

# Overnight Backcountry Visitors at Grand Canyon National Park



**Erik A. Backlund, William Stewart, Zvi Schwartz**

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## **Overnight Backcountry Visitors at Grand Canyon National Park**

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# OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

## EXECUTIVE SUMMARY

This study provides a comprehensive examination of overnight backcountry visitors to address current issues related to backcountry management, and builds on previous research. The research objectives are:

1. To identify and characterize the overnight hikers of the park's backcountry, including socio-demographic characteristics, past backcountry experiences, and group characteristics,
2. To determine hikers' motivations and experiences, behavior, and preferences,
3. To measure hikers level of satisfaction with their Grand Canyon experiences,
4. To evaluate hikers' reaction to present and potential policies, including the reservation and permit system, and pre-trip information,
5. To suggest management actions that best meet social needs of overnight backcountry users.

There were 2,034 trip leaders who obtained a backcountry permit and who were sampled between March 1, 2004 to February 28, 2005. A 76% response rate was received to a 17-page questionnaire. The analyses provide detailed accounts generalizable to the park's overnight backcountry users. Evidence indicates that visitors to the backcountry at Grand Canyon were satisfied with most aspects of their overnight trip. The following recommendations are made to further enhance their experiences, and to consider management operations and policies that will insure future visitors continue to enjoy high quality experiences. Recommendations are to:

### *Enhance the Limits of Acceptable Change (LAC) planning framework*

The primary visitor-based indicators of the 1988 LAC planning framework are the number of *daytime contacts* with other people, and the number of *groups camped within sight or sound*. In general, visitor-based conditions of the backcountry are well-within the standards set for both of these indicators across the four use zones. Barring any ecological resource issues, results suggest that the standards could either become more restrictive or the number of permits allocated for these zones could increase.

### *Reduce the potential for conflict*

The extent of conflict between user groups is primarily influenced by the *quality* of the encounter and the interaction that takes place during the encounter – no matter how brief the exchange. The extent to which backcountry encounter etiquette is known throughout all user types of the backcountry could be built into the LAC framework. Encounter etiquette is not well-known or at least is highly variable across visitors and user types. Also, visitors may have distinct reactions to a user type different than themselves. The extent of encounters between different user

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types could be considered as an indicator of the *quality* of encounter and indicate the degree of recreational conflict.

### *Commit to monitoring*

The LAC framework and basis in monitoring backcountry conditions requires institutional commitment to support research, train staff, and invest in workshops and education across all personnel connected with the backcountry. Backcountry planning and operations has a comparatively smooth history of working with stakeholders, building trust, and implementing plans that adhere to the various missions of Grand Canyon National Park. Its changing population of users implies an evolving political context for backcountry planning. It is within the park's best interest to track the changing user-base, their preferences, and their perceptions of backcountry conditions. An institutional commitment of time, resources, and staff needs to be stated and developed in the backcountry plan.

### *Improve minimum impact behavior*

Over the past 20 years, knowledge of minimum impact behavior generally has increased among overnight backcountry hikers. Awareness of proper food scrap disposal is lowest with Primitive and Wild zone users and results suggest that one quarter may be discarding food scraps and meal leftovers around their campsite and eating areas. In addition, 32% of visitors were not aware of proper handling of archaeological resources, with the lowest proportions being in the Corridor and Threshold Zones. Although most visitors felt respect or a sense of sacredness when visiting such sites, there were still 2% who were tempted to take home an artifact and make it a souvenir of their trip.

### *Conclusion*

By most measures, overnight backcountry visitors at Grand Canyon were supportive of park management. There are a few issues that could be considered to improve visitor management in the backcountry, and these have been put forward in the spirit of improving on a system that already works well.

**ACKNOWLEDGMENTS**

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### OVERNIGHT BACKCOUNTRY VISITOR STUDY: QUICK FACTS

% under the age of 23 in 1985: 15

% under the age of 23 in 2005: 2

% hiking solo in 1985: 10

% hiking solo in 2005: 2

% hiking with family in 1985: 24

% hiking with family in 2005: 43

% on their first Grand Canyon overnight hike in 1985: 54

% on their first Grand Canyon overnight hike in 2005: 51

% who agreeing the backcountry is used by too many people in 1985: 15

% who agreeing the backcountry is used by too many people in 2005: 10

% agreeing that too many aircraft fly over the backcountry in 1985: 43

% agreeing that too many aircraft fly over the backcountry in 2005: 32

% agreeing that commercially guided hikes should be allowed in 1985: 14

% agreeing that commercially guided hikes should be allowed in 2005: 23

% reporting that the trip allowed by their permit was not what they wanted: 3

% reporting they did not stay on their itinerary: 17

% satisfied with the number of groups camped within sight or sound: 72

% who visited a backcountry archaeological site: 35

% who know proper techniques for food scrap disposal in the backcountry: 86

% agreeing that backcountry users should carry out their fecal wastes: 14

% who viewed the hiking preparation DVD after receiving it: 84

% preferring a "real time" web-based permit system: 81

Number of backcountry visitors who responded to the study's questionnaire: 1,918

Number of pages in the study's questionnaire: 17

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# OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

## I: Introduction

### Background

Of the 1.2 million acres of Grand Canyon National Park, close to 98% is considered “backcountry.” Most of the 4.3 million people who came to the Grand Canyon in 2005 viewed the park’s backcountry from distant points on the rim. However about 34,000 people took the opportunity to camp overnight in the park’s backcountry, and an estimated one million more day-hiked into it. For the purposes of this report, the park’s “backcountry” includes areas of the inner canyon, including trails and campgrounds in the Cross-Canyon Corridor, trails and routes elsewhere in remote places, and generally includes any areas above or below the rim specifically managed as backcountry by National Park Service (NPS). “Overnight backcountry visitors” are primarily people who hike or ride horses/mules into these backcountry areas for an overnight trip, and are distinct from visitors who run the Colorado River or those who hike in-and-out of the Canyon within a day’s time. This study was directed at facilitating management planning through the development of scientific evidence related to overnight visitors of the park’s backcountry.

This study provides an examination of overnight backcountry users to address current issues related to backcountry management, and builds on previous research. Results provide an updated scientific basis to elicit current backcountry use patterns and user characteristics, as well as comparable data to explore historic use trends. The previous comprehensive study of overnight backcountry visitors at Grand Canyon was conducted almost 20 years ago (Underhill, et al., 1986). The results from this current study provide user-based data fundamental to an upcoming backcountry management planning process ultimately directed at: (1) providing and promoting a variety of backcountry recreational opportunities for visitors compatible with wilderness values, resource protection, and visitor safety, (2) protecting and preserving natural resources and maintaining natural ecosystem processes within the park, and (3) protecting and preserving cultural resources.

Grand Canyon has a history of employing scientific evidence to inform its planning processes. Some of the first concerns for backcountry management emerged in the 1970s due to crowding, recreational impacts, and sanitation issues within the campgrounds of the Bright Angel Corridor (Grand Canyon Backcountry Use and Operations statement, 1974; Towler, 1977). Through visitor contacts and systematic observations, backcountry user problems were identified and a trailhead quota system was developed as one of the few restrictions on overnight backcountry use. Demand for backcountry recreational opportunities continued to increase throughout the 1970s and problems with crowding, recreational impacts, and sanitation continued to grow. The park developed a Backcountry Management Plan in 1983 that classified land parcels in the backcountry and allocated use according to 79 use-areas each related to one of four types of zones (i.e., Developed, Threshold, Primitive, and Undeveloped). At that time, Grand Canyon was one of the first backcountry areas to implement a fixed itinerary system to allocate recreational use (Stewart, 1989). The 1983 plan called for a comprehensive research and

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monitoring program to collect baseline data on visitor characteristics, impacts, and use patterns, and to evaluate the effectiveness of the newly implemented permit system (both advanced reservations and walk-in application processes, as well as the trip itinerary system). Based upon both sociological and ecological research (Cole, 1985; Underhill et al., 1986), a revised plan was completed in 1988.

During the 1990s, the most notable revisions to backcountry management were: (1) the relocation of Indian Gardens Campground to its current location on the bench above the cottonwood grove, (2) the improvement of the permit process to enhance access and communication with the public, (3) the implementation of use fees and (4) the increased managerial attention to day-hikers, including the development of a day-hiker education campaign to prepare for safe trips in the backcountry.

### **Recent Management Issues Related to Visitation**

Several issues are currently facing backcountry management, and surfaced in July, 2003 during meetings between researchers and the park staff associated backcountry management operations. These issues generally were linked to the following inter-related topics: conflicts between user types, appropriateness of various kinds of commercial use, protection of cultural resources, quality of visitor experiences, and reviewing the effectiveness of the 1980's planning framework.

#### *Conflicts between user types*

Grand Canyon backcountry attracts a variety of different types of users, each having distinct patterns of use. Recreational conflict between two different types of user groups has been a recurrent theme within leisure research. The sociological impact of increases in any given user type, say horse and mule riders, could be related to increased user conflicts with overnight visitors. In addition, most other user types have potential for conflict during encounters with each other: river runners, day-hikers, overnight backpackers, and stock users. Conflict may be influenced not only by differing user types but also by encountering large groups. The maximum group size for river runners is larger than for backcountry users, and may be an issue. For example, at places like Thunder River, there is potential for backpackers to encounter large groups of river runners. However the extent of recreational conflict at Grand Canyon and ways in which users cope with, or avoid, such conflict are neither well-documented nor understood.

#### *Appropriateness of commercial use*

Concessionaires have a long history of operating in the canyon's backcountry. On the North and South Rims, commercial outfitters guide visitors on trips to various points in the Corridor such as Indian Gardens, Plateau Point, and Phantom Ranch, as well as guiding visitors to more remote areas of the backcountry. Commercial guides are required to request and obtain a Commercial

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Use Authorization (CUA) to take visitors into the park's backcountry. The extent to which the general population of overnight backcountry visitors is concerned about commercially guided hikes at Grand Canyon, and encounters with such groups, is one of the concerns of this study. Assessing trends in CUA requests are not within the scope of this study.

### *Protection of cultural resources*

The concerns of the surrounding Nations have become more visible to backcountry managers. Encounters between Native Americans and backcountry visitors have increased particularly where access to the park requires visitors to travel over tribal lands. Park staff has become more aware of tribal beliefs, sacred places, and archaeological sites, and recognizes the need to address tribal concerns within its planning processes. Little is known about the extent to which overnight backcountry visitors are aware of the park's cultural resources in the places they hike. The understanding of visitor awareness, behavior and perceptions of backcountry cultural resources will enhance management operations to protect and preserve these important resources.

### *Quality of visitor experiences*

The vision for recreational use of the park's backcountry area is to "offer visitors opportunities for solitude and primitive recreation; the management of these areas should preserve wilderness values and character" (General Management Plan, 1995). Following from this vision, the recreational opportunities provided by the park's backcountry should be consistent with a broad range of wilderness experiences. The extent to which the park provides recreational opportunities for a range of wilderness experience requires assessment, including an identification and understanding of the current qualities of wilderness expectations and experiences among visitors. The quality of visitor experiences, and its compatibility with wilderness values, across the various use zones of the park's backcountry is a concern.

### *Review of 1988 LAC planning framework*

The 1988 Backcountry Management Plan was based upon a Limits of Acceptable Change (LAC) framework that incorporated goals, objectives, standards, and indicators for the park's use zones. The indicators and standards should be re-assessed to evaluate their appropriateness; in addition, the goals and objectives will be reviewed as part of future backcountry planning processes. Although the 1988 plan required periodic monitoring to collect and analyze user-based data (and comparing standards with indicators to check for compliance with plan), the implementation has been difficult due to lack of resources and techniques to effectively monitor. An important need is to assess the current visitor-related conditions and compare them to the standards of the 1988 Plan. In particular, an

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assessment of distinct conditions between use zones and the extent that variability in conditions affects experiences, are meaningful questions to address. In addition, an assessment of longitudinal changes in use is important, and would examine differences in visitor characteristics, experiences, and behavior between 1984-5 (Underhill et al., 1986) and current day.

### **Research Objectives**

To develop plans for effectively managing the Park's backcountry there is a need for updated information regarding visitor characteristics, spatial and temporal use patterns of backcountry visitors, their ability to understand and successfully navigate the current permit system including their trip itinerary, their satisfaction with various aspects of their park experience including the planning process of their hike, their understanding of "leave no trace" hiking behavior, and impacts related to visitor behavior in the backcountry. Along with these issues, there are also questions regarding the quality of visitor experiences, their expectations for their experiences, particularly as they are connected with solitude. The situational conditions and managerial policies (i.e., attitudes toward aircraft, use of "wag bags", preferences for ranger patrols, awareness of emergency medical services, and so forth) that influence their hiking experience are meaningful to understand (Stewart & Cole, 1999). Previous studies have indicated that Grand Canyon's backcountry provides opportunities for a variety of experiences across all use zones (Stewart & Carpenter, 1989), and an updated assessment of the quality of opportunities is necessary (e.g., Underhill et al., 1986; Stewart & Cole, 2001). Such information is essential for the development of backcountry management planning documents, and will form the foundation of user-based information necessary for effective planning.

The purpose of the research herein is to update existing knowledge of overnight backcountry users. Specifically, the research objectives are:

1. To identify and characterize the overnight hikers of the park's backcountry, including socio-demographic characteristics, past backcountry experiences, and group characteristics,
2. To determine hikers' motivations and experiences, behavior, and preferences,
3. To measure hikers level of satisfaction with their Grand Canyon experiences,
4. To evaluate hikers' reaction to present and potential policies, including the reservation and permit system, and pre-trip information,
5. To suggest management actions that best meet social needs of overnight backcountry users.

## II: Methods

### Population and Sample Selection

The population of potential respondents for this study included overnight backcountry hikers who applied for and received an overnight camping permit between March 1, 2004 and February 28, 2005. For this time period, 10,930 permits were issued and about 2,000 trip leaders sampled. Table 1 of Appendix A displays the number of permits issued for each month over the sampling time period.

To ensure statistically valid and reliable results, the sampling approach was a disproportionate stratified sample. In a disproportionate stratified sample, some strata are over-sampled to ensure enough cases for statistically reliable results. Because the Wild Zone receives far less use than the Corridor Zone, Wild Zone users were over-sampled and the Corridor users were under-sampled. The sampling ratio was based upon the previous year's use distribution. To account for the over and under-sampling, weighting procedures were applied to the data by use zone and month of use, and insure the ability to reach statistically reliable conclusions about hikers of each of the four use zones and seasons of use. Table 2 of Appendix A displays the number of permits sampled for each month over the sampling time period.

### Questionnaire

The data collection instrument for this study was a return-mail questionnaire. Items in the questionnaire necessary to address the research objectives were developed based on consultation with Grand Canyon staff, prior backcountry research at Grand Canyon (specifically see Underhill et al., 1986), and other insight from the outdoor recreation literature. The questionnaire was extensive in length (17 pages) and divided into several sections that required 40 minutes or so to complete. The first section "Past Backpacking Experience," contained questions regarding the respondents' frequency of backpacking at Grand Canyon and elsewhere. The second section, "Trip Planning" included a series of questions designed to evaluate the different strategies and information respondent may have used to make a reservation especially the trip planner, the video, stopping by the Backcountry Office (BCO), and telephoning the BCO. The third section, "Your Backcountry Trip," included a wide variety of question designed to assess visitor evaluations of the conditions they encountered and the experiences they had. Finally the fourth section, "Tell Us About Yourself," demographic and socio-economic characteristics were assessed as well as extra space for respondents to provide a general comment. The questions yielded approximately 256 variables that were analyzed for this report. The questionnaire is presented in Appendix D.

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### **Survey Administration Procedures**

On a monthly basis, information from the trip permits was sent from the BCO to the Park Planning and Policy Lab at the University of Illinois for sampling. Survey administration followed the guidelines of Dillman (2000), a widely accepted and proven set of techniques to improve response rates, and ultimately to represent the population of overnight backcountry visitors. The Dillman technique prescribes personalization of procedures with persistent follow-up of sampled visitors including a “thank you / reminder” post-card after the first mailing, and two additional mailings of the questionnaire, if necessary, for non-respondents. Specifically the steps of survey administration included the following six steps:

1. An initial letter informing the sampled visitor that they will receive a questionnaire within the next week, the purpose of the study, how they were selected, an invitation to complete the questionnaire, and contact information for the Park Planning and Policy Lab in case they had questions.
2. A week later the sampled visitor was mailed a questionnaire packet including a questionnaire, a business reply envelop, and a cover letter that reiterated the invitation to participate, the purpose of study, the approximate time required to complete the questionnaire, directions for returning the questionnaire and contact information in case the participant had questions or problems.
3. A week later, a “thank you/reminder” postcard was sent to each sampled visitor encouraging them to respond and thanking those who had already completed and returned the questionnaire. If the addressee had misplaced their questionnaire packet or had questions or comments about the study, they were invited to call collect or email the Park Planning and Policy Lab at the University of Illinois to request a replacement or to clarify their concerns.
4. For non-respondents, three weeks after the initial questionnaire packet was mailed, a second questionnaire packet was mailed. Like the first, this packet included a revised cover letter, a questionnaire, and a business reply envelope.
5. A week after the second questionnaire packet was mailed a second “thank you/reminder” postcard was mailed to those who were mailed the second packet.
6. Three weeks after the second questionnaire packet was mailed and if the month’s response rate was below 66%, a third questionnaire packet was sent to persistent non-respondents. Like the first two questionnaire packets, the third contained a cover letter, a questionnaire, and a business reply envelope.

The guiding principle of the Dillman Technique is a focus on personalization of the mailing materials and correspondence within them. To this end, mail out envelopes were stamped with postage rather than metered. Cover letters were

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

addressed to the participant and personally signed with a blue ball-point pen at the bottom. All stationary was watermarked letterhead from the Park Planning and Policy Laboratory, Department of Leisure Studies, University of Illinois at Urbana-Champaign. Telephone calls and e-mails were answered promptly with follow-up directed at replacing questionnaires or providing further information about the study.

Respondents were assured that their identity would be confidential and reported in aggregate so that their names would not be associated with their responses. To this end, a database was devised to track the responses from sampled permit holders. The tracking system accounted for which survey form the respondent was assigned, whether the questionnaire was returned, if the address was undeliverable, whether the trip was cancelled, or if the permit was a park service administrative permit. In a separate database, permit information, and questionnaires were coded and entered. This second database was separate from the first and did not include names and addresses. The survey administrative database was discarded at the end of the data collection process.

The questionnaire and survey administrative procedures were reviewed extensively by researchers and park staff. The entire methods, including the questionnaire, sampling procedures, and survey administrative techniques underwent formal review and eventual approval by the University of Illinois Institutional Review Board for use of human subjects, the NPS Washington Office staff of social scientists, and finally the U.S. Office of Management and Budget (OMB). These formal reviews are standard procedure for implementing social scientific research on visitors to federal lands.

### *Response rate*

The primary data collected for this study were based upon a sample of 2,034, or about 19% of the trip leaders who obtained an overnight backcountry permit between March 1, 2004 and February 28, 2005. Excluding questionnaires due to incorrect addresses, cancellations, and administrative uses, 1,460 out of a possible 1,918 or 76% responded (see Table 2.1). The sample was stratified by zone of hike and month of trip, and the results were weighted in order to generalize to the population of trip leaders. This study did not obtain information from various other backcountry user populations, including trip members, people who cancelled their trip, people refused a permit, people who used the backcountry permit system but decided not to apply, and those who hiked without a permit.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

Table 2.1 Sampling ratio and response rate

---

Trip leader population	10,930
Sample size	2,034
Sampling ratio = $2,034 / 10,930$	0.186
Not delivered due to incorrect address	(91)
Trip cancellations	(23)
Administrative permits	(2)
Net sample size = $2,034 - (91 + 23 + 2) =$	1,918
Number of responses	1,460
Response rate = $1,460 / 1,918 =$	76%

---

### Data Coding and Weighting

#### *Coding*

During the mailing procedure, each day's returns or undeliverables were coded into the mailing data base. If we were contacted by the permit holder that they cancelled their trip, this was also recorded. The selection algorithm included NPS administrative permits and these were also recorded.

Responses were coded directly onto an SPSS data screen. Entry was primarily conducted by a data entry professional based on a codebook developed at the Park Planning and Policy Lab. Entry was cross checked by the coder to maximize reliability. The coder then cleaned the data for out-of-range variables and errors initiating the analysis.

#### *Weighting*

The first step in the weighting process was to compare the distribution of the responses to the distribution of sampled permits by strata. To test these distributions a pearson's  $\chi^2$  was performed for the distributions across use zones and months. In both cases, the response distribution did not differ significantly from the sampling distributions. Because the four distributions were consistent, weights were calculated based on the responses.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

To generalize to the population, probability weights were calculated. Probability weights are the inverse of the sampling (response) proportions for example:

Where  $P$  = population, and  $s$  = sample size, and  $W$  = the weight for the probability of the case:

$$W = P/s$$

This equation yields the number of units in the population represented by each respondent. Details are presented in Appendix B.

Because of data weighting from the sample to the parameters of the population, analyses are conducted on the basis of a large  $N$  size, approximately 10,930. With such a large number of cases for each analysis, most statistical tests are generally significant at the .05 level of probability and the specifics of the tests – such as the chi-square or  $F$  values – are not presented. The methods and sampling strategies allowed a 95% or greater confidence level on dichotomous variables for the results.

# OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

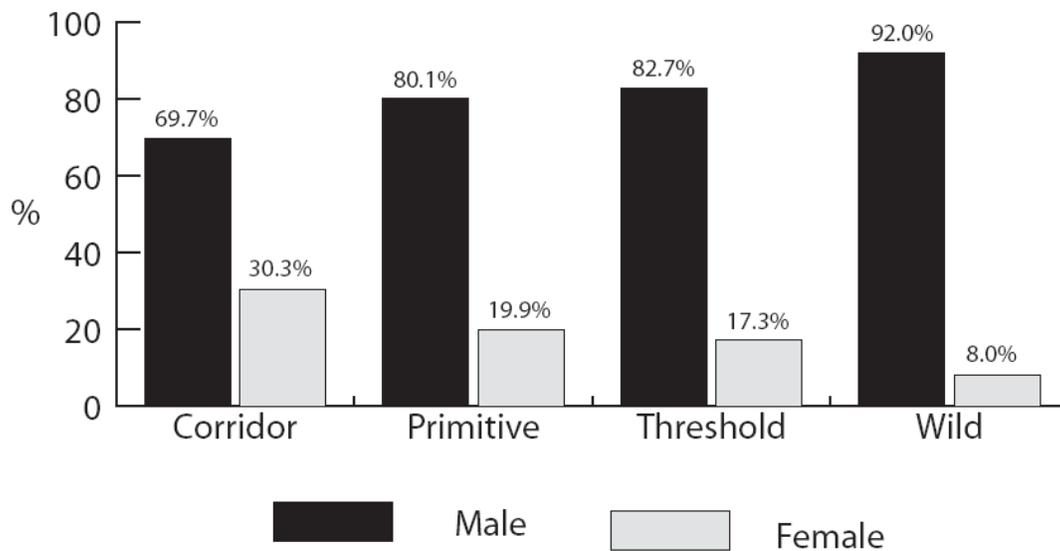
## III: Visitor Characteristics

The first objective of this study is to identify and characterize backcountry hikers. Specifically, this section reports on the socio-demographic characteristics of trip leaders and their past overnight hiking experiences in Grand Canyon.

### Socio-demographic Characteristics

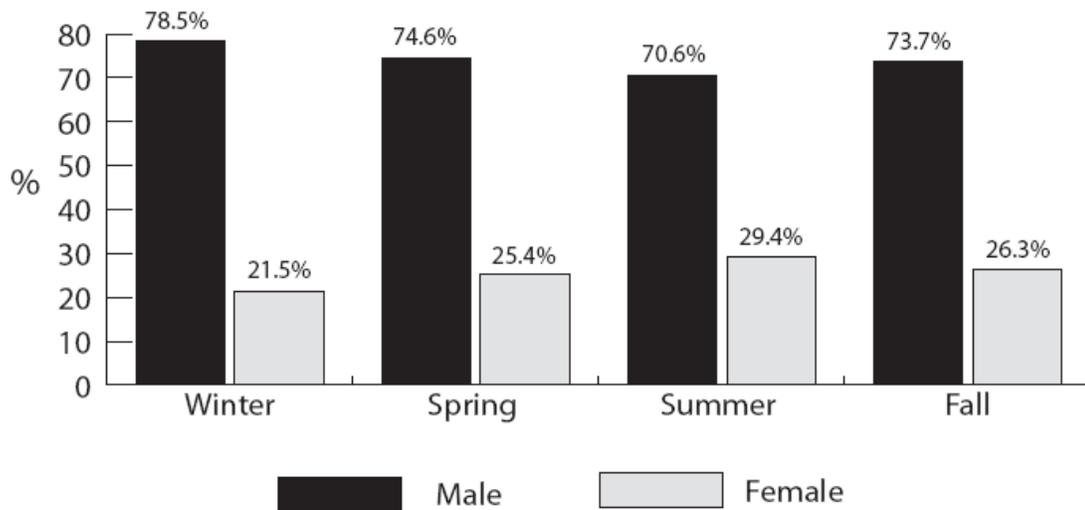
#### *Male/Female breakdown*

Overall, 74% of the group leaders were men. This proportion is generally consistent across seasons except in the summer when females represent approximately 30% of trip leaders. Across the use zones, the highest portion of women as trip leaders was in the Corridor at 30%, and women were least represented as trip leaders in the Wild Zone at 8% (Figures 3.1 and 3.2). Since the 1986 sociological study the proportion of group leaders who are female has increased 23%, up from 20% in 1986 to 26% in the current study.



**Figure 3.1. Male/Female by Zone**

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK



**Figure 3.2. Male/Female by Season**

### Race

Among group leaders who identified a race, 91% indicated that they are white. The next largest group of those who identified a race report Asian (3.3%) Two percent reported “Spanish, Hispanic or Latino” (Table 3.1).

