Congaree National Park

Visitor Study
Spring 2005

Report 163
Visitor Services Project

University of Idaho

Park Studies Unit

Congaree National Park

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Report Summary

- This report describes the results of a visitor study at Congaree National Park during April 15-24, 2005. A total of 453 questionnaires were distributed to visitor groups. Of those, 326 questionnaires were returned resulting in a 72% response rate.

- This report profiles Congaree National Park visitors. Most results are presented in graphs and frequency tables. Summaries of visitor comments are included in the report and complete comments are included in an appendix.

- Forty-one percent of visitor groups were in groups of two and 28% were in groups of three or four. Fifty-six percent of the visitor groups were family groups. Forty-seven percent of visitors were ages 41-65 years and 15% were ages 15 or younger.

- United States visitors were from South Carolina (65%), North Carolina (7%), 33 other states, and Washington DC. International visitors, comprising 5% of the total visitation, were from Canada (33%), England (29%), and 12 other countries.

- Fifty-seven percent of visitors visited Congaree National Park for the first time in their lifetime and 62% visited for the first time in the past five years. Thirty-two percent of visitors (16 years or older) have a graduate degree and 29% hold a bachelor's degree.

- Prior to this visit, visitor groups most often obtained information about Congaree National Park through previous visits (44%) and friends/relatives/word of mouth (31%). Five percent of visitor groups did not obtain any information before their visit. Most groups (88%) received the information they needed about the park.

- Sixty-seven percent of visitor groups' primary reason for traveling to the Congaree National Park area (within 1-hour drive of park) was to visit Congaree National Park. On this visit, the most common activities were walking/hiking (89%) and visiting the visitor center (76%).

- In regard to 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 most used services/facilities by the 318 visitor groups included restrooms (86%), trails (82%), and park trail map (79%). The services/facilities that received the highest combined proportions of "extremely important" and "very important" ratings included trails (98%, N=249), restrooms (94%, N=264), and directional signs-in park (89%, N=224). The services/facilities that received the highest combined proportions of "very good" and "good" ratings included ranger-led programs (97%, N=59), trails (97%, N=244), and restrooms (95%, N=261).

- The average of total expenditures in and outside the park (within 1-hour drive of park) per visitor group was $103. The median visitor group expenditure (50% of groups spent more, 50% of group spent less) was $24. The average per capita expenditure was $40.

- Most visitor groups (97%) rated the overall quality of services, facilities, and recreational opportunities at Congaree National Park as "very good" or "good." Two percent of groups rated the overall quality as "very poor" or "poor."

> For more information about the Visitor Services Project, please contact the Park Studies Unit at the University of Idaho or at the following website http://www.psu.uidaho.edu

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INTRODUCTION

This report describes the results of a visitor study at Congaree National Park. This visitor study was conducted from April 14 to 25, 2005 by the National Park Service (NPS) Visitor Services Project (VSP), a part of the Park Studies Unit at the University of Idaho.

Organization of the report

The report is organized into three sections.

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

Section 2: The ***Results****.* This section provides summary information for each question in the questionnaire and includes a summary of visitor comments. The presentation of the results of this study does not follow the same order of questions in the questionnaire. Instead, the results are presented in the following order:

- *Demographics*
- *Pre-visit information*
- *Visit information*
- *Ratings of the park's services, facilities, resources, qualities, and elements*
- *Expenditures*: **only** presented if the questionnaire included expenditure questions.
- *Information unique to park*
- *Future preferences*
- *Overall quality*
- *Visitor comments*

Section 3: The **Appendices**

Appendix 1: The *Questionnaire* contains a copy of the questionnaire distributed to visitor groups.

Appendix 2: *Additional Analysis* contains a list of options for cross-references and cross comparisons. These comparisons can be analyzed within park or between parks. Results of additional analyses are not included in this report as they may only be requested after of this study is published.

Appendix 3: Decision rules for checking non-response bias

Appendix 4: *Visitor Services Project Publications* contains a complete list of publications by the VSP-PSU. Copies of these reports can be obtained by contacting the PSU office or visiting the website: http://www.psu.uidaho.edu/vsp/reports.htm

Appendix 5: Separate booklet contains visitor comments on open-ended questions.

Presentation of the results

Most results are represented in the form of graphs (see example below) with some narrative text. Results may also be displayed as scatter plots, pie charts, or tables when applicable.

SAMPLE ONLY

1: The figure title describes the graph's information.

2: Listed above the graph, the "N" shows the number of individuals or visitor groups responding to the question. If N is less than 30, **CAUTION!** on the graph indicates the results may be unreliable.

3: Vertical information describes the response categories.

4: Horizontal information shows the number or proportions of responses in each category.

5: In most graphs, percentages provide additional information.
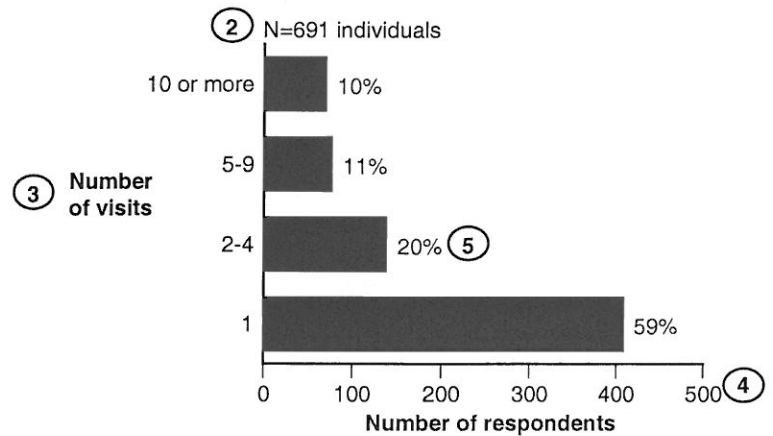
Figure 4: Number of visits

METHODS

Survey Design

Sample size and sampling plan

All VSP questionnaires follow design principles outlined in Don A. Dillman's book *Mail and Internet Surveys: The Tailored Design Method* (2000). Based on this methodology, the sample size was calculated based on statistics of park visitation statistics of previous years. To minimize coverage error, the sample size was also determined to provide adequate information about specific park sites if requested.

Interviews were conducted with visitor groups, and 453 questionnaires were distributed to a random sample of visitor groups who arrived at Congaree National Park during the period from April 15–24, 2005. Table 1 presents the locations and numbers of questionnaires distributed at each location. These locations were selected based on park visitation statistics and advice from park staff.

Table 1: Questionnaire distribution location
N=number of questionnaire distributed

Sampling site	N	Percent
Visitor center	416	92
Cedar Creek canoe access	37	8
Total	453	100

Questionnaire design

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

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

Survey procedure

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 group member (at least 16 years of age) who would complete the questionnaire. These individuals were then asked for their names, addresses, and telephone numbers in order to mail them a reminder/thank you postcard and follow-ups if needed. Visitor groups were given a questionnaire, asked to complete it after their visit, and then return it by mail. The questionnaires were pre-addressed and pre-stamped.

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, a second round of 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 standard statistical software packages—Statistical Analysis System (SAS) or Statistical Package for the Social Sciences (SPSS). Frequency distribution and cross-tabulations were calculated for the coded data, and responses to open-ended questions were categorized and summarized.

Limitations

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

1. This study is a self-administered survey. In addition, the respondents fill out the questionnaire after the visit which may result in poor recall of the visit details. Thus, it is not possible to know whether visitor responses reflect actual behavior.

2. The data reflect visitor use patterns of visitors to the selected sites during the study period of April 15–24, 2005. The results present a 'snap-shot-in-time' and do not necessarily apply to visitors during other times of the year.

3. Caution is advised when interpreting any data with a sample size of less than 30, as the results may be unreliable. Whenever the sample size is less than 30, the word **"CAUTION!"** is included in the graph, figure, or table.

4. Occasionally, there may be inconsistencies in the results. Missing data or incorrect answers may cause these inconsistencies. The respondent may have answered some of the questions incorrectly due to carelessness, misunderstanding the directions, or inaccurate memory. Thus, sometimes it is better to refer to both the percentage and N (number of individuals or visitor groups) to interpret the results.

Special Conditions

At the beginning of the survey period Congaree National Park had experienced some flooding due to high precipitation in the surrounding area and upper Congaree River. Thus, some parts of the park were inaccessible. Some trails remained muddy and slippery after the flood which may have resulted in decreased visitation. In addition, Nature Fest was organized at the park during the weekend of April 16 and 17. This event was a three-day celebration of Springtime at Congaree National Park. It included special nature walks, educational programs and demonstrations from park staff, volunteers and other park partners. Nature Fest is held to recognize National Park Week, Earth Day, and to promote a greater understanding of the park ecosystem. These activities may have attracted more visitors than on usual weekends.

Checking Non-response Bias

At Congaree National Park, 480 visitor groups were contacted and 453 of these groups (94%) accepted the questionnaire. Questionnaires were completed and returned by 326 visitor groups, resulting in a 72% response rate for this study. Age of the group member who actually filled out the questionnaire and group size were the two variables used to check non-response bias.

The results show that there is no significant difference between respondent and nonrespondent ages and insignificant differences in group sizes. Therefore, the non-response bias was judged to be insignificant and the data in this study is a good representation of a larger population of visitors to Congaree National Park. See Appendix 3 for more details of the non-response bias checking procedure.

Table 2: Comparison of respondents and non-respondents

Variable	Non-respondent		Respondent		p-value (t-test)
	N	Average	N	Average	
Age	124	39.8	320	47.4	0.41
Group size	124	3.6	321	3.9	0.55

RESULTS

Demographics

Visitor group size

Visitor group size ranged from 1 person to 60 people
- 41% of visitor groups consisted of two people (see Figure 1)
- 28% of groups had 3 or 4 people
- 19% had 5 or more people.

N=323 visitor groups

Group size

5 or more	19%
4	14%
3	14%
2	41%
1	12%

Number of respondents
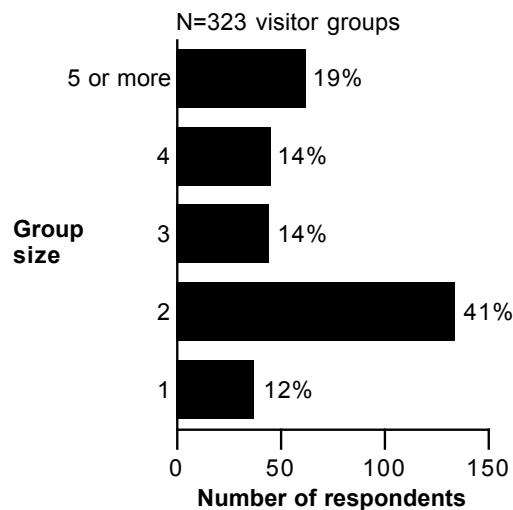
Figure 1: Visitor group size

Visitor group type

- 56% of visitor groups were made up of family members (see Figure 2)
- 16% were with friends
- 12% traveled alone
- "Other" groups included school group, church group, Girl Scouts, Cub Scouts, hiking clubs, birdwatching club, Friends of Congaree groups, college class, and Elder Hostel groups.

N=319 visitor groups

Group type

Alone	12%
Family	56%
Friends	16%
Family and friends	7%
Other	9%

Number of respondents
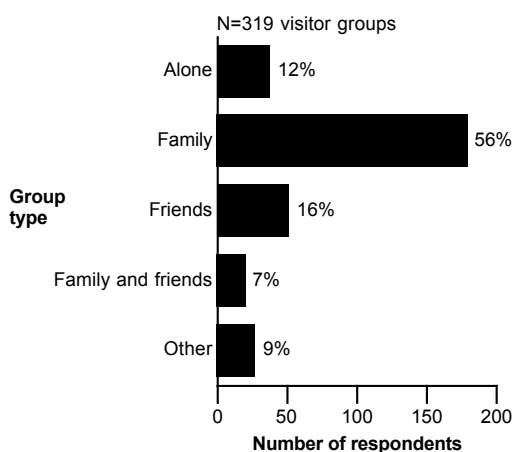
Figure 2: Visitor groups type

Visitor age

Visitor ages ranged from 1 to 90 years old
- 15% of visitors were 15 years or younger (see Figure 3)
- 47% of visitors were in the 41-65 age group
- 8% of visitors were 66 years or older.

N=891 individuals

Age group (Years)	
76 or older	2%
71-75	2%
66-70	4%
61-65	8%
56-60	10%
51-55	12%
46-50	9%
41-45	8%
36-40	7%
31-35	7%
26-30	6%
21-25	5%
16-20	5%
11-15	5%
10 or younger	10%

Number of respondents
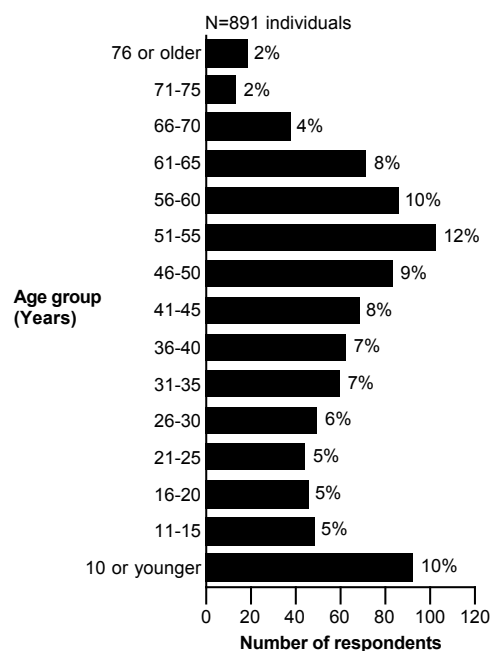
Figure 3: Visitor ages

Visitor level of education

Note: This question applies to visitors who were 16 years or older at the time of answering the questionnaire.

- 32% of visitors have a graduate degree (see Figure 4)
- 29% hold a bachelor's degree
- 22% had some college.

N=762 individuals; percentages do not equal 100 due to rounding.

Level of education	
Graduate degree	32%
Bachelor's degree	29%
Some college	22%
High school diploma/GED	12%
Some high school	4%

Number of respondents
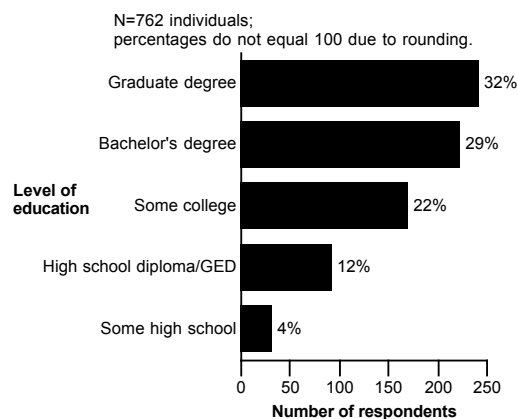
Figure 4: Visitor level of education

Respondent ethnicity

- Most respondents (98%) were not Hispanic or Latino (see Figure 5)

N=320 respondents; percentages do not equal 100 due to rounding.

Hispanic/ Latino	
Yes	3%
No	98%

Number of respondents
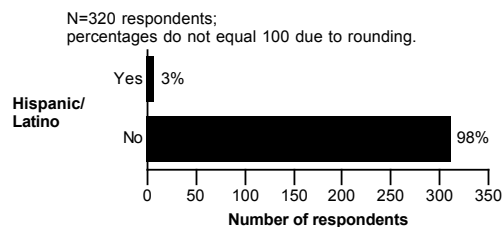
Figure 5: Respondents of Hispanic or Latino ethnicity

Respondent race

- Most respondents (97%) were white (see Figure 6)
- 2% were American Indian or Alaska Native
- 2% were Asian.

N=312 respondents;
percentages do not equal 100 because
respondents could be of more than one race.
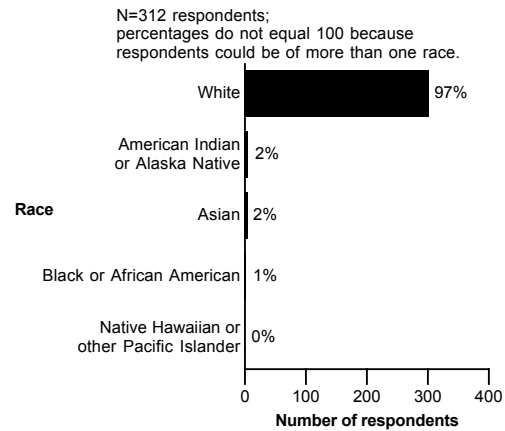
Figure 6: Respondent race

Number of times visiting Congaree National Park in the last five years

- Most visitors (62%) visited Congaree National Park once during the last 5 years (see Figure 7)
- 18% visited the park twice
- 20% visited the park 3 or more times during the last 5 years

N=817 individuals
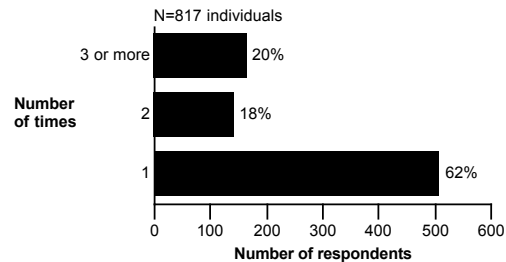
Figure 7: Number of times visited the park in the last 5 years

Number of times visiting the park in lifetime

- 57% of visitors visited Congaree National Park the first time in their lifetime (see Figure 8)
- 16% visited the park twice
- 28% visited the park 3 or more times in their lifetime

N=637 individuals;
percentages do not equal 100 due to rounding.
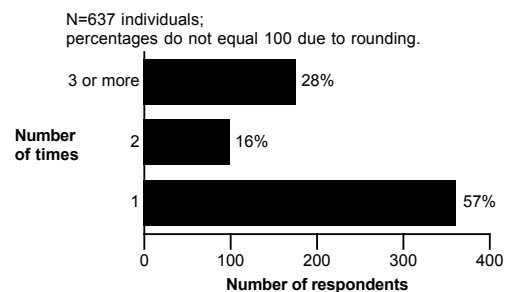
Figure 8: Number of times visited the park in visitor lifetime

U.S. visitor state of residence

Shown in Table 3 and Map 1
- Majority of U.S. visitors (65%) came from South Carolina
- 7% came from North Carolina
- 3% came from New York and another 3% from Connecticut
- Smaller proportions came from 31 other states and Washington, D.C.

