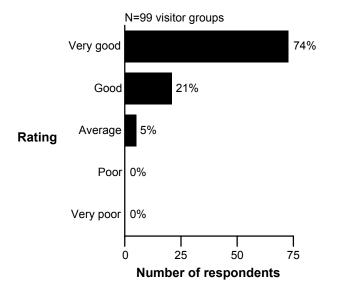


Figure 50: Quality of ferry service from Sayville

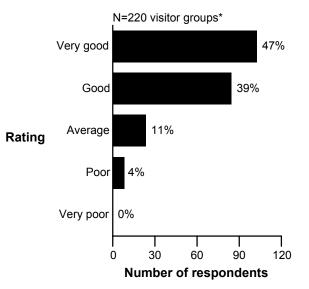
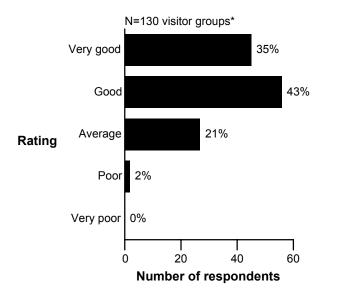


Figure 51: Quality of park brochure/map

*total percentages do not equal 100 due to rounding





Services and facilities used at Fire Island Lighthouse

Question 13b

Please mark the services/facilities that you and your personal group used at Fire Island National Seashore during this visit.

Results

 As shown in Figure 53, the services and facilities most commonly used by visitor groups at the Fire Island Lighthouse were:

> 86% Boardwalk/trails 85% Restrooms

• The least used service/facility was:

8% Access for disabled persons

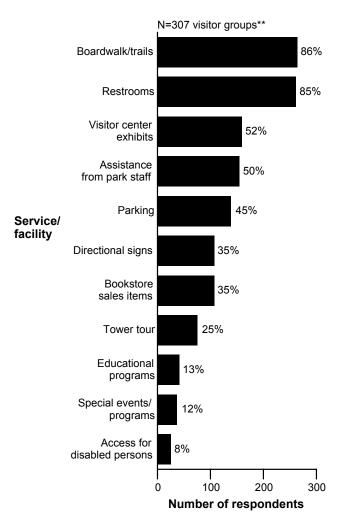


Figure 53: Services and facilities used at Fire Island Lighthouse

*total percentages do not equal 100 due to rounding

Importance ratings of services and facilities at Fire Island Lighthouse

Question 13a

Whether or not you used them on this trip, please rate the importance from 1-5, of the Fire Island NS services and facilities to you and your personal group.

1=Not important 2=Somewhat important 3=Moderately important 4=Very important 5=Extremely important

Results

- Figure 54 shows the combined proportions of "extremely important" and "very important" ratings for the services and facilities at Fire Island Lighthouse that were rated by 30 or more visitor groups.
- The services and facilities receiving the highest combined proportions of "extremely important" and "very important" ratings were:

89% Restrooms 86% Boardwalk/trails

- Figures 55 to 65 show the importance ratings for each service/facility.
- Of the services/facilities rated by 30 or more visitor groups, the one receiving the highest "not important" rating was:

29% Access for disabled persons

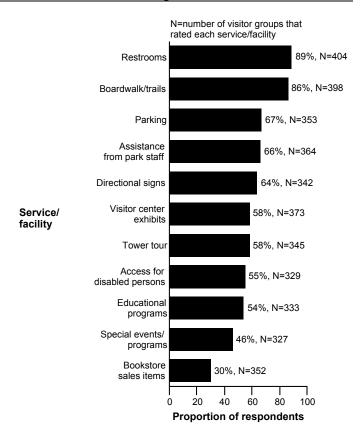
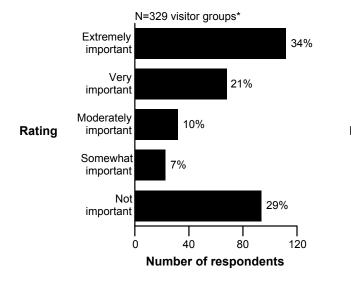
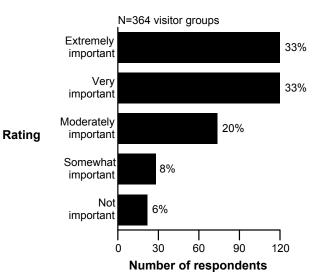
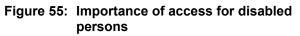


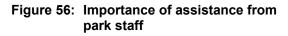
Figure 54: Combined proportions of "extremely important" and "very important" ratings of services/facilities at Fire Island Lighthouse

*total percentages do not equal 100 due to rounding









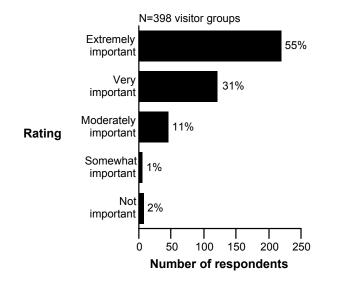
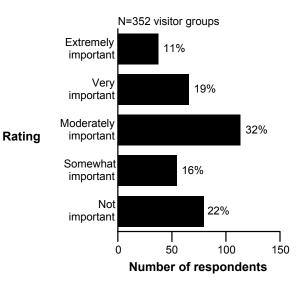


Figure 57: Importance of boardwalk/trails





*total percentages do not equal 100 due to rounding

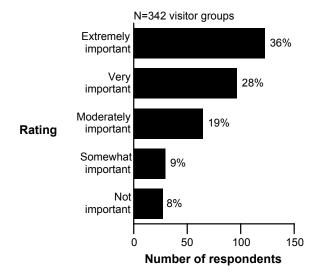
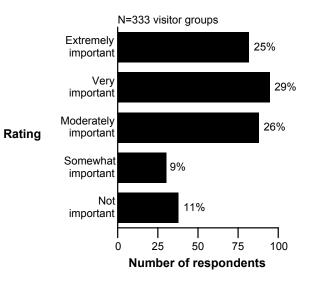
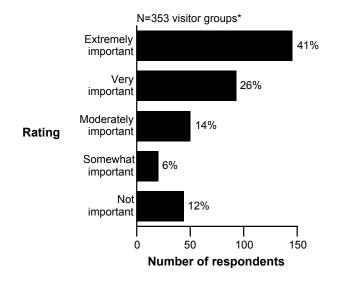


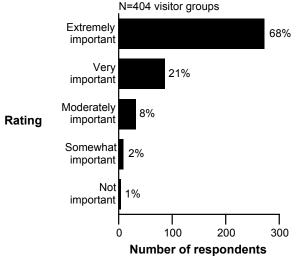
Figure 59: Importance of directional signs





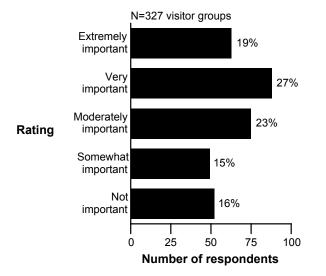




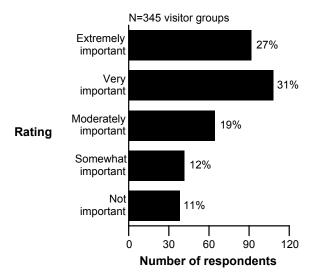




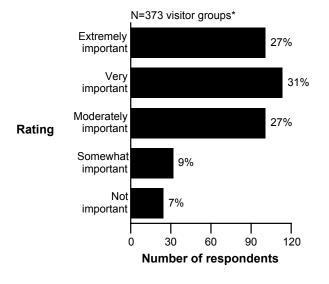
*total percentages do not equal 100 due to rounding













^{*}total percentages do not equal 100 due to rounding

^{**}total percentages do not equal 100 because visitors could select more than one answer

Quality ratings of services and facilities at Fire Island Lighthouse

Question 13c

Finally, for only those services and facilities that you and your personal group used, please rate their quality from 1-5.

1=Very poor 2=Poor 3=Average 4=Good 5=Very good

Results

- Figure 66 shows the combined proportions of "very good" and "good" quality ratings for information services and facilities at Fire Island Lighthouse that were rated by 30 or more visitor groups.
- The services/facilities that received the highest combined proportions of "very good" and "good" quality ratings were:
 - 96% Boardwalk/trails94% Assistance from park staff89% Tower tour89% Educational programs
- Figures 67 to 77 show the quality ratings for each service/facility.
- Of the services/facilities rated by 30 or more visitor groups, the one receiving the highest "very poor" quality rating was:

5% Parking

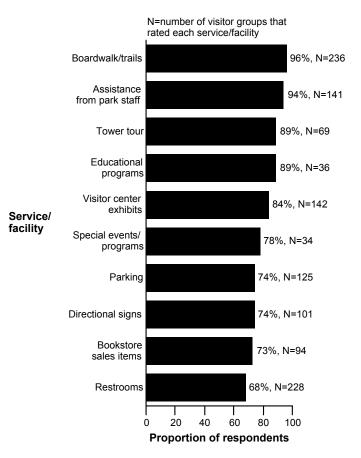
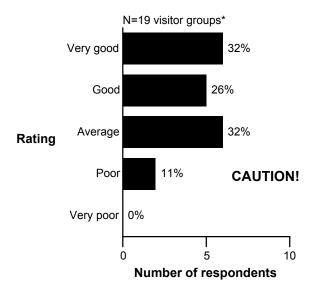
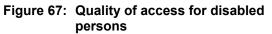
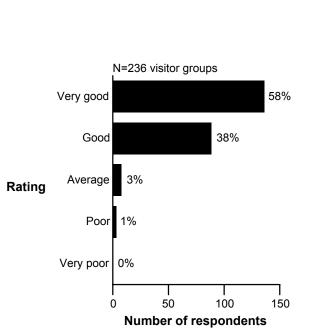


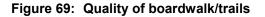
Figure 66: Combined proportions of "very good" and "good" quality ratings of services/ facilities at Fire Island Lighthouse

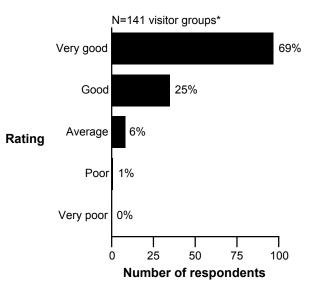
*total percentages do not equal 100 due to rounding

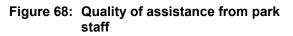


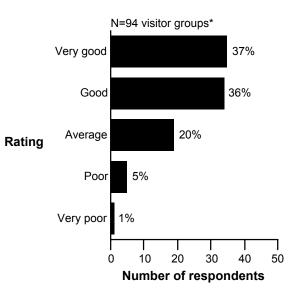


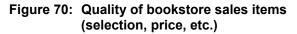




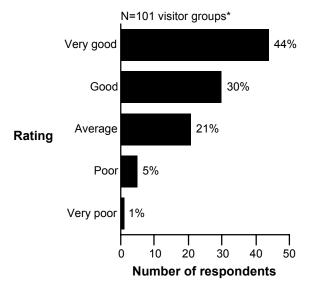


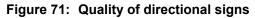


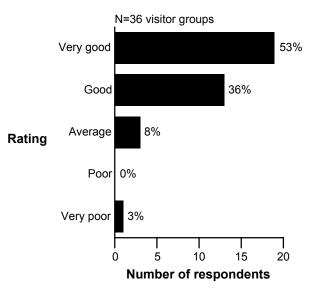


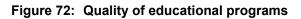


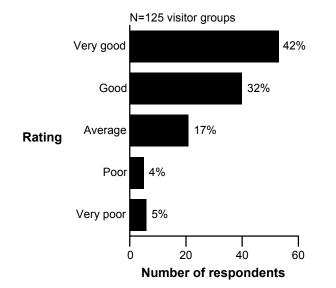
*total percentages do not equal 100 due to rounding

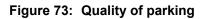












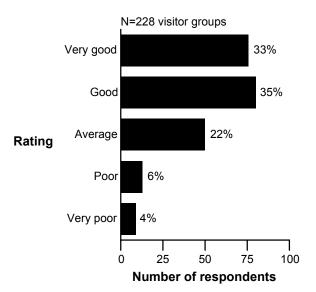
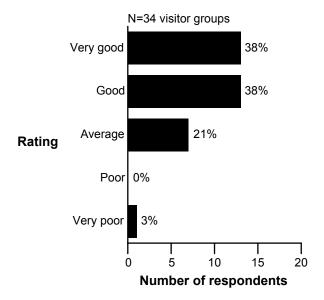
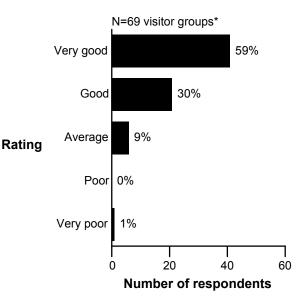
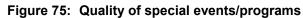


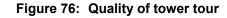
Figure 74: Quality of restrooms

*total percentages do not equal 100 due to rounding









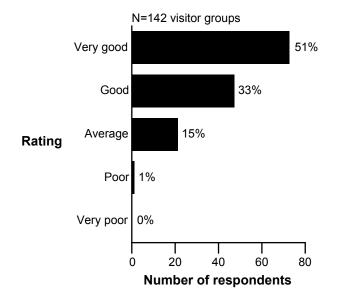


Figure 77: Quality of visitor center exhibits

^{*}total percentages do not equal 100 due to rounding

Visitor services and facilities used at Sailors Haven

Question 14b

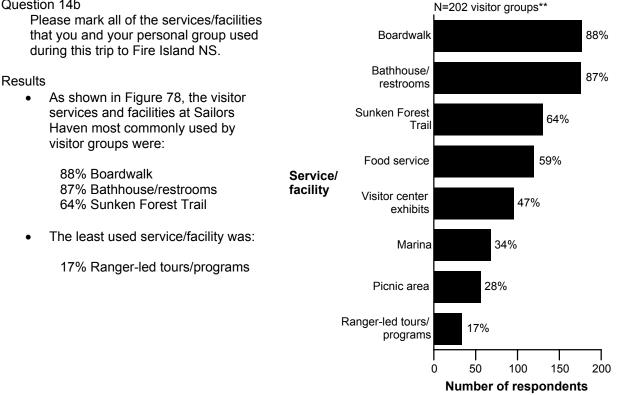


Figure 78: Visitor services and facilities used at Sailors Haven

*total percentages do not equal 100 due to rounding

Importance ratings of visitor services and facilities at Sailors Haven

Question 14a

Whether or not you used them on this trip, please rate the importance from 1-5, of Fire Island NS services and facilities to you and your personal group.

