



National Park Service  
U.S. Department of the Interior

The Visitor Services Project



# **PICTURED ROCKS NATIONAL LAKESHORE Visitor Study**

**SUMMER 2001**

**Report 128**

Cooperative Park Studies Unit





National Park Service  
U.S. Department of the Interior  
The Visitor Services Project

# Pictured Rocks National Lakeshore

## Visitor Study

Summer 2001

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Todd Simmons is a VSP Research Aide based at the Cooperative Park Studies Unit, University of Idaho. I thank Dr. James Gramann, Ginni Dilworth, and Shawn Murphy for their assistance with this study. The VSP acknowledges the Public Opinion Lab of the Social and Economic Sciences Research Center, Washington State University, for its technical assistance.

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## Visitor Services Project Pictured Rocks National Lakeshore Report Summary

- This report describes the results of a visitor study at Pictured Rocks National Lakeshore during July 29-August 4, 2001. A total of 616 questionnaires were distributed to visitors. Visitors returned 505 questionnaires for a 82.0% response rate.
- This report profiles Pictured Rocks NL visitors. A separate appendix contains visitors' comments about their visit. This report and the appendix include summaries of those comments.
- Thirty-six percent of visitor groups were groups of two; thirty-six were in groups of three to five. Sixty-seven percent of visitor groups were family groups. Forty-six percent of visitors were aged 31-55; 26% were aged 15 years or younger.
- Eighty-five percent of visitor groups had visited only once in the past 12 months. Over one-half (54%) of visitor groups had visited one to four times in the past two to five years.
- Three percent of all visitors were international: 41% from Germany, 22% from Canada, 9% from France and 7 other countries. United States visitors were from Michigan (60%), Illinois (8%), Wisconsin (8%), and 35 other states.
- Forty-seven percent of visitors spent less than 24 hours at the park. Twenty-eight percent of visitor groups spent one or two days, and 11% spent three days at the park.
- Previous visits (51%), friends and relatives (47%), and travel guides/ tour books (41%) were the most used sources of information by visitor groups prior to visiting on this trip. Travel guides/ tour books (40%), personal experience (32%), and the Michigan Travel Center (29%) were the most used sources of information by visitor groups during this visit.
- Sixty-one percent of visitor groups visited Pictured Rocks NL as one of several destinations, 30% as their primary destination, and 9% had not planned on visiting.
- The Miner's Area (59%), Munising Falls (47%), and the Visitor Information Center (42%) were the most visited sites by visitor groups. The least visited site was the Grand Marais Maritime Museum (12%).
- The most common activities of visitor groups were sightseeing (78%), beach activities (67%), day hiking (66%) and enjoying solitude/ quiet (65%).
- In regard to the use, importance and quality of visitor services and facilities, it is important to note the number of visitor groups that responded to each question. The services that were most used by 432 respondents were the park brochure/ map (74%) and the information desk service (57%). According to visitors, the most important services were park brochure/ map (86% of 380 respondents) and the information desk service (81% of 239 respondents). The highest quality services were park personnel (91% of 133 respondents) and information desk service (89% of 223 respondents).
- Seventy percent of visitor groups said that wildlife added to their park experience. Twenty-three percent of visitor groups said that personal watercraft detracted from their park experience.
- The average visitor group expenditure was \$294. The average per capita expenditure was \$87. The median visitor group expenditure (50% of group spent more, 50% spent less) was \$170. Forty-three percent of visitor groups spent between \$1 and \$150 and 27% spent \$351 or more in total expenditures in Pictured Rocks NL and within 60 miles of the park. Of the total expenditures by groups, 30% was for lodging and 17% was for restaurants and bars.
- Most visitor groups (95%) rated the overall quality of visitor services at Pictured Rocks NL as "very good" or "good." No visitor groups rated the overall quality of visitor services as "very poor."

For more information about the Visitor Services Project, please contact the  
University of Idaho Cooperative Park Studies Unit; phone (208) 885-7129 or 885-7863.

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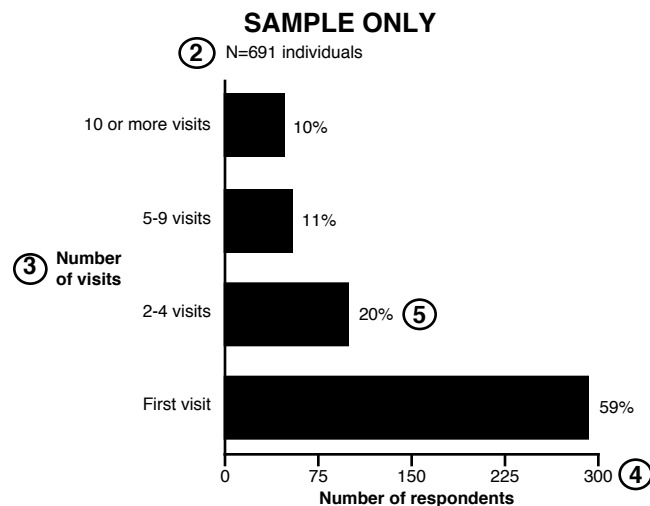
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## INTRODUCTION

This report describes the results of a study of visitors at Pictured Rocks National Lakeshore (NL). This visitor study was conducted July 29-August 4, 2001 by the National Park Service (NPS) Visitor Services Project (VSP), part of the Cooperative Park Studies Unit at the University of Idaho.

The report is divided into four sections. The **Methods** section discusses the procedures and limitations of the study. The **Results** section provides summary information for each question in the questionnaire and includes a summary of visitor comments. An **Additional Analysis** section is included which will help managers request additional analyses. The final section includes a copy of the **Questionnaire**. A separate appendix includes comment summaries and visitors' unedited comments.

Most of this report's graphs resemble the example below. The large numbers refer to explanations following the graph.



① **Figure 4: Number of visits**

- 1: The figure title describes the graph's information.
- 2: Listed above the graph, the 'N' shows the number of visitors responding and a description of the chart's information. Interpret data with an 'N' of less than 30 with **CAUTION!** as the results may be unreliable.
- 3: Vertical information describes categories.
- 4: Horizontal information shows the number or proportions in each category.
- 5: In most graphs, percentages provide additional information.

## METHODS

### Questionnaire design and administration

The questionnaire for this visitor study was designed using a standard format that has been developed in previous Visitor Services Project studies. A copy of the questionnaire is included at the end of this report.

Interviews were conducted with, and questionnaires were distributed to, a sample of visitors who arrived at Pictured Rocks NL during the period from July 29-August 4, 2001. Visitors were sampled at nine locations (see Table 1). At the locations with numerous sites to sample (Little Beaver area, Miner's Castle area, Sand Point area, etc.) the intended distribution was amended to reflect actual visitation patterns.

**Table 1: Questionnaire distribution locations**

Location:	Questionnaires distributed	
	Number	%
Grand Sable Visitor Center	110	18
Miners Castle/Falls/Beach	109	18
Munising Falls	100	16
Sand Point area	100	16
Sable Falls	50	8
Hurricane River/ Twelvemile campgrounds	50	8
Chapel Area	38	6
Little Beaver area	34	6
Log Slide	25	4
<b>GRAND TOTAL</b>	<b>616</b>	<b>100</b>

Visitor groups were greeted, briefly introduced to the purpose of the study, and asked to participate. If visitors agreed, an interview, lasting approximately two minutes was used to determine group size, group type, and the age of the adult who would complete the questionnaire. These individuals were then given a questionnaire and asked their names, addresses and telephone numbers in order to mail them a reminder/thank you postcard. Visitor groups were asked to complete the questionnaire during or after their visit and then return it by mail.

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Two weeks following the survey, a reminder-thank you postcard was mailed to all participants. Replacement questionnaires were mailed to participants who had not returned their questionnaires four weeks after the survey. Seven weeks after the survey, second replacement questionnaires were mailed to visitors who still had not returned their questionnaires.

**Questionnaire  
design and  
administration  
(continued)**

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Returned questionnaires were coded and the information was entered into a computer using a standard statistical software package—Statistical Analysis System (SAS). Frequency distributions and cross-tabulations were calculated for the coded data, and responses to open-ended questions were categorized and summarized.

**Data analysis**

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This study collected information on both visitor groups and individual group members. Thus, the sample size ("N"), varies from figure to figure. For example, while Figure 1 shows information for 499 visitor groups, Figure 4 presents data for 1,685 individuals. A note above each graph specifies the information illustrated.

**Sample size,  
missing data  
and reporting  
errors**

Occasionally, a respondent may not have answered all of the questions, or may have answered some incorrectly. Unanswered questions result in missing data and cause the number in the sample to vary from figure to figure. For example, although 505 questionnaires were returned by Pictured Rocks National Lakeshore visitors, Figure 1 shows data for only 499 respondents.

Questions answered incorrectly due to carelessness, misunderstanding directions, and so forth turn up in the data as reporting errors. These create small data inconsistencies.

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**Limitations**

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

1. It is not possible to know whether visitor responses reflect actual behavior. This disadvantage applies to all such studies and is reduced by having visitors fill out the questionnaire soon after they visit the park.

2. The data reflect visitor use patterns of visitors to the selected sites during the study period of July 29-August 4, 2001. The results 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 or table.

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**Special conditions**

Weather conditions during the visitor study were fairly typical of July and August in the Pictured Rocks area, with warm, sunny days and the occasional rain shower.

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## RESULTS

At Pictured Rocks NL, 635 visitor groups were contacted and 616 of these groups (97%) accepted questionnaires. Questionnaires were completed and returned by 505 visitor groups, resulting in an 82.0% response rate for this study.

### Visitors contacted

Table 2 compares age and group size information collected from the total sample of visitors contacted with that from those who actually returned questionnaires. Based on the variables of respondent age and visitor group size, non-response bias was judged to be insignificant.

**Table 2: Comparison of total sample and actual respondents**

Variable	Total sample		Actual respondents	
	N	Avg.	N	Avg.
Age of respondents	616	43.7	492	44.4
Group size	616	2.6	499	3.9

Figure 1 shows visitor group sizes, which ranged from one person to 25 people. Thirty-six percent of visitor groups consisted of two people, while another 20% consisted of four people. Sixty-seven percent of visitor groups were made up of family members, 13% were made up of friends, and 13% were made up of family and friends (see Figure 2). Groups listing themselves as "other" for group type included church and school groups. Most visitor groups (97%) were not with a guided tour (see Figure 3).

### Demographics

Forty-six percent of visitors were between the ages of 31 and 55 (see Figure 4). Twenty-six percent of visitors were aged 15 years or younger.

Most respondents (96%) said no group members had disabilities or impairments (see Figure 5). Of those with disabilities or impairments, not enough visitors responded to provide reliable data (see Figures 6 and 7). Of those who listed disabilities or impairments, the access/ service problems encountered included: the staircase to Miner's Castle was not accessible, the walks were long, and there were not enough benches.

## Demographics continued

Visitors were asked to list the number of visits they had made to the park including this visit during the past 12 months and from 2 to 5 years ago. Eighty-five percent of visitors indicated they had visited only once in the past 12 months, while more than 12% said they had visited between 2 and 4 times (see Figure 8). During the past 2 to 5 years, 36% had not visited the park, and 28% had visited between 2 and 4 times (see Figure 9).

International visitors to Pictured Rocks NL comprised 3% of the total visitation (see Table 3). The countries most often represented were Germany (41%), Canada (22%) and France (9%). The largest proportions of United States visitors were from Michigan (60%), Illinois (8%), and Wisconsin (8%). Smaller proportions of U.S. visitors came from another thirty-five states (see Map 1 and Table 4).

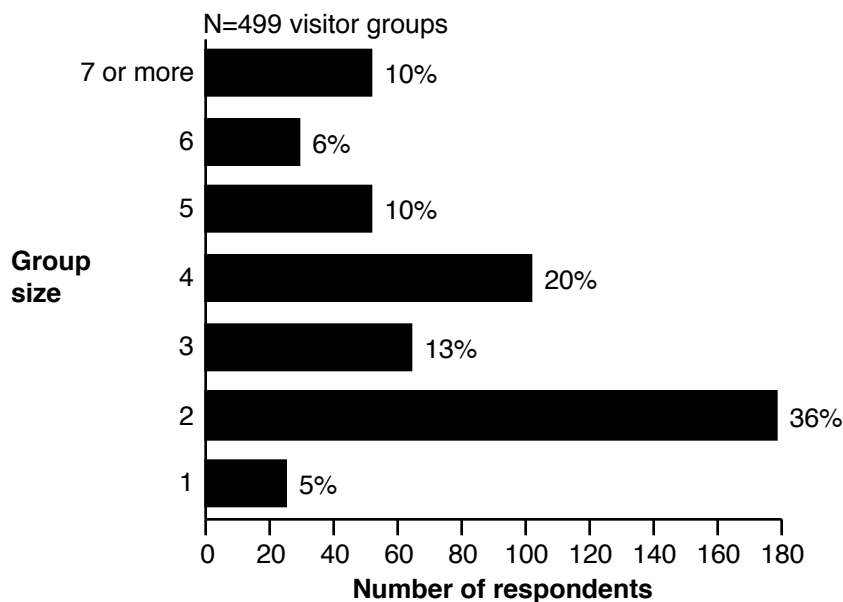


Figure 1: Visitor group sizes

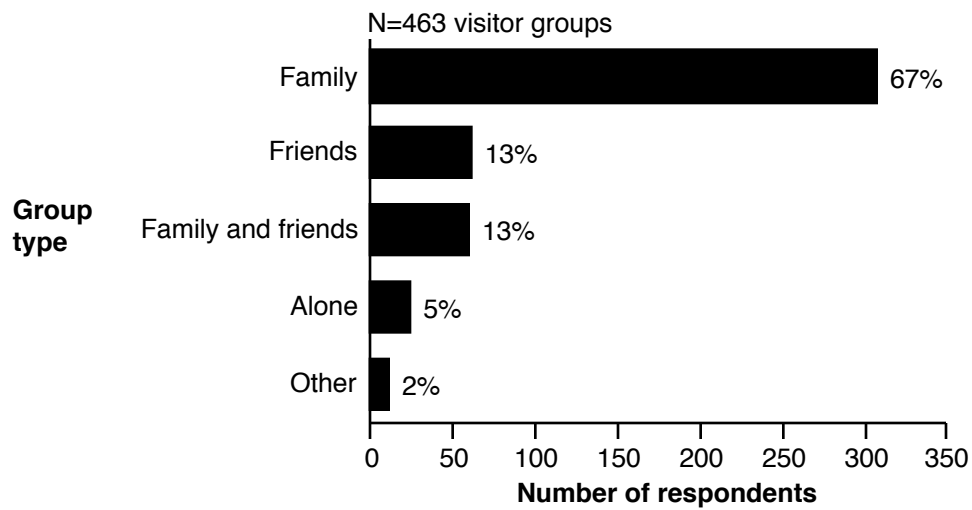


Figure 2: Visitor group types

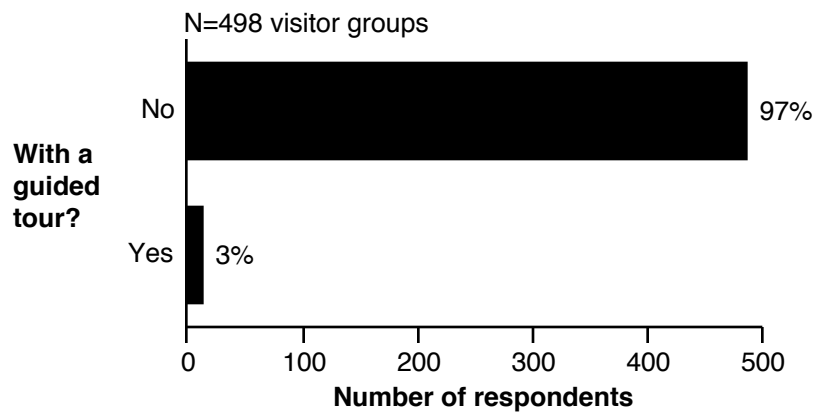


Figure 3: Participation with a guided tour

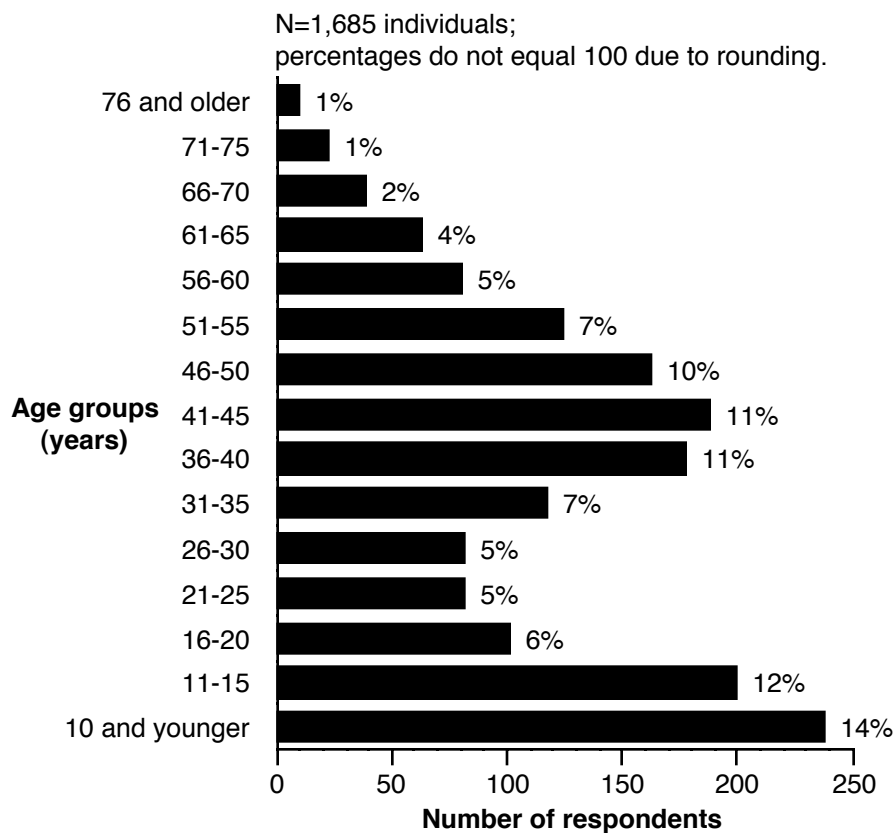


Figure 4: Visitor ages

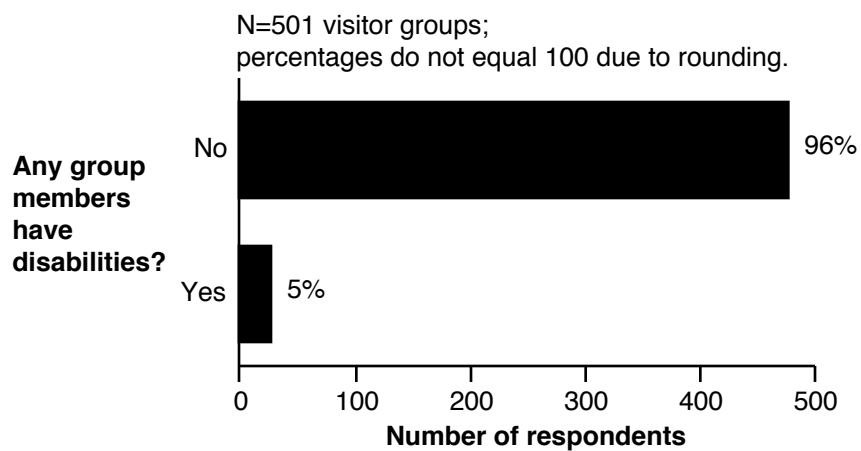


Figure 5: Visitors with disabilities

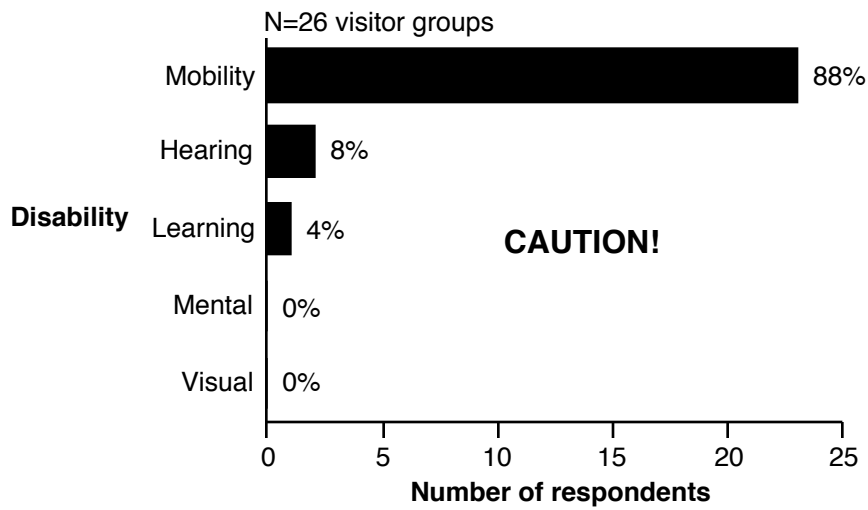


Figure 6: Visitor disabilities or impairments

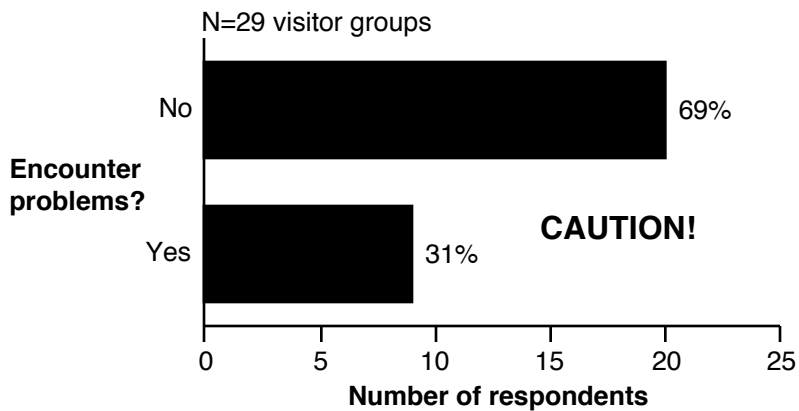


Figure 7: Visitor access/ service problems in park for visitors with disabilities or impairments

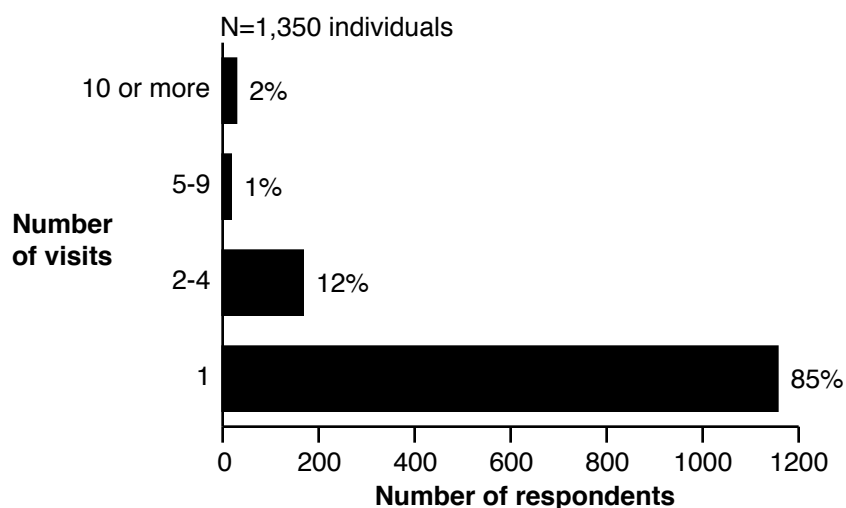


Figure 8: Number of visits during past 12 months

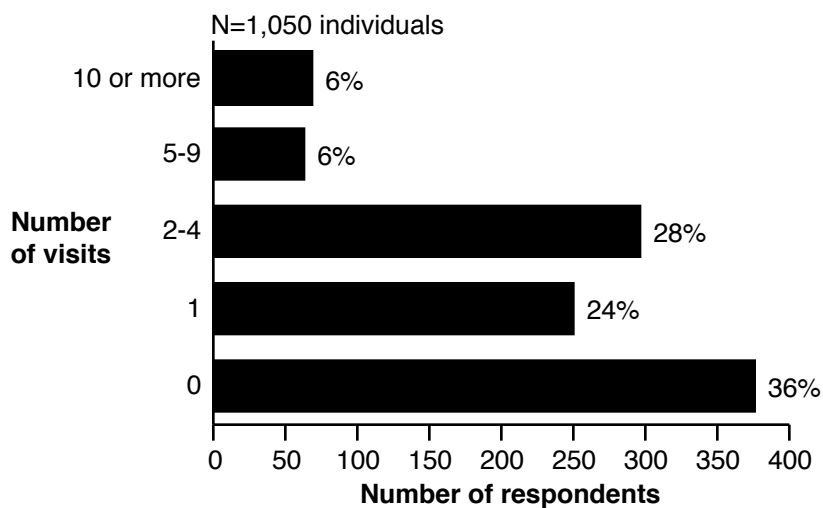


Figure 9: Number of visits during past 2-5 years

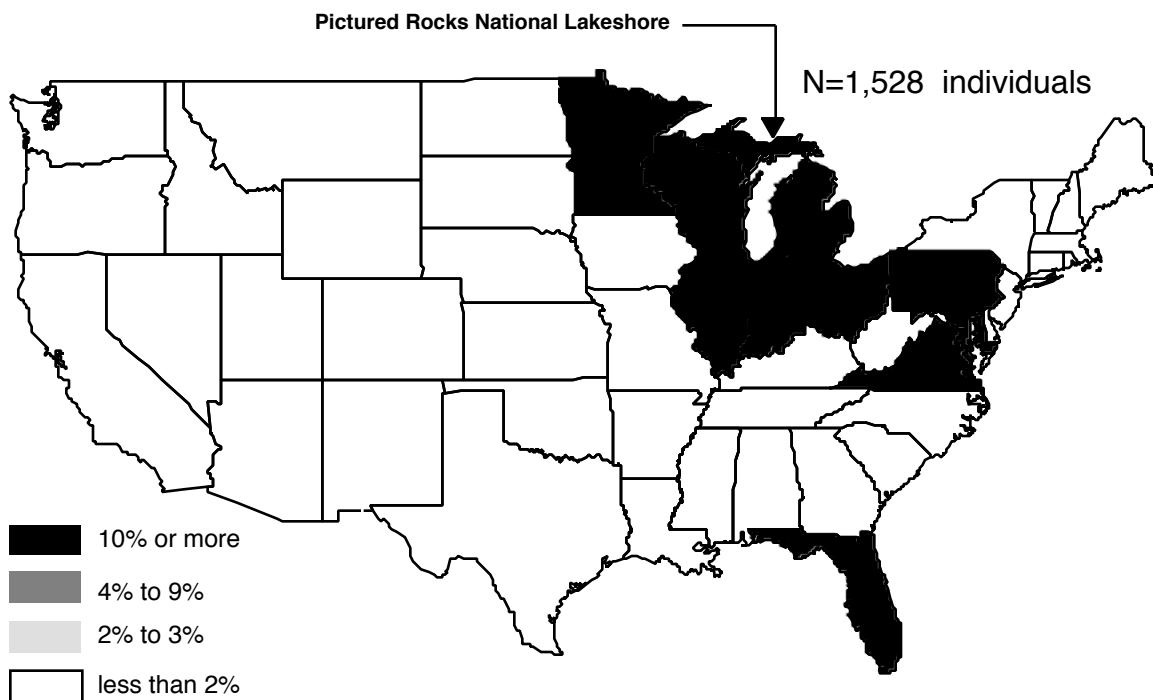
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**Table 3: International visitors by country of residence**

N=46 individuals;  
percentages do not equal 100 due to rounding.

