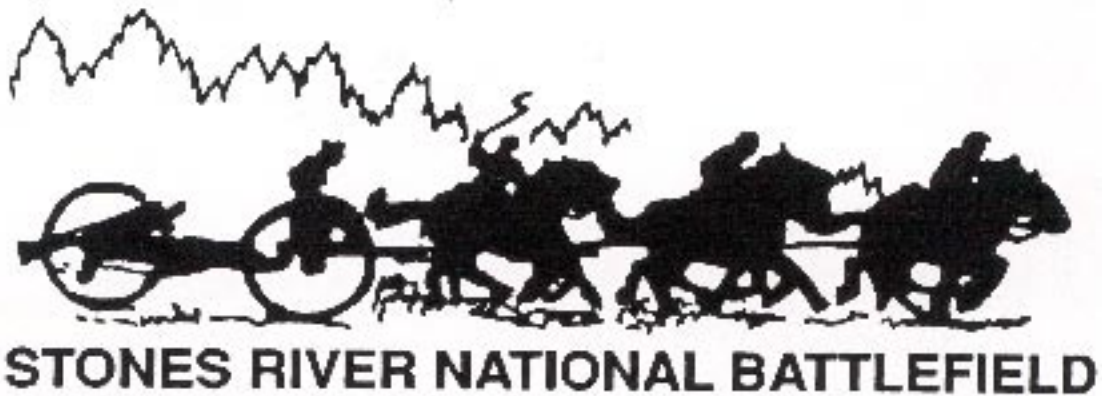




National Park Service
U.S. Department of the Interior

Visitor Services Project



Stones River National Battlefield Visitor Study

Fall 2002

Report 140



University of Idaho
Park Studies Unit



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

Visitor Services Project

Stones River National Battlefield

Visitor Study Fall 2002

Bret H. Meldrum

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Visitor Services Project Report 140

July 2003

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Visitor Services Project Stones River National Battlefield Report Summary

- This report describes the results of a visitor study at Stones River National Battlefield (NB) during October 5-13, 2002. A total of 356 questionnaires were distributed to visitors. Visitors returned 289 questionnaires for a 81.2% response rate.
- This report profiles Stones River NB visitors. A separate appendix contains visitors' comments about their visit. This report and the appendix include summaries of those comments.
- Fifty-three percent of visitor groups were groups of two. Sixty percent of the visitor groups were family groups. Fifty-five percent of visitors were aged 31-60 years and 13% were aged 15 or younger.
- United States visitors were from Tennessee (38%), Illinois (7%), 38 other states and Washington, D.C. There were not enough international visitors to provide reliable data.
- One percent of the visitors were of Spanish/Hispanic/Latino ethnicity. Most visitors were of White racial background (94%). American Indian/Alaskan Native and Asian ethnicity made up of one percent each of the population.
- The three most important reasons for visiting the Murfreesboro area were to "visit Stones River NB" (65%), "learn Civil War history" (47%), and "travel through to other destinations" (26%).
- Most visitors (71%) reported that this was their first visit to Stones River NB. Most visitors (90%) spent one to three hours at the battlefield.
- On this visit, most common activities were walking (71%), taking the self-guided tour (69%) and photography (45%). 22% of visitors took the audio tape tour, 19% attended living history programs, and 15% attended ranger-led programs.
- Prior to this visit, visitors most often obtained information about Stones River NB through maps and brochures (32%), previous visits (26%), and friends, relatives, and word of mouth (24%). 24% of the visitors received no information before their visit. Most visitors (63%) were aware that Stones River National Battlefield was a unit of the National Park Service.
- The most commonly visited places on this visit were the visitor center (89%), Slaughter Pen (74%), and Cotton Field (70%).
- 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 by the 255 respondents included the visitor center (96%) and parking (85%). The most important service was the restrooms (72% of 180 respondents), and the best quality service assistance from park staff (75% of 106 respondents).
- In and outside of the battlefield, the average visitor group expenditure during this visit was \$226. The median group expenditure of the group expenditure (50% of groups spent more and 50% spent less) was \$90. The average per capita expenditure was \$108.
- Most visitor groups (91%) rated the overall quality of visitor services at Stones River NB as "very good" or "good." One percent of visitor groups rated the overall quality of visitor services as "very poor."

For more information about the Visitor Services Project, please contact the University of Idaho Park Studies Unit; phone (208) 885-7863. For a copy of this report summary, visit the following website:
<http://www.nps.gov/socialscience/waso/products.htm>

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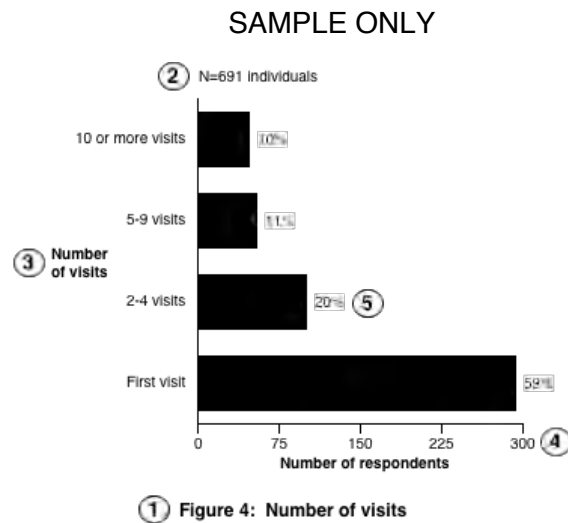
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INTRODUCTION

This report describes the results of a study of visitors at Stones River National Battlefield, also referred to as "Stones River NB." This visitor study was conducted October 5-13, 2002 by the National Park Service (NPS) Visitor Services Project (VSP), part of the Park Studies Unit at the University of Idaho.

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

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



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

METHODS

Questionnaire design and administration

The questionnaire for this visitor study was designed using a standard format that has been developed in previous Visitor Services Project studies. Some of the questions were comparable with VSP studies conducted at other parks. Other questions were customized for Stones River NB.

Interviews were conducted with, and 356 questionnaires were distributed to a sample of visitors who arrived at Stones River NB during the period from October 5-13, 2002. Visitors were sampled at the visitor center.

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

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

Data analysis

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

This study collected information on both visitor groups and individual group members. Thus, the sample size ("N"), varies from figure to figure. For example, while Figure 1 shows information for 283 visitor groups, Figure 3 presents data for 552 individuals. A note above each graph specifies the information illustrated.

**Sampling size,
missing data and
reporting items**

Occasionally, a respondent may not have answered all of the questions, or may have answered some incorrectly. Unanswered questions result in missing data and cause the number in the sample to vary from figure to figure. For example, although Stones River NB visitors returned 289 questionnaires, Figure 1 shows data for only 283 respondents.

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

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

Limitations

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

2. The data reflect visitor use patterns of visitors to the selected sites during the study period of October 5-13, 2002. The results do not necessarily apply to visitors during other times of the year.

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

Weather conditions during the visitor study were wetter and cooler than usual for October in the Stones River NB area. Fall colors had not started. Tropical storm remnants of a hurricane passed through the area just prior to the survey.

Special conditions

RESULTS

Visitors contacted

At Stones River NB, 411 visitor groups were contacted, 356 of these groups (87%) accepted questionnaires. Questionnaires were completed and returned by 289 visitor groups, resulting in an 81.2% response rate for this study.

Table 1 compares age and group size information collected from the total sample of visitors who participated, with age and group size of visitors who actually returned questionnaires. Based on the variables of respondent age and visitor group size, non-response bias was judged to be insignificant.

Table 1: Comparison of total sample and actual respondents

Variable	Total sample		Actual respondents	
	N	Avg.	N	Avg.
Age of respondents	354	48.7	282	49.6
Group size	356	2.6	283	2.5

Demographics

Figure 1 shows visitor group sizes, which ranged from one person to 11 people. Fifty-three percent of visitor groups consisted of two people, while another 23% consisted of three or four people.

Sixty percent of visitor groups were made up of family members, 22% were traveling alone, 12% were with friends, and 5% were traveling with family and friends (see Figure 2). Groups listing themselves as "other" for group type included those traveling with "military group," "spouses," and "pets."

Fifty-two percent of the visitors were in the 41-65 age group, and 13% were 15 years or younger (see Figure 3).

Regarding visitor gender, fifty-two percent of visitors were male while 48% percent were female (see Figure 4).

One percent of the visitors were of Spanish/Hispanic/Latino ethnicity (see Figure 5). Most respondents (95%) were of White racial background, while smaller proportions were of other racial backgrounds (see Figure 6).

**Demographics
(continued)**

Visitor groups were asked how many times each member in the group had visited Stones River NB in the past 12 months as well as in their lifetime. Most visitors (81%) reported that this was their first visit to Stones River NB in the past 12 months (see Figure 7). Most visitors also reported that this was their first visit to Stones River NB in their lifetime (71%), another 17% visited Stone River NB two to four times (see Figure 8).

Sixty-seven percent of visitors earn \$50,000 or less a year. Fifteen percent earned from \$50,000 to \$70,000, while 19% make \$70,000 or more a year (see Figure 9).

There were not enough international visitors to provide reliable data (see Table 2). The largest proportions of United States visitors were from Tennessee (38%), Illinois (7%) and California (5%). Smaller proportions of U.S. visitors came from another 37 states and Washington, D.C. (see Map 1 and Table 3).

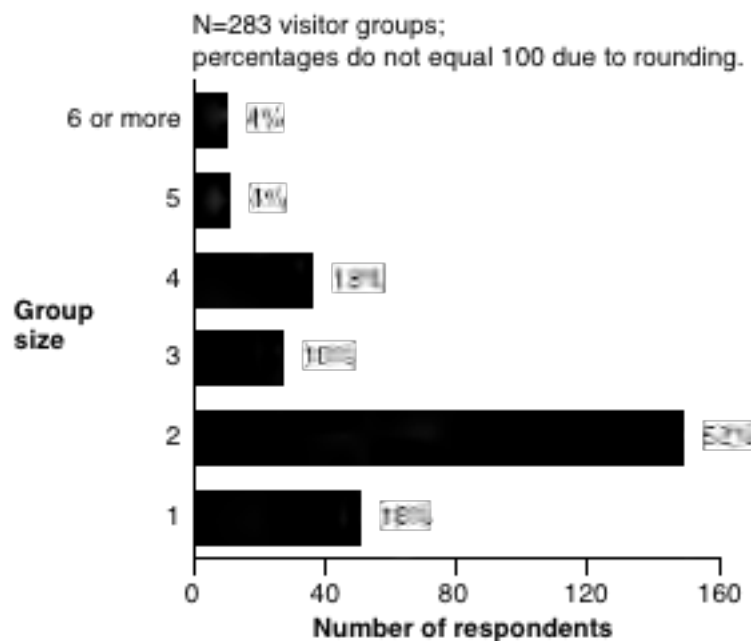


Figure 1: Visitor group sizes

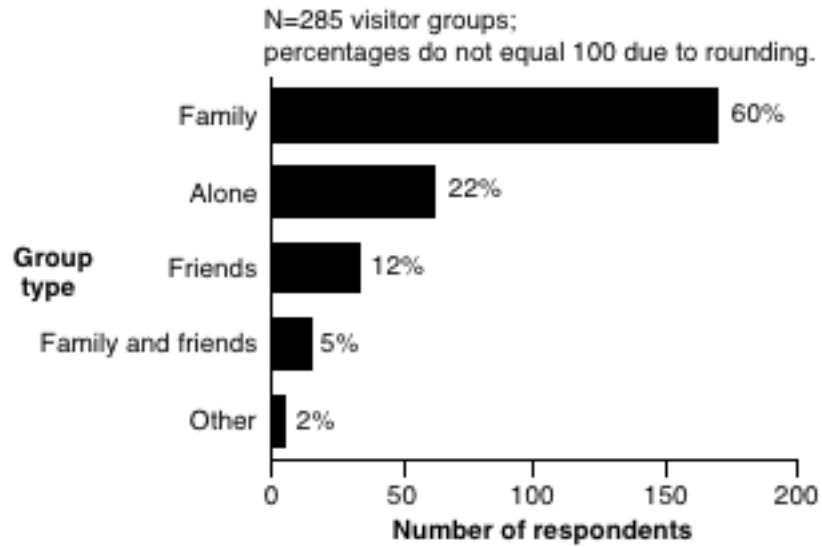


Figure 2: Visitor group types

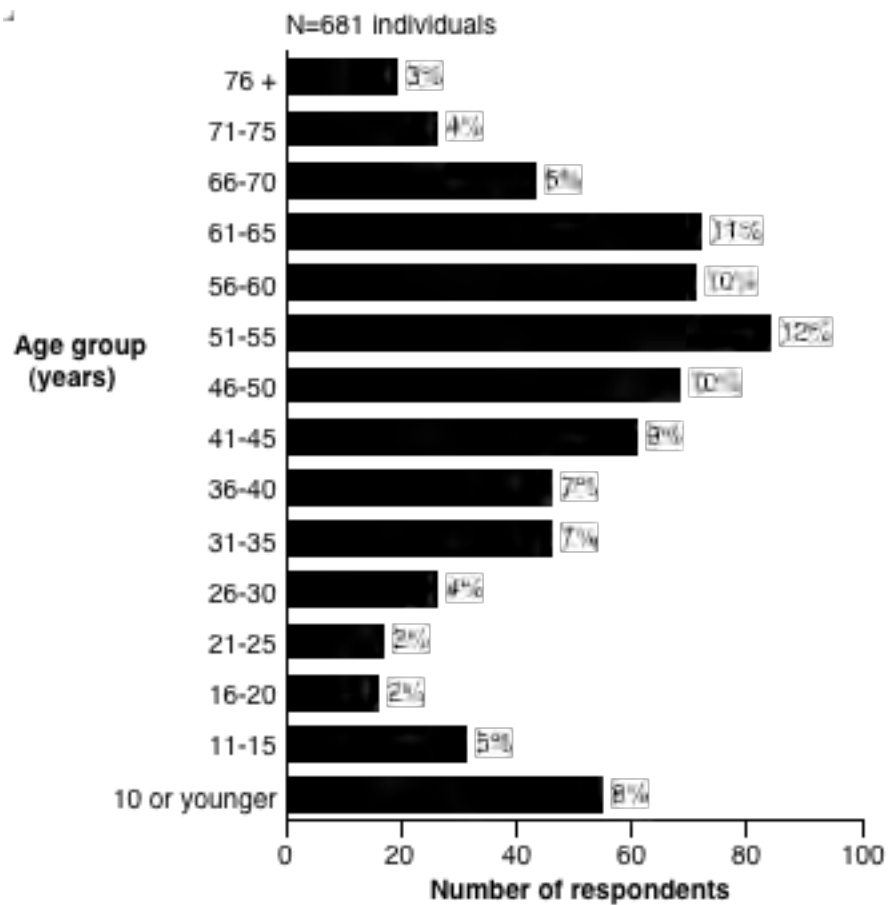


Figure 3: Visitor ages

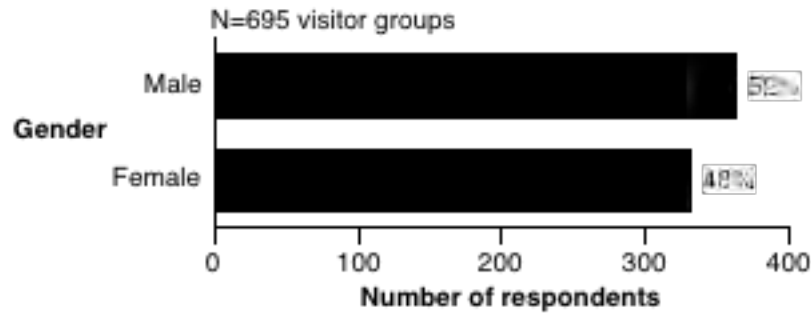


Figure 4: Visitor gender

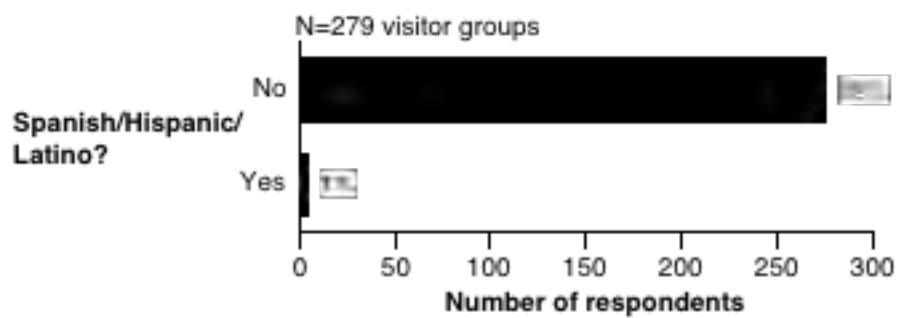


Figure 5: Visitors of Spanish, Hispanic or Latino ethnicity

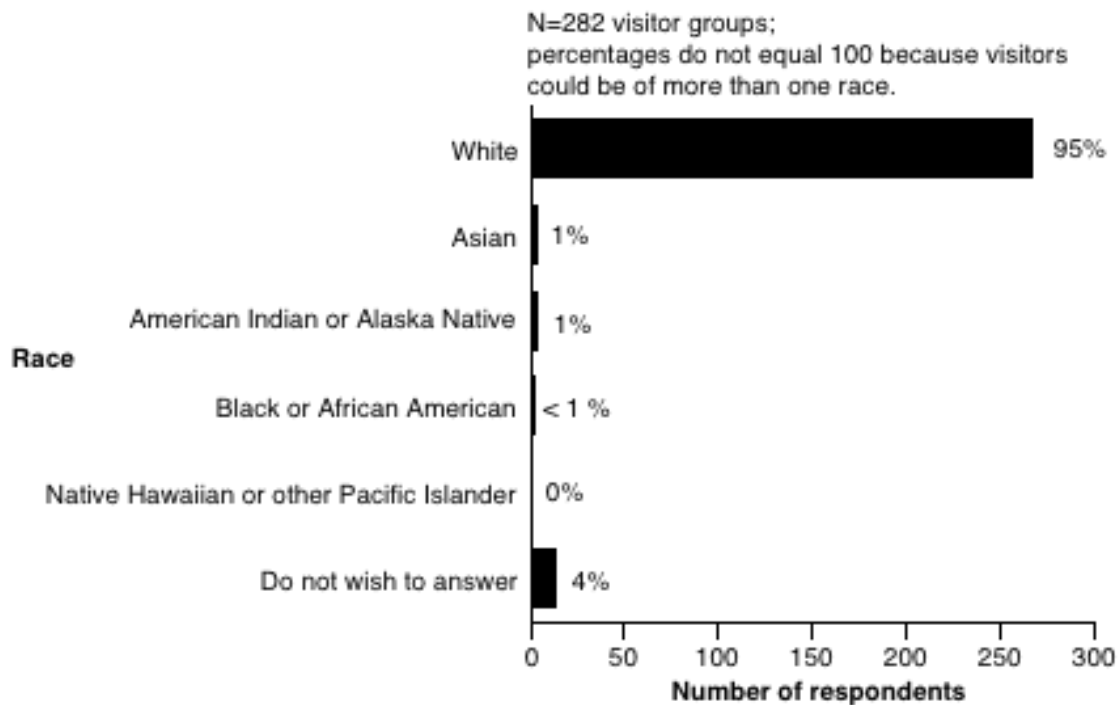


Figure 6: Visitor race

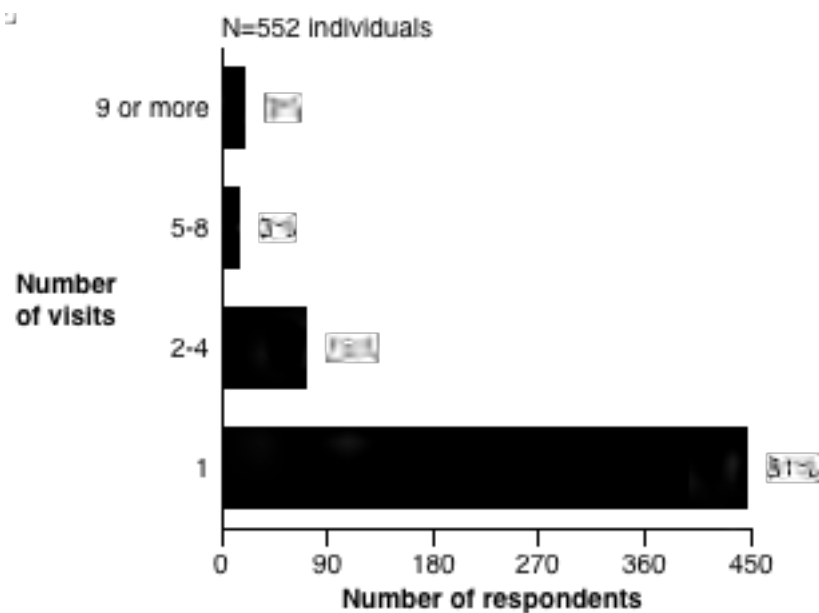


Figure 7: Number of visits in past 12 months (including this visit)

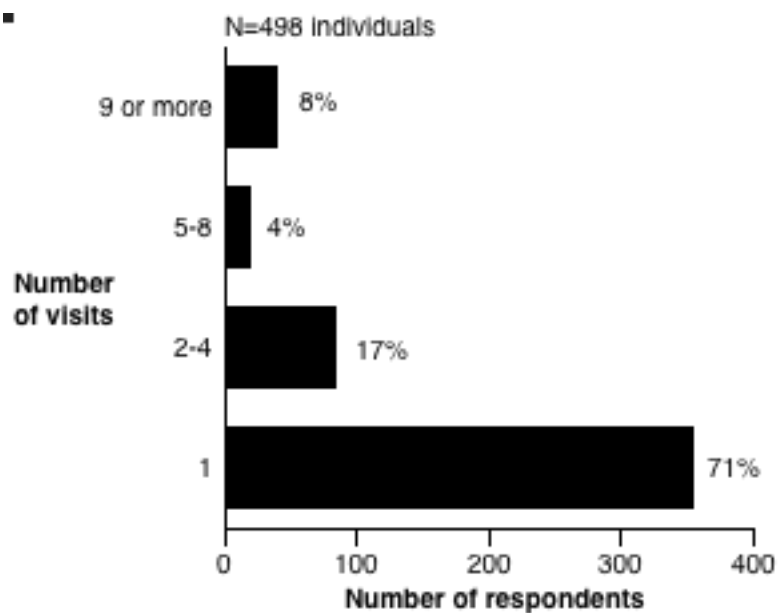


Figure 8: Number of lifetime visits to Stones River NB (including this visit)

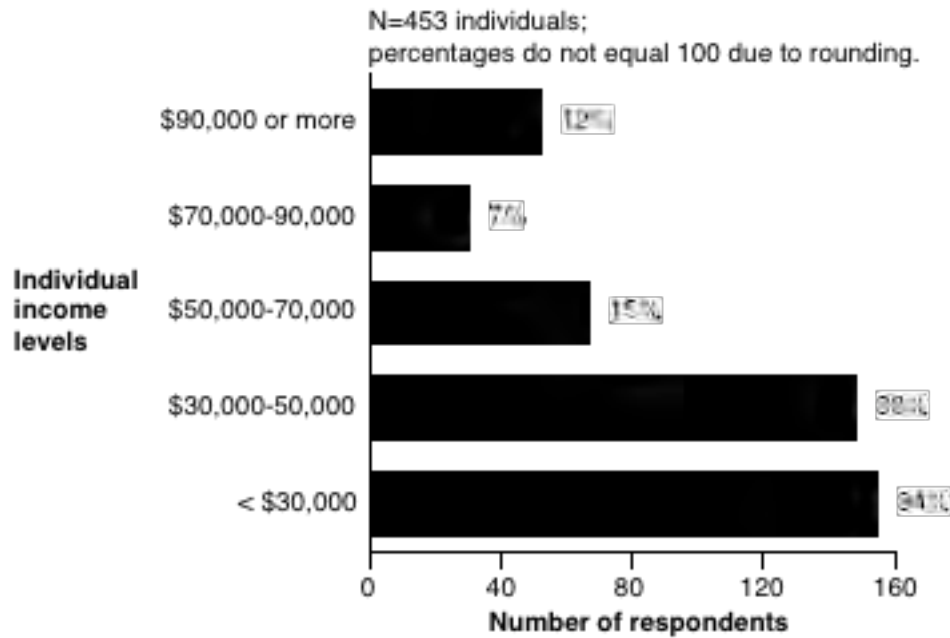


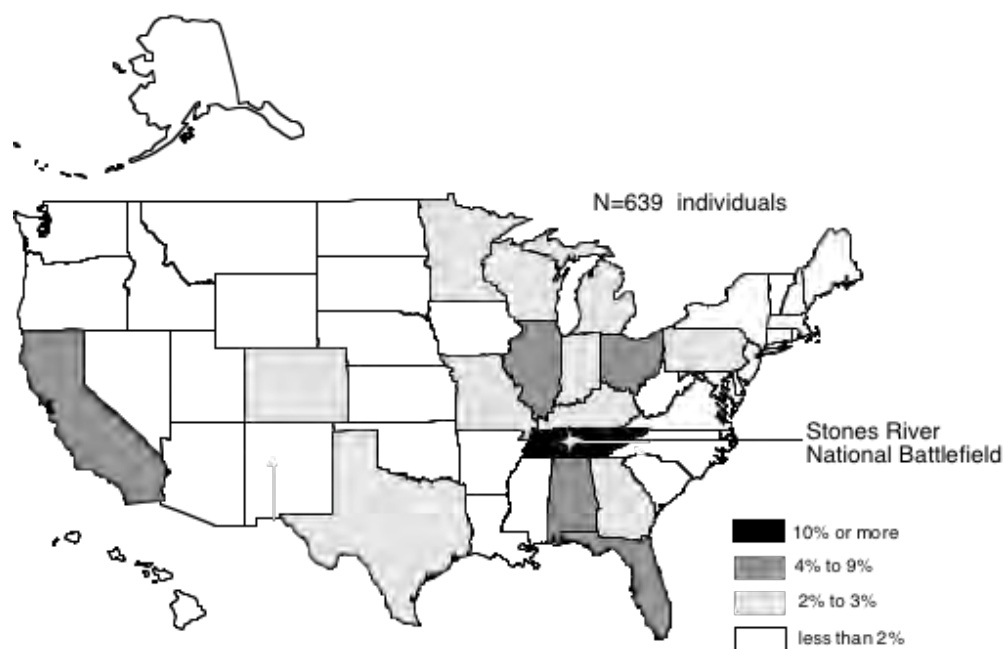
Figure 9: Visitor income levels

Table 2: International visitors by country of residence

percentages do not equal 100 due to rounding.

