



National Park Service
U.S. Department of the Interior

Visitor Services Project



Catoctin Mountain Park Visitor Study

Summer 2002

Report 138



**University of Idaho
Park Studies Unit**



**National Park Service
U.S. Department of the Interior**

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Catoctin Mountain Park

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Yen Le

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**Visitor Services Project
Report 138**

August 2003

Yen Le is Research Assistant and Margaret Littlejohn is National Park Service VSP Coordinator, based at the Park Studies Unit, University of Idaho. We thank the staff and volunteers of Catoctin Mountain Park 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.

Visitor Services Project Catoctin Mountain Park Report Summary

- This report describes the results of a visitor study at Catoctin Mountain Park during August 3-11, 2002. A total of 604 questionnaires were distributed to visitors. Visitors returned 470 questionnaires for a 77.8% response rate.
- This report profiles Catoctin Mountain Park visitors. A separate appendix contains visitors' comments about their visit. This report and the appendix include summaries of those comments.
- Forty-one percent of visitor groups were groups of two. Fifty-two percent of the visitor groups were family groups. Forty-seven percent of visitors were aged 31-55 years and 21% were aged 15 or younger.
- United States visitors were from Maryland (64%), Pennsylvania (10%), Washington D.C. (8%), and 26 other states. There were too few international visitors to provide reliable information.
- This visit was the only time that most visitors (61%) had visited the park in the last 12 months. During their lifetime, 38% of visitors visited the park one time and 29% visited six times or more. Most visitor groups (78%) visited Catoctin Mountain Park for less than 24 hours on this visit. Of those, 70% spent two to four hours in the park.
- On this visit, the most common activities were viewing wildlife and scenery (82%), driving through (61%), and hiking for 1 hour or more (46%). Visitor groups also identified these activities as the three most common activities on past visit(s). In Catoctin Mountain Park and Cunningham Falls State Park, the most visited locations were Catoctin Mountain Park Visitor Center (80%) and Cunningham Falls (57%).
- Previous visit(s) (53%) and word of mouth/friends/relatives (31%) were the most used sources of information about the park prior to visiting.
- Most visitor groups (77%) indicated that Catoctin Mountain Park was the primary reason for visiting the area. Most visitor groups (68%) did not stay overnight in the Catoctin Mountain Park area (within 50 miles). Of those who stayed overnight inside the park, 53% stayed 2 nights and 18% stay 1 night. Of those who stayed overnight outside the park (within a 50-mile area), 46% stayed 2 nights and 19% stayed 1 night. Campgrounds/trailer parks were the most common type of lodging both inside the park (51%) and outside the park (45%).
- The majority of visitor groups (98%) used personal or rental vehicles as their form of transportation to arrive and visit the park. Thurmont (78%) was the most-used community for support services (groceries, ice, gas, etc.).
- In and outside the park, the average visitor group expenditure was \$117. The median visitor group expenditure (50% of groups spent more, 50% spent less) was \$25. The average per capita expenditure was \$34. Forty-six percent of groups spent up to \$100 in total expenditures. Of the total expenditures by groups, 26% was for lodging, and 19% was for groceries and take-out foods.
- Most visitor groups (64%) felt "very safe" concerning personal property safety from crime; 70% felt "very safe" concerning personal safety from crime; and 52% felt "very safe" concerning personal safety from accident in Catoctin Mountain Park.
- Most visitor groups (97%) rated the overall quality of visitor services at Catoctin Mountain Park 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 Park Studies Unit; phone (208) 885-7863 or go to website:
<http://www.psu.uidaho.edu>

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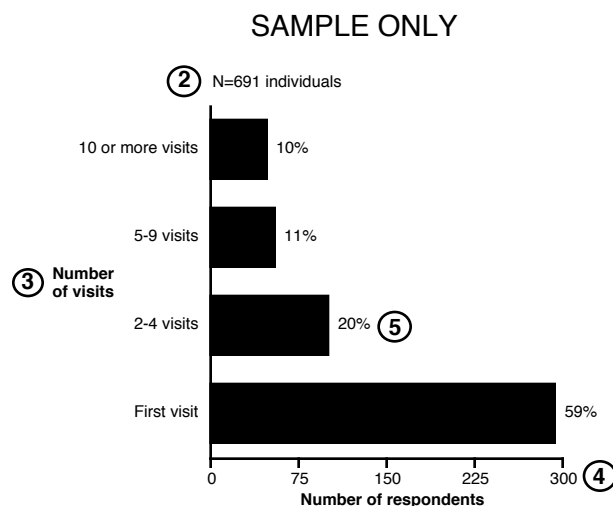
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INTRODUCTION

This report describes the results of a study of visitors at Catoctin Mountain Park. This visitor study was conducted August 3-11, 2002 by the National Park Service (NPS) Visitor Services Project (VSP), part of the Park Studies Unit at the University of Idaho.

The report is organized 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 to help managers request additional analyses. The final section includes a copy of the **Questionnaire**. The 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. Some of the questions were comparable with VSP studies conducted at other parks. Other questions were customized for Catoctin Mountain Park.

Interviews were conducted with, and questionnaires were distributed to, a sample of visitors who arrived at Catoctin Mountain Park during the period from August 3-11, 2002.

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 for 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.

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.

Data analysis

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.

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 457 visitor groups, Figure 6 presents data for 1,343 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 470 questionnaires were returned by Catoctin Mountain Park visitors, Figure 1 shows data for only 457 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.

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

Limitations

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 August 3-11, 2002. 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.

Weather conditions during the visitor study were typical of August in the Catoctin Mountain Park area, with cool to hot sunny days and occasional cloudy or humid days (code red ozone days).

**Special
conditions**

This survey was conducted during the summer after September 11, 2001, when security was still heightened. Any impact on visitation is unknown.

RESULTS

At Catoclin Mountain Park, 641 visitor groups were contacted, and 604 of these groups (94%) accepted questionnaires. Questionnaires were completed and returned by 470 visitor groups, resulting in a 77.8% response rate for this study.

Visitors contacted

Table 1 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 1: Comparison of total sample and actual respondents

Variable	Total sample		Actual respondents	
	N	Avg.	N	Avg.
Age of respondents	596	42.4	455	44.2
Group size	596	5.2	457	4.6

Figure 1 shows visitor group sizes, which ranged from one person to 130 people. Forty-one percent of visitor groups consisted of two people, while 26% consisted of three or four people.

Demographics

Fifty-two percent of visitor groups were made up of family members, 19% were made up of friends, and 13% traveled alone (see Figure 2). Groups listing themselves as "other" for group type included church group, fiancé, co-workers, camper group, motorcycle club group, hiking group, college class, military group, and League for People with Disabilities. Visitors were asked whether their personal groups were part of a family reunion, church or other organized group. Most visitor groups (88%) were not part of any organized groups; 12% were part of family reunion, church, school or other organized groups, as shown in Figure 3.

Forty-seven percent of the visitors were 31-55 years of age (see Figure 4). Another 21% of visitors were in the 15 or younger age group.

Ninety-nine percent of visitor groups identified themselves as neither Hispanic nor Latino, and only 1% indicated that they are Hispanic or Latino (see Figure 5). As shown in Figure 6, most visitor groups (89%) identified themselves as White and 5% were Asian.

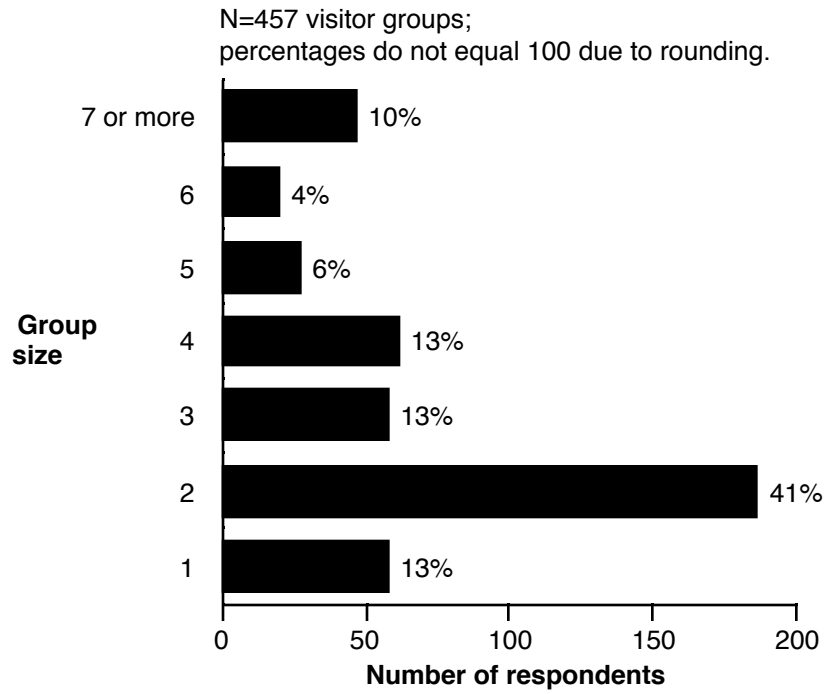


Figure 1: Visitor group sizes

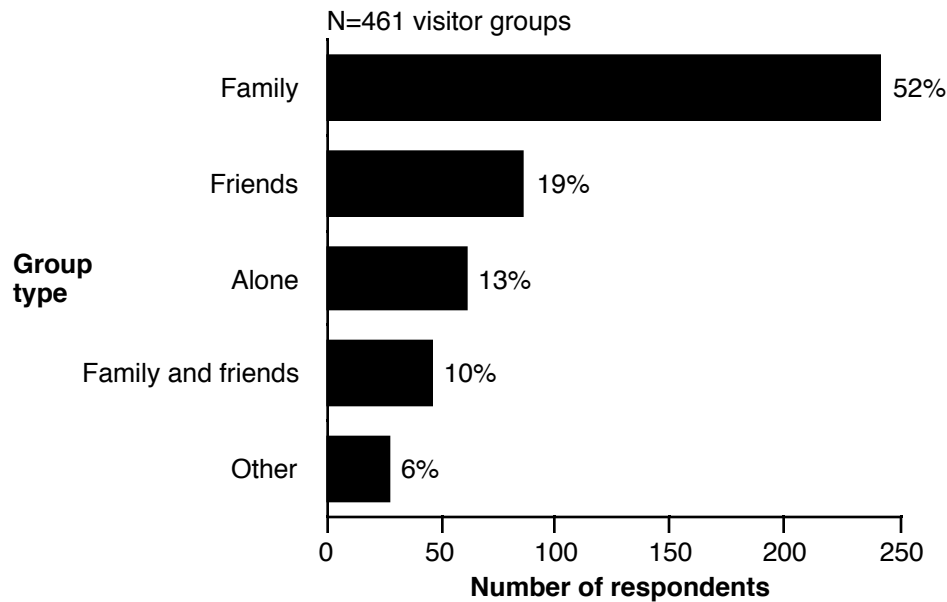


Figure 2: Visitor group types

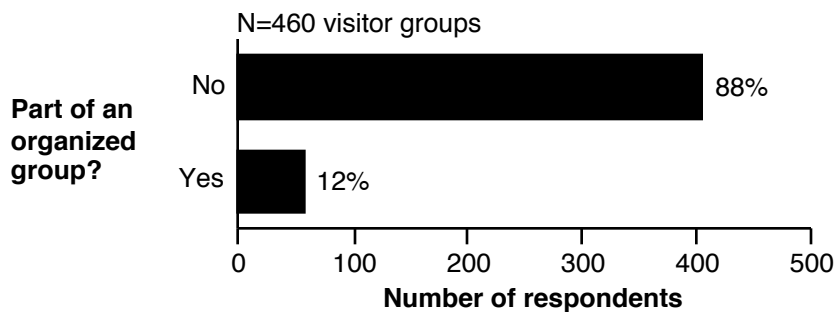


Figure 3: Part of a family reunion, church, school or other organized group?

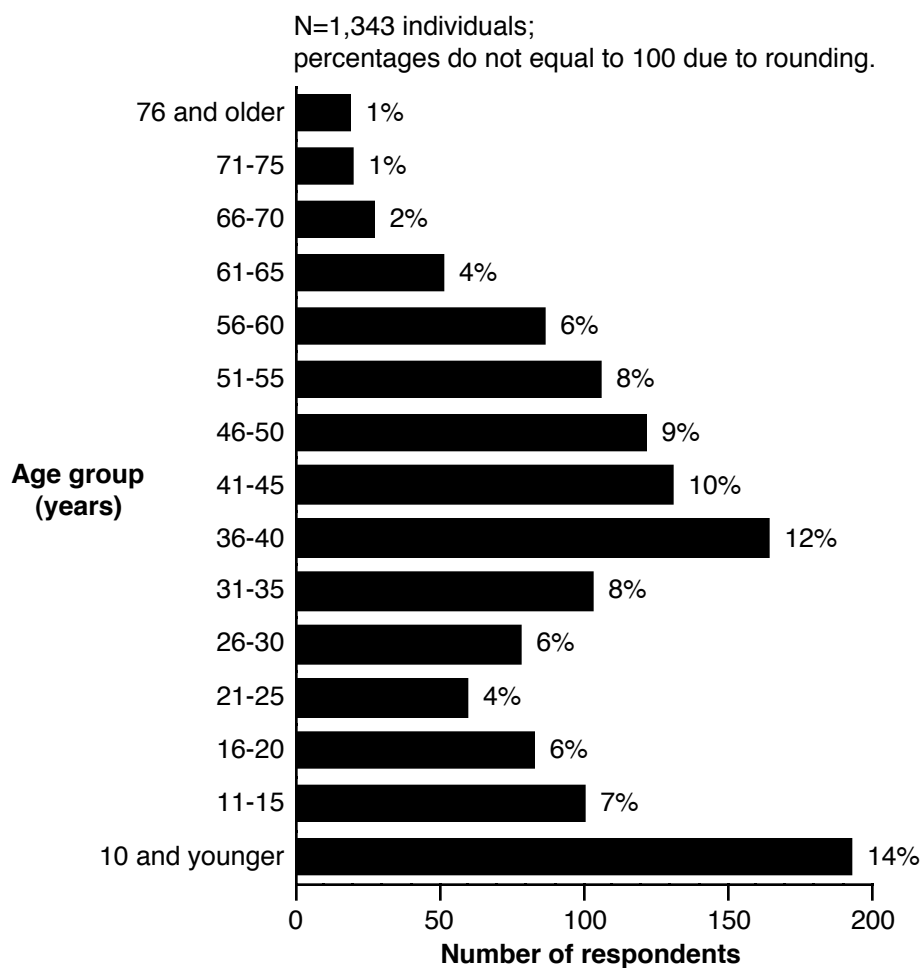


Figure 4: Visitor ages

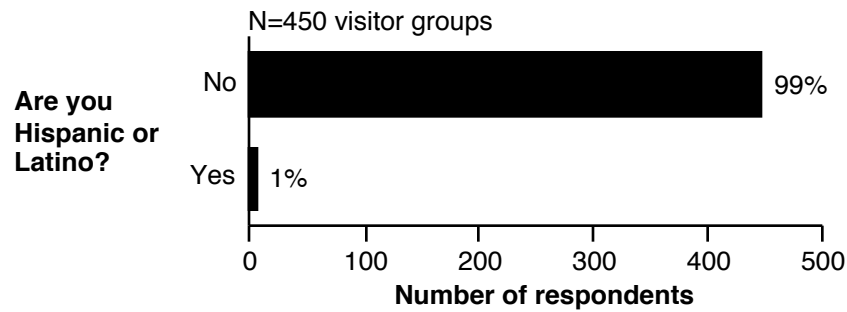


Figure 5: Hispanic or Latino background

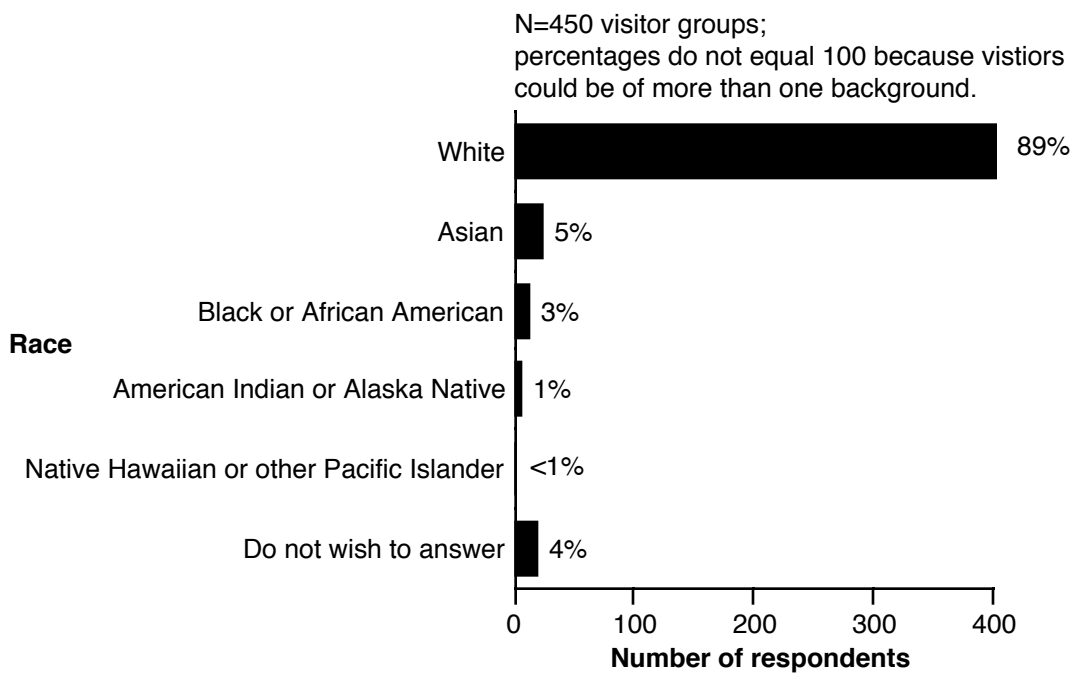


Figure 6: Visitor race

Table 2: Languages that visitor groups preferred to speak and write

N=462 visitor groups;
percentages do not equal 100 due to rounding.

Language	N	%
English	455	98
Korean	3	1
Dutch	1	<1
French	1	<1
Malay	1	<1
Spanish	1	<1

**Demographics
(continued)**

Table 2 lists the language that visitor groups preferred to speak and write as their primary language. The majority of visitor groups (98%) used English as their preferred language to speak and write, and a small proportion of visitor group used other languages.

Most respondents (91%) had no group members with disabilities or impairments that affected their visit to Catoctin Mountain Park (see Figure 7). Of those with disabilities or impairments, 88% had mobility problems, 16% had learning problems, and 14% had mental problems (see Figure 8). Of those with disabilities or impairments, 33% encountered access/service problems (see Figure 9). The problems included: trails too rocky and uneven for wheelchair, Misty Mount was not accessible, walk was too long from parking lot, campsite area was not level, and there was no parking for people with strollers.

Visitors were asked to list the number of visits including this visit that they had made to the park during the past 12 months and in their lifetime. Sixty-one percent of visitors said this was their only visit in the past 12 months, while 18% had visited twice (see Figure 10). During their lifetime, 38% had visited once, and 26% had visited between two and four times (see Figure 11)

Visitor groups were also asked to identify the highest level of education that each adult member (age 17 or over) of their groups had achieved. Thirty-four percent of visitors had a graduate degree, 29% had a bachelor's degree or higher, and another 21% had some college education, as shown in Figure 12.

There were not enough international visitors to Catoctin Mountain Park to provide reliable information (see Table 3). The largest proportions of United States visitors were from Maryland (64%), Pennsylvania (10%), and Washington, D.C. (8%). Smaller proportions of U.S. visitors came from another 25 states (see Map 1 and Table 4).

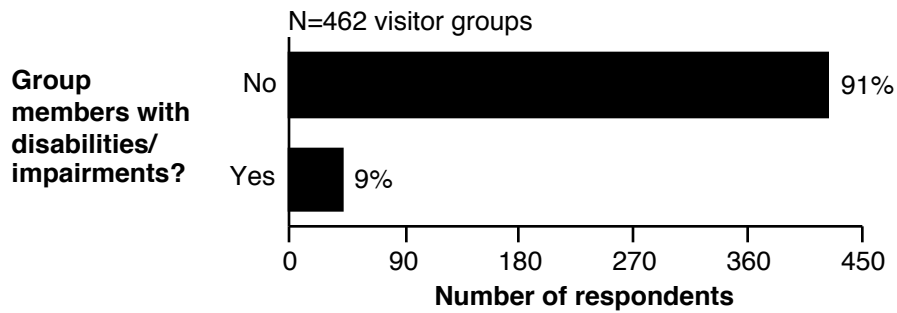


Figure 7: Groups containing member(s) with disabilities/ impairments

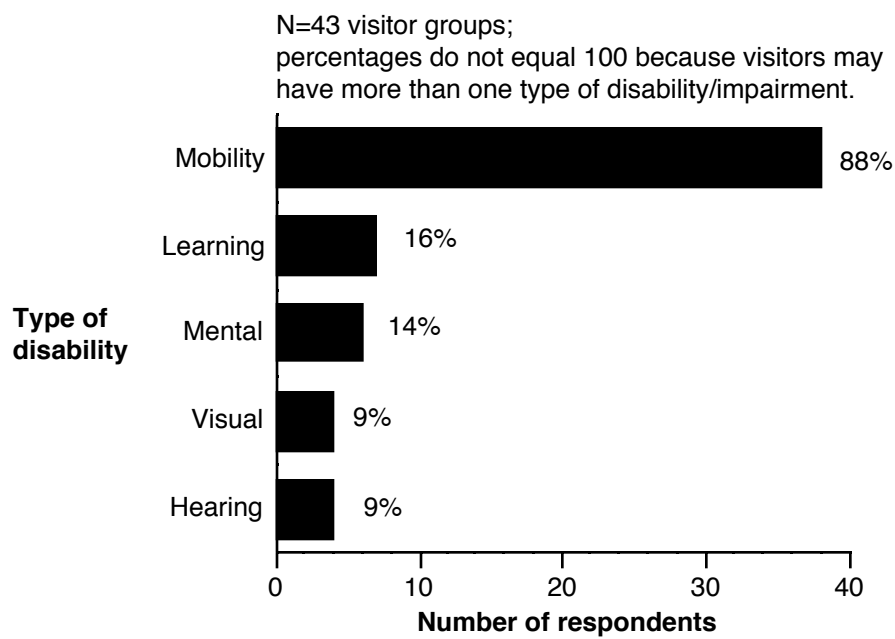


Figure 8: Visitor disabilities/impairments

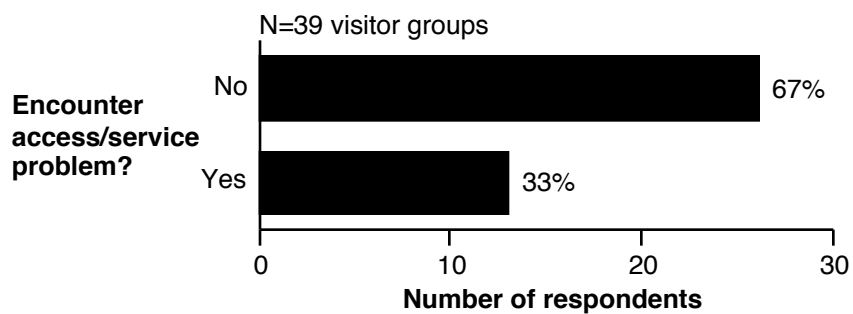


Figure 9: Access/service problems in park for visitors with disabilities or impairments

