Red River Gorge:

A Study of Relationships and Use Patterns among Recreationists and Local Residents

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January 30, 2006

Table of Contents

Table of Contents ……. ii
List of Tables …….. iii
List of Figures ……. iv

Introduction ……..……. 1

Part One: Recreational visitors to Red River Gorge …… 1

A. Basic Socio-demographic Characteristics …… 3
B. Recreational Patterns of Visitors ……. 5
C. Activities while in Red River Gorge …… 9
D. Density Tolerance (or Social Carrying Capacity) …… 11
E. Interactions with Local Residents …… 15
F. Perceptions about the Management of Red River Gorge …… 16

Part Two: Red River Gorge Residents …… 21

A. Demographic Characteristics …….. 22
B. Contact with Recreational Visitors ……. 22
C. Perceptions about Management of the Gorge ……. 23
D. Resident Perceptions about Proposed Improvements for Red River Gorge …….. 25
E. Preferences for the Future of Red River Gorge …….. 25

Appendix A: Red River Gorge Recreationist Survey ……. 27

Appendix B: Landowner Interview ……. 36

Map 1: Red River Gorge Trail Map …… 1

List of Tables

Table 1: Location of Survey ……..……. 2
Table 2: Highest Level of Education ……..…… 3
Table 3: City of Residence ……..…… 4
Table 4: County of Residence ……..…….. 4
Table 5: Number of People in Group ……..…… 5
Table 6: Number of Days this Visit ……..……. 6
Table 7: Number of Visits in Last Two Years ……..…... 6
Table 8: Any Stops before Gorge ……..…… 6
Table 9: Visits by Season ……..……. 6
Table 10: Seasonal Preferences ……..…… 7
Table 11: Membership in Conservation Groups ……..…. 8
Table 12: Information Sources for Red River Gorge ……..….. 8
Table 13: Main Reasons for Visiting Red River Gorge ……..….. 8
Table 14: Recreational Activities of Visitors ……..…. 9
Table 15: Main Activity of Visitors …….…. 10
Table 16: Density Tolerance by Main Activity ……... 13
Table 17: Number of Groups Encountered …….…. 15
Table 18: Number of Groups Encountered by Wilderness Gateway Visitors …… 15
Table 19: Feelings about Controls on People …….. 15
Table 20: Contact with Residents ……. 16
Table 21: Nature of Contact with Residents …… 16
Table 22: Percentage of Privately Owned Land …….. 16
Table 23: Visitor Awareness about Management Responsibilities …….. 17
Table 24: Management Problems in RRG …… 17
Table 25: Feelings about $3 Overnight Fee …… 17
Table 26: Feelings about Potential Problems in RRG …… 18
Table 27: Feelings about Management Options …… 19
Table 28: Problems with Visitors …… 23
Table 29: Residents' Perceptions of Management Problems ……. 23
Table 30: Feelings about Management …….. 24
Table 31: Resident Feelings about Potential Problems in RRG ……. 24
Table 32: Resident Perceptions about Proposed Improvements ……. 25
Table 33: Resident Preferences for Proposed Management Actions ….. 26
Table 34: Resident Feelings about Future Development of the Gorge … 26

List of Figures

Figure 1: Visitor Occupations ……. 3
Figure 2: Childhood Residence …….. 4
Figure 3: State of Residence …… 5
Figure 4: Seasonal Preferences …… 7
Figure 5: Main Activity of Visitors ……. 10
Figure 6: Rating of Recreational Opportunities …… 11
Figure 7: Density Tolerance of RRG Visitors …….. 12
Figure 8: Density Tolerance by Main Activity ……. 12
Figure 9: # of People Encountered while doing Main Activity ……. 13
Figure 10: Wilderness Gateway Visitors: # of People Encountered …. 14
Figure 11: Feelings about Number of Visitors Encountered ……. 14
Figure 12: Perceptions about Use Condition of RRG …….. 19
Figure 13: Perceptions about Environmental Condition of RRG …….. 20
Figure 14: Perceptions about Management of RRG ……. 20
Figure 15: Overall Feelings about Visit to Gorge …… 21

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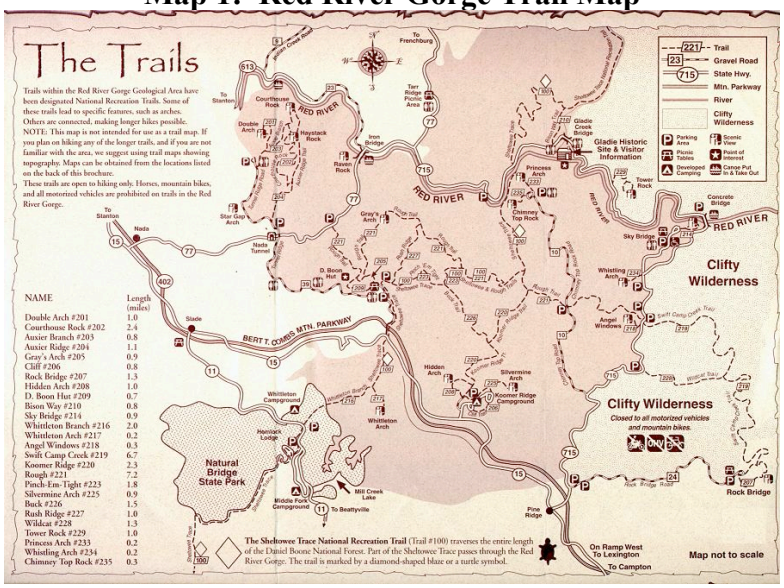
Introduction

In 2004, the Department of Environmental Studies at Baylor University, under the direction of Dr. Sara E. Alexander, conducted an update study of visitors, residents and landowners in Red River Gorge (RRG). Dr. Alexander directed a similar study in the early 1980s, roughly twenty years previous, as part of her graduate studies in Applied Anthropology at the University of Kentucky. This update study was conducted with two main objectives – first, to complete the longitudinal study initiated in 1980, and second, to provide information to the U.S. Forest Service as they go through the Limits of Accepted Change (LAC) process. Specifically, the study involves an examination of two populations relevant to Red River Gorge management – recreational visitors and local residents and landowners. Part 1 of the report presents findings from the study of the recreational visitors and Part 2 reports selected findings from the study of the residents.

Part One: Recreational Visitors to Red River Gorge

The Visitor Study was conducted in the Gorge in June 2004 and a two-week period in October 2004. As part of a Research Field School course in Environmental Studies, Baylor University students conducted the survey at different locations within the Red River Gorge area. Table 1 shows the survey locations and the number of surveys completed at each. These locations included Sky Bridge, Grays Arch, Rock Bridge, the Visitor Center, Clifty Wilderness, Bison's Way, and Military Wall (see Map 1 for locations).

Map 1: Red River Gorge Trail Map



Since the visitor population is transient in nature, this study employed opportunistic sampling to administer the Visitors Survey. This technique involves asking as many visitors as logistically possible at each survey location to complete the survey. Surveyors were in the parking lot areas or other access points to the various trails, arches, cliffs, etc. As visitors left a particular site they were approached and asked to complete a survey. Participation was on a voluntary basis. Surveys with 981 recreational visitors (18 years of age or older) were administered and completed.

The Visitor Survey (Appendix A) collected basic demographic data, information about their recreational use of RRG, social carrying capacity levels (i.e., how they felt about encountering certain numbers of other visitors), feelings about interactions with local residents, perceptions about management of the area, and preferences for future development of the region.

Likert scales were used for questions concerning density tolerance and feelings on the management and upkeep of the Gorge. For other sections, close ended questions were used. The few open-ended questions on the survey dealt with the visitors unique experiences, such as whether or not that visitor had had problems with local residents. The survey took approximately ten to fifteen minutes for most visitors to complete.

Table 1: Location of Survey

Location	Frequency	Percent
Martin's Fork	104	10.6
Canoe take out point, Iron Bridge	1	0.1
Sheltowee Trace Trailhead (on 715, near Suspension Bridge)	125	12.8
Bison Way Trailhead	16	1.6
Gladie Cabin	14	1.4
Gladie Visitor Center	19	2.0
Wilderness Gateway	69	7.0
Sky Bridge	279	28.4
Chimney Top	135	13.8
Half Moon Arch	8	0.8
Rock Bridge	36	3.7
Koomer Ridge trailheads	13	1.3
Grays Arch	83	8.5
Auxier Ridge trailhead	33	3.4
Whittleton Arch	1	0.1
Dipwall	8	0.8
Torrent Falls	1	0.1
Bell's Falls	11	1.1
Rock climbing on road to Tar Ridge	11	1.1
Indian Creek (along road, Fall season only)	10	1.0
Whistling Arch	4	0.4
Total N	981	100.0

A. Basic Socio-Demographic Characteristics

Recreational visitors to the Gorge are a somewhat varied group in terms of basic demographic characteristics. The mean age for all visitors is 34 years. The mean age for males is 36 years and for females is 38. Our survey population included 59% males and 41% females which is loosely reflective of the visitor population. As indicated in Figure 1 below, approximately 33% of visitors have professional occupations; another 20% are students; roughly 8% have service jobs; 5% work in medical fields; and 4% work in some type of education field.

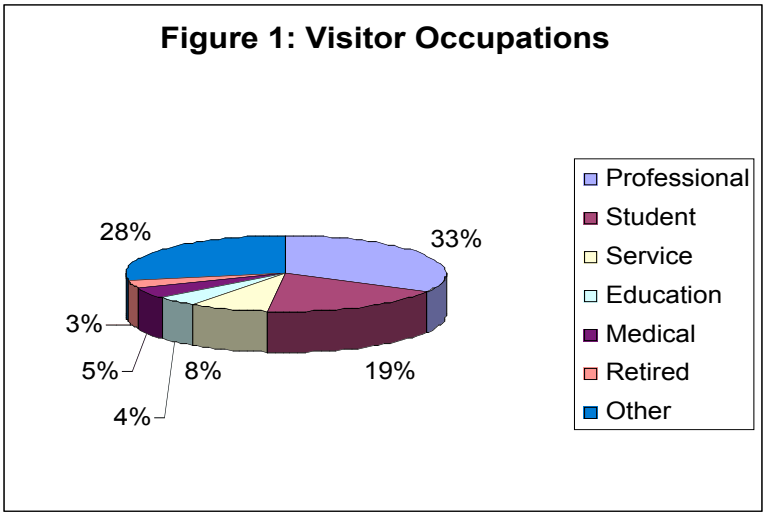


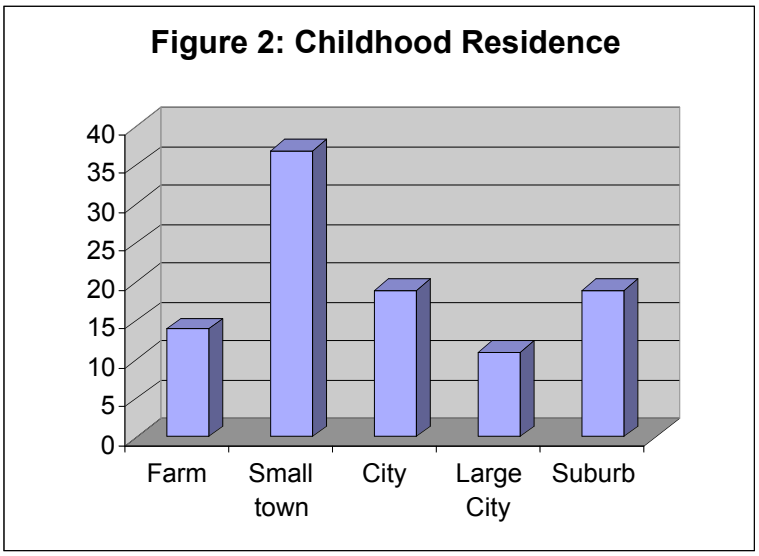
Table 2 below shows the education levels of the visitors. Fifty-nine percent of visitors have completed at least some college education or they have a Bachelor's degree. Another 13% have a graduate degree. Only 4 percent did not finish High School.