CAUTION!

Country	Number of individuals	Percent of international visitors N=7 individuals	Percent of total N=698
Scotland	2	29	<1
Switzerland	2	29	<1
Canada	1	14	<1
Iceland	1	14	<1
Mexico	1	14	<1



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

Table 3: United States visitors by state of residence

State	Number of individuals	Percent of U.S. visitors N=639 individuals	Percent of total visitors N=698 individuals
Tennessee	241	38	35
Illinois	43	7	6
California	29	5	4
Alabama	28	4	4
Ohio	25	4	4
Florida	24	4	3
Missouri	21	3	3
Texas	21	3	3
Michigan	20	3	3
Wisconsin	20	3	3
Kentucky	18	3	3
Georgia	17	3	2
Indiana	16	3	2
Colorado	12	2	2
Pennsylvania	11	2	2
Minnesota	10	2	1
North Carolina	8	1	1
Iowa	6	1	1
Kansas	6	1	1
Nebraska	6	1	1
New York	5	1	1
New Jersey	4	1	1
Oregon	4	1	1
Virginia	4	1	1
16 other state and Washington D.C.	38	6	5

Visitor groups were asked how long they spent visiting Stones River NB on this visit. Most visitor groups (90%) responded that they spent between one and three hours (see Figure 10). Eleven percent reported staying four or more hours.

Length of visit

Visitors were asked if they spent more than one day at Stones River NB. Six percent said that they spent more than one day, and 94% said that they did not (see Figure 11). Seventy-five percent of respondents who stayed more than one day spent two days at the battlefield (see Figure 12).

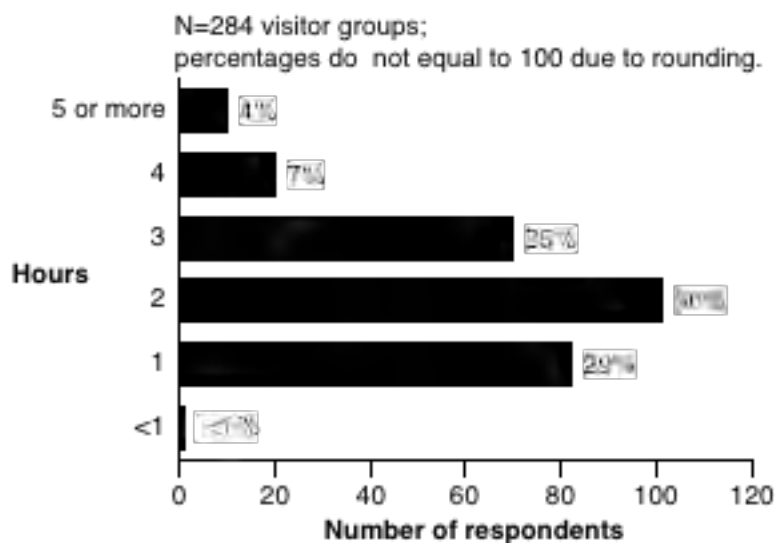


Figure 10: Hours spent at Stones River NB on this visit

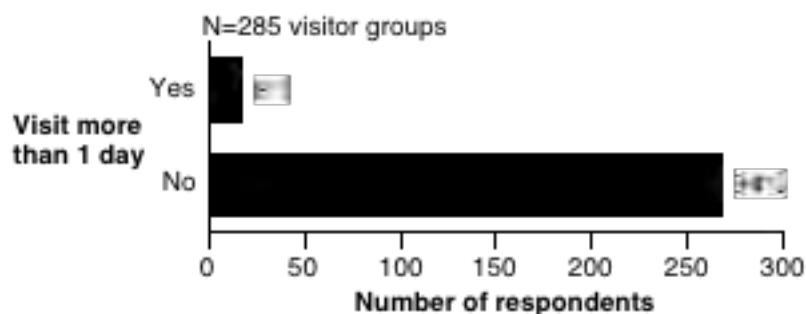


Figure 11: Visitors who spent more than one day at Stones River NB

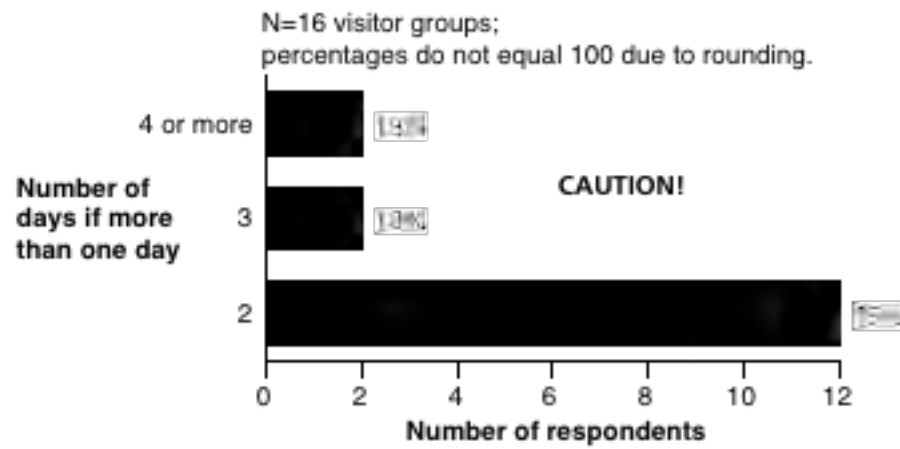


Figure 12: Days spent by visitors at Stones River NB on this visit

Sources of information

Visitor groups were asked to indicate the sources from which they had received information about Stones River NB prior to their visit. Twenty-four percent of visitor groups received no information prior to their visit. Of those groups who received information, the most common sources were maps/brochures (32%), previous visits (26%) and friends/relatives/word of mouth (24%), as shown in Figure 13.

“Other” sources of information used by visitors were Civil War history books, highway signs, National Park Service magazine, genealogical research/family tree, and other guidebooks. “Other tourist sites” that were mentioned by visitors as a source of obtaining information were Sam Davis Home and Oaklands Historic House Museum. For information obtained at “other unit of the National Park System” visitors included Chickamauga and Chattanooga National Military Park, Shiloh National Military Park, and Franklin National Battlefield (sic—visitor’s words).

Most visitors received the information they needed to plan their visit, however 15% did not (see Figure 14). The additional information that they needed prior to their included better directions, hours of operation, brochure/map, and lists of divisions involved in the battle would all be useful.

Visitors were then asked to state what sources of information they would most likely use on future visits. Visitors responded that they would use maps/brochures (25%), NPS website (24%), and information obtained from previous visits (21%) as their main sources of information (see Figure 15).

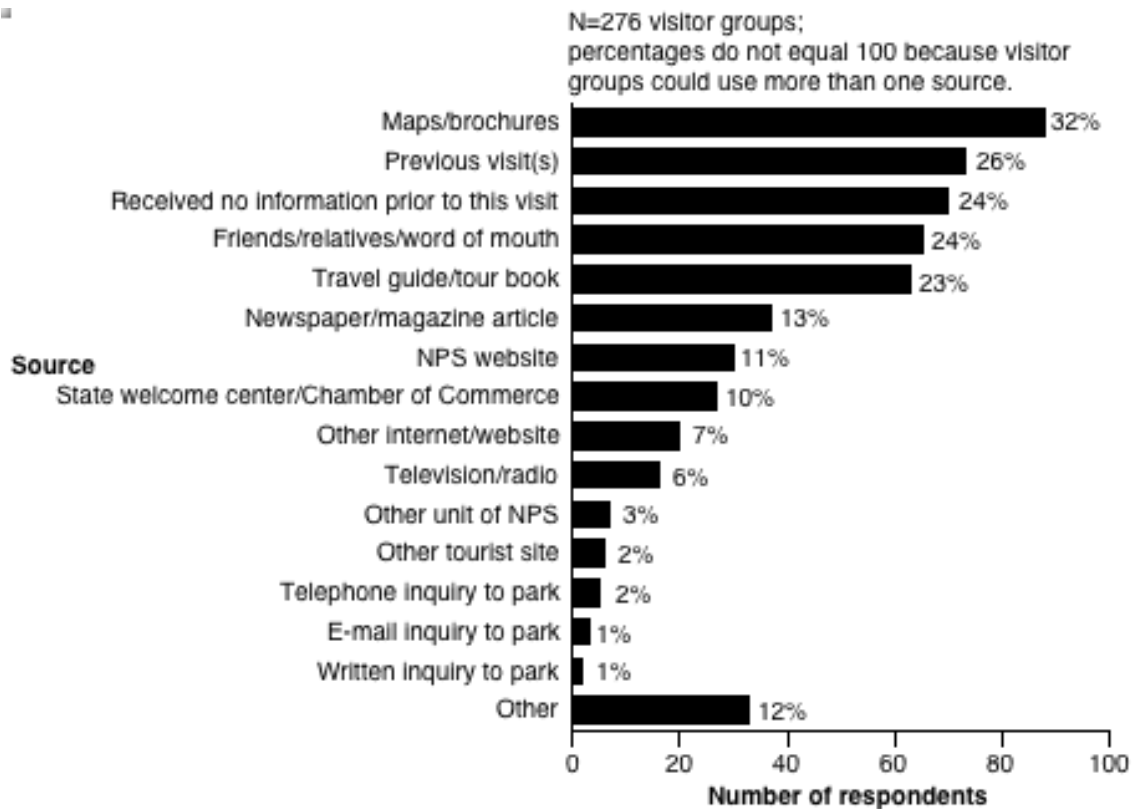


Figure 13: Sources of information used by visitors prior to this visit

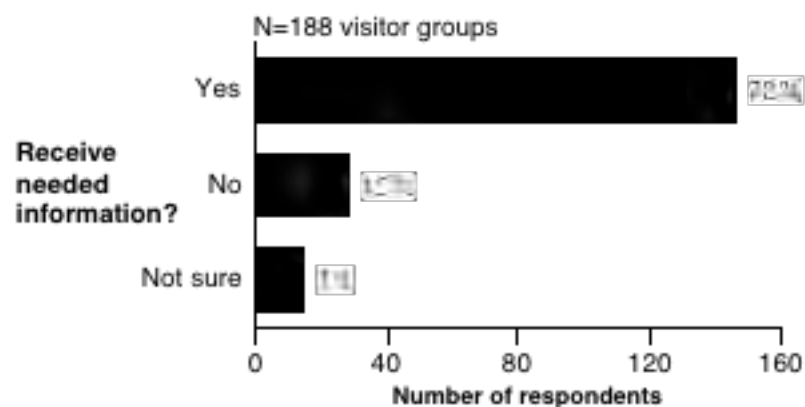


Figure 14: Receive needed information?

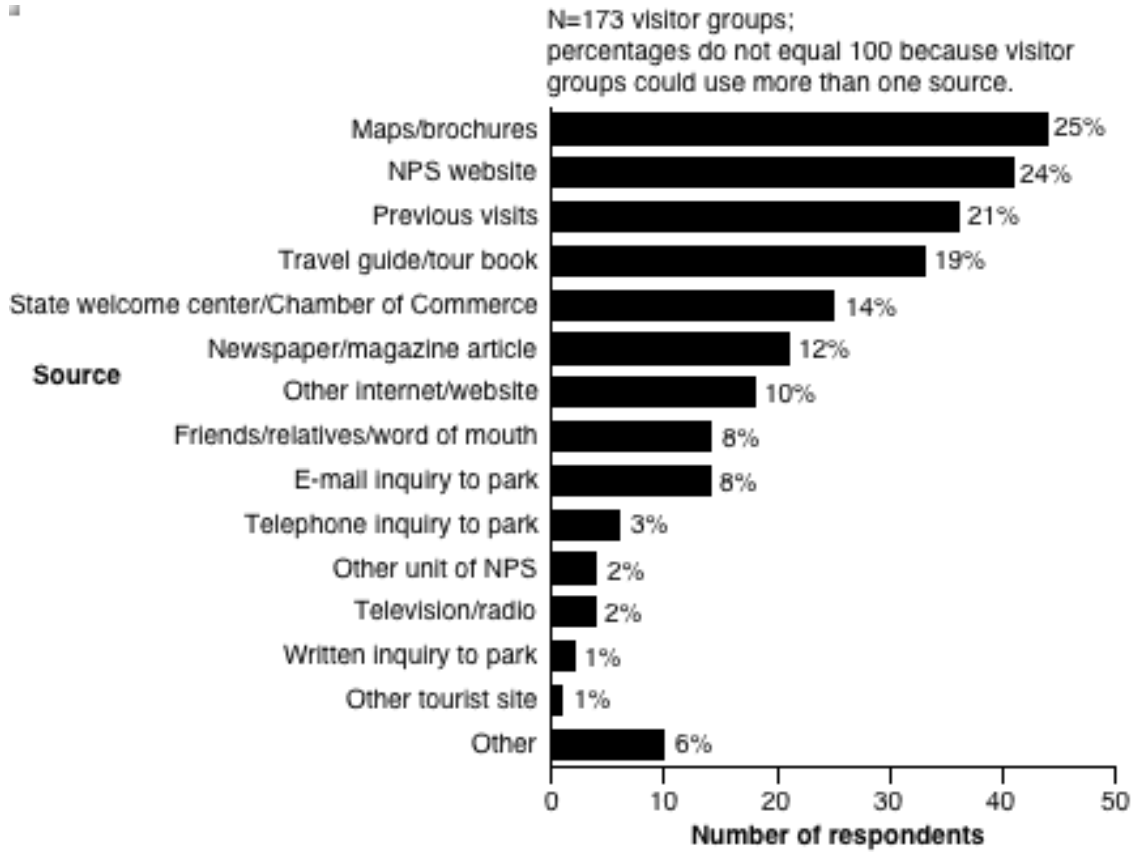


Figure 15: Sources of information visitors would use in planning for future trips to Stones River NB

**Awareness that
battlefield is a
unit of National
Park System**

Visitor groups were asked: "Prior to this visit, were you aware that Stone River NB is a unit of the National Park System?" Most visitors (63%) were aware that Stones River is a unit of the National Park System (see Figure 16). Thirty-four percent were not aware and another 3% were "not sure."

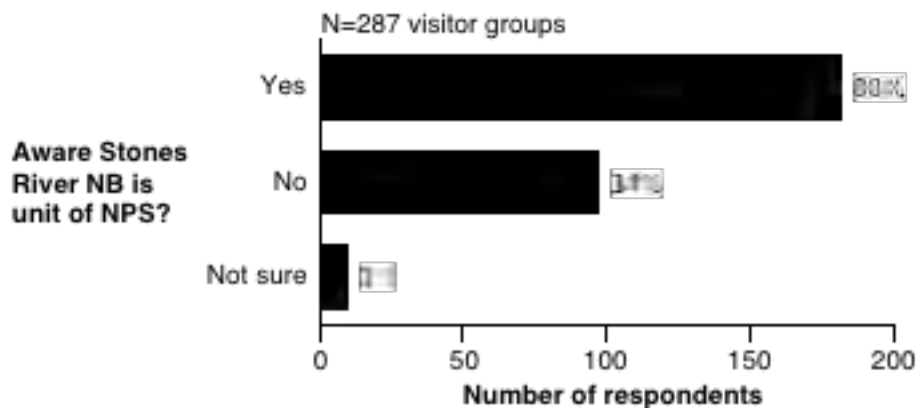


Figure 16: Visitor awareness that battlefield is in the National Park System

Visitor groups were asked to list how Stones River NB fit into their travel plans on this visit. The largest proportion of visitor groups (47%) reported that Stones River NB was one of several destinations, as shown in Figure 17. Thirty percent said that the battlefield was not a planned destination, and another 22% said that it was their primary destination.

Role of Stones River NB in visitor travel plans

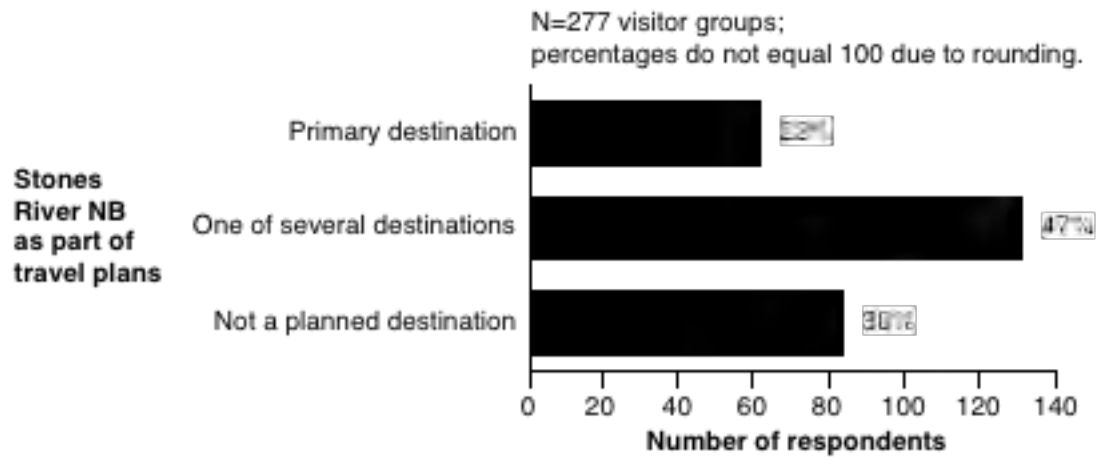


Figure 17: Stones River NB as part of travel plans

**Reasons for
visiting
Murfreesboro
area**

Visitors were asked what their reasons were for visiting the Murfreesboro area (within 10 miles of Murfreesboro). The most common reasons were visiting Stones River NB (65%), learning Civil War history (47%), and traveling through (26%), as shown in Figure 18. The least common reasons for visiting the Murfreesboro area were to attend cultural events and for nature study (each 3%). “Other” reasons for visiting included being a resident of Murfreesboro, touring Nashville, driving through, and touring the state.

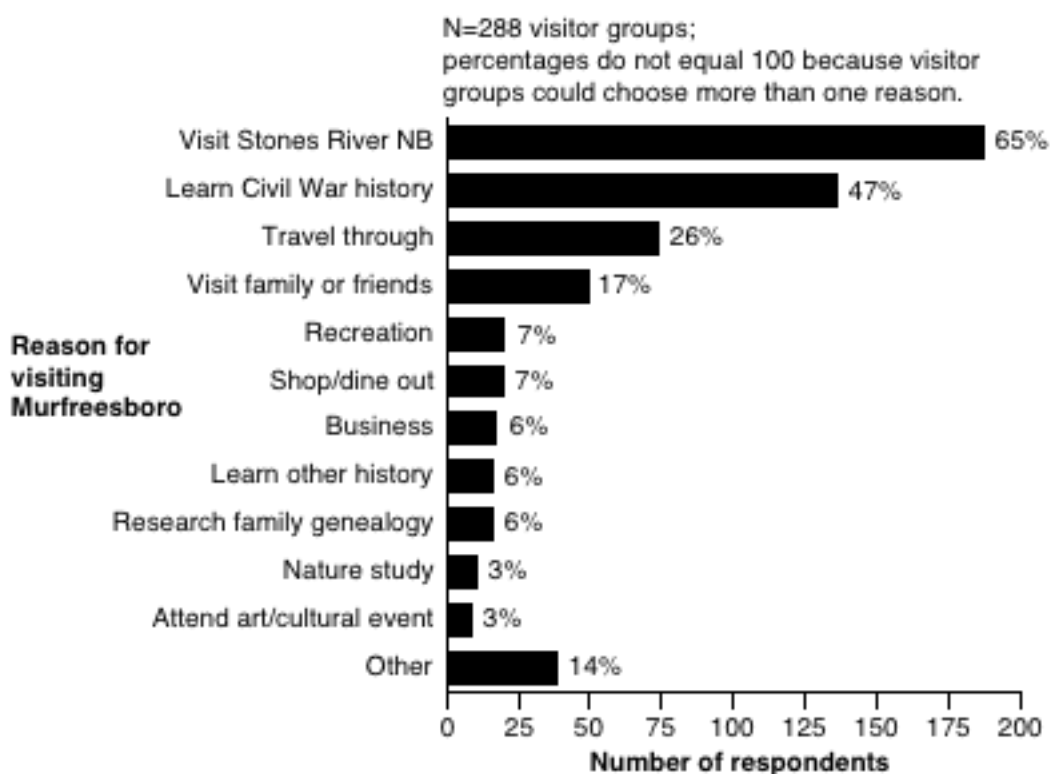


Figure 18: Visitor reasons for visiting the Murfreesboro area

Visitor groups were asked to list the activities in which they participated at Stones River NB on this visit. The most common activities were walking (71%), taking self-guided tour (69%), photography (45%) and listening to audio tape tour (22%), as shown in Figure 19. "Other" activities included attending slide and film presentations, reading and relaxing, living history demonstration, and talking with rangers.

Activities

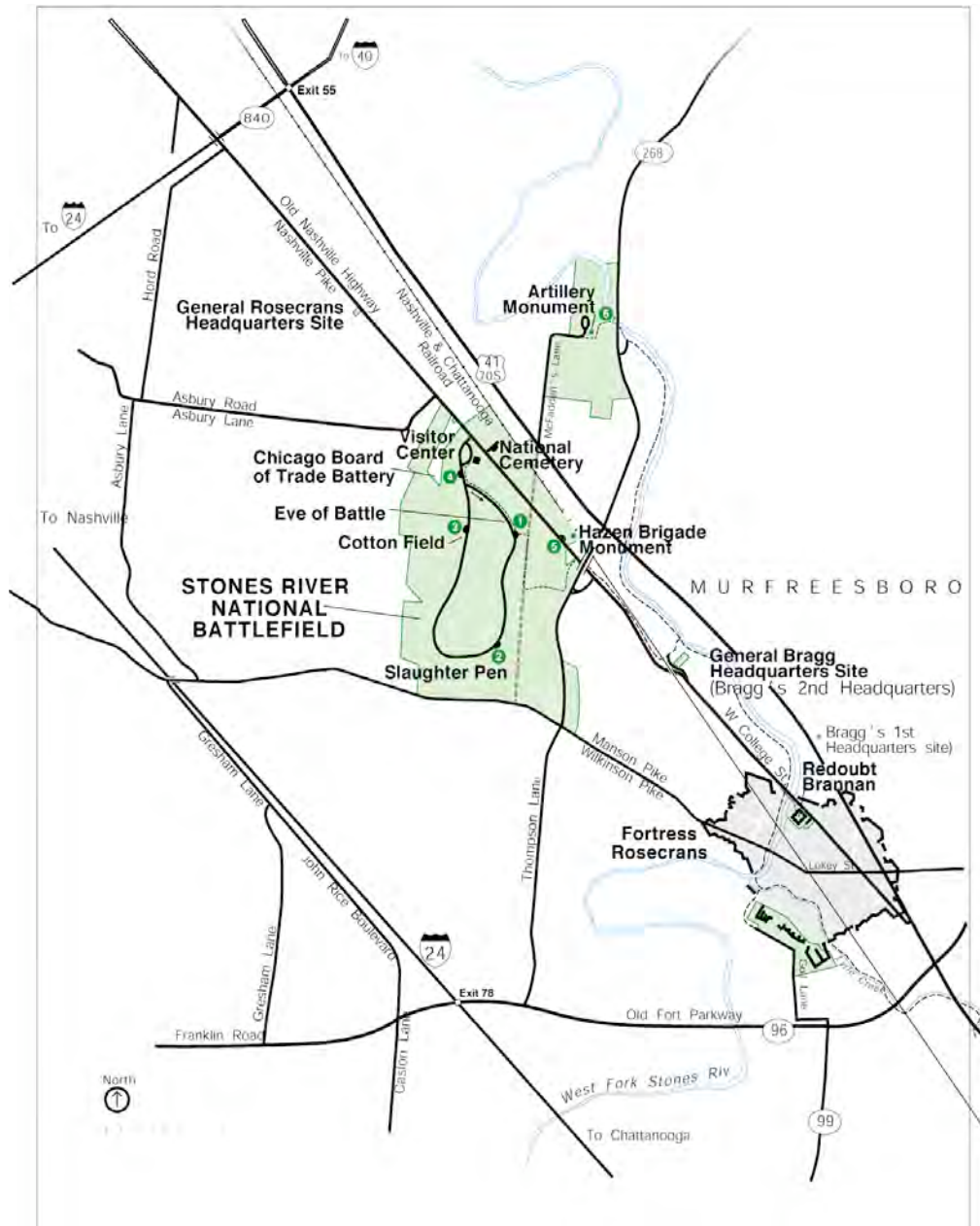


Figure 19: Visitor activities on this visit

Places visited

Visitor groups were asked to indicate the order in which they visited the places at Stones River NB using Map 2, which was included in the questionnaire. As shown in Figure 20, the most commonly visited places were the visitor center (89%), Slaughter Pen (74%), and Cotton Field (70%). The least visited places were Rosecrans Headquarters, Redoubt Brannan, and Bragg Headquarters (each less than 20%). Six percent of the visitors listed "other" places they visited, including the auto-tour loop road, followed tour guide, picnic area, and the artifacts shop.