Country	Number of individuals	Percent of Int'l visitors	Percent of total visitors
Germany	19	41	1
Canada	10	22	1
France	4	9	<1
Russia	3	7	<1
China	2	4	<1
England	2	4	<1
Poland	2	4	<1
Taiwan	2	4	<1
Australia	1	2	<1
Mexico	1	2	<1

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**Map 1: Proportion of United States visitors by state of residence**

**Table 4: United States visitors by state of residence**

N=1,528 individuals;

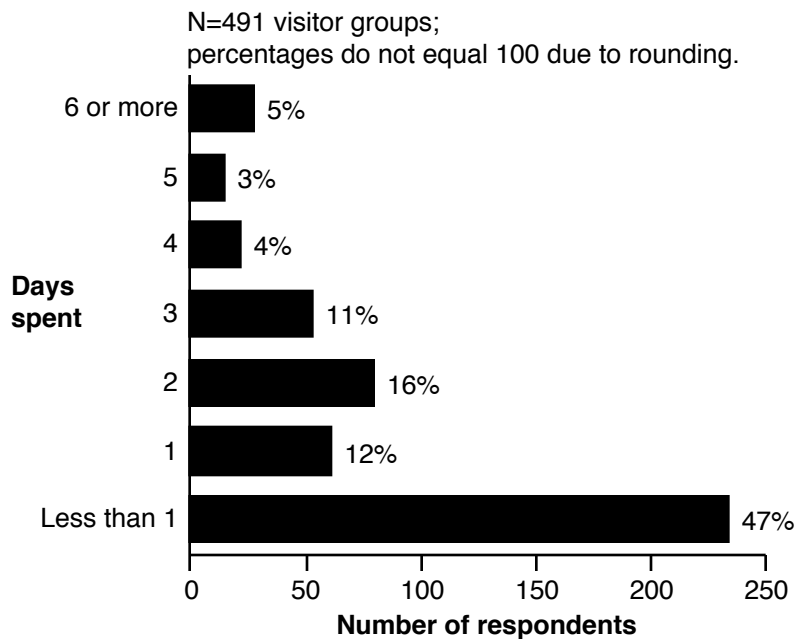
Percentages do not equal 100 due to rounding.

State	Number of individuals	Percent of U.S. visitors	Percent of total visitors
Michigan	913	60	58
Illinois	127	8	8
Wisconsin	120	8	8
Ohio	83	5	5
Indiana	46	3	3
Minnesota	41	3	3
Iowa	17	1	1
California	15	1	1
Pennsylvania	13	1	1
New York	12	1	1
Florida	11	1	1
Texas	10	1	1
Colorado	9	1	1
Massachusetts	9	1	1
Missouri	8	1	1
North Carolina	8	1	1
New Mexico	8	1	1
21 other states	72	5	5

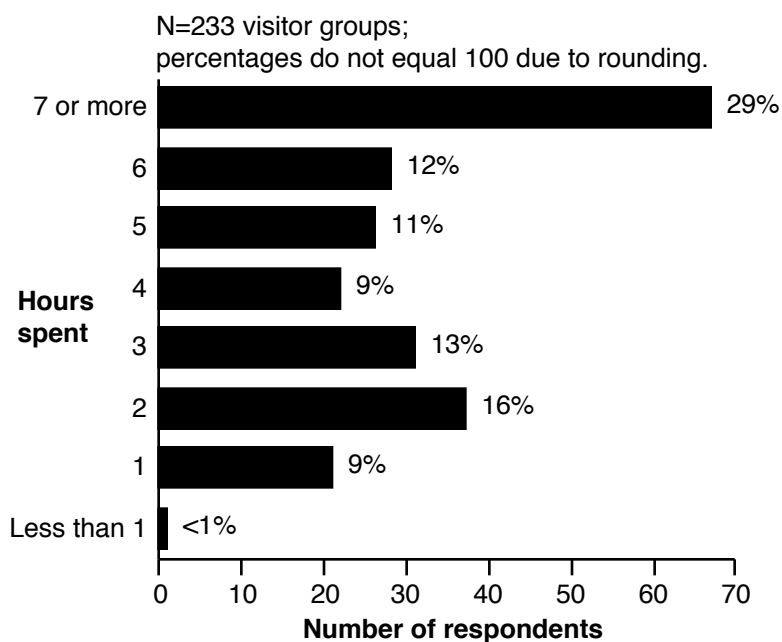


Visitor groups were asked how much time they spent at Pictured Rocks NL. Forty-seven percent of visitors spent less than 24 hours at the park, as shown in Figure 10. Twenty-eight percent of visitor groups spent one to two days, and 11% spent three days at the park. Of the groups that spent less than 24 hours at the park, 29% spent seven hours or more (see Figure 11).

### Length of stay



**Figure 10: Days spent at Pictured Rocks NL**

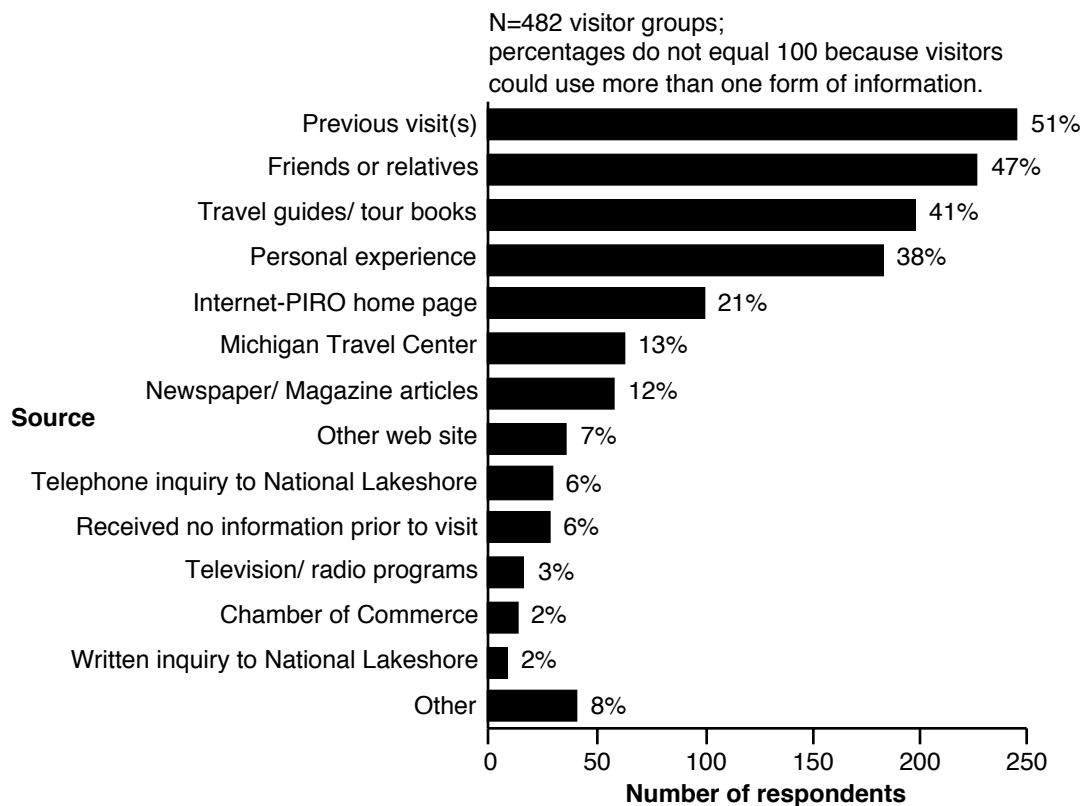


**Figure 11: Hours spent at Pictured Rocks NL if less than 24 hours**

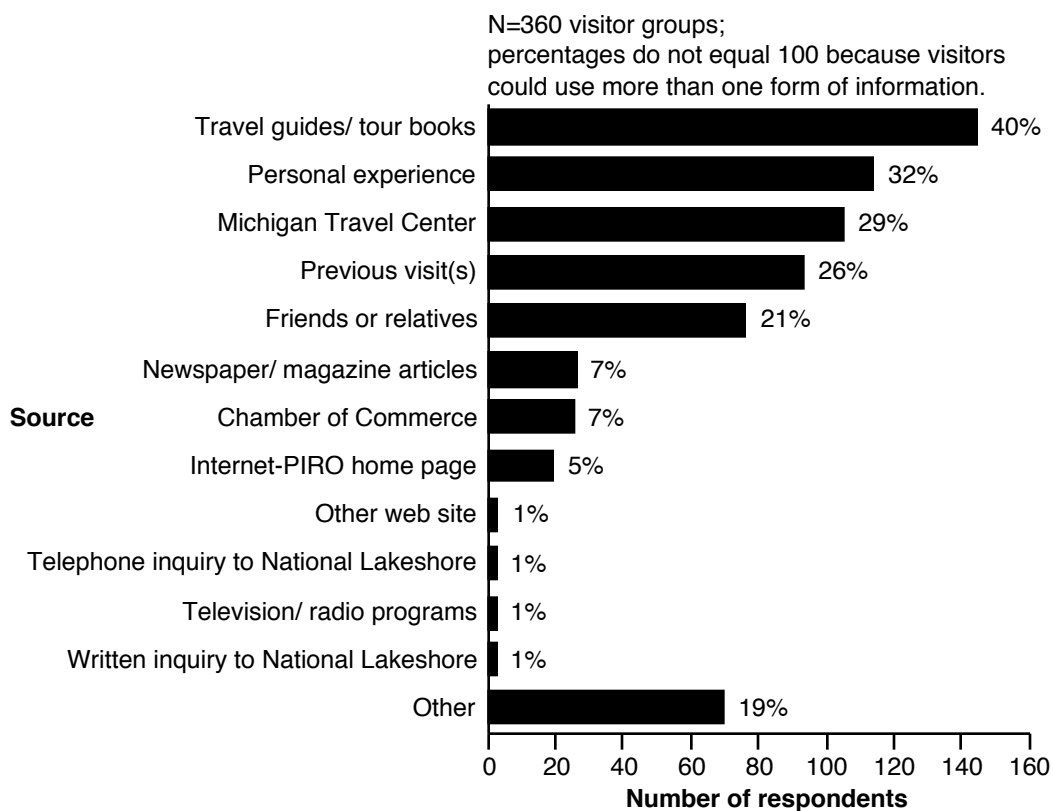
Visitor groups were asked to indicate the sources from which they had received information about Pictured Rocks NL prior to their visit. Fifty-one percent of visitor groups received information from previous visits, 47% from friends or relatives, and 41% from travel guides/ tour books (see Figure 12). Five percent of visitor groups received no information prior to their visit. Eleven percent of visitor groups received information from "other" sources, including maps and National Park Service rangers.

### Sources of information

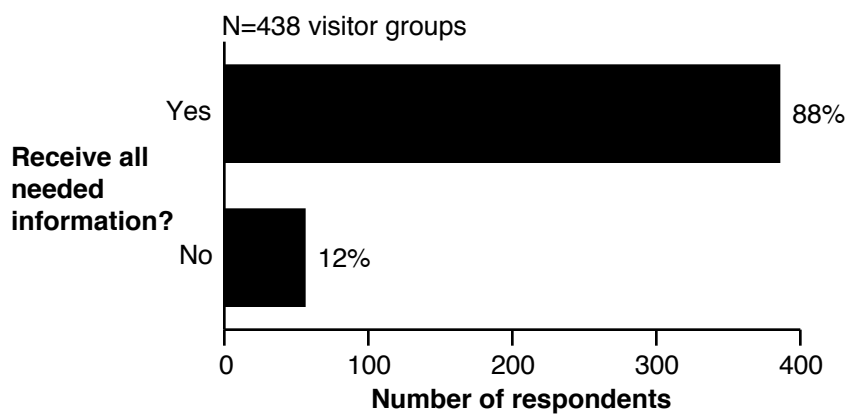
Visitor groups were asked to indicate the sources of information they used during their visit. Forty percent of visitor groups used travel guides/ tour books, 32% used personal experience, and 29% used the Michigan Travel Center (see Figure 13). Eighty-eight percent of visitor groups received all of the information that they needed (see Figure 14). Information that visitors needed but did not receive included more detailed maps of Pictured Rocks NL roads, better trail maps, and information regarding black flies.



**Figure 12: Sources of information used by visitors prior to this visit**



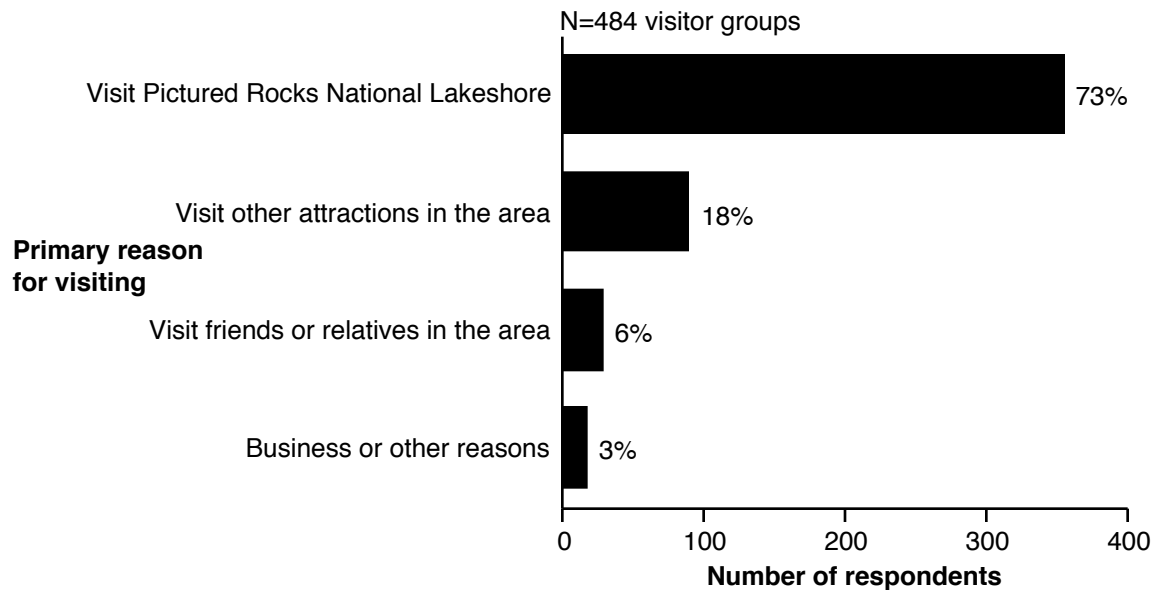
**Figure 13: Sources of information used by visitors during this visit**



**Figure 14: Receive all needed information?**

Visitor groups were asked to indicate their primary reason for visiting the Pictured Rocks NL area. Seventy-three percent of visitor groups indicated that visiting Pictured Rocks NL was their primary reason for visiting the area, 18% to visit other attractions in the area, and 6% to visit friends or relatives in the area (see Figure 15).

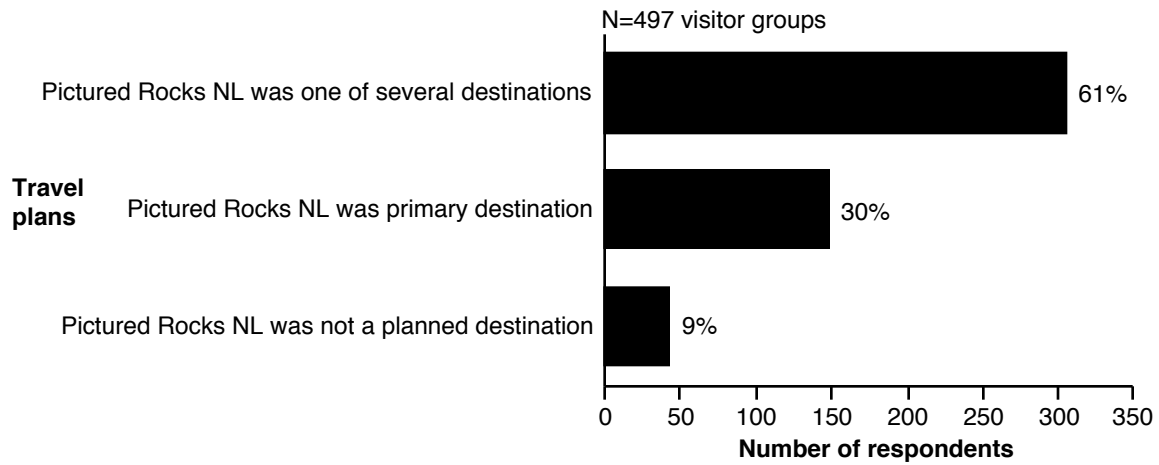
**Primary reason  
for visiting the  
area**



**Figure 15: Primary reason for visiting the area**

**Travel plans**

Visitor groups were asked how this visit to Picture Rocks NL fit into their travel plans. Sixty-one percent of visitor groups visited Pictured Rocks NL as one of several destinations, 30% as their primary destination, and 9% had not planned on visiting (see Figure 16).



**Figure 16: Pictured Rocks NL as part of visitors' travel plans**

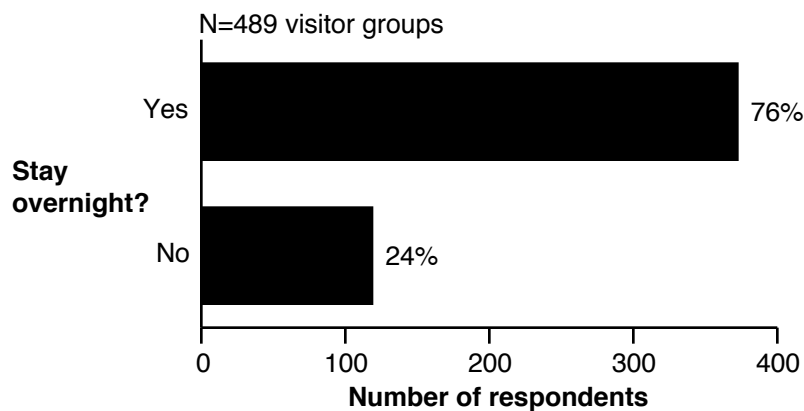
Visitor groups were asked if they stayed overnight within 60 miles of Pictured Rocks NL. Most visitor groups (76%) did stay overnight in the area (see Figure 17).

### Overnight stays and lodging

Visitor groups who stayed overnight were then asked the number of nights they stayed in and outside the park. In the park, 33% stayed one or two nights (see Figure 18). Thirty-seven percent did not stay overnight in the park. Outside the park, 54% spent one or two nights (see Figure 19). Five percent did not stay overnight outside the park.

Finally, visitors who stayed overnight were asked to identify the types of lodging where they stayed either in or outside Pictured Rocks NL. In the park, the most used types of lodging were campground/ trailer park (51%), backcountry campsite (20%), and lodge, motel, cabin, etc. (18%), as shown in Figure 20. Visitors often say they stayed in a lodge, motel, cabin, etc. in a park, even when a park has no such lodging available in its boundaries. This should be considered when interpreting the data for types of lodging used in the park.

Outside the park, the most used types of lodging were lodge, motel, cabin, etc. (60%), campground/ trailer park (34%), and residence of friends or relatives (4%), as shown in Figure 21. "Other" types of lodging included motorhomes and tents.