**Table 3.1: Distribution of overnight hikers by race.**

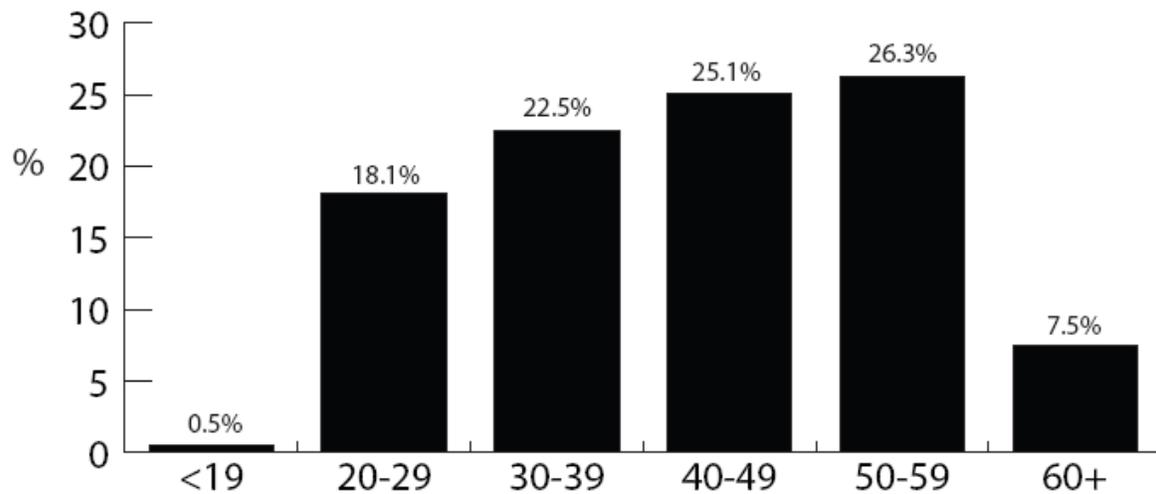
	% <sup>1</sup>
White	90.9
Do not wish to answer	5.6
Asian	3.3
Spanish, Hispanic, Latino	2.1
American Indian or Alaska Native	1.4
Black or African American	0.5
Native Hawaiian or Pacific Islander	0.1

<sup>1</sup>Will not total 100%

### Age

The age of more than 50% of trip leaders ranged between 40 and 59 years old (Figure 3.3). Across the zones, 40% of Wild Zone trip leaders fall into the 50-59 category (Table 3.2). The largest portion of winter overnight hikers are under 30 years; and the largest portion of summer overnight hikers are 30-39 years (Table 3.3). Spring and fall tend to be older trip leaders compared to the other seasons; the largest portions of 50-59 year olds and 40-49 year olds travel in the spring and fall, respectively (Table 3.3).

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK



**Figure 3.3. Age Distribution**

**Table 3.2: Age by zone**

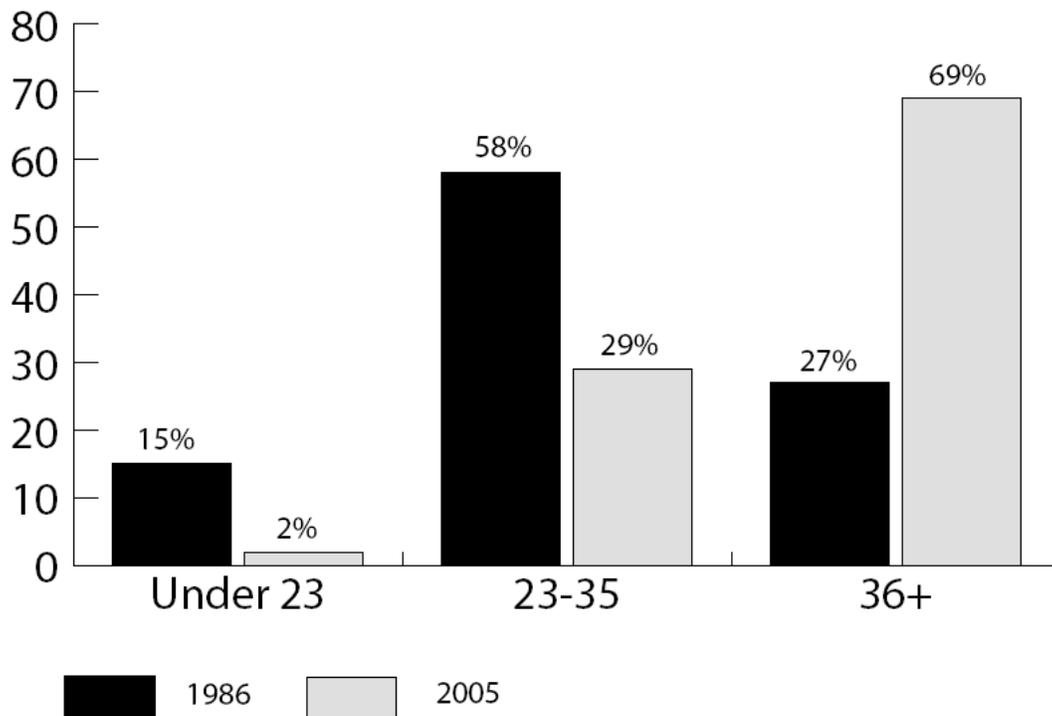
Age Category	Corridor	Threshold	Primitive	Wild
	%	%	%	%
Under 19	0.4	0.4	1.1	1.2
20-29	19.4	16.9	14.7	7.4
30-39	23.3	24.0	18.1	14.2
40-49	24.2	23.8	29.0	27.2
50-59	25.4	26.2	29.2	40.1
60+	7.1	8.8	7.9	9.9

**Table 3.3: Age by season**

Age Category	Winter	Spring	Summer	Fall
	%	%	%	%
Under 19	1.2	0.3	0.9	0.2
20-29	29.6	15.0	22.7	14.2
30-39	17.8	20.8	27.7	21.4
40-49	23.0	25.7	21.5	28.0
50-59	23.4	29.7	23.9	25.4
60+	5.1	8.5	3.4	10.9

Since the 1986 study, there has been a dramatic change in the age of the group leader. The average age of a group leader has increased 12 years from 31.7 years to 43.5 years old. Figure 3.4 illustrates the way that the age distribution changed across the two time periods. In 1986, 72% of the population was age 35 or younger, by 2005 31% of the population was age 35 or younger.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK



**Figure 3.4. Age distribution 1986/2005**

### Social Groups

Social group is one of the best predictors of recreation behavior and motivations. Since the previous sociological study (Underhill et al., 1986), there has been a major shift in the composition of backcountry hiking groups (Table 3.4). In the 1986

study 45% of groups were categorized as “Friends” and 24% categorized themselves as “Family.” In the current study, 42% categorized their social group as “Family” and 33% categorized themselves as “Friends.” Showing a major decline were solo hikers; in 1986 backpackers traveling alone comprised approximately 18% of the overnight backcountry hikers, now the proportion has declined to 10% of the population.

**Table 3.4. Comparison of Social Groups Between 1986 and 2005.**

Social Group	1986	2005
	%	%
Friends	45	33
Family	24	43
Alone	18	10
Friends and Family	8	12
Organized Group	5	3

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

About half of Corridor overnight hiking groups are composed of family groups. Once outside of the Corridor, most groups are friends traveling together. Similarly organized groups and solo hikers are associated with non-Corridor use zones. Seasonally, just under half of summer overnight hikers are in family groups. Organized groups make up the lowest proportion in the fall. The winter months attracts the highest portion of solo hikers (Table 3.5 and 3.6).

Table 3.5. Social groups by zone

Group Type	Zone			
	Corridor %	Threshold %	Primitive %	Wild %
Family	49.5	29.8	26.3	17.2
Friends	28.3	41.1	42.2	50.3
Family and Friends	11.6	12.9	11.7	12.9
Alone	8.5	12.1	17.0	15.3
Organized Group	2.1	4.0	2.8	4.3

Table 3.6. Social group by season

Group Type	Season			
	Winter %	Spring %	Summer %	Fall %
Family	36.8	41.7	48.1	40.4
Friends	33.7	34.9	24.2	37.2
Family and Friends	8.1	14.2	11.8	10.4
Alone	18.6	6.2	13.2	10.3
Organized Group	2.8	2.9	2.7	1.8

Table 3.7. Distribution of group size

Year	Group Size		
	1 %	2 %	3 or more %
1986	18	47	35
2007	10	43	47

.An important consideration along with the types of social groups is the size of those groups. Groups of two were the most frequent group size in both the 1986 sociological study and this current study

(Table 3.7). Table 3.8 presents the distribution of group sizes across use zones. Single hikers tend to be over represented outside of the Corridor and groups of three or more are slightly more likely to be found in the Corridor and Threshold Zones.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

Table 3.8. Group sizes by use zones.

Groups Size	% in Use Zone			
	Corridor	Threshold	Primitive	Wild
1	8.8	12.8	17.4	17.8
2	43.8	40.1	40.5	42.3
3 or more	47.4	47.1	42.1	39.9

### Past Hiking Experience

More than half of all visitors were on their first Grand Canyon overnight backcountry trip in the past five years (see Table 3.9). There were 23% who had taken three or more trips in Grand Canyon in the past five years (including the current trip). These proportions varied substantially by zone of hike. Corridor hikers were the least experienced with 69% of them reporting that they were on their first trip in the past five years, 31% of Threshold Zone hikers reporting the same, 24% of Primitive, and Wild Zone hikers were the least likely to be on their first trip with 8% reporting such (see Table 3.9). From another view, Wild Zone hikers were the most experienced at Grand Canyon overnight backpacking trips with 72% reporting three or more trips, compared to 13% of Corridor hikers who reported the same (see Table 3.9).

Table 3.9. Number of previous trips by zone

Zone	Number of Grand Canyon backpacking trips in past five years (%)		
	1 trip	2-3 trips	> 3 trips
Corridor	69	18	13
Threshold	31	30	39
Primitive	24	27	49
Wild	8	21	72
<b>Total</b>	55	21	23

There was significant variability by season of use also (Table 3.10). Summer visitors were the least experienced in Grand Canyon backpacking with 71% reporting this to be their first overnight backcountry trip in five years. Fall, winter, and spring hikers reporting fairly similar past experience at 54%, 49%, and 48%, respectively, reporting this to be their first overnight trip in five years to Grand Canyon's backcountry.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

Table 3.10 Number of previous trips by season

Season	Number of Grand Canyon backpacking trips in past five years (%)		
	1 trip	2-3 trips	> 3 trips
Summer	71	19	11
Fall	54	18	29
Winter	49	22	28
Spring	48	26	27
<b>Total</b>	55	21	23

Respondents also were asked the age at which they went on their first overnight backpacking trip in Grand Canyon. There were 93% who reported being greater than 20 years old at the time of their first trip. In contrast to the current study, Underhill et al. (1986) found that 84% reported being greater than 20 years old at the time of their first trip. Across the decades of these two studies, first time visitors are older and less like to be in their youth or teen-age years in the 2000's compared to the 1980's (table not shown).

### IV: Visitor Experiences, Behaviors, and Preferences

An objective of this research was to assess hikers' experiences, behaviors and preferences. In this chapter, four areas are addressed: hikers' motivations and experiences; knowledge and behavior when visiting tribal lands and archeological sites; knowledge of minimum impact behavior; and preferences for backcountry policies.

#### Motivations

To assess visitors' motivations, two approaches were employed from previous sociological research at Grand Canyon. The first approach was to ask visitors (in an open-ended format) to name their two or three main reasons for hiking at Grand Canyon. A random subsample was then coded into categories largely congruent with the categories originally reported by Towler (1977) and Underhill et al. (1986). Results from all three studies are presented in Table 4.1. Because the format of asking this question for all three studies was open-ended, numeric comparisons – as if the motivations were given to ranking or some quantitative comparison – are not appropriate.

The way to compare the results of the various studies presented in this table is to recognize that the motive domains identified since 1977 are still relevant across 30 years of backcountry visitor studies. Experiences related to challenge, natural beauty, seeing the inside of the Canyon, and solitude have been appealing factors for Grand Canyon backcountry trips for three decades. In addition, the 75% of "other" responses for this current study suggests that the ways to appreciate and experience Grand Canyon's backcountry are growing. Stated differently, an important conclusion from Table 4.1 is that along with traditional motivations for trips to Grand Canyon's backcountry, new and diverse motivations have emerged. Many of these new motivations were associated with being with friends and family, or changing stages of life (e.g., traveling across country, preparing for after life, celebrating graduation), as well as some motivations that were difficult to interpret (e.g., had some time off, reputation of the Canyon, dinner at Phantom).

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

Table 4.1. Motivations for hiking at Grand Canyon – open-ended format

Motive	Towler 1977	Sociological Study	Sociological Study
	%	1986	2005
Challenge	28	47	26
Natural Beauty	37	42	30
See Inside Canyon	26	31	22
World Wonder	Not Reported	16	4
Enjoy Wilderness	11	13	7
Escape	16	12	5
Solitude	11	11	10
New Experience	10	9	22
Other	Not Reported	13	75
No Response	3	3	8

A second approach to understanding hikers' motivations is to assess their experience preferences. Items were drawn from Underhill et al. (1986) and Shafer (1999). These items are widely used in many outdoor recreation contexts and have been shown to be reliable indicators of various kinds of outdoor recreation experiences and motivations (e.g. Manfredo, Driver, & Brown, 1983; Driver, Tinsley, & Manfredo, 1991).

A principal components analysis to the 31 items was undertaken to reduce the 31 variables to a smaller number of motivational domains. The items reduced to 9 domains. (For technical details of the analysis see Appendix B.) After condensing the items into domains, domain scores for each respondent were calculated and these scores were then tested for differences (or similarity) across use zones and seasons.

On the basis of the principal components analysis, nine experience domains were derived. These domains reflect a variety of experiences consistent with a wilderness experience. The most important experience domain among the nine was being in a wild setting. This domain included items like "Being in an area where human influence is not noticeable" which suggests that visitors were looking for settings they perceive to be wild. Eight of the nine domains were considered important by the hikers, except for the least important domain "knowing help is available" (Table 4.2). There is a small proportion of visitors who think that having help available is important but most hikers do not explicitly seek to hike in areas where they can get help if they need it. In whole, the importance of experience preferences across both season and zone are consistent. In other words, differences across zones or seasons are small and not practically meaningful to interpret.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

Table 4.2. Mean importance ratings for experience preference domains.

<b>Domain</b>	<b>Mean</b>	<b>S.D.</b>
Wild Setting	1.3	0.5
Enjoying Nature	1.3	0.6
Solitude	1.2	0.7
Learning	1.0	0.6
Skills Testing	1.0	0.7
Family	0.8	0.9
Challenge	0.3	0.8
Sociability	0.1	0.7
Help Available	-0.5	0.9

-2=Extremely Unimportant, 0=Neutral,  
2=Extremely Important

Analysis of variance across use zones suggests that the importance of each of the domains differs by zone although the magnitude of these differences tends to be small. For only the domain “Help available,” did zone explain more than 10% of the variance in importance ratings. Figure 4.1 shows the means plots for each experience preference domain by use zone. These plots suggest that for some domains like being in a wild setting, seeking solitude, and seeking challenge, the importance of these domains marginally increases as the use zone becomes more remote and wild. For others like learning, being with family, or being social, these domains become marginally less important as the use zone becomes more remote and wild.

# OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

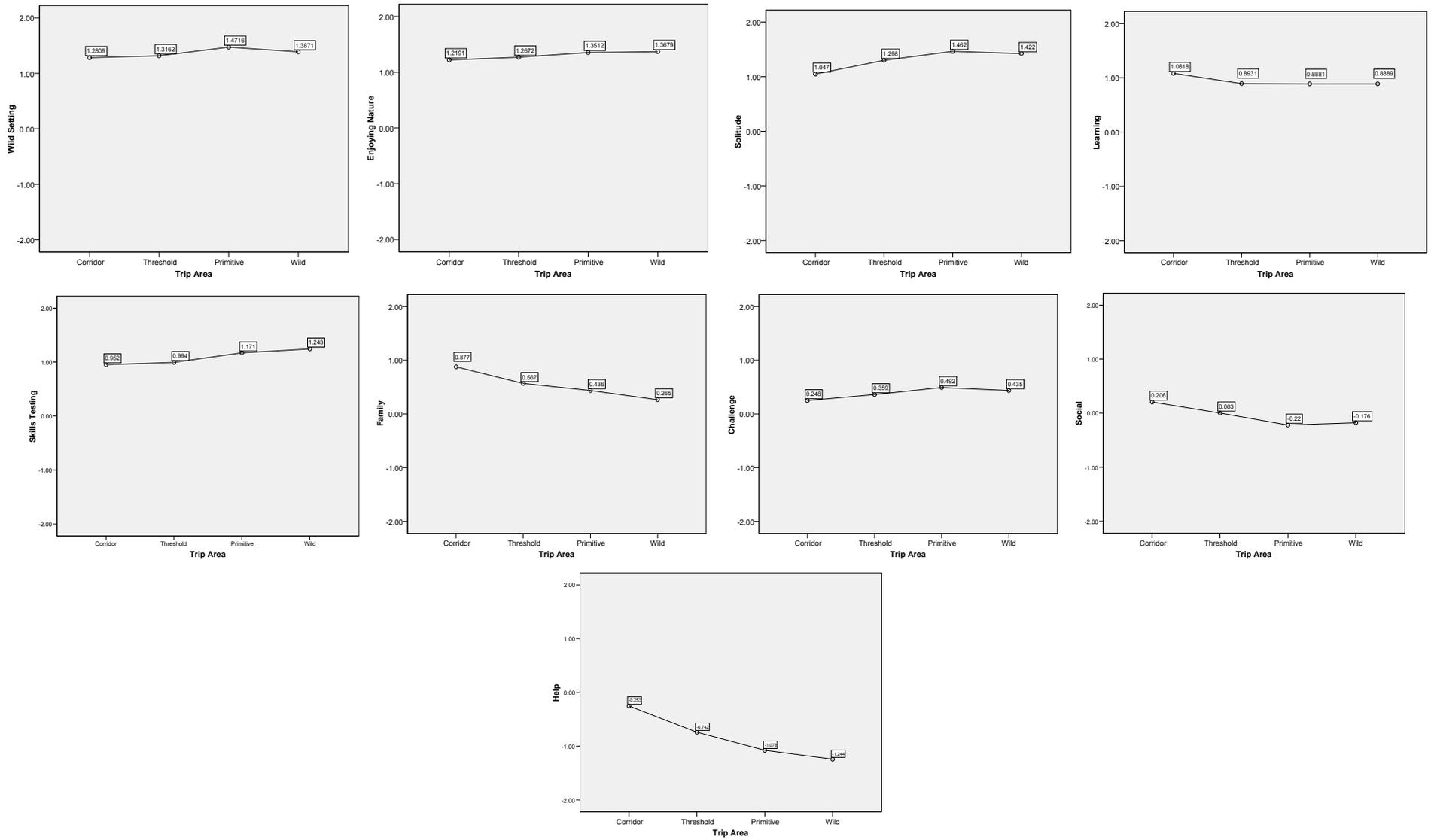


Figure 4.1: Means plots for Experience Preference Domains by Use Zones

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

Findings from analysis by season are similar to the findings by zone. There are differences in the experience preference domains by season but the magnitude of the differences is low. In no case does season explain more than 5% of the variation. One pattern that does emerge in the data is that summer hikers tend to rate the experiences “solitude,” “skills testing,” “challenge,” and “being in a natural setting” slightly lower than hikers in other seasons (Table 4.2).

Table 4.2. Means and standard deviations by season for experience preferences.

Domain	Season							
	Winter		Spring		Summer		Fall	
	M	S.D.	M	S.D.	M	S.D.	M	S.D.
Wild Setting	1.4	0.5	1.3	0.5	1.3	0.6	1.3	0.5
Enjoying Nature	1.3	0.6	1.3	0.6	1.1	0.6	1.3	0.6
Solitude	1.3	0.6	1.2	0.6	1.0	0.7	1.2	0.6
Learning	1.0	0.6	1.1	0.6	1.0	0.5	1.0	0.6
Skills Testing	1.1	0.7	1.1	0.6	0.8	0.8	1.0	0.6
Family	0.7	1.0	0.8	0.9	0.8	0.9	0.6	0.9
Challenge	0.4	0.8	0.4	0.8	0.1	0.9	0.3	0.8
Sociability	0.1	0.8	0.1	0.7	0.1	0.7	0.1	0.7
Help available	-0.7	1.0	-0.5	0.9	-0.3	0.9	-0.5	0.9

The findings presented here suggest that hikers in all use zones are seeking similar type of experiences. What is important to note is that hikers in more remote areas have much more experience backpacking and in the Canyon than those who hike in the Corridor. Similarly, the types of groups in the Corridor are different than those in the more remote and wild use areas. These findings put together suggest that the different use zones ensure that a variety of group types and skill levels can have a high quality backcountry experience. Visitors are able to match their desired experiences (or motivations) to the conditions of one of the four use zones.

### Visits to American Indian Lands and Archaeological Sites

A significant portion of overnight backcountry hikers traveled across American Indian lands to get to their trailheads and access points. Table 4.4 indicates that 13.9% of backcountry users crossed tribal lands. When viewed by zone of hike, the proportion of visitors indicating crossing tribal lands ranged from 11.8% from the Corridor to 20.5% in the Primitive Zone. These proportions varied slightly by season of use also, ranging from 8.7% of Summer to 16.5% for both Fall and Spring visitors who crossed tribal lands to gain access to the park’s backcountry (table not shown by season of use).

Of those who traveled across tribal lands, 12.6% reported paying an additional permit to cross the land, with Wild Zone hikers being the highest portion

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

who paid for an additional permit at 37%. The portion paying for an additional permit varied by season, ranging from 1.0% of Summer to 20.0% of Winter visitors who were required to pay for an additional permit to cross tribal lands (table not shown). In terms of the reported price of permits, 36.6% were charged \$10, 17.9% were \$20, and 20.0% were \$25. The reported range was from \$5 to \$125 (table not shown). When asked to name the tribe that charged to cross tribal lands, 52% reported Navajo and 18% reported Havasupai. There were several other names reported including Hopi, Hualapai, Anasazi, Kaibab, Paiute, and Painted Desert, as well as reports of “I don’t know” (table not shown).

Table 4.4. Travel across American Indian tribal lands

Zone of hike	Traveled across tribal lands %	Of those who traveled across tribal lands:	
		Paid for an additional permit to cross land %	Aware an additional permit was required %
Corridor	11.8	11.8	8.6
Threshold	16.9	12.6	29.4
Primitive	20.5	12.8	46.5
Wild	14.9	37.0	40.9
<b>Total</b>	13.9	12.6	21.5

There was variability in awareness by overnight visitors that an additional permit was required when crossing tribal lands. In total, 21.5% of visitors were aware that an additional permit may be required. Corridor users were the least aware at 8.6%, and Primitive Zone hikers were the most aware at 46.5% (see Table 4.4) who reported knowing that an additional permit may be required.

A substantial portion of backcountry visitors reported visiting archaeological sites and did so with advance planning as a purposeful part of their trip. Table 4.5 indicates that in 35.1% of total backcountry users reported visiting an archaeological site, ranging from 29.7% of Threshold to 64.4% of Wild Zone visitors. Of those who visited an archaeological site in the park’s backcountry, more than one-quarter planned to do so in advance. Of those who visited archaeological sites, Corridor hikers were least likely to make advance planning for such visits at 18.7% and Wild Zone hikers were most likely to do so at 55.8% reporting so (see Table 4.5).

The questionnaire contained several items asking respondents to report their feelings and thoughts about their visit to archaeological sites. Most reported some degree of humbleness, excitement, fascination, respect for the site, or a sense of sacredness, and 18% reported experiencing some slight degree of being bored (see Appendix A for the frequency distributions on item 3.13d). Without much variability across the four use zones, 80.5% of those who visited an archaeological site

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

reported either “very” or “extreme” respect for the site (see Table 4.5). In addition without much variability across the four use zones, 41.2% of those who visited an archaeological site reported either a “very” or “extreme” sense of sacredness when visiting the site.

An important part of the park’s mission is to protect cultural resources for future generations, and this includes archaeological resources such as artifacts and other material remains from past cultures who called the Canyon their home. An item on the questionnaire asked respondents the extent to which they felt “tempted to take an artifact home.” There were 92% who responded that they did not have any such feelings, however there was a portion that felt some degree of temptation. In total 1.6% of those who visited a site (or about 60 trip leaders during the year) reported feeling either “very” or “extreme” temptation to take an artifact home (see Table 4.5). If viewed by season (table not shown), about two-thirds of those reporting “very” or “extreme” temptation were hiking during the spring. There is an important distinction between being tempted and actually doing something. The 92% who know enough not to be tempted in taking an artifact is “good news” for the park, but even 1.6% per year being very tempted indicate that the park staff needs to remain vigilant about this issue.

Table 4.5. Visited archaeological site by Zone of hike

Zone of hike	Visited an archaeological site %	Of those who visited a site:			
		Planned to do so in advance %	Felt “very” or “extreme” respect for site %	Felt “very” or “extreme” sense of sacredness %	Felt “very” or “extreme” temptation to take an artifact home %
Corridor	35.7	18.7	78.8	40.3	1.1
Threshold	29.7	41.5	86.9	41.2	3.2
Primitive	35.0	46.7	82.0	45.0	2.8
Wild	64.4	55.8	84.0	43.3	0.0
<b>Total</b>	35.1	26.5	80.5	41.2	1.6

### Knowledge of Backcountry Regulations

Table 4.6 indicates visitors’ knowledge of backcountry regulations and is broken-down by zone. In the cases where there is no variability across zone, the cells are marked with a dash (-). The questions asked were in a “true or false” format, and were repeated from the previous sociological study (Underhill, et al., 1986). In the far right of Table 4.6 indicates the percent correct from the 1986 study.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

Although most regulations queried were known by 90% or more of visitors, there are a few that were not well known, and these are discussed below.