1=Not important 2=Somewhat important 3=Moderately important 4=Very important 5=Extremely important

Results

- Figure 79 shows the combined proportions of "extremely important" and "very important" ratings for visitor services and facilities at Sailors Haven that were rated by 30 or more visitor groups.
- The services/facilities receiving the highest combined proportions of "extremely important" and "very important" ratings were:

89% Bathhouse/restrooms 85% Boardwalk

- Figures 80 to 87 show the importance ratings for each service/facility.
- Of the visitor services/facilities rated by 30 or more visitor groups, the one receiving the highest "not important" rating was:

23% Marina

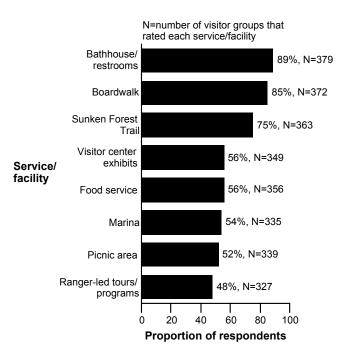
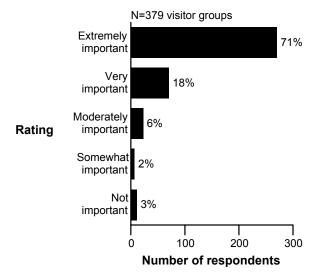
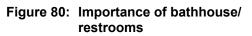
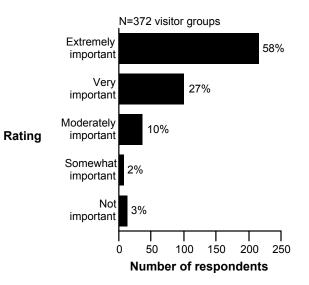


Figure 79: Combined proportions of "extremely important" and "very important" ratings of visitor services/facilities at Sailors Haven

*total percentages do not equal 100 due to rounding









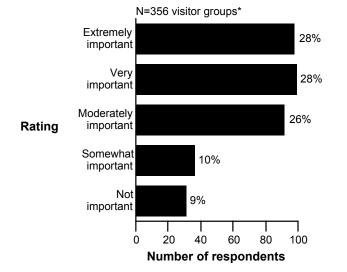


Figure 82: Importance of food service

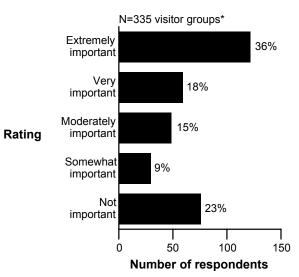
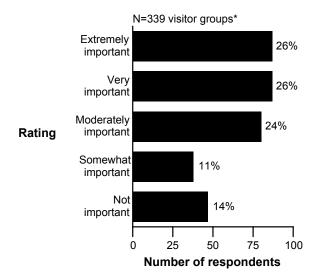
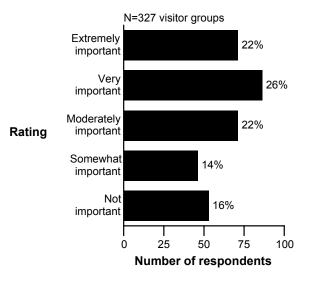


Figure 83: Importance of marina

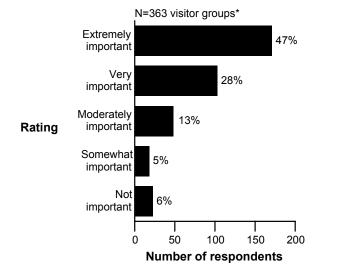
*total percentages do not equal 100 due to rounding













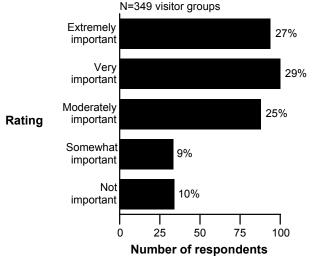


Figure 87: Importance of visitor center exhibits

*total percentages do not equal 100 due to rounding

Quality ratings of visitor services and facilities at Sailors Haven

Question 14c

Finally, for only those services/ facilities that you and your personal group used during this trip, please rate their quality from 1-5.

1=Very poor 2=Poor 3=Average 4=Good 5=Very good

Results

- Figure 88 shows the combined proportions of "very good" and "good" quality ratings for visitor services and facilities at Sailors Haven that were rated by 30 or more visitor groups.
- The services/facilities that received the highest combined proportions of "very good" and "good" quality ratings were:

95% Sunken Forest Trail 90% Boardwalk

- Figures 89 to 96 show the quality ratings for each service/facility.
- Of the visitor services/facilities rated by 30 or more visitor groups, the one receiving the highest "very poor" quality rating was:

9% Ranger-led tours/programs

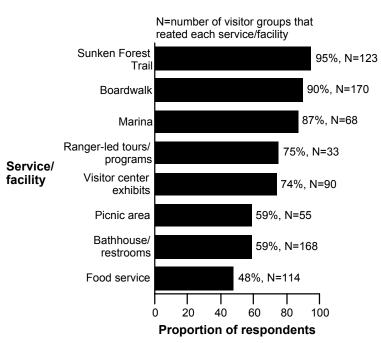
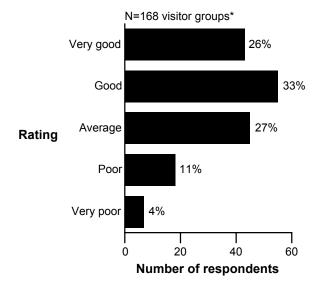
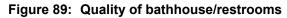
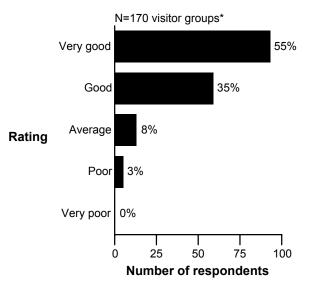


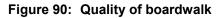
Figure 88: Combined proportions of "very good" and "good" quality ratings of visitor services/facilities at Sailors Haven

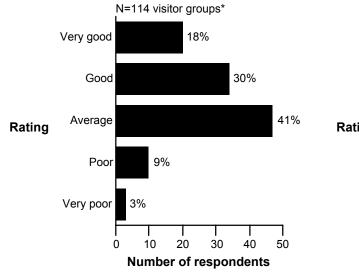
*total percentages do not equal 100 due to rounding

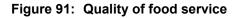


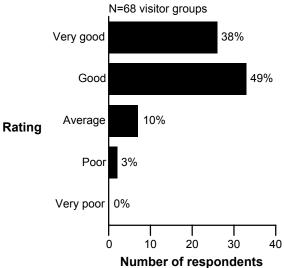






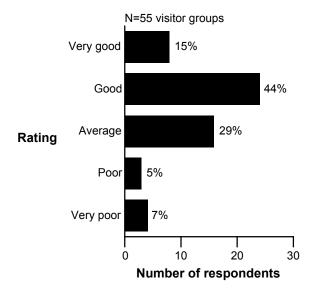


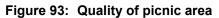


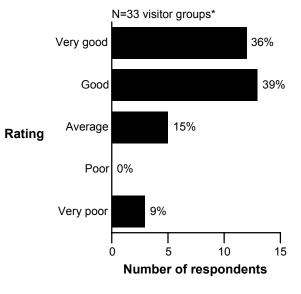


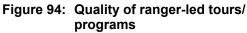


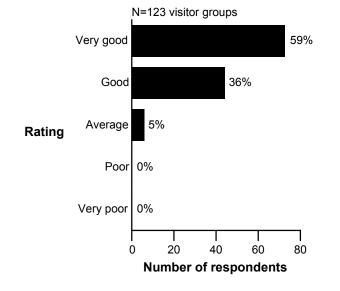
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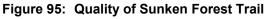


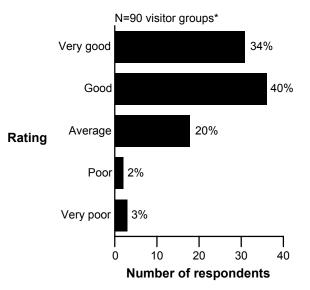














^{*}total percentages do not equal 100 due to rounding

^{**}total percentages do not equal 100 because visitors could select more than one answer

Visitor services and facilities used at Watch Hill

Question 14b

Please mark all of the services/facilities that you and your personal group used during this trip to Fire Island NS.

Results

 As shown in Figure 97, the visitor services and facilities at Watch Hill most commonly used by visitor groups were:

> 91% Bathhouse/restrooms 65% Food service 57% Marina

• The least used service/facility was:

17% Ranger-led tours/programs

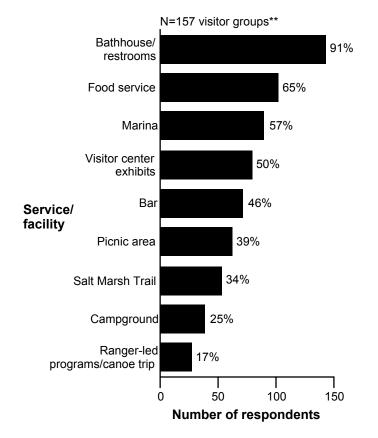


Figure 97: Visitor services and facilities used at Watch Hill

*total percentages do not equal 100 due to rounding

Importance ratings of visitor services and facilities at Watch Hill

Question 14a

Whether or not you used them on this trip, please rate the importance, from 1-5, of Fire Island NS services to you and your personal group.