Table 2: Highest Level of Education

Level of Education	Frequency	Percent
Grades 0-8	11	1.1
Grades 9-11	32	3.3
High school diploma	167	17.3
Some college or additional schooling	339	35.0
Bachelor's degree	228	23.6
Some graduate work	60	6.2
Graduate degree	131	13.5
Total N *	968	100.0

*Please note: For all data tables, slight variations in the Total N figure are due to missing data and/or "not applicable" responses.

Figure 2 shows in what size of community the visitor was raised. Roughly 14% grew up on a farm or ranch. Another 37% grew up in a relatively small town while about 30% grew up in a large city or in the suburb of a large city.



Tables 3 and 4 present information about their current residence. A significant number of the visitors to Red River Gorge come from either Lexington (11.8%), Lousiville

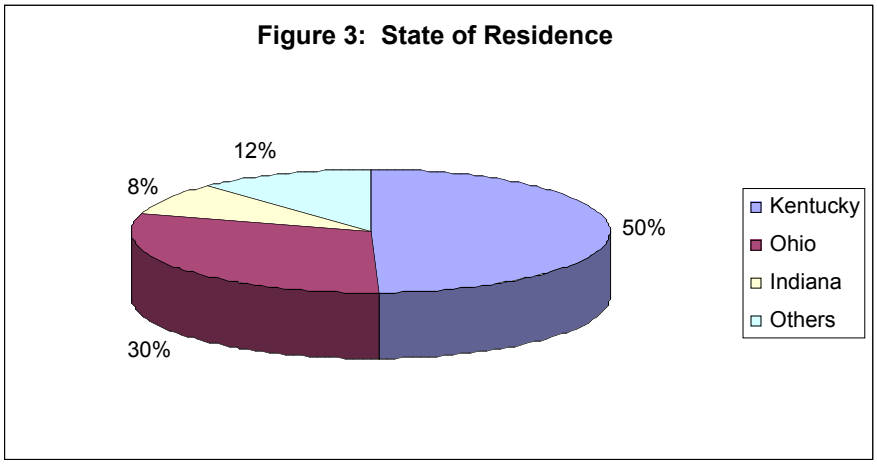
Table 3: City of Residence

City	Frequency	Percent
Lexington	114	11.8
Louisville	64	6.6
Cincinnati	165	17.1
Winchester	14	1.5
Hamilton, OH	10	1.0
Columbus (OH)	10	1.0
Indianapolis	20	2.1
Richmond, KY	21	2.2
Ft. Wayne (IN)	10	1.0
All others	537	55.7
Total N	965	100.0

Table 4: County of Residence

County	Frequency	Percent
Fayette	102	10.8
Hamilton	171	18.1
Jefferson	63	6.7
Kenton	30	3.2
All others	578	61.2
Total N	944	100.0

(6.6%) or Cincinnati (17.1%) (Table 3). If not from the city itself, visitors come from the county in which these cities are located (see Table 4). Figure 3 shows that all in all the vast majority of visitors (88%) come from Kentucky, Ohio or Indiana.



B. Recreational Patterns of Visitors

Most visitors to Red River Gorge come to the area in small groups, with either family or friends and they plan to stay for 2-4 days. Given the fact that most of the visitors come from the tri-state area, that is, from fairly close, one would expect a fairly high rate of repeat visitation, that is, they visit the Gorge multiple times each year. The average number of people in each visitors group was 5.3 (see Table 5). The average number of

Table 5: Number of People in Group

Number of people	Frequency	Percent
0	5	0.5
1	29	2.9
2	279	28.3
3	124	12.6
4	170	17.2
5-9	253	25.8
10-15	89	9.0
>15	37	3.7
Total N	986	100.0

people in the group who were family members was 1.7 and the average who were friends was 2.7. These small groups plan to stay in the Gorge an average of 2.5 days and they have visited the Gorge area, during the last two years, an average of 7.3 times (see Tables 6-7). Most visitors to the Gorge area want to get away from their everyday routine for a few days. They are typically not coming to the Gorge on their longer vacations; they come to this area over weekends or longer holiday weekends because it is an accessible

and attractive area. Aside from its close proximity to several large urban areas, the diversity of resources and recreational opportunities the Gorge offers adds to its attractiveness. Many visitors also like the fact that they can hike, rock climb, camp and swim all in one trip as the area is fairly compact as well.

Table 6: Number of Days this Visit

Number of days	Frequency	Percent
0	7	0.7
1	393	40.2
2	244	24.9
3	252	25.7
4-5	51	5.2
>5	32	3.3
Total N	979	100.0

Table 7: Number of Visits in Last Two Years

Number of visits	Frequency	Percent
0	33	3.4
1	401	41.0
2	154	15.7
3	62	6.3
4	63	6.5
5	48	4.9
6	41	4.2
7-10	66	6.7
11-20	52	5.3
>20	59	6.0
Total N	979	100.0

While the majority of visitors to the Gorge come to the area as a week-end get-away, roughly 10 percent of visitors (see Table 8) said they had stopped elsewhere before coming to the Gorge; 39.7% stopped in another place in Kentucky and 12.3% stopped somewhere in Ohio.

Table 8: Any Stops before Gorge

Visits before the RRG	Frequency	Percent
Yes	94	9.6
No	882	90.4
Total N	976	100.0

The Red River Gorge is a popular location for outdoor recreational activities throughout most of the year. Table 9 shows the percent of visitors who went to the Gorge during each respective season. It is evident that visitors go to the area throughout the year with less only during the winter as one might expect. The Gorge is most popular during the summer and fall seasons.

Table 9: Visits by Season

Season	Frequency	Percent*
Spring	534	55.56
Summer	749	77.9
Fall	607	63.2
Winter	252	26.2

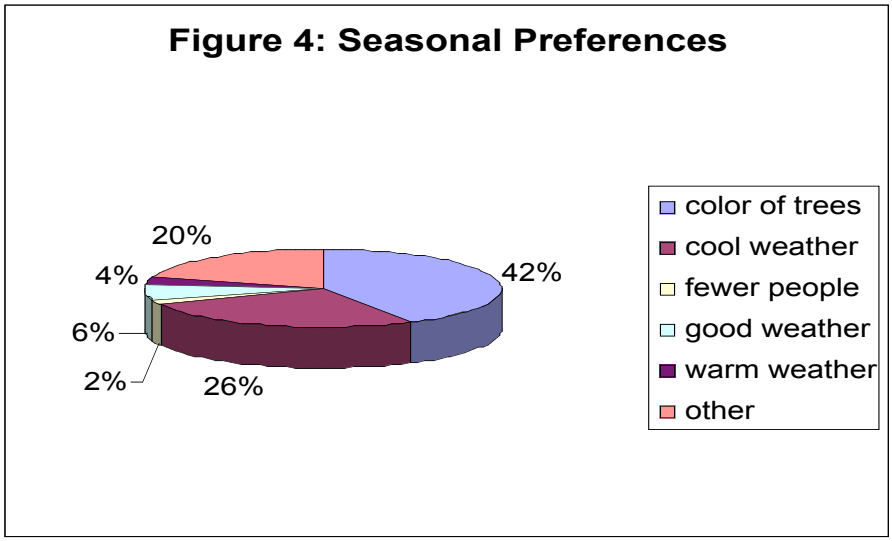
- Each percent is of total sample as respondents were asked about each season separately.

The data presented in Table 10 indicate the seasons visitors prefer to visit Red River Gorge. Almost 30% of visitors prefer the fall season, with the turning of the leaves, but as well, 23% prefer all seasons equally and almost 13% prefer the summer.

Table 10: Seasonal Preferences

Seasonal preference	Frequency	Percent
Spring	63	6.6
Summer	120	12.5
Fall	283	29.5
Winter	7	0.7
All seasons equal	222	23.1
Summer and fall	33	3.4
Spring, summer, fall	58	6.1
Spring and fall	82	8.5
Spring and summer	64	6.7
Fall and winter	17	1.8
Spring, fall, winter	8	0.8
Spring, winter	1	0.1
Summer, winter	2	0.2
Total N	960	100.0

Figure 4 shows that a significant portion of visitors prefer the fall because of the color of the trees. Most of the other popular seasonal preferences were connected to various weather conditions and not necessarily to social characteristics of the visitor population itself.



The survey asked visitors about membership in various special interest groups, in particular, whether they were a member of any conservation or recreation groups. Approximately 14% of visitors are members of some type of group. Table 11 presents the most common groups identified.

Table 11: Membership in Conservation Groups

Group	Frequency	Percent
Sierra Club	18	16.5
National Wildlife Federation	4	3.7
Boy Scouts	12	11.0
RRG Climbing Coalition	11	10.1
Access Fund	8	7.3
All other groups	56	51.4
Total N	109	100.0

Visitors were asked how they found out about Red River Gorge and its recreational opportunities. Table 12 presents the various choices listed as well as the response rates for each. The majority of visitors – 74 % – found out about the Gorge from family or friends. Another 10% found out "on their own" and roughly eight percent live or have lived in the area.