As shown in Figure 21, the places that most visitor groups visited first included the visitor center (86%), Fort Rosecrans (4%), and National Cemetery (3%). "Other" places visited first included the tour loop, picnic area, defense of Nashville Pike, and artifacts shop.



Map 2: Stones River National Battlefield and the Murfreesboro area



Figure 20: Battlefield places visited on this visit

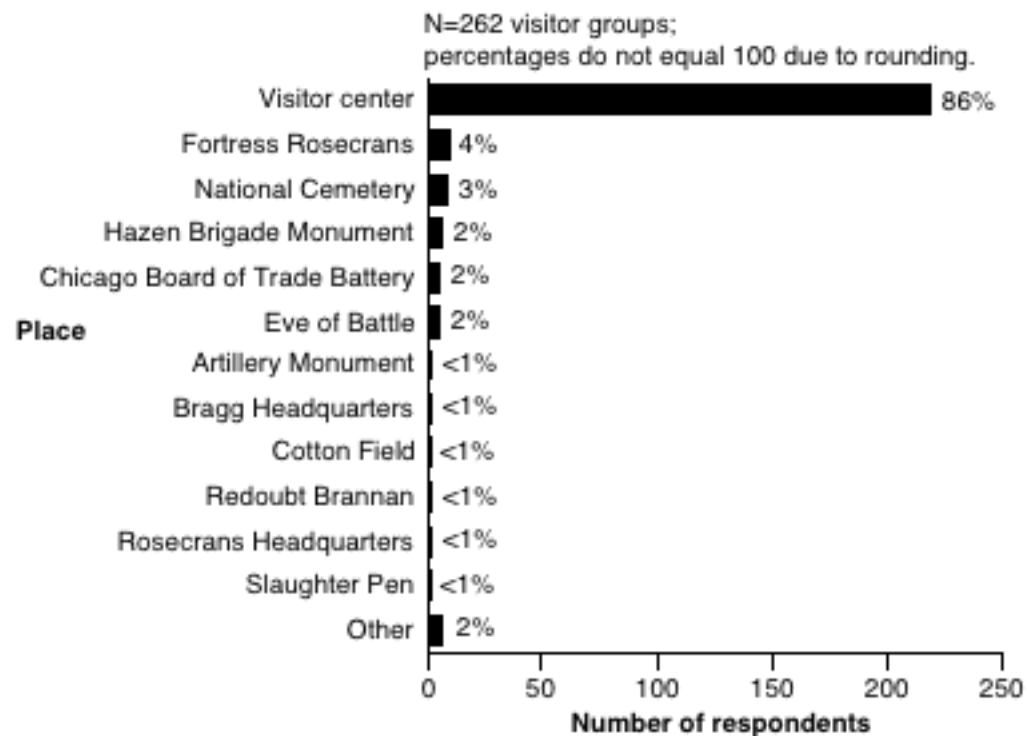


Figure 21: First battlefield place visited on this visit

Visitor groups were asked whether they visited other places in addition to Stones River NB on this trip. One-half of visitor groups (50%) visited other places in addition to Stones River NB, another 50% did not (see Figure 22). The most commonly visited places were Chickamauga and Chattanooga NMP (40%), Battle of Franklin sites (30%), and Shiloh NMP (23%), as shown in Figure 23. "Other" places visitors visited, including Hermitage, Nashville, Jack Daniel's Distillery, Trace Parkway, Perryville Battlefield, Fort Pillow, Great Smoky Mountains National Park, and the Confederate Memorial Cemetery.

Places visited outside the battlefield

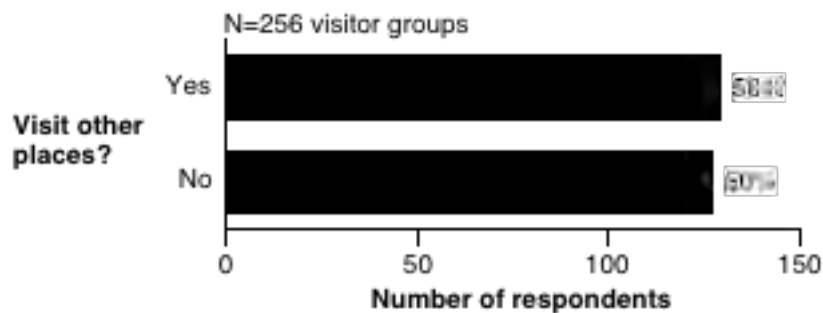


Figure 22: Visit other places in addition to Stones River NB?

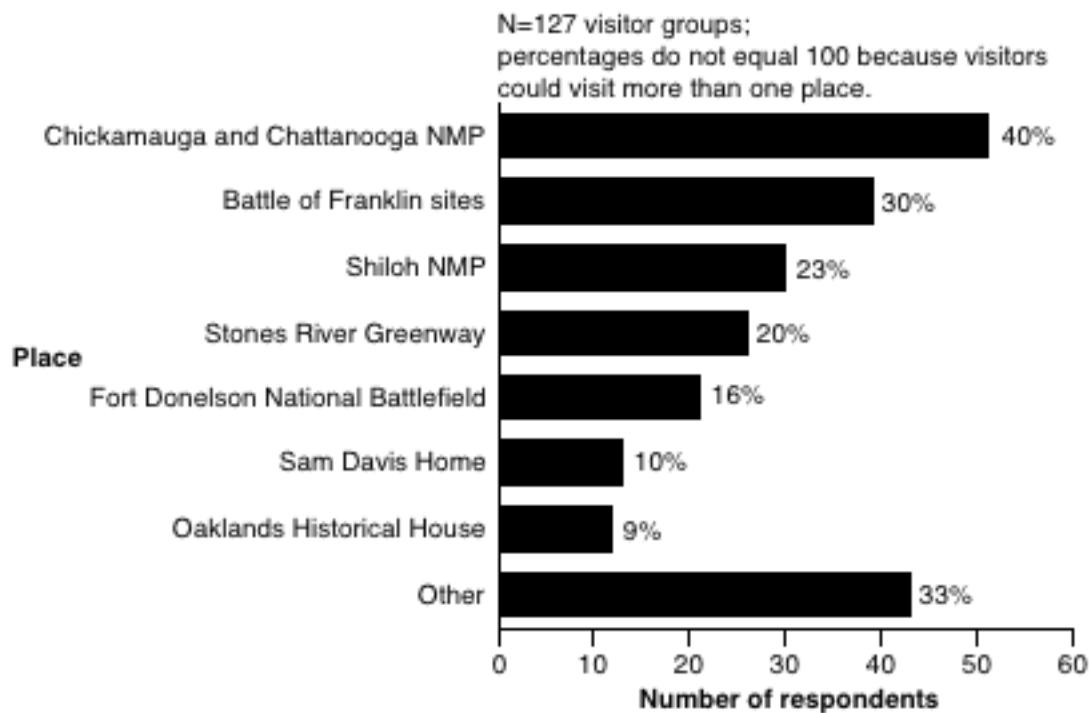


Figure 23: Places visited outside of Stones River NB

Visitor groups were asked a series of questions about overnight accommodations. Fifty-three percent of visitors stayed overnight away from home within one hour of Stones River NB (see Figure 24).

Overnight accommodations

Number of nights: Within a one-hour drive outside of Stones River NB, most visitors stayed one (43%) or two (24%) nights (see Figure 25).

Type of accommodations used: Almost three-fourths of the visitors (74%) stayed in a lodge/motel/cabin, while 17% stayed in a friends' or relatives' residence, and 6% stayed in a campground or trailer park (see Figure 26). "Other" accommodations included a bed and breakfast and living in Murfreesboro or Smyrna.

Number of times entered Stones River NB: Most visitors (78%) entered the battlefield once, while 23% entered two or more times (see Figure 27).

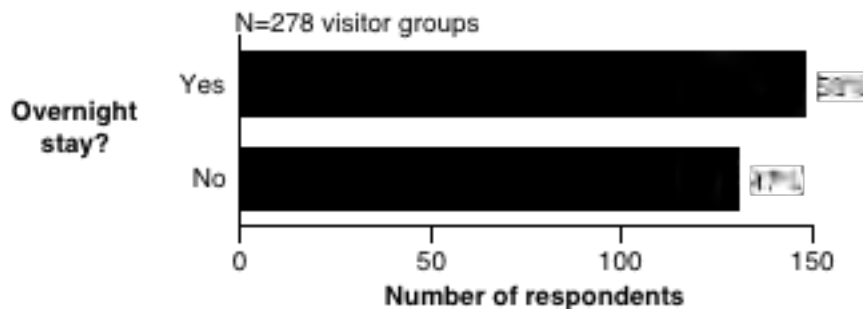


Figure 24: Overnight stays within one hour of Stones River NB

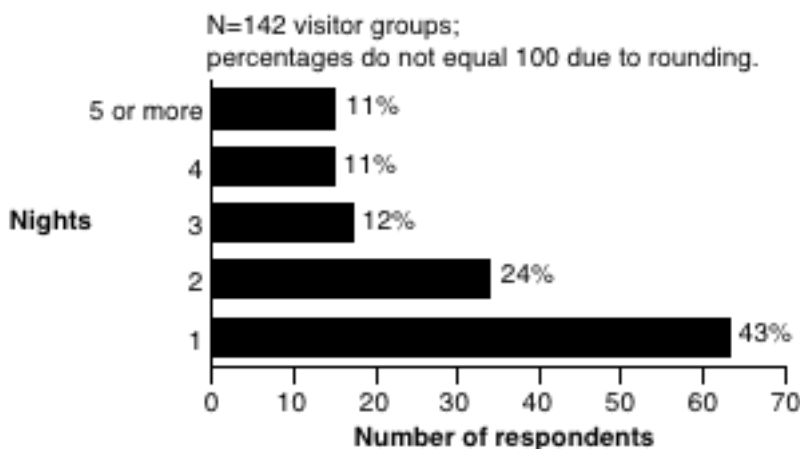


Figure 25: Number of nights visitors stayed within one hour of Stones River NB

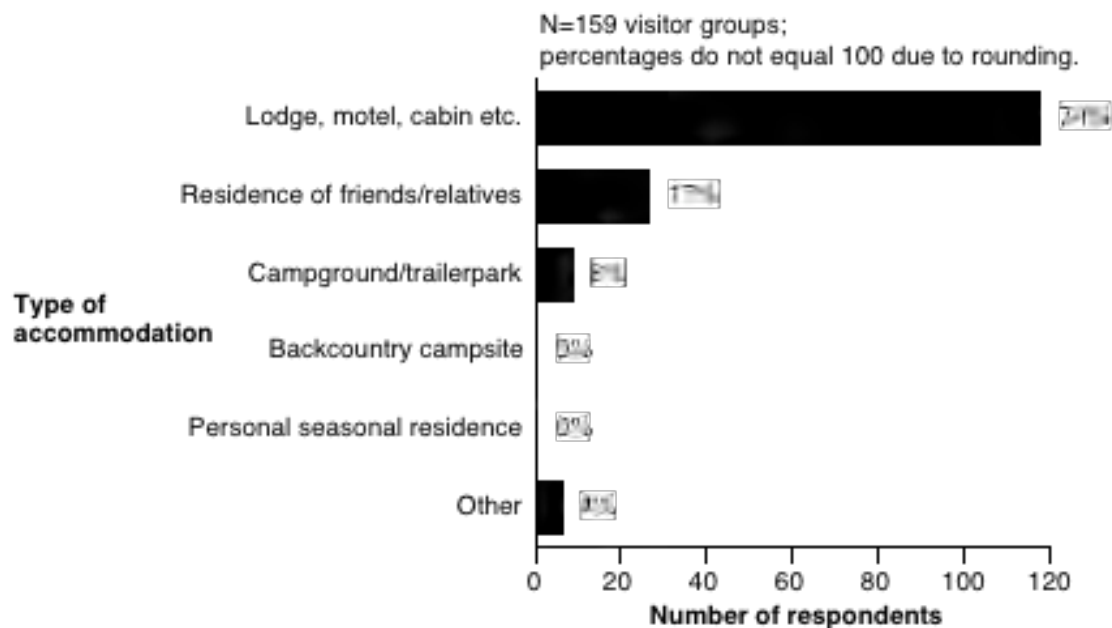


Figure 26: Type of overnight accommodations used within one hour of Stones River NB

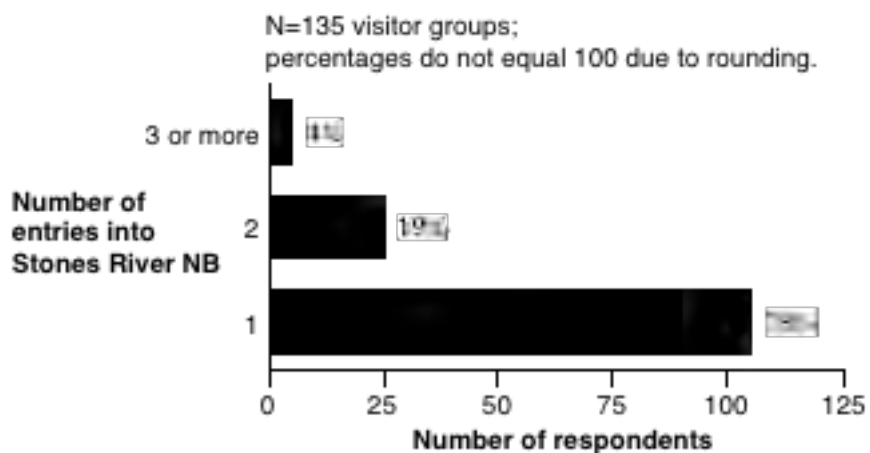


Figure 27: Number of times visitors entered Stones River NB

Visitor groups were asked what highways and interstates they used to access Stones River NB. Fifty-six percent used Interstate 24, while 41% traveled Highway 41/70 to arrive at Stones River NB (see Figure 28).

Roads traveled/ adequacy of signage

Visitors were also asked to rate the adequacy of signs directing them to Stones River NB on the interstates, state highways, and in communities. Sixty-three percent of visitors felt that the signs on the interstates were adequate, while 15% thought that they were not (see Figure 29). Twenty-two percent were “not sure” if the signs were adequate. Most visitor groups (68%) felt that the signs on state highways were adequate in directing them. Eighteen percent felt that they were not and 14% were not sure (see Figure 30). Sixty-seven percent felt that the signs in local communities were adequate, but 21% of the respondents felt that they were not adequate in directing them to Stones River NB (see Figure 31). Another eleven percent of visitor groups were “not sure.”

Visitors who rated any of the signs as inadequate were asked to explain how they were inadequate. Table 4 lists comments from 71 visitor groups, with the most common comment stating that there were “not enough signs.”

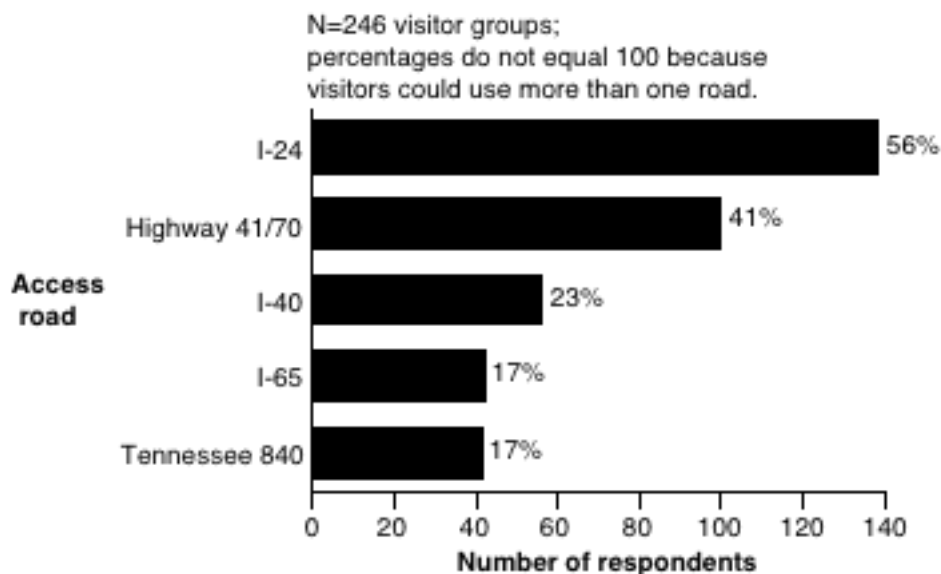


Figure 28: Interstates/highways used to arrive in the Murfreesboro/Stones River NB

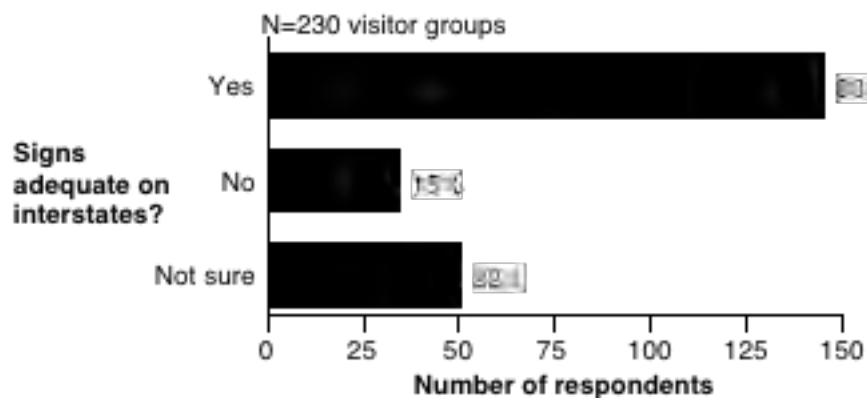


Figure 29: Adequacy of directional signs on interstates

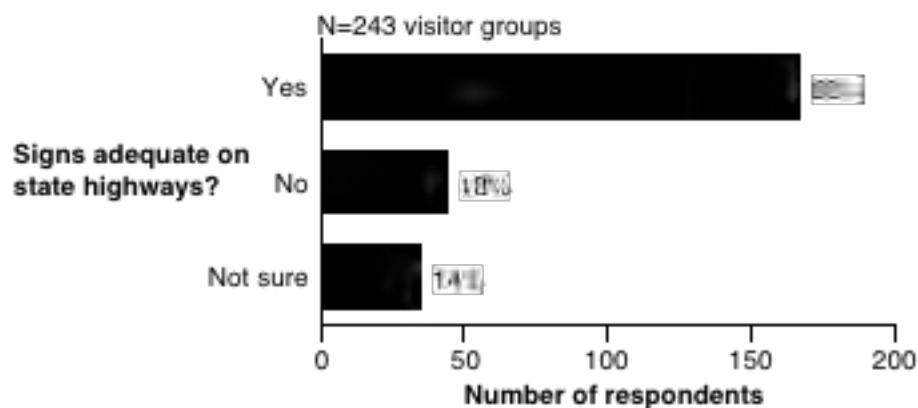


Figure 30: Adequacy of directional signs on state highways

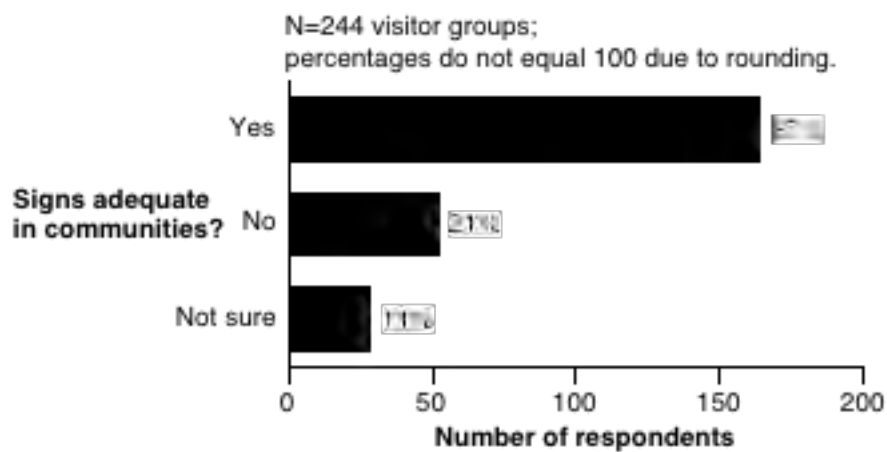


Figure 31: Adequacy of directional signs in communities

Table 4: Reasons why signs were inadequate

N=82 comments;
some visitor groups made more than one comment.

Comment	Number of times mentioned
Not enough signs	17
Signs too small	13
Not enough turning signs	11
Not enough signage on highway	10
Need better signage to identify park entrance	6
No sign in town (Murfreeboro)	6
Business signs too large—cover directional signs	5
Not important for locals, but not clear enough for tourists	5
No signs on Thompson Lane	3
No sign on intersection I-24 and 840	3
No turning sign at the church	2
No distances on signs	1

Visitor services and facilities: use, importance and quality

Visitors were asked to note the visitor services and facilities they used during this visit to Stones River NB. The most used services and facilities included the visitor center (96%), parking (85%), park brochure/map (85%), and restrooms (76%), as shown in Figure 32. The least used services were the Junior Ranger program (1%) and access for disabled persons (3%).



Figure 32: Visitor services and facilities used

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

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

The average importance and quality ratings for each service and facility were determined based on ratings provided by visitors who used each service and facility. Figures 33 and 34 show the average importance and quality ratings for each of the park services and facilities. All services and facilities were rated above average in importance and quality. Note: picnic areas, access for disabled persons, and the Junior Ranger program were not rated by enough visitors to provide reliable data.

Figures 35-49 show the importance ratings that were provided by visitor groups for each of the individual facilities. Those facilities receiving the highest proportion of “extremely important” or “very important” ratings included park brochure/map (92%), living history (91%), visitor center (91%), restrooms (90%), and assistance from park staff (90%). The highest proportion of “not important” ratings was paved roads (3%).

Figures 50-64 show the quality ratings that were provided by visitor groups for each of the individual facilities. Those facilities receiving the highest proportion of “very good” or “good” ratings included restrooms (93%), ranger-led walks/talks (91%), paved roads (90%), park brochure/map (89%), visitor center (86%), and living history (84%). The highest proportion of “very poor” ratings was roadside and trailside exhibits (2% each).

Figure 65 combines the “very good” and “good” quality ratings and compares those ratings for all of the services and facilities.