**Figure 17: Overnight stays within 60 miles of Pictured Rocks NL**

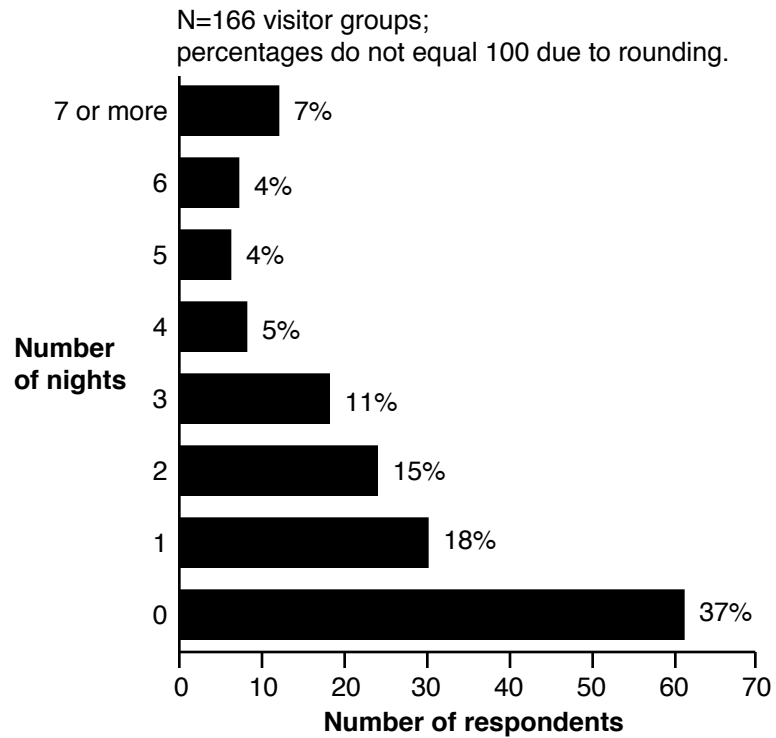


Figure 18: Number of nights in park

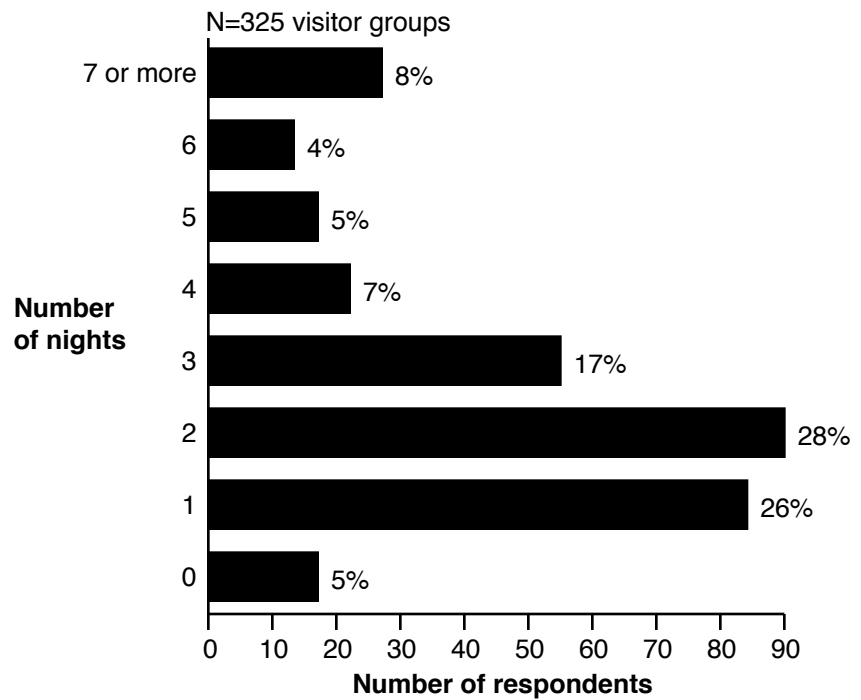
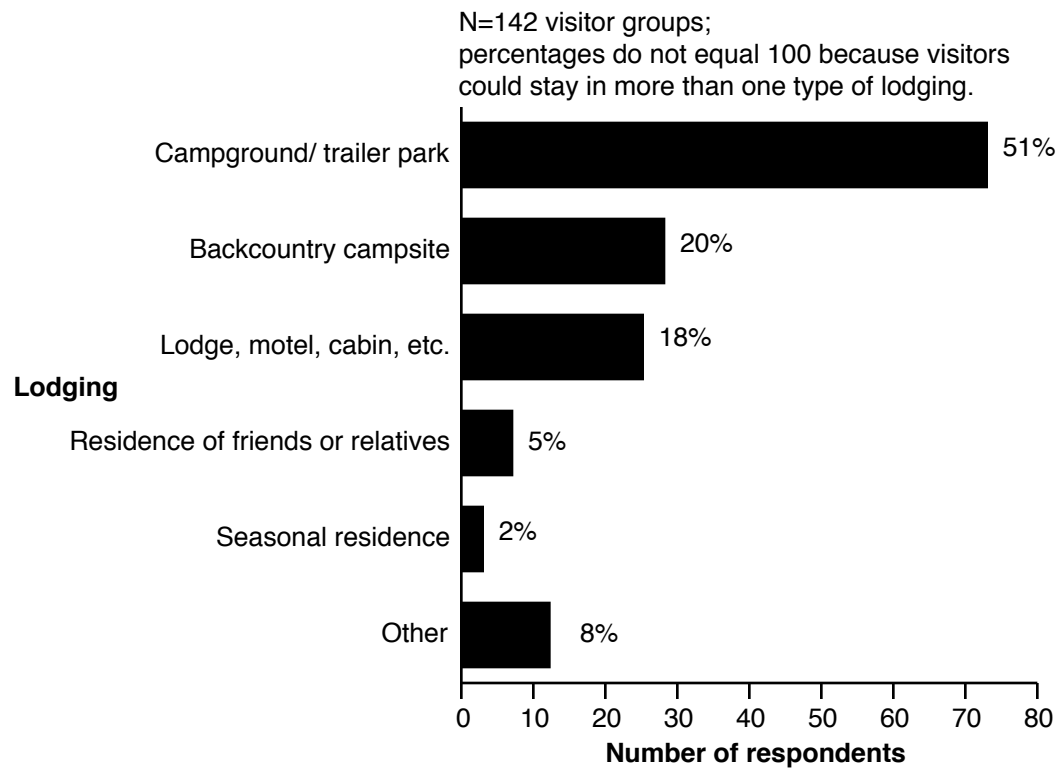


Figure 19: Number of nights out park





**Figure 20: Types of lodging used in park**

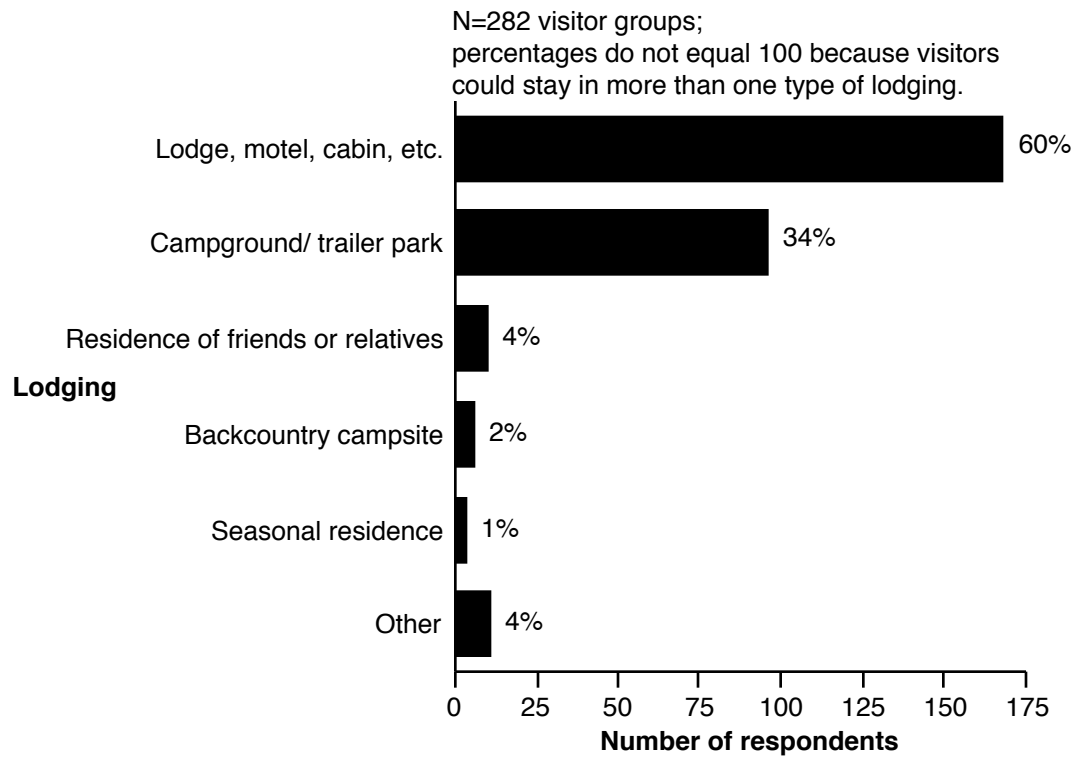


Figure 21: Types of lodging used outside park

Pictured Rocks NL has numerous entrances. Visitor groups were asked how many times they entered Pictured Rocks NL on this visit. Figure 22 shows that 38% of visitor groups entered one time, 24% entered two times, and 19% entered three times. Eighty-nine visitor groups did not know how many times they entered the park.

### Park entries

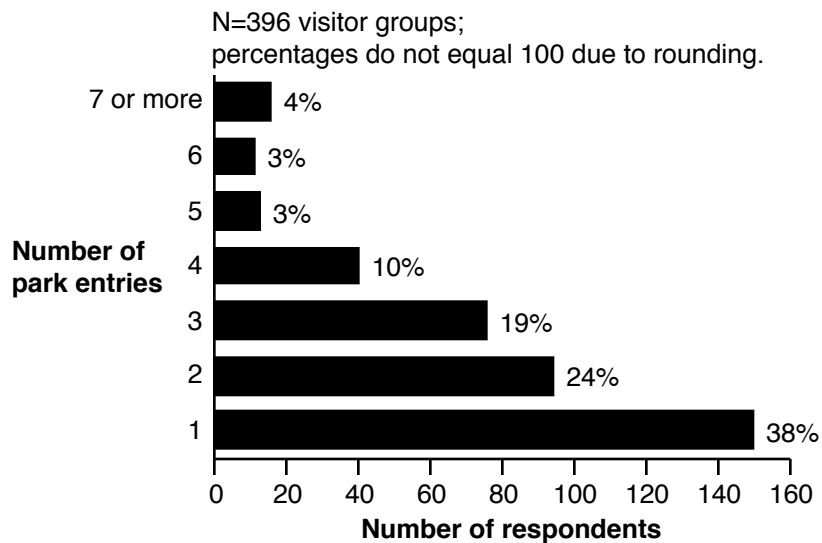


Figure 22: Number of park entries

## Sites visited

Visitor groups were asked to list the order in which they visited selected sites in Pictured Rocks NL. The most visited sites were the Miner's Area (59%), Munising Falls (47%), and the Visitor Information Center in Munising (42%), as shown in Figure 23. The least visited site was the Grand Marais Maritime Museum (12%). "Other" sites visited include the beach at Sable Falls, Sable Lake, and the shipwrecks.

The sites most often visited first were the Visitor Information Center (33%), Munising Falls (15%), and the Grand Sable Visitor Center (13%), as shown in Figure 24. The site visited least was Mosquito Beach. "Other" sites visited first included the scenic overlook at Munising and the dunes.

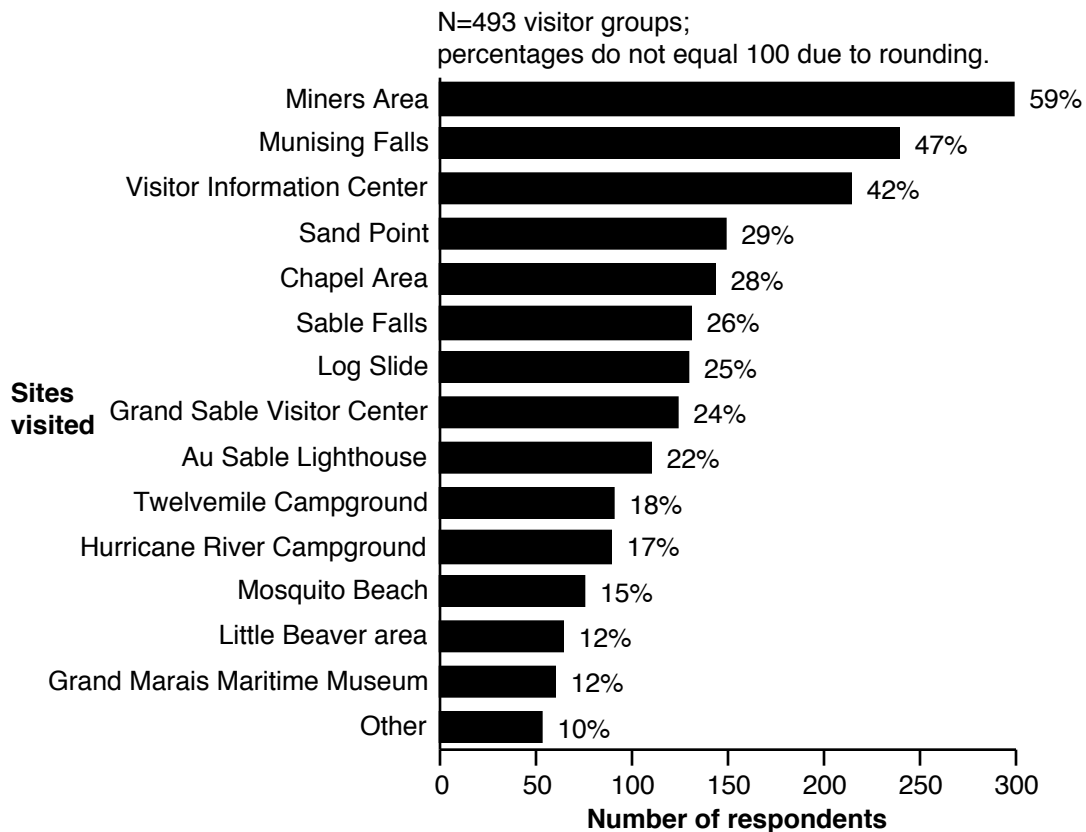
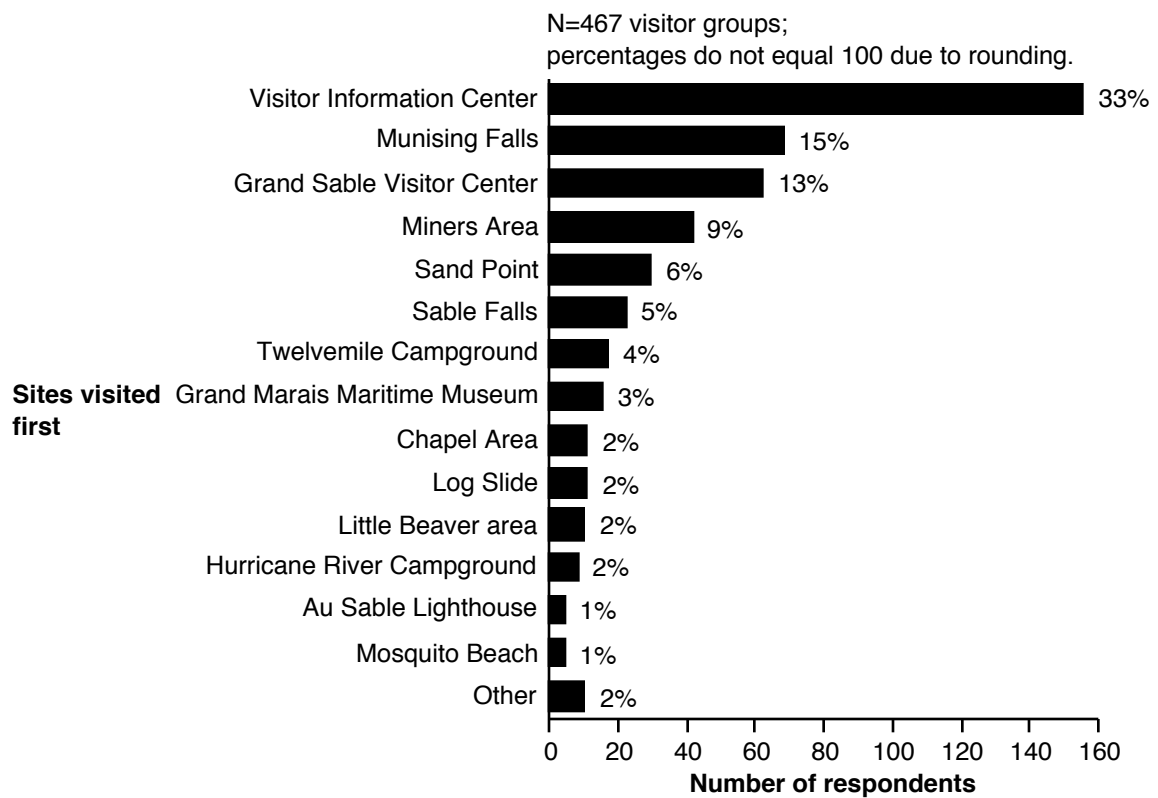


Figure 23: Sites visited



**Figure 24: Sites visited first**

## Activities

Figure 25 shows the proportions of visitor groups that participated in a variety of activities at Pictured Rocks NL. The most common activities were sightseeing (78%), beach activities (67%), day hiking (66%) and enjoying solitude/ quiet (65%) The least done activity was motorized boating (3%).

In addition, visitor groups were asked to specify where they did certain activities. Of those camping in vehicle access campgrounds, 42% used Twelvemile Beach Campground, 29% used Hurricane River Campground, and 29% used Little Beaver Campground (see Figure 26).

Of those visiting historic sites, 52% of visitor groups visited Sand Point, 47% visited Au Sable Lighthouse, 35% visited the Shipwrecks, and 21% visited the Grand Marais Maritime Museum (see Figure 27). "Other" activities that visitors participated in were picnicking and photography.

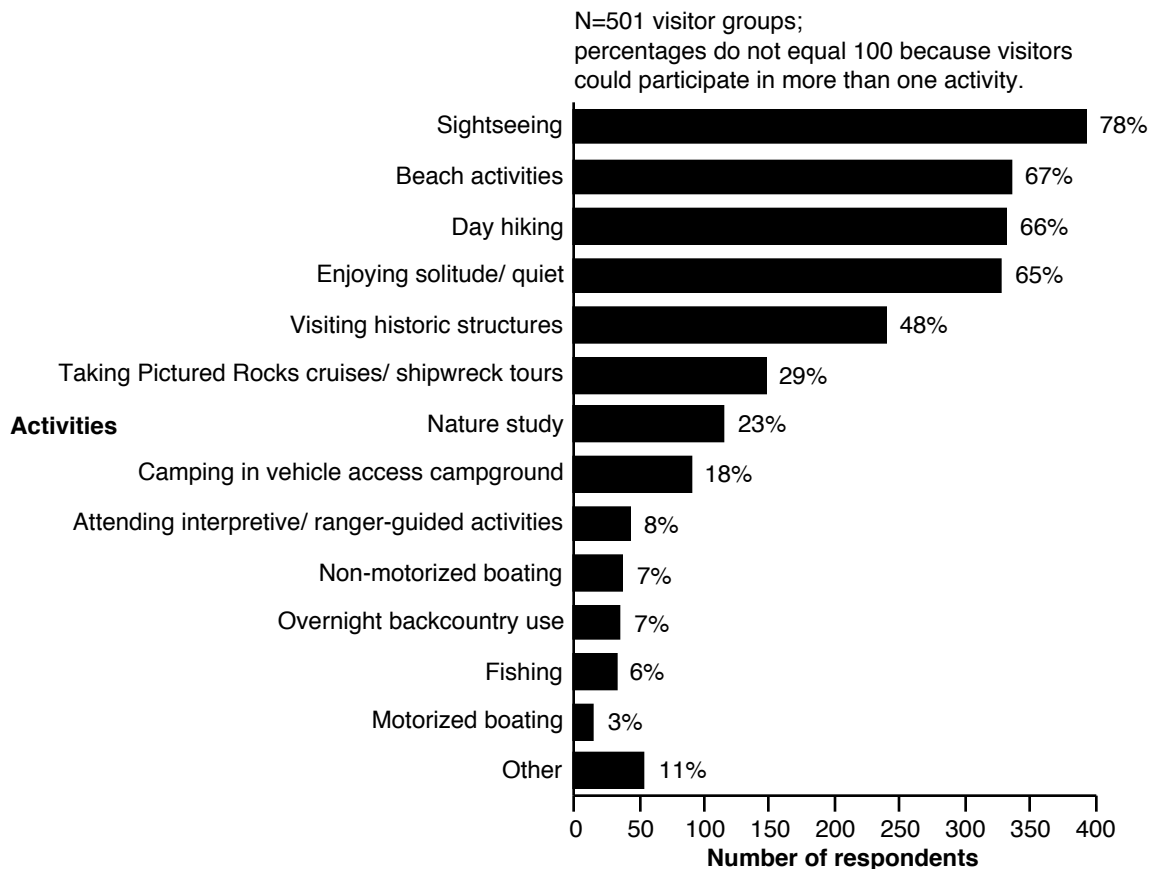
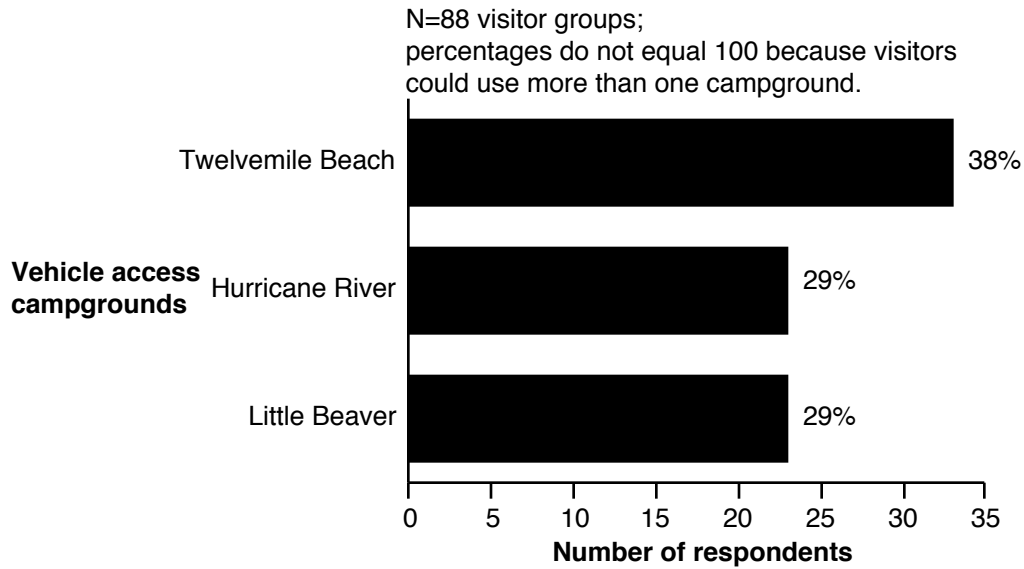
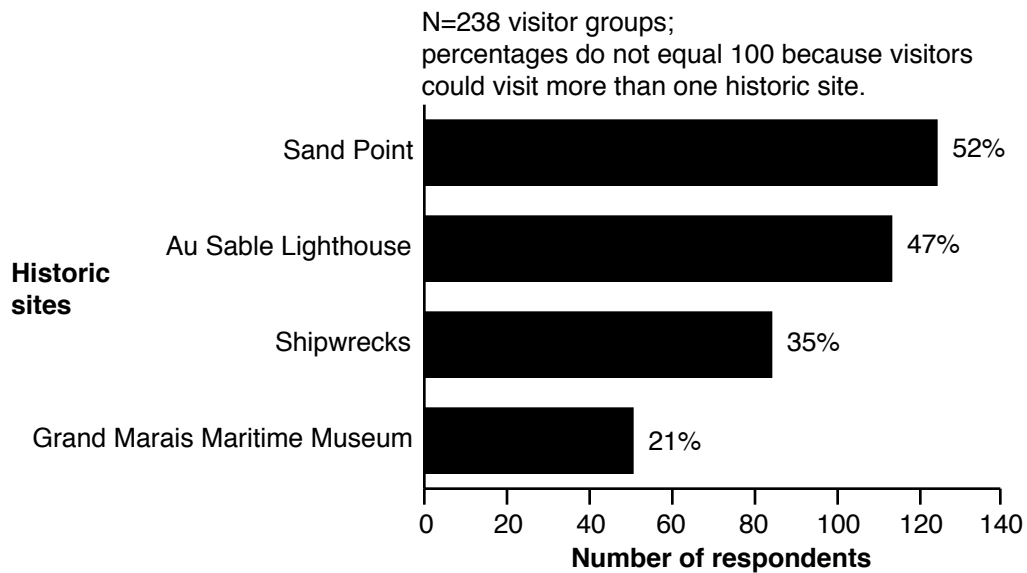


Figure 24: Visitor activities



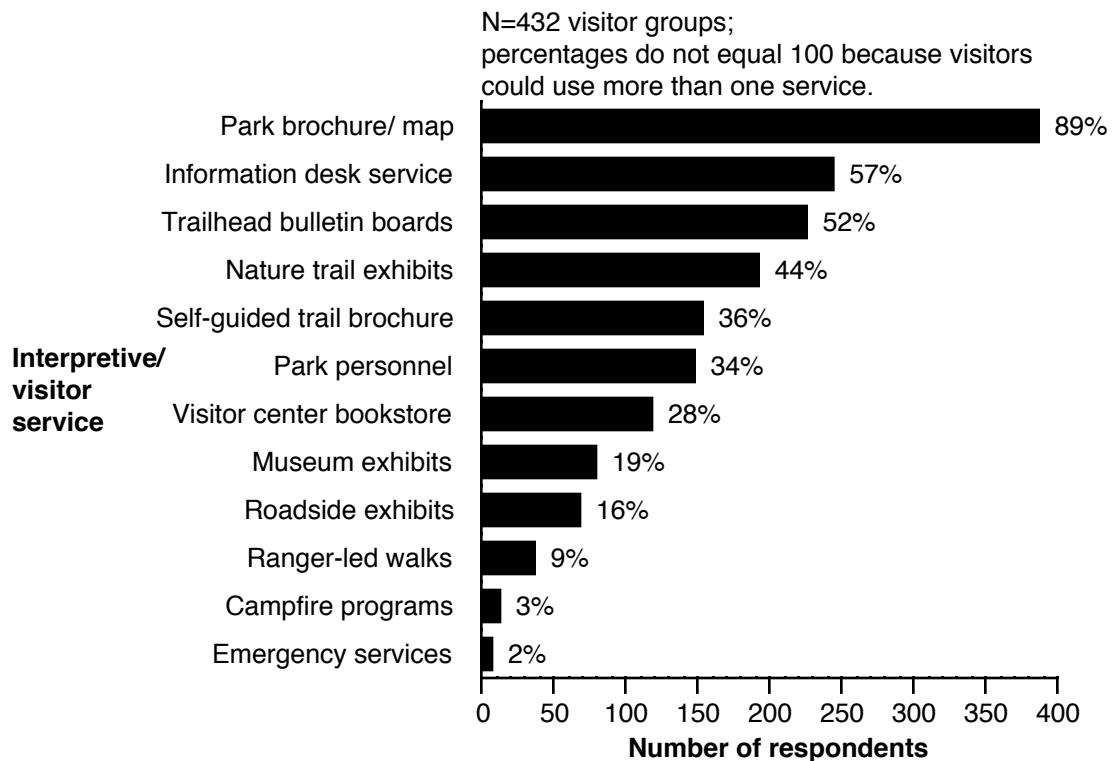
**Figure 25: Camping in vehicle access campgrounds**



**Figure 26: Visiting historic sites**

**Interpretive or  
visitor services:  
use, importance  
and quality**

Visitor groups were asked to note the interpretive or visitor services they used during their visit to Pictured Rocks NL. As is shown by Figure 28, the services and facilities that were most commonly used by visitor groups were the park brochure/ map (74%), information desk service (57%), trailhead bulletin boards (52%) and nature trail exhibits (44%). The least used service was emergency services (2%).