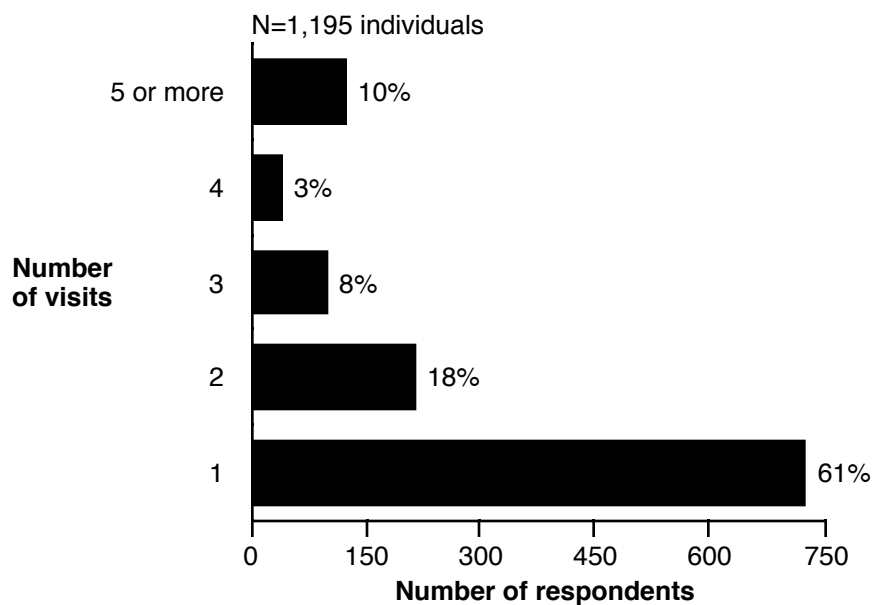


Figure 10: Number of visits during past 12 months (including this visit)

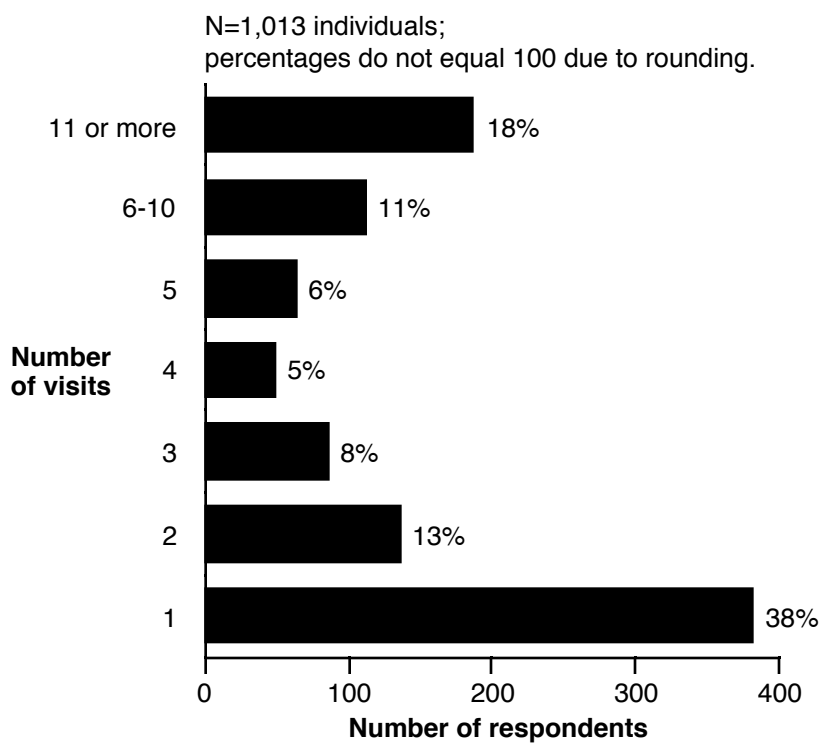


Figure 11: Number of visits during lifetime (including this visit)

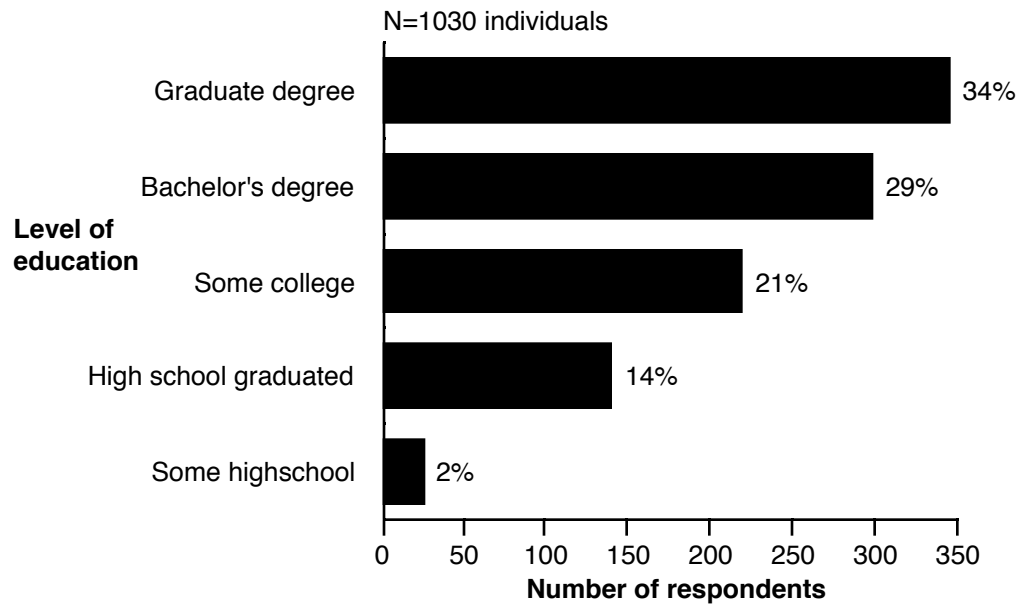


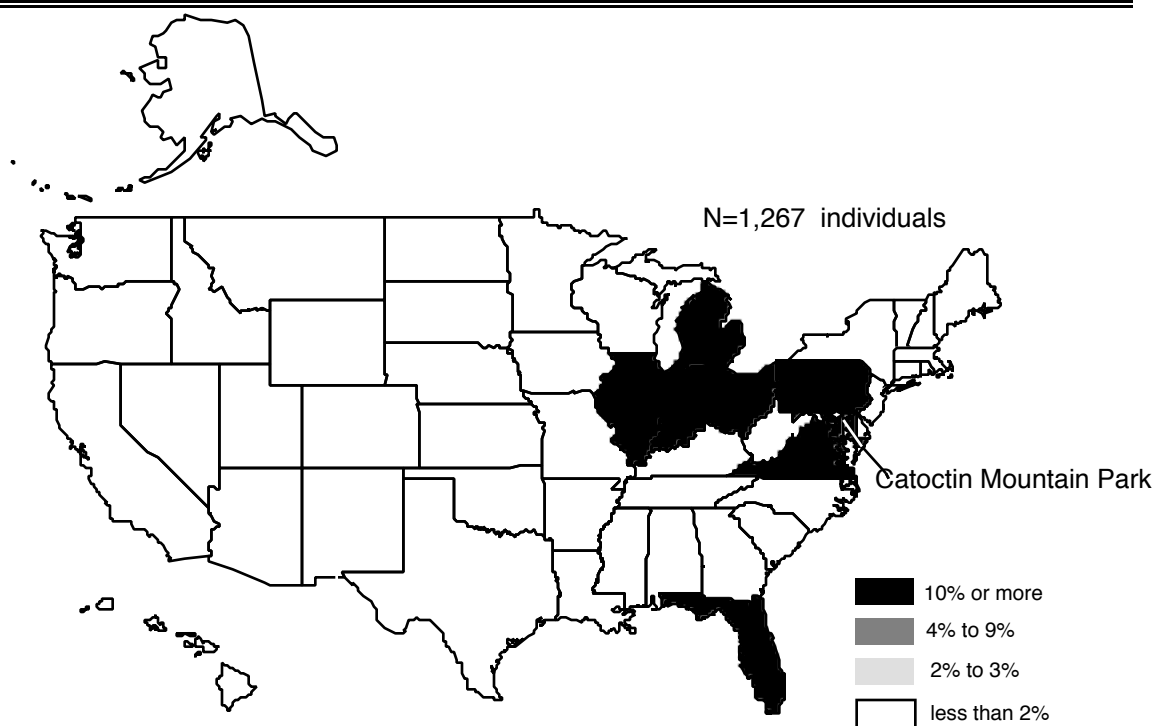
Figure 12: Visitor highest level of education

Table 3: International visitors by country of residence

percentages do not equal 100 due to rounding

CAUTION!

Country	Number of individuals	Percent of international visitors	Percent of total visitors
		N=16 individuals	N =1,283 individuals
England	12	75	1
Palestine	2	13	<1
Korea	1	6	<1
Slovenia	1	6	<1



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

Table 4 : United State visitors by state of residence

percentages do not equal 100 due to rounding

State/District	Number of individuals	Percent of U.S visitors N =1,267 individuals	Percent of total visitors N=1,283 individuals
Maryland	809	64	63
Pennsylvania	123	10	10
Washington, D.C.	97	8	8
Virginia	90	7	7
Ohio	20	2	2
Delaware	12	1	1
North Carolina	10	1	1
New York	10	1	1
California	9	1	1
Illinois	8	1	<1
New Jersey	8	1	<1
West Virginia	8	1	<1
Michigan	7	1	<1
15 other states	56	4	4

Visitor groups were asked to indicate the length of time they spent in Catoctin Mountain Park on this trip. As shown in Figure 13, most visitor groups (78%) spent less than 24 hours in Catoctin Mountain Park, and 22% spent 24 hours or more.

**Length of stay/
number of park
entries**

Of those who spent less than 24 hours, 32% spent two hours or less, 40% spent three or four hours in Catoctin Mountain Park (see Figure 14). As shown in Figure 15, among visitor groups who spent more than 24 hours in the park, 45% spent two days and 23% spent three days.

The number of times that visitor groups entered Catoctin Mountain Park during their stay in the area ranged from 1 to 25 times. Most visitor groups (70%) entered the park only once, and 19% entered twice (see Figure 16).

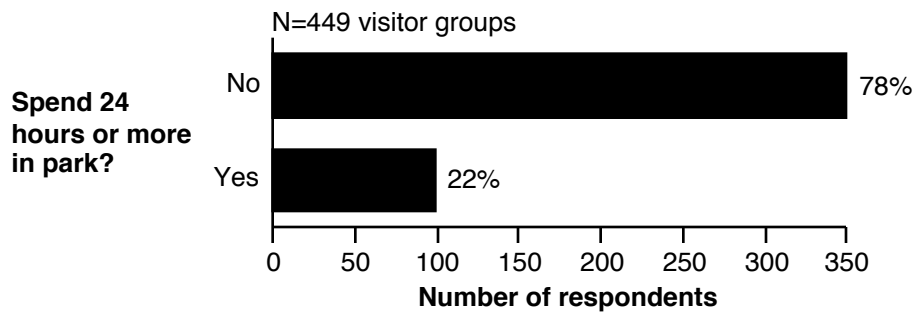


Figure 13: Spend 24 hours or more in park?

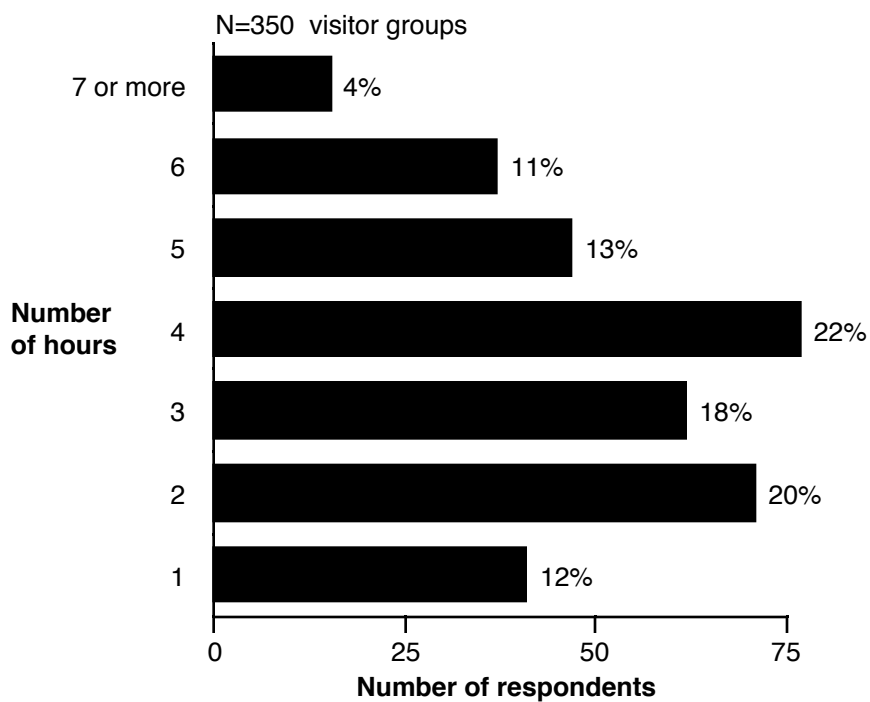


Figure 14: Number of hours spent in Catoclin Mountain Park (if less than 24 hours)

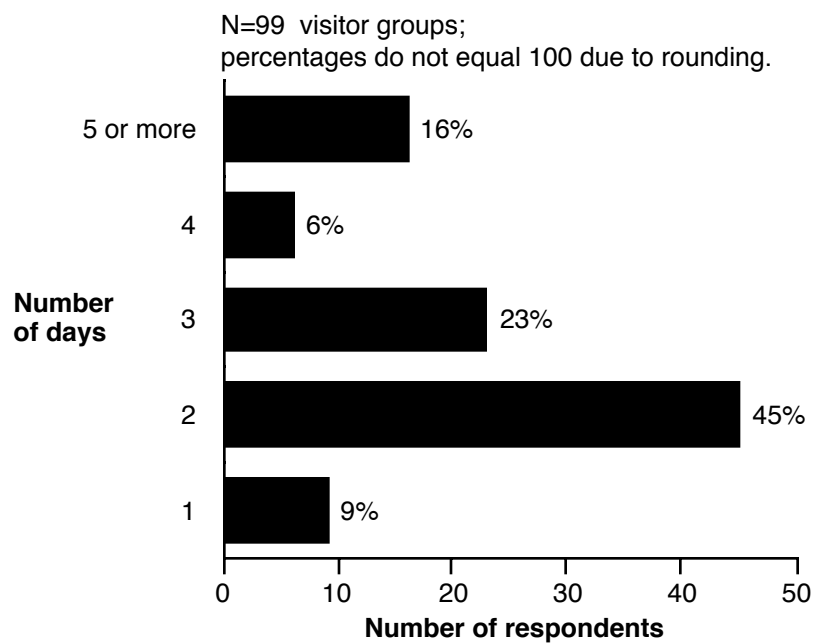


Figure 15: Number of days (24 hours or more) spent in Catoclin Mountain Park

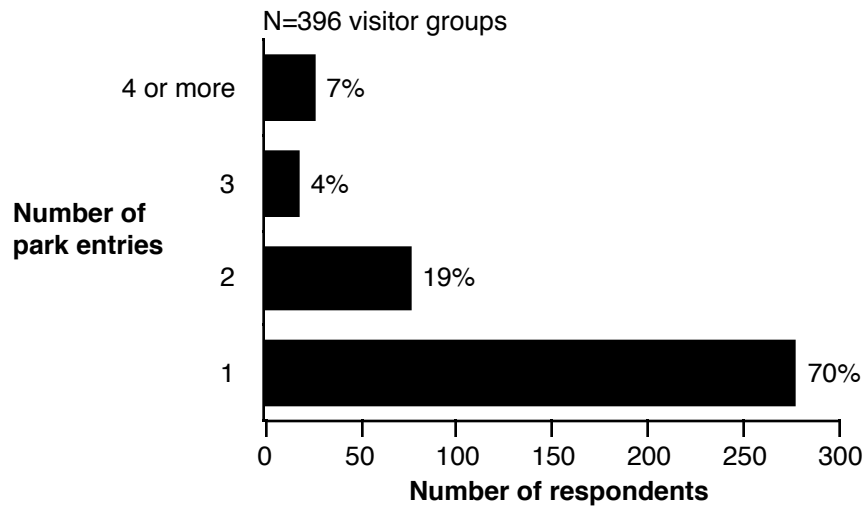


Figure 16: Number of entries into Catoclin Mountain Park

Activities

Figure 17 shows the proportions of visitor groups that participated in a variety of activities at Catoctin Mountain Park on this visit. The most common activities were viewing wildlife and scenery (82%), driving through (61%), and hiking for 1 hour or more (46%). Table 5 shows “other” activities in which visitor groups participated this visit.

If it was not their first visit to Catoctin Mountain Park, visitor groups were also asked to indicate activities that they participated in on past visit(s). The most common activities were viewing wildlife and scenery (80%), hiking for 1 hour or more (68%), and driving through (61%), as shown in Figure 18. The “other” activities that visitors participated in past visit(s) included swimming, attending maple syrup festival, seeing slide shows/exhibits, checking cabin to rent, and enjoying natural quiet.

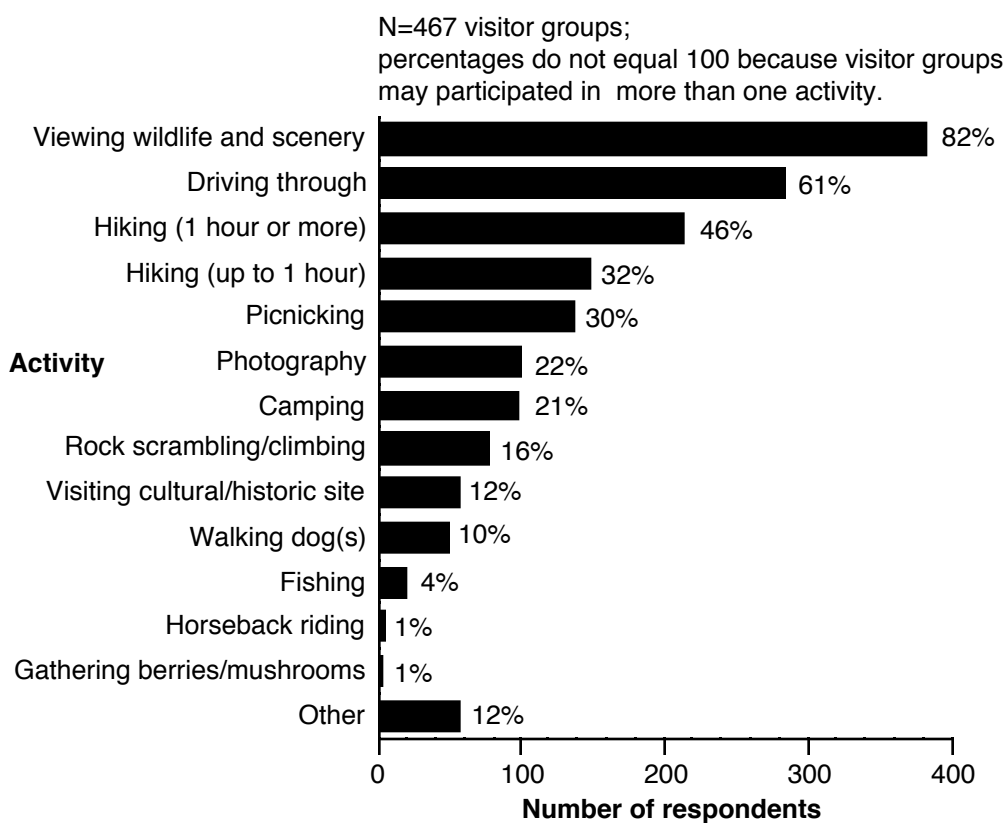


Figure 17: Visitor activities this visit



Figure 18: Visitor activities past visit(s)

Table 5: "Other" activities this visit

N=50 comments

Activities	Number of times mentioned
Swimming	15
Visiting visitor center	7
Attending Camp Greentop event	6
Rowing boat	3
Seeing slide show/ exhibits	2
Seeing Cunningham Falls	2
Visiting campground for future visits	2
Visiting the beach	2
Checking cabins to rent	1
Obtaining information for a future visit	1
Getting Passport book stamped	1
Attending native plant identification class	1
Attending ranger-led hikes/talks	1
Rock mapping	1
Running on trails	1
Cycling	1
Attending junior ranger program	1
Attending a seminar	1
Walking up stream	1
Attending motorcycle club annual meeting	1

**Visitor awareness
of National Park
Service
management**

Visitor groups were asked: "Prior to your visit, were you and your group aware that Catoctin Mountain Park is managed as a unit of National Park System?" Figure 19 shows that 66% of visitor groups were aware, 30% were not aware, and 4% were "not sure" that Catoctin Mountain Park is managed as a unit of National Park System.

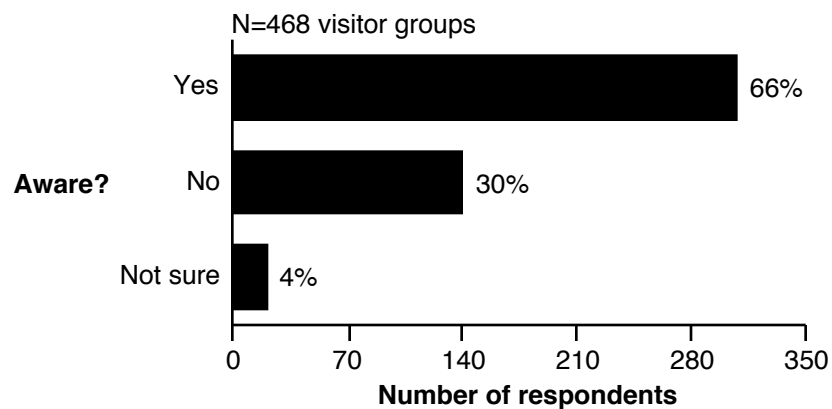


Figure 19: Visitor awareness that Catoctin Mountain Park is managed as unit of National Park System

Sources of information

Visitor groups were asked to indicate the sources from which they had received information about Catoctin Mountain Park prior to their visit. Most visitors received information about the park prior to their visit (see Figure 20). Eleven percent of visitor groups received no information prior to their visit

Of those visitor groups who received information, the most common sources were previous visit(s) (53%), word of mouth/friends/relatives (31%), and travel guide/tour book (19%), as shown in Figure 21.

“Other” sources of information used by visitor groups are listed on Table 6.

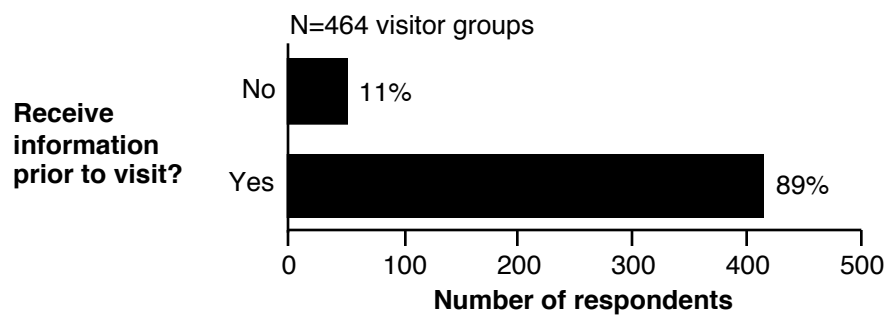


Figure 20: Receive information about Catoctin Mountain Park prior to this visit?

