



# **St. Croix National Scenic Riverway Visitor Study Summer 1999**

**Report 111**  
Visitor Services Project  
Cooperative Park Studies Unit





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# **St. Croix National Scenic Riverway**

## **Visitor Study** **Summer 1999**

Margaret Littlejohn

### **Visitor Services Project** **Report 111**

August 2000

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Margaret Littlejohn is VSP Coordinator, National Park Service, based at the Cooperative Park Studies Unit, University of Idaho. I thank Alyson Vander Stoep, Leigh Blackburn, Sara Kohan and the staff and volunteers of St. Croix National Scenic Riverway for their assistance with this study. The VSP acknowledges the Public Opinion Lab of the Social and Economic Sciences Research Center, Washington State University, for its technical assistance.

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**Visitor Services Project**  
**St. Croix National Scenic Riverway**  
**Report Summary**

- This report describes the results of a visitor study at St. Croix National Scenic Riverway during June 25 to July 3, 1999. A total of 747 questionnaires were distributed to visitors. Visitors returned 499 questionnaires for a 66.8% response rate. It was decided to remove a random sample of the questionnaires returned from the Lower River Visitor Center, where, based on park visitation statistics, too many questionnaires were distributed. The results which follow do not include data from the questionnaires which were removed.
- This report profiles St. Croix National Scenic Riverway visitors. A separate appendix contains visitors' comments about their visit. This report and the appendix include summaries of those comments.
- Sixty percent of the visitor groups were family groups. Thirty-three percent of visitor groups were groups of two and 20% were in groups of four. About one-third (32%) of visitors were aged 36-50 and 21% were aged 15 and younger. Fifty-one percent were female and 49% were male.
- United States visitors were from Minnesota (50%), Wisconsin (33%), Illinois (6%), and 27 other states. There were not enough international visitors to provide reliable information.
- Thirty-nine percent of visitors were making their first visit to St. Croix National Scenic Riverway. Most of the visitor groups (75%) spent less than a day at the park and 22% spent one to four days. Of those groups that spent less than a day at the park, 34% spent three or four hours. Visitors had visited the riverway in summer (97%), fall (43%), spring (36%) and winter (17%).
- On this visit, the most common activities were sightseeing (62%), visiting the visitor centers (51%) and viewing wildlife (51%). The most common activities reported for past visits included: canoeing (64%), sightseeing (64%), and viewing wildlife (62%).
- Some type of watercraft was used by 62% of the visitor groups. The most common types of watercraft used were canoes (64%) and tour boats (19%). About one-third of visitors (33%) who used canoes, kayaks or tubes rented them. Of those, 94% were rented from a local outfitter.
- The most used sources of information by visitor groups were previous visits (56%), friends and relatives (36%) and area signs (23%). Fifteen percent of visitors had received no information prior to their visit.
- Over one-half of visitors (55%) reported that St. Croix National Scenic Riverway was their primary destination for this trip. On this visit, the most commonly visited sites along the riverway were the St. Croix Falls Visitor Center (26%), Taylors Falls to Stillwater (24%) and Namekagon Visitor Center (18%). The most often listed reason for visiting was viewing scenery and wildlife (72%).
- When asked about the number of people they had seen on the riverway, 78% of the visitors said they had seen "neither too many, nor too few."
- In regard to the use, importance and quality of services and facilities, it is important to note the number of visitor groups that responded to each question. The services that were most used by 343 respondents were parking (60%), NPS visitor centers (55%) and restrooms (50%). The most important services were campsites (91% of 81 respondents) and private canoe/rentals (84% of 96 respondents). The best quality services were NPS visitor centers (88% of 179 respondents), highway directional signs (85% of 86 respondents) and restrooms (85% of 152 respondents).
- Thirty-five percent of visitors said they would be willing to pay a \$15.00 yearly user fee. Of those who were willing to pay the fee, 38% wanted it charged by vehicle and 27% by watercraft.
- Most visitor groups (92%) rated the overall quality of visitor services at St. Croix National Scenic Riverway as "very good" or "good." Visitors made many other comments.

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

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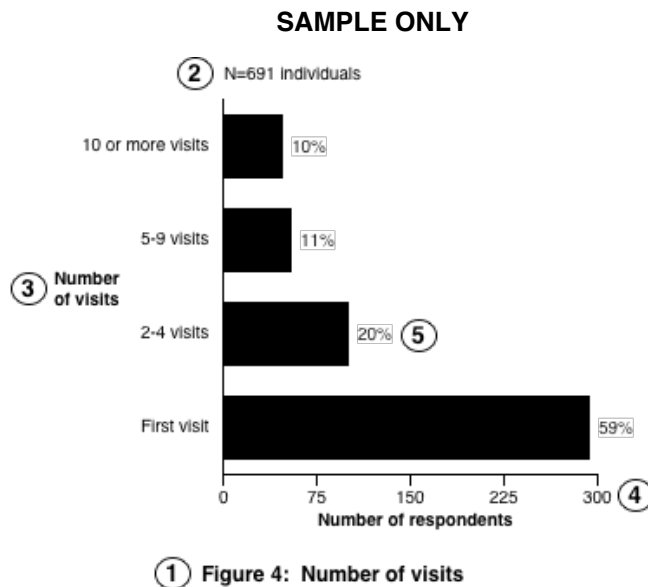


## INTRODUCTION

This report describes the results of a study of visitors at St. Croix National Scenic Riverway, referred to as St. Croix NSR. This visitor study was conducted June 25 - July 3, 1999 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. A **Results** section follows, including a summary of visitor comments. Next, an **Additional Analysis** page helps managers request additional analyses. The final section has 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 are comparable with VSP studies conducted at other parks; others were customized for St. Croix National Scenic Riverway. A copy of the questionnaire is included at the end of this report.

Questionnaires were distributed to a sample of visitors who arrived at St. Croix National Scenic Riverway during the period from June 25 - July 3, 1999. Visitors were randomly sampled as they entered the riverway at the locations listed in Table 1, based on information about visitor use provided by park staff.

**Table 1: Questionnaire distribution and returns**  
percentages do not equal 100 due to rounding.

Q. distribution location	# Q. distributed	% of total Q. distributed	# Q. returned	% of total Q. returned
Lower River Visitor Center	209	28	19*	5
Osceola Landing	24	3	17	5
MN Interstate State Park	33	4	20	5
Wild Mountain Tour Boat	86	7	54	14
St. Croix Falls Visitor Center	60	8	42	11
Hwy 70/Wayside Landing	8	1	8	2
Marshland Visitor Center	121	16	82	21
Wild River Outfitters	12	2	11	3
Nelson Landing	2	<1	2	1
Norway Point	1	<1	1	<1
Riverside Landing	1	<1	1	<1
Namekagon Trail Bridge	0	0	0	0
County K Landing	31	4	24	6
Jack's Canoe Rentals	77	10	41	11
Log Cabin Outfitters	8	1	7	2
Namekagon Visitor Center	53	7	38	10
Earl Park	20	3	10	3
Stinnett Landing	1	<1	1	<1
Hayward Landing	0	0	0	0
Questionnaires returned with ID numbers removed by respondents			4	1
<b>Totals</b>	<b>747</b>	<b>100%+</b>	<b>382</b>	<b>100%+</b>

\* Through park visitation statistics, it was determined that too many questionnaires had been distributed at the Lower River Visitor Center. To reduce bias, a random sample of the questionnaires returned from the Lower River Visitor Center were dropped from the final results shown in this report.

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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. This individual was given a questionnaire and was asked his or her name, address and telephone number for the later mailing of a reminder-thank you postcard. Visitor groups were asked to complete the questionnaire during or after their visit and return it by mail.

**Questionnaire  
design and  
administration  
(continued)**

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. Eight weeks after the survey, second replacement questionnaires were mailed to visitors who still had not returned their questionnaires.

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

**Data analysis**

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This study collected information on both visitor groups and individual group members. Thus, the sample size ("N"), varies from figure to figure. For example, while Figure 1 shows information for 378 visitor groups, Figure 6 presents data for 1,364 individuals. A note above each graph specifies the information illustrated.

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

Occasionally, a respondent may not have answered all of the questions, or may have answered some incorrectly. Unanswered questions result in missing data and cause the number in the sample to vary from figure to figure. For example, although 382 questionnaires were returned by St. Croix National Scenic Riverway visitors, Figure 1 shows data for only 378 respondents.

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

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**Limitations**

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

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

2. The data reflect visitor use patterns of visitors to the selected sites during the study period of June 25 - July 3, 1999. The results do not necessarily apply to visitors during other times of the year.

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

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**Special conditions**

The 10-day period of the visitor study was quite rainy and cool at times, which may have limited the number of visitors using the riverway and the length of time they spent.

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## RESULTS

At St. Croix National Scenic Riverway, 842 visitor groups were contacted, and 747 of these groups (89%) accepted questionnaires. Questionnaires were completed and returned by 499 visitor groups, resulting in a 66.8% response rate for this study, including the oversample at the Lower River Visitor Center (see Methods Section, Table 1). The Lower River Visitor Center oversample results are not included in the results which follow.

### Visitors contacted

Results are usually accurate to within 6 percentage points for simple questions, and are somewhat less accurate for more complex ones. The results are statistically significant at the .05 level. This means that if different samples had been drawn, the results would have been similar 95 out of 100 times.

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

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

Variable	Total sample		Actual respondents	
	N	Avg.	N	Avg.
Age of respondents	738	41.6	368	43.2
Group size	747	5.1	378	4.9

Figure 1 shows visitor group sizes, which ranged from one person to 35 people. Thirty-three percent of visitor groups consisted of two people, while another 20% were groups of four. Sixty percent of visitor groups were made up of family members, 17% were made up of family and friends and 13% were made up of friends (see Figure 2). Groups listing themselves as “other” for group type included summer camp and work groups.

### Demographics

## Demographics (continued)

Only 3% of the visitor groups were travelling with a guided tour or school group (see Figure 3). Figure 4 shows the tour group sizes, but the number of respondents was too small to provide reliable information.

Figure 5 indicates that there were slightly more female (51%) than male visitors (49%). As shown in Figure 6, the most common visitor age groups were in the 36-50 range (32%). Another 21% of visitors were in the 15 or younger age groups. Thirty-nine percent of visitors were making their first visit to the park, while 61% of visitors had visited the park previously (see Figure 7).

There were not enough international visitors to St. Croix National Scenic Riverway to provide reliable information (see Table 3). The largest proportions of United States visitors were from Minnesota (50%), Wisconsin (33%), and Illinois (6%). Smaller proportions of U.S. visitors came from another 27 states (see Map 1 and Table 4).

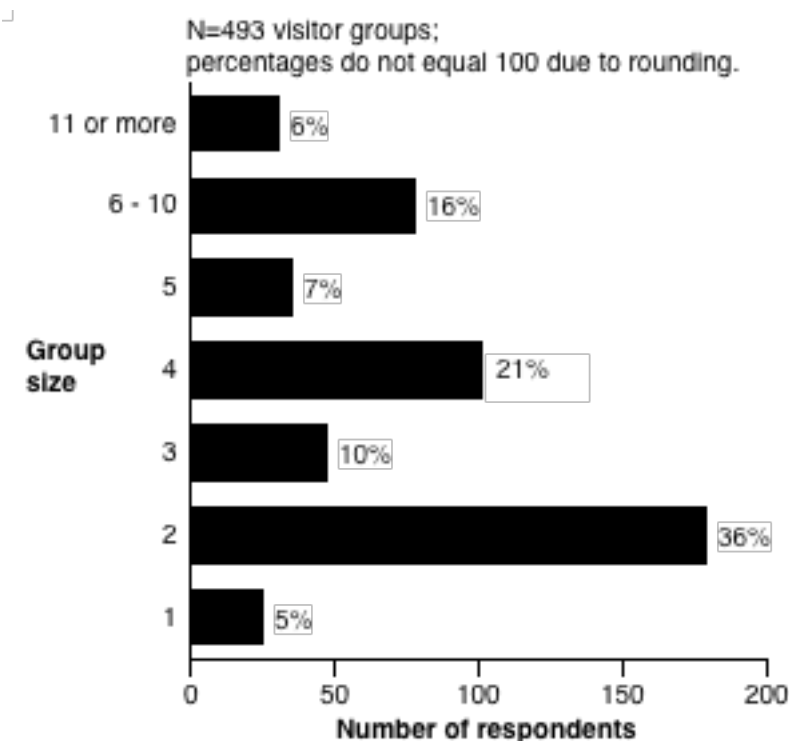


Figure 1: Visitor group sizes

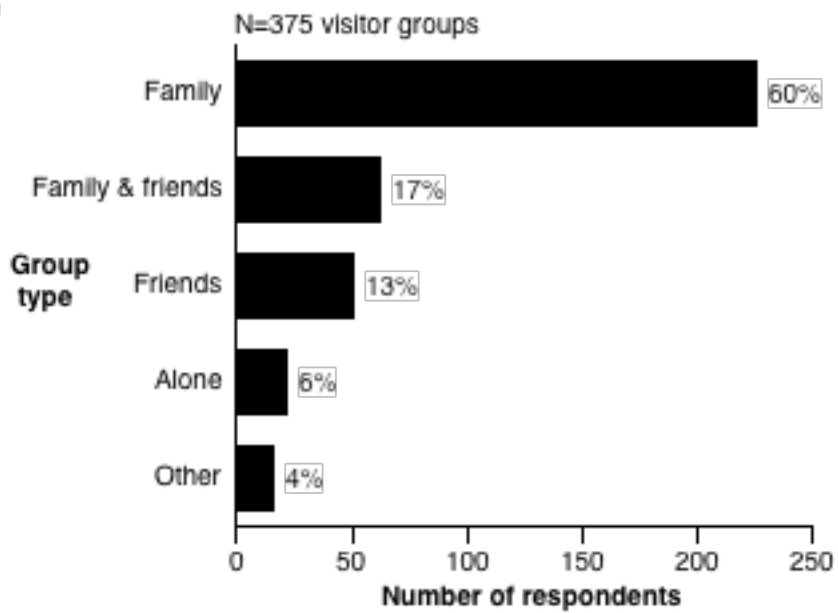


Figure 2: Visitor group types

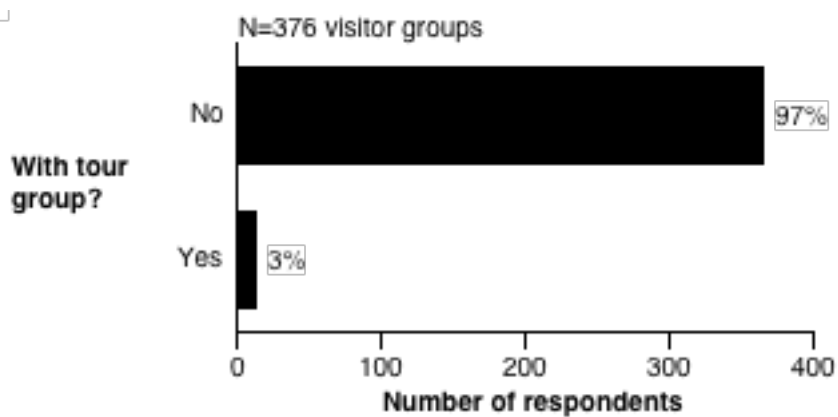


Figure 3: With guided tour or school group?

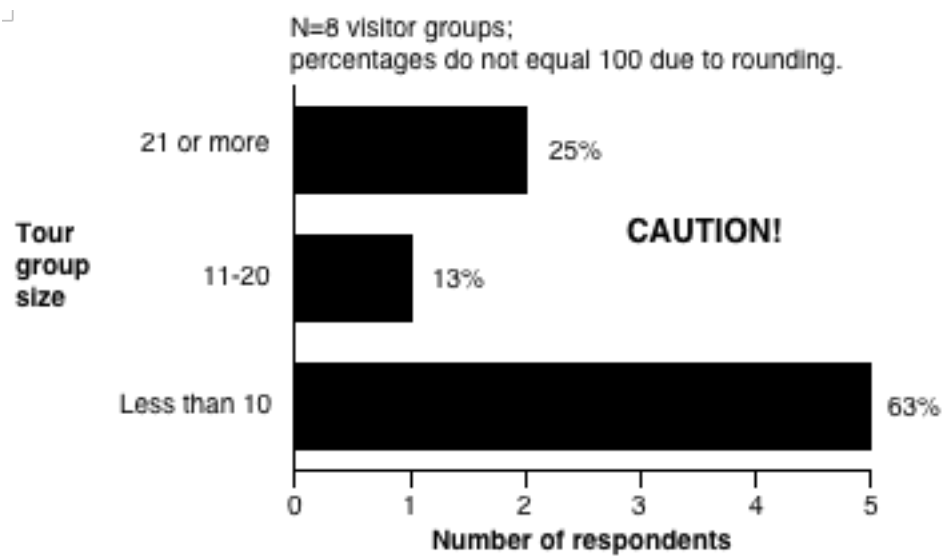


Figure 4: How many in the guided tour or educational group?

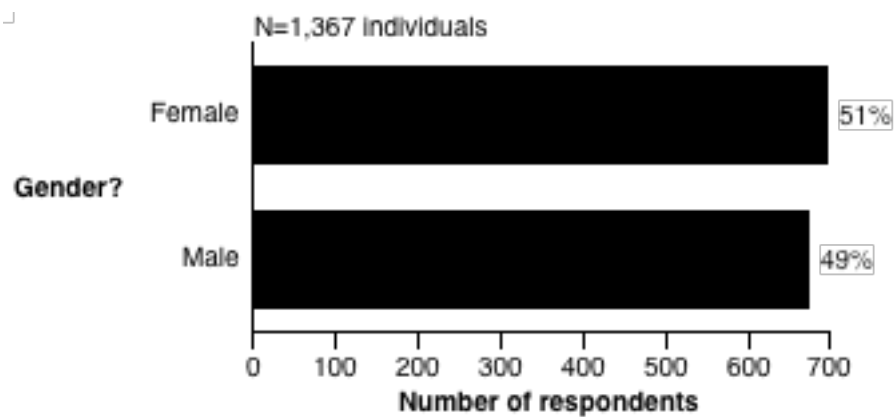


Figure 5: Gender of visitors



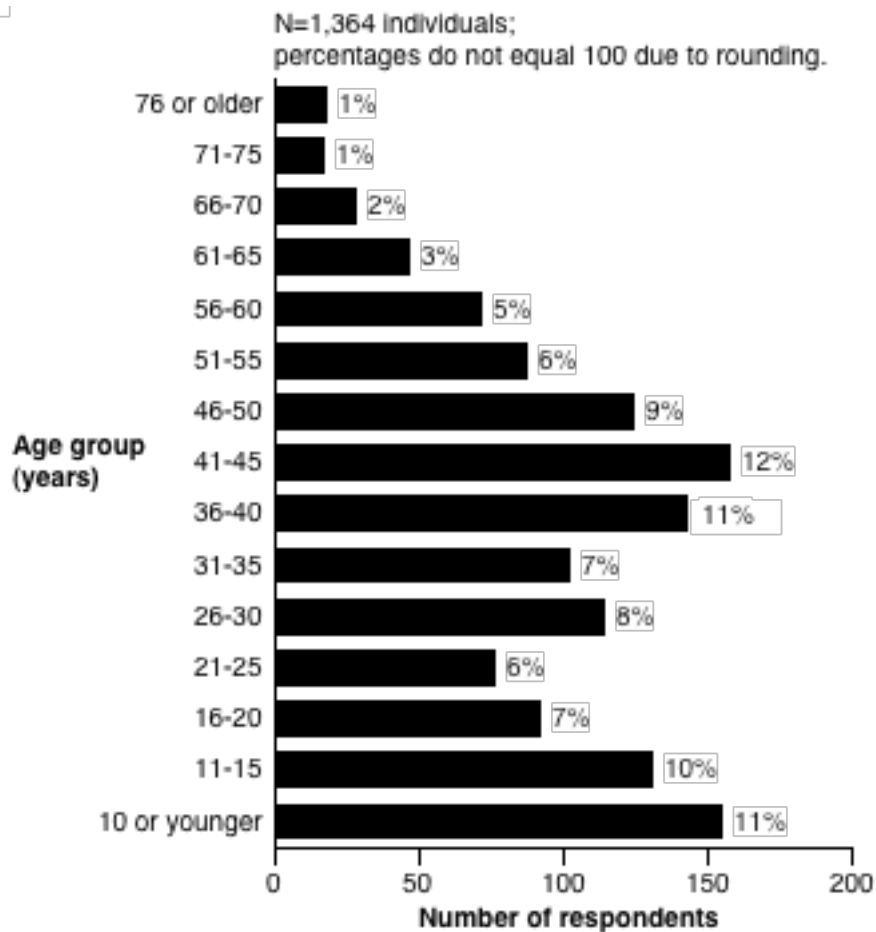


Figure 6: Visitor ages

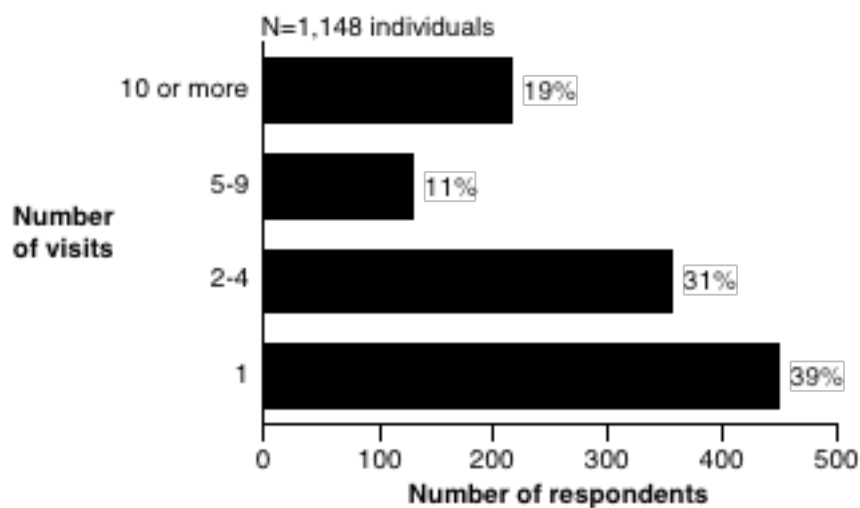


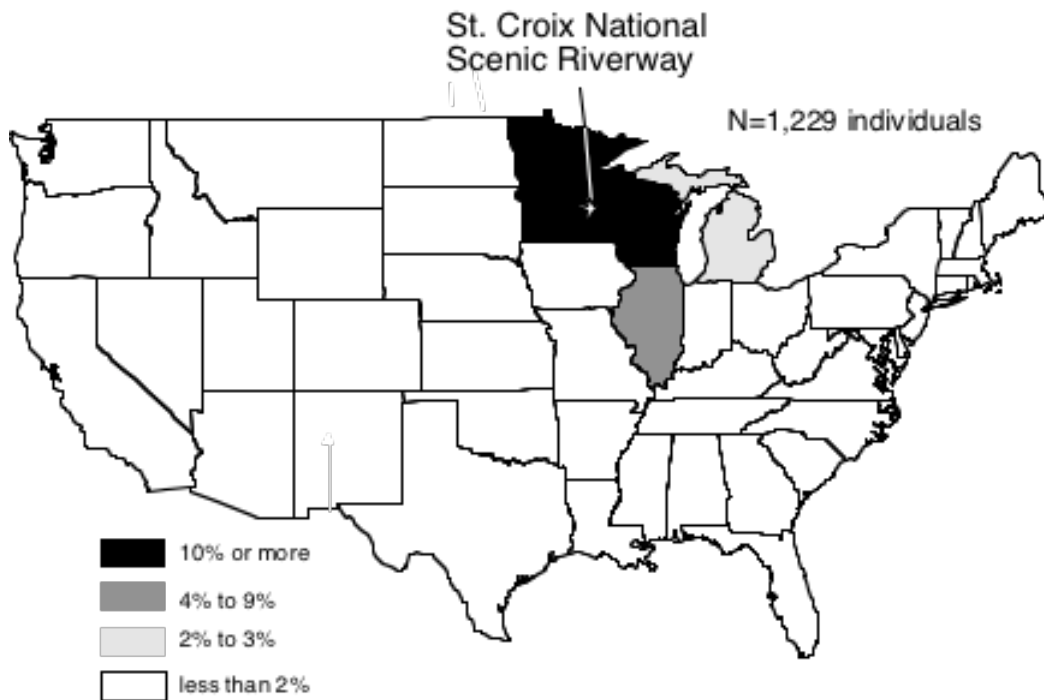
Figure 7: Number of visits

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

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

**CAUTION!**

State	Number of individuals	Percent of International visitors	Percent of total visitors
Sweden	3	25	<1
Japan	2	17	<1
England	1	8	<1
Germany	1	8	<1
Nigeria	1	8	<1
Northern Ireland	1	8	<1
Saudi Arabia	1	8	<1
Scotland	1	8	<1
Spain	1	8	<1



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

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

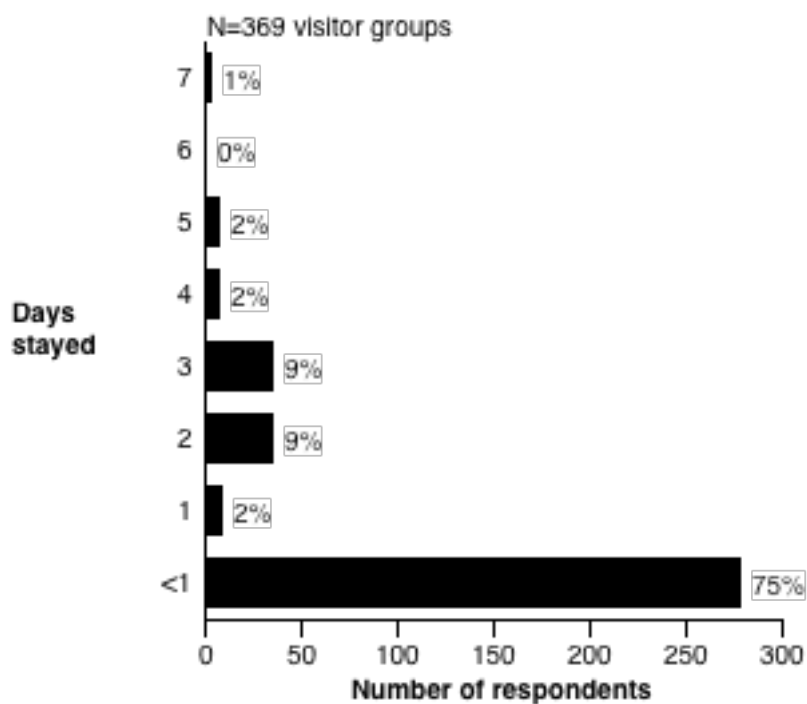
N=1,229 individuals;  
percentages do not equal 100 due to rounding

State	Number of individuals	Percent of U.S. visitors	Percent of total visitors
Minnesota	614	50	50
Wisconsin	404	33	33
Illinois	73	6	6
Michigan	20	2	2
Iowa	16	1	1
North Dakota	11	1	1
California	9	1	1
Colorado	7	1	1
Kansas	7	1	1
Nebraska	6	1	1
New York	5	<1	<1
Ohio	5	<1	<1
Alabama	4	<1	<1
Arkansas	4	<1	<1
Indiana	4	<1	<1
New Mexico	4	<1	<1
South Dakota	4	<1	<1
Tennessee	4	<1	<1
Washington	4	<1	<1
11 other states	24	2	2

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**Length of stay**

Visitor groups were asked how much time they spent at St. Croix National Scenic Riverway. Seventy-five percent of visitor groups spent less than one day on the riverway; 18% spent two to three days (see Figure 8). Of the groups that spent less than a day on the riverway, 66% reported that they spent from one to four hours, while 21% spent five to six hours (see Figure 9).



