



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

Visitor Services Project



Sleeping Bear Dunes National Lakeshore Visitor Study

Summer 2009

University of Idaho
A LEGACY OF LEADING

Park Studies Unit
Visitor Services Project
Report 216



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April 2010

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Visitor Services Project
Sleeping Bear Dunes National Lakeshore
Report Summary

- This report describes the results of a visitor study at Sleeping Bear Dunes National Lakeshore (NL) during July 12-21, 2009. A total of 1,158 questionnaires were distributed to visitor groups. Of those, 696 questionnaires were returned, resulting in a 60.1% response rate.
 - This report profiles a systematic random sample of Sleeping Bear Dunes NL visitors. 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 percent of visitor groups were in groups of two and 21% were in groups of four. Sixty-eight percent of visitor groups were in family groups.
 - United States visitors comprised 98% of total visitation during the survey period, with 57% from Michigan, 10% from Illinois, and smaller proportions from 37 other states and Washington, D.C. International visitors were from 12 countries and comprised 2% of total visitation.
 - Forty-seven percent of visitors were visiting the park for the first time in their lifetime and 25% had visited six or more times. Seventy-eight percent of visitor groups visited the park once during the past year and 5% had visited five or more times.
 - Forty-two percent of visitors were ages 36-60 years, 25% were ages 15 years or younger, and 9% were 66 years or older.
 - Eight percent of visitor groups reported physical conditions that made it difficult to access or participate in park activities or services.
 - Prior to this visit, 82% of visitor groups were aware that Sleeping Bear Dunes NL is a unit of the National Park System.
 - Most visitor groups (94%) obtained information about the park prior to their visit. Prior to this visit, visitor groups most often obtained information about Sleeping Bear Dunes NL through previous visits (66%) and friends, relatives, or word of mouth (48%). Most visitor groups (92%) received the information they needed. Sixty-eight percent indicated they would prefer to obtain information for a future visit from the park website.
 - For 56% of visitor groups, visiting Sleeping Bear Dunes NL was the primary reason for visiting the area.
 - Sixty-five percent of visitor groups stayed overnight within one hour of the park; of these, 25% spent two nights in the park and 33% spent five or more nights in the area outside the park. Of the visitors who stayed overnight inside the park, 55% tent camped in developed campgrounds, while of those staying outside the park, 66% stayed in a lodge, motel, cabin, vacation rental, bed & breakfast, etc.
 - Of visitor groups that spent less than 24 hours visiting the park, 29% spent three to four hours. For those who visited for more than one day, 55% spent two to three days. The average length of stay was 39.5 hours, or 1.6 days.
 - The most common site visited by visitor groups was the Dune Climb (61%), followed by the Pierce Stocking Scenic Drive (56%) and the beaches (42%).
-

- The most common visitor activities were walking, hiking, dune climbing (83%), and general sightseeing (78%). The most important activities were walking, hiking, dune climbing (34%) and general sightseeing (22%).
- Fourteen percent of visitor groups attended a ranger-led talk or program. Of those who did not attend a ranger-led program, 51% indicated that a lack of time prevented them from doing so.
- The visitor services and facilities most commonly used by visitor groups were the park brochure/map (83%) and the restrooms (82%). Nearly all visitor services and facilities were rated as above average in their importance and quality.
- The resources/attributes most commonly rated “very important” or “important” were clean water (96%) and clean air (95%).
- The average group expenditure in the park and the surrounding area (within a one-hour drive) was \$702, with a median (50% spent more and 50% spent less) of \$300. The average total expenditure per person was \$199. Sixty percent of visitor groups had two adults covered by expenditures and 39% had no children covered by expenditures.
- Fifty-two percent of visitor groups were aware that the park operates year round. Ninety-nine percent of visitor groups visited the park in summer. Sixty-two percent of visitor groups would consider visiting the park in a season other than summer, and of those, 91% would consider visiting in the fall.
- Most visitor groups (95%) rated the overall quality of facilities, services, and recreational opportunities at Sleeping Bear Dunes NL as “very good” or “good.” Less than 1% 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

This report describes the results of a visitor study at Sleeping Bear Dunes National Lakeshore (NL), conducted July 12-21, 2009 by the National Park Service (NPS) Visitor Services Project (VSP), part of the Park Studies Unit (PSU) at the University of Idaho.

The National Park Service website for Sleeping Bear Dunes National Lakeshore describes the park: “Sleeping Bear Dunes is as old as continental ice sheets and as young as the 1970 Establishment Act that set aside the Lakeshore for preservation of the natural resources and for public use. The most prominent features, and those for which the park is named, are the perched dunes above Lake Michigan. These immense sand dunes are “perched” atop the already towering headlands that are glacial moraines. The dune overlooks at the Sleeping Bear, Empire and Pyramid Point bluffs are about 400 feet above Lake Michigan. With 65 miles of Lake Michigan shoreline and numerous inland lakes and streams, the park is wonderfully water oriented” (www.nps.gov/slbe, December, 2009).

Organization of the report

The report is organized into three sections.

Section 1: **Methods.** This section discusses the procedures, limitations, and special conditions that may affect the results of the study.

Section 2: **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 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 contacting the PSU office at (208) 885-7863 or by visiting the website: <http://www.psu.uidaho.edu/vsp/reports.htm>.

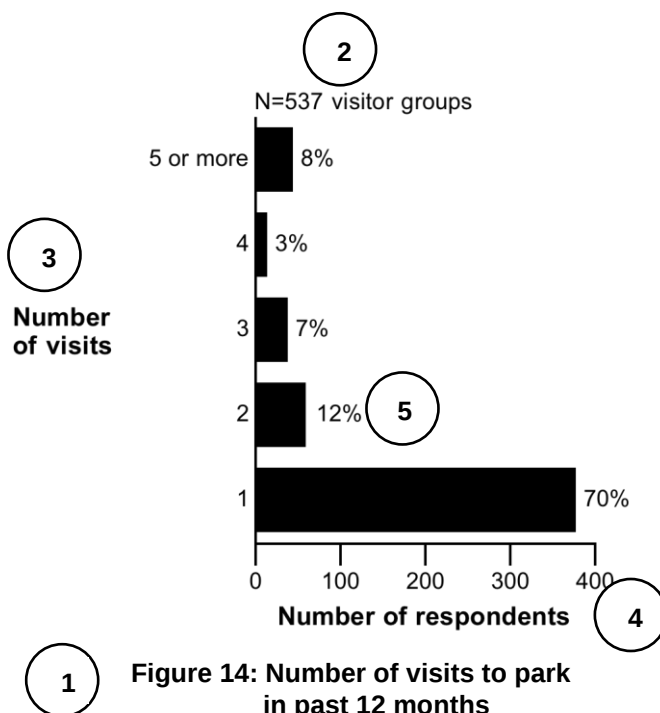
Visitor Comments Appendix: A separate appendix provides visitor responses to open-ended questions. It is bound separately from this report due to its size.

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.
- 2: 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.
- 4: 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 arrived at selected locations in Sleeping Bear Dunes NL during July 12-21, 2009. Table 1 shows the 11 locations and numbers of questionnaires distributed at each location and the response rate for each location. Visitors were surveyed between the hours of 8 a.m. and 8 p.m. During this survey, 1,213 visitor groups were contacted and 1,158 of these groups (95.5%) accepted questionnaires (average acceptance rate for 205 VSP visitor studies is 90.9%). Questionnaires were completed and returned by 696 visitor groups resulting in a 60.1% response rate for this study. The average response rate for the 205 VSP visitor studies conducted from 1988 through 2008 was 74.2%.

Table 1: Questionnaire distribution
 N_1 =number of questionnaires distributed
 N_2 =number of questionnaires returned

Sampling site	Distributed		Returned	
	N_1	%	N_2	%
Dune Climb	203	18	107	15
Platte Beach	191	17	106	15
Scenic Drive	179	16	113	16
Visitor Center	136	12	93	13
North Bar Beach parking lot in Empire	97	8	55	8
Esch Beach	76	7	44	6
Platte Campground	70	6	49	7
Maritime Museum in Glen Haven	69	6	50	7
Rt. 669 and 651 beaches	55	5	27	4
Ferry to Manitou	47	4	25	4
D.H. Day Campground	35	3	27	4
Total	1,158	102*	696	99*

*Total percentages do not equal 100 due to rounding

Questionnaire design

The Sleeping Bear Dunes NL 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 Sleeping Bear Dunes NL. 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 Sleeping Bear Dunes NL questionnaire. However, all questions followed Office of Management and Budget (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 old) 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. These individuals were asked for their names, addresses, and telephone numbers or email addresses in order to mail them a reminder/thank you postcard and follow-ups. Visitors were asked to complete the survey after their visit, and return the questionnaire by mail. 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 (see Table 2). Replacement questionnaires were mailed to participants 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.

Table 2: Follow-up mailing distribution

Mailing	Date	U.S.	International	Total
Postcards	August 3, 2009	1,097	18	1,115
1 st Replacement	August 17, 2009	695	18	713
2 nd Replacement	September 4, 2009	589	0	589

Data Analysis

Returned questionnaires were coded and the visitor responses were processed 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. Double-key data entry validation was performed on numeric and text entry variables and the remaining checkbox (bubble) variables were read by optical mark recognition (OMR) software.

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.
2. The data reflect visitor use patterns to the selected sites during the study period of July 12-21, 2009. 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

The weather during the survey period varied, from sunny and warm, to windy, cool, and rainy. Temperatures varied from 50°F to 70°F. Very poor weather at some beach sites resulted in low visitation, causing the survey period to be extended three additional days.

Checking Non-response Bias

Three variables were used to check non-response bias: respondents' age, travel distance from home to the park, and overall quality rating score. There were no significant differences between early and late responders in any of these variables (see Table 3). Non-response bias is thus judged to be insignificant. See Appendix 3 for more details of the non-response bias checking procedures.

Table 3: Comparison of respondents at different mailing waves				
Variable	Before 1 st replacement	Between 1 st and 2 nd replacement	After 2 nd replacement	p-value (ANOVA)
Age (years)	49.40	47.07	47.23	0.105
Travel distance to park (miles)	303.10	284.70	343.61	0.333
Overall quality rating (from 1 to 5 scale)	4.52	4.38	4.42	0.058

RESULTS

Group and Visitor Characteristics

Visitor group size

Question 20a

On this visit, how many people were in your personal group, including yourself?

Results

- 34% of visitors were in groups of four or five (see Figure 1).
- 30% were in groups of two.
- 23% were in groups of six or more.

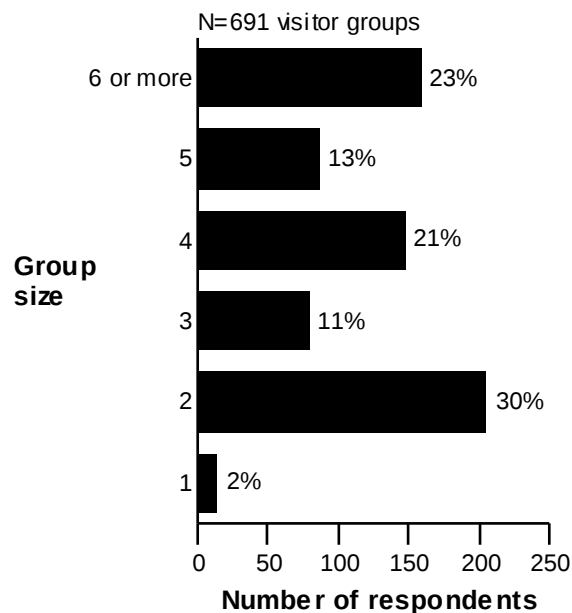


Figure 1: Visitor group size

Visitor group type

Question 19

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

Results

- 68% of visitor groups were made up of family members (see Figure 2).
- 18% were with family and friends.
- “Other” groups (<1%) included:
Airstream RV Caravan
Motor Home Holiday Rambler Rally

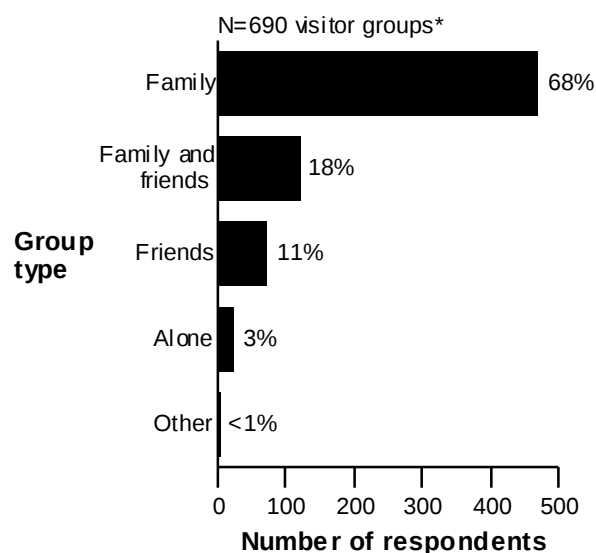


Figure 2: Visitor group type

*total percentages do not equal 100 due to rounding

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

Visitors with organized groups

Question 18a

On this visit, were you and your personal group part of a commercial guided tour group?

Results

- 1% of visitor groups were part of a commercial guided tour group (see Figure 3).

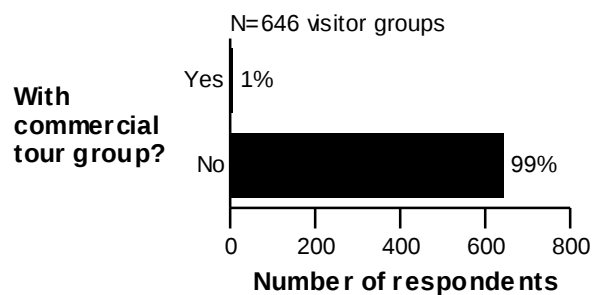


Figure 3: Visitors with a commercial guided tour group

Question 18b

On this visit, were you and your personal group part of a school/educational group?

Results

- Less than 1% of visitor groups were part of a school/educational group (see Figure 4).

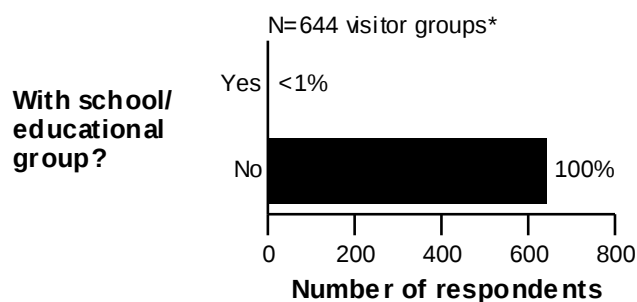


Figure 4: Visitors with a school/educational group

Question 18c

On this visit were you and your personal group part of an "other" organized group (scouts, work, church, etc.)?

Results

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

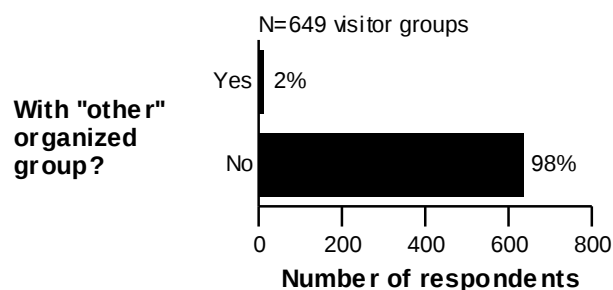


Figure 5: Visitors with an "other" organized group

*total percentages do not equal 100 due to rounding

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

Question 18d

If you were with one of these organized groups, how many people, including yourself, were in this group?

Results – Interpret with **CAUTION!**

- Not enough visitor groups responded to this question to provide reliable results (see Figure 6).

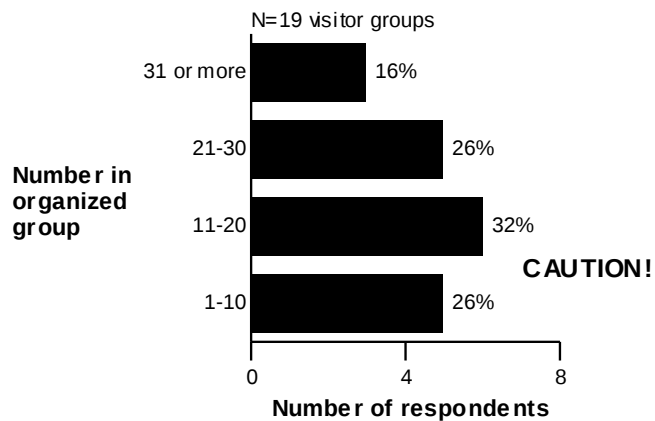


Figure 6: Organized group size

*total percentages do not equal 100 due to rounding

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

United States visitors by state of residence

Question 21b

For you and your personal group on this visit, what is your state of residence?

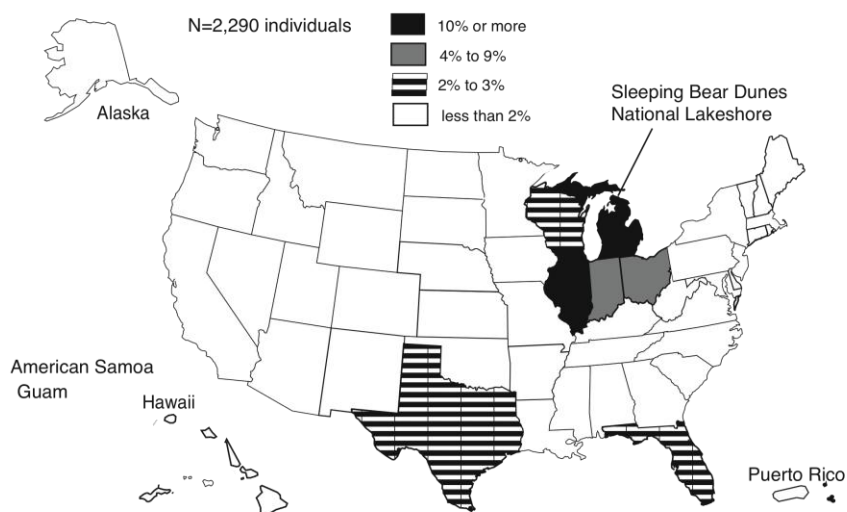
Note: Response was limited to seven members from each visitor group.

Results

- U.S. visitors were from 40 states and Washington, D.C. and comprised 98% of total visitation to the park during the survey period.
- 57% of U.S. visitors came from Michigan (see Table 4 and Map 1).
- 10% came from Illinois and 8% from Ohio.
- Smaller proportions of U.S. visitors came from 37 other states and Washington, D.C.

Table 4: United States visitors by state of residence*

State	Number of visitors	Percent of U.S. visitors N=2,290 individuals	Percent of total visitors N=2,333 individuals
Michigan	1,295	57	56
Illinois	226	10	10
Ohio	180	8	8
Indiana	84	4	4
Texas	57	2	2
Florida	48	2	2
Wisconsin	47	2	1
Missouri	34	1	1
California	30	1	1
Pennsylvania	30	1	1
North Carolina	24	1	1
Iowa	23	1	1
Kentucky	23	1	1
Colorado	17	1	1
New York	17	1	1
Maryland	14	1	1
Washington	14	1	1
Massachusetts	12	1	1
22 other states and Washington, D.C.	115	4	4



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

*total percentages do not equal 100 due to rounding

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

Question 21b

Table 5: International visitors by country of residence *

Country	Number of visitors	Percent of international visitors N=43 individuals	Percent of total visitors N=2,333 individuals
Canada	15	35	1
United Kingdom	5	12	<1
Austria	4	9	<1
Germany	4	9	<1
Brazil	3	7	<1
China	3	7	<1
France	2	5	<1
India	2	5	<1
Netherlands	2	5	<1
Italy	1	2	<1
Japan	1	2	<1
Kenya	1	2	<1

Results

- International visitors were from 12 countries and comprised 2% of total visitation to the park during the survey period (see Table 5).
- 35% of international visitors came from Canada.
- 12% were from the United Kingdom and 9% came from Austria.
- Smaller proportions came from 9 other countries.

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

Number of visits in the past 12 months

Question 21c

For you and your personal group on this visit, how many times have you visited Sleeping Bear Dunes NL in the past 12 months (including this visit)?

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

Results

- 78% of visitors were visiting the park for the first time in the past 12 months (see Figure 7).
- 16% visited two or three times.
- 5% visited the park five or more times.

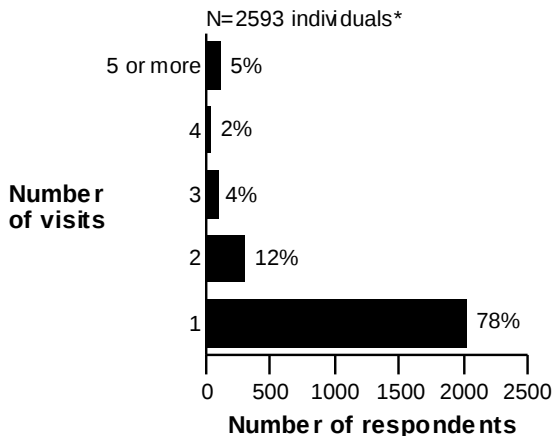


Figure 7: Number of visits to park in past 12 months

Number of visits in lifetime

Question 21d

For you and your personal group on this visit, how many times have you visited Sleeping Bear Dunes NL in your lifetime (including this visit)?

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

Results

- 47% of visitors were visiting the park for the first time in their lifetime (see Figure 8).
- 25% had visited the park six or more times.
- 20% had visited two or three times.

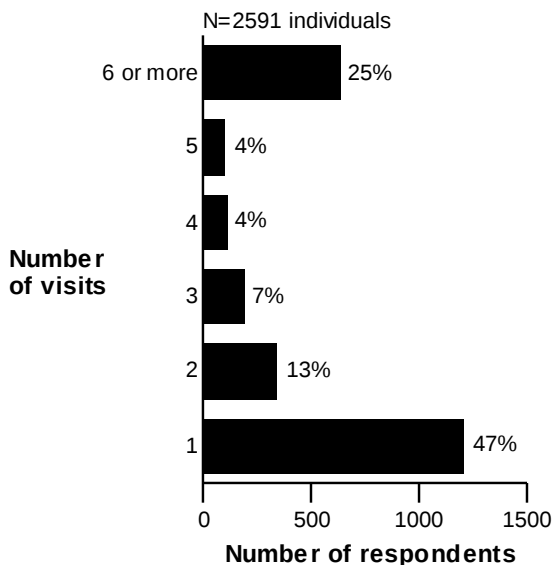


Figure 8: Number of visits to park in lifetime

*total percentages do not equal 100 due to rounding

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

Visitor age

Question 21a

For you and your personal group on this visit, what is your current age?