A significant portion of visitors were unaware that food scraps need to be packed-out. In response to the statement “food scraps should be scattered widely to avoid attracting or concentrating wild animals,” there were 86.3% that correctly reported this as false. The hikers of the Corridor were most knowledgeable about this regulation with 89.0% indicating the correct response. In contrast, hikers of the Primitive and Wild Zones were the least knowledgeable about this regulation with 77.4% and 76.7%, respectively, reporting the correct responses (see Table 4.6). In other words, more than one-fifth of visitors to the Primitive and Wild Zones may be widely scattering their food scraps near eating places.

In a related item, a significant portion of visitors are not aware of the proper way to dispose of organic garbage and burnable trash. There were 82.9% of respondents who correctly reported “false” to the statement “organic garbage and burnable trash may be disposed of properly in the backcountry, but non-biodegradable or unburnable trash must be packed-out.” The proportion who knew correctly this regulation increased slightly in the past 20 years, with 78% stating the correct response (Underhill et al. 1986).

In terms of toilet paper, there are signs that the “pack in, pack out” message has increased in 20 years. Underhill et al. (1986) reported that 79% of their respondents correctly responded that the following statement was true, “toilet paper should be packed out of the backcountry, not burned or buried.” For this current study, the item was slightly changed to “toilet paper (used outside of restrooms) should be packed out of the backcountry, not burned or buried,” and results showed that 94.5% of the sample responded correctly to it. Although the parenthetical phrase “(used outside of restrooms)” may account for some of the increased correct responses – particularly for Corridor hikers – the increased visibility of minimum impact messages throughout the park may deserve credit for the greater awareness of proper disposal of toilet paper in the backcountry.

Some visitors lacked understanding of the proper treatment of archaeological objects and the fact that they should be left in place where found. As presented in Table 4.6, about one-third of respondents incorrectly agreed that “historic and archaeological objects found in the backcountry should be turned in to the park immediately upon completion of the trip.” Corridor hikers are least knowledgeable about this regulation with 62.5% responding correctly, and Wild Zone hikers are most knowledgeable with 87.4% stating the correct response. However compared to results from Underhill et al. (1986), the proportion who knew this regulation has increased dramatically in 20 years. From their dataset of 1984-85, 46% of respondents correctly indicated “false” to this statement, compared to 68% who did the same from 2005-6.

The regulation that reflected the lowest proportion of correct responses concerned permits for entering caves in the park’s backcountry. Without much

## **OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK**

variability across the four use zones, 59% of visitors correctly agreed that “a permit (other than your backcountry permit) is required to enter all caves, except the cave on Horseshoe Mesa” (see Table 7.3). This implies that more than 40% of backcountry visitors are not aware that exploring caves in Grand Canyon’s backcountry requires a special permit.

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Table 4.6. Knowledge of backcountry regulations

Regulation item (correct response True (T) or False (F))	% making correct response by Zone of hike					% correct from 1986 sociological study
	Corridor	Threshold	Primitive	Wild	Total	
Campfires are not allowed in the backcountry. (T)	92.8	96.4	95.4	95.7	93.8	94
Pets may be taken into the backcountry as long as they are on a leash. (F)	—	—	—	—	95.0	96
Only water obtained from the Colorado River needs to be purified before drinking. (F)	93.4	95.5	97.4	98.8	94.4	95
Toilet paper (used outside of restrooms) should be packed out of the backcountry, not burned or buried. (T)	89.8	94.5	93.2	94.5	91.1	79
Food scraps should be scattered widely to avoid attracting wild animals. (F)	89.0	83.4	77.4	76.7	86.3	83
Plants, rocks, and animals may not be collected, except when a special permit for research purposes is obtained. (T)	90.1	93.0	94.2	98.1	91.3	94
Historic and archaeological objects found in the backcountry should be turned in to the park immediately upon completion of the trip. (F)	62.5	75.7	80.9	87.4	67.7	46

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Table 4.6. Knowledge of backcountry regulations (continued)

Regulation item (correct response True (T) or False (F))	% making correct response by Zone of hike					% correct from 1986 sociological study
	Corridor	Threshold	Primitive	Wild	Total	
Organic garbage and burnable trash may be disposed of properly in the backcountry, but non-biodegradable or unburnable trash must be packed out. (F)	82.1	82.3	86.7	89.9	82.9	78
It is all right to camp in a use-area other than the one scheduled on your permit if the other use-area is not occupied. (F)	95.6	95.0	93.6	94.4	95.2	91
Backcountry permits need to be signed by the visitor before they are valid. (T)	—	—	—	—	96.4	—
Hikers need a valid Arizona State fishing license to fish in the Colorado River and its tributaries. (T)	—	—	—	—	94.6	—
A permit (other than your backcountry permit) is required to enter all caves, except the cave on Horseshoe Mesa. (T)	—	—	—	—	58.8	—

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### Hiker Preferences Related to Backcountry Policies

A section of the questionnaire asked respondents for their agreement level on items related to backcountry policies and management operations. Some of these policies and regulations are variable across the use zones, and Table 4.7 indicates respondent preferences to the extent they “agreed” or “strongly agreed” with the statements. The statements with the most variability in agreement level across use zones are discussed below.

Preferences for limiting the size of groups varied across use zones. In response to the statement “there should be a limit to the size of group using the backcountry,” Corridor visitors were the least likely to agree with limits with 78.6% agreeing to this statement. Primitive Zone hikers were most likely to prefer group size limitations with 90.3% agreeing with this statement (see Table 4.7). Overall, 81.3% of respondents agreed with this item, and a similar amount – 80% – agreed with the item in 1984-85. In response to a similar item “encountering a large backpacking group (over 11 people) detracted from my trip,” 18.9% of Corridor hikers agreed with this, and roughly 28% of the Threshold, Primitive and Wild Zone hikers agreed (see Table 4.7).

Two items were concerned with use limitations, and the responses have been fairly consistent across 20 years. There were 10.2% of backcountry visitors who agreed with the statement “the backcountry in Grand Canyon is used by too many people” (see Table 4.7), compared with 15% who agreed to this same statement 20 years ago. In a similar statement, 65.3% agreed to the statement “The NPS allows about the right number of people in the backcountry of Grand Canyon” with the Primitive and Wild Zone hikers least likely to agree with this statement at 59.6% and 60.6%, respectively.

Across all use zones, there was substantial support for ranger patrols. Corridor hikers were most supportive of patrols with 88.1% agreeing to the statement “backcountry ranger patrols are necessary and appropriate,” and Primitive and Wild Zone hikers were least supportive with 67.5% and 68.3% in agreement, respectively. In a related item, Corridor hikers were most in agreement to the statement “park rangers will rescue me if I get into trouble in the backcountry,” and Primitive and Wild Zone hikers were least likely with 15.2% and 14.5% in agreement, respectively.

More than one-fifth of backcountry visitors are supportive of commercially guided hikes. In particular, there were two items that suggest Wild Zone hikers would be the most supportive of commercially guided hikes. In response to the statement “it was easy to follow the route specified on my permit,” Wild Zone hikers were least likely to agree with 76.5% reporting so, and Corridor hikers were most likely to report an easy time following their permitted route with 96.1% reporting so (see Table 4.7). In addition, Wild Zone hikers were most likely to agree with the

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

statement “commercial guided hikes should be allowed in the backcountry” with 32.1% reporting so.

Support for backcountry visitors to carry-out their fecal wastes is weak. There were 13.6% total respondents who agreed with the statement “backcountry users should be required to carry out their fecal wastes.” This support varied across use zones with Corridor visitors being the most supportive at 14.5% and Wild Zone visitors being the least at 7.7%.

Aircraft over the backcountry continues to be problematic for a substantial portion of visitors to the more remote use zones. In response to the item “aircraft over the backcountry did not detract from the enjoyment of my trip,” 48.4% agreed, compared to 43% who agreed to this same item 20 years ago (see Table 4.7). There was considerable variation across the use zones, with Corridor visitors being the least bothered by aircraft at 55.6% indicating aircraft did not detract from their enjoyment compared to 19.5% of Wild Zone visitors indicating aircraft did not detract from their enjoyment. In a related item, 31.7% of total respondents agreed that “too many aircraft fly over the backcountry,” compared to 43% agreeing 20 years ago (see Table 4.7). Again, Corridor hikers were least bothered by aircraft with 20.2% reporting agreement that there are too many aircraft compared to 60.0% and 66.4% of Primitive and Wild Zone visitors, respectively. In the summer, the agreement level for “too many aircraft fly over the backcountry” is at its lowest of 20.4%, and in the Winter the agreement to this statement increases to 40.0% (table not shown). The seasonal variation may be due to by the larger proportion of visitors who travel to remote use zones in the fall, winter, and spring, compared to summer when most backcountry visitation is concentrated in the Corridor (which is a flight free zone).

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Table 4.7. Visitor preferences related to backcountry policies

	% who “strongly agree” or “agree” by Zone of hike					% “strongly agree” or “agree” from 1986 sociological study
	Corridor	Threshold	Primitive	Wild	Total	
Backpacking and river running parties are compatible with one another.	71.4	71.4	68.4	74.6	71.0	58
There should be a limit to the size of group using the backcountry.	78.6	84.3	90.3	82.1	81.3	80
Backcountry ranger patrols are necessary and appropriate.	88.1	75.8	67.5	68.3	82.9	84
Primitive sanitary facilities (e.g., pit toilets) should be available at more camping areas within the backcountry.	33.7	43.8	33.1	36.7	35.3	33
It was easy to follow the route specified on my permit.	96.1	90.4	80.4	76.5	92.5	93
Encountering a large backpacking group (over 11 people) detracted from my trip.	18.9	28.4	27.1	29.4	21.7	-
Aircraft over the backcountry did <u>not</u> detract from the enjoyment of my trip.	55.6	34.0	33.9	19.5	48.4	43

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Table 4.7. Visitor preferences related to backcountry policies (continued)

	% who “strongly agree” or “agree” by zone of hike					% “strongly agree” or “agree” from 1986 sociological study
	Corridor	Threshold	Primitive	Wild	Total	
Too many aircraft fly over the backcountry.	20.2	51.0	60.0	66.4	31.7	43
The backcountry in Grand Canyon is used by too many people.	11.5	6.3	9.1	8.1	10.2	15
Park rangers will rescue me if I get into trouble in the backcountry.	37.8	19.5	15.2	14.5	31.3	—
The NPS allows about the right number of people in the backcountry of Grand Canyon.	66.1	67.8	59.6	60.6	65.3	62
Backcountry users should be required to carry out their fecal wastes.	14.5	12.9	10.9	7.7	13.6	—
Animal-proof food storage should be available at all campsites in the park’s backcountry.	69.1	52.2	25.9	23.3	59.8	—
Commercial guided hikes should be allowed in the backcountry.	24.2	22.0	18.9	32.1	23.2	14
I was well prepared for my trip.	—	—	—	—	95.0	—

### V. Visitor Satisfaction

An important goal of the park's management operations is to ensure that visitors have a high quality experience. For this study several indicators of quality were assessed and operationalized in several different ways, roughly corresponding to three major determinants of experience quality. These include resource conditions, managerial operations, and quality of the social setting. Indicators of quality included perceptions of resource impacts, perceptions of visitors, behavioral responses to other visitors, and satisfaction with their experience. Visitor satisfaction is connected to satisfaction with resource conditions, managerial operations and presence, and social setting and encounters with others. Each is discussed in turn.

#### Satisfaction with resource conditions

Nine resource conditions were investigated to assess how apparent they were; to what degree visitors thought they were disturbing, and finally their satisfaction with the condition. These nine conditions were litter along trails and at campsites, human wastes along trails and at campsites, toilet paper along trails and at campsites, livestock waste, trail erosion, and vegetation damage.

#### *Apparentness*

The degree to which visitors noticed resource impacts was assessed on a five point scale ranging from "Not at all apparent" to "Extremely Apparent" where "not at all apparent" = 1 and "Extremely Apparent" = 5. Table 5.1 displays the "apparentness" of each of the resource impacts investigated in descending order by mean. Livestock waste and trail erosion were far more apparent to visitors than the other impacts. Analysis of variance tests suggest that for livestock waste there are differences among visitors across zones ( $F=1526.11$ ,  $p<.001$ ,  $\eta^2=.29$ )<sup>1</sup>. Mean ratings for livestock waste were highest for Corridor hikers ( $m=3.6$ ) followed by Wild Zone hikers ( $m=2.3$ ), Threshold hikers ( $m=2.2$ ), and finally Primitive Zone hikers ( $m=1.7$ ). No significant differences were found among visitors hiking in different seasons.

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<sup>1</sup> Because of the weighting, SPSS performs the ANOVA assuming a sample size of 10,742, thus the very large F value

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

Table 5.1. Proportion of respondents citing apparentness ratings for resource impacts.

Item	Apparent Rating %					M	S.D.
	Not at all	Slightly	Moderately	Very	Extremely		
Livestock Waste	24.8	10.9	20.3	23.8	20.2	3.4	1.5
Trail Erosion	11.6	36.8	33.2	12.3	6.1	2.7	1.0
Vegetation damage from trampling or cutting	49.6	39.5	9.2	1.5	0.1	1.6	0.7
Litter along trails	61.2	34.0	3.8	0.5	0.4	1.5	0.6
Litter at campsites	61.4	34.1	2.9	1.2	0.4	1.5	0.7
Toilet paper along trails	84.7	12.6	1.8	0.8	0.1	1.2	0.50
Toilet paper at camp areas	85.9	10.4	2.9	0.8	0.1	1.2	0.5
Human waste at camp areas	87.4	10.2	1.4	0.6	0.4	1.2	0.5
Human waste along trails	88.3	10.3	1.0	0.3	0.0	1.1	0.4

### *Level of Disturbance*

To assess the degree to which the resource impacts detracted from the backcountry experience, respondents were asked to rate how disturbing each of the resource impacts on a scale of “Not at all disturbing” to “Extremely Disturbing.” Table 5.2 displays the mean level of being disturbed in descending order. Like with the “Apparent” ratings, disturbing ratings for livestock waste depended on the use zone of the visitor (ANOVA,  $F=190.03$ ,  $p<.001$ ,  $\eta^2=.72$ ). Corridor ( $m=2.3$ ) and Wild ( $m=2.1$ ) Zone hikers were more disturbed by livestock waste than Threshold ( $m=1.8$ ) or Primitive ( $m=1.6$ ) Zone hikers. These results may not be surprising given the amount of horse and mule traffic in the Corridor and that many hikers from the Wild Zones move through the Corridor on their way in or out of the Canyon.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

Table 5.2. Proportion of respondents citing level of disturbing and mean ratings.

Item	Level of being disturbed (%)					M	S.D.
	Not at all	Slightly	Moderately	Very	Extremely		
Livestock Waste	43.5	22.3	18.8	8.5	6.9	2.1	1.3
Trail Erosion	57.8	25.2	12.7	3.6	0.7	1.6	0.9
Litter along trails	65.4	19.5	7.8	4.6	2.7	1.6	1.0
Vegetation damage from trampling or cutting	66.3	21.2	9.2	2.3	1.1	1.5	0.8
Litter at campsites	71.0	15.9	6.4	4.3	2.4	1.5	1.0
Toilet paper along trails	78.7	9.1	2.6	5.9	3.7	1.5	1.1
Human waste along trails	80.0	6.7	2.6	4.1	4.2	1.4	1.0
Human waste at camp areas	82.9	6.5	2.0	3.7	4.9	1.4	1.0
Toilet paper at camp areas	81.6	7.8	3.1	3.7	3.8	1.4	1.0

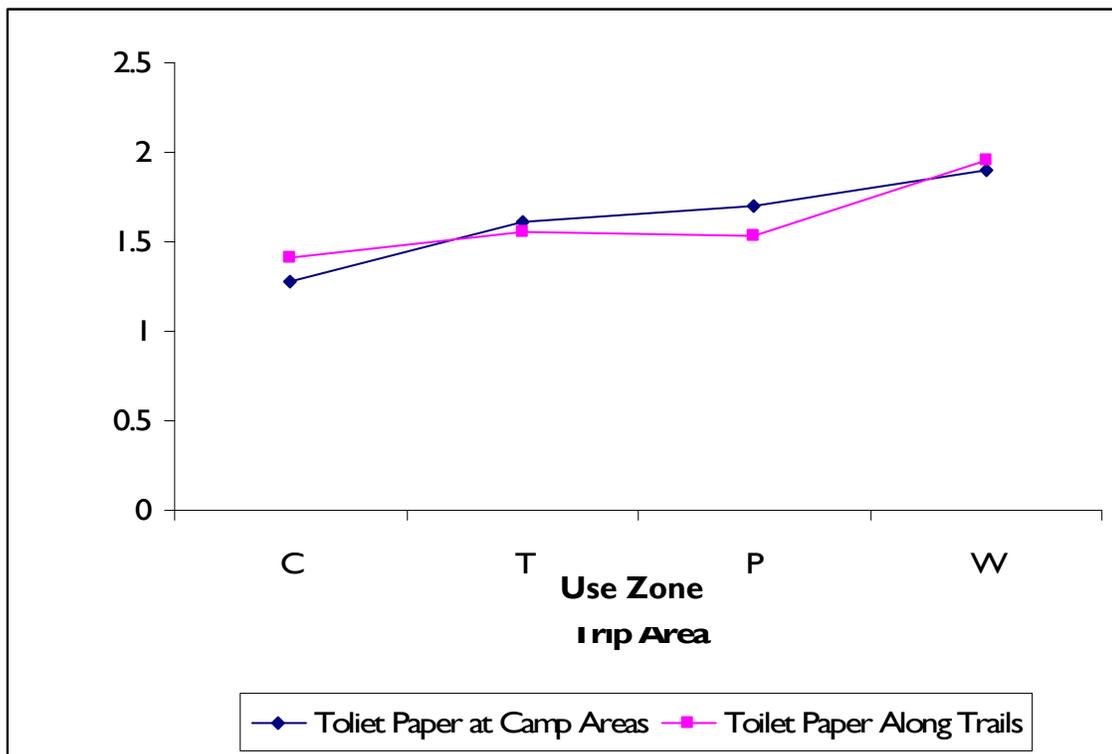
One pattern that emerged from the data suggests people using the different zones have differing sensitivities to resource conditions. Table 5.3 show the mean responses across use areas, and Figures 5.1 is a means plot of the data shown in Table 5.3. In both the tables and the figure when reading left to right, the mean responses follow a consistent pattern somewhat matching the Corridor to Wild continuum, although Threshold hikers seem to be a little more sensitive to the resource impacts than Primitive Zone hikers and consistently report being more disturbed by the impacts than Primitive Zone hikers. This matching pattern of responses is not evident in the “apparent” ratings (Table not shown), suggesting that Wild Zone hikers react differently to various resource impacts than Corridor hikers. This could be that there are different expectations of hikers to the various zones, or it could be that Wild Zone hikers have stricter normative assumptions about the way resource conditions ought to be and therefore, are more likely to be disturbed by the resource impacts compared to users of other zones.

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Table 5.3. Mean “Disturbing” ratings by use zone.

Item	Zone							
	Corridor		Threshold		Primitive		Wild	
	M	SD	M	SD	M	SD	M	SD
Livestock Waste	2.3	1.3	1.8	1.2	1.6	1.1	2.1	1.4
Trail Erosion	1.6	0.9	1.7	0.9	1.6	0.9	1.7	0.9
Litter along trails	1.5	0.9	1.7	1.1	1.6	1.0	1.9	1.2
Vegetation damage from trampling or cutting	1.4	0.8	1.7	1.0	1.6	1.0	1.8	1.0
Litter at campsites	1.4	0.8	1.7	1.1	1.6	1.0	1.9	1.3
Toilet paper along trails	1.4	1.0	1.6	1.2	1.5	1.1	2.0	1.4
Human waste along trails	1.4	0.9	1.5	1.2	1.5	1.1	1.8	1.3
Human waste at camp areas	1.3	0.9	1.6	1.3	1.6	1.2	1.8	1.4
Toilet paper at camp areas	1.3	0.8	1.6	1.2	1.7	1.2	1.9	1.4

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**Figure 5.1. Means plot "Disturbing" ratings of Toilet Paper along Trail and Toilet paper at camp areas.**

Although trail erosion ratings held a similar pattern as the resource impacts cited above yet, there were no statistical differences across settings. There were 42% of the hikers who indicated that trail erosion was at least moderately disturbing to them, and this level of disturbance did not depend on the use zone. Rather, the degree to which the trail erosion was apparent to the hiker was a much better predictor of the degree to which trail erosion was disturbing as indicated by spearman's rho ( $\rho = .51$ ) compared to zone.

Seasonally, there were few differences in level of being disturbed across seasons. Summer hikers rated "Livestock waste along trails or in campsites" and "trail erosion" as the two disturbance variables that showed differences across seasons (Table 5.4).

**Table 5.4. Means for Livestock Waste and Trail Erosion by Season.**

Item	Season							
	Winter		Spring		Summer		Fall	
	M	SD	M	SD	M	SD	M	SD
Livestock Waste	2.13	1.25	1.94	1.18	2.41	1.34	2.08	1.19
Trail Erosion	1.80	0.99	1.61	0.86	1.62	0.92	1.63	0.84

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In these results, hikers in the summer tend to be the most disturbed by livestock waste. This makes sense considering that most of the use during the summer is in the Corridor where the majority of livestock is concentrated. Trail erosion is most disturbing to winter hikers. This may be so because winter hikers are sensitive to trail conditions because they can be wet and icy.

### *Resource condition satisfaction*

The apparentness of resource impacts and the degree to which they disturb visitors are important factors in the assessment of satisfaction with resource conditions. Table 5.5 displays the proportions of respondents who were satisfied, neutral or unsatisfied with the resource conditions they encountered during their trip.

Table 5.5. Satisfaction with Resource Conditions.

<b>Item</b>	<b>Satisfied %</b>	<b>Neutral %</b>	<b>Unsatisfied %</b>
Human Waste Along Trails	93.4	5.1	1.5
Human Waste Camp Areas	92.9	4.9	2.2
Litter at Campsites	91.6	5.5	2.9
Toilet Paper at Camp Areas	91.1	6.3	2.6
Toilet Paper Along Trails	90.6	5.8	3.6
Litter Along Trails	90.0	5.9	4.1
Vegetation Damage form Trampling or Cutting	81.4	14.6	4.0
Trail Erosion	70.0	21.0	9.0
Livestock Waste	48.3	24.7	27.1

Not surprisingly, satisfaction with livestock waste was associated with the Corridor, otherwise there were no associations of significant magnitude with zone of hike. Table 5.6 displays the proportion of hikers satisfied with livestock waste by zone.

Table 5.6. Satisfaction with Livestock Waste by zone.

<b>Satisfaction Level</b>	<b>Corridor %</b>	<b>Threshold %</b>	<b>Primitive %</b>	<b>Wild %</b>	<b>Total %</b>
<b>Satisfied</b>	36.5	69.5	78.5	62.3	48.3
<b>Neutral</b>	29.8	15.9	10.8	17.9	24.7
<b>Unsatisfied</b>	33.7	14.6	10.7	19.8	27.1

In sum, large majorities are satisfied with the resource conditions they encounter with the exception of livestock waste. In the case of livestock waste, most of those who indicated they were unsatisfied were hikers who traveled in the corridor or through the corridor where the majority of livestock is concentrated.

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### Satisfaction with Managerial Operations

For satisfaction with managerial operations, respondents were asked to assess four elements of backcountry facilities; the physical conditions of campsites, physical conditions of trails, sanitary facilities in the backcountry, and finally spacing of designated campsites. A majority of hikers were satisfied with all of the managerial items. Table 5.7 displays the proportion of respondents indicating three levels of satisfaction.

Table 5.7. Satisfaction with Managerial Conditions

<b>Item</b>	<b>Satisfied %</b>	<b>Neutral %</b>	<b>Unsatisfied %</b>
Physical condition of campsites	91.7	6.4	1.9
Physical condition of trails	85.4	9.8	4.7
Sanitary facilities in the backcountry	83.2	11.9	4.9
Spacing of designated campsites	76.5	16.5	7.0

“Sanitary facilities in the backcountry” was the only item that varied by zone. Corridor hikers were the most likely to be satisfied with the sanitary facilities and the least like to be “Neutral” or “Unsatisfied.” The lowest proportion of hikers satisfied with sanitary facilities were Primitive Zone hikers and the highest proportion of dissatisfied hikers were in the Threshold Zone (Table 5.8). There were not any significant associations between seasons and satisfaction with the managerial items.

Table 5.8. Satisfaction with sanitary facilities by use zone.

<b>Satisfaction Level</b>	<b>Corridor %</b>	<b>Threshold %</b>	<b>Primitive %</b>	<b>Wild %</b>	<b>Total %</b>
<b>Satisfied</b>	86.9	78.1	70.8	81.4	83.2
<b>Neutral</b>	9.3	13.1	23.1	14.7	11.9
<b>Unsatisfied</b>	3.8	8.8	6.1	3.8	4.9

Although there were few spatial or seasonal relationships with satisfaction with managerial items, these relationships may be masked by the relationships between the managerial items and the resource condition variables. To assess this, spearman’s correlations were calculated between the managerial items and various resource condition variables. Tables 5.9 and 5.10 display spearman’s correlations between satisfaction with the managerial items and selected resource condition variables.

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Table 5.9. Correlations between satisfaction with “Physical conditions of campsites” and satisfaction with resource conditions.

	Litter at campsites	Human waste at camp areas	Toilet Paper at Camp Areas	Vegetation Damage from Trampling or Cutting	Livestock waste along trails or at camp areas
<i>r</i>	.50	.41	.40	.38	.19
<i>p</i> .	<.001	<.001	<.001	<.001	<.001
<i>n</i>	1354	1356	1356	1367	1364

Table 5.10. Correlations between level of satisfaction with “Physical conditions of Trails” and level of satisfaction with selected resource condition variables.