Table 12: Information Sources for Red River Gorge

Information Sources about RRG	Frequency	Percent
On my own	106	10.9
Family or friends	720	74.1
Internet	10	1.0
Guidebook	9	0.9
Government agencies or official source	5	0.5
Live or have lived in area	77	7.9
Advertisement or news	3	0.3
Conservation or rec. group	13	1.4
Family/friends and internet	28	2.9
Family/friends and recreation group	1	0.1
Total N	972	100.0

Table 13 shows the main reasons visitors come to the Gorge. The most common responses were for the natural beauty, to be with friends and family, and for outdoor exercise. Roughly 10% of visitors also want to get away from everyday life or they want to experience the "rugged life."

Table 13: Main Reason for Visiting Red River Gorge

Main Reason for Visiting RRG	Frequency	Percent
Natural beauty	361	36.9
Communion with God	43	4.4
Peacefulness	53	5.4
To be with friends & family	151	15.4
Party	23	2.4
Get away from everyday life	103	10.5
Outdoor exercise	124	12.7
Take it easy	34	3.5
Experience the rugged life	86	8.8
Total N	978	100.0

C. Activities While in Red River Gorge

Visitors to the Gorge recreate in a wide variety of ways, and there are numerous opportunities in the area to engage in a number of different types of activities. The following table shows all of the various activities recreationists are doing. Visitors were asked to indicate all activities. The most popular activities are hiking (86.8%), camping (48.8%), backpacking (29.9%) and picnicking (26.7%). Other common choices included swimming, traditional climbing, "partying" and sport climbing.

Table 14: Recreational Activities of Visitors

Activities	Frequency	Percent
Canoe	80	8.2
Hiking	848	86.8
Biking	48	4.9
Camping	477	48.8
Fishing	115	11.8
Swimming	181	18.5
Backpacking	292	29.9
Rappelling	111	11.4
Traditional Climbing	167	17.1
Sport Climbing	123	12.6
Bouldering	94	9.6
Picnicking	261	26.7
Birdwatching	66	6.8
"partying"	163	16.7
"4-wheeling"	30	3.1
Hunting	21	2.2
Other	101	10.3

The visitors were then asked to identify their main activity for this visit to the Gorge. Figure 5 (and Table 15 below) shows that hiking, followed by camping, are the most common main activities engaged in by recreational visitors. Other common activities include backpacking, traditional and sport climbing. Some of the "other" activities included: "brotherhood," "romance," and writing.

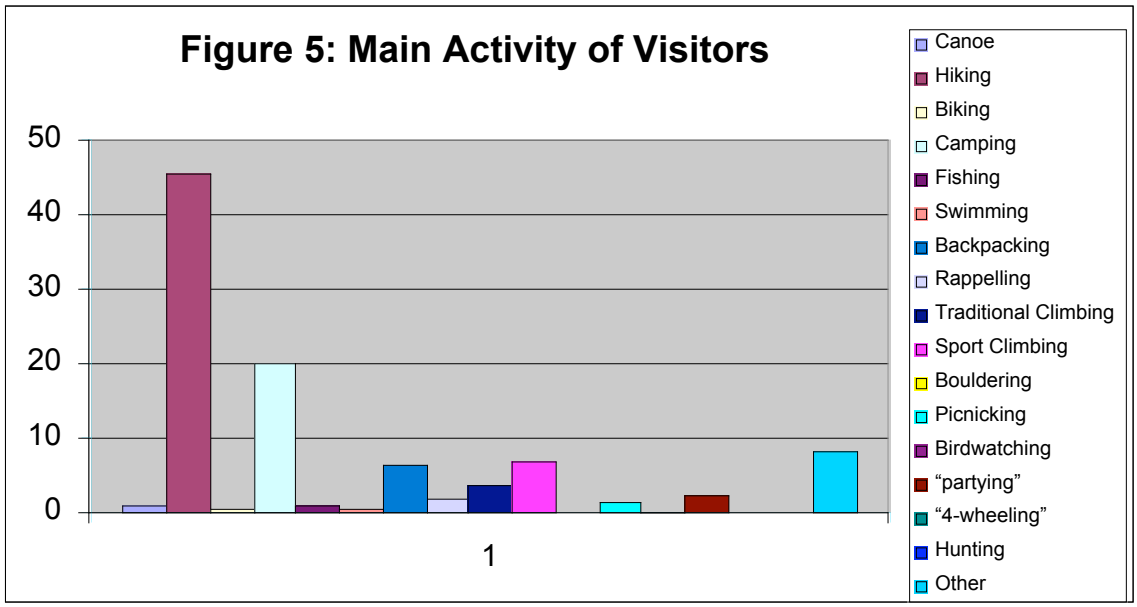
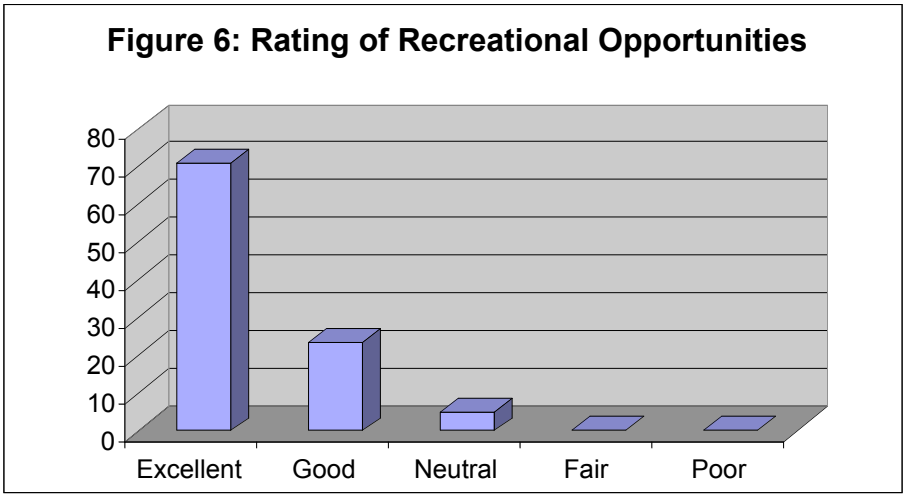


Table 15: Main Activity of Visitors

Main Activity in RRG	Frequency	Percent
Canoeing	9	1.0
Hiking	399	45.4
Biking	6	0.7
Camping	175	19.9
Fishing	8	0.9
Swimming	4	0.5
Backpacking	56	6.4
Rappelling	16	1.8
Traditional Climbing	33	3.8
Sport Climbing	60	6.8
Bouldering	1	0.1
Picnicking	14	1.6
Birdwatching	3	0.3
Partying	20	2.3
4-wheeling	1	0.1
Hunting	1	0.1
Other	73	8.3
Total N	879	100.0

The visitors were then asked to rank the Gorge in terms of opportunities to pursue their main recreational activity. Figure 6 indicates an overwhelming majority – 70.9% -- rated the Gorge as "excellent" for their main activity and another 23.5% gave the region a "good" rating.



The recreationists were asked some questions about use of fire versus camp stoves for cooking; 78.4% prefer to use wood for cooking while 21.6% prefer to use a camp stove.

They were also asked whether they ever leave designated trails and hike through the woods or on undesignated trails. The majority of visitors – 72.8 percent – do not leave designated trails when they are hiking; 28.2% responded that they do leave designated trails to hike to their destination.

D. Density Tolerance (or Social Carrying Capacity)

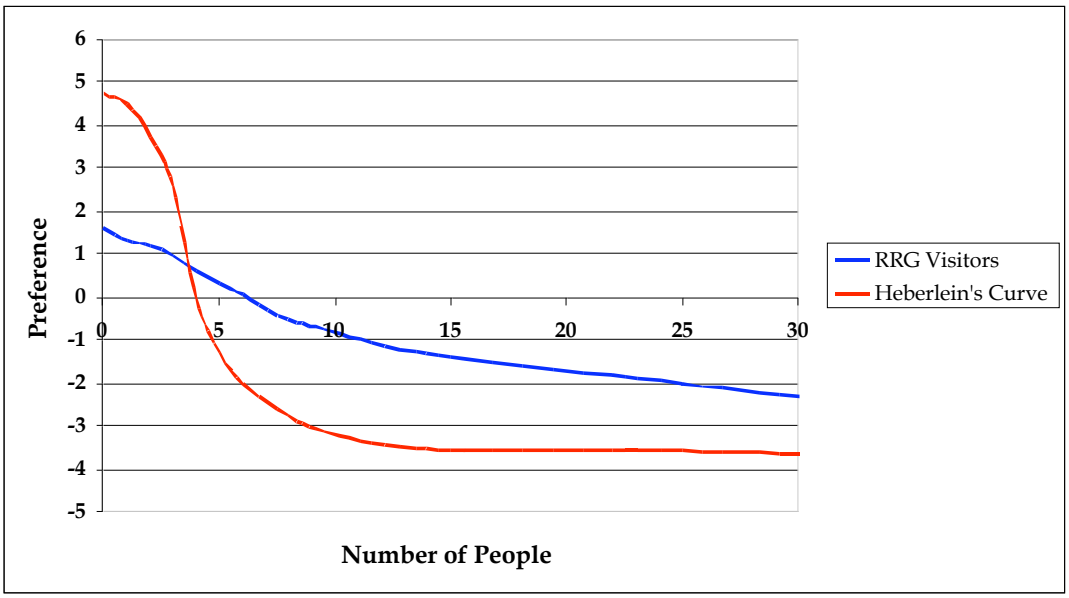
Density tolerance of visitors to a recreational area is a measurement used to identify at what point a person's recreational experience is impacted by encountering certain umbers of people not in his/her own group. This is an important measurement for wilderness recreation areas because one of the reasons visitors go to these areas is to get away and hopefully not see many people. It is important, therefore, to document whether a visitor's recreational experience is being impacted by crowded conditions, and if so, at what point this occurs for each visitor.

In this study we asked visitors to rank ("very favorable" to "very unfavorable") how they would feel (it is a conditional question) about seeing zero to thirty plus people while doing their main activity in Red River Gorge. The two figures below present the results of this series of questions. Figure 7 shows the entire sample of Gorge respondents from this study relative to the standard curve generated by collecting these data in over 300 wilderness areas in the United States (a study conducted by Thomas Heberlein hence known as the 'Heberlein curve'). It is evident that the critical point, for the average Gorge visitor, at which the experience goes from positive to negative (that is, where the line crosses the x-axis) in terms of number of other people encountered is approximately six. Heberlein's wilderness tolerance curve crosses the line at about four people.

Figure 8 (and Table 16 for reference) shows these curves delineated by the most common main activities. All of these curves cross the x-axis somewhere between 5 and 7 people so the average density tolerance for each of these subgroups is in that range. This result means that regardless of the type of recreation in which they are engaged, the visitors

have a tolerance of seeing 5-7 people in addition to their own group. In turn, they feel negative or "unfavorable" about seeing more than these 5-7 people.