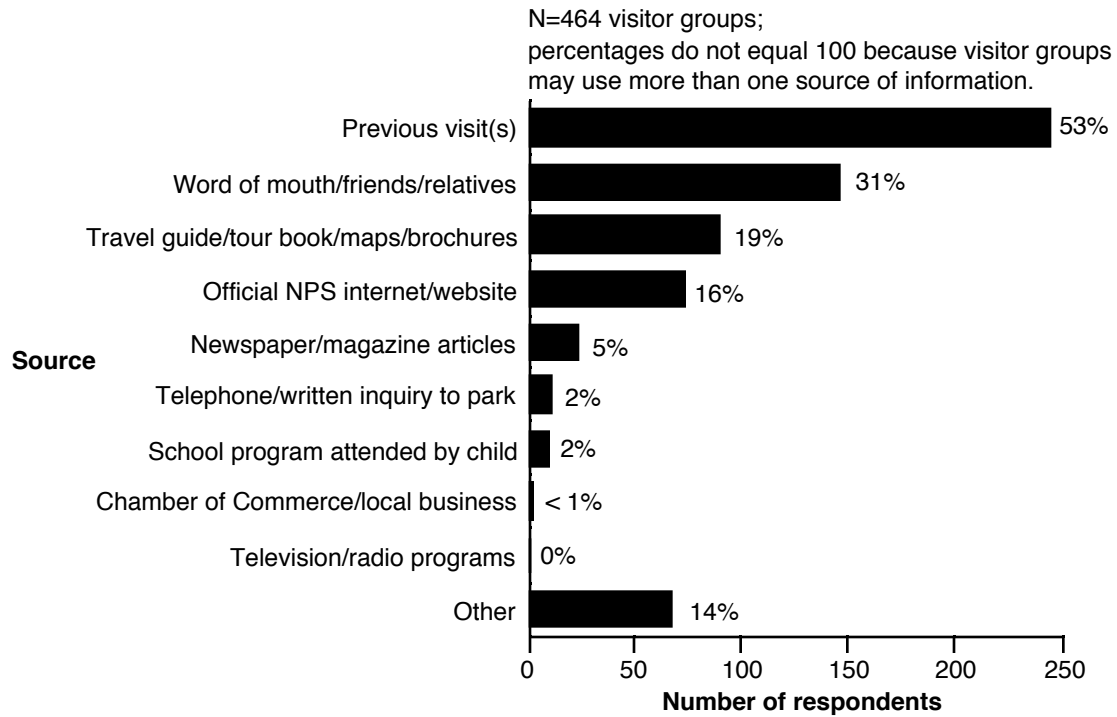


Figure 21: Sources of information used by visitors prior to visit

Table 6: "Other" sources of information

N=68 comments

Source	Number of times mentioned
Drove nearby and saw highway signs	19
Live nearby	12
Searched other internet websites	9
Used to camp at Greentop	5
Work nearby	5
Books	4
Came to park as a child	3
Used to work in park	3
Scouts	2
League for People with Disabilities	2
Ranger station	1
National Park Passport book	1
College class	1
<i>Backpacking</i> magazine	1

Visitor groups were asked: “On this visit, what forms of transportation did you and your group use to arrive at and visit Catoclin Mountain Park?” As shown in Figure 22, the majority of visitor groups (98%) used a personal or rental vehicle. Another 17% of visitor groups visited Catoclin Mountain Park on foot, and small proportions of visitor groups used other forms of transportation such as a bicycle or commercial van/bus. No visitor groups used a small commercial bus to arrive at and visit Catoclin Mountain Park.

“Other” forms of transportation included church van, Amtrak, Greyhound bus, van for Camp Greentop group, and camper for the League for People with Disabilities.

Forms of transportation

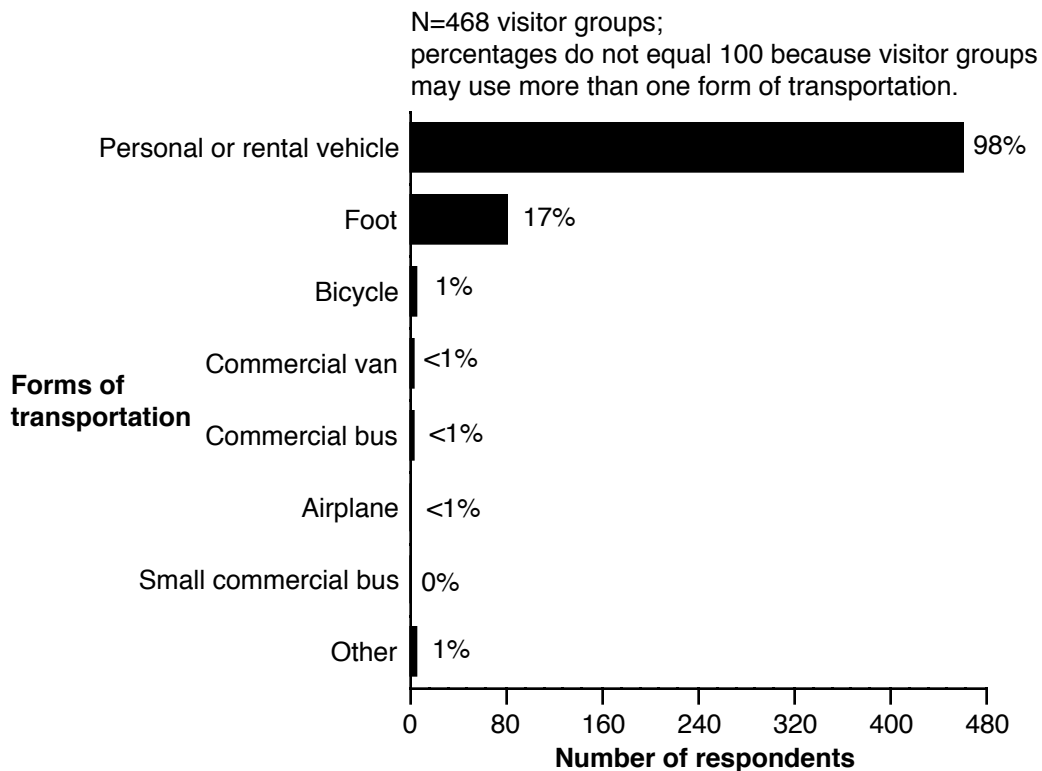


Figure 22: Forms of transportation

**Primary reason
for visiting the
area**

Visitor groups were asked to indicate the primary reason their group visited the area. Most visitor groups (77%) said that visiting Catoclin Mountain Park was their primary reason for visiting the area, as shown in Figure 23. Another 9% were in the area to visit other attractions and for business or other reasons (7%).

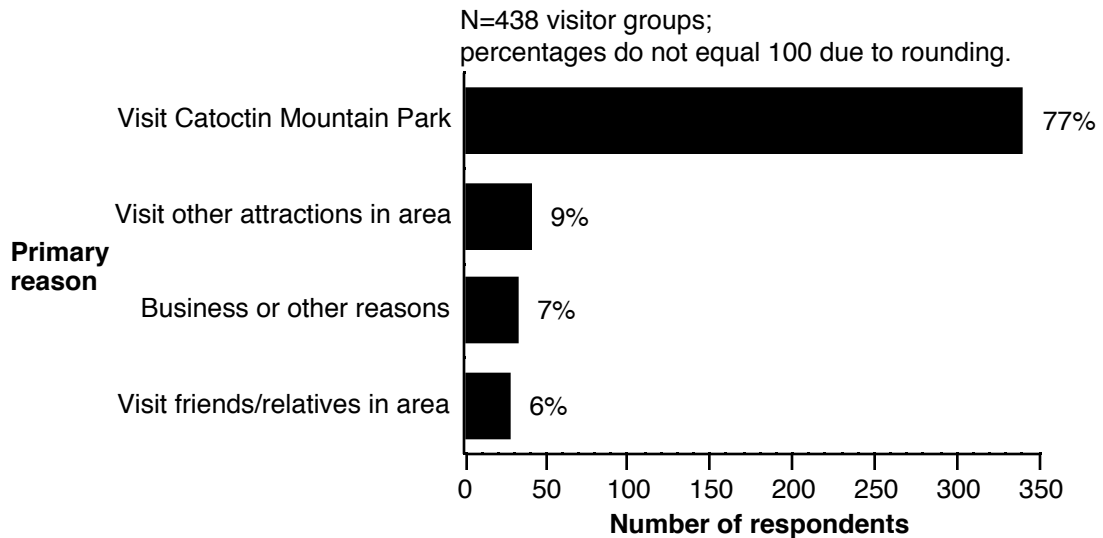


Figure 23: Primary reason for visiting the area

Visitor groups were asked: "On this visit, which of the following places in Catoclin Mountain Park and Cunningham Falls State Park did you and your group visit?" Map 2 was included in the questionnaire to help visitor groups locate the places they visited. As shown in Figure 24, the most commonly visited places were Catoclin Mountain Park Visitor Center (80%), Cunningham Falls (47%), Chimney Rock Vista (29%), and Hog Rock Vista (28%).

Locations visited

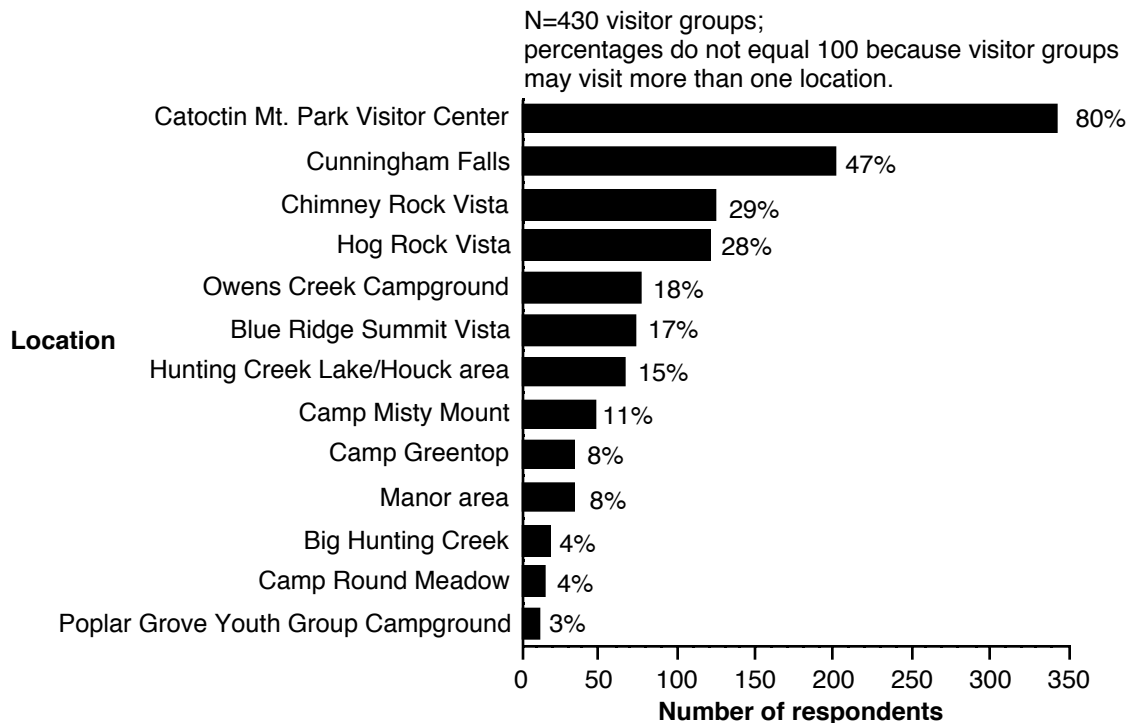
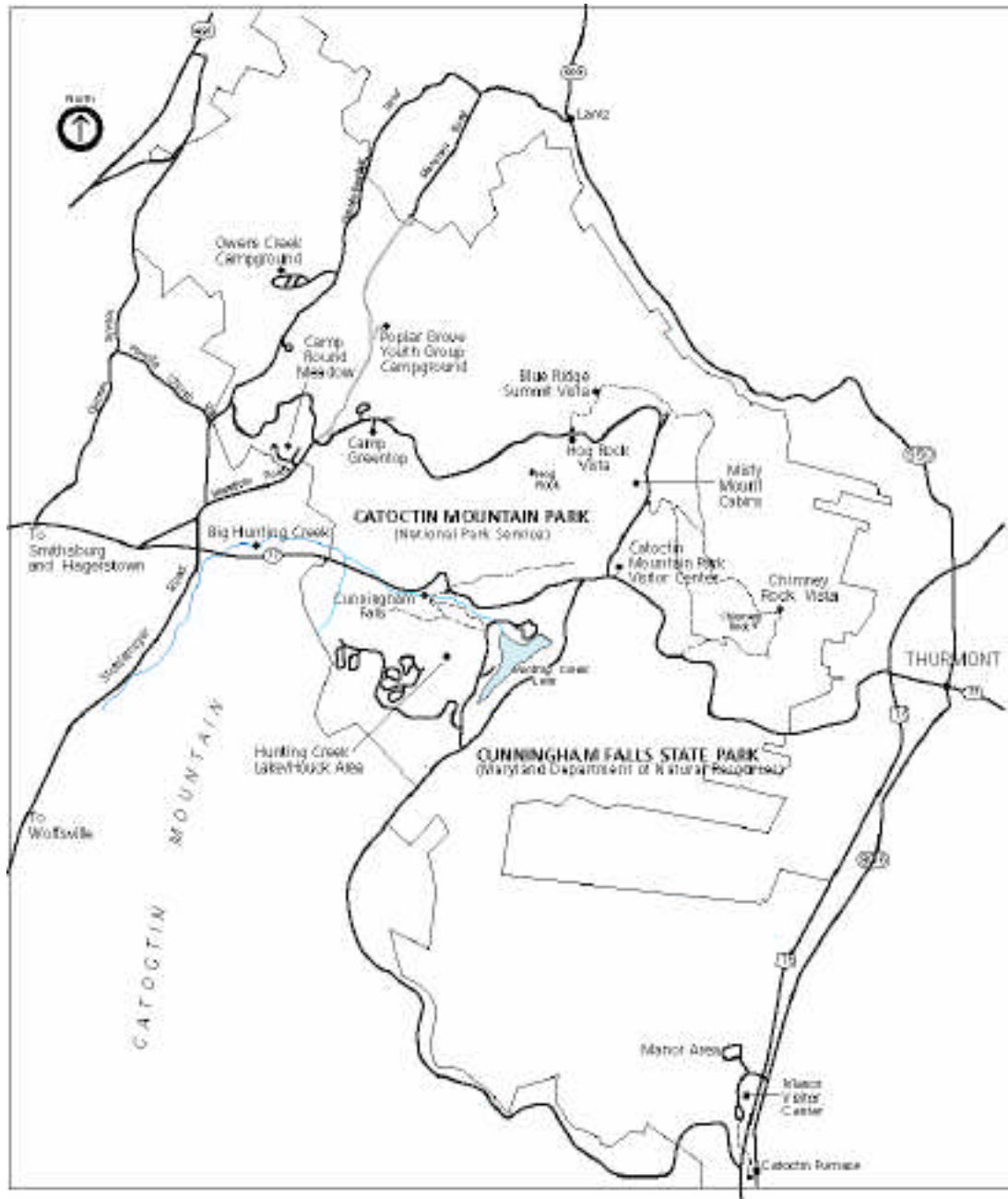


Figure 24: Locations visited



Map 2: Selected locations in Catoctin Mountain Park and Cunningham Falls State Park

**Overnight
stays/use of
community
support
services**

Visitor groups were asked a series of questions about their overnight lodging within the Catoctin Mountain Park area. First, visitor groups were asked: "On this trip to Catoctin Mountain Park, did you and your group stay overnight inside and/or outside the park (within 50 miles)? Most visitor groups (68%) did not stay in the park/area and 32% did stay (see Figure 25).

Visitor groups who stayed overnight inside and/or outside the park (within 50 miles), were asked to list the number of nights they stayed and the types of accommodations they used. Inside the park, the number of nights ranged from 1 to 56 nights. Most visitor groups (71%) stayed one or two nights inside the park, as shown in Figure 26. The most common type of lodging that visitor groups used inside Catoctin Mountain Park was a campground/trailer park (51%), followed by organized group camp (25%), and cabin (21%), as shown in Figure 27.

Outside the park but within 50 miles, visitors stayed from 1 to 64 nights. Sixty-five percent of visitor groups stayed one or two nights and 25% stayed 3 to 4 nights (see Figure 28). As shown in Figure 29, the campground/trailer park (45%) was also the most common type of lodging that visitor groups used outside the park (within 50 miles). About one-third of visitor groups (33%) used lodges, motels, cabins, rented condo/home, B&B, etc. "Other" types of lodging included personal residence, Cunningham Falls State Park, Camp Airy, and military camp at Camp David.

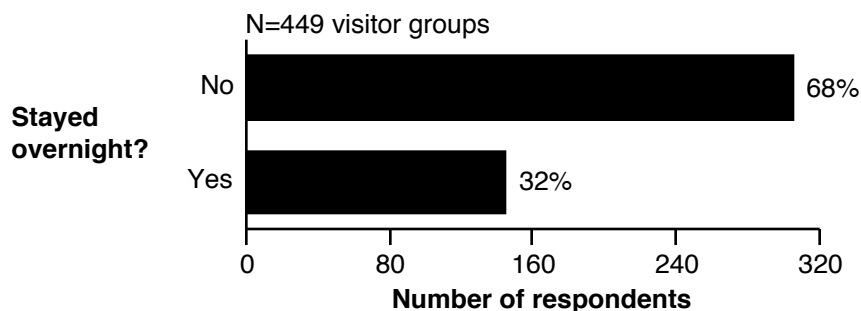


Figure 25: Overnight stay in the park area (within 50 miles)

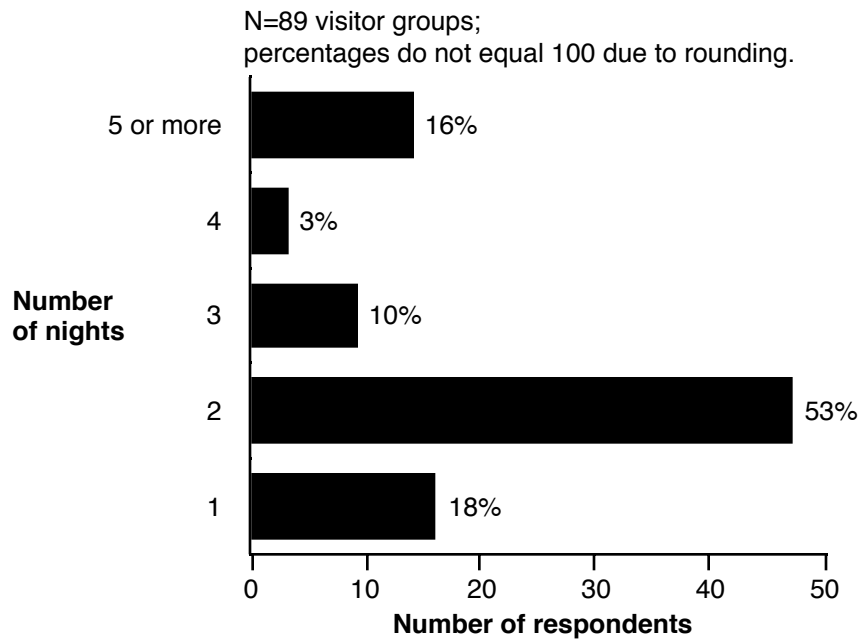


Figure 26: Number of nights inside the park

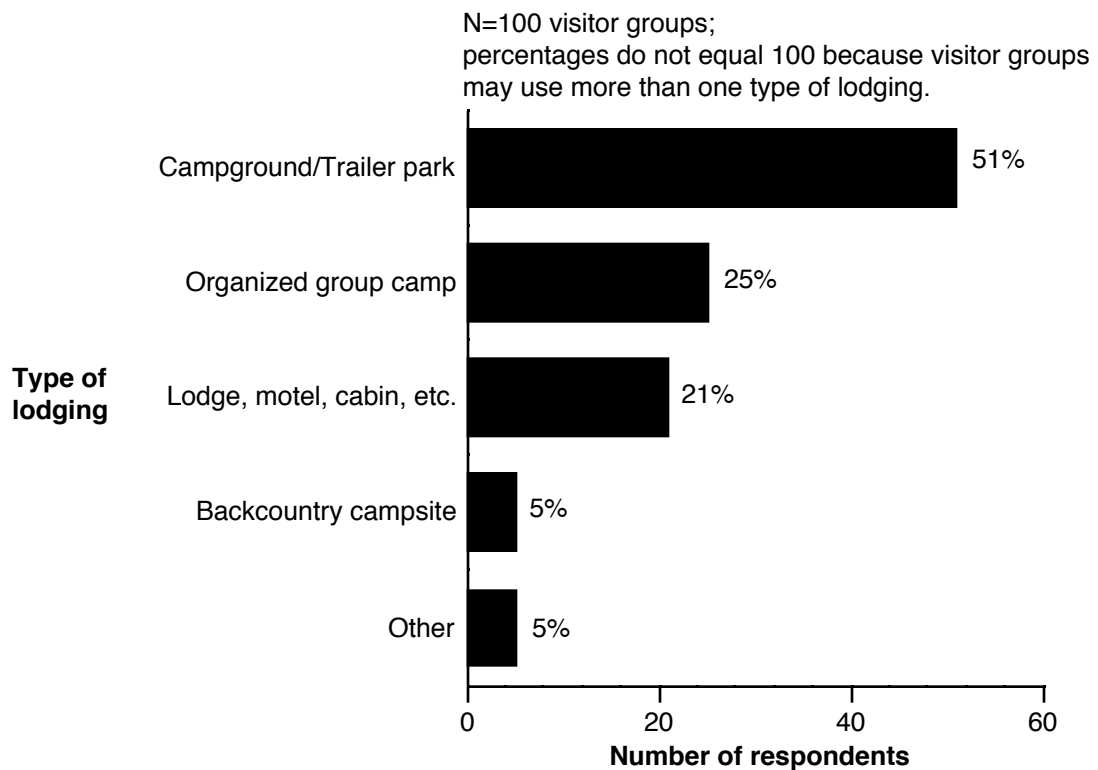


Figure 27: Type of lodging used inside park

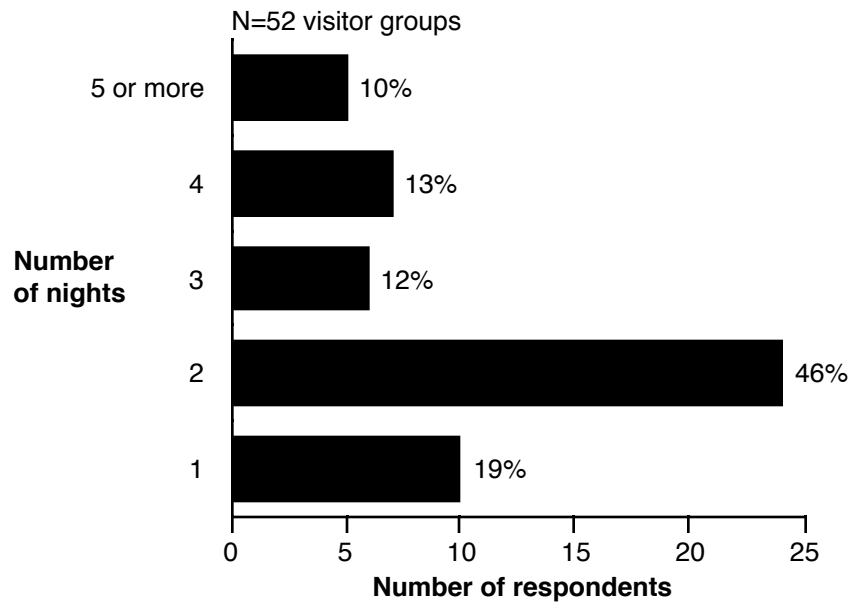


Figure 28: Number of nights outside the park (within 50 miles)