	Trail Erosion	Vegetation Damage from Trampling or Cutting	Human Waste Along Trails	Litter along trails	Toilet paper along trails	Livestock waste along trails or at camp areas
<i>r</i>	.63	.29	.29	.28	.25	.23
<i>p</i> .	<.001	<.001	<.001	<.001	<.001	<.001
<i>n</i>	1372	1369	1368	1377	1374	1371

Table 5.9 shows that most resource condition satisfaction variables are moderately related to hikers satisfaction with the physical conditions of campsites. Livestock waste, while statistically significant, is fairly weak, suggesting that the relationship may be spurious. These results suggest that hikers satisfaction with conditions with campsites are strongly affected by their degree of satisfaction with resource conditions that are most affected by the behaviors of other visitor. Alternatively, visitor satisfaction with trail conditions is most strongly related to their satisfaction level with trail erosion.

### Satisfaction with Social Settings

As important as resource and managerial conditions are to visitor’s experiences, more important are the social conditions encountered by visitors. To assess visitors’ evaluations of the social conditions and their response to those conditions, three approaches were taken. The first was to assess satisfaction with the social conditions, the second was to elicit attitudinal evaluations of user density, user groups, and aircraft and finally the third approach was to assess the behavioral responses to visitor encounters.

As with the resource conditions, satisfaction with social conditions were assessed in three ways; first how apparent was the condition; second, how disturbing was the condition; and finally, how satisfied was the visitor with the condition.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

### *Apparentness*

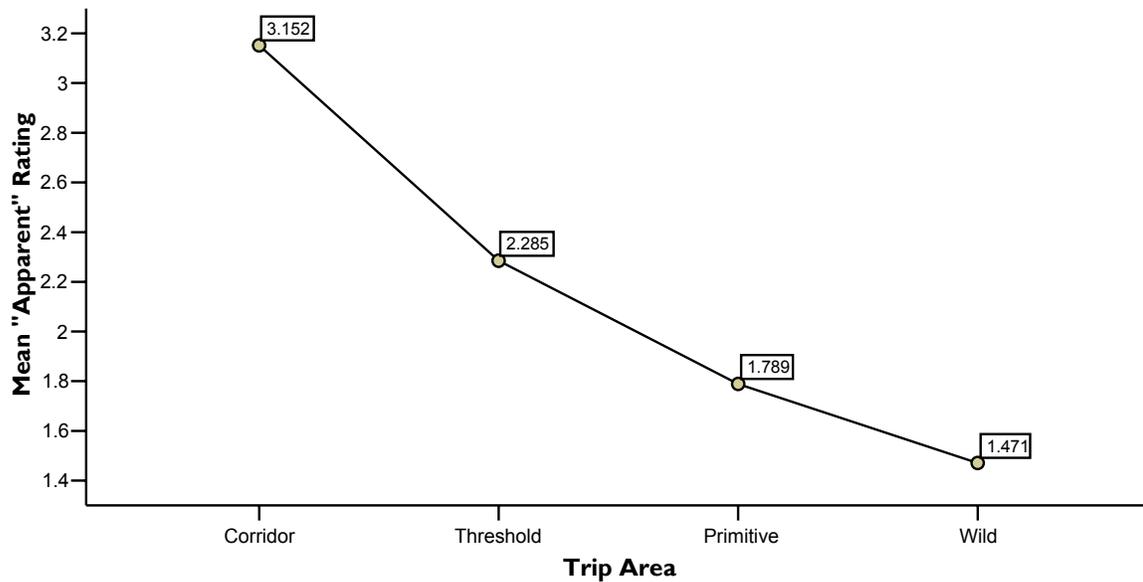
Table 5.11 displays the proportion of visitors indicating “Apparentness” for three social conditions. The most apparent social impact item was the “number of other groups camped within sight or sound of you,” and the least apparent was “motorized equipment on river trips.”

Table 5.11. Apparentness ratings for three social conditions.

Item	Apparent Rating %					M	S.D.
	Not at all	Slightly	Moderately	Very	Extremely		
Number of other groups camped within sight or sound of you	15.9	28.0	29.2	19.8	7.8	2.77	1.16
Aircraft Overhead	37.8	34.8	16.3	6.8	4.4	2.05	1.10
Motorized equipment on river trips	75.2	17.0	4.7	1.8	1.2	1.37	0.77

For both “number of other groups camped within sight or sound” and “aircraft overhead,” a substantial proportion of the variation in apparentness could be explained by the respondent’s zone. “Number of groups camped within sight or sound” matched the Corridor to Wild continuum as could have been expected. Figure 5.1 and Table 5.12 show that the mean apparent rating continually declines for night time contacts as the zone of hike moves from the Corridor to the Wild Zone. As for “Aircraft Overhead,” these results suggest that to backcountry hikers, aircraft are much more apparent to those outside the Corridor, and make sense given that flight patterns purposely avoid the Corridor. The seasons were not related to any differences in apparentness of social conditions.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK



**Figure 5.2. Means plot of apparentness by zone for “number of other groups camped within sight or sound of you”**

**Table 5.12. Means for level of apparentness by zone for social conditions.**

Item	Trip Area							
	Corridor		Threshold		Primitive		Wild	
	M	SD	M	SD	M	SD	M	SD
Number of other groups camped within sight or sound	3.15	1.03	2.29	1.05	1.79	0.96	1.47	0.80
Aircraft Overhead	1.78	0.86	2.62	1.32	2.62	1.29	2.74	1.27

### *Being disturbed by social conditions*

The number of other groups camped within sight or sound were more apparent to hikers than aircraft overhead. However, aircraft overhead was more disturbing than the number of other groups camped within sight or sound (Table 5.13).

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

Table 5.13. Being disturbed by social conditions

Item	Level of being disturbed (%)					M	S.D.
	Not at all	Slightly	Moderately	Very	Extremely		
Aircraft Overhead	57.7	17.3	12.7	6.9	5.3	1.9	1.2
Number of other groups camped within sight or sound of you	52.6	32.4	11.1	3.0	0.9	1.7	0.9
Motorized equipment on river trips	81.8	10.1	4.3	2.1	1.6	1.3	0.8

A zone analysis of the mean disturbing ratings suggests that hikers whose trips were in the Wild Zone are more sensitive to mechanical noise than hikers within other zones. As might be expected from the “Apparent” ratings, Corridor hikers were the least disturbed by “Aircraft Overhead.” There was little difference between Threshold and Primitive Zone hikers and Wild Zone hikers were the most disturbed. Mean “disturbing” levels did not significantly differ for “Number of other groups camped within sight or sound of you” by zone. In a pattern not forecasted by the apparent ratings, “Disturbing” ratings for “Motorized equipment on river trips” matched the Corridor to Wild continuum (Table 5.14). The seasons were not related to any differences in being disturbed with social conditions.

Table 5.14. Means and Standard Deviations of Disturbance Ratings by Zone.

Item	Use Zone							
	Corridor		Threshold		Primitive		Wild	
	M	SD	M	SD	M	SD	M	SD
Aircraft Overhead	1.5	0.9	2.6	1.4	2.5	1.4	2.8	1.5
Motorized equipment on river trips	1.2	0.6	1.5	0.9	1.6	1.1	1.9	1.2

### *Social Condition Satisfaction*

Despite the significant proportions that were disturbed by “Aircraft Overhead” and the “Number of other groups camped within sight or sound of you,” large majorities of hikers were satisfied with the social conditions they encountered on their hike. Very few reported that they were “Unsatisfied” with the social conditions they encountered. The condition with the least satisfaction overall was “Aircraft Overhead” just as it is the social condition hikers were most disturbed by. As a general trend, Corridor hikers tended to be less satisfied with the social conditions than non-Corridor hikers (Table 5.14).

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

Table 5.15. Proportion of hikers satisfied with each social condition item.

Item	Satisfied	Neutral	Unsatisfied
	%	%	%
Size of other groups that you encountered	76.8	20.6	2.7
Number of other groups you met along the trail	75.3	20.1	4.6
Number of other groups camped within sight or sound	72.4	21.1	6.5
Motorized Equipment on river trips	71.9	24.5	3.5
Aircraft Overhead	63.4	19.9	16.8

The only condition that varied with magnitude across the zones was “aircraft overhead” and was coupled with a declining satisfaction pattern matching the Corridor to Wild continuum (Table 5.14). Corridor hikers tended to be the most satisfied with aircraft overhead while non-Corridor hikers were significantly less satisfied. Aircraft were also more apparent and more disturbing to non-Corridor hikers so it is not surprising that these hikers are less satisfied with aircraft overhead (Table 5.16). There were no differences of significant magnitude in satisfaction with social conditions by season.

Table 5.16. Satisfaction with “Aircraft Overhead” by use zone.

Item	Use Area							
	Corridor		Threshold		Primitive		Wild	
	M	SD	M	SD	M	SD	M	SD
Aircraft Overhead	1.94	0.99	2.79	1.41	2.80	1.39	2.89	1.51

1 = Very Satisfied, 2 = Satisfied, 3 = Neutral, 4 = Unsatisfied, 5 = Very Unsatisfied

### *Behavioral responses to social conditions*

Visitors’ satisfaction ratings and attitudinal evaluations can often mask the behavioral adjustments visitors make to maintain the quality of their experience when they are faced with less than optimal situations. Often they do this by changing some aspect of their trip to cope with the situation they encountered. The 1988 BMP’s objectives are largely concerned with the number of contacts that groups have with each other. Given this, respondents were asked “Did the number of groups you met in the backcountry cause you to change your planned schedule?” Only a very small proportion (2.9%) reported changing their schedule because of their number of others they encountered. Of those who did change because of the number of others they encountered, just under half (48.5%) were in the Corridor and the rest were in the other zones. As a proportion of visitor in each zone, those who changed represented only 2% in the Corridor whereas they represented 4.6% of the visitors outside of the Corridor. These are both relatively small proportions of the visitors and suggest that current management practices manage visitor numbers well.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

### Overall Satisfaction

Overall satisfaction was assessed through a summative scale including five items that encompassed the domains of enjoyment, comparison with an ideal, value, behavioral intention, and dissatisfaction (Schomaker & Knopf, 1982). Based on responses, an index was calculated for each individual. The index had a potential range of 20 with the lowest possible value of -10 and the highest possible value of +10. Scale values of zero indicate that the respondent is neither dissatisfied nor satisfied. A multiple item measure is used because in the past single item measures have displayed relatively constant levels of high satisfaction (Ditton, Graefe, & Fedler, 1981). Although, from a management perspective, generally high levels of satisfaction is a good thing, the lack of variability constrains the ability to identify weaker areas of performance which is less than ideal to maintaining high quality experiences.

Among overnight backcountry users, the level of overall satisfaction is moderately high. Only two percent of the hikers indicated a level of overall satisfaction that was in either the neutral to dissatisfied range (0 or less) with the lowest score a -9. Sixty-four percent of respondents scored within the range of three to six. The highest overall satisfaction rating was 10. Figure 5.2 represents the distribution of overall satisfaction ratings. Overall satisfaction was not related to either zone or season.

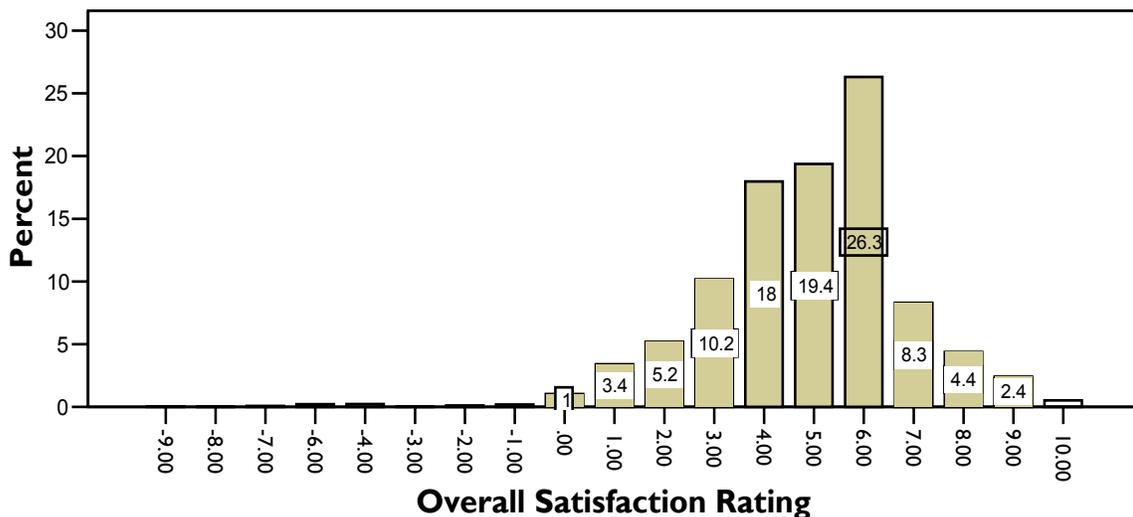


Figure 5.3 Distribution of overall satisfaction ratings.

**VI: Visitor Reaction to Permit System**

Since the previous sociological study of backcountry use, the operations of the Backcountry Office have expanded and focused on customer service. This section examines hikers’ perceptions of the permit process in eight sections, addressing the reactions of hikers to the advance reservations system, the trip planner package, the video on hiking safety, services at the BCO including phone access, their reaction to their permit itinerary, and their preferences for revisions to the reservation process – including an analysis of their willingness-to-pay for special services. Findings of the study have indicated that overnight backcountry hikers are generally pleased with the services they receive at the Backcountry Office, including their trip itinerary.

**Advance Reservations**

Since Underhill et al. (1986), the proportion of permits obtained by advanced reservation has increased markedly. Twenty years ago, most overnight visitors (56%) obtained their permit on a “walk-in” basis. In this study however, 24% of respondents indicated that they obtained their permit within a day of their trip, or by being a “walk-in.” Non-Corridor users were more likely to make advanced reservations than those who hike in the Corridor, and winter and summer users were less likely to make advanced reservations than fall and spring users. The least likely to make an advanced reservation were winter, Primitive Zone hikers; the most likely, were Primitive Zone permittees who hike in the Fall (Table 6.1).

Table 6.1. Permits by advanced reservation by season and zone

Season	Obtained an advanced reservation (%)				Overall
	Corridor	Threshold	Primitive	Wild	
<b>Winter</b>	63.3	67.5	<b>54.8</b>	69.2	62.7
<b>Spring</b>	71.7	90.2	89.2	74.0	79.2
<b>Summer</b>	69.2	66.0	62.9	81.3	68.4
<b>Fall</b>	83.3	83.9	<b>90.3</b>	86.9	86.6
<b>Total</b>	73.6	83.7	81.5	79.1	<b>76.4</b>

Respondents were asked to indicate how they would like to make their future reservations; options presented included “Through the mail,” “Telephone,” “Personal visit to the Backcountry Office,” “Internet to download paper forms,” “Fax,” and “By using the internet to make an instantaneous electronic reservation.” There were 66% who preferred to make their reservations through the internet. The least popular option was through the mail with 8% preferring this method (see Appendix D).

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

### Trip Planner

Seventy-five percent of the respondents reported receiving the backcountry planner. By and large, the trip planner is well regarded by the respondents. Respondents were asked to rate six items regarding the trip planner including the map, the explanation of the reservations and permit system purposes, explanations of low impact techniques, safety information, and information on water sources. The planner item with the smallest proportion of satisfied respondents (64.0%) was the map of the backcountry. The planner item with the largest proportion of satisfied respondents (89.4%) was the safety information. Aside from the map, at minimum 80% of the respondents were satisfied with elements of the planner.

Table 6.2. Permittee satisfaction with elements of the trip planner.

Item	Satisfied %	Neutral %	Unsatisfied %
Map of Backcountry	64.0	25.3	10.7
Explanation of permit and reservation system	83.7	14.7	1.6
Description of low impact hiking techniques	83.3	13.9	2.8
Description of how permit and reservation system work	80.4	17.0	2.6
Information on safety in the backcountry	89.4	10.2	0.5
Information on water sources and water quality	84.0	9.6	6.5

### Video

Fifty percent of the sample reported receiving the video when making their reservation, 84% of those who received the video reported watching it. About 80% of the video watchers indicated that it was useful to them in some way. Over two thirds indicated that they had a safer hike because of the video. Almost three quarters agreed that the video help them prepare for their hike and informed them about how to dispose of their wastes.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

Table 6.3. Satisfaction with aspects of the video.

Item	Agree %	Neutral %	Disagree %
The video helped me prepare for my trip.	73.6	20.0	6.4
I was better informed about how to dispose of trash and human wastes because of the video.	70.3	23.2	6.6
Watching the video helped me to have a safer hike.	67.7	25.0	7.3
Information from the video was <u>not</u> useful.	6.6	13.8	79.6

After rating each of the above items, respondents were asked their preferences for the way they would like to receive the information presented on the video. Six options were given including: “Video like the one I received,” “CD ROM/DVD,” “Face to face conversation with rangers at the Backcountry Office,” “Internet Website,” “Brochure through the mail,” and “Over the phone with a ranger at the Backcountry Office.” The largest portion (35%) reported they preferred to receive hiking safety information in the form of a video like the one they received.

### Backcountry Office

Approximately 66% of the respondents reported visiting the backcountry office. Most (53%) reported no wait to talk to staff, and 24% of the respondents reported waiting more than 5 minutes. The longest wait times were associated with the Spring visitors. In the other seasons, 80% or more of the visitors indicated that they had no wait or their wait was five minutes or fewer minutes. In the spring, 66% of the visitors reported no wait or five or fewer minutes. This is most likely a reflection of the fact that in the spring, the highest proportion of visitors reported visiting the BCO. The shortest wait times are associated with winter visitors when visits the BCO are lowest in absolute terms.

Table 6.4. Percentage reporting BCO wait times by season.

Time	Season				Total
	Winter	Spring	Summer	Fall	
No line	69.8	38.8	58.6	59.4	53.4
0-5 minutes	20.8	27.4	25.9	24.0	23.5
6-10 minutes	6.0	12.2	8.3	6.1	8.7
11-15 minutes	0.6	8.1	4.8	3.1	4.9
16-30 minutes	2.0	9.5	2.1	4.7	5.3
31-60 minutes	0.0	1.9	0.3	0.2	.8
Over an hour	0.8	2.1	0.0	2.4	1.5

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

By and large visitors to the BCO were satisfied with their interactions with BCO staff. To assess BCO visitor's satisfaction respondents were asked to rate six items that are designed to indicate the performance of the staff and the information given to visitors. BCO visitors were most satisfied with the helpfulness of the staff and the lowest percentage of BCO visitors were satisfied with safety information. As might be expected, visitors who reported waiting longer for service were less likely to be satisfied with the promptness of service (spearman's  $r=-.454$ ). Table 6.5 displays the proportion of respondents indicating their level of satisfaction with the services at the BCO.

Table 6.5. BCO visitor satisfaction with service.

Item	Satisfied %	Neutral %	Unsatisfied %
Helpfulness of the rangers	95.0	4.0	1.0
Rangers' knowledge of the backcountry	91.9	7.0	1.1
Promptness of service	91.8	7.0	1.2
Information on safety in the backcountry	83.8	12.9	3.2
Usefulness of rangers in helping with trip planning	82.3	16.1	1.6
Information on water sources and water quality in the backcountry	82.0	17.5	0.5

### *BCO by Phone*

A moderately large proportion of the respondents (42.3%) indicated that they phoned the BCO for information. Table 6.6 shows the proportion of people reporting each level of satisfaction for three items meant to assess the quality of the BCO phone service. Overall, the callers were satisfied by the service they received over the phone. "Ability to contact the office by phone" had the largest proportion of callers indicating they were unsatisfied (24.5%). Of the 24.5%, fall permits(39.5%) were the most likely to be unsatisfied with their ability to phone the BCO, followed by spring(31.4%), summer(21.8%) and finally winter (7.3%) permits.

Table 6.6. Satisfaction with BCO telephone service

Item	Satisfied %	Neutral %	Unsatisfied %
Helpfulness of ranger	90.7	5.3	4.0
Information received	85.0	9.7	5.3
Ability to contact the office by phone	63.0	12.5	24.5

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

### Permit Itinerary

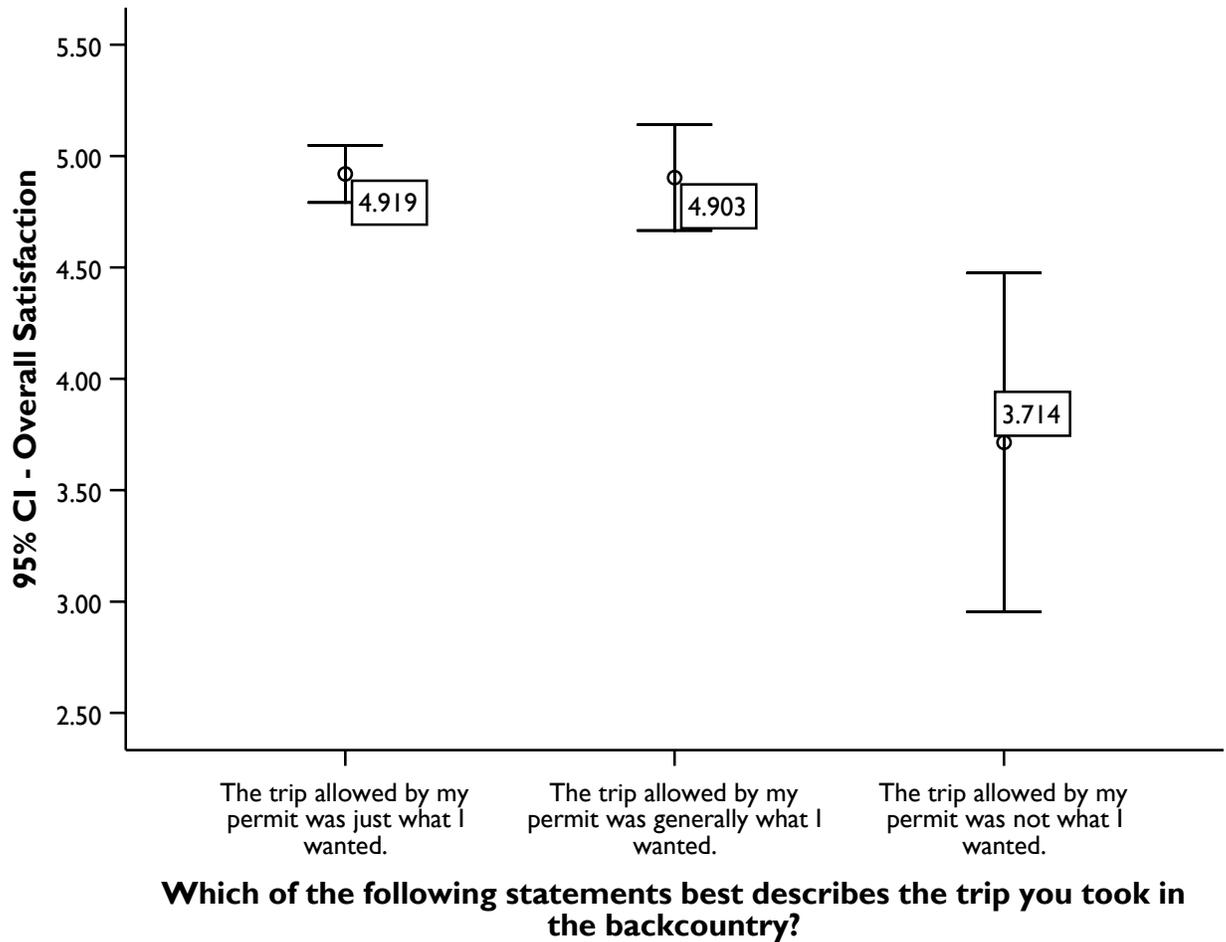
After assessing the process of obtaining their permit, their reaction to their permit itinerary was assessed. Seventy-two percent of the respondents indicated that “The trip allowed by my permit was just what I wanted,” 25% indicated that “The trip allowed by my permit was generally what I wanted,” and finally 3.3% indicated that “The trip allowed by my permit was not what I wanted.” Those who did not get their first choice itinerary were asked to indicate how their permit itinerary was different from what they originally wanted. Six options were given and the proportion of respondent indicating each is presented in Table 6.7.

Table 6.7 How was did your permit itinerary differ from your preference?

<b>Reason why trip was not what preferred itinerary (check all that apply)</b>	<b>%</b>
Other	38.0
I preferred to go on a longer trip.	27.0
I didn't get to go when I preferred.	24.1
I preferred to go to less developed areas.	17.2
I didn't get to go to the attraction areas I preferred.	11.1
I preferred to go to more developed areas.	2.8

An important question one might ask about hikers ability to get their preferred itinerary is that the failure to get a preferred itinerary may have detracted from the quality of the hikers' experiences. To investigate this question, ANOVA was performed across the three permit itinerary descriptors. Figure 6.1 displays error bars and mean for each response. Respondents who indicated that “The trip allowed by my permit was not what I wanted” had a mean overall satisfaction score significantly lower than respondent who indicated that “The trip allowed by my permit was just what I wanted” and “The trip allowed by my permit was generally what I wanted” (Table 6.8). Thus, although a relatively small proportion of the overnight backcountry hikers get an itinerary that is not what they want, not getting an itinerary that is similar to a pre-planned itinerary seems to decrease the hikers overall satisfaction with their experience. So, the BCO can do its part to maximize hikers overall satisfaction by attempting to help permit applicants get an itinerary close to their preferred itinerary.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK



**Figure 6.1. Error bar plot of mean overall satisfaction ratings for respondents indicating each category of itinerary preference.**

**Table 6.8. Means of overall satisfaction level by itinerary preference**

	The trip allowed by my permit was just what I wanted.	The trip allowed by my permit was generally what I wanted.	The trip allowed by my permit was not what I wanted.
Mean	4.9	4.9	3.7
Standard Deviation	2.1	2.1	2.4
Standard Error	0.1	0.1	0.4

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

### *Did the respondent stay on their itinerary?*

Everyone was asked if they stayed on their itinerary, 17.3% indicated that they did not stay on their itinerary and 0.4% did not know. Those who did not stay on their permit or did not know were asked to identify all of the circumstances that best describe why they may have gone off their permit itinerary. Nine circumstances were proposed and an “Other” category was provided. Table 6.9 lists the circumstances in descending order on the basis of the proportion citing that circumstance.