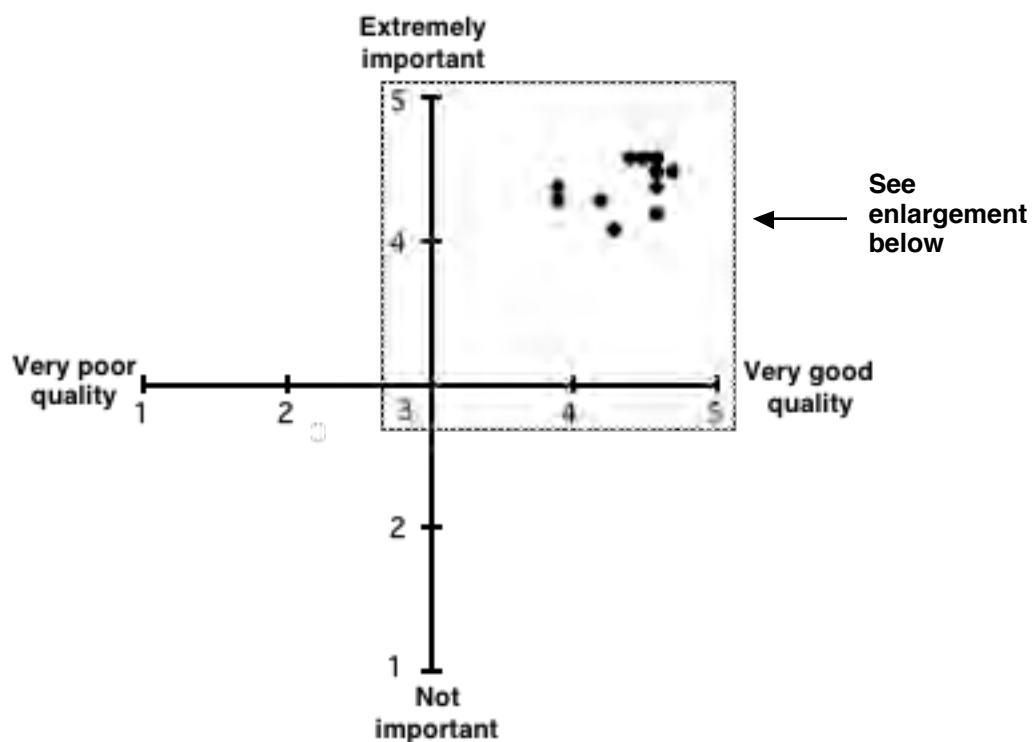


Figure 33: Average ratings of visitor service importance and quality

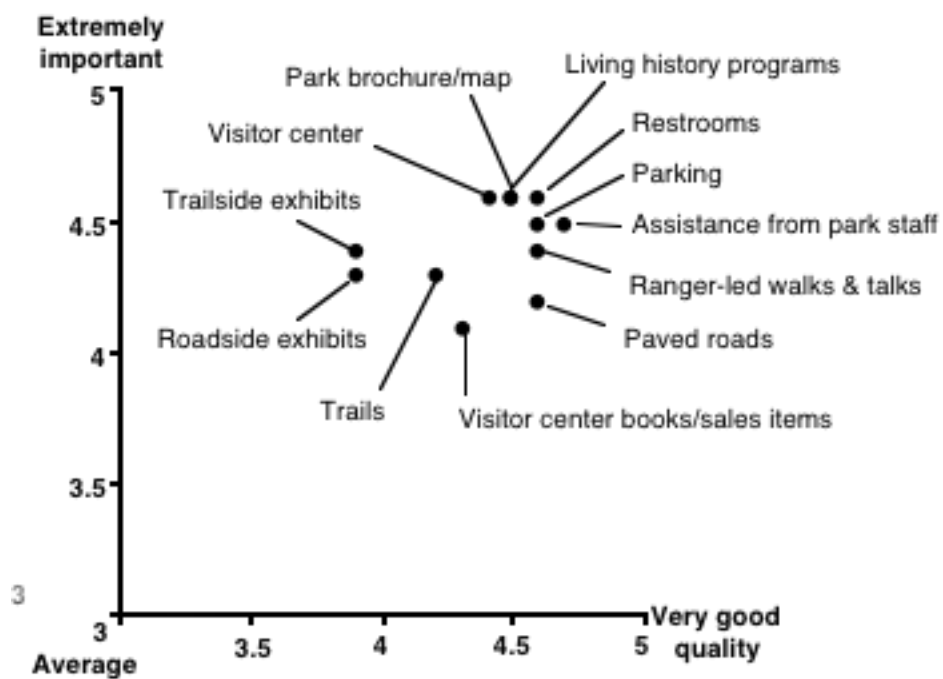


Figure 34: Detail of Figure 33

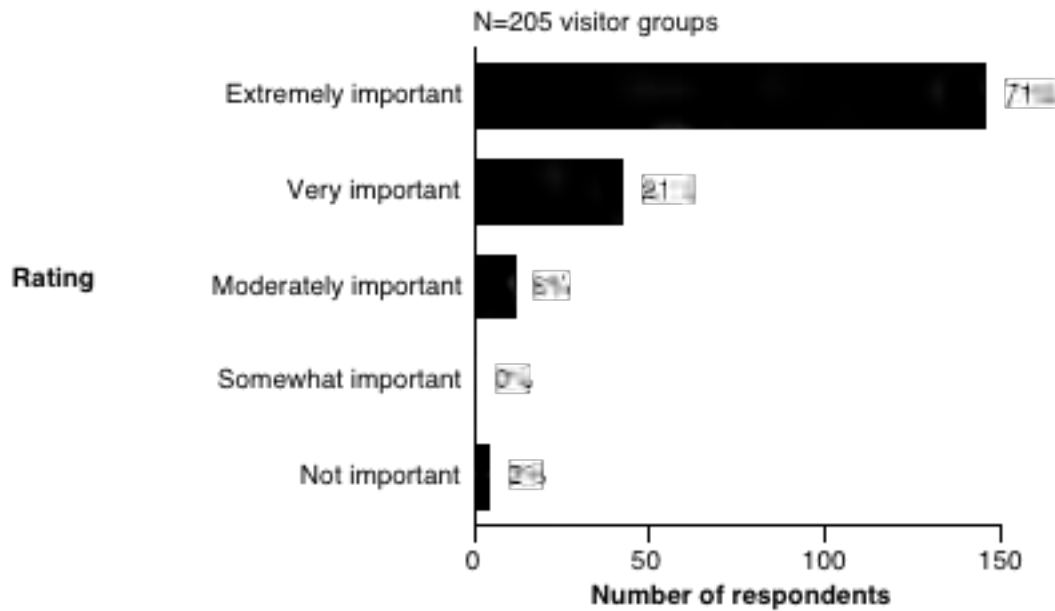


Figure 35: Importance of park brochure/map

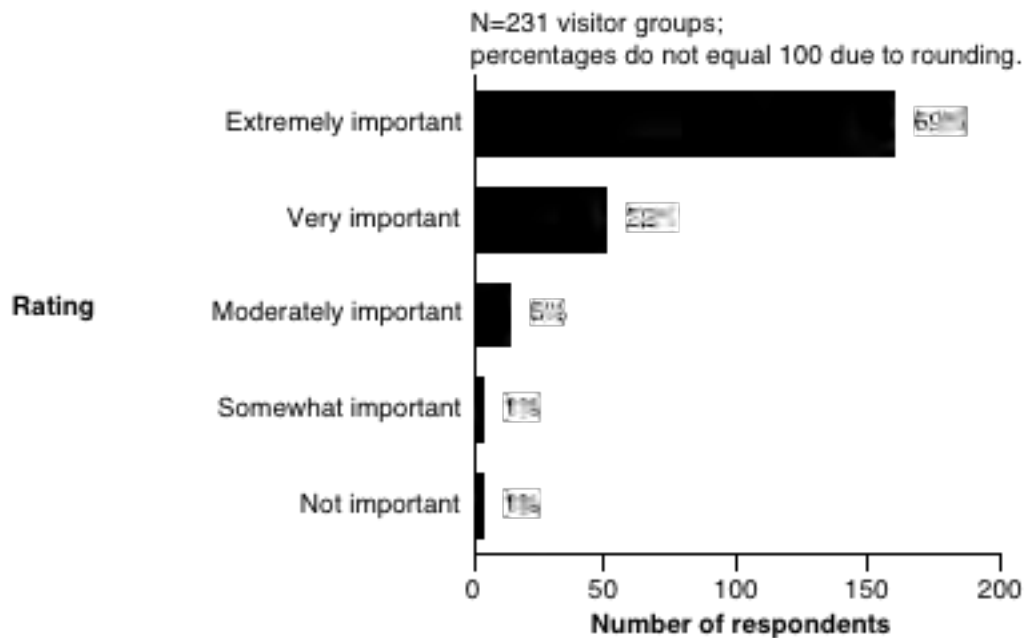


Figure 36: Importance of the visitor center

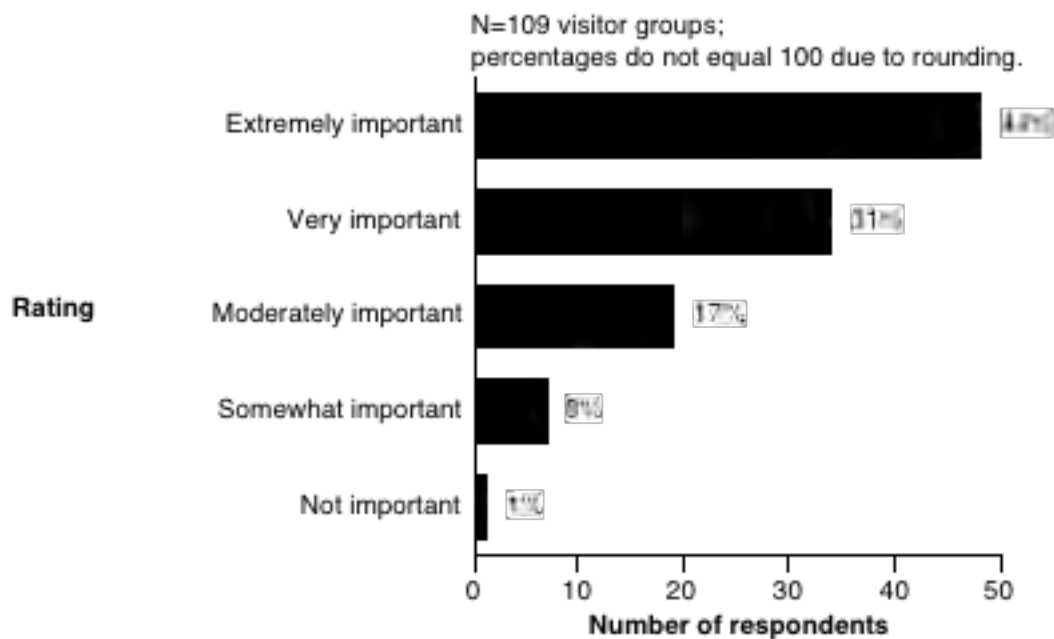


Figure 37: Importance of visitor center books/sales items

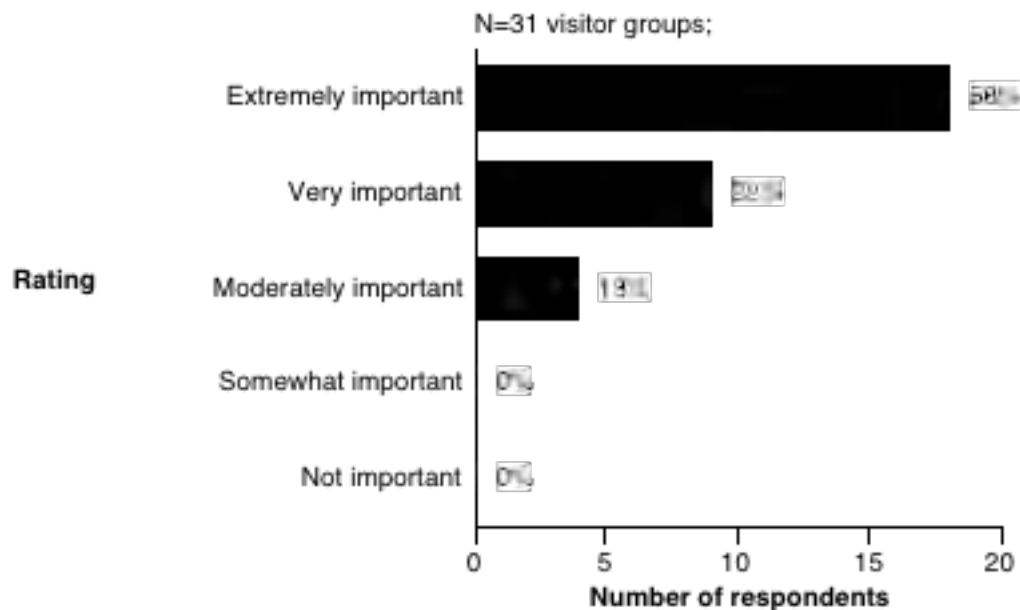


Figure 38: Importance of ranger-led walks/talks

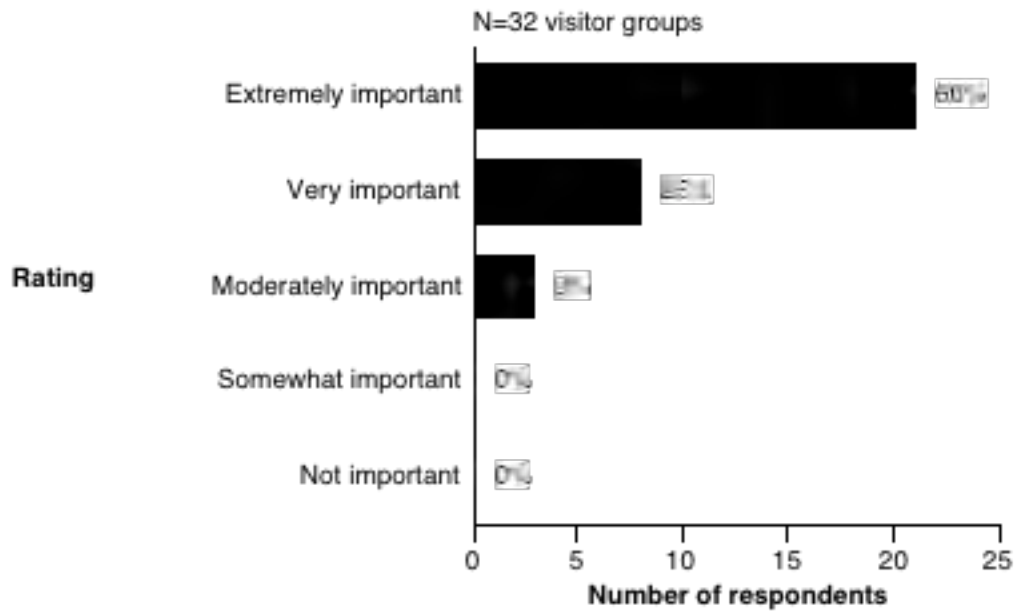


Figure 39: Importance of living history

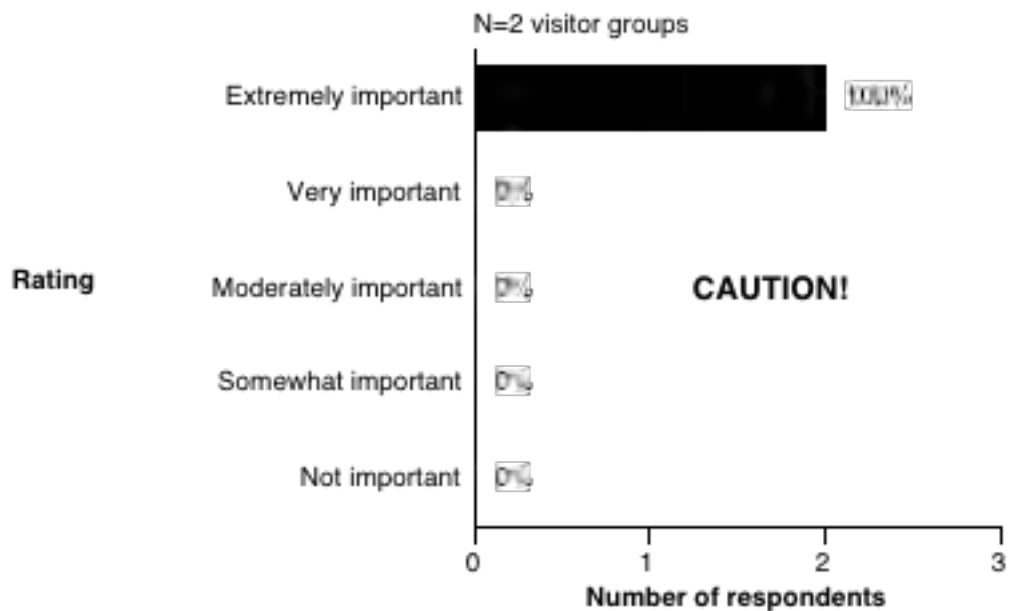


Figure 40: Importance of Junior Ranger program

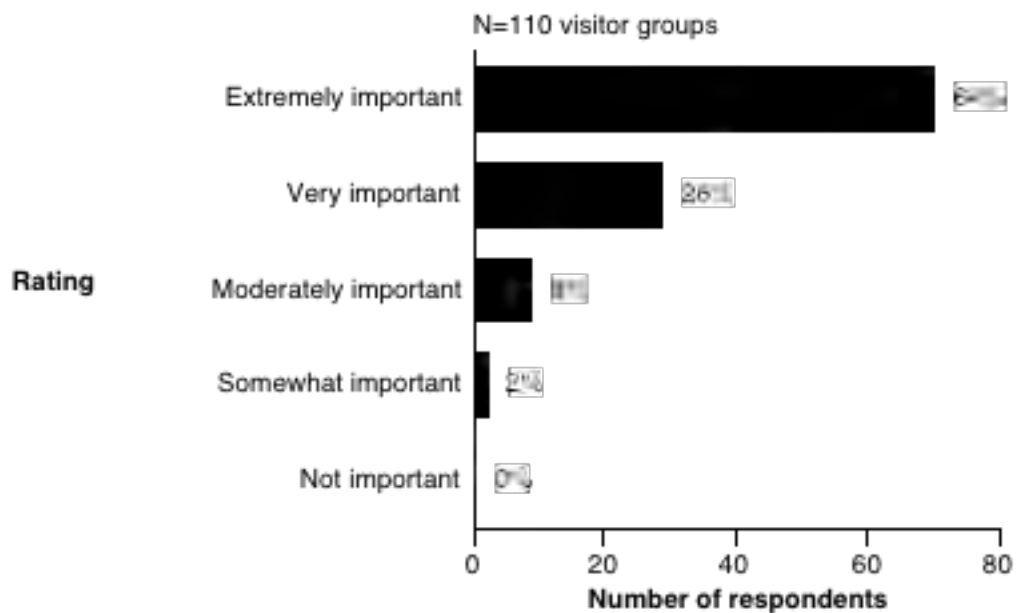


Figure 41: Importance of assistance from park staff

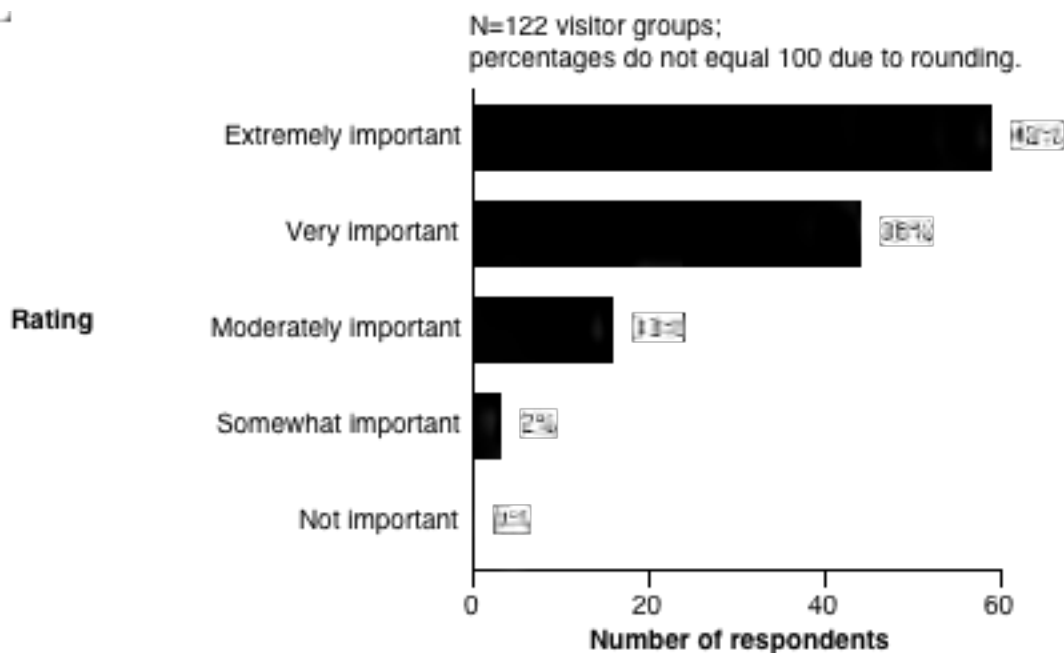


Figure 42: Importance of roadside exhibits

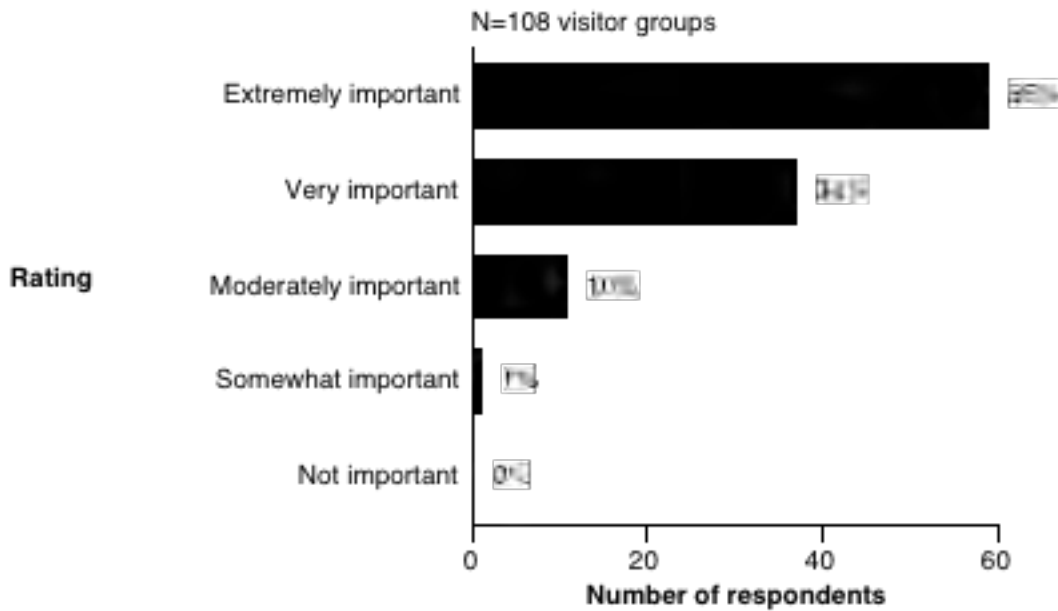


Figure 43: Importance of trailside exhibits

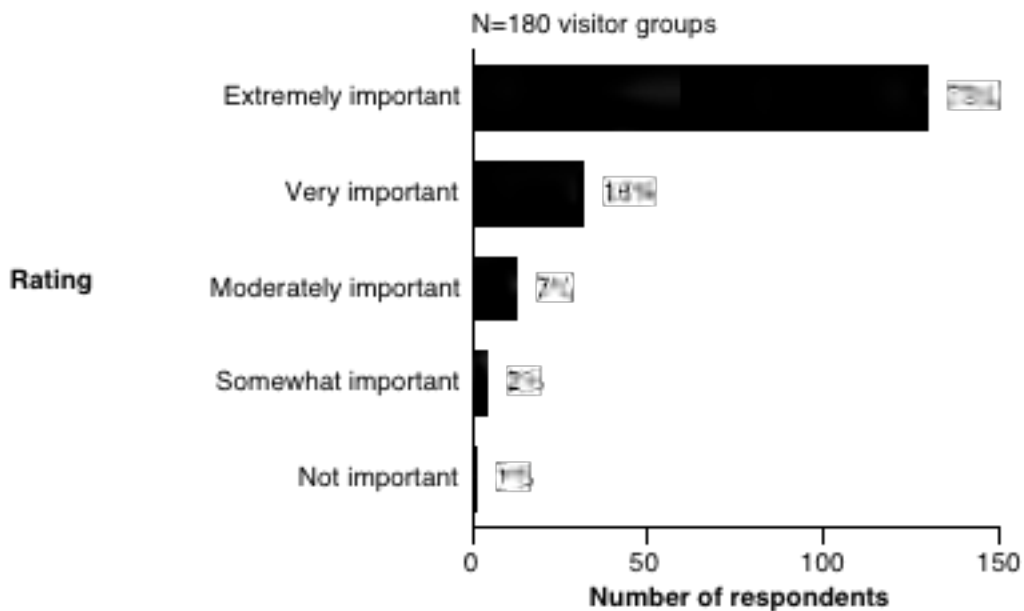


Figure 44: Importance of restrooms

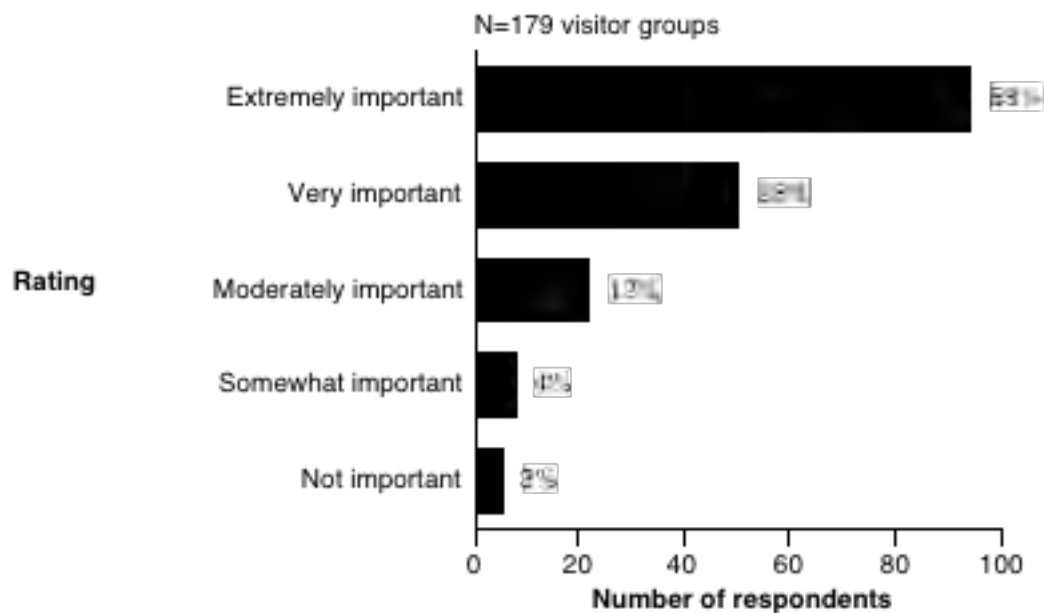


Figure 45: Importance of paved roads

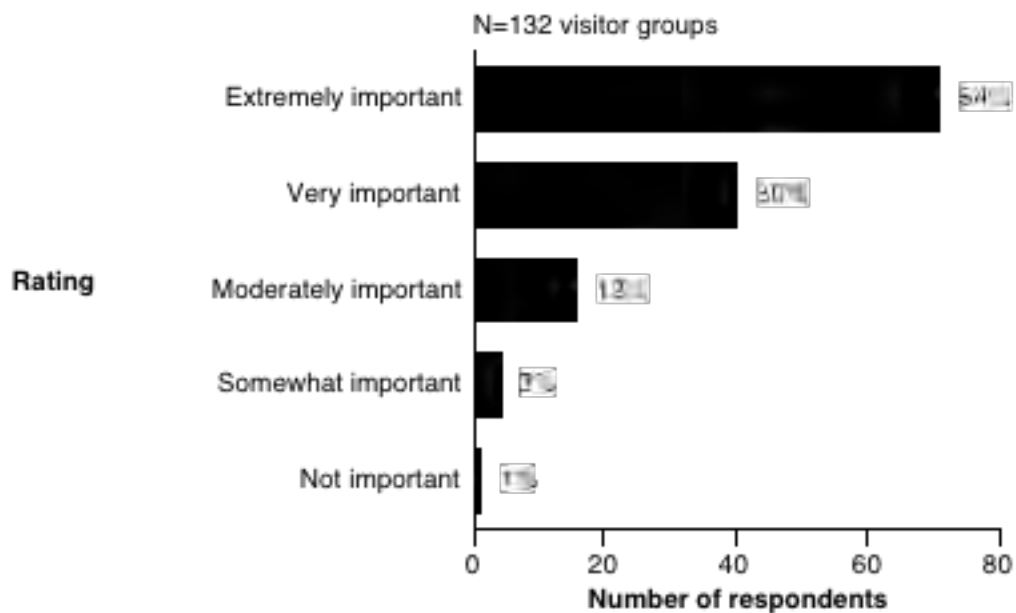


Figure 46: Importance of trails

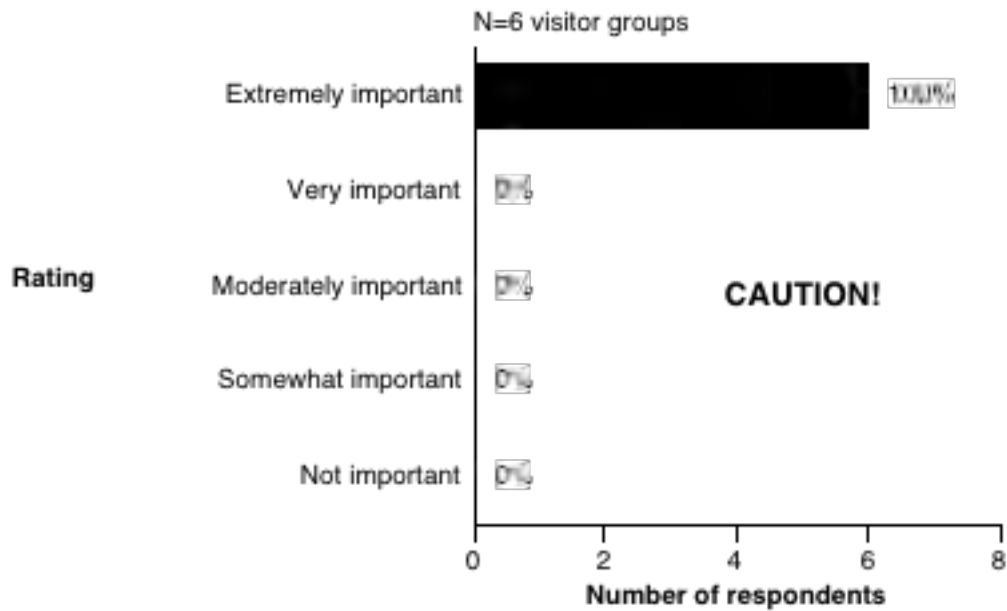


Figure 47: Importance of access for disabled persons

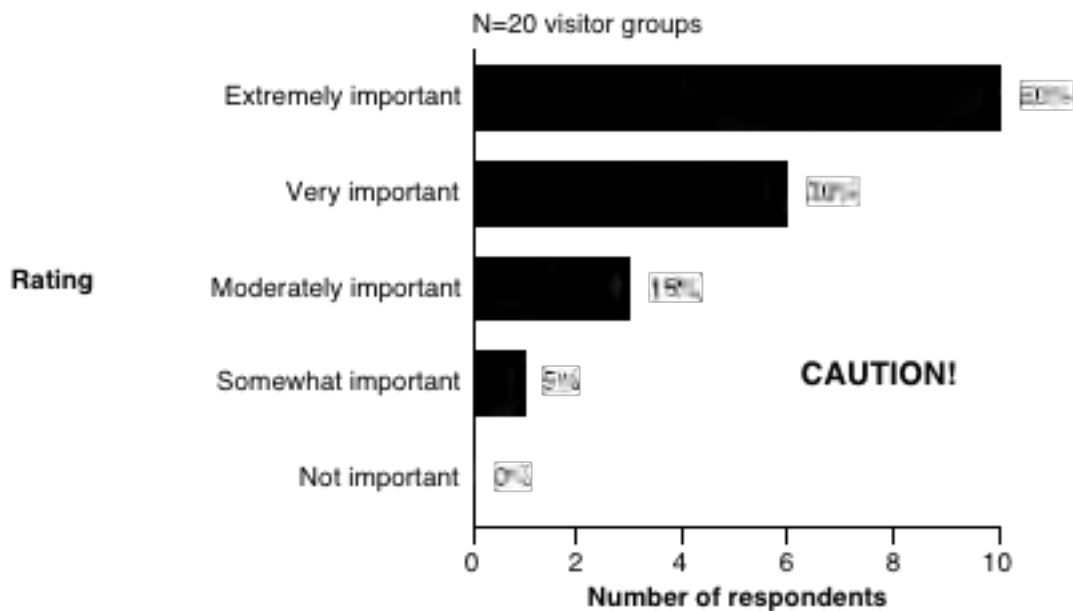


Figure 48: Importance of picnic areas

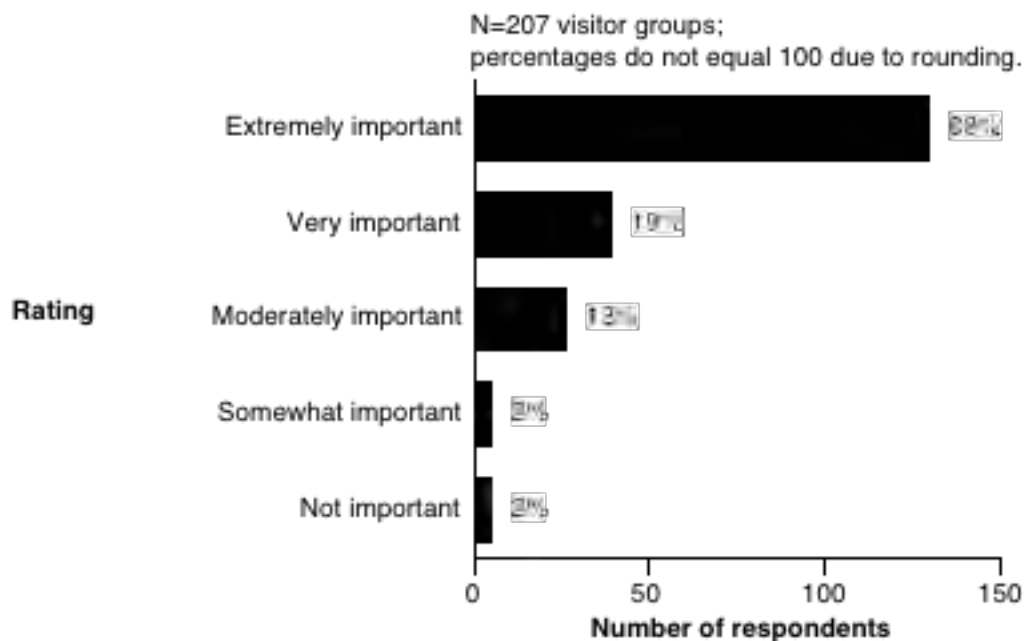


Figure 49: Importance of parking

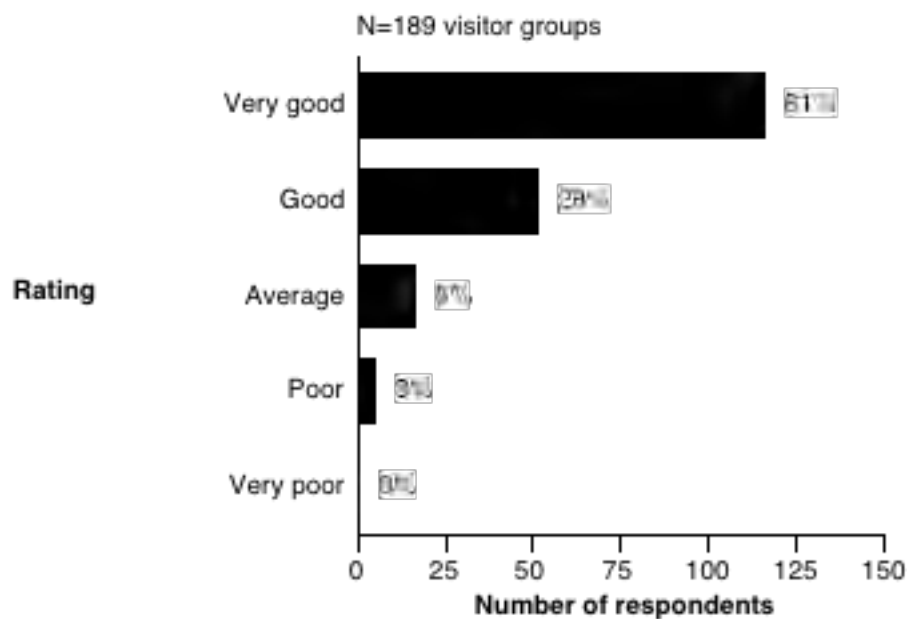


Figure 50: Quality of park brochure/map

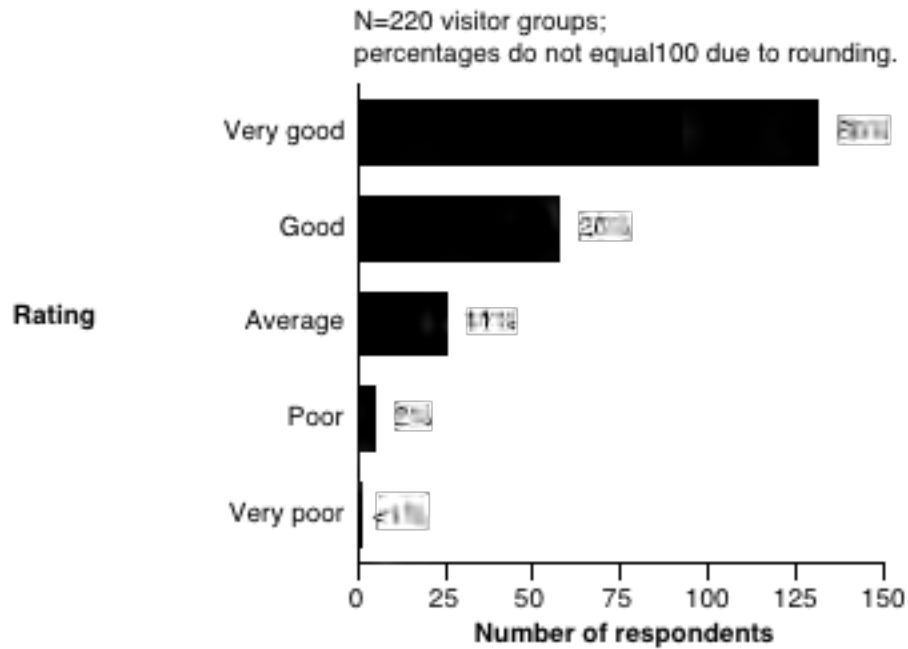


Figure 51: Quality of the visitor center

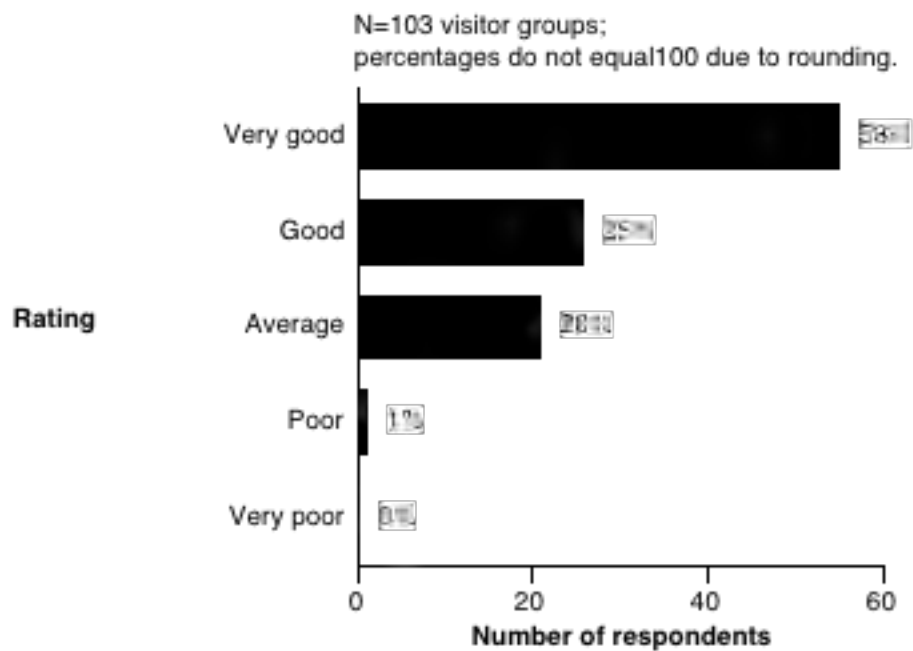


Figure 52: Quality of the visitor center books/sales items

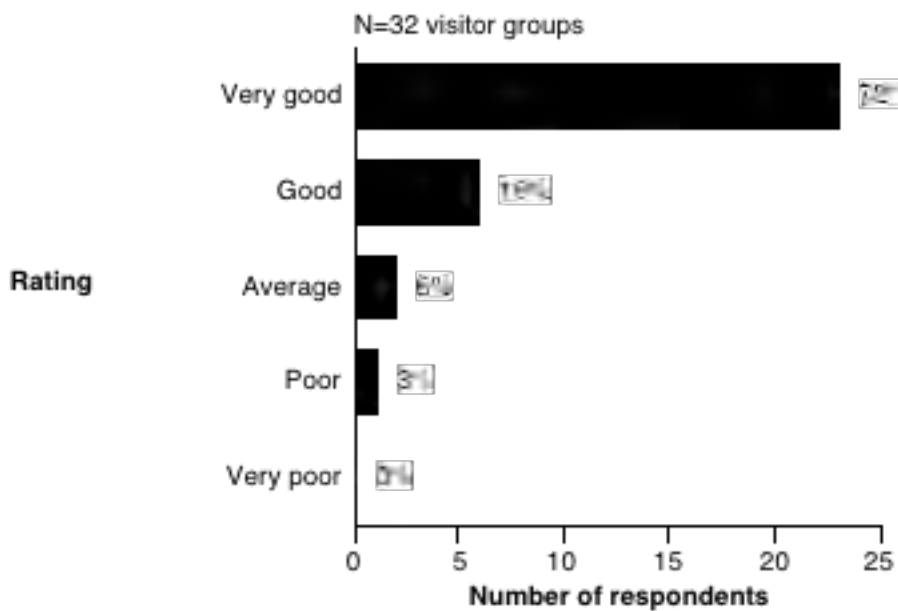


