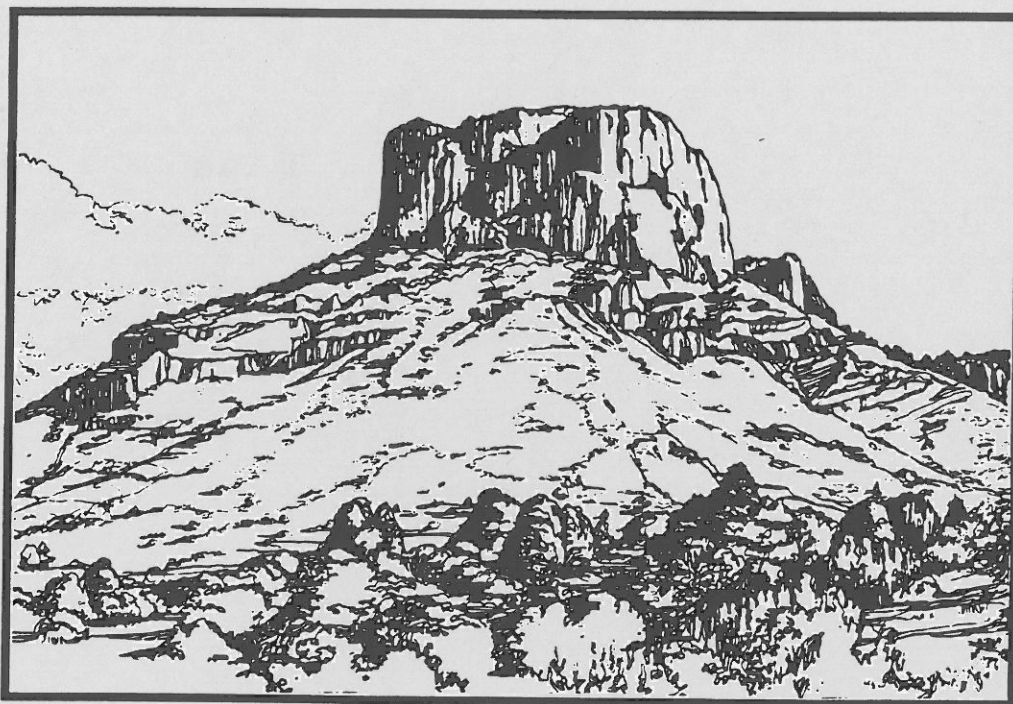

Visitor Services Project Big Bend National Park



Visitor Services Project Report 45
Cooperative Park Studies Unit



Visitor Services Project

Big Bend National Park

Margaret Littlejohn

Report 45

January 1993

Margaret Littlejohn is VSP Western Coordinator, National Park Service, based at the Cooperative Park Studies Unit, University of Idaho. I thank the Big Bend Natural History Association and the staff at Big Bend National Park for their assistance with this study. The VSP acknowledges the Public Opinion Lab of the Social and Economic Sciences Research Center, Washington State University, for its technical assistance.

Visitor Services Project Big Bend National Park

Report Summary

- This report describes the results of a visitor study at Big Bend National Park during April 3-9, 1992. A total of 512 questionnaires were distributed and 460 returned, a 90% response rate.
- This report profiles Big Bend visitors. A separate appendix has visitors' comments about their visit; this report and the appendix contain a comment summary.
- Visitors were often families (62%) and in groups of two (60%). Forty-four percent of visitors were 56-70 years old; 20% were aged 41-55. Most (60%) were first time visitors to Big Bend.
- Visitors from foreign countries comprised 10% of the visitation, with 48% of the international visitors from Germany. Americans came from Texas (65%), with smaller numbers from many other states.
- Most visitors (73%) spent more than one day at Big Bend. Most visitors viewed scenery (98%), visited the visitor center(s) (88%) and went dayhiking (53%). Panther Junction Visitor Center was the most visited park site (87%), followed by the Chisos Basin (80%), Santa Elena Canyon (68%) and Rio Grande Village (62%).
- Visitors most often used maps, advice from friends and relatives, and travel guides/tour books as sources of information about the park. Many reasons brought visitors to the park, but most often identified was the scenic views/drives (96%).
- The most used visitor services were the park brochure/map and visitor center personnel. The park brochure/map, visitor center personnel and safety information brochures were the most important services, according to visitors. Visitor center sales publications and ranger/volunteer-led programs received the highest quality ratings.
- The most used maintenance services/facilities were highway directional signs and restrooms. These two services were also rated most important. The highest quality services were trails and highway directional signs.
- Inside the park, the average visitor group expenditure was \$117 for this visit; the average per capita expenditure was \$43. Outside the park, the average visitor group expenditure for this visit was \$274; the average per capita expenditure was \$104.
- Most visitors (76%) stayed one or two nights in Big Bend, with the largest proportion camping without hookups (40%).
- Visitors made many additional comments.

| |
|---|
| <p>For more information about the Visitor Services Project, please contact Dr. Gary E. Machlis, Sociology Project Leader, University of Idaho Cooperative Park Studies Unit, College of Forestry, Wildlife and Range Sciences, Moscow, Idaho 83843-4199 or call (208) 885-7129.</p> |
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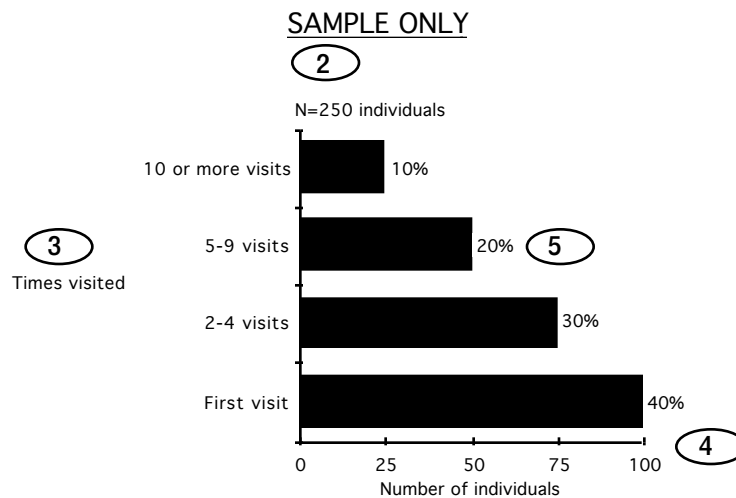
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INTRODUCTION

This report describes the results of a study of visitors at Big Bend National Park (referred to as "Big Bend"). This visitor study was conducted April 3-9, 1992 by the National Park Service (NPS) Visitor Services Project (VSP), part of the Cooperative Park Studies Unit at the University of Idaho.

A Methods section discusses the procedures and limitations of the study. The Results section follows, including a summary of visitor comments. Next, a Menu for Further Analysis helps managers request additional analyses. The final section has a copy of the Questionnaire. The separate appendix includes a comment summary and the visitors' unedited comments.

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



(1) Figure 4: Number of visits

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

METHODS

General strategy

Interviews were conducted and questionnaires distributed to a sample of selected visitors visiting Big Bend National Park during April 3-9, 1992. Visitors completed the questionnaire during or after their trip and then returned it by mail.

Questionnaire design and administration

The questionnaire design used the standard format of previous Visitor Services Project studies. See the end of this report for a copy of the questionnaire.

Visitors were sampled as they drove through the two park entrances at Persimmon Gap and Maverick.

Visitor groups were greeted, briefly introduced to the purpose of the study and asked to participate. If visitors agreed, the interview took approximately two minutes. These interviews included determining group size group type and the age of the adult who would complete the questionnaire. This individual was asked his or her name, address and telephone number for the later mailing of a reminder-thank you postcard.

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.

Data analysis

Returned questionnaires were coded and entered into a computer. Frequency distributions and cross-tabulations were calculated using a standard statistical software package. Respondents' comments were 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 451 groups, Figure 3 presents data for 1159 individuals. A note above each figure's graph specifies the information illustrated.

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

Occasionally, a respondent may not have answered all of the questions, or may have answered some incorrectly. Unanswered questions create missing data and cause the number in the sample to vary from figure to figure. For example, although 460 questionnaires were returned, Figure 1 shows data for only 451 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 which 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 as they visit the park.

2. The data reflect visitor use patterns of visitors to the selected sites during the study period of April 3-9, 1992. The results do not necessarily apply to visitors using other sites in the park or 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.

RESULTS

Visitors contacted

Five hundred thirty-one visitor groups were contacted; 97% accepted questionnaires. Four hundred sixty visitor groups completed and returned their questionnaires, a 90% response rate.

Table 1 compares information collected from the total sample of visitors contacted and the actual respondents who returned questionnaires. Non-response bias was insignificant.

Table 1: Comparison of total sample and actual respondents

| Variable | Total sample | | Actual respondents | |
|---------------------------|--------------|------|--------------------|------|
| | N | Avg. | N | Avg. |
| Age of respondent (years) | 512 | 53.6 | 454 | 54.8 |
| Group size | 512 | 2.8 | 451 | 3.2 |

Demographics

Figure 1 shows group sizes, which varied from one person to 39 people. Sixty percent of Big Bend visitors came in groups of two people, 24% came in groups of three or four. Sixty-two percent of visitors came in family groups, while 16% came in friends groups, as shown in Figure 2.

Figure 3 shows varied age groups; the most common were visitors aged 56-70 (44%), with 20% visitors aged 41-55. Most visitors (60%) were first time visitors, although 29% had been at Big Bend two to four times (see Figure 4).

Visitors from foreign countries comprised 10% of all visitation. Map 1 and Table 2 show that most foreign visitors came from Germany (48%), Great Britain (20%) and Canada (17%). Map 2 and Table 3 show that the majority of American visitors came from Texas (65%), with much smaller numbers from many other states.

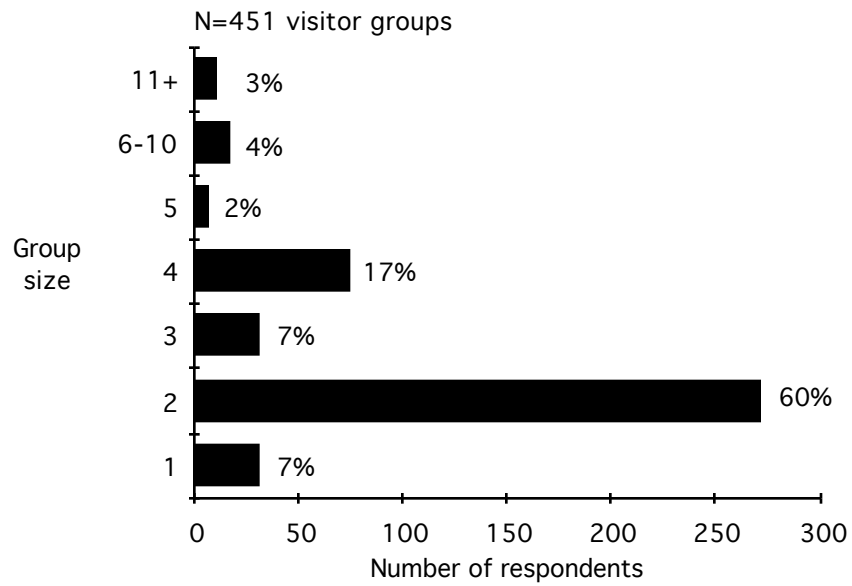


Figure 1: Visitor group sizes

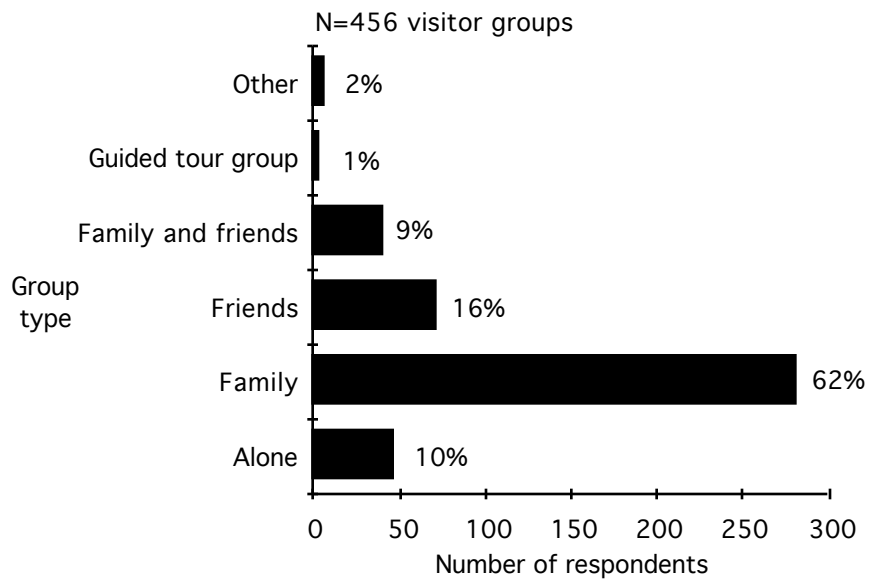


Figure 2: Visitor group types

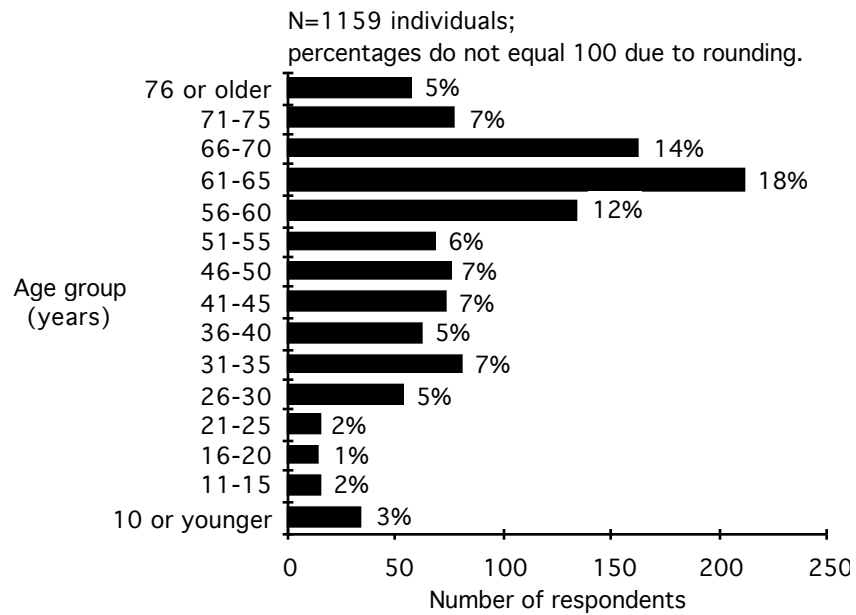


Figure 3: Visitor ages

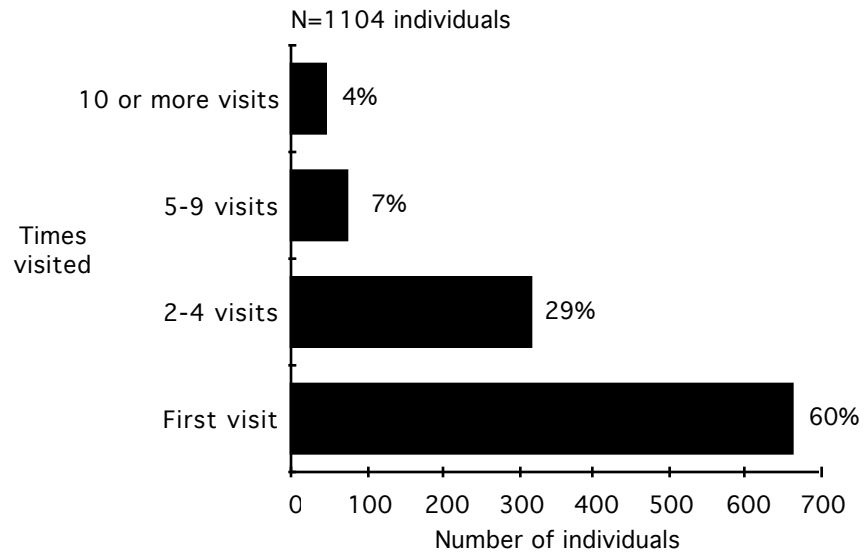


Figure 4: Number of visits

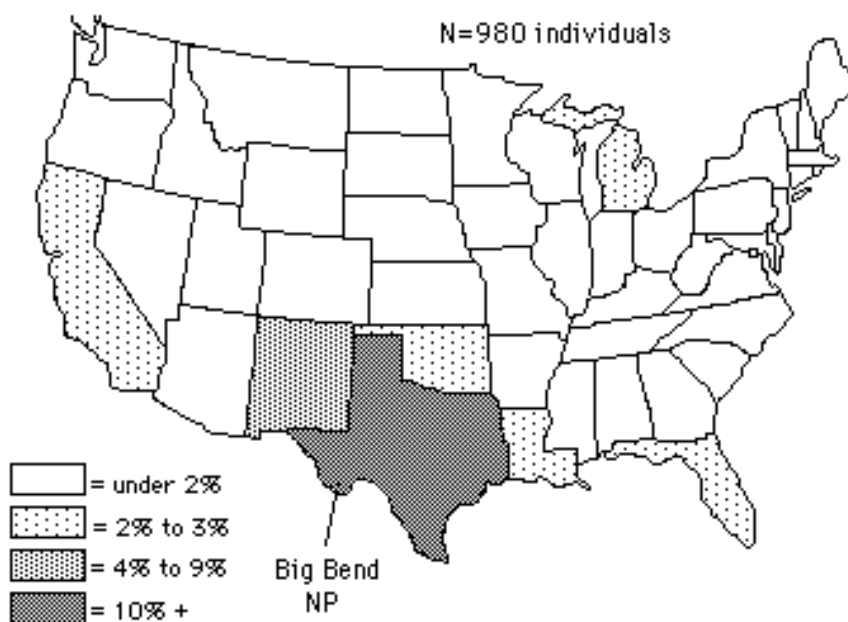


Map 1: Proportion of international visitors by country

Table 2: International visitors by country of residence

N=109 individuals;
percentages do not equal 100 due to rounding.

| Country | Number of individuals | % of international visitors |
|---------------|-----------------------|-----------------------------|
| Germany | 52 | 48 |
| Great Britain | 22 | 20 |
| Canada | 18 | 17 |
| Taiwan | 6 | 6 |
| Australia | 2 | 2 |
| Denmark | 2 | 2 |
| Peru | 2 | 2 |
| Sweden | 2 | 2 |
| Austria | 1 | 1 |
| Belgium | 1 | 1 |
| New Zealand | 1 | 1 |



Map 2: Proportion of visitors from each state

Table 3: Proportion of visitors from each state

N=980 individuals;
percentages do not equal 100 due to rounding.

| State | Number of individuals | % of visitors |
|-------------------|-----------------------|---------------|
| Texas | 639 | 65 |
| New Mexico | 35 | 4 |
| Florida | 26 | 3 |
| Oklahoma | 26 | 3 |
| California | 24 | 2 |
| Louisiana | 18 | 2 |
| Michigan | 15 | 1 |
| New York | 13 | 1 |
| Arizona | 12 | 1 |
| Alabama | 11 | 1 |
| Colorado | 11 | 1 |
| Wisconsin | 11 | 1 |
| Ohio | 9 | 1 |
| Georgia | 7 | 1 |
| Illinois | 7 | 1 |
| Maine | 7 | 1 |
| Nevada | 7 | 1 |
| Oregon | 7 | 1 |
| Connecticut | 6 | 1 |
| Indiana | 6 | 1 |
| Missouri | 6 | 1 |
| Pennsylvania | 6 | 1 |
| Other states (21) | 71 | 7 |

Seventy-three percent of Big Bend's visitors stayed one day or more (see Figure 5). Most visitors (55%) stayed two to four days. Of the visitors who spent less than one day, most (50%) spent 8 hours or more, as shown in Figure 6.

Length of stay

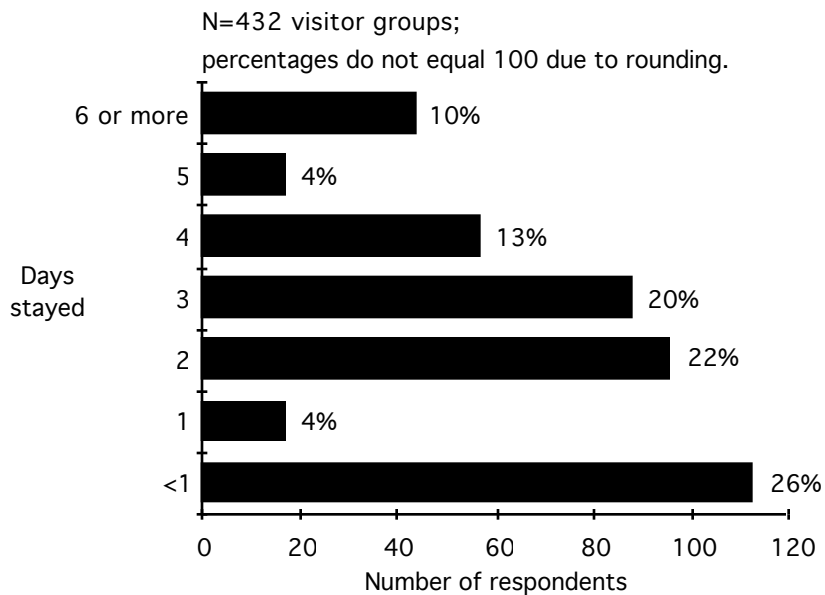


Figure 5: Length of stay (days)

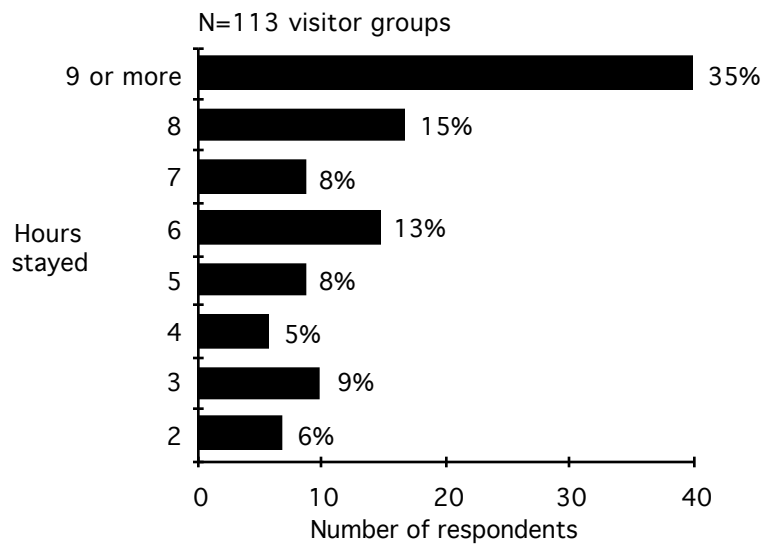


Figure 6: Length of stay (less than one day)

Activities

Figure 7 shows the proportion of visitor groups who participated in various activities during their visit. Common activities were viewing scenery (98%), visiting the visitor center(s) (88%), dayhiking on trails (53%), picnicking (41%), and birdwatching (40%). Twenty-two percent of the visitors described "other" activities they pursued including viewing/studying plants and wildflowers, taking photographs, camping, driving on unpaved roads.