Table 6.9. Circumstance identifying why they did not stay on their permit itinerary.

<b>Circumstance for not staying on permit itinerary (check all that apply)</b>	<b>%</b>
Other	65.9
I (or someone in my group) was tired and we needed to hike out early.	14.0
I (or someone in my group) was either injured or became ill.	13.1
Changing weather made me leave early.	9.3
I saw another place I wanted to explore.	5.9
I was looking for more solitude and hiked off my permit itinerary	3.2
My food supply was low so the hike ended early.	2.4
I did not think it was important to stay on my permit.	1.7
I was not sure if I was on the right trail.	0.7
The campsite area of my permit was too crowded.	2.0
I did not understand my permit itinerary.	0.3

From these findings, 17% who deviated from their permit did so for many reasons. However it is interesting to note that just 2% did so because of issues related to crowding.

### **Preferences for Reservation Process**

Over the years, the BCO has carefully explored various options for hikers to apply for, and secure, a backcountry permit. A few items on the questionnaire asked respondents for their preferences and willingness to use some different options. Specifically, one item proposed a “real time” web-based system where one can examine the current status of all camp sites, plan a trip based on the availability of sites, submit a trip plan electronically, and receive an instantaneous, on-line approval. Respondents were asked whether they would prefer using such a real time system (with response categories being yes, no, don’t care). Those who responded favorably to the question were asked if they would be willing to pay an extra amount for this service in addition to the current fees. Three distinct questionnaires were developed, with each having a different amount of money to which respondents were being asked for their willingness-to-pay. The three different amounts were \$5, \$10, and \$25 per permit. One-third of respondents had \$5 as the

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

extra amount for the real time option, one third had \$10 and one third had a fee of \$25.

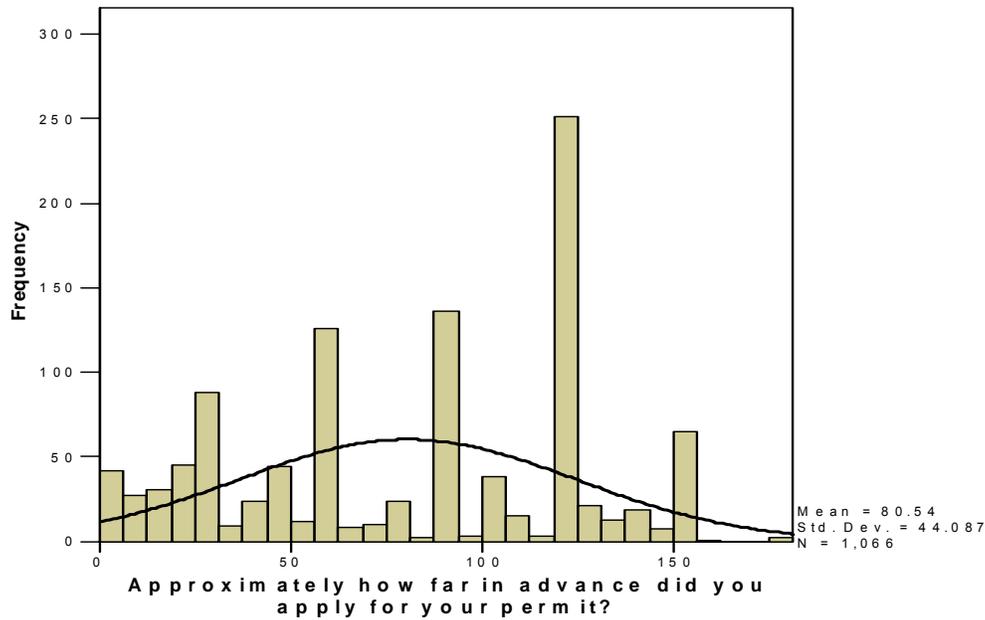
Another item asked whether the respondent would support changing the regulation so that one could submit a backcountry permit application as early as one year prior to the planned start date (as opposed to the current four month limit) and pay a higher permit fee for the earlier application (with response categories being yes, no, don't care). People who responded favorably to the question were asked if they would be willing to pay an extra amount for this option. The three different amounts were \$5, \$10, and \$25 per permit. One-third of respondents had \$5 as the extra amount for the early application option, one third had \$10 and one third had a fee of \$25.

As a methods note, there were nine different questionnaires that were identical in every way except the three distinct dollar amounts placed in each of these two items on the questionnaire (thus,  $3 \times 3 = 9$  distinct questionnaires). Approximately one-ninth of respondents received each distinct questionnaire. When sampled, each respondent's record was marked with the questionnaire format that they were to receive.

### *Obtaining advance reservations*

Seventy-six percent of overnight backcountry visitors obtained their permit by advanced reservation. Their response to the question on how far in advance was the application submitted is shown in Figure 6.2. The mean is about 81 days prior to the start of the trip. The most popular time to make an advance reservation was 120 days before one's trip, with 29% of visitors making advance reservations at such a time. Thirteen percent applied 90 days ahead, while 9% applied 60 days ahead. Twenty-seven percent reported that they applied more than 120 days before they trip.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK



**Figure 6.2. How far in advance did you apply for reservations?**

### *Preferences for “real time” web-based application*

Most respondents (81%) would prefer to use a “real time” web-based system to apply for a backcountry permit (10% said that they do not prefer using such a system and 6% said that they do not care.) We applied a tri-level (i.e., yes, no, don’t care) multinomial logistic regression to explore who wants the system. The results (see Table 6.10) suggest that backpackers who prefer real time web-based permit reservations tend to be younger, have higher education, higher income and reside in larger cities. In addition, those who visit in the Fall tend to prefer real time web-based reservation more than those who visit during the Summer or Winter.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

Table 6.10. Multinomial regression: who prefers real time application system?

Willing to pay?	Factor	B	Sig.	Exp(B)
Yes (compared to No)	Education	.178	.000	1.195
	Winter	-.932	.003	.394
	Summer	-1.042	.001	.353
	Fall	0(b)	.	.
Yes (compared to Don't care)	Income	.258	.000	1.295
	City	-.153	.031	.858
	Age	-.027	.012	.973
	Summer	-.944	.004	.389
Don't care (compared to No)	Income	-.250	.001	.779

Respondents interested in the real time reservation system were asked about their willingness to pay an extra fee for this feature. The results are shown in Figure 6.3, where 69% of the survey participants who were asked about their willingness to pay \$5 said yes, 66% said yes to \$10, and 39% agreed to pay the higher fee of \$25.

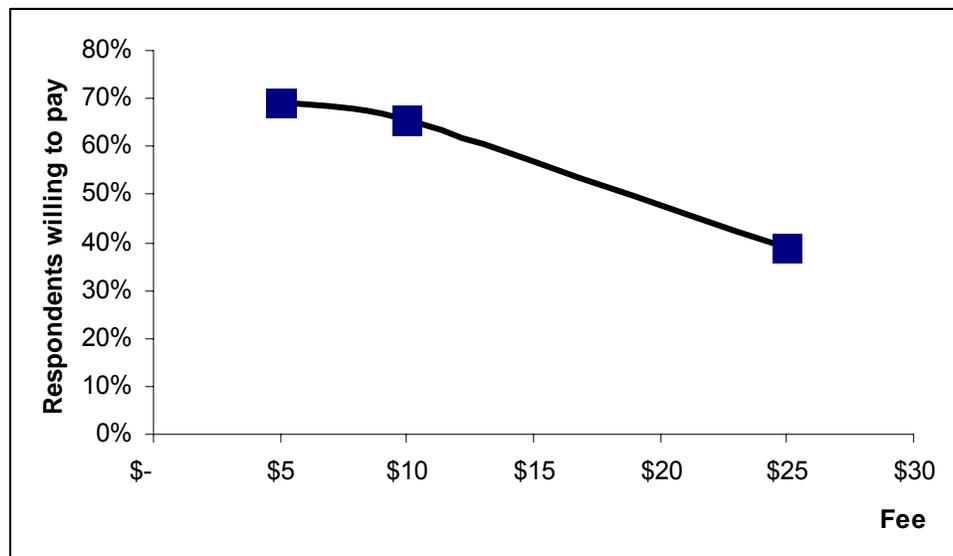


Figure 6.3. How many people are willing to pay: \$5, \$10 or \$25 for on-line application system?

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

A set of three binomial regression models (one for each of the three fee levels of \$5, \$10, and \$25) was fitted to the data to explore the characteristics of people who are willing to pay more for an on-line application system. Not surprisingly (as shown in Table 6.11) people with higher income are more likely to be willing to pay the extra fee in all three fee levels. Interestingly, the size of the group plays a role only at the lower fee level of \$5. That is, at that fee level, people who hike with a larger group are more likely to be willing to pay the extra fee for online application.

Table 6.11. Multinomial regression: who is willing to pay an extra fee for on-line application?

Extra fee	Willing to pay	Variables	B	Significance	Exp(B)	Classification rate (of full model)
\$5	69.2%	Group size	0.225	0.001	1.252	70%
		Income	0.111	0.028	1.117	
\$10	65.5%	Income	0.241	0.000	1.272	67%
\$25	39.0%	Income	0.332	0.000	1.393	67%

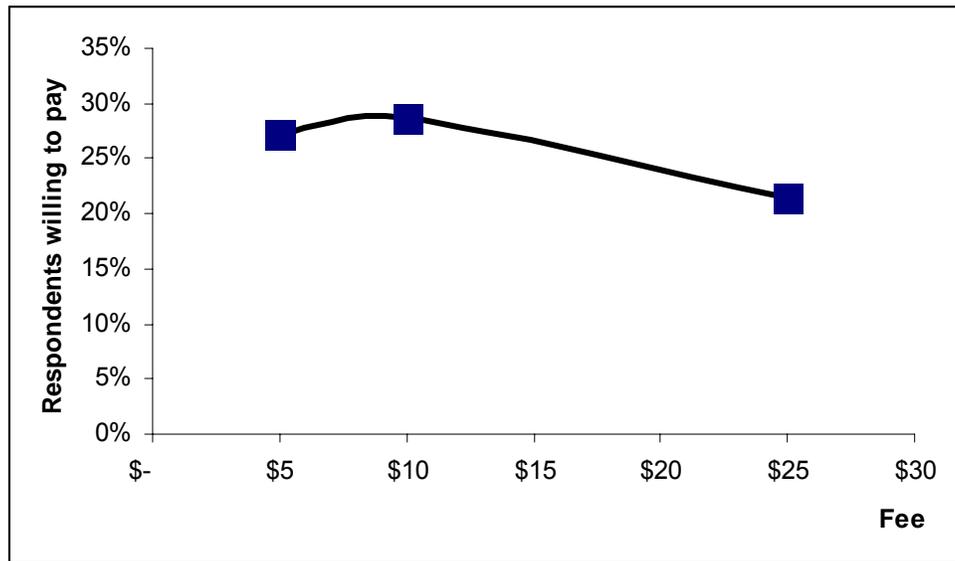
### *“Privileged” early application*

About 28% of respondents are willing to pay extra fees for the ability to apply for a permit as early as a year before their travel. The majority (63%) replied that they are not willing to pay for this option while 9% of the participants do not care.

Again, multinomial logistic regression model was applied to explore what factors affect visitors’ opinion about this issue and again income is clearly the dominating factor. The results indicate that income is the only demographic variable to be found significant. That is, the higher the income the more likely the person would be willing to pay for the opportunity to apply early for the backcountry permit.

Respondents that answered yes to the previous question were asked about their willingness to pay one of the three fee levels. The results (shown in Figure 6.2) indicate that 27% of visitors who were asked about their willingness to pay \$5 said yes, 29% reported yes to \$10, and 21% agree to pay the higher fee of \$25. Hence, in terms of the potential for revenue generation, it is estimated that about 6% (28% \* 21%) of the people who apply for a permit in advance are willing to pay \$25 in addition to the regular fees for the option of applying up to a year ahead of their trip.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK



**Figure 6.4. How many people are willing to pay: \$5, \$10 or \$25 for an early application?**

A set of three binomial regression models (one for each of the three fee levels of \$5, \$10, and \$25) was fitted to the data to explore the characteristics of people who are willing to pay more for early application. The results are listed in Table 6.12. People with higher income are more likely to be willing to pay the extra \$5 fee; older people are more likely to agree to pay the extra \$10 for early application, while people with higher income or higher education are more likely to be willing to pay the extra \$25 for early application.

**Table 6.12. Multinomial regression: who is willing to pay an extra fee for early application?**

Extra fee	Willing to pay	Variables	B	Significance	Exp(B)	Classification rate (of full model)
\$5	27.3%	Income	0.288	0.000	1.334	74%
\$10	28.6%	Age	0.024	0.024	1.024	70%
\$25	21.4%	Education	0.141	0.016	1.151	79%
		Income	0.317	0.000	1.373	

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

### VII: Analysis of 1988 Management Objectives

In the previous sociological study of backcountry users (Underhill et.al., 1986) it was recommended that specific management objectives be developed for each use zone. Three of those management objectives are analyzed here, specifically, "Variety of recreational activities," "Number of daytime contacts with other people," and "Number of parties or groups camped within sight or sound." Table 7.1 List the management objective and the standards for the corresponding use zone.

Table 7.1. 1988 Backcountry Management Objectives

<b>Management Objective</b>	<b>Corridor Management zone</b>	<b>Threshold Management Zone</b>	<b>Primitive Management Zone</b>	<b>Wild Management Zone</b>
<b>Variety of Recreation Activities</b>	Day hikers, backpackers, livestock, river runners.	<i>Inner Canyon use areas:</i> day hikers, backpackers, river runners. <i>Rim use areas:</i> motor vehicles, bicycles, livestock, day hikers, backpackers.	<i>Inner Canyon use areas:</i> day hikers, backpackers, and river runners. <i>Rim use areas:</i> motor vehicles, bicycles, livestock, day hikers, backpackers.	Backpackers, day hikers, and river runners.
<b>Number of daytime contacts with other people</b> (Number will be encountered 80% of the time)	Large Numbers	10 or fewer contacts with other overnight parties or groups per day (except Monument and Hermit where up to 15 contacts per day may occur. Potential for contact with many day hikers and river users.	5 or fewer contacts with other overnight parties or groups per day (except rim use areas and Tanner where more contacts may occur. Potential contact with few day hikers and many river users in some areas.	1 or fewer contact with other overnight parties or groups per day. Probably no contact with day hikers. Potential contact with many river users in some areas.
<b>Number of parties or groups camped with sight or sound</b> (Number will be encountered 80% of the time)	Large Numbers	No more than 5 other parties or groups per night.	No more than 2 other groups per night (except in rim use areas and Tanner where more contacts may occur).	No other parties or groups per night.

#### Variety of Activities Encountered

A current issue in backcountry management is a concern for an increase in the number of user types. The traditional dominant user types have been overnight backpackers throughout the four use zones, and day hikers and visitors using horses or mules within the Corridor. However the proportion of visitors representing other user types may be increasing. The concerns for increases in user types stems

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from the outdoor recreation conflict literature that provides argument and evidence for the potential for negative encounters between user types. Because of these concerns, the study assessed the number of encounters between user types. Along with traditional user types, others include day hikers beyond the Corridor, visitors using horses and mules on rim backcountry areas, commercially guided hikes, river runners taking hikes from the river, river trips using motorized watercraft, and aircraft overhead.

At some point during their trip, hikers of all four zones reported encounters with each user type (see Table 7.2). Generally speaking, hikers from the Wild Zone were less likely than hikers from the other three zones to encounter the other user types. However as an exception, Wild Zone visitors were most likely to encounter river runners with 39% of the Wild Zone visitors reported encountering river runners compared to Corridor, Threshold, and Primitive Zone hikers of whom 23%, 32%, and 28% reported at least one encounter with river runners (Table 7.2). With the recent implementation of the Colorado River Management Plan, encounters between overnight backcountry visitors and river runners during the spring and fall may be more frequent, and the protocol (or etiquette) for these encounters may need explicit development.

Day hikers were encountered by visitors in all four zones. Ninety four percent of Corridor hikers, 79% of Threshold Zone hikers, 56% of Primitive Zone hikers, and 58% of Wild Zone hikers encountered day hikers (Table 7.2). Note that categorizing a visitor as a “Wild Zone” hiker was done on the basis of the zone for which most of the permit was written, and allows the possibility that a “Wild Zone” hiker spent time in a different use zone in order to enter or exit the Wild Zone portion of their trip.

Encounters with commercially guided hikes were similar in proportion throughout the four zones, ranging from a low of 6% in the Primitive Zone and high of 14% in the Corridor (Table 7.2). Aircraft tours overhead were highest in the Threshold, Primitive, and Wild Zone (around 30% of visitors in these groups encountered aircraft overhead) and 14% of Corridor visitors encountered aircraft tours overhead.

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Table 7.2. User Types Encountered by Zone

<b>User types encountered on trip (%)</b>							
<b>Zone</b>	<b>day hikers</b>	<b>overnight backpackers</b>	<b>horses or mules</b>	<b>river trips using motorized watercraft</b>	<b>river runners</b>	<b>commercially guided hikes</b>	<b>aircraft tours overhead</b>
<b>Corridor</b>	94	100	87	18	23	14	14
<b>Threshold</b>	79	93	33	21	32	7	32
<b>Primitive</b>	56	82	11	17	28	6	27
<b>Wild</b>	58	75	28	28	39	11	30
<b>Total</b>	85	96	66	19	26	12	19

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### **Daytime Encounters**

To assess daytime contacts with other people, respondents were asked to recall how many groups they encountered on their trips up to the first six days of their trip. These responses were then matched to the use zones on their permits and then collapsed back into the corresponding use areas. Thus, the unit of analysis is the person/day rather than the individual permit holder as in the rest of the report. Also, since permits are allocated by nights, the last day on the permit itinerary is listed as "OUT." The "OUT" was recoded to the previous night's use zone; because of this there maybe a slight bias in the daytime contacts.

Assuming that the sample of person days is representative of the daytime encounters in each of the use areas, all LAC standards for inter-group daytime contacts are being met (Table 7.3). Wild Zone contacts seem to be on the edge concerning meeting the standard but this may be due to several factors. First, the response categories gave an option of 1-3 contacts rather than just one (of which the latter is the standard for the Wild Zone). Second, the problem of the recoded "OUT" itinerary days suggests that the first and last day of a Wild Zone trip may have been in a zone with less restrictive standards of encounters. It is reasonable to accept that daytime encounter standards are being met across the backcountry's use zones.

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Table 7.3. Percent reporting daytime encounter categories by season and use zone.

Season	Use Zone	Day Time Encounter Categories					Don't Know/ Can't Remember %	Total Visitor Days (n)
		0 groups %	1-3 Groups %	4-7 Groups %	8-10 Groups %	11+ Groups %		
<b>Winter</b>	<b>Corridor</b>	4.6	20.3	22.4	17.8	29.7	5.2	562
	<b>Threshold</b>	23.3	54.6	11.8	3.8	6.5	0.0	262
	<b>Primitive</b>	53.8	35.2	5.7	1.1	4.2	0.0	264
	<b>Wild</b>	82.4	5.9	0.0	5.9	5.9	0.0	17
	<b>Total</b>	22.0	31.8	15.6	10.3	17.7	2.6	1105
<b>Spring</b>	<b>Corridor</b>	1.6	12.0	15.5	15.8	50.3	4.7	316
	<b>Threshold</b>	10.9	45.2	28.3	6.2	8.4	0.9	469
	<b>Primitive</b>	27.9	48.8	15.6	2.6	4.3	0.9	321
	<b>Wild</b>	58.9	22.5	7.3	4.0	6.0	1.3	151
	<b>Total</b>	20.7	35.5	17.8	7.0	17.1	1.9	1257
<b>Summer</b>	<b>Corridor</b>	2.2	13.5	25.4	13.5	40.1	5.3	319
	<b>Threshold</b>	19.9	50.0	15.2	4.6	9.2	1.1	282
	<b>Primitive</b>	51.7	34.1	6.9	1.1	4.6	1.9	261
	<b>Wild</b>	78.9	10.5	10.5	0.0	0.0	0.0	19
	<b>Total</b>	24.2	31.2	16.3	6.7	18.7	2.8	881
<b>Fall</b>	<b>Corridor</b>	3.2	17.1	18.4	11.1	46.0	4.1	315
	<b>Threshold</b>	16.5	49.6	23.9	4.1	5.6	0.3	339
	<b>Primitive</b>	34.5	53.4	7.5	1.3	2.0	1.3	545
	<b>Wild</b>	64.9	24.6	2.6	1.8	6.1	0.0	114
	<b>Total</b>	25.0	41.2	13.9	4.4	13.9	1.6	1313

### Encounters at Camp

To assess the number of other groups camped within sight or sound, respondents were asked to indicate how many groups they saw or heard at night for up to six nights of their trip. Responses were matched to permit use areas and then classified into use zones, thus the unit of analysis is person/night rather than the permit holder or trip. These findings (Table 7.4) show that LAC standards for night time contacts were being met across the use zones.

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Table 7.4. Percent reporting nighttime encounter categories by season and use zone.

Season	Use Area	Groups Camped Within Sight or Sound				Don't Know/ Can't Remember	Total Visitor Nights
		0 groups	1-2 Groups	3-5 Groups	6+ Groups		
<b>Winter</b>	<b>Corridor</b>	11.9	23.1	27.5	32.1	5.4	411
	<b>Threshold</b>	59.6	34.4	3.2	2.8	0.0	281
	<b>Primitive</b>	89.9	9.3	0.4	1.3	0.0	225
	<b>Wild</b>	100.0	0.0	0.0	0.0	0.0	15
	<b>Total</b>	45.3	22.3	13.9	16.2	2.5	869
<b>Spring</b>	<b>Corridor</b>	3.8	16.8	23.1	55.5	0.8	238
	<b>Threshold</b>	43.8	33.5	18.5	3.2	1.1	281
	<b>Primitive</b>	71.1	24.2	2.6	1.2	1.0	418
	<b>Wild</b>	89.5	7.5	0.8	0.8	1.5	133
	<b>Total</b>	51.2	22.9	11.1	13.7	1.0	1070
<b>Summer</b>	<b>Corridor</b>	9.1	14.3	30.7	41.6	4.3	231
	<b>Threshold</b>	60.3	30.1	4.8	3.5	1.3	229
	<b>Primitive</b>	83.3	9.3	1.3	4.4	1.8	227
	<b>Wild</b>	83.3	5.6	5.6	5.6	0.0	18
	<b>Total</b>	51.5	17.6	12.2	16.3	2.4	705
<b>Fall</b>	<b>Corridor</b>	8.9	15.4	24.4	50.0	1.2	246
	<b>Threshold</b>	49.0	38.2	9.4	3.5	0.0	288
	<b>Primitive</b>	81.7	15.4	0.9	0.2	1.8	454
	<b>Wild</b>	93.8	5.4	0.0	0.9	0.0	112
	<b>Total</b>	58.1	20.4	8.3	12.3	1.0	1100

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### VIII: Analysis of Key Locations in the Backcountry

For this analysis, overnight backcountry visitors to the following four Use Areas were identified: Tanner, Hermit, Tapeats, and Deer Creek. Visitors who stayed even one night in the specific Use Area were classified as such. For example, if a permit itinerary was written for one night at Tanner and one night at Palisades, the respondent would be flagged as being a “Tanner” visitor and questionnaire responses would be analyzed as such. The analysis examines visitors to these four Use Areas and compares them to the general population of the weighted overnight backcountry visitors. For the tables developed, visitors of specific Use Areas are compared with each other, and with the total population.

An important backcountry issue is connected with encounters at campsites, and the capacity for hikers to stay on their itinerary. Table 8.1 provides some information relevant to this issue. In response to the item “Did you stay on your permit itinerary?”, Tapeats and Deer Creek visitors were least likely to report “yes” – compare 52% and 57%, respectively, to a total population proportion of 83%. In response to a follow-up item that asked the reason for deviating from their itinerary, Tapeats and Deer Creek visitors were most likely to report that the reason for being off their itinerary was a crowded campsite area – compare 12% and 13%, respectively, to a total population proportion of 2%.

In terms of encounters with various kinds of groups, Table 8.1 indicates that Tapeats and Deer Creek visitors were most likely to encounter river trips using motorized watercraft and most likely to encounter river runners compared to either Tanner, Hermit, or the general population of visitors. For example, 69% of Tapeats visitors encountered river runners compared to 30% of Hermit visitors and 26% of the general population of visitors (Table 8.1).

Encountering various kinds of users may affect visitor opinions and preferences. In response to the item “Backpacking and river running parties are compatible with one another,” Table 8.2 reports that Tapeats and Deer Creek visitors are more likely to report either agree or strongly agree compared to other hikers. For example, 83% of Tapeats visitors reported backpackers and river runners as compatible compared to 70% of Hermit visitors, and 71% of the total population. In addition, Tapeats and Deer Creek visitors were least likely to agree with the statement “The NPS allows about the right number of people in the backcountry” – compare 50% of Deer Creek visitors who agreed with this statement to 65% of Tanner visitors who agreed.

The nature of the topography – that is, a narrow canyon for a campsite area – at Hermit, Tapeats, and Deer Creek may influence the number of other groups camped within sight or sound. Visitors to these three areas are more likely to report that other groups camped nearby, compared to those at Tanner. For example 13% of Hermit visitors reported that groups camping nearby were apparent compared to 5% at Tanner (Table 8.2).