Figure 53: Quality of ranger-led walks/talks

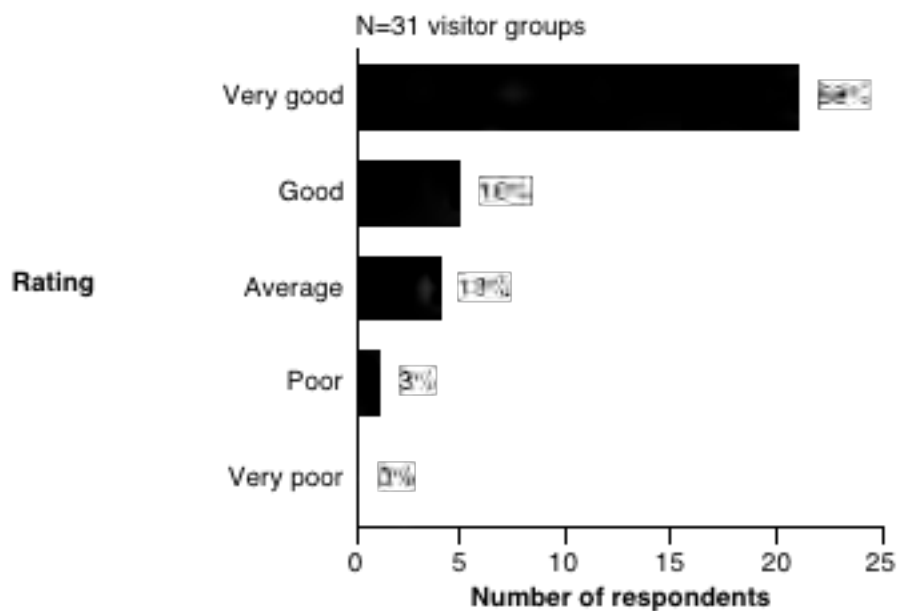


Figure 54: Quality of living history programs

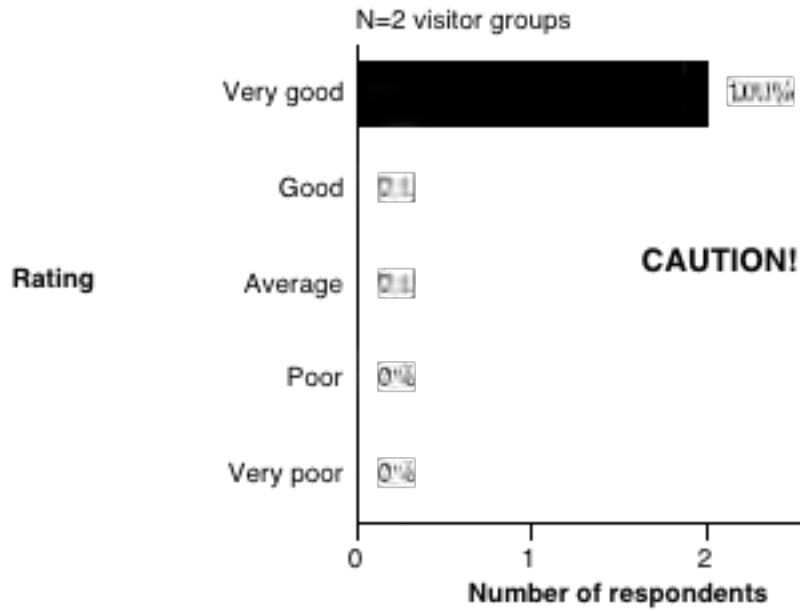


Figure 55: Quality of Junior Ranger program

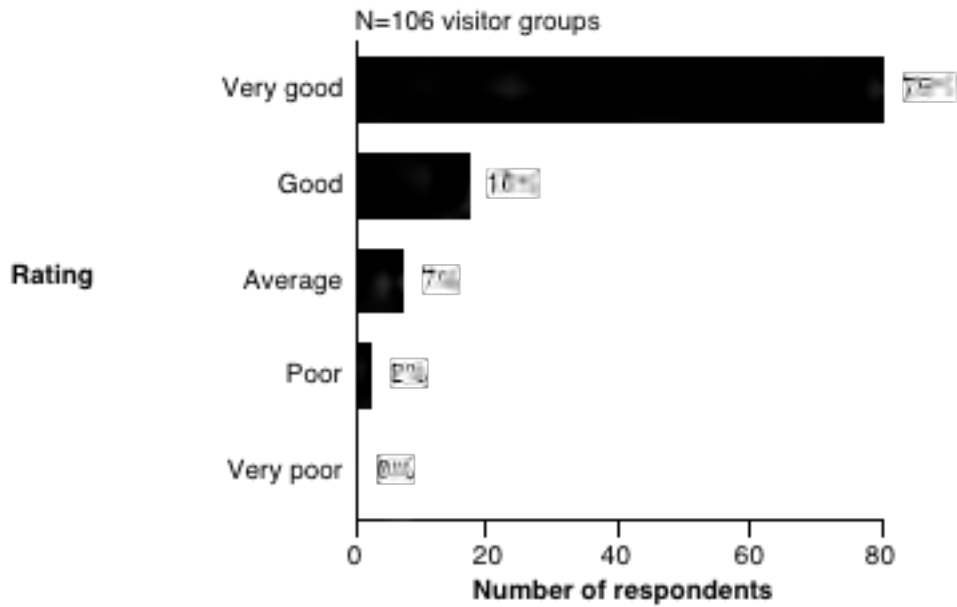


Figure 56: Quality of assistance from park staff

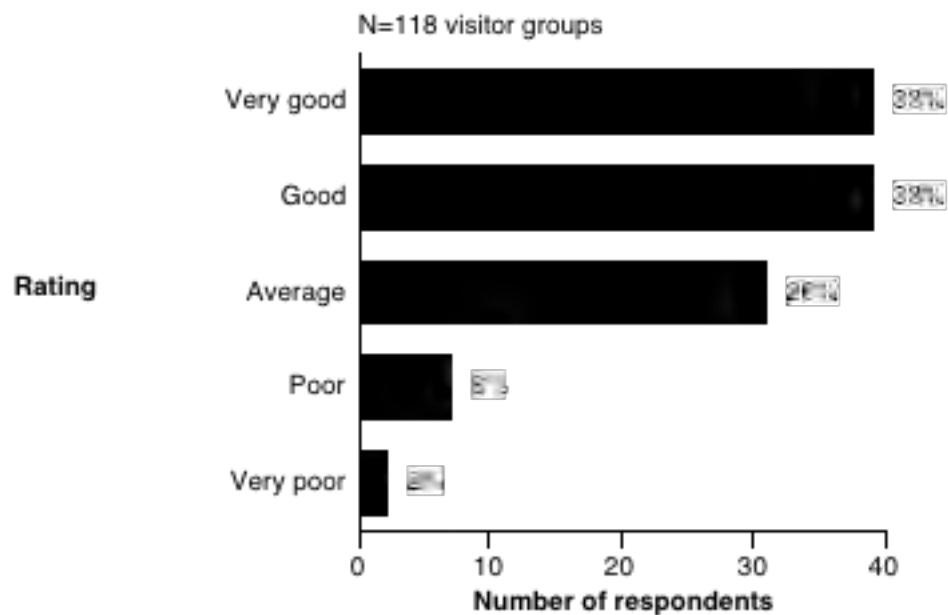


Figure 57: Quality of roadside exhibits

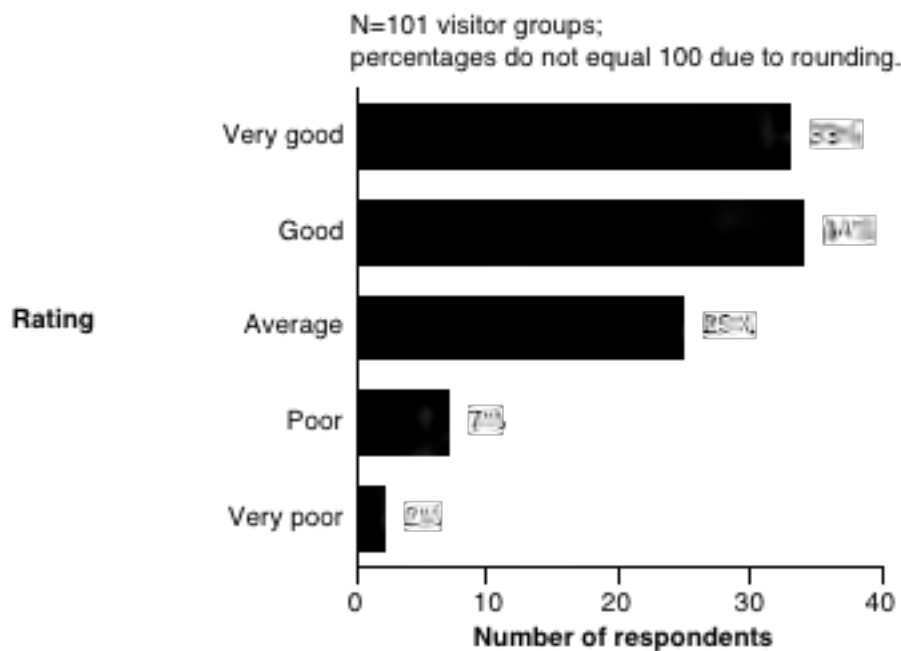


Figure 58: Quality of trailside exhibits

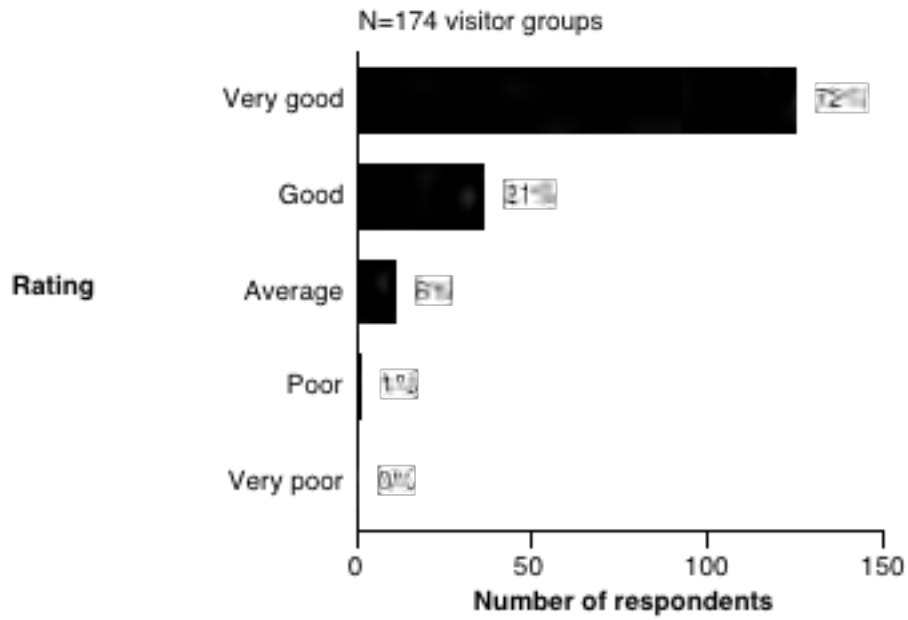


Figure 59: Quality of restrooms

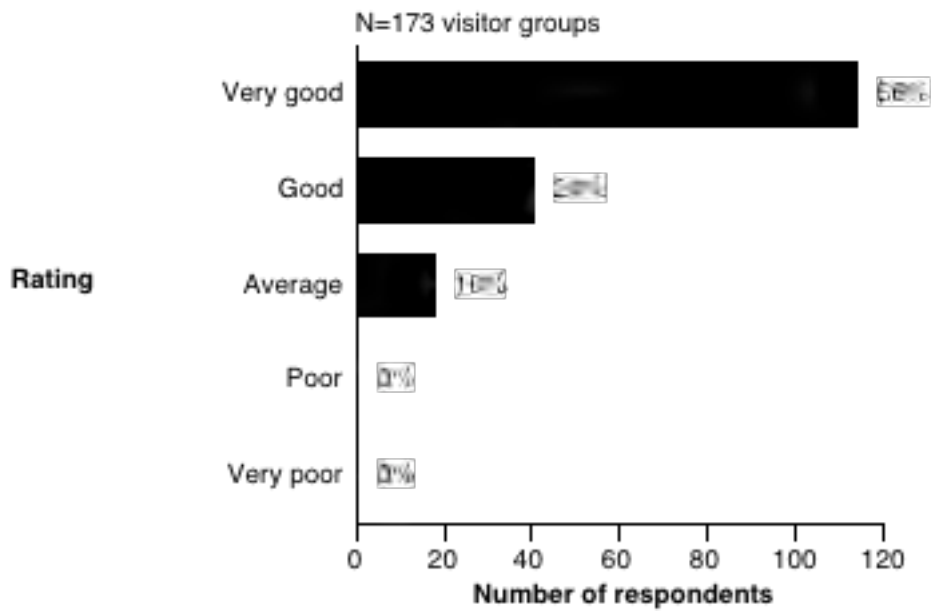


Figure 603: Quality of paved roads

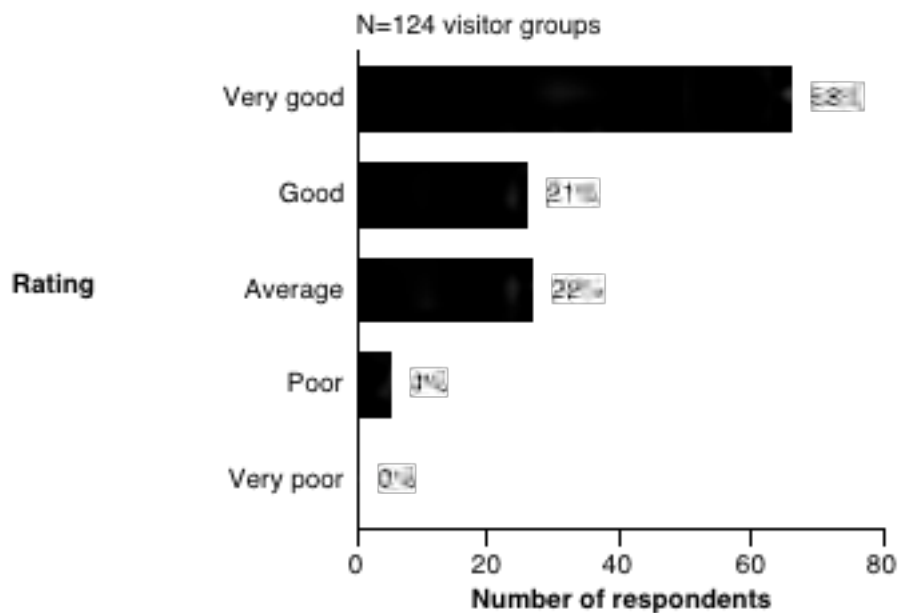


Figure 61: Quality of trails



Figure 62: Quality of access for disabled persons

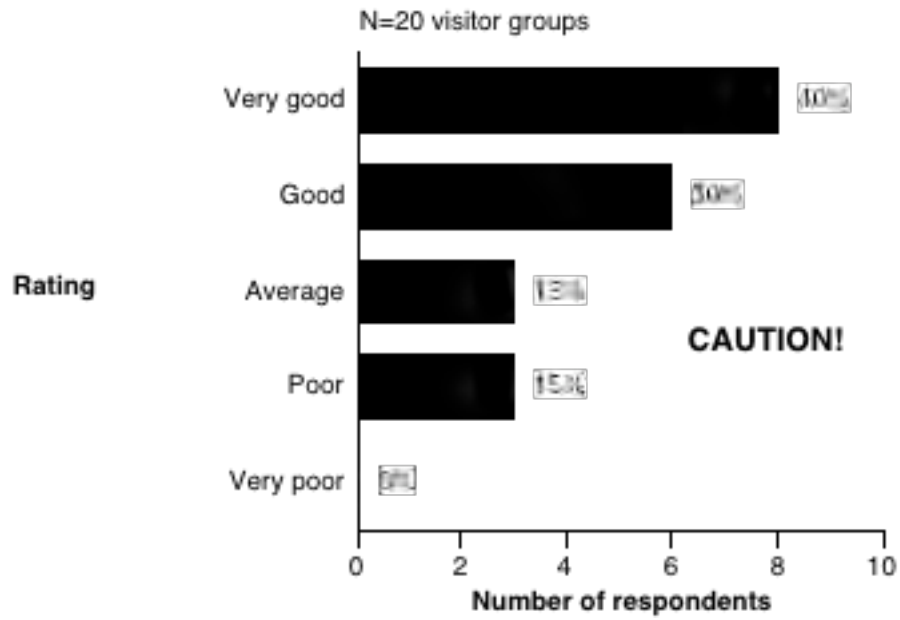


Figure 63: Quality of picnic areas

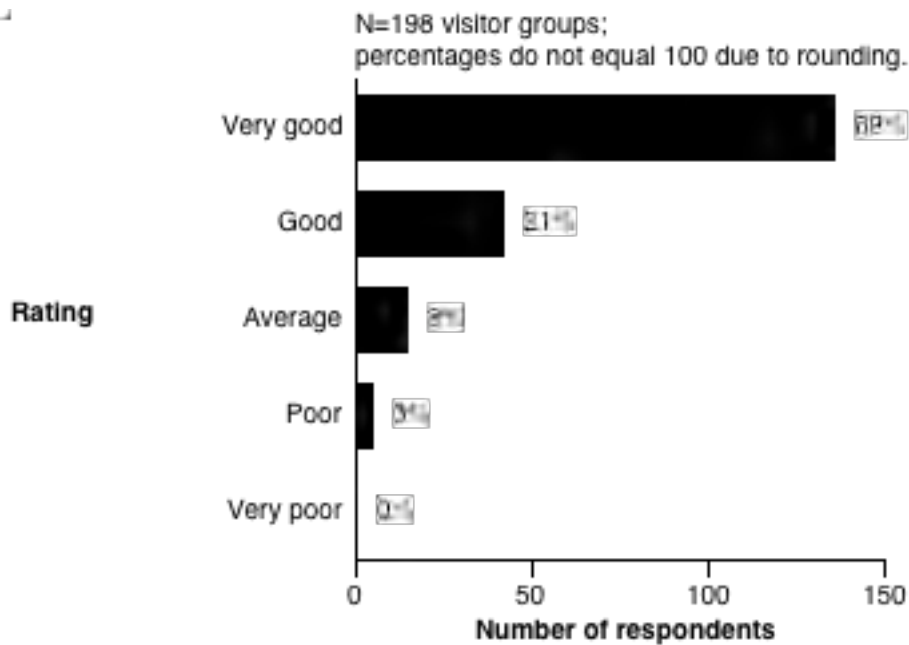


Figure 64: Quality of parking

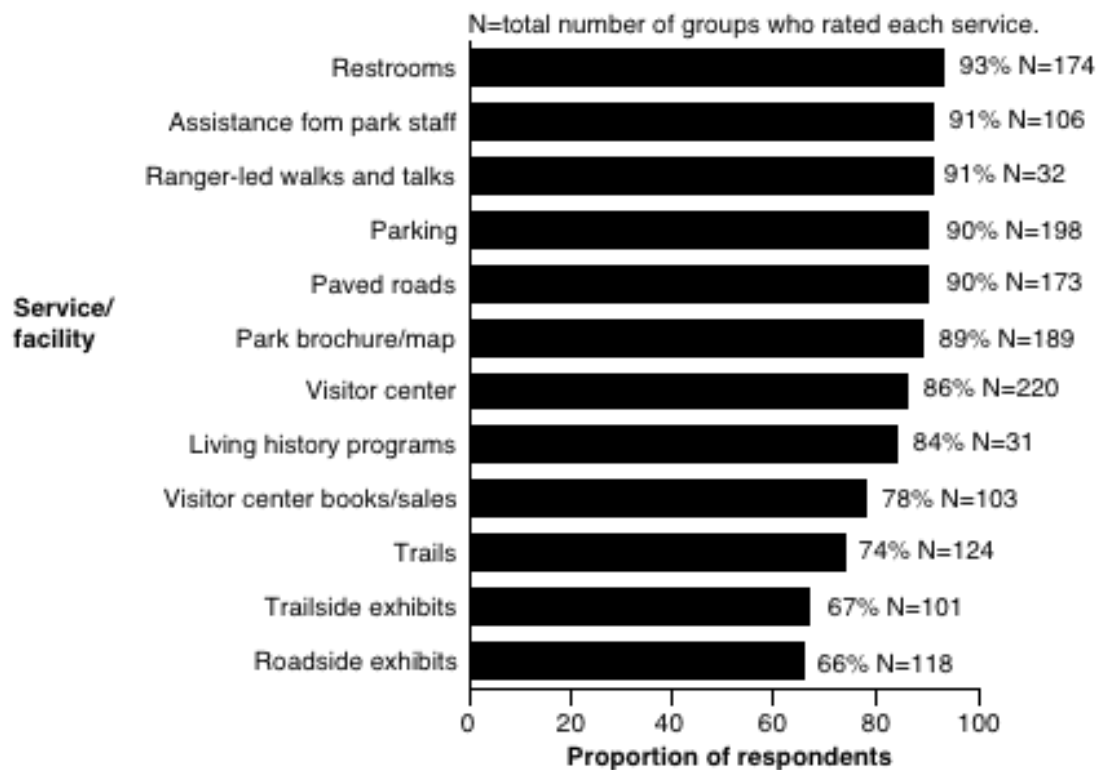


Figure 65: Combined proportions of “very good” and “good” quality ratings for visitor services and facilities

Visitor groups were asked if they had any safety concerns while visiting the park. The majority of visitors (96%) did not have any safety concerns, while 4% said that they had some safety concerns (see Figure 66).

Visitor opinions about safety concerns

Visitors who had safety concerns in Stones River NB during this visit were then asked to list their concerns. The concerns included speeders, wooded areas where people could conceal themselves, no rangers on trails, and unpaved walkways.

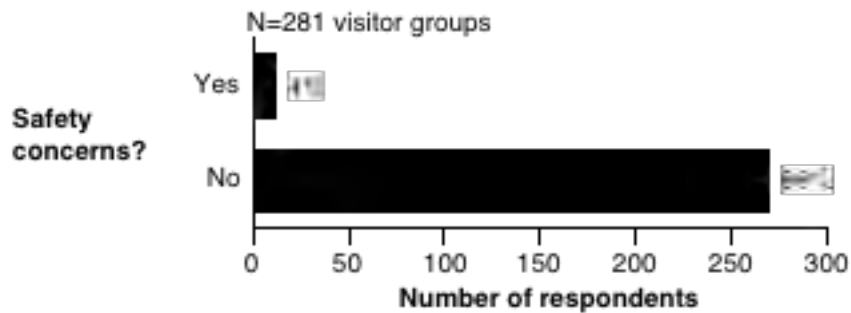


Figure 66: Visitor safety concerns in park?

**Elements
affecting park
experience**