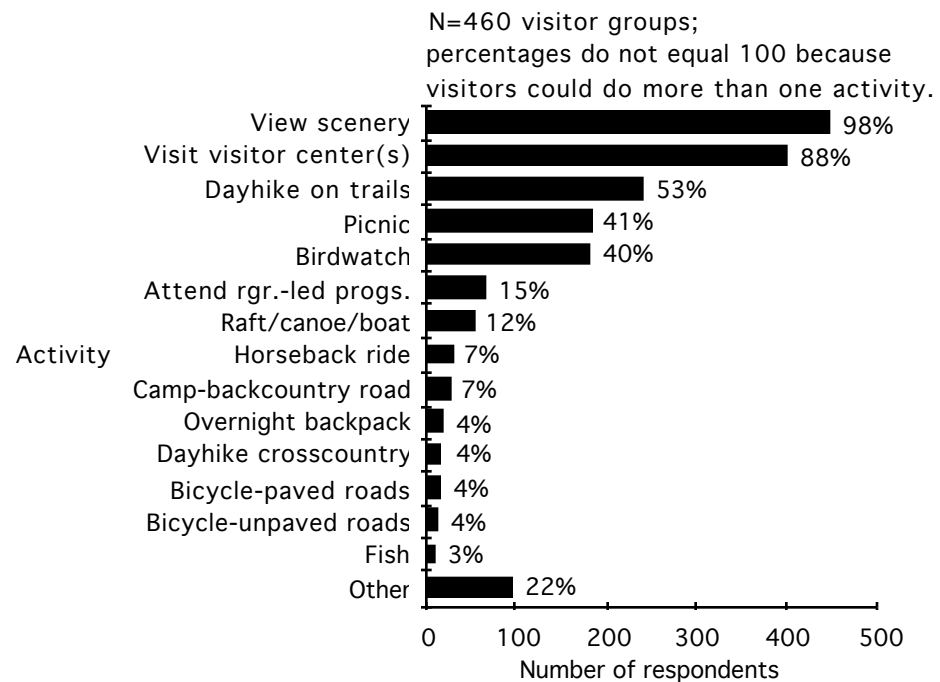
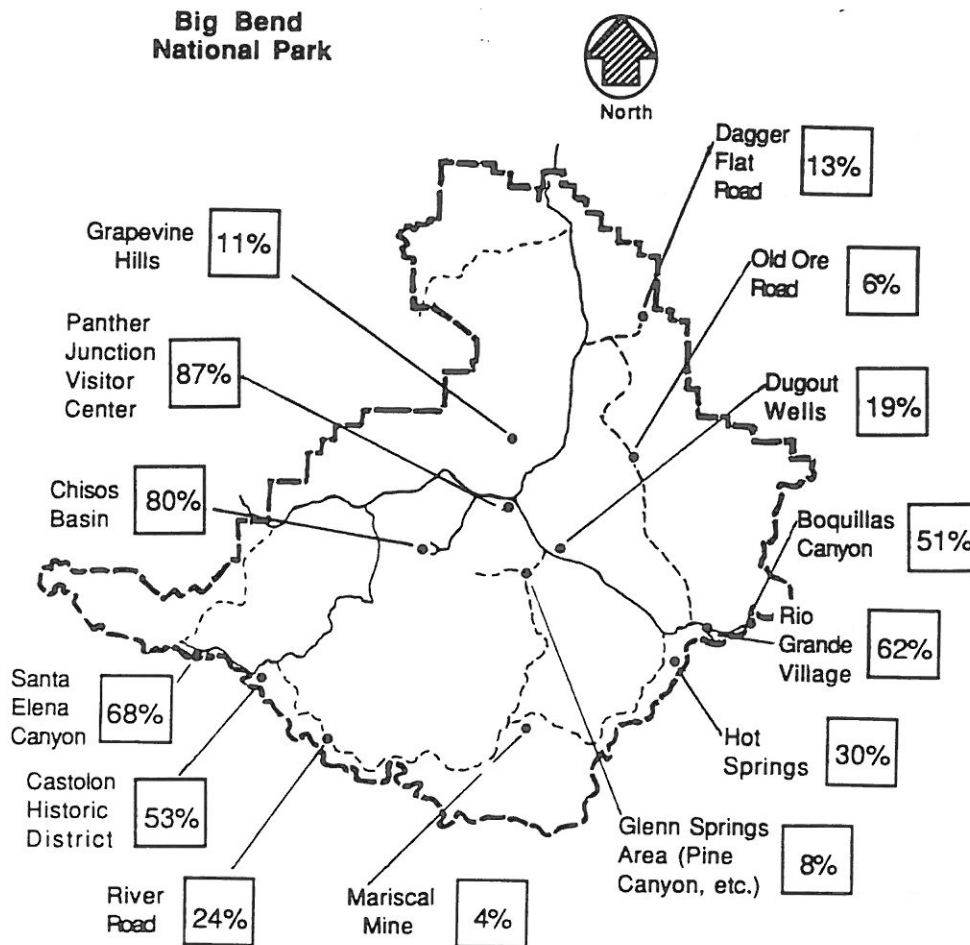


Figure 7: Visitor activities

Map 3 shows the proportion of visitor groups that visited selected sites at Big Bend. Most visitors went to Panther Junction Visitor Center (87%), the Chisos Basin (80%), Santa Elena Canyon (68%), Rio Grande Village (62%), Castolon Historic District (53%) and Boquillas Canyon (51%). The least visited sites were Mariscal Mine (4%), Old Ore Road (6%) and Glenn Springs Area (8%).

Sites visited



Map 3: Sites visited

**Places
visited
outside
Big Bend**

During their visit to Big Bend, most visitors traveled through, visited, or planned to travel through Marathon (79%), Study Butte (74%), Terlingua (65%), Alpine (63%), Lajitas (62%), and Ft. Stockton (53%), as shown in Figure 8.

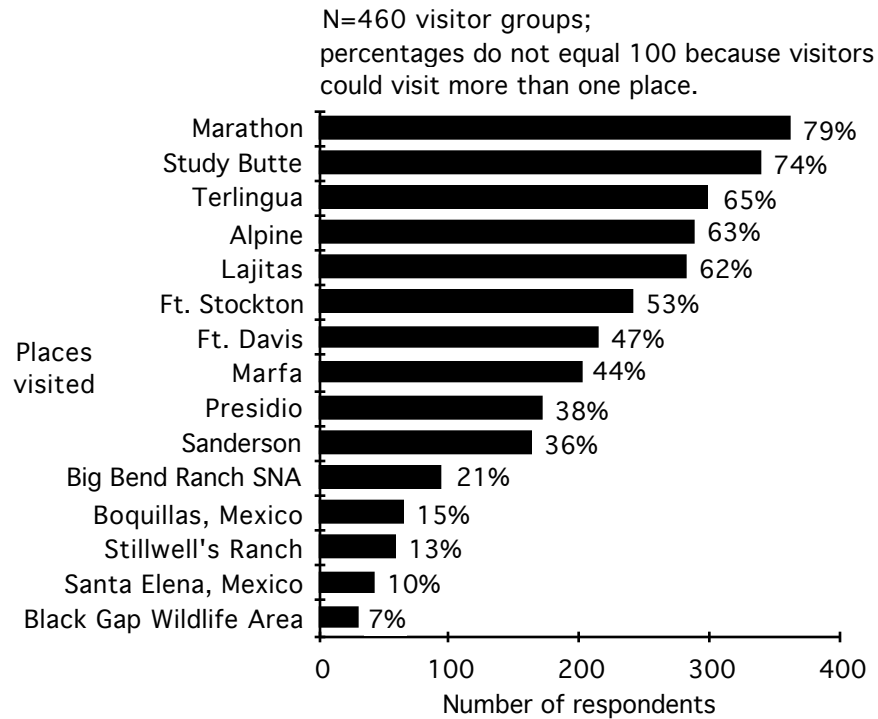


Figure 8: Places which visitors traveled through, visited, or planned to travel through

The most often used sources of information about the park were maps (42%), advice from friends and relatives (42%), and travel guides/tour books (40%), as shown in Figure 9. "Other" sources included previous visits, living in Texas, magazines and books.

Sources of park information

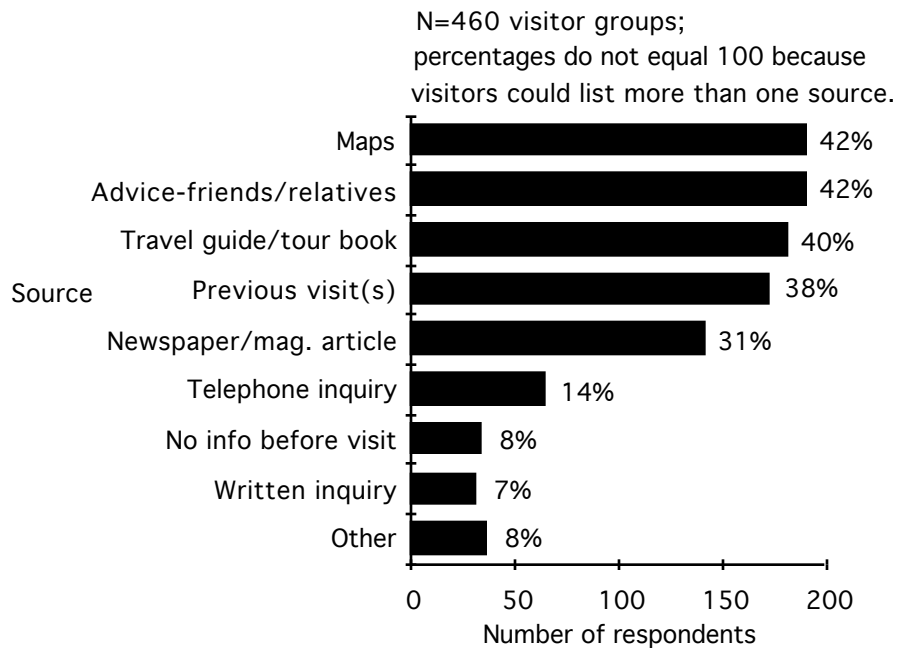


Figure 9: Sources of park information

**Visitor
services:
use,
importance
and quality**

The most commonly used visitor services were the park brochure/map (90%), visitor center personnel (82%), roadside exhibits (57%), self-guided nature trails/roads (56%), and park newspaper (56%), as shown in Figure 10. The least used service was emergency services (3%).

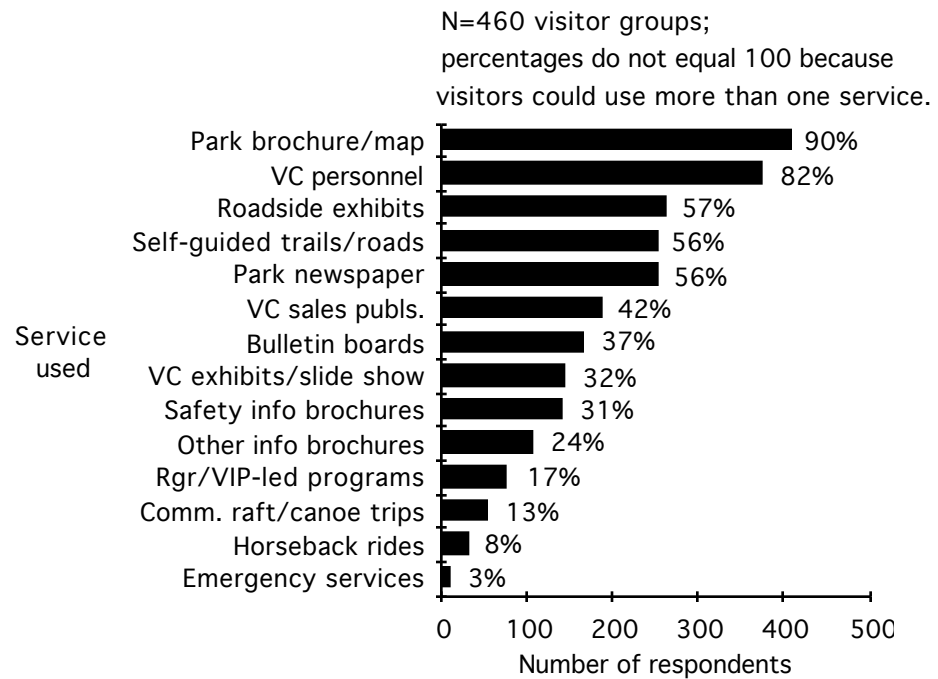


Figure 10: Use of visitor services

Visitors rated the importance and quality of visitor services they used. They used a five point scale (see boxes below).

| IMPORTANCE |
|------------------------|
| 1=extremely important |
| 2=very important |
| 3=moderately important |
| 4=somewhat important |
| 5=not important |

| QUALITY |
|-------------|
| 1=very good |
| 2=good |
| 3=average |
| 4=poor |
| 5=very poor |

Figure 11 shows the average importance and quality ratings for each service. An average score was determined for each service based on ratings by visitors who used that service. This was done for both importance and quality. The results were plotted on the grid shown in Figure 11. Services were all rated above average in importance and quality. One service (emergency services) was not rated by enough visitors to provide reliable results.

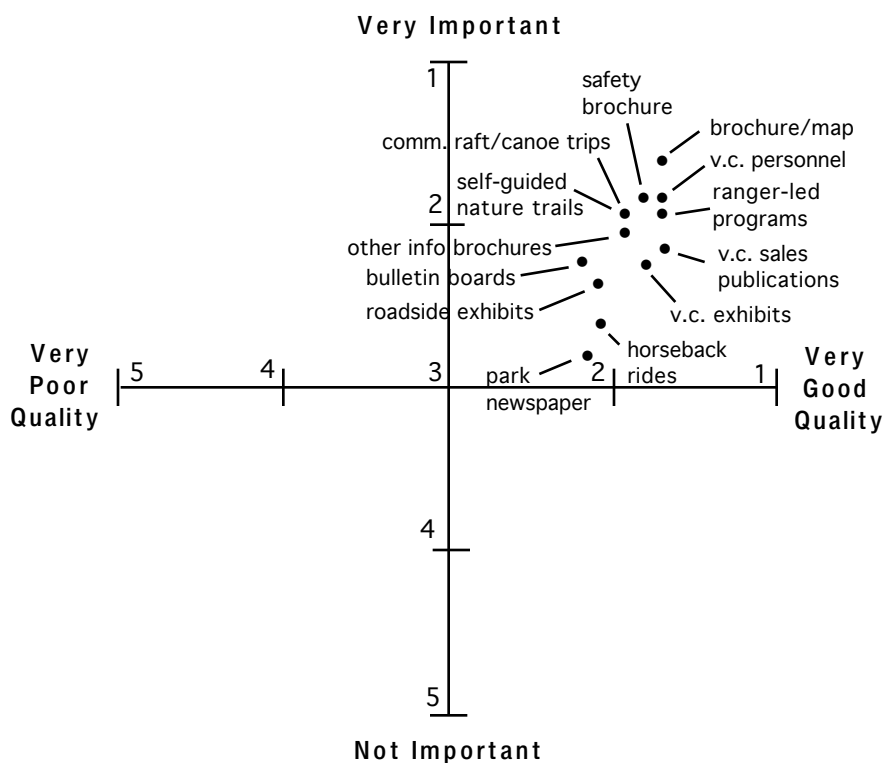


Figure 11: Average ratings of visitor services importance and quality

Figures 12-25 show that several services received the highest "very important" to "extremely important" ratings: park brochure/map (87%), visitor center personnel (81%), and safety information brochures (81%). The highest "somewhat important" to "not important" ratings were for horseback rides (28%) and the park newspaper (27%).

Figures 26-39 show that several services were given high "good" to "very good" ratings: visitor center sales publications (87%), ranger/volunteer-led programs (86%), park brochure/map (84%), visitor center personnel (84%), and safety information brochures (84%). The services receiving the highest "poor" to "very poor" ratings were commercial raft/canoe trips (16%) and horseback rides (15%).

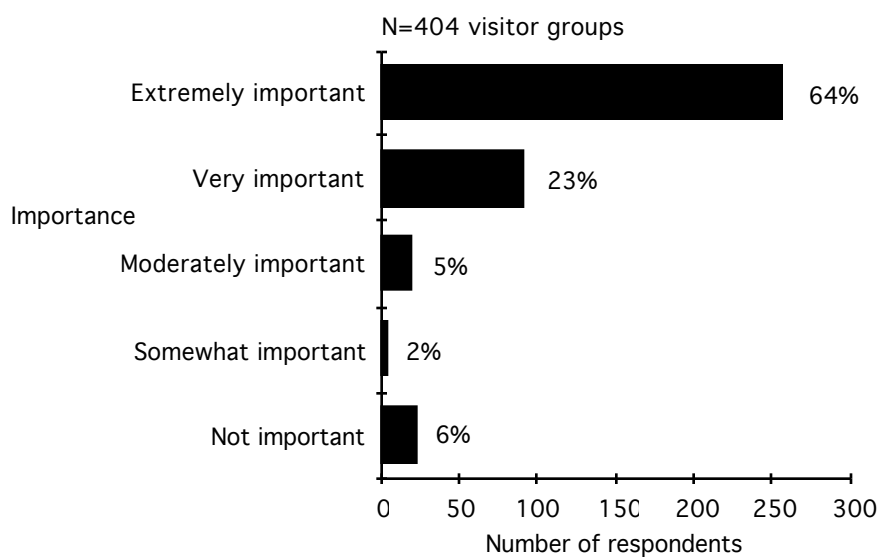


Figure 12: Importance of park brochure/map

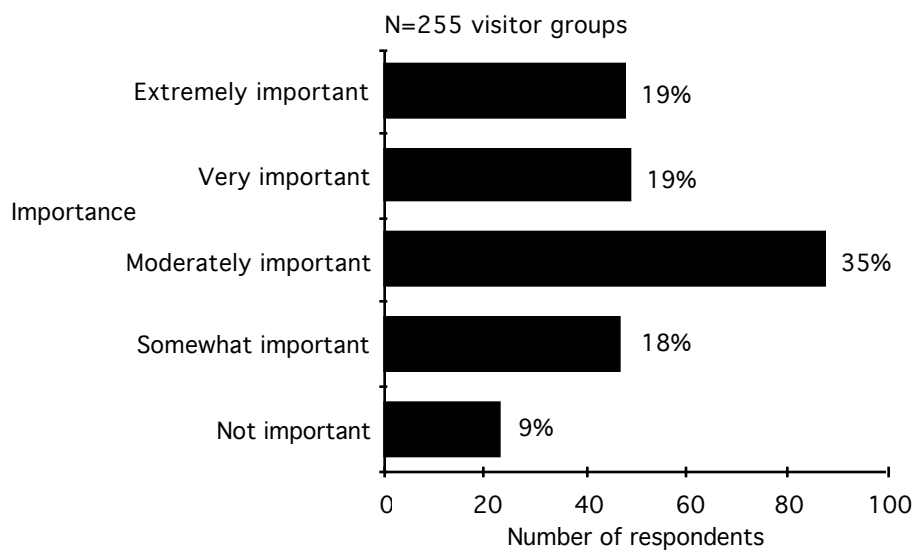


Figure 13: Importance of park newspaper (*Big Bend Paisano*)