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

Results

- Visitor ages ranged from 1 to 92 years.
- 42% of visitors were in the 36-60 years age group (see Figure 9).
- 25% were 15 years or younger.
- 9% were 66 years or older.

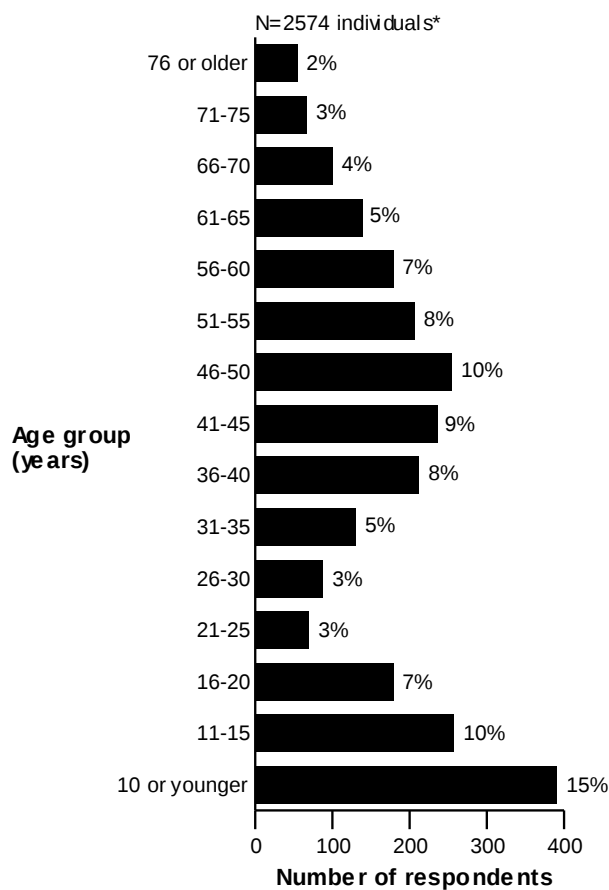


Figure 9: Visitor age

*total percentages do not equal 100 due to rounding

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

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

- 8% of visitor groups included members with physical conditions that made it difficult to access or participate in park activities or services (see Figure 10).

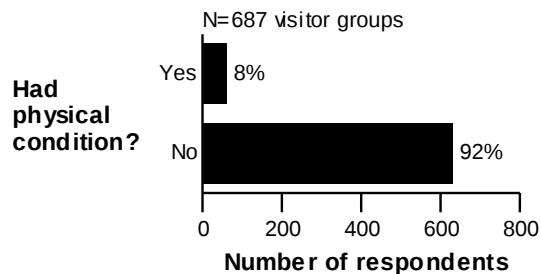


Figure 10: Visitor groups that included members with physical conditions

Question 22b

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

Results – Interpret with **CAUTION!**

- Twenty-six visitor groups commented on services and activities that were difficult to access or participate in (see Table 6).

Table 6: Services/activities difficult to access/participate in

N=56 comments;
some visitor groups made more than one comment.

Service/activity	Number of times mentioned
Dune climbing	21
Walking/hiking	17
Walking in sand	8
Beach access	2
Access to islands	1
Access to park areas	1
Biking	1
Boating	1
Lodging in the park	1
Swimming	1
Travel in isolated areas	1
Walking on boardwalk	1

*total percentages do not equal 100 due to rounding

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

Question 22c

What specific problems did the person have?

Results

- Forty-nine visitor groups commented on specific physical problems (see Table 7).

Table 7: Specific problems

N=56 comments;
some visitor groups made more than one comment.

Problem	Number of times mentioned
Walking problems	8
Age related problems	7
Back injury	6
Bad legs	5
Breathing problems	4
Heart problems	4
Arthritis	3
Knee problems	3
Disabled in a wheelchair	2
Hip problems	2
ADHD	1
Ankle injury	1
Asthma	1
Bad feet	1
Cast on broken foot	1
Fibromyalgia	1
Head injury	1
High blood pressure	1
Legally blind	1
Leg injury	1
Seizure disorder	1

*total percentages do not equal 100 due to rounding

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

Awareness of park

Question 2a

Prior to this visit, were you and your personal group aware that Sleeping Bear Dunes NL is a unit of the National Park System?

Results

- 82% of visitor groups were aware that Sleeping Bear Dunes NL is a unit of the National Park System (see Figure 11).

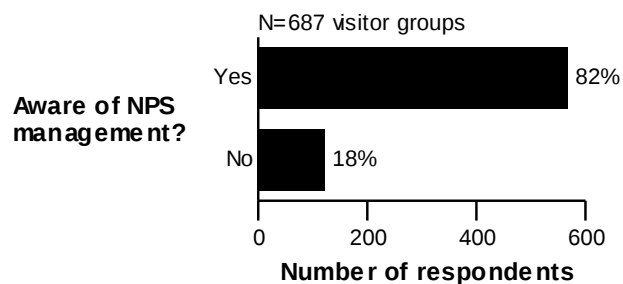


Figure 11: Visitor groups that were aware Sleeping Bear Dunes NL is unit of the NPS

Awareness of proposed wilderness areas

Question 2b

Wilderness areas are proposed within Sleeping Bear Dunes NL in order to provide opportunities for solitude and recreation. Prior to this visit, were you and your personal group aware of the proposed wilderness areas?

Results

- 30% of visitor groups were aware of the proposed wilderness areas within Sleeping Bear Dunes NL (see Figure 12).

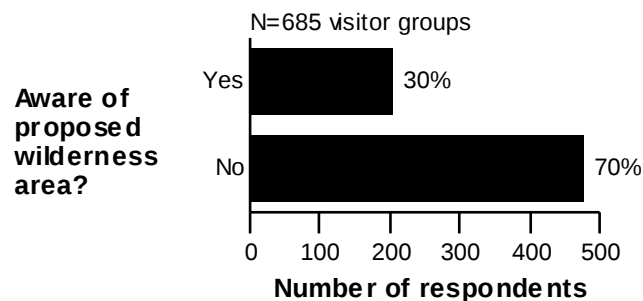


Figure 12: Visitor groups that were aware of the proposed wilderness areas

*total percentages do not equal 100 due to rounding

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

Awareness of park partner organizations

Question 5

Several non-profit organizations work as partners to protect Sleeping Bear Dunes NL. They provide support to the park through donations/contributions to scientific studies, educational programs, and general operational needs. Prior to receiving this questionnaire, were you and your personal group aware of the following groups?

Results

- Table 8 shows visitor groups' awareness of park partner organizations.

Table 8: Visitor groups' awareness of park partners

N=number of visitor groups that answered each question

Organization	N	Aware of organization?	
		Yes %	No %
a) Friends of Sleeping Bear Dunes	680	17	83
b) Manitou Islands Memorial Society	676	5	95
c) Preserve Historic Sleeping Bear	676	14	86

*total percentages do not equal 100 due to rounding

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

Awareness of park rules and regulations

Question 3a

Prior to this visit, were you and your personal group aware of the following rules/regulations at Sleeping Bear Dunes NL?

Results

- Column a in Table 9 shows the proportions of visitor groups that were aware of park rules/ regulations prior to their visit.

Question 3b

Did you and your group learn (via publications, signs, talking to park staff, etc.) about these rules/regulations during this visit to Sleeping Bear Dunes NL?

Results

- Column b in Table 9 shows the proportions of visitor groups that learned about park rules/regulations during their visit.

Table 9: Visitor groups that were aware of and learned about park rules/regulations

a) Aware prior to visit?				b) Learned during visit?		
N=number of visitor groups				N=number of visitor groups		
N	Yes %	No %	Rules/regulations	N	Yes %	No %
680	78	22	An entrance fee is required to recreate within Sleeping Bear Dunes NL	403	63	37
666	55	45	Pets are only permitted in certain areas and must be controlled on a 6-foot or less leash	444	49	51
664	58	42	Glass containers are not allowed on beaches	446	42	58
674	73	27	It is illegal to transport firewood from quarantined areas in Michigan	416	33	67
654	30	70	Bicycles are not allowed on trails	506	40	60

*total percentages do not equal 100 due to rounding

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

Trip/Visit Characteristics and Preferences

Seasonal visitation and preferences

Question 4a

Sleeping Bear Dunes NL operates year round, although available programs and facilities vary according to season. Prior to this visit, were you and your personal group aware that the park operated year round?

Results

- 52% of visitor groups were aware that the park operates year round (see Figure 13).

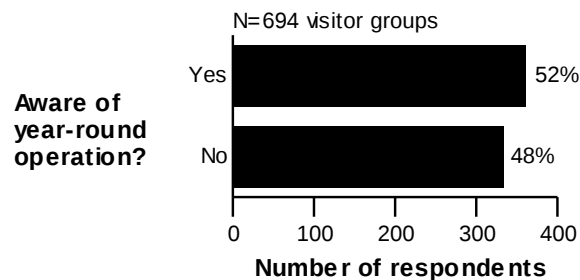


Figure 13: Visitor groups that were aware the park operates year round

Question 4b

Including this visit, in which seasons have you and your personal group visited the park?

Results

- 99% of visitor groups visited the park in summer (see Figure 14).
- Fall was the next most visited season (34%).

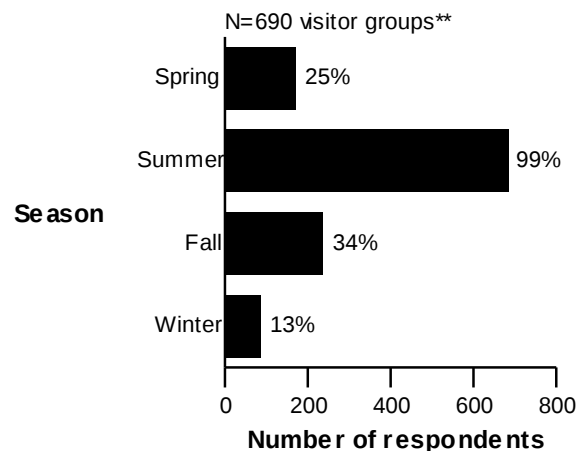


Figure 14: Seasons in which visitor groups visited the park

*total percentages do not equal 100 due to rounding

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

Question 4c

Would you and your personal group consider visiting in a season other than summer?

Results

- 62% of visitor groups would consider visiting the park in a season other than summer (see Figure 15).

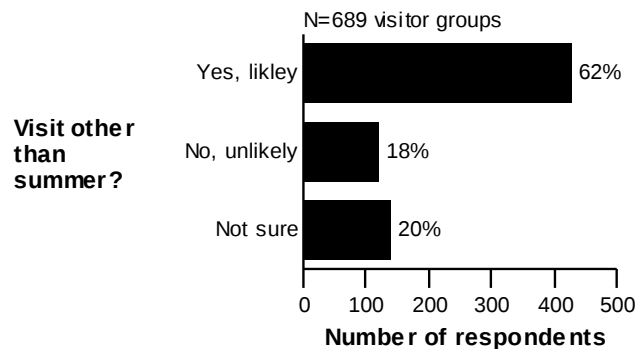


Figure 15: Visitor groups that would consider visiting the park in a season other than summer

Question 4d

If YES, in which season(s) would you and your personal group likely visit?

Results

- Fall was the most common season (91%) other than summer in which visitor groups would consider visiting the park (see Figure 16).

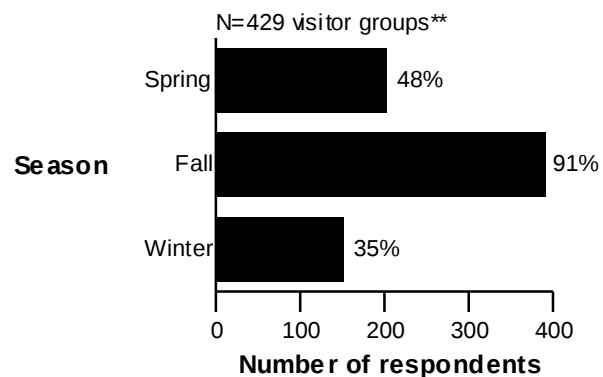


Figure 16: Seasons other than summer in which visitor groups would visit the park

*total percentages do not equal 100 due to rounding

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

Information sources prior to visit

Question 1a

Prior to your visit, how did you and your personal group obtain information about Sleeping Bear Dunes NL?

Results

- 94% of visitor groups obtained information about Sleeping Bear Dunes NL prior to their visit (see Figure 17).
- As shown in Figure 18, among those visitor groups who obtained information about Sleeping Bear Dunes NL prior to their visit, the most common sources were:
 - 66% Previous visits
 - 48% Friends/relatives/word of mouth
 - 32% Maps/brochures
 - 32% Park website
- “Other” sources (7%) were:
 - Camp sends field trips
 - Family pictures
 - GPS
 - Grew up in the area
 - Internet
 - Live in the area
 - Michigan organization/website
 - National Park passport book
 - Road sign
 - School visit
 - Traverse City website

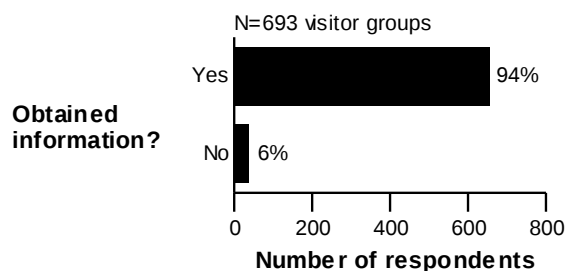


Figure 17: Visitor groups that obtained information about Sleeping Bear Dunes NL prior to visit

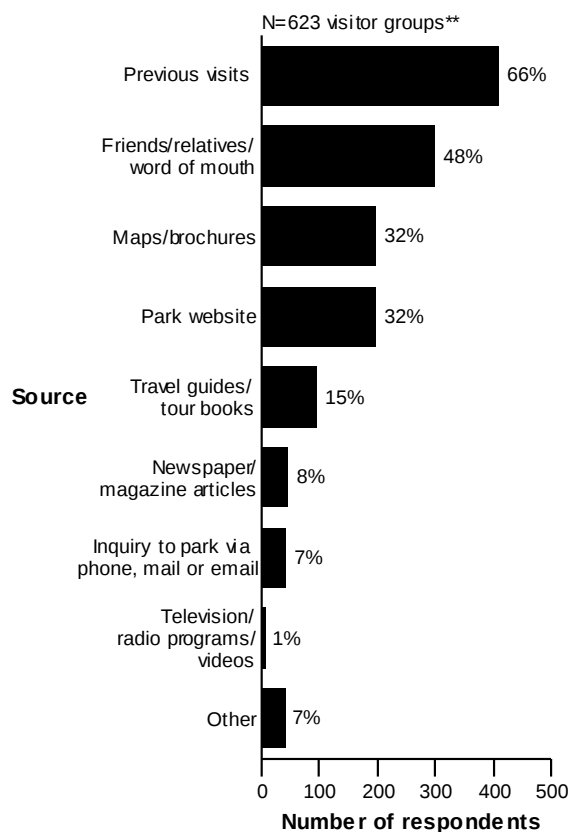


Figure 18: Sources of information used by visitor groups prior to visit

*total percentages do not equal 100 due to rounding

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

Question 1c

From the sources you used prior to this visit, did you and your personal group receive the type of information about the park that you needed?

Results

- 92% of visitor groups received needed information prior to their visit (see Figure 19).

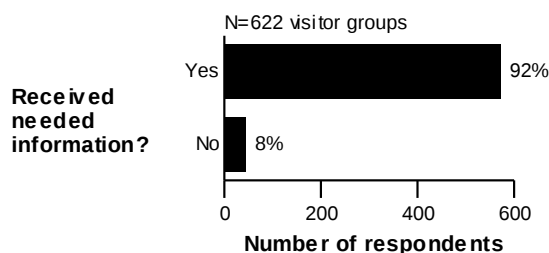


Figure 19: Visitor groups that received needed information prior to their visit

Question 2d

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

Results

- Thirty-four visitor groups listed information they needed, but was not available (see Table 10).

Table 10: Needed information

N=40 comments;
some visitor groups made more than one comment.

Type of information	Number of times mentioned
Camping information (locations, prices, etc.)	5
Detailed description of trails	3
Map of park areas and information	3
Cost of admission	2
Information about beaches	2
Maps	2
Maps of swimming beaches	2
Directions	1
Electric site verses air conditioned site	1
Fruit harvesting information	1
Hiking trail information on website	1
History information on website	1
Hours of operation	1
How crowded the park is	1
How far to walk from car to beach	1
How long hikes take and supplies to bring	1
How much time to spend at each location	1
Information about climbing dunes	1
Information about parking passes	1
Information on historic district	1
Locations where pets were allowed	1
Manitou Island Ferry schedule	1
Map with bike routes	1
Maps and brochures at motels and visitor centers	1
Online schedule of events	1
Parking in Leland	1
Personal planning	1
Road signs	1

*total percentages do not equal 100 due to rounding

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

Information sources for future visit

Question 1b

If you were to visit Sleeping Bear Dunes NL in the future, how would you and your personal group prefer to obtain information about the park?

Results

- As shown in Figure 20, visitor groups' most preferred sources of information to plan a future visit were:

68% Park website
43% Previous visits
36% Maps/brochures

- "Other" sources of information (4%) were:

Email
Family pictures
Grew up in the area
GPS
Information on special events
Internet (e.g., www.michigan.org)
Local resident

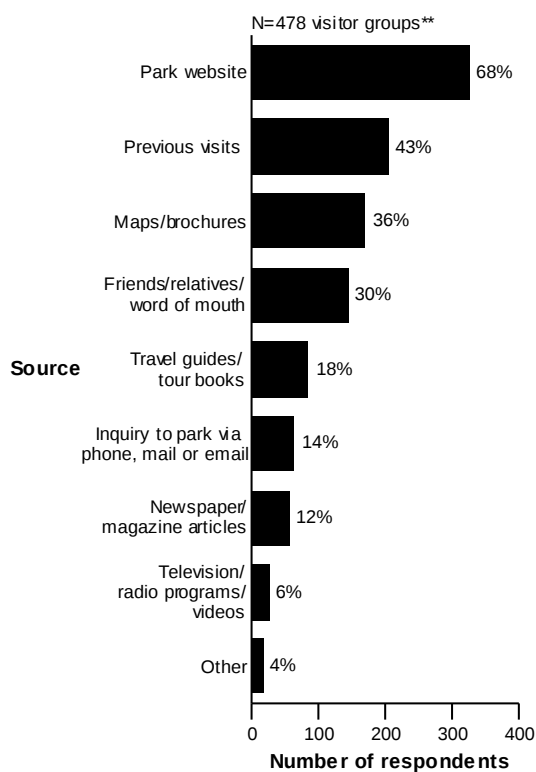


Figure 20: Sources of information to use for a future visit

*total percentages do not equal 100 due to rounding

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

Primary reason for visit to the area

Question 7

On this trip, what was the primary reason that you and your personal group came to the Sleeping Bear Dunes NL area (within 1-hour drive from park boundary)?

Results

- 14% of visitor groups were residents of the area (see Figure 21).
- As shown in Figure 22, among non-residents, the most common primary reasons for visiting the area were:

56% Visit Sleeping Bear Dunes NL
21% Visit other attractions in the area

- “Other” reasons (9%) were:

Anchor Days Parade
Attend a baptism
Attend a reunion
Attend wedding
Avoid St. Louis heat
Backpacking
Biking
Bring family/friends to the area
Came to look at a house for sale
Camping
Childhood memories
Drop off child at camp
Drove Lake Michigan shoreline
Family reunion
Float down the river
Geo-caching in area
Kayaking
Love Lake Michigan beaches
Motor home rally
Outdoor activities
Paragliding
Planned visit by RV Caravan
Regular visitors of the area
River access

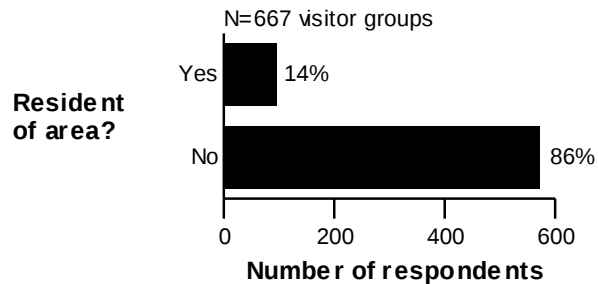


Figure 21: Visitor groups that were residents of the Sleeping Bear Dunes NL area

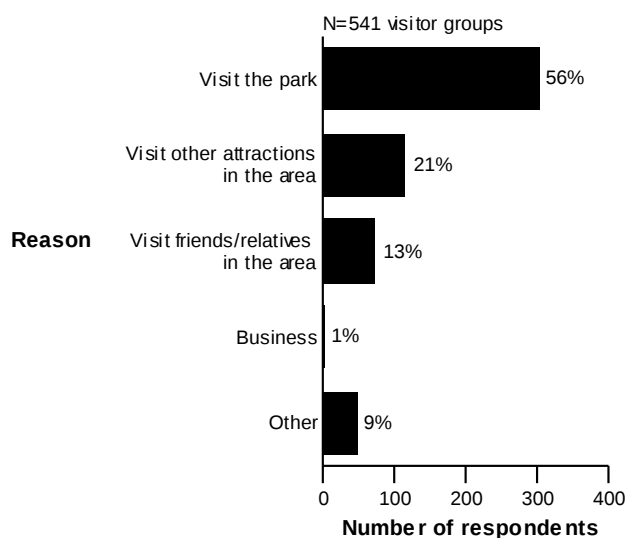


Figure 22: Primary reason for visiting the Sleeping Bear Dunes NL area

- “Other” reasons (continued)

Stay in vacation rental in the area
Summer job
Swimming
Traverse City horse show by bay
Tubing
Vacation
Visit a beautiful part of Michigan
Volunteering
Wedding anniversary

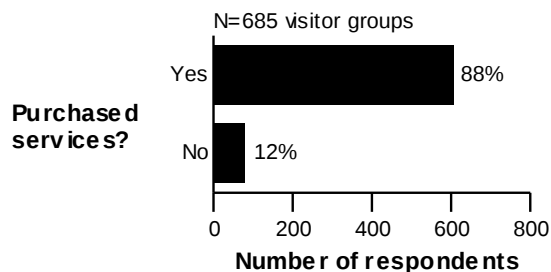
*total percentages do not equal 100 due to rounding

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

Services used in the community

Question 23

In which communities, within a 1-hour drive from the park boundary, did you and your personal group purchase support services (such as hotels, restaurants, groceries, gas, recreational equipment rentals, etc.) that were specifically related to this visit to Sleeping Bear Dunes NL?