**Figure 8: Days spent at St. Croix National Scenic Riverway**

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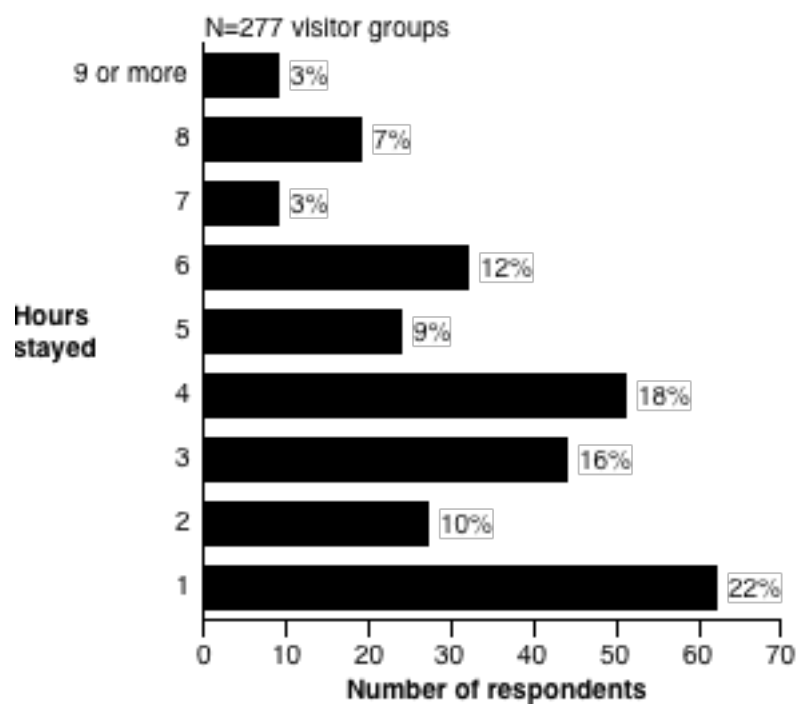


Figure 9: Hours spent at St. Croix National Scenic Riverway

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**Activities/  
watercraft use**

Visitors were asked to identify the most common activities they participated in during this visit and past visits. Common visitor activities on this visit to St. Croix National Scenic Riverway included sightseeing (62%), viewing wildlife (51%), and visiting the visitor centers (51%), as shown in Figure 10. Visitor groups participated in a number of "other" activities, including taking a paddleboat tour, rest stop and family bonding.

During past visits, common activities included canoeing (64%), sightseeing (64%), viewing wildlife (62%), walking/hiking (54%) and visiting the visitor centers (52%), as shown in Figure 11. "Other" past activities identified by visitor groups included family bonding and rock climbing. Table 5 lists the activities visitors considered to be most important on this visit.

Visitors were also asked if they used some type of watercraft during their visit and if so, what type of watercraft they had used. Over one-half (62%) of the visitors reported using some type of watercraft (see Figure 12). Of these, 64% used canoes, 19% tour boats, and 17% used inner tubes, as shown in Figure 13. "Other" types of watercraft used included paddle boats and rubber rafts.

Visitors were asked whether they had rented a canoe, kayak or inner tube on this trip and if so, whether they had rented from a local (within 5 miles of the riverway) outfitter. About one-third of the visitor groups (33%) rented watercraft (see Figure 14). Of those who rented canoes, kayaks or inner tubes, most groups (94%) rented from a local outfitter, as shown in Figure 15.

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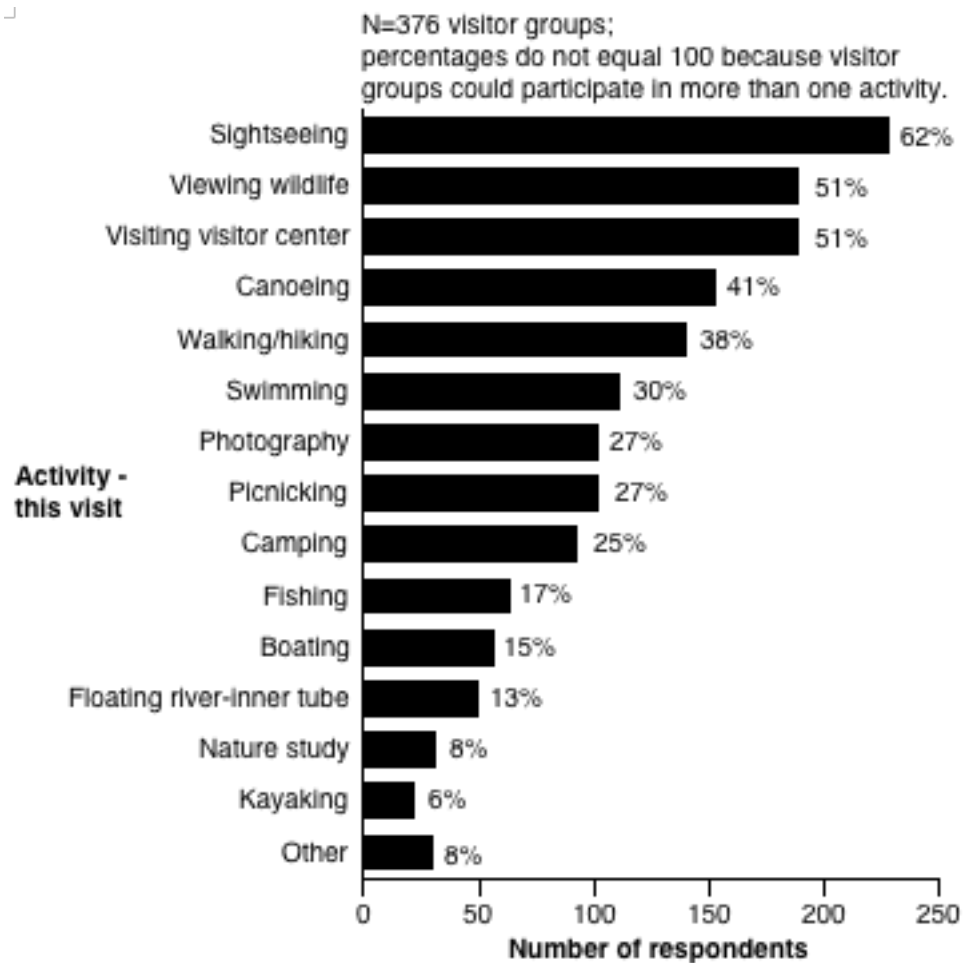
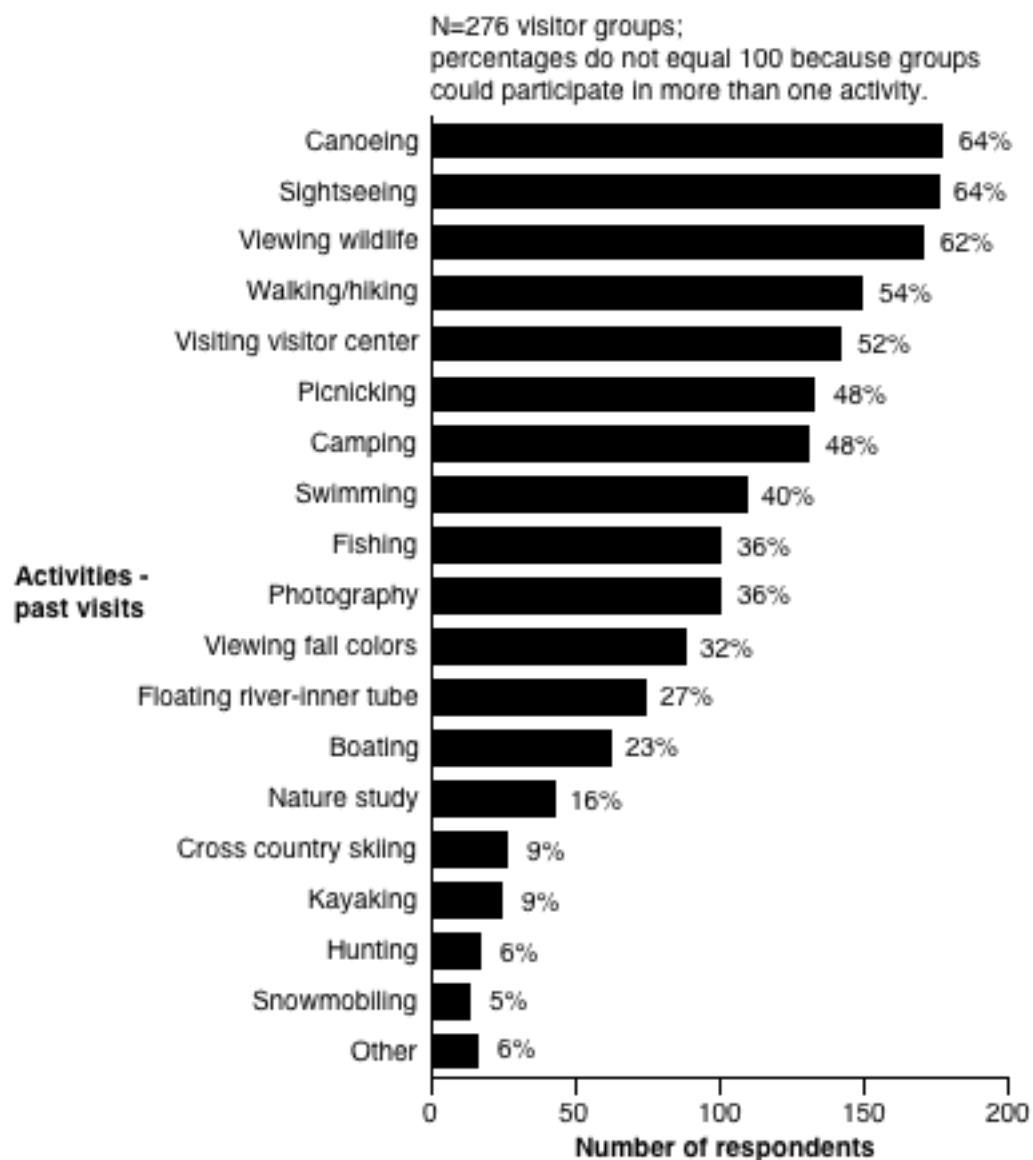


Figure 10: Visitor activities during this visit



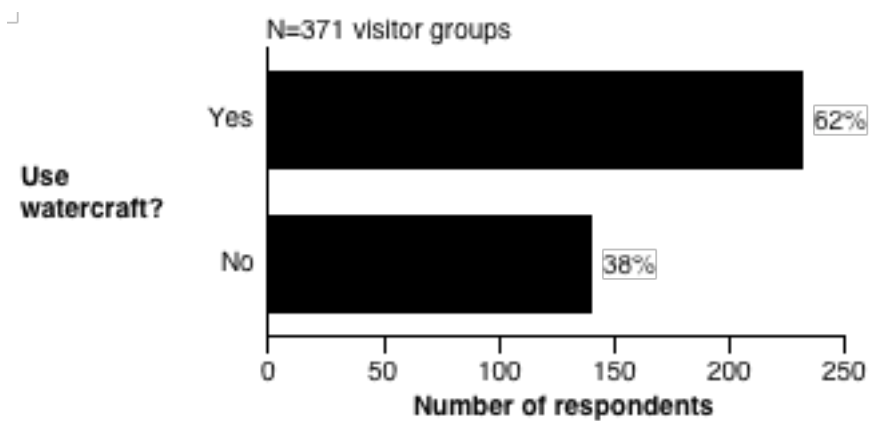
**Figure 11: Visitor activities during past visits**



**Table 5: Most important activities on this visit**

N=329 comments

Activity	Number of times mentioned
Canoeing	106
Sightseeing	44
Walking/hiking	27
Boat trip	22
Inner tubing	20
Camping	18
Visiting visitor center	16
Fishing	15
Viewing wildlife	10
Swimming	8
Using restrooms	7
Picnicking	6
Kayaking	5
Obtaining information	4
Viewing scenery/wildlife	4
Photography	3
Family bonding	2
Hunting	2
Other	10

**Figure 12: Use any type of watercraft?**

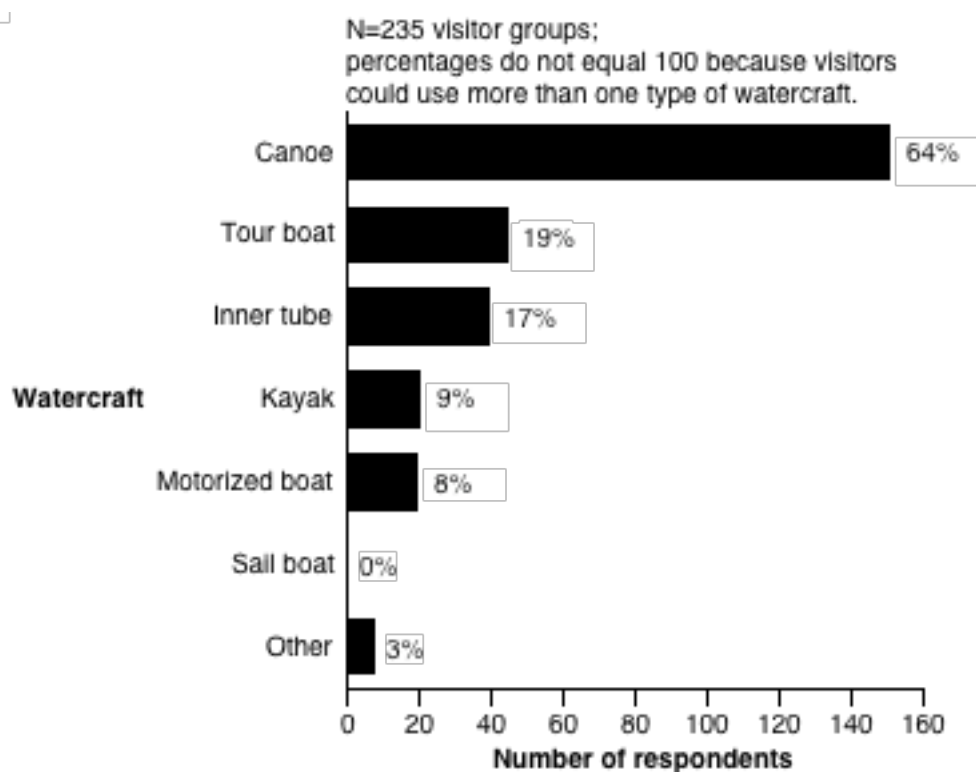


Figure 13: Type of watercraft used on this visit

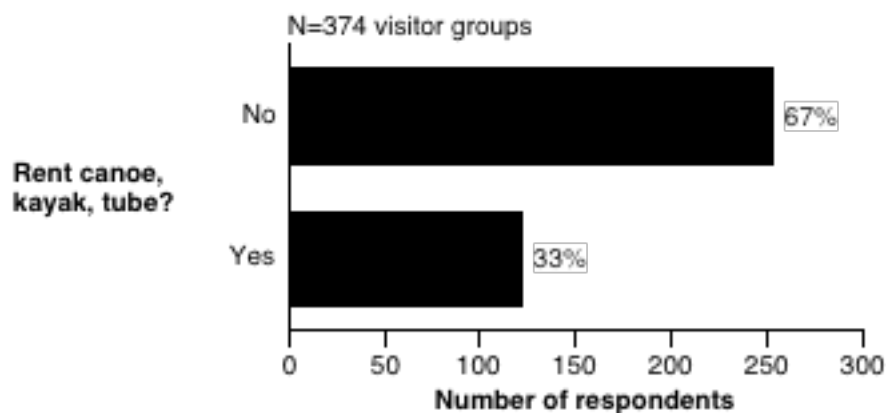
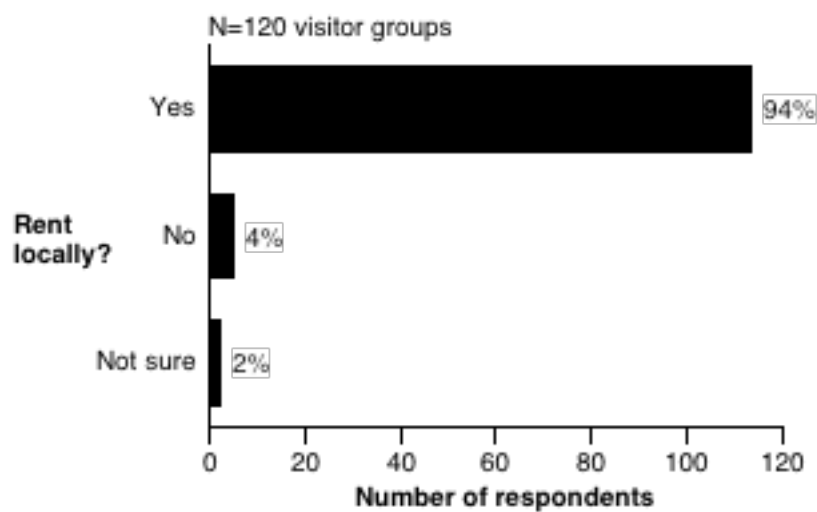


Figure 14: Did your group rent a canoe, kayak or inner tube?



**Figure 15: Did you rent from a local (within 5 miles of riverway) outfitter?**

## Sources of Information

Visitor groups were asked to indicate the sources they used to plan their visit to St. Croix National Scenic Riverway prior to their visit. Fifty-six percent of visitor groups received information during previous visits, 36% from friends or relatives and 23% from area signs (see Figure 16). Fifteen percent of visitor groups received no information prior to their visit. The least used sources were TV/radio and special events publicity (each 1%). "Other" sources of information used by visitor groups included living nearby currently or in the past, seeing the riverway while driving through the area, Department of Natural Resources' maps and Minnesota Tourism services.

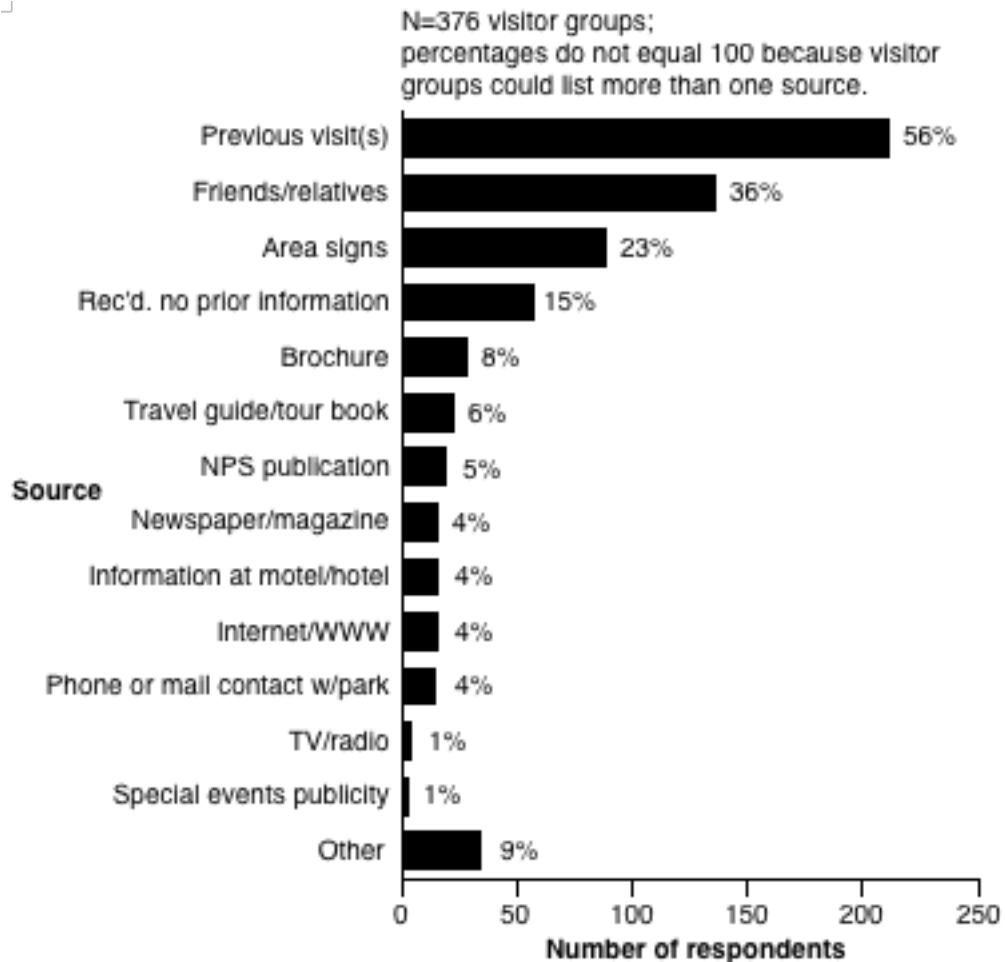


Figure 16: Sources of information used by visitors

As shown in Figure 17, when asked how their visit fit into their travel plans, over one-half (55%) of the visitor groups indicated that it was their primary destination. Twenty-six percent said that it was one of several destinations and 19% responded that it was not a planned destination.