**Figure 28: Services and facilities used**



Visitor groups rated the importance and quality of each of the services they used. The following five point scales were used in the questionnaire:

<b>IMPORTANCE</b> 5=extremely important 4=very important 3=moderately important 2=somewhat important 1=not important	<b>QUALITY</b> 5=very good 4=good 3=average 2=poor 1=very poor
---	---

The average importance and quality ratings for each service were determined based on ratings provided by visitors who used each service. Figures 29 and 30 show the average importance and quality ratings for each of the interpretive or visitor services. All services were rated as above "average" both in importance and quality by those who used them. It should be noted that campfire programs and emergency services were not rated by enough people to provide reliable data.

Figures 31-42 show the importance ratings that were provided by visitor groups who used each of the individual services. Those services receiving the highest proportion of "extremely important" or "very important" ratings included park brochure/ map (86%), information desk service (81%) and ranger-led walks (73%). The highest proportions of "not important" ratings were for the self-guided trail brochure (7%) and the visitor center bookstore (5%).

Figures 43-54 show the quality ratings that were provided by visitor groups who used each of the individual services. Those services receiving the highest proportion of "very good" or "good" ratings included the park personnel (91%), information desk service (89%) and ranger-led walks (89%). The highest proportion of "very poor" ratings was for the self-guided trail brochure (6%).

Figure 55 combines the "very good" and "good" quality ratings and compares those ratings for all of the services.

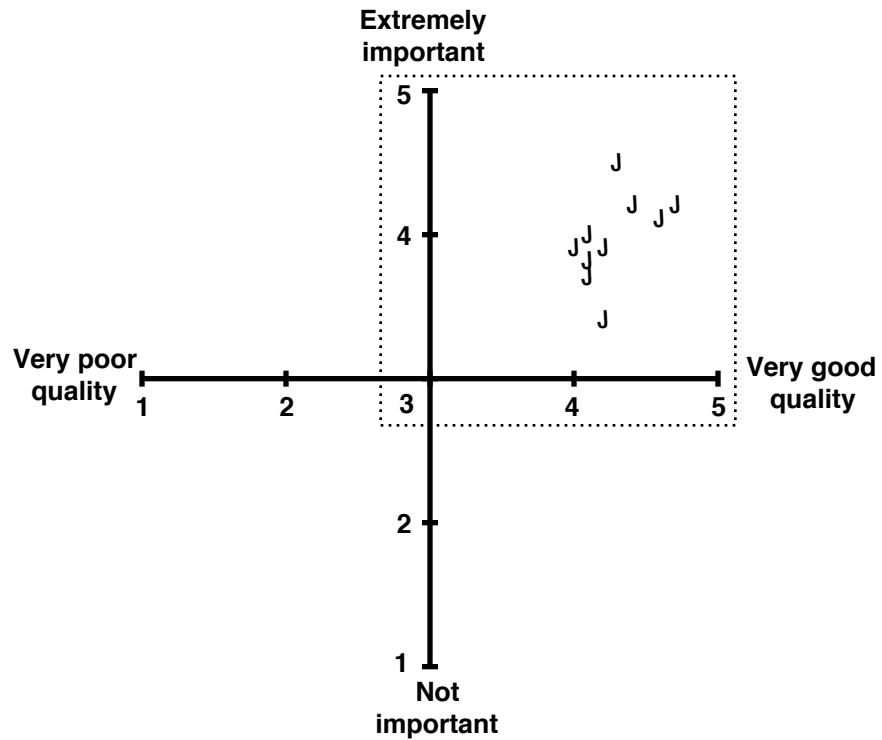


Figure 29: Average ratings of service importance and quality

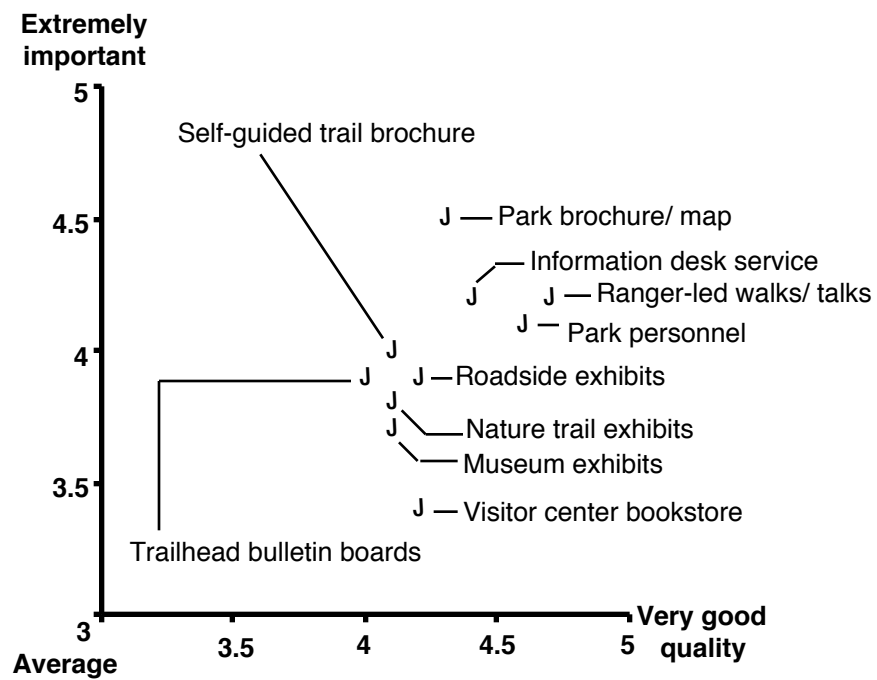
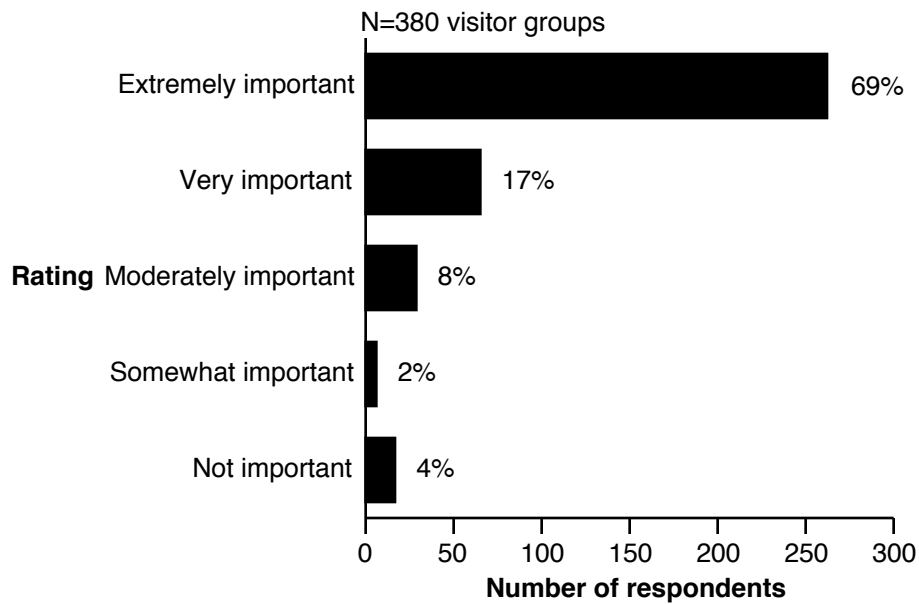
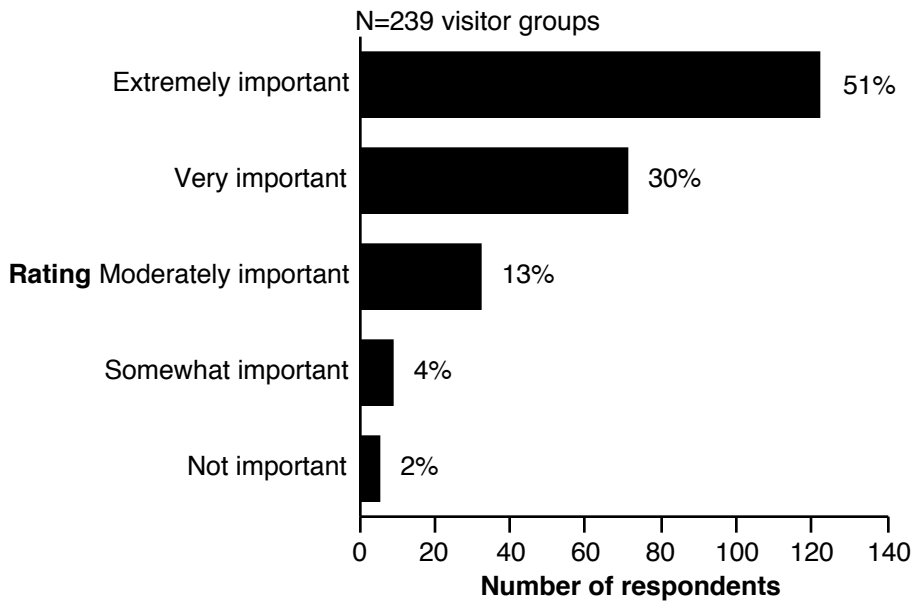


Figure 30: Detail



**Figure 31: Importance of park brochure/map  
(National Park Service)**



**Figure 32: Importance of information desk service**

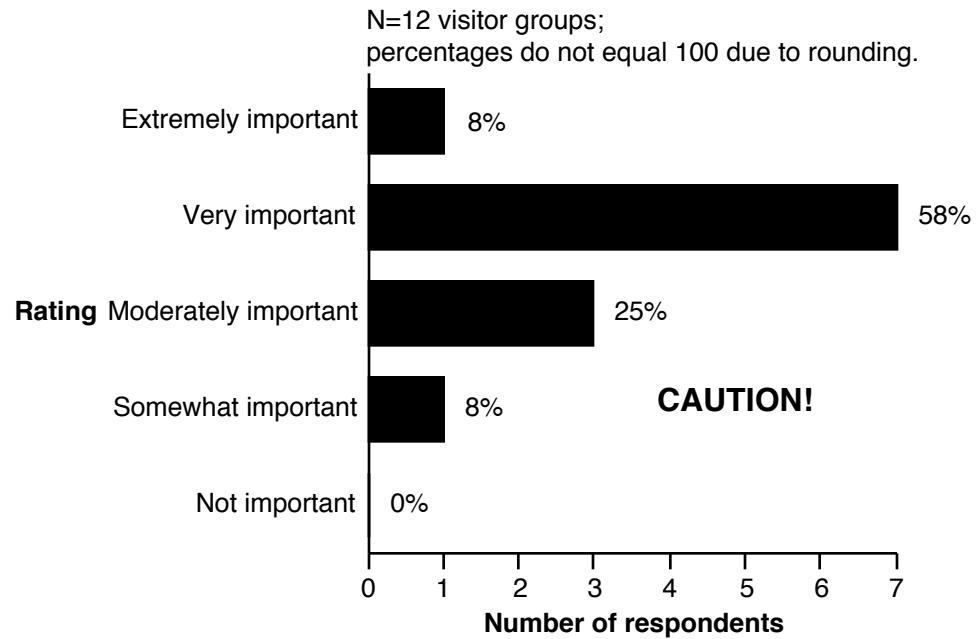


Figure 33: Importance of campfire programs

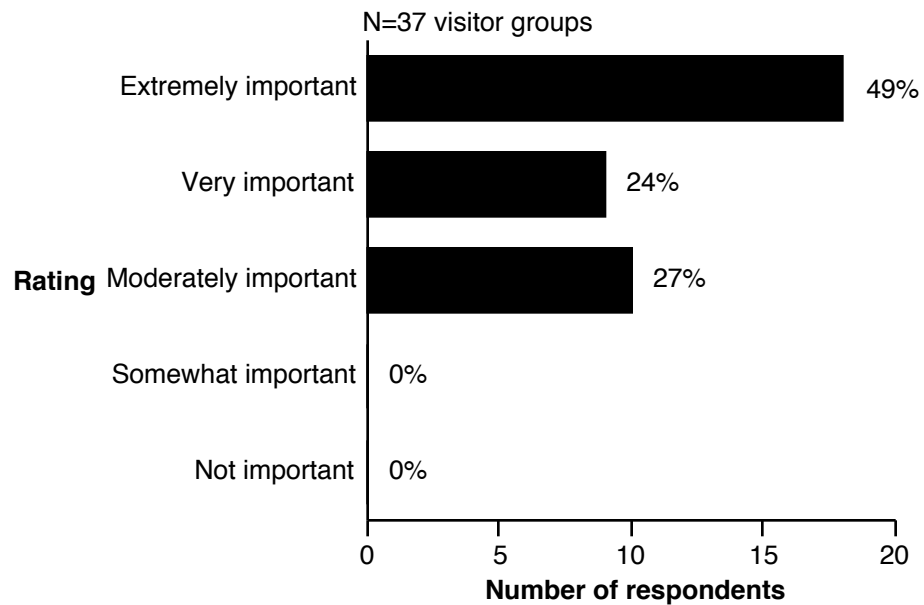
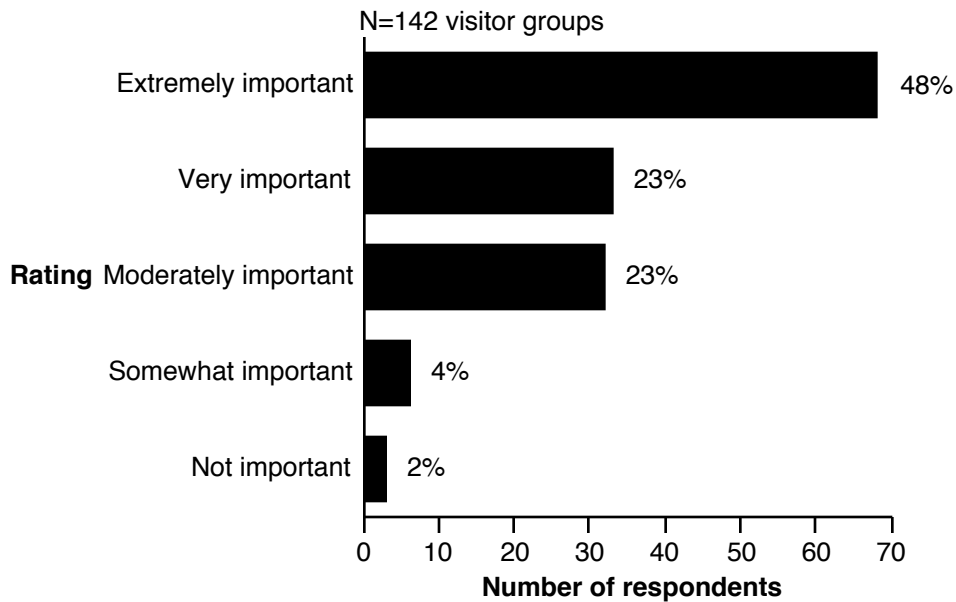
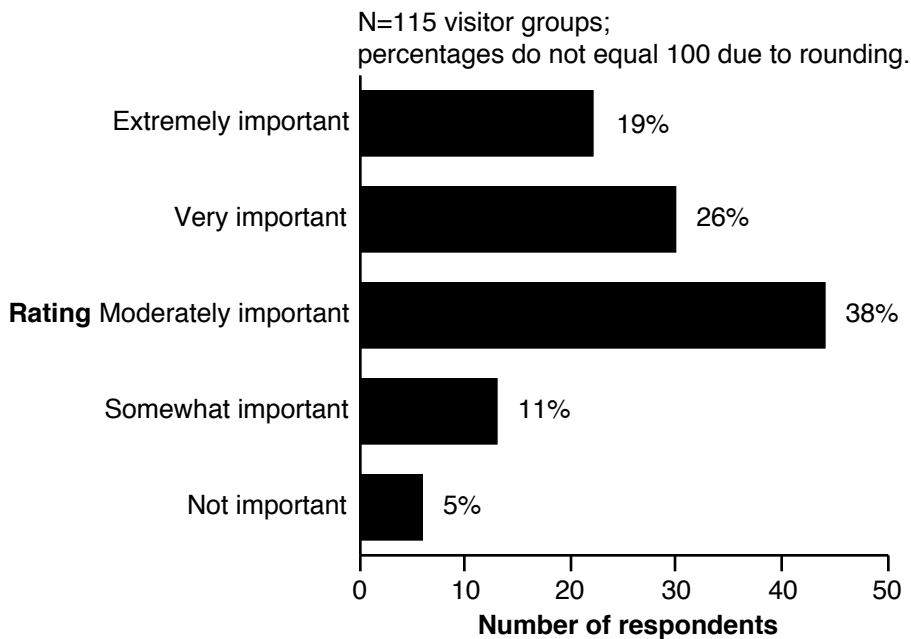


Figure 34: Importance of ranger-led walks/ talks  
(other than campfire programs)



**Figure 35: Importance of park personnel**



**Figure 36: Importance of visitor center bookstores**

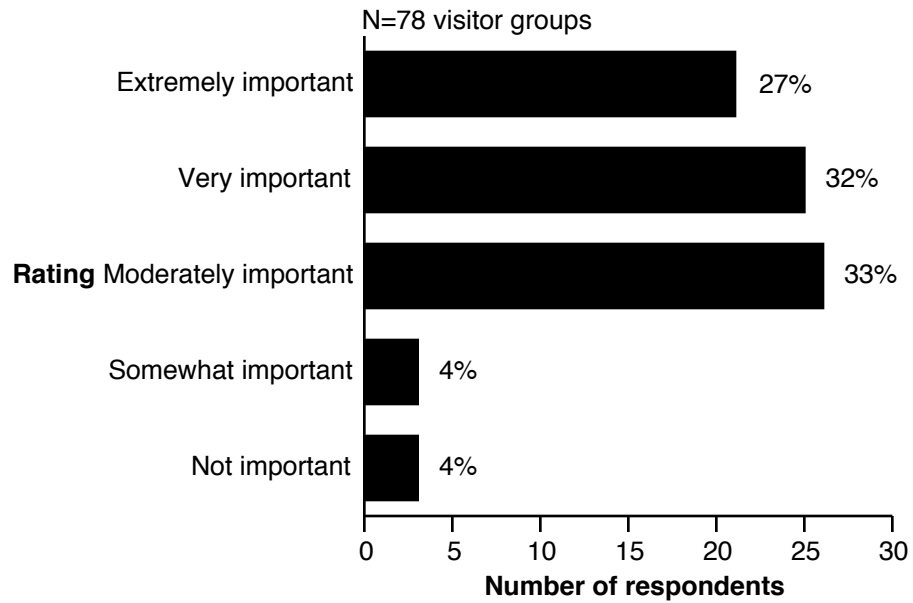


Figure 37: Importance of museum exhibits

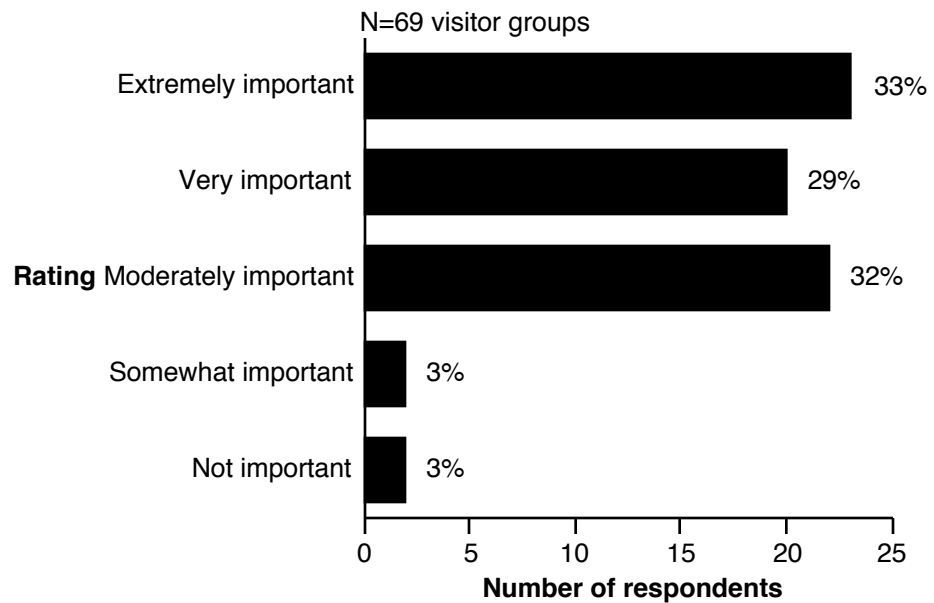
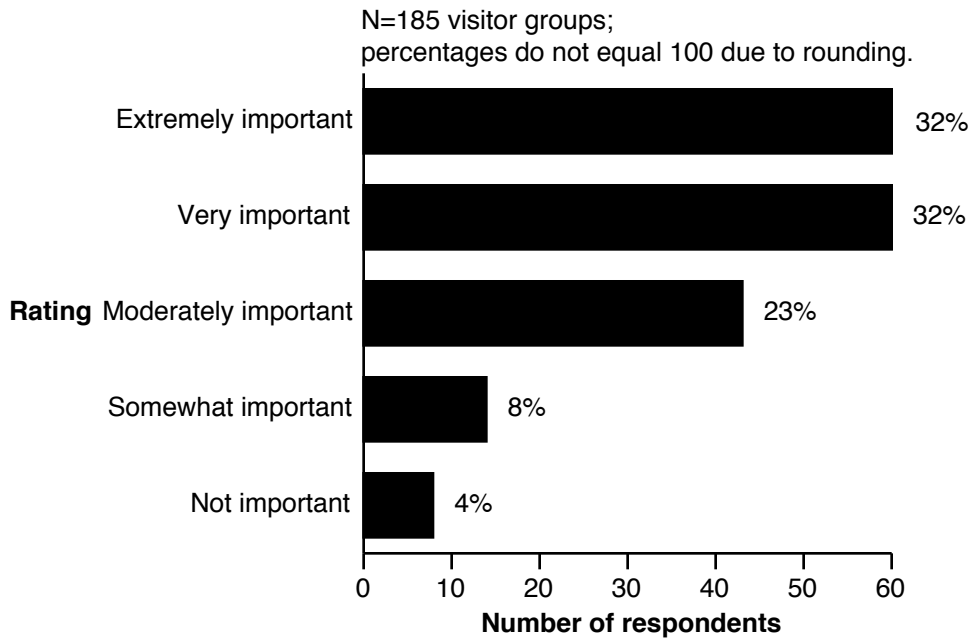
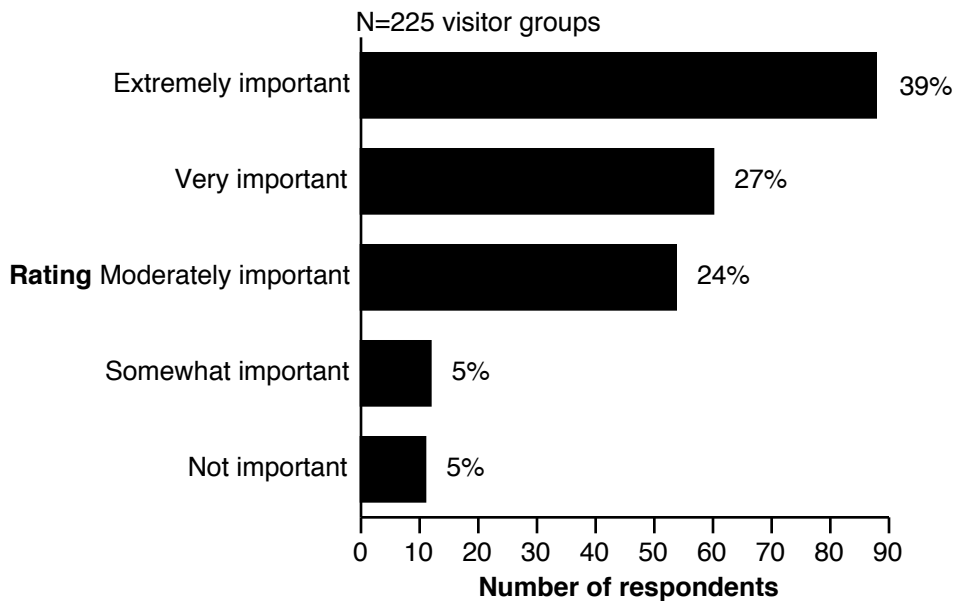