Results

- 88% of visitor groups purchased support services in communities within a 1-hour drive from the park boundary (see Figure 23).
- As shown in Figure 24, the communities most commonly used for support services were:
 - 54% Traverse City
 - 46% Glen Arbor
 - 45% Empire
- Table 11 shows “other” communities (20%) in which visitor groups purchased support services.

Figure 23: Visitor groups that purchased support services in nearby communities

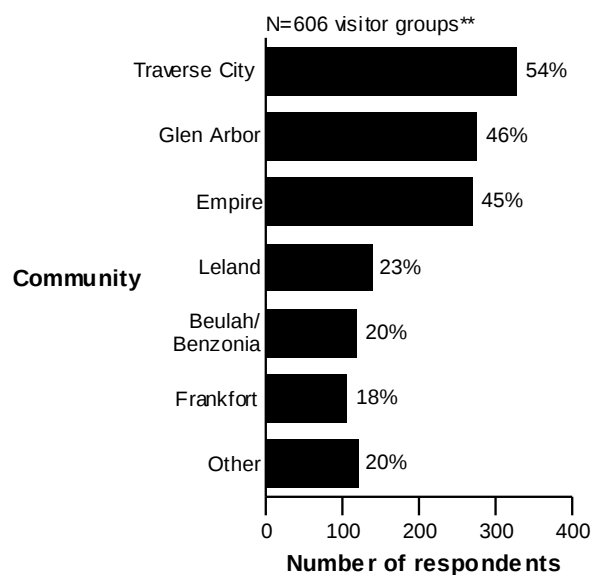


Figure 24: Communities used to obtain services

*total percentages do not equal 100 due to rounding

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

Table 11: “Other” communities used for support services

N=136 comments

Community	Number of times mentioned	Percent within “other”	Percent in overall use
Honor	25	18	2
Northport	14	10	2
Sutton's Bay	14	10	2
Interlochen	12	9	1
Cedar	8	6	1
Lake Leelanau	7	5	1
Cadillac	5	4	1
Glen Haven	5	4	1
Lake Ann	5	4	1
Manistee	5	4	1
Bear Lake	4	3	<1
Elberta	3	2	<1
Maple City	3	2	<1
Petosky	3	2	<1
Arcadia	2	1	<1
Burdickville	2	1	<1
Frederick	2	1	<1
Omena	2	1	<1
Spider Lake	2	1	<1
Acme	1	<1	<1
Charlevoix	1	<1	<1
Crystal Mountain	1	<1	<1
Crystal River	1	<1	<1
Harbor Springs	1	<1	<1
Leelanau State Park	1	<1	<1
Long Lake Township	1	<1	<1
Ludington	1	<1	<1
Mackinaw City	1	<1	<1
Mission Peninsula	1	<1	<1
Platte River	1	<1	<1
Sleeping Bear Campground	1	<1	<1
Thompsonville	1	<1	<1

*total percentages do not equal 100 due to rounding

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

Number of vehicles

Question 20b

On this visit, how many vehicles did you and your personal group use to arrive at the park?

Results

- 76% of visitor groups used one vehicle to arrive at the park (see Figure 25).

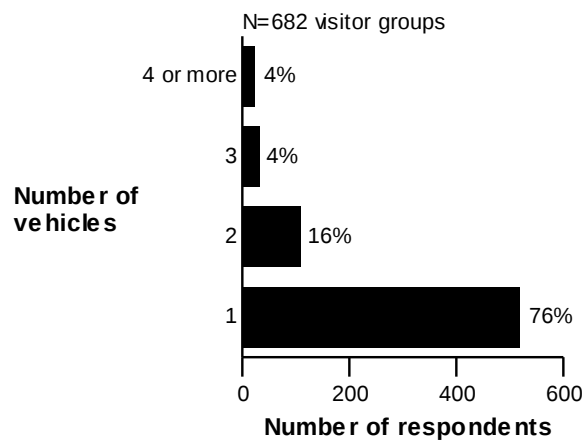


Figure 25: Number of vehicles used to arrive at the park

*total percentages do not equal 100 due to rounding

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

Overnight stays

Question 8a

On this trip, did you and your personal group stay overnight away from your permanent residence inside Sleeping Bear Dunes NL, or in the surrounding area (within 1-hour drive from park boundary)?

Results

- 43% of visitor groups stayed overnight away from home outside the park within a 1-hour drive (see Figure 26).
- 35% did not stay overnight away from their permanent residence.

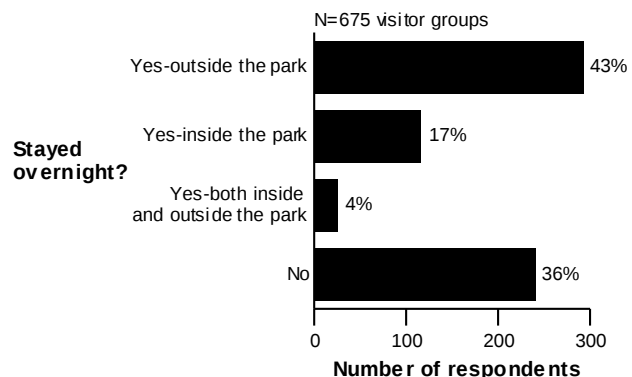


Figure 26: Visitor groups that stayed overnight within 1-hour drive of the park

Question 8b

If YES, please list the number of nights you and your personal group stayed inside Sleeping Bear Dunes NL.

Results

- 35% of visitor groups spent five or more nights inside the park (see Figure 27).
- 25% spent two nights.

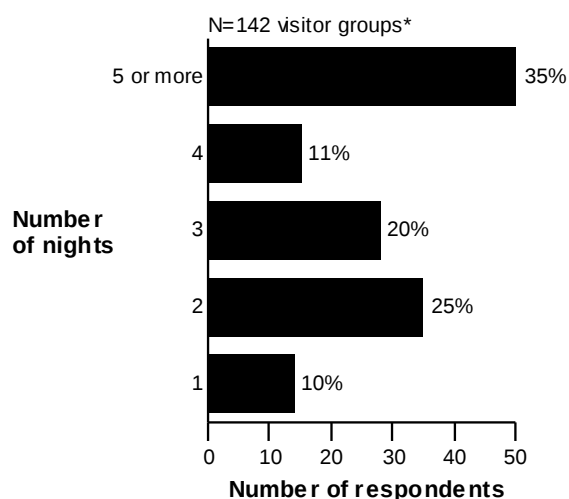


Figure 27: Number of nights spent inside the park

*total percentages do not equal 100 due to rounding

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

Question 8b

If YES, please list the number of nights you and your personal group stayed in the surrounding area outside the park (within 1-hour drive).

Results

- 33% of visitor groups spent five or more nights outside the park (see Figure 28).
- 25% spent two nights.

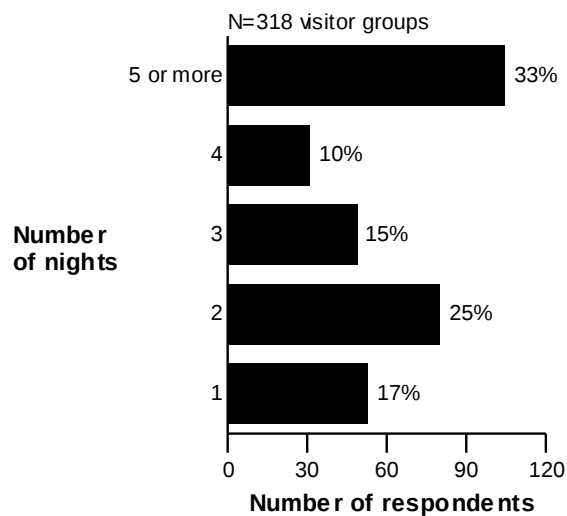


Figure 28: Number of nights spent in the surrounding area outside the park (within 1-hour drive)

*total percentages do not equal 100 due to rounding

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

Lodging used inside the park

Question 8c

In which types of lodging did you and your personal group spend the night(s) inside the park?

Results

- 55% of visitor groups tent camped in developed campgrounds inside the park (see Figure 29).
- 36% were RV/trailer camping.
- “Other” type of lodging (1%) was:

Kramer House

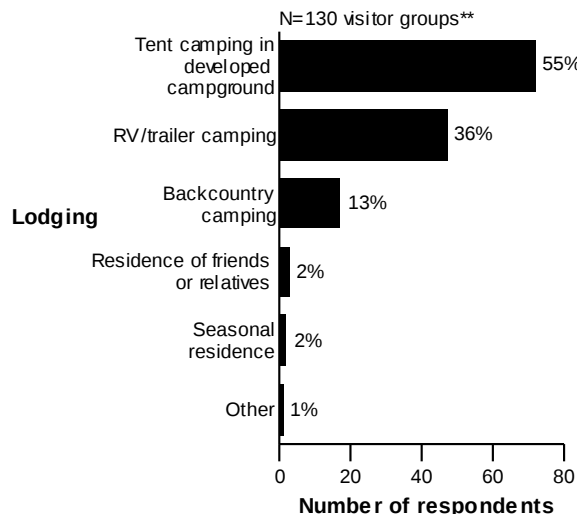


Figure 29: Type of lodging used inside the park

Lodging used in area outside the park

Question 8d

In which types of lodging did you and your personal group spend the night(s) outside the park in the surrounding area (within 1-hour drive)?

Results

- 66% of visitor groups stayed in a lodge, motel, cabin, vacation rental, bed & breakfast, etc. (see Figure 30).
- 13% were RV/trailer camping.
- 13% stayed at the residence of friends or relatives.
- “Other” type of lodging (<1%) was:

Veterans Memorial State Forest Campground, Honor, MI

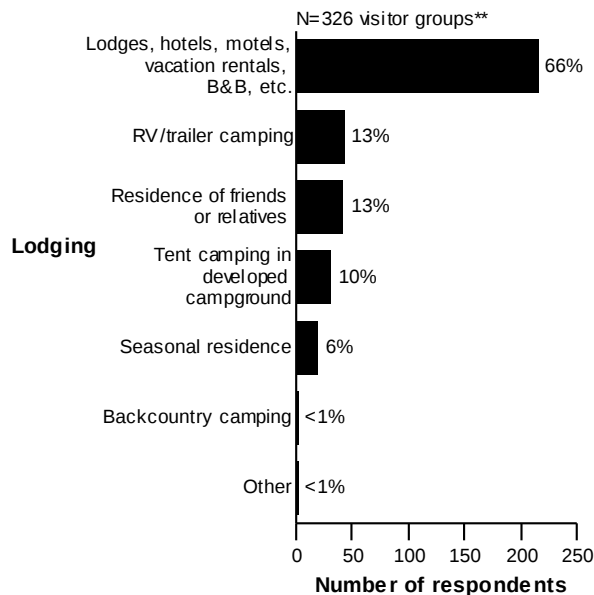


Figure 30: Type of lodging outside the park (within 1-hour drive)

Use of campgrounds

Question 6b

If you and your personal group

*total percentages do not equal 100 due to rounding

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

camped in the park on this visit,
which campground did you use?

Results

- 53% of visitor groups used the Platte River Campground (see Figure 31).
- 36% used the D.H. Day Campground
- “Other” campgrounds (11%) were:

Backcountry
Bay
Group Site II
Weather Station
White Pine

Campground

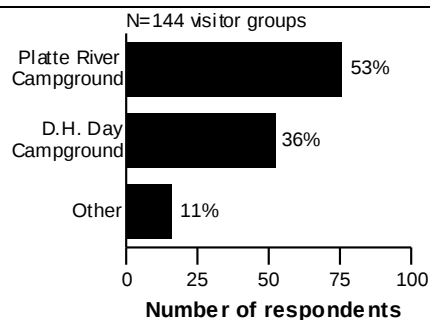


Figure 31: Campgrounds used by visitor groups

Crowding in campgrounds

Question 6c

How crowded did you and your
personal group feel at the
campground that you used?

Results

- 50% of visitor groups felt “neither crowded nor uncrowded” at park campgrounds (see Figure 32).
- 29% felt “crowded or over crowded.”
- Table 12 shows the level of crowding at each park campground.

Level of crowding

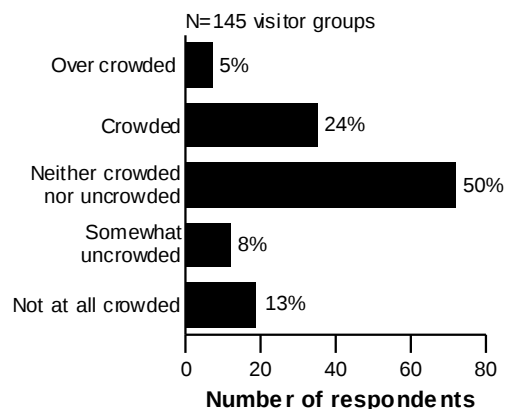


Figure 32: Level of crowding in campgrounds

Table 12: Visitor ratings of crowding in park campgrounds

N=number of visitor groups that rated the crowding in park campground

Campground	N	Rating (%)				
		Over crowded	Crowded	Neither crowded nor uncrowded	Somewhat uncrowded	Not at all crowded
Platte River	74	5	22	50	8	15
D.H. Day	50	2	32	56	8	2
All other – CAUTION!	16	6	13	38	13	31

Quality of campgrounds

Question 6d

Finally, for only those campgrounds that

*total percentages do not equal 100 due to rounding

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

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

- 90% of visitor groups rated the quality of park campgrounds as “very good” or “good” (see Figure 33).
- Table 13 shows how visitors rated the quality of each park campground.

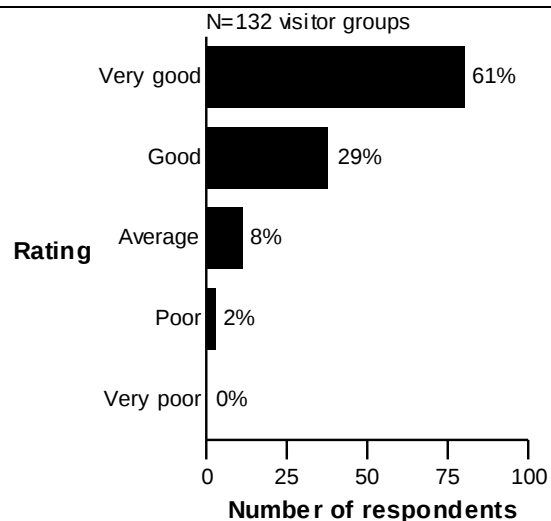


Figure 33: Quality of park campgrounds

Table 13: Visitor ratings of park campground quality

N=number of visitor groups that rated the quality of each campground

Campground	N	Rating (%)				
		Very poor	Poor	Average	Good	Very good
Platte River	67	0	1	6	16	76
D.H. Day	46	0	0	9	50	41
Other – CAUTION!	14	0	14	21	29	36

*total percentages do not equal 100 due to rounding

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

Use of campground reservation system

Question 6a

Currently, advance reservations are accepted via the internet or telephone for selected campgrounds within Sleeping Bear Dunes NL. On this visit, did you and your group use the camping reservation system?

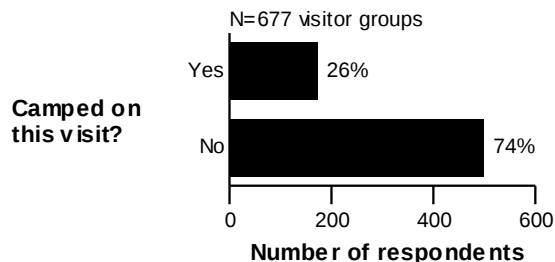


Figure 34: Visitor groups that camped on this visit

Results

- 26% of visitor groups camped on this visit (see Figure 34)
- Of those that camped, 52% of visitor groups used the first-come first-served only campground (see Figure 35).
- 27% used the campground reservation system.
- 21% chose not to use the reservation system.

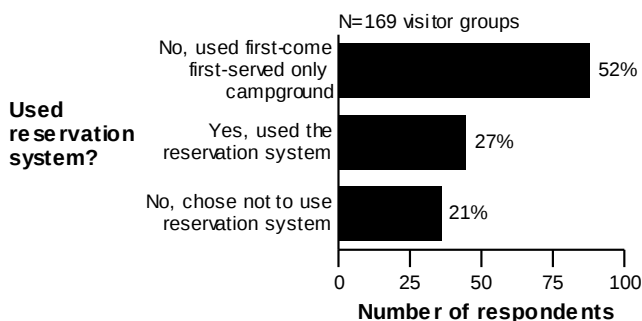


Figure 35: Visitor groups that used the campground reservation system

Question 6e

If you were to camp inside Sleeping Bear Dunes NL on a future visit, which of the following options would you and your personal group prefer?

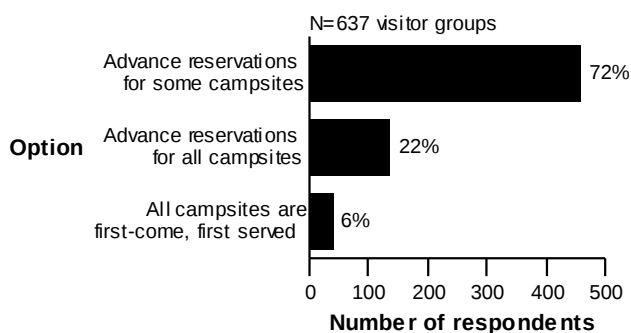


Figure 36: Visitor groups' preferred campground reservation option

Results

- 72% of visitor groups would prefer advance reservations for some campsites (see Figure 36).

*total percentages do not equal 100 due to rounding

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

Length of stay in the park

Question 17

On this visit to Sleeping Bear Dunes NL, how long did you and your personal group spend visiting the park?

Results

Number of hours if less than 24

- 66% of visitor groups spent less than 24 hours at the park on this visit.
- 29% of visitor groups spent three to four hours visiting the park (see Figure 37).
- 26% spent one to two hours.
- 23% spent five to six hours.
- The average length of stay for visitor groups who spent less than 24 hours was 4.5 hours.

Number of days if 24 hours or more

- 34% of visitor groups spent 24 hours or more at the park on this visit.
- 47% of visitor groups spent two or three days visiting the park (see Figure 38).
- 34% spent five or more days.
- The average length of stay for visitor groups who spent more than 24 hours was 4.4 days.

Average length of stay

- The average length of stay for all visitor groups was 39.5 hours or 1.6 days.

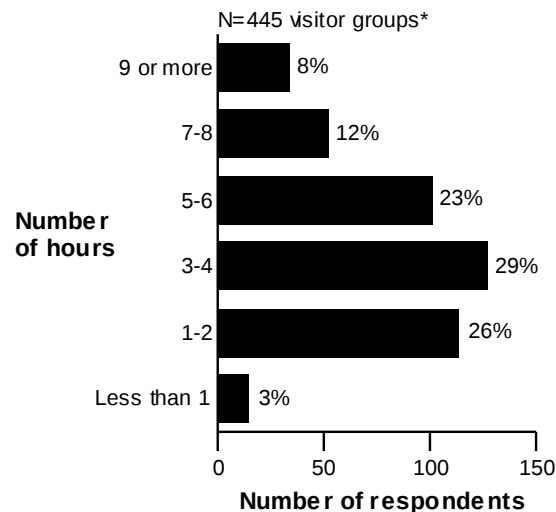


Figure 37: Number of hours visiting the park

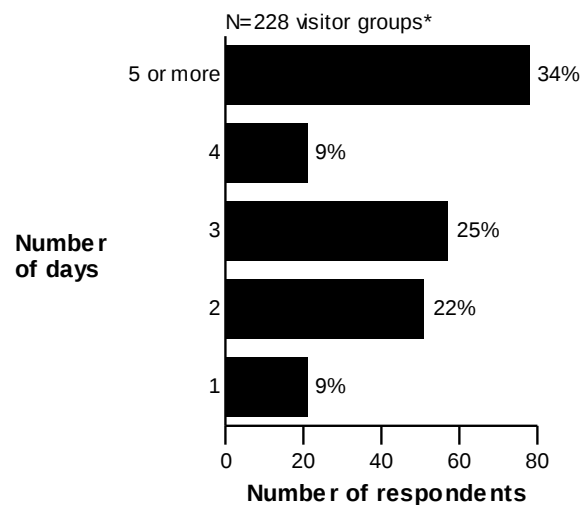


Figure 38: Number of days visiting the park

*total percentages do not equal 100 due to rounding

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

Sites visited

Question 11

On this visit to Sleeping Bear Dunes NL, which park sites did you and your personal group visit?

Results

- As shown in Figure 39, the most commonly visited sites by visitor groups at Sleeping Bear Dunes NL were:

61% Dune Climb
56% Pierce Stocking Scenic Drive
42% Beach

- The least visited sites were:

4% South Manitou Island
2% North Manitou Island

- Beaches that were visited (42%) are shown in Table 14.

- “Other” sites that were visited (8%) are shown in Table 15.