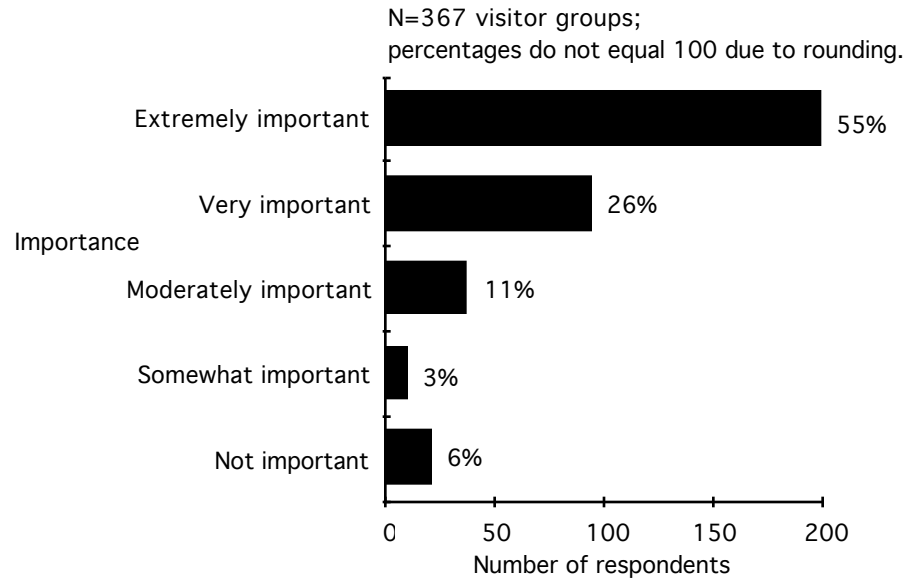


Figure 14: Importance of visitor center personnel

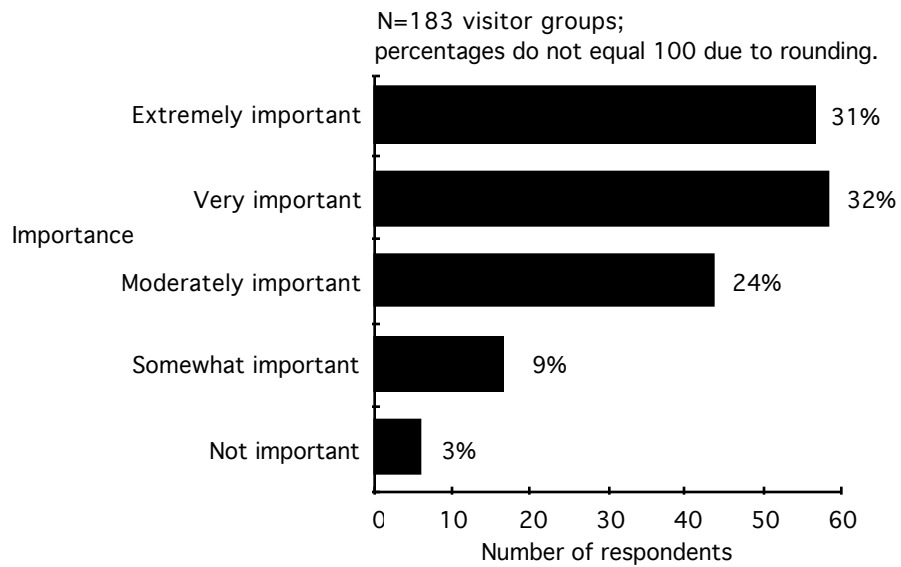


Figure 15: Importance of visitor center sales publications

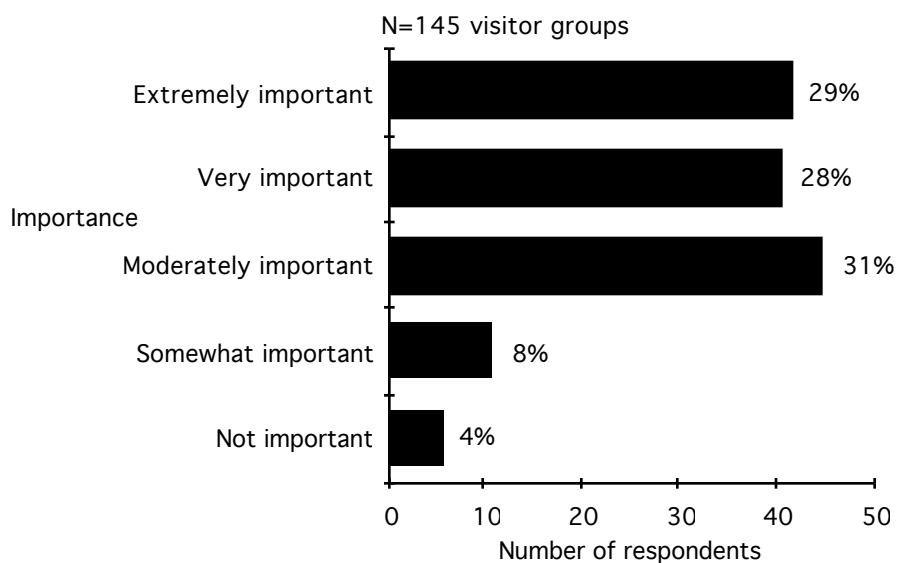


Figure 16: Importance of visitor center exhibits/slide show

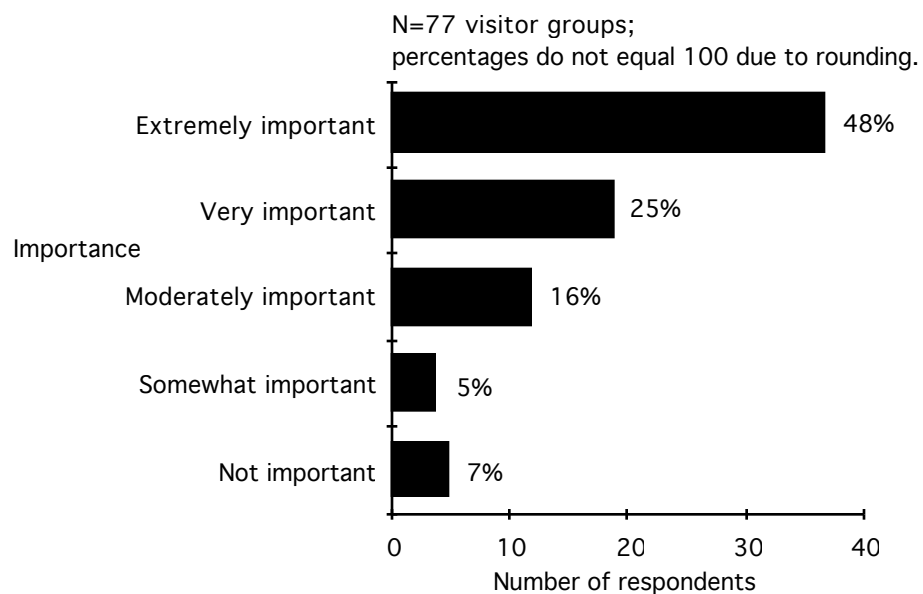


Figure 17: Importance of ranger/volunteer-led programs

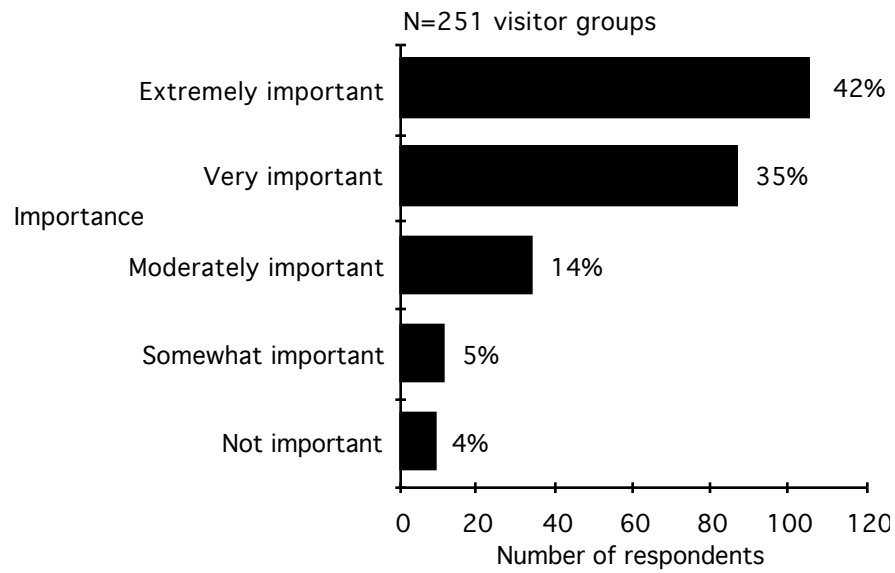


Figure 18: Importance of self-guided nature trails/roads

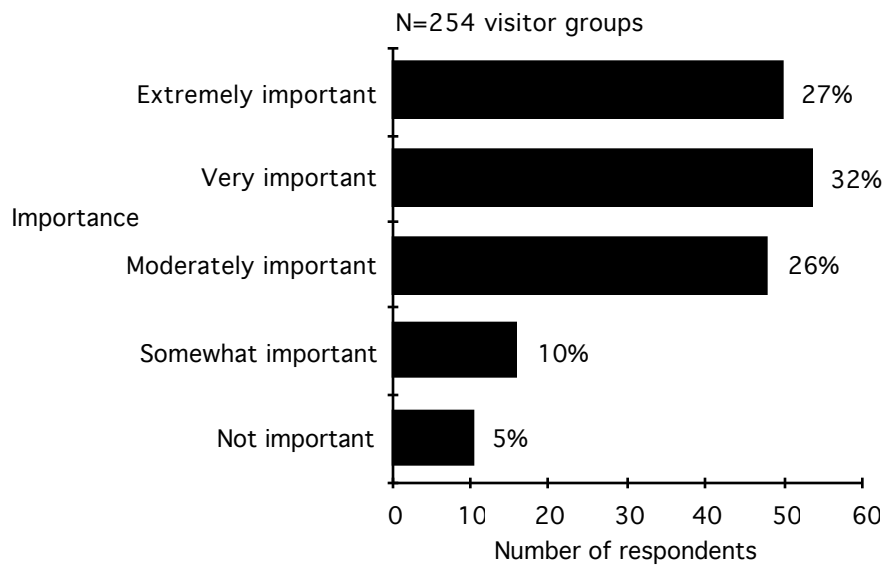


Figure 19: Importance of roadside exhibits

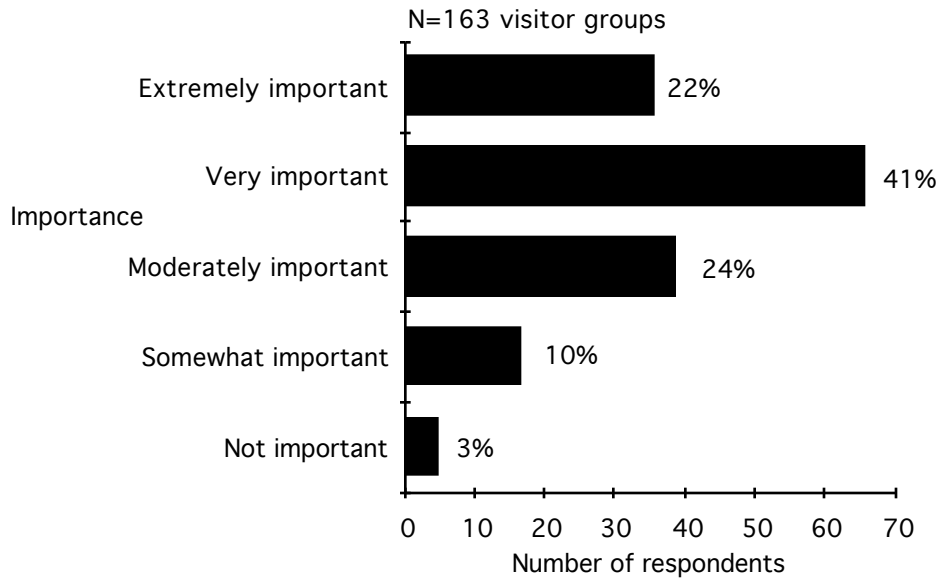


Figure 20: Importance of bulletin boards

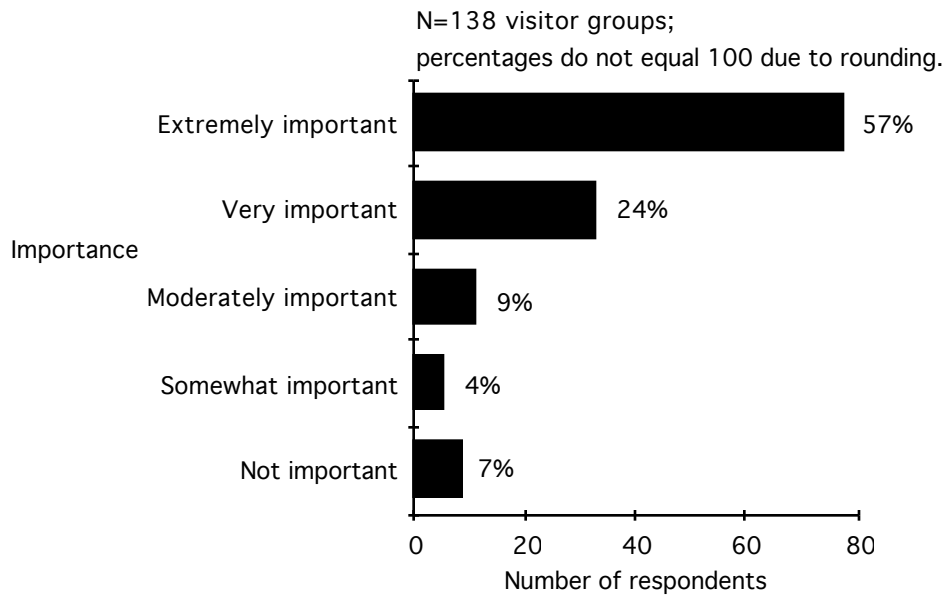


Figure 21: Importance of safety information brochures

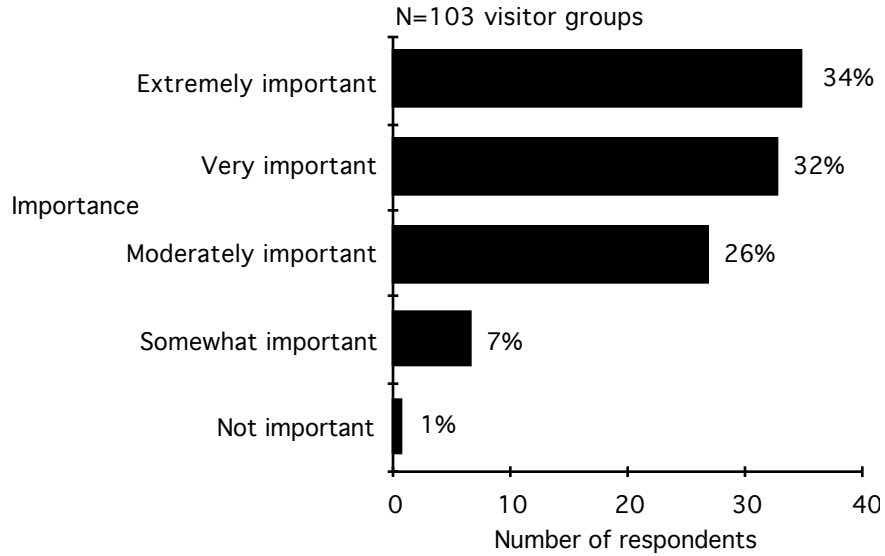


Figure 22: Importance of other information brochures

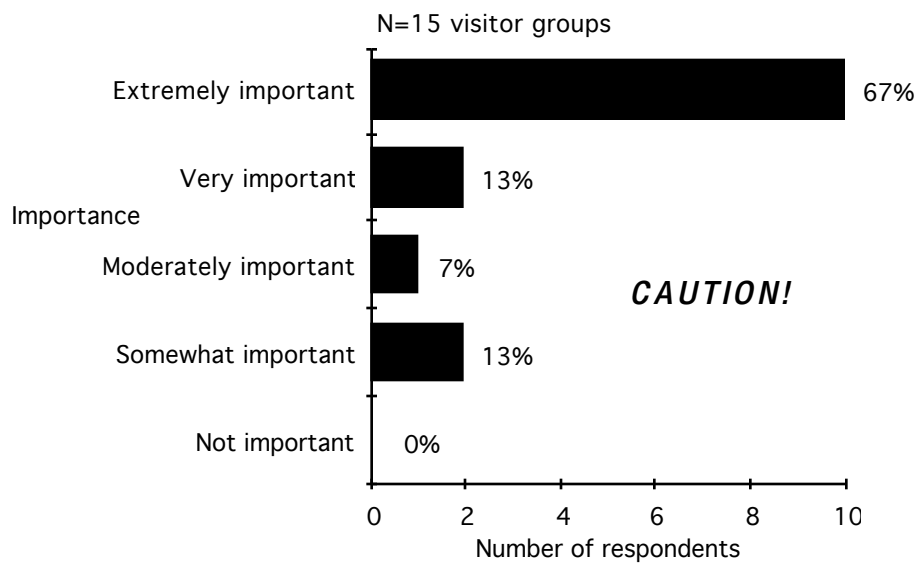


Figure 23: Importance of emergency services

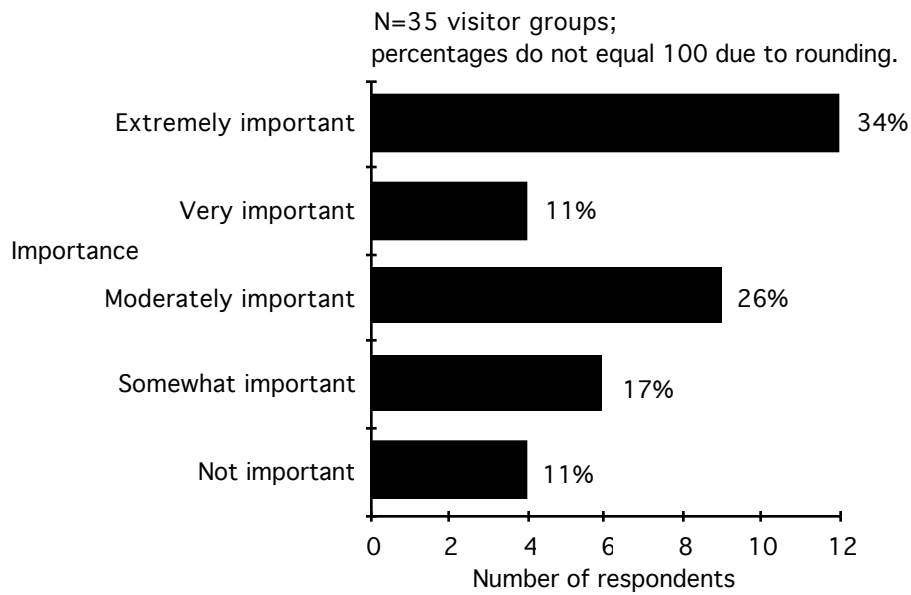


Figure 24: Importance of horseback rides

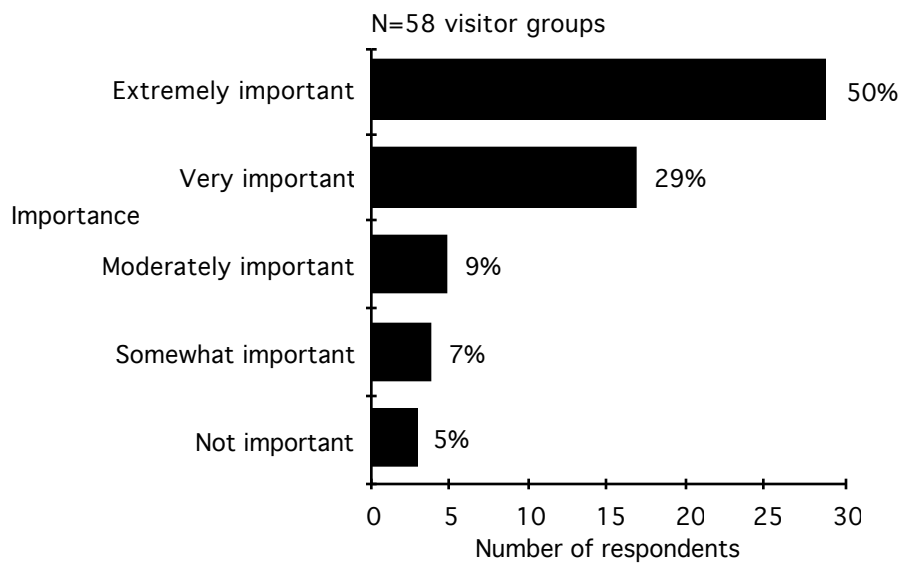


Figure 25: Importance of commercial raft/canoe trips

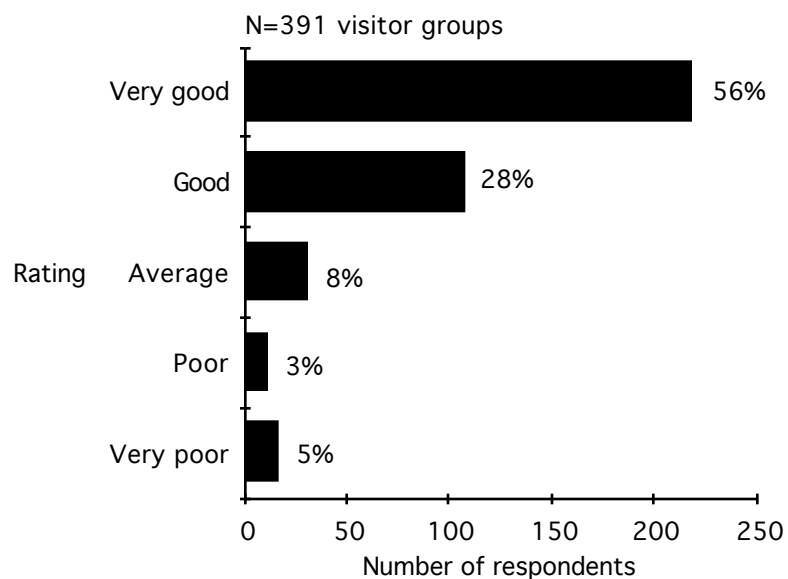


Figure 26: Quality of park brochure/map

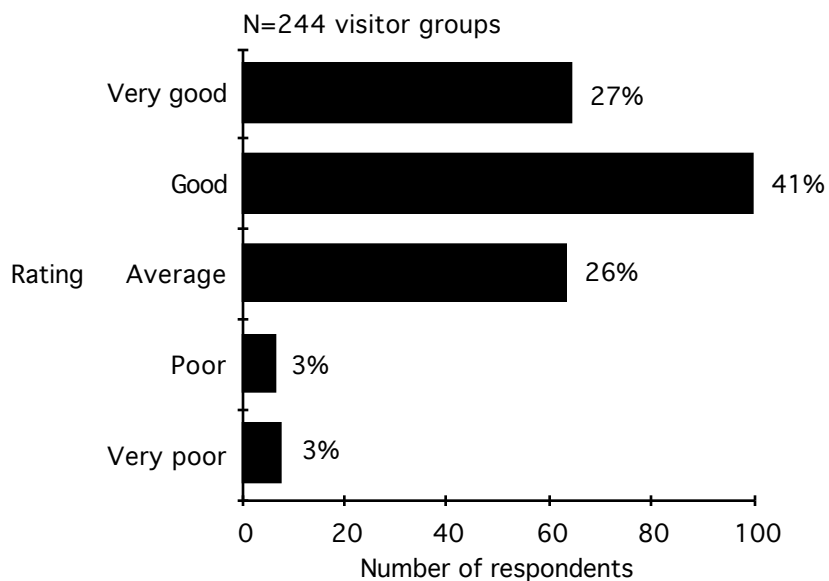


Figure 27: Quality of park newspaper (*Big Bend Paisano*)