Table 3: United States visitors by state of residence
Total percentages may not equal 100 due to rounding.

| State	Number of visitors	Percent of U.S. visitors N=814 individuals	Percent of total visitors N=859 individuals
South Carolina	529	65	65
North Carolina	61	7	7
New York	25	3	3
Connecticut	24	3	3
California	20	2	2
Virginia	16	2	2
Florida	13	2	2
Georgia	12	1	1
Ohio	10	1	1
Massachusetts	10	1	1
Michigan	9	1	1
Colorado	9	1	1
Alabama	7	1	1
Wisconsin	6	1	1
Kansas	6	1	1
Kentucky	6	1	1
Utah	5	1	1
Indiana	5	1	1
17 other states and Washington, D.C.	41	5	5
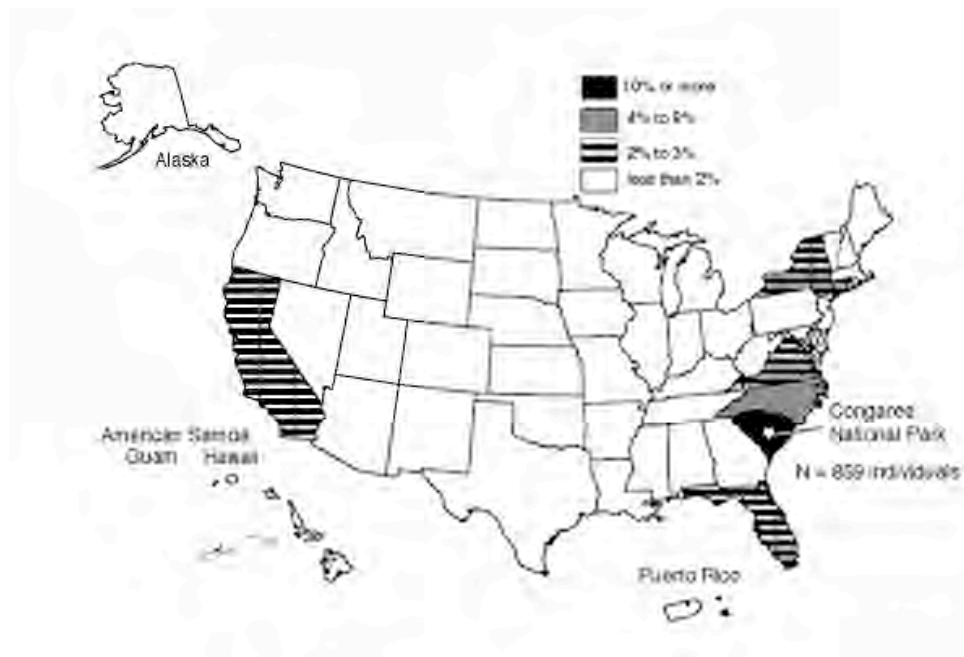
Map 1: Proportions of United States visitors by state of residence

International visitors

As shown in Table 4, international visitors comprised 5% of total visitation to Congaree National Park

- 15% of international visitors came from Canada
- 13% came from United Kingdom
- 7% came from Belgium
- Smaller proportions came from 11 other countries.

Total percentages may not equal to 100 due to rounding

Country	Number of visitors	Percent of international visitors N=45 individuals	Percent of total visitors N=859 individuals
Canada	15	33	2
United Kingdom	13	29	2
Belgium	3	7	<1
India	2	4	<1
Germany	2	4	<1
Philippines	2	4	<1
Korea	1	2	<1
Spain	1	2	<1
Japan	1	2	<1
Uganda	1	2	<1
Vietnam	1	2	<1
China	1	2	<1
Russia	1	2	<1
Austria	1	2	<1

Table 4: International visitors by country of residence

Visitors with disabilities/impairments

As shown in Figures 9 and 10:

- Most visitor groups (94%) did not have any group member with disabilities or impairments that affected their park experience
- Among the groups (6%) that had members with disabilities/impairments, some (33%) encountered access/service problems. **Interpret with caution!**
- Access/service problems that visitors with disabilities/impairments encountered included handicapped parking space was taken, rocks on trail, unleveled trails, narrow trails, limited to boardwalk area only, and having difficulty finding the way back to the parking lot.

N=321 visitor groups

Group member with disabilities/ impairments?   Yes 6%   No 94%

Number of respondents
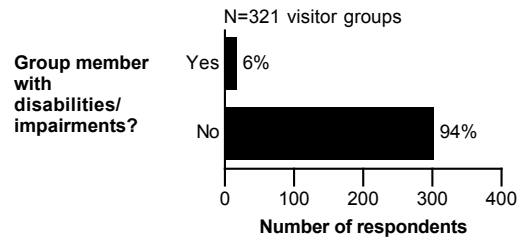
Figure 9: Visitors with disabilities/impairments

N=18 visitor groups

Encounter access/ service problems?   Yes 33%   **CAUTION!**   No 67%
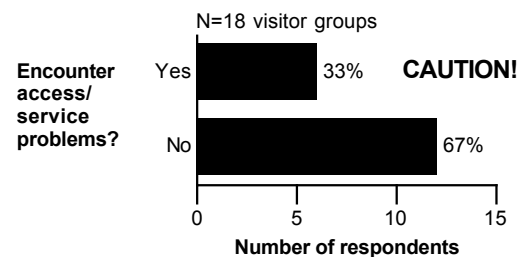
Number of respondents

Figure 10: Visitors who encountered access/service problems due to disabilities/impairments

Information Prior to Visit

Sources of information

Question 1
a. Prior to your visit, how did you and your group obtain information about Congaree National Park?
b. From the sources you used prior to this visit, did you and your group receive the type of information about the park that you needed?
c. If No, what additional information did you and your group need?

Result
- 5% of visitor groups did not obtain any information about the park prior to their visit (see Figure 11)
- Of those who obtained some information (95%), the most common sources of information included previous visits (44%), friends/relatives/word of mouth (31%), and internet-park website (27%), as shown in Figure 12
- "Other" sources of information included maps (AAA, state, Rand McNally), living in the area, books for canoeing and paddling, flyer/brochure, church, National Park Passport book, school/college class, park's reputation for birding, Sierra Club, name of a race horse, and being told by a ranger
- Most visitor groups (88%) obtained information they needed to prepare for this trip to Congaree National Park (see Figure 13)
- Additional information that visitor groups needed but was not available through these sources included specific directions of how to get to the park, trail information including trails for pets and detailed trail maps, water level, canoe renting services and accessibility, accommodations in the park and the area, flora and fauna guides, special activities/events at park, safety information, fees, and weather conditions.

N=326 visitor groups
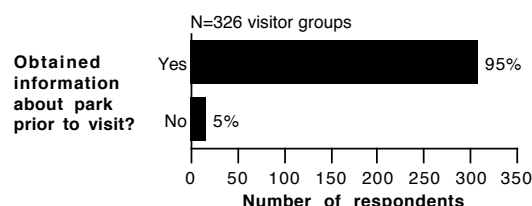
Figure 11: Visitors who obtained information about park prior to this visit

N=309 visitor groups; percentages do not equal 100 because visitor groups could use more than one source.
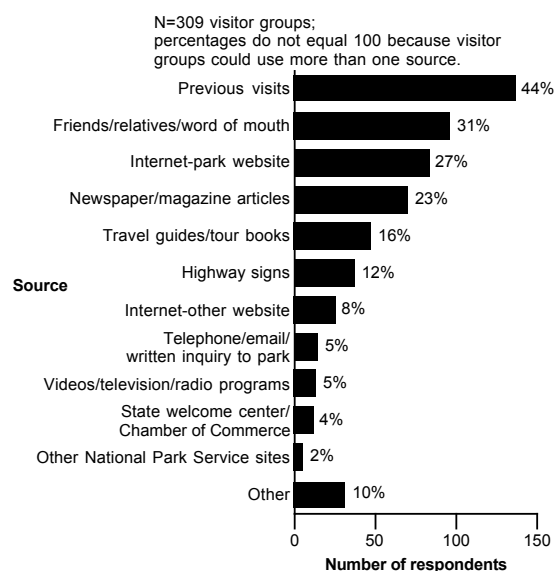
Figure 12: Sources of information used by visitor groups prior to this visit
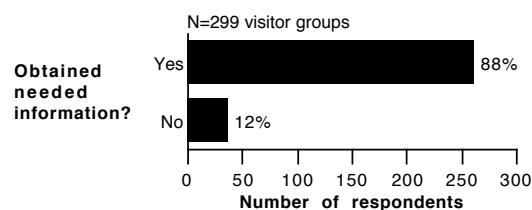

N=299 visitor groups

Figure 13: Visitor groups who obtained needed information prior to this visit to Congaree National Park

Effect of name change

Question 2
   a.   In 2003, Congaree Swamp National Monument became Congaree National Park. Did this name change have any effect on your decision to visit?
   b.   If Yes, what effect did it have?

Result
   •   Most visitor groups (84%) reported that the name change did not have any effect on their decision to visit park (see Figure 14)
   •   13% reported that the name change had an effect on their decision to visit park.
   •   Comments about the effect of the name change are shown in Table 5

N=325 visitor groups;
percentages do not equal 100 due to rounding.

Did the name change affect decision to visit park?

Yes 13%
No 84%
Not sure 2%

Number of respondents
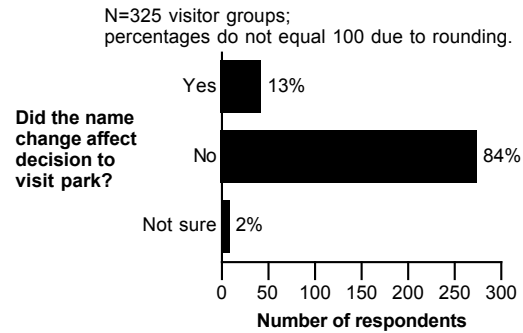
Figure 14: Did the name change affect decision to visit park?

Table 5: Effect of the name change on visitor decision to visit Congaree National Park
N=45 comments;
some visitor groups made more than one comment.

Comment	Number of times mentioned
National Park sounds more appealing to visit than a monument	10
National Parks are better published, did not know the place existed before the name change	9
Wanted to see the changes in resources/facilities	9
Assumed that National Parks are at a higher standard than Monuments	7
Assumed that Monuments are only associated with historical/cultural resources	4
Made a goal to visit all National Parks	4
Assumed that National Parks have more funding than Monuments	2
Thought it was a swamp flooded all year round	1

Visitor awareness

Question 3
    a.   Prior to your visit, were you aware of what Congressionally designated wilderness is?
    b.   If No, did you and your group learn about Congressionally designated wilderness during your visit?

Result
- 58% of visitor groups were aware of what Congressionally designated wilderness is, while 42% were not aware (see Figure 15)
- Of those who were not aware of the meaning of Congressionally designated wilderness, 38% learned about this concept during this visit to Congaree National Park (see Figure 16).

Question 4
    a.   Most of Congaree National Park (98%) is Congressionally designated wilderness. Did the wilderness designation affect what you were able to do in the park?
    b.   If Yes, how did it affect your visit?

Result
- Most visitor groups (74%) reported that the wilderness designation did not affect what they were able to do in the park, 7% of visitor activities were affected, and 19% were "not sure," as shown in Figure 17
- Visitor comments about how the wilderness designation affected their park experience included more enjoyable, better walk/kayak/canoe in natural environment without development, better bird watching opportunity, no bike trail, cannot touch plants or wildlife, and less accessible due to physical limitations.

Question 5
    Prior to your visit, were you aware of what programs were offered in Congaree National Park?

Result
- 52% of visitor groups were not aware of what programs were offered at the park, while 48% were aware (see Figure 18)

N=325 visitor groups
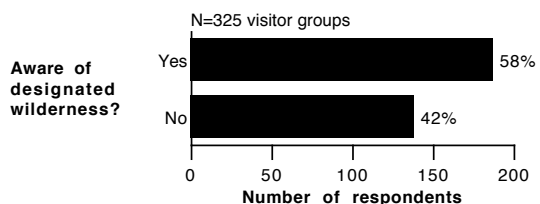
Figure 15: Visitor awareness of the meaning of Congressionally designated wilderness

N=135 visitor groups
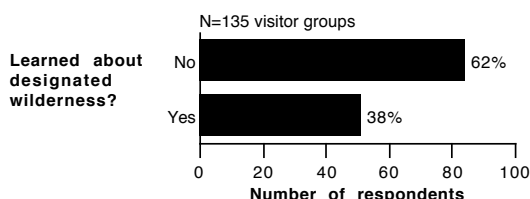
Figure 16: Visitors groups who learned about Congressionally designated wilderness during this visit

N=323 visitor groups
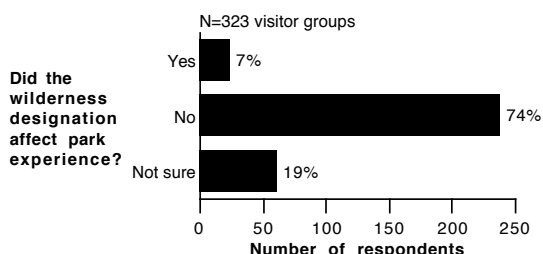
Figure 17: Did the wilderness designation affect what visitors were able to do in the park?
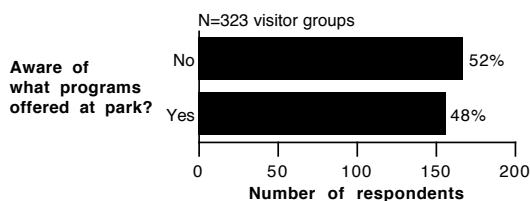

N=323 visitor groups

Figure 18: Visitor awareness of what programs were offered at the park

Information During Visit

Primary reason for visiting the area

Question 6
   a. On this visit what was the primary reason that you and your group visited the Congaree National Park area (within 1-hour drive of park)

Result
   • 67% reported visiting Congaree National Park was their primary reason for visiting the area (see Figure 19)
   • 12% visited friends/relatives and 16% had other primary reasons for visiting the area
   • "Other" primary reasons included living in the area, traveling/passing through to another destination, attending graduation ceremonies, on a canoe trip, attending Elder Hostel program, attending a class, and having a holiday in the U.S.
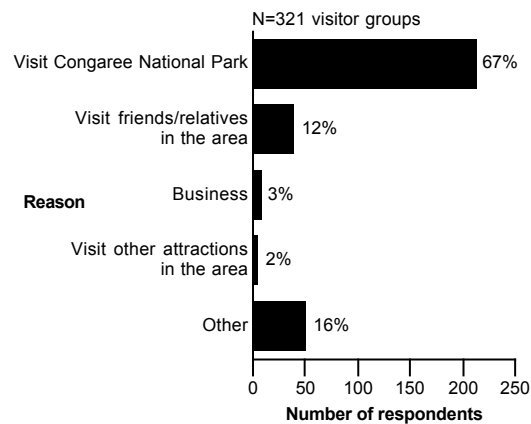
Figure 19: Primary reason for visiting Congaree National Park area (within 1-hour drive of park)

Other sites visited in the area

Question 6
   b. What sites in the area did you and your group visit?

Result
   • 47% of visitor groups visited Riverbanks Zoo (see Figure 20)
   • 26% visited University of South Carolina
   • 26% visited South Carolina State Museum
   • "Other" places visited (41%) included the State Capitol, Sesquicentennial State Park, Camden Revolutionary Park, Kensington Mansion, EdVenture Children Museum, Audubon Wildlife Sanctuary at the Francis Beidler Forest, Poinsett State Park, Magnolia Plantation, Orangeburg Rose Garden, Great Smoky Mountains National Park, Swan Lake at Fort Sumter, Charleston, bowling tournament in Columbia, kayaking along Edisto River, Colonial Center, "Patriot" film site, and Confederate Relic Room.
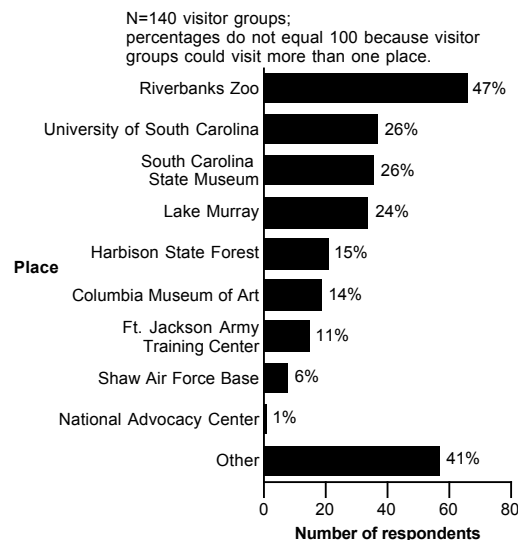
Figure 20: Other places visited in the area

Trails used

Question 7

a. On this visit to Congaree National Park, did you and your group walk/canoe/kayak any park trail?

b. If Yes, which trails did you and your group walk/canoe/kayak on this visit?

c. On past visits, which trails did you and your group walk/canoe/kayak?

d. Why did you and your group choose the trails you did?

Result

- On this visit, most visitor groups (97%) used park trails to walk, canoe, or kayak (see Figure 21)

- On this visit, Elevated Boardwalk (78%) and Low Boardwalk (68%) were the most used trails (see Figure 22). The least used trails were River Trail (4%) and Kingsnake Trail (4%)
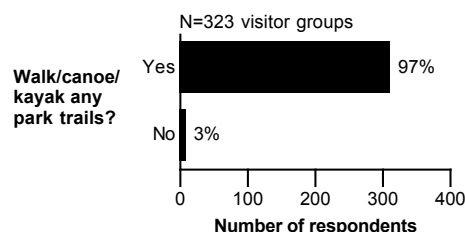
Figure 21: Visitor groups who walked/canoed/ kayaked trails on this visit
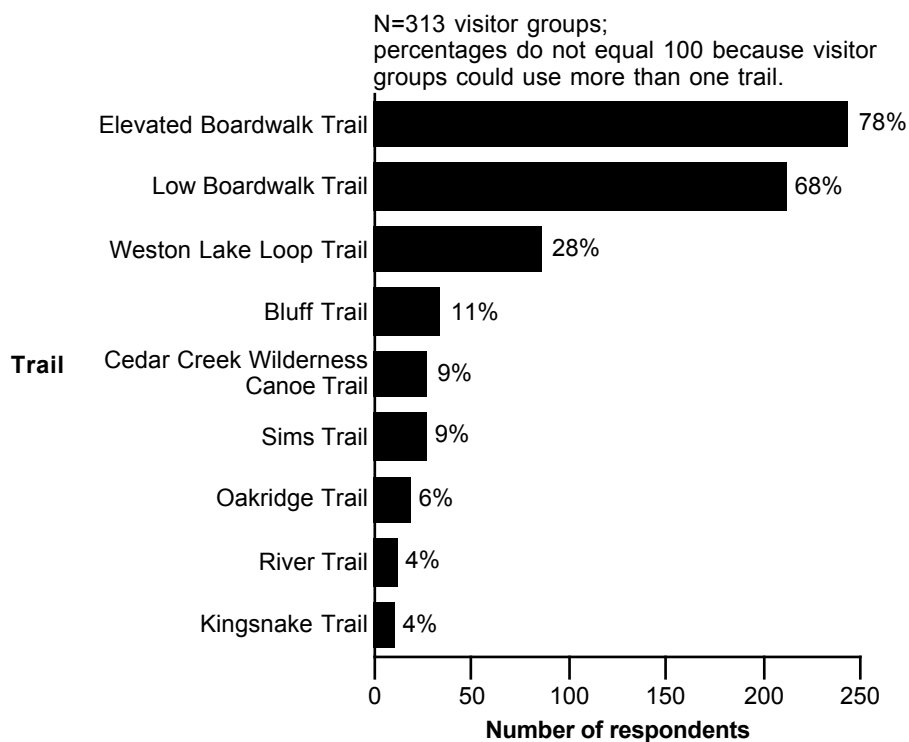
Figure 22: Trail used on this visit

Trails used (continued)

- On past visits, most visitor groups used the Elevated Boardwalk Trail (84%) and Low Boardwalk Trail (78%), as shown in Figure 23. The least used trails included the Kingsnake Trail (12%) and Sims Trail (11%)

- 88% of visitor groups (288 groups) provided reasons why they chose to walk/canoe/kayak on certain trails. Comments are summarized in Table 6.