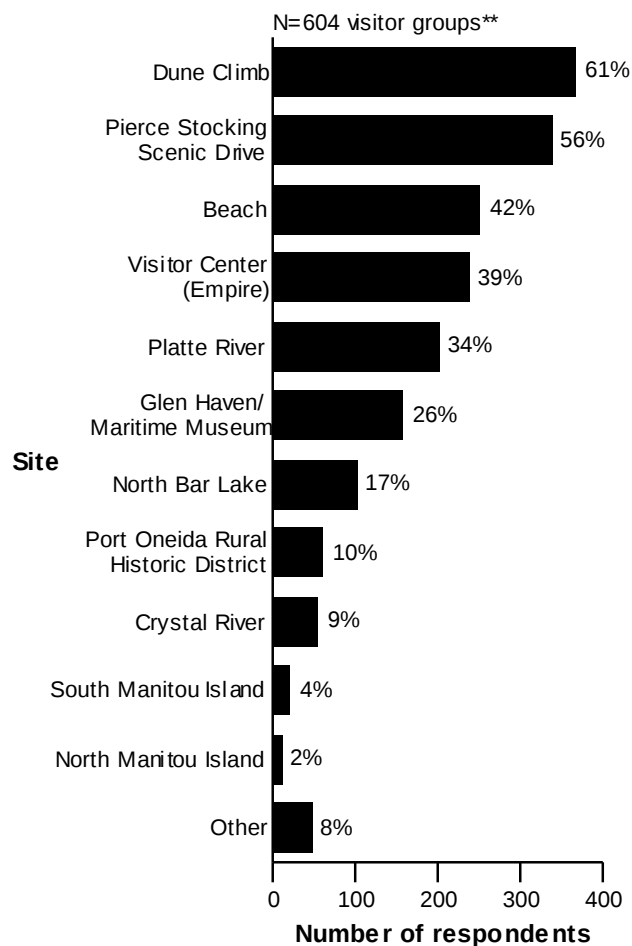


Figure 39: Sites visited

*total percentages do not equal 100 due to rounding

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

Table 14: Beaches visited

N=264 comments

Site	Number of times mentioned	Percent within “beaches” responses	Percent in total
Platte River	50	19	8
Esch Beach	41	16	7
Good Harbor	32	12	5
Empire	32	12	5
D.H. Day	25	10	4
Glen Haven	19	7	3
Peterson Road	13	5	2
Otter Creek	9	3	1
Lake Michigan	7	3	1
Sleeping Bear Point	7	3	1
North Bar Lake	7	3	1
Frankfort	3	1	<1
Glen Arbor	3	1	<1
Old Indian Trail	3	1	<1
Campground Beach	2	<1	<1
Dune Trail	1	<1	<1
Glen Lake	1	<1	<1
Lake Michigan Trail	1	<1	<1
Many beaches	1	<1	<1
Oneida	1	<1	<1
Point Betsy Beach	1	<1	<1
Port Oneida	1	<1	<1
Pyramid Point	1	<1	<1
South Bar	1	<1	<1
Suttons Bay	1	<1	<1
White Pine	1	<1	<1

*total percentages do not equal 100 due to rounding

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

Table 15: “Other” sites visited

N=49 comments

Site	Number of times mentioned	Percent within “other” responses	Percent in total
Empire Bluff Trail	7	14	1
Pyramid Point	4	8	1
Alligator Trail	3	6	<1
Otter Creek	3	6	<1
Bass Lake	2	4	<1
Betsy Point	2	4	<1
Dune Trail	2	4	<1
Glen Arbor	2	4	<1
Lake Michigan scenic overlook	2	4	<1
Old Indian Trail	2	4	<1
Platte River	2	4	<1
All 13 trails	1	2	<1
Betsy River	1	2	<1
Bike Glen Lake	1	2	<1
Cedar	1	2	<1
City Run	1	2	<1
D. H. Day	1	2	<1
Deer Lake Trail	1	2	<1
Empire Dunes	1	2	<1
Green Lake	1	2	<1
Hiking trails	1	2	<1
Lake Leelanau	1	2	<1
Otter Lakes	1	2	<1
Platte River Campground	1	2	<1
Pyramid Point Trail	1	2	<1
Shalda Creek	1	2	<1
South Farm Tour	1	2	<1
Treat Farm walk	1	2	<1
Windy Moraine Trail	1	2	<1

*total percentages do not equal 100 due to rounding

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

Reasons for not visiting Manitou Islands

Question 11c

If you and your personal group did not visit either of the Manitou Islands, why not? (open-ended)

Results

- Five hundred thirty-nine visitor groups listed reasons for not visiting either of the Manitou Islands (see Table 16).

Table 16: Reasons for not visiting Manitou Islands

N=661 comments;
some visitor groups made more than one comment.

Reason	Number of times mentioned	Percent
Lack of time	301	46
Did not know about the islands	64	10
Not interested/did not want to	60	9
High cost	57	9
Did not plan to visit	33	5
Had children in the group	30	5
Had visited in the past	24	4
Infrequent ferry trips	18	3
Poor weather conditions	16	2
Long distance	10	2
Participated in other activities	9	1
No pets allowed on the ferry	6	1
Did not have transportation	5	1
Drive to boat is too long/far	4	1
Seasickness	3	<1
Do not like wilderness camping	3	<1
Boat was canceled	2	<1
Could not swim that far	2	<1
Limited handicap access	2	<1
Too much energy needed	2	<1
Bridge was in construction	1	<1
Concern about access to care in case of medical emergency	1	<1
Cost of lodging	1	<1
Fear boat rides	1	<1
Had knee injury	1	<1
Had motor home for transportation	1	<1
Heard mosquitoes are bad	1	<1
No talks posted that week	1	<1
Old age	1	<1
Poison ivy	1	<1

*total percentages do not equal 100 due to rounding

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

Crowding at park sites

Question 11b

For the sites that you and your personal group visited, how crowded did you feel?

Results

- 38% of visitor groups felt “neither crowded nor uncrowded” at park sites (see Figure 40).
- 30% felt “not at all crowded.”
- Table 17 shows how crowded visitor groups felt at park sites.

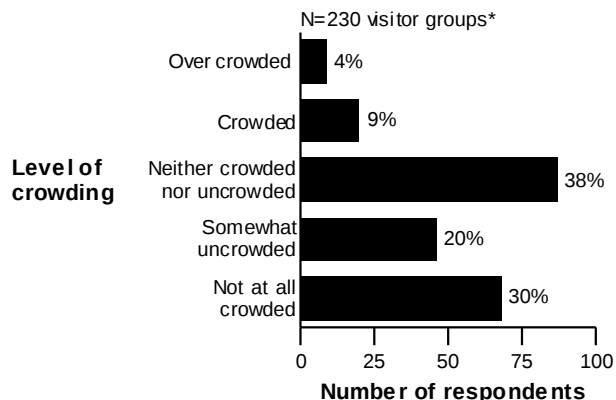


Figure 40: Crowding of park sites

Table 17: Visitor ratings of crowding at park sites

N=number of visitor groups that rated the crowding at park sites

Rating (%)

Site	N	Over crowded	Crowded	Neither crowded nor uncrowded	Somewhat uncrowded	Not at all crowded
Dune Climb	353	1	14	56	12	18
Pierce Stocking Scenic Drive	324	2	18	46	20	14
Beach	230	4	9	38	20	30
Visitor Center (in Empire)	226	1	21	51	12	15
Platte River	192	9	26	38	9	19
Glen Haven/Maritime Museum	149	7	4	44	24	28
North Bar Lake	97	6	27	31	16	21
Port Oneida Rural Historic District	56	0	4	30	25	41
Crystal River	54	2	6	43	24	26
Other	51	0	5	28	12	53
South Manitou Island - CAUTION!	22	5	5	45	23	23
North Manitou Island - CAUTION!	10	10	0	30	10	50

*total percentages do not equal 100 due to rounding

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

Use of park trails

Question 14a

On this visit to Sleeping Bear Dunes NL, which trails did you and your personal group use?

Results

- 47% of visitor groups hiked/walked on park trails (see Figure 41).

For those who reported hiked/walked on park trails:

- 41% of visitor groups used the Dunes Trail/Dune Climb (see Figure 42).
- 21% used the Sleeping Bear Point Trail.
- “Other” trails (6%) used were:

North Manitou
Old Railroad Grade
South Manitou
Port Oneida
Treat Farm Trail

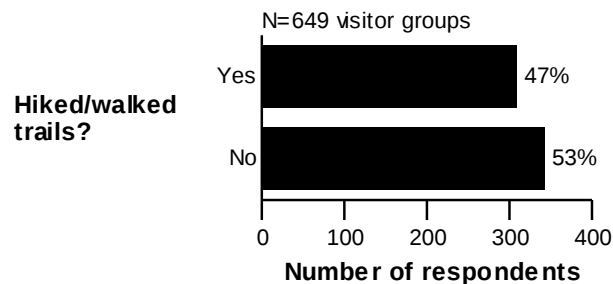


Figure 41: Visitor groups that hiked/walked on park trails

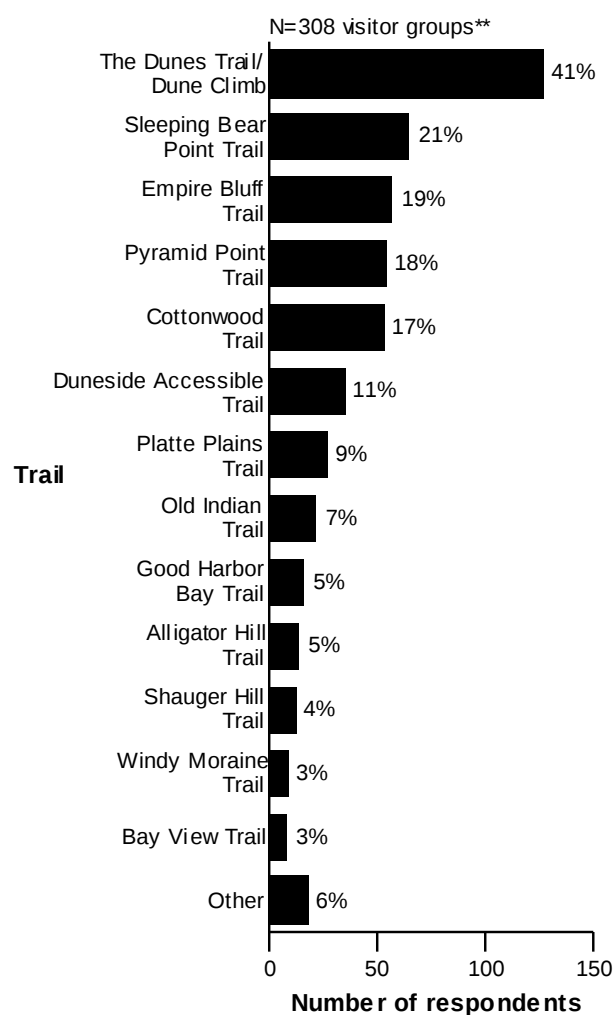


Figure 42: Trails used by visitor groups on this visit

*total percentages do not equal 100 due to rounding

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

Of the visitor groups that reported walking/hiking on park trails:

- 54% walked/hiked on one trail (see Figure 43).
- 46% used more than one trail.

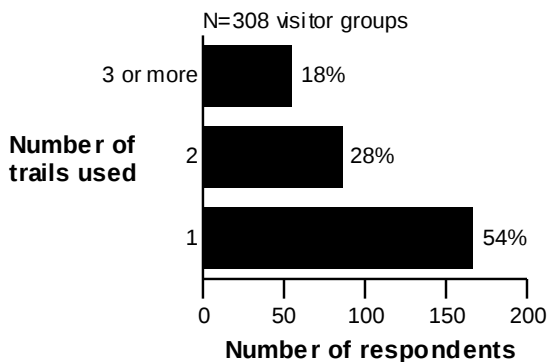


Figure 43: Number of trails used by groups

Crowding on park trails

Question 14b

For the trails that you and your group used, how crowded did you feel?

Results

- 37% of visitor groups felt “neither crowded nor uncrowded” on trails (see Figure 44).
- 35% felt “not at all crowded.”
- Table 18 shows how visitor groups rated the crowding of trails.

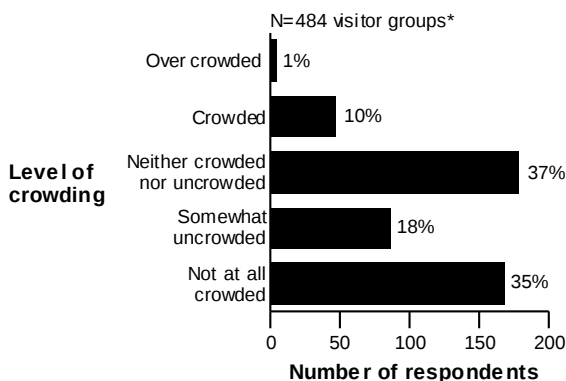


Figure 44: Level of crowding on park trails

Table 18: Visitor ratings of crowding on park trails

N=number of visitor groups that rated crowding on park trails

Trail	N	Rating (%)				
		Over crowded	Crowded	Neither crowded nor uncrowded	Somewhat uncrowded	Not at all crowded
The Dunes Trail	117	2	15	50	13	21
All other trails	95	0	6	29	14	51
Sleeping Bear Point Trail	60	0	15	33	18	33
Empire Bluff Trail	53	2	6	42	32	19
Pyramid Point Trail	53	2	4	32	28	34
Cottonwood Trail	51	0	6	35	14	45
Duneside Accessible Trail	32	0	9	41	13	38

*total percentages do not equal 100 due to rounding

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

Quality of park trails

Question 14c

Finally, for only those trails 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

- 90% of visitor groups rated the quality of the trails as “very good” or “good” (see Figure 45).
- Table 19 shows how visitors rated the quality of each trail.

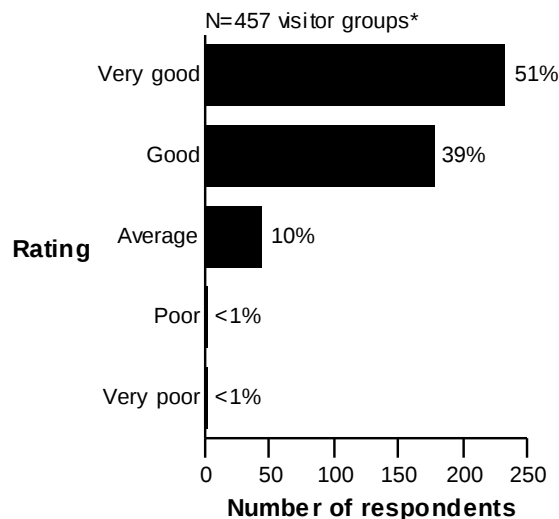


Figure 45: Quality of park trails

Table 19: Visitor ratings of park trail quality

N=number of visitor groups that rated the quality of trails

Trail	N	Rating (%)				
		Very poor	Poor	Average	Good	Very good
The Dunes Trail	108	0	0	5	47	49
All other trails	88	0	0	17	39	44
Sleeping Bear Point Trail	57	0	0	9	37	54
Empire Bluff Trail	53	0	0	8	25	68
Pyramid Point Trail	51	0	2	16	37	45
Cottonwood Trail	49	0	0	6	47	47
Duneside Accessible Trail – CAUTION!	29	3	0	0	48	48

*total percentages do not equal 100 due to rounding

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

Expected activities

Question 9a

As you were planning your trip, what did you and your personal group expect to do on this visit?

Results

- As shown in Figure 46, the most common activities visitor groups expected to do were:

79% Walking/hiking/dune climbing

78% General sightseeing

68% Beach activities

- “Other” activities (7%) were:

Biking
Business trip
Cleaning August Beck House
Geo-caching
Horseback riding on Alligator Hill
Fruit picking
Letterboxing
Obtain NPS Passport stamp
Paragliding
Pizza at Empire
Riding dune buggies
Rock hunting/collecting
Shopping
Snow activities
Spending time with family
Volunteering

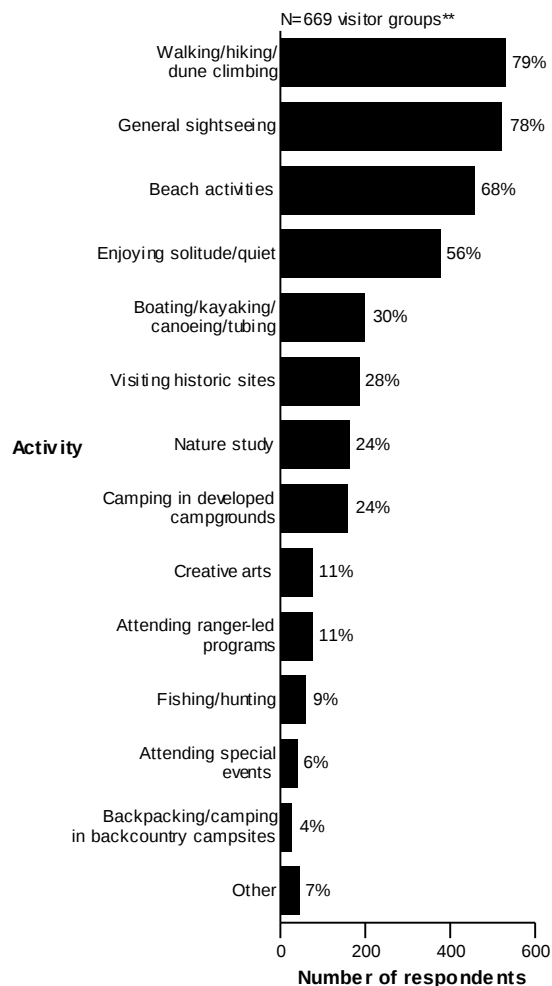


Figure 46: Expected activities on this visit

*total percentages do not equal 100 due to rounding

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

Activities on this visit

Question 9b

On this visit, what did you and your personal group actually do within Sleeping Bear Dunes NL?

Results

- As shown in Figure 47, the most common activities in which visitor groups participated were:

83% Walking/hiking/dune climbing

79% General sightseeing

62% Beach activities

- “Other” activities (6%) were:

Biking

Business trip

Geo-caching

Kite flying

Letterboxing

Motor biking

Picking up rocks

Pizza at Empire

Shopping

Spending time with family

Volunteering

Wine tours

Witnessed citation being handed out to young group next to us

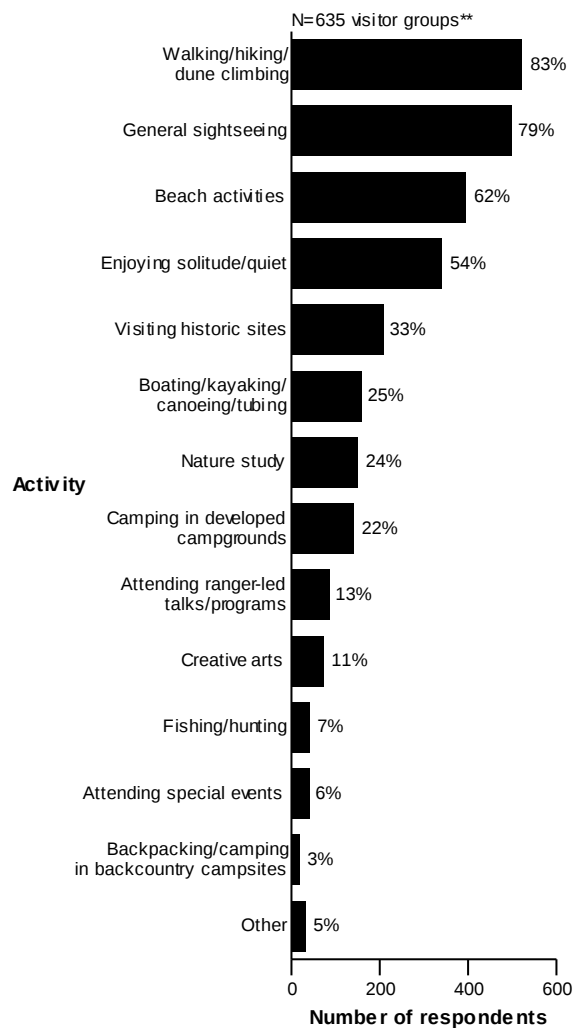


Figure 47: Activities on this visit

*total percentages do not equal 100 due to rounding

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

Primary activity on this visit

Question 9c

Which one of the above activities was the primary reason you and your personal group visited Sleeping Bear Dunes NL on this visit?

Results

- As shown in Figure 48, the most common primary activities listed by visitor groups were:

34% Walking/hiking/dune climbing
23% General sightseeing
16% Beach activities

- “Other” primary activities (3%) were:

Bike riding
Geo-caching
Letterboxing

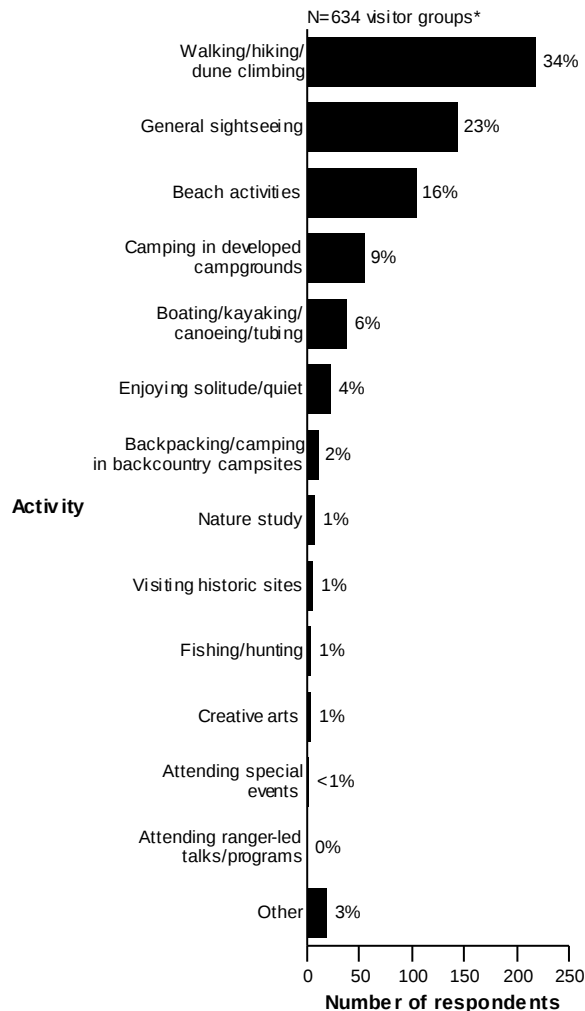


Figure 48: Primary activity

*total percentages do not equal 100 due to rounding

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

Ranger-led talks/programs

Question 10a

On this visit to Sleeping Bear Dunes NL, did anyone in your personal group participate in any of the ranger-led talks/programs?

Results

- 14% of visitor groups participated in ranger-led talks/programs (see Figure 49).

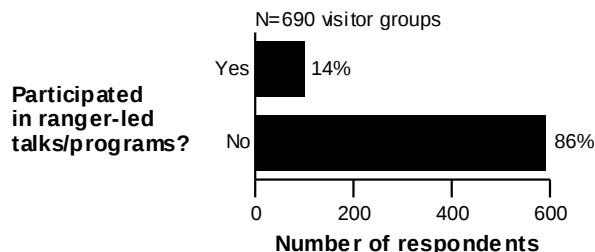


Figure 49: Visitor groups that participated in ranger-led talks/programs

Question 10b

If NO, what prevented you and your personal group from participating in ranger-led talks/programs?