1=Not important 2=Somewhat important 3=Moderately important 4=Very important 5=Extremely important

Results

- Figure 98 shows the combined proportions of "extremely important" and "very important" ratings for visitor services and facilities at Watch Hill that were rated by 30 or more visitor groups.
- The services/facilities receiving the highest combined proportions of "extremely important" and "very important" ratings were:

87% Bathhouse/restrooms61% Salt Marsh Trail60% Food service

- Figures 99 to 107 show the importance ratings for each service/facility.
- Of the visitor services/facilities rated by 30 or more visitor groups, the one receiving the highest "not important" rating was:

32% Bar

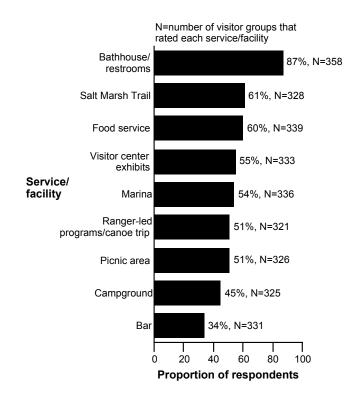


Figure 98: Combined proportions of "extremely important" and "very important" ratings of visitor services/facilities at Watch Hill

*total percentages do not equal 100 due to rounding

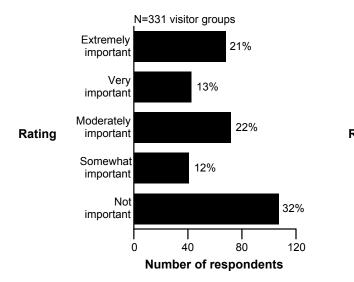
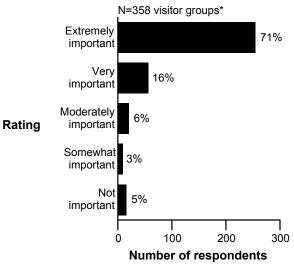
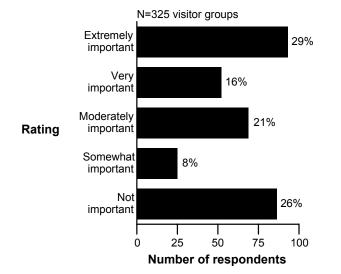


Figure 99: Importance of bar









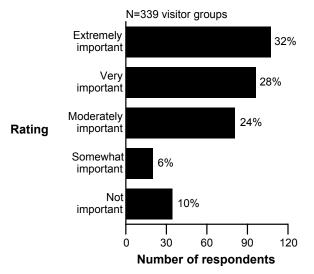


Figure 102: Importance of food service

*total percentages do not equal 100 due to rounding

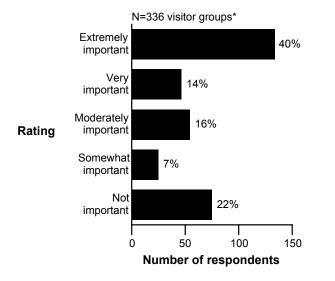


Figure 103: Importance of marina

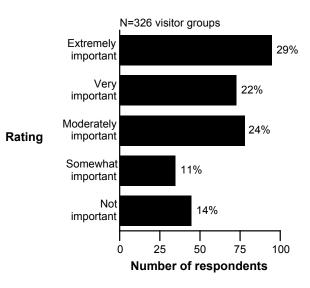
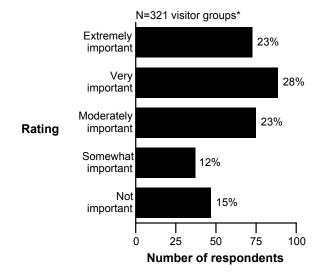


Figure 104: Importance of picnic area





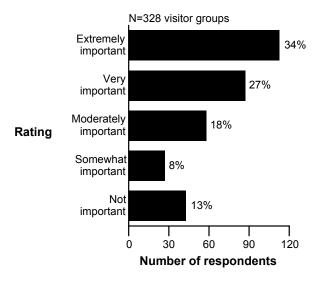
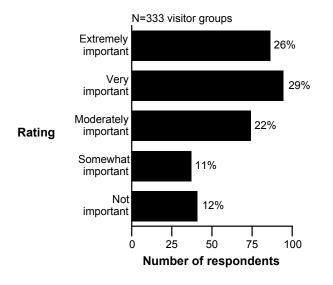
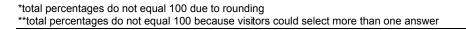


Figure 106: Importance of Salt Marsh Trail

*total percentages do not equal 100 due to rounding







Quality ratings of visitor services and facilities at Watch Hill

Question 14c

Finally, for only those services/facilities that you and your personal group used during this trip, please rate their quality from 1-5.

1=Very poor 2=Poor 3=Average 4=Good 5=Very good

Results

- Figure 108 shows the combined proportions of "very good" and "good" quality ratings for visitor services and facilities at Watch Hill that were rated by 30 or more visitor groups.
- The services/facilities that received the highest combined proportions of "very good" and "good" quality ratings were:

94% Salt Marsh Trail 87% Marina

- Figures 109 to 117 show the quality ratings for each service/facility.
- Of the visitor services/facilities rated by 30 or more visitor groups, the one receiving the highest "very poor" quality rating were:

5% Visitor center exhibits

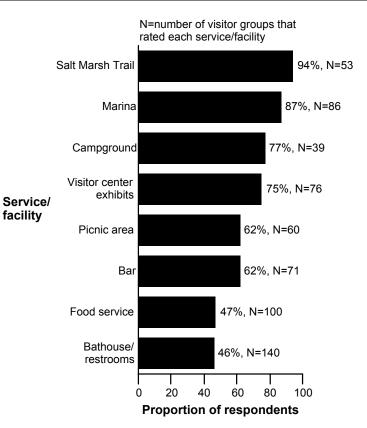
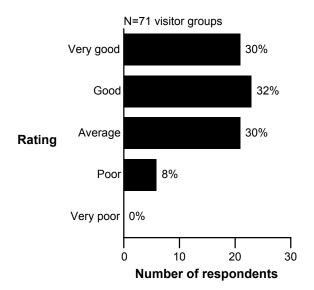


Figure 108: Combined proportions of "very good" and "good" quality ratings of visitor services/facilities at Watch Hill

*total percentages do not equal 100 due to rounding



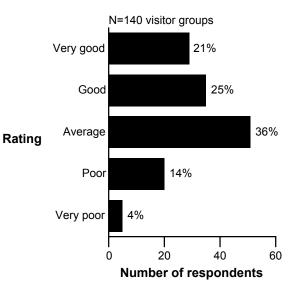
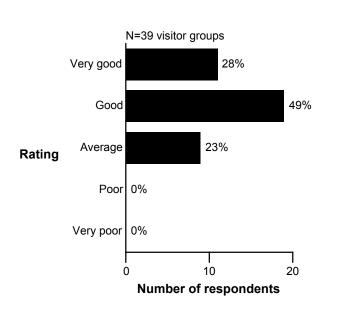
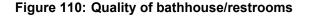


Figure 109: Quality of bar







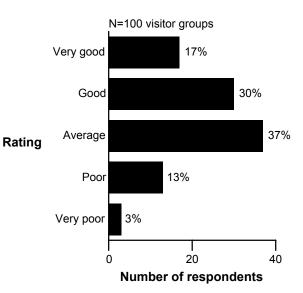
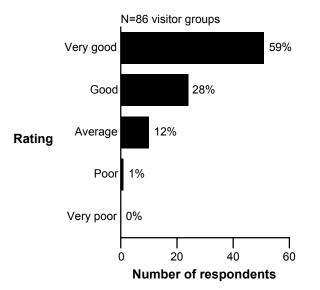
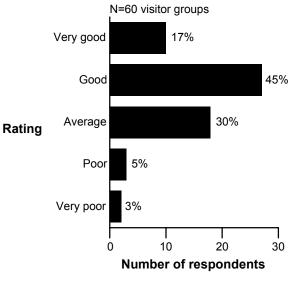


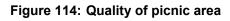
Figure 112: Quality of food service

*total percentages do not equal 100 due to rounding









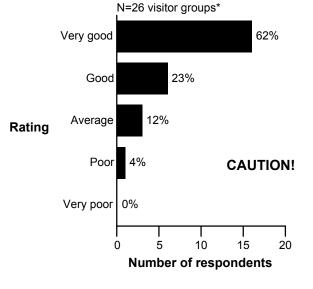
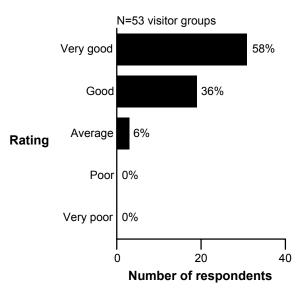
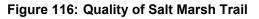


Figure 115: Quality of ranger-led programs/ canoe trip





*total percentages do not equal 100 due to rounding

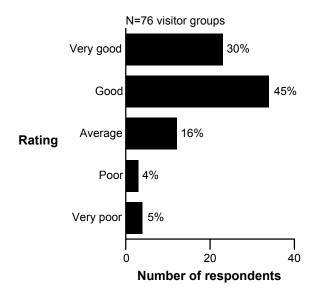


Figure 117: Quality of visitor center exhibits

Visitor services and facilities used at Barrett Beach/Talisman

Question 15b

Please mark all of the services/facilities that you and your personal group used during this trip to Fire Island NS.

Results

 As shown in Figure 118, the visitor services and facilities at Barrett Beach/Talisman most commonly used by visitor groups were:

> 84% Bathhouse/restrooms 48% Dock 43% Picnic area

• The least used service/facility was:

20% Food service

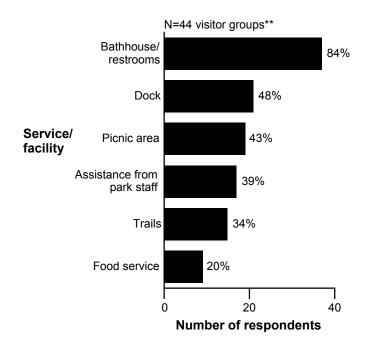


Figure 118: Visitor services and facilities used at Barrett Beach/Talisman

Importance ratings of visitor services and facilities at Barrett Beach/Talisman

Question 15a

Whether or not you used them on this trip, please rate the importance, from 1-5, of Fire Island NS services to you and your personal group.

1=Not important 2=Somewhat important 3=Moderately important 4=Very important 5=Extremely important

Results

- Figure 119 shows the combined proportions of "extremely important" and "very important" ratings for visitor services and facilities at Barrett Beach/ Talisman that were rated by 30 or more visitor groups.
- The services/facilities receiving the highest combined proportions of "extremely important" and "very important" ratings were:

87% Bathhouse/restrooms66% Trails61% Assistance from park staff

- Figures 120 to 125 show the importance ratings for each service/facility.
- Of the visitor services/facilities rated by 30 or more visitor groups, the one receiving the highest "not important" rating was:

22% Dock

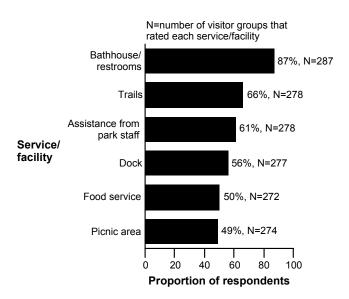
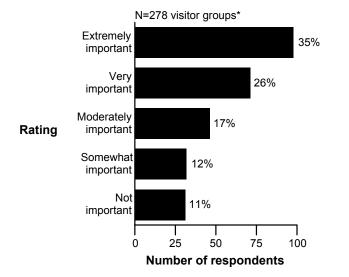
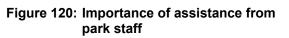
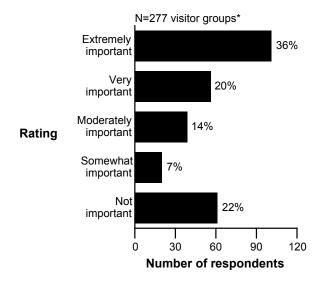


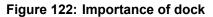
Figure 119: Combined proportions of "extremely important" and "very important" ratings of visitor services/facilities at Barrett Beach/Talisman

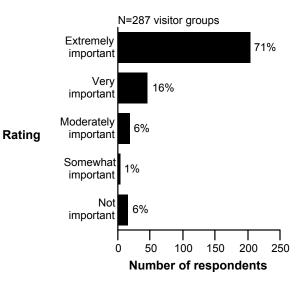
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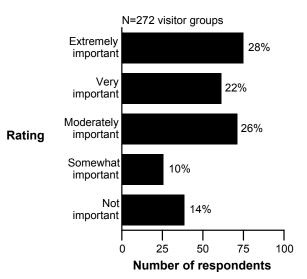


Figure 123: Importance of food service

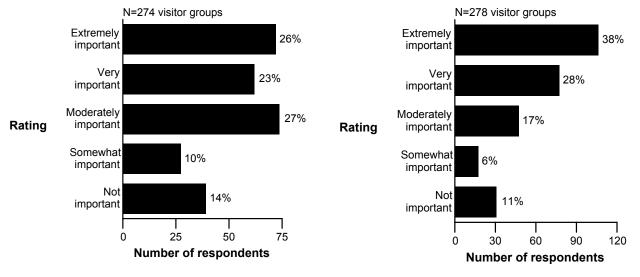


Figure 124: Importance of picnic area

Figure 125: Importance of trails

Quality ratings of visitor services and facilities at Barrett Beach/Talisman

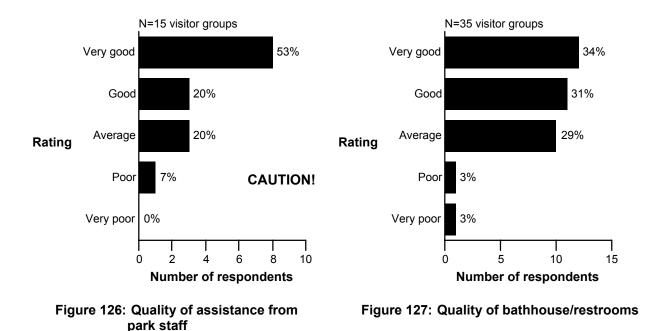
Question 15c

Finally, for only those services and facilities that you and your personal group used during this trip, please rate their quality from 1-5.