Visitor groups were asked to indicate how certain elements affected their park experience at Stones River NB. The elements were unnatural noise, large groups, bus traffic, parking availability, other visitors' pets, aircraft overflights, closed/restricted areas, and air quality. The majority of visitors felt that these elements had no effect on their experience (see Figures 67 to 74). The elements that most added to the visitor experience were parking availability (36%), air quality (12%), and other visitors' pets (3%). Unnatural noise (16%), closed/restricted areas (12%), and other visitors' pets (5%) most detracted from their park experience.

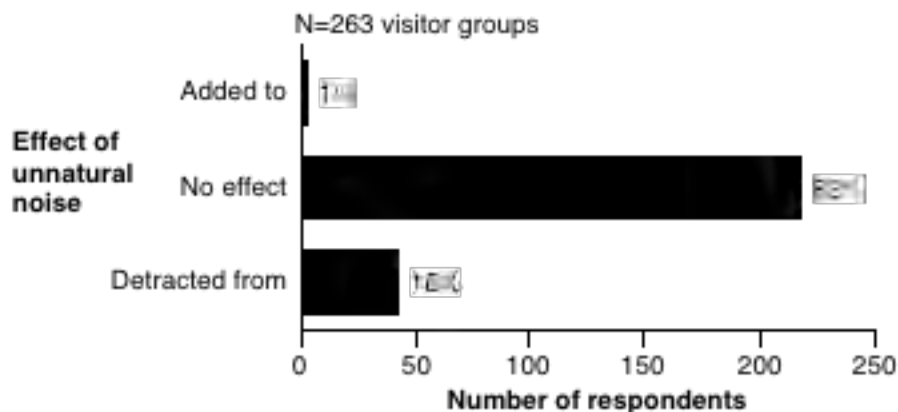


Figure 67: Effect of unnatural noise on visitor experience

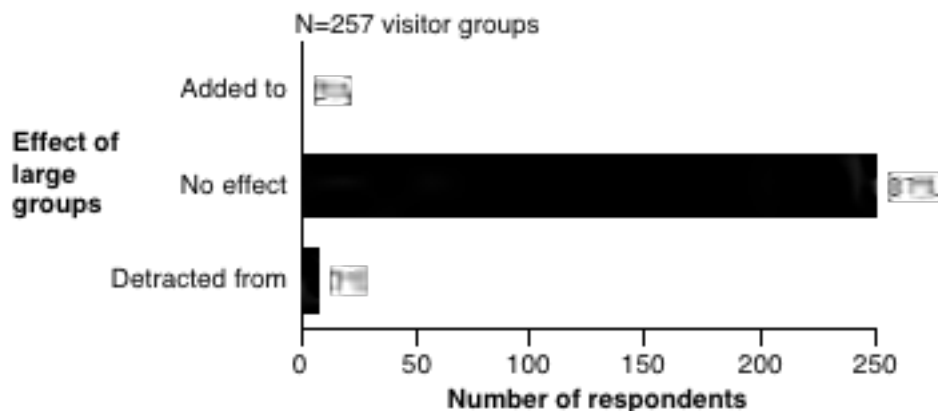


Figure 68: Effect of large groups on visitor park experience

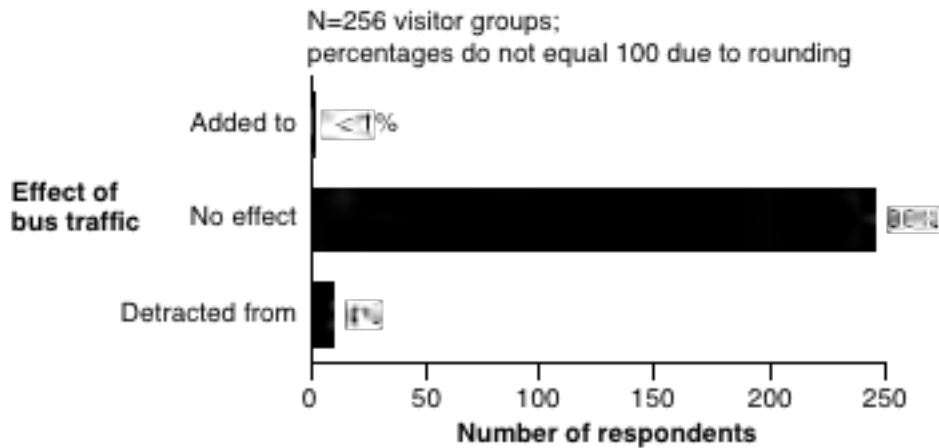


Figure 69: Effect of bus traffic on visitor experience

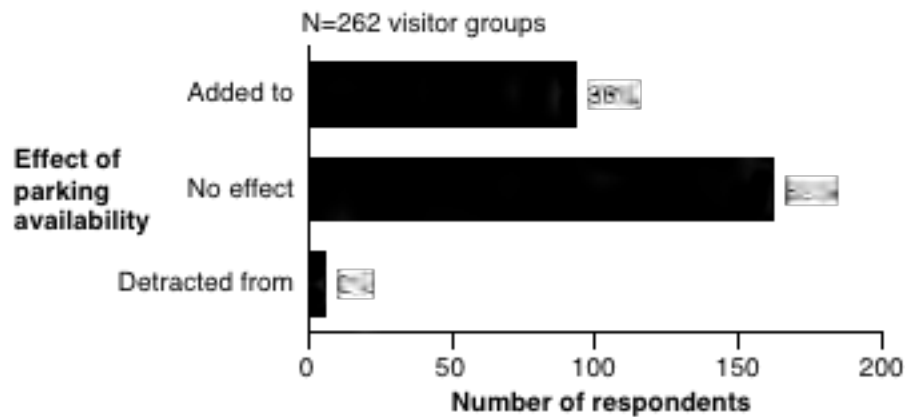


Figure 70: Effect of parking availability on visitor experience

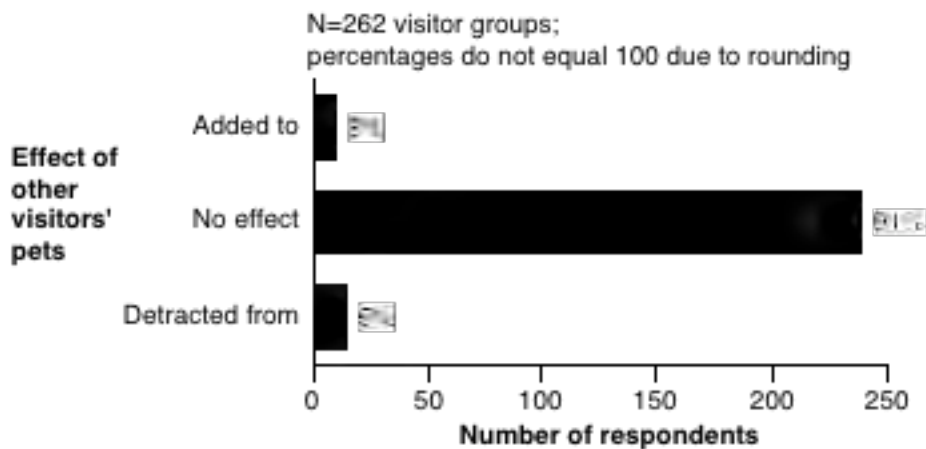


Figure 71: Effect of other visitor's pets on visitor experience

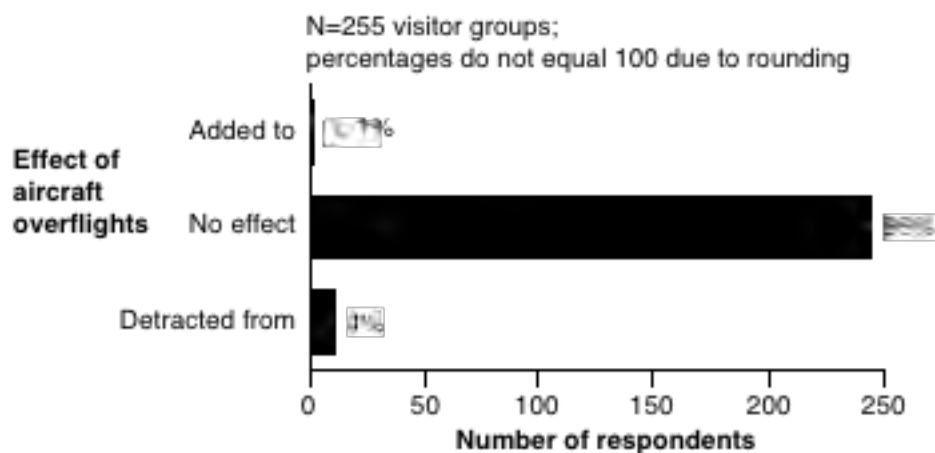


Figure 72: Effect of aircraft overflights on visitor experience

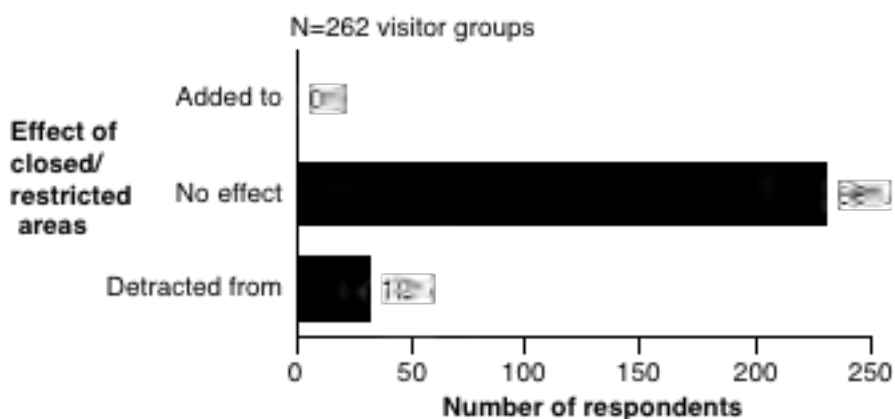


Figure 73: Effect of closed/restricted areas on visitor experience

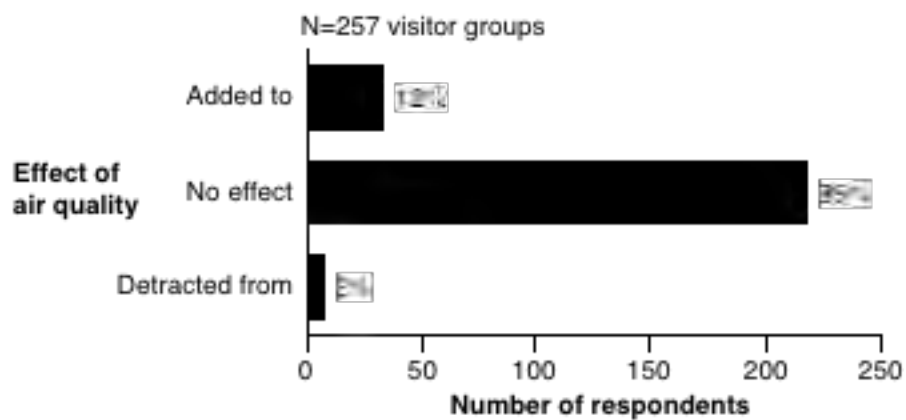


Figure 74: Effect of air quality on visitor experience

Visitor groups were asked to estimate the amount of money they spent on this visit inside Stones River NB and the surrounding area (within a one-hour drive). Groups were asked to list the amounts they spent for lodging; camping fees; restaurants and bars; groceries and take-out food; gas and oil; other transportation expenses; admissions, recreation, and entertainment fees; and all other purchases.