N=146 visitor groups;
percentages do not equal 100 because visitor groups could walk/hike on more than one trail.
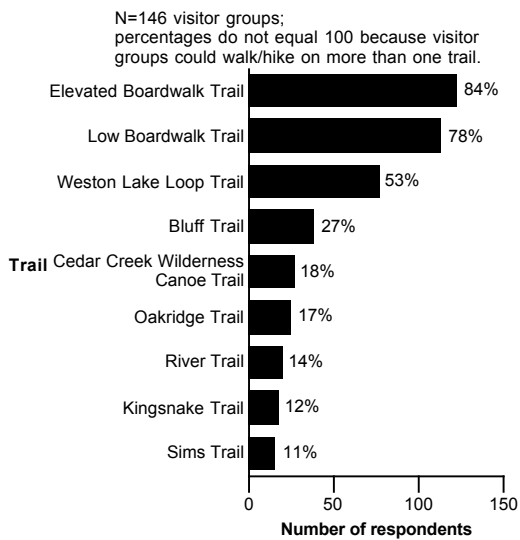
Figure 23: Trail used on past visits

Table 6: Reasons for selecting a trail to walk/canoe/kayak
N= 325 comments;
some visitor groups made more than one comment.

| Comment	Number of times mentioned
Time constraint	59
Limited by the flood/wet trails	43
Easy walking	31
Followed a tour schedule/ranger-led program	22
Able to do with small children	17
Appropriate hiking distance	16
Accessibility	14
Wanted to canoe/kayak	13
Birdwatching	12
Had a member with disabilities	11
Liked walking on the boardwalk	9
A good overall view of the park	9
Was recommended	7
Wanted to walk uncrowded/ unpopular trails	5
Wanted to explore the park	5
No particular reason	5
Wanted to see the big tree	4
Safety	4
Exercised in nature	4
Preferred loop trails	4
Sounded interesting	3
Did not know about other trails	3
To see the swamp	3
Had dogs	3
Fishing	3
Wanted to get to the river	3
Photography	3
Wanted to get to the lake	2
To get to campsites	2
Other comments	6

Activity

Question 9
   On this visit to Congaree National Park, what activities did you and your group participate in?

Result
   • The most common activities on this visit included walking/hiking (89%) and visiting visitor center (76%), as shown in Figure 24
   • The least common activities included backpacking (2%) and exercising (2%)
   • "Other" activities included celebrating a birthday, attending Nature Fest, and quiet reflection in a solitude setting.

N=322 visitor groups;
percentages do not equal 100 because visitors could participate in more than one activity.

Activity	Percentage
Walking/hiking	89%
Visiting visitor center	76%
Birdwatching	34%
Nature study (other than birdwatching)	26%
Photography/painting	25%
Picnicking	22%
Attending ranger-led program	18%
Canoeing/kayaking	11%
Camping	4%
Fishing	4%
Walking dogs	3%
Backpacking	2%
Exercising	2%
Other	4%

Number of respondents

Figure 24: Activities on this visit

Length of visit

Question 10
    a. On this visit what was the total amount of time
       you and your group spent at Congaree
       National Park?

Result
    • For visitor groups who visited the park less
       than 24 hours, 29% spent 2 hours and 28%
       spent 3 hours (see Figure 25)
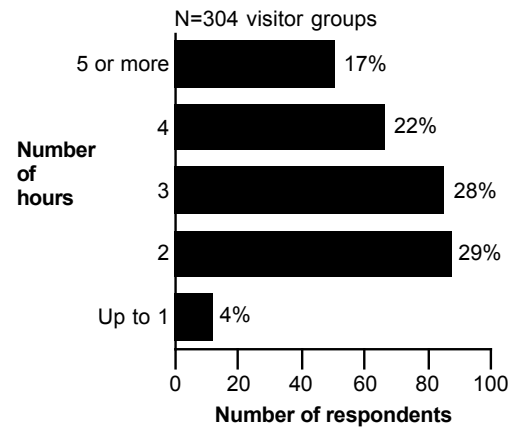
Figure 25: Number of hours visiting the park

    • For visitor groups who visited the park for
       more than 24 hours, 63% spent 2 days (see
       Figure 26). **Interpret with caution!**
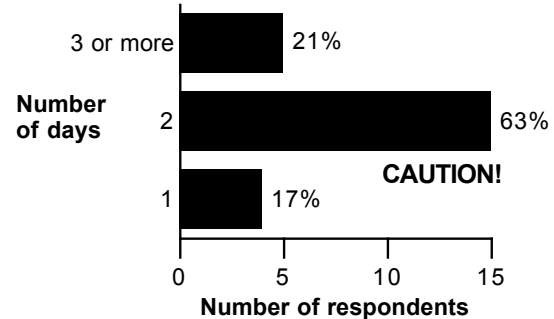
Figure 26: Number of days visiting the park

Number of times entered the park

Question 10

    b. How many times did you enter Congaree
       National Park on this visit to the area (within 1-
       hour drive of park)?

Result

    •   Most visitor groups (86%) entered the park
        once during this visit and 11% entered twice
        (see Figure 27).

N=288 visitor groups
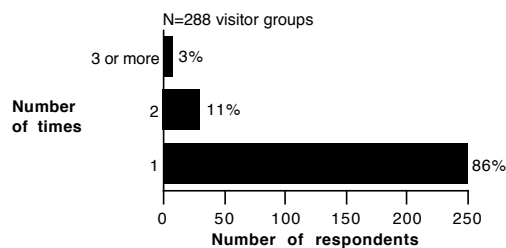
Figure 27: Number of times entered Congaree National Park

Number of vehicles used

Question 17

    b. For this visit, please list the number of
       vehicles in which you and your group arrived.

Result

    •   Most visitor groups (85%) arrived in one
        vehicle and 9% arrived in two vehicles (see
        Figure 28).

N=320 visitor groups
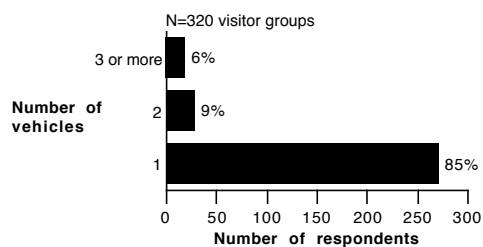
Figure 28: Number of vehicles used by visitor groups on this visit

Overnight accommodations

Question 11
- a. On this visit, did you and your group stay overnight away from home in Congaree National Park and/or the surrounding area (within 1-hour drive of park)
- b. If Yes, please list the number of nights you and your group stayed in the park, number of nights you and your group stayed in the area.
- c. In what type of lodging did you and your group spend the nights? (List separately for lodging inside park and lodging in the area.)

Result
- Most visitor groups (74%) did not stay overnight away from home in the park or in the area while 26% stayed overnight (see Figure 29)
- Of those who stayed overnight in the park, 54% stayed one night (see Figure 30). **Interpret with caution!**
- Of those who stayed overnight in the area (within 1-hour drive of park), 37% stayed one night and 35% stayed two nights (see Figure 31).

N=325 visitor groups
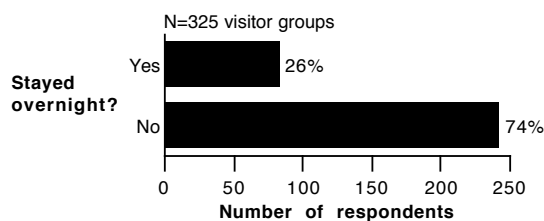
Figure 29:   Visitor groups who stayed overnight away from home in the area (within 1-hour drive of park)
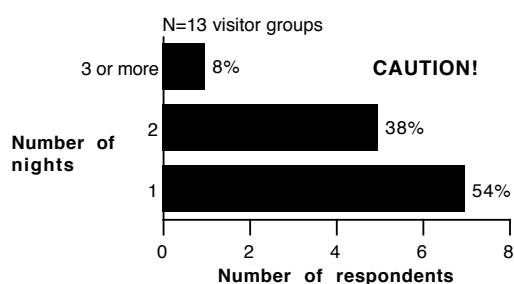
N=13 visitor groups

Figure 30:   Number of nights stayed in the park on this visit
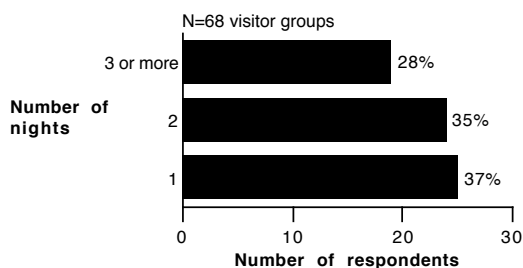
N=68 visitor groups

Figure 31:   Number of nights stayed in the area on this visit

Overnight accommodations (continued)

Result (continued)
- The most common type of lodging visitor groups used inside the park was tent camping in campground (57%), as shown in Figure 32. **Interpret with caution!**
- "Other" types of lodging inside park included volunteer research quarters (the old visitor center) and in a van in the parking lot.

N=14 visitor groups;
percentages do not equal 100 because visitor groups could use more than one type of lodging.
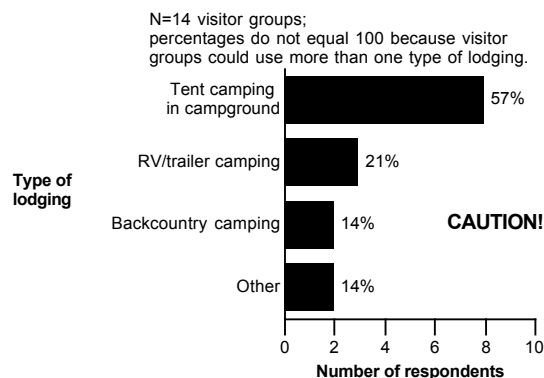
Figure 32: Type of lodging visitor groups used inside park

- The most common type of lodging visitor groups used in the area (within 1-hour drive of park) was a lodge, motel, hotel, cabin, etc. (68%), as shown in Figure 33
- No visitor groups used backcountry camping or tent camping in campground in the area outside the park
- "Other" types of lodging included Fort Jackson Army housing, RM Cooper Adult Leadership Camp, and state park cabins.

N=71 visitor groups;
percentages do not equal 100 because visitor groups could use more than one type of lodging.
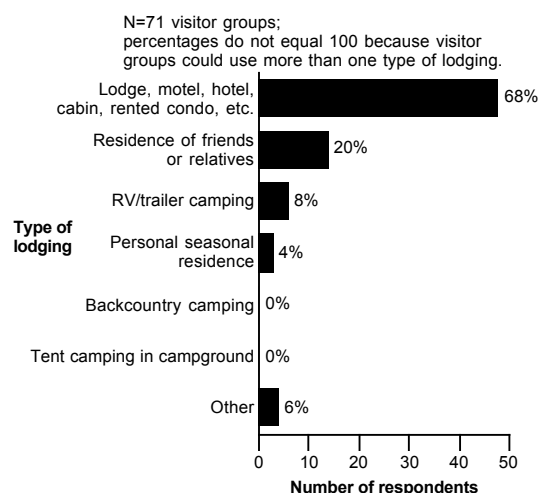
Figure 33:   Type of lodging visitor groups used in the area (within 1-hour drive of park)

Opinions about safety in park

Question 12

    a. Please indicate from 1 to 5 how safe you and your group felt (from crimes and accidents) during this visit to Congaree National Park?

        1=Very unsafe
        2=Somewhat unsafe
        3=No opinion
        4=Somewhat safe
        5=Very safe

    b. If you circled 1 or 2 on any of the above questions, please explain why.

Result

- 74% of visitor groups felt that their personal property was "very safe" from crime in the park (see Figure 34)
- 83% of visitor groups felt "very safe" in regard to personal safety from crime in the park (see Figure 35)
- 68% of visitor groups felt "very safe" from accidents against their person during this visit to Congaree National Park (see Figure 36)
- Reasons that visitors felt "somewhat unsafe" or "very unsafe" included slippery trails after being flooded, no signs about danger of snakes/wildlife, possibility of trees/limbs falling down on trails, primitive and remote campground outside park secured area, poison ivy, no security at canoe pull out spots, rude people in the camping area, and no roving ranger in case of emergency.

N=326 visitor groups
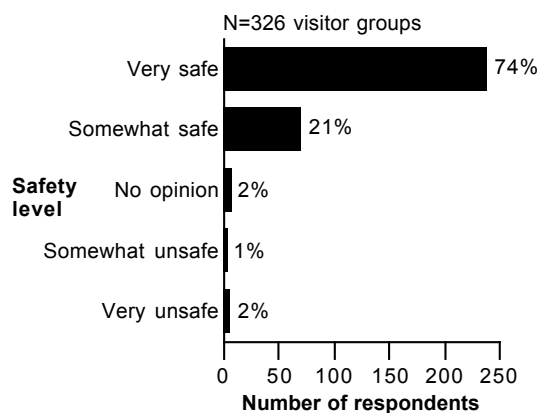
Figure 34: **Visitor opinions about safety of personal property from crimes in park**

N=325 visitor groups;
percentages do not equal 100 due to rounding
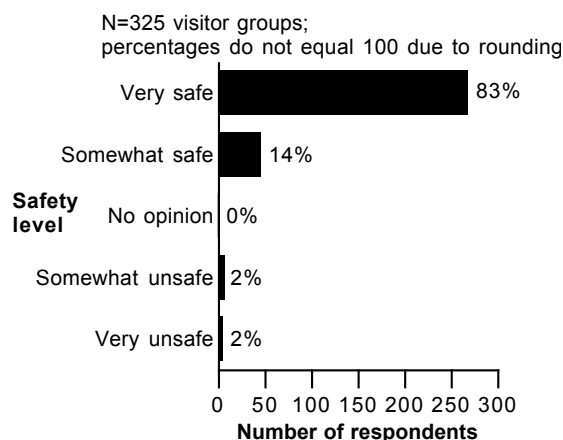
Figure 35: **Visitor opinions about personal safety from crimes in park**

N=323 visitor groups;
percentages do not equal 100 due to rounding
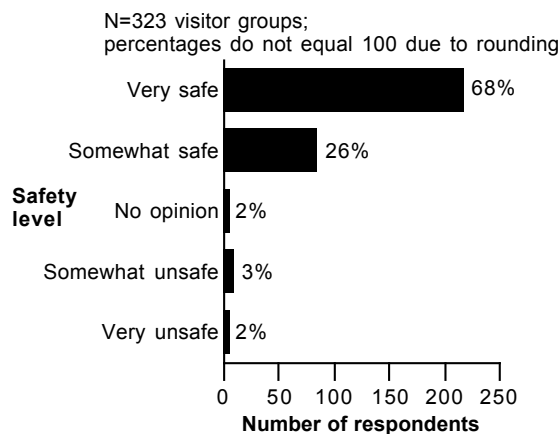
Figure 36: **Visitor opinions about personal safety from accidents in park**

Ratings of Visitor Services, Facilities, Resources, Qualities, and Elements

Visitor services and facilities used

Question 13
   a. Please check all of the visitor services and facilities that you and your group used during this trip to Congaree National Park.

Result
   • The most used services and facilities included restrooms (86%), trails (82%), and park trail map (79%), as shown in Figure 37
   • The least used services and facilities included access for disabled persons (4%) and Junior Ranger program (2%)

N=318 visitor groups;
percentages do not equal 100 because visitor groups could use more than one service/facility.

Service/facility	Number of respondents
Restrooms	86%
Trails	82%
Park trail map	79%
Visitor center exhibits	74%
Directional signs-in park	73%
Park brochure	68%
Directional signs-outside park	61%
Assistance from park staff	52%
Bulletin boards	29%
Visitor center film	28%
Park interpretive pamphlets	28%
Park website	26%
Picnic areas	23%
Ranger-led programs	20%
Visitor center sales publications	19%
Access for disabled persons	4%
Junior Ranger program	2%

Figure 37: Visitor services and facilities used

Importance ratings of visitor services/ facilities

Question 13
    b. For only those services that you or your group
       used, please rate their importance from 1 to 5.
          1=Not important
          2=Somewhat important
          3=Moderately important
          4=Very important
          5=Extremely important

Result
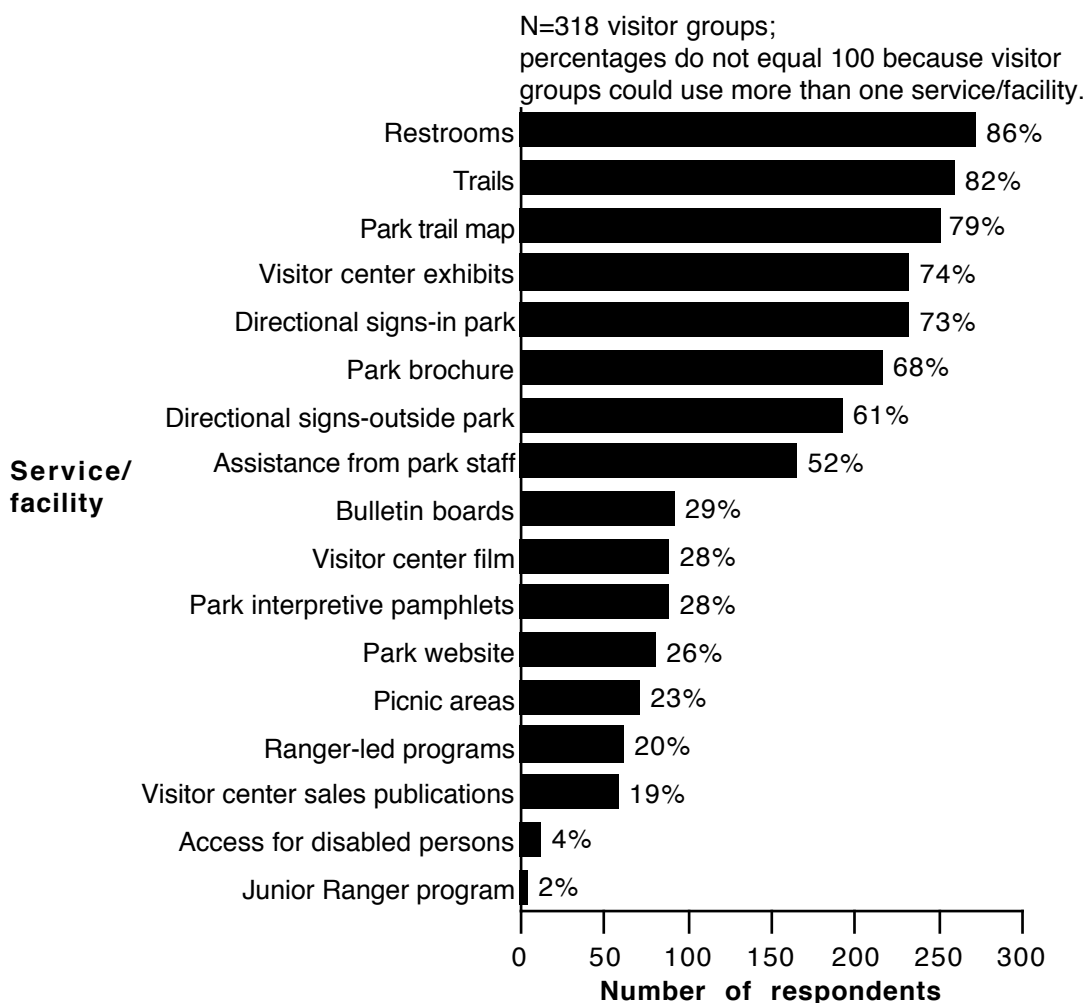- Figure 38 shows the combined proportions of "extremely important" and "very important" ratings for all services and facilities that were rated by enough visitor groups (N ≥ 30). Figures 39 to 55 show the visitor groups' ratings of importance of each service/facility.
- Trails (98%), restrooms (94%), directional signs-in park (89%), directional signs-outside park (88%), and park trail map (88%) were the services/facilities that received the highest combined proportions of "extremely important" and "very important" ratings
- Bulletin boards (5%), visitor center exhibits (4%), and visitor center sales publication (4%) were the services/facilities that received the highest "not important" ratings.
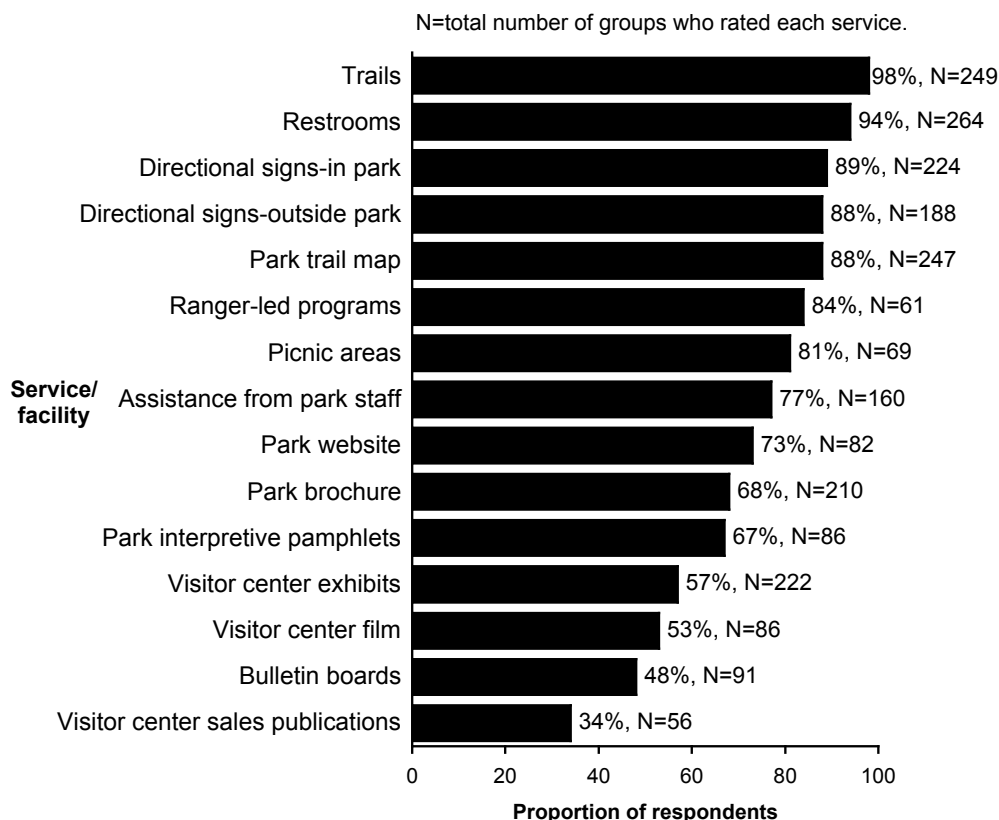
N=total number of groups who rated each service.