1=Very poor 2=Poor 3=Average 4=Good 5=Very good

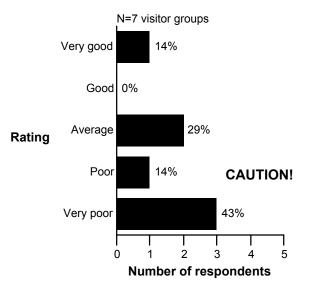
Results

- Note: A combined proportions graph displaying the quality ratings of visitor services at Barrett Beach/Talisman is omitted because only one service (bathhouse/restrooms) was rated for its quality by 30 or more visitor groups.
- 65% of visitor groups rated the quality of bathhouse/restrooms as "very good" or "good."
- Figures 126 to 131 show the quality ratings for each service/facility.

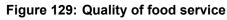


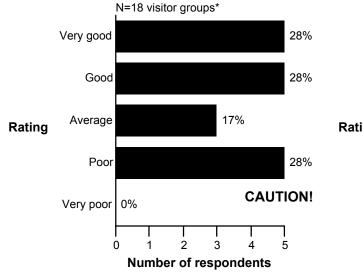
^{*}total percentages do not equal 100 due to rounding

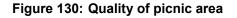


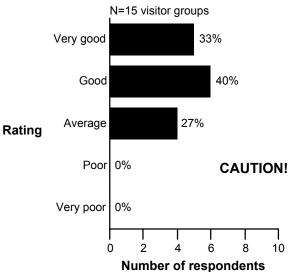














*total percentages do not equal 100 due to rounding

Visitor services and facilities used at Fire Island Wilderness Area



Please mark all of the services/facilities that you and your personal group used during this trip to Fire Island NS.

Results

 As shown in Figure 132, the visitor services and facilities at Fire Island Wilderness Area most commonly used by visitor groups were:

> 78% Restrooms 69% Trails

• The least used service/facility was:

15% Wilderness camping

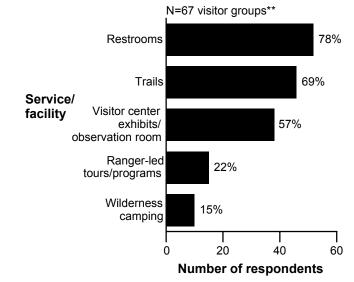


Figure 132: Visitor services and facilities used at Fire Island Wilderness Area

Importance ratings of visitor services and facilities at Fire Island Wilderness Area

Question 15a

Whether or not you used them on this trip, please rate the importance, from 1-5, of Fire Island NS services to you and your personal group.

1=Not important 2=Somewhat important 3=Moderately important 4=Very important 5=Extremely important

Results

- Figure 133 shows the combined proportions of "extremely important" and "very important" ratings for visitor services and facilities at Fire Island Wilderness Area that were rated by 30 or more visitor groups.
- The services/facilities receiving the highest combined proportions of "extremely important" and "very important" ratings were:

87% Restrooms 77% Trails

- Figures 134 to 138 show the importance ratings for each service/facility.
- Of the visitor services/facilities rated by 30 or more visitor groups, the one receiving the highest "not important" rating was:

25% Wilderness camping

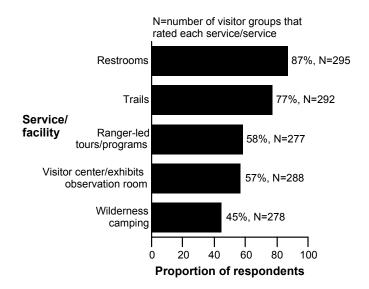
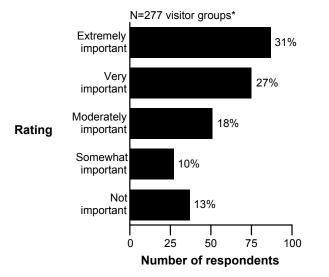
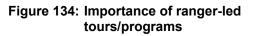
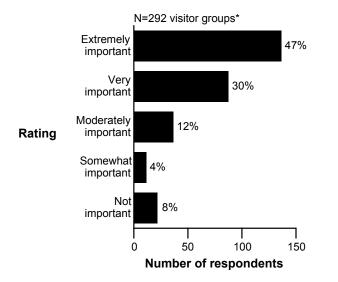


Figure 133: Combined proportions of "extremely important" and "very important" ratings of visitor services/facilities at Fire Island Wilderness Area

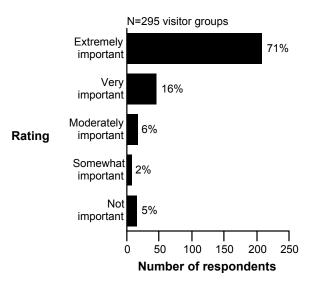
*total percentages do not equal 100 due to rounding













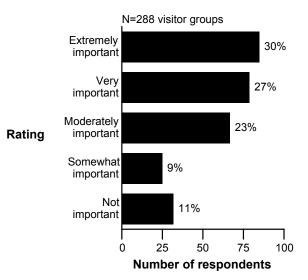


Figure 137: Importance of visitor center exhibits/observation room

*total percentages do not equal 100 due to rounding

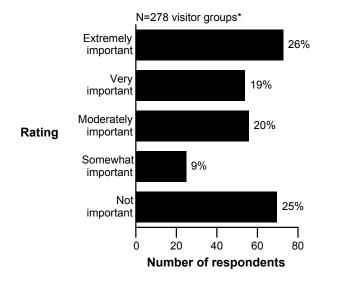


Figure 138: Importance of wilderness camping

87%, N=39

Quality ratings of visitor services and facilities at Fire Island Wilderness Area

Question 15c

1=Very poor

3=Average 4=Good

5=Verv good

2=Poor

Finally, for only those services and facilities that you and your personal group used during this trip, please rate their quality from 1-5.

your personal rated each service/facility s trip, please rate Service/ facility Visitor center exhibits/ observation room Restrooms 62%

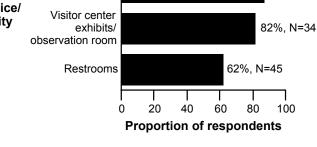
Results

- Figure 139 shows the combined proportions of "very good" and "good" quality ratings for visitor services and facilities at Fire Island Wilderness Area that were rated by 30 or more visitor groups.
- The services/facilities that received the highest combined proportions of "very good" and "good" quality ratings were:

87% Trails82% Visitor center exhibits/observation room

- Figures 140 to 144 show the quality ratings for each service/facility.
- Of the visitor services/facilities rated by 30 or more visitor groups, the one receiving the highest "very poor" quality rating was:

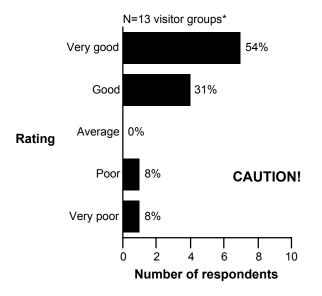
6% visitor center exhibits/ observation room

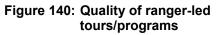


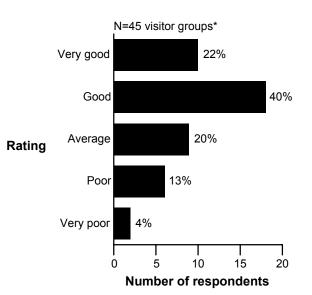
N=number of visitor groups that

Figure 139: Combined proportions of "very good" and "good" quality ratings of visitor services/facilities at Fire Island Wilderness Area

*total percentages do not equal 100 due to rounding









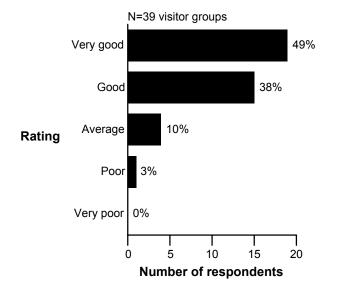
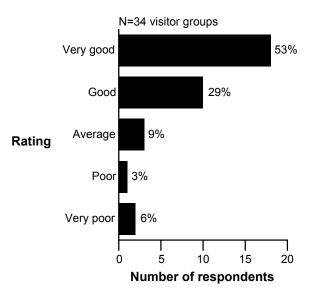


Figure 142: Quality of trails





*total percentages do not equal 100 due to rounding

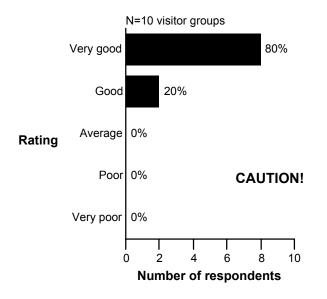


Figure 144: Quality of wilderness camping

Visitor services and facilities used at William Floyd Estate

Question 15b

Please mark all of the services/facilities that you and your personal group used during this trip to Fire Island NS.

Results

 As shown in Figure 145, the visitor services and facilities at William Floyd Estate most commonly used by visitor groups were:

91% Grounds/trails88% Ranger-led tours/programs86% Exhibits

• The least used service/facility was:

77% Directional signs

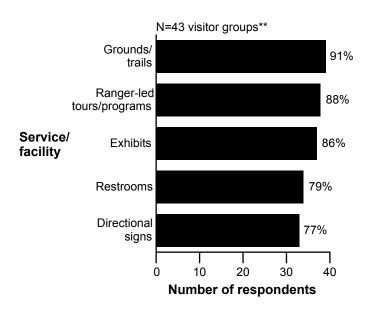


Figure 145: Visitor services and facilities used at William Floyd Estate

*total percentages do not equal 100 due to rounding

Importance ratings of visitor services and facilities at William Floyd Estate

Question 15a

Whether or not you used them on this trip, please rate the importance, from 1-5, of Fire Island NS services to you and your personal group.

1=Not important 2=Somewhat important 3=Moderately important 4=Very important 5=Extremely important

Results

- Figure 146 shows the combined proportions of "extremely important" and "very important" ratings for visitor services and facilities at William Floyd Estate that were rated by 30 or more visitor groups.
- The services/facilities receiving the highest combined proportions of "extremely important" and "very important" ratings were:

83% Restrooms 70% Grounds/trails

- Figures 147 to 151 show the importance ratings for each service/facility.
- Of the visitor services/facilities rated by 30 or more visitor groups, the one receiving the highest "not important" rating was:

13% Ranger-led tours/programs

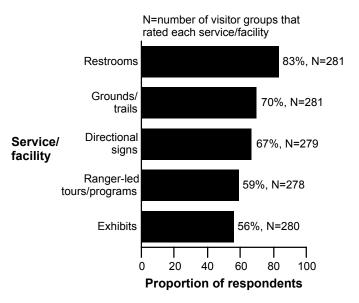


Figure 146: Combined proportions of "extremely important" and "very important" ratings of visitor services/facilities at William Floyd Estate

*total percentages do not equal 100 due to rounding

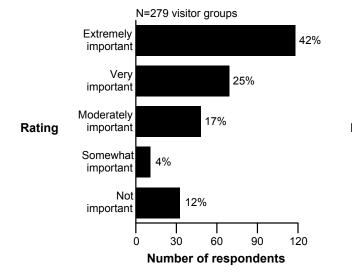
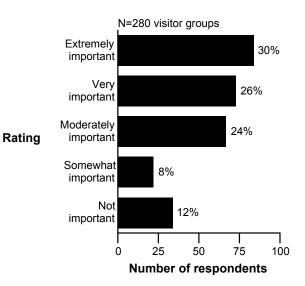
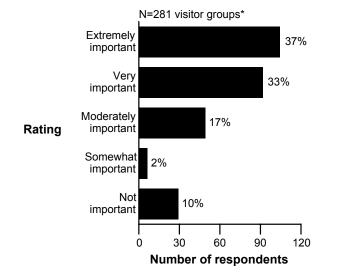
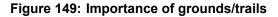


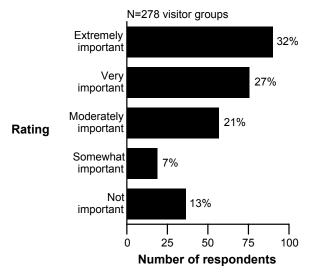
Figure 147: Importance of directional signs













*total percentages do not equal 100 due to rounding

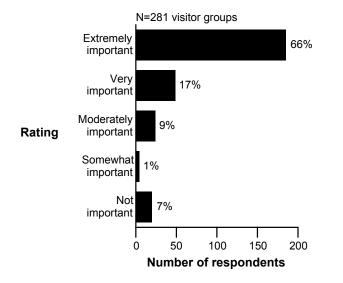


Figure 151: Importance of restrooms

Quality ratings of visitor services and facilities at William Floyd Estate

Question 15c

Finally, for only those services and facilities that you and your personal group used during this trip, please rate their quality from 1-5.