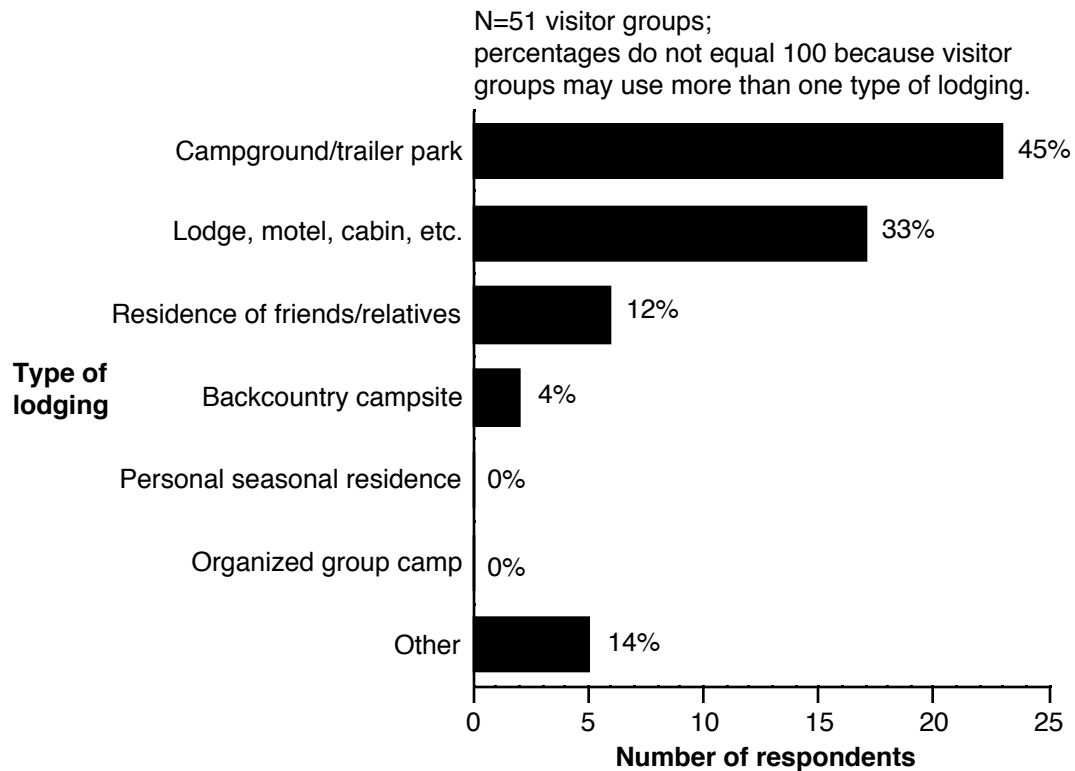


Figure 29: Type of lodging used outside the park (within 50 miles)

Visitor groups were asked: "What community within 50 miles did you use for support services (such as groceries, ice, gas, etc.) during your stay in the park/area?" The community most often used was Thurmont (78%), followed by Frederick (27%), as shown in Figure 30. "Other" communities included Walkersville, Gaithersburg, Cunningham Falls, Waynesburg, Buckeystown, Sabilasville, and Mount Airy.

Overnight stays (continued)

Most visitor groups (94%) were able to obtain all needed services from local communities, although 6% were unable to obtain some services, as shown in Figure 31. The missing services visitors needed included Internet access, cell phone service, guided hikes, boating, pharmacy, shoe store, trail horse rides, boating, tubing, miniature golf, evening recreation, health food store, and restaurant with vegetarian foods.

Finally, visitor groups were asked, "In your opinion, does Catoclin Mountain Park offer enough evening programs/activities for evening users?" There were too few respondents to provide reliable data for this information (see Figure 32).

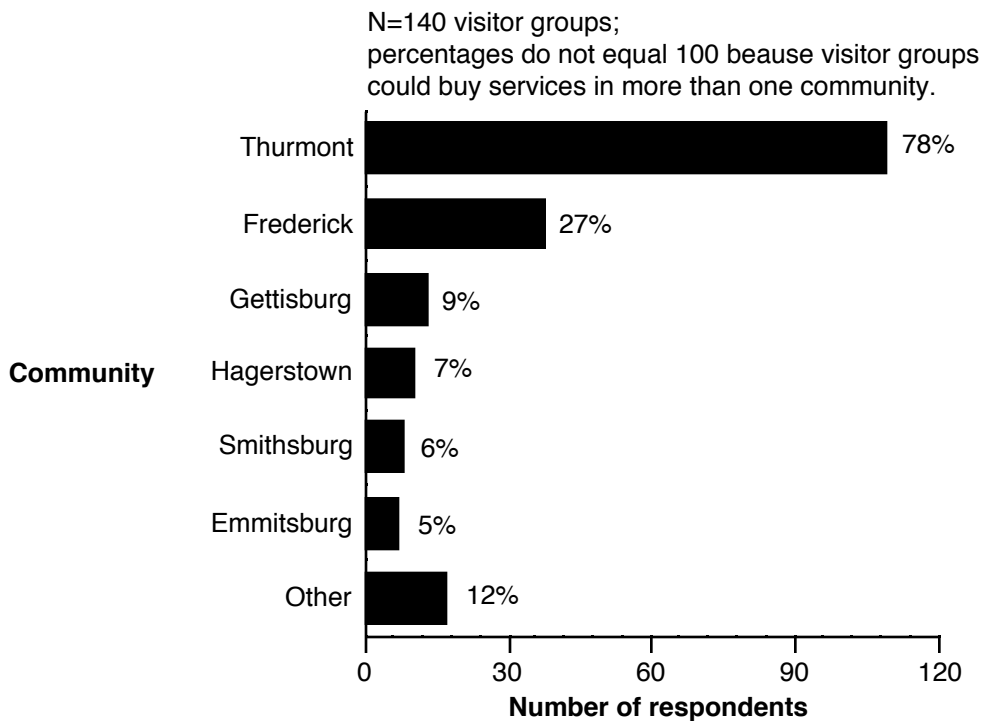


Figure 30: Community used for support services

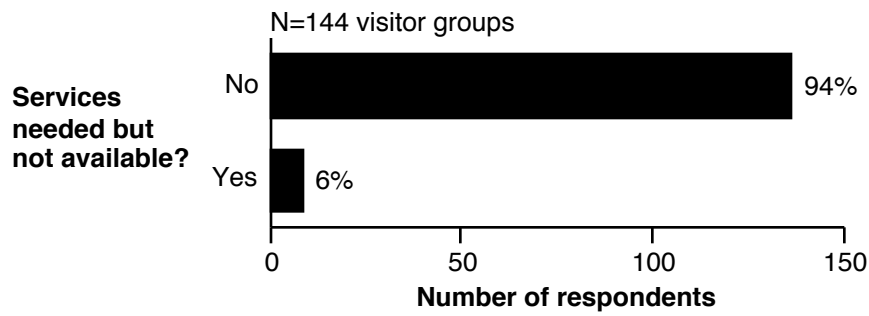


Figure 31: Visitor opinions about whether services were lacking from local communities

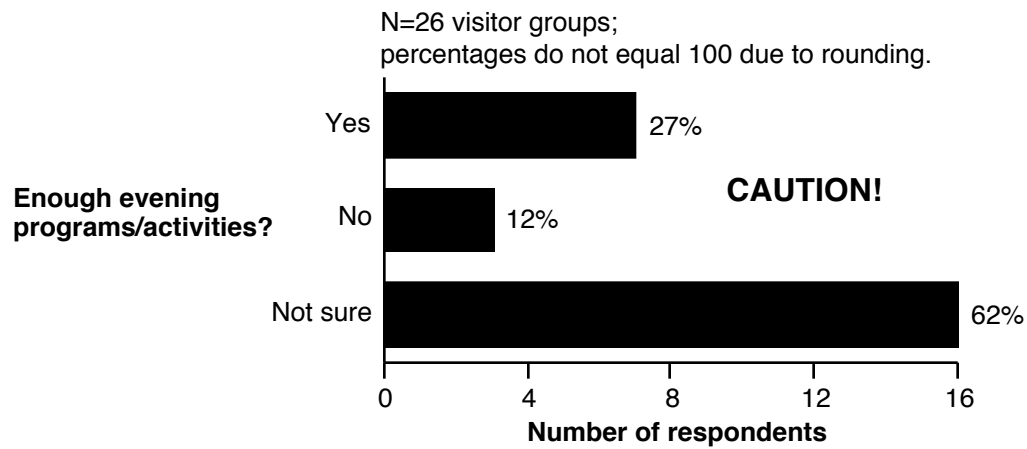


Figure 32: Enough evening programs/activities for overnight users?

Effects of selected elements on park experience

Visitors were asked how certain elements affected their experience at Catoclin Mountain Park. For each of the elements, most visitors responded that there was “no effect” on their visit (see Table 7). The elements that most added to visitors’ experience were parking availability (29%) and air quality (27%). The elements that most detracted from visitors’ experience were unnatural noise (20%), large groups (14%), and closed/restricted areas (11%).

Table 7: Elements' effect on visitor experience in park
percentages may not equal 100 due to rounding.

Element	Number of respondents N	Added to	No effect	Detracted from
		%	%	%
Unnatural noise	423	<1	80	20
Large groups	420	1	85	14
Bus traffic	416	<1	90	10
Parking availability	419	29	63	9
Other visitor's pets	415	8	86	7
Park night lighting	367	4	90	6
Aircraft overflights	404	1	94	6
Closed/restricted areas	405	1	88	11
Air quality	425	27	64	10

Visitor groups were asked to rate the appropriateness of selected activities in Catoctin Mountain Park. As shown in Table 8, the activities receiving the highest “always” appropriate rating were fishing—catch and release (34%), bicycling on road (30%), and controlling the white-tailed deer population (22%). The activities receiving the highest “never” appropriate rating were removal of non-native plants/species (33%), bicycling off road, and fishing—catch and keep (each 19%).

Opinions about appropriateness of activities in park

Table 8: Appropriateness of selected activities in park percentages may not equal 100 due to rounding.					
Activity	Always	Usually	Sometimes	Never	No opinion/ don't know
	%	%	%	%	%
Visitors collecting mushrooms N=440	15	14	15	13	44
Visitors gathering berries N=440	18	15	18	11	37
Removal of non-native plants/species (Japanese barberry, rose, stiltgrass, etc.) N=442	16	10	13	33	29
Control of white-tailed deer population N=435	22	20	28	11	20
Bicycling on road N=441	30	28	18	10	15
Bicycling off road N=441	18	20	27	19	17
Fishing—catch and keep N=438	9	13	37	19	23
Fishing—catch and release N=443	34	24	17	5	20

Ratings of the importance of park elements

Visitor groups were asked to rate the importance of selected Catoclin Mountain Park elements in planning for the preservation of the park for future generations. The following scale was used:

<p>IMPORTANCE 5= extremely important 4= very important 3= moderately important 2= somewhat important 1= not important DK= don't know/no opinion</p>

Figures 32 to 40 show the importance ratings that were provided by visitor groups for each of the individual park elements. The elements receiving the highest proportion of "extremely important" and "very important" ratings included natural quiet/sounds of nature (92%), views without development (89%), and viewing native plants/forest (85%). The highest proportions of "not important" ratings were viewing deer and viewing night sky (each 4%).

Figure 41 combines the "extremely important" and "very important" ratings and compares those ratings for all of the park elements.

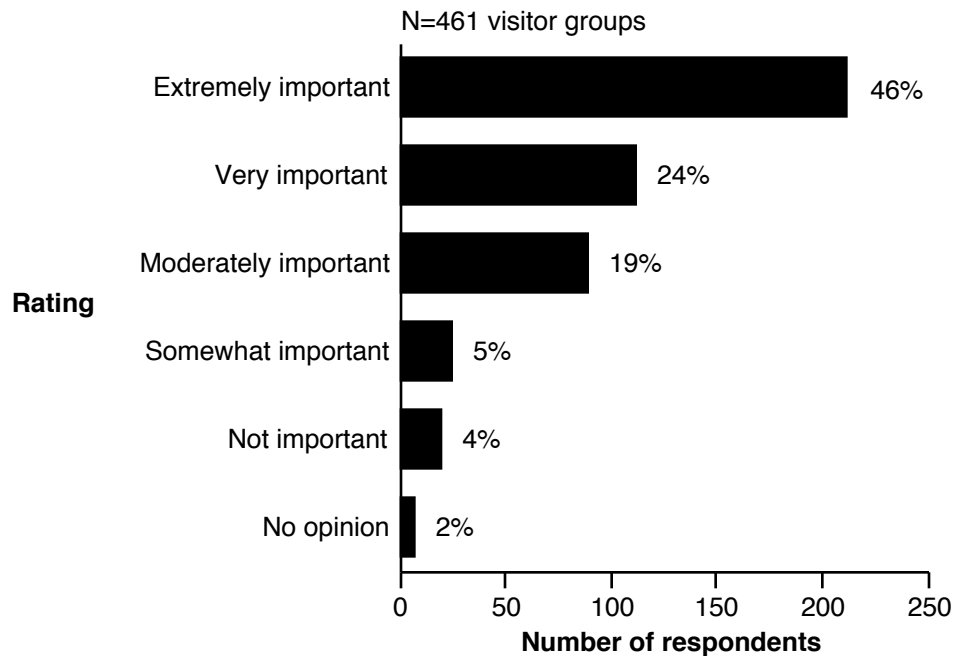


Figure 32: Importance of park element: viewing deer

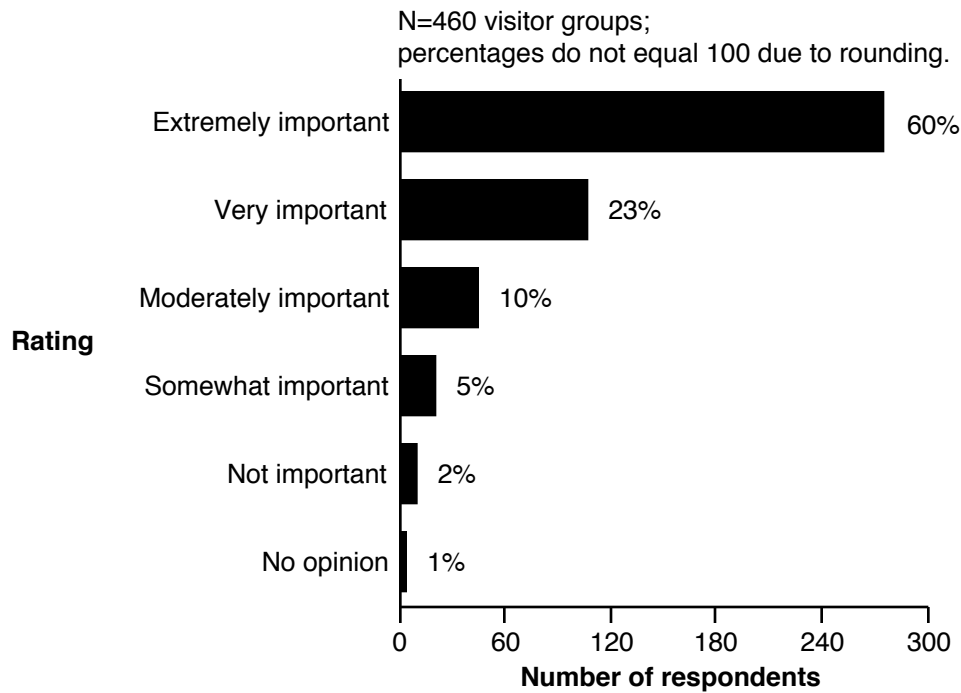


Figure 33: Importance of park element: viewing birds

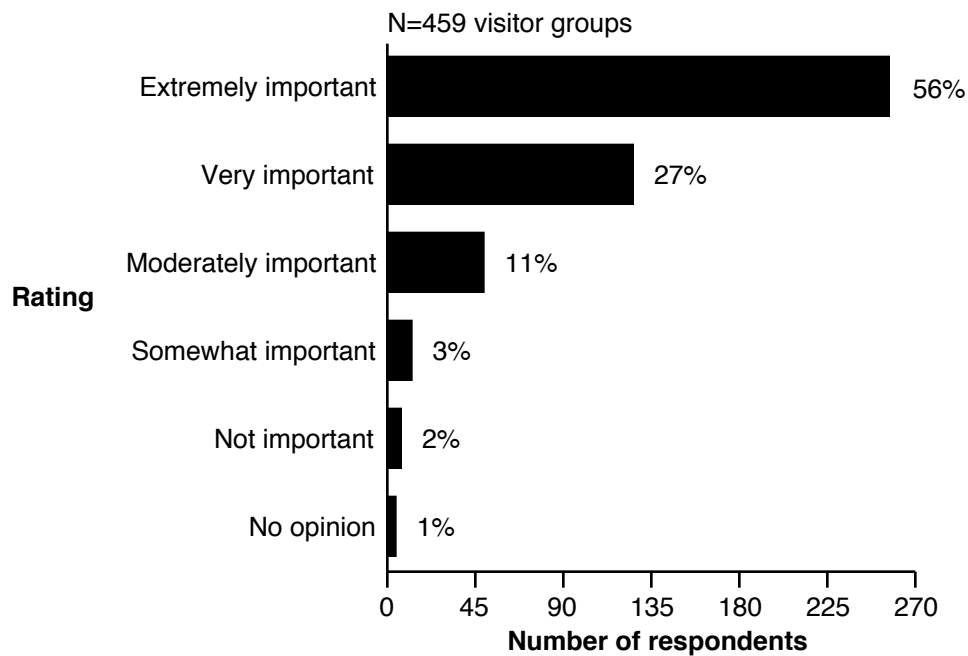


Figure 34: Importance of park element: viewing other native animals

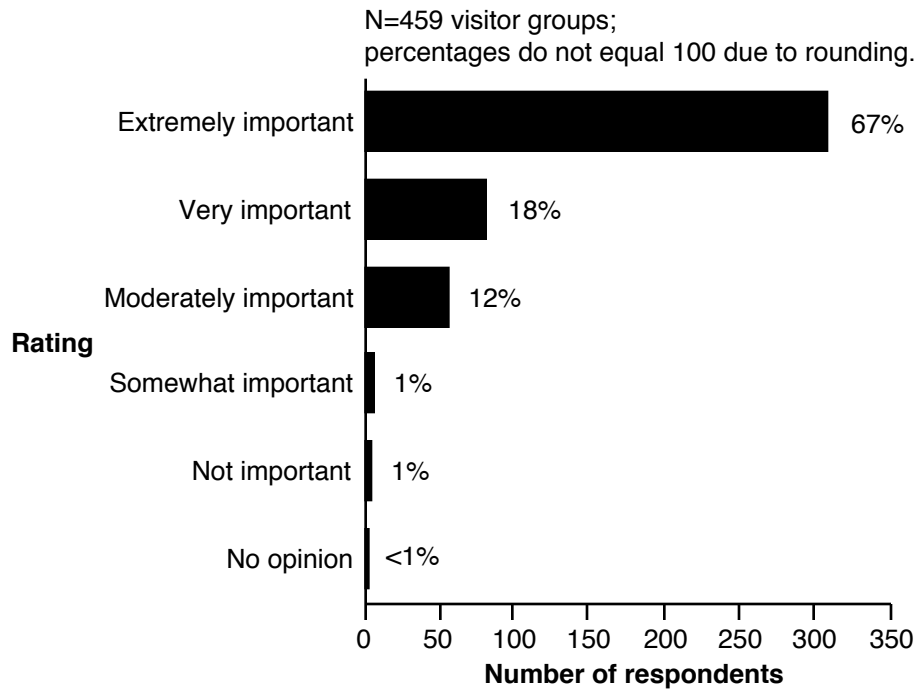


Figure 35: Importance of park element: viewing native plants/forest

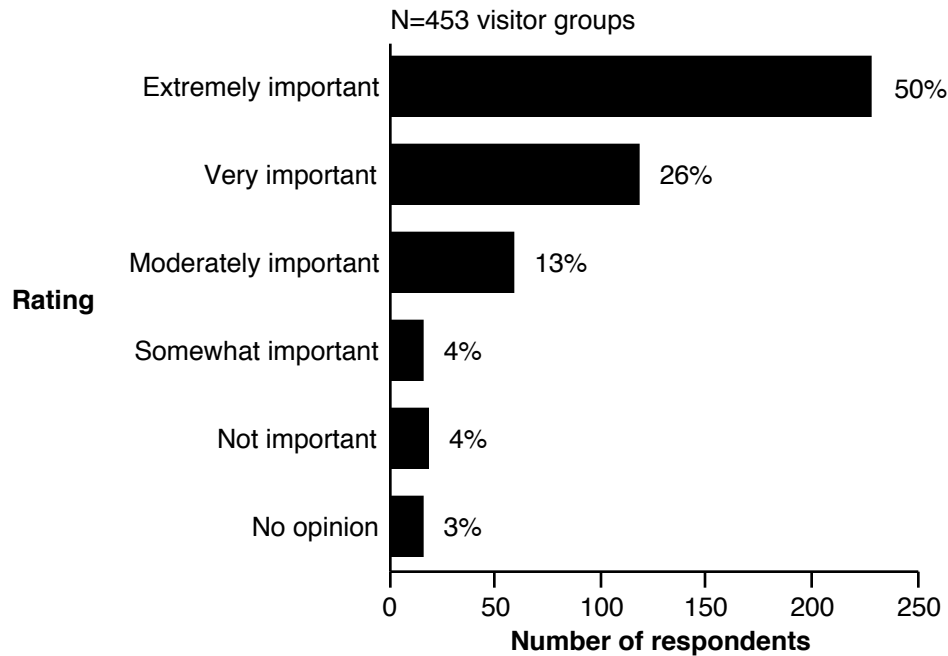


Figure 36: Importance of park element: viewing night sky

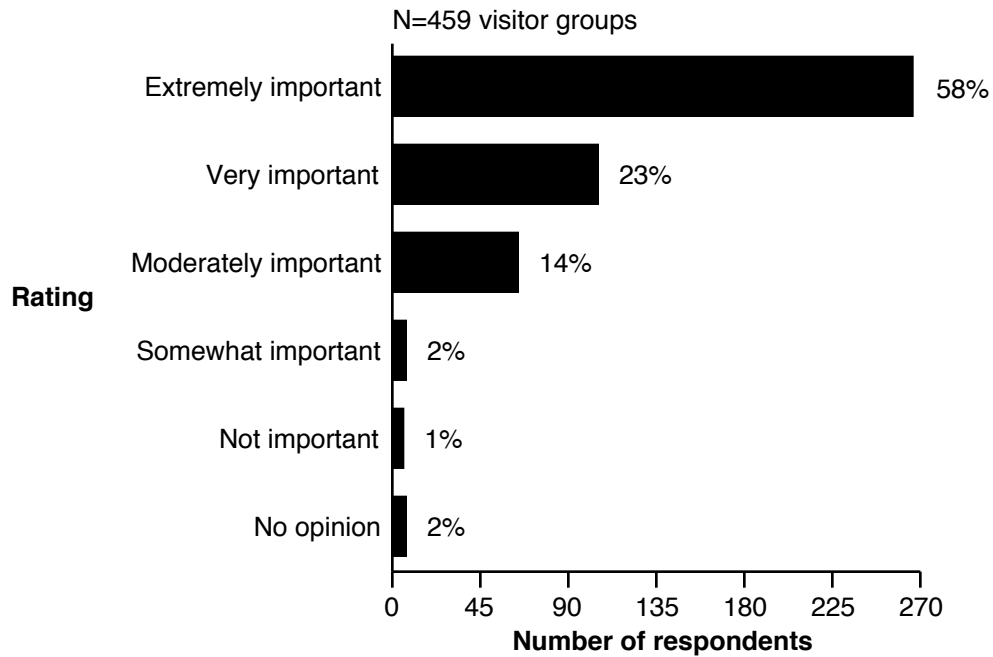
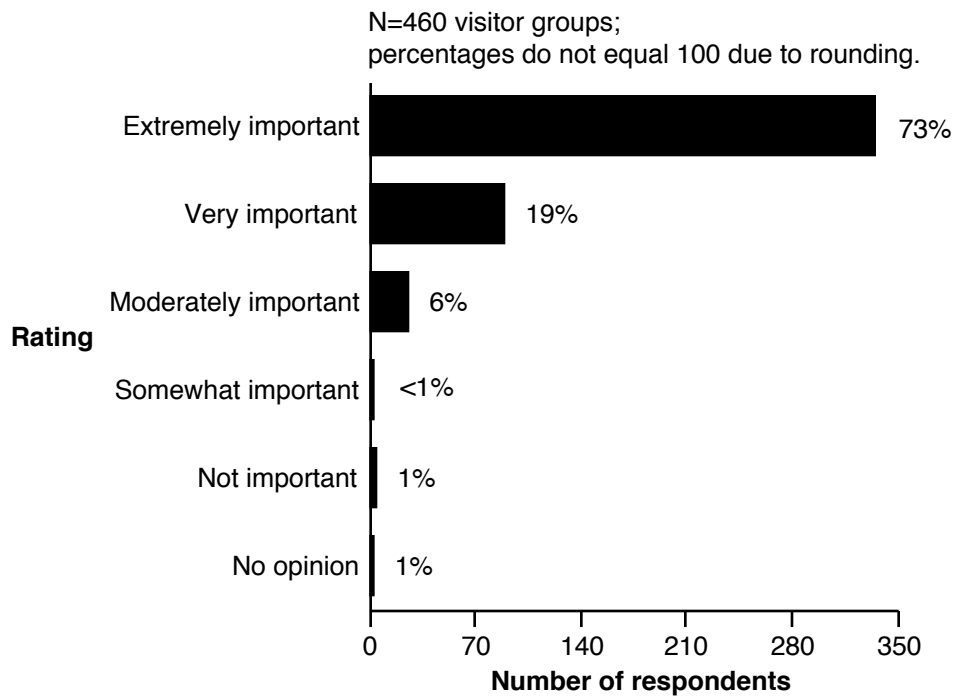