Figure 38: Combined proportions of "extremely important" and "very important" ratings for visitor services and facilities

N=210 visitor groups

Extremely important — 28%

Very important — 40%

Rating Moderately important — 21%

Somewhat important — 10%

Not important — 1%

0   20   40   60   80   100

Number of respondents

Figure 39: Importance of park brochure

N=247 visitor groups;
percentages do not equal 100 due to rounding.

Extremely important — 59%

Very important — 29%

Rating Moderately important — 10%

Somewhat important — 3%

Not important — 0%

0   40   80   120   160

Number of respondents

Figure 41: Importance of park trail map

N=86 visitor groups;
percentages do not equal 100 due to rounding.

Extremely important — 24%

Very important — 43%

Rating Moderately important — 22%

Somewhat important — 10%

Not important — 0%

0   10   20   30   40

Number of respondents
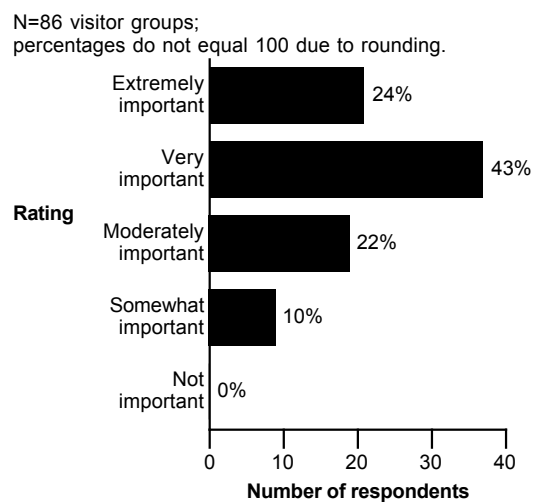
Figure 40:   Importance of park interpretive pamphlets

N=91 visitor groups;
percentages do not equal 100 due to rounding.

Extremely important — 15%

Very important — 33%

Rating Moderately important — 30%

Somewhat important — 16%

Not important — 5%

0   10   20   30

Number of respondents
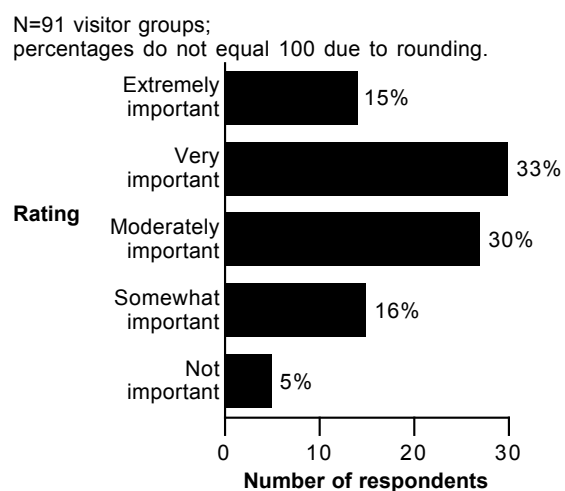
Figure 42:   Importance of bulletin boards

N=86 visitor groups

Rating

Extremely important — 19%
Very important — 34%
Moderately important — 31%
Somewhat important — 13%
Not important — 3%

Number of respondents
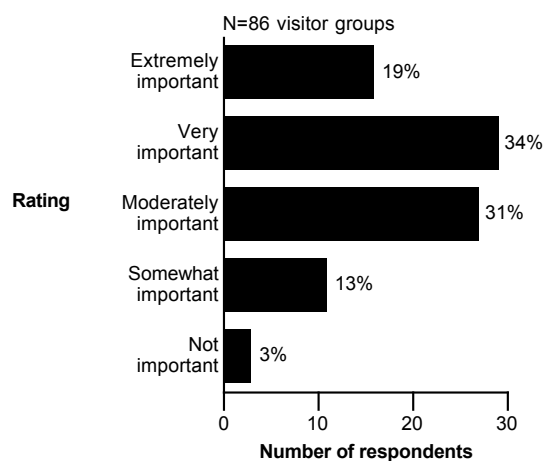
Figure 43: Importance of visitor center film

N=56 visitor groups

Rating

Extremely important — 18%
Very important — 16%
Moderately important — 32%
Somewhat important — 30%
Not important — 4%

Number of respondents
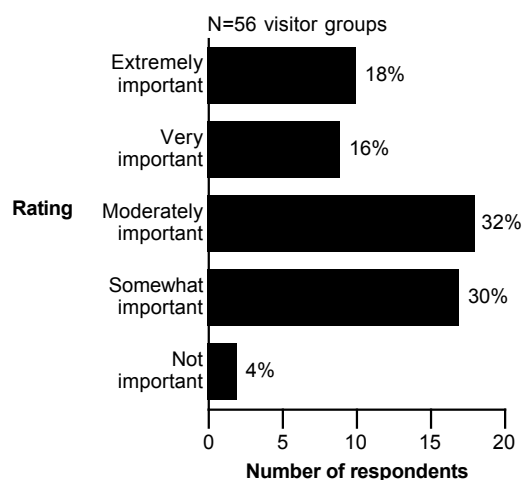
Figure 45: Importance of visitor center sales publications

N=222 visitor groups;
percentages do not equal 100 due to rounding.

Rating

Extremely important — 23%
Very important — 34%
Moderately important — 31%
Somewhat important — 7%
Not important — 4%

Number of respondents
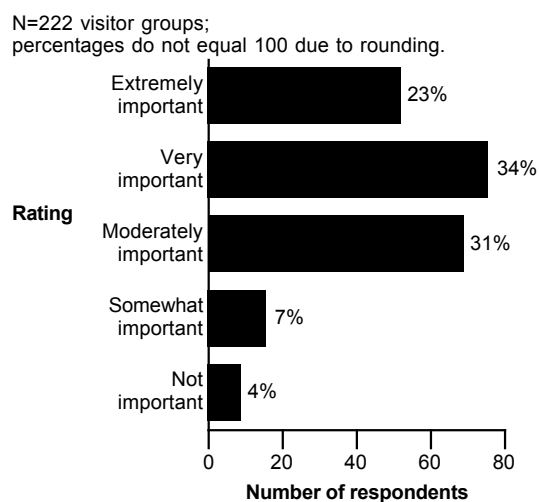
Figure 44: Importance of visitor center exhibits

N=249 visitor groups;
percentages do not equal 100 due to rounding.

Rating

Extremely important — 80%
Very important — 18%
Moderately important — 1%
Somewhat important — 0%
Not important — <1%

Number of respondents
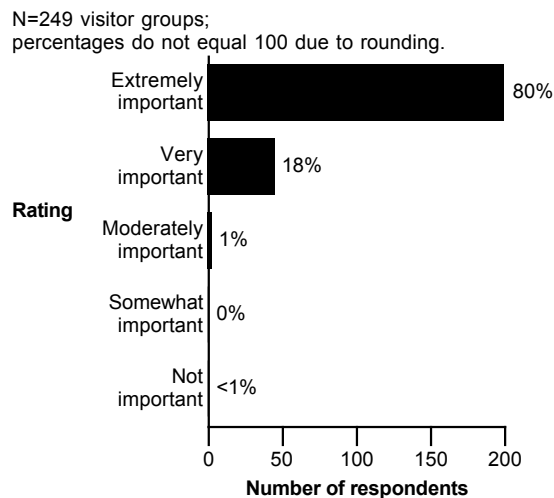
Figure 46: Importance of trails

N=160 visitor groups

Extremely important 44%

Very important 33%

Moderately important 17%

Somewhat important 6%

Not important 0%

Rating

Number of respondents
0 20 40 60 80
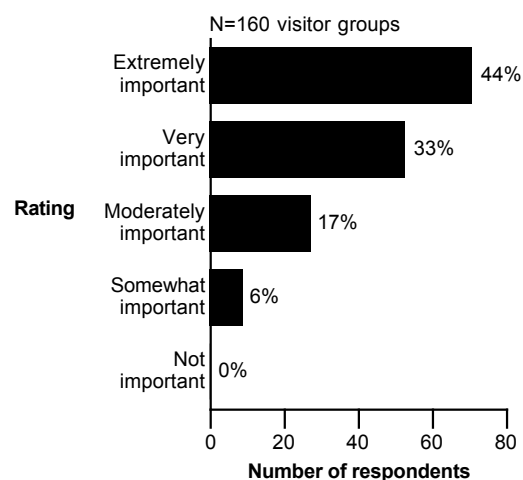
Figure 47: Importance of assistance from park staff

N=188 visitor groups;
percentages do not equal 100 due to rounding.

Extremely important 60%

Very important 28%

Moderately important 10%

Somewhat important 3%

Not important 0%

Rating

Number of respondents
0 30 60 90 120
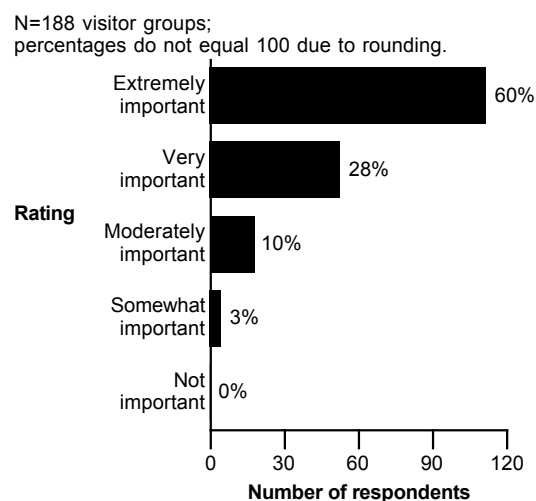
Figure 49: Importance of directional signs-outside park

N=224 visitor groups;
percentages do not equal 100 due to rounding.

Extremely important 59%

Very important 30%

Moderately important 8%

Somewhat important 2%

Not important <1%

Rating

Number of respondents
0 50 100 150
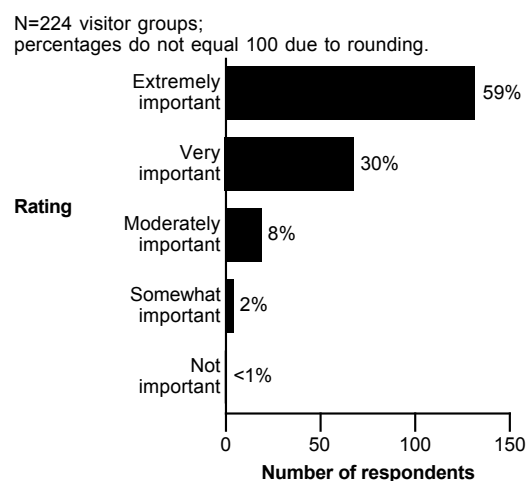
Figure 48: Importance of directional signs-in park

N=264 visitor groups

Extremely important 72%

Very important 22%

Moderately important 5%

Somewhat important 1%

Not important 0%

Rating

Number of respondents
0 50 100 150 200

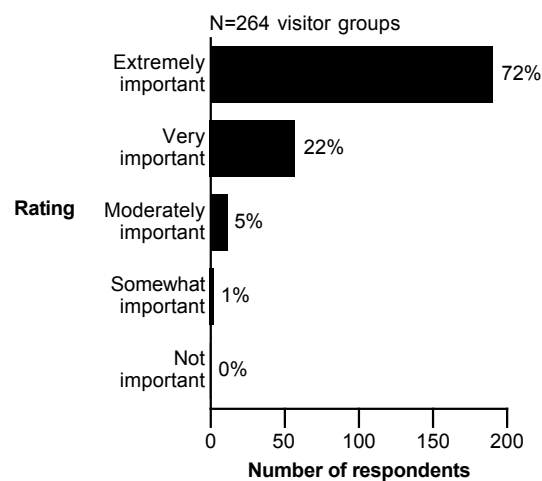**Figure 50: Importance of restrooms**

N=69 visitor groups;
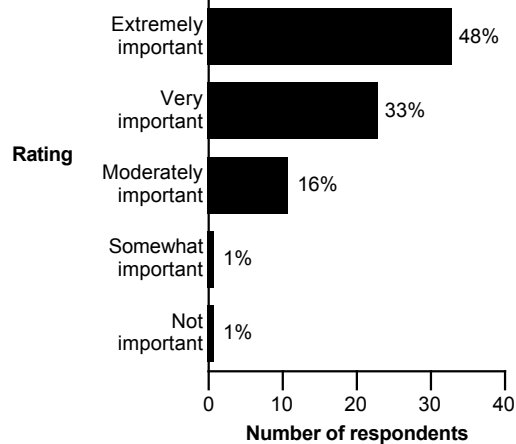percentages do not equal 100 due to rounding.

Figure 51: Importance of picnic areas

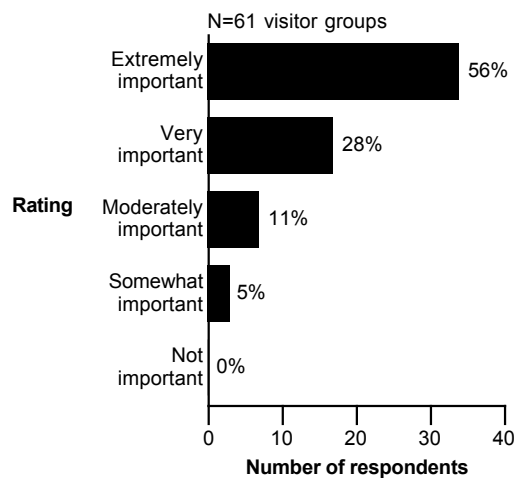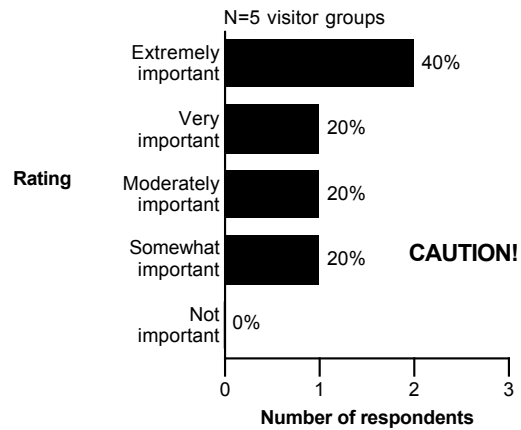

Figure 52: Importance of ranger-led programs

Figure 53: Importance of Junior Ranger program
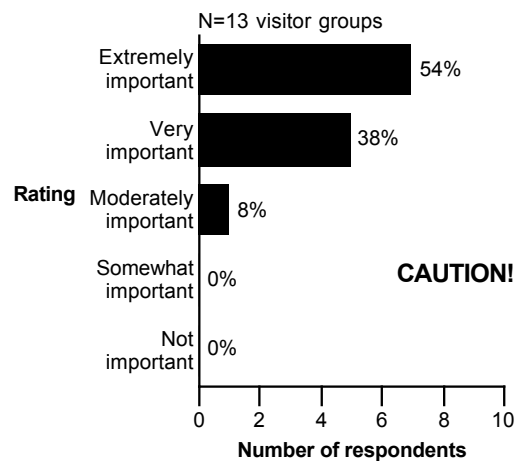

Figure 54: Importance of access for disabled persons
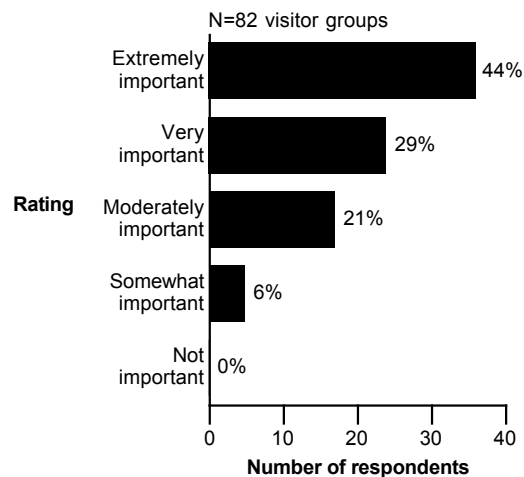

Figure 55: Importance of park website used before or during visit

Quality ratings of visitor services/facilities

Question 13
  c. For those services and facilities that you and your group used, please rate their quality from 1-5.

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

Result
  • Figure 56 shows the combined proportions of "very good" and "good" quality ratings for services/facilities that were rated by enough visitor groups (N≥30 visitor groups)
  • Figures 57 to 73 show the quality ratings for each visitor service/facility
  • Trails (97%), ranger-led program (97%), and restrooms (95%) were the services/facilities that received the highest combined proportions of "very good" and "good" quality ratings
  • Directional signs – outside park (3%) was the facility that received the highest "very poor" quality rating.

N=total number of groups who rated each service.