Results

- As shown in Figure 50, the most common reasons visitor groups did not participate in ranger-led talks/programs were:

51% Did not have enough time
31% Not aware of talks/programs
30% Not interested

- “Other” reasons (8%) were:

Had children in the group
Poor weather conditions
Directions to program not clear
Cost of ferry and infrequent trips
Had a pet
Had an injured knee
Just wanted to listen not participate
Not handicap accessible
We know the area well

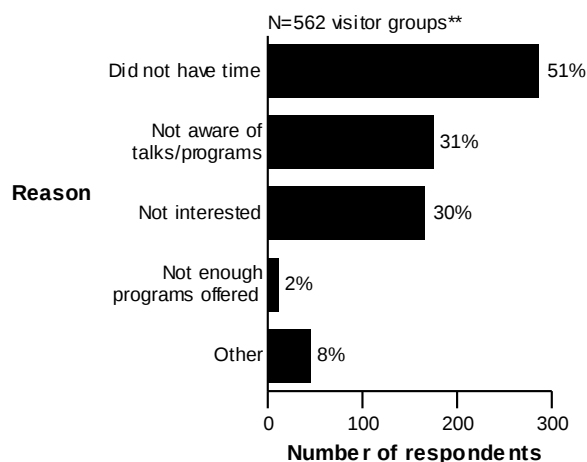


Figure 50: Reasons for not participating in ranger-led talks/programs

*total percentages do not equal 100 due to rounding

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

Ratings of Visitor Services, Facilities, Attributes and Resources

Visitor services and facilities used

Question 12a

Please indicate all visitor services and facilities that you or your personal group used at Sleeping Bear Dunes NL during this visit.

Results

- As shown in Figure 51, the most common visitor services and facilities used by visitor groups were:

83% Park brochure/map
82% Restrooms

- The least used service/facility was:

5% Junior Ranger program

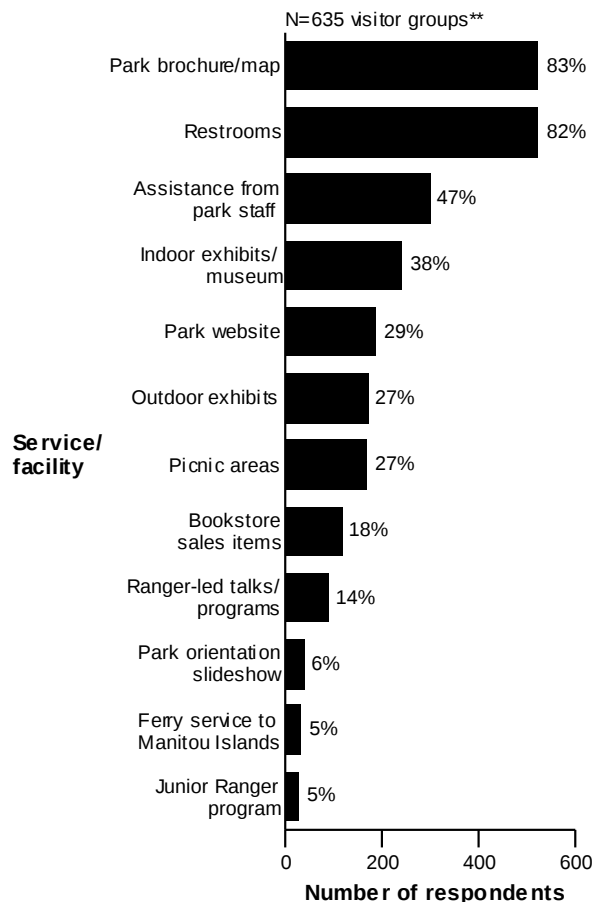


Figure 51: Visitor services and facilities used

*total percentages do not equal 100 due to rounding

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

Importance ratings of visitor services and facilities

Question 12b

Next, for only those services and facilities that you or your personal group used, please rate their importance to your visit from 1-5.

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

Results

- Figure 52 shows the combined proportions of “extremely important” and “very important” ratings for visitor services and facilities 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:

97% Ferry service to Manitou Islands
88% Restrooms
78% Park website

- Figures 53 to 64 show the importance ratings for each service/facility.
- The services/facilities receiving the highest “not important” rating that was rated by 30 or more visitor groups were:

6% Bookstore sales items
6% Ranger-led talks/programs

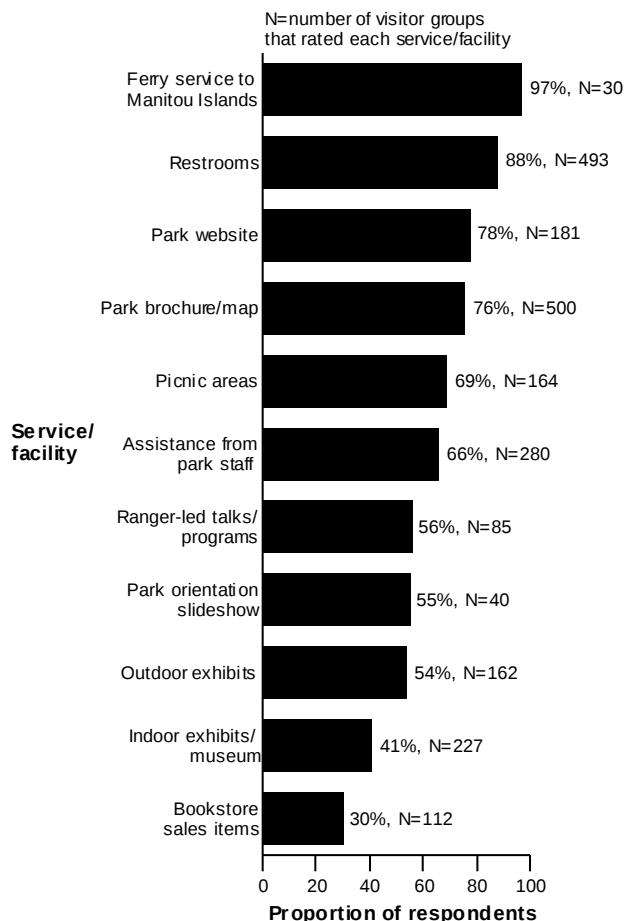


Figure 52: Combined proportions of “extremely important” and “very important” ratings of visitor services/facilities

*total percentages do not equal 100 due to rounding

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

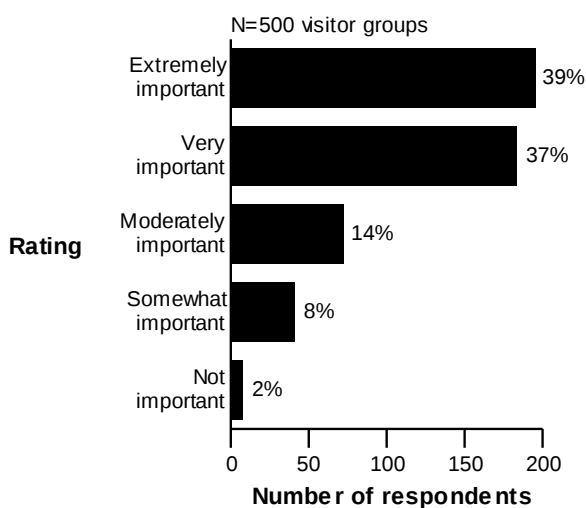


Figure 53: Importance of park brochure/map

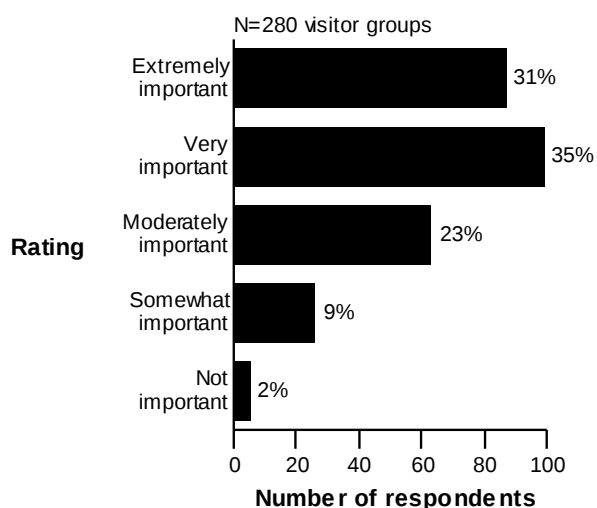


Figure 54: Importance of assistance from park staff

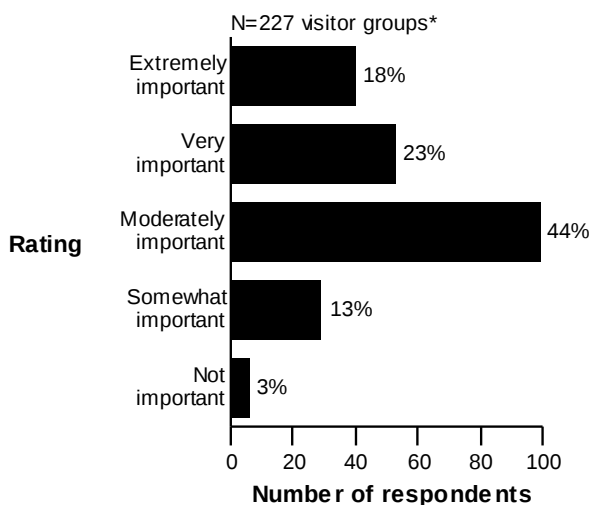


Figure 55: Importance of indoor exhibits/museum

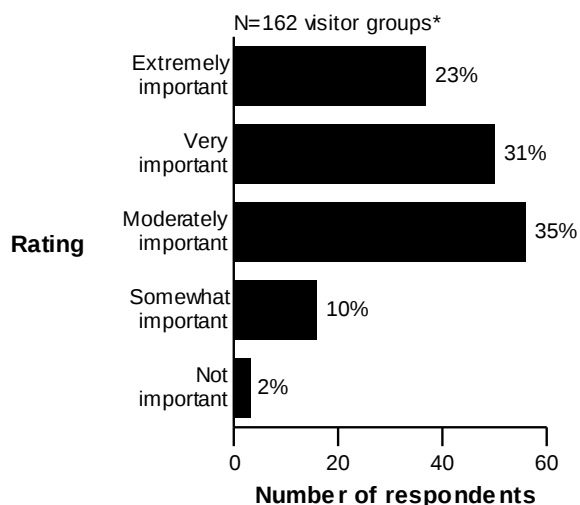


Figure 56: Importance of outdoor exhibits

*total percentages do not equal 100 due to rounding

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

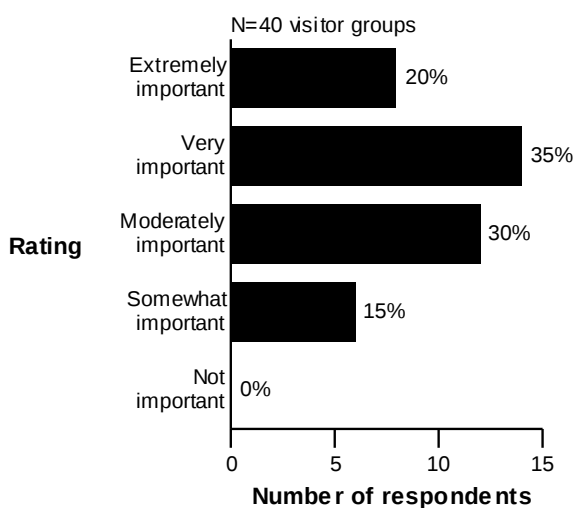


Figure 57: Importance of park orientation slideshow

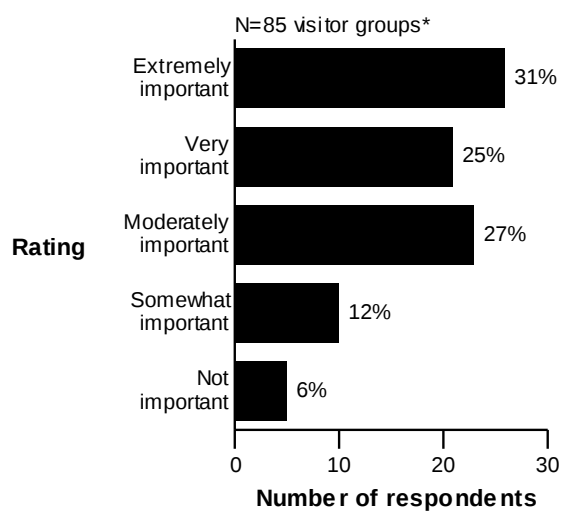


Figure 58: Importance of ranger-led talks/programs

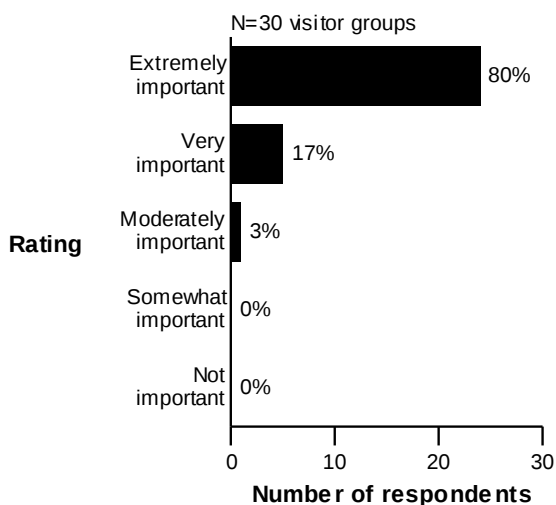


Figure 59: Importance of ferry service to Manitou Islands

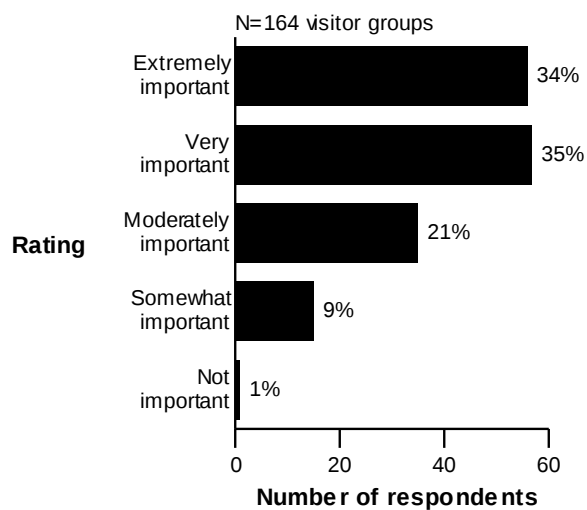


Figure 60: Importance of picnic areas

*total percentages do not equal 100 due to rounding

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

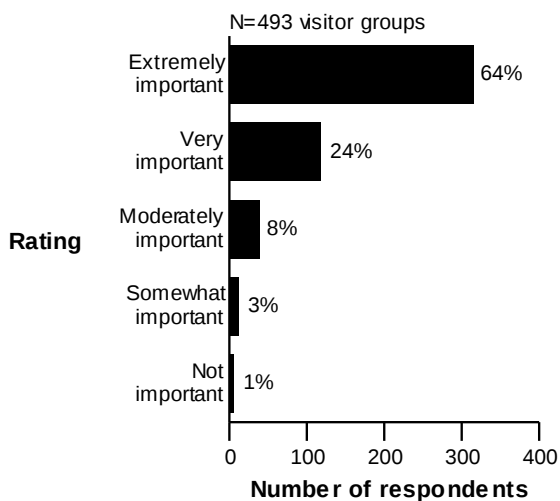


Figure 61: Importance of restrooms

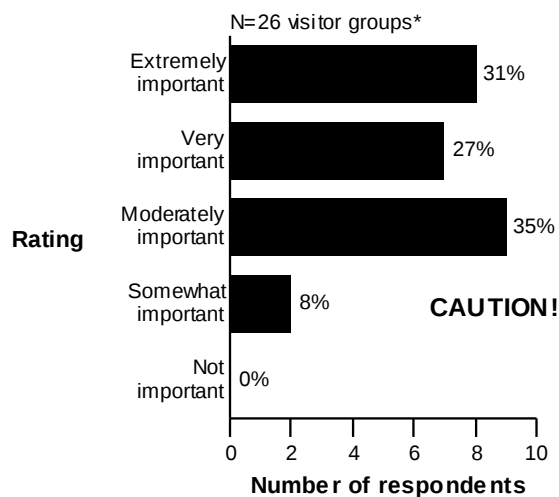


Figure 62: Importance of Junior Ranger program

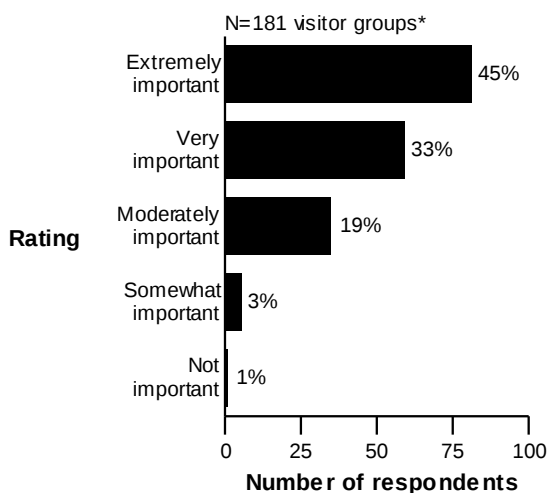
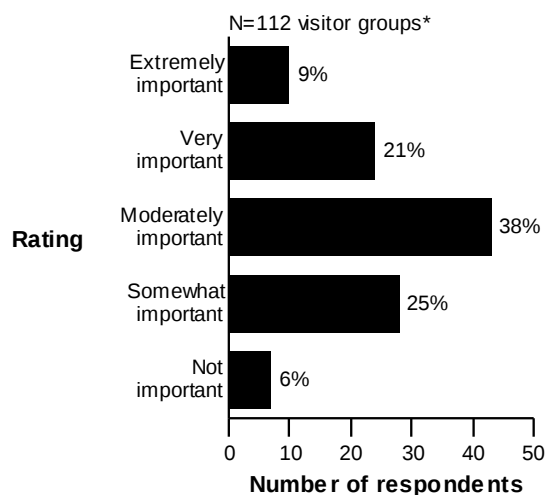
Figure 63: Importance of park website: www.nps.gov/slbe used before or during visit

Figure 64: Importance of bookstore sales items (selection, price, etc.)

*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 visitor services and facilities

Question 12c

Finally, for only those services and facilities that you or 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 65 shows the combined proportions of “very good” and “good” quality ratings for visitor services/facilities 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:
 - 92% Assistance from park staff
 - 88% Ranger-led talks/programs
 - 88% Park brochure/map
- Figures 66 to 77 show the quality ratings for each service/facility.
- The service/facility receiving the highest “very poor” quality ratings that was rated by 30 or more visitor groups was:

8% Park orientation/slideshow

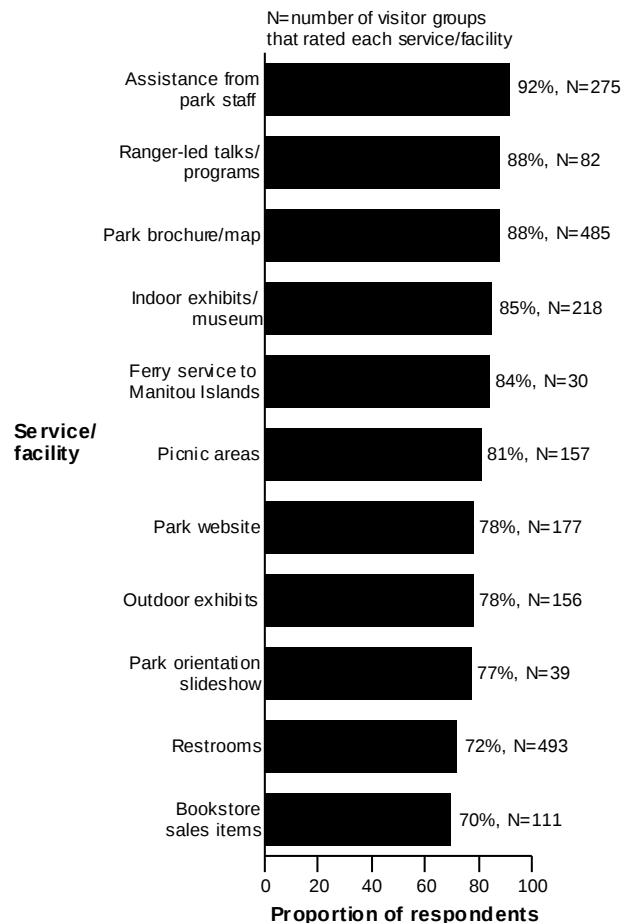


Figure 65: Combined proportions of “very good” and “good” quality ratings of visitor services/facilities