### Travel plans

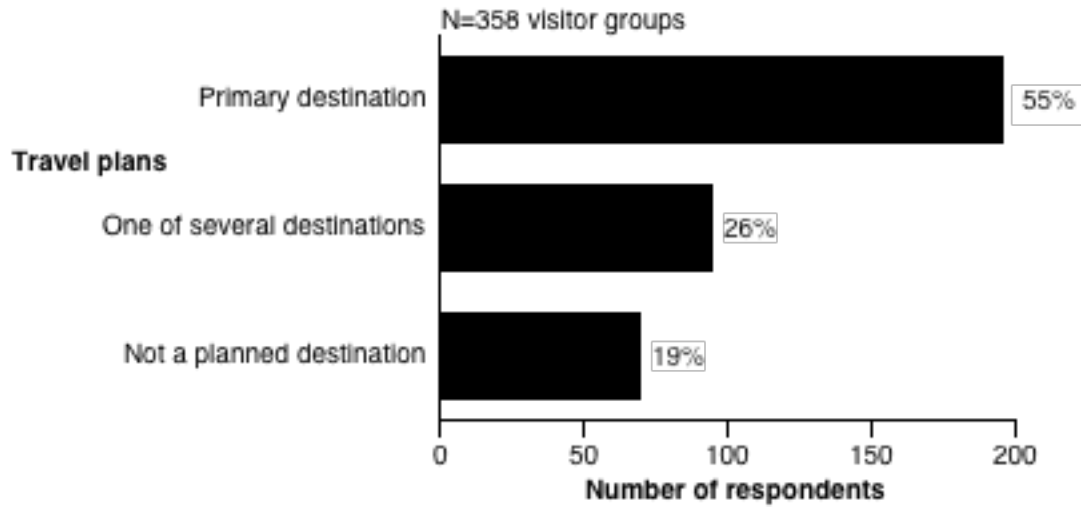


Figure 17: How did visit fit into travel plans?

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**Awareness of  
how St. Croix  
NSR is managed**

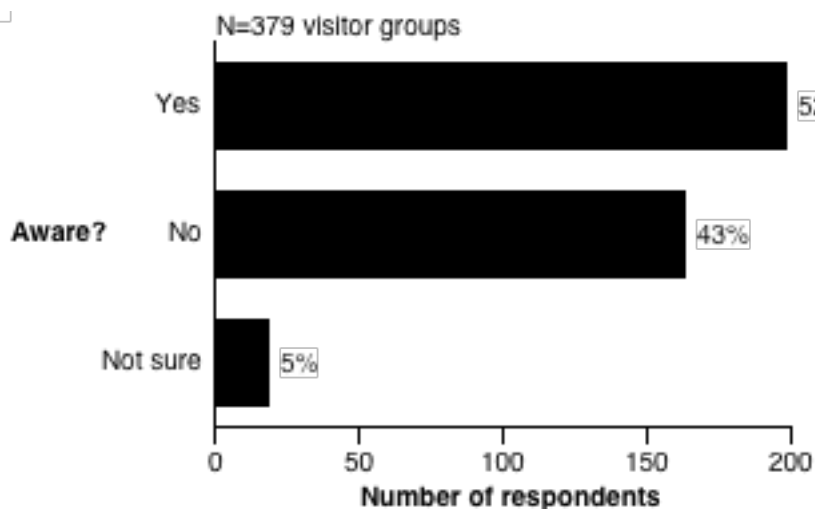
Visitor groups were asked if, prior to their visit, they were aware of several aspects of the way St. Croix National Scenic Riverway is managed.

Just over one-half of the groups (52%) were aware that the riverway was a unit of the National Park System and 43% were not aware (see Figure 18).

Over one-half of groups (57%) were aware that the river is a National Wild and Scenic River and 40% were not (see Figure 19).

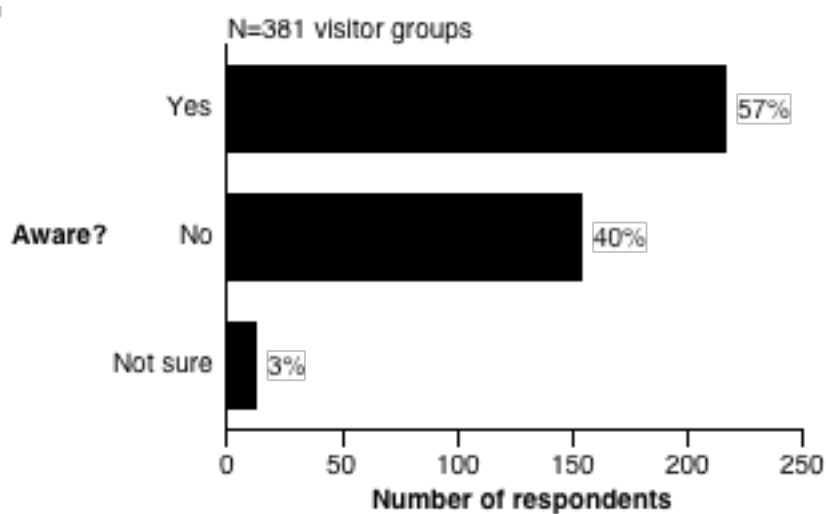
Over one-half of groups (57%) were aware that St. Croix National Scenic Riverway was set aside to protect the natural and scenic resources for present and future generations and 39% were not (see Figure 20).

One-half of visitor groups (50%) knew that visitors were required to pack out their garbage and 46% were not aware about that requirement (see Figure 21).

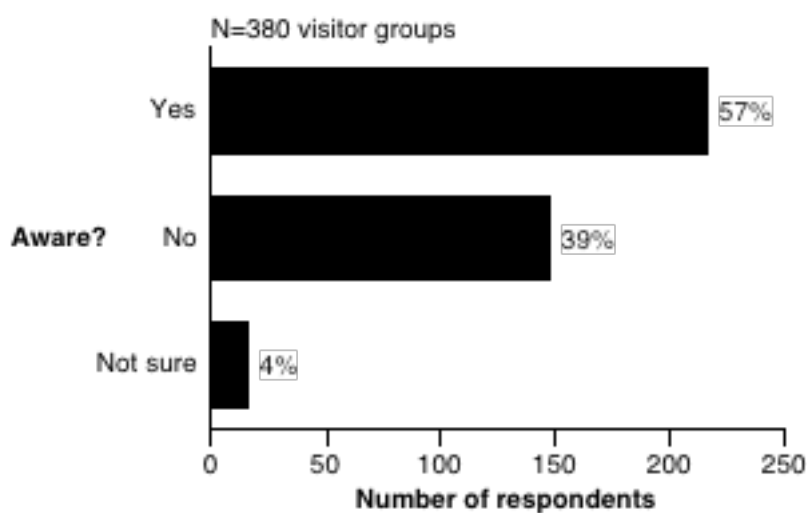


**Figure 18: Awareness that St. Croix NSR is a unit of the National Park System**

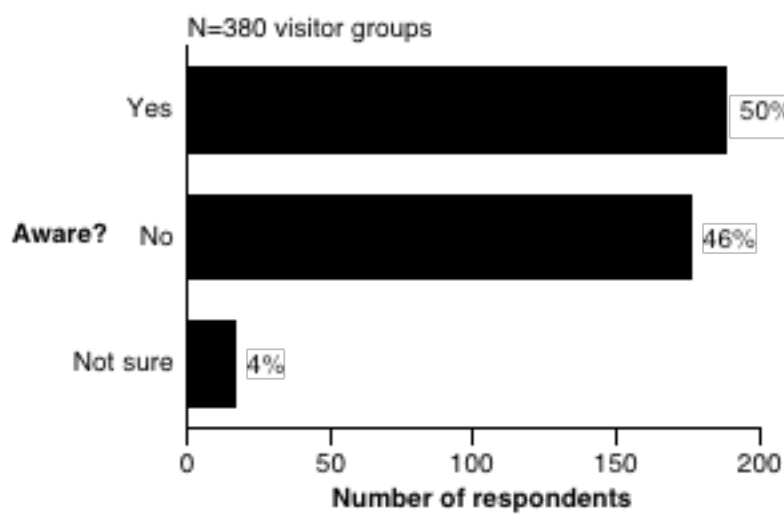
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**Figure 19: Awareness that St. Croix NSR is a National Wild and Scenic River?**



**Figure 20: Awareness that St. Croix NSR was set aside to protect resources for present and future generations?**



**Figure 21: Awareness that St. Croix NSR requires visitors to pack out garbage?**



Visitors were asked to list their reasons for visiting the riverway on this trip. The most frequently listed reasons were viewing the scenery/ wildlife (72%), canoeing/boating on a wild and scenic river (49%), and experiencing solitude/quiet (37%), as shown in Figure 22. The least often listed reason was educational opportunities (12%). "Other" reasons that visitors gave included using the restroom, obtaining information and visiting the area for other reasons.

### Reasons for visiting

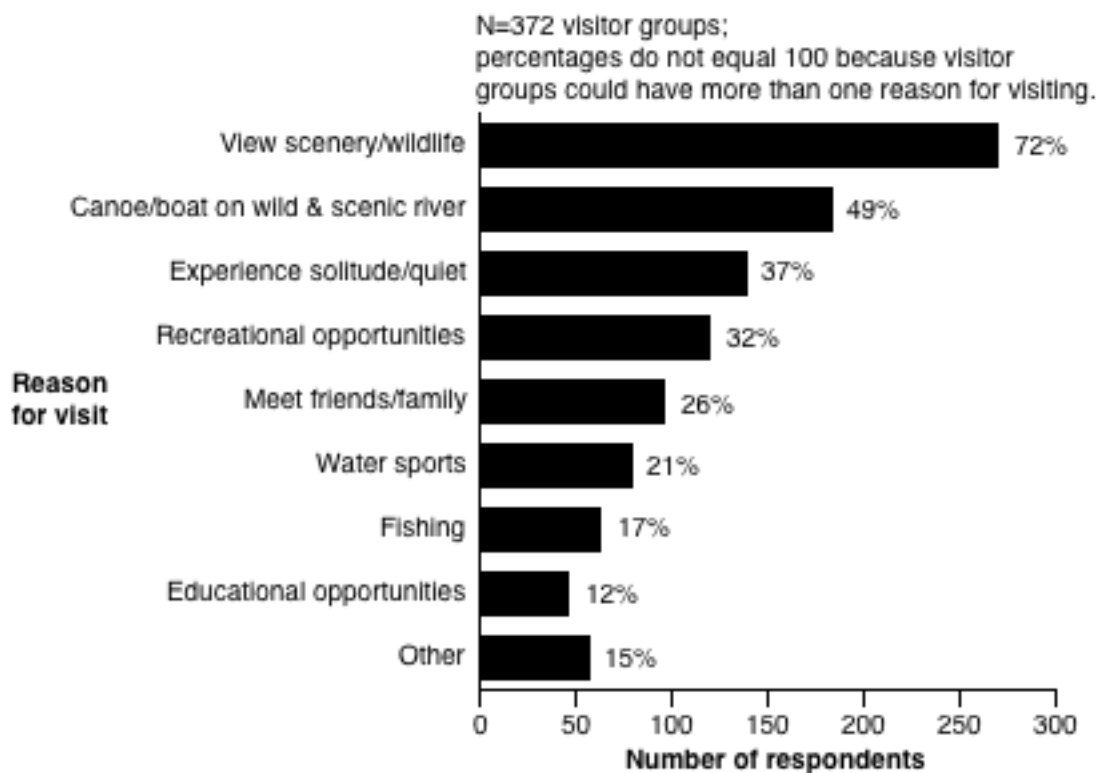


Figure 22: Reasons for visiting

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**River sections  
visited/effects of  
management  
zones on visitation**

Visitor groups were asked to indicate the river sections that they had visited during their visit to St. Croix National Scenic Riverway. As shown in Figure 23, the most commonly visited sites were the St. Croix Falls Visitor Center (26%), the river section from Taylors Falls to Stillwater (24%), and the Namekagon Visitor Center (18%).

On past visits, the most commonly visited river sections were Taylors Falls to Stillwater (48%), St Croix Falls Visitor Center (38%), and Highway 70 to Taylors Falls (34%), as shown in Figure 24.

Visitors were also asked if knowledge of management zones for different types of recreational experiences would have affected their plans for visiting the riverway. Many groups (74%) indicated that knowing the management zones would not have affected their plans, 8% said it would have affected their plans and 18% were not sure (see Figure 25). Table 6 shows the ways visitor plans would have changed if they had known about the management zones.

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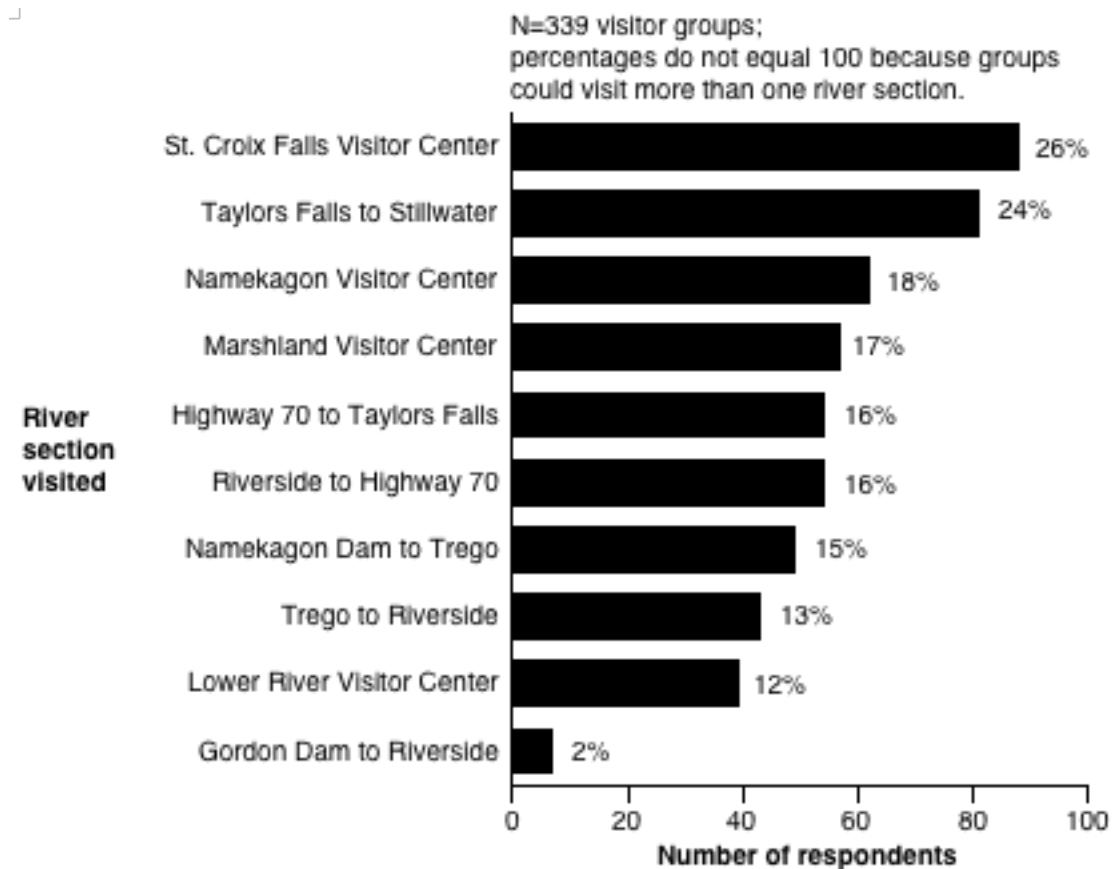


Figure 23: River sections visited on this visit

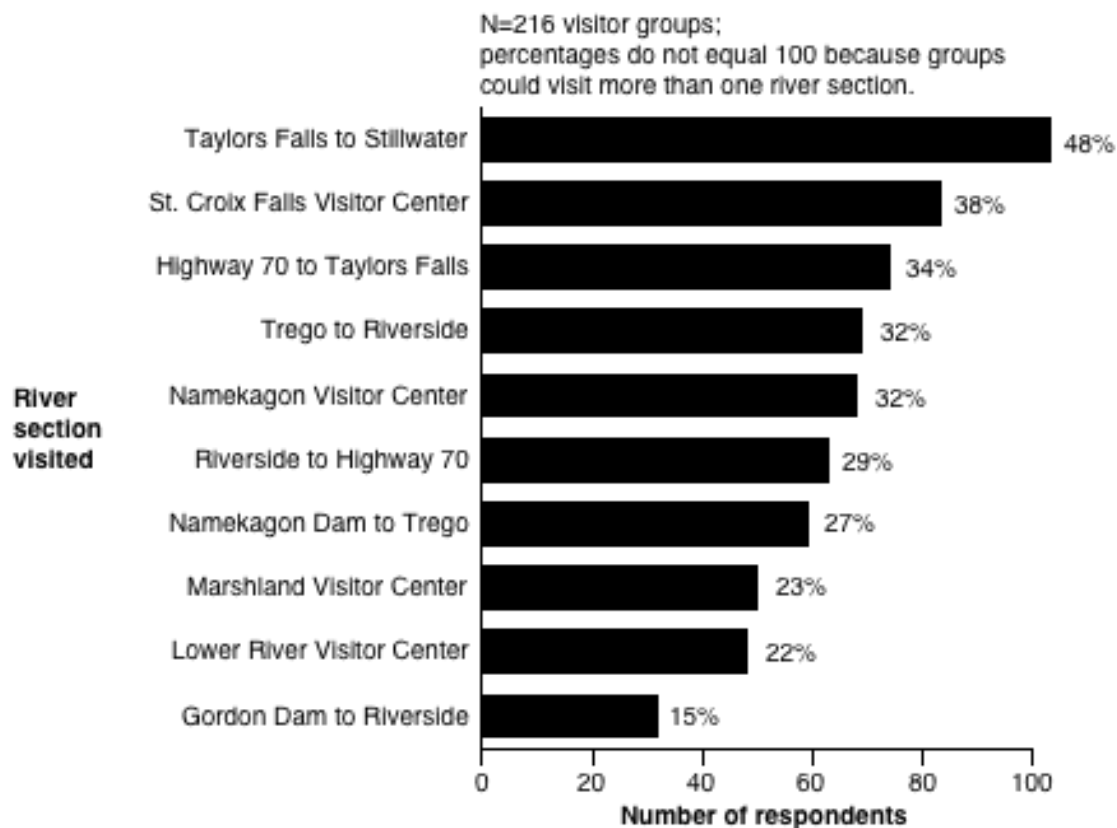


Figure 24: River sections visited on past visits

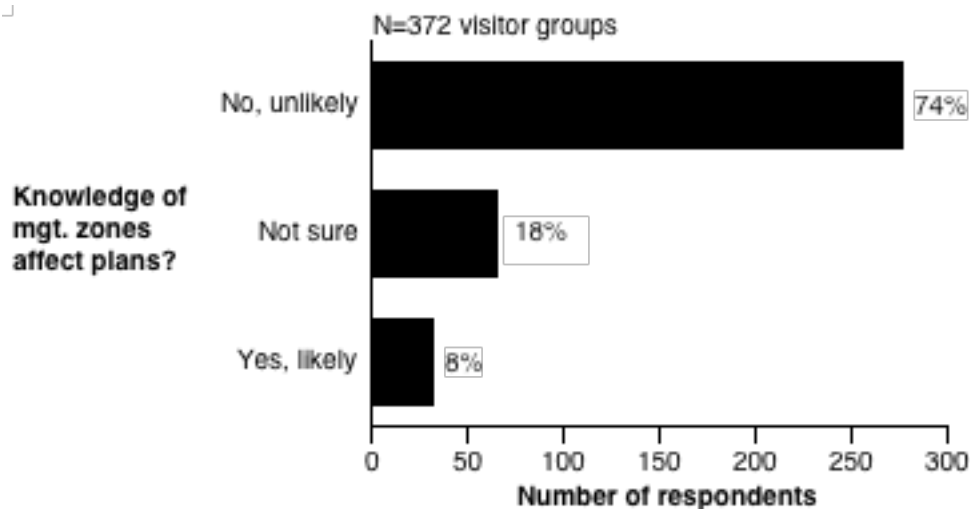


Figure 25: Would knowledge of management zones change visitation plans?

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**Table 6: Ways visitor plans would change based upon management zones**

N=23 comments

**CAUTION!**

Type of change	Number of times mentioned
Visit areas with more solitude	9
Spend more time	3
Select location based on planned activity	3
Would have visited more areas	2
Visit area with no motor traffic	2
Would have visited more primitive areas	2
Other	2

---

### Park visitation patterns

Visitor groups were asked whether they had previously visited St. Croix National Scenic Riverway. Three-fourths of the visitors (75%) were repeat visitors (see Figure 26). The repeat visitors were asked when they usually visit the riverway. Forty-two percent of the visitors usually visit on weekends, 42% visit on weekends and weekdays, and 17% usually visit on weekdays, as shown in Figure 27.

When asked about what seasons they had visited, 97% responded that they had visited during the summer (the season that the questionnaire was distributed), 43% in fall, 36% in spring and 17% in winter (see Figure 28).

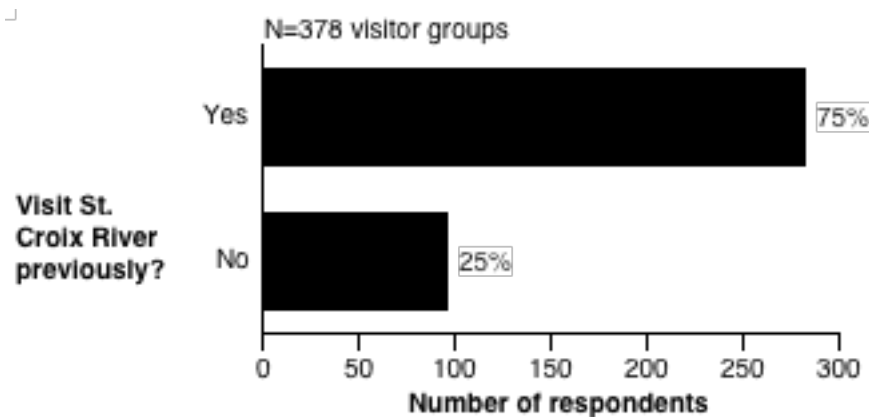


Figure 26: Visitors who had made previous visits

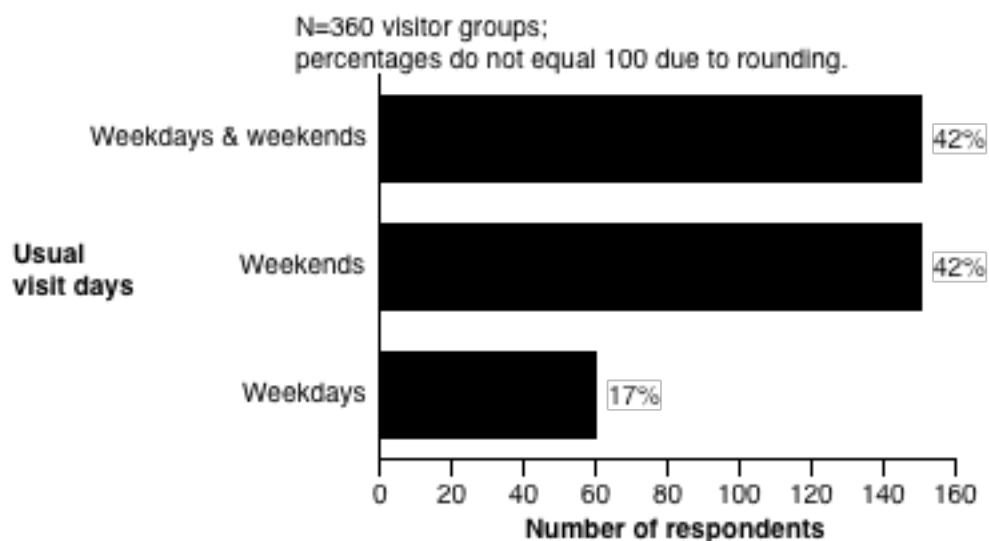
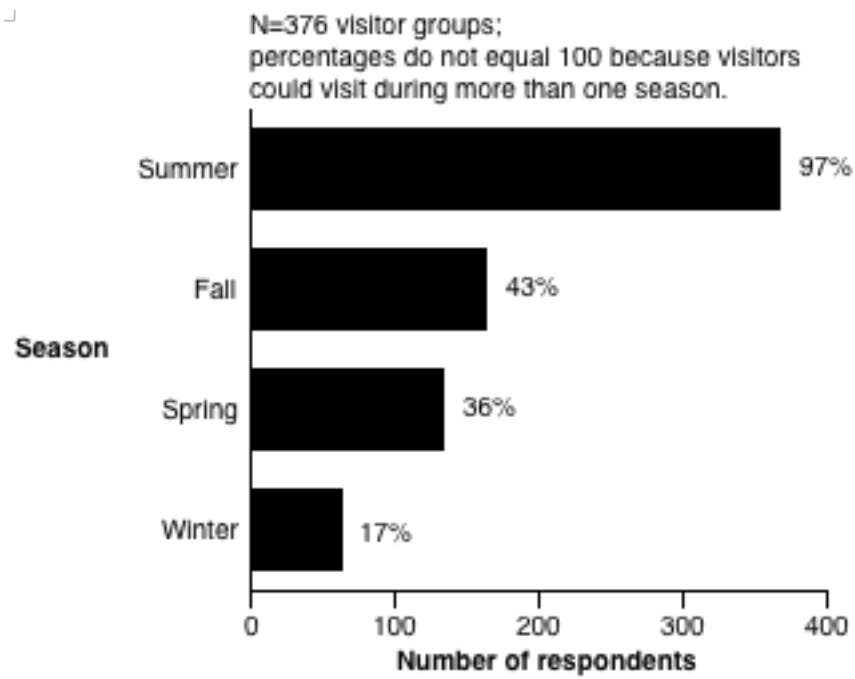


Figure 27: Riverway use on weekdays versus weekends



**Figure 28: Seasonal use of riverway**

### Visitor services and facilities: use, importance and quality

Visitor groups were asked to note the services and facilities they used during their visit to St. Croix National Scenic Riverway. As shown in Figure 29, the most commonly used services and facilities were the parking (60%), National Park Service visitor centers (55%), and restrooms (50%). The least used service was the ranger-led programs/activities (1%).