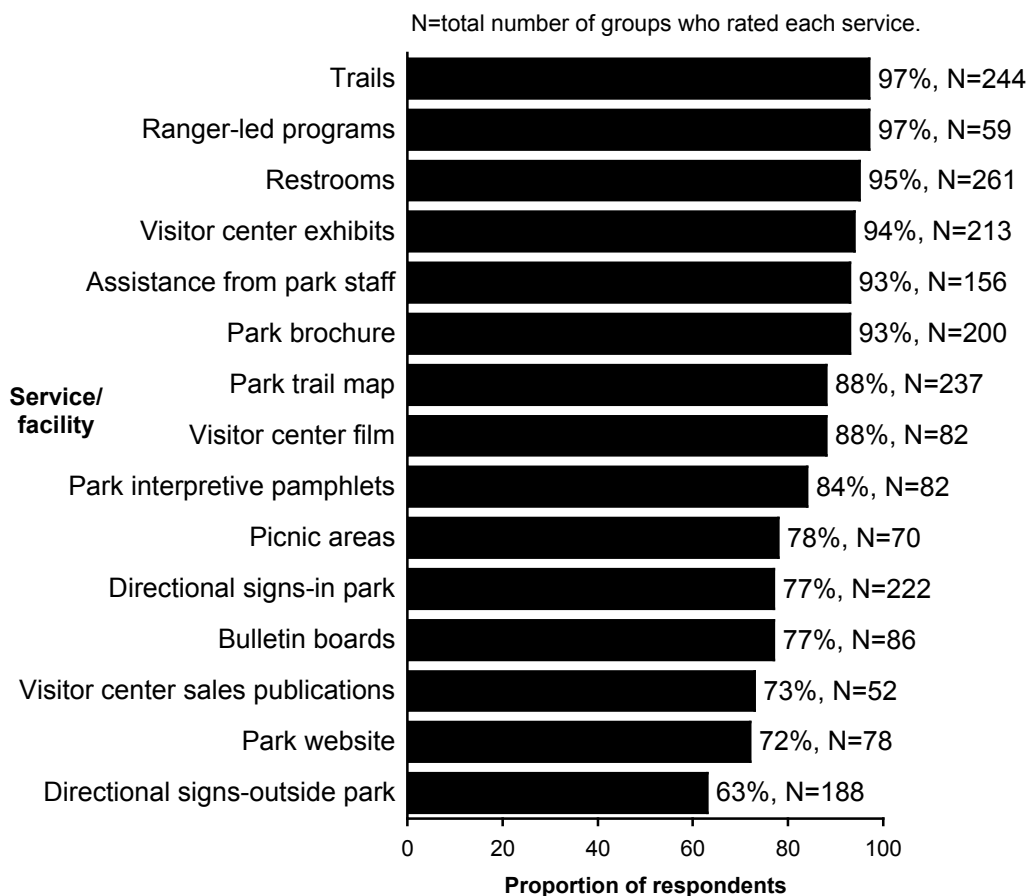| Service/facility	Proportion
Trails	97%, N=244
Ranger-led programs	97%, N=59
Restrooms	95%, N=261
Visitor center exhibits	94%, N=213
Assistance from park staff	93%, N=156
Park brochure	93%, N=200
Park trail map	88%, N=237
Visitor center film	88%, N=82
Park interpretive pamphlets	84%, N=82
Picnic areas	78%, N=70
Directional signs-in park	77%, N=222
Bulletin boards	77%, N=86
Visitor center sales publications	73%, N=52
Park website	72%, N=78
Directional signs-outside park	63%, N=188

Proportion of respondents

Figure 56: Combined proportions of "very good" and "good" quality ratings for visitor services and facilities

N=200 visitor groups;
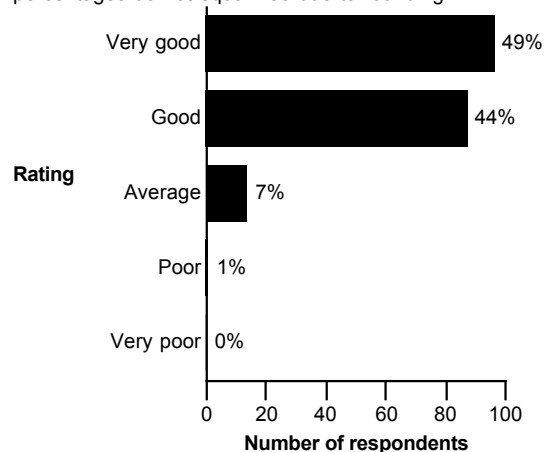percentages do not equal 100 due to rounding.

Figure 57: Quality of park brochure

N=237 visitor groups
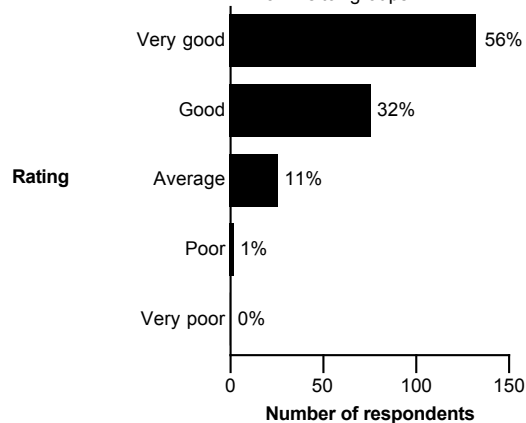
Figure 59: Quality of park trail map

N=82 visitor groups
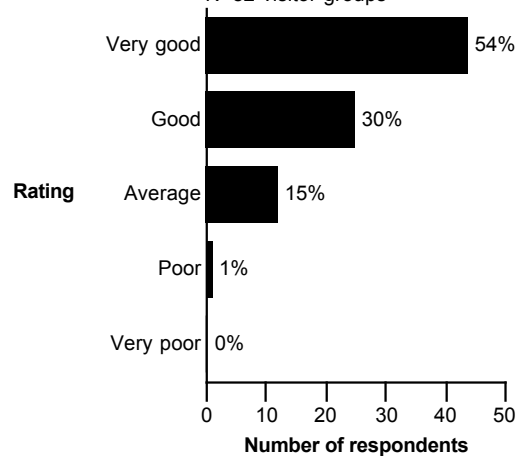
Figure 58: Quality of park interpretive pamphlets

N=86 visitor groups
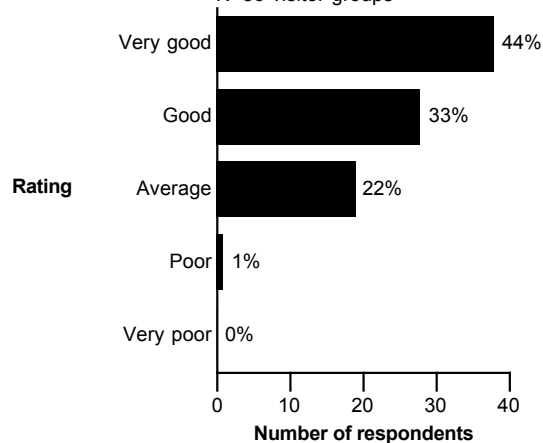
Figure 60: Quality of bulletin boards

N=82 visitor groups
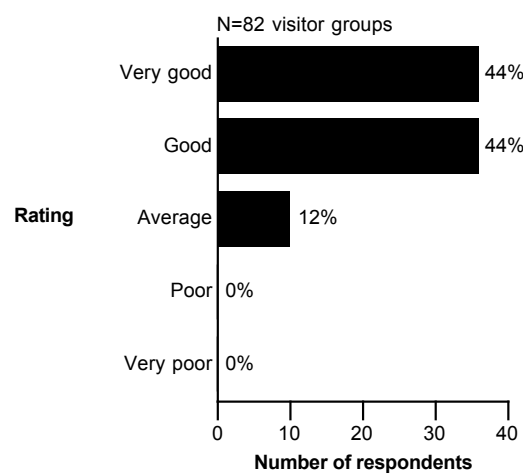
Figure 61: Quality of visitor center film

N=52 visitor groups
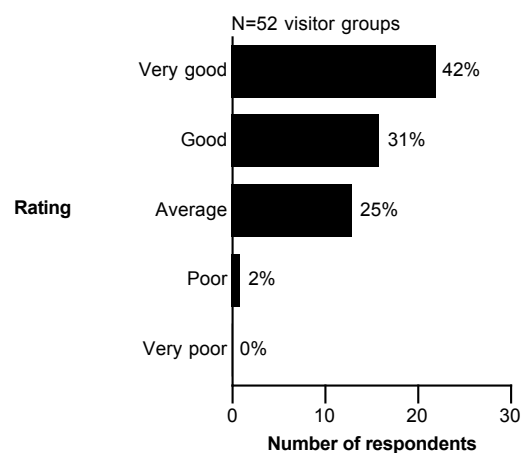
**Figure 63: Quality of visitor center sales
publications**

N=213 visitor groups
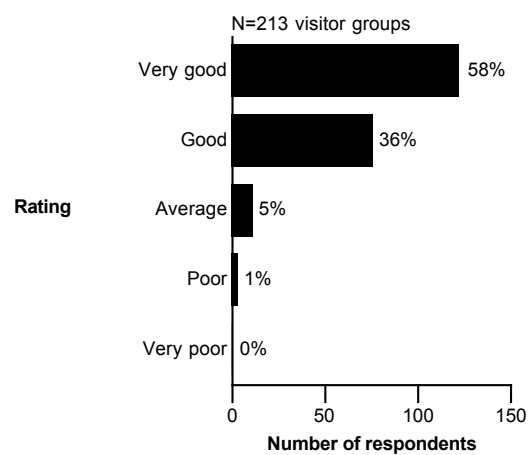
Figure 62: Quality of visitor center exhibits

N=244 visitor groups
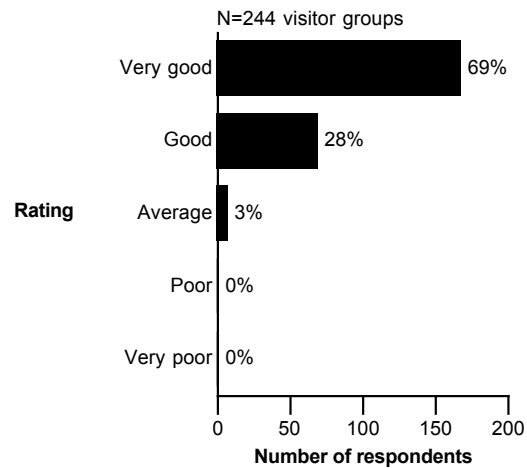
Figure 64: Quality of trails

N=156 visitor groups;
percentages do not equal 100 due to rounding.
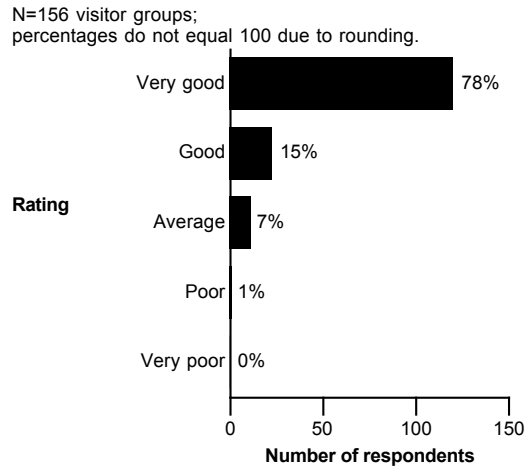
Figure 65: Quality of assistance from park staff

N=188 visitor groups;
percentages do not equal 100 due to rounding.
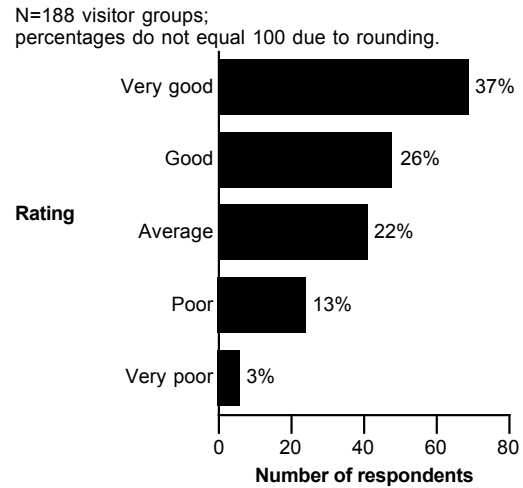
Figure 67: Quality of directional signs-outside park

N=222 visitor groups;
percentages do not equal 100 due to rounding.
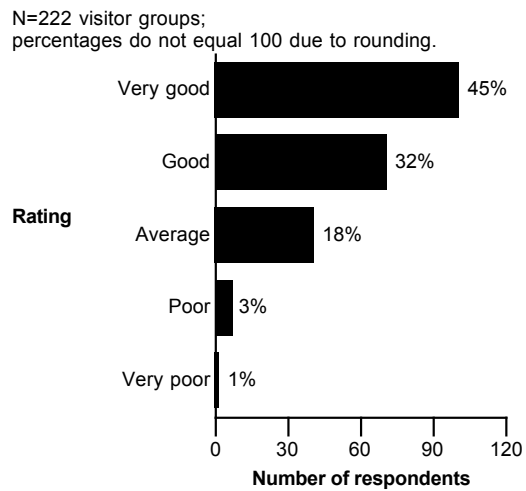
Figure 66: Quality of directional signs-in park

N=261 visitor groups;
percentages do not equal 100 due to rounding.
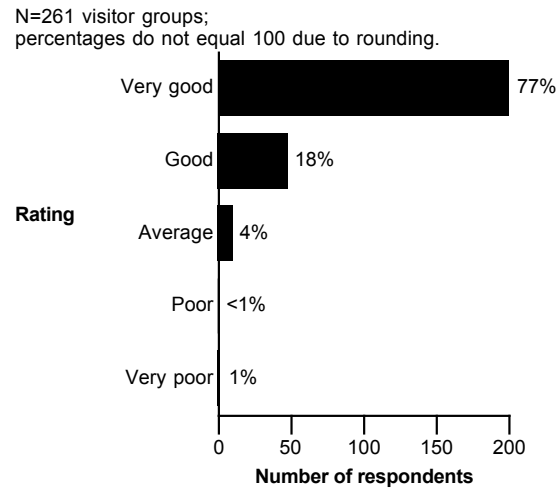
Figure 68: Quality of restrooms

N=70 visitor groups;
percentages do not equal 100 due to rounding.
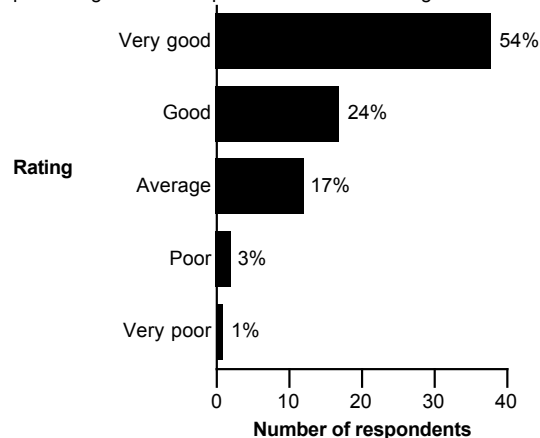
Figure 69: Quality of picnic areas

Figure 70: Quality of ranger-led programs
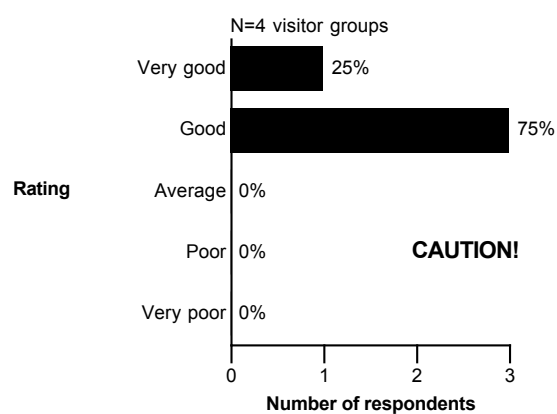
Figure 71: Quality of Junior Ranger program

N=12 visitor groups;
percentages do not equal 100 due to rounding.

Figure 72: Quality of access for disabled persons
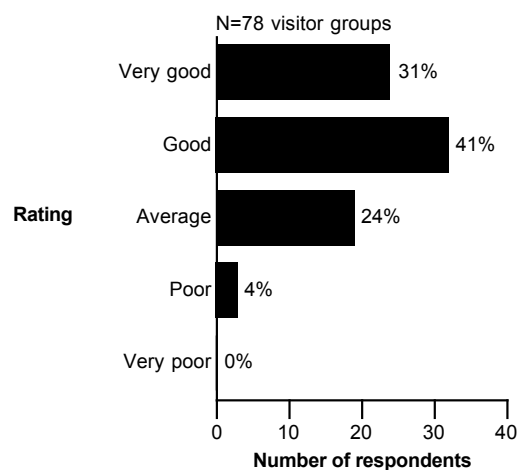
Figure 73: Quality of park website used before or during visit

Means of importance and quality scores

Result
- Figures 74 and 75 show the mean scores of importance and quality ratings for all visitor services and facilities that were rated by enough visitor groups (N≥30)

- All services and facilities were rated above average
- Directional road signs (both in and outside of park) require some attentions since both were rated high in importance but relatively lower in quality compared to other services/facilities.
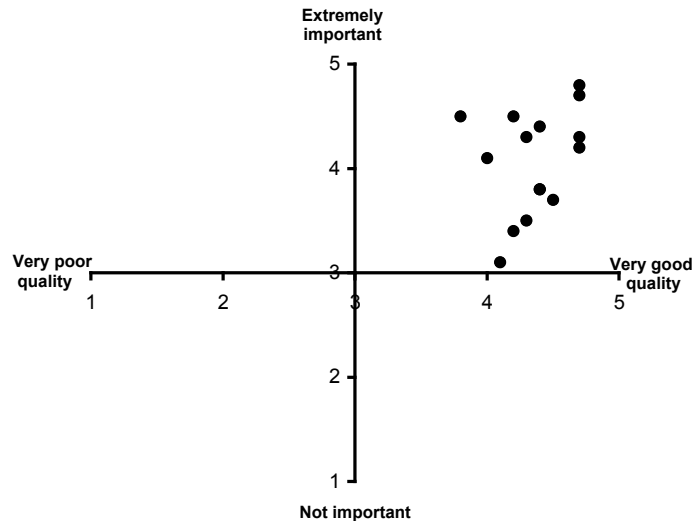
Figure 74: Mean scores of importance and quality ratings for visitor services and facilities
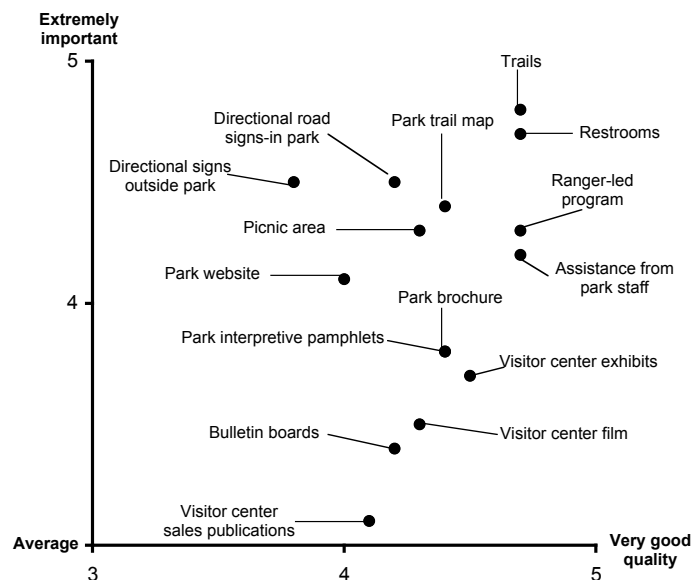
Figure 75: Detail of Figure 74

Additional services/facilities needed

Question 14
  a. During your stay in the park or in the area (within a 1-hour drive of park), were there any services that you and your group needed that were not available?
  b. If Yes, what services did you and your group need that were not available?