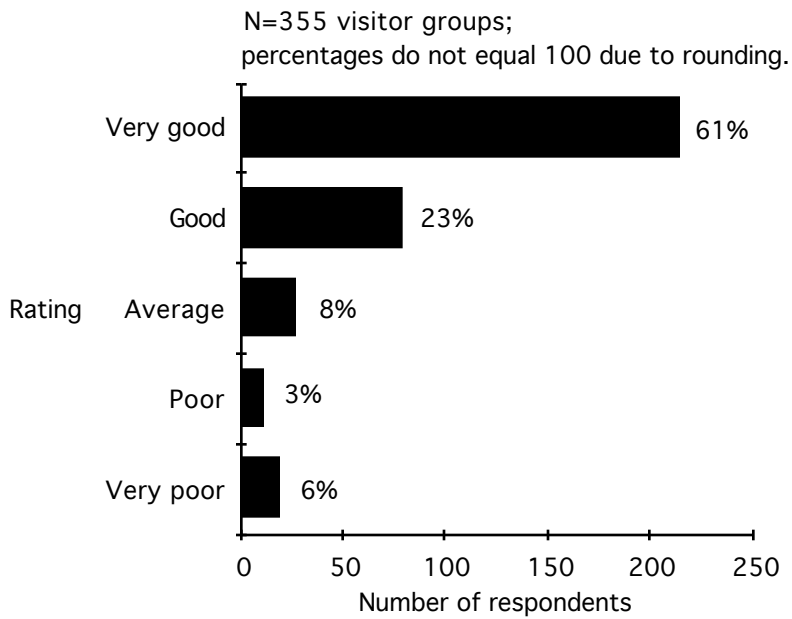


Figure 28: Quality of visitor center personnel

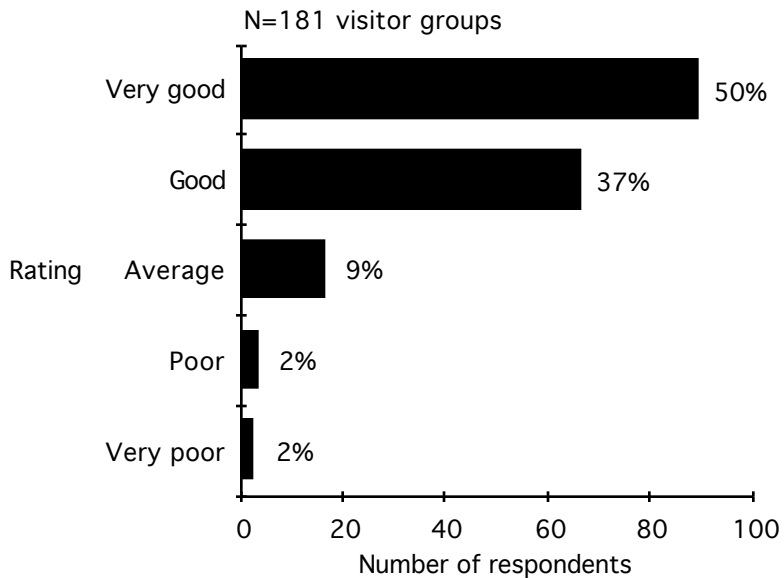


Figure 29: Quality of visitor center sales publications

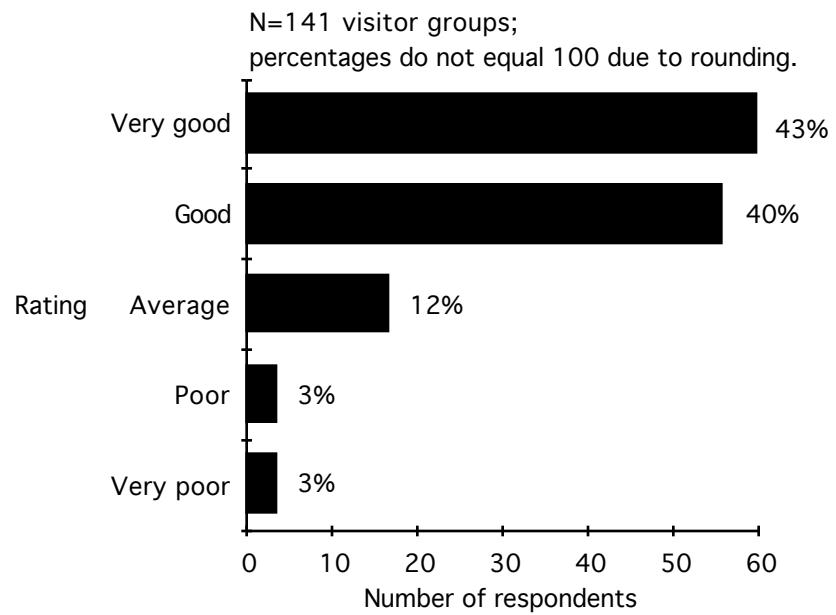


Figure 30: Quality of visitor center exhibits/slide show

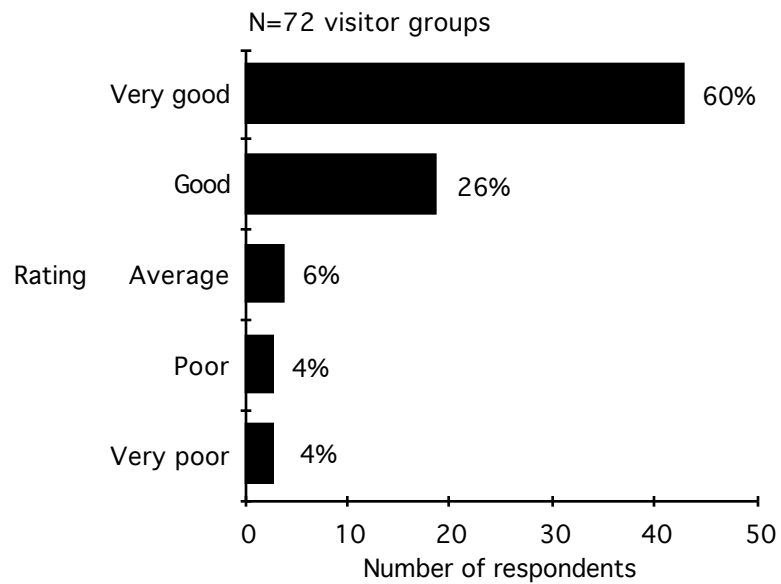


Figure 31: Quality of ranger/volunteer-led programs

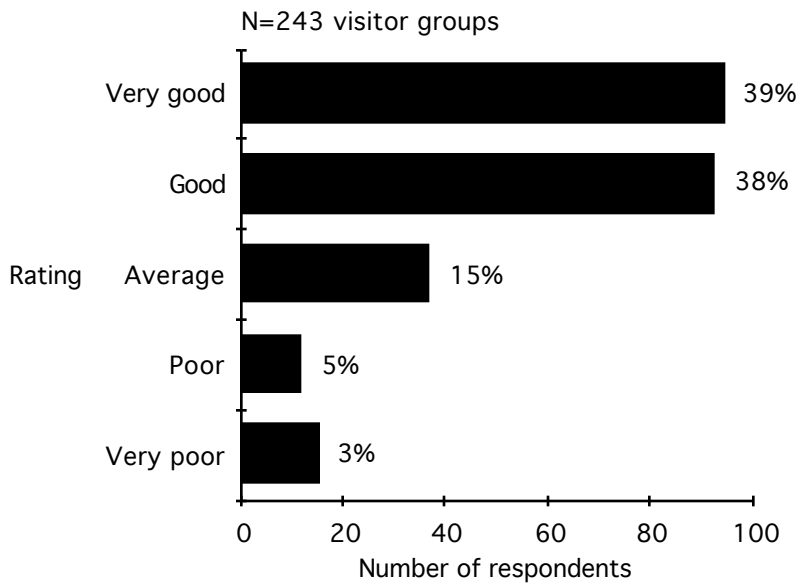


Figure 32: Quality of self-guided nature trails/roads

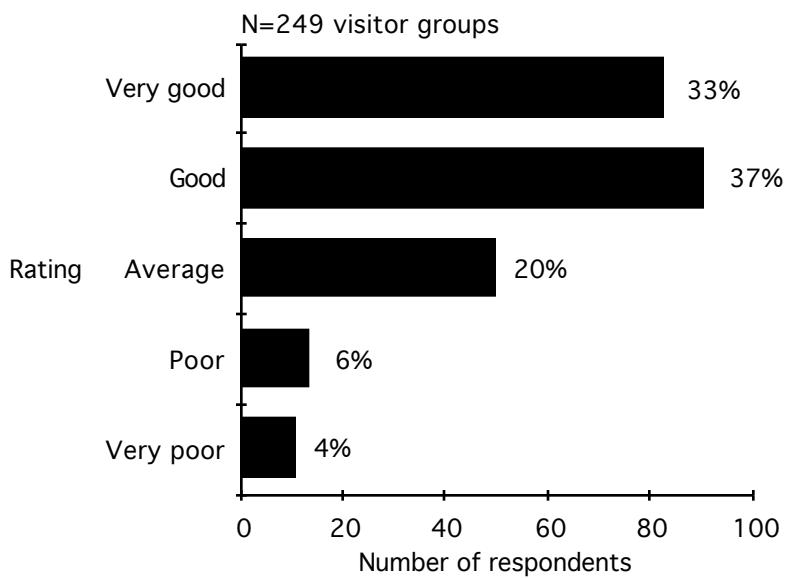


Figure 33: Quality of roadside exhibits

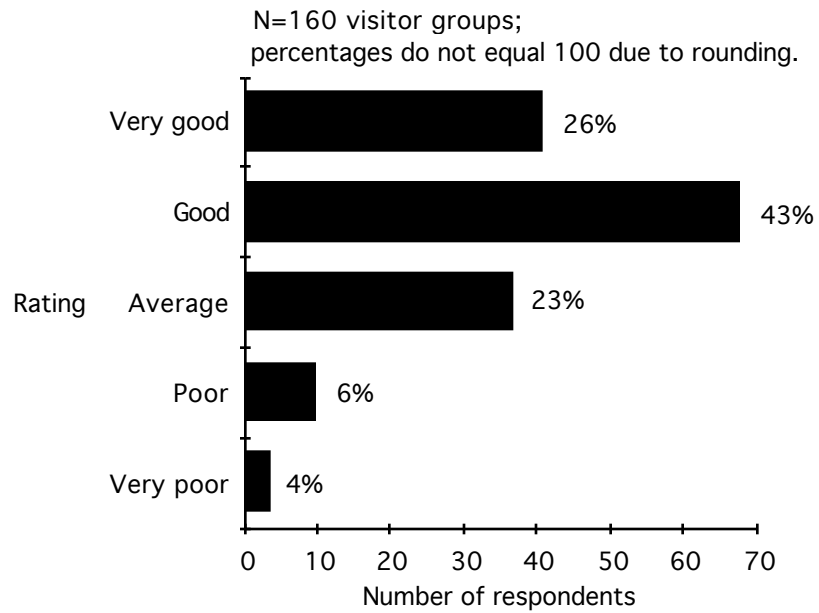


Figure 34: Quality of bulletin boards

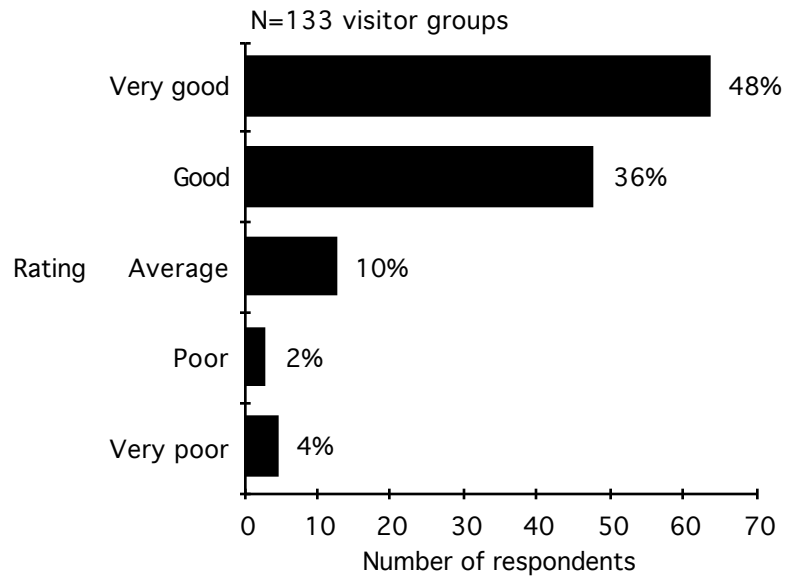


Figure 35: Quality of safety information brochures

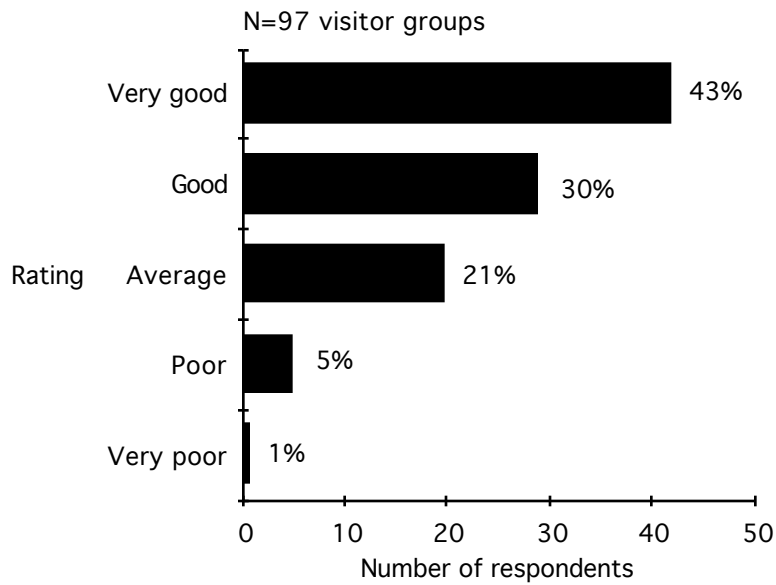


Figure 36: Quality of other information brochures

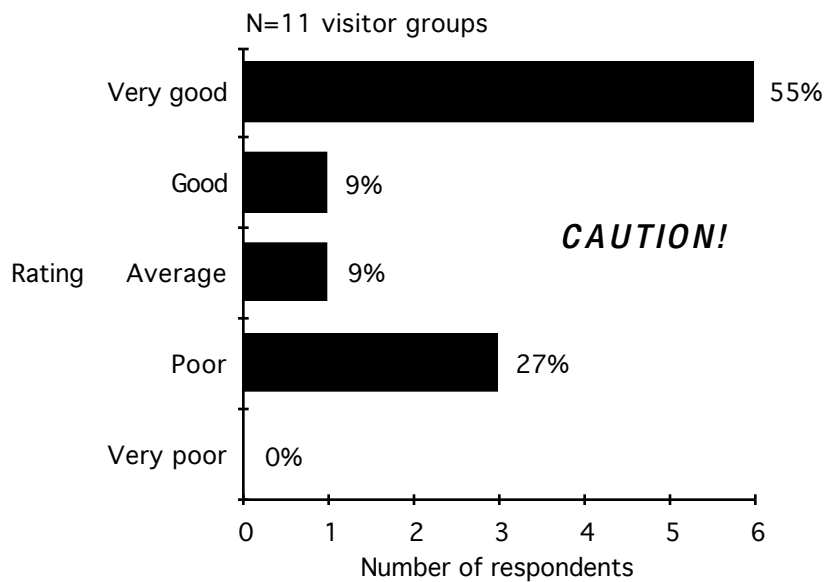


Figure 37: Quality of emergency services

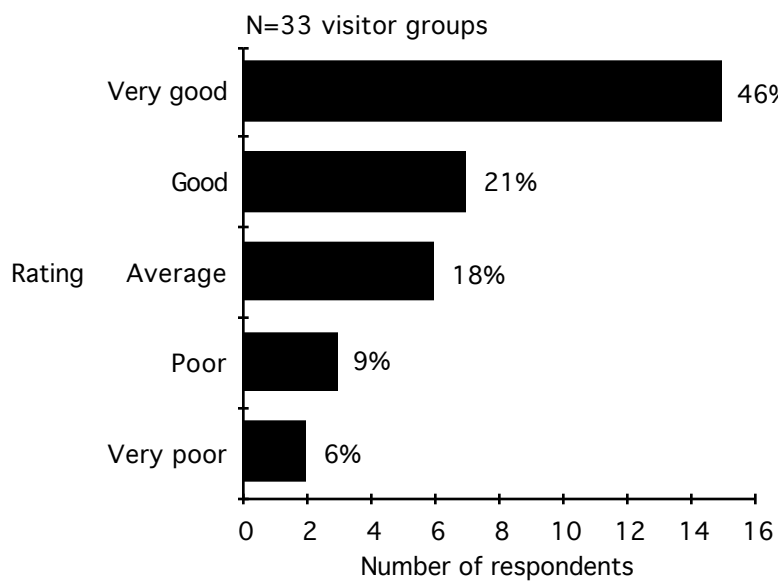


Figure 38: Quality of horseback rides

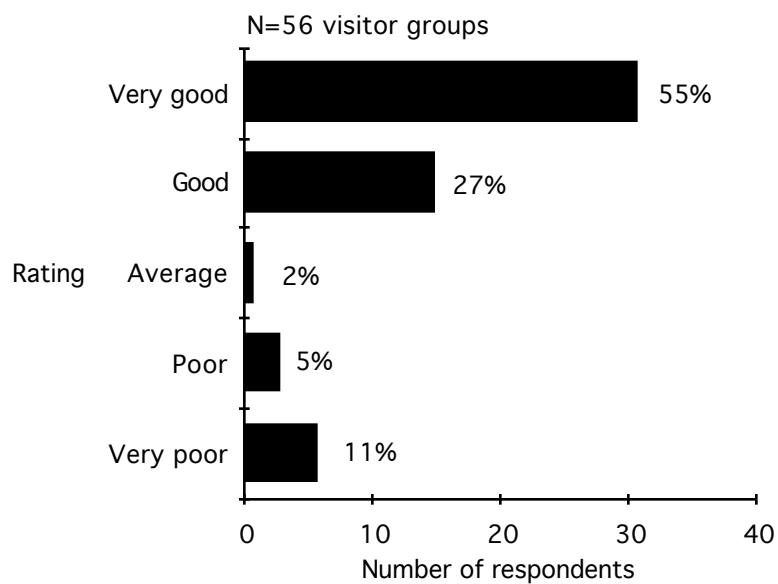


Figure 39: Quality of commercial raft/canoe trips

The most commonly used maintenance and concession services or facilities were highway directional signs (90%), restrooms (80%), parking areas (68%), and trails (58%) as shown in Figure 40. The least used service was handicapped access (5%).

Maintenance and concession services/facilities: use, importance and quality

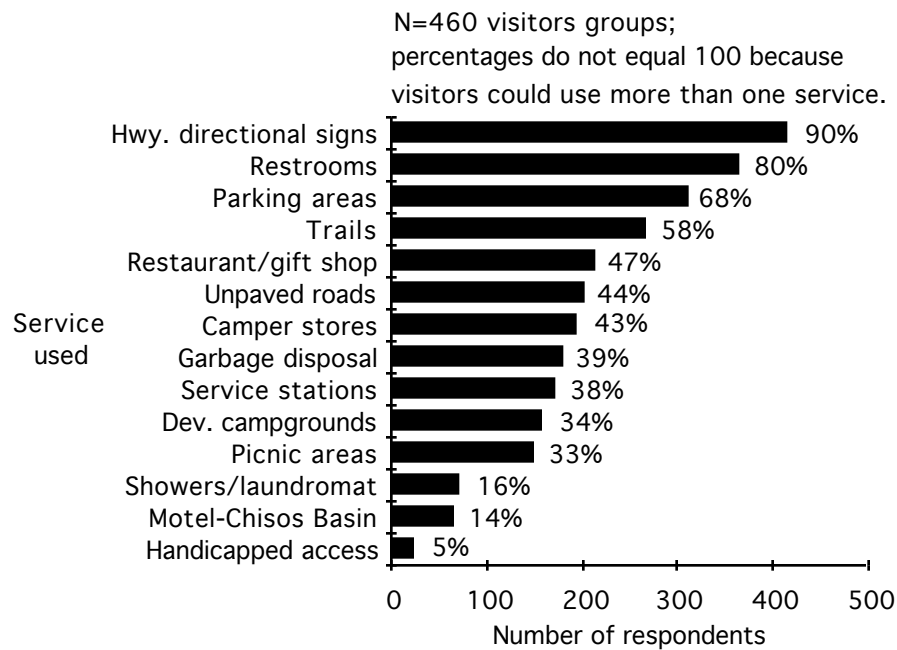


Figure 40: Maintenance or concession services/facilities used

Visitors rated the importance and quality of maintenance and concession services and facilities they used. They rated the importance and quality using a five point scale (see boxes below).

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

Figure 41 shows the average importance and quality ratings for each service. An average score was determined for each service based on ratings by visitors who used that service. This was done for both importance and quality. The results were plotted on the grid shown in Figure 41. Services were all rated above average in importance and quality. One service (handicapped access) was not rated by enough visitors to provide reliable results.

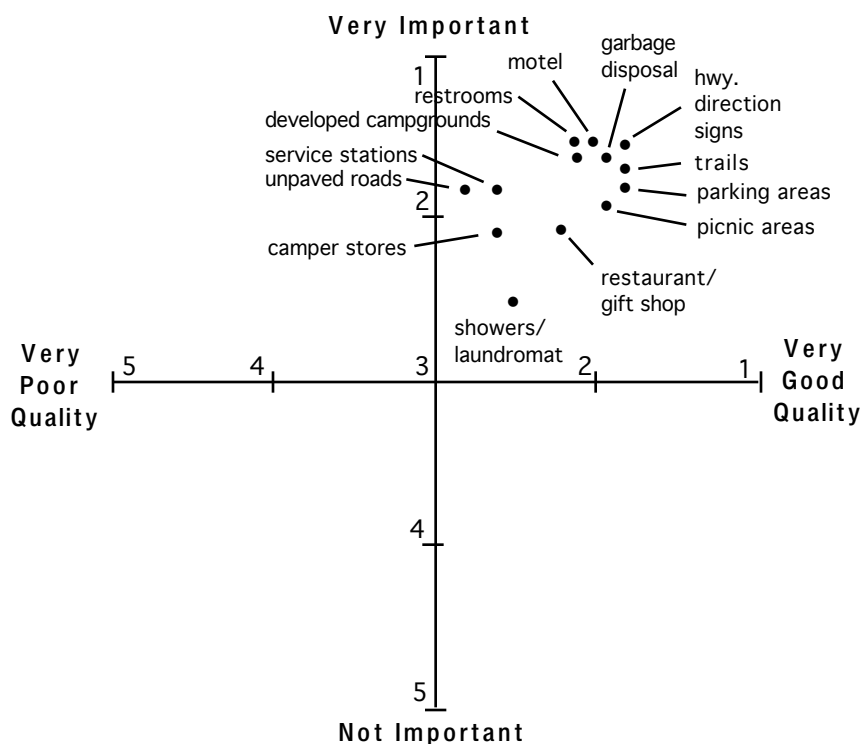


Figure 41: Average ratings of maintenance or concession services or facilities importance and quality

Figures 42-55 show that several services received the highest "very important" to "extremely important" ratings: restrooms (92%), highway directional signs (89%), garbage disposal (87%) and trails (84%). The highest "somewhat important" to "not important" ratings were for restaurant/gift shop (15%) and showers/laundromat (14%).

Figures 56-69 show that several services were given high "good" to "very good" ratings: trails (84%), highway directional signs (81%), picnic areas (80%), parking areas (80%), and garbage disposal (80%). The services receiving the highest "poor" to "very poor" ratings were unpaved roads (22%) and shower/laundromat (20%).