Figure 7: Density Tolerance of RRG Visitors



It is also important to examine the slope and other characteristics of these curves. For example, the "partiers" are more tolerant of seeing more people which is not a surprising result, and in comparison, the backpackers feel more strongly about not seeing so many people, which is also an expected result.

Figure 8: Density Tolerance by Main Activity

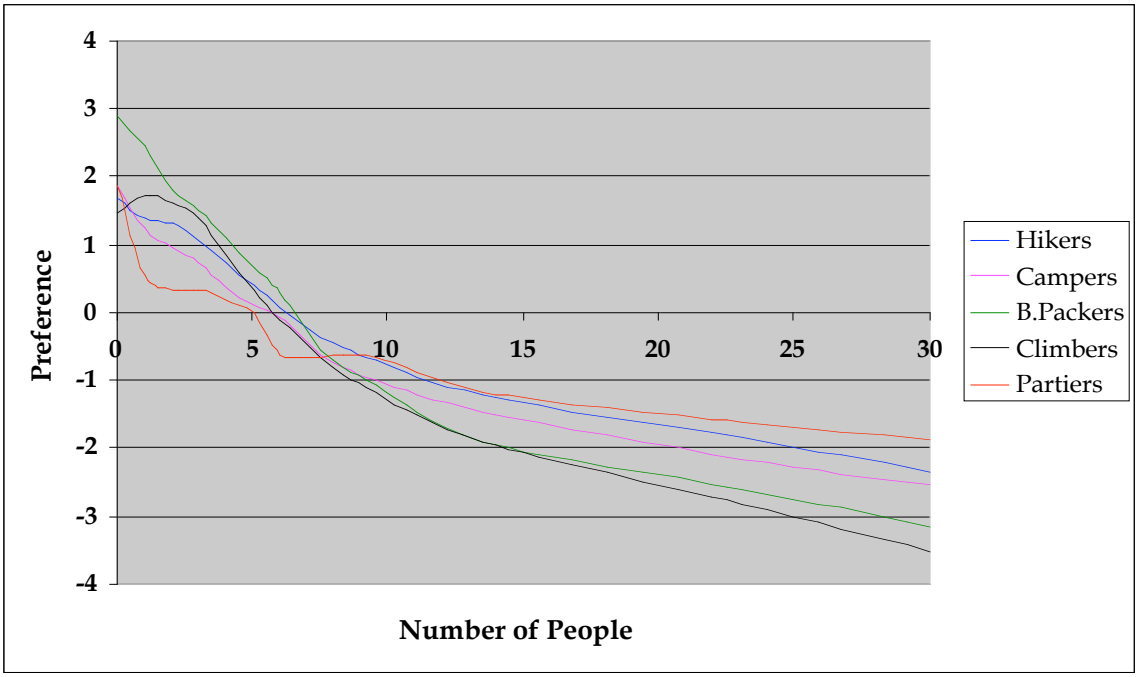
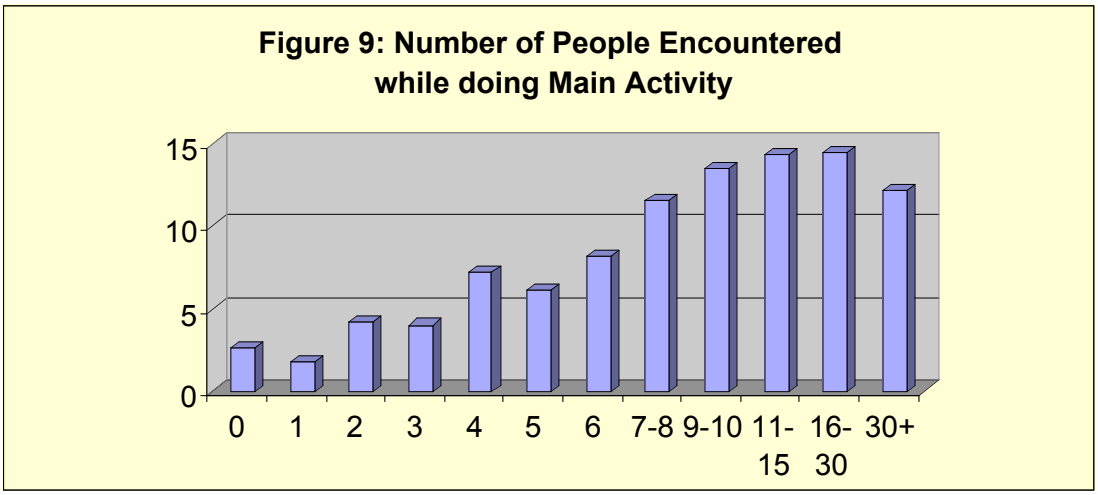


Table 16: Density Tolerance by Main Activity

Number of People	Hikers	Campers	Backpackers	Partiers	Climbers
0	1.68	1.88	2.91	1.88	1.48
1	1.39	1.25	2.46	0.55	1.75
2	1.32	0.97	1.82	0.35	1.63
3	1.09	0.74	1.53	0.35	1.42
4	0.75	0.39	1.1	0.2	0.85
5	0.41	0.11	0.68	0.0	0.34
6	0.1	-0.06	0.3	-0.6	-0.09
7-8	-0.34	-0.6	-0.54	-0.65	-0.66
9-10	-0.7	-0.99	-1.07	-0.65	-1.17
11-15	-1.21	-1.45	-1.89	-1.15	-1.89
16-30	-1.83	-2.14	-2.58	-1.6	-2.81
More than 30	-2.33	-2.53	-3.14	-1.85	-3.5
Total N	375	169	57	20	91

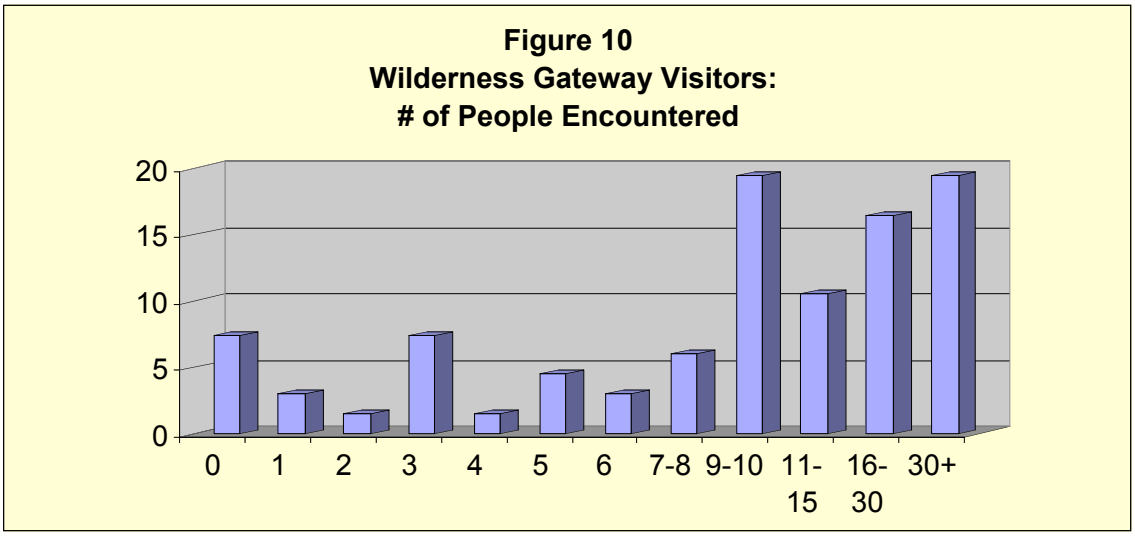
As a follow up to this series of questions, the visitors were also asked to estimate how many people they actually encountered while doing their main activity (Figure 9). It is interesting to note that the majority of visitors (66.3%) estimated they encountered seven or more visitors while recreating in the Gorge. Figure 11 shows these data specifically for those visitors surveyed in the Wilderness Gateway area which is the main access point for the Clifty Wilderness Area. The Clifty Wilderness Area has special regulations about group size, i.e., the maximum group size is 10 people.



* Visitors sampled at Wilderness Gateway location have been excluded (see Figure 11).

The Wilderness Act also stipulates that these areas have to be managed such that they are providing opportunities for solitude and unconfined recreation. It is therefore important to document the number of people visitors to this area are encountering as well as group size. As Figure 10 shows, roughly 45% of visitors to the wilderness area estimate they encountered 11 or more visitors while doing their main activity (this figure does not account for group size). While they earlier felt unfavorable towards seeing 5-7 people,

Figure 12 indicates that, even though they encountered more than this number, the majority actually felt that the number they encountered was "just right."



The visitors were also asked to estimate the *number of groups* they encountered while doing their main activity. Table 17 shows these estimates for the visitor sample with the exclusion of the Wilderness Gateway visitors. Roughly 34% estimated they met two or less groups and another 44% estimated they met between three and six groups. Table 18 presents these data for those visitors to the Clifty Wilderness Area only. Forty-seven percent of those visitors encountered 3-6 groups while another 10% estimated they met 7-9 groups and another 21% estimated they encountered 10 or more groups.

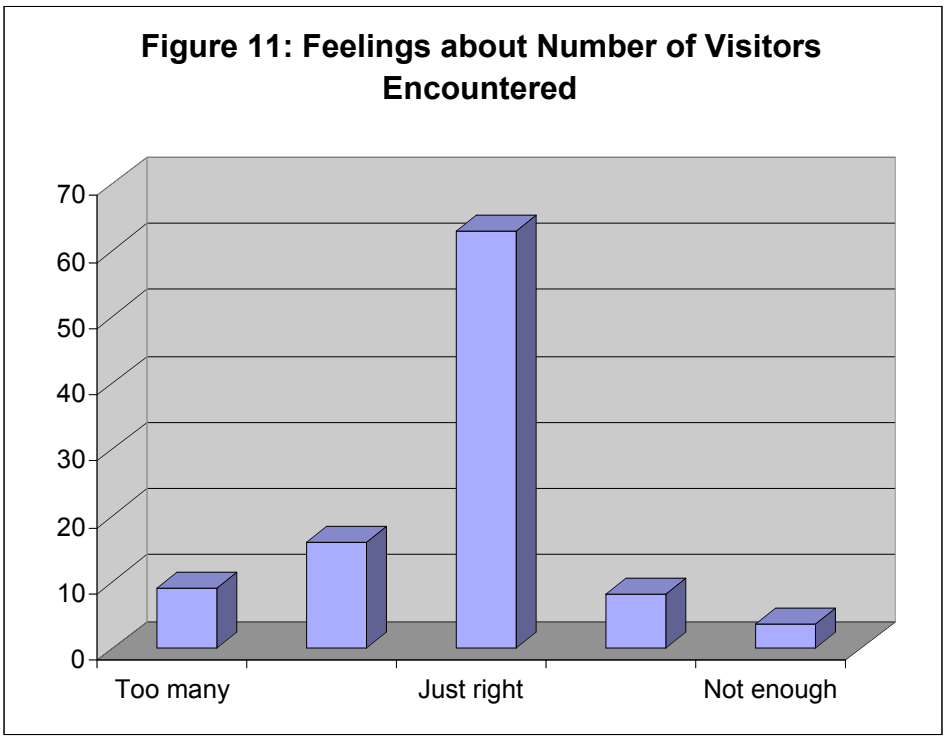


Table 17: Number of Groups Encountered *

Number of groups seen	Frequency	Percent
2 or less	298	33.7
Between 3 and 6	385	43.5
Between 7 and 9	119	13.5
10 or more	82	9.3
Total N	884	100.0

* Visitors sampled at Wilderness Gateway location have been excluded (see Table 18).