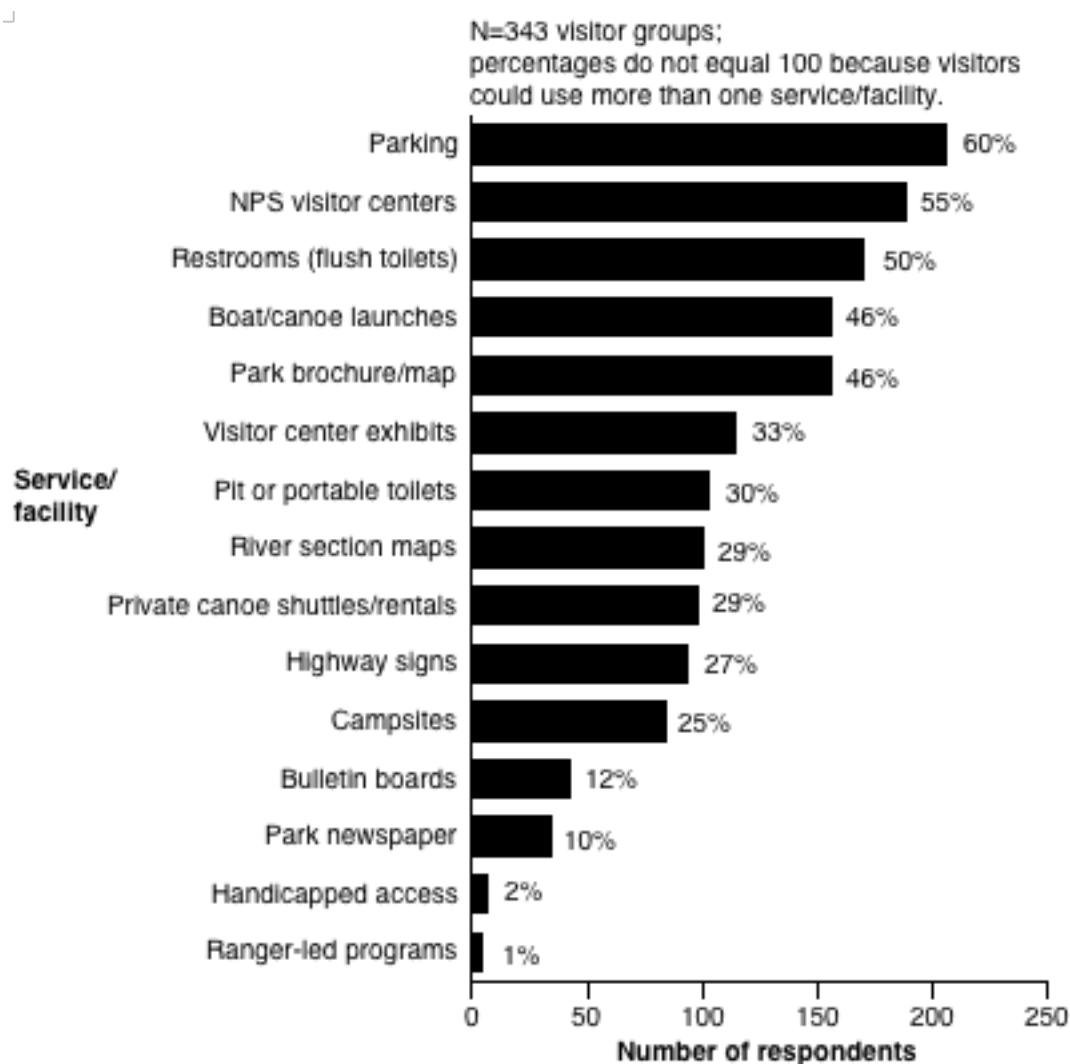


Figure 29: Services and facilities used



Visitor groups rated the importance and quality of each of the 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. Figure 30 shows the average importance and quality ratings for each of the visitor service and facilities. All but one, the park newspaper, were rated as above "average" in importance and quality. It should be noted that ranger-led programs and access for people with disabilities were not rated by enough people to provide reliable data.

Figures 31-45 show the importance ratings that were provided by visitor groups for each of the individual services and facilities. Those services and facilities receiving the highest proportion of "extremely important" or "very important" ratings included campsites (91%), private canoe rentals (84%), boat/canoe launches (83%) and restrooms (80%). The highest proportion of "not important" ratings was for the park newspaper (16%).

Figures 46-60 show the quality ratings that were provided by visitor groups for each of the individual services and facilities. Those services and facilities receiving the highest proportion of "very good" or "good" ratings included NPS visitor centers (88%), highway directional signs (85%), restrooms (85%), and park brochure/map (83%). The highest proportion of "very poor" ratings was for pit toilets (5%).

Figure 61 combines the "very good" and "good" quality ratings and compares those ratings for all of the services and facilities.

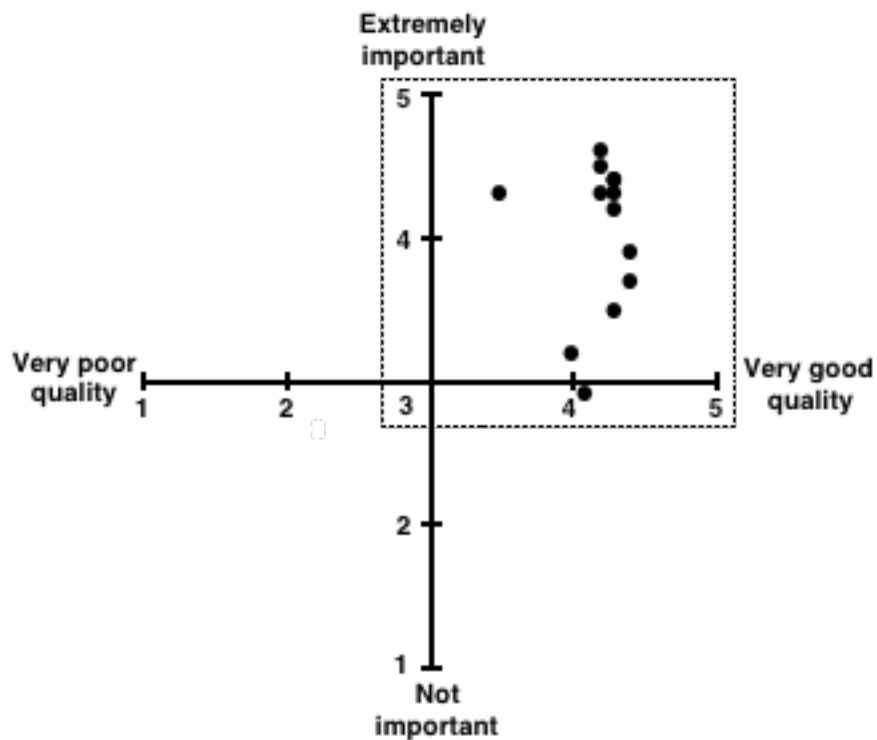


Figure 30: Average ratings of service importance and quality

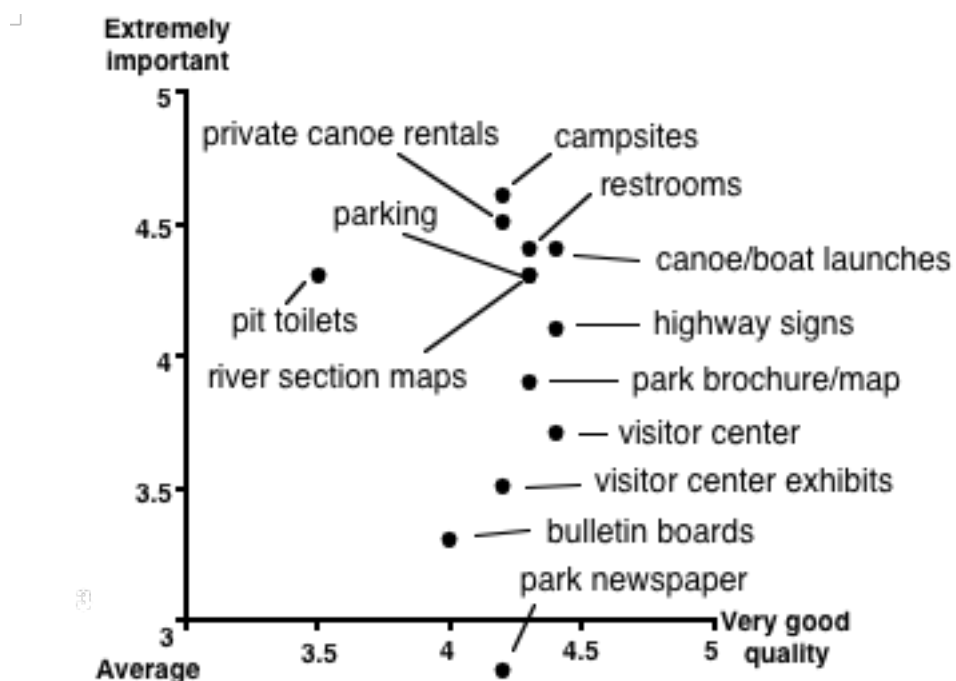
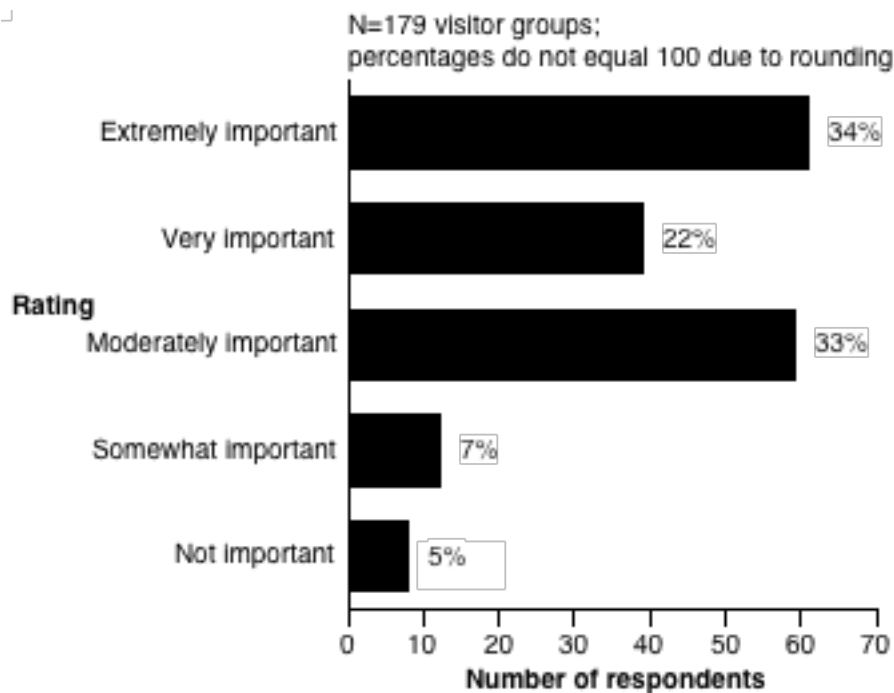
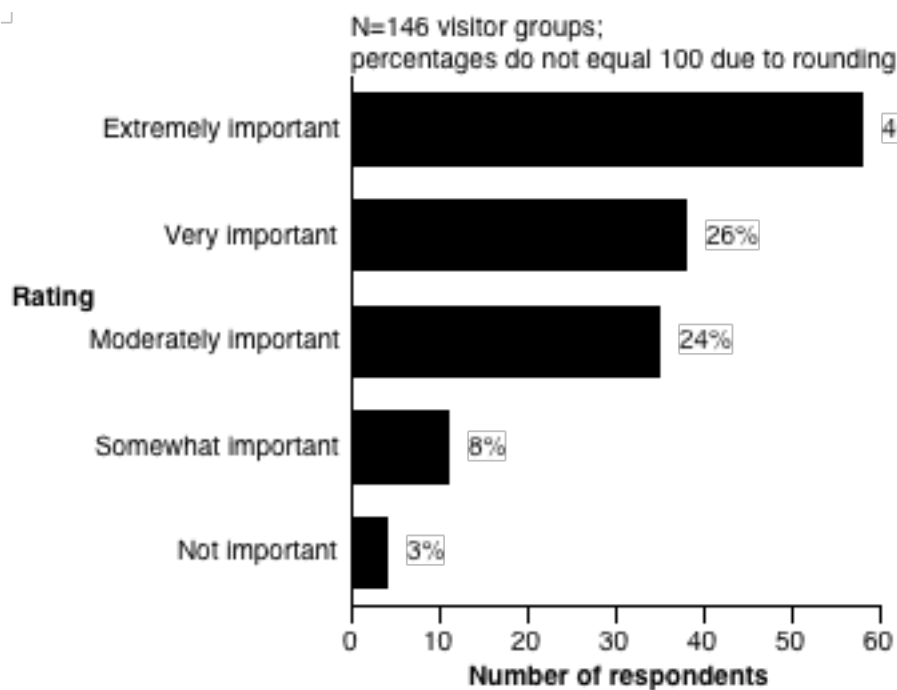


Figure 30: Detail



**Figure 31: Importance of National Park Service visitor centers**



**Figure 32: Importance of park brochure/map**

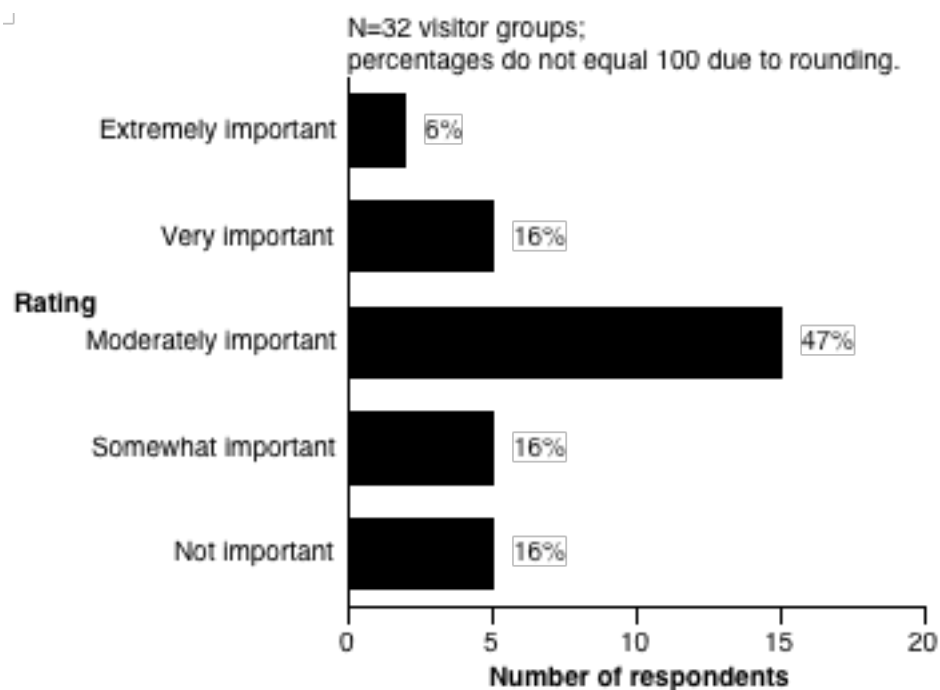


Figure 33: Importance of park newspaper

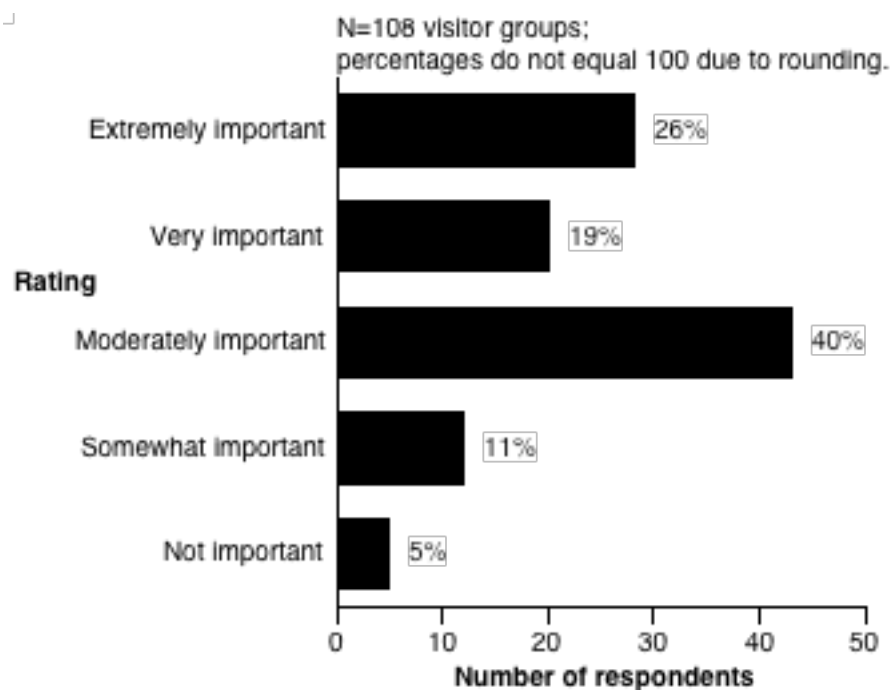


Figure 34: Importance of visitor center exhibits

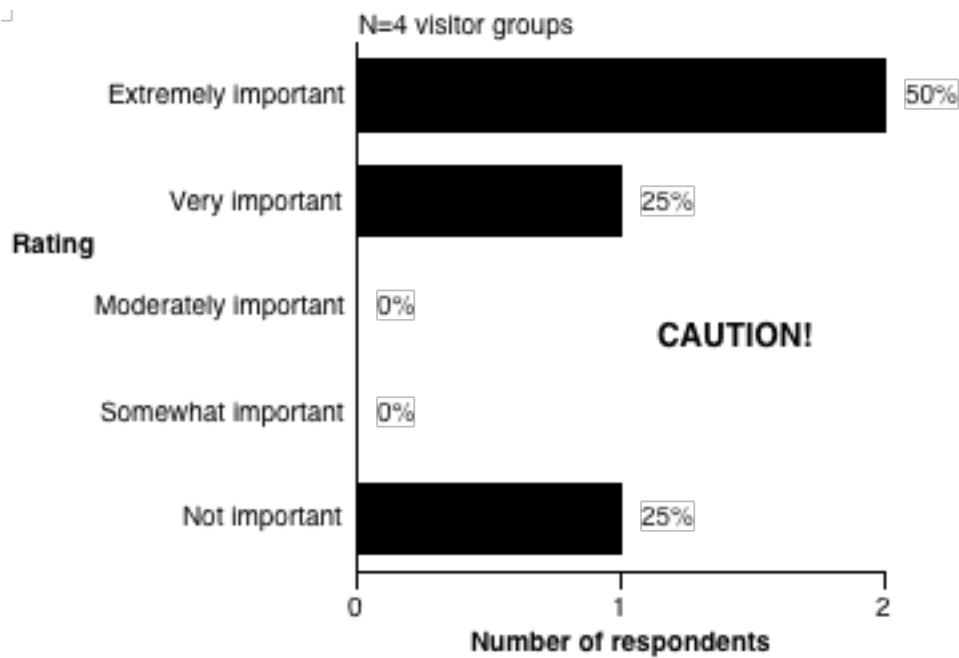


Figure 35: Importance of ranger-led programs/activities

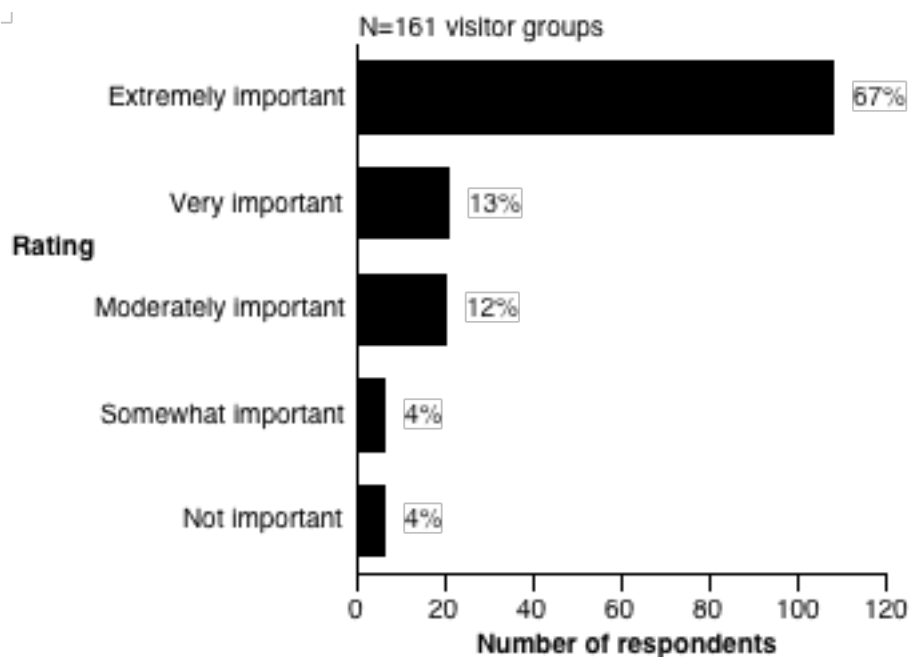
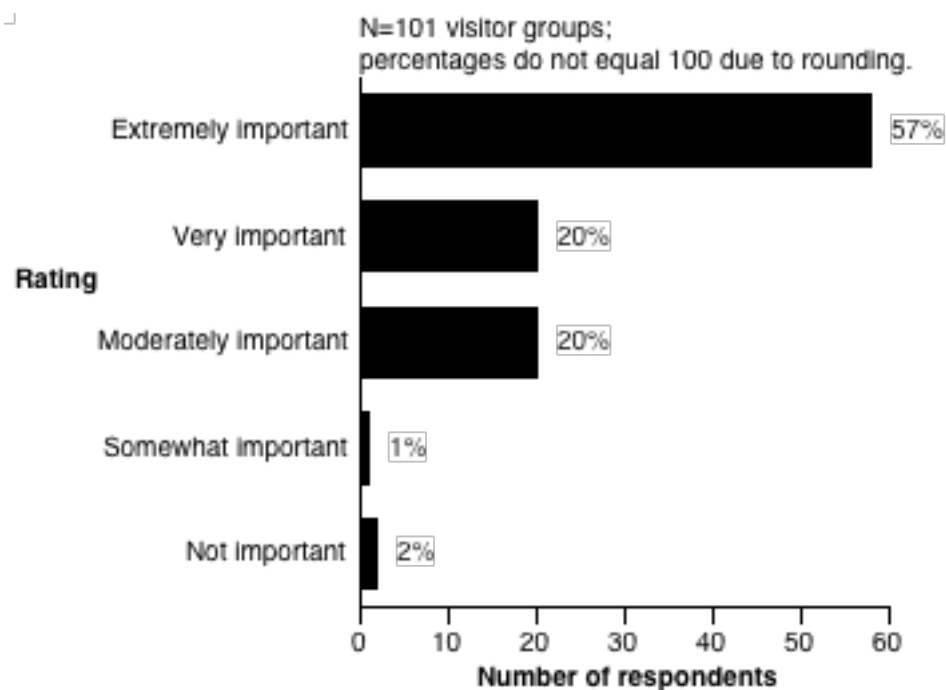
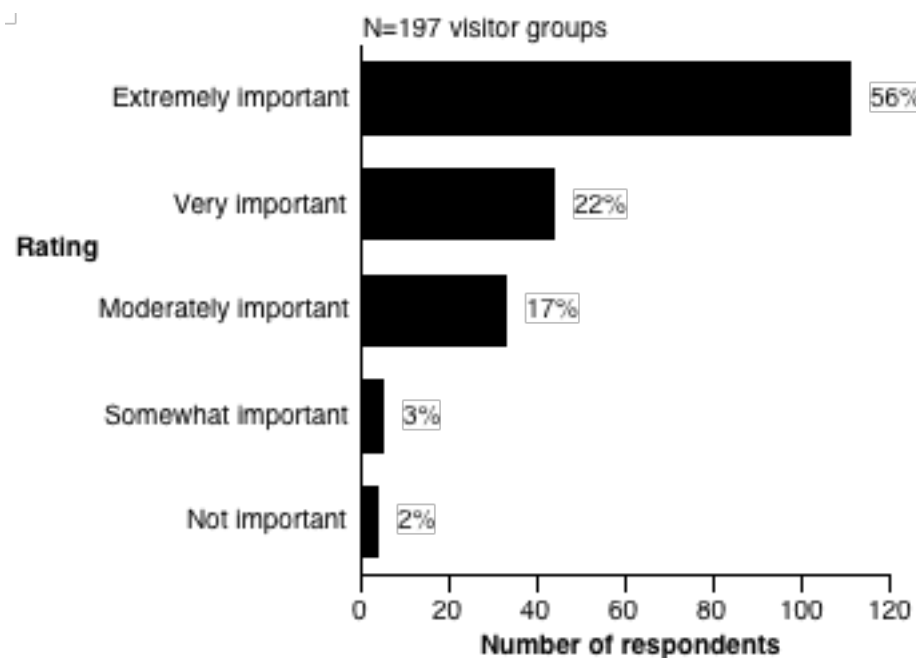