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Table 8.1. Encounters Related to Specific Places

	Users of Specific Places				Total Population
	Tanner	Hermit	Tapeats	Deer Creek	
<b>Did you stay on your permit itinerary? (% Yes)</b>	73	76	52	57	83
<b>If you did not stay on your itinerary, did you go off it because your campsite area was too crowded? (% Yes)</b>	2	2	12	13	2
<b>Which kinds of user groups did you encounter? (% reporting an encounter)</b>					
<b>Overnight backpackers</b>	89	97	94	92	96
<b>River trips using motorized watercraft</b>	26	22	42	52	19
<b>River runners</b>	35	30	69	71	26
<b>Commercially guided hikers</b>	10	8	9	11	12
<b>Aircraft tours overhead</b>	37	48	8	8	19

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Table 8.2. Perceptions of Users of Specific Places

Perception Item (% agreeing and strongly agreeing)	Users of Specific Places				
	Tanner	Hermit	Tapeats	Deer Creek	Total Population
Backpacking and river running parties are compatible with one another.	71	70	83	85	71
Encountering a large backpacking group (over 11 people) detracted from my trip.	32	29	27	30	22
Aircraft over the backcountry did <u>not</u> detract from the enjoyment of my trip.	30	26	47	46	48
Too many aircraft fly over the backcountry.	64	64	43	46	31
The NPS allows about the right number of people in the backcountry.	65	70	53	50	65
% reporting very and extremely apparent to the following items:					
Number of other groups camped within sight or sound	5	13	14	10	28
Human waste at camp areas	3	3	7	5	1

Table 8.3 provides information about the usefulness of the hiking preparation video and its effect on visits to backcountry archaeological sites. Visitors to Tanner were least likely to receive a video, compare 40% of Tanner visitors to 55% of Deer Creek or Hermit visitors who reported receiving a hiking preparedness video when they made their reservations. Of those that received a video, Tanner visitors were least likely to watch the video compared to other hikers. For example, Table 8.2 indicates that 68% of Tanner visitors who received a video watched it compared to 88% of Hermit visitors.

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Although backcountry campsite areas are generally located in and around archaeological sites, many backcountry visitors are not aware of this fact. For example, just 21% of Tapeats visitors reported visiting any archaeological site. A similar portion of visitors to Tanner, Hermit, and Deer Creek reported visiting an archaeological site on their trip (Table 8.3). However of those who were aware that their backcountry travel took them to an archaeological site, between 37% to 50% purposefully did so as part of their planned itinerary. This suggests that for a significant portion of non-Corridor visitors, experiencing archaeological sites is a meaningful motivation for their backcountry travel to the point of anticipating and planning such an experience prior to the start of their trip.

Table 8.3. Hiking Video, Archaeological Sites, and Specific Places

	Users of Specific Places				Total Population
	Tanner	Hermit	Tapeats	Deer Creek	
<b>Did you receive a video?</b> (% Yes)	40	55	50	55	50
<b>Did you watch the video?</b> (% Yes)	68	88	75	77	84
<b>The video helped me prepare for my hike.</b> (% agree and strongly agree)	48	63	72	76	74
<b>Did you visit any archaeological sites?</b> (% Yes)	20	25	21	25	36
<b>If you visited an archaeological site, did you plan in advance to do so?</b> (% Yes)	40	37	50	49	27

The knowledge of backcountry regulations of visitors to these four areas was comparable or better than the general population except for Tapeats and Deer Creek visitors who scored lower on their knowledge about disposing garbage. In response to the item “Food scraps should be scattered widely to avoid attracting or concentrating wild animals,” 68% of Deer Creek visitors reported the correct answer of “false” compared to 86% of the total population of backcountry visitors. Tapeats visitors reported 71% to this same item. In response to the statement “Organic garbage and burnable trash may be disposed of properly in the backcountry, but

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non-biodegradable or unburnable trash must be packed out” 71% of Deer Creek visitors report the correct answer of “false” compared to 83% of the total population. Tapeats visitors reported 69% to this same item (Table 8.4).

Table 8.4. Knowledge of Regulations by Specific Places

Regulation Item (% with correct response)	Users of Specific Places				
	Tanner	Hermit	Tapeats	Deer Creek	Total Population
<b>Campfires are not allowed in the backcountry. (% True)</b>	95	97	100	99	94
<b>Toilet paper (used outside of restrooms) should be packed out of the backcountry, not burned or buried. (% True)</b>	99	95	95	98	91
<b>Food scraps should be scattered widely to avoid attracting or concentrating wild animals. (% False)</b>	91	81	71	68	86
<b>Historic and archaeological objects found in the backcountry should be turned in to the park immediately upon completion of the trip. (% False)</b>	87	79	79	75	68
<b>Organic garbage and burnable trash may be disposed of properly in the backcountry, but non-biodegradable or unburnable trash must be packed out. (% False)</b>	91	89	69	71	83

The Backcountry Management Plan has developed objectives for site conditions in each of these Use Areas. Hermit, Deer Creek, and Tapeats are Threshold Use Zones, and Tanner is classified as a Primitive Use Zone. The plan indicates objectives for number of groups camped within sight or sound for the Threshold as no more than five other groups, and for the Primitive Use Zone as no more than two other groups. Table 8.5 indicates that these objectives are being met for Deer Creek, Tapeats, Tanner and Hermit. For example at Hermit, between 65% and 79% of the visitors were well within the standard of the Threshold Zone for

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number of groups within sight or sound of camp. At Tanner, at most 95 out of 100 person/nights were reported as no more than two groups who camped within sight of sound (compared to the standard of 80 out of 100 person/nights).

Table 8.5. Number of Groups Camped Within Sight or Sound at Specific Places

Specific Place	% Reporting "0" and "1-2" Groups		
	Night 1	Night 2	Night 3
Tanner	98	99	95
Hermit	77	79	65
Tapeats	95	90	96
Deer Creek	95	88	95

### IX: Conclusions and Recommendations

This research provided user-based information on a comprehensive set of issues connected to overnight backcountry visitation at Grand Canyon National Park. The primary objectives were: (1) the identification of overnight backcountry visitors, including their socio-demographic characteristics and past hiking experience, (2) the experiences sought by backcountry visitors, their knowledge of backcountry regulations, and preferences for park policies, (3) their satisfaction with aspects of their hike, including resource conditions, managerial operations, and social settings, (4) their reaction to the permit application process, and (5) an analysis of the 1988 LAC framework related to visitor-based standards and indicators. The objectives and methods were based upon previous backcountry visitor research, and also were developed in consultation with the park staff and the NPS Washington Office.

The evidence from this report indicates that visitors to the backcountry at Grand Canyon were satisfied with most aspects of their overnight trip. The recommendations made herein are made to further enhance their experiences, and to consider management operations and policies that will insure future visitors continue to enjoy high quality experiences. These recommendations are informed by our interpretation of the data collected and analyzed from this study. In addition, the recommendations are also informed by other social science studies elsewhere of backcountry and wilderness areas, our past experiences with connecting research to management operations at Grand Canyon and elsewhere, and our understanding of current backcountry issues at the park.

To the extent possible, we indicate the results upon which the recommendations are based. These conclusions and recommendations are interdependent and, although presented as if discrete points, have several common threads that run among them. Our recommendations follow, and each is discussed in turn.

- (1) The visitor-based objectives from the 1988 LAC framework were met during the time period of this study. The park should consider inclusion of other social indicators that are explicitly related to the quality of encounters during a future planning process.
- (2) The quality of encounters could be indicated by the extent of encounters between different user types, and also by the awareness of trail and camp encounter etiquette. Insuring high quality exchanges will reduce the potential for recreational conflict.
- (3) Effective backcountry management requires a long-term commitment to monitoring. Time, personnel, training, and education are some of the resources that need explicit institutional commitment to conduct periodic monitoring.

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- (4) This study indicates the need to improve awareness of minimum impact behavior. In particular, the issues related to “leave no trace” with cultural resources and proper disposal of food scraps.
- (5) The permit processing system is working well. If the park is exploring ways to improve service and/or generate revenue from BCO operations, there are at least two opportunities for doing so. Installing a web-based reservation and an early application process are two options.

### Enhancing the LAC framework

The primary visitor-based indicators of the 1988 LAC planning framework are the number of *daytime contacts* with other people, and the number of *groups camped within sight or sound*. The results provide the opportunity to evaluate whether the management objectives across the four use zones are being met for each of these indicators. In general, the visitor-based conditions of the backcountry are well-within the standards set for both of these indicators across the four use zones.

For the Threshold Zone, the standard for *daytime contacts* is that 80% of the time visitors should encounter 10 or fewer groups. The results indicate that across the four seasons, more than 90% of the visitor-days reported in this study for the Threshold Zone fell within this standard (see Table 7.3). In fact, across the four seasons, 85% of the visitor-days reflected an encounter level of 7 or fewer groups in the Threshold. The standard for number of *groups camped within sight or sound* is that 80% of the time visitors should encounter no more than 5 groups. The results indicate that across the four seasons, more than 95% of the visitor-days reported were within this standard (see Table 7.3; see also Table 8.5 for specific locations). During winter, summer, and fall, more than 87% of the visitor-days reflected encounters at camp to be 2 or fewer groups; and in the spring, 77% of the visitor-days reflected encounters with 2 or fewer groups. Barring any problems with ecological impacts or other resource-based issues, these two factors suggest there may be room to increase the number of permits for the Threshold Zone. Or from a different angle, the standards for the Threshold Zone could be adjusted downward to target the current conditions for encounter numbers.

For the Primitive Zone, the standard for *daytime contacts* is that 80% of the time visitors should encounter 5 or fewer groups. The results indicate that for winter, summer, and fall, more than 86% of the visitor-days reported in this study for the Primitive Zone reflected 3 or fewer groups encountered during the daytime (see Table 7.3). Whereas during the spring in use areas of the Primitive Zone, 77% of the visitor-days were connected with 3 or fewer daytime contacts and 92% of the visitor-days were connected with 7 or fewer daytime contacts. The response categories were “1-3 groups” and “4-7 groups” and did not allow for a precise

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assessment of 5 or fewer groups encountered. The standard for number of *groups camped within sight or sound* is that 80% of the time visitors should camped within sight or sound of no more than 2 other groups. The results indicate that across the four seasons, more than 92% of the visitor-days reported were within this standard (see Table 7.3; see also Table 8.5 for specifics on the Tanner Use Area). Besides the spring season, more than 81% of the visitor-days were related to zero encounters at camp. Barring any problems with ecological impacts or other resource-based issues, these two factors suggest there may be room to increase the number of permits for the Primitive Zone. Or from a different angle, the standards for the Threshold Zone could be adjusted downward to target the current conditions for encounter numbers.

For the Wild Zone, the standard for *daytime contacts* is that 80% of the time visitors should encounter 1 or fewer groups. The results do not directly compare to this standard due to the response category being “1-3 groups.” The results indicated that across the four seasons, more than 81% of the visitor-days in the Wild Zone fell within “1-3 groups” or fewer (see Table 7.3). The standard for number of *groups camped within sight or sound* is that 80% of the time visitors should encounter no other parties at camp. This standard was met across all seasons (see Table 7.3). Another potentially confounding factor is some groups may have camped within sight or sound of river runners and not overnight backcountry visitors, yet reported them as backcountry encounters. Although daytime social conditions of the Wild Zone were not fully assessed by this study, a cautious interpretation would be that the daytime social conditions of the Wild Zone meet the standards as do the night time encounters at camp. Unless ways are devised to further disperse groups during the day and night, it would not be advisable to increase the number of permits for the Wild Zone. Of the social conditions assessed in the three remote management zones, the Wild Zone is the closest to violating its standards.

Several other indicators suggest that the quantity of encounters is being managed appropriately in Grand Canyon’s backcountry. There were 17% of respondents who indicated they strayed from their permit itinerary, but just 2% (of 17% or 37 people per year) deviated from their itinerary because the “campsite area of my permit was too crowded.” Fifty three percent of the visitors who reported being “not at all disturbed” by the number of other groups camped nearby and 32% reported being “slightly disturbed” (Table 5.13). About 95% of respondents reported being either satisfied or neutral in their feelings when asked for their reaction to number of other groups they met along the trail or camped nearby (Table 5.15). From Table 4.7, about 10% agreed that the backcountry is used by too many people, and 7% disagreed with “the NPS allows about the right number of people in the backcountry” (see Appendix D). For these latter two items, the proportion of respondents reporting the backcountry is too crowded slightly decreased over the past 20 years. Although not every backcountry visitor feels that the quantity of encounters is right, from the several kinds of evidence exhibited herein at least 85% of visitors are not bothered by the number of encounters, and just 37 out of 10,930

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trip leaders reported they felt crowded enough to change their behavior and deviate from their itinerary.

Along with the *quantity* of encounters, there may be visitor-based standards related to the *quality* of encounters that could be included in a future version of the Backcountry Management Plan. The *quality* of encounters has become an important issue in Grand Canyon backcountry management. Conflicts due to backcountry visitors encountering other user types, such as day hikers or river runners, may become more frequent in the future and require some kind of management intervention. The park should consider including some aspects of the *quality* of encounters with other groups as part of the review of backcountry management.

### Reducing the potential for conflict

The *quality* of backcountry encounters with other groups and the potential for conflict could be more directly addressed in future backcountry plans. The *quantity* of encounters is managed well in Grand Canyon's backcountry as demonstrated in the high degree of compliance with the standards of the 1988 LAC framework, the low degree of perceived crowding, and the low levels of behavioral change in response to number of encounters. The extent of conflict between user groups is primarily influenced by the *quality* of the encounter and the interaction that takes place during the encounter – no matter how brief the exchange (Watson, 2001). There are several ways in which the *quality* of encounters could be indicated, and include the following two approaches: (1) the extent to which backcountry encounter etiquette is known throughout all user types of the backcountry, and (2) the extent of interaction between distinct types of visitors in the backcountry.

Backcountry encounter etiquette may be viewed as “common sense,” but not every visitor has the same common sense. Encounter etiquette also may seem trivial to some visitors, but to others, when points of politeness in communication and behavior are violated it leads to feelings of anger, frustration, and conflict with another group. Although minimum impact and “leave no trace” textbooks are more definitive about camp and trail etiquette, some basic protocol for encounters along trails and at camp include: uphill hikers have the right away; when encountering mules or horses on the trail, hikers should step off the trail on the uphill side; no throwing stones or other objects; maintain campsite distance in at-large areas; and keep radios and other electronic equipment on low volume. These points were derived from the exchanges identified in the open-ended comments that were bothersome to hikers (see Appendix C).

Along with encounter etiquette, visitors may have distinct reactions to a user type different than themselves. The recreation conflict literature has a long history of demonstrating conflict with inter-group encounters, particularly between groups who use a motorized form of travel and those who do not (Manning, 1999, Ch. 9). A general principle from this literature is that encounters between differing user types

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is more likely to lead to conflict than encounters between the same user type due to differences in recreational goals between the two user types. Across the use zones, overnight visitors are likely to encounter several different kinds of visitors, including the following: day hikers, horse and mule riders, river trips using motorized watercraft, river runners, commercially guided hikers, and aircraft tours overhead (see Tables 7.2 and 8.1). Although not included as an item in the questionnaire, open-ended comments from Appendix C suggest that several visitors were able to distinguish, and be bothered by, other overnight visitors who did not have a permit. To various extents, these user types (from Table 7.2) and their travel locations are managed by the park in ways that affect the potential for encounters with each other.

This point is not to say that recreational conflict needs can be completely addressed by backcountry operations, but to say that the park should be proactive about reducing the potential for conflict. The mixture of user types in the backcountry could increase due to access by day hikers, changes in distribution of river runners, increase in commercially guided hikes, or increase in visitors who do not obtain a backcountry permit. An increase in the diversity of user types suggests that social norms for encounter etiquette and inter-group exchange may need development and increased awareness. In addition, assessing the extent to which encounters between user types occurs, and the level of awareness of trail and camp encounter etiquette could serve as indicators of the quality of encounters on trail and at camp, and could be included in a future LAC framework (see Tables 4.6 and 8.4 that indicate a significant lack of awareness of some minimum impact behavior).

### **Commitment to monitoring**

Monitoring of backcountry conditions is an essential part of its management (Cole, 2006). The LAC framework is based upon implementing a periodic monitoring program. With decreasing budgets, down-sizing of staff, and backcountry management operations potentially taking a low priority to more politically visible frontcountry activities, resource management staff may be responsible for monitoring conditions for which they lack funds and personnel. The LAC framework and basis in monitoring backcountry conditions requires institutional commitment to support research, train staff, and invest in workshops and education across all personnel connected with the backcountry. With institutional commitment and full support of monitoring programs, long-term management costs for the backcountry would likely decrease due to an enhanced capacity to be proactive in addressing problems and resolving issues before they become polarized.

Backcountry planning and operations has a comparatively smooth history of working with stakeholders, building trust, and implementing plans that adhere to the various missions of Grand Canyon National Park. Its changing population of users (see visitor characteristics) implies an evolving political context for backcountry planning. It is within the park's best interest to track the changing user-base, their preferences, and their perceptions of backcountry conditions. Periodic assessment

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of such information would allow the park to more effectively influence the direction and contexts for backcountry planning.

The park should consider its need to monitor backcountry conditions, and review both the frequency and commitment to monitoring. In particular, with monitoring being an essential part of the function of the LAC, the periodic implementation of its monitoring program should be considered on a cycle of every five years or so, or whenever a policy or event occurs that suggests the need to monitor. In addition, monitoring does not need to occur on a backcountry-wide basis, but could be conducted for users of certain backcountry zones or areas that warrant attention.

A general commitment to backcountry research or scientific study in the backcountry is not adequate. Specific long term commitments for the resources needed to monitor is needed. An institutional commitment of time, resources, and staff needs to be stated and developed in the backcountry plan.

### **Improving minimum impact behavior**

Over the past 20 years, knowledge of minimum impact behavior generally has increased among overnight backcountry hikers. In particular, visitor awareness of the following “leave no trace” issues has been enhanced: proper toilet paper disposal, proper food scrap disposal, and handling of archaeological resources. However there is still room to improve minimum impact behavior, particularly on proper food scrap disposal and handling of archaeological resources.

Surprisingly, the lowest awareness of proper food scrap disposal is with visitors to the Primitive and Wild Zones. In response to the statement “food scraps should be scattered widely to avoid attracting wild animals,” 23% of the Primitive and Wild Zone respondents incorrectly marked this as true (see Tables 4.6 and 8.4). This suggests that about one-fourth of visitors to these zones may be discarding food scraps and meal leftovers around their campsite and eating areas.

Awareness of proper handling of archaeological resources has increased dramatically in 20 years. Underhill et al. (1986) reported 46% of their respondents correctly marked “false” to the statement “historic and archaeological objects found in the backcountry should be turned in to the park immediately upon completion of the trip.” We found 68% reporting the correct response to this same statement. It is clear that visitor-based ways to protect historic and archaeological resources have become a better known over 20 years, and indeed, more than one-third of overnight backcountry users reported visiting an archaeological site. However there is still a need to improve awareness of protocol and visitor treatment of such resources. Stated differently, 32% of visitors were not aware of proper handling of archaeological resources (see Table 4.6), with the lowest proportions being in the Corridor and Threshold Zones. In addition, although most visitors felt respect or a

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sense of sacredness when visiting such sites, there were still 2% who were tempted to take home an artifact and make it a souvenir of their trip (see Table 4.5).

Lastly, the regulation that is least known is the need to obtain a permit to enter caves in Grand Canyon. There were 41% of visitors who did not respond correctly to the item “a permit (other than your backcountry permit) is required to enter all caves, except the cave on Horseshoe Mesa” (see Table 4.6). To insure the future protection of cave resources, the park should review its strategy to inform backcountry users about cave resources and the need to obtain permits to enter caves.

### **Future issues for backcountry permit processing**

The BCO has evolved over the past decades, and has created a permit system that has responded to user needs and convenience to prospective applicants, and has also streamlined and moved towards efficiency in delivering information and other services to users. The results from this study reflect a user-base that is generally pleased with the service provided from the BCO staff, displays, and planning materials. Comments for improvement are working the margins of an effectively functioning and user-friendly permit system.

There were about 27% of respondents who indicated they did not get their preferred itinerary, and 3% who explicitly reported their itinerary was not what they wanted. They reported wanting to go on a longer trip, to less developed areas, and timing of trip as differences between their permit itinerary and their preferences. Also, those who stated their trip was “not what they wanted” were connected with the lowest levels of overall satisfaction with their hiking experience (Figure 6.1). It is not possible to please every one who tries to access the permit system, however there may be ways to provide further options to please a wider group of users.

There were two questions developed that addressed issues of willingness-to-pay for enhanced BCO services regarding trip planning. More than four-fifths of respondents indicated they would prefer a “real-time” web-based system to apply for a backcountry permit, and two-thirds of respondents would be willing-to-pay up to \$10 for such a service, with 39% willing-to-pay \$25 for it (Figure 6.3, Table 6.11). Those that both prefer such a system, and that would be willing-to-pay extra for it, are correlated with higher incomes, larger group sizes, and higher education.

There was a significant portion of visitors who would pay an extra fee for a “privileged” early application. Currently the earliest one may apply for a permit is four months in advance, yet some users would prefer to make an advance reservation up to one-year in advance. Of those who would be willing-to-pay an extra fee, the amount of payment was not necessarily an issue, as the options of \$5, \$10, and \$25 each received about one-fifth of respondents who would pay this level of fee (see Figure 6.4 and Table 6.12). In other words, about 20% of visitors would

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pay an extra fee of \$25 to apply a year in advance (before others who did not pay the fee submitted their applications).

If the park is exploring ways to improve service of the permit application process and/or increase revenue from BCO activities, either one of these options would generate significant revenue and would allow those with strong preferences for specific permit itineraries to secure their preferred permit. A concern for moving in this direction is connected to potentially marginalizing some hikers who could not afford the extra fees and possibly “price them out” of this channel of the reservation process.

### **Conclusion**

By most measures, overnight backcountry visitors at Grand Canyon were supportive of park management. They understood the management of the park’s backcountry to the extent that they matched their motivations for hiking to the various opportunities provided by the park’s backcountry. The allocation of permits, including numbers of visitors allowed in various use areas and campsites, fit within the park’s Limits of Acceptable Change standards and suggest an effective visitor-based management regime. There are a few issues that could be considered to improve visitor management in the backcountry, and these have been put forward in the spirit of improving on a system that already works well.

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### APPENDIX A Number of permits issues and sampled

Table A1: Number of permits issued between March 2004 and February 2005 by Use Zone and Month

Month	Year	Corridor Permits	Threshold Permits	Primitive Permits	Wilderness Permits	Total
March	2004	630	266	180	23	1099
April	2004	674	343	246	31	1294
May	2004	864	292	248	19	1423
June	2004	846	103	141	5	1095
July	2004	801	46	75	6	928
August	2004	809	39	76	5	929
Sept.	2004	877	90	169	18	1154
Oct.	2004	761	260	216	32	1269
Nov.	2004	563	132	118	11	824
Dec.	2004	298	65	53	3	419
Jan.	2005	168	32	40	3	243
Feb.	2005	231	62	62	7	362
<b>Total</b>		7522	1730	1624	163	11039

Table A2: Number of permits sampled for March 2004 to February 2005 by Use Zone and Month.

Month	Year	Corridor Permits	Threshold Permits	Primitive Permits	Wilderness Permits	Total
March	2004	42	41	39	21	143
April	2004	39	39	48	25	151
May	2004	49	48	74	15	186
June	2004	49	46	82	4	181
July	2004	72	70	36	4	182
August	2004	79	65	25	2	171
Sept.	2004	46	42	59	12	159
Oct.	2004	48	45	58	20	171
Nov.	2004	47	48	75	7	177
Dec.	2004	76	50	51	2	179
Jan.	2005	114	33	22	0	169
Feb.	2005	67	51	41	6	165
<b>Total</b>		728	578	610	118	2034

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Table A3: Number of responses from the sample from March 2004 to February 2005 by month and use zone.

<b>Month</b>	<b>Year</b>	<b>Corridor Permits</b>	<b>Threshold Permits</b>	<b>Primitive Permits</b>	<b>Wilderness Permits</b>	<b>Total</b>
March	2004	29	28	32	14	103
April	2004	28	28	37	20	113
May	2004	36	38	60	13	147
June	2004	31	29	58	4	122
July	2004	42	42	23	2	109
August	2004	49	43	18	0	110
Sept.	2004	30	33	45	11	119
Oct.	2004	30	35	47	15	127
Nov.	2004	30	34	54	4	122
Dec.	2004	45	35	34	2	116
Jan.	2005	78	24	13	0	115
Feb.	2005	46	35	28	4	113
<b>Total</b>		<b>474</b>	<b>404</b>	<b>449</b>	<b>89</b>	<b>1416</b>

**APPENDIX B**

**Principal Components Analysis of Motivation Items**

To develop the domains presented in chapter \_\_, principal components extraction with promax rotation was performed on 31 items from questionnaire pages 12-13 in SPSS 13. Initial extraction suggested that communalities were moderate to high. On the basis of a standard of eigenvalues greater than one, a 7 component solution was initially indicated. Examination of the scree plot confirmed the minimum 7 component solution but also suggested the possibility of an eight or nine component solution. The eighth and ninth component both had eigenvalues below 1 but not considerably, .996 and .910 respectively. The change in eigenvalue and percent of variance was noticeable different between the ninth and tenth component and less so between the seventh and ninth. Thus, six solutions were extracted a seven, eight and nine components all with varimax and promax rotations. In terms of a simple structure the nine component solution fit best and had the fewest moderate to large residuals from the reproduction of the correlation matrix (19%). Table B.1 present the component loadings, communalities ( $h^2$ ), and the percent of variance explained by each component.