Table 18: Number of Groups Encountered by Wilderness Gateway Visitors *

Number of groups seen	Frequency	Percent
2 or less	15	22.0
Between 3 and 6	32	47.1
Between 7 and 9	7	10.3
10 or more	14	20.6
Total N	68	100.0

When asked if they felt that controls were needed on the number of people using the Gorge at any given time, an overwhelming majority felt that either no controls should ever be used or no controls are needed now, but some might be needed in the future if the area began to reach carrying capacity (see Table 19).

Table 19: Feelings about Controls on People

Controls on Number of People	Frequency	Percent
Yes, to lower the current level of use	62	6.5
Yes, to hold use at current level	114	12.1
No, only in future if overuse occurs	413	43.7
No controls ever on number	356	37.7
Total N	945	100.0

E. Interactions with Local Residents

One area of concern that is oftentimes relevant in wilderness recreation management focuses on relations between residents or local populations and visitors. Over the last several decades in Red River Gorge, there have sometimes been issues raised by either the residents or the visitors about the other group in terms of a number of issues. The visitors were asked in their survey if they had ever had contact with any residents who live in Red River Gorge. Table 20 indicates their responses. About 66% had no contact while 31% had ‘positive’ contact and roughly 3% had ‘negative’ contact.

Table 20: Contact with Residents

Contact with Residents	Frequency	Percent
No contact	636	66.1
Yes, positive contact	298	31.0
Yes, negative contact	28	2.9
Total N	962	100.0

Those who responded in the affirmative were then asked to describe the nature of the contact they had had with residents. The following table shows some of the more common responses, all of which are favorable. Twenty-eight percent felt the residents

Table 21: Nature of Contact with Residents

Nature of contact with residents	Frequency	Percent
"Business owners appreciative"	28	16.5
"Very nice"	21	12.4
"Friendly"	48	28.2
"Helpful"	26	15.3
Other	47	27.6
Total N	170	100.0

were friendly and another 15% felt they were helpful. The only negative responses concerned encountering residents who had had too much to drink, one car stereo theft and one resident who was unfriendly when visitors trespassed on his property. These concerns comprised roughly 2% of all responses.

Visitors were also asked to estimate the amount of land they thought was privately owned in the Gorge area. Table 22 indicates their responses.

Table 22: Percentage of Privately Owned Land

Percentage of land privately owned	Frequency	Percent
0-9%	198	24.1
10-25%	354	43.1
26-50%	125	15.2
Over 50%	53	6.4
Don't know	92	11.2
Total N	822	100.0

F. Perceptions about the Management of Red River Gorge

An initial series of questions were designed to identify levels of awareness of the visitors about the current protective status of different areas within the Gorge. Seventy percent of the recreationists surveyed responded that they knew that the Gorge is part of the National Wild and Scenic Rivers system. Fifty-seven percent of the recreationists responded that they were aware that Red River Gorge is a federally designated wilderness area called Clifty Wilderness.

Visitors were asked to indicate who they thought was mainly responsible for managing Red River Gorge. The following table shows their responses. Almost 36% indicated the

federal government only, with another 34% who indicated the State government. Fifteen percent admitted that they did not know.

Table 23: Visitor Awareness about Management Responsibilities

Who is Responsible for Management	Frequency	Percent
Local Landowners	35	3.6
County Government	55	5.7
State Government	325	33.5
Federal Government	346	35.7
Don't know	148	15.2
State and Federal	17	1.8
County, State and Federal	5	0.5
All	14	1.4
All Users	3	0.3
Local and State	2	0.2
Local and Federal	2	0.2
County and State	2	0.2
Other	16	1.7
Total N	970	100.0

When asked whether they felt there were any management problems in Red River Gorge (see Table 24), only 15% responded in the affirmative. Eighteen percent of respondents felt that trail maintenance was a management issue and 16% listed litter as a problem.

Table 24: Management Problems in RRG

Management problems	Frequency	Percent
Yes	141	15.3
No	755	82.1
Don't know	24	2.6
Total N	920	100.0

Sixty-six percent of the visitors acknowledged they knew about the $3 overnight fee. Table 25 shows their responses when asked how they felt about the fee. All of these responses are either neutral or favorable. Less than one percent of respondents indicated a negative feeling about the fee stating they had already paid taxes to have public lands maintained and did not feel they should pay multiple times.

Table 25: Feelings about $3 Overnight Fee

Feelings about fee	Frequency	Percent
"It seems reasonable"	82	10.0
"It's fair"	34	4.1
"Very good"	147	17.9
"Too low"	27	3.3
"It's okay"	356	43.3
"Great idea"	10	1.2
"Not a problem"	17	2.1
"Yes, it's needed"	14	1.7
"Great"	25	3.0
Other	111	13.4
Total N	823	100.0

Using a Likert scale, where visitors were asked to acknowledge how significant a problem they felt certain issues were, Table 26 shows their responses to a number of potential problems that the Gorge has or may have in the near future. This list was provided by the Forest Service.

There are several potential problems that a fair percent of the recreationists feel strongly about and there are a number where they felt the issue was not a problem at all. Approximately 35% of the visitors felt that litter was a moderate or significant problem; roughly 27% felt that tree damage due to humans was also a problem. Another 25% acknowledged that they felt there were problems in reference to damage to archaeological sites. At the same time, most visitors did not think trail maintenance (79%) was a significant problem, or poorly marked trails (70%), or having too many trails (almost 75%). They also felt strongly that too many climbing areas, too many campsites, too many fire rings – were not problems.

Table 26: Feelings about Potential Problems in RRG *

	Don't Know	No problem at all	A small problem	A moderate problem	A big problem
Trails poorly maintained (n = 957)	12.6	53.9	24.5	7.2	1.8
Trails poorly marked (n = 957)	12.2	47.3	26.3	9.8	4.4
Too many trails (n = 954)	15.0	74.8	6.4	2.8	1.0
Trail erosion (n = 954)	13.5	34.5	36.3	11.7	4.0
Tree damage from humans (n = 957)	16.4	30.1	28.4	16.3	8.8
Litter (n = 957)	8.9	25.3	30.0	20.6	15.2
Theft of personal property (n=955)	33.0	36.6	14.8	7.0	8.6
Inadequate disposal of human waste (n=954)	28.6	38.4	17.5	9.2	6.3
Pets off-leash (n = 954)	21.3	52.7	15.9	6.3	3.8
Rowdy or drunk people (n = 953)	22.5	42.2	18.5	10.2	6.6
Too many rules and regulations (n = 952)	18.4	66.4	9.3	4.3	1.6
Too many fire rings (n = 956)	23.2	58.7	12.2	4.4	1.5
Too many campsites (n = 951)	19.4	65.6	10.1	3.9	1.0
Too many climbing areas (n = 945)	20.4	70.2	6.9	1.6	0.9
Damage to archeological sites (n = 947)	22.6	32.5	20.4	12.1	12.4
Damage to plant and animal species (n = 947)	20.8	34.5	22.3	12.9	9.5

* Figures indicate percent of survey population responding in each respective category.

Table 27 is derived from a series of questions where visitors were asked their feeling about certain management options for addressing some of these issues. Even though they said they did not feel having rules and regulations would be a problem, these data suggest that, for the most part, visitors to the Gorge do not want more regulations. Except for the night use fee which shows significant support (63%), most of the other proposed options show at least 35-50% of visitors opposed. It is also important to note that, in several

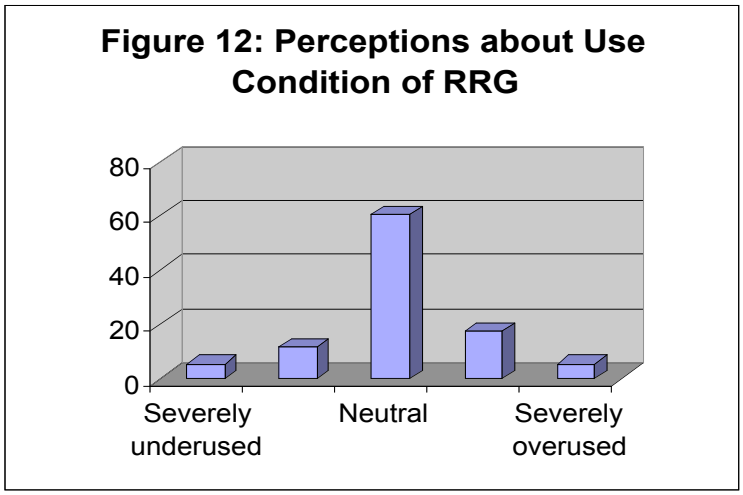
cases, while this is the case, conversely roughly 30-40% also support the option. As an example, 24% of respondents support "designated climbing" areas.