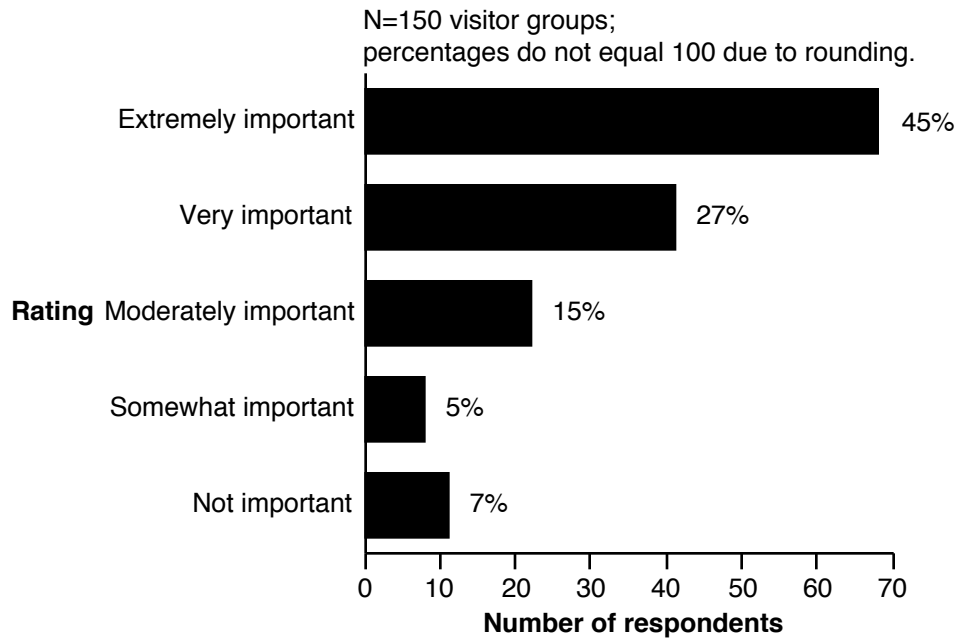
Figure 38: Importance of roadside exhibits



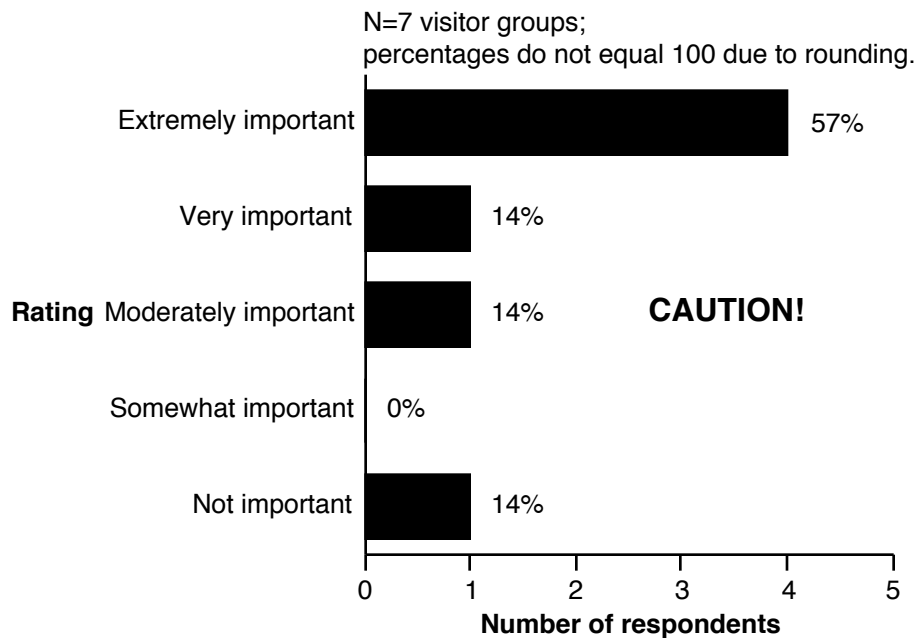
**Figure 39: Importance of nature trail exhibits**



**Figure 40: Importance of trailhead bulletin boards**

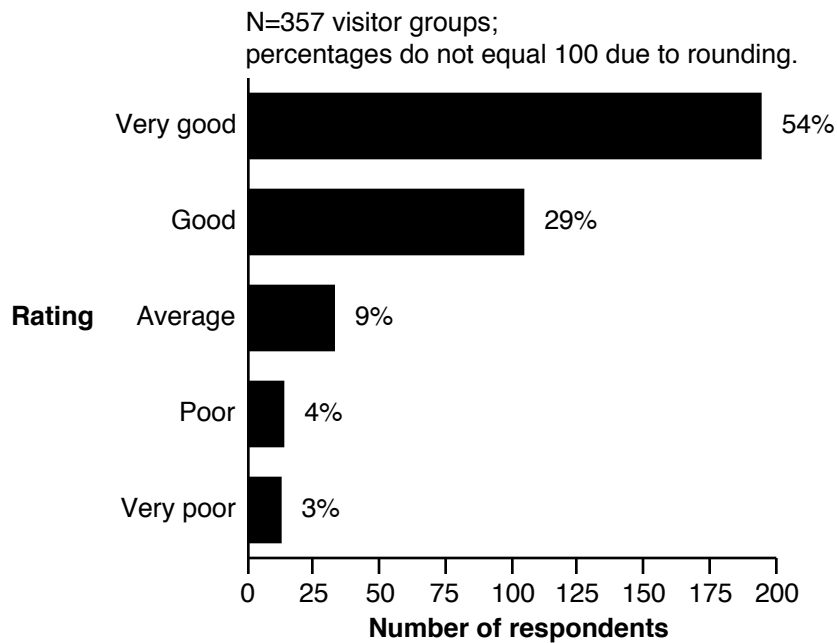


**Figure 41: Importance of self-guided trail brochure**

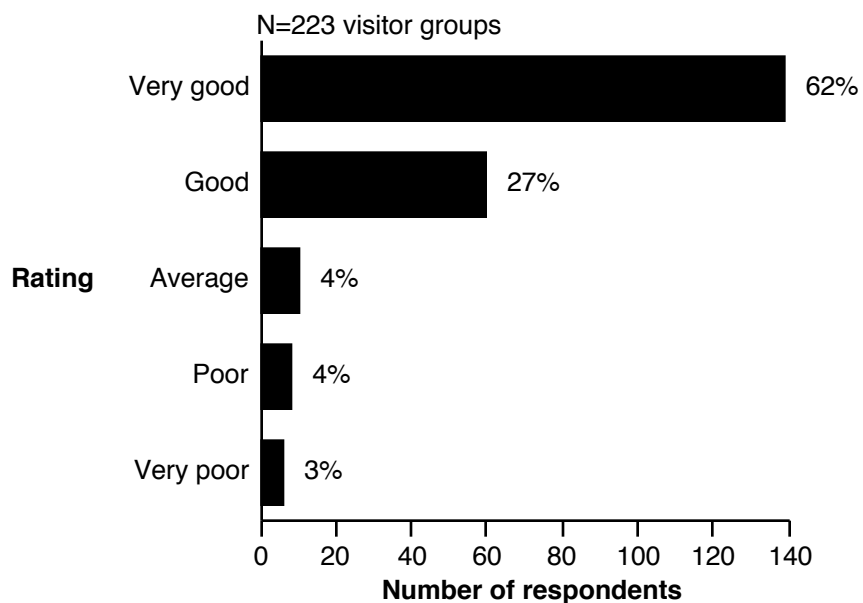


**Figure 42: Importance of emergency services**





**Figure 43: Quality of park brochure/ map  
(National Park Service)**



**Figure 44: Quality of information desk service**

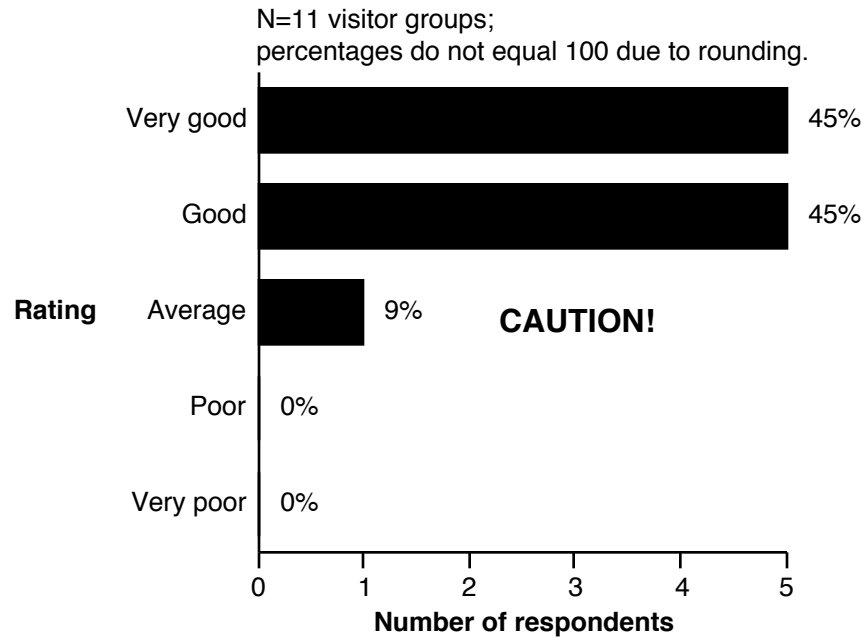


Figure 45: Quality of campfire programs

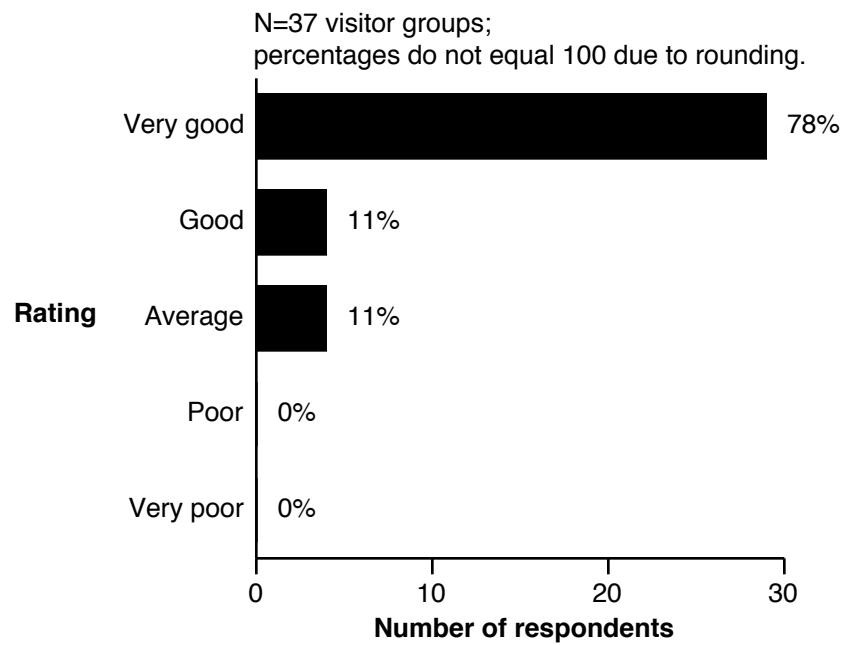
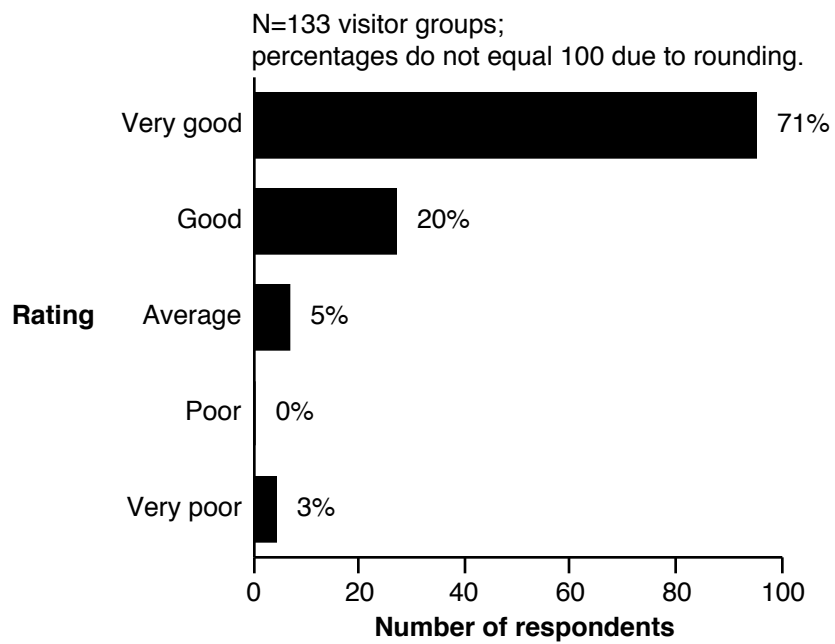
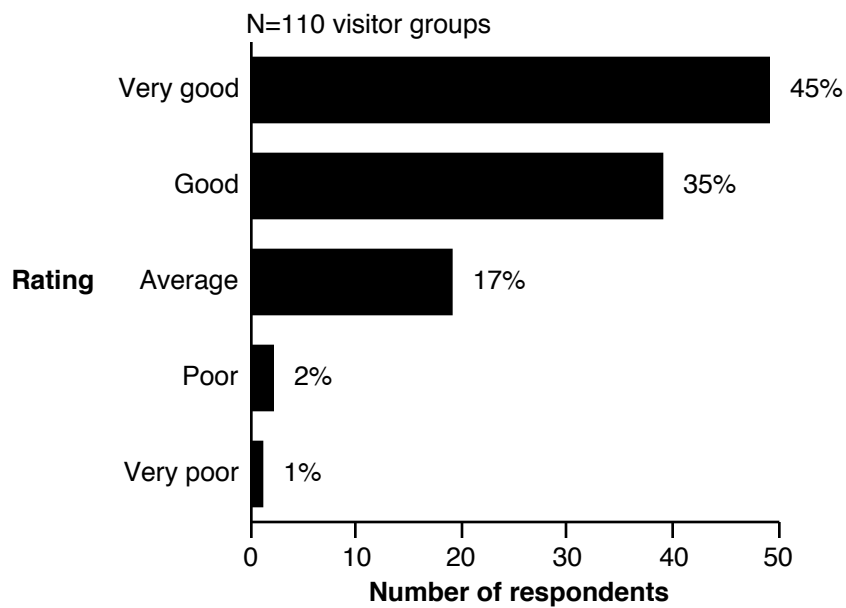


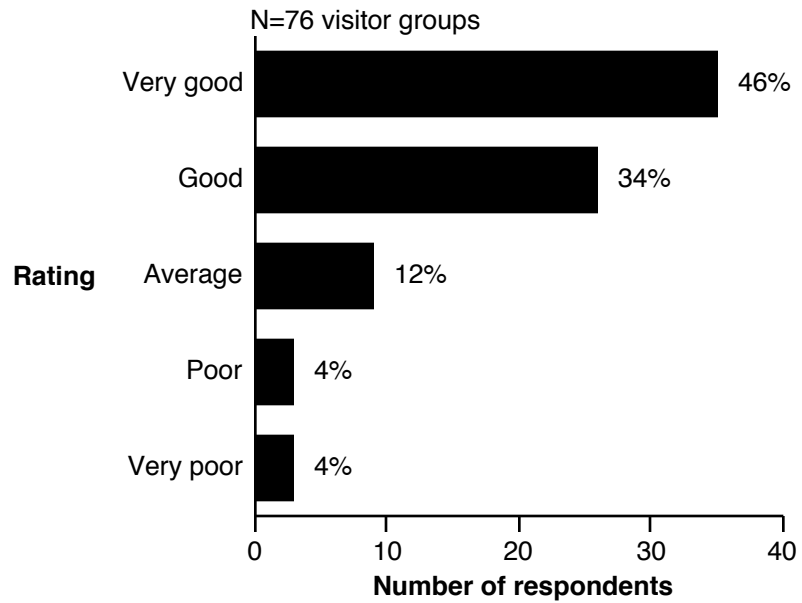
Figure 46: Quality of ranger-led walks/ talks  
(other than campfire programs)



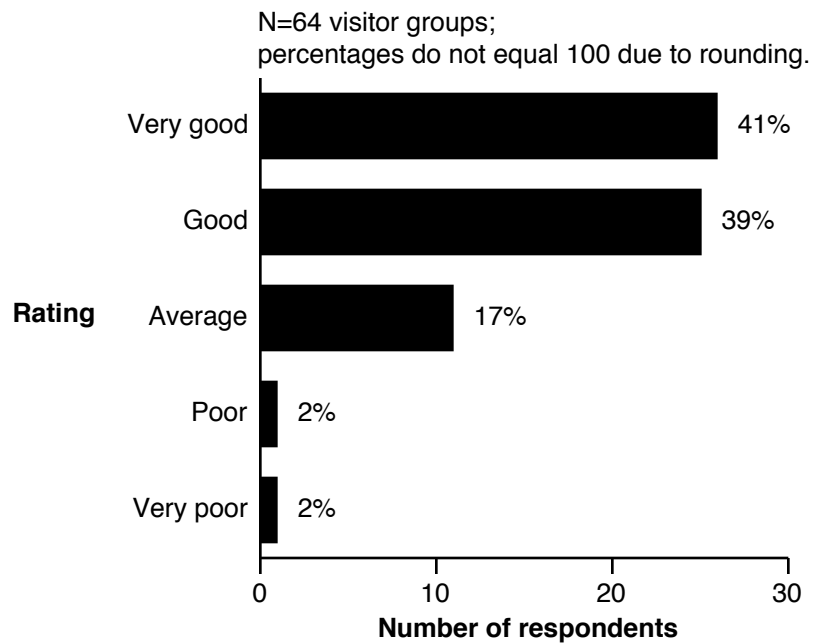
**Figure 47: Quality of park personnel**



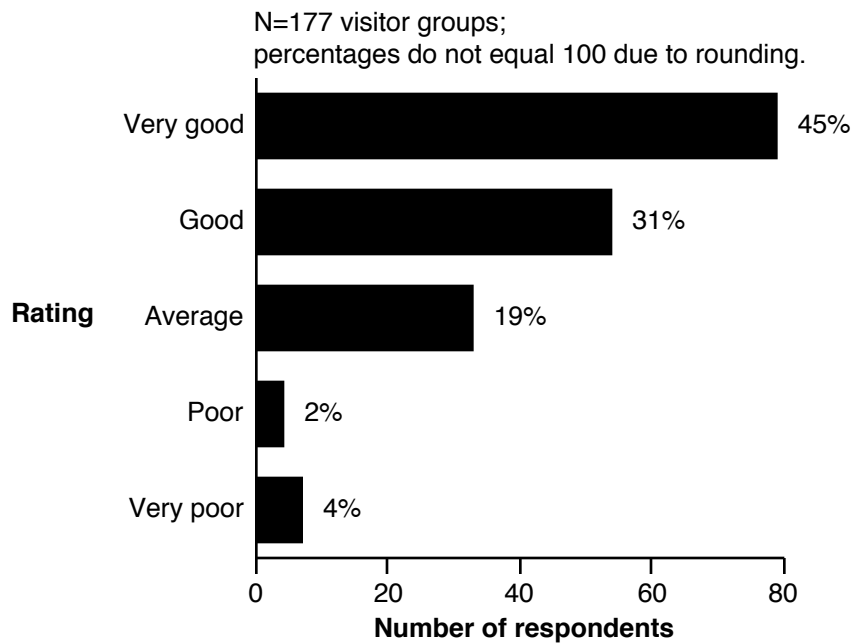
**Figure 48: Quality of visitor center bookstores**



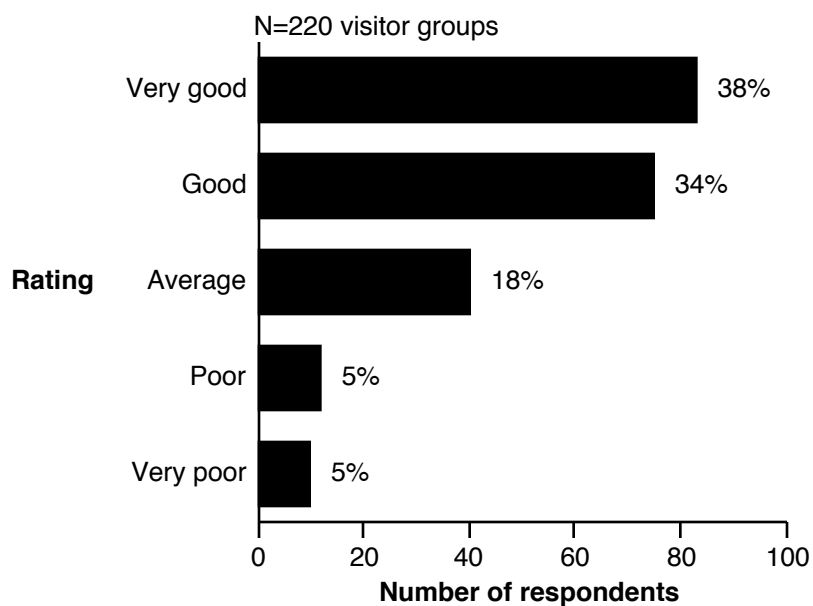
**Figure 49: Quality of museum exhibits**