Total expenditures

Total expenditures in and around the battlefield: Fifty-nine percent of visitors spent between \$1 and \$200 during their visit to Stones River NB (see Figure 75). Forty-seven percent of the visitors spent over \$100 during their visit. Of the total expenditures by groups, 40% was for hotels, motels, cabins, etc., as shown in Figure 76.

The average visitor group expenditure during the visit was \$226. The median visitor group expenditure (50% of groups spent more and 50% of groups spent less) was \$90. The average per capita expenditure was \$109.

In addition, visitors were asked to indicate how many adults (18 years or older) and children (under 18 years) were covered by their expenditures. Figure 77 show that 63% of the visitor groups had two adults. Figure 78 show that 50% had one or two children under 18 years of age.

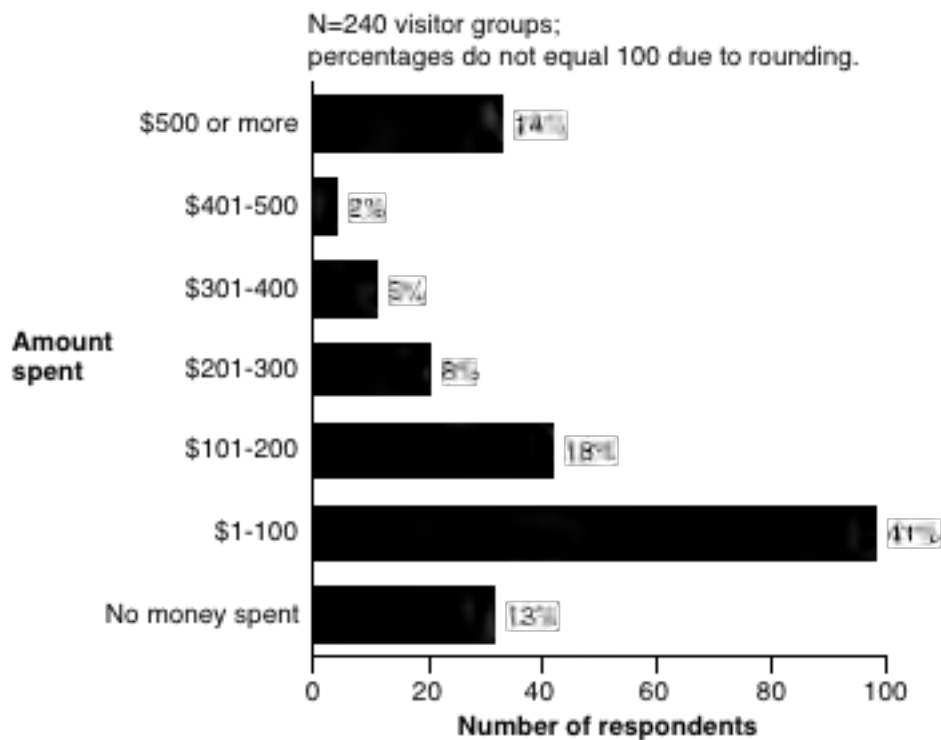


Figure 75: Total expenditures both in and out of Stones River NB

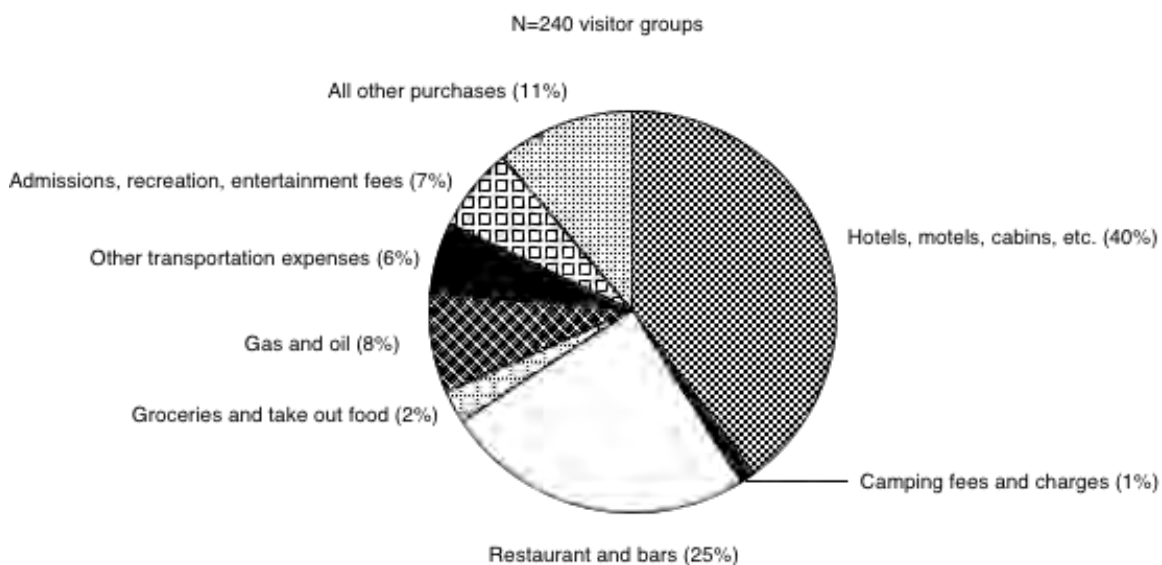


Figure 76: Proportions of expenditures in and around Stones River NB

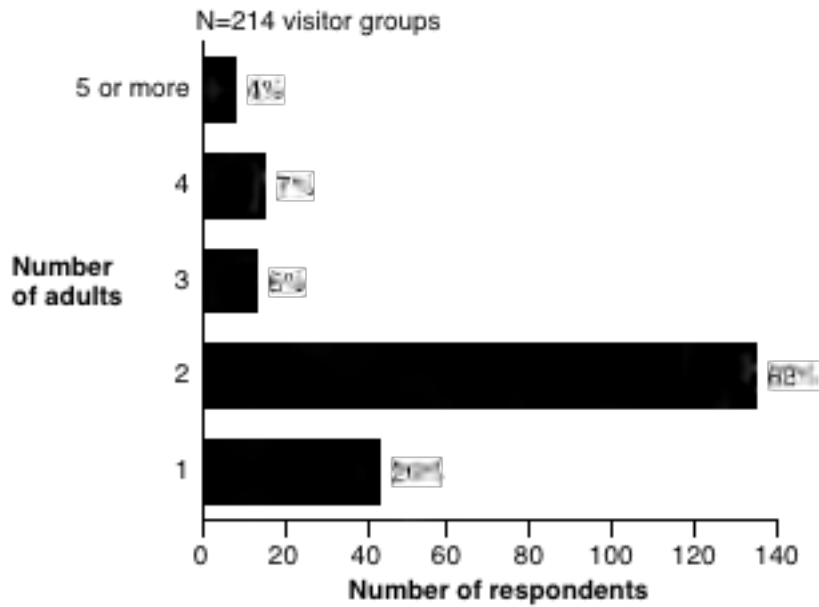


Figure 77: Number of adults covered by expenditures

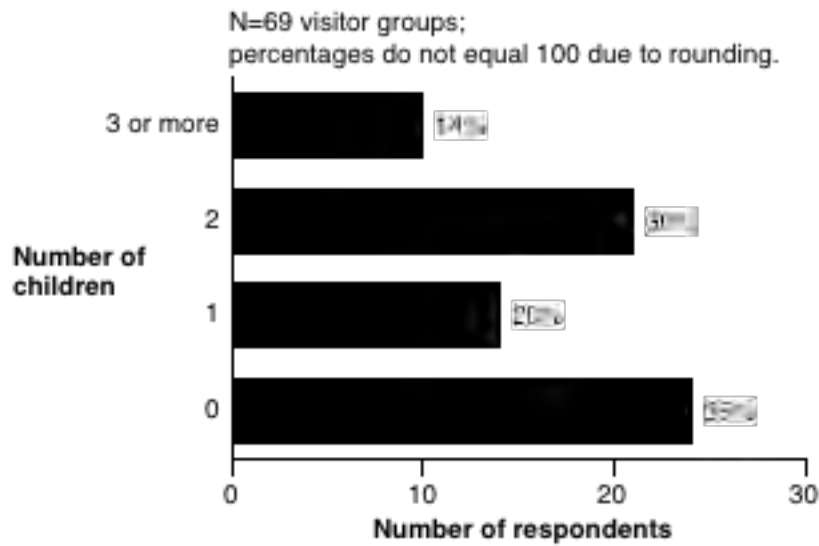


Figure 78: Number of children covered by expenditures

Expenditures within battlefield

Total expenditures inside battlefield: Fifty-three spent between \$1 and \$50 and 40% of visitor groups spent no money within Stones River NB (see Figure 79).

All other purchases, including souvenirs, films, books, sporting goods, clothing, etc. accounted for the greatest proportion of expenditures (85%) in the battlefield, as shown in Figure 80.

The average visitor group expenditure in the battlefield during this visit was \$17. The median visitor group expenditure (50% of groups spent more and 50% of groups spent less) was \$6. The average per capita expenditure was \$13.

Admissions, recreation, and entertainment fees inside battlefield: Most visitors (79%) spent no money on admissions, recreation, and entertainment and 20% of the visitors spent between \$1 to \$50 inside the battlefield (see Figure 81).

All other purchases inside the battlefield: One-half of the visitors (50%) spent between \$1 and \$50 on all other purchases within Stones River NB, and 44% spent no money, as shown in Figure 82.



Figure 79: Total expenditures in Stones Rive NB

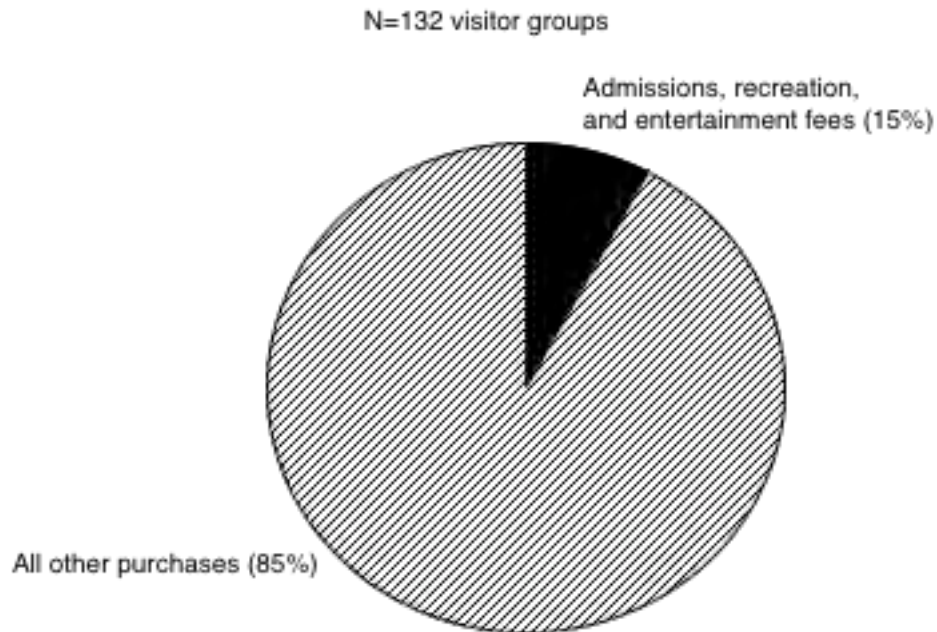


Figure 80: Proportions of expenditures in Stones River NB

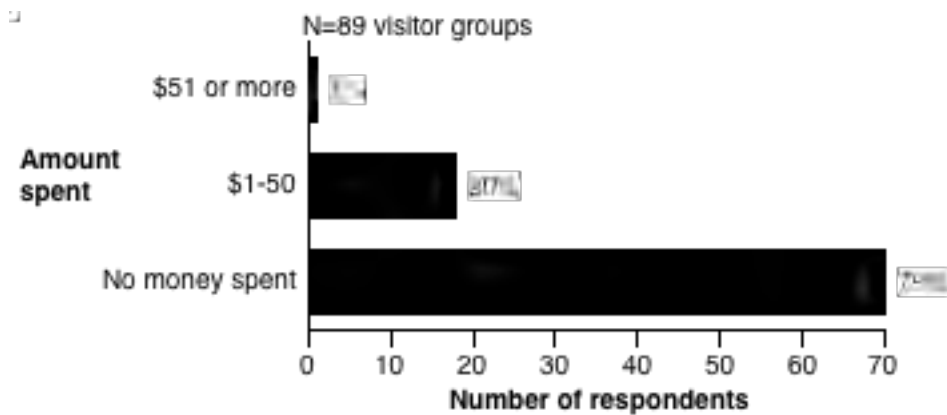


Figure 81: Expenditures for admissions, recreation, and entertainment fees inside the battlefield

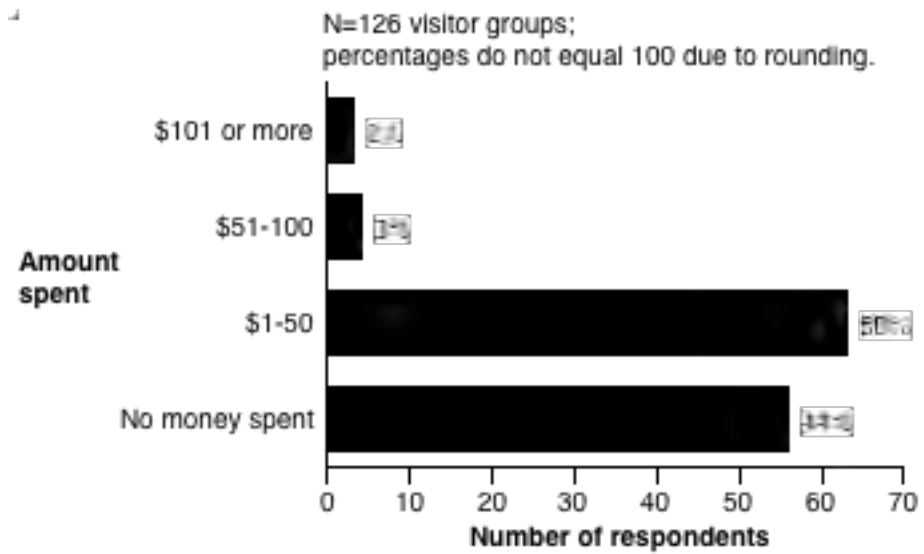


Figure 82: Expenditures for all other purchases inside the battlefield

Total expenditures outside the battlefield: Thirty-nine percent spent between \$1 and \$100 and 15% of visitor groups spent no money within a one-hour drive of Stones River NB (see Figure 83). Twenty-eight percent spent over \$200. Eighteen percent of visitors spent between \$101 and \$200.

Expenditures outside battlefield

The greatest proportions of money spent outside the battlefield were for lodging (42%) and restaurants and bars (26%), as shown in Figure 84.

The average visitor group expenditure outside of the battlefield during this visit was \$232. The median visitor group (50% of groups spent more and 50% of groups spent less) was \$90. The average per capita expenditure was \$129.

Hotel, motels, cabins, etc. out of the battlefield: Forty-four percent spent no money, while 30% spent up to \$100 (see Figure 85).

Camping fees and charges out of the battlefield: Most visitor groups spent no money (see Figure 86).

Restaurants and bars out of the battlefield: Forty-two percent of visitor groups spent between \$1 to \$50 outside of the battlefield, while 28% spent no money (see Figure 87).

Groceries and take-out food out of the battlefield: Sixty-two percent of visitor groups spent no money outside the battlefield, while 36% spent between \$1 and \$50, as shown in Figure 88.

Gas and oil out of the battlefield: Seventy-two percent of visitor groups spent from \$1 to \$50, and 22% of visitors spent no money, as shown in Figure 89.

Other transportation expenses out of the battlefield: Most visitor groups (87%) spent no money on (see Figure 90).

Admissions, recreation, and entertainment fees out of the battlefield: Most visitor groups (73%) spent no, while 19% spent up to \$100 (see Figure 91).

Other purchases out of the battlefield: Fifty-one percent of visitor groups spent no money, 35% spent up to \$50 (see Figure 92).