Figure 36: Importance of restrooms (flush toilets)



**Figure 37: Importance of pit or portable toilets**



**Figure 38: Importance of parking**

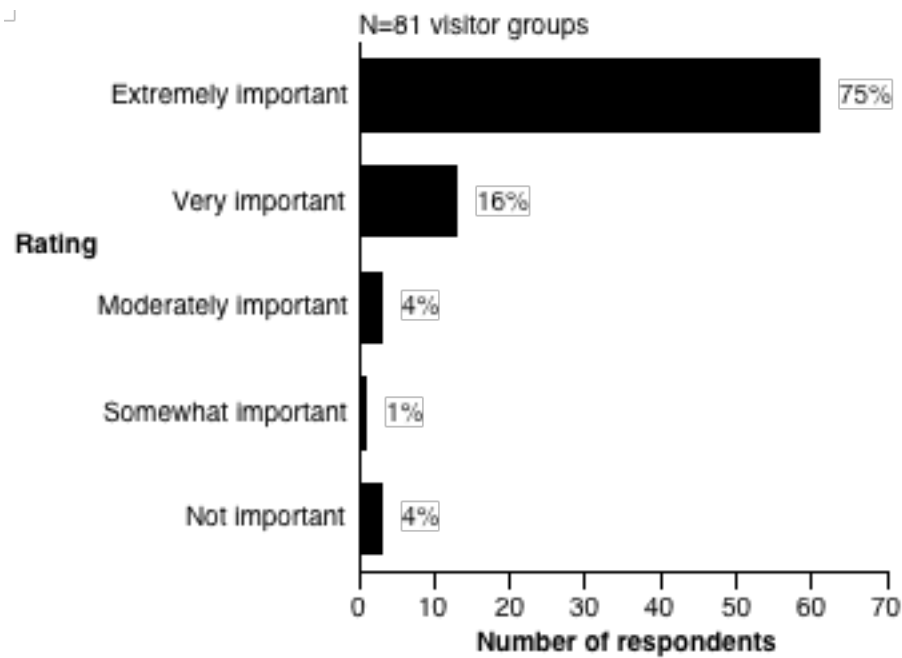


Figure 39: Importance of campsites

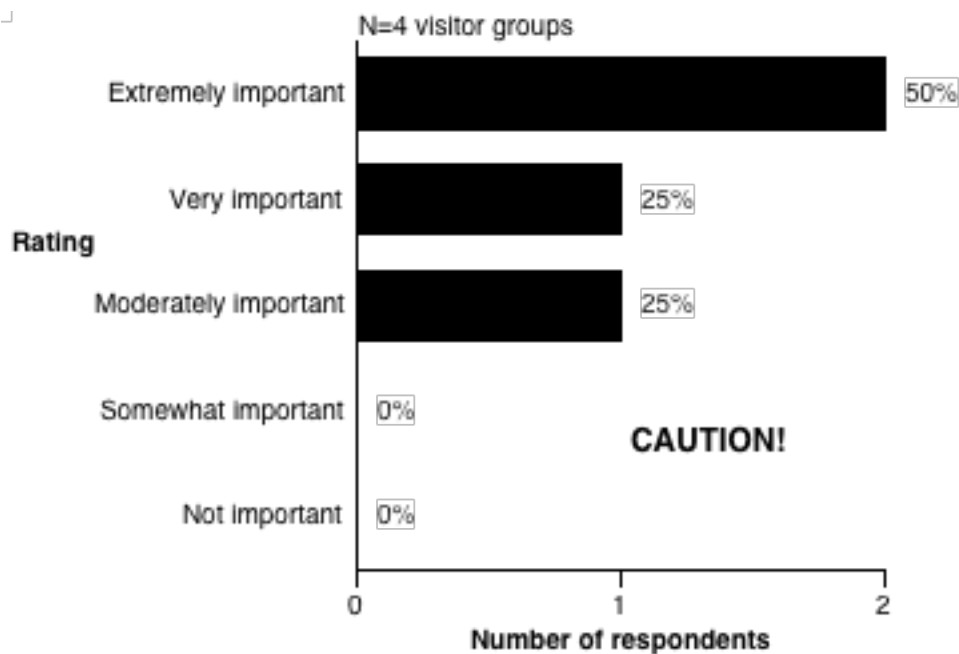


Figure 40: Importance of access for visitors with disabilities

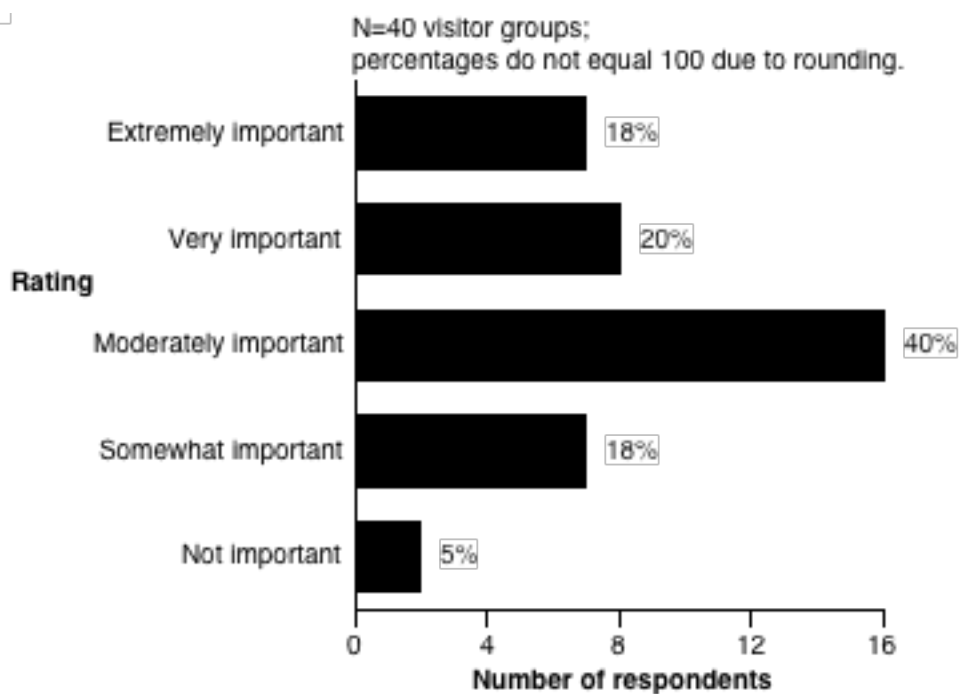


Figure 41: Importance of bulletin boards

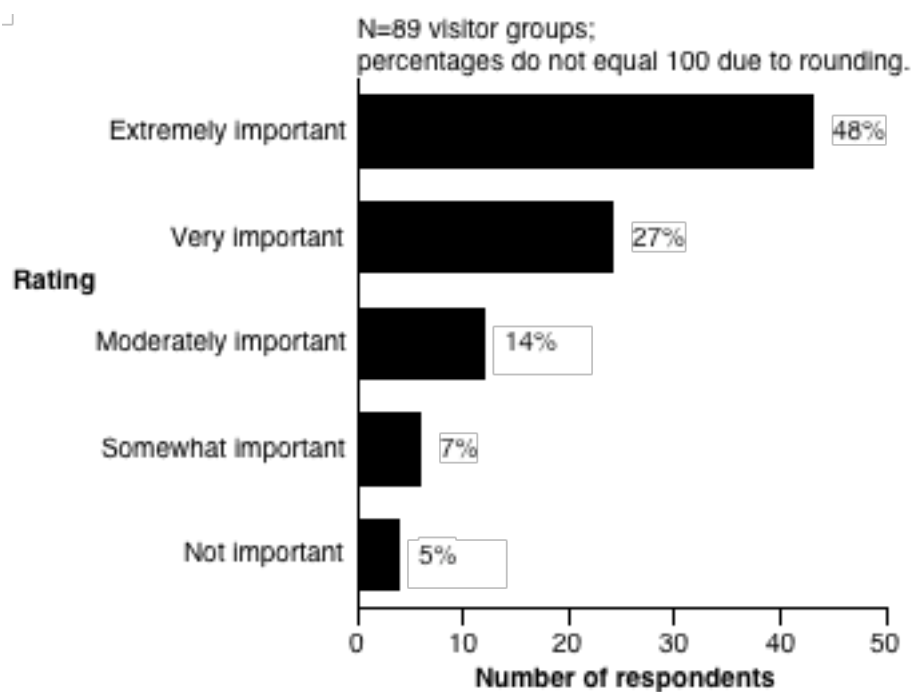


Figure 42: Importance of highway directional signs



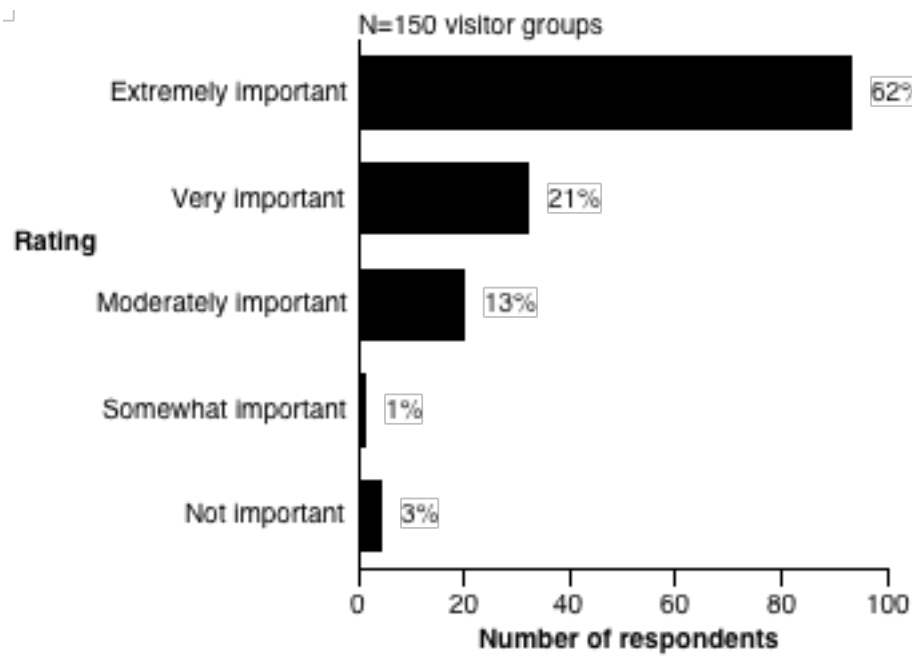


Figure 43: Importance of boat/canoe launches

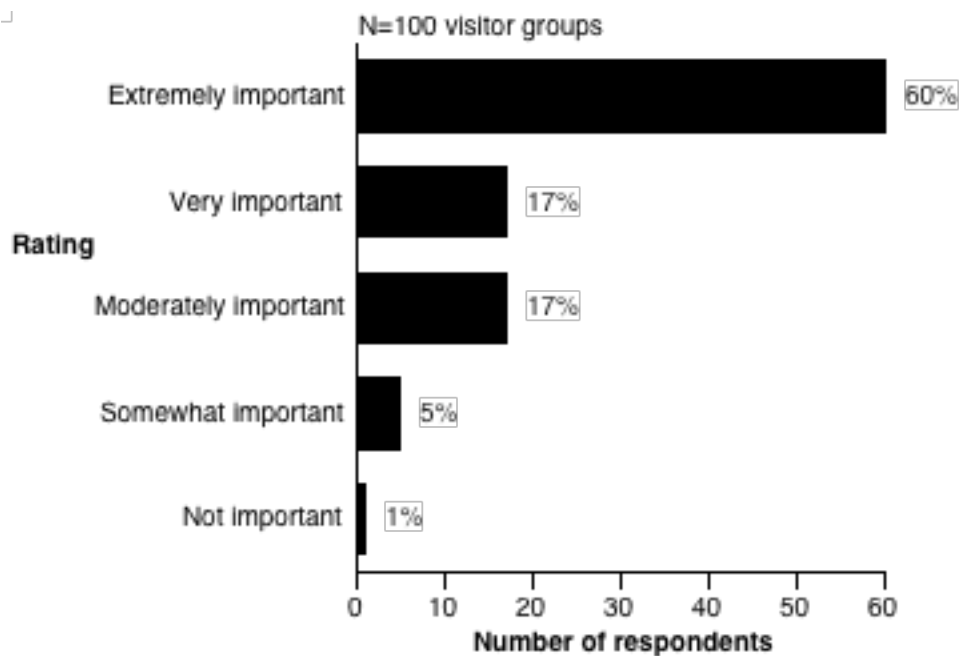


Figure 44: Importance of river section maps

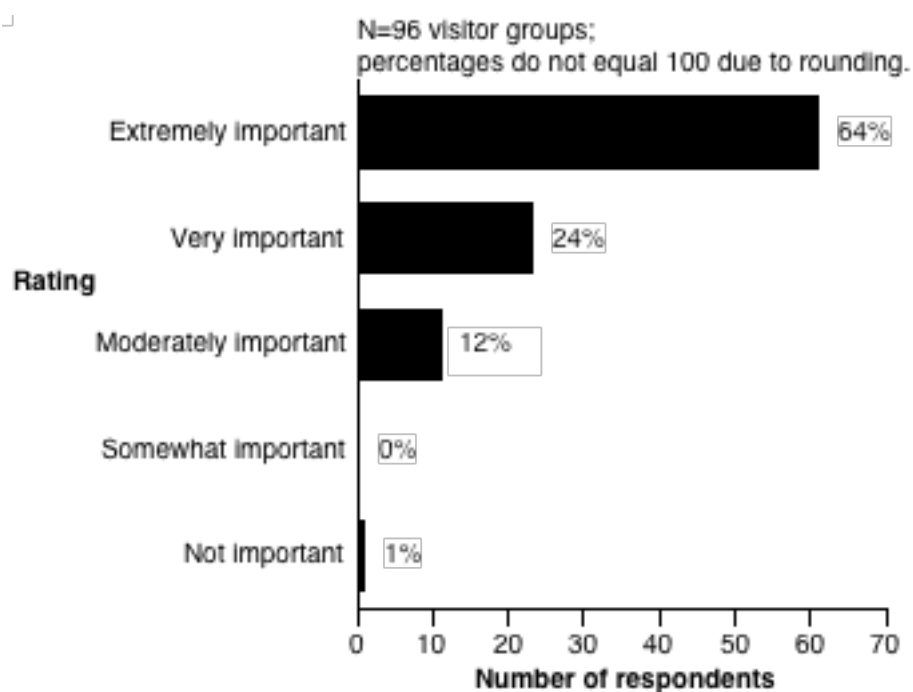


Figure 45: Importance of private canoe shuttles and rentals

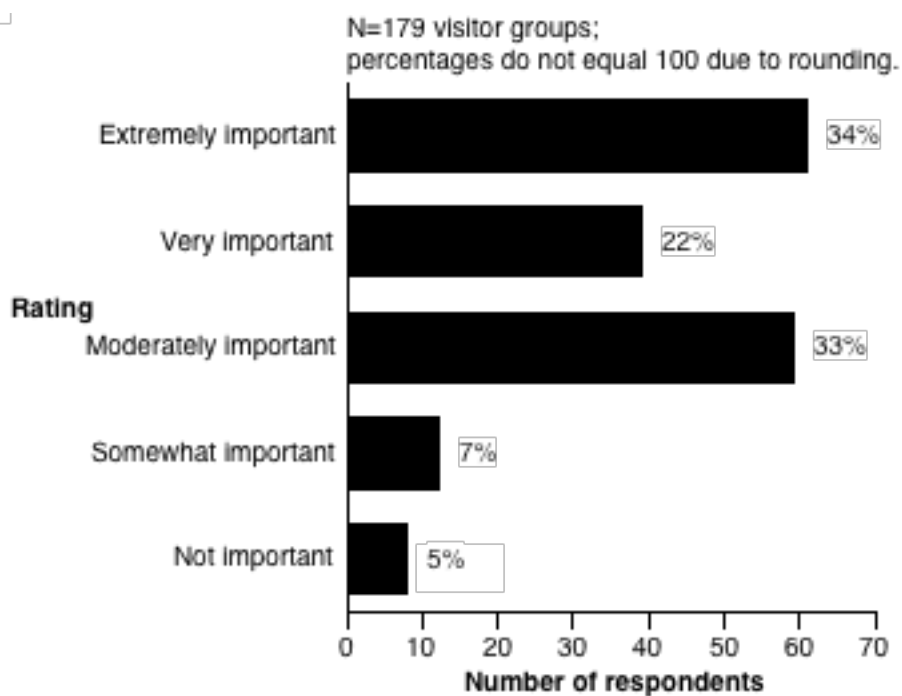


Figure 46: Quality of visitor center

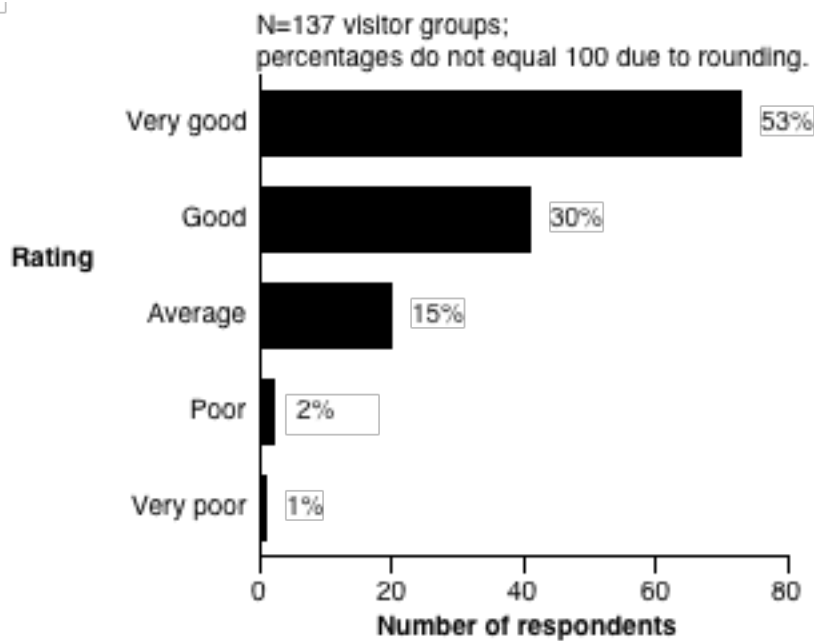


Figure 47: Quality of park brochure/map

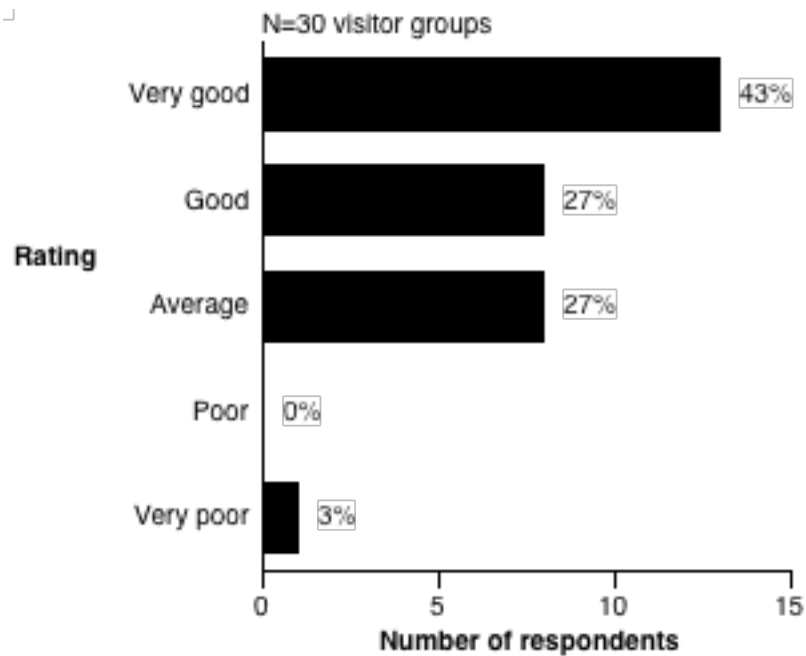


Figure 48: Quality of park newspaper

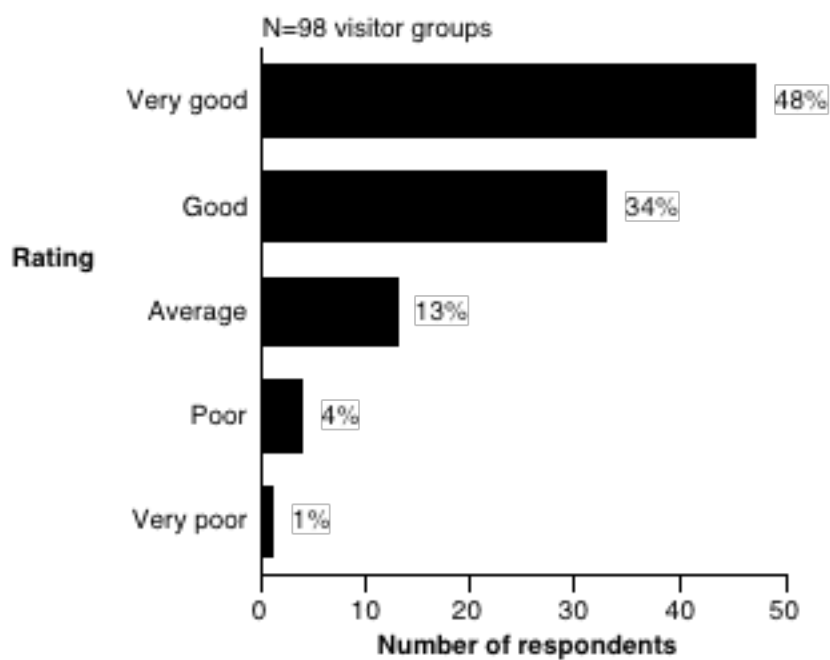


Figure 49: Quality of visitor center exhibits

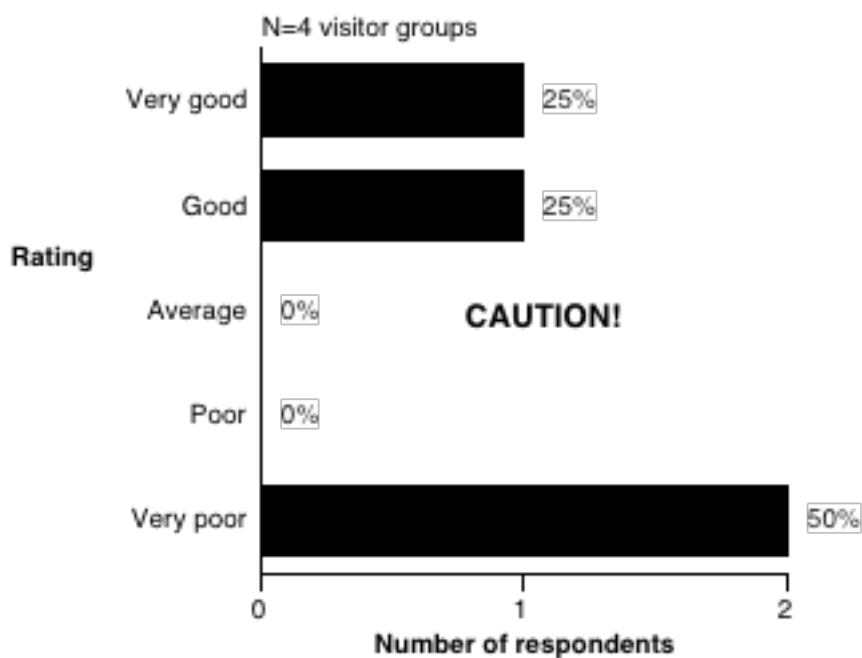


Figure 50: Quality of ranger-led programs/activities

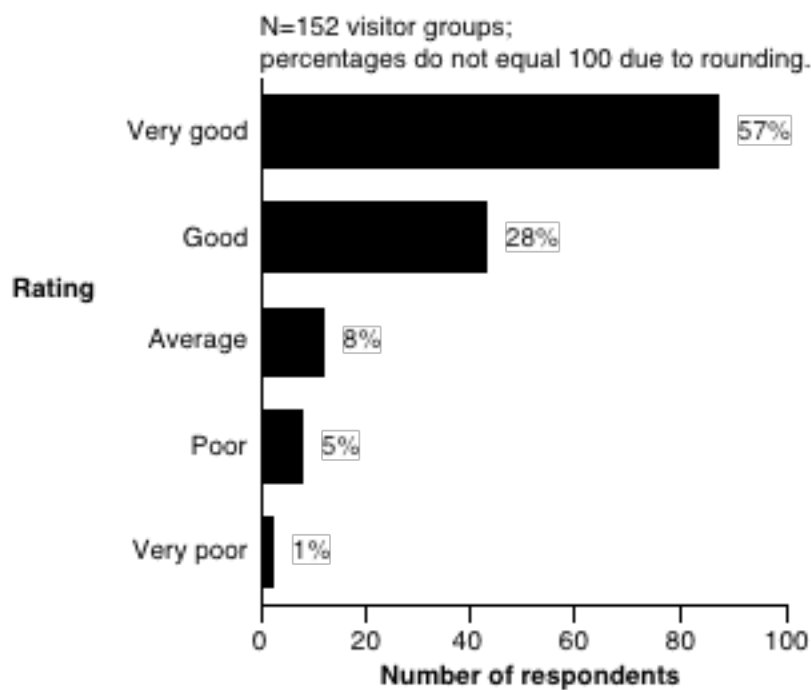


Figure 51: Quality of restrooms (flush toilets)