**Figure 50: Quality of roadside exhibits**



**Figure 51: Quality of nature trail exhibits**



**Figure 52: Quality of trailhead bulletin boards**

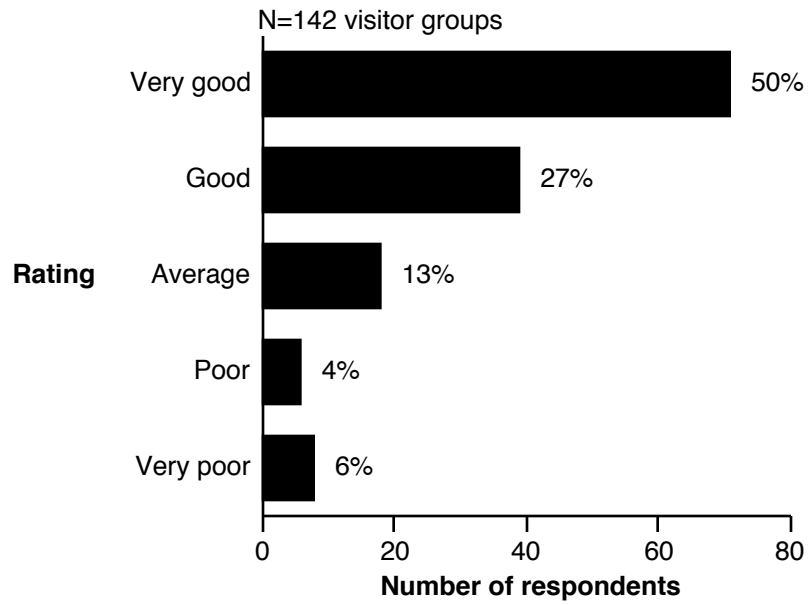


Figure 53: Quality of self-guided trail brochure

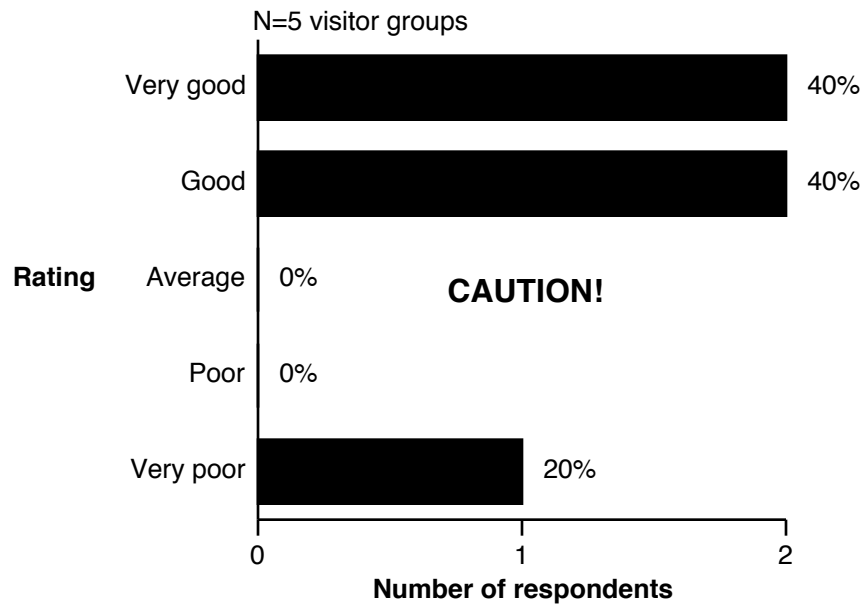
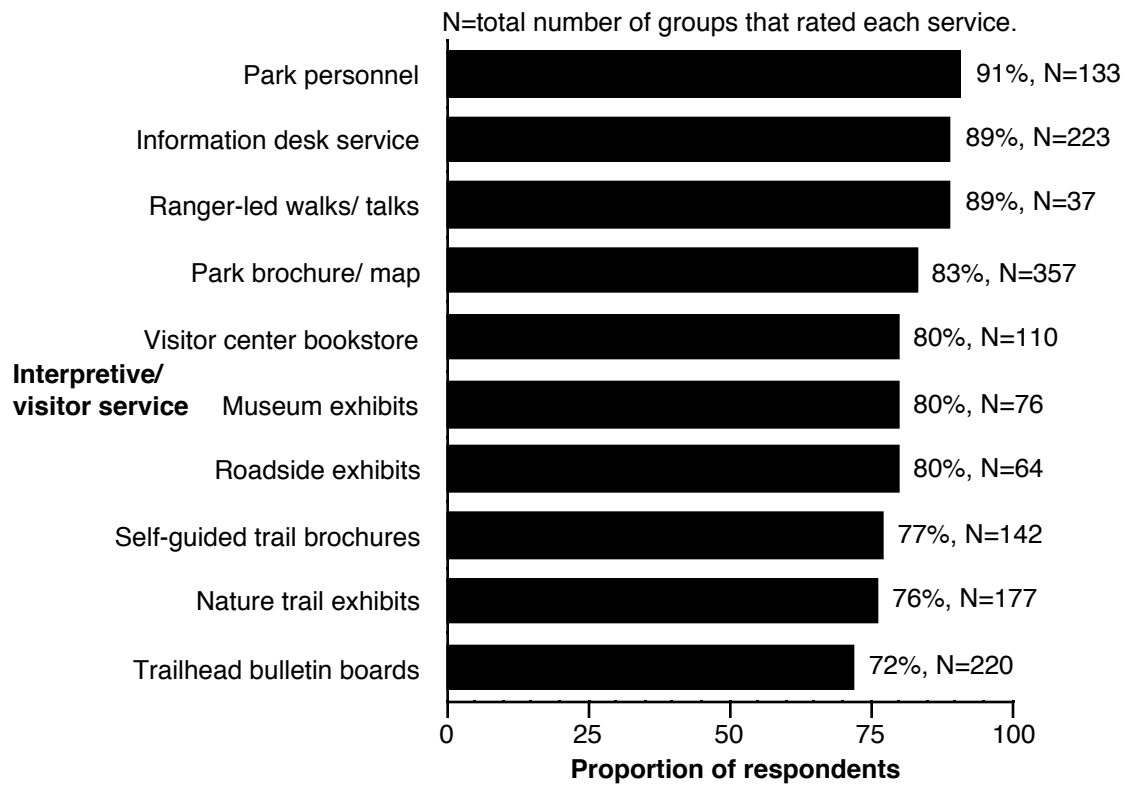


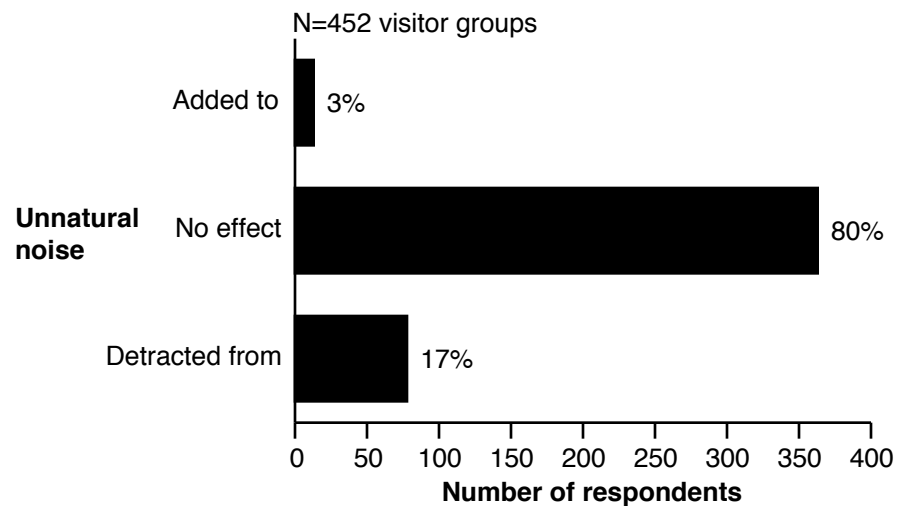
Figure 54: Quality of emergency services



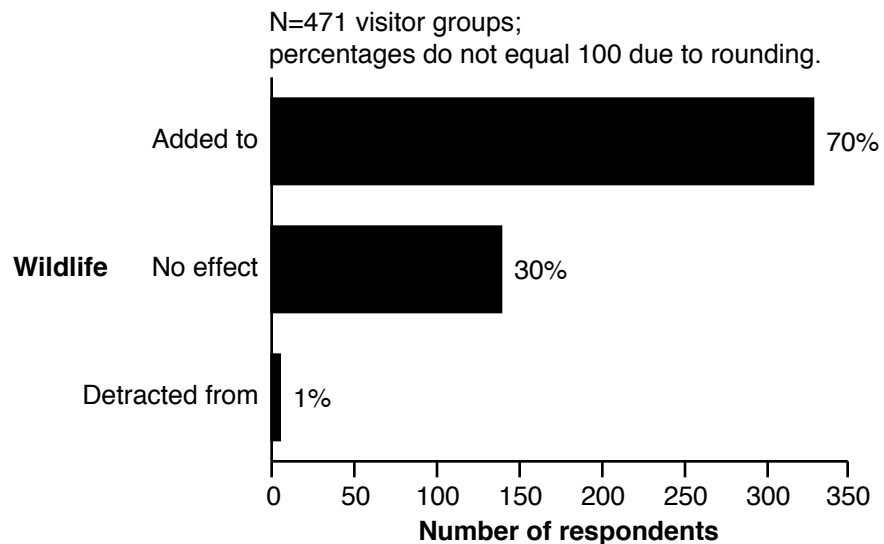
**Figure 55: Combined proportions of "very good" or "good" quality ratings for services**

**Park elements—  
effects on visitor  
experience**

Visitor groups were asked: "On this visit to Pictured Rocks National Lakeshore, please indicate how the following elements may have affected your park experience." Except for wildlife, the majority of visitor groups indicated "no effect" from the park elements (see Figures 56-61). Seventy percent of visitor groups indicated the effects from wildlife "added to" their park experience (see Figure 57). The element which "detracted from" their visit the most was personal watercraft (23%).

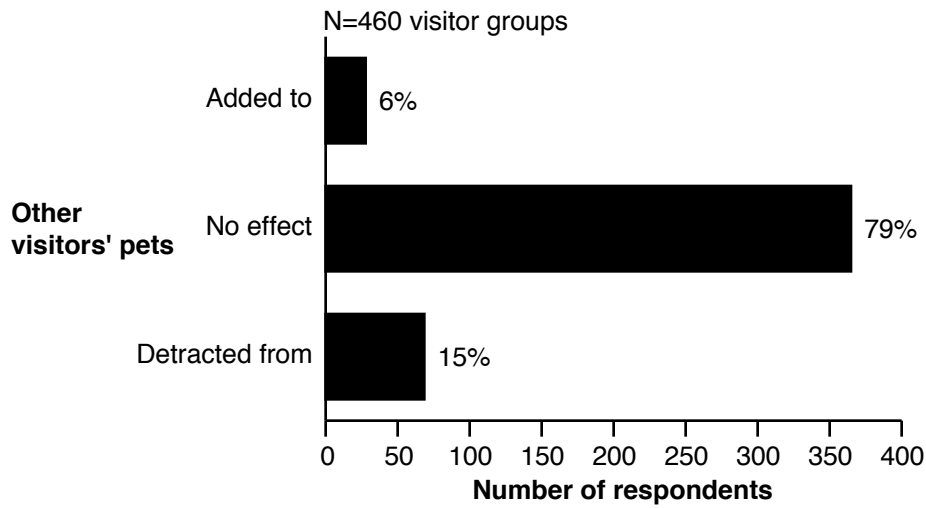


**Figure 56: Effects of unnatural noise on visitor experience**

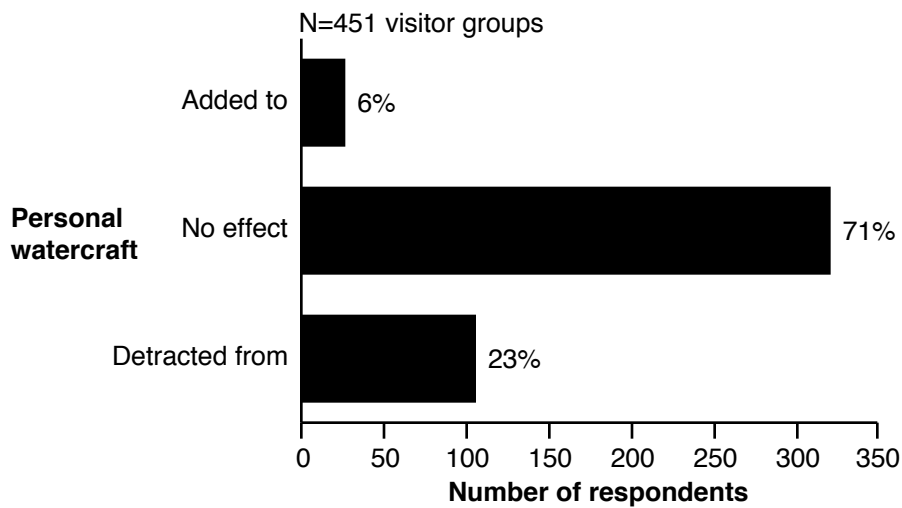


**Figure 57: Effects of wildlife on visitor experience**

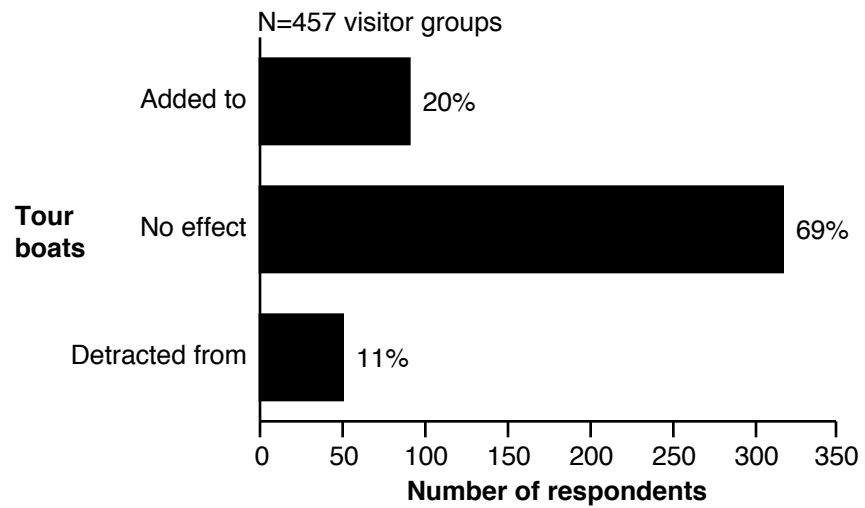




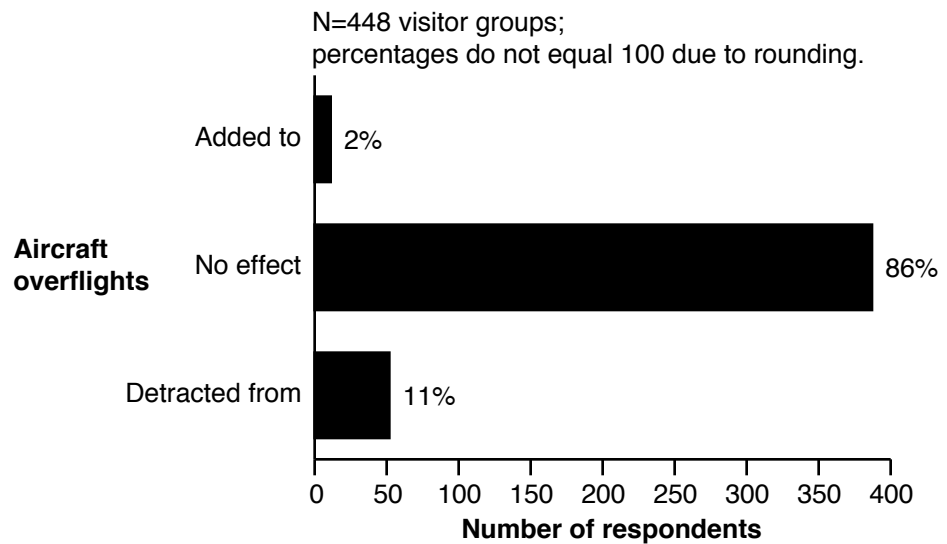
**Figure 58: Effects of other visitors' pets on visitor experience**



**Figure 59: Effects of personal watercraft on visitor experience**



**Figure 60: Effects of tour boats on visitor experience**



**Figure 61: Effects of aircraft overflights on visitor experience**

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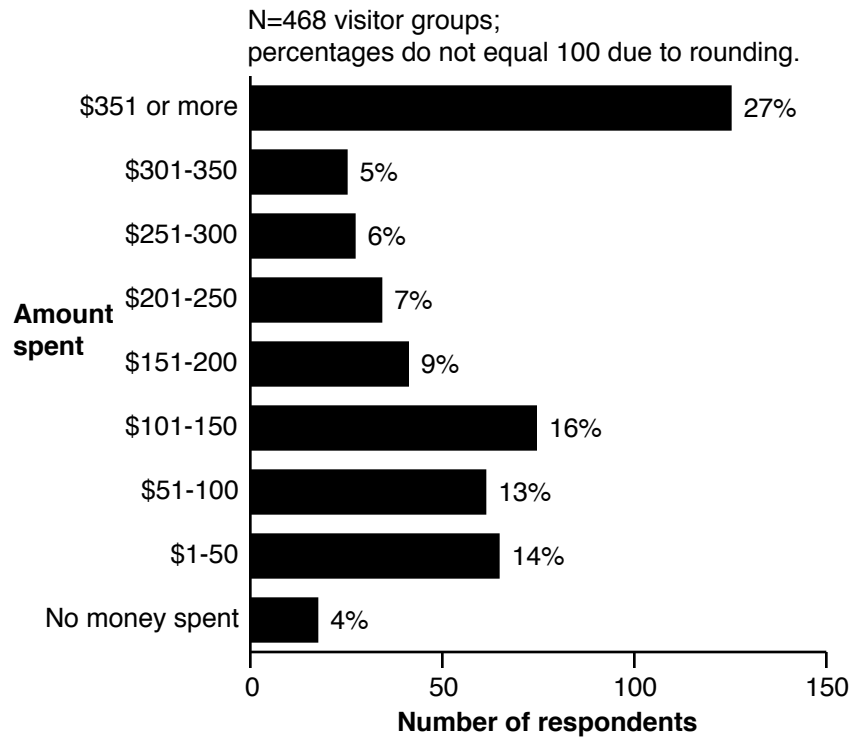
Visitor groups were asked to list the amount of money they spent both inside Pictured Rocks NL and within 60 miles of the park on this visit. Groups were asked to indicate the amounts they spent for lodging; camping fees; guide fees and charges; restaurants and bars; groceries and take-out food, gas and oil; other transportation expenses; admissions, recreation, entertainment fees; and all other purchases.

### **Total expenditures**

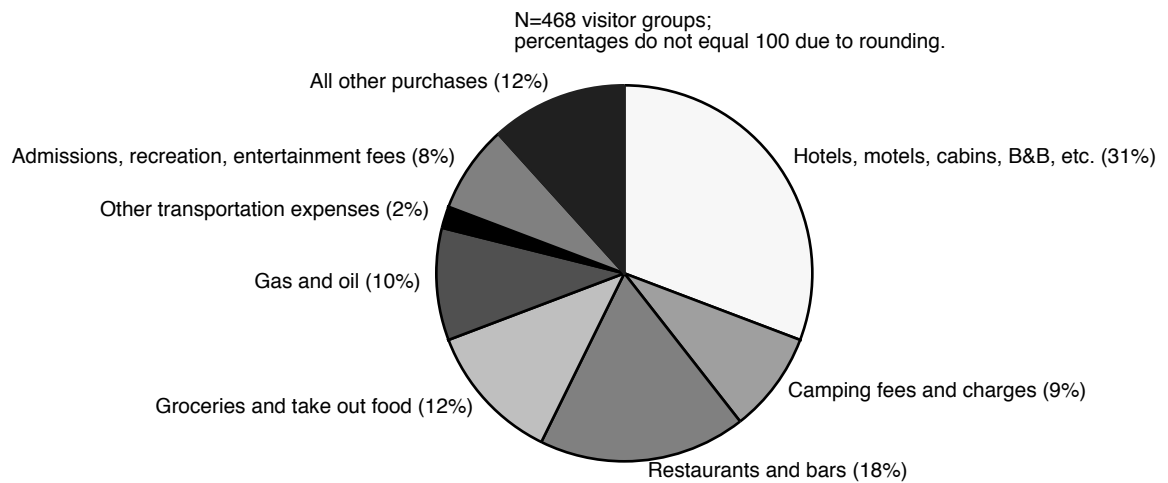
***Total expenditures in and out of park:*** Twenty-seven percent of visitor groups spent \$351 or more and 16% percent of visitor groups spent between \$101 and \$150. Four percent of visitor groups spent no money (see Figure 62). Of the total expenditures by groups, 31% was for lodging, 18% was for restaurants and bars, and 12% was for groceries and take out food (see Figure 63).

The average visitor group expenditure during this visit was \$294. The median visitor group expenditure (50% of groups spent more and 50% of groups spent less) was \$170. The average per capita expenditure was \$87. In addition, visitors were asked to indicate how many adults (18 years and older) and children (under 18 years) were covered by their expenditures. Figure 64 shows that 65% of the visitor groups had two adults. Figure 65 shows that 53% of the visitor groups had no children and 31% had one or two children under 18 years of age.

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**Figure 62: Total expenses in Pictured Rocks NL and surrounding area**



**Figure 63: Proportions of expenses in Pictured Rocks NL and surrounding area**

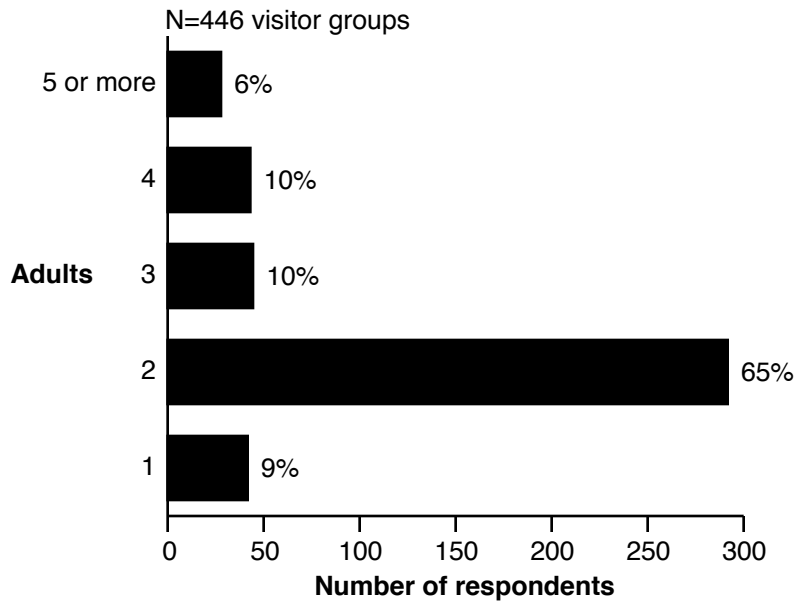


Figure 64: Number of adults covered by expenses

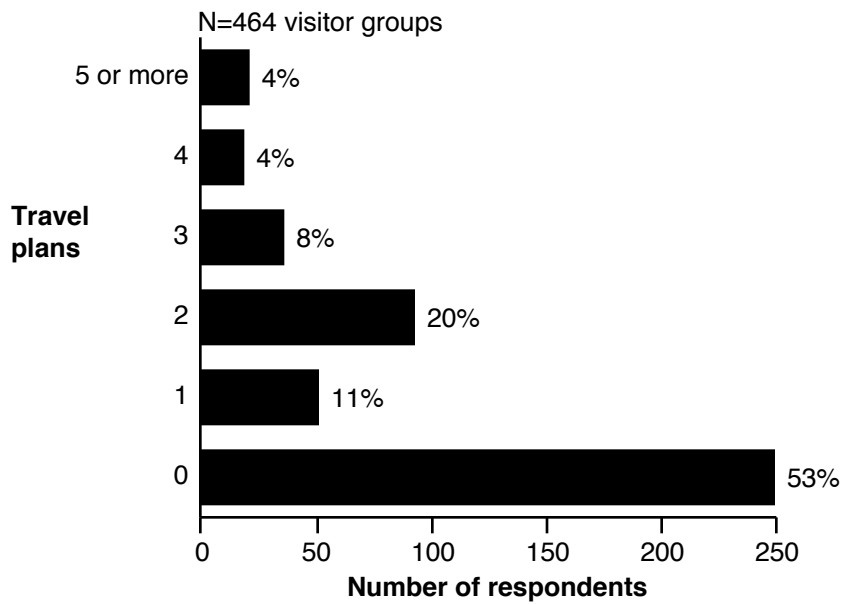


Figure 65: Number of children covered by expenses

## Expenditures inside park

**Total expenditures in the park:** Thirty-three percent of visitor groups spent no money in Pictured Rocks NL and another 51% spent between \$1 and \$50 in total expenditures in the park on this visit (see Figure 66). The average visitor group expenditure in the park during this visit was \$39. The median visitor group expenditure in the park (50% of groups spent more; 50% spent less) was \$15. The average per capita expenditure was \$18.