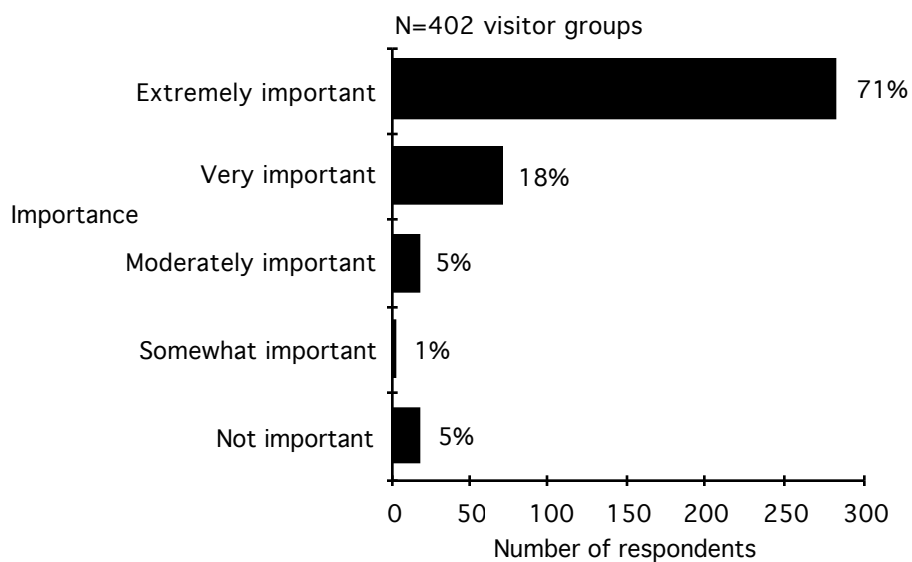


Figure 42: Importance of highway direction signs

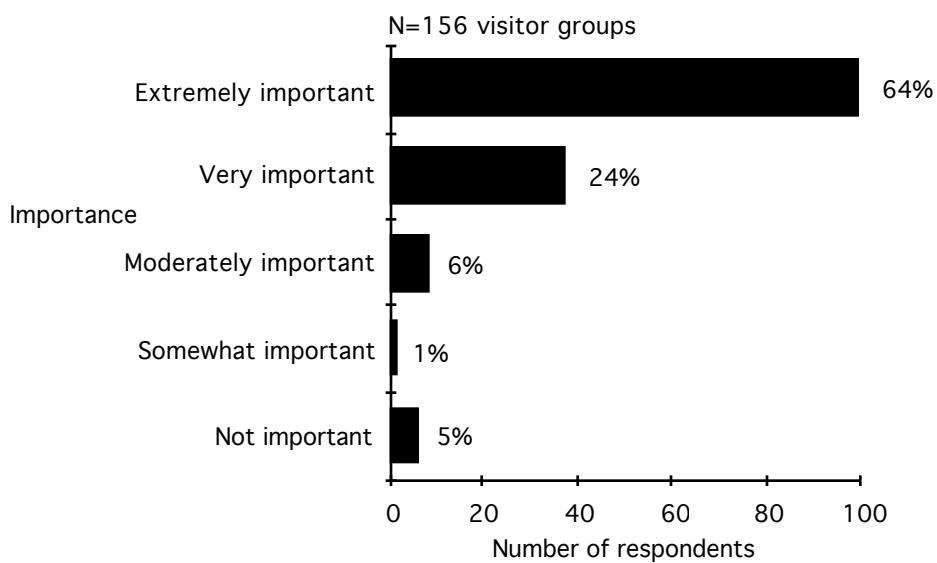


Figure 43: Importance of developed campgrounds

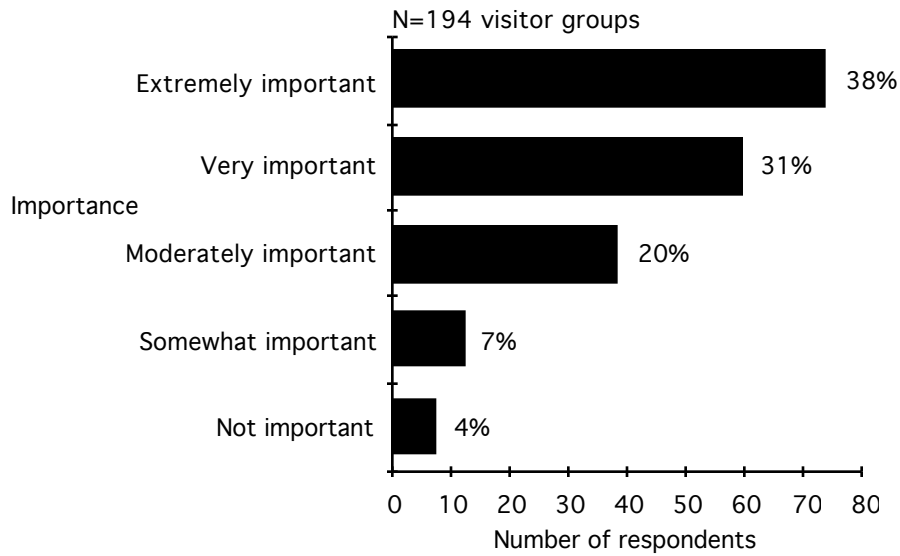


Figure 44: Importance of unpaved roads

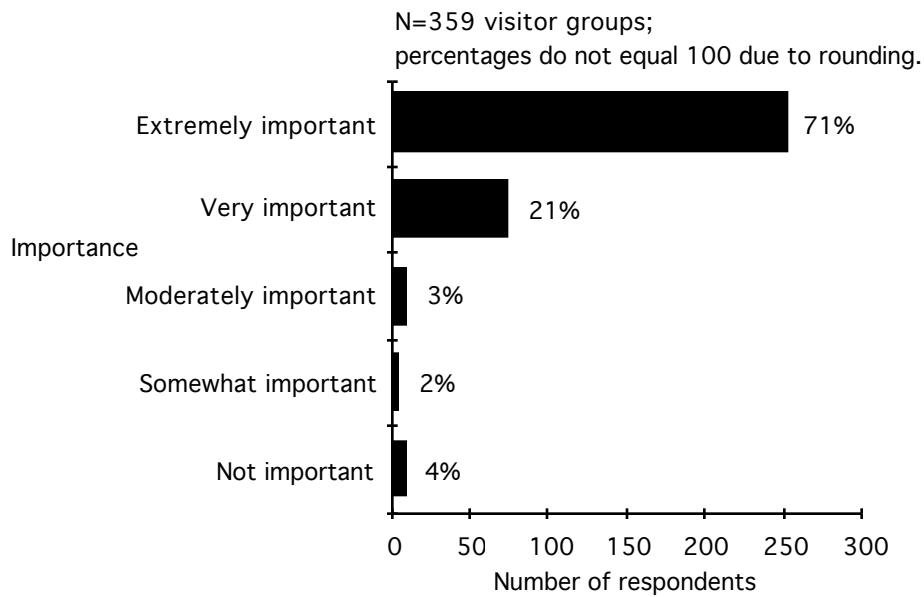


Figure 45: Importance of restrooms

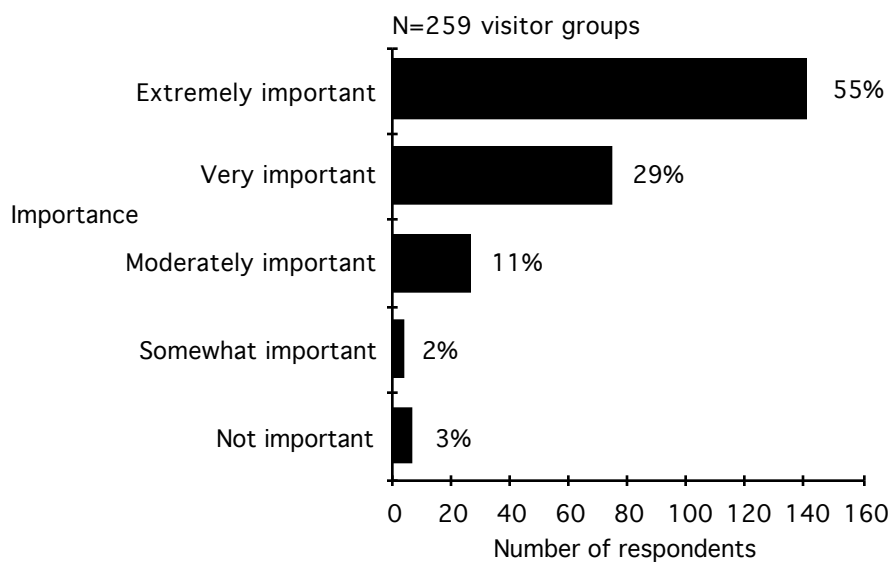


Figure 46: Importance of trails

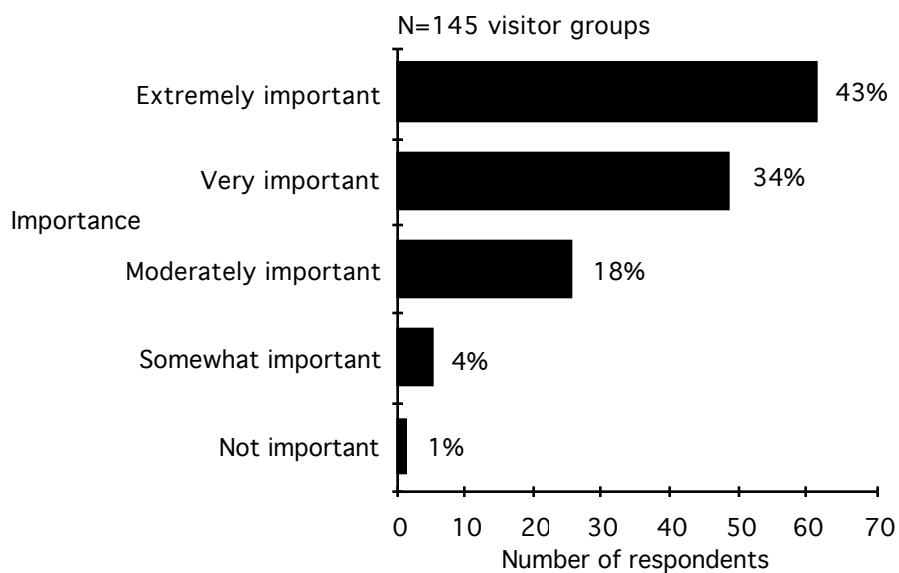


Figure 47: Importance of picnic areas

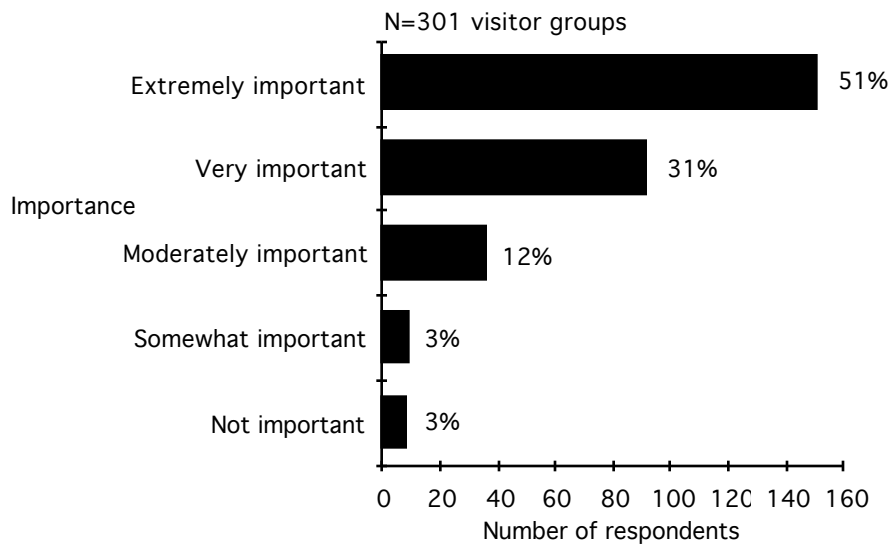


Figure 48: Importance of parking areas

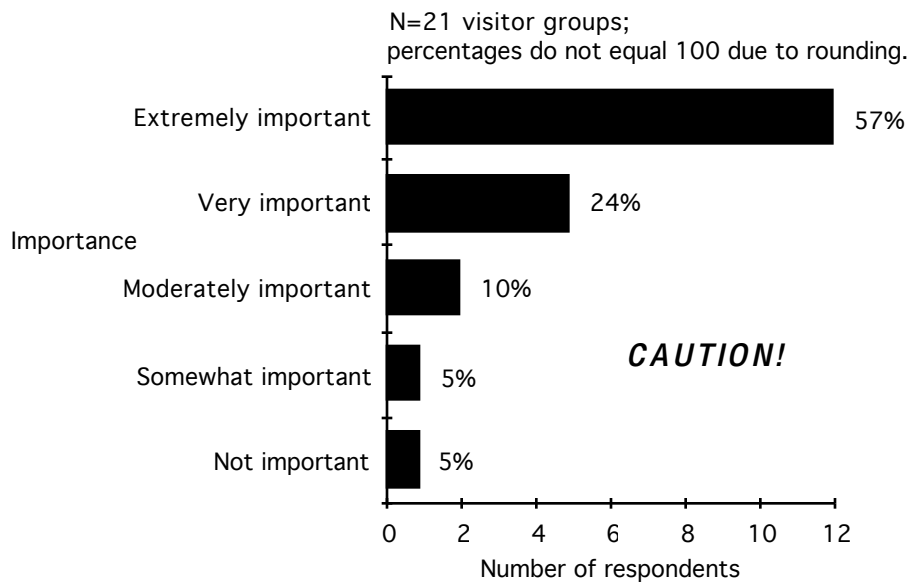


Figure 49: Importance of handicapped accessibility

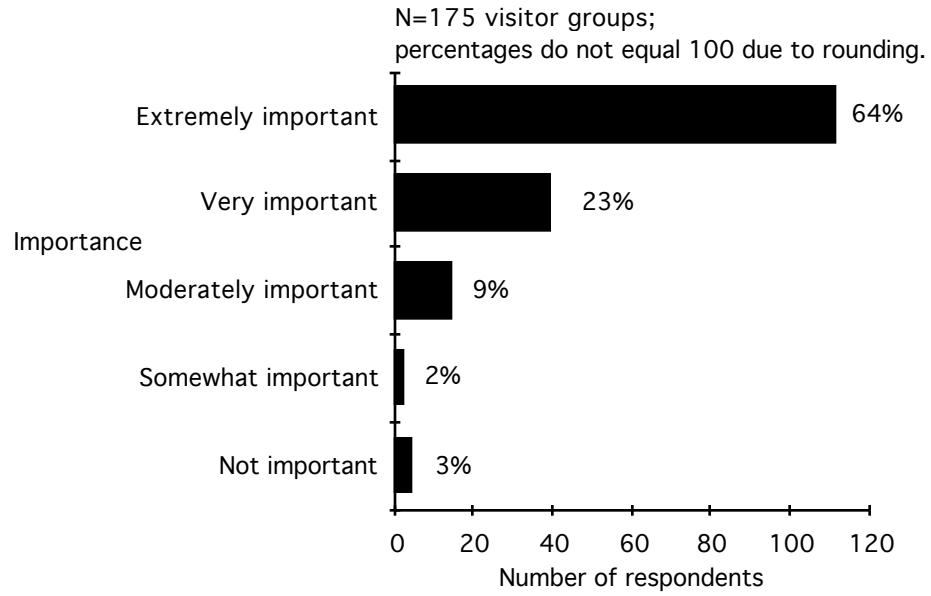


Figure 50: Importance of garbage disposal

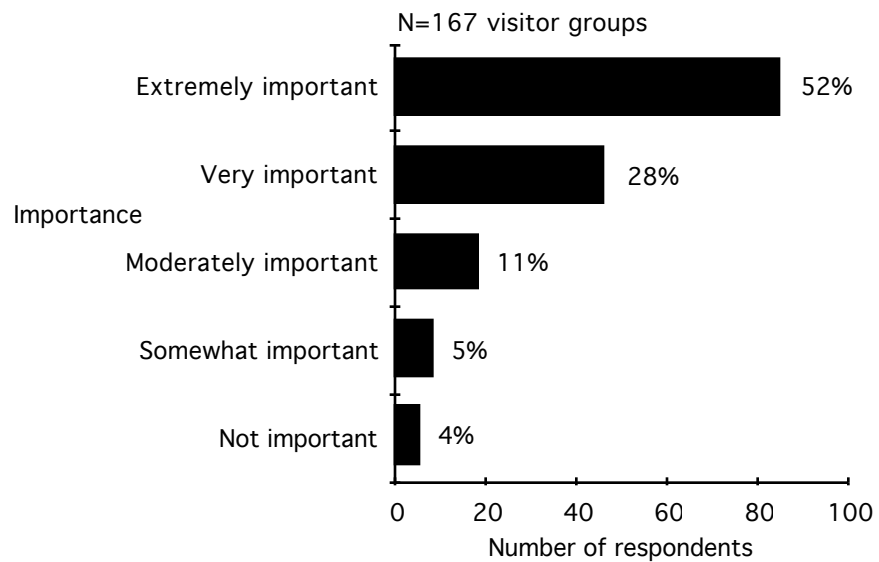


Figure 51: Importance of service stations

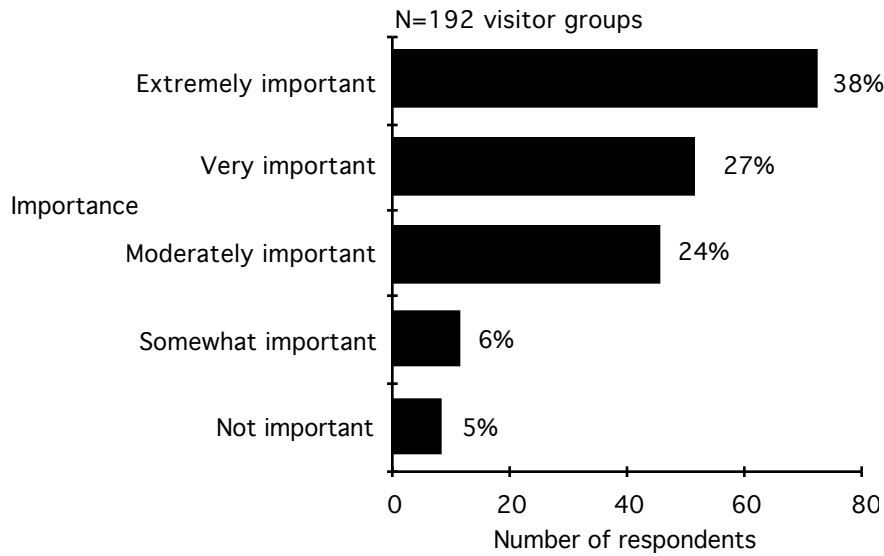


Figure 52: Importance of camper stores

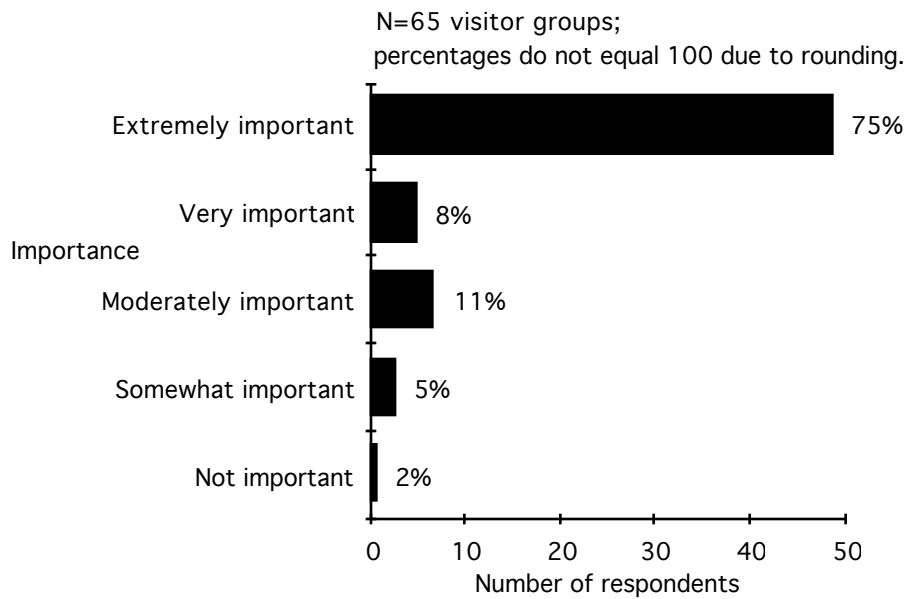


Figure 53: Importance of motel in Chisos Basin

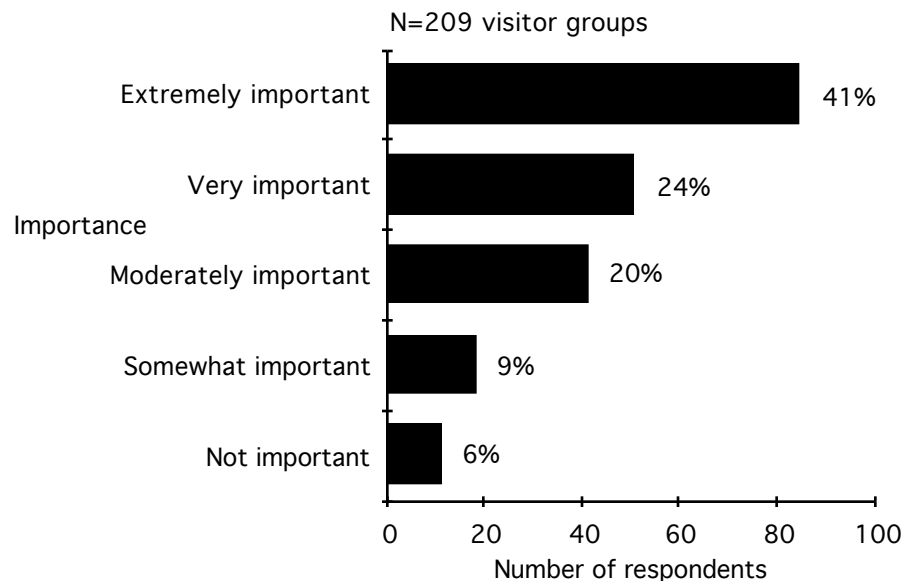


Figure 54: Importance of restaurant/gift shop in Chisos Basin

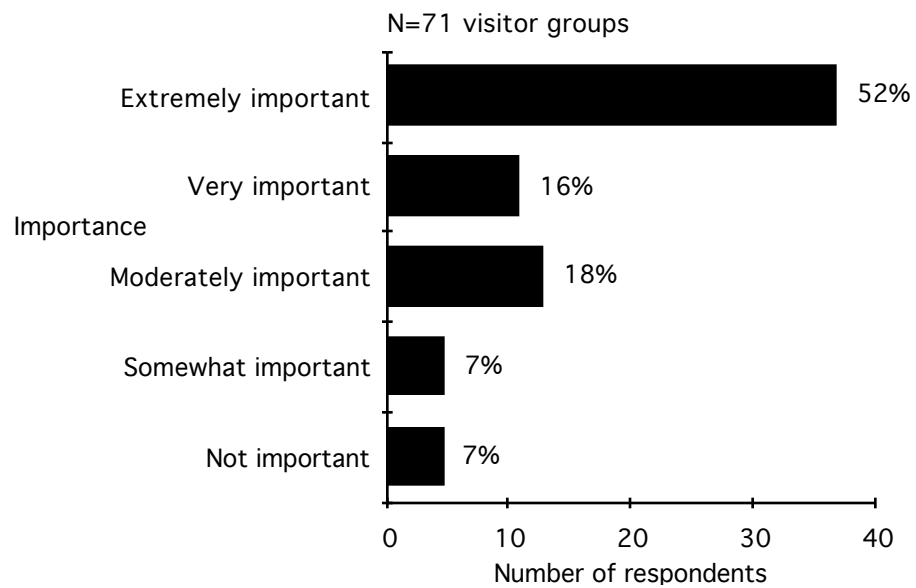


Figure 55: Importance of showers/laundromat

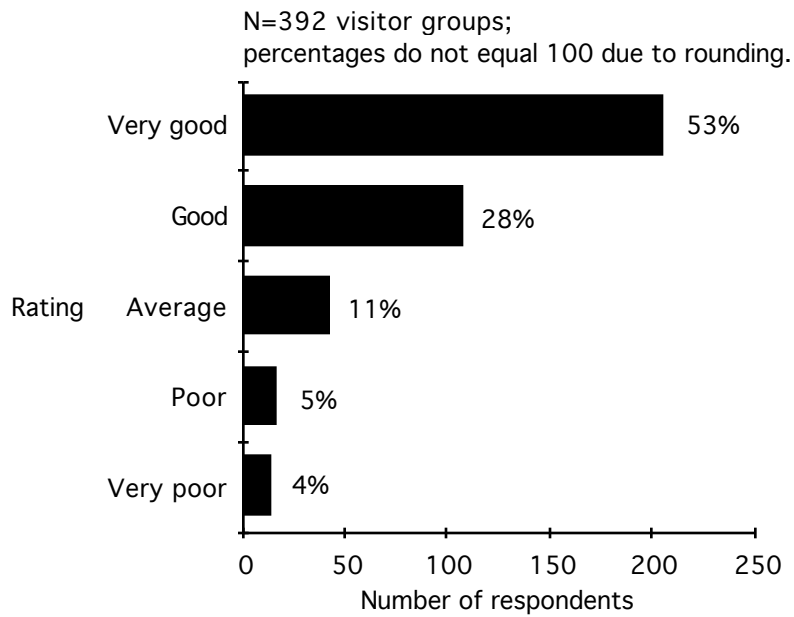


Figure 56: Quality of highway direction signs

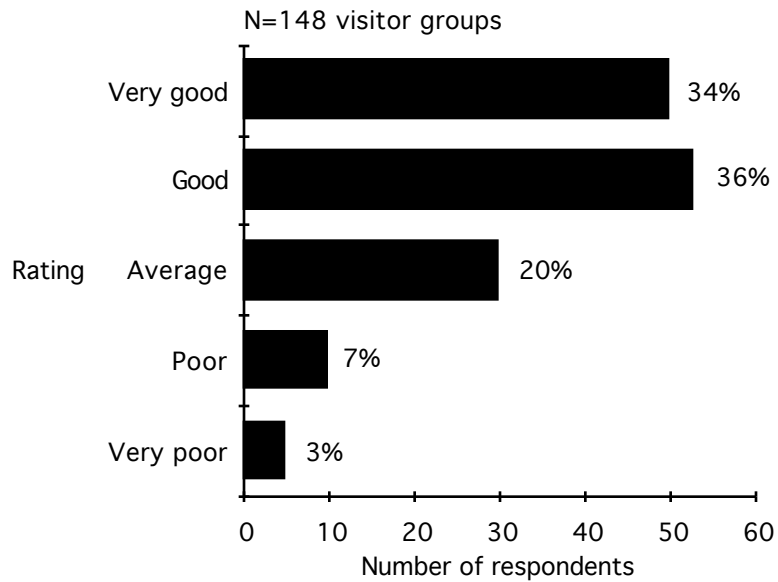


Figure 57: Quality of developed campgrounds

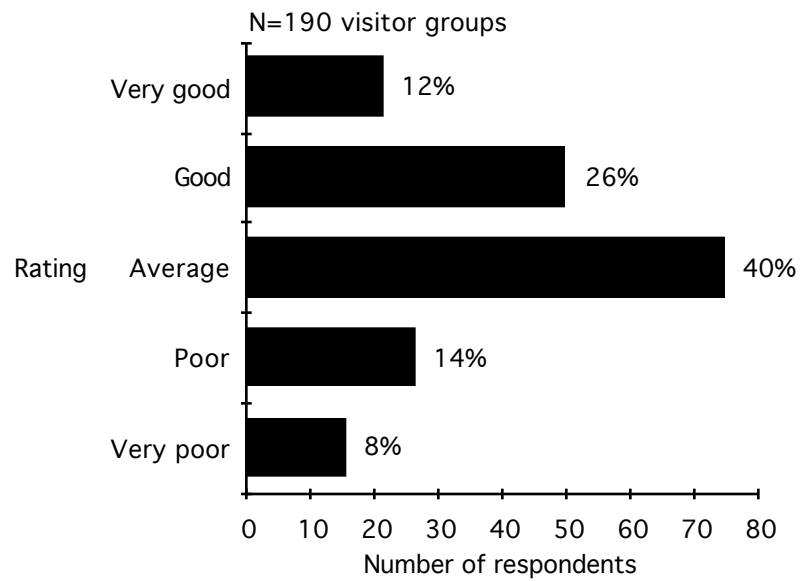


Figure 58: Quality of unpaved roads

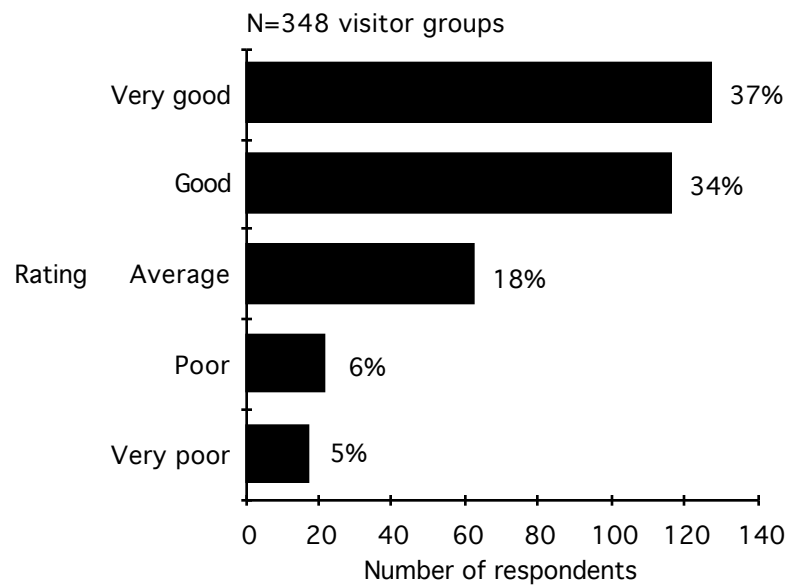


Figure 59: Quality of restrooms

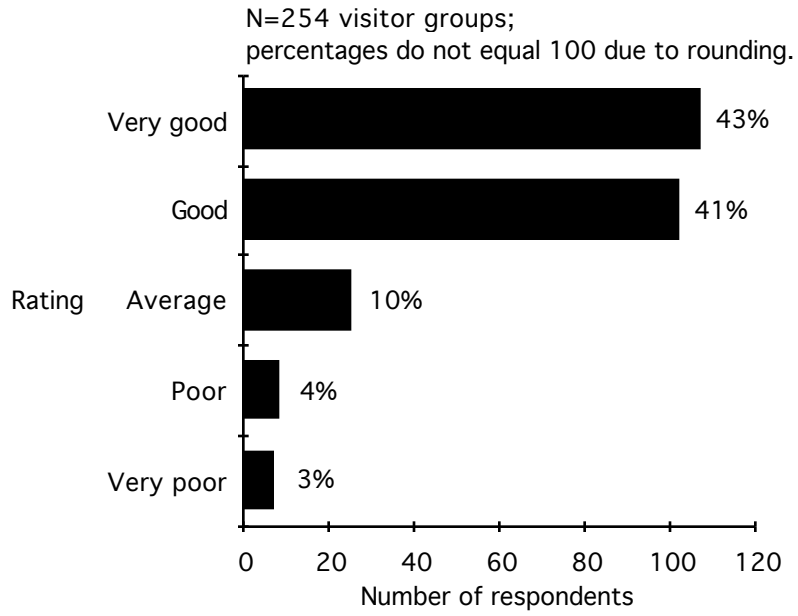


Figure 60: Quality of trails

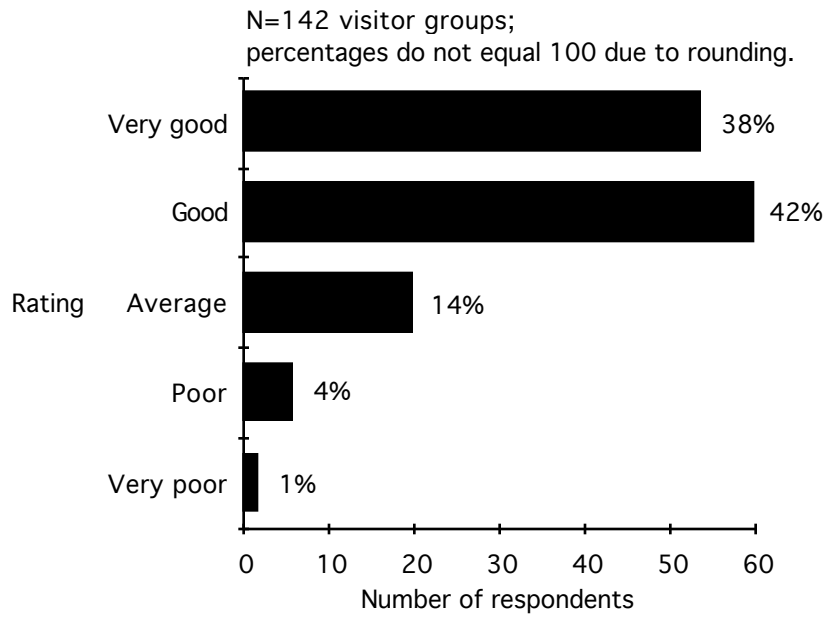


Figure 61: Quality of picnic areas

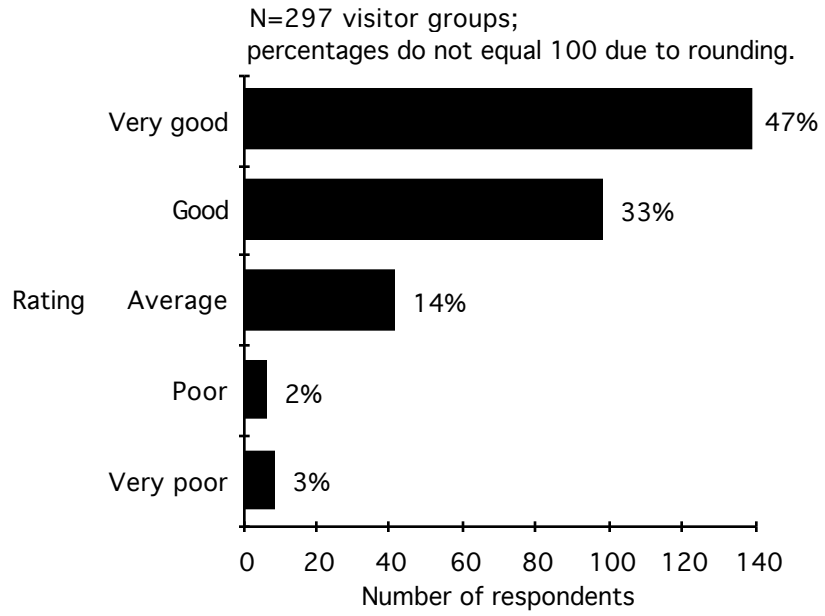