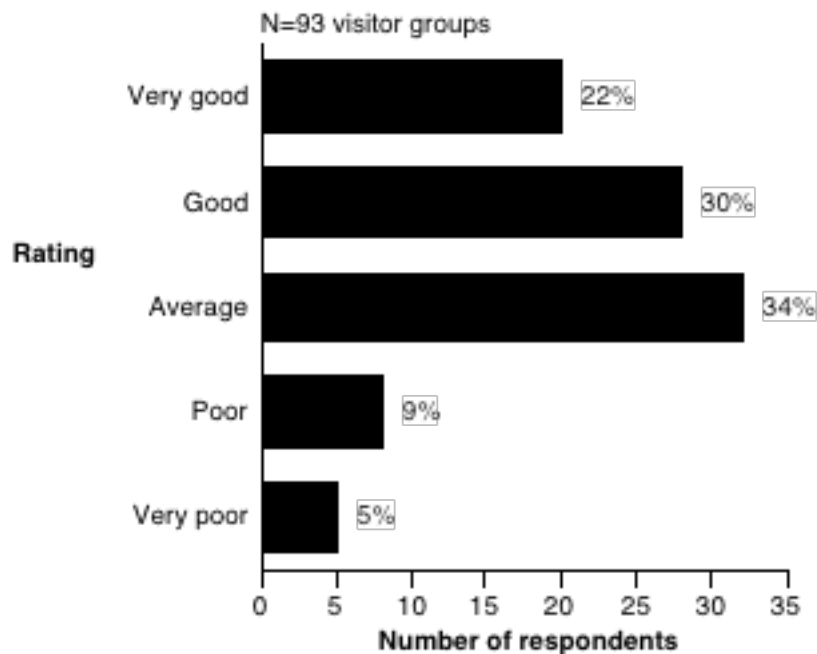


Figure 52: Quality of pit or portable toilets

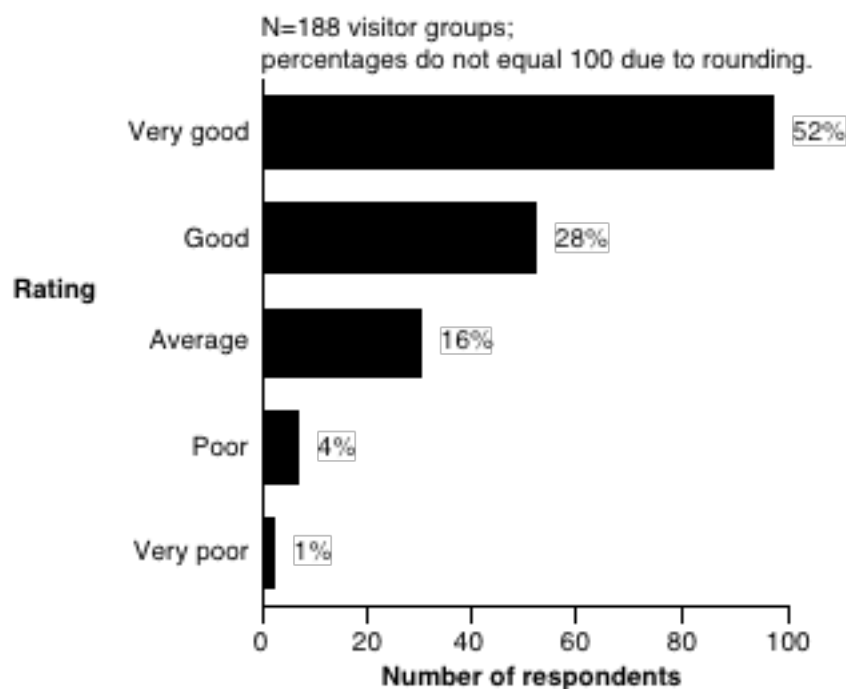


Figure 53: Quality of parking

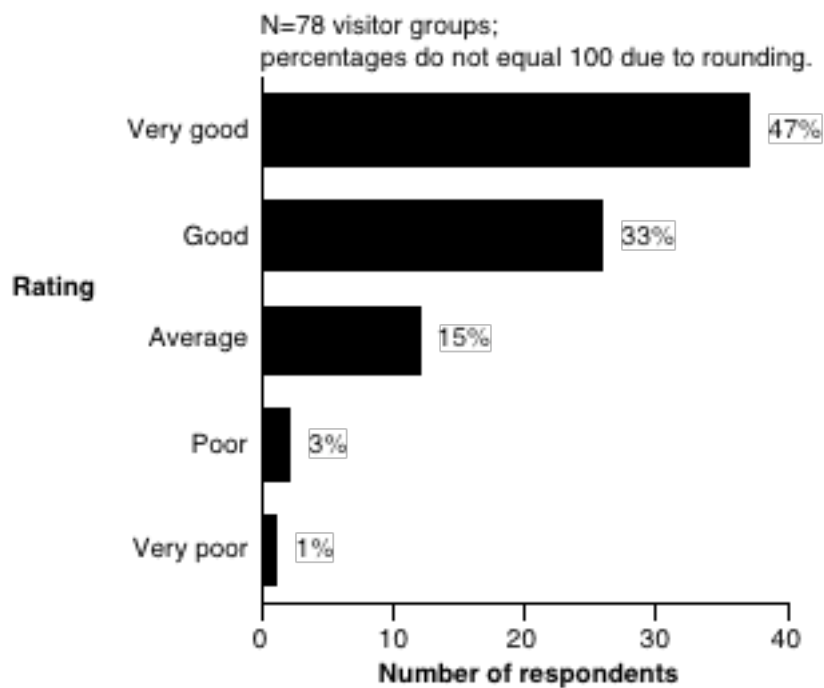


Figure 54: Quality of campsites

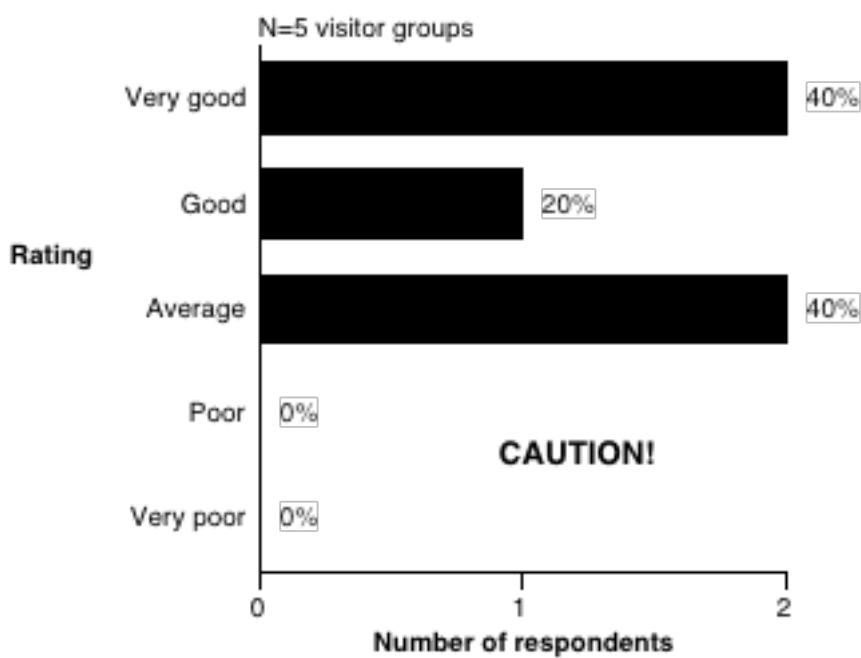


Figure 55: Quality of access for those with disabilities

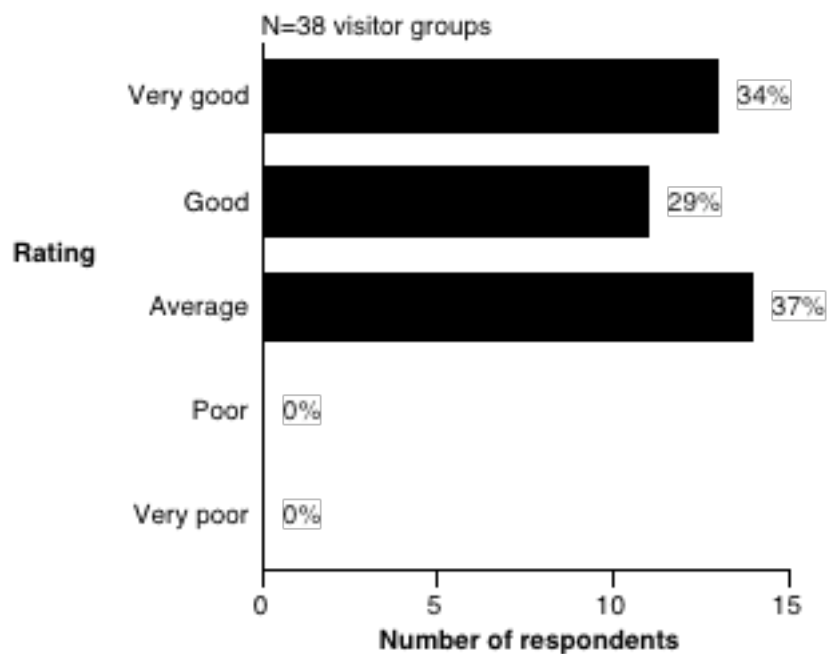


Figure 56: Quality of bulletin boards

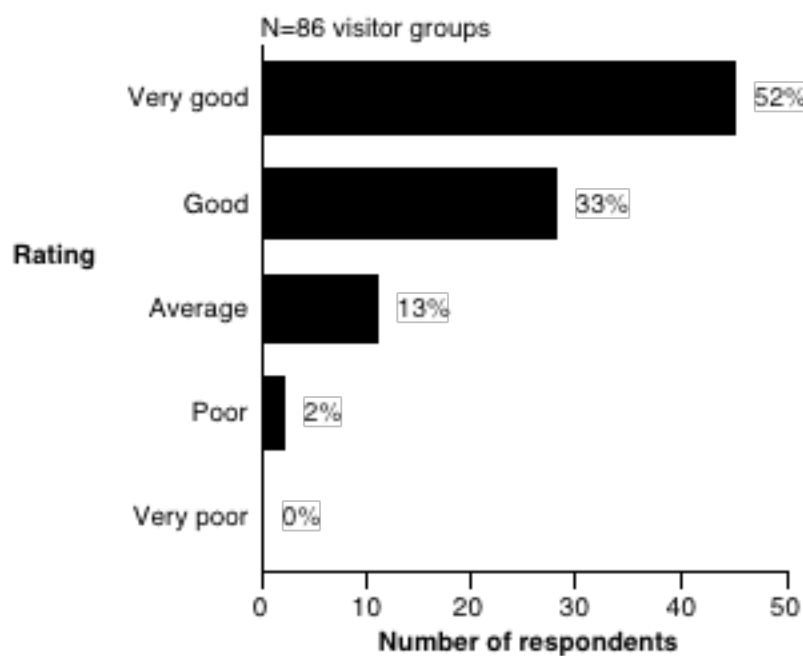


Figure 57: Quality of highway directional signs

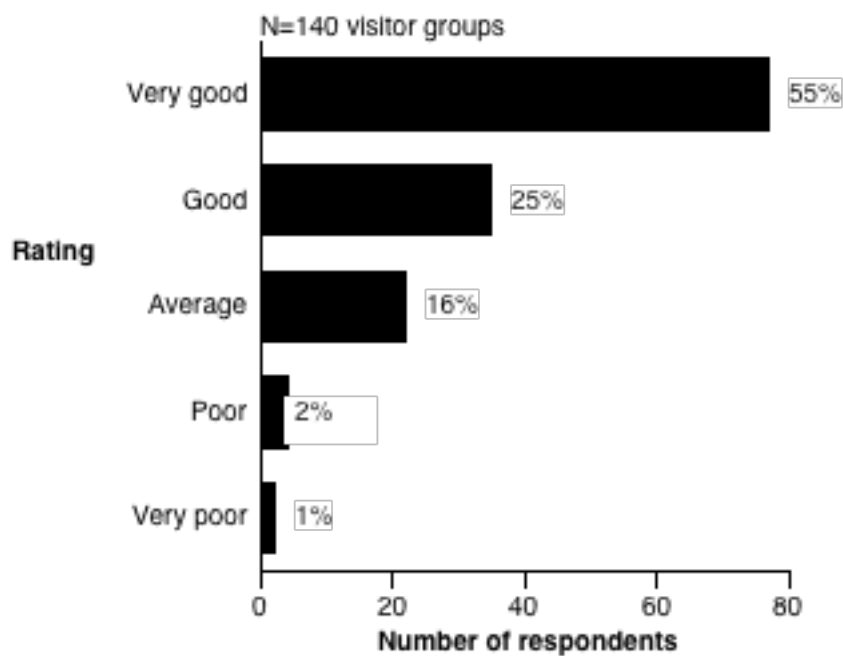


Figure 58: Quality of boat/canoe launches



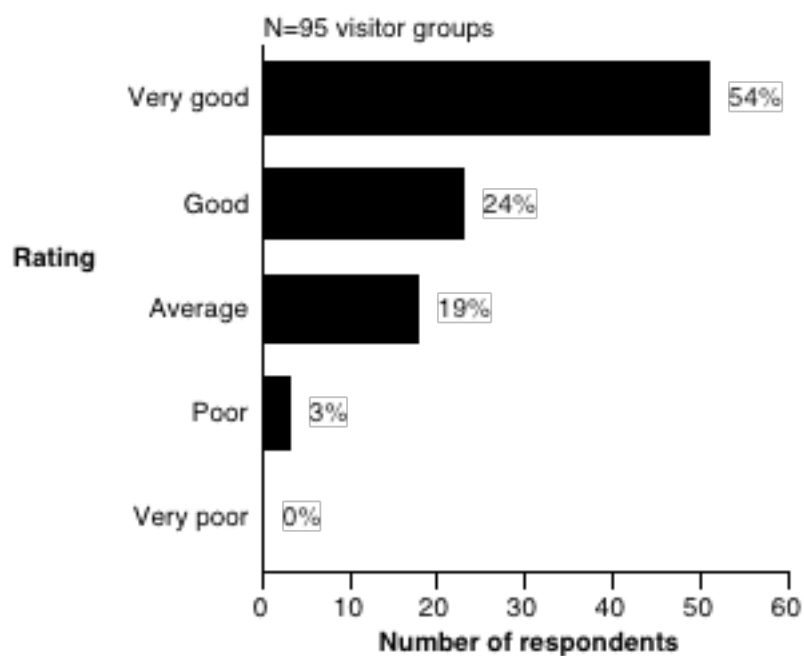


Figure 59: Quality of river section maps

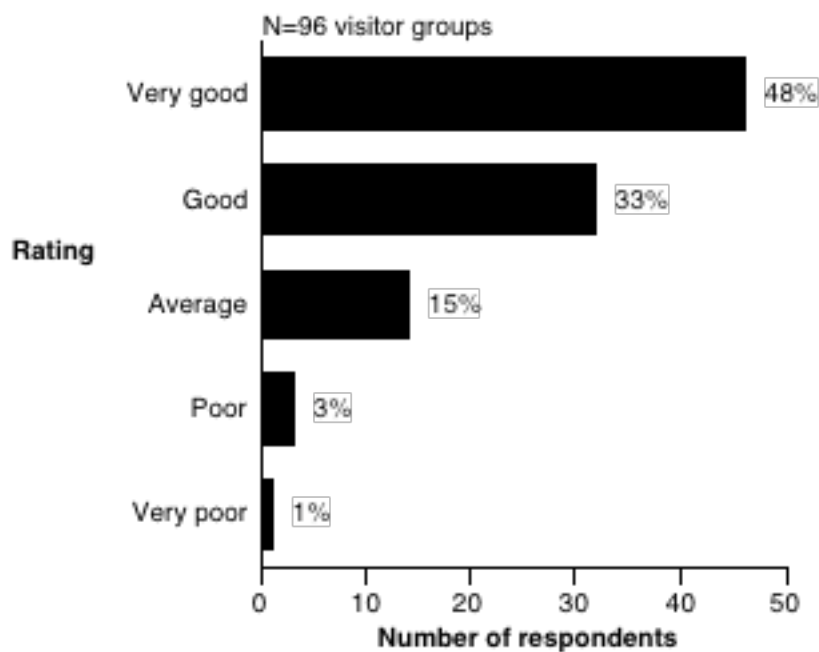
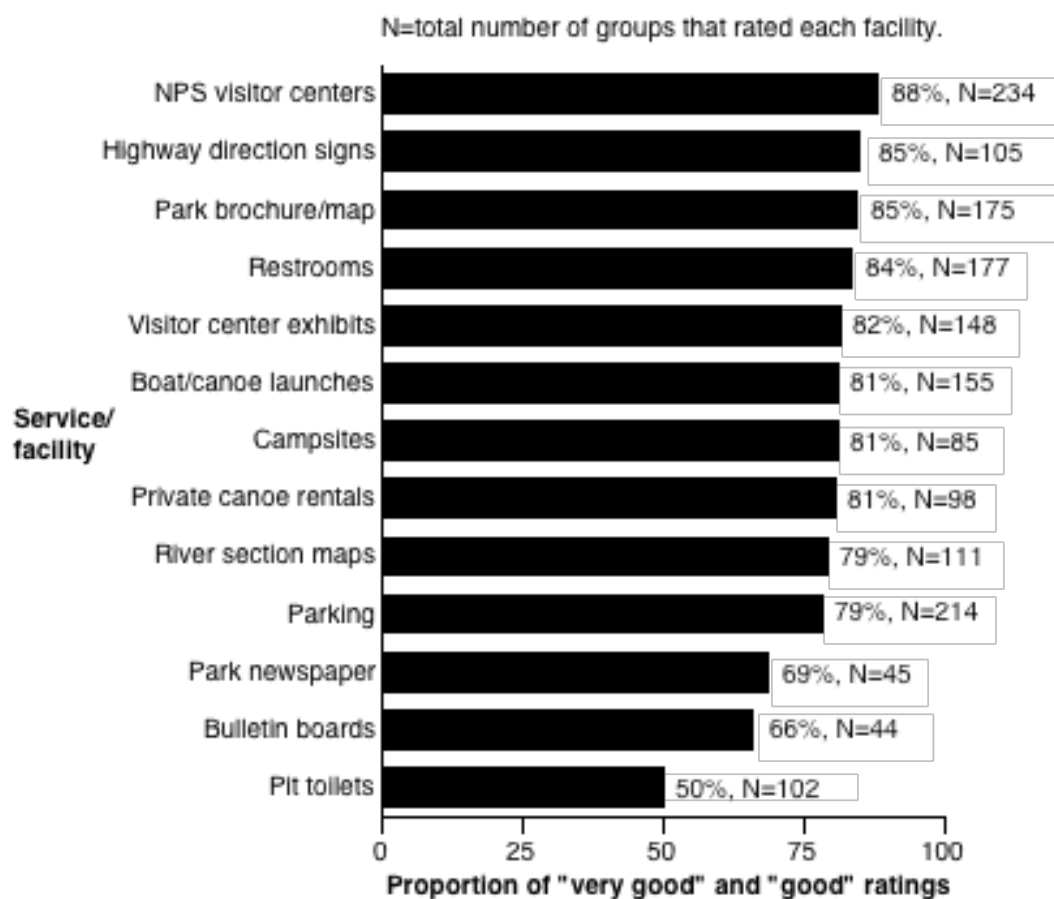


Figure 60: Quality of private canoe shuttles and rentals



**Figure 61: Combined proportions of "very good" or "good" quality ratings for services**

Visitors were asked, "It is the National Park Service's responsibility to protect the St. Croix National Scenic Riverway's natural, scenic and cultural resources. How important is the protection of the following resources to you?" Visitors rated the importance of selected resources at St. Croix National Scenic Riverway, using a scale from 1 to 4 or "don't know." The resources included water quality, native plants and animals, free-flowing sections of river, historic and archeological sites, opportunities for solitude, and scenic views.

Visitors' opinions about the importance of these resources can be compared by looking at the combined "extremely important" and "quite important" ratings, as shown in Figures 62-67: water quality (98%), scenic views (96%), native plants and animals (94%), free-flowing sections of the river (90%), opportunities for solitude (84%) and historic and archeological sites (83%).