1=Very poor 2=Poor 3=Average 4=Good 5=Very good

Results

- Figure 152 shows the combined proportions of "very good" and "good" quality ratings for visitor services and facilities at William Floyd Estate that were rated by 30 or more visitor groups.
- The services/facilities that received the highest combined proportions of "very good" and "good" quality ratings were:

94% Exhibits 88% Ranger-led tours/programs

- Figures 153 to 157 show the quality ratings for each service/facility.
- Of the visitor services/facilities rated by 30 or more visitor groups, the one receiving the highest "very poor" quality rating was:

13% Directional signs

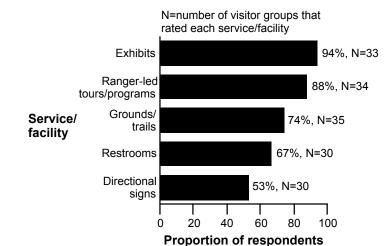
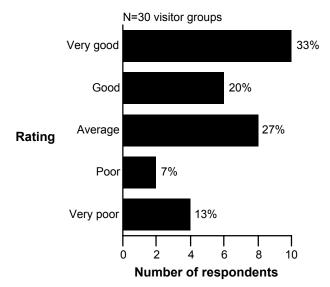
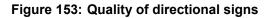
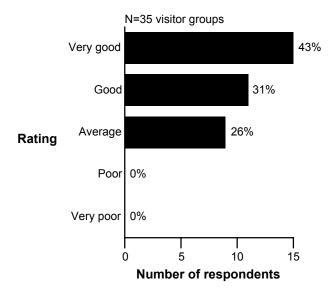


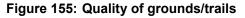
Figure 152: Combined proportions of "very good" and "good" quality ratings of visitor services/facilities at William Floyd Estate

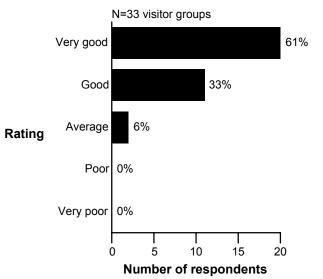
*total percentages do not equal 100 due to rounding

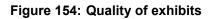


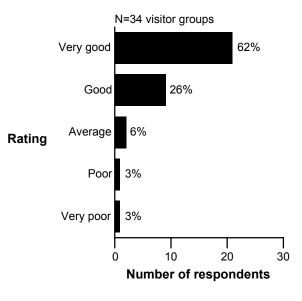


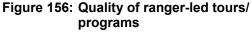












*total percentages do not equal 100 due to rounding

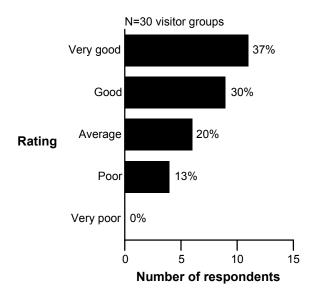


Figure 157: Quality of restrooms

Effect of elements on park experience

Question 7

On this trip to Fire Island NS, please indicate how the following elements may have affected your park experience.

Results

- 61% of visitor groups felt the public facilities on the beach "added to" their park experience (see Table 13).
- 41% indicated that mosquitoes "detracted from" their experience.

Table 13: Effect of elements on park experience*

N=number of visitor groups who rated each element Rating (%) Added No Detracted Did not Element Ν to effect from experience 33 40 9 Beach/shoreline changes 591 18 Close contact with deer or other 610 50 20 2 29 wildlife Closed park facilities 596 2 27 11 61 Clothing optional use of beach/nude 602 12 33 8 48 sunbathing Dogs on beach 12 37 606 36 15 608 2 32 Mosquitoes 24 41 Private developments on island 595 5 37 12 46 Public facilities on island 601 61 23 5 12 Ticks 605 1 22 22 56 Vehicles on beach 603 1 36 20 42

*total percentages do not equal 100 due to rounding

Preferences for Future Visit

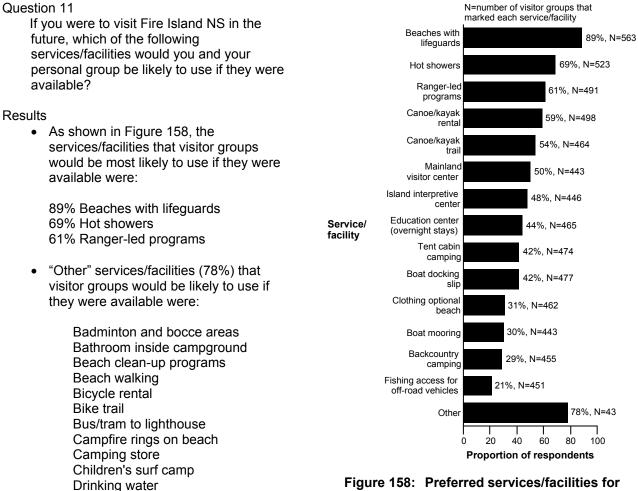


Figure 158: Preferred services/facilities for future visit

*total percentages do not equal 100 due to rounding

Walking/hiking trails

Food store Horseback riding

Laundromat

Restaurant/bar Restrooms Screenhouses Shaded areas Surfing area Swimming pools Trash cans

Maritime forest trails

Kayak launch and storage site

Mooring/marina at Talisman More frequent ferry service

Hotel Jet skis

Mister

Overall Quality

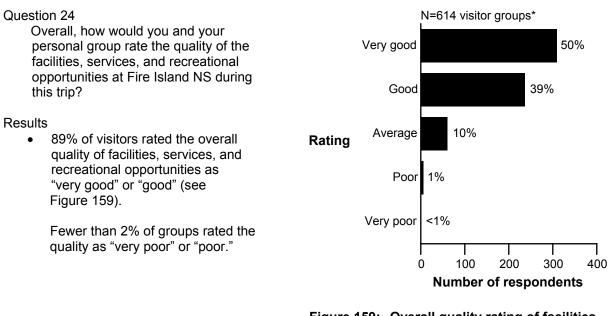


Figure 159: Overall quality rating of facilities, services, and recreational opportunities

*total percentages do not equal 100 due to rounding

Visitor Comments

Additional comments

Question 23

Is there anything else you and your personal group would like to tell us about your trip to Fire Island NS?

Results

- 55% of visitor groups (N=350) responded to this question.
- Table 14 shows a summary of visitor comments. A complete copy of hand-written comments is included in the Visitor Comments Appendix.

Table 14: Additional comments N=470 comments;

some visitor groups made more than one comment.

Comment	Number of times mentioned
PERSONNEL	
Nice/friendly staff	15
Helpful staff	8
Knowledgeable staff	6
Ferry personnel not helpful/friendly	2
Great lifeguards	2
Other comments	3
INTERPRETIVE SERVICES	
Enjoyed the exhibits	3
Enjoyed slide presentation	2 2
Increase/upgrade the exhibits	2
Other comments	11
FACILITIES/MAINTENANCE	
More trash cans needed	15
Hot showers needed	13
Restrooms need cleaning	8
Too much litter	8
Well maintained site/facilities	8
Enjoyed the boardwalks	5
Improve/upgrade docks	5
Beaches are clean/well maintained	4
Need receptacles for recyclables	4
Park is clean	4
More drinking fountains needed	3
More picnic tables/barbeque areas	3
Rebuild/repair boardwalks	3
Restrooms need maintenance/repair	3
Showers need repair/maintenance	3
Add bike paths	3 3 3 2 2
Add fire pits to campsites	2

Table 14: Additional comments (continued)

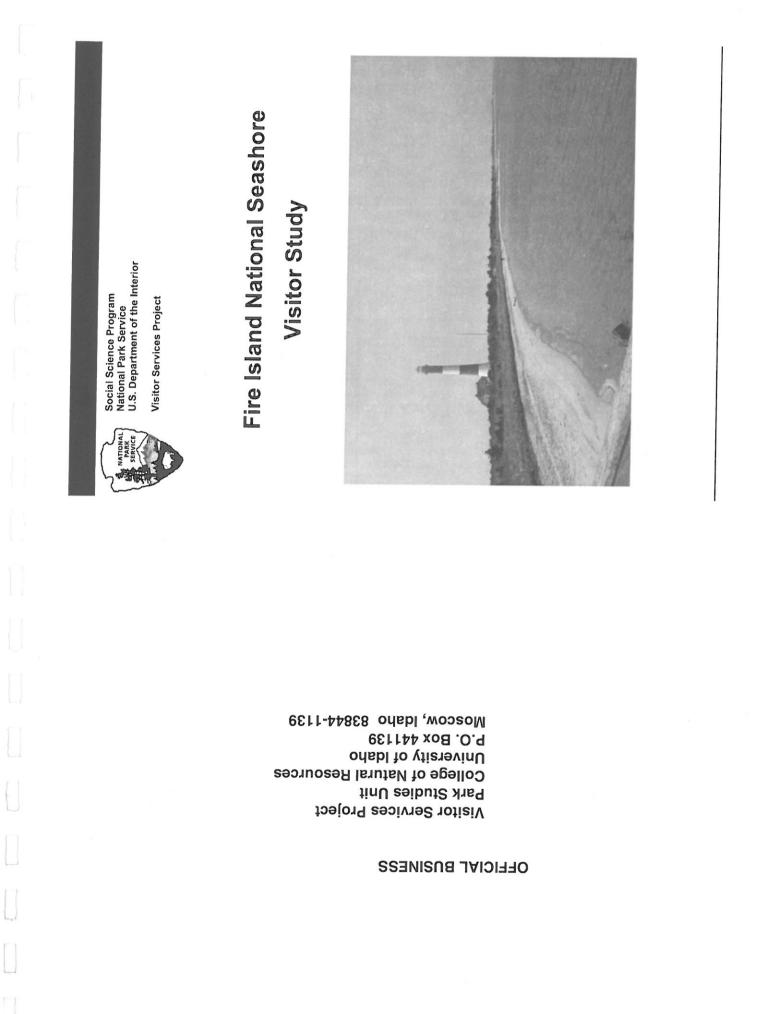
Comment	Number of times mentioned
FACILITIES/MAINTENANCE (continued)	
Add floating docks to marina	2
Add public showers to beaches	2
Additional restrooms needed	2
Beach needs maintenance	2
Boardwalks need better signage	2
Drinking fountains need repair	2
Facilities should be cleaner	2
Improve beach access for wheelchairs/strollers	2
Increase parking	2
Need boat dock at Talisman	2
Need directions to William Floyd Manor	2
Need parking closer to Lighthouse	2
Provide beach wheel chairs	2
Restrooms should be open all year	2
Structures need maintenance/repair	2
Watch Hill restrooms need repair/maintenance	2
Other comments	40
CONCESSION SERVICES Additional food service needed Better quality food service needed Laundry facilities needed Other comments	3 2 2 8
POLICIES/MANAGEMENT	
No new development/building	6
Garbage pack-in/pack-out system does not work	5
Beach near lighthouse should be clothing-required	4
Better information/enforcement of regulations	4
Enforce dog leash regulations	4
Clearly mark the clothing optional beaches	3
Expand leashed dog areas	3
Extend/continue clothing optional beaches	3
Keep dogs off beach	3
Dog owners do not clean up	2
Enjoy the pet-friendly policy	2
Joggers are disruptive to wildlife, tranquility	2
Keep it natural	2
Need transportation/shuttle buses	2
Survey is too long	2
Other comments	18

(continued)	
Comment	Number of times mentioned
RESOURCE MANAGEMENT	
Mosquitoes/other insects detracted from experience	14
Need insect control	13
Control poison ivy	3
Control deer ticks	2
Other comments	12
GENERAL COMMENTS	
Enjoyed the visit	55
Love it	14
Beautiful place	10
Keep up the good work	7
Enjoyed lighthouse	6
Favorite place	6
Keep it as it is	6
Enjoyed the beaches	3
Enjoyed nature	2
Other comments	18

Table 14: Additional comments (continued)

APPENDICES

Appendix 1: The Questionnaire



Fire Island National Seashore Visitor Study OMB Approval #1024-0224 (NPS #08-41

Expiration Date: 02/28/2009

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United States Department of the Interior

Fire Island National Seashore NATIONAL PARK SERVICE Patchogue, NY 11772 120 Laurel Street

IN REPLY REFER TO:

July 2008

Dear Visitor:

Thank you for participating in this important study. We want to learn about the expectations, opinions, and interests of people who come to Fire management of this site and better serve you, our visitor, on future visits. Island National Seashore. This information will help us improve our

This questionnaire will be given to only a select number of visitors, so your participation is very important! It should only take about 20 minutes after your visit to complete. When your visit is over, please complete the questionnaire. Seal it with the stickers provided on the last page and drop it in any U.S. mailbox.

If you have any questions, please contact Margaret Littlejohn, NPS VSP 441139, University of Idaho, Moscow, Idaho 83844-1139, phone: 208-Director, Park Studies Unit, College of Natural Resources, P.O. Box 885-7863, email: littlej@uidaho.edu.

We appreciate your help.