Result
  • As shown in Figure 76, most visitor groups (88%) did not have any difficulty obtaining services they needed in the park or in the area
  • 12% of visitor groups reported that there were services their groups needed but were not available
  • Services visitor groups needed but were not available in the park or in the area included drinking fountains (along the trail), restrooms along trail and at the canoe put out, restrooms to use after hours, food services near by, bug repellent, campgrounds for RV/camper, canoe outfitters, drop off and pick up canoe service, maps of locations of the champion trees, information of how to contact a ranger, ice/ice machine, wine store in Orangeburg, more handicapped accessibility, more trails for pets, and a comprehensive tree identification guide.

N=317 visitor groups

Need other services?

Yes 12%

No 88%

0   50   100   150   200   250   300
Number of respondents
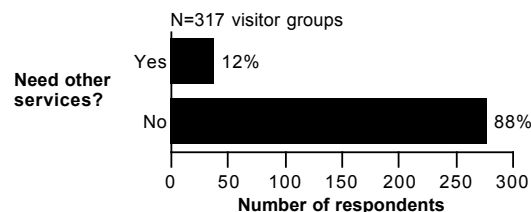
Figure 76: Were there other services that visitors needed but were not available?

**Importance ratings of selected park
resources/qualities**

Question 15

It is the National Park Service's
responsibility to protect Congaree
National Park's natural, scenic, and
cultural resources while at the same
time providing for public enjoyment. How
important is protection of the following
resources/qualities in the park to you?

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

Result

- Native plants (98%), native wildlife (98%), and natural
  setting (98%) were the resources/qualities that
  received the highest combined proportions of
  "extremely important" and "very important" ratings
  (see Figure 77)
- Parking availability (2%) was the resource/quality that
  received the highest "not important" rating, as shown
  in Table 7.
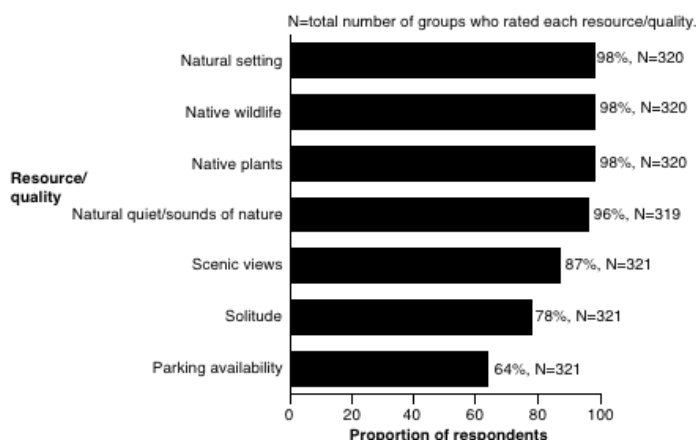
**Figure 77:   Combined proportions of "extremely
                important" and "very important" ratings for
                selected park resources/qualities**

Table 7: Importance ratings for selected park resources/qualities N=number of visitor groups who rated each resource/quality; total percentages may not equal 100 due to rounding.						
Resource/quality	N	Ratings (%)				
		Not important	Somewhat important	Moderately important	Very important	Extremely important
Scenic views	321	1	3	9	28	59
Natural setting	320	0	<1	2	17	81
Native wildlife	320	0	<1	1	15	83
Native plants	320	0	1	2	16	82
Natural quiet/sounds of nature	319	0	<1	3	19	77
Parking availability	321	2	7	27	33	31
Solitude	321	1	4	18	30	48

Elements affecting park experience

Question 22

   Please indicate how the following elements may have affected your park experience during this visit to Congaree National Park

Result

- Small number of visitors on trails (33%), other visitors' activities (8%), and small number of visitors canoeing/kayaking (7%) were the elements that received the highest "added to" rating (see Table 8)
- Large number of visitors on trails (19%), other visitors' activities (12%), and airplane noise (11%) were the elements that received the highest "detracted from" ratings
- "Other" elements that detracted from visitors enjoying the park included noise from other visitors' activities, dogs on trails, mosquitoes, light pollution, flood, large school groups invaded picnic area, crowded, limited parking, invasive exotic plants and animal species, and noise from machinery nearby
- "Other" elements that added to visitor experience included Nature Fest, additional exhibits, ranger-led tour, and enthusiasm of rangers.

Table 8: Elements affecting park experience N=number of visitor groups who rated each element; total percentages may not equal 100 due to rounding.					
		Rating (%)			
Element	N	Detracted from	No effect	Added to	Did not experience
Noise from					
Airplanes	312	11	23	<1	66
Trains	311	2	19	<1	79
Automobile	308	5	35	0	60
Park staff activities	308	4	22	<1	73
Gunshots from neighboring land	307	4	15	<1	81
Other visitors' activities	304	12	61	8	19
Small number of visitors on trails	307	2	50	33	15
Large number of visitors on trails	301	19	28	1	52
Small number of visitors canoeing/kayaking	292	0	21	7	72
Large number of visitors canoeing/kayaking	293	1	17	<1	82
Other	22	69	-	31	-

Expenditures

Question 25

For you and your group, please report all expenditures for the items listed below for this visit to Congaree National Park and the surrounding area (within 1-hour drive of park). Please write "0" if no money was spent in a particular category.

a. Please list your group's total expenditures inside Congaree National Park.
b. Please list your group's total expenditures in the surrounding area (within 1-hour drive of park).

Note: Residents from the surrounding area should only include expenditures that were directly related to this visit to Congaree National Park.

Total expenditures in and outside of the park

- 52% of visitor groups spent up to $50, 19% spent $151 or more, and 16% did not spend any money (see Figure 78)
- The largest proportions of total expenditures were for hotel, motel, cabin, rented condo, etc. (38%), followed by restaurants and bars (20%), as shown in Figure 79
- The average visitor group expenditure was $103
- The median (50% of groups spent more and 50% of groups spent less) expenditure was $24
- Average total expenditure per person (per capita) was $40.

N=279 visitor groups; percentages do not equal 100 due to rounding.

Amount spent	
$151 or more	19%
$101-150	5%
$51-100	7%
$1-50	52%
Spent no money	16%
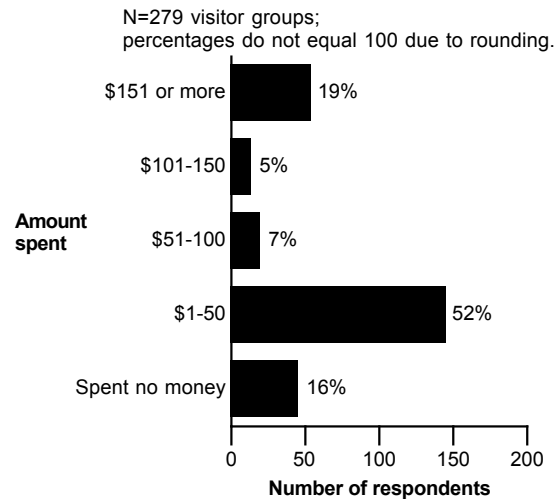
Figure 78:   Total expenditures in and outside of the park

N=279 visitor groups; total percentages may not equal 100 due to rounding.

- Donations (1%)
- All other purchases (9%)
- Admission, recreation entertainment fees (1%)
- Other transportation expenses (4%)
- Gas and oil (12%)
- Groceries and takeout food (8%)
- Restaurants and bars (20%)
- Guide fees and charges (<1%)
- Canoe kayak rental (3%)
- Camping fees and charges (3%)
- Hotel, motel, cabin, rented condo, etc. (38%)
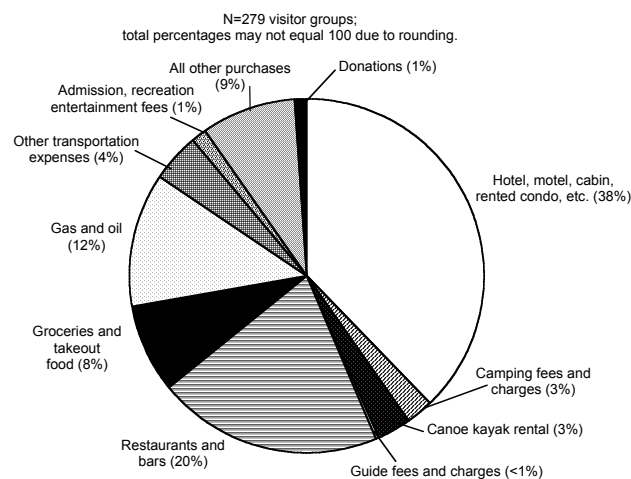
Figure 79:   Proportions of total expenditures in and outside of the park

Number of people covered by expenditures

Number of adults covered by the expenditures

- 55% of visitor groups had two adults covered by expenditures (see Figure 80)
- 20% of groups had one adult covered by expenditures

Number of children covered by expenditures

- Most groups (71%) did not have any children covered by expenditures (see Figure 81)
- 12% of groups had one child and 10% of groups had two children covered by expenditures.

N=264 visitor groups

Number of adults

5 or more — 6%
4 — 10%
3 — 9%
2 — 55%
1 — 20%

Number of respondents
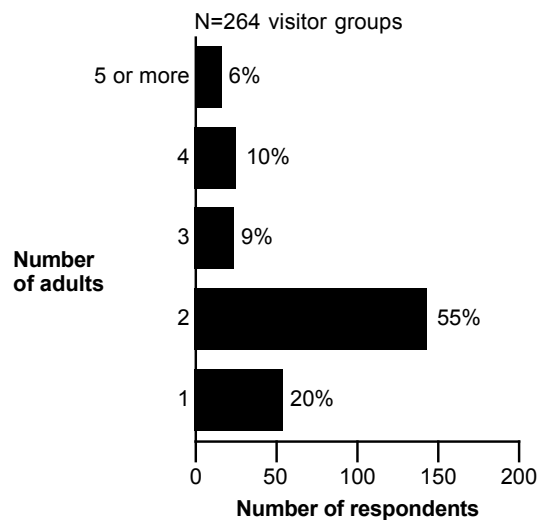
Figure 80: Number of adults covered by expenditures

N=242 visitor groups

Number of children

3 or more — 7%
2 — 10%
1 — 12%
0 — 71%

Number of respondents

Figure 81: Number of children covered by expenditures

Expenditures inside park

- 48% of visitor groups did not spend any money inside Congaree National Park and 33% spent up to $10 (see Figure 82)
- 79% of expenditures inside park was for all other purchases and 21% was for donations (see Figure 83)
- The average visitor group expenditure inside park was $7
- The median (50% of visitor groups spent more and 50% of visitor groups spent less) expenditure inside park was $1
- Average expenditure inside park per visitor (per capita) was $3.

- All other purchases: 55% of visitor groups did not spend any money and 25% spent up to $10 (see Figure 84).
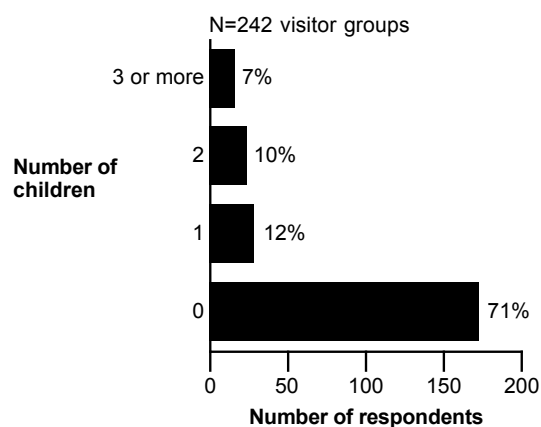- Donations: 75% of visitor groups did not donate any money in the park and 22% donated up to $10 (see Figure 85).

N=149 visitor groups

Donations (21%)

All other purchases (79%)

Figure 83: Proportions of expenditures inside park

N=149 visitor groups;
percentages do not equal 100 due to rounding.

Amount spent

$21 or more — 11%
$11-20 — 7%
$1-10 — 33%
Spent no money — 48%

Number of respondents

Figure 82: Total expenditures inside Congaree National Park

N=133 visitor groups;
percentages do not equal 100 due to rounding.

Amount spent

$21 or more — 11%
$11-20 — 10%
$1-10 — 25%
Spent no money — 55%

Number of respondents
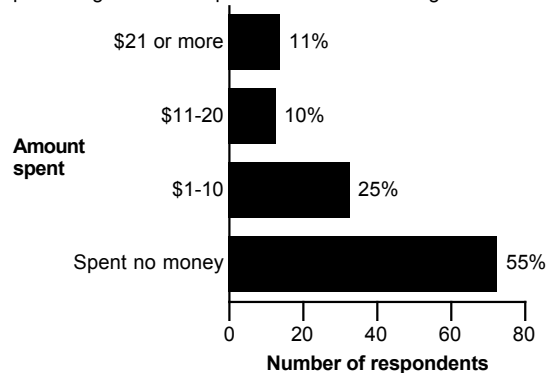
Figure 84: Expenditures for all other purchases inside park

N=116 visitor groups

Amount spent

$11 or more — 3%
$1-10 — 22%
Spent no money — 75%

Number of respondents
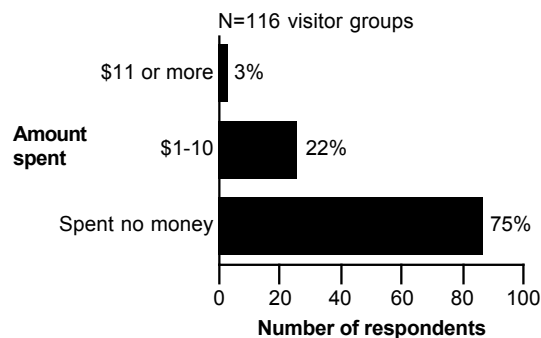
Figure 85: Expenditures for donations inside park

Expenditures outside park

- 48% of visitor groups spent up to $50 in the area surrounding Congaree National Park (within 1-hour drive of park) and 20% did not spent any money (see Figure 86)
- The largest proportions of expenditures were for hotel, motel, cabin, rented condo, etc. (39%), followed by restaurants and bars (21%), as shown in Figure 87
- The average visitor group expenditure outside park was $105
- The median (50% of groups spent more and 50% spent less) expenditure outside the park was $23
- The average expenditure outside park per visitor (per capita) was $40.

N=263 visitor groups;
percentages do not equal 100 due to rounding.
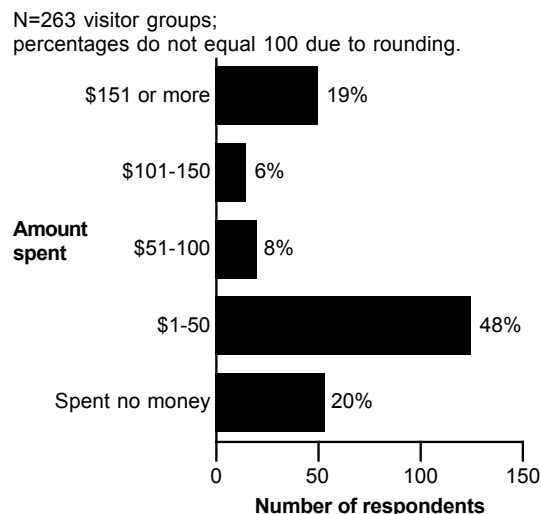
Figure 86: Expenditures outside Congaree National Park
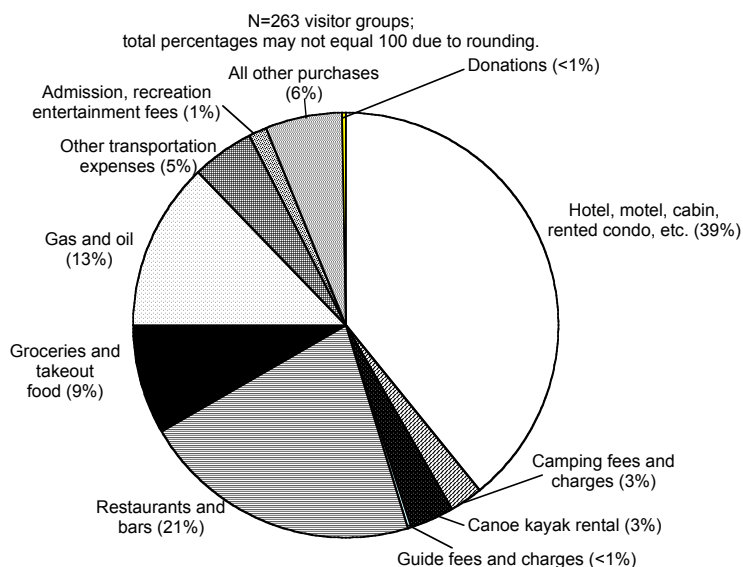
Figure 87: Proportions of expenditures outside Congaree National Park

Expenditures outside park (continued)

- Hotel, motel, cabin, rented condo, etc.: 76% of visitor groups did not spend any money and 12% spent up to $100 (see Figure 88)

N=191 visitor groups

Amount spent	
$201 or more	4%
$101-200	8%
$1-100	12%
Spent no money	76%

Number of respondents
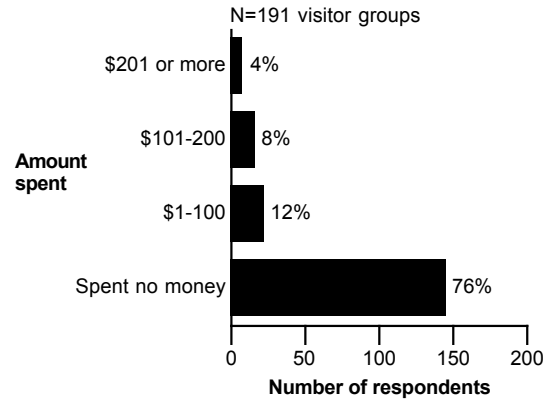
Figure 88: Expenditures for hotel, motel, cabin, rented condo, etc. outside Congaree National Park

- Camping fees and charges: Most visitor groups (94%) did not spend any money (see Figure 89)

N=161 visitor groups

Amount spent	
$21 or more	4%
$1-20	2%
Spent no money	94%

Number of respondents
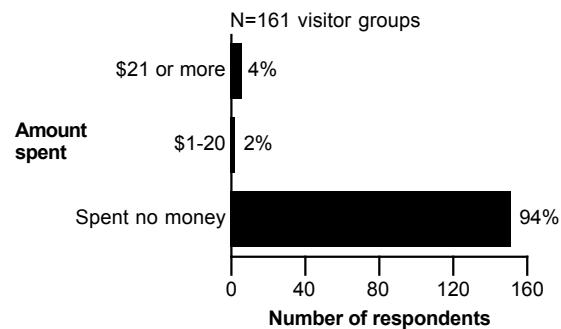
Figure 89: Expenditures for camping fees and charges outside park

- Kayak/canoe rental charges: 96% of visitor groups did not spend any money (see Figure 90)