Table 27: Feelings about Management Options *

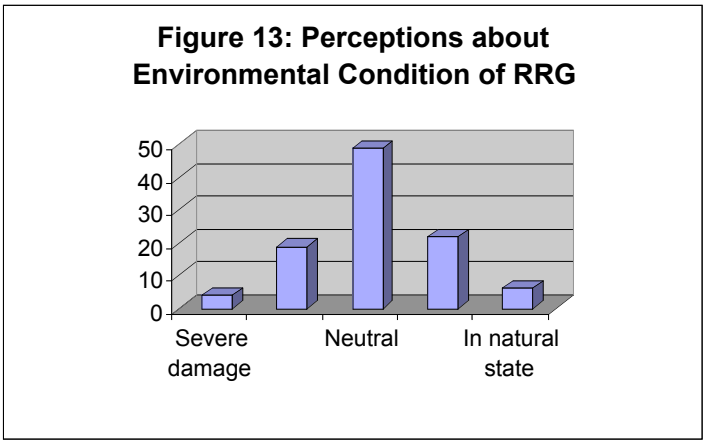
Management Options	Strongly Support	Support	Neutral	Oppose	Strongly Oppose
Limit overall use (n = 936)	11.3	14.4	37.5	14.6	22.2
Night fee (n = 945)	40.9	22.1	29.2	3.3	4.5
Day use fee (n = 945)	14.2	16.9	29.8	16.1	23.0
Limit max group size (n = 944)	11.8	13.6	33.5	17.8	23.3
Designate campsites (n = 947)	15.0	15.2	30.5	16.6	22.7
Designate trails (n = 943)	9.8	12.5	29.0	19.9	28.8
Designate climbing (n = 946)	17.5	16.4	30.9	13.4	21.8
Prohibit campfires (n = 944)	6.7	7.2	29.9	17.2	39.0

* Figures indicate percent of survey population responding in each respective category.

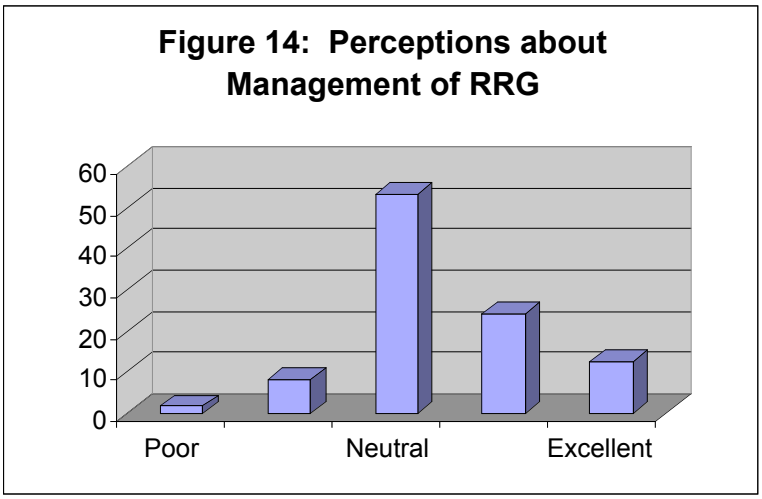
The Visitor Survey concludes with a section asking visitors to provide their feelings about the condition of use, environment and management in Red River Gorge. Figures 12-14 present the responses to these questions. The majority of visitors (60%) are neutral about use conditions (Figure 12). Twenty-two percent felt the Gorge was overused or severely overused.



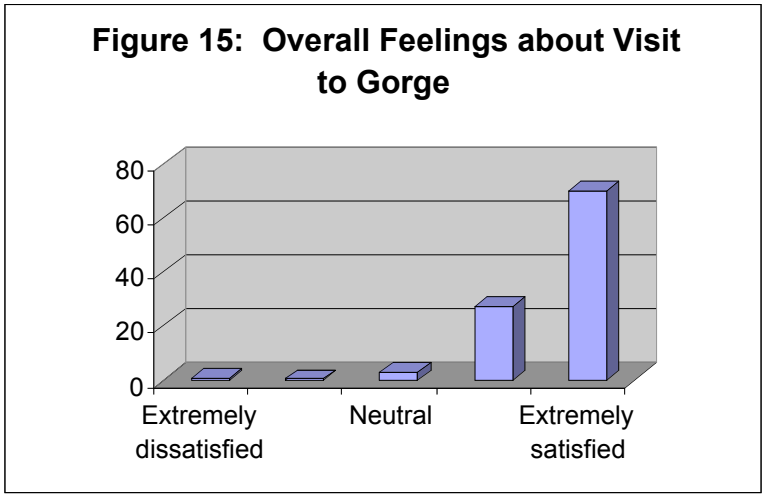
Along the same lines (Figure 13), almost 49% were neutral about the general condition of the environment while 23% acknowledged it was damaged or severely damaged but 6% felt it was it its natural state.



And while 53% of visitors were neutral about management of the area, 8% felt management was "fair" or poor (2%) but 24% felt it was "good" and another 13% felt it was "excellent."



Last, the visitors were asked to indicate their satisfaction level (of this visit to the Gorge). Figure 15 presents these results. Regardless of perhaps encountering too many people, or seeing a lot of litter or erosion and not liking it, the visitor to Red River Gorge is overwhelmingly satisfied with their visit. This result is also evidenced in the high repeat visitation figure (7.3 visits over the last two years) as well as the fact that the majority had also shown they felt the number of people they had encountered was "just right."



Part Two: Red River Gorge Residents

Interviews were conducted with forty residents who live adjacent to the Red River Gorge Geological Area or in close proximity to it. Respondents for the resident portion of the research were chosen using a form of opportunistic sampling known as snowball sampling. Snowball sampling involves using referrals from initial subjects to identify additional subjects. When possible, residents and landowners from the original study conducted in 1980 were included in this sample. Names of some lifelong residents were initially obtained from key informant interviews; and from that point, word of mouth was used to identify more respondents. Respondents were then chosen based on several criteria including amount of time they have lived in the Gorge, extent of landholdings, and their residence location relative to the Gorge.

Interviews were held with the head of the household. For purposes of this study, head of household is defined as either a male or female of legal age who assumes at least fifty percent of household responsibility. While the majority of interviewees were male, in several cases females were the main respondents. In these cases, either there was no male head of household or the male head of household was unavailable or unwilling to be interviewed. During the interviews it became clear how influential the female members of these households were by interjecting their opinions into the survey and also through their role in decision-making and providing additional income for the family. The interviews were conducted in the respondent's home or principle place of business. The interview typically took thirty minutes to two hours to complete; most averaged approximately 45-60 minutes in length.

Appendix B presents the Resident Interview. The interview is structured to collect biographical information, land use histories, recreational patterns, and perceptions about management of the area. In addition to the quantitative questions, respondents were asked open-ended questions addressing their feelings concerning the future of the Gorge.

A. Demographic Characteristics

Fifty-two percent of respondents are married, and the mean age of the local resident sample is 57. The average household size is two people. Data were not collected on the residents' income because of the sensitivity of that topic, and the depressed economic state of the area only made this subject more delicate. However, an occupational history was obtained. The two responses that comprised the majority of occupations were self-employed (27%) or employed by the government (29%). Roughly 50% of the resident sample had some additional schooling or a college degree.

Many of the residents interviewed had strong historical and familial ties to the area. The residents had lived an average of 19 years in the Gorge and owned an average of 18.2 acres. Several of those interviewed had lived in the Gorge all their lives. The most popular response for why people moved to the Gorge was that they had family who lived in the area (50%). Seventy-five percent of the interviewees had family living in the Gorge, and 33% of the survey population stated all of their family lived in the area. One-hundred percent of the residents interviewed claimed to have close friends in the area. These data suggest evidence of the strong social networks present among the residents of Red River Gorge.

Of the residents interviewed, 80% of the sample said they currently recreated in the Gorge and 12.5% said they had recreated in the Gorge in the past. The recreational frequencies are collapsed into six categories with 25.6% of the sample recreating in the Gorge more than once a week. The interviewees were asked to identify the main activity they participated in when they visited the Gorge. Hiking was named most often (36.3%). The second most popular response was "nature-viewing" (21.2%).

B. Contact with Recreational Visitors

Residents were asked whether or not they came into contact with visitors to the area. Fifty-five percent said that they had contact with recreationists all the time, 30% estimated they had contact once a month. Eleven percent had contact less than once a month, and 4% responded that they never had any contact with visitors.

The main source of communication between residents and visitors was "giving out information." Other types of contact included casual meetings, residents who provide education, eating at local restaurants, and through their job or business.

Fifty-eight percent of residents asserted that they had had "negative contact" with visitors. The data in Table 28 indicate the nature of problems residents reported they have had with visitors. The most common problem cited was the use of ATVs in the area (32%). The issues that the residents have with the use of ATVs include damage to both their personal property and to the general landscape of the Gorge. An associated problem with the ATVs is trespassing. For example, visitors will inadvertently use ATVs on private property without asking for permission.

Table 28: Problems with Visitors

Response	Frequency	Percent
Trespassing	2	8.7
Drugs	2	8.7
ATVs	8	34.8
Climbers	3	13.0
Guns	1	4.4
Professional problems	1	4.4
People camping on trail	1	4.4
Lending Property	1	4.4
Archeology ruined	4	17.2
Total N	23	100.0

C. Perceptions about Management of the Gorge

All of the residents interviewed were aware that the Red River Gorge is located in the Daniel Boone National Forest and that a portion of the Red River is designated a National Wild and Scenic River. When asked who was responsible for management of the Gorge, 37 residents knew that the Forest Service was the agency responsible for management. While 76% felt there were management problems in the Gorge, 24% felt there were no problems with management.

Table 29 lists the problems that residents mentioned in reference to management of the Gorge, the most common response being problems with the bureaucracy of the Forest Service (57%). Residents also noted problems with damage to natural resources in the Gorge (37%).

Table 29: Residents Perceptions of Management Problems*

Response	Frequency	Percent
Damage to nature/Gorge	6	31.6
Bureaucracy of the USFS	11	57.8
Problems with visitors	1	5.3
Local involvement	1	5.3
Total N	19	100.0

* While 70% of the sample felt there were problems, less than 50% provided an explanation regarding types of problems, hence the discrepancy in the total N.

When asked how they felt about the current management of the Gorge (see Table 30), the most frequent responses dealt with what the residents felt was lacking, such as not enough management for the resources in the area (80%) not enough restrictions on visitor activities (12.5%) and not enough education for visitors (10%). However, all of the responses given to this question were not negative; roughly 38% of the respondents felt that the "management is good."

Table 30: Feelings on Management *

Response	Frequency	Percent
Education for visitors	4	10.0
Management of resources	32	80.0
Restrictions on visitors	5	12.5
Management is good	15	37.5
Access issues	5	12.5
Visitor caused problems	12	30.0
NWSR is good	2	5.0
Things have changed	1	2.5
Total N	40	*

* Respondents were able to list up to three explanations so percent for each indicates percent of responses relative to total N.

The residents were also asked if they had noted any negative impacts on the land and water of the Gorge. Sixty-three percent of the residents said that they thought there had been harmful impacts to the land of the area. Examples given of problems with the land include: logging, mudslides, trash, impacts to cliff line, ATVs, horses, "vegetation disappeared," strip mining, and "carving on rocks." Forty percent of the residents noted that water quality had become problematic, mostly in terms of litter, human waste, erosion, damage from oil, availability of mussels, pollution, and runoff from rock quarries.