Camping fees and charges accounted for 55% of total expenditures in the park, followed by all other purchases (45%), as shown in Figure 67.

**Camping fees and charges in the park:** Thirty-two percent of visitor groups spent between \$1 and \$25 on admission, recreation, and entertainment fees in Pictured Rocks NL, while 12% spent between \$26 and \$50 (see Figure 68). Forty-five percent of visitor groups spent no money on fees.

**Other purchases in the park:** Thirty percent of visitor groups spent between \$1 and \$25 on other purchases in Pictured Rocks NL; 52% spent no money on other purchases (see Figure 69).

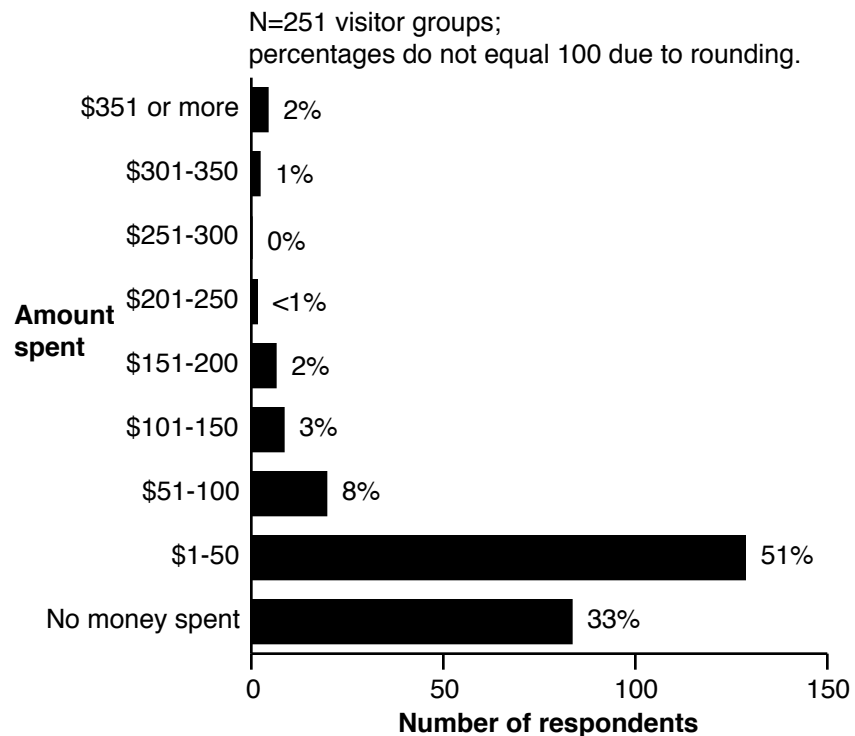
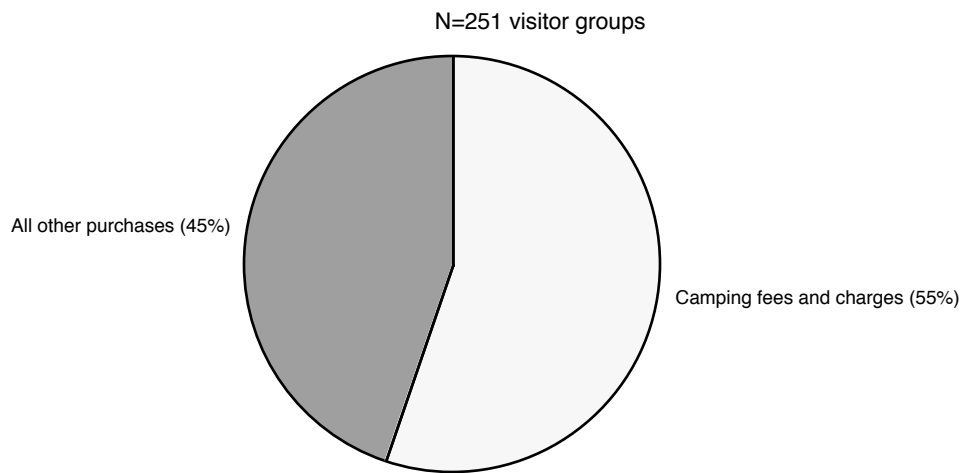
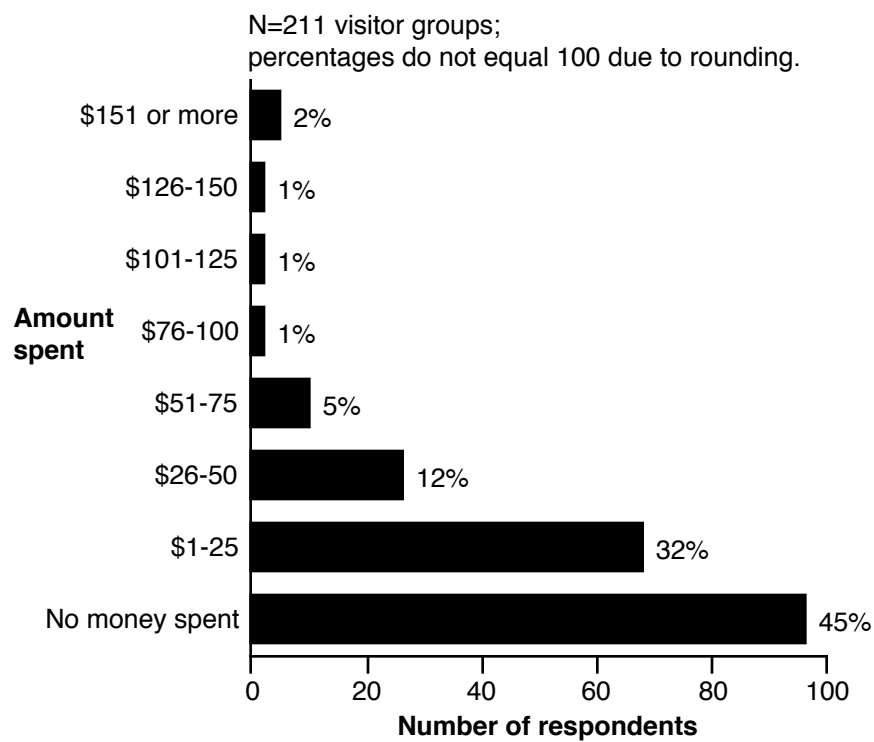


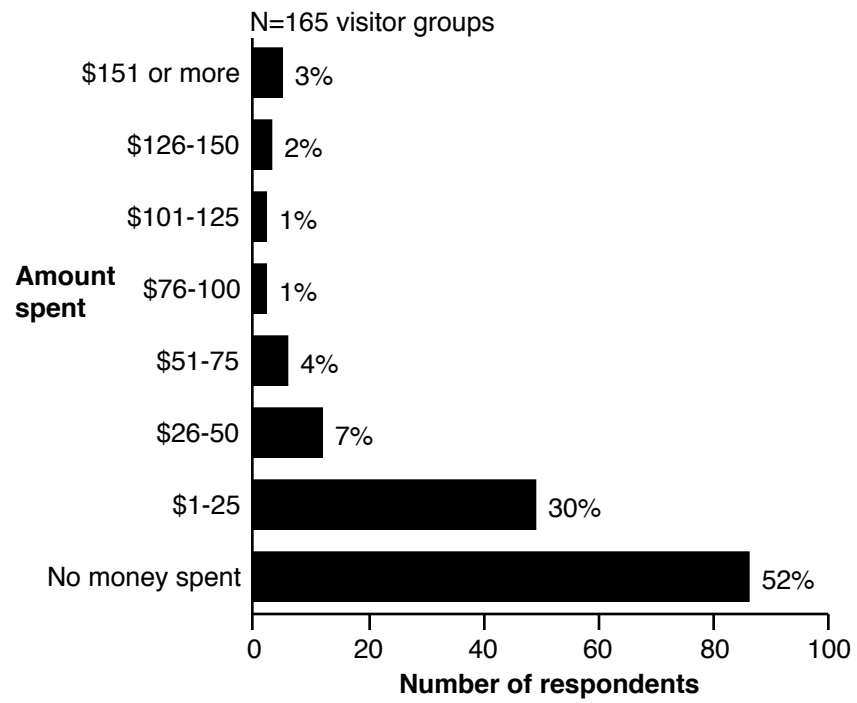
Figure 66: Total expenditures in park



**Figure 67: Proportion of expenditures in park**



**Figure 68: Camping fees and charges in park**



**Figure 69: Expenditures for all other purchases in park (souvenirs, film, books, sporting goods, clothing)**



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**Total expenditures:** Twenty-five percent of visitor groups spent \$351 or more in total expenditures out of the park during this trip (see Figure 70). Only 3% spent no money at all outside the park. The average visitor group expenditure out of the park during this visit was \$282. The median visitor group expenditure out of the park (50% of groups spent more; 50% spent less) was \$160. The average per capita expenditure was \$86.

### Expenditures outside park

Lodging accounted for 33% of total expenditures out of the park, followed by 19% for restaurants and bars, as shown in Figure 71.

**Hotels, motels, cabins, B&B, etc. out of the park:** Forty-two percent of visitor groups spent no money on lodging out of the park during this trip while 26% of spent \$151 or more (see Figure 72).

**Camping fees and charges out of the park:** Forty-seven percent of visitor groups spent no money on camping fees and charges out of the park (see Figure 73). Thirty-five percent spent between \$1 and \$50.

**Restaurants and bars out of the park:** Twenty-five percent of visitor groups spent between \$26 and \$50 on restaurants and bars out of the park, while 21% spent between \$1 and \$25 (see Figure 74).

**Groceries and take-out food out of the park:** Thirty-six percent of visitor groups spent between \$1 and \$25 on groceries and take-out food out of the park, while 26% spent between \$26 and \$50 (see Figure 75).

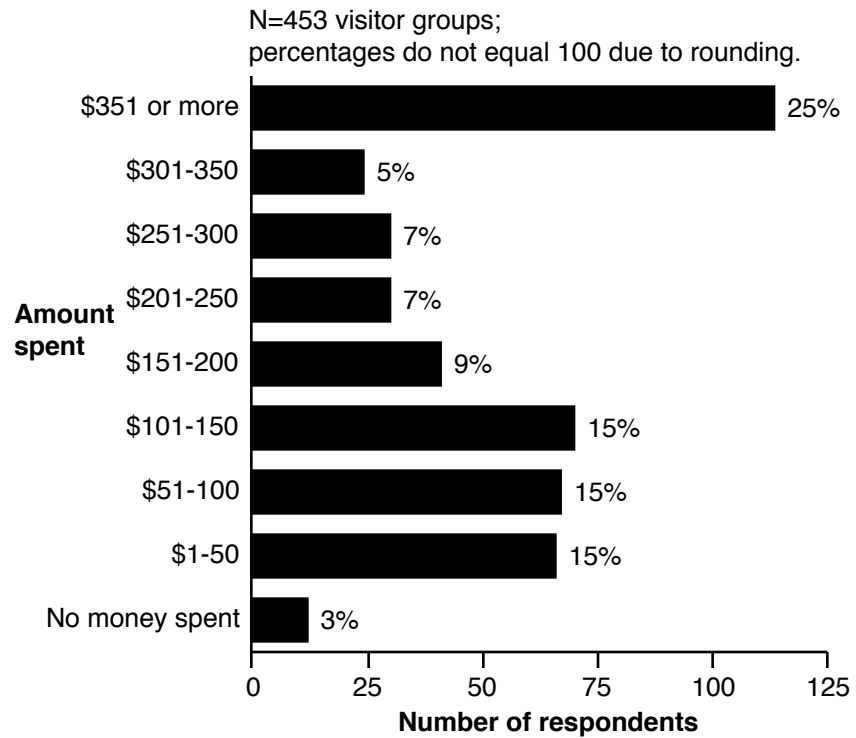
**Gas and oil out of the park:** Forty-two percent of visitor groups spent between \$1 and \$25 on gas and oil out of the park, while 33% spent between \$26 and \$50 (see Figure 76).

**Other transportation expenses out of the park:** Most visitor groups (82%) spent no money on other transportation expenses out of the park (see Figure 77).

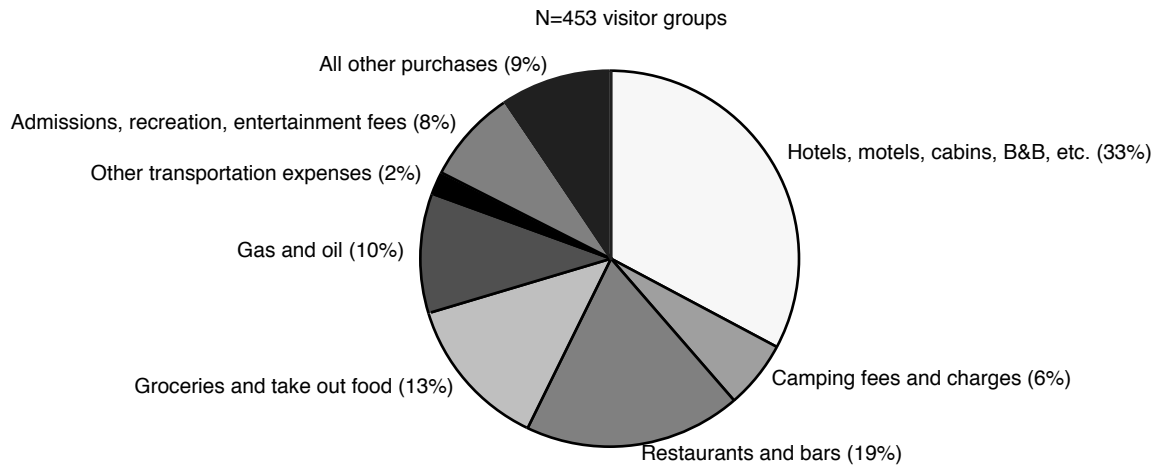
**Admissions, recreation, and entertainment fees out of park:** Thirty-nine percent of visitor groups spent no money on admissions, recreation, and entertainment fees out of the park (see Figure 78).

**Other purchases out of park:** Thirty percent of visitor groups spent no money on other purchases out of the park. Forty-nine percent of visitor groups spent between \$1 and \$50 on other purchases out of the park (see Figure 79).

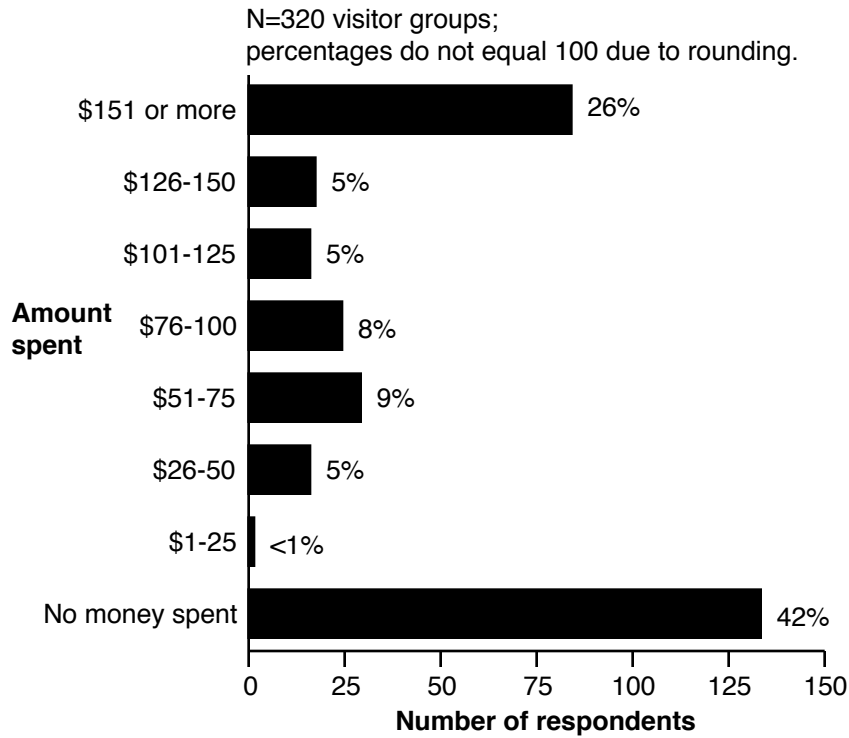
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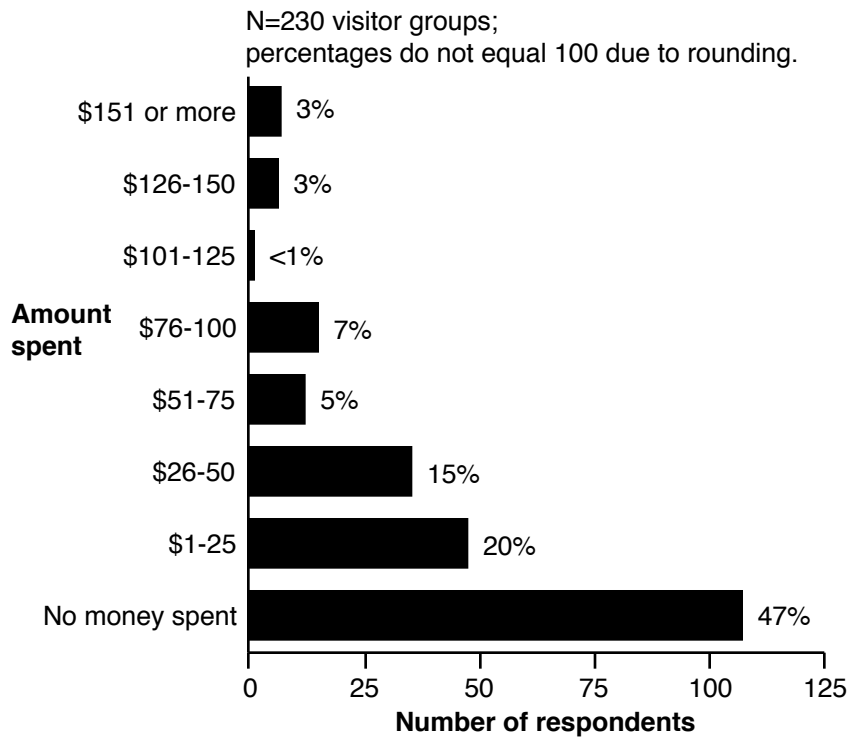
**Figure 70: Total expenditures out of park**



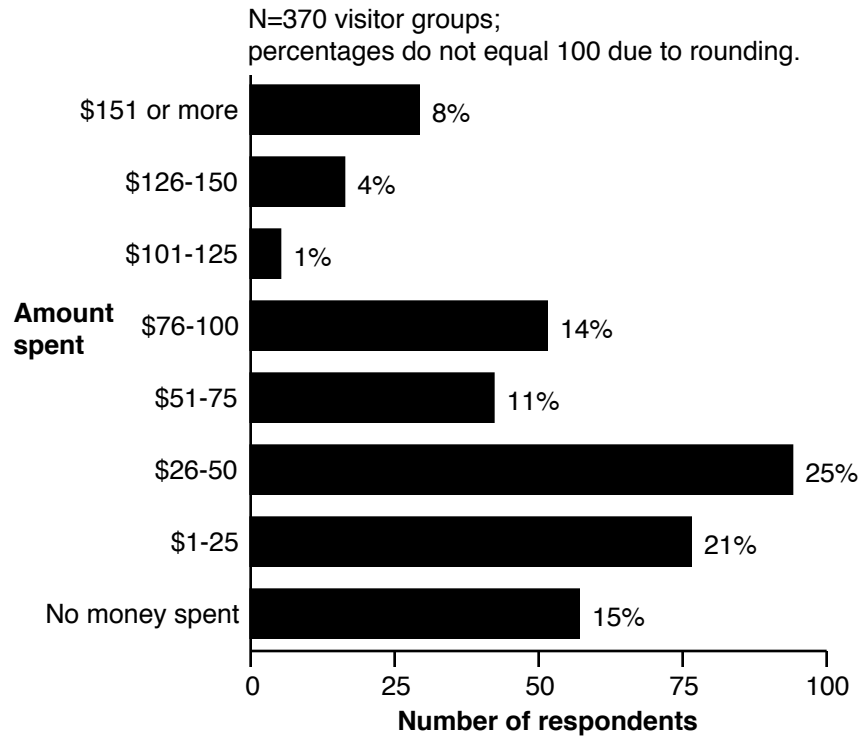
**Figure 71: Proportion of expenditures out of park**



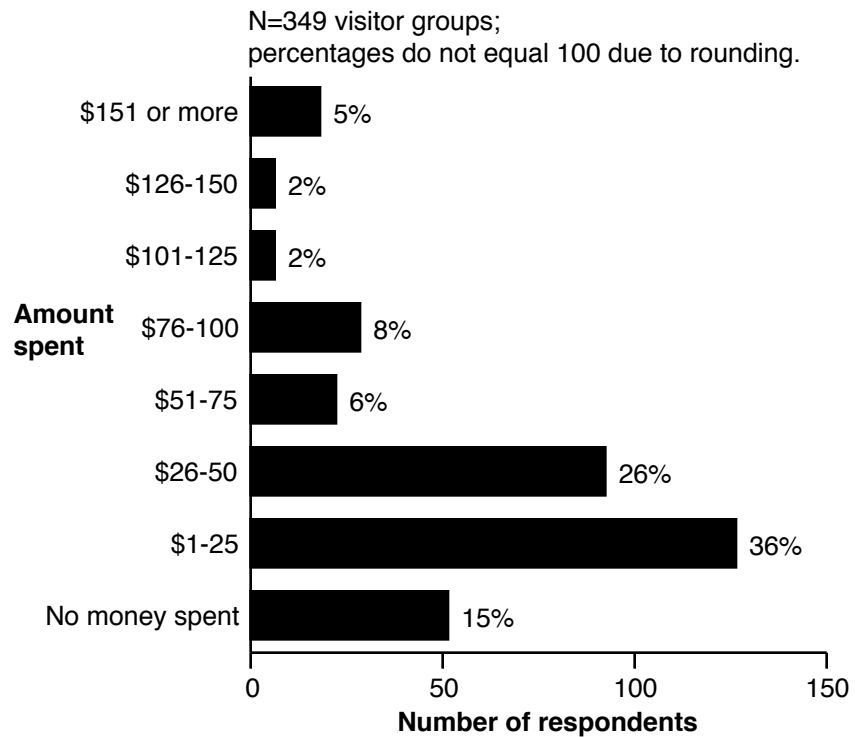
**Figure 72: Expenditures for hotels, motels, cabins and B&B out of park**