### Importance of park resources

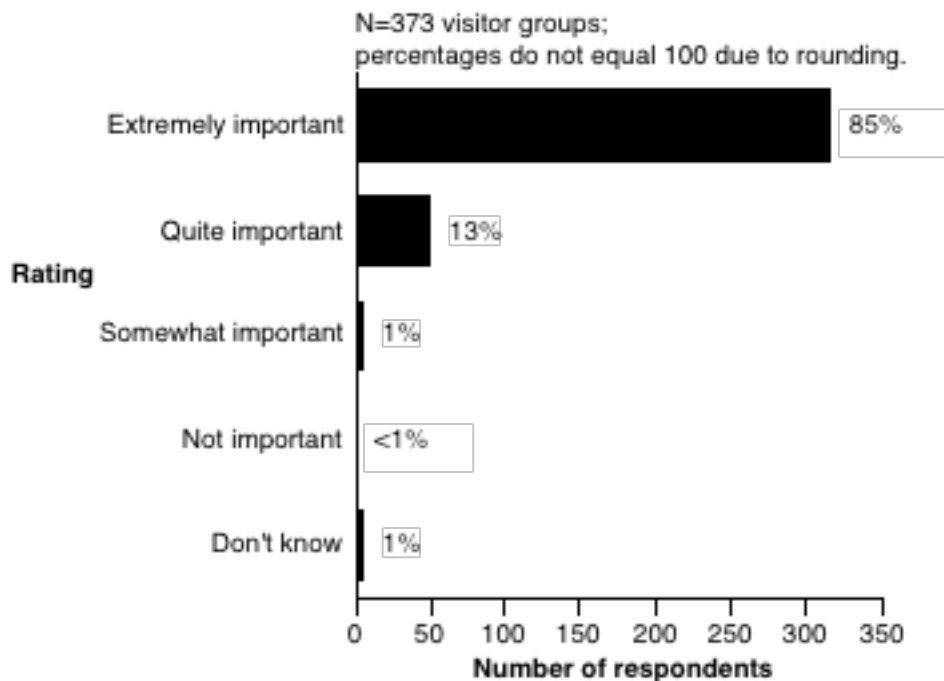


Figure 62: Importance of water quality

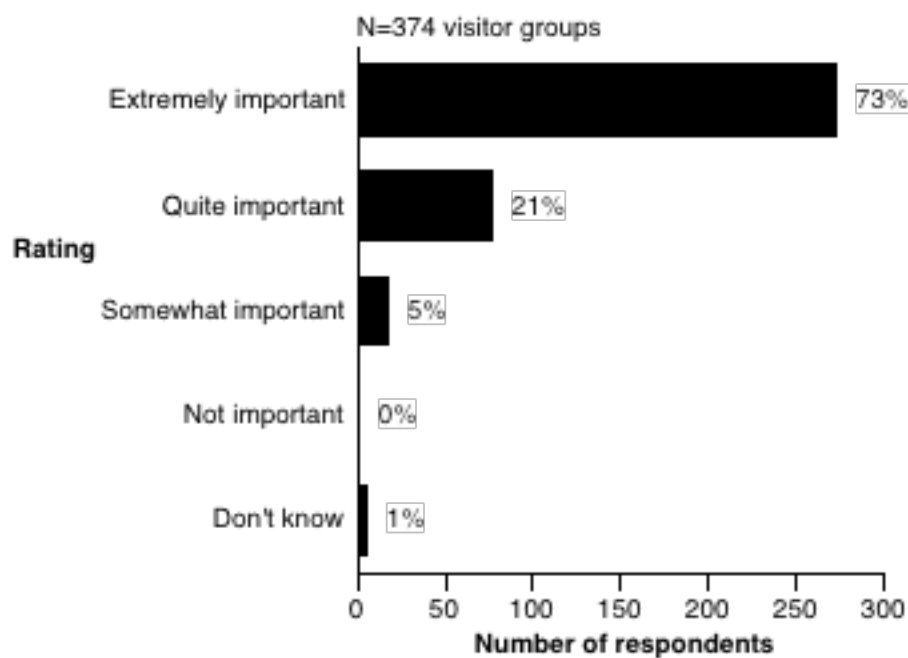


Figure 63: Importance of native plants and animals

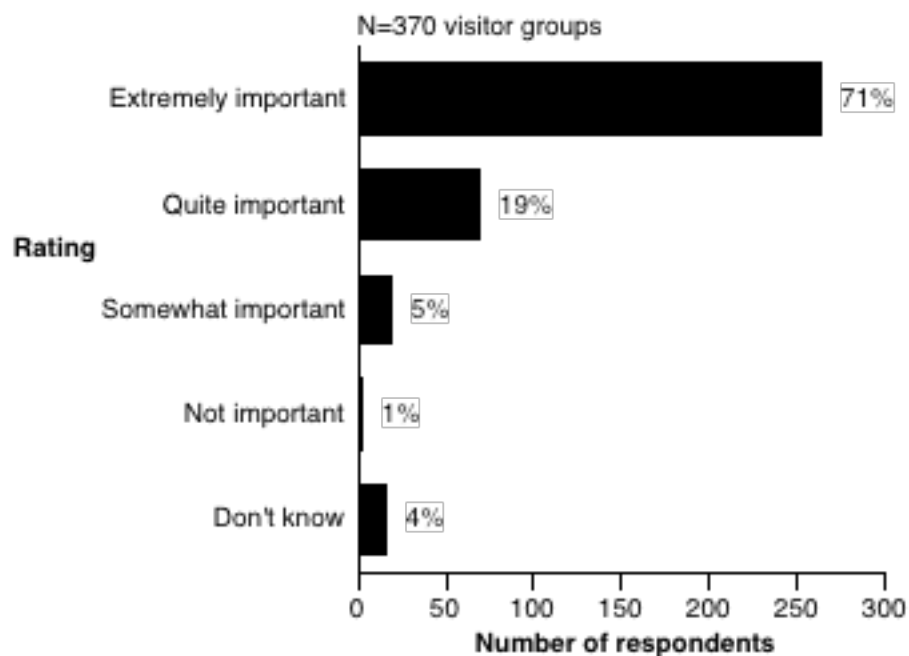


Figure 64: Importance of free-flowing sections of the river

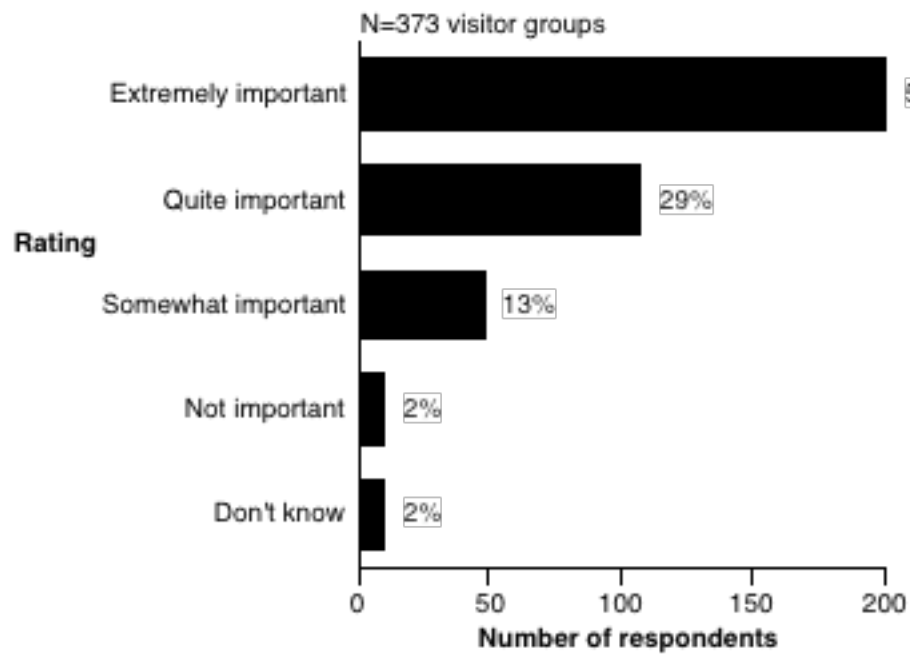


Figure 65: Importance of historic and archeological sites

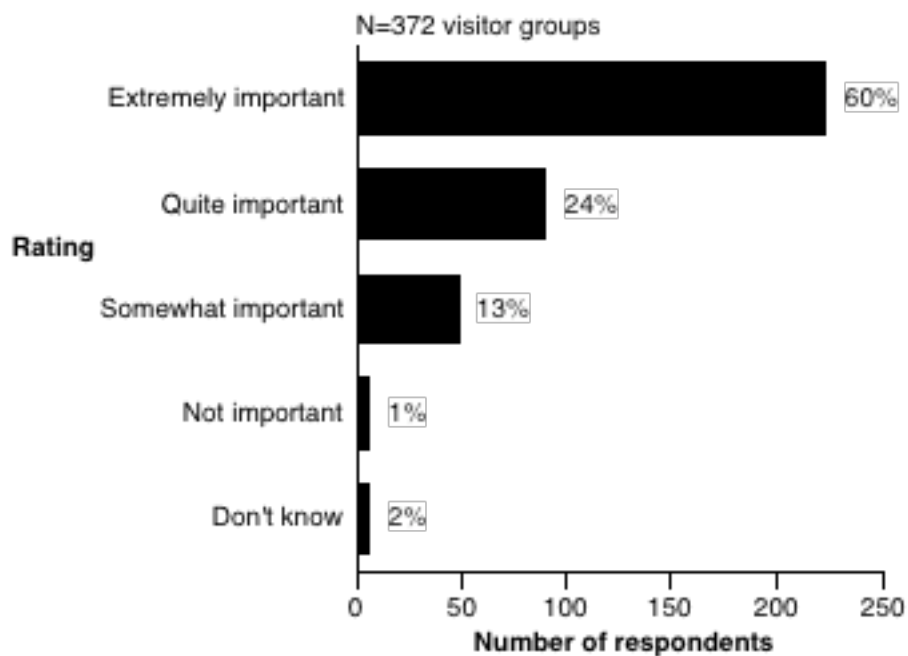


Figure 66: Importance of opportunities for solitude

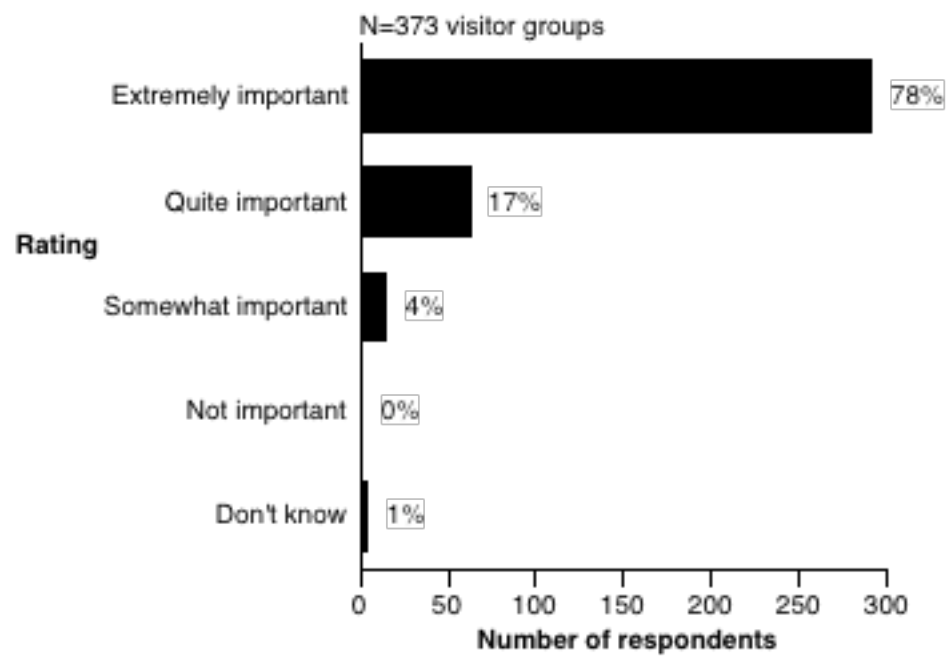


Figure 67: Importance of scenic views

Visitors were asked if they had visited St. Croix National Scenic Riverway before, and 76% of visitors said they had visited in the past. They were then asked the year of their first visit. Thirty-two percent of these visitors had first visited between 1991 and 1999, 23% between 1981 and 1990, 21% from 1971 to 1980, and another 14% had come in the years from 1961 to 1970, as shown in Figure 68.

These visitors then indicated whether there was “quite an increase,” “some increase,” “no change,” “some decrease,” “quite a decrease” or “don’t know/can’t remember” on five different aspects of river conditions. Visitors were asked about crowding, litter, visible human waste, river bank erosion, and conflicts between different users. In judging crowding along the riverway, visitors thought that there was “some increase” (36%), “quite an increase” (25%), and “no change” (25%), as shown in Figure 69. For all of the other conditions, the greatest proportion of visitors felt that there had been “no change:” litter (46%), visible human waste (56%), river bank erosion (41%), and conflicts between user groups (63%), as shown in Figures 70-73.

### Opinions about river conditions

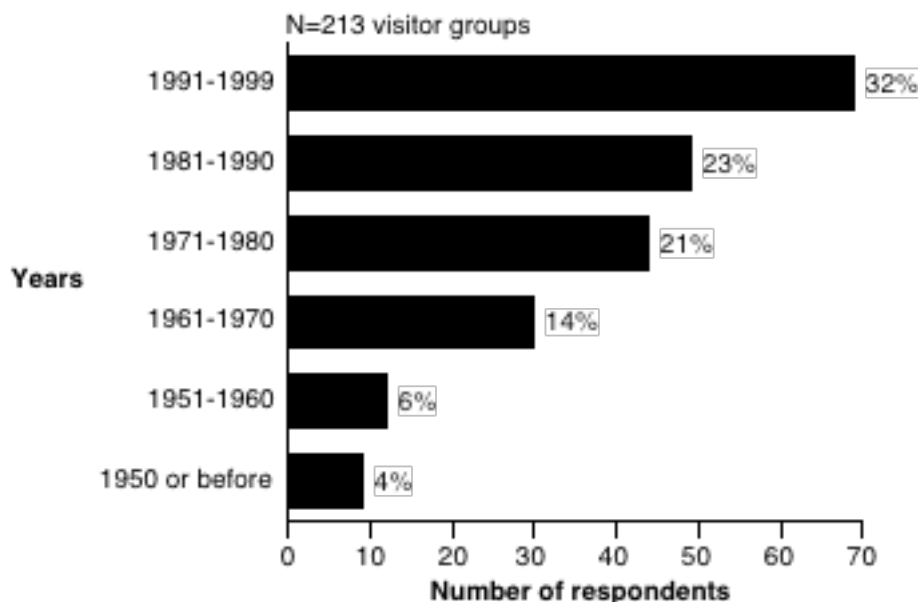


Figure 68: Year of first visit

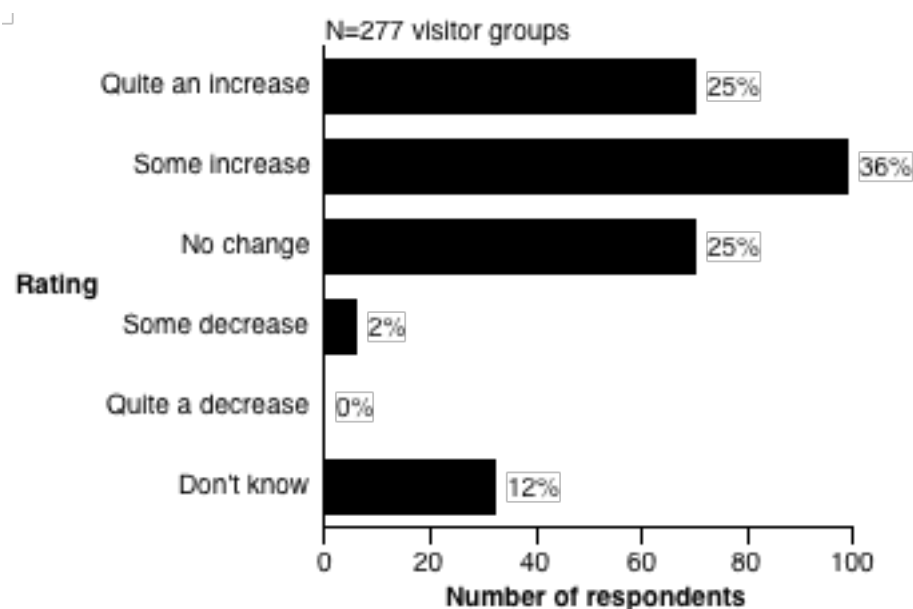


Figure 69: Increase or decrease in crowding

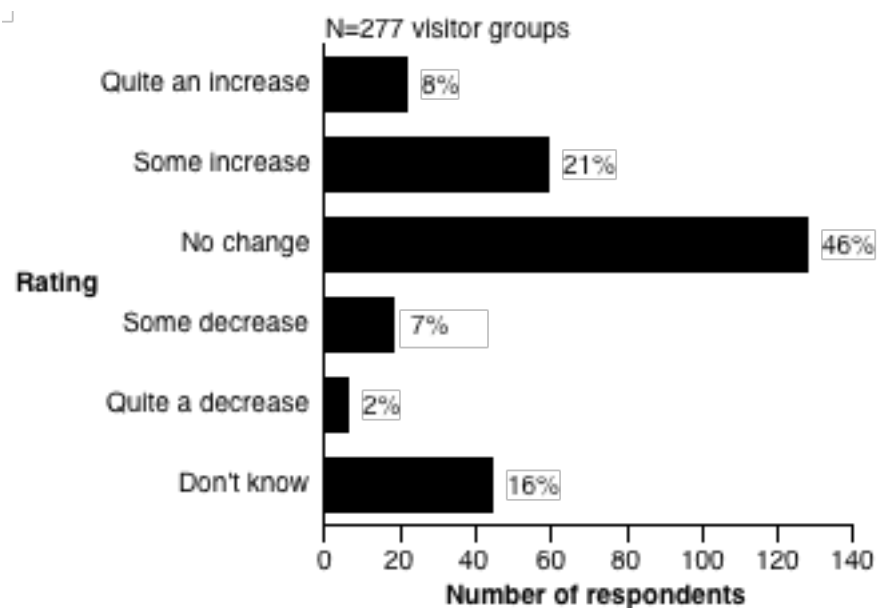


Figure 70: Increase or decrease in litter



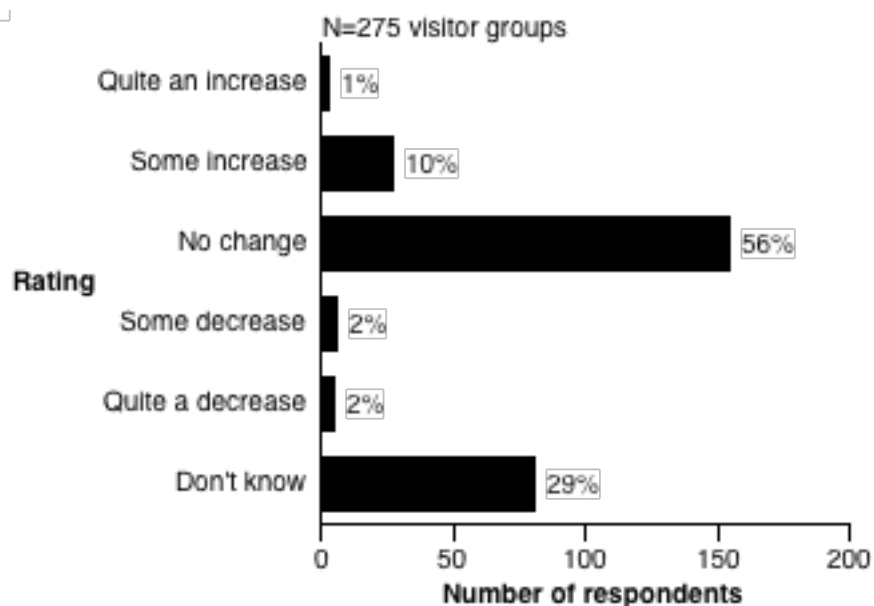


Figure 71: Increase or decrease in visible human waste

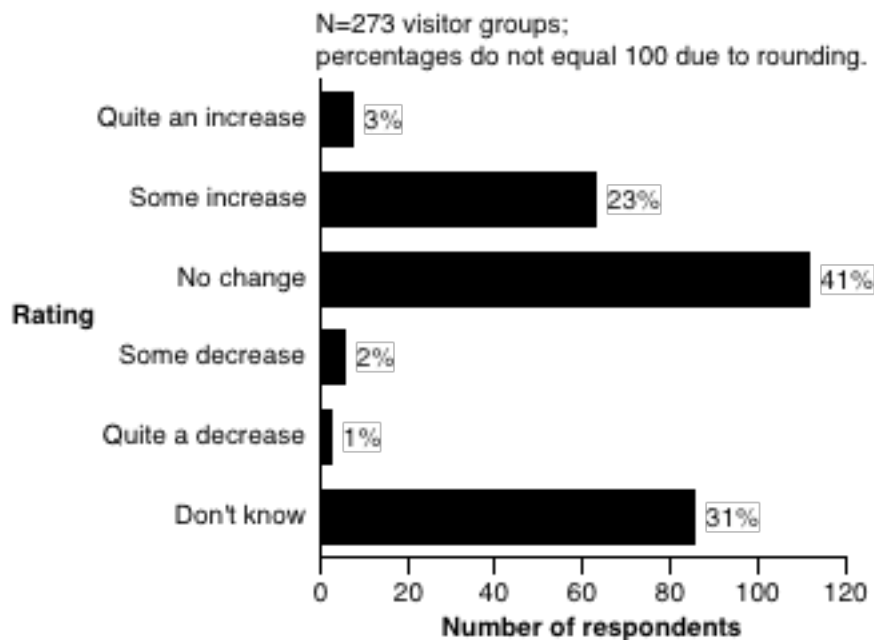
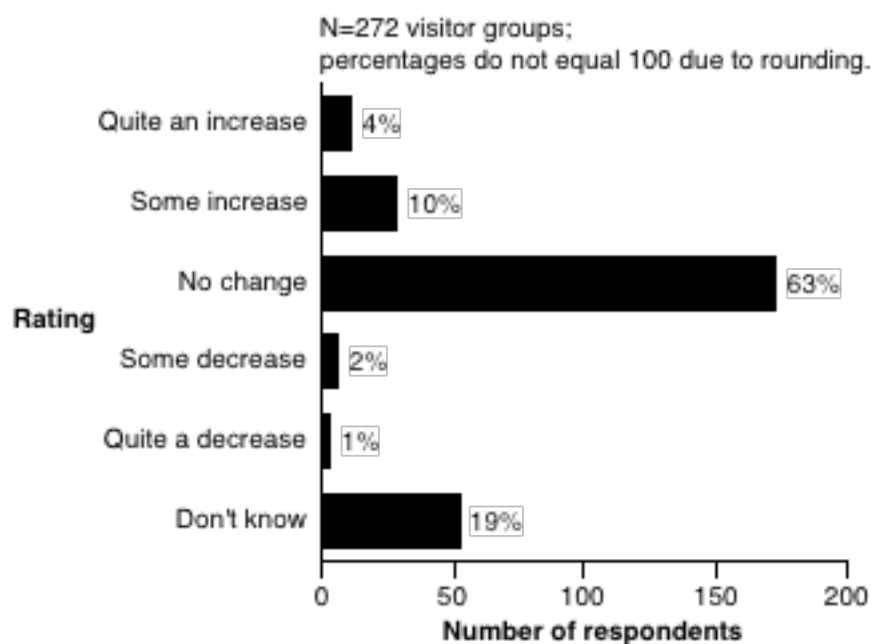


Figure 72: Increase or decrease in river bank erosion



**Figure 73: Increase or decrease in conflicts your group member have experienced with other users**

Visitors who traveled in or used a watercraft on the riverway on this visit were asked their opinion about the number of people they saw along the riverway during their visit. Many visitors thought that they had seen "neither too many nor too few people" (78%), as shown in Figure 74. Another 15% thought they had seen 'too many people,' and 4% thought that they had seen "far too many people."

### Opinions about number of river users

When asked to report how many other groups they had seen while on the water on this trip, 36% of visitors reported seeing 0-5 groups, and another 39% reported seeing 6-19 groups. Twenty-three percent indicated that they had seen 20 or more groups, as shown in Figure 75.

Visitors were also asked how many groups with over 10 people they had seen on the water on this trip. Many visitors (80%) reported seeing 0-5 groups of over 10 people (see Figure 76). Twelve percent of visitors saw 6-19 groups of over 10 people.