Sincerely

Xart AVC

Acting Superintendent Sean McGuinness

DIRECTIONS

National Seashore, you can visit not only National Park Service facilities Pike Fire Island High Dune Wilderness, but also 17 private communities Estate. Robert Moses State Park borders the National Seashore to its like the Fire Island Lighthouse, Sailors Haven, Watch Hill and the Otis and Smith Point County Park on Fire Island, and the William Floyd It may be helpful to know that within the boundaries of Fire Island west.

At the end of your visit:

1) Please have the selected individual complete this questionnaire. 2) Answer the questions carefully since each question is different.

3) For questions that use circles (O), please mark your answer by filling in the circle with black or blue ink, or a pencil with dark (e.g. #2) lead.

8 Not like this: (2) Like this:

9

Seal it with the stickers provided.
 Drop it in a U.S. mailbox.

Thank you!

PRIVACY ACT and PAPERWORK REDUCTION ACT statement:

refusing to supply the information requested. Your name is requested for followup mailing purposes only. When analysis of the questionnaire is completed, all Response to this request is voluntary. No action may be taken against you for and a person is not required to respond to, a collection of information unless it personal group on the questionnaire. An agency may not conduct or sponsor, name and address files will be destroyed. Thus the permanent data will be anonymous. Please do not put your name or that of any member of your This information will be used by park managers to better serve the public. displays a currently valid OMB control number.

Burden estimate statement: Public reporting burden for this form is estimated Services Project, College of Natural Resources, University of Idaho, P.O. Box to average 20 minutes per response. Direct comments regarding the burden estimate or any other aspect of this form to Margaret Littlejohn, NPS Visitor 441139, Moscow, ID, 83844-1139; email: littlej@uidaho.edu.

♠ Please go to the next page

Fire Island National Seashore Visitor Study	did vou and vour personal group need	that was not available? Please be specific.	 a) Prior to this trip to Fire Island, were you and your personal group aware that Fire Island NS is a unit of the National Park System? Please mark (one. Ves No. 	h) Prior to this frin to Eiro Island upon and and and and and and and and and an	difference between Fire Island, were you and your personal group aware of the difference between Fire Island NS and other public beaches on the island, such as Smith Point County Park and Robert Moses State Park? Please mark	(©) one.	O Yes O No	 On this trip, what was your primary reason for visiting the Fire Island NS area (within 45 miles of any entry point to Fire Island National Seashore)? Please mark (●) only one. 	O Year round resident of Fire Island	O Resident of local area (within 45 miles)	O Seasonal resident of Fire Island and resident of local area (within 45 miles)	O Seasonal resident of Fire Island and not a resident of Iorel area (within an	miles) O Visit Fire Island National Seashore		O Visit friends/relatives in the local area (within 45 miles)	O Business	O Other (Please specify)	 a) Where did you spend the night before you arrived at Fire Island NS? If you stayed at home, please write the name of your hometown and state. 	Nearest city/town State	b) Where did you spend the night after your departure from Fire Island NS? If you stayed at home, please write the name of your hometown and state.	Nearest city/town State
4 Fire Island National Seashore Visitor Study	Your Trip To Fire Island National Seashore	NOTE: In this questionnaire, your personal group is defined as anyone that you are visiting the park with, such as spouse, family, friends, etc. This does not include a larger group that you might be traveling with, such as school, church, scouts, or tour drown.	 a) Prior to this trip, how did you and your personal group obtain information about Fire Island National Seashore (NS)? Please mark (O Obtained no information prior to trip → Go to Question 2	O Previous visits	O Friends/relatives/word of mouth	O Travel guides/tour books (such as AAA, etc.)	O Maps/brochures	O Park website: www.nps.gov/fiis	O Other websites	O Newspaper/magazine articles	O Telephone/written/email inquiry to park	O School class/program	O Long Island Convention and Visitors Bureau/Chambers of Commerce	O Park partners, such as Fire Island Lighthouse Preservation Society, Friends of Fire island NS, or other (Please specify)	O Local businesses (hotels, motels, restaurants, ferry, etc.)	O Special interest group (Please specify)	O Television/radio programs/videos	O Other (Please specify)	b) From the sources marked above, did you and your personal group receive the type of information about the park that you needed? Please mark (●) one.	O No O Yes ➔ Go to Question 2

9			Fire Island National Seashore Vi	nal Seas	hore Visitor Study	Fire Islan	Fire Island National Seashore Visitor Study	or Study			7
5. Incl Isla	luding this visit, durir ind NS? Please mar	ng which k (●) all	Including this visit, during which months of the last 12 months did yo Island NS? Please mark (●) all that apply.	2 months	did you visit Fire	7. On th have	On this trip to Fire Island NS, please indicate how the following elements \mathfrak{m}_i have affected your park experience. Please mark ($ullet$) one for each element	lease indicat ence. Please	e how th mark (ne following) one for ea	please indicate how the following elements may rience. Please mark (●) one for each element.
0	July 2008	0	June 2008	0	May 2008	Element		Detracted from	No effect	Added to	Did not experience
0	April 2008	0	March 2008	0	February 2008	Beach/sh	Beach/shoreline changes	0	0	0	0
0	January 2008	0	December 2007	0	November 2007	Close cor wildlife	Close contact with deer or other wildlife	0	0	0	0
0	October 2007	0	September 2007	0	August 2007	Closed pa	Closed park facilities	0	0	0	0
6. a) O	In this trip, did you all ermanent residence	e, on Fire	a) On this trip, did you and your personal group stay overnight, away permanent residence, on Fire Island or in the area (off the island,	overnight a (off the	, away from your island, but within	Clothing on the second	Clothing optional use of beach/ nude sunbathing	0	0	0	0
4	45 miles of any entry point to Fire Island)?	point to	-ire Island) <i>:</i>			Dogs on beach	beach	0	0	0	0
5	O Y _{es}		0 No 🕈 🖸	Go to Question 7	stion 7	Mosquitoes	es	0	0	0	0
4 (q	Please list the numb	er of nigh (off the is	b) Please list the number of nights you and your personal group stayed on Fire Island or in the area (off the island, but within 45 miles of any entry point to	sonal gro niles of a	up stayed on Fire ny entry point to	Private de	Private developments on island	0	0	0	Ō
	Fire Island).					Public fac	Public facilities on island	0	0	0	0
	Number of nigh	hts on Fii	Number of nights on Fire Island (including island communities)	sland con	ımunities)	Ticks		0	0	0	0
	Number of nigh	hts in Fire	Number of nights in Fire Island NS area (off island, but within 45 miles)	island, b	ut within 45 miles)	Vehicles on beach	on beach	0	0	С	С
လွ ပ	d) In what type of Ic	ip di di	c & d) In what type of lodging did you and your personal group spend the	nal grou	p spend the)))
c) (c)	c) On Fire Island			d) OI	d) Off Fire Island (but within 45 milee)	8. a) O Pe al	On this trip to Fire Island NS, what forms of transportation did you and your personal group use to travel to the park from your home? Please mark (●) all that apply.	S, what forms I to the park	s of trans from you	sportation d ur home? PI	d you and your ease mark (●)
4				~							
J	O Lodge/motel/hotel/cabin/B&B, etc.	hotel/cab	in/B&B, etc.		0	0	Airplane	a	А 0	Amtrak	
J	O Campground/trailer park	ʻtrailer pa	ž		0	0	Long Island Railroad		۹ 0	Air train	
0	O Backcountry camping	camping			0	0	Private auto/vehicle		л В	Rental auto/vehicle	ehicle
J	O On a boat				0	0	Minibus/shuttle van		s O	Suffolk County bus	y bus
J	O Private residence (rented)	nce (rent	(bd)		0	0	Coach/tour bus		т 0	Taxi/limo	
U	O Private resider	nce (per	Private residence (personally owned)		0	0	Motorcycle		B	Bicycle	
U	O Residence of friends or relatives	friends o	r relatives		0	0	Private boat		0	Public ferry	
J	O Other (Please specify)	specify)	Sec. 1		0	0	Water taxi		s 0	Walk	
On Fi	On Fire Island		Off Fire Island			0	Other (Please specify) _				

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		\bigcup											
8		Fire	Fire Island National Seashore Visitor Study	shore V	isitor Study	Fire	Island N	Fire Island National Seashore Visitor Study	itor Study				0
n N (q	What was the last mode of transportation that you and your personal group used before entering the park? Please mark (●) one .	Pleas	ation that you and y se mark (●) one.	our pers	onal group	10.	Which F group vi:	Which Fire Island communities or housing areas did you and your personal group visit? Please mark (●) all that apply.	es or hous all that ap	ing areas di ply.	id you and	d your pe	rsonal
0	Automobile/vehicle	0	Bicycle	0	Private boat	0	None	→ Go to Question 11	11				
0	Public ferry	0	Walk	0	Water taxi	С	Atlantique		C			C	(
0	Other (Please specify))		anhi		blue Point beach	seach		Cherry Grove
9. a) Du	a) During this trip to Fire Island NS, which of the following sites did you	S, which	1 of the following sit	tes did y	ou and your	0	Corni	Cornielle Estates	0	Davis Park		0	Dunewood
b) Fo	b) For the sites you visit Please mark (•) all that apply in column (a). b) For the sites you visited on this trip, please list the amount of time spent at each invation in hours OD down 1 is noticed by the superior of the spent at the section of the spent.	ark () ; trip, ple	all that apply in colu sase list the amoun	t of time	spent at	0	Fair H	Fair Harbor	0	Fire Island Pines	ines	0	Lonelyville
3 0		. LIST DO	aruar riours/uays as	1/4, 1/2,	3/4.	0	Fire Is	Fire Island Summer Club	0	Kismet		0	Ocean Beach
a) V	 U Did not stop at any places in the park → a) Visited park location 	s in the	park Go to Question 10 b) Time spent	e st	0	0	Oakleyville	yville	0	Ocean Bay Park	Park	0	Saltaire
Mark (●)			HOURS SPENT OF If less than 24 hours	-	Days spent If more than 24 hours	0	Point	Point O'Woods	0	Robbins Rest	st	0	Other (Specify)
0	Patchogue/Park headquarters	rters			n/a	С	Neaview	///ic	C	Mator Iolond	7		
0	Fire Island Lighthouse			OR			If vou we	ew are to visit Fire Island	NS in the	tintina whi	l ch of tho f		
0	Sailors Haven			OR			facilities Please n	facilities would you and your personal group be likely to use if they were available? Please mark (●) yes or no for each item.	personal c	group be like	ely to use	if they we	services/ ere available?
0	Sunken Forest			OR		Yes, likely	No, unlikely	y Service/facility		Yes, No, likelv unlikelv	, elv	Service/facility	/facility
0	Talisman/Barrett Beach			OR		C		Backo	ind			Educational center	antor
0	Watch Hill Marina			OR))		ກ		J	owing ov	allowing overnight stays
0	Watch Hill Campground			OR		0	0	Beaches with lifeguards	uards	0		ishing acces vehicles	Fishing access for off-road vehicles
0	Beaches			OR		0	0	Boat docking slip		0		Hot showers	
0	Otis Pike Wilderness Area	-		OR		C	(Doot mooning					
0	William Floyd Estate				n/a	C	C	DUALITIOUTING		0		nd interpr	Island interpretive center
Sites not	Sites not operated by the National Park Service	rk Servi	8			0	0	Canoe/kayak rental	1	0		nland visi	Mainland visitor center
0	Captree State Park			OR		C	C	Canoe/kavak trail		Ċ			
0	Communities on Fire Island	p		OR))			с С		nanger-reu programs	logiants
0	Robert Moses State Park			OR		0	0	Clothing optional beach	each	0		Tent cabin camping	Imping
0	Smith Point County Park			OR		0	0	Other (Please specify)	cify)				

11	e importance from d your personal	your personal		personal group	of it used, what quality? 1=Very poor	2=Poor 3=Average	5=Very good																
Fire Island National Seashore Visitor Study	 Whether or not you used them on this trip, please rate the importance from 1-5, of the Fire Island NS services and facilities to you and your personal 	b) Please mark (●) all of the services/facilities that you and your personal denotes that the tended denotes the services of	group used during trus trip to Fire Island NS. c) Finally for only those services/facilities that you and your normonal around	5		ortant	5=Extremely important Mark (●)	Ferry service from Patchogue	Ferry service from Bay Shore O	Ferry service from Sayville O	Park brochure/map	Park website: www.nps.gov/fiis O	At Fire Island I inhthouse	Access for disabled persons O	Assistance from park staff	Boardwalk/trails O	Bookstore sales items (selection, price, etc.) O		Educational programs	Restrooms	ents/programs	Tower tour	Visitor center exhibits O
ore Visitor Study	jroup participate lumn (a).	oup participate in column (b).	b) This trip	tion n/a	0	0	0	0	0		0	0	n/a	0	0	0	0	0	0	0		ason for visiting	
Fire Island National Seashore Visitor Study	On past trips, in which activities did you and your personal group while at Fire Island NS? Please mark (●) all that apply in column	On this trip, in which activities did you and your personal group participate while visiting Fire Island NS? Please mark (●) all that apply in column (b).		Have not visited previously 🏓 Go part b of this question	Attending ranger-led tours/programs	Boating	Camping	Dining/shopping at concession facilities	Beach activities	(beachcombing, swimming, sunbathing, etc.)	Experiencing solitude	Fishing	Hunting	Learning history	Nature study (birdwatching, wildlife viewing)	Painting/drawing/photography	Spending time with family/friends	Visiting Fire Island Lighthouse	Visiting William Floyd Estate	Other (Please specify)	ssThis trip	c) Which ONE activity in column (b) above was your primary reason Fire Island NS on this trin?	
10	12. a) (v) (q	a) Past trips	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	Past trips	м С) С	.