*total percentages do not equal 100 due to rounding

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

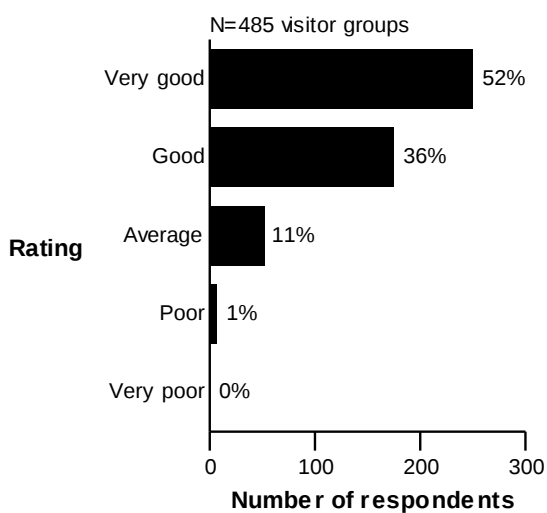


Figure 66: Quality of park brochure/map

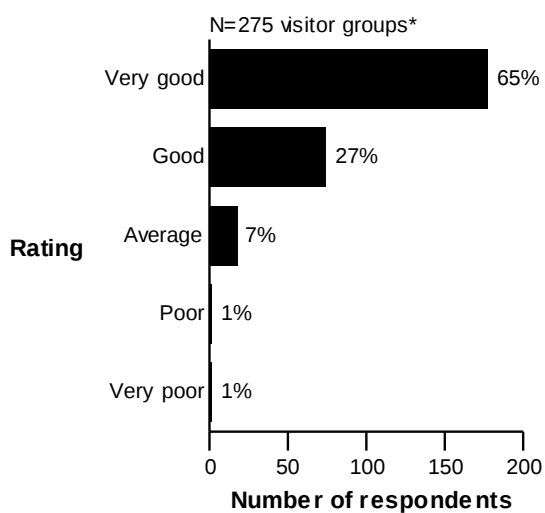


Figure 67: Quality of assistance from park staff

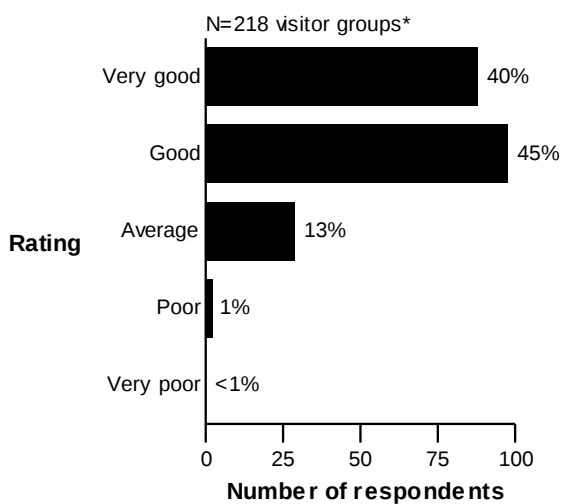
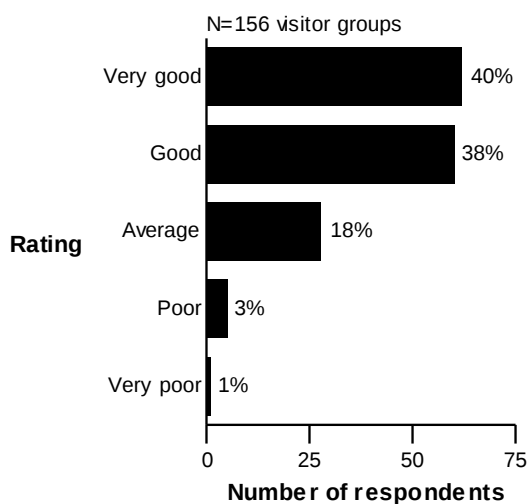
Figure 68: Quality of indoor exhibits/
museums

Figure 69: Quality of outdoor exhibits

*total percentages do not equal 100 due to rounding

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

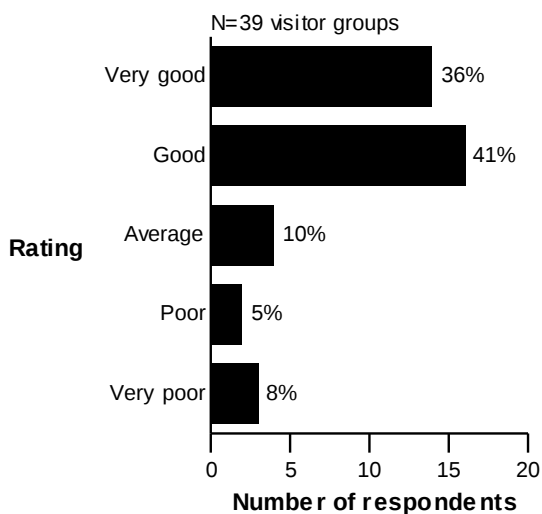


Figure 70: Quality of park orientation slideshow

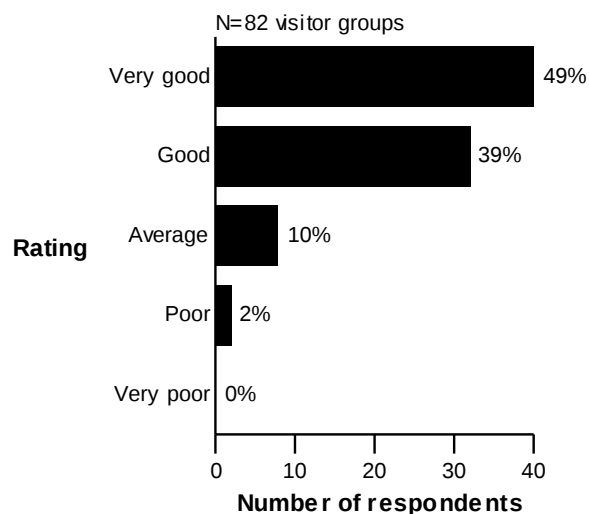


Figure 71: Quality of ranger-led talks/programs

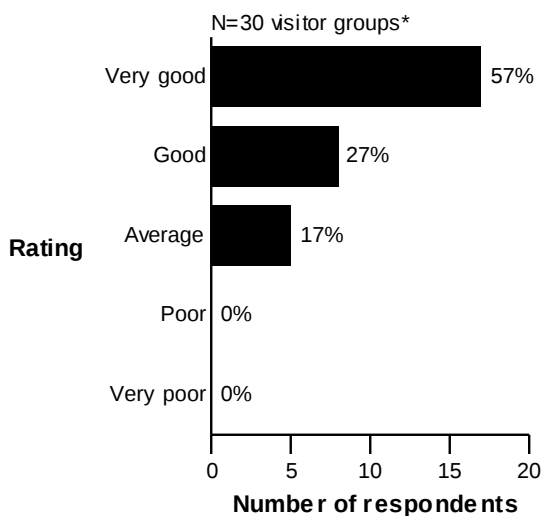


Figure 72: Quality of ferry service to Manitou Islands

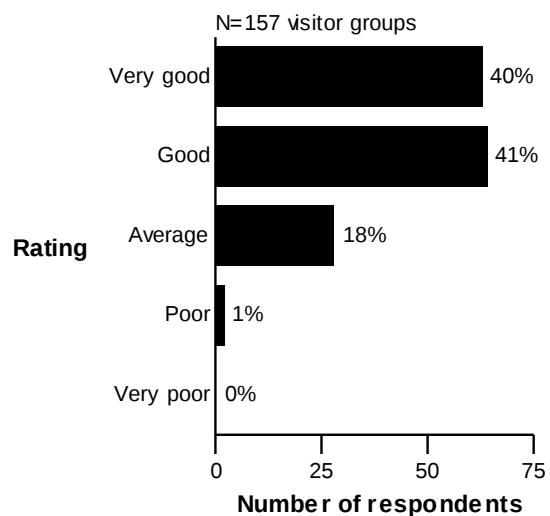


Figure 73: Quality of picnic areas

*total percentages do not equal 100 due to rounding

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

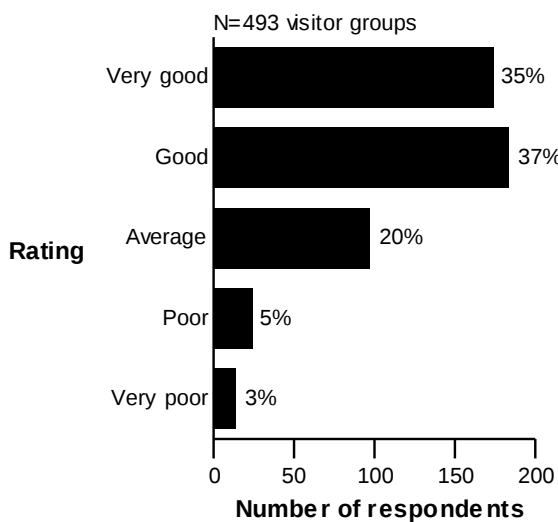


Figure 74: Quality of restrooms

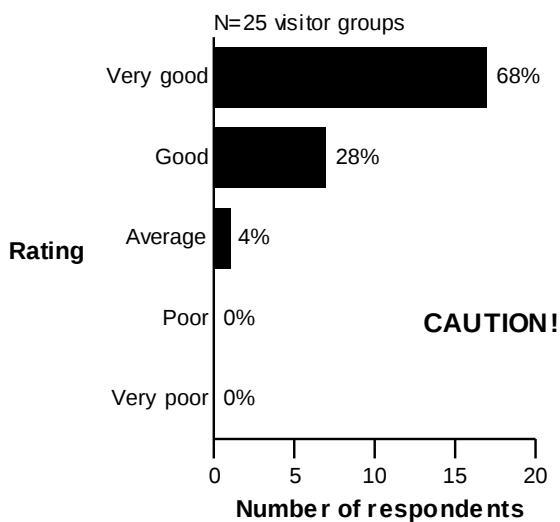
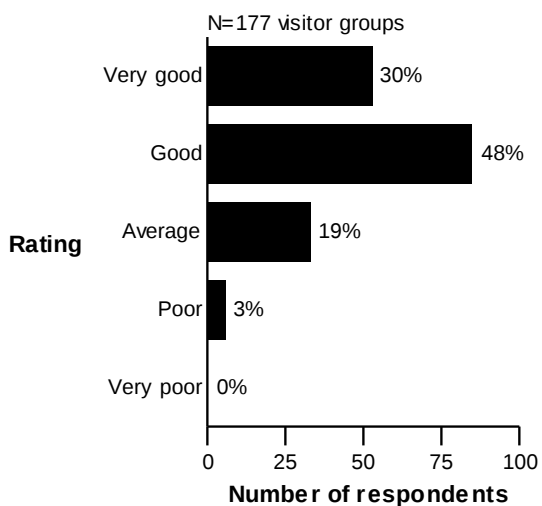
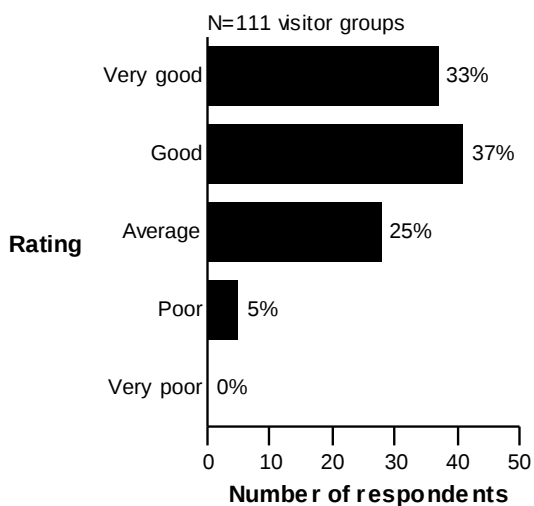


Figure 75: Quality of Junior Ranger program

Figure 76: Quality of park website
www.nps.gov/slbe used before
or during visitFigure 77: Quality of bookstore sales items
(selection, price, etc.)

*total percentages do not equal 100 due to rounding

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

Mean scores of importance and quality ratings for visitor services and facilities

- Figures 78 and 79 show the mean scores of importance and quality ratings for all visitor services/facilities that were rated by 30 or more visitor groups.
- All visitor services/facilities were rated above average, except for the bookstore sales items, which had a importance rating of “average.”

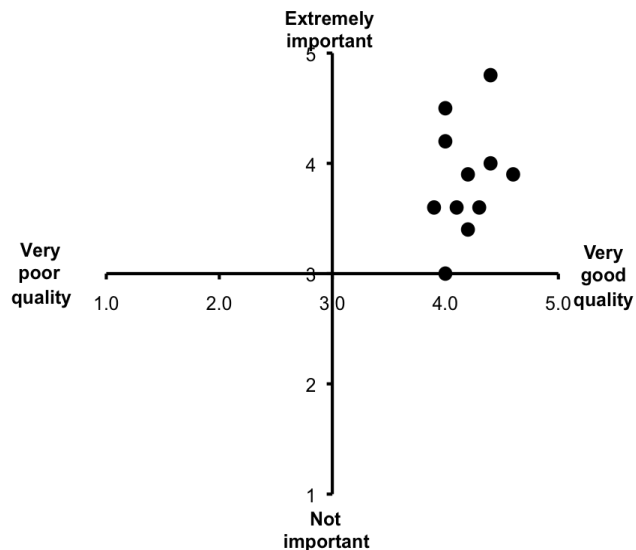


Figure 78: Mean scores of importance and quality ratings for visitor services/facilities

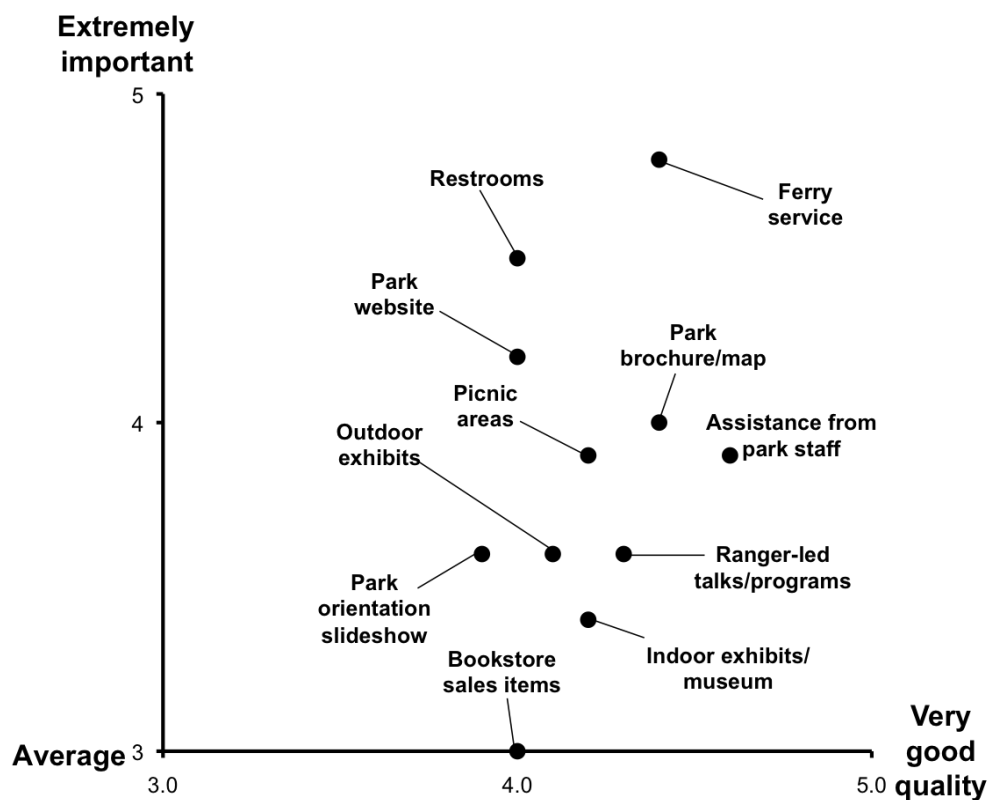


Figure 79: Detail of Figure 78

*total percentages do not equal 100 due to rounding

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

Importance of protecting park resources/attributes

Question 16

It is the National Park Service's responsibility to protect Sleeping Bear Dunes NL's natural, scenic, and cultural resources while providing for public enjoyment. How important is protection of the following park resources/attributes to you?

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

Results

- As shown in Figure 80, the highest combined proportions of "extremely important" and "very important" ratings were:
 - 96% Clean water
 - 95% Clean air
 - 95% Scenic views
- The resource/attribute that received the highest "not important" rating was:
 - 3% Dark, starry night sky
- Table 20 shows the importance ratings of park resources/attributes.

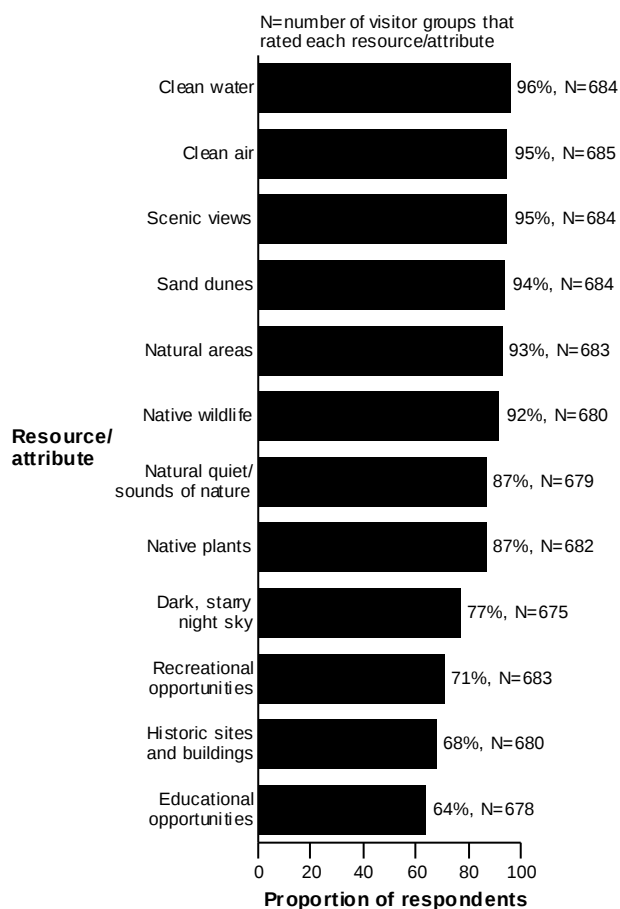


Figure 80: Combined proportions of "extremely important" and "very important" ratings of park resources/attributes

*total percentages do not equal 100 due to rounding

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

Table 20: Visitor ratings of importance of protecting park resources/attributes*

N=number of visitor groups that rated each resource/attribute

Resource/attribute	N	Rating (%)				
		Not important	Somewhat important	Moderately important	Very important	Extremely important
Clean air (visibility)	685	<1	1	4	26	69
Scenic views	684	0	1	4	28	67
Clean water	684	<1	<1	3	21	75
Sand dunes	684	<1	1	5	25	69
Natural areas	683	<1	2	5	27	66
Recreational opportunities	683	2	5	23	36	35
Native plants	682	1	3	9	25	62
Native wildlife	680	<1	2	6	26	66
Historic sites and buildings	680	2	8	23	37	31
Natural quiet/sounds of nature	679	1	2	7	31	60
Educational opportunities	678	2	8	26	36	28
Dark, starry night skies	675	3	5	16	29	48

*total percentages do not equal 100 due to rounding

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

Expenditures

Total expenditures inside and outside Sleeping Bear Dunes NL

Question 23

For you and your personal group, please estimate all expenditures for the items listed below for this visit to Sleeping Bear Dunes NL and the surrounding area (within a 1-hour drive from park boundary).

Results

- 49% of visitor groups spent \$1-\$300 (see Figure 81).
- 19% spent \$301-\$600.
- The average visitor group expenditure was \$702.
- The median group expenditure (50% of groups spent more and 50% of groups spent less) was \$300.
- Average total expenditure per person (per capita) was \$199.
- As shown in Figure 82, the largest proportions of total expenditures inside and outside the park were:

43% Lodges, hotels, motels, B&B, cabins, etc.
17% Restaurants and bars
10% Groceries and takeout food

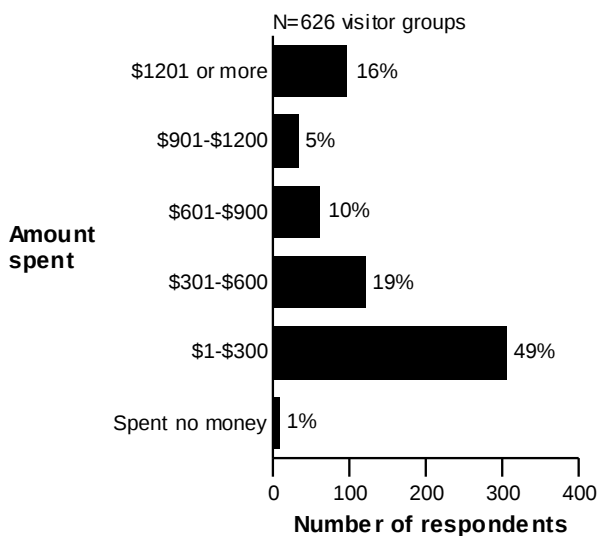


Figure 81: Total expenditures inside and outside the park

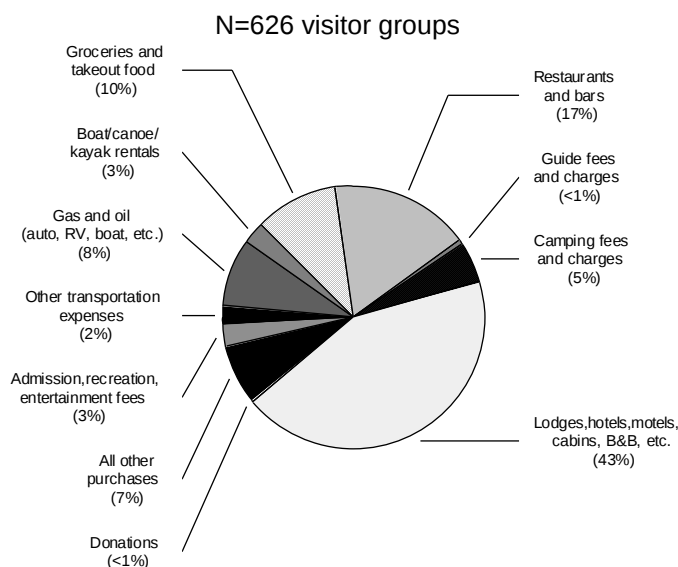


Figure 82: Proportions of total expenditures inside and outside the park

*total percentages do not equal 100 due to rounding

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

Number of adults covered by expenditures

Question 23c

How many adults (18 years or older) do these expenses cover?

Results

- 60% of visitor groups had two adults covered by expenditures (see Figure 83).
- 22% had four or more adults.

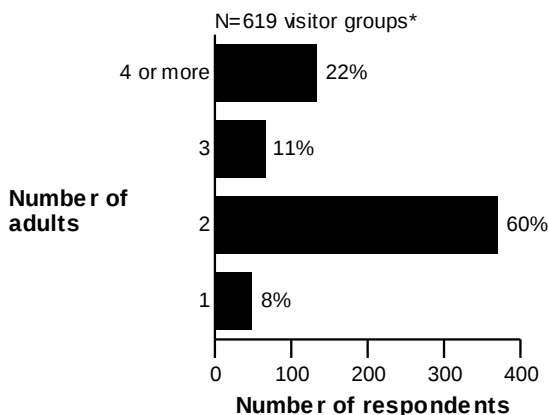


Figure 83: Number of adults covered by expenditures

Number of children covered by expenditures

Question 23c

How many children (under 18 years) do these expenses cover?

Results

- 39% of visitor groups did not have any children covered by expenditures (see Figure 84).
- 48% had two or more children.