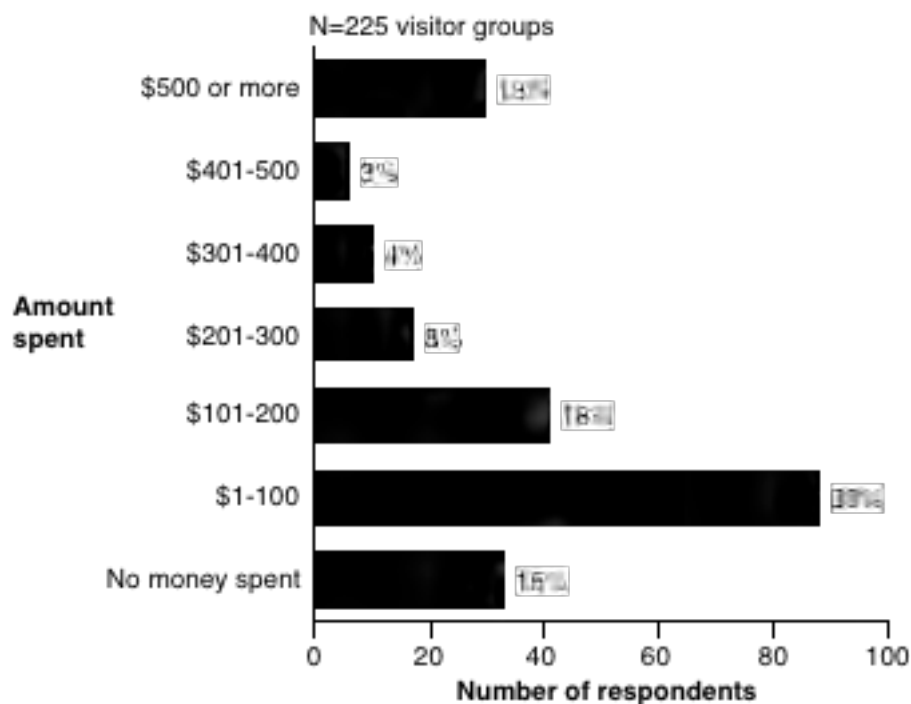


Figure 83: Expenditures outside the battlefield

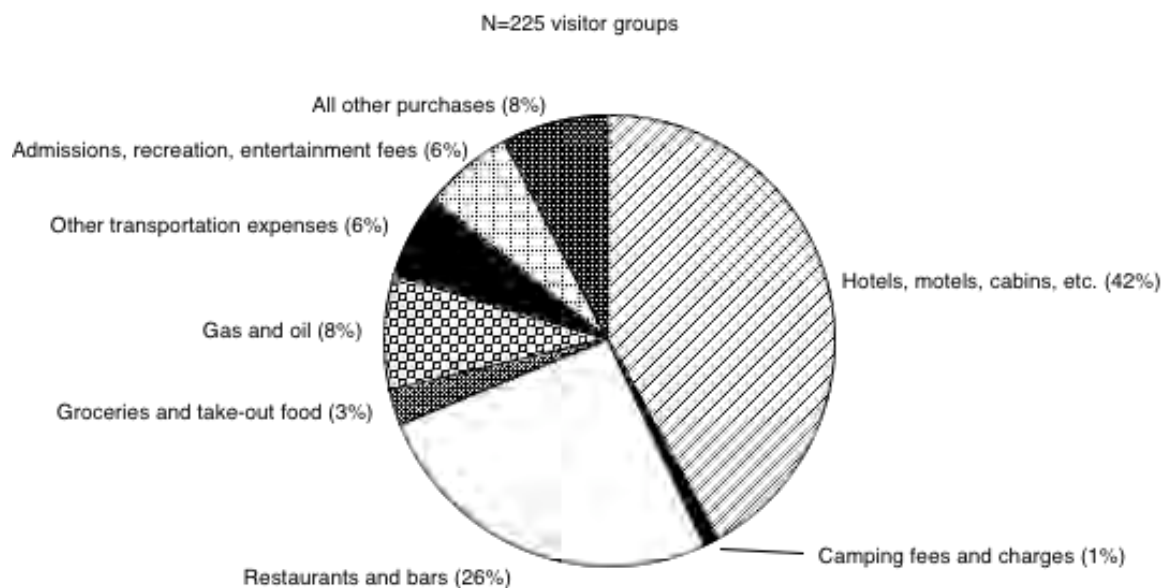


Figure 84: Proportions of expenditures outside of Stones River NB

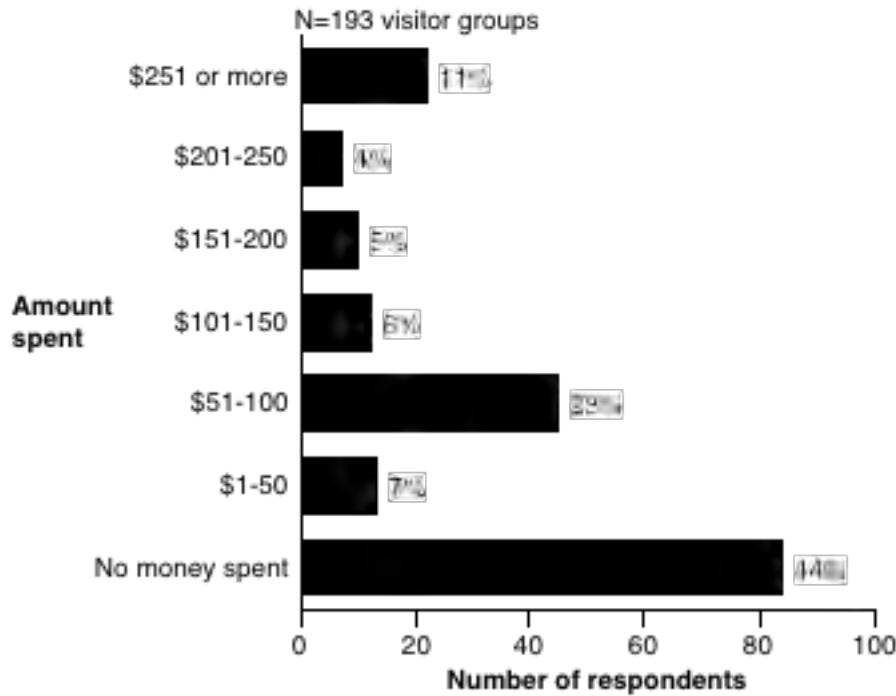


Figure 85: Expenditures for hotels, motels, cabins, etc. outside the battlefield

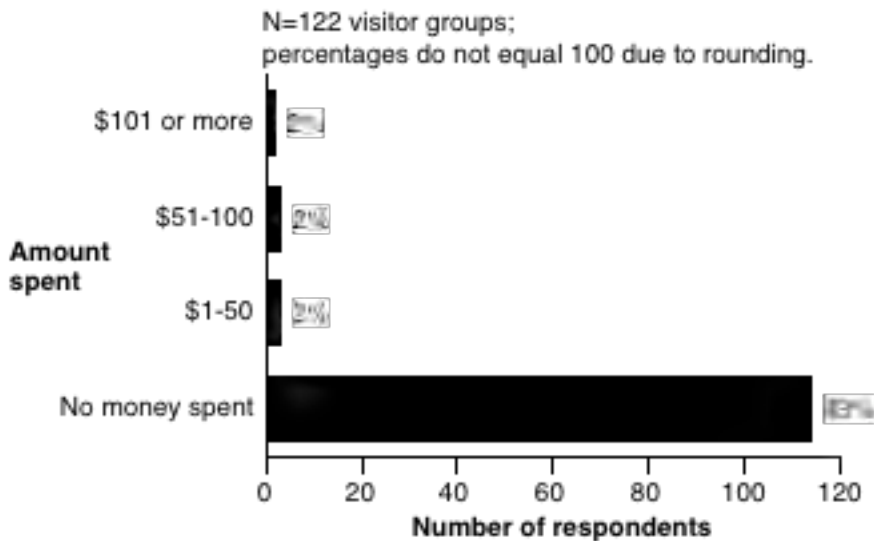


Figure 86: Expenditures for camping fees and charges outside the battlefield

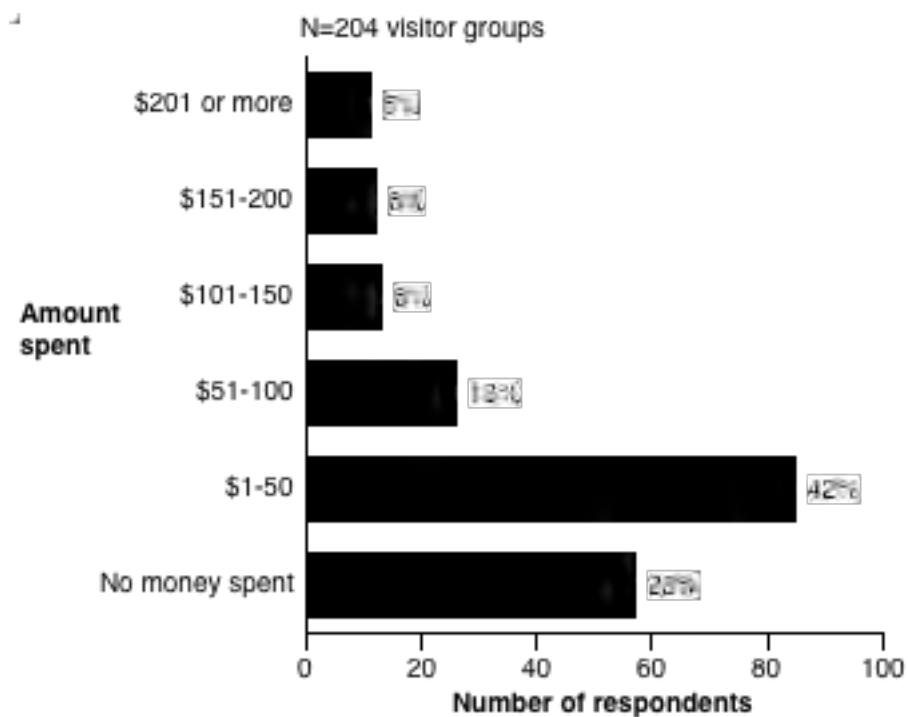


Figure 87: Expenditures for restaurants and bars outside the battlefield

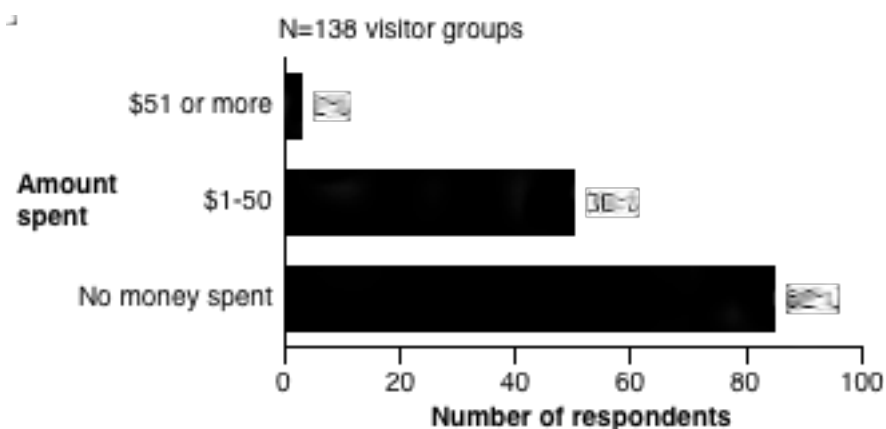


Figure 88: Expenditures for groceries and take-out food outside the battlefield

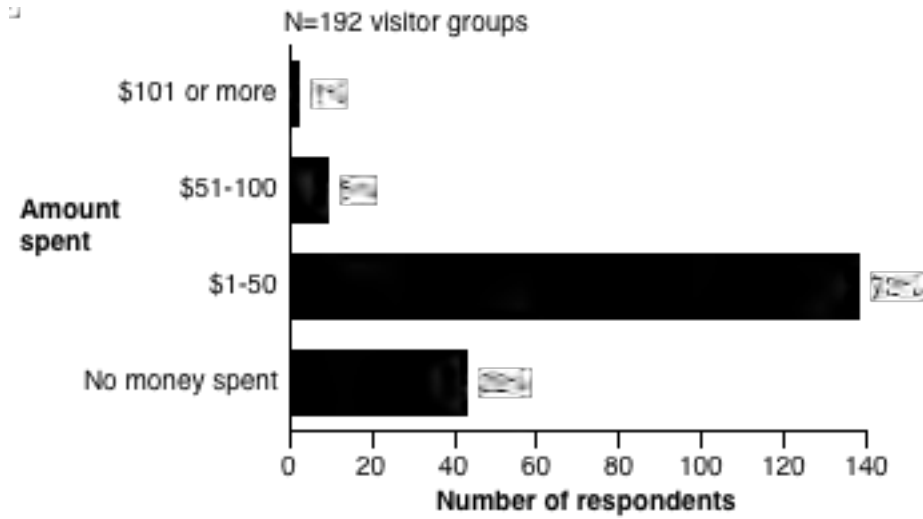


Figure 89: Expenditures for gas and oil outside the battlefield

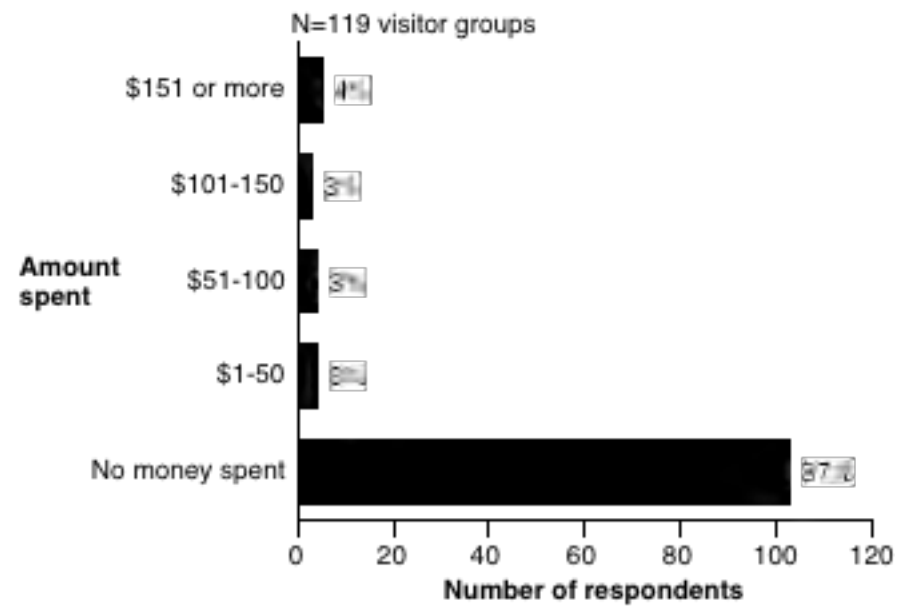


Figure 90: Expenditures for other transportation expenses outside the battlefield

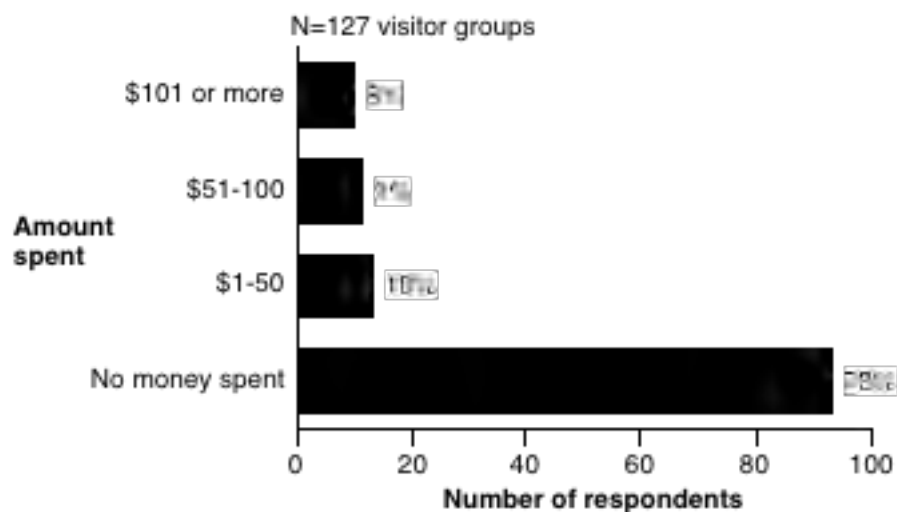


Figure 91: Expenditures for admissions, recreation, and entertainment fees outside the battlefield

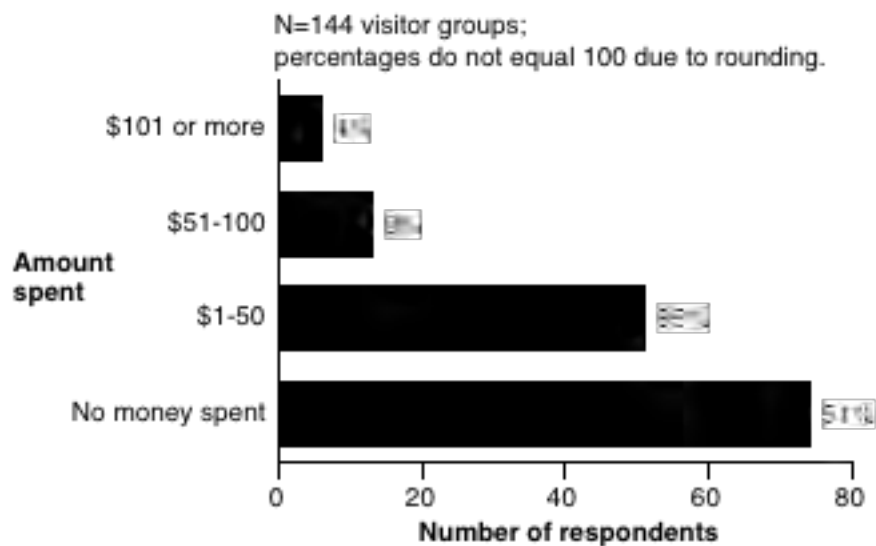


Figure 92: Expenditures for all other purchases outside the battlefield

Visitor groups were asked, “On a future visit, how would you and your group prefer to learn about the park?” The most common methods/materials that visitors prefer to use in learning about Stones River NB included Visitor center exhibits (59%), roadside and trailside exhibits, and ranger-guided walks/talks/tours (49%), as shown in Figure 93. “Other” methods/materials included providing more information at each site, a lighted board of battlefield movements, informing visitors more about the availability of the audio-tape, and Civil War magazines and literature.

Preferred methods of learning

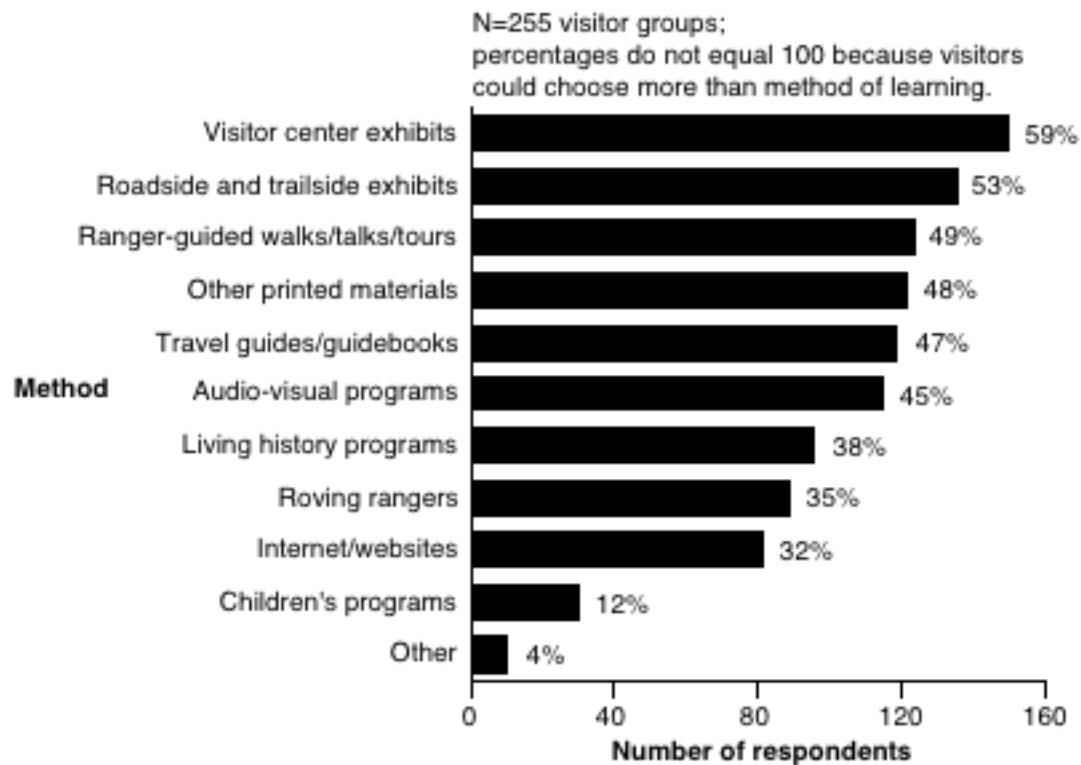


Figure 93: Preferred methods of learning during future visits to Stones River NB

**Opinions
about
maintenance
options**

Visitor groups were asked to choose between three options as to how they would prefer the battlefield to be maintained at Stones River NB. The options were “maintain this area as it is now, mow grassy areas for a more manicured appearance,” and “no opinion/don’t care.” Most visitors preferred (91%) to maintain the battlefield as is now (see Figure 94).

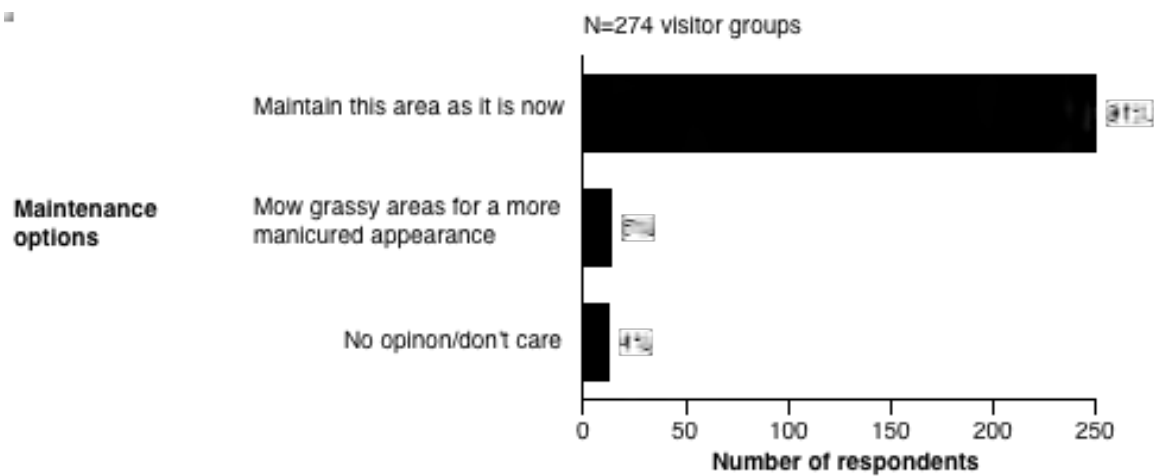


Figure 94: Alternatives for maintaining Stones River NB

Visitor groups were asked to rate the overall quality of the visitor services provided Stones River NB during this visit. Most visitor groups (91%) rated services as "very good" or "good" (see Figure 95). One percent of visitor groups rated the overall quality of services provided at Stones River NB as "very poor."

Overall quality of visitor services

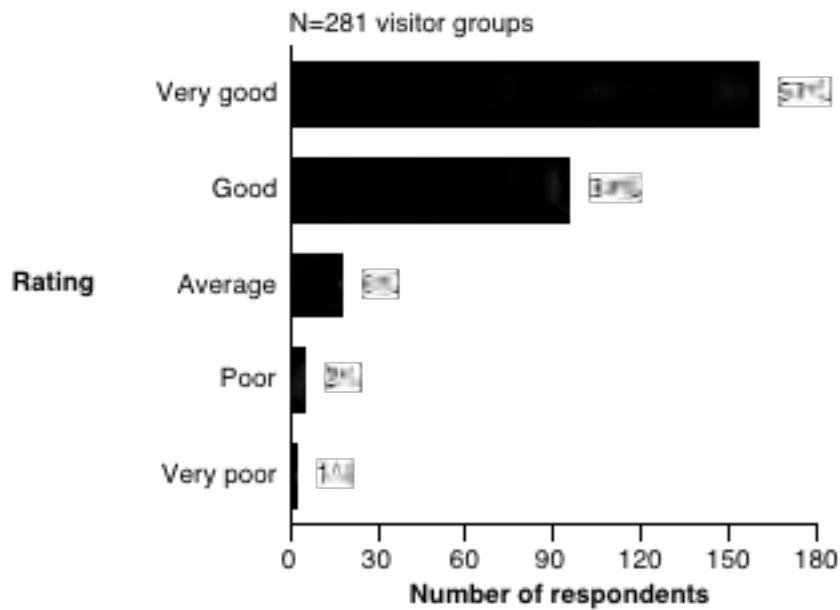


Figure 95: Overall quality of visitor services

What visitors liked most

Visitors were asked “what did you like most about your visit to Stones River NB?” Eighty-nine percent of visitor groups (256 groups) responded to the question, which are included in the separate appendix of this report. Their comments about Stones River NB are summarized below (see Table 5).

Table 5: What visitors liked most

N= 395 comments;
some visitors made more than one comment.

Comment	Number of times mentioned
PERSONNEL	
Rangers/staff	28
INTERPRETIVE SERVICES	
Learn/enjoy history	55
Audio tour	19
Visitor center	16
Information/interpretation	15
Slide show/video	14
Living history/re-enactment	13
Historical artifacts	13
Preservation of battlefield	11
Museum	5
Driving tour	5
Hazen Brigade Monument	5
Exhibits	4
Maps	3
Authenticity	2
Genealogical information	2
MAINTENANCE AND FACILITIES	
Trails	20
Site maintenance/appearance	13
Markers	3
Restrooms	2
POLICIES	
Low cost	2
RESOURCE MANAGEMENT	
Battlefield	24
National Cemetery	18
Nature/environment	16
Stones River Greenway	2
Wildlife	2
GENERAL	
Peace and quiet	22
Exercising/walking	14
Scenery	3
Weather	3
Not crowded	3
Other comments	38

Visitors were also asked, "What did you enjoy least about your visit to Stones River NB?" Sixty-five percent of visitor groups (189 groups) responded to this question, which are included in the separate appendix of this report. Their comments about Stones River NB are summarized below (see Table 6).

What visitors liked least

Table 6: What visitors liked least

N=189 comments;
some visitors made more than one comment.

Comment	Number of times mentioned
PERSONNEL	
Staff	3
INTERPRETIVE SERVICES	
Lack of site information/signs	18
Separation of sites in battlefield	12
Missing/worn exhibits in the Visitor Center	12
Worn markers and signs at outdoor sites	9
Slideshow/ audio visual presentation	8
Lack of markers	7
Lack of monuments	5
Not informed of audio tour	2
Confusing information about battle	2
MAINTENANCE & FACILITIES	
Area surrounding the park (encroaching development)	14
Directions to battlefield	6
Directions/map within the battlefield	5
Closed areas	3
Lack of walkways	2
Poor trails	2
Parking	2
POLICIES	
Early closing hours	4
Other's pets	4
GENERAL	
Poor weather	24
Everything was fine	10
Not enough time	9
Traffic	8
Bugs	2
Other comments	30

Planning for the future

Visitor groups were asked, "If you were a manager planning for the future of Stones River National Battlefield, what would you propose?" Sixty-seven percent of visitor groups (193 groups) responded to this question. A summary of their responses is listed below in Table 7 and complete copies of visitor responses are contained in the appendix.

Table 7: Planning for the future

N= 268 comments;
some visitors made more than one comment.

Comment	Number of times mentioned
PERSONNEL	
Additional rangers	2
Other comment	1
INTERPRETIVE SERVICES	
More detailed and improved interpretive signs	16
Improve audio/visual presentation in Visitor Center	15
Add monuments and markers in battlefield	15
Increase living history programs	14
More description of battle events and importance	10
Keep historically correct	10
Hold more festival and special events	9
Provide more ranger-led programs	9
Show a scale model of battlefield and movements	7
Display more visitor center exhibits	6
Provide more historical artifacts/objects on battlefield	6
Incorporate paintings/pictures on signs near battlefield	5
List soldier's names and information	4
Expand and improve visitor center	4
More general information of battlefield/area	4
More trailside exhibits	4
Expand and improve museum displays	3
Expand museum	3
Promote Stones River NB more	3
Makes us aware of how important the site is	3
More website information	2
Improve Fort Rosecrans	2
More detailed pamphlets	2
Encourage more student and children programs	2
Integrate Stones River NB with other historic sites	2
Show more maps	2
Other comments	18

Table 7: Planning for the future (continued)

Comment	Number of times mentioned
FACILITIES/MAINTENANCE	
Add restrooms along trails and battlefield	3
Better maintenance around buildings	2
More parking at each stop along driving route	2
Improve picnic area	2
Better directional signs on driving tour	2
More trails	2
Other comments	10
MANAGEMENT/POLICIES	
Extend hours	4
Better directions to park	3
Provide food and beverage vendors	3
Other comments	3
RESOURCE MANAGEMENT	
Obtain more land/keep development away	21
Maintain as is	7
Preserve the site	5
Keep natural appearance	2
Reduce noise from the city	2
Other	3
GENERAL IMPRESSIONS	
Keep up the good job	3
Other comments	6

**Comment
summary**

Forty percent of visitor groups (115 groups) wrote additional comments, which are included in the separate appendix of this report. Their comments about Stones River NB are summarized below (see Table 8). Some comments offer specific suggestions on how to improve the park; others describe what visitors enjoyed or did not enjoy about their visit.

Table 8: Additional comments

N=162 comments;
some visitors made more than one comment.

Comment	Number of times mentioned
PERSONNEL	
Rangers friendly/helpful/knowledgeable	10
Park staff was friendly and helpful	10
Rangers rude/unhelpful	2
Other comment	1
INTERPRETIVE SERVICES	
Expand upon depth/amount of re-enactments	3
Always have audio tape available	2
Re-enactments were great	2
More information at each significant site	2
Other comments	8
FACILITIES/MAINTENANCE	
Improve directional signs to sites in park	5
Clean well maintained park	3
Well kept restrooms	3
Great overall facility	3
More quality picnic areas	3
Expand boundaries	2
Well kept cemetery	2
Mosquitoes were aggravating	2
Other comments	7
MANAGEMENT/POLICIES	
Keep it as is	3
Other comments	10
RESOURCE MANAGEMENT	
Comments	4

Table 8: Additional comments (continued)

Comment	Number of times mentioned
GENERAL IMPRESSIONS	
Enjoyed visit	24
Thank you	11
Very educational	8
Plan to return	7
Enjoy run/walk	5
Love/enjoy park	4
Enjoy trails	4
Peaceful/calm place	3
Good work	3
Visit too short	2
Other comments	4

Stones River National Battlefield Visitor Study Additional Analysis VSP Report 140

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

Additional Analysis

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

- | | | |
|---|--|--|
| • Awareness that monument is NPS unit | • Number of visits past 12 months | • Admissions, recreation, entertainment fees in the battlefield |
| • Sources of information prior to visit | • Number of lifetime visits | • All other purchases in the battlefield |
| • Sources of information for future visits | • Income level | • Hotels, motels, cabins, etc. out of battlefield |
| • Activities participated in on this visit | • Spanish, Hispanic, Latino ethnicity | • Camping fees/charges expenditures out of battlefield |
| • Stones River NB fitting into travel plans | • Race | • Restaurants and bars expenditures out of battlefield |
| • Areas visited within the battlefield | • Reasons for visiting the Murfreesboro area | • Groceries and take-out food expenditures out of battlefield |
| • Destinations visited in addition to Stones River NB | • Roads used to arrive at Stones River NB | • Gas and oil expenditures out of battlefield |
| • Length of stay (hours) | • Adequacy of signs directing the visitor to Stones River NB | • Other transportation expenditures out of park |
| • Length of stay (days) | • Elements affecting park experience | • Admissions/recreation/entertainment fee expenditures out of park |
| • Type of lodging used | • Services/Facilities used | • All other purchases out of park |
| • Personal group type | • Importance of services/facilities used | • Number of adults covered by expenses |
| • Number of people in group | • Quality of services/facilities used | • Number of children covered by expenses |
| • Gender | • Safety concerns | • Preference of learning on future visits |
| • Age | • Total expenditures in and out of battlefield | • Preference of maintenance options |
| • Zip code/state of residence | • Total expenditures in battlefield | • Overall quality of services |
| • Country of residence (other than U.S.) | • Total expenditures out of battlefield | |

Phone/send requests to:

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

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

QUESTIONNAIRE

Visitor Services Project Publications

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

1982

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

1983

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

1985

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

1986

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

1987

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

1988

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

1989

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

1990

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

1991

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

1992

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

1993

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

1994

64. Death Valley National Monument Backcountry (winter)

Visitor Services Project Publications (continued)

1994 (continued)

- 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)

1997

- 92. Great Smoky Mountains National Park (summer & fall)
- 93. Virgin Islands National Park (winter)
- 94. Mojave National Preserve (spring)
- 95. Martin Luther King, Jr., National Historic Site (spring)
- 96. Lincoln Boyhood Home 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)

1998 (continued)

- 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)
- 111. Saint 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 & Preserve
- 116. Lassen Volcanic National Park
- 117. Cumberland Gap National Historic 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

2002

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

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