Figure 37: Importance of park element: solitude



**Figure 38: Importance of park element: natural quiet/
sounds of nature**

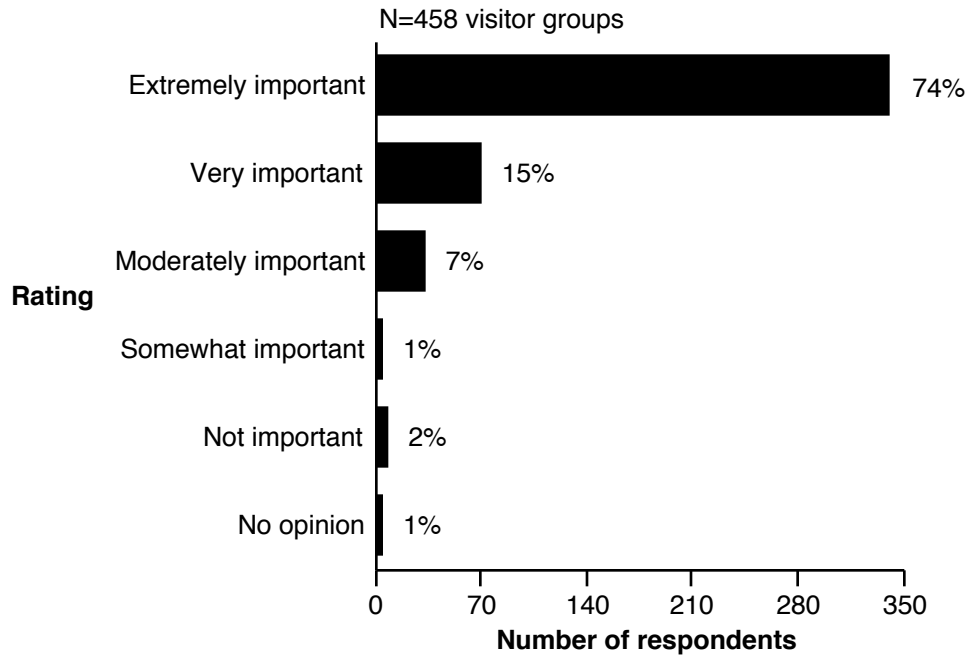


Figure 39: Importance of park element: views without development

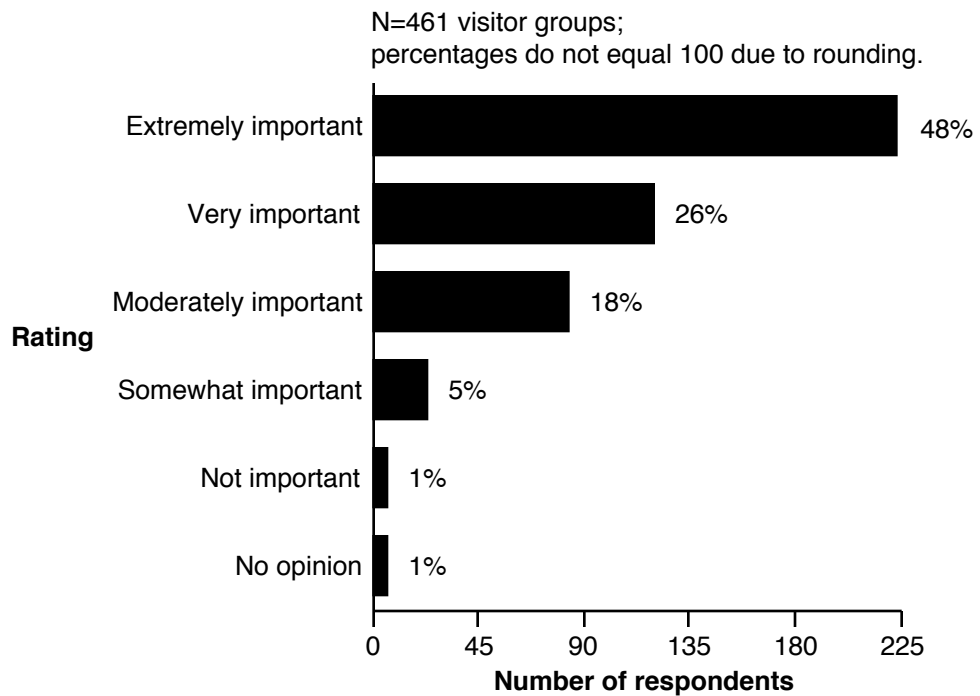


Figure 40: Importance of park element: cultural landscape/historic structures

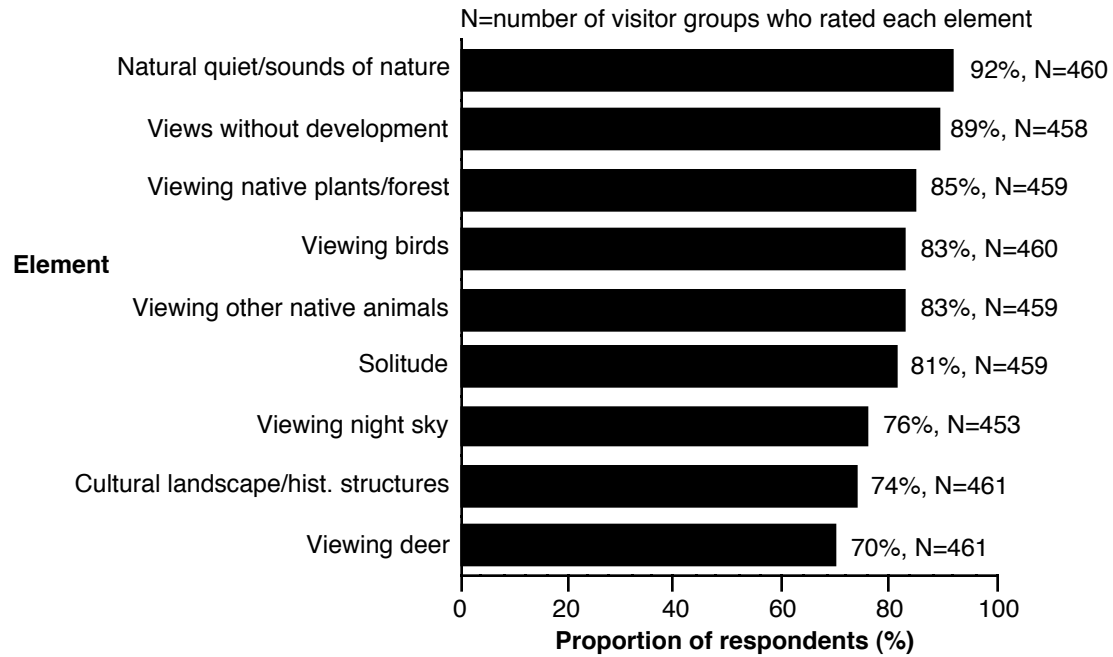


Figure 41: Combined proportions of “extremely important” and “very important” ratings for park elements

Total expenditures

Visitor groups were asked to list the amount of money they had spent both inside Catoctin Mountain Park and the surrounding area (within 50 miles) on this visit. Groups were asked to indicate the amounts they spent for lodging; camping fees; restaurants and bars; groceries and take-out food; gas and oil; other transportation expenses; admissions, recreation, entertainment fees; and all other purchases.

Total expenditures in and out of park: Forty-six percent of visitor groups spent between up to \$50 in total expenditures in Catoctin Mountain Park and the surrounding area (see Figure 48), 17% did not spend any money, and 15% spent between \$51 and \$100. Of the total expenditures by groups, 26% was for lodging, 19% was for groceries and take out food, another 17% was for restaurants and bars, and 15% was for camping fees and charges (see Figure 49).

The average visitor group expenditure during this visit was \$117. The median visitor group expenditure (50% of groups spent more and 50% of groups spent less) was \$25. The average per capita expenditure was \$34.

In addition, visitors were asked to list the number of adults (18 years and older) and children (under 18 years) were covered by their expenditures. Figure 50 shows that 59% of the visitor groups had two adults. Figure 51 show that 49% of the visitor groups had one or two children under 18 years of age.

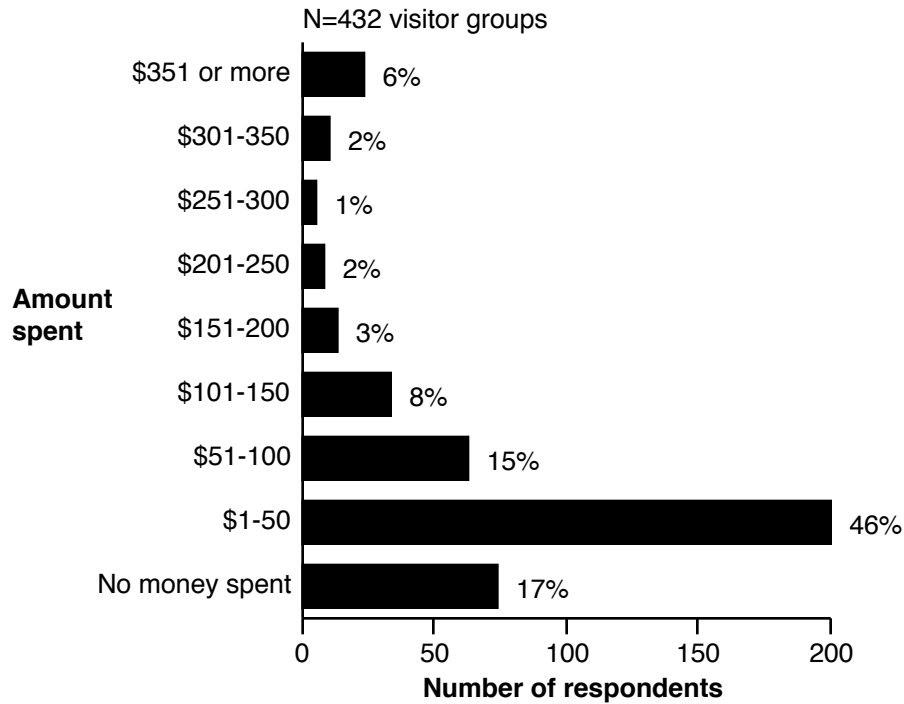


Figure 48: Total expenses in and out of Catoclin Mountain Park

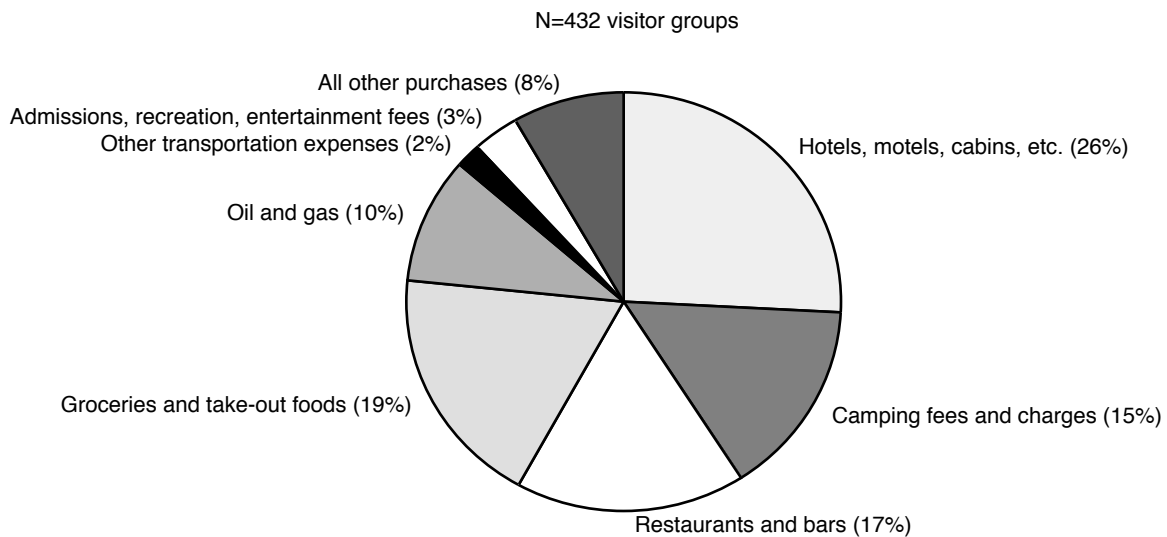


Figure 49: Proportions of expenditures in and out of Catoclin Mountain Park

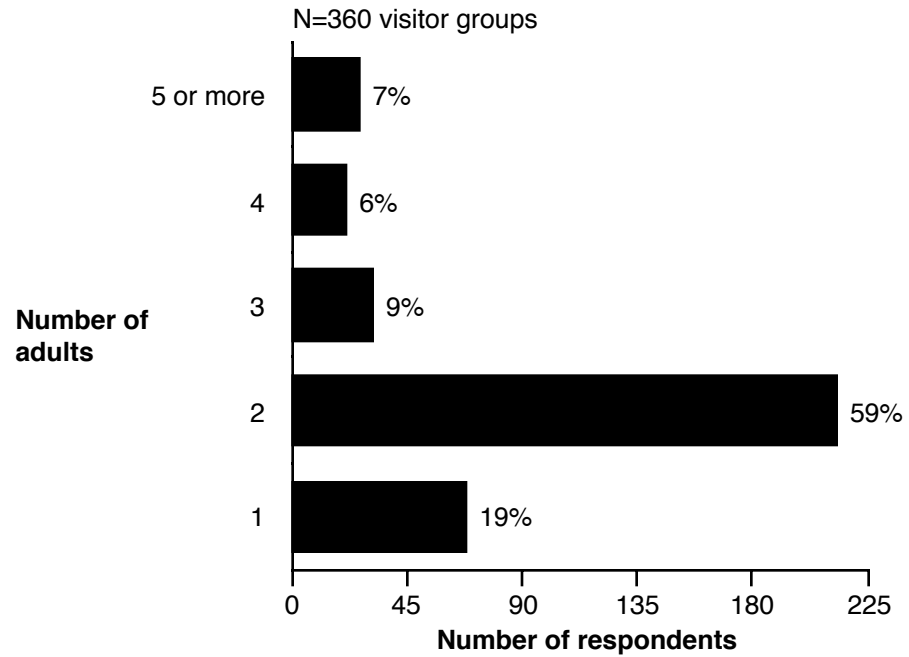


Figure 50: Number of adults covered by expenses

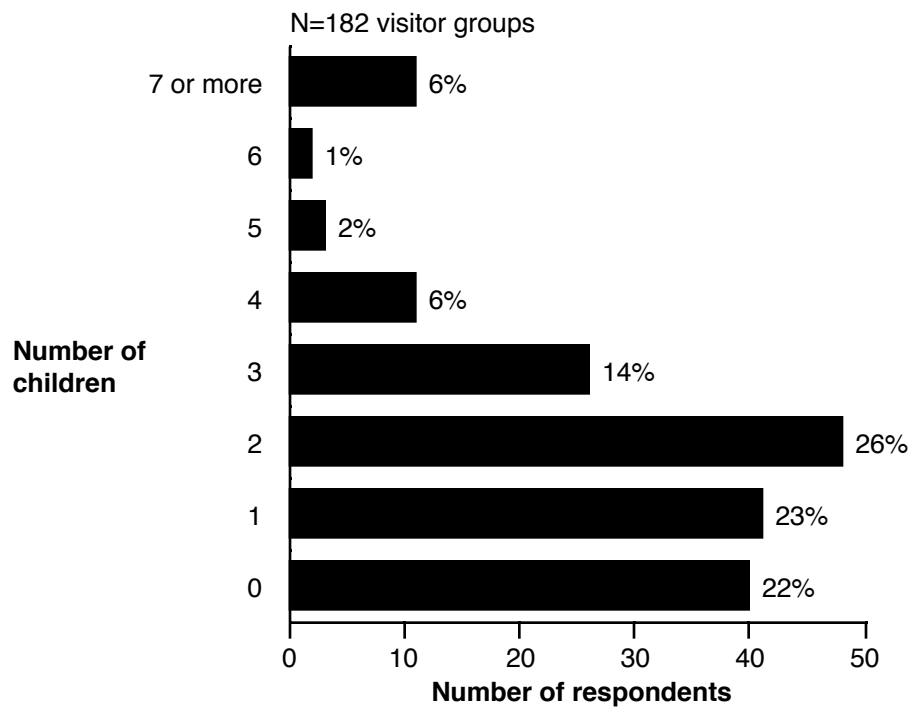


Figure 51: Number of children covered by expenses

Total expenditures in the park: Sixty-five percent of visitor groups did not spend any money and 17% spent up to \$25 in total expenditures in the Catoclin Mountain Park on this visit (see Figure 52).

Expenditures inside park

Camping fees and charges accounted for 58% of total expenditures in the park, followed by lodges, hotels, motels, cabins, B&B, etc. (35%), as shown in Figure 53.

The average visitor group expenditure in the park during this visit was \$32. The median visitor group expenditure (50% of groups spent more and 50% of groups spent less) was \$0. The average per capita expenditure was \$20.

Lodges, hotels, motels, cabins, B&B, etc.: Most visitor groups (93%) did not spend any money inside the park, as shown in Figure 54.

Camping fees and charges: Eighty percent of visitor groups did not spend any money in Catoclin Mountain Park (see Figure 55).

All other purchases: Sixty-nine percent of visitor groups did not spend any money in the park; 26% spent between \$1 and \$20 (see Figure 56).