N=158 visitor groups

Amount spent	
$21 or more	3%
$1-20	1%
Spent no money	96%

Number of respondents
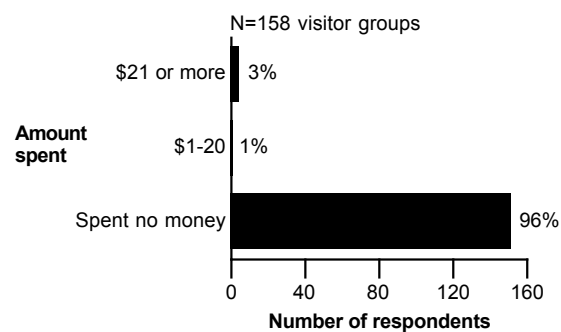
Figure 90: Expenditures for kayak/canoe rental charges outside park

Expenditures outside park (continued)

- Guide fees and charges: 99% of visitor groups did not spend any money (see Figure 91)

N=154 visitor groups;
percentages do not equal 100 due to rounding.
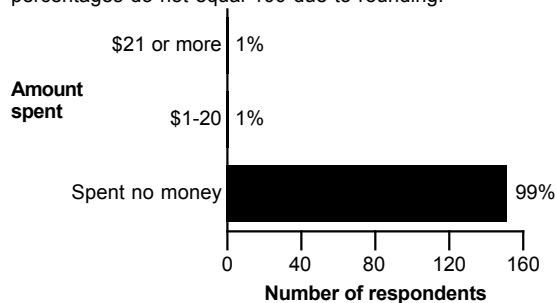
Figure 91: Expenditures for guide fees and charges outside park
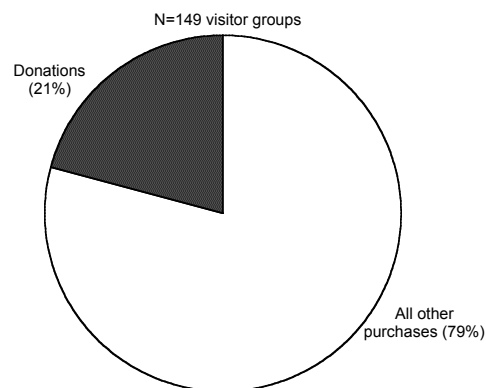
- Restaurants and bars: 57% of visitor groups did not spend any money, 14% spent up to $20, and 19% spent $41 or more (see Figure 92)

N=212 visitor groups
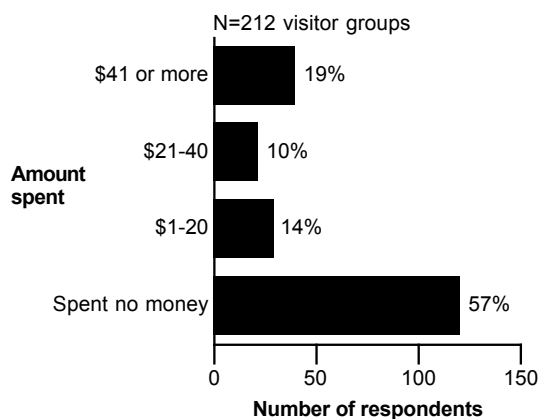
Figure 92: Expenditures for restaurants and bars outside park

- Groceries and takeout food: 59% of visitor groups did not spend any money and 26% spent up to $20 (see Figure 93)

N=196 visitor groups
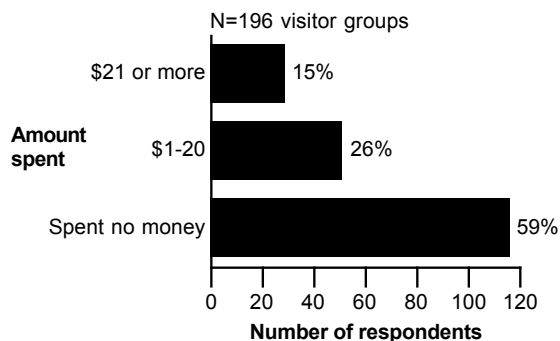
Figure 93: Expenditures for groceries and takeout food outside park

Expenditures outside park (continued)

- <u>Gas and oil:</u> 43% spent up to $20 and 30% did not spend any money (see Figure 94)

N=212 visitor groups;
percentages do not equal 100 due to rounding.
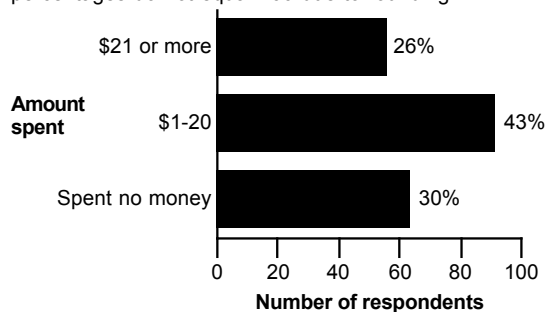
Figure 94: Expenditures for gas and oil outside park

- <u>Other transportations expenses</u>: Most groups (93%) did not spend any money (see Figure 95)

N=160 visitor groups;
percentages do not equal 100 due to rounding.
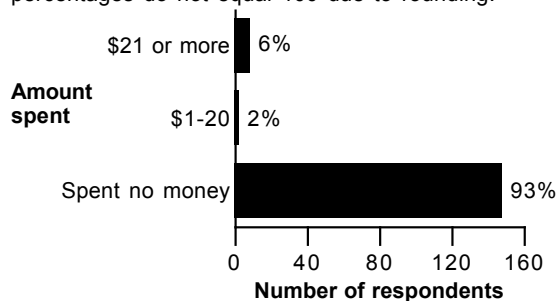
Figure 95: Expenditures for other transportation expenses outside park

- <u>Admission, recreation, entertainment fees</u>: 92% of visitor groups did not spent any money (see Figure 96)

N=156 visitor groups
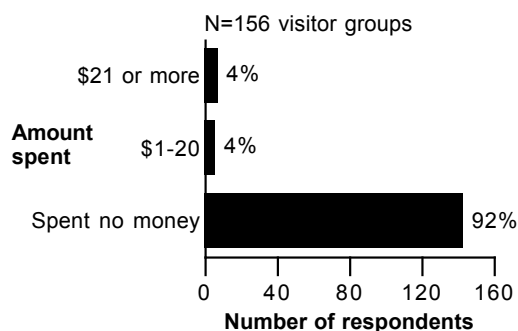
Figure 96: Expenditures for admission, recreation, entertainment fees outside park

Expenditures outside park (continued)

- All other purchases: 75% of visitor groups did not spend any money and 14% spent up to $20 (see Figure 97)

N=171 visitor groups
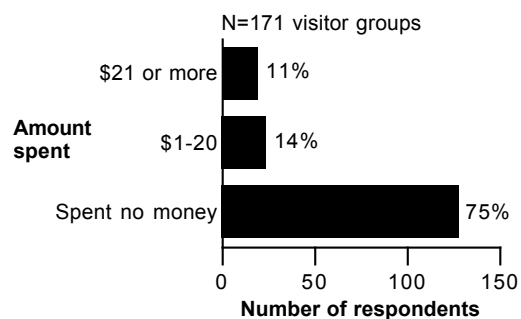
Figure 97: Expenditures for all other purchases outside park

- Donations: Most groups (91%) did not donate any money and 9% donated up to $20 (see Figure 98).

N=149 visitor groups;
percentages do not equal 100 due to rounding.
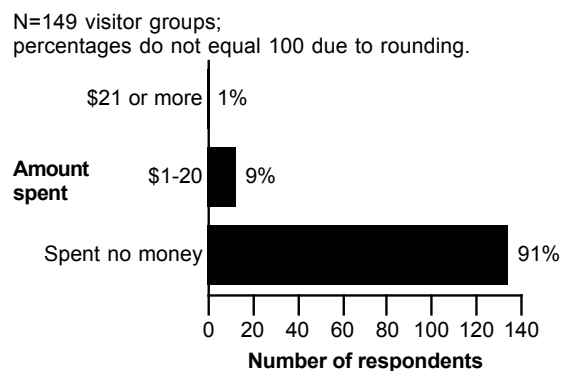
Figure 98: Expenditures for donations outside park

Information Unique to Park

Opinions about controlling non-native plants/animals in park

Question 23

The National Park Service has a policy to control or remove non-native plants and animals from within park boundaries. Non-native species occupy an area that is not part of their natural, historic range, and often originated from another continent or region. Many of these species are invasive and damage park resources. Were you aware of this policy prior to your visit to Congaree National Park?

Result

- 60% of visitor groups were not aware of the policy to control or remove non-native species from within park boundaries and 36% were aware (see Figure 99)

Question 24

Would you and your group be supportive of the control and removal of non-native species at Congaree National Park?
a. Control/remove non-native plants?
b. Control/remove non-native animals?

Result

- 78% of visitor groups were supportive of control/removal of non-native plants in park and 18% were "not sure," as shown in Figure 100
- 68% of visitor groups were supportive of control/removal of non-native animals in park and 25% were "not sure," as shown in Figure 101.

N=320 visitor groups;
percentages do not equal 100 due to rounding.
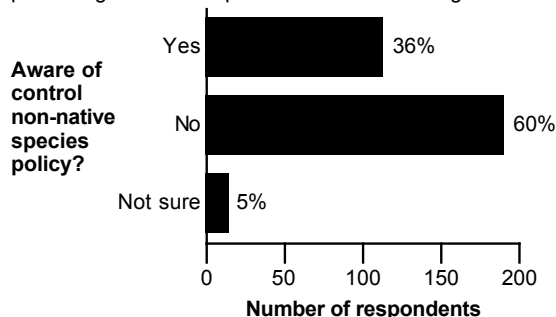
Figure 99: Visitor groups who were aware of the policy to control or remove non-native species within the park boundaries

N=320 visitor groups
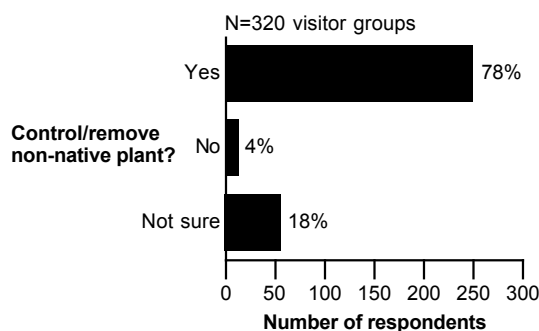
Figure 100: Visitors who support control/ removal of non-native plants in park

N=319 visitor groups
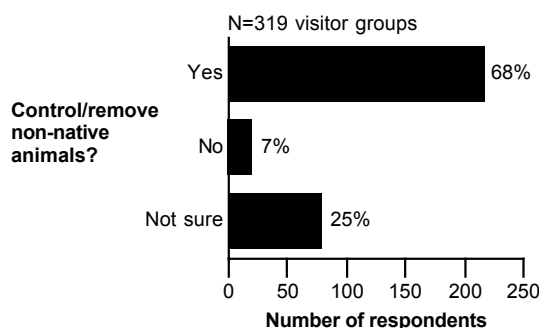
Figure 101: Visitors who support control/ removal of non-native animals in park

Interest in volunteering opportunity

Question 26

Do you or any member of your group have any interest in volunteering or providing research assistance in a national park such as Congaree National Park?

Result
- 50% of visitor groups did not have any member who were interested in volunteering at a park unit like Congaree National Park (see Figure 102).
- 28% were "not sure"
- 21% were interested

N=314 visitor groups; percentages do not equal 100 due to rounding.
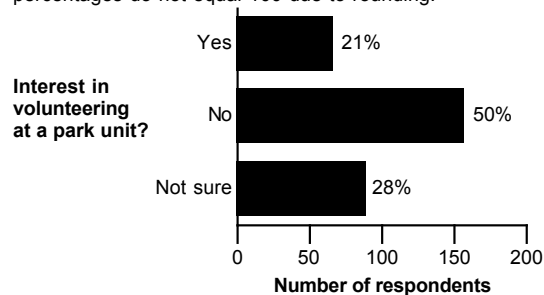
Figure 102:   Visitors who were interested in volunteering at a park unit

Interest in returning to visit Congaree National Park in the future

Question 28

Would you and your group be likely to visit Congaree National Park again in the future?

Result
- 89% of visitor groups reported that they would be likely to visit Congaree National Park again (see Figure 103).
- 7% were "not sure"
- 5% were not likely to visit the park again.

N=321 visitor groups; percentages do not equal 100 due to rounding.
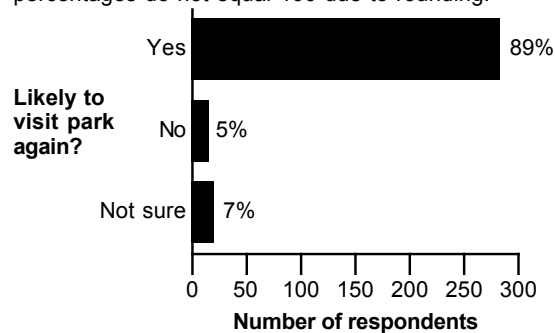
Figure 103:   Visitor groups who would likely to visit Congaree National Park again

Information About Future Preferences

Preferred future organized programs/activities

Question 29

On a future visit to Congaree National Park, what types of organized activities and programs would you and your group like to have available?

Result

- 80% of visitor groups were interested in participating in organized activities/ programs at the park on a future visit and 20% were not interested (see Figure 104)
- Canoeing/kayaking (63%), night walk/night sky program (59%), and ranger-led programs (52%) were the most requested activities/programs (see Figure 105)

- "Other" programs/activities that visitors were interested in participating included mountain biking, programs by Tom Mancke, fishing, champion tree walks, anthropology tours, reenactments, and wildlife identifications/ descriptions.

N=312 visitor groups
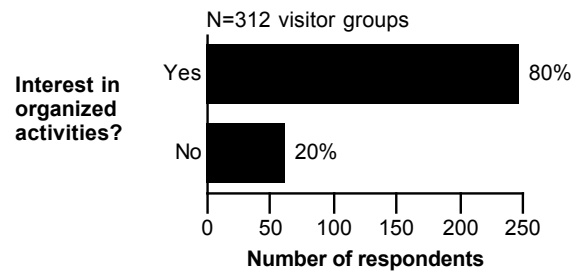
Figure 104: Visitor groups who were interested in organized programs/activities on a future visit
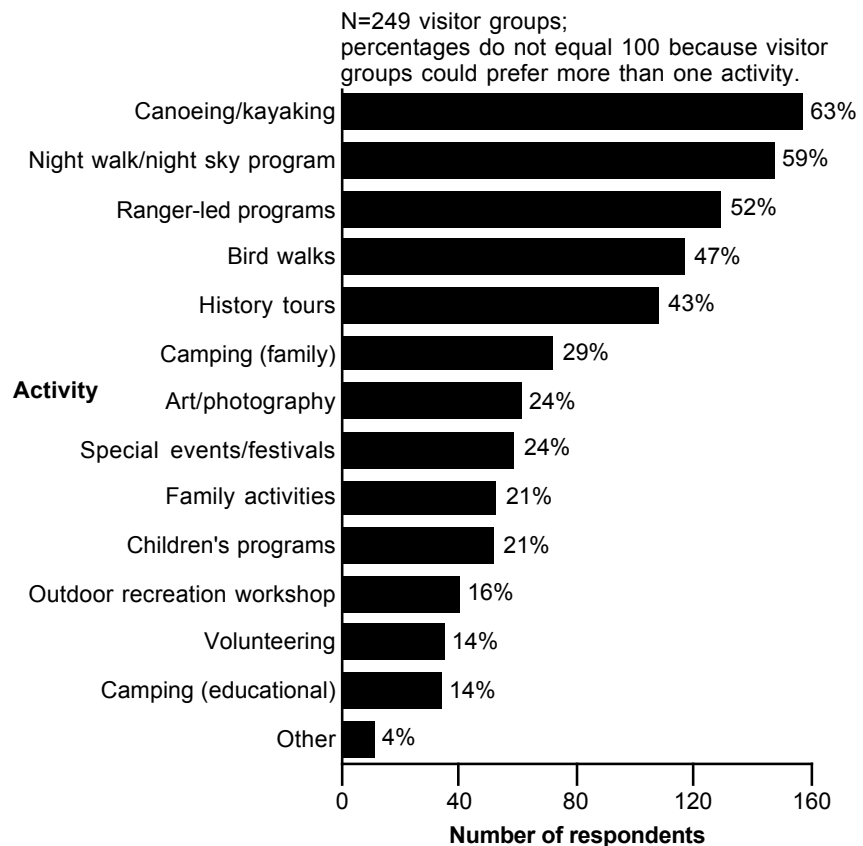
Figure 105: Visitor preference of organized programs/activities on a future visit

Preferred future learning topics

Question 30

On a future visit to Congaree National Park, what subjects would you and your groups be most interested in learning about?

Result

- Plants/animals (74%), champion trees (61%), and old growth floodplain forest (60%) were the topics that most visitors were interested in learning about on a future visit (see Figure 106)
- "Other" topics that visitors were interested in learning about on a future visit included birding tips/guides.

N=281 visitor groups; percentages do not equal 100 because visitor groups may prefer more than one topic.
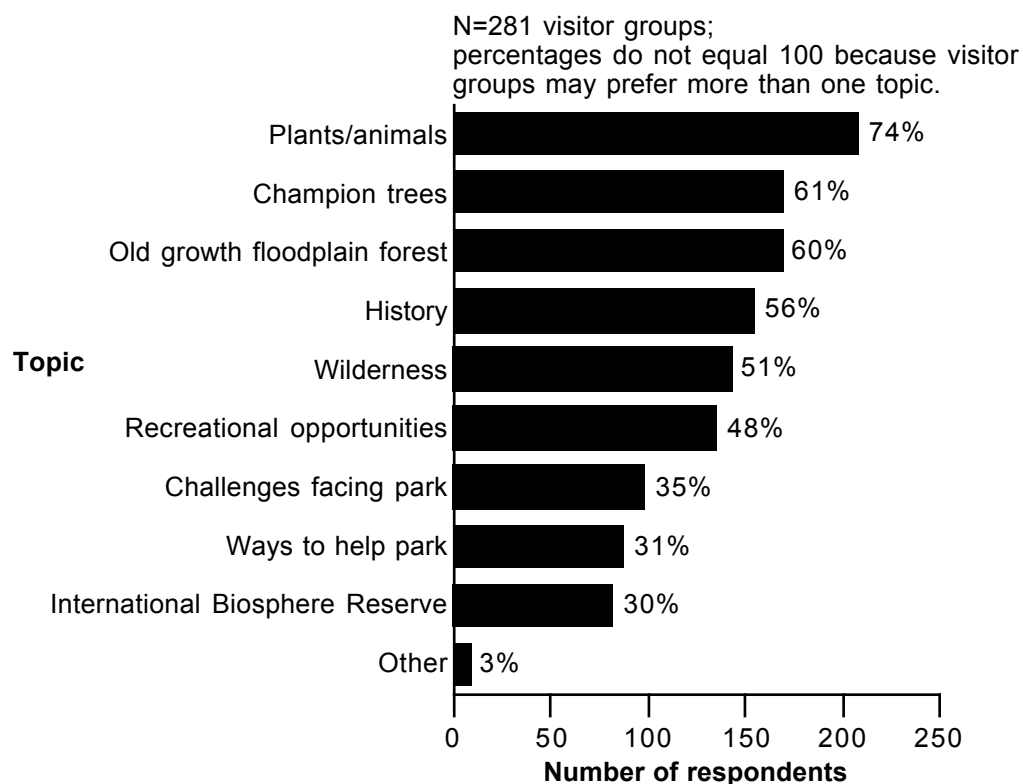
Figure 106: Preferred learning topics on a future visit

Overall Quality

Question 34

Overall, how would you and your group rate the quality of the facilities, services, and recreational opportunities provided to you at Congaree National Park during this visit?