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12 Fire Islan	Fire Island National Seashore Visitor Study	ore Visitor Study	Fire Island National Seashore Visitor Study
 14. a) Whether or not you used them on this trip, please rate the importance from 1-5, of Fire Island NS services and facilities to you and your personal group. b) Please mark (•) all of the services/facilities that you and your personal group used during this trip to Fire Island NS. 	, please rate the ii es to you and your es that you and yo VS.	mportance from - personal group. ur personal	 15. a) Whether or not you used them on this tri 1-5, of Fire Island NS services and facili b) Please mark (●) all of the services/facili
 c) Finally, for only those services/facilities that you and your personal group used during this trip, please rate their quality from 1-5. a) How important? b) Services c) If used, and facilities 	at you and your pulity from 1-5. b) Services and facilities	ersonal group c) If used,	 c) Finally, for only those services/facilities tubes used during this trip, please rate their quality is the important?
1=Not important 2=Somewhat important 3=Moderately important 4=Very important 5=Extremely important	used during this trip Mark (●)	all the second s	1=Not important 2=Somewhat important 3=Moderately important 4=Very important 5=Extremely important
<u>At Sailors Haven</u>			At Barrett Beach/Talisman
Bathhouse/restrooms	0		Assistance from park staff
Boardwalk	0		Bathhouse/restrooms
Food service	0		Dock
Marina	0		Food service
Picnic area	0		Picnic area
Ranger-led tours/programs	0		Trails
Sunken Forest Trail	0		At Fire Island Wilderness Area
Visitor center exhibits	0		Ranger-led tours/programs
<u>At Watch Hill</u>			Restrooms
Bar	0		Trails
Bathhouse/restrooms	0		Visitor center exhibits/observation r
Campground	0		Wilderness camping
Food service	0		<u>At William Floyd Estate</u>
Marina	0		Directional signs
Picnic area	0		Exhibits
Ranger-led programs/canoe trip	0		Grounds/trails
Salt Marsh Trail	0		Ranger-led tours/programs
Visitor center exhibits	0		Restrooms

trip, please rate the importance from ilities to you and your personal group.

- - ilities that you and your personal nd NS.
- s that you and your personal group quality from 1-5.

		s what quality?	1=Very poor	2=Poor	3=Average	4=Good	5=Very good
in the family for the second s	b) Services	and facilities	used during	this trip			Mark (•)
	łow important?	lot important	ionewhat important	Inderately important	ervimportant	xtramaly important	

0	0	0	0	0	0		0	0	0	0	0
Assistance from park staff	Bathhouse/restrooms	Dock	Food service	Picnic area	Trails	ire Island Wilderness Area	Ranger-led tours/programs	Restrooms	Trails	Visitor center exhibits/observation room	Wilderness camping

- 0 0 0 0 0

14		Fire Is	land Na	Fire Island National Seashore Visitor Study	iore Visi	tor Study	Fire Island National Seashore Visitor Study	Seashore \	/isitor Stu	dy				15
16. On this trip	On this trip were you and your personal group with the following groups?	our personal gr	oup with	h the followin	ig group	S?	21. a) Are you or members of your group Hispanic or Latino? Please mark (() one	embers of	/our grout	o Hispanic	c or Latine	o? Please	mark (•)	one
a) Comme	a) Commercial guided tour group	group	0	Yes	0	No	for each group member	p member.	- >	-				
b) School/	b) School/eclucational group	0	0	Yes	0	No		Yourself	Member Member Member #2 #3 #4	Member 1 #3		Member #5	Member I #6	Member #7
c) Other or	c) Other organized group (such as	tuch as	0	Yes	0	No	Yes, Hispanic or Latino	0	0	0	0	0	0	0
17 On this trin	business group, scout group, etc.) s trin what kind of porceard crave	t group, etc.)	10		_		No, not Hispanic nor Latino	0	0	0	0	0	0	0
	our uns uns, what kind of personal group (not guided tour/school group/other organized group) were you with? Please mark () one.	with? Please m	iot guid iark (•)	ea tour/scho	ol group	/other	b) What is voirr race? What is the race of each member of voirr procession	race? Wha	t is the rad	na nf aan	ledmom d	r of vour r	o locoror	C
O Alone	ē		0	Friends			Please mark (*) one or more for you and each group member.	(.) one or	more for	you and e	each grou	ip membe	Jersonal ç	Jroup :
O Family	ylir		0	Family and friends	friends			Yourself	Member #2	Member #3	Member #4	Member #5	Member Member #6 #7	lember #7
O	Other (Please specify)	ý)					American Indian or Alaska Native	0	0	0	0	0	0	0
18. On this trip to Fire including volurself?	On this trip to Fire Island NS, how many people were in your personal group, including voluce(P2)	S, how many p _t	eople w	'ere in your p	ersonal	group,	Asian	0	0	0	0	0	0	0
	Number of people						Black or African American	0	0	0	0	0	0	0
19. For you an not have in	For you and your personal group, please complete the answers below. If you do not have information for any group member, please leave that line blank.	group, please con y group member,	sompletury, pleas	e the answer se leave that	s below line blar	. If you do .kr	Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0
		or name of country other than	than	Fir Fir (inclu	Fire Island NS Fire Island NS (including this visit)	visits to hd NS his visit)	White	0	0	0	0	0	0	0
Yourself		Ū.S.		ba	past 12 months	onths	22. a) Does anyone in your personal group have a physical condition that made it difficult to access or participate in park activities or services?	in your per cess or part	sonal gro icipate in	up have a park activ	a physical vities or se	l conditior ervices?	that mad	de it
Member #2				. 1			O Yes	U	0 No	No 🕹 Go to	Go to Question 23	on 23		
Member #3							b) If YES, what services or activities were difficult to access/participate in?	services or	activities	were diffi	cult to ac	cess/parti	cipate in?	
Member #4				,				a liov asla n		o leaosae		of of the to	do ou llot	•
Member #5								Island NS?					leii us au	about
Member #6				,										
Member #7				,										
20. When usin most mem	When using an area such as Fire Island NS, which one language do most members of your personal group prefer to use for the following?	s Fire Island N. onal group pret	S, which	h one langu <i>s</i> se for the foll		you and	24. Overall, how wo	uld vou and	d vour per	sonal aro	un rate th	ne oriality	of facilitie	
a) Speaking	O English	0 oth	Other (Specify)	scify)			services, and recreational opportunities at Fire Island NS during this trip? Please mark (\bullet) one.	creational o	opportunit	ies at Fire	lsland N	IS during	this trip?	Please
b) Reading	C) English	O oth	Other (Specify)	scify)			Very poor	Poor	A	Average	Good	ро	Very good	р
c) In your opini than English	c) In your opinion, what services in the park need to be provided in languages other than Endice? Blocco endity a consist of consistence of the service of t	s in the park ne	sed to t	be provided in	r langua	iges other	0	0		0	0	~	0	
Service		a service(s) u	L IIIark	() None.	C	andN	Thank you for your help! Please seal the questionnaire with the stickers provided and drop it in any U.S. mailbox.	/our help! F	lease sea / U.S. ma	al the que ilbox.	stionnaire	e with the	stickers	
)						•	 Printed on recycled paper 	ecycled pap	- Ja

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Fire Island National Seashore VSP visitor study Survey period: July 19-25, 2008 (7 days)

Park contact: Paula Valentine Public Affairs Phone: 631-687-7549 Cell: 908-625-3254 Email: <u>Paula valentine@nps.gov</u> Irene Rosen Supervisory Interpretive Park Ranger Volunteer Coordinator Phone: 631-687-4765 Email: Irene_rosen@nps.gov

Jay Lippert Chief Ranger Phone: 631-687-4757 Cell: 631-774-6846 Email: Jay_lippert@nps.gov

VSP contact: Lena Le VSP Assistant Director Phone: 208-885-2585 Cell: 208-596-1671 Email: <u>lenale@uidaho.edu</u> Steven Hollenhorst PSU Director Cell: 208-301-1717 Email: stevenh@uidaho.edu

July 2005 visitation statistics: William Floyd Estate: 877, Watch Hill: 20,691, Lighthouse: 20.043, Sailors Heaven: 22064, Wilderness Center 2462/last week of July. The weekend/weekday visitation ratio about 60/40 (except for William Floyd Estate and Wilderness Questionnaire will be given to a random sample of visitor groups. The interval will be adjusted according to visitation at each site. Center)

Training sessions for interviewers are scheduled for July 18 and 19. July 18th, training is at 10 am in River Room for 9 people. July Lighthouse folks at the Lighthouse and more training at Wilderness Visitor Center. Some other additional training maybe needed. 19th, Lena will train Dave and Claire at Sailors Haven, Steve will train people at Watch Hill. July 20th, some more training for

	July 19	July 20	July 21	July 22	July 23	July 24	July 25	Total
	Sat	Sun	Monday	Tuesday	Wednesday	Thursday	Friday	
Lighthouse	64	50	42	42	ç	54	64	
9-5 pm	Eddie	Eddie	Lighthouse	Lighthouse	42 Eddia Fostar	Eddie	Eddie	358
	Foster	Foster	Association	Association		Foster	Foster	
Sailors Haven	60	60			40			
9:30-5pm	Dave	Dave	40	40	Claire	48	48	200
	Raymond	Raymond	Eleonora	Eleonora	Formanski	Eleonora	Eleonora	000
Talisman/Barrett Beach	35	35		10				80
(no ferry service except	ſ	Steve	X	Eddie	X	X	X	too many
Sat Sun) 10-4 pm		Henderson		Foster				, ¿Ò
Watch Hill	60	50	40	40	40	50	60	
9:30 – 5 pm	Pat	Pat	Mike	Justine	Danielle	Sonia	Pat	340
	Livingston	Livingston	Livingston	Stefanelli	Summa	Tania	Livingston	
Old Inlet	12	12					D	
Sat & Sunday only	Steve	depends on	X	X	X	Х	X	24
	Henderson	weather						
Wilderness Center	32	28			24	24	32	
9-4 pm	volunteer	SCA	CLOSED	CLOSED	SCA	SCA	Steve Henderson	140
William Floyd Estate	18	10						
11-4pm	Mary Laura		CLUSED	CLUSED	CLUSED	CLUSED	18	54
Total	258	230	130	158	166	176	214	1,332
# of interviewers	7	7	3	4	4	4	S	

The survey was extended until 27 July 2008 due to inclement weather.

Appendix 2: Additional Analysis

The Visitor Services Project (VSP) offers the opportunity to learn more from VSP visitor study data. Additional analysis can be done using the park's VSP visitor study data that was collected and entered into the computer. Two-way and three-way cross tabulations can be made of any of the characteristics listed below. Be as specific as possible—you may select a single program/service/facility instead of all that were listed in the questionnaire. Include your name, address and phone number in the request.

- Obtained information prior to visit?
- Sources of information used prior to visit
- Received needed information?
- Aware that Fire Island NS is NPS unit?
- Aware of difference between Fire Island NS and other public beaches?
- Type of resident
- Primary reason for visit to Fire Island NS area
- Time (month) of visit during past 12 months
- Overnight stay away from home?
 Number of nights on Fire Island
 Number of nights in Fire Island NS area

For more information please contact:

Visitor Services Project, PSU College of Natural Resources P.O. Box 441139 University of Idaho Moscow, ID 83843-1139 Type of lodging on/off Fire Island Effect of elements on visit Forms of transportation Last mode of transportation prior to park entry

- Stop at any places in park?
- Sites visited
- Length of visit (hours/days) at park sites
- Communities/housing areas visited
- Services/facilities preferred on future visit
- Activities on past trips
- Activities this trip
- Importance of services/ facilities
- Services/facilities used
- Quality of services/facilities used

- With school/educational group?
- With other organized group
- Group type
- Group size
- Visitor age
- State of residence
- Country of residence
- Number of visits
- Language used (speaking/ reading)
- Ethnicity/race
- Group member with physical condition making access/ participation difficult?
- Overall quality

Phone: 208-885-7863 Fax: 208-885-4261 Email: littlej@uidaho.edu Website: http//www.pusuidaho.edu

Appendix 3: Decision Rules for Checking Non-response Bias

There are several methods for checking non-response bias. However, the most common way is to use some demographic indicators to compare between respondents and non-respondents (Dey 1997; Salant and Dillman 1994; Dillman and Carly-Baxter 2000; Dillman, 2007; Stoop 2004). In this study, group type, group size and age of the group member (at least 16 years old) completing the survey were three variables that were used to check for non-response bias.