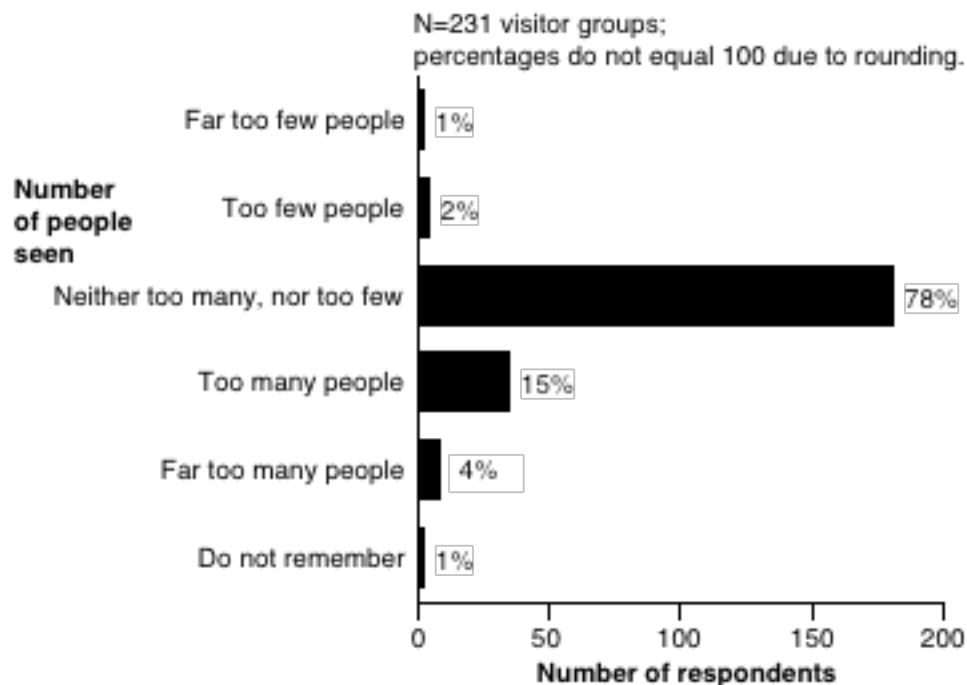


Figure 74: Opinion about number of people seen during your visit

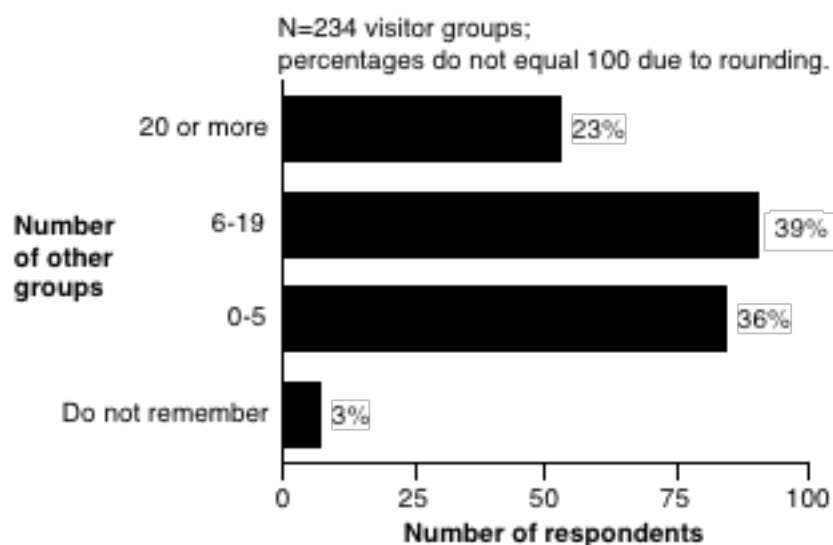


Figure 75: Number of other groups seen while on the water

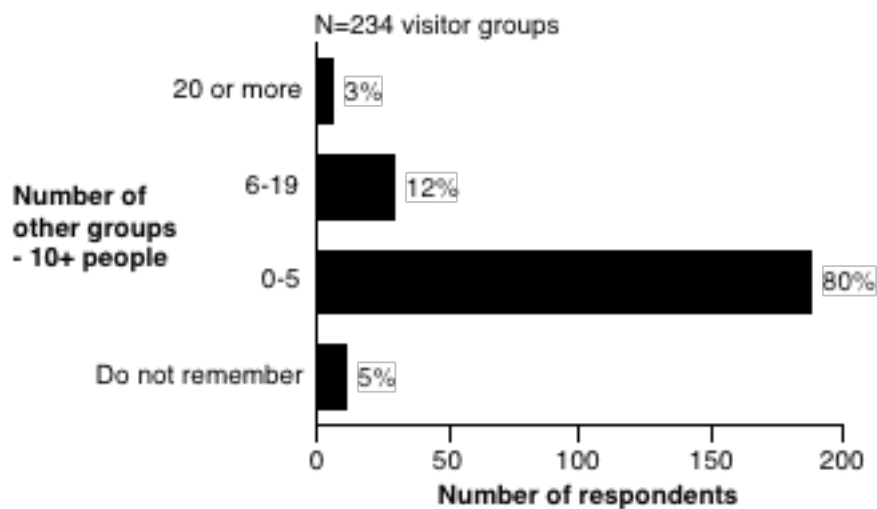


Figure 76: Number of groups with over 10 people seen while on the water

Visitor groups were asked "If the number of campers using back country or primitive campsites at St. Croix National Scenic Riverway in the future must be limited due to overcrowding, which of the following alternatives for this type of camping would you find most acceptable?" Over one-half (51%) of groups preferred a reservation system, 24% preferred a first come, first served system, and 3% said that no system would be acceptable (see Figure 77). Eighteen percent replied "don't know." The most common "other" suggestion was to provide some campsites based on reservations and some on a first come, first served basis.

### Opinions about ways to limit use of backcountry campsites

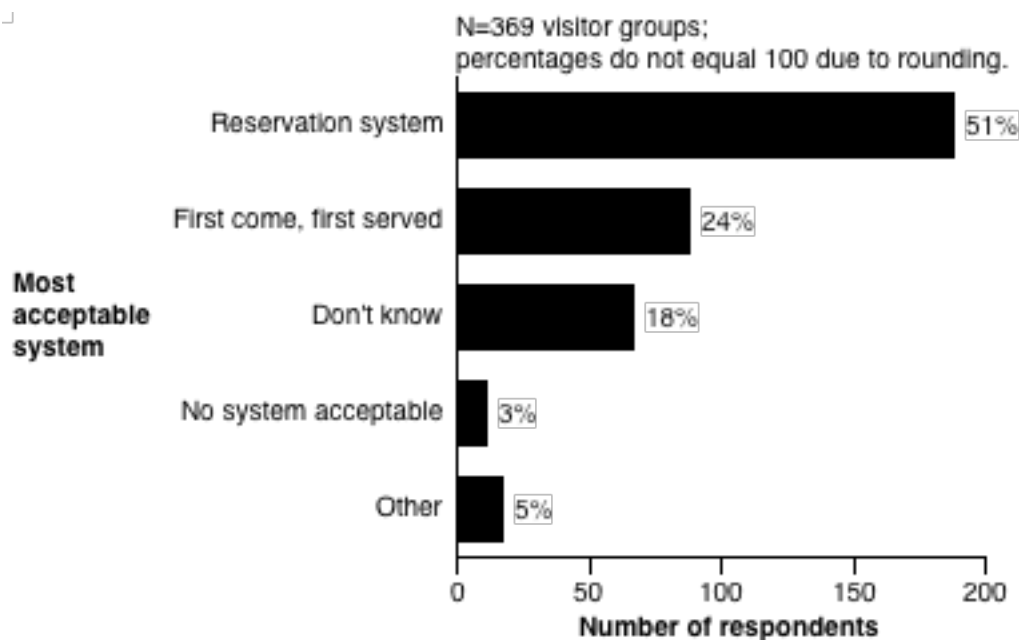
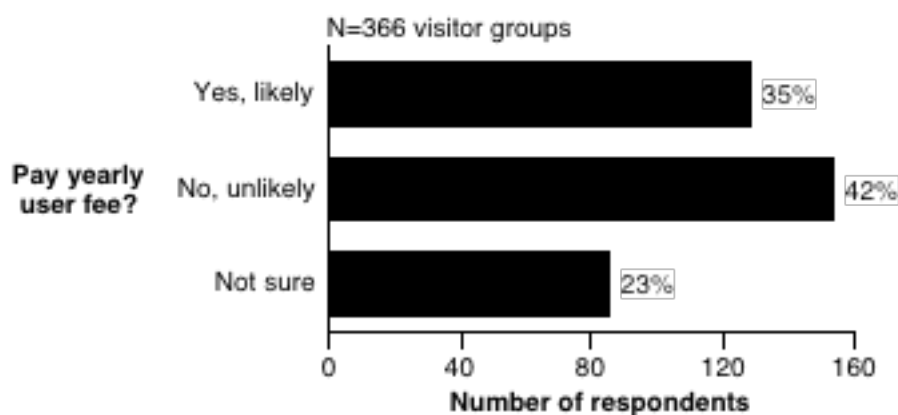


Figure 77: Acceptable ways to limit use of backcountry campsites

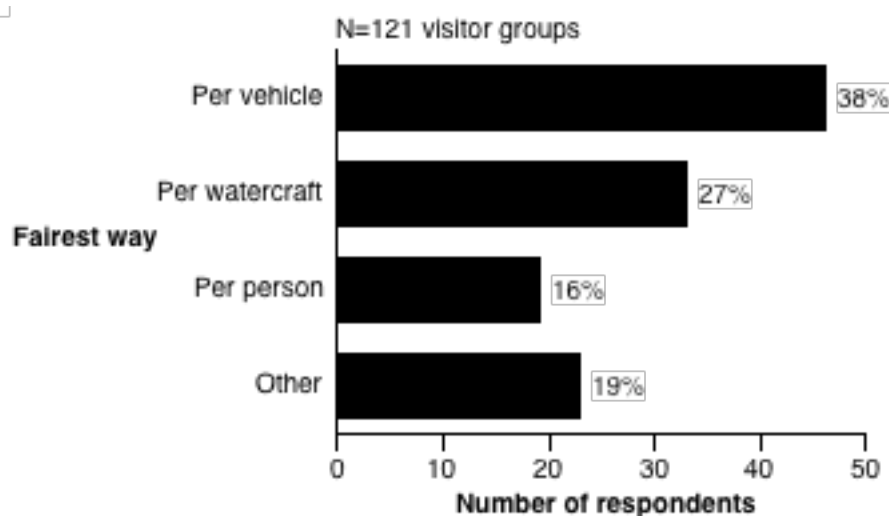
### Opinions about user fees

Visitors were asked the following question: "Would you be willing to pay a user fee of \$15.00 per year if it was used to improve St. Croix National Scenic Riverway's facilities and services?" Thirty-five percent of the visitors said it was likely that they would be willing to pay a yearly fee and 42% responded that it was unlikely (see Figure 78). Another 23% were unsure.

Visitors who said that they would be willing to pay a user fee were asked the fairest way to charge user fees. As shown in Figure 79, visitors felt the fairest way to charge a user fee was per vehicle (38%), per watercraft (27%), and per person (16%). Another 19% suggested "other" ways of charging user fees, including per family, per group or using state lottery funds.



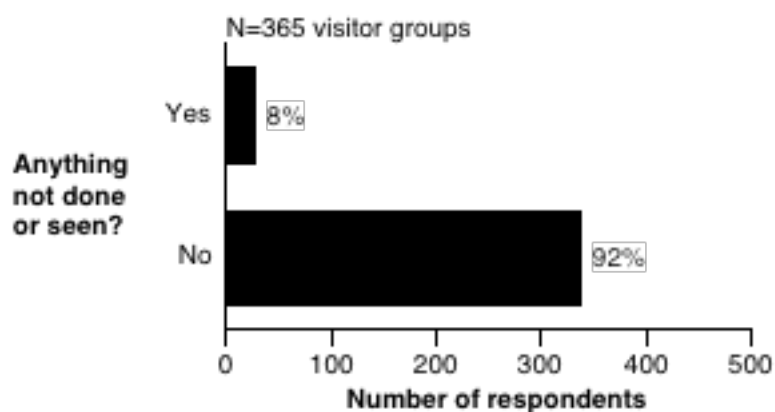
**Figure 78: Willing to pay a \$15.00 user fee**



**Figure 79: Fairest way to charge user fees**

Visitor groups were asked whether they were unable to see or do something. Figure 80 shows that 8% of visitor groups indicated that there was something that they were unable to see or do. Table 7 shows what these visitors were unable to see or do. Table 8 lists the reasons they were unable to see or do what they wanted.

### Anything not seen or done and reasons



**Figure 80: Anything you were unable to see or do?**

**Table 7: What visitors expected**

N=28 comments

**CAUTION!**

Expectations	Number of times mentioned
More wildlife	4
Catch fish	4
Hiking	3
Canoeing	3
Waterfalls	2
Potholes	2
Faster water	2
Other	8

**Table 8: Reasons visitors did not see or do what they wanted**

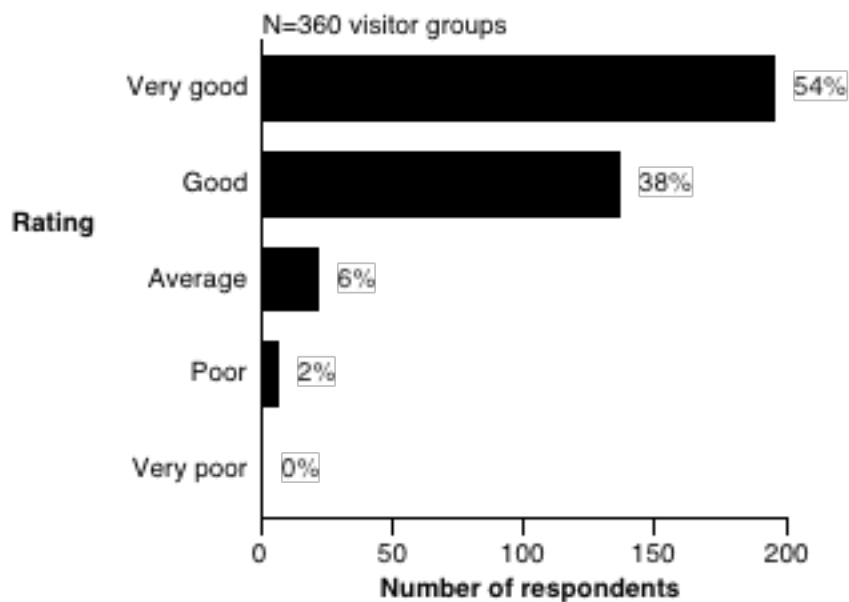
N=25 comments

**CAUTION!**

Reason	Number of times mentioned
Weather	4
Ages of children	3
Wrong season/lack of fish management	3
Too crowded	2
Low water/current too slow	2
Lack of time	2
Other	9

**Overall quality  
of visitor  
services**

Visitor groups were asked to rate the overall quality of the visitor services provided at St. Croix National Scenic Riverway during this visit. The majority of visitor groups (92%) rated services as "very good" or "good" (see Figure 81). No visitor groups rated services as "very poor."



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



Visitor groups were asked "On this visit, what did you and your group like most about your visit to St. Croix National Scenic Riverway?" Eighty-eight percent of visitor groups (337 groups) responded to this question. A summary of their responses is listed below in Table 9 and in the appendix.

### What visitors liked most

**Table 9: What visitors liked most**

N=608 comments;  
many visitors made more than one comment.

Comment	Number of times mentioned
<b>PERSONNEL</b>	
Friendly/ helpful staff	5
<b>INTERPRETIVE SERVICES</b>	
Visitor center information	12
Visitor center exhibits excellent	5
Area history	2
Children's exhibit in visitor center	2
Maps good	2
Other comment	1
<b>FACILITIES AND MAINTENANCE</b>	
Cleanliness	30
Trails	5
Well maintained	4
Restrooms	3
River landings	2
Boat launches	2
Other comments	2
<b>POLICIES</b>	
No reservations required	5
No fees	3
Other comment	4
<b>RESOURCE MANAGEMENT</b>	
Viewing wildlife	39
Clean water quality	30
River	25
Lack of development/primitive	14
Not too crowded	9
Fishing	6
Rock formations	5
River rapids	3
High water level	2
Calm river	2

**GENERAL IMPRESSIONS**

Scenery/natural beauty	138
Quiet	34
Solitude	31
Peacefulness	25
Time with family and friends	20
Canoeing	18
Hiking/walking	15
Enjoyed nature	15
Relaxing	14
Camping	11
River boat tour	8
Fun activities available	6
Close to home—convenience	5
Everything	5
Courteous/friendly people	5
Floating the river	4
Inner tubing	4
Weather	3
Watching rock divers	3
Swimming	2
Picnicking	2
Kids learning	2
Park organized	2
Escaping from city	2
Other comments	10

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Visitor groups were asked "What did you and your group like least about your visit to St. Croix National Scenic Riverway?" Sixty-four percent of visitor groups (244 groups) responded to this question. A summary of their responses is listed below in Table 10 and in the appendix.

### What visitors liked least

**Table 10: What visitors liked least**

N=293 comments;  
many visitors made more than one comment.

Comment	Number of times mentioned
<b>INTERPRETIVE SERVICES</b>	
Comments	3
<b>FACILITIES AND MAINTENANCE</b>	
Litter/trash	18
Unclean toilets	7
Provide picnic tables at all campsites	4
Lack of garbage containers	3
Campsites need improved	3
Overhanging trees along river	2
Visitor center closed too early	2
Trouble finding a campsite	2
Lack of parking	2
Other comments	19
<b>POLICIES</b>	
Large groups drinking while floating	6
Too many motor boats	2
Canoe rental expensive	2
People drinking	2
Other comments	13
<b>RESOURCE MANAGEMENT</b>	
Crowds/too many people	29
Crowded landings	3
Poor fishing	2
Not catching fish that could be kept	2
Other comments	6

**GENERAL IMPRESSIONS**

Nothing	60
Not enough time	15
Cold weather	11
Mosquitoes	8
Disrespectful/rude people	8
Deer flies	7
Long wait for outfitter shuttle	6
Public nudity	6
Watching others litter	5
Traffic	5
Noise while camping	3
Heat	2
Outfitter operation	2
Float distance too long	2
Shallow water	2
Surveys	2
Other comments	17

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Visitor groups were asked "If you were a park manager planning for the future of St. Croix National Scenic Riverway, what would you propose? Please be specific." Fifty-seven percent of visitor groups (216 groups) responded to this question. A summary of their responses is listed below in Table 11 and in the appendix.

## Planning for the future

**Table 11: Planning for the future**

N=350 comments;  
many visitors made more than one comment.

Comment	Number of times mentioned
<b>PERSONNEL</b>	
Need more rangers to enforce rules	8
Provide more knowledgeable staff	2
Other comments	2
<b>INTERPRETIVE SERVICES</b>	
Educate public about regulations and "leave no trace" policy	9
Provide more detailed/accurate maps	5
Improve exhibits	4
Advertise park	4
Add bicycle trails	2
Provide additional nature/education programs	2
Provide more information about local history	2
Provide school programs about park	2
Add visitor centers/ranger stations	2
Other comments	9
<b>FACILITIES AND MAINTENANCE</b>	
Provide more campsites	15
Keep park clean/well maintained	12
Provide signs to mark campsites/landings	6
Add more trails	6
Add mileage markers along river	5
Provide more toilets	3
Improve restrooms/pit toilets	3
Keep the trails	3
Improve campsites	3
Improve maintenance of pit toilets	2
Fence cliffs along trails (especially Wisconsin)	2
Remove downed trees/branches from river	2
Remove cabins along river	2
Provide wheelchair access to some areas	2
Provide potable water	2
Provide recycling containers	2
Improve pit toilets	2
Other comments	25

**POLICIES**

Limit number of people on river (reservations)	16
Keep boat size & type/motor size restrictions on sections of river	9
Provide more garbage cans/more frequent collection	7
Prohibit cans/bottles on river	5
No fees	5
Keep "pack it out" policy	5
Charge user fees	5
Expand park boundary	3
Ban motors on river	3
Enforce fines for littering	3
Ban inner tubes/rentals	3
Limit number of campsites	3
Allow campsite reservations	3
Weekend reservation system	2
Add shuttle	2
Ban alcohol in park	2
Prohibit "floating keg parties"	2
Restrict/enforce "no-wake "zones	2
Fine people who do not follow rules	2
Allow only primitive camping	2
Provide more group campsites	2
Other comments	25

**RESOURCE MANAGEMENT**

Preserve natural beauty/wildness	24
Preserve restore wildlife habitat	7
Protect water quality	6
Preserve river	4
Limit additional development/commercialism	4
Do not overdevelop	3
Protect from erosion	2
Protect against pollution	2
Monitor noise level on river/campsites	2
Preserve wildlife	2
Provide deeper water/more rapids	2
Other comments	4

**GENERAL IMPRESSIONS**

Keep it as it is	21
Improve concession operation	2
Other comments	4

Thirty-seven percent of visitor groups (141 groups) wrote additional comments, which are included in the separate appendix of this report. Their comments about St. Croix National Scenic Riverway are summarized below in Table 12 and in the appendix.

### Comment summary

**Table 12: Additional comments**  
N=207 comments;  
many visitors made more than one comment.

Comment	Number of times mentioned
<b>PERSONNEL</b>	
Employees friendly, helpful, knowledgeable	10
Other comment	1
<b>INTERPRETIVE SERVICES</b>	
Improve river map	2
Other comments	3
<b>FACILITIES AND MAINTENANCE</b>	
Clean up litter	5
Clean	2
Provide better campsite maintenance	2
Improve restrooms	2
Difficulty finding campsite	2
Improve access (walking/wheelchair)	2
Other comments	8
<b>POLICIES</b>	
Enforce rules and regulations	2
No more fees	2
Other comments	9
<b>RESOURCE MANAGEMENT</b>	
Glad river is preserved	5
Too crowded	3
Other comments	6
<b>GENERAL IMPRESSIONS</b>	
Enjoyed visit	51
Good management of park	18
Beautiful/scenic area	15
Hope to visit again	12
Return visit	8
Thank you	7
Enjoyed hiking	6
Enjoyed canoeing	3
Enjoyed wildlife	3

**GENERAL IMPRESSIONS (continued)**

Relaxing	3
Friendly locals	2
Enjoyed river	2
Other comments	25

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## St. Croix National Scenic Riverway Additional Analysis VSP Report 111

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

### Additional Analysis

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

- |                                       |                                       |   |
|---------------------------------------|---------------------------------------|---|
| • Sources of information              | • Activities--past visits             | • Year of previous visits                         |
| • Awareness-unit of NP System         | • Group size                          | • Change in resource conditions                   |
| • Awareness-Nat'l. Wild/Scenic River  | • With tour/educational group         | • Use of watercraft                               |
| • Awareness-set aside for protection  | • Tour group size                     | • Type of watercraft used                         |
| • Awareness-garbage carryout policy   | • Group type                          | • Opinion about number of river users             |
| • Prior visits to St. Croix NSR       | • Gender                              | • Number of river groups seen                     |
| • Visit on weekdays vs. weekends      | • Age                                 | • Number of river groups with over 10 people seen |
| • Knowing mgt. policies change visit? | • State of residence/zip code         | • Rent canoe, kayak, inner tube?                  |
| • Reasons for visiting                | • Country of residence                | • Use local outfitter?                            |
| • River sections visited--this visit  | • Number of visits                    | • Opinion about user fee                          |
| • River sections visited--past visits | • Use of visitor services/facilities  | • Fairest way to charge user fee                  |
| • Was riverway primary destination?   | • Visitor service/facility importance | • Best way to limit backcountry campsite use      |
| • Length of stay                      | • Visitor service/facility quality    | • Anything you wanted to see or do                |
| • Seasons visited                     | • Importance of park resources        | • Overall quality rating                          |
| • Activities--this visit              | • Prior park visits?                  |   |

### Database

The VSP database is currently under development, but requests can be handled through Washington State University, by calling the VSP.

Phone/send requests to:

**Visitor Services Project, CPSU  
College of Natural Resources  
University of Idaho  
Moscow, Idaho 83844-1133**

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



## QUESTIONNAIRE

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## Visitor Services Project Publications

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

### 1982

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

### 1983

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

### 1985

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

### 1986

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

### 1987

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

### 1988

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

### 1989

21. Everglades National Park (winter)
22. Statue of Liberty National Monument
23. The White House Tours, President's Park (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 NRA
43. City of Rocks National Reserve
44. The White House Tours, President's Park (fall)

### 1992

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

### 1993

54. Belle Haven Park/Dyke Marsh Wildlife Preserve (spring)
55. Santa Monica Mountains National Recreation Area (spring)
56. Whitman Mission National Historic Site
57. Sitka National Historical Park
58. Indiana Dunes National Lakeshore (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)

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**Visitor Services Project Publications (continued)**

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**1994**

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

**1995**

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

**1996**

- 84. Everglades National Park (spring)
- 85. Chiricahua National Monument (spring)
- 86. Fort Bowie National Historic Site (spring)
- 87. Great Falls Park, Virginia (spring)
- 88. Great Smoky Mountains National Park (summer)
- 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 Historical Park (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)
- 104. Iwo Jima/Netherlands Carillon Memorials
- 105. National Monuments & Memorials, Washington, D.C.
- 106. Klondike Gold Rush National Historical Park, AK
- 107. Whiskeytown National Recreation Area
- 108. Acadia National Park

**1999**

- 109. Big Cypress National Preserve (winter)
- 110. San Juan National Historic Site, Puerto Rico (winter)
- 111. St. Croix National Scenic Riverway

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

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**NPS D-63**

**August 2000**



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