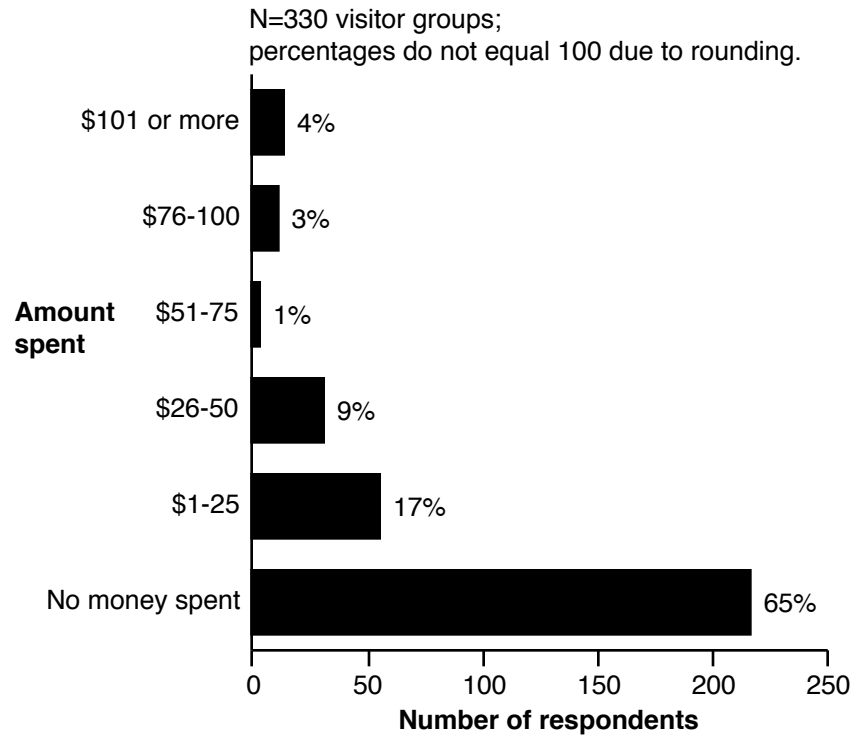


Figure 52: Total expenditures in park

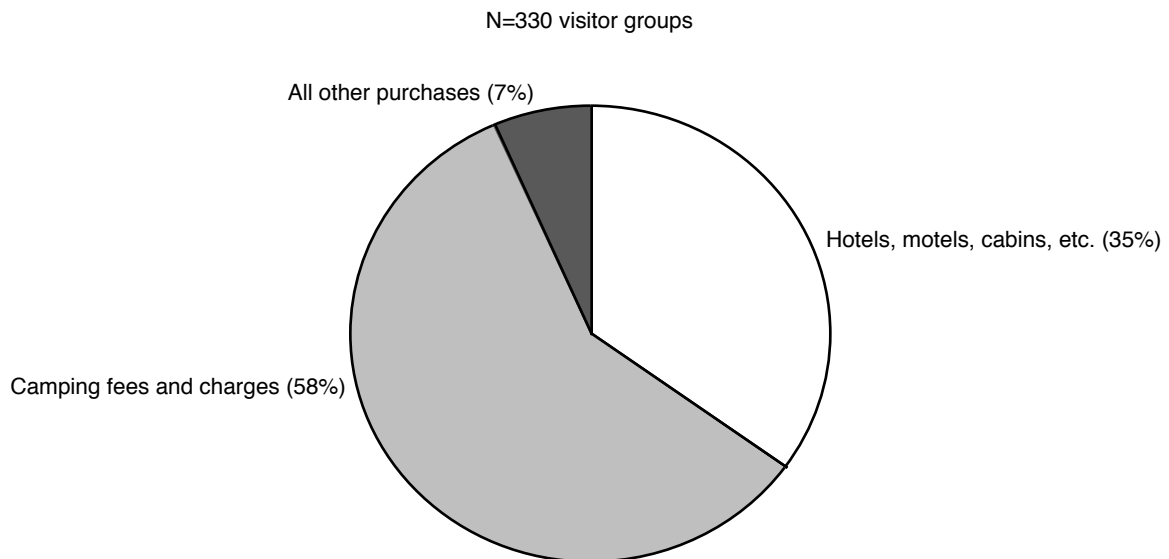


Figure 53: Proportion of expenditures in park

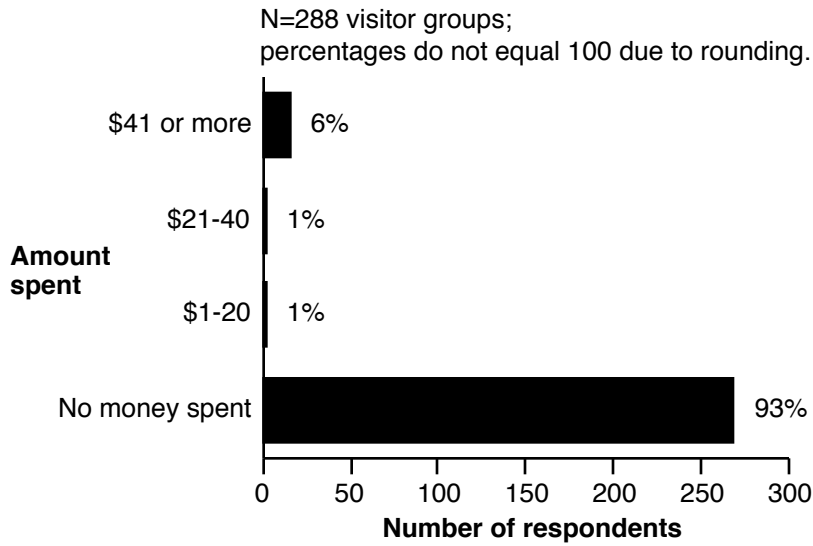


Figure 54: Expenditures lodges, hotels, motels, cabins, B&B, etc. in park

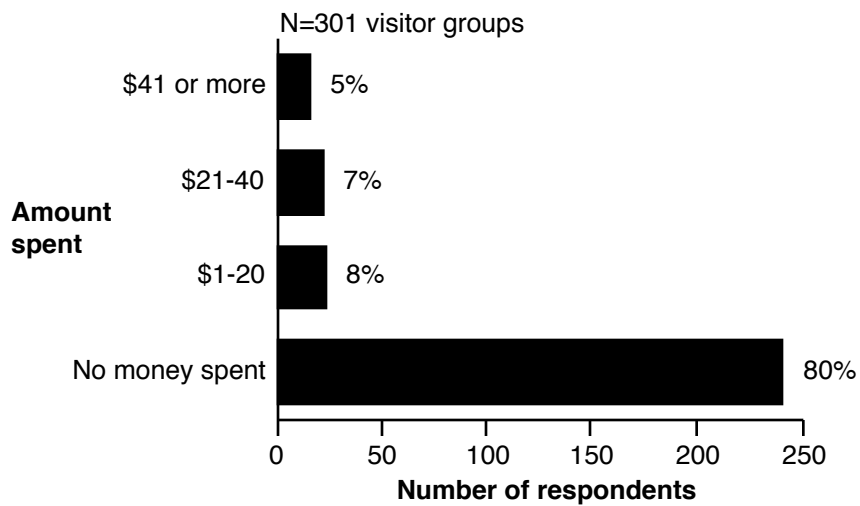


Figure 55: Expenditures for camping fees and charges in park

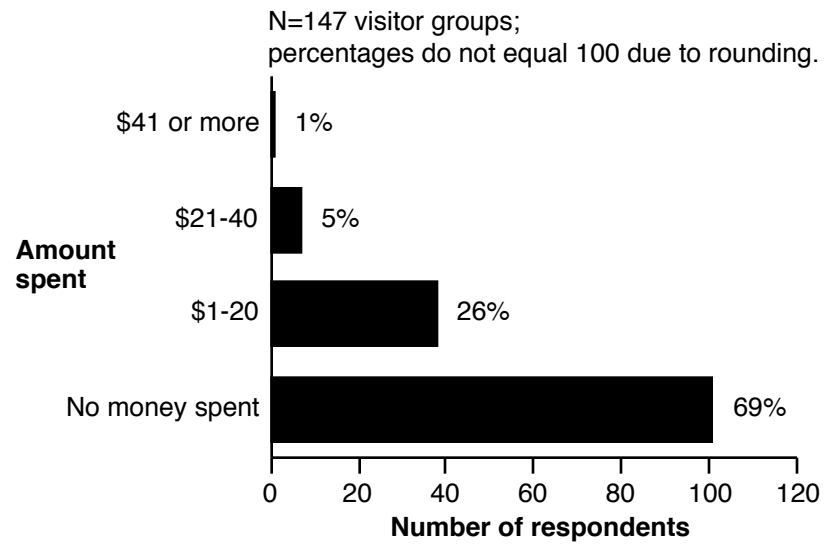


Figure 56: Expenditures for all other purchases in park

**Expenditures
outside park**

Total expenditures outside the park (within 50 miles): Fifty-two percent of visitor groups spent up to \$50 and 17% did not spend any money in total expenditures out of the park but within 50 miles during this trip (see Figure 57).

Lodging accounted for 23% of total expenditures out of the park, another 23% for groceries and take-out foods, followed by 22% for restaurants and bars, as shown in Figure 58.

The average visitor group expenditure in the park during this visit was \$94. The median visitor group expenditure (50% of groups spent more and 50% of groups spent less) was \$23. The average per capita expenditure was \$36.

Hotels, motels, cabins, etc. out of the park: Most visitor groups (88%) did not spend any money (see Figure 59).

Camping fees and charges out of the park: Most visitor groups (91%) did not spend any money (see Figure 60).

Restaurants and bars out of the park: Fifty-six percent of visitor groups did not spend any money, while 30% spent up to \$40 (see Figure 61).

Groceries and take-out food out of the park: Forty-four percent of visitor groups did not spend any money, 33% spent up to \$20, as shown in Figure 62

Gas and oil out of the park: Forty-seven percent of visitor groups spent up to \$20, while 37% did not spend any money (see Figure 63).

Other transportation expenses out of the park: As shown in Figure 64, most of visitor groups (97%) did not spend any money.

Admissions, recreation, and entertainment fees out of park: Most visitor groups (75%) did not spend any money, while 18% spent up to \$20 (see Figure 65).

Other purchases out of park: Most visitor groups (74%) did not spend any money (see Figure 66).

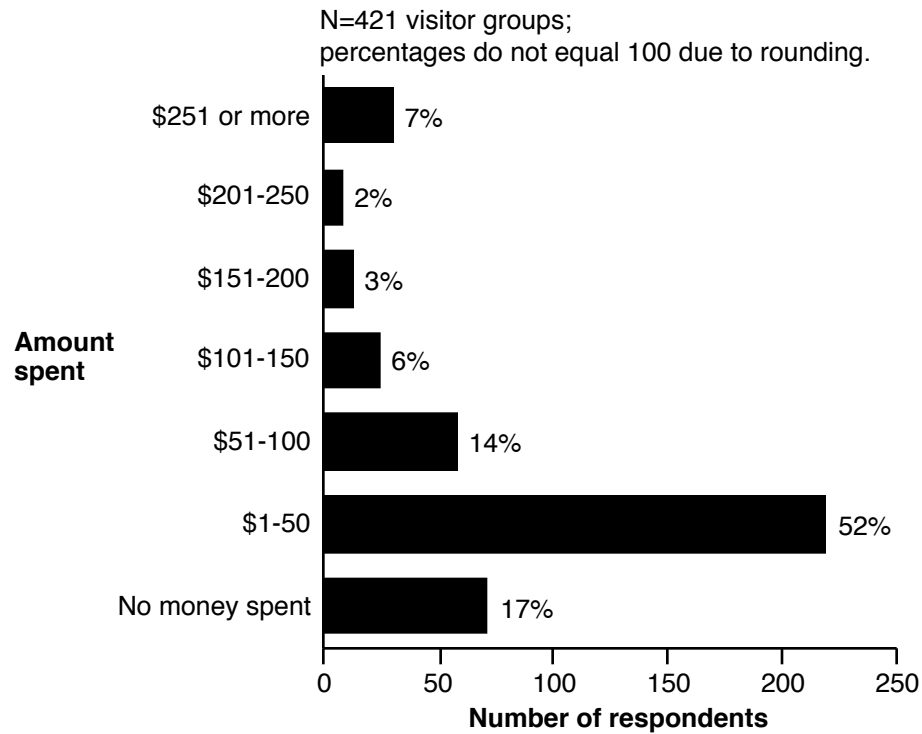


Figure 57: Total expenditures out of park

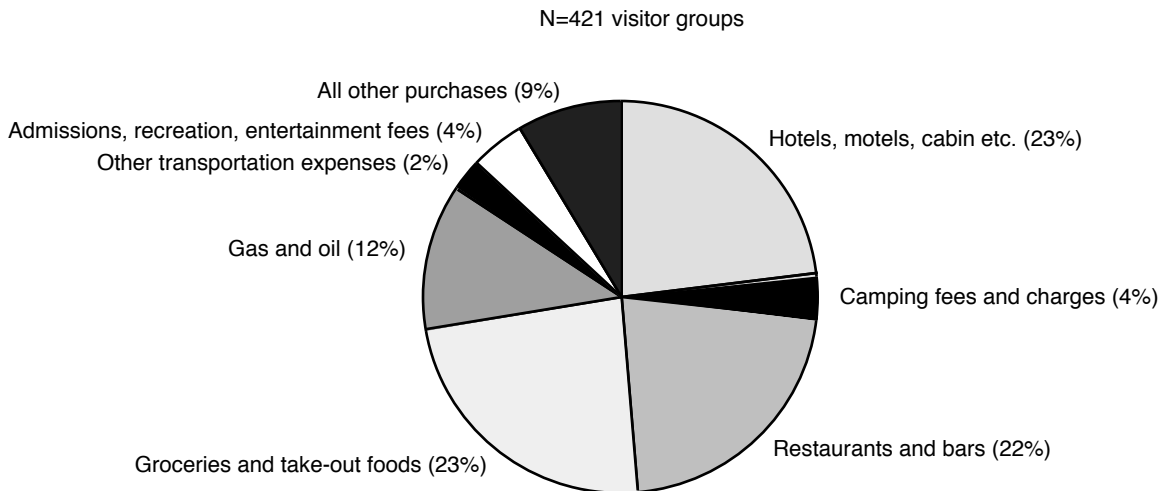


Figure 58: Proportion of expenditures out of park

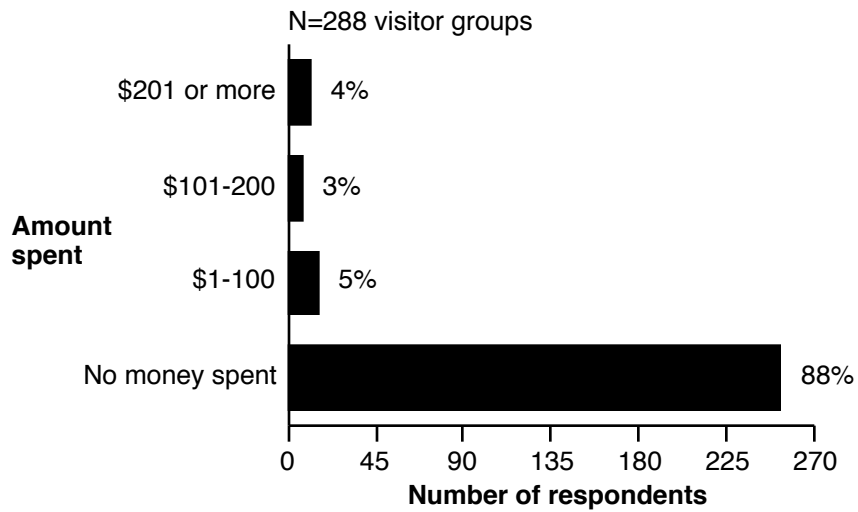


Figure 59: Expenditures for hotels, motels, cabins, B&B, etc. out of park

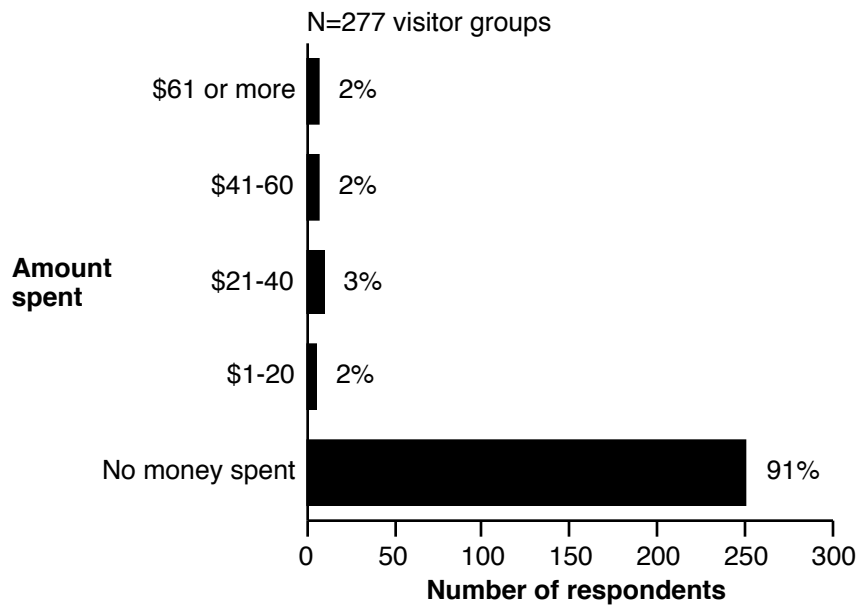


Figure 60: Expenditures for camping fees and charges out of park

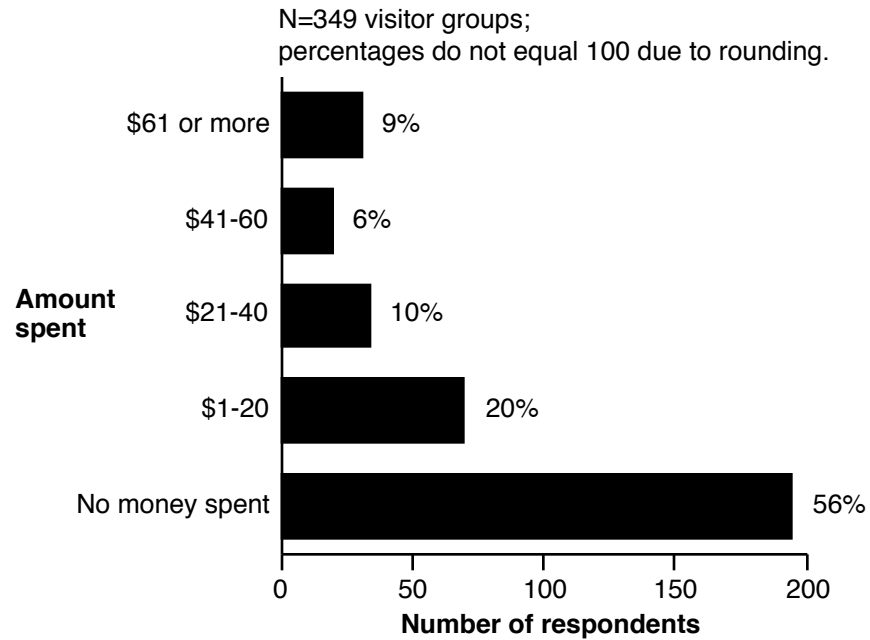


Figure 61: Expenditures for restaurants and bars out of park

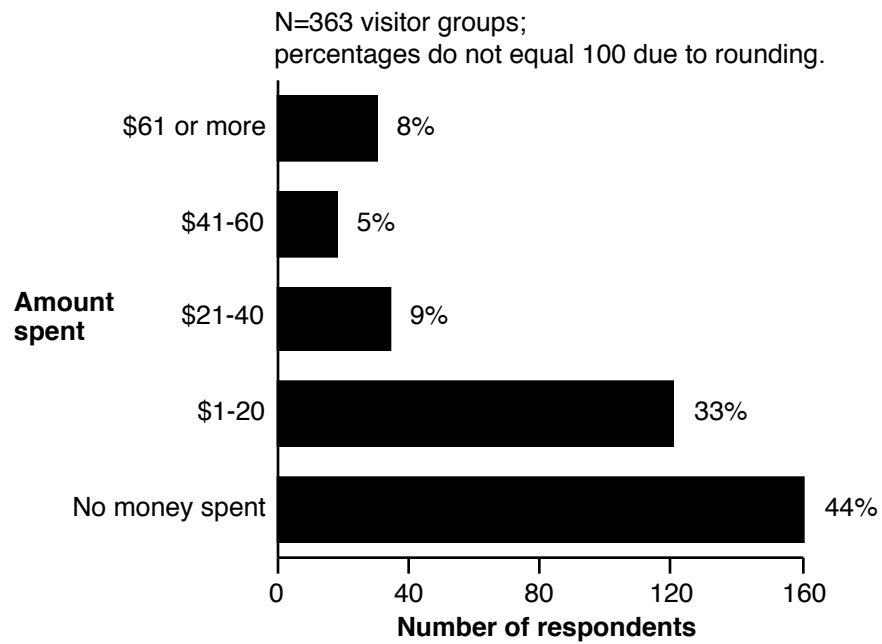


Figure 62: Expenditures for groceries and take-out food out of park

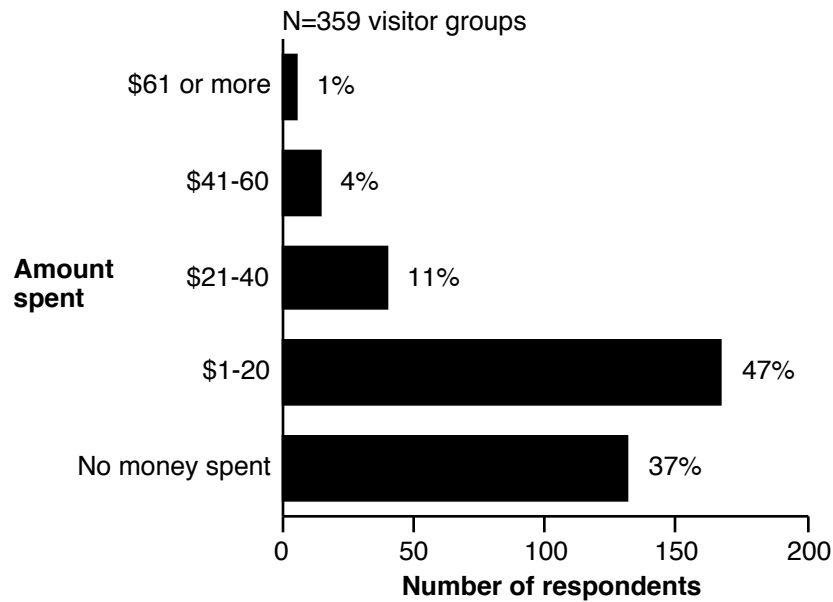


Figure 63: Expenditures for gas and oil out of park

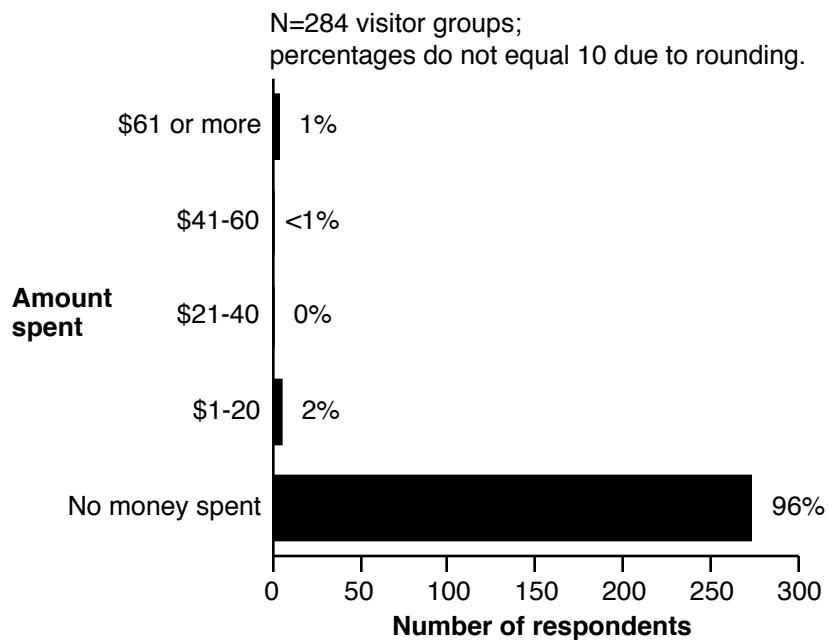


Figure 64: Expenditures for other transportation expenses out of park

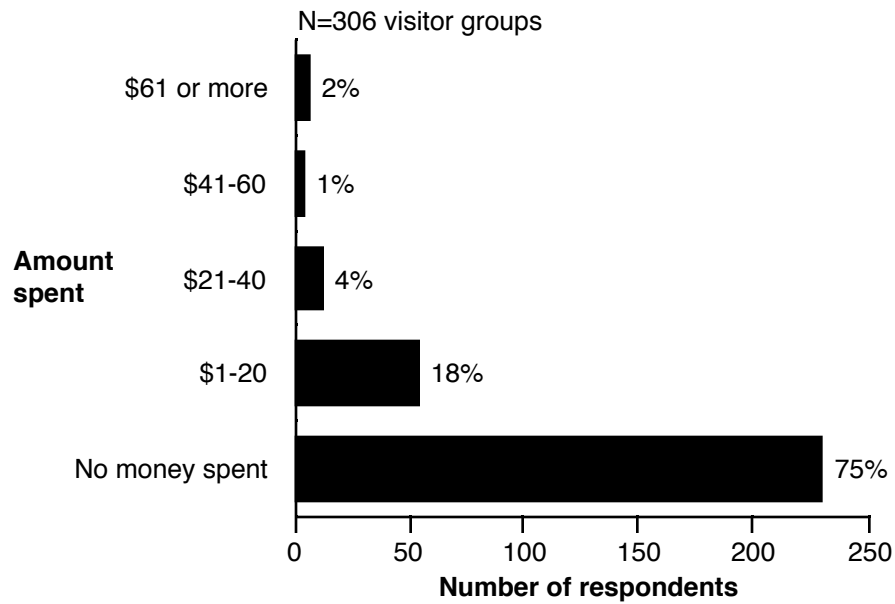


Figure 65: Expenditures for admissions, recreation, and entertainment fees out of park

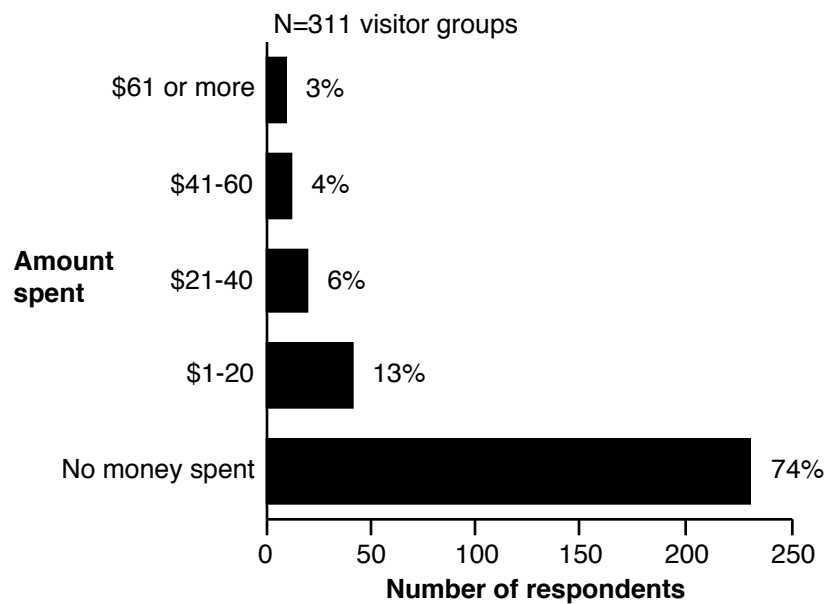


Figure 66: Expenditures for all other purchases out of park

**Opinions
about safety**

Visitors were asked how safe they felt from crime and accidents during this visit to Catoctin Mountain Park. Figures 42-44 show visitor opinions concerning their personal safety and property safety from crime and accidents in the park. Seventy percent of visitor groups felt “very safe” from crime, 64% felt their personal property was “very safe” from crime, and 52% rated their personal safety from accidents in the park as “very safe.” A small proportion of visitor groups (1% each) felt that each of these was “very unsafe” in the park.