Figure 62: Quality of parking areas

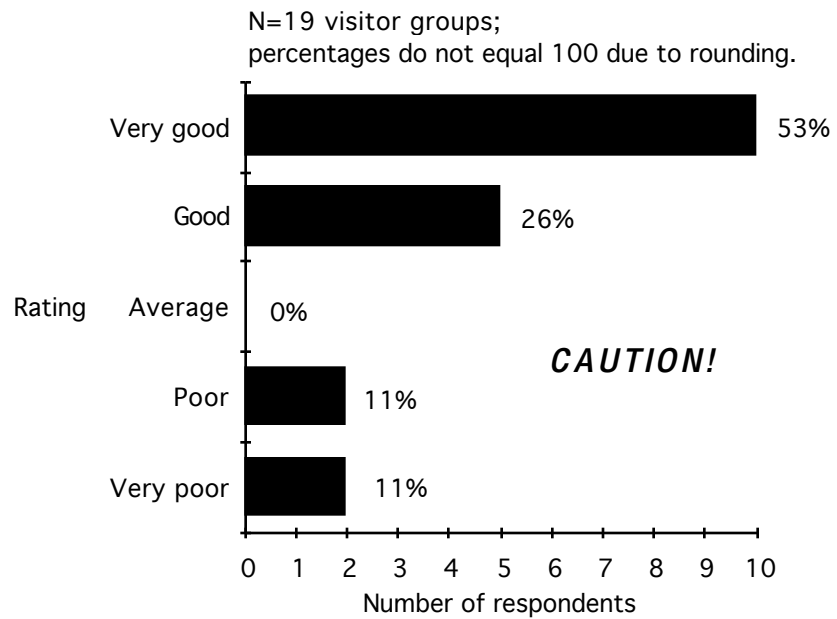


Figure 63: Quality of handicapped accessibility

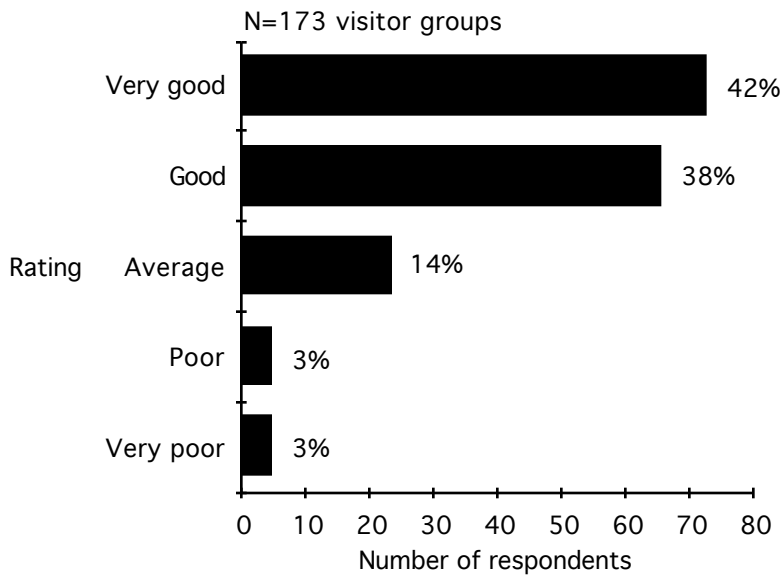


Figure 64: Quality of garbage disposal

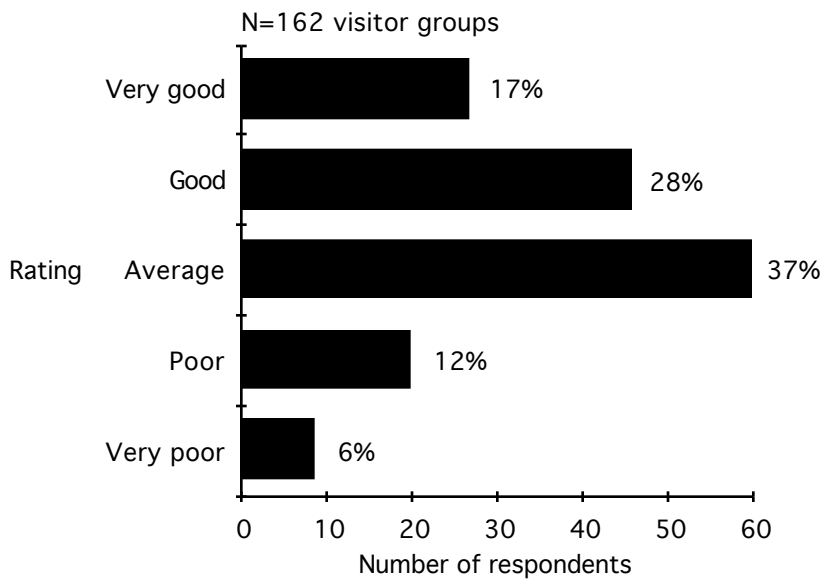


Figure 65: Quality of service stations

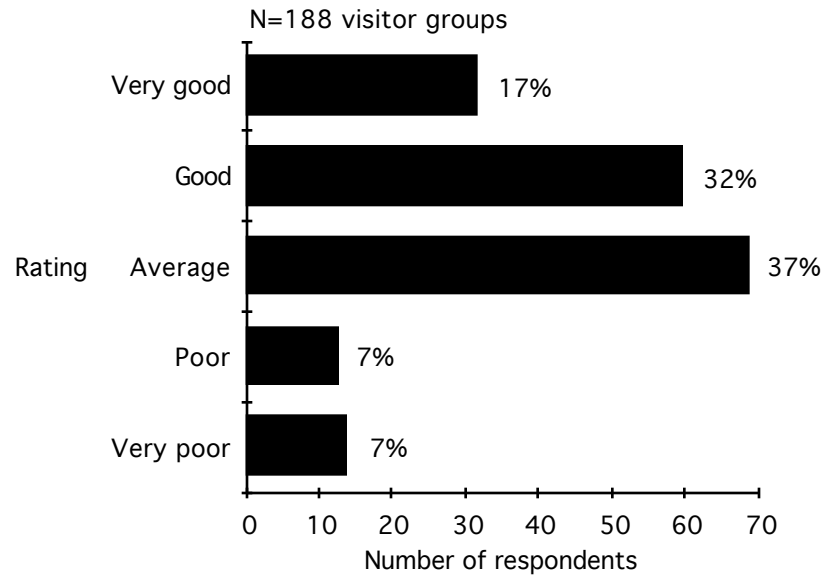


Figure 66: Quality of camper stores

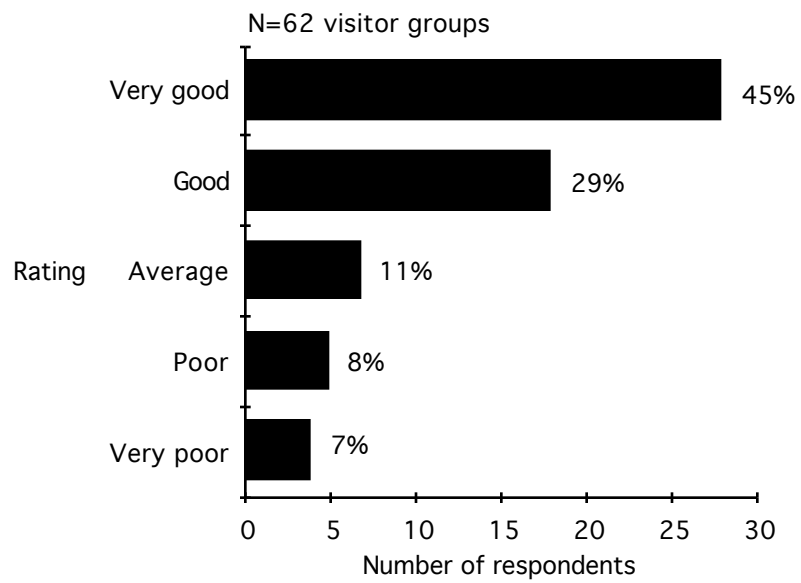


Figure 67: Quality of motel in Chisos Basin

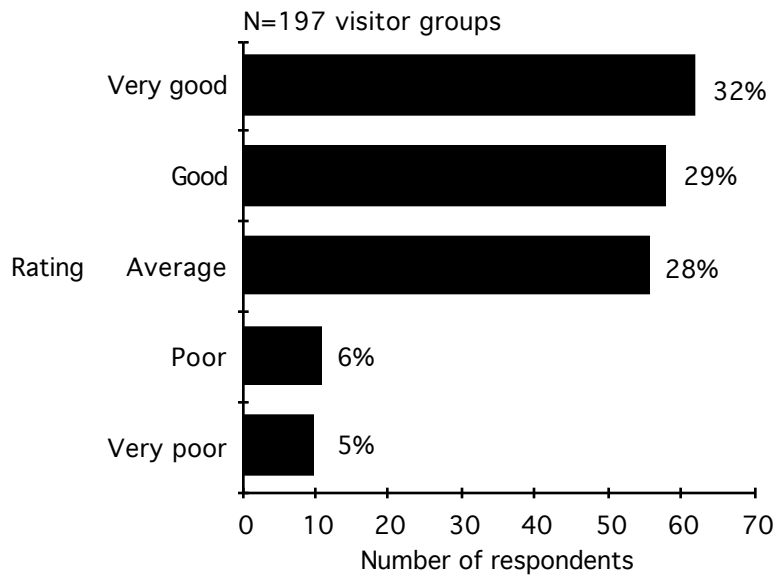


Figure 68: Quality of restaurant/gift shop in Chisos Basin

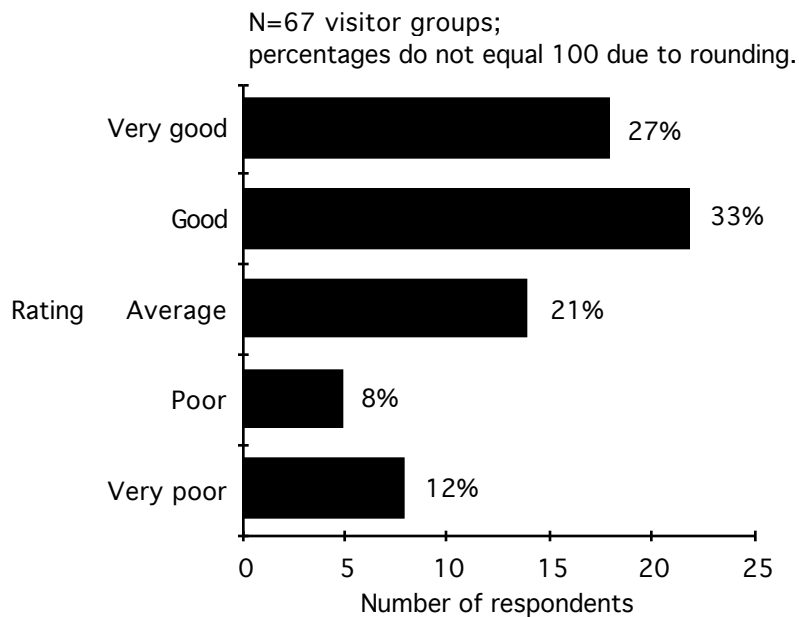


Figure 69: Quality of showers/laundromat

Reasons for visit

Visitors identified their reasons for visiting Big Bend. These included scenic views/drives (96%), desert experience (67%), wilderness environment (65%), view park wildlife (65%), and solitude/quiet (52%). "Other" reasons visitors listed included seeing wildflowers/cactus in bloom, photography, birdwatching and studying geology.

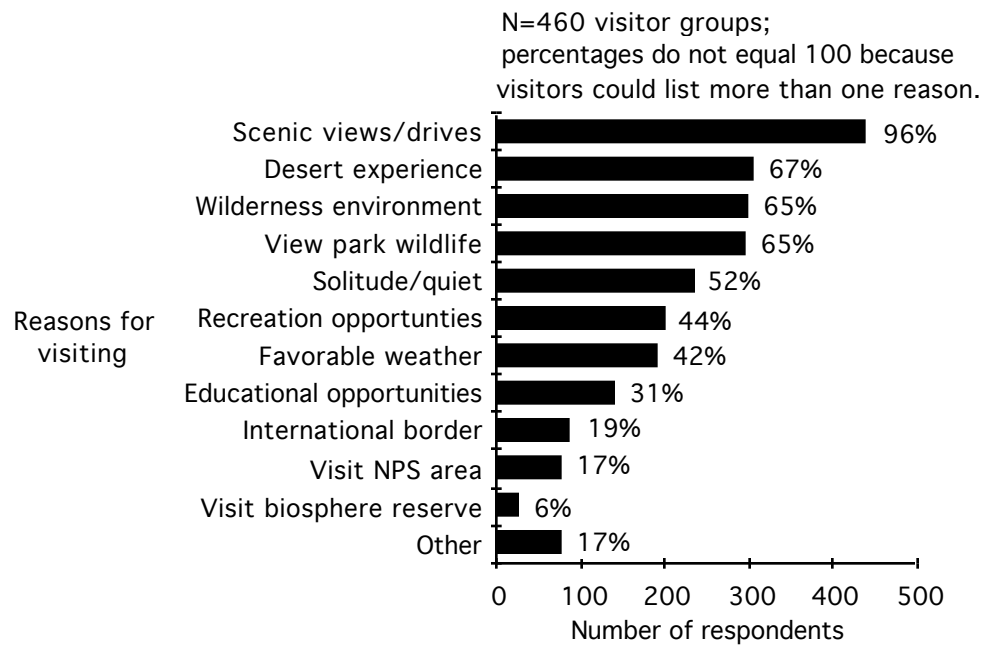


Figure 70: Reasons for visiting

Visitors were asked to identify the number of nights they spent in each type of accommodation in and outside the park.

Sixty-seven percent of the visitors spent one to two nights in the park, as shown in Figure 71. Forty percent of the visitors stayed in campgrounds without hookups; 30% stayed in a motel/hotel (see Figure 72). Under "other" accommodations used, visitors said they stayed with friends, lived in the area, or stayed at a lodge or motel.

Outside the park (within 100 miles), 57% of the visitors spent one to two nights (see Figure 73). Sixty percent of the visitors stayed in motels/hotels outside the park, as Figure 74 shows.