Table 31: Resident Feelings about Potential Problems in RRG *

Potential Problems	Don't Know	No problem at all	A small problem	A moderate problem	A big problem
Trails poorly maintained	11	40	19	11	19
Trails poorly marked	14	32	24	14	16
Too many trails	11	71	11	5	2
Trail erosion	16	19	24	33	8
Tree damage from humans	5	27	38	22	8
Litter	3	22	13	35	27
Theft of personal property	13	19	35	11	22
Inadequate disposal of human waste	19	21	11	30	19
Pets off-leash	11	38	19	27	5
Rowdy or drunk people	6	16	22	32	24
Too many rules and regulations	2	81	3	3	11
Too many fire rings	24	40	8	14	14
Too many campsites	11	59	16	3	11
Too many climbing areas	19	43	3	5	30
Damage to archeological sites	11	11	30	16	32
Damage to plant and animal species	9	16	22	28	25
Visitor presence on private property	22	31	22	19	6

* Figures indicate percent of survey population responding in each respective category.

Thirty-eight percent of the residents thought that the Gorge was overused, while 18% thought that the Gorge was underused. Thirty-nine percent said that the Gorge was in its natural state, and 32% thought that the Gorge was environmentally damaged. Thirty-nine percent of the residents said that the Gorge was poorly managed, while 26% said that it was well-managed.

Residents were then asked how they felt about a number of potential problems in the Red River Gorge (see Table 31). For the most part, the residents did not feel that there were many potential problems in the Red River Gorge. Sixty-five percent of the residents felt that having too many trails was not a problem. Forty percent of the residents said that too many rock climbing areas would not be a problem. Seventy-five percent said that too many rules would not be a problem. However, 53% said that damage to plant and animal species would be a problem, and 78% percent said that damage to archeological sites was a potential problem. Litter was also acknowledged as a problem by 62% of respondents as well as having drunk and rowdy people (56%) and proper disposal of human waste (49%).

D. Resident Perceptions about Proposed Improvements for Red River Gorge

There were several sets of Likert scale questions on the Resident Interview (See Appendix B). The first set asked the residents about feelings regarding improvements that could be made in the Gorge area. The second set asks for their perceptions regarding potential problems in the Gorge, and the final set asked about the residents' perceptions of proposed Forest Service management actions.

Table 32 presents data showing the residents' feelings regarding proposed improvements for the Red River Gorge area. While 53% of the residents supported having more services available in the Gorge area, another 39% opposed this option. Seventy-two percent supported having more information available. Forty-eight percent supported having more public and privately-owned campgrounds while 33% opposed this option, and 61% approved having the Gladie Visitor Center.

Table 32: Resident Perceptions on Proposed Improvements *

Proposed Improvement	Strongly Approve	Approve	Neutral	Disapprove	Strongly Disapprove
Having more services available	33	20	8	13	26
More Information	44	28	25	0	3
More campgrounds	24	24	19	19	14
Visitor Center	34	27	13	21	5

* Figures indicate percent of survey population responding in each respective category.

E. Preferences for the Future of Red River Gorge

The final set of Likert scale questions asked residents about a number of proposed management actions (see Table 33). Seventy percent were opposed to a daily usage fee

for the Gorge, and 55% were opposed to an overnight use fee. Seventy-four percent supported limiting climbing to designated areas, and 63% supported limiting camping to designated areas. An overwhelming 78% of residents want to limit access to private property.

Table 33: Resident Preferences for Proposed Management Actions

Proposed Action	Strongly Approve	Approve	Neutral	Disapprove	Strongly Disapprove
Day use fee	16	6	8	35	35
Overnight use fee	14	24	8	30	24
Limit max group size	11	14	36	25	14
Designate campsites	28	35	9	17	11
Designate trails	17	29	17	20	17
Designate climbing	39	39	5	14	3
Prohibit campfires	3	17	30	28	22
Limit access to private property	53	25	16	6	0

The last two questions asked the residents their feelings on the future of the Gorge and if they had any final comments. Table 34 presents the residents feelings about the future. The most common response for this question (31%) was that there needed to be more facilities and improvements in the Gorge area. Other responses included "development is good," "don't let the area become another Gatlinburg," and "protect the beauty of the area." The residents also maintained that the scenic quality and ecological integrity were attributes they want to see remain intact. They noted that the Gorge is a special place and that they wanted to see it remain wild and primitive.

Table 34: Resident Feelings about Future Development of the Gorge

Response	Percent
"Alright as it is"	9.0
"Beauty of area"	20.0
Anti-government	8.0
Anti-ATVs	4.0
More supervision	9.0
More facilities/improvement	31.0
More employment opportunities	2.0
Gorge is a valuable resource	2.0
Development (LAC) is good	2.0
"Don't let people love Gorge to death"	2.0
Keep development natural	4.0
Make it a national park	4.0
Anti-Gatlinburg	11.0
Total N	*

*Respondents were able to list more than one response hence each percent indicates that of total population.

APPENDIX A
RED RIVER GORGE
RECREATIONIST SURVEY

I.D. #: ___ ___ ___ ___

A. Basic Information

1. Where do you live?

   _____ _____ _____
   city county state

2. How many people are in your group, counting yourself? _____

3. Please indicate by number how many of the people with you are:
   family members _____
   friends _____

4. How many days do you plan to stay (or have stayed) on this visit to Red River Gorge? _____

5. Including this visit, how many times have you visited the Red River Gorge in the last two years? _____

6. Did you stop to vacation elsewhere before coming to Red River Gorge?
   _____ 1. yes: _____
   _____ 2. no

7. If you continue your vacation after leaving the Red River Gorge, where will you go?
   _____

8. When have you visited the Red River Gorge? (Please circle all that apply).
   _____ Spring
   _____ Summer
   _____ Fall
   _____ Winter

9. When do you prefer to visit Red River Gorge?
   _____ 1. Spring
   _____ 2. Summer
   _____ 3. Fall
   _____ 4. Winter
   _____ 5. I like the Gorge equally well in all seasons.

10. If you prefer one particular season, please explain why:

11. Do you belong to any conservation or recreation groups?
    _____ 1. no
    _____ 2. yes, please list:

12. Are you here with a conservation or recreation group?
_____ 1. no
_____ 2. yes, please list: _____

13. How did you first find out about Red River Gorge?
_____ 1. on my own
_____ 2. family or friends
_____ 3. internet
_____ 4. guidebook
_____ 5. government agencies or other official sources
_____ 6. live or have lived in the area
_____ 7. advertisement or news
_____ 8. conservation or recreation groups
_____ 9. other source: _____

14. What is the MAIN REASON that you came to Red River Gorge? (Please indicate **ONLY ONE** activity)
_____ 1. natural beauty
_____ 2. sense of communion with God
_____ 3. peacefulness
_____ 4. to be with friends or family
_____ 5. partying
_____ 6. get away from everyday routine
_____ 7. outdoor exercise
_____ 8. to take it easy
_____ 9. to experience the rugged life

B. Activities while in Red River Gorge

1. While you are in Red River Gorge, what activities will you do? (Please indicate **ALL** that apply):

_____ canoeing
_____ hiking
_____ biking
_____ camping
_____ fishing
_____ swimming
_____ backpacking
_____ rappelling
_____ traditional rock climbing
_____ sport rock climbing
_____ bouldering
_____ picnicking
_____ birdwatching
_____ "partying"
_____ "4-wheeling"
_____ hunting
_____ other: _____

2. Of these activities, which is the MAIN activity for which you came? Please list only one activity: _____

3. Do you purposely leave designated system trails to hike to places?
_____ 1. No
_____ 2. Yes

4. Do you prefer to use a _____ 1. wood fire
or a _____ 2. camp stove when camping in the RRG?

5. How would you rate the recreational opportunities in the Red River Gorge for your MAIN activity?

Excellent		Neutral		Poor
+2	+1	0	-1	-2

6. While you are here for recreation, we'd like to find out how many people you would prefer to see. While you are doing the MAIN activity for which you came (canoeing, hiking, camping, partying, etc.)…

How would you feel about seeing **NO other people** beside your own group?

Very favorable					Neutral					Very unfavorable
+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5

How would you feel about seeing **ONE other person** beside your own group?

Very favorable					Neutral					Very unfavorable
+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5

How would you feel about seeing **TWO other people** beside your own group?

Very favorable					Neutral					Very unfavorable
+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5

How would you feel about seeing **THREE other people** beside your own group?

Very favorable					Neutral					Very unfavorable
+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5

How would you feel about seeing **FOUR other people** beside your own group?

Very favorable					Neutral					Very unfavorable
+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5

How would you feel about seeing **FIVE other people** beside your own group?

Very favorable					Neutral					Very unfavorable
+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5

How would you feel about seeing **SIX other people** beside your own group?

Very Very

favorable Neutral unfavorable
+5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5

How would you feel about seeing **7-8 other people** beside your own group?

Very favorable Neutral Very unfavorable
+5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5

How would you feel about seeing **9-10 other people** beside your own group?

Very favorable Neutral Very unfavorable
+5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5

How would you feel about seeing **11-15 other people** beside your own group?

Very favorable Neutral Very unfavorable
+5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5

How would you feel about seeing **16-30 other people** beside your own group?

Very favorable Neutral Very unfavorable
+5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5

How would you feel about seeing **more than 30 other people** beside your own group?

Very favorable Neutral Very unfavorable
+5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5

7. Please estimate how many people you actually saw while doing your MAIN activity:
_____ 1. zero
_____ 2. one other person
_____ 3. two other people
_____ 4. three other people
_____ 5. four other people
_____ 6. five other people
_____ 7. six other people
_____ 8. 7-8 other people
_____ 9. 9-10 other people
_____ 10. 11-15 other people
_____ 11. 16-30 other people
_____ 12. more than 30 other people

8. How did you feel about seeing this number of people?

Not enough Just right Too many

+2 +1 0 -1 -2

9. Please estimate the number of GROUPS you encountered while doing your main activity:
   _____ 1. two or fewer
   _____ 2. between 3 and 6
   _____ 3. between 7 and 9
   _____ 4. 10 or more groups

10. Do you feel that controls are needed on the # of people using the RRG?
   _____ 1. Yes, controls are needed to lower the current level of use
   _____ 2. Yes, controls are needed now to hold use at about the current level.
   _____ 3. No controls are needed now, but should be imposed in the future if & when overuse occurs.
   _____ 4. No, there should be no controls now or in the future on the # of people using the RRG.