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Table B.1. Component Loadings, Communalities ( $h^2$ ), and percent of variance explained by for principal components extraction with Promax rotation.

Item	Load	$h^2$	Item Mean	Component		% Variation Explained
				$\alpha$	Mean	
Challenge				.82	0.31	22.21
Chancing dangerous situations	.89	.70	-.24			
Having thrills	.81	.67	.42			
Being your own boss	.64	.57	.52			
Experiencing the risks involved	.58	.68	.52			
Being self-sufficient in a wilderness area	.44	.57	1.08			
Solitude				.81	1.15	14.73
Being alone	.86	.70	.71			
Getting away from crowded situations	.85	.75	1.25			
Experiencing solitude	.81	.71	1.26			
Experiencing peace and calm	.74	.67	1.40			
Releasing or reducing some built up tensions	.47	.51	.78			
Skills Testing				.87	1.00	9.48
Developing your outdoor abilities and skills	.92	.74	1.02			
Depending on your skills in to deal with wilderness conditions	.84	.71	1.02			
Testing your abilities	.68	.75	.98			
Learning what you are capable of	.64	.74	.98			
Social				.73	.011	4.93
Meeting other people in the area	.81	.81	-.28			
Talking to new and varied people	.81	.75	.14			
Being with others who enjoy the same thing you do	.68	.60	.78			
Observing other people in the area	.55	.64	-.71			
Reflecting on your spiritual values	.43	.51	.61			
Help				.87	-.47	4.59
Being near others who could help you if you need them	.89	.83	-.31			
Knowing others are nearby	.86	.83	-.62			
Wild Setting				.68	1.32	3.84
Encountering wildlife	.77	.70	1.21			
Being in an area where human influence is not noticeable	.70	.60	1.17			
Being in a wilderness setting	.70	.65	1.57			
Enjoying Nature				.70	1.24	3.57
Enjoying the sounds of nature	.86	.72	1.45			
Enjoying smells of nature	.85	.71	1.05			
Studying nature	.42	.61	1.03			
Family				.87	0.76	3.21
Doing something with your family	.86	.87	.91			
Bringing your family closer together	.85	.87	.60			
Learning				.62	1.02	2.94
Learning about the park's natural wonders	.81	.72	1.20			
Learning about the park's history	.74	.68	.84			

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## APPENDIX C OPEN ENDED COMMENTS FROM RESPONDENTS

### January Comments

"I went in January, which was absolutely beautiful (weather was perfect when I was there); and because it was off-season I know I ran into a lot fewer people than if I'd gone later in the year. If it's that crowded in January, how bad must it be in the spring and fall?! I'm inferring that (based on guessing what it must be like during the season) if I went during those times I'd be disappointed with the number of people on those trails and at sites. I hope that backcountry management policies will continue to monitor carefully the number of people using the main trails and maybe even limit that number more – improve the quality of the experience by lowering the people per day within the Canyon. Then again I am not familiar at all with how you decide the number of people accessing the Canyon and all that stuff. And anyway I had a fantastic time! I loved it!!"

-----

"Our trip was in winter, so enough place on Phantom Ranch Campground was available. Two people were sent away at 6 p.m. because they had a permit for another campground. If they had had the possibility to buy (at high price) a permit there (at the ranger or ranch); the chance of accidents could be reduced."

-----

"I didn't experience the backcountry to any significant degree. I went up and down South Kaibob Trail and stayed at Phantom Ranch."

-----

"I have enjoyed the canyon a long time with close to 50 trips, which include hiking, camping, and running rim to rim. Let me give you the thoughts on backcountry policies. The people I have had to deal with have done a great job. I like dealing with people so I don't like mailing applications or faxing them, I would rather talk to someone on the phone. I also think there are people who hike the canyon who have no idea what they're getting themselves in for, and when you have a chance to talk to a human they may find out it would be best if they enjoy the canyon in a different way."

A lot of the questions you have are related to group size and the number of people around you while in the canyon. My concern is the number of Non-Americans around me. It is currently true there are more people taking space in the canyon. We need to work on a way to limit foreigners which take up space in the canyon. US citizens should have first choice. We pay taxes, we pay for park fees, and we should be first to get space or permits for travel into the canyon and also other national parks."

-----

"I believe everyone should be allowed to camp in the Grand Canyon."

"Current Website is difficult to use, confusing."

"New visitor center was disappointing"

- lacked exhibits
- the video explanations in old center were good introductions
- the visitor info given at gate did not clearly explain where to go for ranger/visitor info

"It's good that fewer planes flew over the canyon."

"Signs needed for non-English speakers to stay on trails, etc."

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"I normally go during the winter to avoid people and having problems with permits."

"Topo maps of the canyon should be made more available to backcountry visitors."

"Please continue to limit the number of people and size of groups. Small guided groups would be acceptable."

"If larger groups were permitted they should have to pack out fecal matter."

"Keep up the good work NPS! I am incredibly grateful for you and your hard work."

-----

"Wonderful park. Only complaint is that they should provide the best maps possible for backpackers going on long trips to ensure they know where they are going. Also may review the planned path and given pointers/suggestions if needed for a specific path."

-----

"The backcountry office and park staff in general were remarkably helpful and responsive! I really appreciate the great service I received."

-----

"This is the second time I applied for a permit. We were denied one for March of last year – applied too late. I would have liked to receive the official guide to hiking the Grand Canyon. We planned a winter trip so the permit process was not a problem."

-----

"The amount of animal fecal matter on the trails was a complete atrocity. Animals should have bags or something to collect that. There are so many rules regulating human waste and none regulating animal waste."

The trails could do with some maintenance work as many were washed out and made the trail unpleasant. Perhaps using certain trails for the animals that are separate from the hikers would be a good idea; it would stop erosion and fecal matter on hiker trails.

An increased amount of backcountry access would be appreciated to get away from the crowds, and to let those who want to get away and experience the true Grand Canyon.

There could be more information of the formation of the Canyon and its history on the display boards. The information centre was filled with trail information, but not much on history and geology."

-----

"I am disappointed with the information about drinking the water in wilderness areas. See [www.adventureplus.org](http://www.adventureplus.org) – click on "controversial topics."

I will backpack at the Grand Canyon during the off season. I will not deal with the permit nightmares. I think a real time system as described in the questionnaire would improve things.

People at the backcountry were extremely helpful both on the phone and in person.

It was not clear in permit planner if a party with a permit had to check in when they arrived. They should be required to do so! Otherwise, valuable permit space is not being made available to walk-in users if the permit holder does not show up. I would think that many, many people who get their permits months in advance do not show up."

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"Mule damage to trails and aircraft overhead are the two worst problems I have noticed in my trips to the Canyon. I intentionally go during winter months to see fewer people, so normally do not have a problem with permits. It seems like too many people expect Park staff to help them plan their trip. Given the number of people, trash and waste are not too bad' and I have noticed that it is normally on areas of trails used by day hikers or corridor routes (such as Bright Angel) that I have seen most trash and erosion on trails – mule trails contribute greatly to erosion on corridor routes and mule waste detracts from the overall experience."

-----  
"I had a wonderful time. Thanks so much for your helpfulness."

-----  
"This was the most rewarding experience I have had in many years. I took over a hundred pictures and put them on my Website. The rangers were great. The whole trip was fantastic."

-----  
"Got some good help, obtained appropriate permit by making phone contact. Only negative experience was meeting a large group of guys with attitudes."

-----  
"For both of my trips I camped in at large areas so many of the questions were not relevant. Both times I went in the winter to avoid contact with others. For my last trip we took the South Bass to Tonto and up Boucher. This section is very remote, rugged and dangerous. It was very difficult obtaining information on these trails prior to the trip. It would have been nice if information on these trail segments was available on the NPS Website."

-----  
"I prefer to visit the Grand Canyon in winter because I would not be able to do this kind of hiking in the heat of summer. I did try on one previous trip to get permits in advance. The "receipt" process does not seem to work for me in the mail. The rangers were great and helpful. I did not get the "packing" right until my fourth trip. I would try to emphasize that people must filter water because you can't carry enough water and to pack as light as possible. This should not be a person's first trip. One should get experience hiking before doing overnights in the Grand Canyon. Great place!"

-----  
"Aircraft were not a problem on this trip (South Haibab/Bright Angel Campground) but they were very annoying on another trip to Hermit Creek. Permit system – it would be nice to do on the Web. Here's the deal – the procedure of faxing the form and requesting days that might already be filled is not very good. I have learned to call the backcountry rangers and ask them what is available then I fax in the form and request day that are open. The people in the backcountry office are generally very nice and try to be helpful."

-----  
"We visited in January after some heavy storms – it was difficult to find up-to-date trail conditions and weather info. The message on the backcountry office voicemail was over a month old. Web page had trail closure info, but nothing about the open trails (icy, muddy, high level of maintenance occurring, etc.). Web access to permit system would be nice, but not critical."

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Backcountry management is excellent. I think there should be as many permits allowed as possible to the corridor trails and use areas. Encourage advanced backpackers to visit more remote parts of the park, or in off seasons. If you want a trip with total solitude in the peak season, go to another park. Don't reduce backpacking access – everything seemed about right when we were there.

No disappointments – awesome trip!!”

-----

“I've done three backpacking trips in the Grand Canyon and I have enjoyed each one. The reservation system has worked fine each time. Although I did not meet a ranger this past trip I have on previous trips. One year I lost a pair of sunglasses (prescription) on a trail near the Colorado River. I filled out a lost and found form and it was returned by mail. That was super! The Canyon is amazing and the people are great. I will certainly return.”

“I love the Grand Canyon. Keep up the good work!”

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“My wife and I had a wonderful trip! We were lucky to get permits on short notice, but traveling during the winter months helped in that regard – both with backcountry permits and lodging on the rim on short notice. Keep our secret!

The campsites were well maintained. We enjoyed the solitude during the day as not many hikers crossed our path. I'd imagine things are quite different during the summer months! So we feel lucky as this was our first trip.

My one concern with online registration is large tour groups taking all the slots – relatively easy if signatures are not required. Someone will always find a way to “scam” the system and ruin it for the “small guy.” I think charging less the longer you plan a trip is better than charging more? Maybe only during peak seasons? The one thing I like about not doing it “online” is it makes the would-be hiker do a little more (or make the extra effort) to get a slot. Online registrants may tend to book, then not even show up, thus taking up precious slots. But...you probably don't care because the park service gets the money either way, huh?”

-----

“No aircraft!

Do not lengthen permit application period. It would favor commercial outfitters.

Make available sealable trash bags at backcountry office.

Give public opportunity to accompany park staff on archeological digs.”

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“Some of the questions in this survey would better serve if they weren't restricted to the most recent trip.”

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“Limit overflights to areas west of S. Kaibab trail. Limit construction of pit toilets to west of S. Kaibab trail or S. Rim. Invest in backcountry ethic outreach. Maintain walk-in permitting at its present level. Invest in N. Rim road clearing before increasing S. Rim winter permits. The best thing I can think of

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

for NPS is to let the rangers have a bigger part of the management of the park; a bigger say from the folks on the frontline will give NPS a better system.:"

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"We departed our itinerary due to inclement weather, and a rock slide which made Bright Angel Trail impassable during the day while the trail crew was at work. Rather than spending two nights at Bright Angel Campground we hiked up to Indian Garden to be in place early to finish climbing Bright Angel Trail in advance for forecast snow the third day, and hoping to be allowed up the trail before the trail crew began working. Indian Garden was almost completely empty that second night, but the Indian Garden ranger rudely lectured me for departing our itinerary, despite the mitigating circumstances."

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"Issue of permit was fine. Was pleasantly surprised by the accommodations at the Bright Angel (i.e., not overbuilt) – was expecting commerce to override!"

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"Everything was great – unfortunately we were there when the trails run mess in January. But it was more of an adventure that way!"

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"I liked the park. But not my favorite. It was worth the 27-hour drive. Survey was a little long. What could you possibly want to know all that stuff for?"

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"A. The permit system in a nuisance.

B. However, the NPS forest roads are shameful. After traveling down BLM on national forest roads and then entering the park boundary there is a very marked degradation in road maintenance; I feel like I just entered Native American lands – and very poorly kept ones at that."

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"All of our planning was done via the internet. We called the park office to check on the weather. It would be nice to have regular weather postings on your site as well as maps, etc."

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"It is frustrating not to be able to contact the B/C office by phone. I think a system needs to be in place to allow people information on the availability of walk-up permits. Many people will probably never visit the park during peak season and walk-up permits will always be my preference."

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"Very satisfied with the status quo. The facilities at Bright Angel Campground could have been cleaner and better maintained. Enjoy knowing where to locate rangers without running into rangers on every trail."

"Lack of clarity at bottom of and top of canyon on trail closures."

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

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“Sorry – can’t help you. The trip was awesome. Would do it again in a heartbeat.”

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“Back country office is very inconveniently located in the park. It should be prominently located near the most traveled trailheads.

There were far too many hikers trying to go down and back in one day. They are a danger to everyone. You should require a special permit to do this which provides proof of fitness.

Even in January parking is a nightmare. Cars should be restricted to those staying overnight or with a reservation at a restaurant. All others should be parked outside the park and bused (for a daily fee) within the park.”

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“For the reason noted on page 6, I had discarded the earlier received questionnaire on the assumption that an in and out hike to BACG is not the type of hike you could gather relevant information from. With the second questionnaire, I will now let you decide.”

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“My worst experience is when a group from Utah without permits overwhelmed the Thunder River/Tapeats campsite.

It may be difficult, but I would appreciate some consideration for local residents and frequent, or period, hikers of the canyon. For example, using our knowledge and experience. This might be done by asking for immediate feedback, written or e-mail, as to our observations of conditions, etc.

Maybe we could become “registered” users that require some qualifications and could support the park personnel’s efforts in patrolling the back country.

As “registered” users, we might be called to help in emergency trail building, etc.”

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“I hike the Grand Canyon 5 or 6 times a year at different seasons. Hard to answer some questions based on latest trip. Not sure if a Web-based “real time” system would work, if a party might reserve “several” trips at one time, but not go on them; as it would be so easy to book then maybe choose other trips.”

“We are aware of backcountry management policies and we plan accordingly. We know to plan ahead, and to have more than one option ready. We have no complaints about how to obtain a permit. We also realize that management of the amount of people in a particular area is to our advantage – the less people, the more “wild” we feel.

If we had a disappointment, it was only that we couldn’t stay any longer – jobs called us back home.”

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“Just before we arrived, there were bad storms in the area that I’m sure washed the trail out, and closed Bright Angel Trail. We saw people working on the trails each day of our trip!”

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

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"We're three friends who have packed the GC for over ten years – always a good trip – always a good time. We talked with rangers when we wanted to change an itinerary and being early in the season it's usually not a problem. Can't really comment on summer, high traffic times which I'm sure would reduce one's enthusiasm. I'm planning on taking a daughter next year and my grandkids – if I can still walk. The permit system is functional, but real time on the Web would be nice. Didn't have time for the video, but we checked weather, trails, etc. for weeks in advance on the Net. Keep up the good work – don't let the Republicans ruin the place!"

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"The rangers would not stop giving advice and let us hike, i.e., you might want to wear a windbreaker and we were already wearing them. A lot of obvious common sense advice put our trip off one day."

### Grand Canyon Backcountry Visitor Study February Comments

"The Kaibab Trail needs maintenance."

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"The worst for me is the phone system. I know e-mail is time-consuming. However, the phone/fax thing is not very efficient either. It would be great for more online application of procedures. Thanks. The GC is the best!!"

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"The policy to limit the number of trips, so that the environment of the Canyon can stand it, is a good thing. What I do not understand is that so many commercial (river) trips are allowed. To my opinion all overflights for sightseeing should be banned!"

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"I did not go on this last planned Grand Canyon trip because the weather was bad. I tried to call but could not get through. I reapplied for another permit. It took two months for a reply, the letter was dated March 7, the envelope postmarked March 23 with a deadline to respond by March 28. I am very frustrated and angry at the Grand Canyon reservations system."

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"I was satisfied, and very pleased with the efforts of the rangers to fulfill my permit request and their information about the hike route. The Internet resources were extremely useful – theirs as well as Kaibab."

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"Please lower the fees for backcountry permits – they are outrageous! If I take a six night trip with my two children it will cost me \$120 (\$20 park entrance, \$10 permit, \$90 for six nights). On a past trip I got into this argument with a Park Ranger. He asked me to compare the entertainment value to something else such as going to the movies. The major difference is a movie theatre is in business to make money, the Grand Canyon is not! I don't mind paying a nominal fee but when I have to pay

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

\$120 for a week backpacking trip that is where I have to draw the line. I've been an honest U.S. taxpayer for over 30 years and I'm about fee demoed out. Please do something about this!"

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"I had had numerous problems with the permit process: incorrect charges, incorrect dates, wrong number of people in party, etc. This happens about 40% of the time (current example: application rejected because I wasn't a member of their 'frequent hikers' club. After 15 minutes on the phone, they found my membership was valid for eight more months.)

The permit process is not good. My reasons for not wanting to change it are selfish: I can generally get the permit I want.

I often have to lie about my itinerary. I generally hike about 18 miles a day, about double what rangers recommend. Therefore, they reject my applications and force me to get unwanted nights at crowded corridor campgrounds.

A few campgrounds serve as major bottlenecks – often I don't get a hike due to the requirement that I spend the first and last night at (say) Bright Angel.

The Canyon is big enough for everyone – planes and motor rafts don't bother me at all. But is it too much to ask for one maintained trail in the Canyon that isn't covered with mules? I'm not asking to close trails to mules, who were there before I was – why not open a maintained trail (with water and restrooms) that is only open to hikers (e.g., improve the Hermit, or build one between the S. Kaibab and Grandview.)

I rarely use cell phones, but I would have no problem if they worked in the Canyon. On this hike I was ten trail miles from any other person. It would have been nice to have emergency communications.

I have been rejected for a number of hikes in the past. When I finally got a permit, I found I was the only camper at a camp with many sites."

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"These answers are based on two trips I took in the course of a month. Permit system should be real-time Internet. I don't mind paying the money for extra services. Noise pollution from aircraft is ridiculous. Glad I moved here from the Midwest."

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"There was absolutely no literature available at the Backcountry office. I went out of the way to go to the office thinking like most park offices I could pick up information, but none were available – not even a map."

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"It would be nice for Backcountry permit people (only) to park at the top of Honce Trail. The biodegradable toilets work great. Thanks for helping keep our parks well run!"

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"Being a solo hiker arriving after a rim snow fall during the off season I found no crowds, lines or problems associated with high demand. The backcountry office was quick in issuing a multi-day permit on the Tanner Trail for that very day. They tried to talk me out of going alone but assurances of my conservative nature when alone and experience let the issue end.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

I found all the warnings about travel in the Canyon to be a bit overstated! This probably is a result of the rangers' experience with the crowds. I needlessly underestimated my travel distance ability as a result. I thoroughly enjoyed my experience in the Park and look forward to returning with more time to 'get out'.

I visit the national parks in my region all year long and find spontaneous (less than a couple of weeks planning time) of multi-day trips impossible in the high season. The demands for the backcountry experience and the limits on heartbeats placed by our park professionals makes this situation difficult for those unable to plan far in advance. Outdoor conditions also vary and thus it is sometimes a "crap-shoot" on scheduling. I do not know of any solution and fully realize the professionals are trying their best. In the end, more access is what we who use the wilderness desire. More wilderness would be nice! Thanks for asking. Respectfully, Guy Pittman."

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"Tear down the Glen Canyon Dam. We did the Hermit Trail. Trail is extremely rugged in places and we could not hike all the way to our campsite at Monument Creek the first night, but we found an established overnight place to put up our tent and sleep. I don't think you should make people risk their safety by trying to hike too far. That's all!"

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"Entrance fees increased in 1990 and 1996. Backcountry fees were started in 1996. In each case the excuse was to improve part infrastructure, but little changed except an out-of- place, architecturally, visitor center. They were hidden tax increases. The park getting a little extra, but former funds from Washington, DC stayed in DC. Strongly oppose any future tax increases of this sort.

Too many fee increases (such as question 3.106) will make hiking affordable only to the rich, result in many cancellations, and inhibit most people who can't plan that far ahead. Only a small elite will be hiking.

There seems to be hostility by hikers or boaters against aircraft, and now, motorized boats. Many cite the noise. However, I have seen these same critics making more noise in camp by partying, yelling, dancing, and beating on pots and pans. This is hypocrisy. Maybe there should be hiker and river summer noise regulations, but how would you enforce it! Let the aircraft fly. They are many times the best way to signal a party is in distress.

I find digging a cathole is more sanitary than using pit toilets, especially with some of the characters who misuse pit toilets."

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"I would have liked to see less people. However, I realize the GC is extremely popular and that there are more remote areas than the ones I went to. Next time I will plan a more remote trip. The phone contact at the Backcountry office was very helpful. Particularly, one NPS employee named Lon who I spoke to on the phone was very helpful. It was great to be able to go right to the Backcountry office after calling ahead and be able to get an itinerary and permits right there that day. I hope this continues for people like myself that are more spontaneous trip planners and are willing to go in the off season to avoid crowds."

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"We were given a hard time by a park ranger because we had multiple permits within our group. The previous year (2004) we were questioned about only having one permit for our group of six. Online permit info is not clear at all on when or not to have a group permit."

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

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“The reservation policies for the Phantom Ranch are bad. People can cancel for full refund within 48 hours of planned trip. We had reservations for camping permit. We wanted to stay in dorms. We were able to get in dorms a day before our trip – did someone stay in place of our permit? No.

The last two days are crazy.”

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“Being able to buy a meal at the Phantom Ranch would be appreciated.”

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“Everything was great except constant helicopters. We saw a ranger on trail who was very helpful and radioed in so we could change our permit since we only had one night now because of weather.

A lot of these questions are repetitive. Especially, section 3.8 and 3.9 were a bit silly in my opinion as far as data collection goes.”

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“Kind of cumbersome process. I’ve only hiked here in the winter and there’s hardly anyone here. Maybe over the phone per units in the winter.”

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“Permits should be applied for on a daily basis instead of monthly; this would eliminate the high and reduce “false” reservations. Group size should be lowered from the 11 to a lower impact size. Limit raft trips to smaller number. Eliminate mule trips – very hard on trails, unsanitary. Make rodent/deer-proof containers mandatory for backcountry hikers – hikers would supply their own, approved containers or NPS have available for rent (with deposits).”

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“First time I came to Grand Canyon I was 16 years old. Since then I’ve backpacked Grand Canyon more than 30 times and now I’m 40 years old. Grand Canyon is a very special place for me and my family. I have two sons that love backpacking in the Grand Canyon. Personally I would like to see nothing changed to the current system. I have seen it work for 24 years. The only concern or comment that I have is the noise made by food storage boxes at campsites. I have backpacked Grand Canyon in all seasons including my favorite winter. I consider myself as an experienced multi-day Canyon hiker and I plan to come back to Grand Canyon for as long as my body will allow me to. I hope the information that I provided was helpful and thank you for letting me take part in this study. Please feel free to write or call me with any questions: Arthur Obrzut, 1604 Potter Rd., Park Ridge, IL 60068, phone 847-962-5666.”

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“My experience at the Canyon was great. The rangers were very nice and helpful. We went in February which was a great time of year. The crowds were low. I will return to backpack the Canyon again!”

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## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

"I love the national parks. The Grand Canyon NP is exceptional. This was my second visit but only my first to the Grand Canyon backcountry. We spoke to several rangers and find them all to be friendly, informative and with a good sense of humor.

I am hoping that the NPS will continue to strive to keep our parks wild as they should be. Our parks are not Disneyland and nor should tourists consider them as such. The visitors need to continue to be aware and own the responsibility for their own safety.

P.S. Please also consider that my answers reflect the fact that I was there in the off season (February)."

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"I had an awesome time and recommend everyone to go to the Grand Canyon! But I tell them they must hike down it or it is a wasted trip. You can't really enjoy its beauty until you rough it in the Canyon! Thank you to all the rangers who helped plan my trip! Thanks again! I'll be back!"

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"In the process of obtaining a permit, we felt like much of communication was geared to the "lowest common denominator". That is, all the warnings and caveats assumed that we knew nothing about surviving on our own in the backcountry. Thus, there was a lot of back and forth with the ranger about our permit that seemed unnecessary given our previous experience.

"Understand that the park probably sees a lot of people with little experience, and that much of the ranger's stance is due to a sort of "cover your ass" mantra that's typical of government work, but perhaps something can be done to treat customers more as individuals rather than a mass of ignorants.

Otherwise, love the park and appreciate the outstanding efforts of the rangers and staff. JR."  
"I camped at Salt Creek one night. That night another solo backpacker stayed there as well. Later when "shooting the shit" with a ranger, she mentioned that Salt Creek has a one party limit, and that this other gentleman should not have been there. I have slightly mixed feelings. He did chase away two ravens that unzipped my pack and ate some food while I was exploring upstream. On the other hand, do ravens really do this? Or did he unzip my pack, etc.? Woohoo! I'm a U of I alumni of '96 – studied Anthropology and Geology."

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"We were very impressed by the rangers we came into contact with. When we made mistakes in the application, they called us to get it right. I did not expect to have a wilderness experience in Grand Canyon but to experience the greatness of the park – and I do appreciate that a lot of people want to see it."

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"I was especially pleased with the park ranger at the entrance to the park, when he told me I was entitled to a "golden age passport" because of my age. I was equally pleased with the female park ranger I encountered at Bright Angel Campground (name: Jan – don't recall last name), an informed and delightful individual!

However, I was displeased with the park's concessionaire and their demand for full payment up to a year or two in advance for food and accommodations.

Thank you for including me in this survey. My next hike into the Grand Canyon is January 2006, and every year thereafter, so long as I can still walk. R.L. Travers."