A Chi-square test was used to detect the difference in the response rates among different group types. The hypothesis was that group types are equally represented. If p-value is greater than 0.05, the difference in group type is judged to be insignificant.

Two independent-sample T-tests were used to test the differences between respondents and nonrespondents. The p-values represent the significance levels of these tests. If p-value is greater than 0.05, the two groups are judged to be insignificantly different.

Therefore, the hypotheses for checking non-response bias are:

- 1. Respondents from different group types are equally represented
- 2. Average age of respondents average age of non-respondents = 0
- 3. Average group size of respondents average group size of non-respondents = 0

Chi-square test in Table 2 shows significant difference in group type.

As shown in Table 3, the p-value for respondent/non-respondent group size test is greater than 0.05, indicating insignificant differences between respondents and non-respondents. Thus, non-response bias for group size is judged to be insignificant. However, the p-value for respondent/non-respondent age test is less than 0.05 indicating significant age differences between respondents and non-respondents. In regard to age difference, various reviews of survey methodology (Dillman and Carley-Baxter 2000; Goudy 1976, Filion 1976, Mayer and Pratt Jr. 1967) have consistently found that in public opinion surveys, average respondent ages tend to be higher than average non-respondent ages. This difference is often caused by other reasons such as availability of free time rather than problems with survey methodology. In addition, because the unit of analysis for this study is a visitor group, the group member who received the questionnaire may be different than the one who actually completed it after the visit. Sometimes the age of the actual respondent is higher than the age of the group member who accepted the survey were older than the person who accepted the survey at the park. Therefore, non-response bias is judged to be significant.

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- Salant, P. and Dillman, D. A. (1994) *How to Conduct Your Own Survey*. U.S.: John Wiley and Sons, Inc. Stoop, I. A. L. (2004) Surveying Non-respondents. Field Methods, 16 (1): 23.

Appendix 4: Visitor Services Project Publications

All VSP reports are available on the Park Studies Unit website at www.psu.uidaho.edu.vsp.reports.htm. All studies were conducted in summer unless otherwise noted.

1982

1. Mapping interpretive services: A pilot study at Grand Teton National Park.

1983

- 2. Mapping interpretive services: Identifying barriers to adoption and diffusion of the method.
- 3. Mapping interpretive services: A follow-up study at Yellowstone National Park and Mt Rushmore National Memorial.
- 4. Mapping visitor populations: A pilot study at Yellowstone National Park.

1985

- 5. North Cascades National Park Service Complex
- 6. Crater Lake National Park

1986

- 7. Gettysburg National Military Park
- 8. Independence National Historical Park
- 9. Valley Forge National Historical Park

1987

- 10. Colonial National Historical Park (summer & fall)
- 11. Grand Teton National Park
- 12. Harpers Ferry National Historical Park
- 13. Mesa Verde National Park
- 14. Shenandoah National Park (summer & fall)
- 15. Yellowstone National Park
- 16. Independence National Historical Park: Four Seasons Study

1988

- 17. Glen Canyon National Recreational Area
- 18. Denali National Park and Preserve
- 19. Bryce Canyon National Park
- 20. Craters of the Moon National Monument

1989

- 21. Everglades National Park (winter)
- 22. Statue of Liberty National Monument
- 23. The White House Tours, President's Park

1989 (continued)

- 24. Lincoln Home National Historic Site
- 25. Yellowstone National Park
- 26. Delaware Water Gap National Recreation Area
- 27. Muir Woods National Monument

1990

- 28. Canyonlands National Park (spring)
- 29. White Sands National Monument
- 30. National Monuments & Memorials, Washington, D.C.
- 31. Kenai Fjords National Park
- 32. Gateway National Recreation Area
- 33. Petersburg National Battlefield
- 34. Death Valley National Monument
- 35. Glacier National Park
- 36. Scott's Bluff National Monument
- 37. John Day Fossil Beds National Monument

1991

- 38. Jean Lafitte National Historical Park (spring)
- 39. Joshua Tree National Monument (spring)
- 40. The White House Tours, President's Park (spring)
- 41. Natchez Trace Parkway (spring)
- 42. Stehekin-North Cascades NP/Lake Chelan NRA
- 43. City of Rocks National Reserve
- 44. The White House Tours, President's Park (fall)

- 45. Big Bend National Park (spring)
- 46. Frederick Douglass National Historic Site (spring)
- 47. Glen Echo Park (spring)
- 48. Bent's Old Fort National Historic Site
- 49. Jefferson National Expansion Memorial
- 50. Zion National Park
- 51. New River Gorge National River
- 52. Klondike Gold Rush National Historical Park, AK
- 53. Arlington House-The Robert E. Lee Memorial

Visitor Services Project Publications (continued)

1993

- 54. Belle Haven Park/Dyke Marsh Wildlife Park (spring)
- 55. Santa Monica Mountains National Recreation Area (spring)
- 56. Whitman Mission National Historic Site
- 57. Sitka National Historical Park
- 58. Indiana Dunes National Lakeshore
- 59. Redwood National Park
- 60. Channel Islands National Park
- 61. Pecos National Historical Park
- 62. Canyon de Chelly National Monument
- 63. Bryce Canyon National Park (fall)

1994

- 64. Death Valley National Monument Backcountry (winter)
- 65. San Antonio Missions National Historical Park (spring)
- 66. Anchorage Alaska Public Lands Information Center
- 67. Wolf Trap Farm Park for the Performing Arts
- 68. Nez Perce National Historical Park
- 69. Edison National Historic Site
- 70. San Juan Island National Historical Park
- 71. Canaveral National Seashore
- 72. Indiana Dunes National Lakeshore (fall)
- 73. Gettysburg National Military Park (fall)

1995

- 74. Grand Teton National Park (winter)
- 75. Yellowstone National Park (winter)
- 76. Bandelier National Monument
- 77. Wrangell-St. Elias National Park & Preserve
- 78. Adams National Historic Site
- 79. Devils Tower National Monument
- 80. Manassas National Battlefield Park
- 81. Booker T. Washington National Monument
- 82. San Francisco Maritime National Historical Park
- 83. Dry Tortugas National Park

1996

- 84. Everglades National Park (spring)
- 85. Chiricahua National Monument (spring)

1996 (continued)

- 86. Fort Bowie National Historic Site (spring)
- 87. Great Falls Park, Virginia (spring)
- 88. Great Smoky Mountains National Park
- 89. Chamizal National Memorial
- 90. Death Valley National Park (fall)
- 91. Prince William Forest Park (fall)
- 92. Great Smoky Mountains National Park (fall)

1997

- 93. Virgin Islands National Park (winter)
- 94. Mojave National Preserve (spring)
- 95. Martin Luther King, Jr., National Historic Site (spring)
- 96. Lincoln Boyhood National Memorial
- 97. Grand Teton National Park
- 98. Bryce Canyon National Park
- 99. Voyageurs National Park
- 100. Lowell National Historical Park

1998

- 101. Jean Lafitte National Historical Park & Park (spring)
- 102. Chattahoochee River National Recreation Area (spring)
- 103. Cumberland Island National Seashore (spring)
- 104. Iwo Jima/Netherlands Carillon Memorials
- 105. National Monuments & Memorials, Washington, D.C.
- 106. Klondike Gold Rush National Historical Park, AK
- 107. Whiskeytown National Recreation Area
- 108. Acadia National Park

- 109. Big Cypress National Preserve (winter)
- 110. San Juan National Historic Site, Puerto Rico (winter)
- 111. St. Croix National Scenic Riverway
- 112. Rock Creek Park
- 113. New Bedford Whaling National Historical Park
- 114. Glacier Bay National Park & Preserve
- 115. Kenai Fjords National Park
- 116. Lassen Volcanic National Park
- 117. Cumberland Gap National Historical Park (fall)

Visitor Services Project Publications (continued)

2000

- 118. Haleakala National Park (spring)
- 119. White House Tour and White House Visitor Center (spring)
- 120. USS Arizona Memorial
- 121. Olympic National Park
- 122. Eisenhower National Historic Site
- 123. Badlands National Park
- 124. Mount Rainier National Park

2001

- 125. Biscayne National Park (spring)
- 126. Colonial National Historical Park (Jamestown)
- 127. Shenandoah National Park
- 128. Pictured Rocks National Lakeshore
- 129. Crater Lake National Park
- 130. Valley Forge National Historical Park

2002

- 131. Everglades National Park (spring)
- 132. Dry Tortugas National Park (spring)
- 133. Pinnacles National Monument (spring)
- 134. Great Sand Dunes National Park & Preserve
- 135. Pipestone National Monument
- 136. Outer Banks Group (Cape Hatteras National Seashore, Ft. Raleigh National Historic Site, and Wright Brothers National Memorial)
- 137. Sequoia & Kings Canyon National Parks and Sequoia National Forest
- 138. Catoctin Mountain Park
- 139. Hopewell Furnace National Historic Site
- 140. Stones River National Battlefield (fall)

2003

- 141. Gateway National Recreation Area: Floyd Bennett Field (spring)
- 142. Cowpens National Battlefield (spring)
- 143. Grand Canyon National Park North Rim
- 144. Grand Canyon National Park South Rim
- 145. C&O Canal National Historical Park
- 146. Capulin Volcano National Monument
- 147. Oregon Caves National Monument
- 148. Knife River Indian Villages National Historic Site
- 149. Fort Stanwix National Monument
- 150. Arches National Park

2003 continued

151. Mojave National Preserve (fall)

2004

- 152. Joshua Tree National Park (spring)
- 153. New River Gorge National River
- 154. George Washington Birthplace National Monument
- 155. Craters of the Moon National Monument & Preserve
- 156. Dayton Aviation Heritage National Historical Park
- 157. Apostle Islands National Lakeshore
- 158. Keweenaw National Historical Park
- 159. Effigy Mounds National Monument
- 160. Saint-Gaudens National Historic Site
- 161. Manzanar National Historic Site
- 162. John Day Fossil Beds National Monument

2005

- 163. Congaree National Park (spring)
- 164. San Francisco Maritime National Historical Park (spring)
- 165. Lincoln Home National Historic Site
- 166. Chickasaw National Recreation Area
- 167. Timpanogos Cave National Monument
- 168. Yosemite National Park
- 169. Fort Sumter National Monument
- 170. Harpers Ferry National Historical Park
- 171. Cuyahoga Valley National Park
- 172. Johnstown Flood National Memorial
- 173. Nicodemus National Historic Site

- 174. Kings Mountain National Military Park (spring)
- 175. John Fitzgerald Kennedy National Historic Site
- 176. Devils Postpile National Monument
- 177. Mammoth Cave National Park
- 178. Yellowstone National Park
- 179. Monocacy National Battlefield
- 180. Denali National Park & Preserve
- 181. Golden Spike National Historic Site
- 182. Katmai National Park and Preserve
- 183. Zion National Park (spring and fall)

Visitor Services Project Publications (continued)

2007

- 184.1. Big Cypress National Preserve (spring)
- 184.2. Big Cypress National Preserve (ORV Permit Holder/Camp Owner)
- 185. Hawaii Volcanoes National Park
- 186.1. Glen Canyon National Recreation Area (spring)
- 186.2. Glen Canyon National Recreation Area (summer)
- 187. Lava Beds National Monument
- 188. John Muir National Historic Site
- 189. Fort Union Trading Post National Historic Site
- 190. Fort Donelson National Battlefield
- 191. Agate Fossil Beds National Monument
- 192. Mount Rushmore National Memorial
- 193. Ebey's Landing National Historical Reserve
- 194. Rainbow Bridge National Monument
- 195. Independence National Historical Park
- 196. Minute Man National Historical Park

2008

- 197. Blue Ridge Parkway (fall and summer)
- 198. Yosemite National Park
- 199. Everglades National Park (winter and spring)
- 200. Horseshoe Bend National Military Park (spring)
- 201. Carl Sandburg Home National Historic Site (spring)
- 202. Fire Island National Seashore resident (spring)
- 203. Fire Island National Seashore visitor

For more information about the Visitor Services Project, please contact the University of Idaho Park Studies Unit, website: www.psu.uidaho.edu or phone (208) 885-7863.

Visitor Comments Appendix

This section contains complete visitor comments of all open-ended questions and is bound separately from this report due to its size.

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