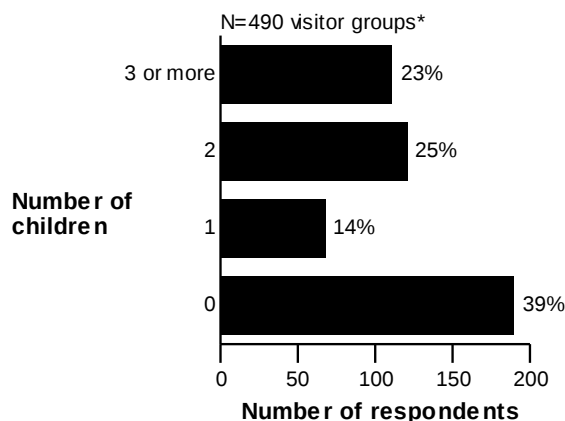


Figure 84: Number of children covered by expenditures

*total percentages do not equal 100 due to rounding

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

Expenditures inside the park

Question 23a

Please list your personal group's total expenditures inside Sleeping Bear Dunes NL.

Results

- 69% of visitor groups spent \$1-\$100 inside the park (see Figure 85)
- 14% spent no money inside the park.
- The average visitor group expenditure inside the park was \$65.
- The median expenditure (50% of groups spent more and 50% of groups spent less) was \$22.
- Average total expenditure per person (per capita) was \$23.
- As shown in Figure 86, the largest proportions of total expenditures inside the park were:

35% Camping fees and charges
16% All other purchases

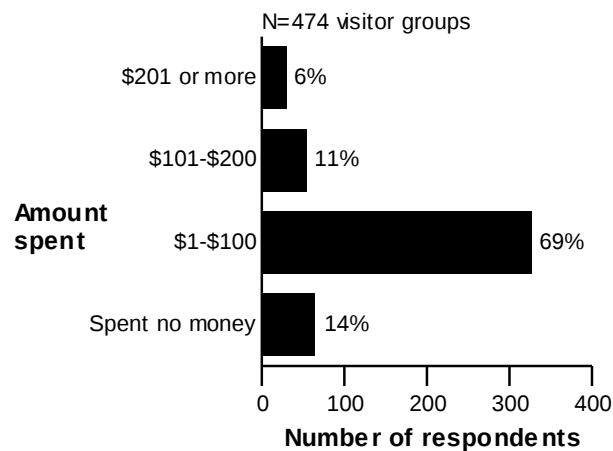


Figure 85: Total expenditures inside the park

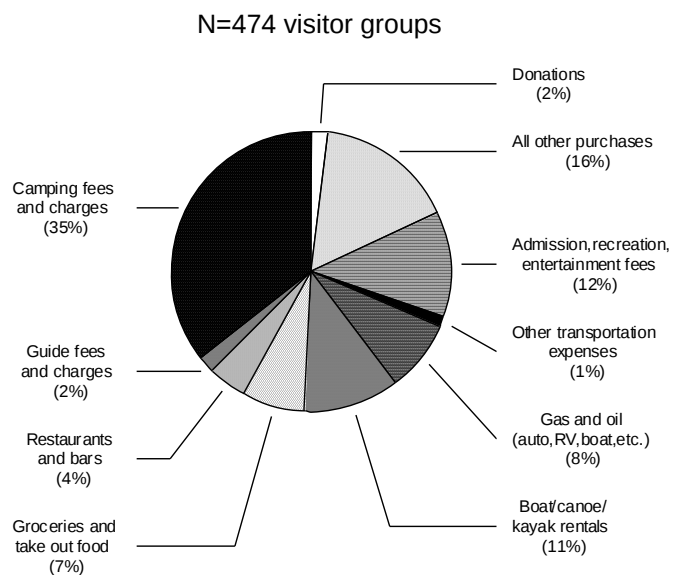


Figure 86: Proportions of total expenditures inside the park

*total percentages do not equal 100 due to rounding

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

Camping fees and charges

- 56% of visitor groups did not spend any money on camping fees and charges inside the park (see Figure 87).
- 21% spent \$1-\$50.

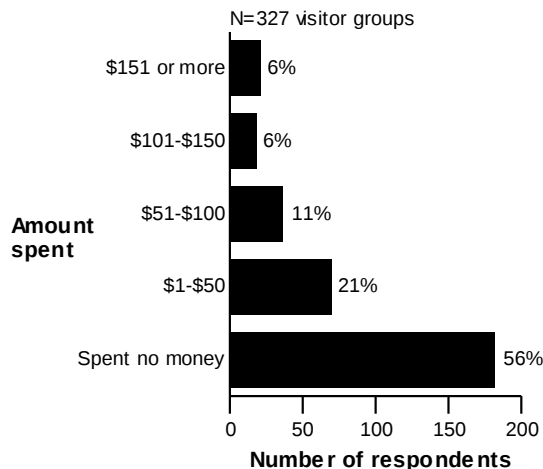


Figure 87: Expenditures for camping fees and charges inside the park

Guide fees and charges

- 93% of visitor groups did not spend any money on guide fees and charges inside the park (see Figure 88).

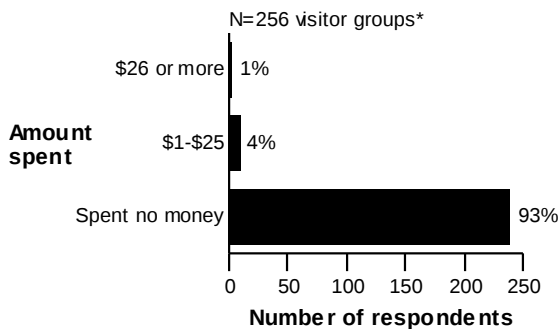


Figure 88: Expenditures for guide fees and charges inside the park

Restaurants and bars

- 91% of visitor groups did not spend any money on restaurants and bars inside the park (see Figure 89).

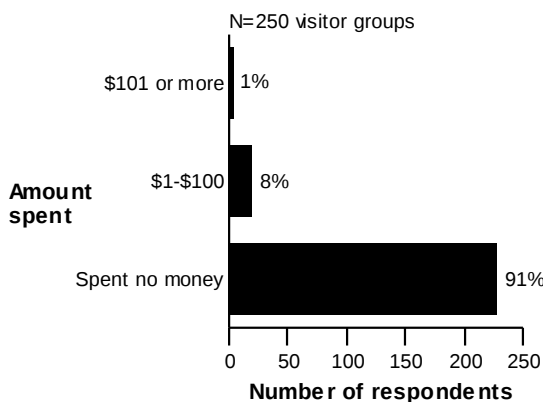


Figure 89: Expenditures for restaurants and bars inside the park

*total percentages do not equal 100 due to rounding

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

Groceries and takeout food

- 84% of visitor groups did not spend any money on groceries and takeout food inside the park (see Figure 90).
- 13% spent \$1-\$50.

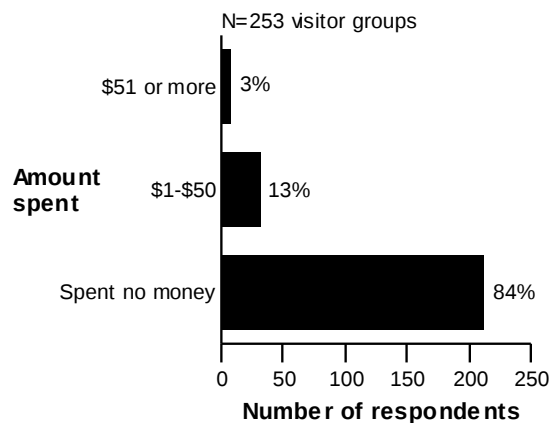


Figure 90: Expenditures for groceries and takeout food inside the park

Boat/canoe/kayak rentals

- 88% of visitor groups did not spend any money on boat, canoe, or kayak rentals inside the park (see Figure 91).
- 8% spent \$51 or more

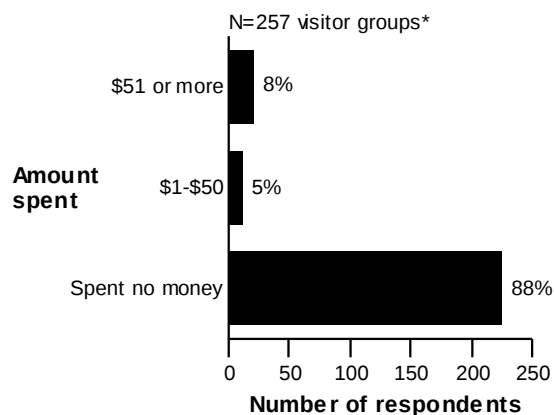


Figure 91: Expenditures for boat/canoe/kayak rentals inside the park

Gas and oil (auto, RV, boat, etc.)

- 88% of visitor groups did not spend any money on gas and oil inside the park (see Figure 92).
- 9% spent \$1-\$50.

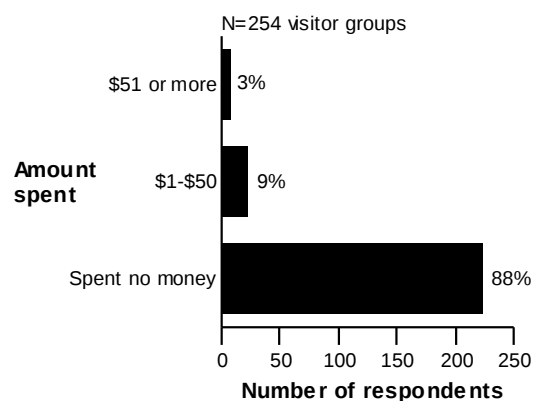


Figure 92: Expenditures for gas and oil inside the park

*total percentages do not equal 100 due to rounding

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

Other transportation costs (rental cars, taxis, auto repairs, but not including airfare)

- 98% of visitor groups did not spend any money on other transportation costs inside the park (see Figure 93).

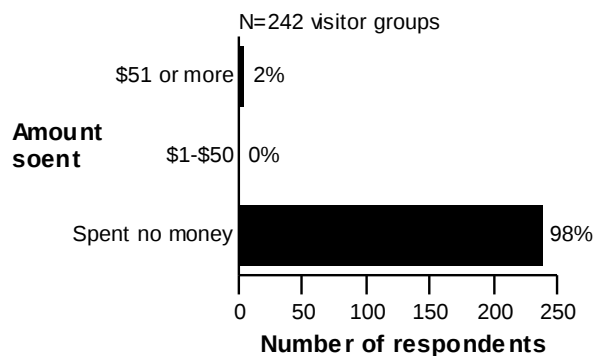


Figure 93: Expenditures for other transportation costs inside the park

Admission, recreation, entertainment fees

- 61% of visitor groups spent \$1-\$50 on admission, recreation, entertainment inside the park (see Figure 94).
- 35% did not spend any money.

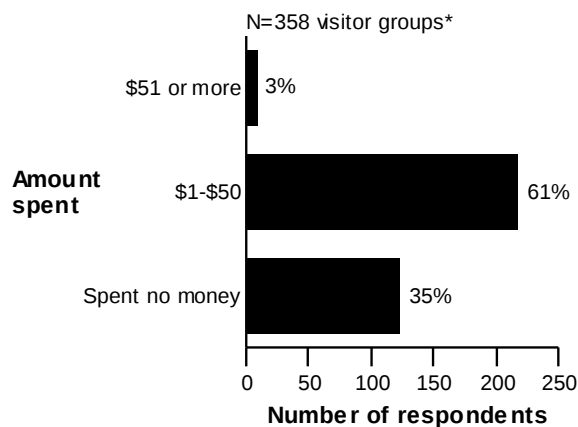


Figure 94: Expenditures for admission, recreation, entertainment fees inside the park

*total percentages do not equal 100 due to rounding

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

All other purchases (souvenirs, books, equipment, licenses, clothing, etc.)

- 58% of visitor groups did not spend any money on other purchases inside the park (see Figure 95).
- 26% spent \$1-\$25.

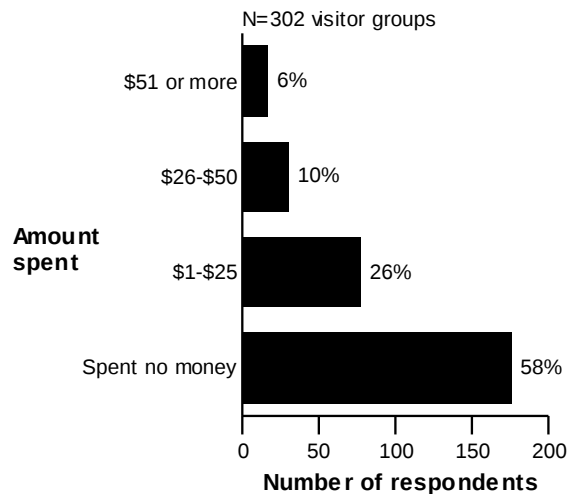


Figure 95: Expenditures for all other purchases inside the park

Donations

- 78% of visitor groups did not donate any money inside the park (see Figure 96).
- 21% donated \$1-\$20.

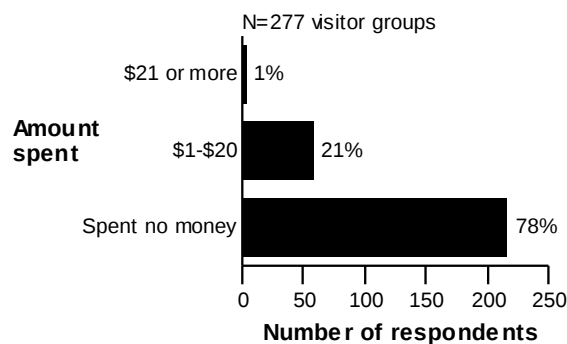


Figure 96: Expenditures for donations inside the park

*total percentages do not equal 100 due to rounding

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

Expenditures outside the park

Question 23b

Please list your personal group's total expenditures in the surrounding area outside the park (within a 1-hour drive from park boundary).

Results

- 38% of visitor groups spent \$1-\$200 (see Figure 97).
- 23% spent \$801 or more.
- 18% spent \$201-\$400.
- The average visitor group expenditure outside the park was \$699.
- The median expenditure (50% of groups spent more and 50% of groups spent less) was \$275.
- Average total expenditure per person (per capita) was \$202.
- As shown in Figure 98, the largest proportions of total expenditures outside the park were:

47% Lodges, hotels, motels, cabins, B&B, etc.
18% Restaurants and bars
11% Groceries and takeout food

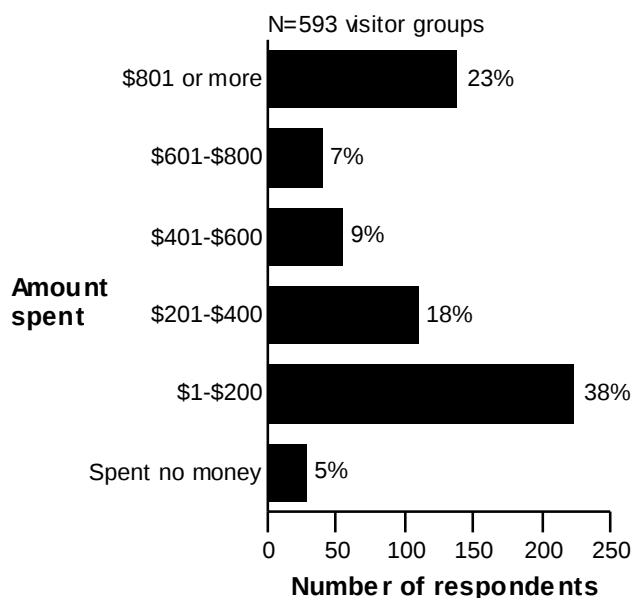


Figure 97: Total expenditures outside the park

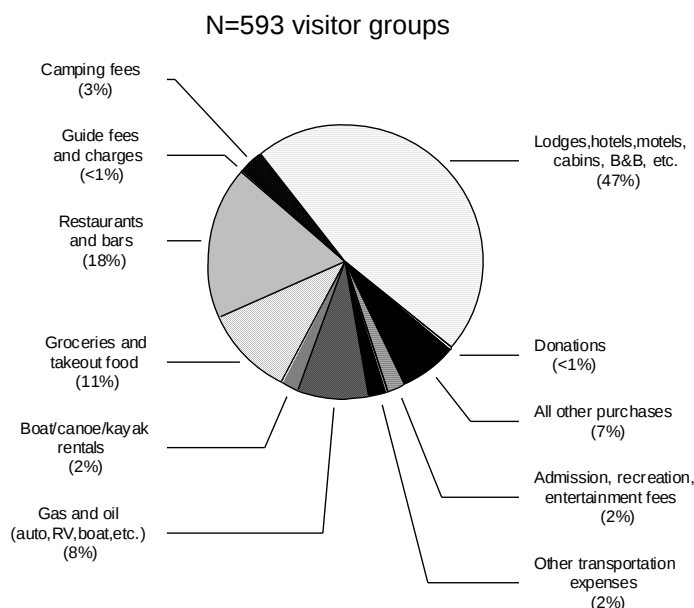


Figure 98: Proportions of total expenditures outside the park

*total percentages do not equal 100 due to rounding

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

Lodges, hotels, motels, cabins, B&B, etc.

- 45% of visitor groups spent no money on lodging outside the park (see Figure 99).
- 19% spent \$601 or more.

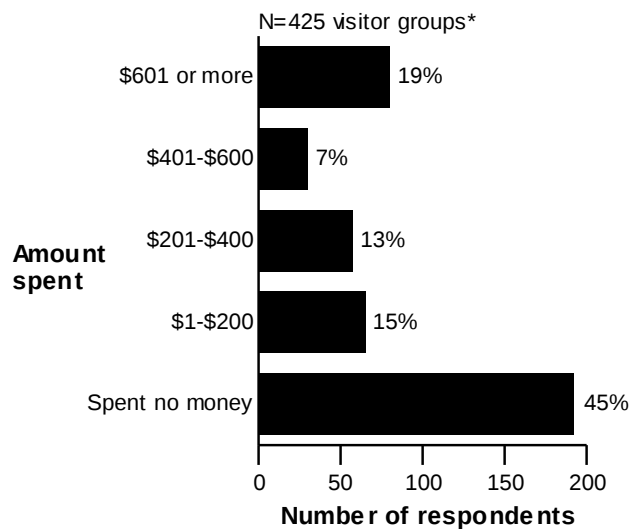


Figure 99: Expenditures for lodging outside the park

Camping fees and charges

- 77% of visitor groups did not spend any money on camping fees and charges outside the park (see Figure 100).
- 9% spent \$1-\$50.

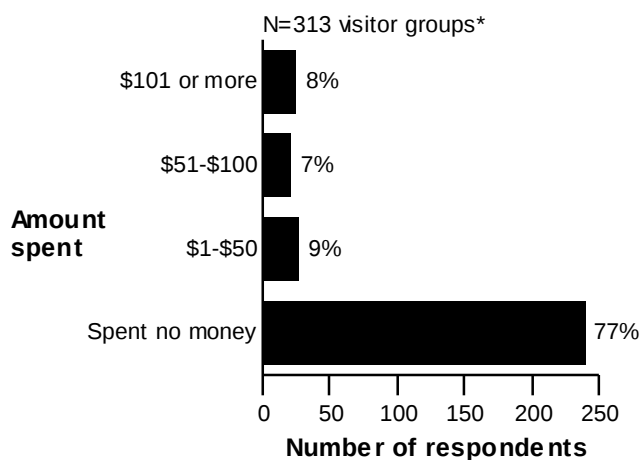


Figure 100: Expenditures for camping fees and charges outside the park

*total percentages do not equal 100 due to rounding

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

Guide fees and charges

- 96% of visitor groups spent no money on guide fees and charges outside the park (see Figure 101).

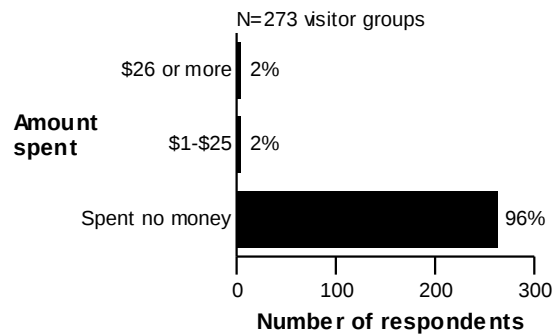


Figure 101: Expenditures for guide fees and charges outside the park

Restaurants and bars

- 68% of visitor groups spent \$1-\$100 on restaurants and bars outside the park (see Figure 102).
- 15% did not spend any money.

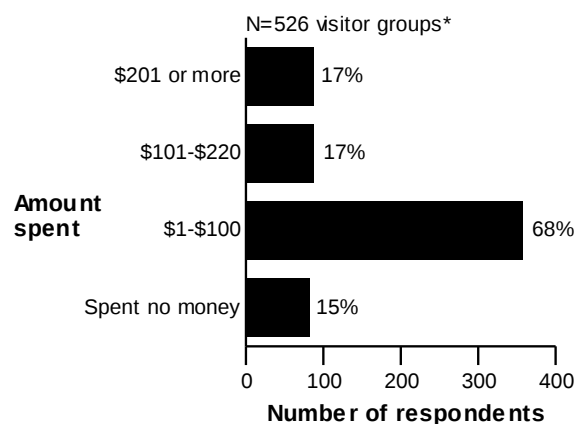


Figure 102: Expenditures for restaurants and bars outside the park

Groceries and takeout food

- 40% of visitor groups spent \$1-\$50 on groceries and takeout food outside the park (see Figure 103).
- 23% did not spend any money.

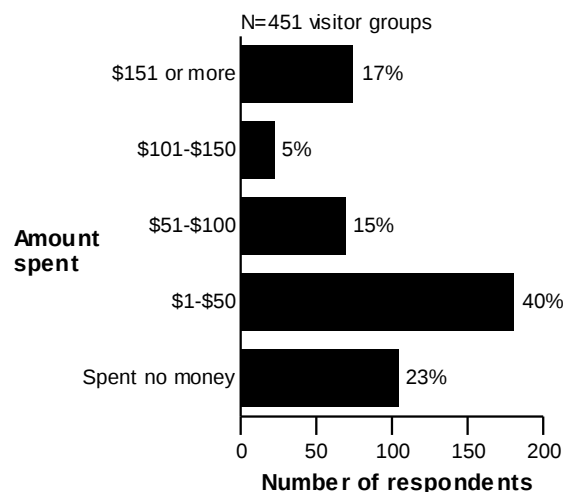


Figure 103: Expenditures for groceries and takeout food outside the park

*total percentages do not equal 100 due to rounding

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

Boat/canoe/kayak rentals

- 75% of visitor groups spent no money on boat, canoe, or kayak rentals outside the park (see Figure 104).
- 11% spent \$51-\$100.