If they answered that they felt “very” or “somewhat” unsafe in the park, visitors were asked to explain why they felt that way (see Table 9)

Visitors were also asked: “In preparing for this trip, what safety measures did you and your group take?” Table 10 summarizes comments from 229 visitor groups (49%).

Finally, visitor groups were asked how safe they felt in their home town/city regarding personal property safety from crime, personal safety from crime, and personal safety from accidents. Figures 45-47 show that 27% of visitor groups felt “very safe” from crime, 24% felt “very safe” from accidents, and 22% felt their personal property was “very safe” from crime in their home town/city. Seventeen percent of visitor groups felt “somewhat” or “very” unsafe about their personal property safety from crime. In their home town/city, some visitors felt “somewhat” or “very” unsafe about personal safety from accident (18%) and personal safety from crime (16%).

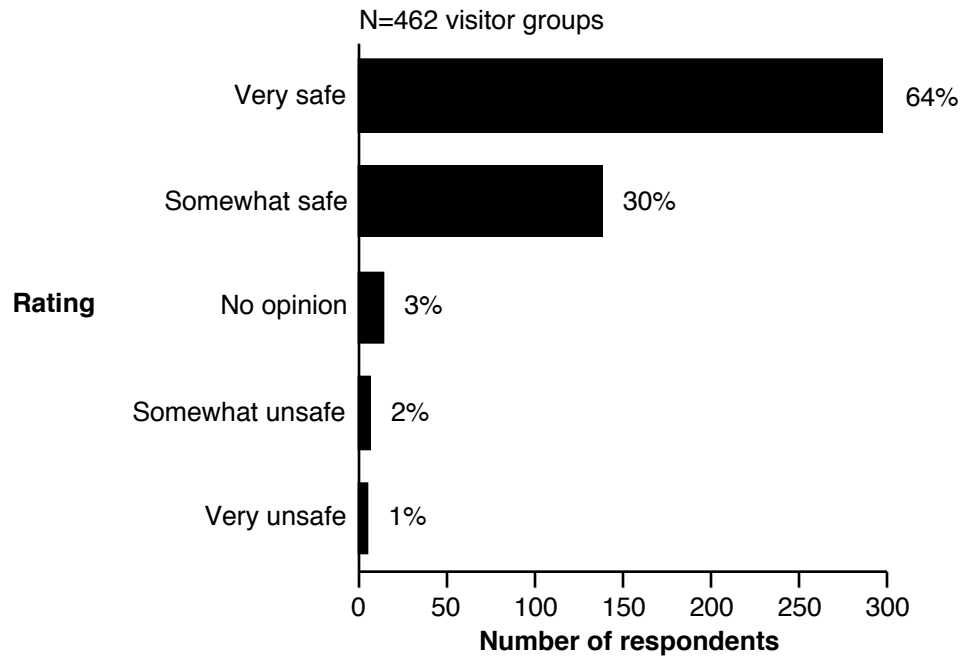


Figure 42: Opinions about personal property safety—from crime in park

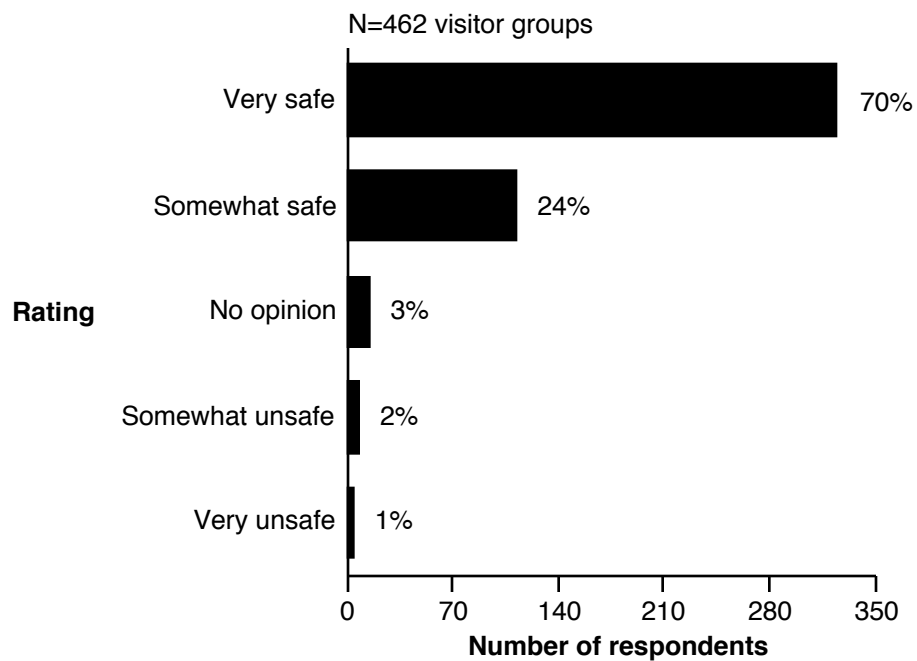


Figure 43: Opinions about personal safety—from crime in park

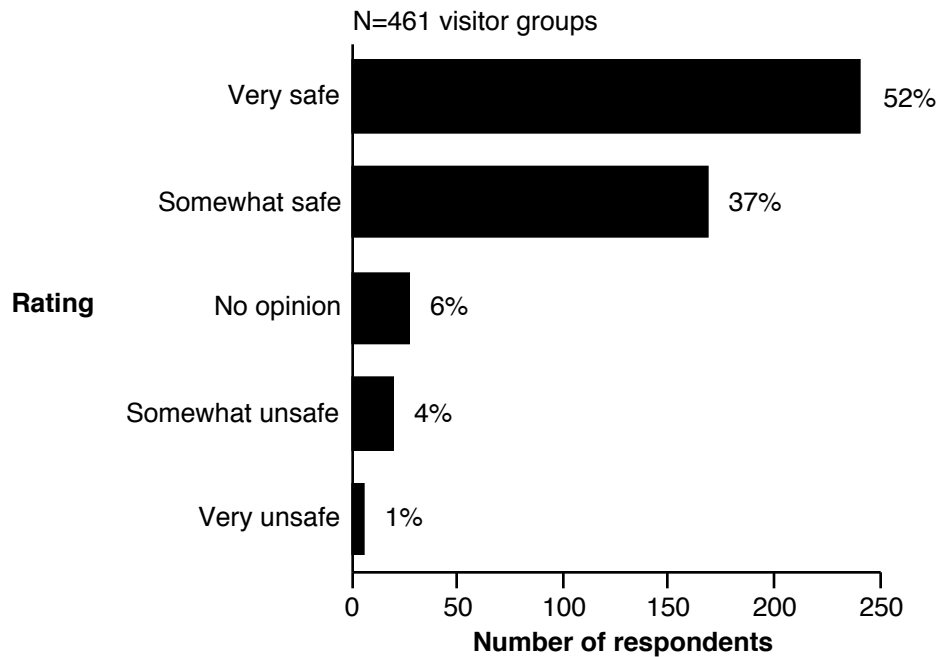


Figure 44: Opinions about personal safety—from accidents in park

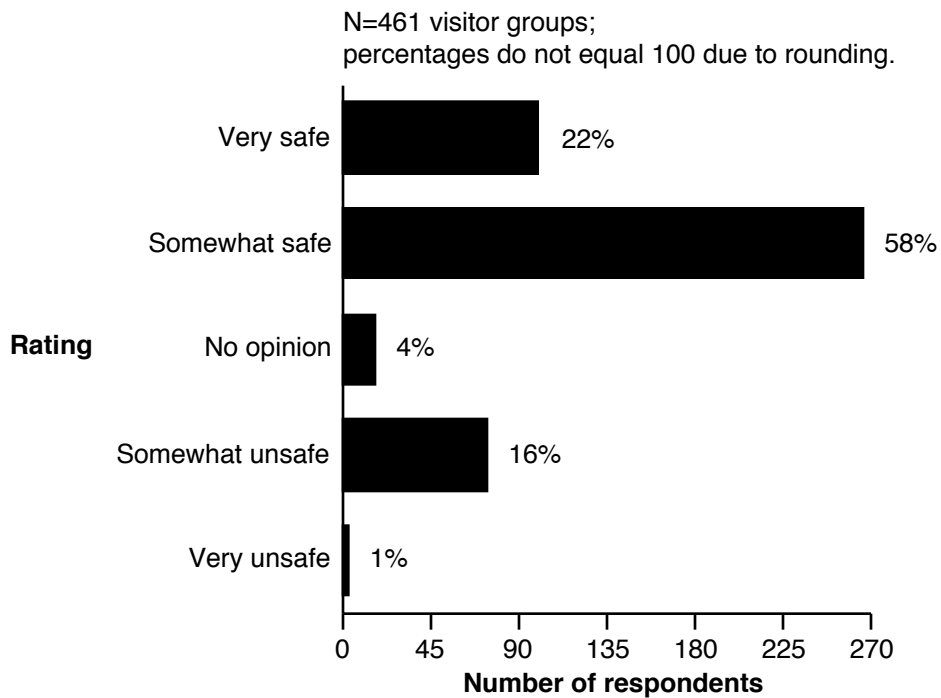


Figure 45: Opinions about personal property safety—from crime in home town/city

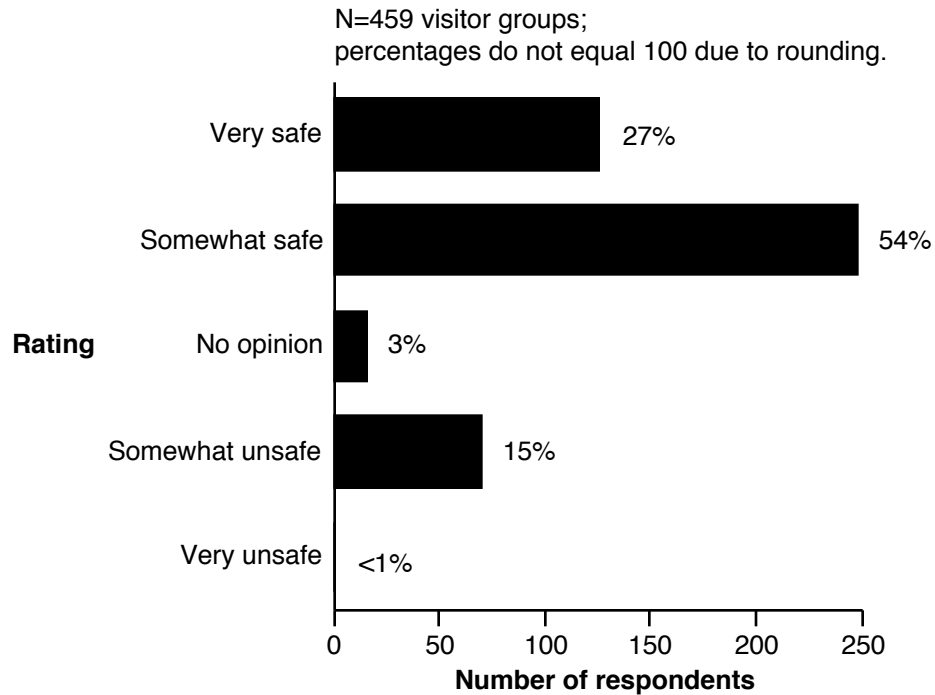


Figure 46: Opinions about personal safety—from crime in home town/city

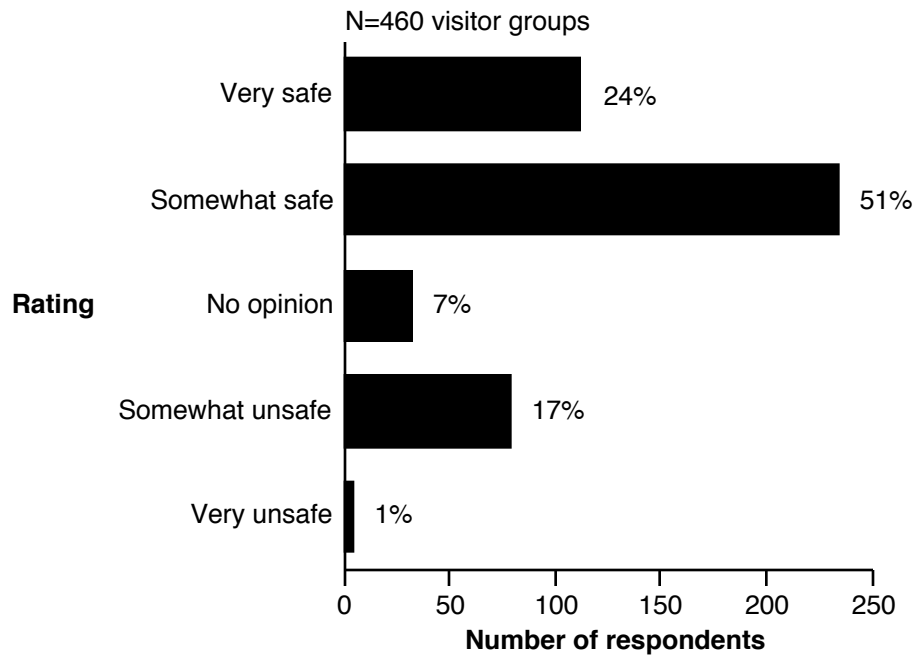


Figure 47: Opinions about personal safety—from accidents in home town/city

Table 9: Reasons visitors felt “somewhat” or “very” unsafe in park

N=32 comments

Comments	Number of times mentioned
Rt. 77 is very dangerous	5
Always feel unsafe when there are lots of people	4
Other drivers speeding	3
Unsecured parking areas	3
Curvy, narrow road	3
Had to park vehicle away from camp area	2
Always have to be careful when traveling with small children	2
Dangerous for people to hike/bike on the roads	2
Wolf Rock was very scary with crevices	2
No locker at pool for valuable property	1
Campsites extremely dark at night	1
Unsafe to walk alone through park	1
Dangerous road crossing between Catoclin and Cunningham Falls at Chimney Rock access	1
Trails are too rocky	1
Lack of park staff presence	1

Table 10: Safety measures taken to prepare for the trip

N=393 comments;
some visitors made more than one comment.

Comments	Number of times mentioned
Carried water	54
Brought first aid kit	52
Always locked car/cabin doors	42
Brought a cell phone	26
Brought appropriate footwear	26
Brought bug spray/insect repellent	17
Brought proper clothing	16
Hid valuables	14
Stayed in groups	13
Brought food	13
Warned kids about being cautious and supervised them	11
Brought sunscreen gear (sunblock, hats, eyeglasses)	9
Brought flashlight	9
Left valuable personal property at home	7
Being aware of surroundings	7
Made people aware of our plans	6
Necessary maps	6
Controlled campfire	5
Wore seatbelts	5
Brought helmets	4
Brought a compass	4
Brought enough gas and oil for car	4
Carried whistle	4
Learned/reviewed hiking rules	4
Followed trails	4
Brought car safety kit	3
Carried survival kit	3
Packed rain protection gear	3
Carried pepper spray	3
Packed matches/lighter	3
Packed walkie-talkies	2
Read park publication on rattlesnakes	2
Drove at proper speed	2
Did not take any safety measures	5
Others	5

Visitors were asked a series of questions about attending ranger programs on a future visit. Forty percent of visitor groups indicated that they were interested in ranger programs on a future visit; 60% were not, as shown in Figure 67. Those who were interested in ranger programs were then asked to prioritize (list 1, 2, 3, etc.) the audiences for which they would like to have programs presented. All family members, children only, and adults were ranked as the first, second and third priority audiences (see Figures 68 to 71). The “other” type of audiences included scouts, pre-arranged groups, youth group, nature hikes, and anyone who requested.

Opinions about future ranger programs

Visitor groups were then asked the length of program they would most prefer. Most visitor groups (69%) preferred 1/2-1 hour programs, 21% preferred under 1/2 hour, and 10% preferred 1-2 hours long programs (see Figure 72).

Finally, visitor groups were asked the time of day and the day(s) of the week that are best to hold programs. Most visitor groups (39%) preferred to hold programs in the afternoon (1-4 p.m.), while 33% preferred morning (9 a.m. to Noon), and 28% preferred evening (6-9 p.m.), as shown Figure 73. Figure 74 shows that the most preferred days of the week to hold programs were Saturday (90%), and Sunday (69%), followed by Friday (47%).