Overnight use in and outside Big Bend

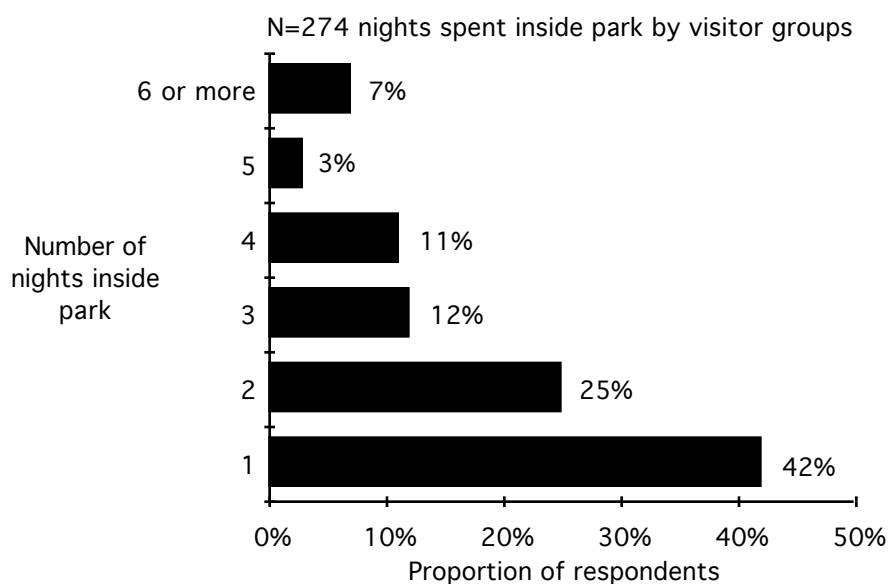


Figure 71: Number of nights spent in the park

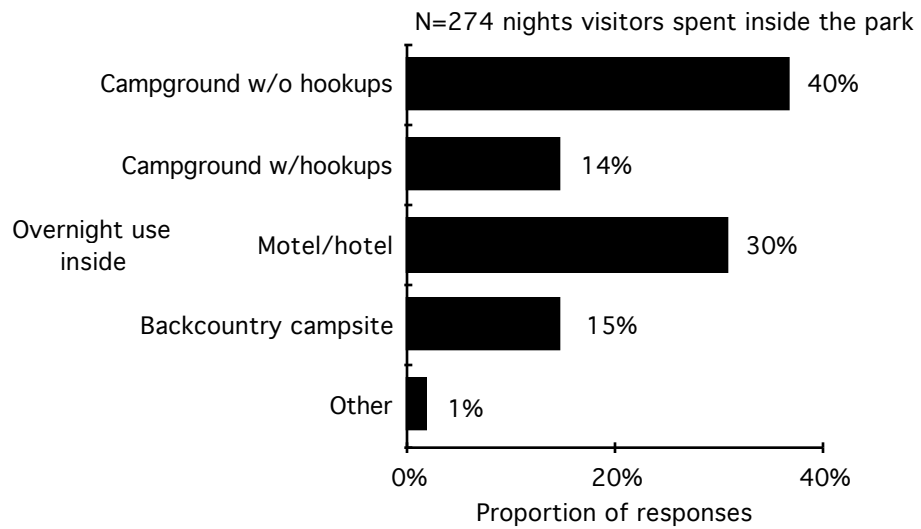


Figure 72: Types of overnight accommodations used in the park

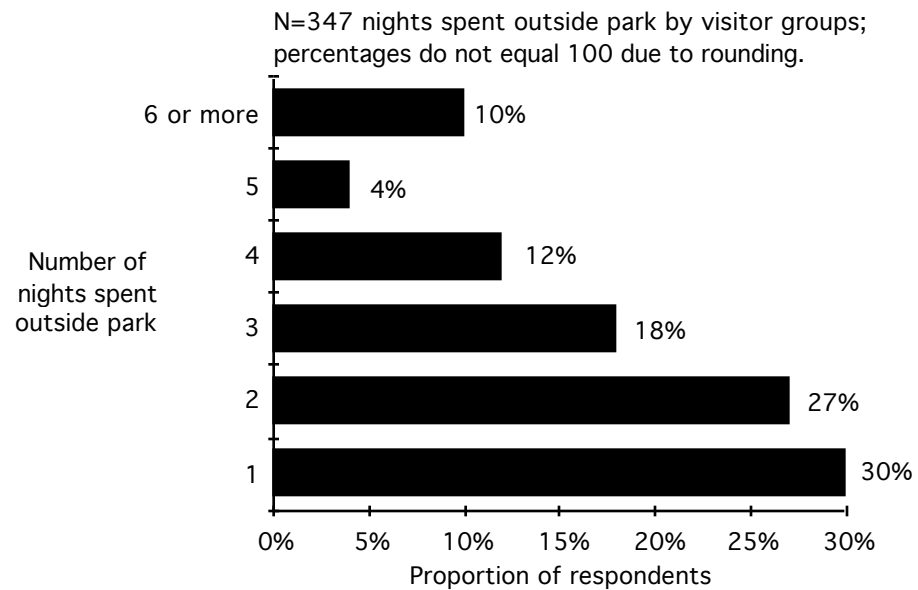


Figure 73: Number of nights spent outside the park (within 100 miles)

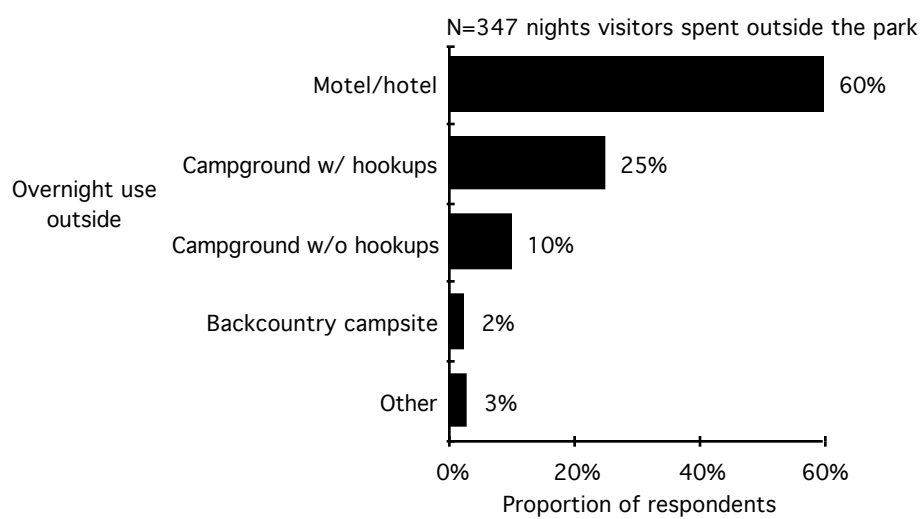


Figure 74: Types of overnight accommodations used outside the park (within 100 miles)

Expenditures

Visitors were asked to list their expenditures for lodging, travel, food and other items in and outside the park during this visit.

Of visitors who reported expenditures during their visit, 40% spent \$251 or more for lodging, travel, food and other items in and outside the park as shown in Figure 75.

In the park, 44% of the visitors spent from \$1-50 (see Figure 76). Please note that Figure 76 had a large number of missing cases (visitor groups that did not complete the "Inside park" expenditure column). In Figure 77, the greatest proportion of money was spent on lodging (33%), followed by food and other items. In the park, visitors often spent \$25 or less for each of the categories of lodging, travel, food and other items, as shown in Figures 78-81.

Including visitors who spent no money, the average visitor group expenditure in the park was \$117; the average per capita expenditure was \$43.

Outside the park (within 100 miles), 33% of the visitors spent \$251 or more on total expenses during their visit (see Figure 82). The greatest proportion of their money was spent on lodging (39%), with 23% for food, and 20% for travel, as shown in Figure 83.

Including visitors who spent no money, the average visitor group expenditure outside the park was \$274. The average per capita expenditure was \$104.

For lodging outside the park, 24% of the visitors spent \$151 or more (see Figure 84). For travel and food, visitors often spent up to \$50 (see Figures 85 and 86). For "other" items, 40% of the visitors spent \$25 or less, as shown in Figure 87.

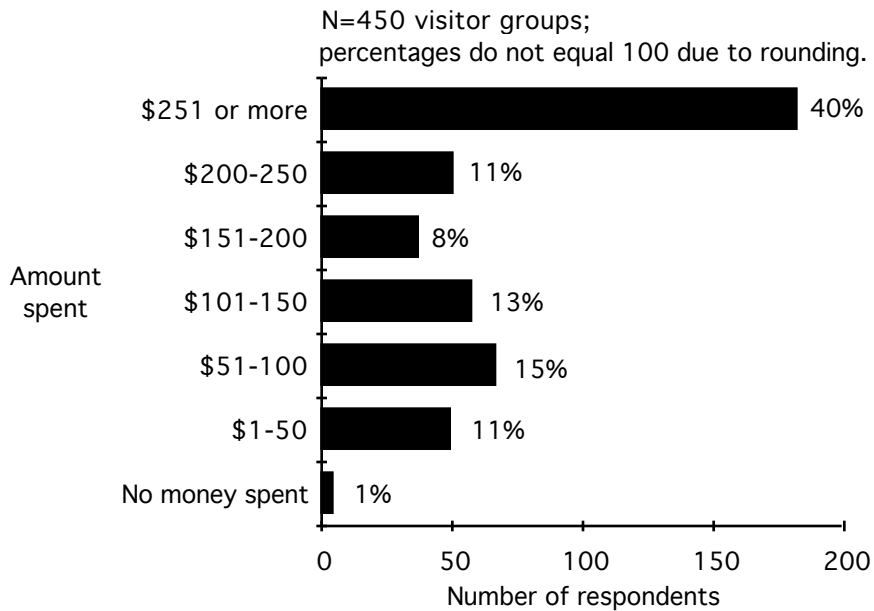


Figure 75: Total visitor expenditures in and outside the park

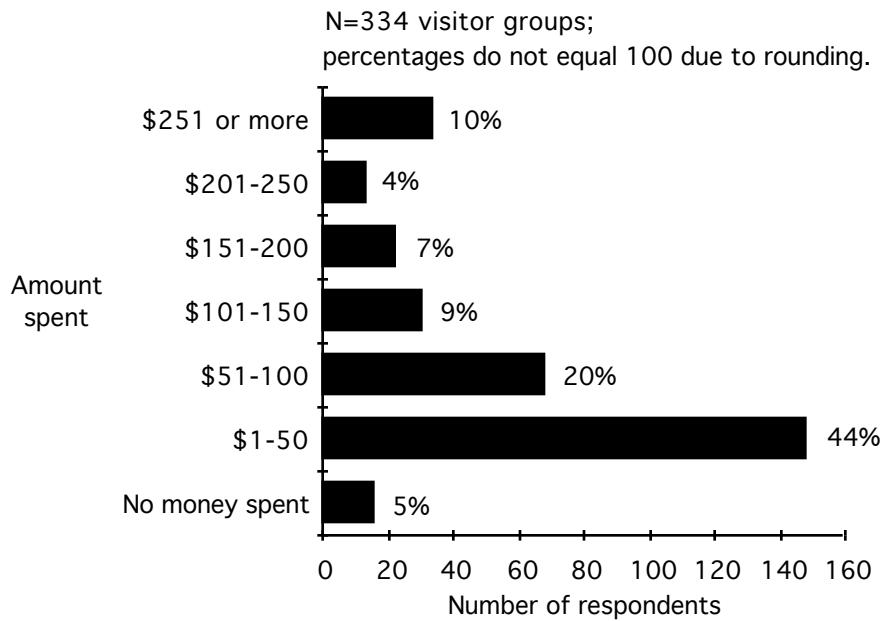


Figure 76: Total visitor expenditures in the park

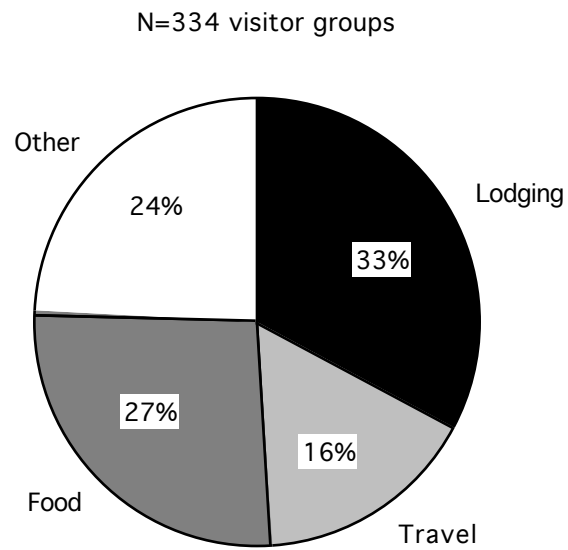


Figure 77: Proportion of visitor expenditures in the park by category

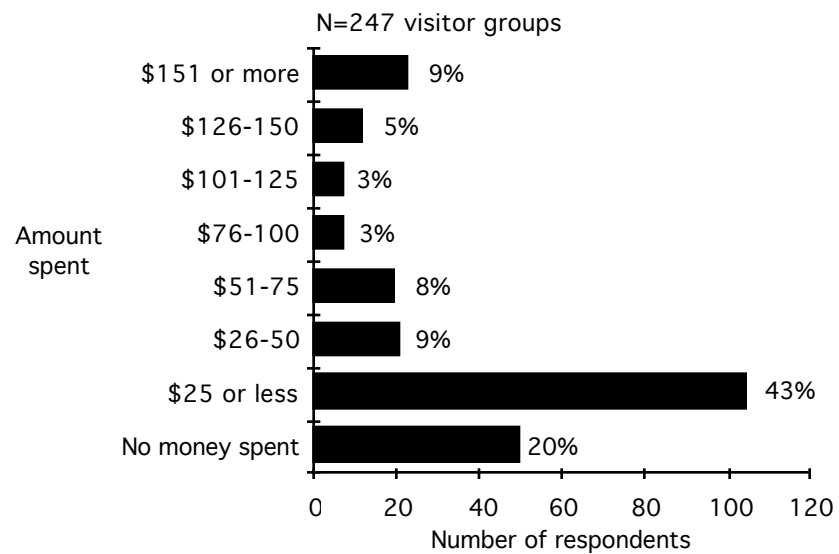


Figure 78: Visitor expenses for lodging in the park

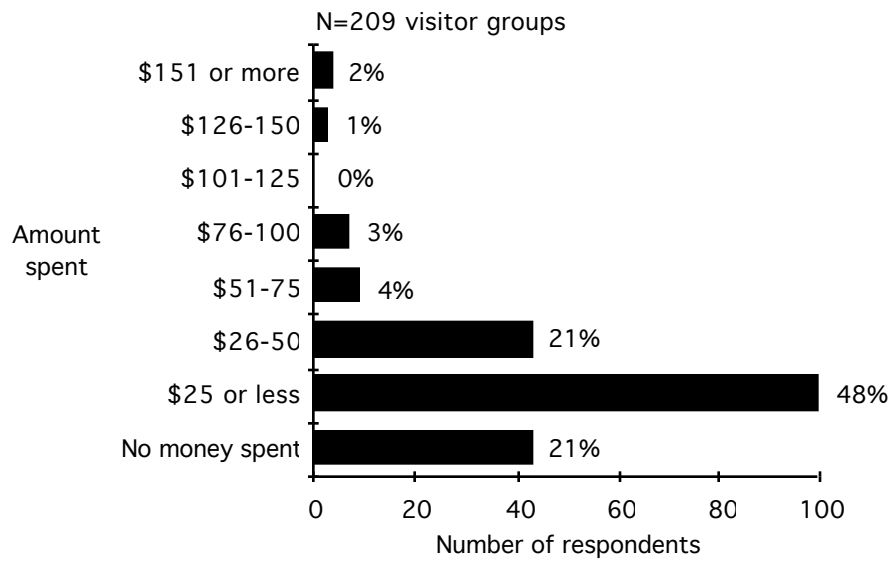


Figure 79: Visitor expenses for travel in the park

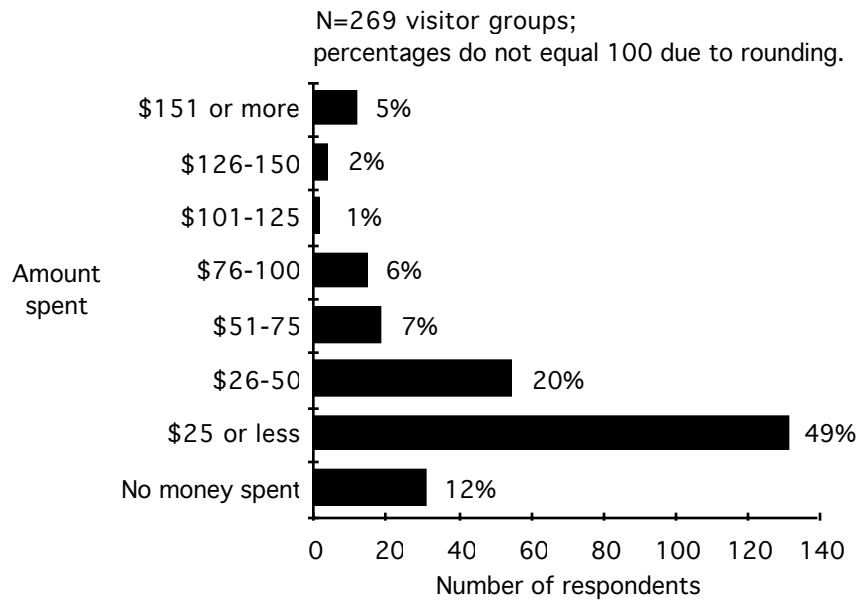


Figure 80: Visitor expenses for food in the park

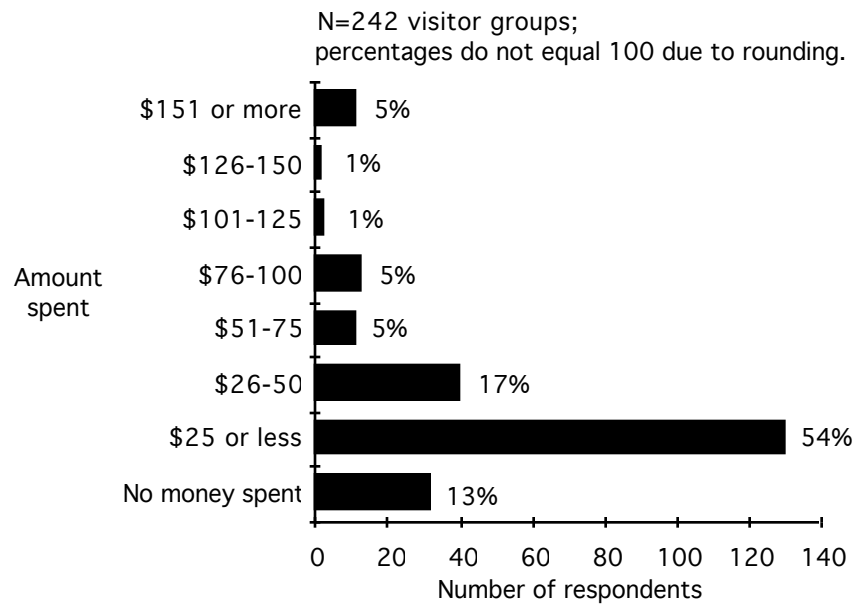


Figure 81: Visitor expenses for "other" items in the park

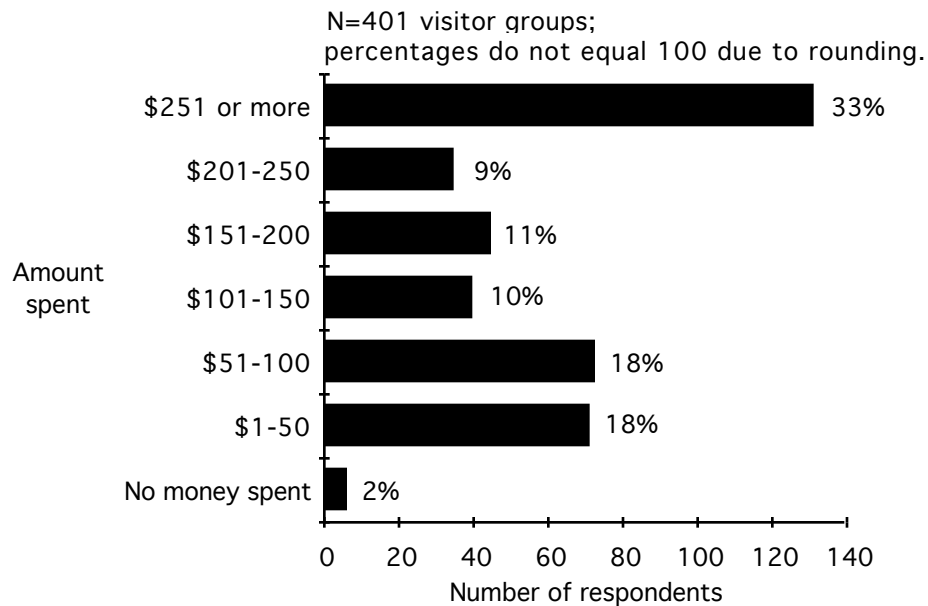


Figure 82: Total visitor expenditures outside the park (within 100 miles)

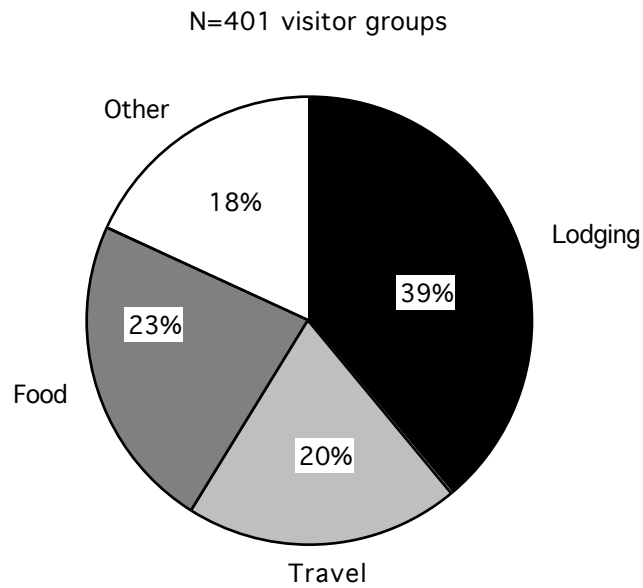


Figure 83: Proportion of visitor expenditures outside the park (within 100 miles) by category

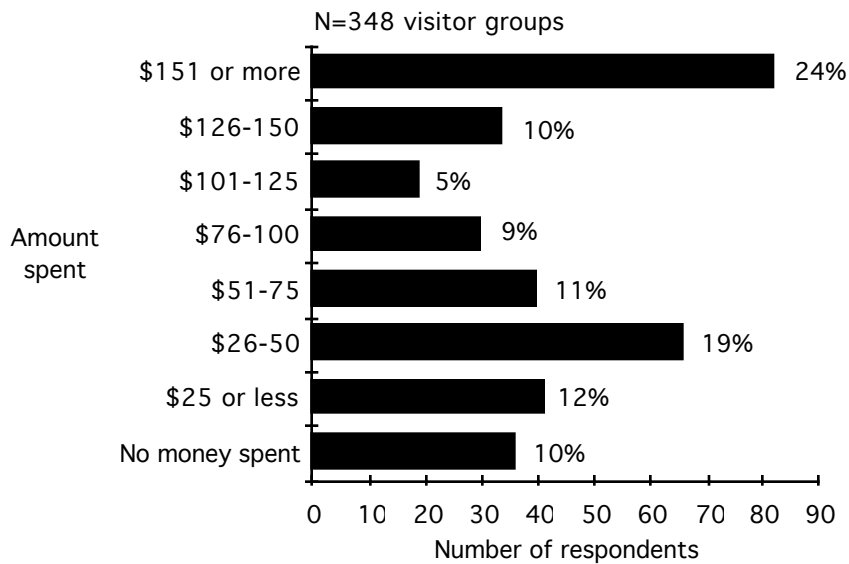


Figure 84: Visitor expenses for lodging outside the park (within 100 miles)

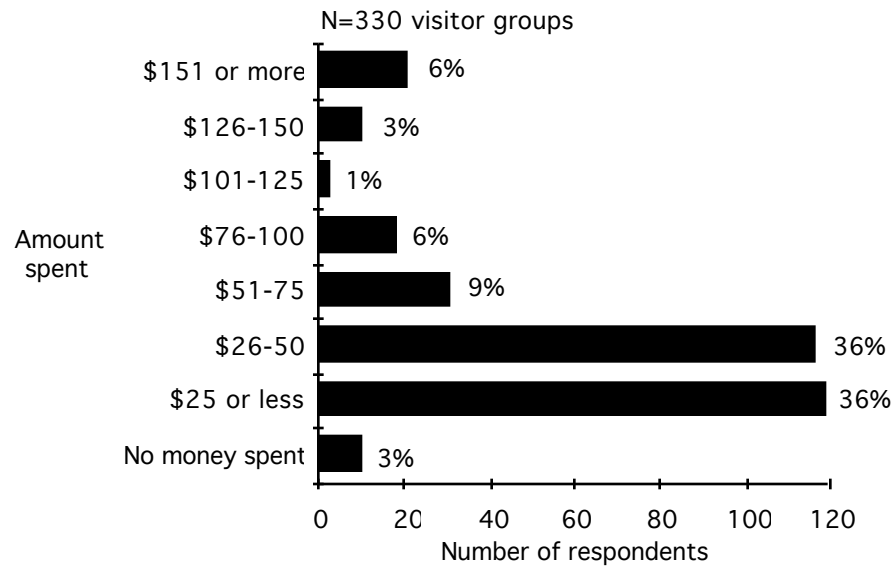


Figure 85: Visitor expenses for travel outside the park (within 100 miles)