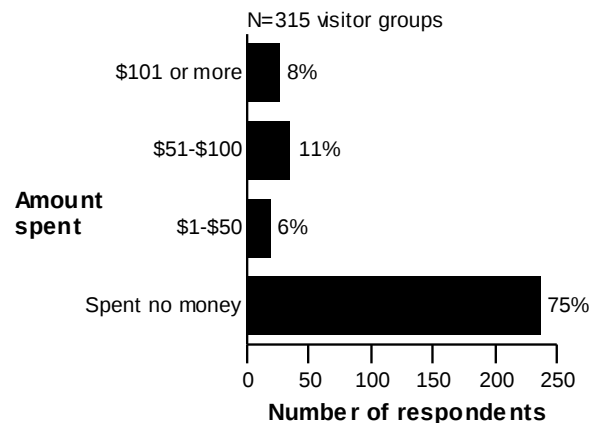


Figure 104: Expenditures for boat/canoe/kayak rentals outside the park

Gas and oil (auto, RV, boat, etc.)

- 52% of visitor groups spent \$1-\$50 on gas and oil outside the park (see Figure 105).
- 35% spent \$51 or more.

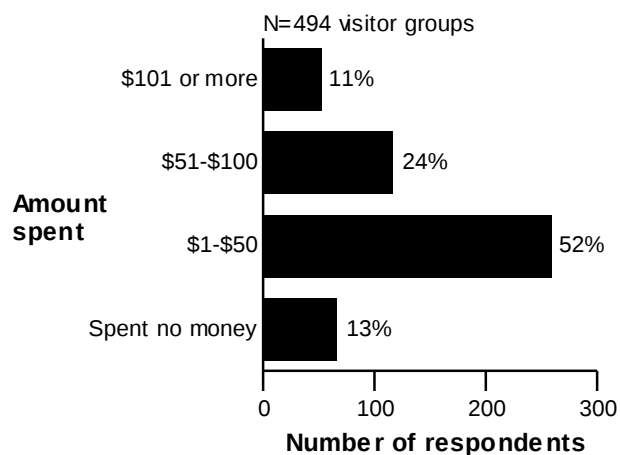


Figure 105: Expenditures for gas and oil outside the park

Other transportation expenses (rental cars, taxis, auto repairs, but not including airfare)

- 89% of visitor groups did not spend any money on other transportation costs outside the park (see Figure 106).

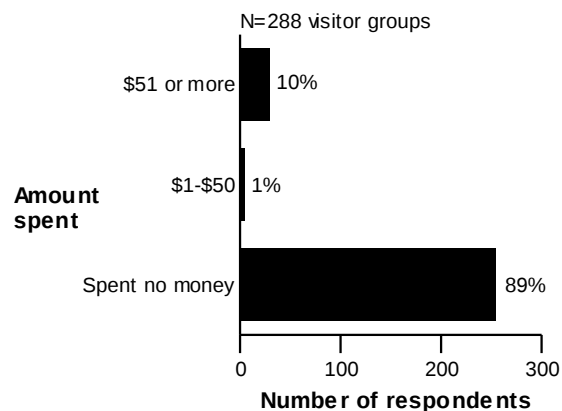


Figure 106: Expenditures for other transportation costs outside the park

*total percentages do not equal 100 due to rounding

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

Admission, recreation, entertainment fees

- 63% of visitor groups did not spend any money on admission, recreation, entertainment fees outside the park (see Figure 107).
- 25% spent \$1-\$50.

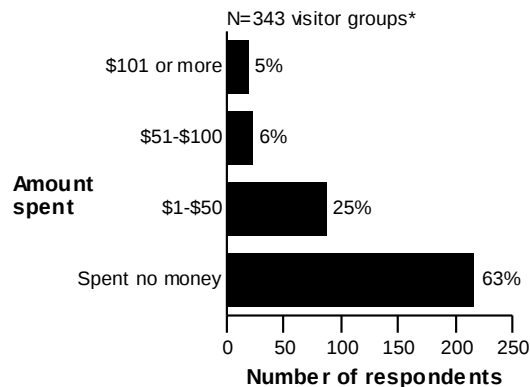


Figure 107: Expenditures for admission, recreation, entertainment fees outside the park

All other purchases (souvenirs, books, equipment, licenses, clothing, etc.)

- 41% of visitor groups did not spend any money on other purchases outside the park (see Figure 108).
- 28% spent \$1-\$50.

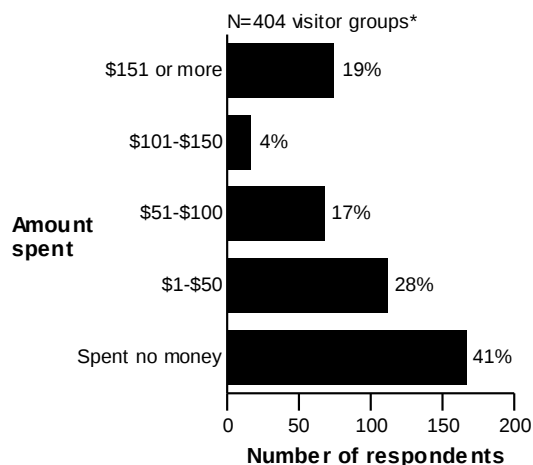


Figure 108: Expenditures for all other purchases outside the park

Donations

- 85% of visitor groups did not donate any money outside the park (see Figure 109).
- 13% donated \$1-\$20.

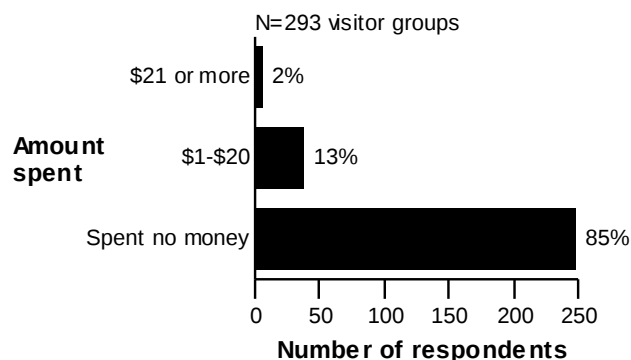


Figure 109: Expenditures for donations outside the park

*total percentages do not equal 100 due to rounding

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

Preferences for future visit

Preferred methods to learn about the park

Question 24

If you were to visit Sleeping Bear Dunes NL in the future, how would you and your personal group prefer to learn about cultural and natural history/features of Sleeping Bear Dunes NL?

Results

- 93% of visitor groups were interested in learning about Sleeping Bear Dunes NL on future visit (see Figure 110).
- As shown in Figure 111, among those visitor groups who were interested in learning about Sleeping Bear Dunes NL, the most preferred methods of learning were:
 - 75% Printed materials
 - 62% Self-guided tours
 - 53% Outdoor exhibits
 - 53% Park website
- “Other” methods (2%) were:
 - Campground host
 - Dune rides for seniors and handicapped
 - Interpretive dance
 - Meetings
 - Podcast
 - Quarterly email newsletter
 - Rangers to answer questions
 - Reenactments
 - Restored historical buildings
 - Rope climb
 - Roving rangers to answer questions

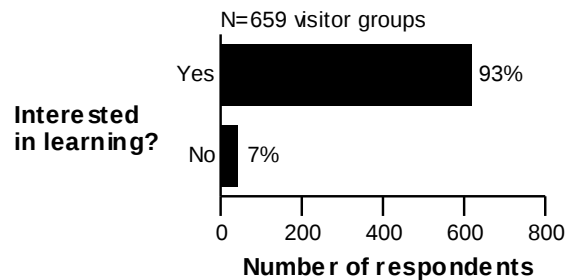


Figure 110: Visitor groups interested in learning about the park

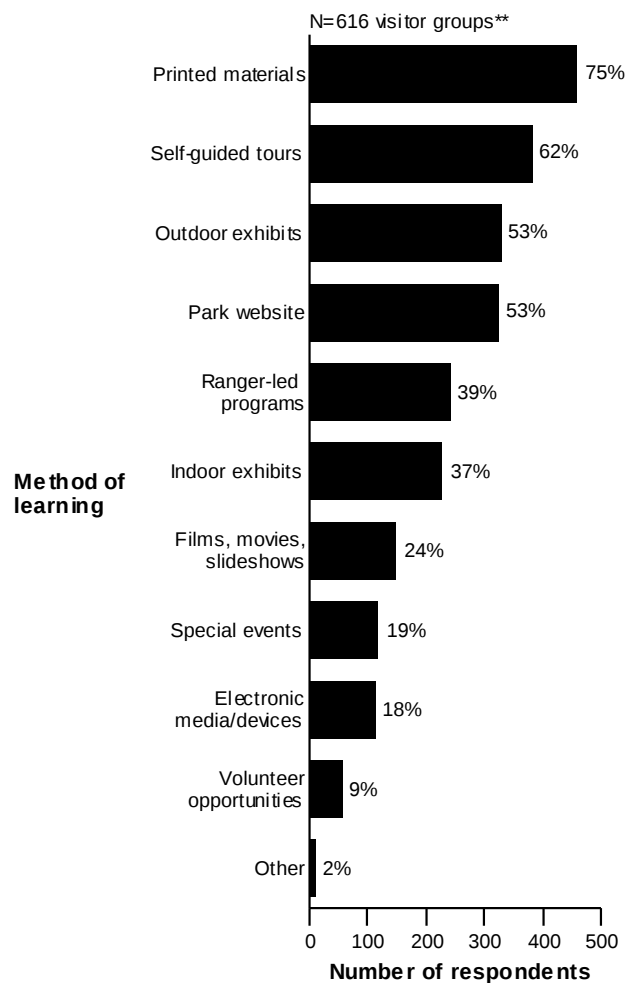


Figure 111: Preferred methods for learning

*total percentages do not equal 100 due to rounding

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

Overall Quality**Question 13**

Overall, how would you rate the quality of the facilities, services, and recreational opportunities provided to you and your personal group at Sleeping Bear Dunes NL during this visit?

Results

- 95% of visitor groups rated the overall quality of facilities, services, and recreational opportunities as “very good” or “good” (see Figure 112).
- Fewer than 1% rated the quality as “very poor” or “poor.”

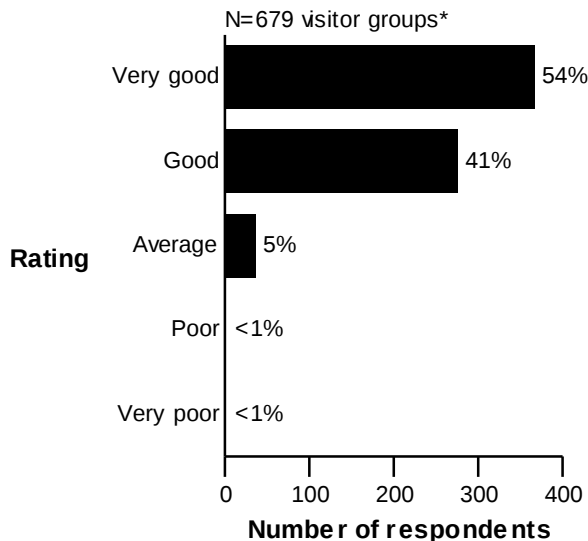


Figure 112: Overall quality rating of facilities, services, and recreational opportunities

*total percentages do not equal 100 due to rounding

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

Visitor Comments

What visitors liked most

Question 25a

What did you and your personal group like most about your visit to Sleeping Bear Dunes NL?

Results

- 92% of visitor groups (N=645) responded to this question.
- Table 21 shows a summary of visitor comments. A complete copy of hand-written comments is included in the Visitor Comments Appendix.

Table 21: What visitors liked most

N=1,097 comments;
some visitor groups made more than one comment.

Comment	Number of times mentioned
PERSONNEL	
Park staff	2
Other comments	3
INTERPRETIVE SERVICES	
Ranger-led programs	8
History of area	5
Maritime Museum	4
Cell phone tour	2
Informational brochures	2
Learning geology of area	2
Other comments	4
FACILITIES/MAINTENANCE	
Pierce Stocking Scenic Drive/overlooks	47
Clean/well maintained park	27
Trails	23
Nice/large/spacious/private campsites	18
Quality/cleanliness of restrooms	9
Cleanliness of beaches	8
Campgrounds	7
Dune walk/trail	5
Picnic areas	5
Accessibility	3
Quiet campground	3
Campgrounds - Platte River	2
Clean campground	2
Good signage	2
Group campsite	2
Other comments	11

*total percentages do not equal 100 due to rounding

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

Table 21: What visitors liked most
(continued)

Comment	Number of times mentioned
POLICIES/MANAGEMENT	
Park is not crowded	9
Access to beaches	6
Lack of development	5
Beaches are not crowded	4
Lack of motorized vehicles	2
Park preservation	2
Other comments	5
RESOURCE MANAGEMENT	
Clean lake water	12
Historic preservation	5
Trees/woods	5
Wildlife	5
Manitou Islands	3
Unspoiled	3
Wilderness	3
Bird watching	2
Flora	2
Night sky (no light pollution)	2
Seeing deer	2
Other comments	6
CONCESSION SERVICES	
Comments	5
GENERAL COMMENTS	
Scenic views/scenery	145
Dune climb	117
Beauty	91
Beaches	65
The dunes	43
Peace/quiet/tranquility	41
Natural area/nature	39
Hiking/walking	32
Swimming	16
Lake Michigan	15
North Bar Lake	11
Family activity/togetherness	10
Kayaking	9
Camping	8
Platte River	8
Solitude	8
Water	8
Good weather	7
Relaxing	7
Being outdoors	7

Table 21: What visitors liked most
(continued)

Comment	Number of times mentioned
GENERAL COMMENTS (continued)	
Lakes	5
Sand	5
Walking on beaches	5
Walking on dunes	5
Being away from the city/traffic	4
Biking opportunities	4
Recreational opportunities	4
Tubing	4
Canoeing	3
Everything	3
Exploring	3
Family atmosphere/orientation	3
Fishing	3
Floating/rafting	3
Fresh air	3
Sunsets	3
Tubing on Platte River	3
Close to home	2
Dunes concert	2
Good people	2
Many activities	2
Rock hunting/collecting	2
Unique habitat	2
Other comments	29

What visitors liked least

Question 25b

What did you and your personal group like least about your visit to Sleeping Bear Dunes NL?

Results

- 71% of visitor groups (N=492) responded to this question.
- Table 22 shows a summary of visitor comments. A complete copy of hand-written comments is included in the Visitor Comments Appendix.

Table 22: What visitors liked least
N=514 comments;
some visitor groups made more than one comment.

Comment	Number of times mentioned
PERSONNEL	
Rangers	2
Other comments	3
INTERPRETIVE SERVICES	
More detailed/accurate trail maps	5
Not enough ranger-led activities	2
Other comments	14
FACILITIES/MAINTENANCE	
Restrooms	21
Restrooms at Pierce Stocking Drive	9
Restroom odor	6
Litter/trash	4
Access to beach area is difficult	3
Lack of parking	3
Litter/trash on beach	3
Poorly maintained/dirty restroom	3
Poorly maintained/dirty beach	2
Campsites too close to each other	2
Inadequate signage to points of interest on M22	2
Lack of dune trail signage	2
Lack of recycling facilities	2
Picnic tables not moveable	2
Too few restrooms	2
Other comments	45
POLICIES/MANAGEMENT	
Crowding	18
Reservation system	7
Crowded conditions at North Bar Lake	6
Pet policy	5
Barking dogs	3
Campsites unavailable	3
Noisy campers	3

Table 22: What visitors liked least
(continued)

Comment	Number of times mentioned
POLICIES/MANAGEMENT (continued)	
Visitors leaving marked trails	3
Crowded conditions at beaches	2
Crowded conditions at picnic area	2
Crowded conditions on Platte River	2
No entry to historic buildings	2
Partiers in campground (noise/alcohol)	2
Visitors' lack of respect for park	2
Other comments	45
RESOURCE MANAGEMENT	
Poison ivy	8
Poison ivy in campgrounds	5
Mosquitoes	4
Biting flies	3
Debris from beach fires	3
Other comments	9
CONCESSION SERVICES	
Lack of restaurants	3
No food concession in park	3
Ferry schedule - too infrequent	2
Other comments	11
GENERAL COMMENTS	
Nothing to dislike	115
Inclement weather	43
Lack of time	21
Having to leave/go home	6
Climbing the dunes	4
Scenic drive	3
Too far from home	3
Traffic	2
Other comments	24

Additional comments

Question 26

Is there anything else you and your personal group would like to say about your visit to Sleeping Bear Dunes NL?

Results

- 53% of visitor groups (N=372) responded to this question.
- Table 23 shows a summary of visitor comments. A complete copy of hand-written comments is included in the Visitor Comments Appendix.

Table 23: Additional comments

N=506 comments;
some visitor groups made more than one comment.

Comment	Number of times mentioned
PERSONNEL	
Friendly staff	5
Helpful staff	5
Great staff	4
Great/friendly campground hosts	3
Helpful rangers	3
Other comments	8
INTERPRETIVE SERVICES	
Enjoyed visitor center	3
More information about activities available	3
Learned a lot	2
Other comments	20
FACILITIES/MAINTENANCE	
Enjoyed campground	5
Add bike trails/lanes	4
Campground restrooms smelly/dirty	4
Improve road signs	4
More road signs needed	4
Well maintained	4
Clean	3
Add distances to dune trail signs	2
Better markings on trails	2
Campsites too small	2
Enjoyed the trails	2
Good facilities	2
Improve parking	2
Keep campground pit toilets	2
Need flush toilets in campgrounds	2
Other comments	25

Table 23: Additional comments
(continued)

Comment	Number of times mentioned
POLICIES/MANAGEMENT	
Allow dogs on dunes/beach	6
Keep it beautiful	5
Keep it as it is	4
Publicize/advertise the park	4
Appreciated free admission	3
Increase number of first-come/first-serve campsites	3
Questionnaire too long	3
Allow dogs in backcountry/trails	2
Do not add more reservable campsites	2
Do not allow dogs on beach	2
Park is safe	2
Park was crowded	2
Spend more money to support national parks	2
Wrong to remove local residents	2
Other comments	49
RESOURCE MANAGEMENT	
Preserve the park	5
Control/limit beach fires	3
Preserve old/historic buildings	3
Keep it natural	2
Spray for/remove poison ivy	2
Other comments	6
CONCESSION SERVICES	
Comments	5
GENERAL COMMENTS	
Enjoyed visit	71
We love the park/area	39
Park is beautiful	29
Will return	25
Thank you	24
Keep up the good work	22
Good family activity	6
Nice park	5
We visit often	5
Live nearby and enjoy the park	3
Visited park as a child	3
Enjoy access to dunes	2
Good place/area for families	2
Our favorite place	2
Other comments	20

Appendix 1: The Questionnaire

Appendix 2: Additional Analysis

The Visitor Services Project (VSP) offers the opportunity to learn more from VSP visitor study data through additional analysis. Two-way and three-way cross tabulations can be made with any questions.

Below are some examples of the types of cross tabulations that can be requested. To make a request, please use the contact information below, and include your name, address and phone number in the request.

1. What proportion of family groups with children attend interpretive programs?
2. Is there a correlation between visitors' ages and their preferred sources of information about the park?
3. Are highly satisfied visitors more likely to return for a future visit?
4. How many international visitors participate in hiking?
5. What ages of visitors would use the park website as a source of information on a future visit?
6. Is there a correlation between visitor groups' rating of the overall quality of their park experience, and their ratings of individual services and facilities?
7. Do larger visitor groups (e.g., four or more) participate in different activities than smaller groups?
8. Do frequent visitors rate the overall quality of their park experiences differently than less frequent visitors?

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Appendix 3: Decision Rules for Checking Non-response Bias

Non-response bias is one of the major threats to the quality of a survey project. It affects the ability to generalize from a sample to general population (Salant and Dillman 1994; Dillman, 2007; Stoop 2004; Filion 1976; Dey 1997). Since non-response bias is usually caused by participants failing to return their questionnaires, a higher response rate is more desirable. However, higher response rates do not guarantee low non-response bias. Researchers have suggested different methods to detect non-response bias. The most common variables used to detect non-response bias are demographic variables. Some researchers such as Van Kenhove (2002), Groves (2000) also suggest that saliency of topic has an effect on response rate. In our visitor study, visitors' satisfaction (overall quality rating) could be considered as one of the salient factors as we aim to collect opinions from both unsatisfied and satisfied visitors. There are also several methods for checking non-response bias suggested in the literature. We decided to follow the method suggested by Groves (2006), De Rada (2005), and Rogelberg and Luong (1998) to compare the demographic characteristics as well as satisfaction scores of respondents in three different mailing waves. This seems to be the most suitable method because the visitor population is generally unknown.

Respondents were categorized based on the date their questionnaire was received. The first wave is defined as surveys received before the postcards, the second wave is between postcard and 2nd replacement and the third wave contains surveys received after the 2nd replacement. Analysis of variance was used to detect differences in age, distance of travel to the park, and overall quality rating scores among different mailing waves.

The hypothesis was that group types are equally represented. If the p-value is greater than 0.05, the difference in group type is judged to be insignificant.

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

1. Respondents of different mailing waves have the same average age.
2. On average respondents of different mailing waves traveled the same distance to the park.
3. Respondents of different mailing waves have the same average satisfaction scores.

Table 3 shows no significant difference in age, travel distance, overall quality rating. The non-response bias is thus judged to be insignificant.

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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)

1992

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

1999

- 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

2006

- 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 (spring)
- 186. Glen Canyon National Recreation Area (spring and summer)
- 187. Lava Beds National Monument
- 188. John Muir National Historic Site
- 189. Fort Union Trading Post NHS
- 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 (winter)
- 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
- 204. Capitol Reef National Park
- 205.1 Great Smoky Mountains National Park (summer)
- 205.2 Great Smoky Mountains National Park (fall)
- 206. Grand Teton National Park
- 207. Herbert Hoover National Historic Site
- 208. City of Rocks National Reserve

2009

- 209. Fort Larned National Historic Site
- 210. Homestead National Monument of America

2009 (continued)

- 211. Minuteman Missile National Historic Site
- 212. Perry's Victory & International Peace Memorial
- 213. Women's Rights National Historical Park
- 214. Klondike Gold Rush National Historical Park Seattle Unit
- 215. Yosemite National Park
- 216. Sleeping Bear Dunes National Lakeshore

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.

NPS 634/10095

April 2010



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