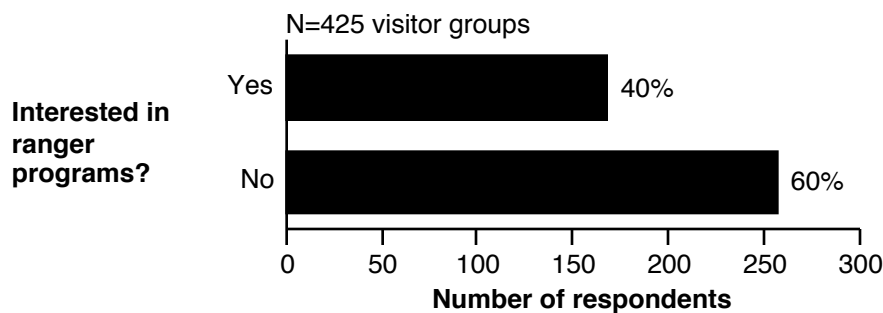


Figure 67: Visitor interest in ranger programs

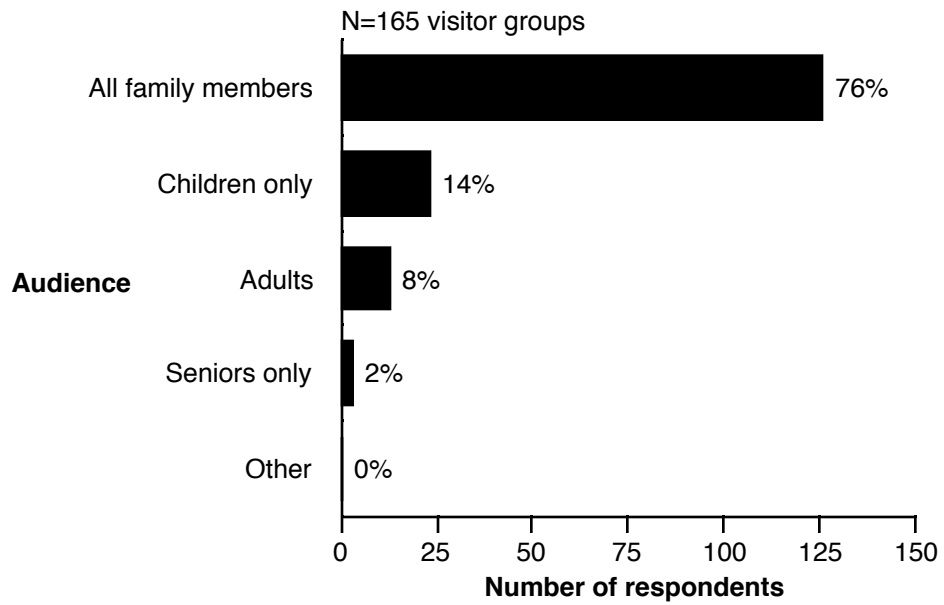


Figure 68: The first priority audiences

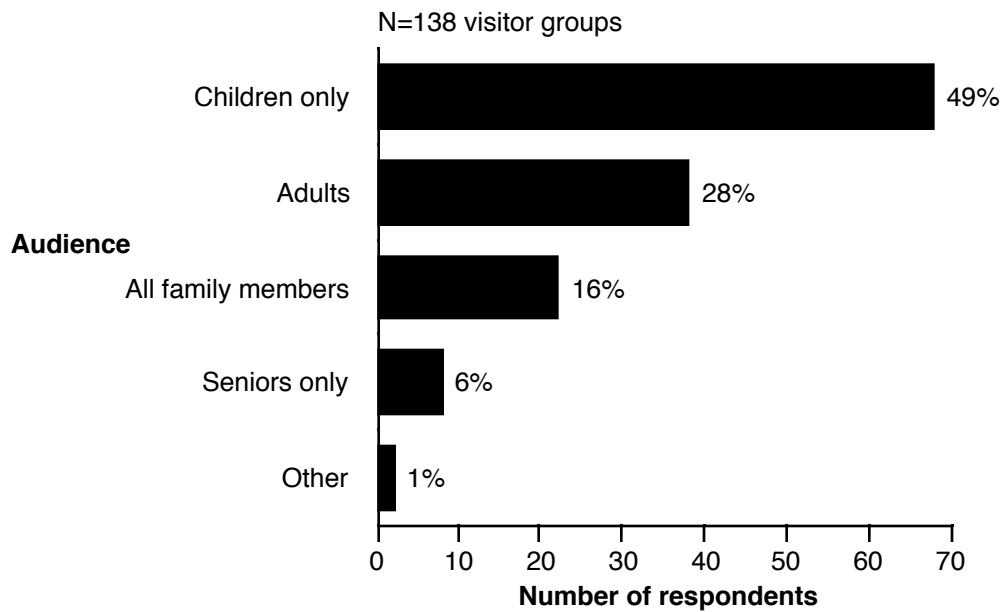
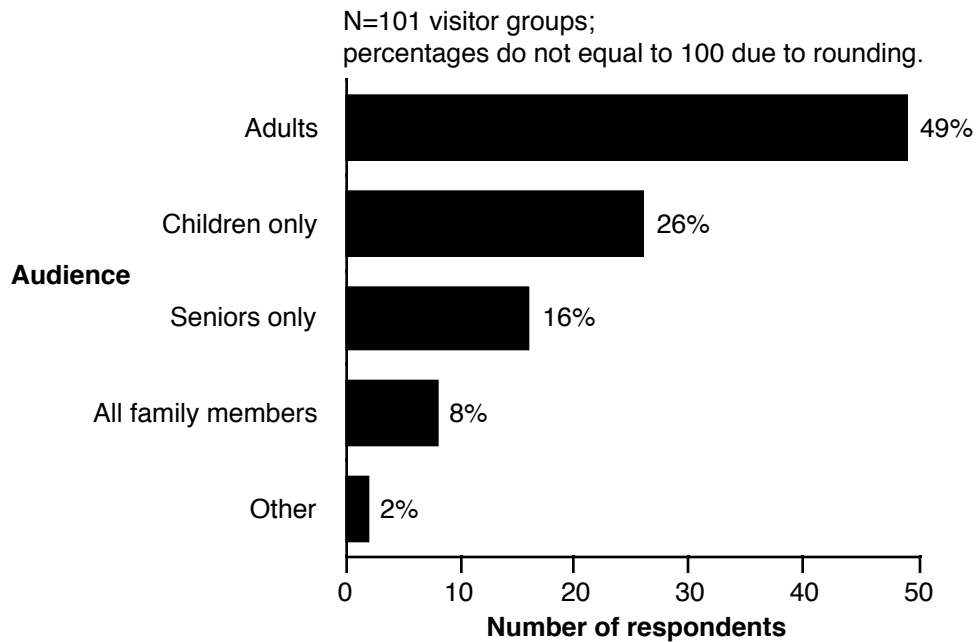
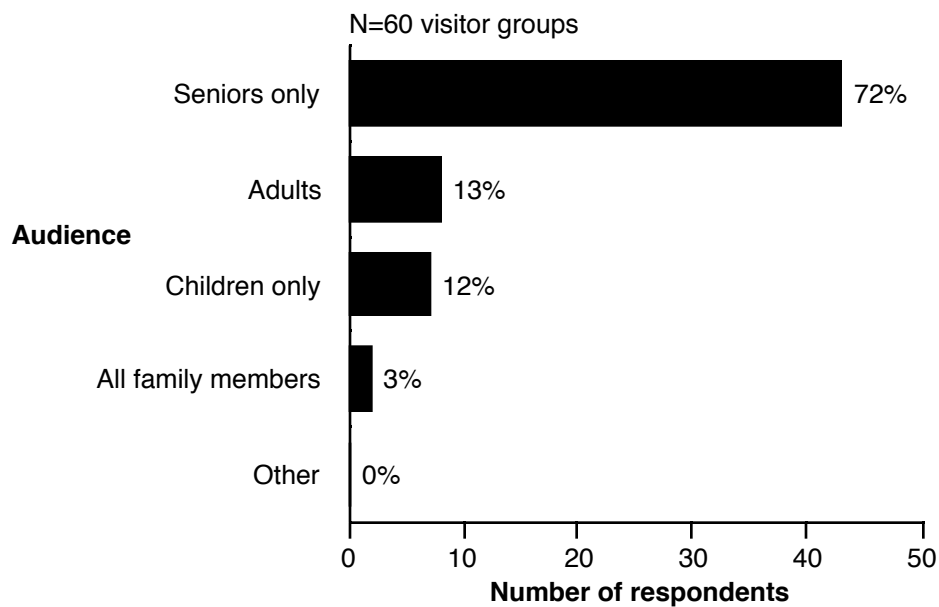
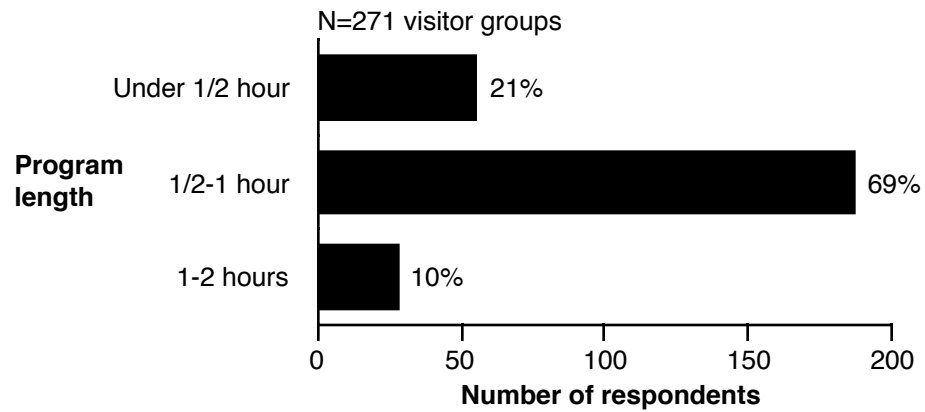
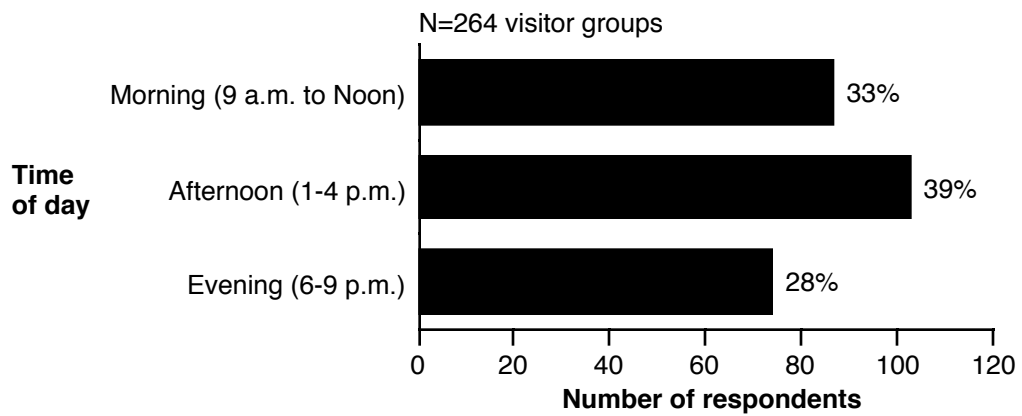


Figure 69: The second priority audiences

**Figure 70: The third priority audiences****Figure 71: The fourth priority audiences**

**Figure 72: Length of program****Figure 73: Best time of day to hold ranger programs**

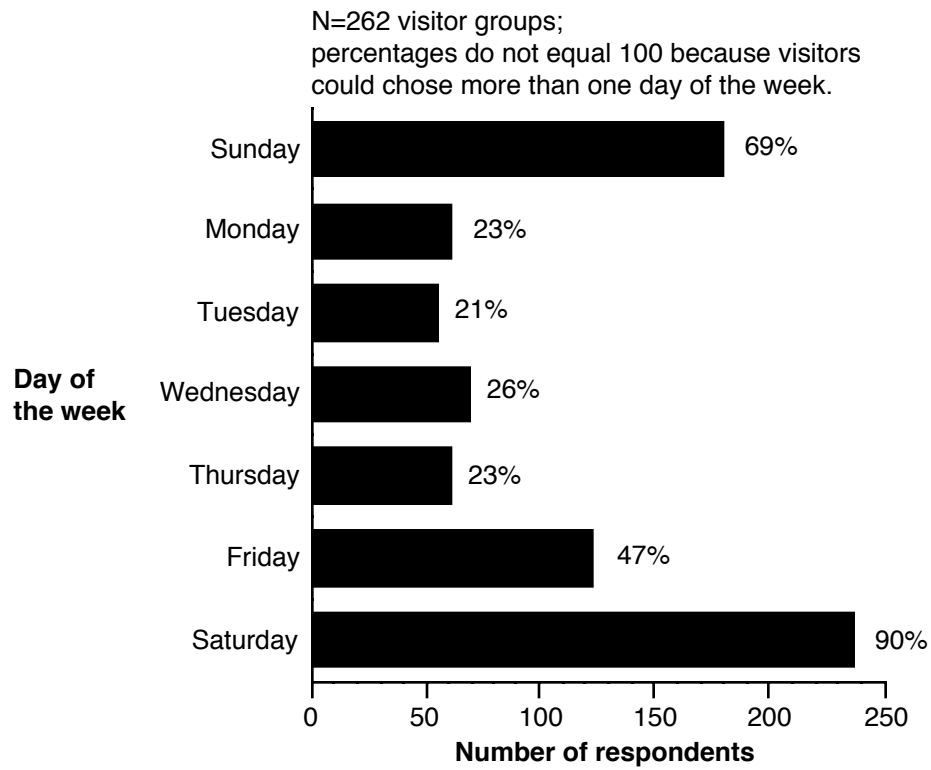


Figure 74: Best day(s) of the week to hold ranger programs

Preferred subjects to learn on a future visit

When asked about the subjects they were most interested in learning about on a future visit to Catoclin Mountain Park, 15% of visitor groups indicated they were not interested in any learning subject at the park (see Figure 75).

Those interested in learning were then asked to indicate what subject(s) they would be most interested in learning. As shown in Figure 76, the subjects of interest were natural history (75%), history-Native American culture (60%), and geology (58%). Table 11 lists the “other” subjects that visitor groups indicated they were interested in learning about at Catoclin Mountain Park.

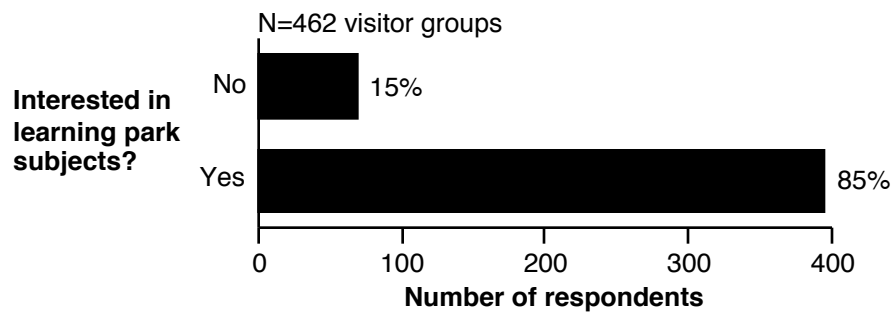


Figure 75: Interested in learning subjects at the park?

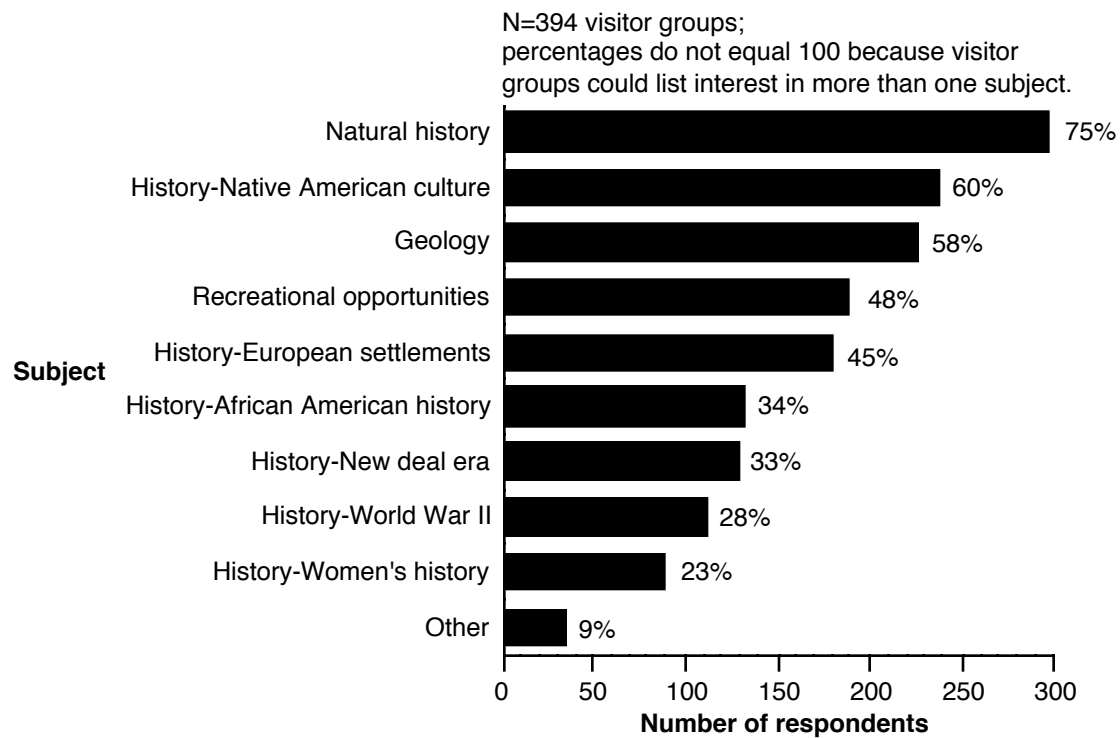


Figure 76: Future subjects of interest at Catoclin Mountain Park

Table 11: "Other" subjects of interest in future

N=45 comments

Subject	Number of times mentioned
Native plants	7
Birds identification	7
Wildlife	6
Nature	3
Camping	3
Relationship with Camp David	3
Hiking	2
Fishing	2
Safety	2
Art and crafts	2
Survival skills	1
Environmental issues	1
Horticulture	1
Insects	1
Preservation plan for Hunting Creek	1
Rock climbing	1
Impact of Camp David meetings on national politics	1
Tales	1

Preferred methods of learning about the park

Visitors were asked: "On a future visit, how would you and your group prefer to learn about Catoclin Mountain Park?" Some visitors (7%) were not interested in learning (see Figure 77). Of the 93% of visitors who were interested in learning, the preferred methods were the visitor center or information station (79%), printed material (67%), and visitor center exhibits (66%). "Other" methods that visitor groups preferred included "locals" giving talks on human history of area, ranger-led hikes, and local newspaper/radio.

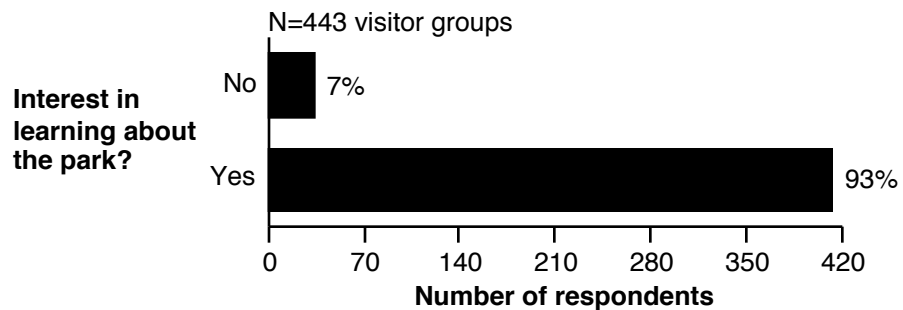


Figure 77: Are you interested in learning about the park?

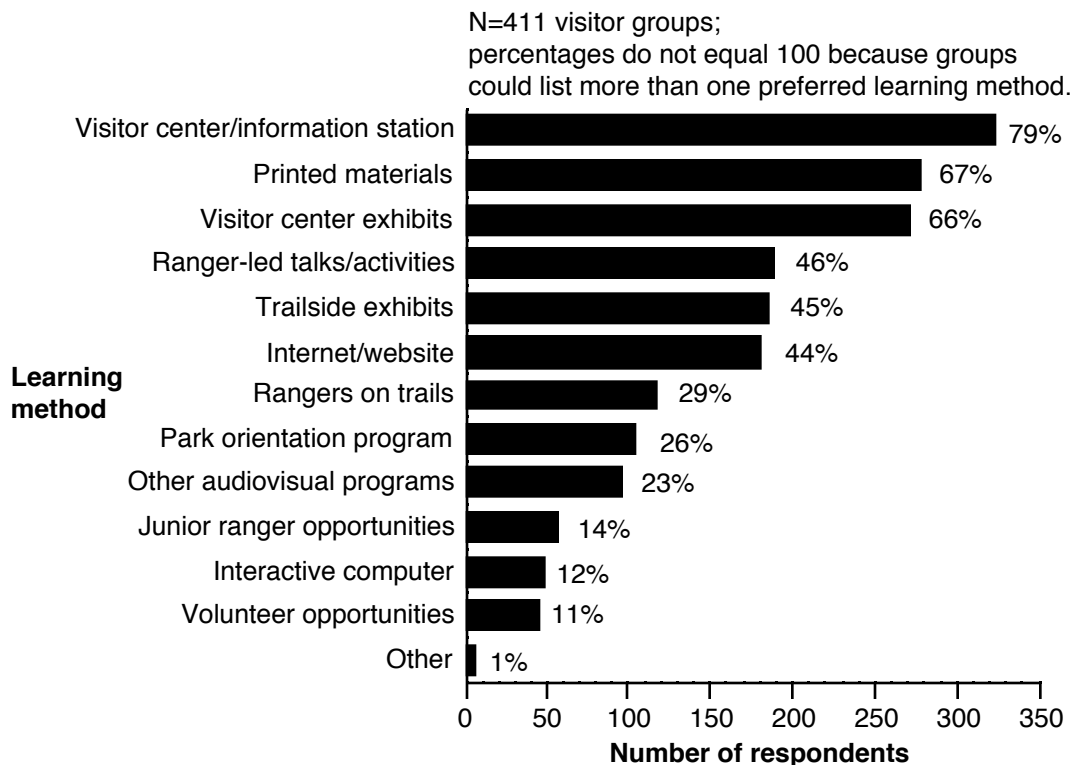


Figure 78: Methods of learning about the park in the future

Visitor groups were asked to rate the overall quality of the visitor services provided at Catoclin Mountain Park during this visit.

Most visitor groups (97%) rated services as "very good" or "good" (see Figure 79). No visitor groups rated the overall quality of services provided at Catoclin Mountain Park as "very poor."

Overall quality of visitor services

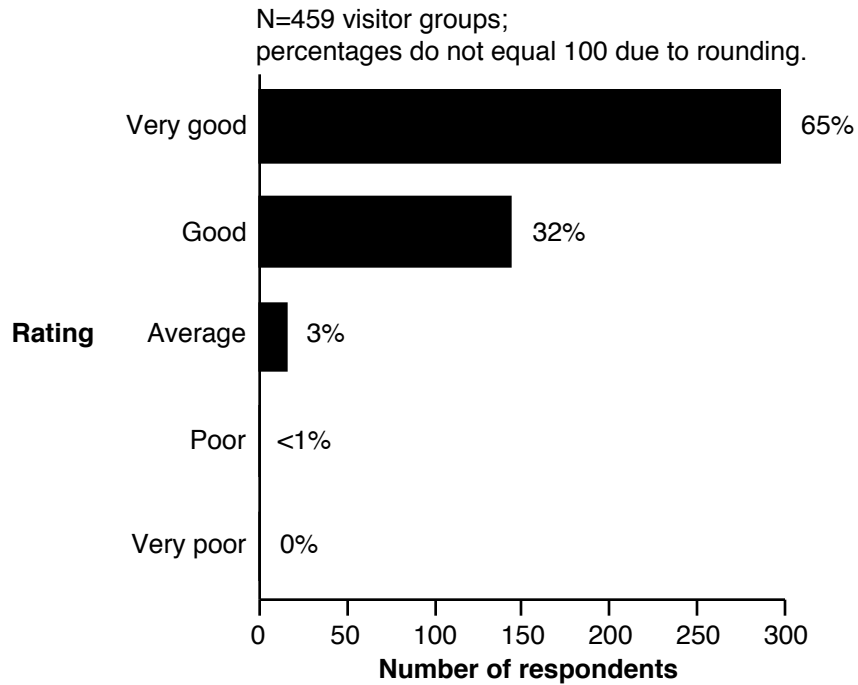


Figure 79: Overall quality of visitor services

**Comment
summary**

Forty-eight percent of visitor groups (224 groups) wrote additional comments, which are included in the separate appendix of this report. Their comments about Catoctin Mountain Park are summarized below (see Table 12).

Table 12: Additional comments

N= 280 comments;
some visitors made more than one comment.

Comment	Number of times mentioned
PERSONNEL	
Rangers very friendly and helpful	19
Staff very knowledgeable and courteous	12
Excellent camp host	2
Other comments	2
INTERPRETIVE SERVICES	
Provide more information about campground	3
Put distances on trail map	3
Good displays at visitor center	2
Other comments	2
FACILITIES /MAINTENANCE	
Well maintained park	23
Very good trail system	15
Very clean park	13
Excellent campsite	10
Well marked trails	6
More parking needed by the falls	5
Poor bathroom facilities	3
Need better marked trails	3
Clean shower	3
More water fountain	2
More mountain biking trails	2
Other comments	2
POLICY	
Very safe in park with rangers frequent presence	5
Continue allowing pets	5
Need to have law enforcement/fine noisy campers	5
Limit mountain biking access	2
Add a camper store	2
Other comment	1
RESOURCE MANAGEMENT	
Need a better control for deer population	3
No more development in park	3
Keep it as natural as possible	3
Remove some trees to enhance the view	3

Table 12: Additional comments (continued)

Comment	Number of times mentioned
GENERAL IMPRESSIONS	
Enjoyable	29
Beautiful	22
Great place to hike	12
Our favorite destination of many years	12
We will come back	10
Great visit	8
Quiet/peaceful/serenity	7
Lovely unspoiled nature close to urban settings	6
Good learning experience for children	5
Rt 77 through park is very distracting	2
Hope to see the falls again	2
Comment	1

Catoctin Mountain Park Visitor Study Additional Analysis VSP Report 138

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.

- | | | |
|---|--|--|
| • Aware of NPS management | • Part of family reunion/church/school group? | • Other expenditures in park |
| • Sources of information prior to visit | • Group members with disabilities/impairments? | • Lodging expenditures out of park |
| • Forms of transportation used | • Type of disability/impairment | • Camping expenditures out of park |
| • Hours stayed | • Encounter service/access problems in park? | • Restaurant and bar expenditures out of park |
| • Days stayed | • Gender | • Groceries and take-out food expenditures out of park |
| • Activities on this visit | • Visitor age | • Gas and oil expenditures out of park |
| • Activities on past visits | • U.S. zip code of residence | • Other transportation expenditures out of park |
| • Places visited | • Country of residence | • Admissions/recreation/entertainment fee expenditures out of park |
| • Overnight stay away from home? | • Number of visits—12 months | • All other purchases out of park |
| • Nights inside park | • Number of visits—lifetime | • Number of adults covered by expenses |
| • Nights outside park within 50 miles | • Highest level of education | • Number of children covered by expenses |
| • Type of accommodations in park | • Ethnicity Hispanic? | • Preferred priority of audiences for ranger programs |
| • Type of accommodations outside park within 50 miles | • Race | • Preferred length of ranger programs |
| • Communities within 50 miles used for support services | • Elements' effect on visit | • Preferred time of day for ranger programs |
| • Any services not available? | • Appropriateness of activities in park | • Preferred day of week for ranger programs |
| • Park offer enough evening programs? | • Importance of elements in preserving park for future | • Preferred subjects for ranger programs |
| • Primary reason for visit to area | • Safety in park | • Preferred methods of learning about park |
| • Group type | • Safety in home town | • Overall quality of services |
| • Number of park entries | • Lodging expenditures in park | |
| • Group size | • Camping expenditures in park | |

Phone/send requests to:

Visitor Services Project, PSU
College of Natural Resources
P.O. Box 441139
University of Idaho
Moscow, Idaho 83844-1139

Phone: 208-885-7863
FAX: 208-885-4261
Email: littlej@uidaho.edu

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)