11. Have you ever had any contact with residents who live in the Gorge?
   _____ 1. no
   _____ 2. yes, positive contact
   _____ 3. yes, negative contact

   Please describe briefly:

12. What percentage of the land in Red River Gorge is privately owned?

   0-9% 10-25% 26-50% over 50%

C. Red River Gorge Management

1. Do you know the Red River is part of the National Wild and Scenic Rivers system?
   _____ 1. yes
   _____ 2. no

2. Do you know that part of the Red River Gorge area is a federally designated wilderness called Clifty Wilderness?
   _____ 1. yes
   _____ 2. no

3. Who do you think is mainly responsible for managing Red River Gorge?
   _____ 1. local landowners
   _____ 2. county government
   _____ 3. state government
   _____ 4. federal government

_____ 5. don't know
_____ 6. other: _____

4. Are you aware that there is a $3 overnight fee for visitors in the RRG?
   _____ 1. Yes
   _____ 2. No

   a. The fees collected are spent to improve facilities in the RRG.
      How do you feel about this fee?

5. Do you feel there are any management problems in Red River Gorge?
   _____ 1. no
   _____ 2. yes, please explain:

6. Please indicate your feelings about the following potential problems in Red River Gorge:

	Don't know	No problem at all	A small problem	A moderate problem	A big problem
Trails poorly maintained	1	2	3	4	5
Trails poorly marked	1	2	3	4	5
Too many trails	1	2	3	4	5
Trail erosion	1	2	3	4	5
Tree damage from humans	1	2	3	4	5
Litter	1	2	3	4	5
Theft of personal property	1	2	3	4	5
Inadequate disposal of human waste	1	2	3	4	5
Pets off-leash	1	2	3	4	5
Rowdy or drunk people	1	2	3	4	5
Too many rules and regulations	1	2	3	4	5
Too many firerings	1	2	3	4	5
Too many campsites	1	2	3	4	5

Too many climbing areas	1	2	3	4	5
Damage to archaeological sites	1	2	3	4	5
Damage to plant & animal species	1	2	3	4	5

7. Please indicate how you would feel about the following management actions?

	Strongly Support		Neutral		Strongly Oppose
Limit overall use by a permit system	1	2	3	4	5
$3 overnight user fee	1	2	3	4	5
Day use fee for all RRG visitors	1	2	3	4	5
Limit maximum group size	1	2	3	4	5
Restrict overnight use to designated campsites	1	2	3	4	5
Restrict all use to designated trail systems	1	2	3	4	5
Limit climbing to designated areas only	1	2	3	4	5
Prohibit campfires	1	2	3	4	5

8. Do you feel the Red River Gorge is:

Underused				Overused
-2	-1	0	+1	+2

Environmentally Damaged				In its natural state
-2	-1	0	+1	+2

Poorly managed Well managed

-2 -1 0 +1 +2

D. Basic Demographic Information

1. Age: _____

2. Gender: _____ male _____ female

3. Occupation: _____

4. Please check the highest amount of education you have completed:
   _____ 1. grades 0-8
   _____ 2. grades 9-11
   _____ 3. high school diploma
   _____ 4. some college or additional schooling
   _____ 5. Bachelor's degree
   _____ 6. some graduate work
   _____ 7. graduate degree

5. Where did you grow up (to age 18)? Please check ONLY ONE answer.
   _____ 1. on a farm or ranch
   _____ 2. in a small town (2500 or less)
   _____ 3. in a town or small city (2500-25,000)
   _____ 4. in a city (25,000-100,000)
   _____ 5. in the suburb of a large city
   _____ 6. in l large city (over 100,000)

6. Please indicate your overall feelings about this visit to Red River Gorge:

Extremely Satisfied		Neutral		Extremely Dissatisfied
+2	+1	0	-1	-2

THANK YOU FOR YOUR TIME AND EFFORT!!

APPENDIX B

Red River Gorge: Landowner Interview

I. Basic Demographic Information

1. HOUSEHOLD COMPOSITION (please fill in beginning with heads of households and then oldest to youngest living in the home)

Name	Relation to Self	Gender	Age (years)	Year of Birth	Education Level	Occupations
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10						
11.						
12.						

2. What is your marital status?

3. What is your religious affiliation?

4. What is your current primary occupation? _____

5. How long have you had this job? _____ years _____ months

6. **Occupational History** (for the respondent only)
Please list most current work first and work back in time.

Job	Type of work	Length at Job (how long at each job)
1.		
2.		
3.		
4.		
5.		

7. Please estimate your approximate income level for last year (2003):

_____ 0-9,999.99
_____ 10,000.00-19,999.99
_____ 20,000.00-39,999.99
_____ 40,000.00-59,999.99
_____ 60,000.00-89,999.99
_____ 90,000.00-99,999.99
_____ 100,000 +

8. Do you own or rent current residence?

How long have you lived at your current residence? _____ years _____ months

What year did you move to this residence? _____

Why did you move here?

9. Do you have family in this area?
_____ yes
_____ no

What family?

10. Do you have close friends in this area?
    _____ yes
    _____ no

II. Contact and Relations with Visitor Recreationists

1. Do you or your family ever recreate within the Red River Gorge area?
    _____ yes
    _____ no

    If yes, about how often do you recreate in Red River Gorge?
    _____ more than once/week
    _____ once/week
    _____ once/2 weeks
    _____ once/month
    _____ less than once/month

    When you recreate in the Gorge, what are your primary activities?
    (Please indicate ALL that apply):

    _____ canoeing
    _____ hiking
    _____ biking
    _____ camping
    _____ fishing
    _____ traditional rock climbing
    _____ sport rock climbing
    _____ bouldering
    _____ picnicking
    _____ birdwatching
    _____ "partying"
    _____ "4-wheeling"
    _____ hunting
    _____swimming
    _____ backpacking
    _____ rappelling
    _____ other: _____

Of these activities, which is your MAIN activity typically when you recreate in the Gorge?
(Please list only one activity): _____

2. Do you belong to any conservation recreation or community groups?
    _____ No
    _____ Yes, please list

3. Do you ever have contact with recreationsists?
    _____ Yes
    _____ No

About how often do you come into contact with RRG visitors?

Can you briefly describe the typical nature of the contact:

Have you ever had any problems with recreationists?
_____ No
_____ Yes, please explain:

Tourism Activities:

4. Are you directly involved in the tourism industry? If NO, go to Section III)
_____ Yes
_____ No

If yes, do you own a tourism-based business?
_____ Yes
_____ No

If yes, what type of business do you own?

How many employees do you have? _____

How long have you been in this business? _____ years _____ months

Is it going well?

Do you have any problems with your tourism business?
_____ No
_____ Yes, please explain:

III. The National Wild and Scenic Rivers Designation

1. Do you _____ own land in the Red River Gorge?
_____ rent
_____ share crop

If yes to "own", approximately where is your land located?

2. Can you provide some information about the history of your land:

Location	Amount of land	Time Owned (years)	Uses over time	Constraints (to uses)
1. 2. 3. 4.				

3. Do you own any river front property in Red River Gorge?
   _____ yes
   _____ no

   How many acres do you own? _____ acres

   How many feet of shoreline does this acreage have? _____ feet

4. Are you aware that the RRG is included in the Daniel Boone National Forest?
   _____yes
   _____ no

   Are you aware that the Red River is part of the National Wild and Scenic Rivers System?
   _____yes
   _____ no

   Did you live on this property when the river became part of this system (1994)?
   _____ yes
   _____ no

5. Has this designation affected you (and your life) in any way?
   _____ yes (go to table below)
   _____ no

Curtailing certain types of land use?	Economic impacts	Social impacts	Political impacts	Number of recreationists

IV. Current Management of Red River Gorge

1. Who has primary responsibility for managing Red River Gorge today?

_____ Local landowners
_____ County government
_____ State government
_____ Federal government
_____ Don't know
_____ Other: _____

2. How do you feel about current management of the Gorge area?

3. Do you feel there are any management problems in Red River Gorge?

_____ No
_____ Yes, please explain:

4. Since you have lived here, have you noticed any negative impacts on the LAND in Red River Gorge?

_____ No
_____ Yes, please explain:

5. Since you have lived here, have you noticed any negative impacts on the WATER in Red River Gorge?

_____ No
_____ Yes, please explain:

6. Do you feel the Red River Gorge is:

Underused		Neutral		Overused
1	2	3	4	5

Environmentally Damaged		Neutral		In its natural state
1	2	3	4	5

Poorly managed		Neutral		Well managed
1	2	3	4	5

V. Future Development of the Red River Gorge area

1. Do you have future plans for development of your Gorge property?
_____ yes, please describe:
_____ no

2. In terms of the development of your property, where do you see yourself in *5 years*?

Where do you see yourself in *10 years*?

3. Please circle the number below that expresses how you would feel about the following in Red River Gorge:

	Strongly Approve		Neutral		Strongly Disapprove
Having more services available (groceries, gas, restaurants)	1	2	3	4	5
Having more information available about the area	1	2	3	4	5
Having more public or private camp-grounds in the area	1	2	3	4	5
Having a Visitor Center in the Gorge proper	1	2	3	4	5

4. Please indicate your feelings about the following potential problems in Red River Gorge:

	Don't know	No problem at all	A small problem	A moderate problem	A big problem
Trails poorly Maintained	1	2	3	4	5

Trails poorly marked	1	2	3	4	5
Too many trails	1	2	3	4	5
Trail erosion	1	2	3	4	5
Tree damage from humans	1	2	3	4	5
Litter	1	2	3	4	5
Theft of personal property	1	2	3	4	5
Inadequate disposal of human waste	1	2	3	4	5
Pets off-leash	1	2	3	4	5
Rowdy or drunk people	1	2	3	4	5
Too many rules and regulations	1	2	3	4	5
Too many firerings	1	2	3	4	5
Too many campsites	1	2	3	4	5
Too many climbing Areas	1	2	3	4	5
Damage to archaeological sites	1	2	3	4	5
Damage to plant & animal species	1	2	3	4	5
Visitor presence on private property	1	2	3	4	5

5. Please indicate how you would feel about the following management actions?

	Strongly Support		Neutral		Strongly Oppose
Limit overall use by a permit system	1	2	3	4	5
Day use fee for all RRG visitors	1	2	3	4	5
Limit maximum group Size	1	2	3	4	5
Restrict overnight use to designated campsites	1	2	3	4	5
Restrict all use to designated trail systems	1	2	3	4	5
Limit climbing to designated areas only	1	2	3	4	5
Prohibit campfires	1	2	3	4	5
Limiting access to private property	1	2	3	4	5

6. What are your feelings about the future development of the Red River Gorge area?

7. Do you have any final comments that you would like to make about any issues we've talked about today?