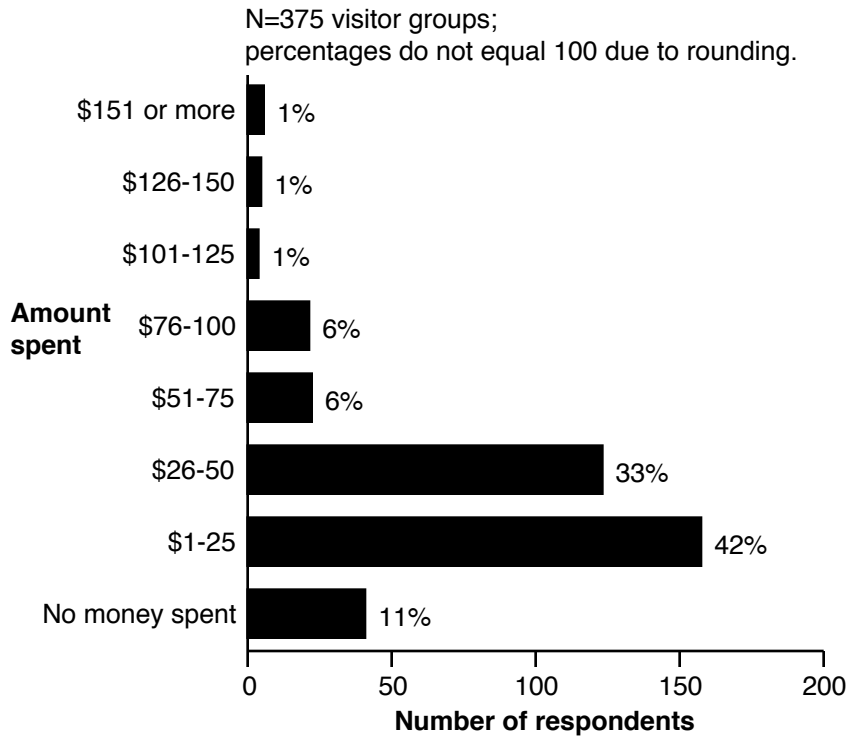
**Figure 73: Expenditures for camping fees and charges out of park**



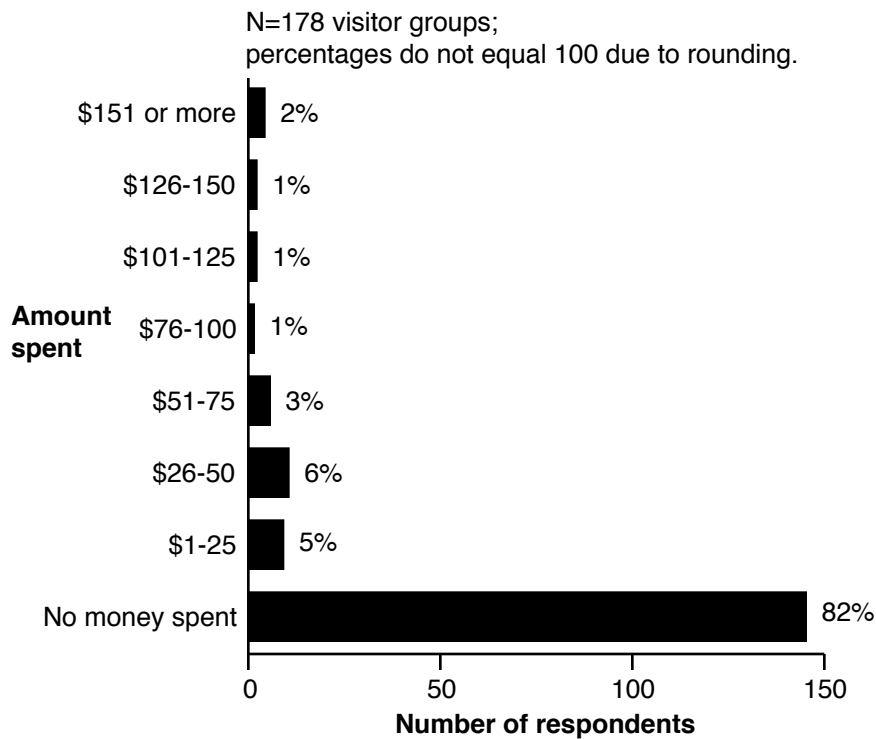
**Figure 74: Expenditures for restaurants and bars out of park**



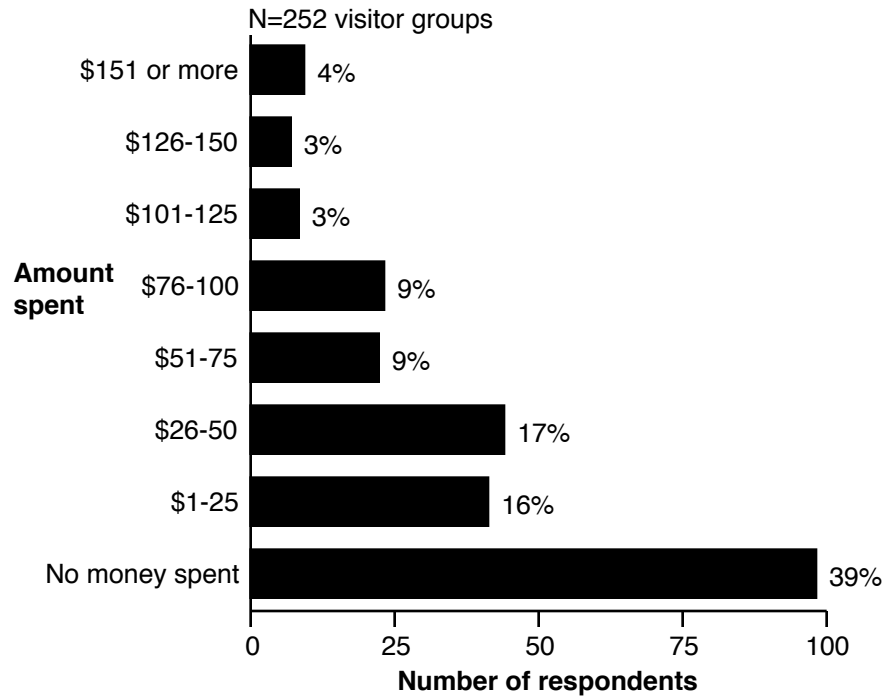
**Figure 75: Expenditures for groceries and take-out food out of park**



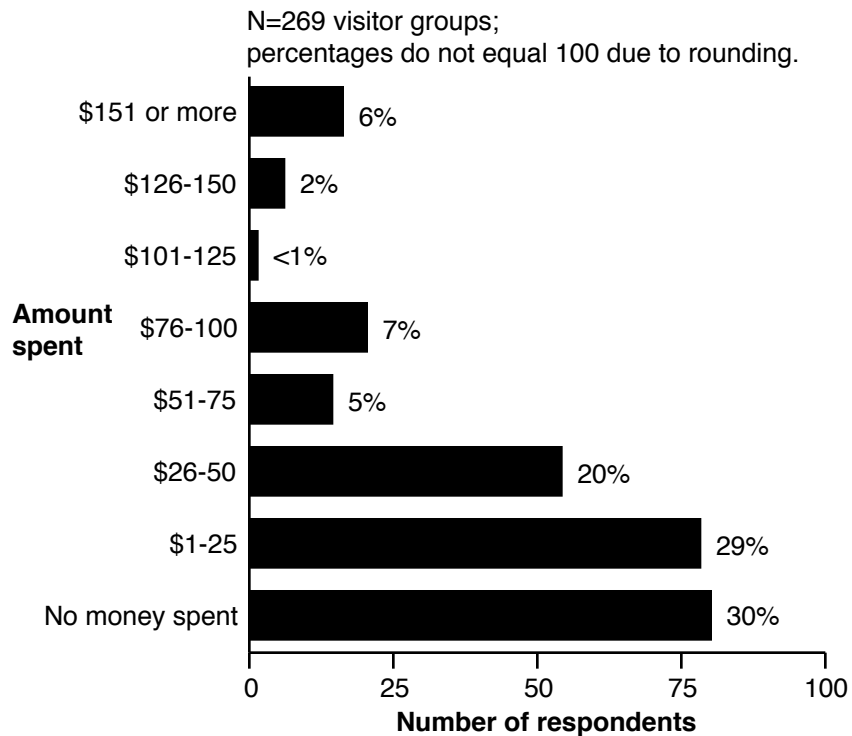
**Figure 76: Expenditures for gas and oil out of park**



**Figure 77: Expenditures for other transportation expenses out of park**



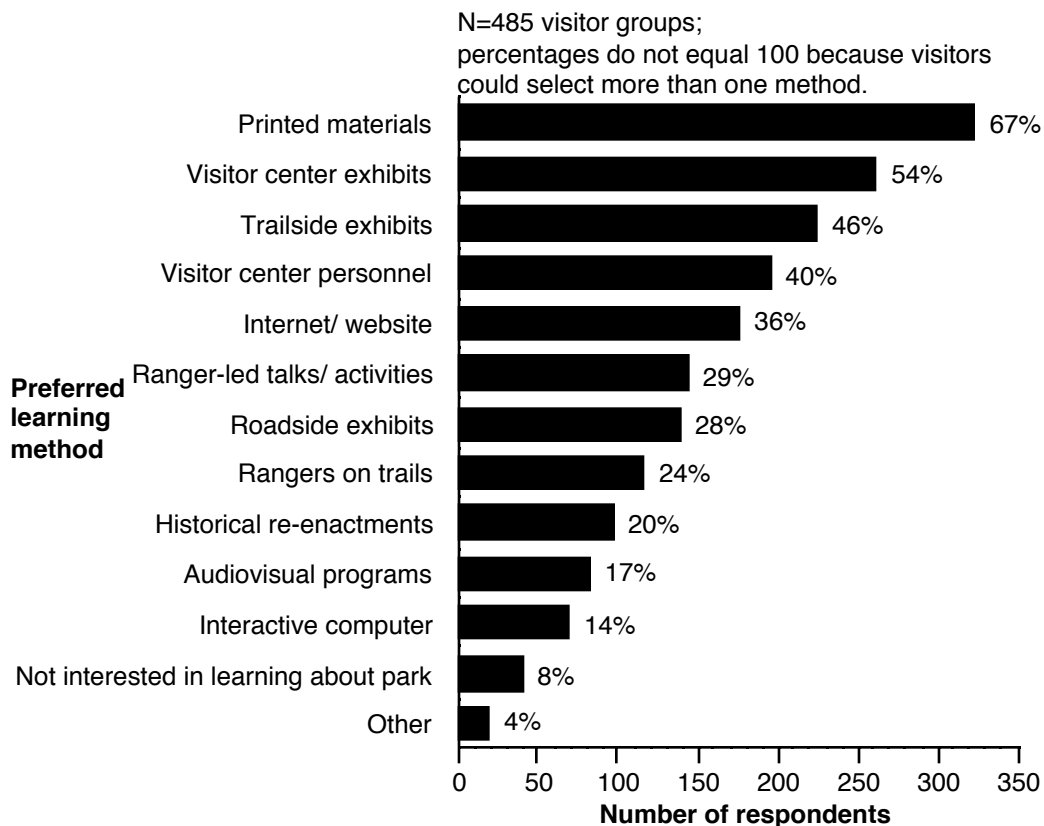
**Figure 78: Expenditures for admissions, recreation, and entertainment fees out of park**



**Figure 79 Expenditures for all other purchases out of park (souvenirs, film, books, sporting goods, clothing)**

Visitor groups were asked their preferred methods for learning about cultural and natural history on future visits to Pictured Rocks NL. As is shown in Figure 80, two-thirds of visitor groups (67%) indicated printed material as their preferred method, followed by visitor center exhibits (54%), trailside exhibits (46%), and visitor center personnel (40%). The least preferred method was an interactive computer (14%). Eight percent of visitor groups were not interested in learning about cultural and natural history on future visits to the park. Other preferred methods of learning included videos, a naturalist on the tour boat, and a dedicated radio station.

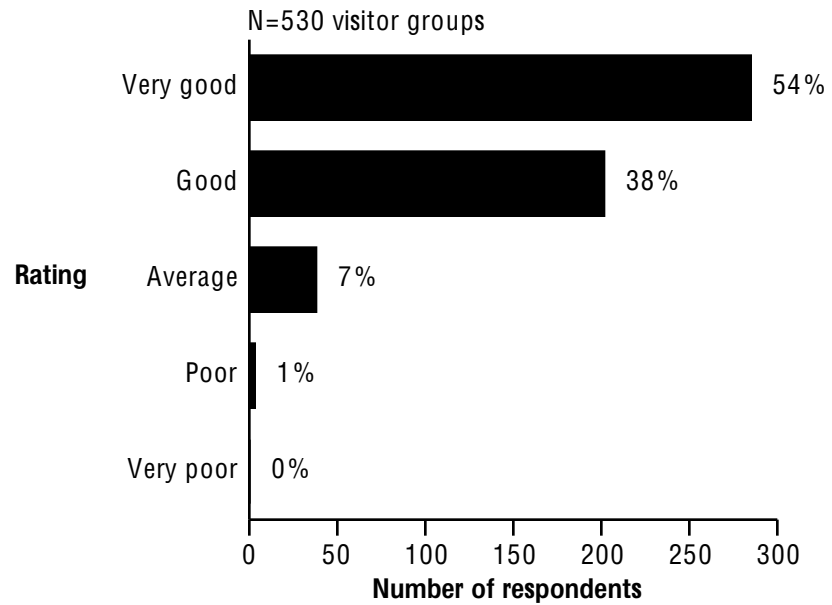
**Preferred  
methods for  
learning about  
cultural and  
natural history**



**Figure 80: Preferred methods of learning about cultural and natural history**

**Overall quality of visitor services**

Visitor groups were asked to rate the overall quality of the visitor services provided at Pictured Rocks NL during this visit. Most visitor groups (95%) rated services as "very good" or "good" (see Figure 81). No visitor groups rated the overall quality of services provided at Pictured Rocks NL as "very poor."



**Figure 81: Overall quality of visitor services**



Visitor groups were asked what they liked most about their visit to Pictured Rocks NL. Ninety-two percent of visitor groups (465 groups) responded to this question. A summary of their responses is listed below in Table 5 and complete copies of visitor responses are contained in the appendix.

### What visitors like most

**Table 5: What visitors like most**

N=674 comments;  
many visitors made more than one comment.

Comment	Number of times mentioned
<b>PERSONNEL</b>	
Comments	4
<b>INTERPRETIVE SERVICES</b>	
Comments	1
<b>FACILITIES AND MAINTENANCE</b>	
Clean park	10
Access through park	3
Small campgrounds	2
Unpaved roads	2
Well maintained campgrounds	2
Well maintained trails	2
Other comments	6
<b>POLICY</b>	
Comments	2
<b>RESOURCE MANAGEMENT</b>	
Hiking/ walking trails	48
Waterfalls	42
Boat tour	41
Beach	40
Scenic views	30
Rocks	22
Lake Superior	18
Lakeshore	15
Not crowded	11
Pristine environment	10
Dunes	8
Swimming	8
Water	8
Water quality (clean/ clear)	7
Campgrounds	6
Chapel Beach	6
Lighthouse	5
Attractions	4
Miners Beach	4

Comment	Number of times mentioned
<b>RESOURCE MANAGEMENT (continued)</b>	
Sable Lighthouse tour	4
Backcountry trails	3
Mosquito Beach	3
Shipwreck tour	3
Wildlife	3
Backpacking	2
Beachcombing	2
Camping	2
Cliffs	2
Fishing	2
Good water access	2
Log Slide	2
Scenic drive	2
Skylane Air Tour	2
Steps to Sable Falls	2
Twelvemile Beach	2
Uncommercialized	2
Other comments	7
<b>GENERAL IMPRESSIONS</b>	
Scenery/ natural beauty	138
Peace and quiet	32
Solitude	21
Experience of nature	11
Hiking/ walking	10
Solitude	21
Escape from everyday life	6
Remote	4
Weather	4
Rest and relaxation	3
Sunsets	3
Time with friends/ family	2
Other comments	5

Visitor groups were asked what they liked least about their visit to Pictured Rocks NL. Seventy-four percent of visitor groups (374 groups) responded to this question. A summary of their responses is listed below in Table 6 and complete copies of visitor responses are contained in the appendix.

### What visitors like least

**Table 6: What visitors like least**

N=387 comments;  
some visitors made more than comment.

Comment	Number of times mentioned
<b>PERSONNEL</b>	
Comments	6
<b>INTERPRETIVE SERVICES</b>	
No trail or backcountry maps	3
Inadequate information along roads	2
Other comments	7
<b>FACILITIES AND MAINTENANCE</b>	
Unpaved roads	57
Dirty restrooms	9
Cigarette butt littering	5
Litter	5
Highway 58	3
Not enough parking	3
Few directional signs	2
Mud on trails	2
No toilet paper in bathrooms	2
No recycling receptacles	2
Other comments	20
<b>RESOURCE MANAGEMENT</b>	
Jet skis	17
Commercial boat tours	8
Difficulty accessing sites	8
Boats	7
Noise from watercraft	6
Campground availability	4
Crowding	3
Difficulty viewing lakeshore	2
No bike trails	2
Noise from music	2
Watercraft	2
Other comments	7

Comment	Number of times mentioned
<b>POLICY</b>	
Pets in park	5
Pets allowed on trails	3
Dogs on beach	2
No restrictions on pets	2
No wheelchair access to lighthouse	2
Other comments	4
<b>GENERAL IMPRESSIONS</b>	
Black/ stable flies	79
Weather	31
Nothing	17
Not enough time	8
Aircraft overflights	3
Cost of motel room	3
Rude people	3
Cost of gas	2
Out of the way	2
Other comments	25

Visitor groups were asked, "If you were a manager planning for the future of Pictured Rocks NL, what would you propose?" Sixty-five percent of visitor groups (330 groups) responded to this question. A summary of their responses is listed below in Table 7 and complete copies of visitor responses are contained in the appendix.

## Planning for the future

**Table 7: Planning for the future**

N=461 comments;  
many visitors made more than one comment.

Comment	Number of times mentioned
<b>PERSONNEL</b>	
Increase ranger patrols	2
Other comments	2
<b>INTERPRETIVE SERVICES</b>	
Provide more information on PIRO history	7
Provide information about PIRO attractions	6
More guided nature walks/ hikes	5
Provide information on local flora	5
Provide information on geology of PIRO	5
Improve maps/ provide more detail	5
Offer interpretive tours more frequently	4
Promote environmental awareness/ stewardship	4
Increase access to information about park before visitors arrive	3
Provide environmental education opportunities	3
Provide brochure on park activities	2
Provide information on bear safety	2
Provide more information on the web	2
Provide NPS led boat tours	2
Provide self-guided tour with brochure	2
Other comments	11
<b>FACILITIES AND MAINTENANCE</b>	
Pave roads	20
Maintain/ improve dirt roads	18
Improve directional signs	10
Do not pave roads	9
Increase camping sites	7
Improve handicap access to sites	7
Improve trail signs	7
Provide drinking water	7
Make trails more accessible	4
Modernize camping facilities	4
Provide parking near attractions	4
Clean bathrooms more often	3
Do not pave H58	3

Comment	Number of times mentioned
<b>FACILITIES AND MAINTENANCE (continued)</b>	
Maintain trails	3
Provide biking trails	3
Provide canoe/ kayak rental	3
Provide distance markers on trails	3
Provide more parking	3
Provide more picnic facilities	3
Provide more vending machines	3
Provide recycling containers	3
Provide transportation to sites	3
Identify difficulty level of trails	2
Implement shuttle system	2
Improve bathrooms	2
Improve H-58	2
Improve NPS gift shops	2
Modernize pit toilets	2
Pick up trash	2
Provide dump stations for RV's	2
Provide more NPS gift shops	2
Provide rest stops with benches along trails	2
Other comments	44
<b>RESOURCE MANAGEMENT</b>	
No new development	35
Maintain natural beauty	34
Conserve/ preserve the park	3
Protect park from human impact	3
Continue limiting visitor use	2
Preserve lakeshore	2
Protect park from erosion	2
Other comments	4
<b>POLICY</b>	
Eliminate watercraft	11
Place restrictions on motorized watercraft	8
Provision of reservations at campgrounds	6
Ban pets from PIRO	2
Implement fines for littering	2
Limit campgrounds to tents	2
No pets on trails	2
Place restrictions on pets	2
Restrict watercraft from shore	2
Other comments	24
<b>GENERAL IMPRESSIONS</b>	
NPS does a great job	3
Continue to limit access to park	2
Cruise price too expensive	2
Get rid of biting flies	2
Other comments	40

Forty-six percent of visitor groups (232 groups) wrote additional comments, which are included in the separate appendix of this report. Their comments about Pictured Rocks NL are summarized below (see Table 8). Some comments offer specific suggestions on how to improve the park; others describe what visitors enjoyed or did not enjoy about their visit.

### Comment summary

**Table 8: Additional comments**

N=325 comments;  
many visitors made more than one comment.

Comments	Number of times mentioned
<b>PERSONNEL</b>	
Helpful/ informative/ friendly staff	15
Helpful/ informative/ friendly volunteers	2
Other comment	4
<b>INTERPRETIVE SERVICES</b>	
Junior Ranger program worthwhile	2
Other comments	9
<b>FACILITIES AND MAINTENANCE</b>	
Park well maintained	11
Improve directional signs	5
Improve roads—level/ grade	5
Park clean	4
Printed and posted distances do not correlate	2
Provide drinking water	3
Appreciate limited camping spaces	2
Good directional signs	2
Increase number of campgrounds	2
Other comments	13
<b>RESOURCE MANAGEMENT</b>	
Impressed with the lack of commercialization	4
Enjoyed the lack of crowds	2
Other comments	3
<b>GENERAL IMPRESSIONS</b>	
Will return	34
Wonderful experience	33
Beautiful	27
Very good experience	20
Enjoyed scenery	13
Enjoyed hiking/ walking	10
Keep up the good work	8
Not enough time	7
Peace and quiet	7
Enjoyed camping	4
Enjoyed scenic overlooks	4
Favorite place to visit	4
Enjoyed feelings of solitude	4
Will recommend	3

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Comments	Number of times mentioned
<b>GENERAL IMPRESSIONS</b>	
Enjoyed backcountry	2
Enjoyed boat tour	2
Enjoyed the rocks	2
Friendly people in the area	2
Fun	2
Next time will stay longer	2
Nice park	2
Reasonable prices	2
Relaxing	2
Wanted to stay longer	2
Other comments	37

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## Pictured Rocks National Lakeshore Additional Analysis VSP Report 128

The Visitor Services Project (VSP) offers the opportunity to learn more from VSP visitor study data.

### Additional Analysis

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

- |   |  |   |
|---|--|---|
| • Sources of information used prior to trip | • Number of visits—past year                 | • Camping fee expenditures in park                                  |
| • Sources of information used during trip   | • Number of visits—two to five years ago     | • All other expenditures in park                                    |
| • Needed information provided               | • Group members with disabilities            | • Lodging expenditures out of park                                  |
| • Park as destination                       | • Type of disability                         | • Camping fee expenditures out of park                              |
| • Length of stay                            | • Encounter access problem for disabled      | • Restaurant and bar expenditures out of park                       |
| • Activities                                | • Primary reason for visiting area           | • Groceries and take out food expenditure                           |
| • Number of times entered                   | • Stay overnight within 60 miles of the park | • Gas and oil expenditures  |
| • Sites visited                             | • Number of nights in park                   | • Other transportation expenditures out of park                     |
| • Sites visited first                       | • Number of nights outside park              | • Admissions expenditures out of park                               |
| • Group type                                | • Type of lodging used in park               | • All other expenditures out of park                                |
| • Group size                                | • Type of lodging used out of park           | • Number of adults covered by expenses                              |
| • With guided tour                          | • Effects of park elements                   | • Number of children covered by expenses                            |
| • Age                                       | • Use of interpretive services               | • Preferred methods for learning about cultural and natural history |
| • Zip Code                                  | • Importance of interpretive services        | • Overall quality of visitor services                               |
| • Country of residence                      | • Quality of interpretive services           |   |

Requests can be handled by contacting the VSP. Phone/send requests to:

**Visitor Services Project, CPSU  
College of Natural Resources  
P.O. Box 441133  
University of Idaho  
Moscow, Idaho 83844-1133**

**Phone: 208-885-7863  
FAX: 208-885-4261**

## QUESTIONNAIRE



### Visitor Services Project Publications

Reports 1-6 (pilot studies) are available from the University of Idaho Cooperative Park Studies Unit. All other VSP reports listed are available from the parks where the studies were conducted or from the UI CPSU. 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
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 (summer)
24. Lincoln Home National Historical 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, 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 National Recreation Area
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

**1993**

54. Belle Haven Park/Dyke Marsh Wildlife Preserve (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 (summer)
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)