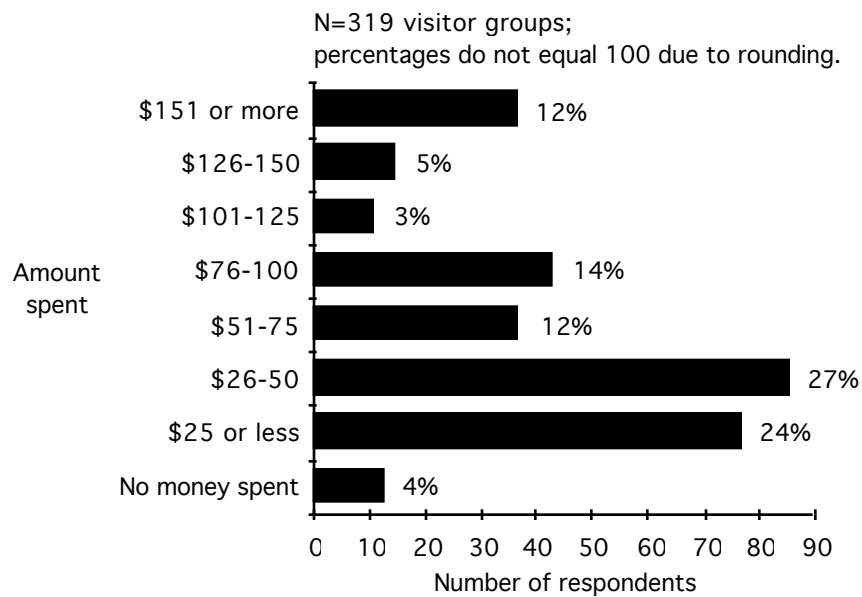


Figure 86: Visitor expenses for food outside the park (within 100 miles)

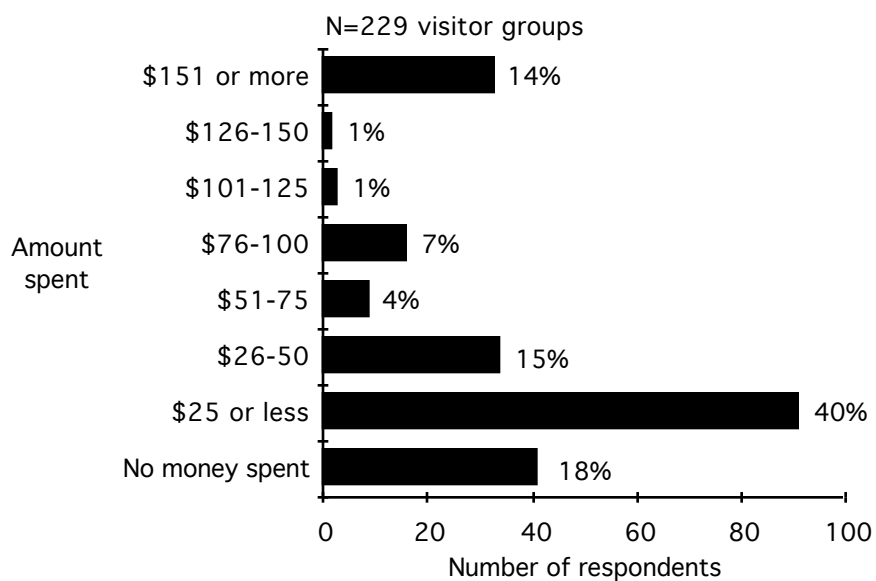


Figure 87: Visitor expenses for "other" items outside the park (within 100 miles)

**Future
educational
topics**

Visitors were asked what educational program topics would be most important to them during a future visit. Their comments are summarized in Table 3 below and in the appendix.

Table 3: Future educational topics

N=576 topics listed;
percentages do not equal 100 due to rounding.

| Topic | Number of times mentioned | % of visitors |
|------------------------------|------------------------------|------------------|
| History | 144 | 25 |
| Geology | 119 | 21 |
| Environmental concerns | 80 | 14 |
| Biology | 79 | 14 |
| Wildlife | 47 | 8 |
| Botany | 32 | 6 |
| Birding | 17 | 3 |
| Wildflowers | 11 | 2 |
| Ecology | 8 | 1 |
| Conserving the park | 5 | 1 |
| Desert environment/survival | 5 | 1 |
| Astronomy | 4 | 1 |
| Photography | 4 | 1 |
| International border/culture | 3 | 1 |
| Anthropology | 2 | <1 |
| Hiking/backcountry | 2 | <1 |
| Paleontology | 2 | <1 |
| Other topics (listed once) | 12 | 2 |

Many visitors wrote additional comments, which are included in the separate appendix of this report. Their comments are summarized below and in the appendix. Some comments offer specific suggestions on how to improve the park; others describe what visitors enjoyed or did not enjoy.

Comment Summary

Visitor Comment Summary

N=878 comments;
many visitors made more than one comment.

| Comment | Number of times mentioned |
|---------|------------------------------|
|---------|------------------------------|

PERSONNEL

NPS

| | |
|--|----|
| Staff friendly, helpful, knowledgeable | 45 |
| Employees unfriendly, unhelpful | 6 |
| Employees lacked area knowledge | 2 |
| Other comments | 2 |

Concession

| | |
|----------|---|
| Comments | 4 |
|----------|---|

Private Businesses

| | |
|---------------------|---|
| Raft guide comments | 2 |
|---------------------|---|

INTERPRETIVE SERVICES

Nonpersonal

| | |
|---|---|
| Provide more detailed written information | 8 |
| Maps need more detail, need improvement | 5 |
| Enjoyed nature trails | 4 |
| Publicize park more | 3 |
| Provide specific information for foreign visitors | 3 |
| Offer orientation program, shown regularly | 3 |
| Advertise activity schedule more widely, outside park | 3 |
| Need more roadside exhibits/interpretive signs | 3 |
| Improve information distribution | 3 |
| Provide more information at park entrances | 2 |
| Emphasize variety in park's geography | 2 |
| Self-guided trails should describe difficulty, length | 2 |
| Improve plant information/publications | 2 |
| Improve, expand museums | 2 |
| Other comments | 9 |

Personal

| | |
|--|---|
| Excellent ranger programs | 7 |
| Visitor center should provide campsite availability info | 7 |
| Need more ranger talks | 4 |
| Didn't attend ranger programs this time | 2 |
| Provide programs on specific subjects | 2 |
| Other comments | 2 |

FACILITIES AND MAINTENANCE**General**

| | |
|--|----|
| Park clean/well maintained | 19 |
| Improve women's restroom Panther Junction | 5 |
| Need more picnic areas | 5 |
| Need more restrooms at Panther Junction | 3 |
| Do more recycling/provide more containers | 2 |
| Observed safety problem | 2 |
| Improve restrooms | 2 |
| Restrooms/pit toilets good quality | 2 |
| Provide additional facilities for visitors | 2 |
| Other comments | 8 |

Campgrounds

| | |
|--|----|
| Need more RV hookup campsites | 18 |
| Need showers in other locations | 14 |
| Need more campsites | 11 |
| Campsites should be spaced further apart | 4 |
| Need more primitive campsites | 2 |
| Other comments | 11 |

Roads

| | |
|---|---|
| Improve road signing | 9 |
| Make unpaved roads passable to cars | 5 |
| Improve/pave Maverick road | 4 |
| Provide more turnouts along roads | 3 |
| Main roads need shoulders/widen | 3 |
| Need more shaded benches at overlooks | 2 |
| Enlarge Panther Junction visitor center parking | 2 |
| Improve unpaved road signing | 2 |
| Good/clear road signs | 2 |
| Roads in good condition | 2 |
| Safety problems along roads | 2 |
| Other comments | 4 |

Trails

| | |
|----------------------------------|---|
| Improve trail signing | 5 |
| Separate horse and hiking trails | 4 |
| Good trails | 2 |
| Other comments | 2 |

CONCESSION

| | |
|--|----|
| Add more lodging in park | 12 |
| No accommodations available in park | 8 |
| Improve motel quality | 7 |
| Gas should be more readily available | 5 |
| Gas too expensive | 4 |
| Need more restaurants in park | 4 |
| Improve restaurant service | 4 |
| Improve camper stores/supply availability | 4 |
| Provide radio and TV | 3 |
| Improve motel registration | 3 |
| Offer service not currently available | 3 |
| Restaurant/snack shops should be open more hours | 2 |
| Restaurants should offer healthier food options | 2 |
| Need better restaurants | 2 |
| Lodging too expensive | 2 |
| Suggestions for horseback rides | 2 |
| Motel good quality | 2 |
| Improve gas stations | 2 |
| Other comments | 5 |

POLICIES

| | |
|---|---|
| Concerned about loitering by cars at Boquillas | 3 |
| Dog rules too restrictive | 3 |
| Narrow roads dangerous-need warnings/restrictions | 3 |
| Campground rules not followed | 3 |
| Stealing from cars at border crossings shocking | 2 |
| Keep RV generators out of Basin | 2 |
| Take reservations for camping | 2 |
| Entrance fee should be paid at entrance | 2 |
| Change camping rules | 2 |
| Other comments | 5 |

RESOURCE MANAGEMENT

| | |
|--|---|
| Preserve park | 9 |
| No more development | 8 |
| Park conservation well done | 5 |
| Don't allow overcrowding/limit number of visitors | 5 |
| Experience has been diminished/too many people now | 4 |
| Saw only birds/where's other wildlife? | 3 |
| Too much development in Basin | 2 |
| Other comments | 6 |

VISITOR SERVICES PROJECT

| | |
|-------------------------------------|---|
| Sorry questionnaire was late | 3 |
| This is second questionnaire mailed | 2 |
| Other comment | 1 |

GENERAL IMPRESSIONS

| | |
|--|-----|
| Enjoyed visit | 123 |
| Beautiful | 55 |
| Will/hope to return | 50 |
| Enjoyed wildflowers | 35 |
| Short visit/not enough time | 17 |
| Return visit/visit often | 16 |
| Thanks | 11 |
| Enjoyed space/solitude/quiet | 10 |
| Enjoyed warm/dry weather | 10 |
| Keep up the good work | 9 |
| Enjoyed wildlife | 6 |
| Enjoyed raft trip | 5 |
| Grew up/live in west Texas | 5 |
| Enjoyed specific scenery in park | 5 |
| Enjoyed geology | 5 |
| People friendly | 4 |
| First visit | 3 |
| Park well managed | 3 |
| Age reduced our ability to do park activities | 2 |
| Enjoyed primitive camping | 2 |
| Brought friends/relatives to visit | 2 |
| RV's too large to take to Basin | 2 |
| RV size limited our access | 2 |
| A learning experience | 2 |
| Disappointed that access is limited by vehicle size/type | 2 |
| Enjoyed motorcycle riding in park | 2 |
| Other comments | 22 |
| Surrounding Area | |
| Enjoyed Ft. Davis facilities | 3 |
| Need more facilities near Big Bend | 2 |
| Enjoyed Stillwell Ranch/museum | 2 |
| Improve McDonald Observatory tours | 2 |
| Enjoyed Lajitas | 2 |
| Other comments | 4 |

MENU FOR FURTHER ANALYSIS

Park personnel who wish to see other tables, graphs, and maps to learn more about their visitors may request such information from the VSP. Two kinds of analyses are available:

1) Two-way comparisons compare two characteristics. For example, to learn about the overnight use by first time visitors, request a comparison of overnight use by first time visit; to help learn about the ages of visitors who attend ranger-led programs, request a comparison of visitor ages by ranger program attendance.

2) Three-way comparisons compare a two-way comparison to a third characteristic. For example, to learn about the sites visited by first time visitors who dayhiked on trails, request a comparison of (sites visited by first time visitors) by dayhike trail users; to learn about age group participation in a site activity, request a comparison of (age group by activity) by site visited.

Consult the list of characteristics for Big Bend visitors; then complete the appropriate blanks on the order form. Make a copy of the order form which follows the example below.

SAMPLE

Visitor Services Project Report 45
Analysis Order Form - Big Bend National Park

Date of request: _____
 Person requesting analysis: _____
 Phone number (commercial): _____

The following list has the variables available for comparison from the visitor survey conducted in your park. Use this list to find the characteristics for which you want to request additional two-way and three-way comparisons. Be as specific as possible--you may select a single program/service/facility instead of all that were listed in the questionnaire.

| | | |
|------------------------|--|--------------------------------|
| • Group size | • Sites visited | • Reasons for visit |
| • Group type | • Information sources | • Number of nights |
| • Age | • Visitor service use | • Overnight accommodations use |
| • State residence | • Visitor service importance | • Total expenses |
| • Country residence | • Visitor service quality | • Lodging expenses |
| • Number times visited | • Maint./concession service use | • Travel expenses |
| • Length of stay | • Maint./concession service importance | • Food expenses |
| • Activity | • Maint./concession service quality | • Other expenses |

Two-way comparisons (write in the appropriate variables from the above list)
Visitor ages by ranger program use
 _____ by _____
 _____ by _____

Three-way comparisons (write in the appropriate variables from the above list)
sites visited by first time visit by dayhikers
 _____ by _____ by _____
 _____ by _____ by _____

Special instructions It may be helpful to know what format you need, the purpose of the information, and so forth.

Mail to:
 Visitor Services Project, CPSU
 College of Forestry, Wildlife, and Range Sciences
 University of Idaho

**Visitor Services Project
Analysis Order Form
Big Bend National Park - Report 45**

Date of request: ____/____/____

Person requesting analysis: _____

Phone number (commercial): _____

The following list has the variables available for comparison from the visitor survey conducted in your park. Use this list to find the characteristics for which you want to request additional two-way and three-way comparisons. Be as specific as possible--you may select a single program/service/facility instead of all that were listed in the questionnaire.

- | | | |
|------------------------|--|--------------------------------|
| • Group size | • Sites visited | • Reasons for visit |
| • Group type | • Information sources | • Number of nights |
| • Age | • Visitor service use | • Overnight accommodations use |
| • State residence | • Visitor service importance | • Total expenses |
| • Country residence | • Visitor service quality | • Lodging expenses |
| • Number times visited | • Maint./concession service use | • Travel expenses |
| • Length of stay | • Maint./concession service importance | • Food expenses |
| • Activity | • Maint./concession service quality | • Other expenses |

Two-way comparisons (write in the appropriate variables from the above list)

_____ by _____
_____ by _____
_____ by _____

Three-way comparisons (write in the appropriate variables from the above list)

_____ by _____ by _____
_____ by _____ by _____
_____ by _____ by _____

Special instructions _____

Mail to:

**Visitor Services Project, CPSU
College of Forestry, Wildlife, and Range Sciences
University of Idaho
Moscow, Idaho 83843-4199**

QUESTIONNAIRE

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Visitor Services Project Publications

Reports 1-4 (pilot studies) are available from the University of Idaho Cooperative Park Studies Unit. All VSP reports listed below are available from the parks where the studies were conducted.

1985

- 5. North Cascades National Park Service Complex

1986

- 6. Crater Lake National Park

1987

- 7. Gettysburg National Military Park
- 8. Independence National Historical Park
- 9. Valley Forge National Historical Park
- 10. Colonial National Historical Park
- 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
- 22. Statue of Liberty National Monument
- 23. The White House Tours, President's Park
- 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
- 29. White Sands National Monument
- 30. National Monuments
- 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
- 39. Joshua Tree National Monument
- 40. The White House Tours, President's Park
- 41. Natchez Trace Parkway
- 42. Stehekin-North Cascades National Park/Lake Chelan National Rec. Area
- 43. City of Rocks National Reserve
- 44. The White House Tours, President's Park

1992

- 45. Big Bend National Park

For more information about the Visitor Services Project, please contact Dr. Gary E. Machlis, Sociology Project Leader, University of Idaho Cooperative Park Studies Unit, College of Forestry, Wildlife and Range Sciences, Moscow, Idaho 83843-4199 or call (208)885-7129.

Visitor Services Project

Big Bend National Park

Appendix

Visitor Services Project

Big Bend National Park

Appendix

Margaret Littlejohn

Report 45

January 1993

This volume contains a summary of visitors' comments for Question 15.
The summary is followed by their unedited comments.

Margaret Littlejohn is VSP Western Coordinator, National Park Service, based at the Cooperative Park Studies Unit, University of Idaho. I thank the staff at Big Bend National Park for their assistance with this study. This study was partially funded by the Big Bend Natural History Association. The VSP acknowledges the Public Opinion Lab of the Social and Economic Sciences Research Center, Washington State University, for its technical assistance.

Future educational topics

N=576 topics listed;
percentages do not equal 100 due to rounding.

| Topic | Number of times mentioned | % of visitors |
|------------------------------|------------------------------|------------------|
| History | 144 | 25 |
| Geology | 119 | 21 |
| Environmental concerns | 80 | 14 |
| Biology | 79 | 14 |
| Wildlife | 47 | 8 |
| Botany | 32 | 6 |
| Birding | 17 | 3 |
| Wildflowers | 11 | 2 |
| Ecology | 8 | 1 |
| Conserving the park | 5 | 1 |
| Desert environment/survival | 5 | 1 |
| Astronomy | 4 | 1 |
| Photography | 4 | 1 |
| International border/culture | 3 | 1 |
| Anthropology | 2 | <1 |
| Hiking/backcountry | 2 | <1 |
| Paleontology | 2 | <1 |
| Other topics (listed once) | 12 | 2 |

Visitor Comment Summary

N=878 comments;
many visitors made more than one comment.

| Comment | Number of times mentioned |
|---------|------------------------------|
|---------|------------------------------|

PERSONNEL

NPS

| | |
|--|----|
| Staff friendly, helpful, knowledgeable | 45 |
| Employees unfriendly, unhelpful | 6 |
| Employees lacked area knowledge | 2 |
| Other comments | 2 |

Concession

| | |
|----------|---|
| Comments | 4 |
|----------|---|

Private Businesses

| | |
|---------------------|---|
| Raft guide comments | 2 |
|---------------------|---|

INTERPRETIVE SERVICES

Nonpersonal

| | |
|---|---|
| Provide more detailed written information | 8 |
| Maps need more detail, need improvement | 5 |
| Enjoyed nature trails | 4 |
| Publicize park more | 3 |
| Provide specific information for foreign visitors | 3 |
| Offer orientation program, shown regularly | 3 |
| Advertise activity schedule more widely, outside park | 3 |
| Need more roadside exhibits/interpretive signs | 3 |
| Improve information distribution | 3 |
| Provide more information at park entrances | 2 |
| Emphasize variety in park's geography | 2 |
| Self-guided trails should describe difficulty, length | 2 |
| Improve plant information/publications | 2 |
| Improve, expand museums | 2 |
| Other comments | 9 |

Personal

| | |
|---|---|
| Excellent ranger programs | 7 |
| Visitor center should provide info on campsite availability | 7 |
| Need more ranger talks | 4 |
| Didn't attend ranger programs this time | 2 |
| Provide programs on specific subjects | 2 |
| Other comments | 2 |

FACILITIES AND MAINTENANCE
General

| | |
|--|----|
| Park clean/well maintained | 19 |
| Improve women's restroom Panther Junction | 5 |
| Need more picnic areas | 5 |
| Need more restrooms at Panther Junction | 3 |
| Do more recycling/provide more containers | 2 |
| Observed safety problem | 2 |
| Improve restrooms | 2 |
| Restrooms/pit toilets good quality | 2 |
| Provide additional facilities for visitors | 2 |
| Other comments | 8 |

Campgrounds

| | |
|--|----|
| Need more RV hookup campsites | 18 |
| Need showers in other locations | 14 |
| Need more campsites | 11 |
| Campsites should be spaced further apart | 4 |
| Need more primitive campsites | 2 |
| Other comments | 11 |

Roads

| | |
|---|---|
| Improve road signing | 9 |
| Make unpaved roads passable to cars | 5 |
| Improve/pave Maverick road | 4 |
| Provide more turnouts along roads | 3 |
| Main roads need shoulders/widen | 3 |
| Need more shaded benches at overlooks | 2 |
| Enlarge Panther Junction visitor center parking | 2 |
| Improve unpaved road signing | 2 |
| Good/clear road signs | 2 |
| Roads in good condition | 2 |
| Safety problems along roads | 2 |
| Other comments | 4 |

Trails

| | |
|----------------------------------|---|
| Improve trail signing | 5 |
| Separate horse and hiking trails | 4 |
| Good trails | 2 |
| Other comments | 2 |

CONCESSION

| | |
|---|----|
| Add more lodging in park | 12 |
| No accommodations available in park | 8 |
| Improve motel quality | 7 |
| Gas should be more readily available | 5 |
| Gas too expensive | 4 |
| Need more restaurants in park | 4 |
| Improve restaurant service | 4 |
| Improve camper stores/supply availability | 4 |
| Provide radio and TV | 3 |

| | |
|--|---|
| Improve motel registration | 3 |
| Offer service not currently available | 3 |
| Restaurant/snack shops should be open more hours | 2 |
| Restaurants should offer healthier food options | 2 |
| Need better restaurants | 2 |
| Lodging too expensive | 2 |
| Suggestions for horseback rides | 2 |
| Motel good quality | 2 |
| Improve gas stations | 2 |
| Other comments | 5 |

POLICIES

| | |
|---|---|
| Concerned about loitering by cars at Boquillas | 3 |
| Dog rules too restrictive | 3 |
| Narrow roads dangerous-need warnings/restrictions | 3 |
| Campground rules not followed | 3 |
| Stealing from cars at border crossings shocking | 2 |
| Keep RV generators out of Basin | 2 |
| Take reservations for camping | 2 |
| Entrance fee should be paid at entrance | 2 |
| Change camping rules | 2 |
| Other comments | 5 |

RESOURCE MANAGEMENT

| | |
|--|---|
| Preserve park | 9 |
| No more development | 8 |
| Park conservation well done | 5 |
| Don't allow overcrowding/limit number of visitors | 5 |
| Experience has been diminished/too many people now | 4 |
| Saw only birds/where's other wildlife | 3 |
| Too much development in Basin | 2 |
| Other comments | 6 |

VISITOR SERVICES PROJECT

| | |
|-------------------------------------|---|
| Sorry questionnaire was late | 3 |
| This is second questionnaire mailed | 2 |
| Other comment | 1 |

GENERAL IMPRESSIONS

| | |
|-----------------------------|-----|
| Enjoyed visit | 123 |
| Beautiful | 55 |
| Will/hope to return | 50 |
| Enjoyed wildflowers | 35 |
| Short visit/not enough time | 17 |
| Return visit/visit often | 16 |
| Thanks | 11 |

| | |
|--|----|
| Enjoyed space/solitude/quiet | 10 |
| Enjoyed warm/dry weather | 10 |
| Keep up the good work | 9 |
| Enjoyed wildlife | 6 |
| Enjoyed raft trip | 5 |
| Grew up/live in west Texas | 5 |
| Enjoyed specific scenery in park | 5 |
| Enjoyed geology | 5 |
| People friendly | 4 |
| First visit | 3 |
| Park well managed | 3 |
| Age reduced our ability to do park activities | 2 |
| Enjoyed primitive camping | 2 |
| Brought friends/relatives to visit | 2 |
| RV's too large to take to Basin | 2 |
| RV size limited our access | 2 |
| A learning experience | 2 |
| Disappointed that access is limited by vehicle size/type | 2 |
| Enjoyed motorcycle riding in park | 2 |
| Other comments | 22 |

Surrounding Area

| | |
|------------------------------------|---|
| Enjoyed Ft. Davis facilities | 3 |
| Need more facilities near Big Bend | 2 |
| Enjoyed Stillwell Ranch/museum | 2 |
| Improve McDonald Observatory tours | 2 |
| Enjoyed Lajitas | 2 |
| Other comments | 4 |