Result

- 72% of visitor groups rated the overall quality as "very good," as shown in Figure 107
- 25% rated the overall quality as "good"
- 2% rated "average"
- 2% rated the overall quality as "very poor" or "poor."

N=322 visitor groups;
percentages do not equal 100 due to rounding.
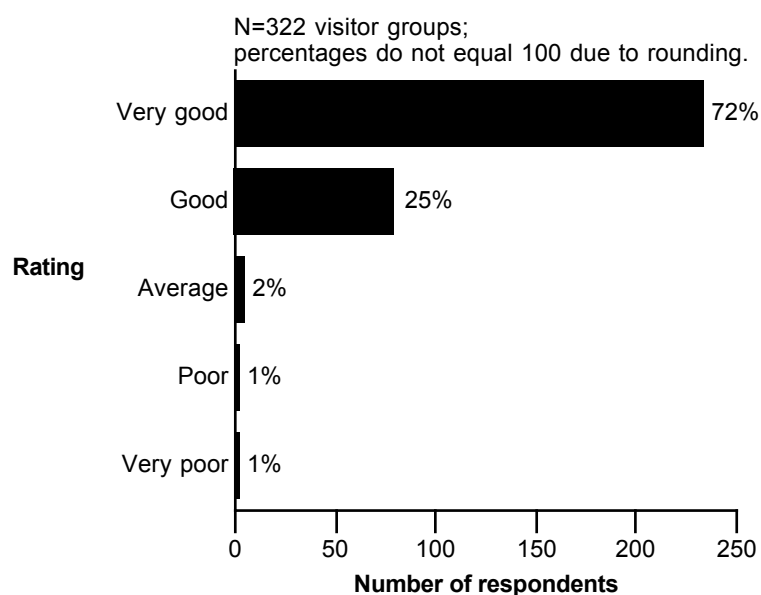
Figure 107: Overall quality of visitor services and facilities

Visitor Comments

Preferred activities in park expanded area

Question 8

4,600 acres of land are authorized to be added to Congaree National Park. What type of activities would you like to have available there?

Result

- 65% of visitor groups (N=211 groups) provided comments about activities that they preferred to have at the added area.
- Table 9 shows the summary of visitor comments. Complete comments are in appendix 5.

Table 9: Preferred activities/facilities in the park expanded area
N= 349 comments;
some visitor groups made more than one comment.

Comment	Number of times mentioned
Walking/hiking/running trails	97
Canoeing/kayaking trails	46
Campsites	45
Bike trails	23
Not familiar enough with the area to offer comments	19
Developed campgrounds with bathrooms	11
Bird watching areas	11
Fishing areas	11
More boardwalks	9
Keep it as natural as possible	9
Picnic areas	8
Interpretive trails with signs to identify trees/wildlife	8
Educational opportunities/programs	7
Areas for dogs	6
Canoe/kayak rental	5
Horseback riding trails	5
Same as currently offered at park	5
Cabins	4
Hunting areas	3
Children's activities areas	3
Benches to rest	2
Sport areas	2
Non-motorized access only	2
Other comments	8

Most important information learned during this visit

Question 27
   In your opinion, what was the most important information you and your group learned during this visit to Congaree National Park?

Result
   • 230 visitor groups (71%) provided comments about the most important information they learned during this visit to Congaree National Park
   • Summary of comments is presented in Table 10 and complete comments are in the appendix.

Table 10: Most important information learned during this visit
N=312 comments;
some visitor groups made more than one comment.

Comment	Number of times mentioned
General information about plants/trees at park	28
Ecosystem of an old growth forest	28
Largest bottomland old growth forest still intact	20
Value of the area	15
Efforts to protect the area	12
Champion trees	11
Trail condition/accessibility	11
Age of trees	10
Congaree National Park is not a swamp	9
How tall trees can get	9
Effect of flooding on the ecosystem	9
The difference between a flood plain and a swamp	8
The existence of the park	8
Learn more about birds	8
Get familiar with park for future visits	8
Appreciation for natural beauty	8
Why Congaree became a national park	7
Cypress trees	7
History of the area	7
Canoeing/kayaking information	7
Informative ranger-led/Nature Fest programs	7

**Table 10: Most important information learned during this visit
(continued)**

Comment	Number of times mentioned
Programs offered at park	6
Information about park in the visitor center	6
Snake identification	4
The need to preserve the area	4
Geology of the area	4
How to identify plants and wildlife	4
The park is a international biosphere reserve	3
Logging activities in the area	3
Definition of an oxbow lake	2
Butterflies	2
Lack of funding for park	2
Need to bring bug repellent	2
Bats	2
Did not learn any new thing	7
Other comments	24

What visitor liked most

Question 31
    a. What did you and your group like most about your visit to Congaree National Park?

Result
- Ninety percent of visitor groups (N=292 groups) wrote comments about what they liked most about this visit to Congaree National Park.
- Table 11 shows summary of comments. Complete comments are included in the appendix.

Table 11: What visitors liked most
N=444 comments;
some visitor groups made more than one comment.

Comment	Number of times mentioned
PERSONNEL	
Helpful and friendly staff	13
INTERPRETIVE SERVICES	
Ranger programs	14
Exhibits	4
Educational opportunities	4
Other comments	4
FACILITIES/MAINTENANCE	
Boardwalk	52
Trails	21
Visitor center	11
Accessibility	10
Clean park	7
Good facilities	2
Canoe trails	2
Other comments	2
POLICIES/MANAGEMENT	
The area being protected	11
Well managed park	2
Other comments	3

**Table 11: What visitors liked most
(continued)**

Comment	Number of times mentioned
RESOURCE MANAGEMENT	
Beautiful trees/forest	48
Natural beauty	26
Wildlife habitat	25
Bird watching opportunities	12
Interesting plants	7
The swamp	7
The wilderness	5
The lake	3
Uniqueness of park	2
Diversity of wildlife habitat	2
Other comments	3
GENERAL COMMENTS	
Solitude	31
Quiet/sounds of nature	22
Peaceful	21
Nature	13
Scenery	11
Uncrowded	8
Walking/hiking	8
Nice weather	5
Canoeing/kayaking	5
Other visitors	3
Everything	3
Seeing flood	2
Fun family time	2
Wading in water	2
Other comments	6

What visitors liked least

Question 31
    b. What did you and your group like least about
       your visit to Congaree National Park?

Result
- 74% of visitor groups (N=242 groups) provided comments about what they liked least about this visit to Congaree National Park.
- Table 12 shows summary of the comments. Complete comments are included in the appendix

Table 12: What visitors liked least
N= 242 comments

Comment	Number of times mentioned
PERSONNEL	
Comment	1
INTERPRETIVE SERVICES	
Lack of plant identification cards/signs	5
Full booked canoe trip	2
Other comment	1
FACILITIES/MAINTENANCE	
Difficult to find the park	8
Lack of trail signs/markers	7
Lack of restrooms along trails	4
Not enough trails	3
Fallen trees/limbs blocking trails	3
Primitive campground	2
No RV camping	2
Lack of snack bar/machine	2
Other comments	5
POLICIES/MANAGEMENT	
Park closed too early	8
Noisy visitors on boardwalk	8
Too many noisy children in park	6
Felt unsafe in park and surrounding area	4
Noise from neighboring land	2
Other comments	4

Table 12: What visitors liked least
(continued)

Comment	Number of times mentioned
RESOURCE MANAGEMENT	
Lack of wildlife	3
Snakes	2
Other comments	4
GENERAL COMMENTS	
Nothing to dislike	53
Mosquitoes/bugs/insects	51
Flooding	16
Too crowded	15
Lack of time	5
Long distance traveled to park	3
Other comments	13

Planning for the future

Question 32
If you were a park manager planning for the future of Congaree National Park, what would you and your group proposed?

Result
- 62% of visitor groups (N=203 groups) provided comments about the future management of Congaree National Park.
- Table 13 shows summary of the comments. Complete comments are included in the appendix.

Table 13: Planning for the future
N= 308 comments;
some visitor groups made more than one comment.

Comment	Number of times mentioned
PERSONNEL	
More rangers	6
Staff need more training	2
INTERPRETIVE SERVICES	
More interpretive programs	41
Provide booklets/markers/signs to identify plants	11
Advertise/publicize more about park	10
Increase public awareness of park	4
Add some warning signs about water level	4
More ranger-led programs	4
Improve trail maps	3
More interpretive programs for children	3
More organized activities	3
Other comments	4
FACILITIES/MAINTENANCE	
More trails	17
Improve signage outside park	13
More campsites	11
Maintain current trails	7
Add mountain bike trails	6
Improve trail markers/signage	6
Add RV campsites	5
Add more benches	5
Better accessibility	4
Add more observation decks to view wildlife	4
Improve campground	3
Improve access roads	2
Other comments	11

Table 13: Planning for the future
(continued)

Comment	Number of times mentioned
POLICIES/MANAGEMENT	
Land acquisition for larger park	16
Keep it as is	10
Protect and preserve the park	8
Limit noise level in park	6
Charge entrance fee to help park	4
Limit number of visitors in park	5
Keep it safe	3
Do not allow ATVs in park	3
Open longer hours	3
Keep the park noncommercial	3
Prevent development from approaching park	3
Limit use of motor vehicles in park	2
Other comments	12
RESOURCE MANAGEMENT	
Remove/control non-native species	7
Spray for mosquitoes	2
Other comments	10
CONCESSION SERVICES	
Add commercial facilities in park	6
Add kayak/canoe rental service	3
More variety of sales items	2
Other comments	3
GENERAL COMMENTS	
Not familiar enough with park to make recommendations	6
Other comments	3

Additional comments

Question 33
Is there anything else you and your group would like
to tell us about your visit to Congaree National Park?

Result
- 45% of visitor groups (N=146 groups) provided additional comments about their visit to Congaree National Park.
- Table 14 shows the summary of comments. Complete comments are included in the appendix.

Table 14: Additional comments
N= 230 comments;
some visitor groups made more than one comment.

Comment	Number of times mentioned
PERSONNEL	
Very helpful staff	13
Excellent tour guides	2
Other comments	3
INTERPRETIVE SERVICES	
Advertise more about the park	3
Very educational	3
Nice visitor center	4
Put up signs to warn about water level	3
Put up signs to warn about mosquitoes	3
More interpretive signs/boards	3
Good trail maps	2
Well done exhibits	2
Good information on website	2
Other comments	8
FACILITIES/MAINTENANCE	
Better directional signs to park	5
More trails	3
Clean park	3
Keep it accessible to general public	2
Provide after-hour access	2
Enjoyed the boardwalk	2
Well maintained facilities	3
Clean restrooms	2
Other comments	13

**Table 14: Additional comments
(continued)**

Comment	Number of times mentioned
POLICIES/MANAGEMENT	
Emphasize preserving nature	8
Acquisition of land to expand park	3
Prefer the old park name	2
Limit dogs on trails	2
Other comments	7
RESOURCE MANAGEMENT	
Wonderful resources	6
Enjoyed the forest	2
Other comments	3
GENERAL COMMENTS	
Enjoyed our visit	49
Plan to return	11
Beautiful	9
Thank you for the good work	5
Enjoyed hiking	4
Good work	3
Visit too short	3
Peaceful/quiet	3
Solitude	2
Survey too long	2
Appreciate National Park efforts to protect the area	2
Other comments	17

APPENDICES

Appendix 1: The Questionnaire

Appendix 2: Additional Analysis

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

- Sources of information prior to visit
- Awareness of Congressionally designated wilderness area
- Learning about wilderness area during this visit
- Affect of Congressionally on to park experience
- Awareness of programs offered at park
- Primary reason for visiting the park
- Other places visited in the area
- Trail used on this visit
- Trail used on past visits
- Activities participated in on this visit
- Length of visit
- Number of times entered the park
- Number of nights stay away from home inside/outside park
- Types of lodging inside/ outside park
- Opinions about safety in park

- Visitor services and facilities used
- Importance of visitor services and facilities
- Quality of visitor services and facilities
- Importance of selected park resources/qualities
- Group type
- Group size
- Number of vehicles used
- Visitor race and ethnicity
- Visitor age
- Zip code/state of residence
- Country of residence
- Number of times visited the park in the past five years
- Number of times visited the park in visitor lifetime
- Visitor level of education
- Visitors with disabilities/ impairments
- Elements affecting park experience
- Opinions about policy to control/remove non native

- species from within park boundaries
- Total expenditures in and outside of park
- Expenditures within park
- Expenditures outside park
- Number of adults covered by expenses
- Number of children covered by expenses
- Visitors with volunteering interest
- Intention to visit the park again in the future
- Preference of organized activities/programs on a future visit
- Preference of learning topic on a future visit
- Overall quality of visitor services and facilities

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Appendix 3: Decision Rules for Checking Non-response Bias

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

Two-independent sample T-tests were used to test the differences between respondents and non-respondents. The p-values represent the significance levels of these tests. If p-value is greater than 0.05 the two groups are judged to be insignificantly different. In regard to age difference, various reviews of survey methodology (Dillman and Carley-Baxter 2000; Goudy 1976, Filion 1976, Mayer and Pratt Jr. 1967) have consistently found that in public opinion survey average respondent ages tend to be higher than average nonrespondent ages. This difference is often caused by other reasons such as availability of free time rather than problems with survey methodology. In addition, because unit of analysis for this study is a visitor group, the group member who received the questionnaire may be different than the one who actually completed it after the visit. In some occasions, the age of actual respondent is higher than the age of the group member who accepted the questionnaire at the park. Thus, a 10-year difference in average age between respondents and nonrespondents is an acceptable justification.

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

1. Average age of respondents – average age of nonrespondents $\leq$ 10

2. Average group size of respondents – average group size of nonrespondents = 0

As shown in Table 2, the p-values for both of these tests are greater than 0.05 indicating insignificant difference between respondents and nonrespondents. Thus, non-response bias is judged to be insignificant.

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Dillman D. A. (2000) *Mail and Internet Surveys: The Tailored Design Method*, 2nd Edition, New York: John Wiley and Sons, Inc.

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Mayer C. S. and Pratt Jr. R. W. (Winter 1966-Winter 1967) A Note on Nonresponse in a Mail Survey. *Public Opinion Quarterly*. Vol 30 (4): 637-646.

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Stoop, I. A.L. (2004) Surveying Nonrespondents. *Field Methods*, 16 (1): 23.

Appendix 4: Visitor Services Project Publications

Reports 1-6 (pilot studies) are available from the University of Idaho Park Studies Unit (UI PSU). All other VSP reports listed are available from the parks where the studies were conducted or from the UI PSU. All studies were conducted in summer unless otherwise noted.

1982
 1. Mapping interpretive services: A pilot study at Grand Teton National Park.

1983
 2. Mapping interpretive services: Identifying barriers to adoption and diffusion of the method.
 3. Mapping interpretive services: A follow-up study at Yellowstone National Park and Mt Rushmore National Memorial.
 4. Mapping visitor populations: A pilot study at Yellowstone National Park.

1985
 5. North Cascades National Park Service Complex
 6. Crater Lake National Park

1986
 7. Gettysburg National Military Park
 8. Independence National Historical Park
 9. Valley Forge National Historical Park

1987
10. Colonial National Historical Park (summer & fall)
11. Grand Teton National Park
12. Harpers Ferry National Historical Park
13. Mesa Verde National Park
14. Shenandoah National Park (summer & fall)
15. Yellowstone National Park
16. Independence National Historical Park: Four Seasons Study

1988
17. Glen Canyon National Recreational Area
18. Denali National Park and Preserve
19. Bryce Canyon National Park
20. Craters of the Moon National Monument

1989
21. Everglades National Park (winter)
22. Statue of Liberty National Monument
23. The White House Tours, President's Park
24. Lincoln Home National Historic Site
25. Yellowstone National Park
26. Delaware Water Gap National Recreation Area
27. Muir Woods National Monument

1990
28. Canyonlands National Park (spring)
29. White Sands National Monument
30. National Monuments & Memorials, Washington, D.C.
31. Kenai Fjords National Park
32. Gateway National Recreation Area
33. Petersburg National Battlefield
34. Death Valley National Monument
35. Glacier National Park
36. Scott's Bluff National Monument
37. John Day Fossil Beds National Monument

1991
38. Jean Lafitte National Historical Park (spring)
39. Joshua Tree National Monument (spring)
40. The White House Tours, President's Park (spring)
41. Natchez Trace Parkway (spring)
42. Stehekin-North Cascades NP/ Lake Chelan NRA
43. City of Rocks National Reserve
44. The White House Tours, President's Park (fall)

1992
45. Big Bend National Park (spring)
46. Frederick Douglass National Historic Site (spring)
47. Glen Echo Park (spring)
48. Bent's Old Fort National Historic Site
49. Jefferson National Expansion Memorial
50. Zion National Park
51. New River Gorge National River
52. Klondike Gold Rush National Historical Park, AK
53. Arlington House-The Robert E. Lee Memorial

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
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)

Visitor Services Project Publications (continued)

1994

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

1995

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

1996

84. Everglades National Park (spring)
85. Chiricahua National Monument (spring)
86. Fort Bowie National Historic Site (spring)
87. Great Falls Park, Virginia (spring)
88. Great Smoky Mountains National Park
89. Chamizal National Memorial
90. Death Valley National Park (fall)
91. Prince William Forest Park (fall)
92. Great Smoky Mountains National Park (summer & fall)

1997

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

1998

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

1999

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

2000

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

2001

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

Visitor Services Project Publications (continued)

2002
131. Everglades National Park
132. Dry Tortugas National Park
133. Pinnacles National Monument
134. Great Sand Dunes National Monument & Preserve
135. Pipestone National Monument
136. Outer Banks Group (Cape Hatteras National Seashore, Ft. Raleigh National Historic Site, and Wright Brothers National Memorial)
137. Sequoia & Kings Canyon National Parks and Sequoia National Forest
138. Catoctin Mountain Park
139. Hopewell Furnace National Historic Site
140. Stones River National Battlefield

2003
141. Gateway National Recreation Area: Floyd Bennett Field (spring)
142. Cowpens National Battlefield (spring)
143. Grand Canyon National Park – North Rim
144. Grand Canyon National Park – South Rim
145. C&O Canal National Historical Park
146. Capulin Volcano National Monument
147. Oregon Caves National Monument
148. Knife River Indian Villages National Historic Site
149. Fort Stanwix National Monument
150. Arches National Park
151. Mojave National Preserve (fall)

2004
152. Joshua Tree National Park (spring)
153. New River Gorge National River
154. George Washington Birthplace National Monument
155. Craters of the Moon National Monument & Preserve
156. Dayton Aviation Heritage National Historical Park
157. Apostle Islands National Lakeshore
158. Keweenaw National Historical Park
159. Effigy Mounds National Monument
160. Saint-Gaudens National Historic Site
161. Manzanar National Historic Site
162. John Day Fossil Beds National Monument

2005
163. Congaree National Park
164. San Francisco Maritime National Historical Park
165. Lincoln Home National Historic Site
166. Chickasaw National Recreation Area
167. Timpanogos Cave National Monument
168. Yosemite National Park
169. Fort Sumter National Monument
170. Harpers Ferry National Historical Park
171. Cuyahoga Valley National Park
172. Nicodemus National Historic Site
173. Johnstown Flood National Memorial

For more information about the Visitor Services Project, please contact
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