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

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"I have been very happy with the permit process. I always received the permit I requested. The only request that I have would be for more readily available information to research trips vs. having to use trip reports posted by others on the Internet. I understand there is a safety issue involved but I think there are ways to avoid the wrong people going to the wrong places. I was interviewed by phone briefly before I was issued my last permit.

Feel free to contact me if you have any follow-up questions. Thank you. Judge Dobrient, 972-367-3633, [judge.dobrient@alonusa.com](mailto:judge.dobrient@alonusa.com)."

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"We had the trip of a lifetime! We were so fortunate to have the place practically to ourselves and saw lots of wildlife. The only disappointment was our information regarding the water at Horn Creek where we planned to spend the night. Before we got there, two hikers who passed us told us the water was contaminated but we had nothing in writing about it. We made sure we didn't use it."

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"Brochures and/or a pamphlet/flyer should be distributed to all hikers to explain and promote "hiking etiquette"...in other words, who should let who pass on the trail. It was the exception when day hikers would allow us by when we were climbing back out of the Canyon with our packs on! It got to be a joke with our family, but the ignorance and basic discourtesy was unsettling.

All rangers/ staff who issue permits should know the same information regarding the permit issuance system. We called ten days before our trip, hoping we might be able to get a permit. The first person said, "Don't bother, just come. The park's not crowded. You can get a permit the day you travel." Calling back later in the day to confirm this, we were told, "Absolutely not! You must get a permit!" So we sent our downloaded interest application in via regular mail. Not hearing anything, we called again and were told, "Come on down. There's plenty of space!" So – we took a chance (we also had family to visit in A2), and were lucky enough to get our permit at the Backcountry office the day before we went. When we got home, we discovered a notice from the NPS saying that our permit application had been denied!

All in all – a phenomenal experience. Full moon, mild temps...fewer people than in the summer. Sorry it took us so long to get this back to you!"

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"I was impressed by the cleanliness of the park compared to other large, popular parks (especially Yosemite). A slightly more detailed trail map would have been nice. The "Clear Creek Trail" was not listed and turned out to be a fantastic hike."

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"I would like to see as many people as possible have the opportunity to see and appreciate the Canyon, to learn to value it and develop an interest in protecting it.

One way is to shift the focus from avoiding overcrowding to letting as many people as possible hike and camp in the Canyon. Require that hikers pack out their trash and their human waste and minimize their effect on wildlife at campsites by using a ratsack if there is no ammo can. Increase the number of people maintaining the trails and cleaning up after the hikers. Increase the number of permits to as many as the environment can handle. Those who want solitude can either visit during a

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

less crowded time or camp in a more out-of-the-way location. Hopefully this would be paid for by an increase in the number of permits sold.

Another idea is to give the vast majority of visitors who do not hike into the Canyon an opportunity to experience it. If the rock would permit it, possibly build a gondola lift down to near the Bright Angel campground. As in most parks, a small portion of the park would be harmed to provide the easy access that most visitors want. Most of the park would remain protected.”

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“No commercial backpacking trips! More walk-in permit availability, less aircraft flights.”

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“I went on two six-day backpack trips in late February/early March. The trips were great and the park appeared to be well managed and take care of – especially considering the number of people that visit the park each year and the multi-faceted ways people want to see the park. But my experience was skewed to wintertime when visitation rates are lowest. Good luck in your study.”

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“I enjoyed my experience in the Grand Canyon. All the information I received about the Backcountry from the rangers was useful and they were happy to help. A more detailed map of the trails would help. The map that I received didn’t have all the facilities, and I feel this is somewhat important. Thank you.”

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“I loved staying at Phantom Ranch. My husband, son and daughter are all experienced backpackers. As long as I am with my husband (born 1949) I would probably enjoy backpacking in the Canyon. Although quite fit, I found the hike down quite difficult. We obtained reservations at Phantom Ranch at the last moment. It was special not to have to carry much with us!”

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“You know, the only thing the bugs me is the lack of water spouts on the South Rim (for filling up canteens). Tired of filling canteens with warm lodge bathroom-sink water. Permit system is a pain, but is necessary to assure that the Backcountry isn’t trampled. I plan on hiking the Canyon twice more this year, and consider it to be one of the most spectacular places on the planet. I am lucky to live so close to it. Best of luck! Please let me know if I can help you anymore. Brian, [babert2008@scco.edu](mailto:babert2008@scco.edu).”

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“Never see a ranger except at Indian Garden and Phantom. No enforcement of rules. Why don’t they use satellite to observe overuse?  
I like old system where had to meet ranger before start of trip.  
Money from Backcountry doesn’t even go for the Backcountry.  
Toilets help but encourage overuse. So do beer boxes.  
Thanks, it’s an awesome place. [keith.briggs@juno.com](mailto:keith.briggs@juno.com).”

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## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

"I am considering whether limitations to numbers of people allowed access to national parks is something to be considered. Our parks are a national treasure and need to be protected from overuse. I have been pleasantly satisfied with the Backcountry impact. Use of the Rim is very obvious. One final thought – the truly wild places of the Canyon are amazing. Access by foot, pack animal or river running (notice the absence of vehicles!) is the best thing of the Canyon!!! Please keep it that way FOREVER!!!"

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"I only visit in January-February as to avoid crowds, permit problems and heat. I would like to be able to obtain permits earlier. Overall I think park staff does a fairly good job of balancing the wide variety of park visitors. It's impossible to satisfy all. Impressed with rangers, trail maintenance, employees. No real disappointments."

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"I've gone twice in February and no problem getting a permit to camp at Bright Angel campground. I suspect it's different in summer. I think more educational opportunities are the way to go. I think so many of us think we want to be entertained but what we really want is to be allowed to change.

I think keeping cars out during the crowded months is something that should happen now. People will accept this – open air shuttle buses would make the park so much better for walking and would be quieter, which is what people really want. Less time in car. Do it! Thank you."

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"Grand Canyon is a wonderful place and needs to be protected. I do find it a bit hypocritical in that they allow groups of 11 but frown on small groupings (say 2 groups of 4) that may know each other. I never go during busy periods as I enjoy the calm of winter months. If I can be of any help – I have hundreds of maps of the Canyon. Please call. Thanks for your efforts."

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"There are too many planes allowed – they interrupt the wilderness experience. Group size should be limited to eleven. Motorized rafts should be limited to research trips only! An interactive reservation system would work best. I do not believe that the time period should be extended. Too many people would change plans and waste reservations!"

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"On my latest trip (02/05) the Bright Angel Trail was being repaired after several winter storms caused wash-outs. The National Park Service Website for the G.C. kept a posting that the trail was closed indefinitely. Four days before the scheduled hike I called the Backcountry Office, only to find that the trail had been opened for a week. After I returned from the hike, the Website still said the trail was closed. So my concern is that the info flow could be improved. I applaud the idea of an online registration system. It seems that with the ubiquity of computer technology this would be a vast improvement over the relatively low-tech of fax or snail mail. My only concern with this, as with the present system, is that people will make reservations, not be able to keep them, and not cancel them, thereby taking up space that ultimately doesn't get used. Otherwise, the rangers and Park Service do an admirable job given the conditions."

"As you have noticed, I have some problems with some of the trail conditions, i.e., animal waste and erosion. These conditions were only on the developed corridor trails – Bright Angel and South Kaibab. The Canyon experienced extremely rainy conditions. When the weather warrants, i.e., extremely rainy conditions, these corridor trails should be closed to livestock due to the erosion they cause and the fecal matter liquefied and makes for unpleasant conditions for backpackers.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

I am aware this might be an inconvenience for the concessioners – but the park would have no problem closing areas to backpackers if it would cause environmental damage. It should do the same for concession livestock if conditions warrant. Feel free to contact me. Ron Siller, 573-626-4901, HC 82 Bo 152, Salem, MO 65560.”

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“I would like to see the \$5/day group member fee be based on the type of areas used, i.e., corridor or threshold or wilderness camping (corridor>threshold>wilderness).

I would not like a system of permitting that allows people to buy in ahead of others as suggested in item 3.10.

I would like to be allowed to spend more than seven days in single wilderness area in the off-season.

Only the weather (rainy) disappointed me!

Whenever I’ve mentioned backcountry problems, they were addressed by the rangers in a timely fashion.”

### Grand Canyon Backcountry Visitor Study March Comments

“I think the number of permits released day of should be increased. Previously, while on a road trip, we were passing by and decided to backpack for a few days. We wasted a day and a half on the rim trying to get a permit, then started the next day having only one night in the Canyon when we were trying to have three nights in a row.

Now I live close enough to go when I have a few days off work. One time it worked out well (wintertime), and the other time I was told the day before to arrive at 6:30-7:00, but was unable to get anything near what I wanted. That was when I met the group of ten excellent people and camped with them.”

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“Only that the girl ranger was not going to let me go anywhere but Phantom Ranch (they ask if it’s your first time there then switch to P.R. if first trip. P.R. was great, loved it. Running water, food storage, etc., food available (I like Backcountry but P.R. was special). [xenduro@bigfoot.com](mailto:xenduro@bigfoot.com).”

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“Permit wording should be more clear that includes the campsite. We called and confirmed to make sure...the wording could be better defined so you would know without calling. The delay in receiving confirmation of permit and ordering meals was a little frustrating...I waited until after receiving permit confirmation to reserve meals, but was told supper and breakfast were sold out. Luckily I checked a couple days before we left, and the meals then were available. It would have been less stressful to purchase everything at once for a first time user. I would be better aware in the system now, if we would plan a trip again. We had a wonderful time.”

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“The current policies seem good to me. The permit system worked well. I received a quick response and was pleased with the information provided. The brochure with suggested gear to bring for the trip in the Backcountry was extremely helpful. My fiancé and I both very much enjoyed our trip and look forward to visiting again in the future.”

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## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

Several questions in this survey dealt with the presence of human waste/toilet tissue in the Canyon. I have never noticed either during several trips into the Canyon. Instead, the pit toilets provided in some areas are far more disgusting. It seems the toilets are hardly ever emptied – as the pit toilet on Horseshoe Mesa was nearly overflowing during our visit. With conditions like these, I can understand why some hikers/backpackers would choose not to use the latrine facilities.

I think the real problem with group size in the Backcountry is with day hikers. On my last trip, for example, we encountered a group of at least 30 hikers who had all taken the same bus to the trailhead. I have encountered at least one group of this size every time I've been down in the Canyon, and their noise detracts from the experience. In addition, I have noticed these groups to cause environmental damage by walking two or three abreast on narrow trails and all stopping for breaks in the same area. If the park is interested in reducing visitor impacts and generating more fees, they ought to look into a day hike permit system, although I admit that I don't like permit systems that much at all. If you want to go hiking/backpacking to "get away from it all", it is hard to plan when you'll most need the trip four or more months in advance!"

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"Park managed superbly – felt well prepared for trek and felt staff encountered was helpful and knowledgeable. Appreciated minimal number of people allowed to camp in park – allowed for very intimate and natural experience."

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"We were camped at Bright Angel Campground, near the group site. They were a group of volunteers celebrating a week of work in the Park. They were loud and chatty way into the night, 1:00-2:00 a.m. I realize we were on the most popular loop, but we had an 11-year-old with us on her first backpacking trip. I would have thought your volunteer groups would be more polite to those of us new to the Grand Canyon. Maybe they could have their celebrations on the rim. Thanks – we all in all had a great trip. I also want to thank you for allowing space for those of us who cannot plan their lives that far in advance. I was lucky enough to get the week off of work – unscheduled due to low patient volume. We were able to get a permit within a few days. One thing is that a young man at the gate dissuaded us from going to the Backcountry office the day we arrived, claiming "no chance" of Backcountry permit, when in fact the next day the Backcountry office told us we could have gotten in. As a result we had to hike out and drive twelve hours in the same day. Maybe better communication or policies for permits could help that problem. Thanks. (name)"

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"Please extend the season for ranger talks at Phantom Ranch. We went to the Ranch on March 16<sup>th</sup>. The talks did not start until the following week. We've been told that March is a good month to hike the Canyon. I think there should be a longer season for the ranger talks. Ranger Laurie is dynamite!!"

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"I was expecting a remote Backcountry experience because of the trail I was on (Bright Angel). If I had been I would have been very disappointed about the number of groups we ran into. I didn't know I would be able to visit the Grand Canyon until about two weeks before my visit. I wasn't able to get an advanced reservation at that time so I took my chances of getting a permit the day before I wanted to hike. I drove the Grand Canyon arriving at 6:00 a.m. at Backcountry office. I was able to get a permit, though not where I had wanted – better than nothing. If I had not gotten a permit I would have been upset."

"Just a few offhand comments:

Toilet facilities go a long way to reduce toilet paper and waste around campsites. People will not pack it out even if they know they are supposed to (some don't even bury it).

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

An Internet real-time reservation and confirmation system would be fantastic. Please do it. I have never once seen a park ranger in the Backcountry, either on a backpack or a day hike (except on the corridor trails).

I know that one organization is not allowed to have two groups in the same use area on the same nights. I have also heard a rumor that NPS considers "Boy Scouts of America" to be one organization. I hope that if this is true, you understand that there are hundreds of Boy Scout troops in Arizona alone, and that we have no way of knowing what other troops have planned...it would be next to impossible for BSA to comply with this policy as a single organization. Or maybe I was misinformed...

This survey requested that I respond to the questions in the context of my most recent trip. Having made several backpacking and day hiking trips in the Canyon I might have answered many of the questions differently if instructed to consider all of my trips."

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"I definitely think the Backcountry permit size needs to be limited, however it ought to be twelve and not eleven. We can fit four people per tent in three tents just as easily as eleven. Possibly have a twelve-person three-tent limit in the Backcountry."

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"I have been extremely disappointed with the reservation system – too confusing – too difficult to get reservation wanted – have many years of backpacking in the Grand Canyon and learn something new about reservation system each time!"

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"Rarely has anything in the Grand Canyon disappointed us. The only disappointing feature is the air traffic all day long – takes away from the experience, you know?"

Would like to know if proof of a Backcountry trip (i.e., valid permit) would entitle one to 10% discount at any of the Rim hotels. Just a little recognition for being one of the few to hike down in the Canyon."

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"There's so many people that want to do it, it can get overly crowded. Then again, I don't believe people should be denied the experience."

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"People who are serious and really love getting into the Grand Canyon are on top of getting their permit four months early, like us. I like that if I am competing for a particular area it is most likely with someone else who lives the Grand Canyon as much as I do. Where those who just think it would be fun to go will usually apply for a permit after the four-month time and after those with a passion already have their permits."

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"No good campsites at the river when I got to the end of South Canyon. Too many river rafters. Poor fishing."

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"All I have to ask is that the number of visitors allowed in the park/Backcountry does not increase. The more widely known and used the park and lands become, the faster they will be destroyed. This

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

land is too precious to so many people to lose it to tourism. This is where I grew up, and it means the world to me! Good luck with your research!"

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"I believe the cost of permits is too high. Hikers are not the problem – it's the number of people on top."

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"My trip was very good and all went well. I do wish the Park Service were better funded by the federal government to better protect unique areas like the Grand Canyon. I like the idea of online reservations – though it might be difficult to get in the system on the day reservations open and that might be very frustrating. I think it's time to stop the mule rides – most people physically able to ride a mule could also walk, and the mule waste is smelly, etc. Also, the mules erode the trails more than hikers. You might consider adding a few more sites for camping and allowing a somewhat larger number of people out of the core areas. We encountered many people in the core, but few elsewhere."

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"The Web map showing use area boundaries should be updated to include all areas! As of 23<sup>rd</sup> June, this was not the case.

Information on Backcountry etiquette presented to hikers, especially groups, should include an admonition to not come too closely to other parties. We were camped at Hance Radios when a large group of plus or minus 15 (mostly young people) camped within five feet of us. We moved our camp to avoid such close quarters!

Increase the number of hours that staff are available to answer questions over the phone."

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"The present permit application process seems to work well if applications are made 120 days in advance. However, it seems impractical after areas begin to fill up. If open sites and dates were available to look at online, putting together trip itineraries would be far simpler.

It is nice to be able to talk with the Park Rangers; and the limited phone line and times are completely inconvenient.

High use camping areas along the Colorado River all should have pit toilets. I'd be willing to pay extra money for permit fees if the Park Service would implement a better human waste management program.

Only disappointment was the volume of trash along and floating in the Colorado River (we carried a bunch out). Why not have NPS run cleanup river raft trips?"

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"I feel that government regulations are about responsibility. You can not have freedom without responsibility."

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"The only disappointing aspect of any of my Canyon treks has always been related to large groups or out-of-permit groups. Out of the main corridor people and noise can generally be avoided, but not in designated camping areas. The primitive Backcountry certainly does not need more assigned camping, pit toilets, or food storage. These only degrade the wilderness experience and the opportunity for flexibility and solitude. Those who want more creative comforts can stay in the main corridor.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

I find the current permit system reasonable and have usually been able to get the trek I want if applied for early. An Internet system sounds appealing but I would be concerned about abuses by commercial outfitters acquiring more than their share of permits.

Finally, I know of not a single Grand Canyon enthusiast who is in favor of continued aircraft tours or motorized river use. Their presence is nothing short of disruptive. It is a shame that we are forced to endure this abuse simply because there is money being made by commercial interests. It is not the right of every American to experience wilderness by every means available. After all, the Grand Canyon is a national park not an amusement park.”

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“The first night we camped at Hance Creek, there were probably a total of at least 30 people camped there. Hance Creek is a popular place as it is the first perennial water coming from either Horseshoe Mesa or Red Canyon. I strongly recommend you put a chemical toilet there. You have far more backpackers that stay at Hance Creek where there is no toilet than camp at Upper Tapeats where there is a toilet.

You used to have a resident ranger at Hermit Creek who had a two-way radio, who could report and/or deal with emergencies. But, you have removed the ranger from Hermit Creek. I think that was a mistake. Now, if there were an emergency in that part of the Canyon, the closest ranger is at Indian Gardens, too far away to be effective. You continue to have a problem of people hiking overnight in the Canyon without a permit. A greater ranger presence is needed in the Backcountry.

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I have experienced four Backcountry trips. The only disappointment was Bright Angel, but that's okay because I seek more isolated trails during “off-season.” I believe it was Hermit's Trail in which I encountered a lot of copter/airplane visual and olfactory irritations – quite disturbing and out of character for such a beautiful area. Overall, I believe the G.C. to be managed very well – thanks!

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“The Canyon is my passion. I make between 5-10 trips there a year (for the last ten years) for both day hikes and backpacks. I hike the corridor trails very infrequently and most of my backpacks are remote trails or routes. I have had no problems with the current Backcountry management policies or permit system.

I do however have a problem, a big problem, with overflights. I also have a big problem with motorized boats, especially baloney boats, on the River. If it were up to me the only maintained trails would be in the corridor. Everything else would be unmaintained. I also don't like the commercial guides operating in the Canyon. I don't consider the Grand Canyon Field Institute to fall in this category – they are necessary and do an excellent job educating people about the Canyon. Their stuff is top notch.

In short, I absolutely despise overflights, hate motorized boats (the Canyon should be a wilderness area), and think paid guides are unnecessary. Mass consumerism for the Canyon or any other wilderness setting is bad, very bad, and not a sustainable model.”

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“Questions 3.7e, 3.7p, and 3.8j do not lend themselves to single answers because we were at four different campsites and covered a lot of miles of trail – which varied largely in terms of volume of traffic, spacing of campsites, and conditions of the trail.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

Questions 2.2 re: trip planner and 2.3 re: video – the content was devoted to people who have not had previous experience hiking in the SW or Grand Canyon. I have accumulated years of experience, have backpacked in the Grand Canyon numerous times, so didn't find it helped me. But it seemed appropriate for those without prior pertinent experience.”

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“I had no easy access to a printer or fax machine so had to rely entirely on the postal service for acquiring and submitting my completed permit application. The obvious problem here is that during the one to two-week period I am waiting for a response, other applications are being processed, etc. I never knew, real time, what sites were available on what dates, nor did I have the opportunity to immediately pay for and receive conformation that my itinerary was approved. I was forced to wait a week or two with each request, as more permits were being scooped up by others. I repeatedly had no success in calling the Backcountry Office, even during times when the line was supposed to be staffed. So I just ended up driving out there and hoping for the best. A real-time Web based system would be great, but a well-staffed phone center would be more fair, for those of us without easy Web access. We are out here.”

“You guys do a great job. Improvements to the campsites such as pit toilets and ammo boxes for food were very helpful. The ability to drive to the top of Hermit Trailhead (Hermit's Rest) was very helpful as well. Restore the ecology to the inner gorge as best you can. I was amazed at the changes to Granite Rapids' beach in the last 30 years. Do what it takes to restore the ecology of the inner gorge ecosystem.”

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“I have been in the Canyon seven times in the last six years, including four backpacking trips of several nights each, two of which were solo. Because I live in Maryland, knowing that I have a permit well in advance of my trip is important, so that I can make travel arrangements, etc. I have never experienced much trouble in this regard until this past March (2004), when I had a very tough time getting a permit (for three of us). Fortunately, when we arrived at the Park, we went to the BRO and were able to get a permit for several additional nights\*. Although the rangers to the BRO generally do a great job (especially Brittany and Michele), it sure would be nice to be able to go online and plan a trip. Also, it's very hard to get through on the phone, given the limited staff in the BRO and the very restricted phone hours.

A more fundamental – and critical – issue is commercial helicopter overflights. Although these have been disturbing on earlier backcountry trips to the western end of the Park (on the Hermit and Boucher Trails), this part experience (in March 2004) was completely beyond the pale. These flights began around 9:30 a.m. and continued until early evening. At times they were as frequent as six to eight times per hour. Each time the noise reverberated down the Canyon well east of Hermit Trail – we heard them loud and clear in Salt Canyon, the easternmost point on our trip – for up to five minutes per overflight. The current “no-fly” zone is totally adequate to protect the peace and serenity of the Canyon and should be extended well to the west and to a much higher altitude. The Canyon is a very special, sacred place, a natural wonder and World Heritage site. Allowing this crassly commercial intrusion is as inappropriate and sacrilegious as would be allowing me to open a lemonade stand at, say, Boucher Creek. With all we do to protect the Canyon and the Canyon experience, I utterly fail to understand why the Park Service can not or will not deal with this problem once and for all.

\*The particular sites and dates were not available at the times of my three telephone conversations with the BRO during the weeks preceding the trip.”

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“Strongly support online trip availability and permitting system.”

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

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“Given the high volume of traffic (campers) at Hermit, the Park needs to establish either: 1) staff at trailhead checking permits, or 2) a ranger at the campground – our most recent trip we experienced one group with 10-12 people who neither had permits, but camped in several camp spots, left food laying all over the ground, dumped food in the stream, and urinated in the stream. One group (with valid permit) scheduled to camp at Hermit actually decided to hike out early because of the noise and lack of room for everyone.”

“Allow more private rafting trips. Why do private companies have a near monopoly on rafting in a national park? Decrease plan and helicopter overflights, or raise the flight ceiling so that they can not be seen or heard. They destroy the peacefulness of the Canyon and the experience of nature.”

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“I believe that all groups should be required to check in with the Backcountry office upon arrival to the Canyon. First, so rangers can outline Backcountry regulations in person, not via a brochure and video four months in advance, especially for Canyon first-timers and groups with childhood. Secondly, all levels of backpackers need current weather information and water availability. Lastly, everyone who enters the Canyon for an overnight trip should have their name, age, emergency contact info entered for safety purposes.”

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“It would be nice if you were always up-to-date on water availability in not so popular areas for those who have the experience and skill to hike remote areas. Recently you changed my itinerary to a more ‘safe’ hike. It would be okay if you checked hikes that hike remote places and made it easy for them if they have hiked the Canyon a lot like my friends and me.”

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“I liked the pit toilet at Clear Creek. It was innocuous, yet successful in eliminating evidence of human waste near heavily-used backcountry sites. I’d pay for more of these units!

After additional thought, I’d vote to continue the current permit insurance system. The time-delay between a requested backcountry trip and the notification of acceptance requires me to plan carefully my requested dates and sites and to consider alternatives – that’s desirable. An immediate Internet reservation system would allow me to play around with too many choices – it would give me more information than I need! – that’s not desirable. I don’t expect the backcountry reservation system to operate like the Holiday Inn online reservation system, nor like Orbitz. I’m going to hike in, anyway, carrying all my stuff – a manual reservation is consistent with backpacking! Part of the pleasure is accepting changes in itinerary – going to sites I’d given little consideration. The manual system encourages more contact with the rangers – listening to their advice and recommendations.”

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“Recently (May 16 through 22) I took a six-day backpack trip to climb Shiva Temple via the North Rim. I obtained the permit about 80 days in advance and appropriate preparations were made. There is no water (reliably) in this part of the backcountry, requiring plans to carry all six days of water (eight gallons each) into the backcountry. Prior to leaving on the trip, I called the South Rim Backcountry office to inquire about conditions on the access road (Grand Canyon North Rim opened on about May 5 this year). The ranger I talked to assured me that all the roads were open, said some trees might be down from the winter, might have to cut or pull some off the road (this is usual for the North Rim spring). We talked some about the climb and conditions (drought) in the backcountry.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

When I arrived at the North Rim to do the day hike to carry all our water to the rim descent, I found a locked gate on the Point Sublime Road. I drove to the North Rim Backcountry office, found the ranger and explained the particulars of my planned expedition to climb Shiva Temple. He was very sympathetic and attempted to reach someone to obtain a key to the gate. After an hour and a half of unsuccessful attempts to reach a "patrol ranger" he left to find someone. While he was gone, the "patrol ranger" came to the Backcountry office. I explained the situation to her, attempting to gain some cooperation. She informed me that the road was closed because trees were across the road and that I must be kept out "for my own safety". This to someone attempting to minimize risk and stay on itinerary. She suggested hiking to our destination from the locked gate or cross country. This is about 4.5 to 5 miles one way (extra). She did not seem to understand the need for one trip just for the water. This would add 18 to 20 miles total to the hike. There was no reasoning with her and the Backcountry ranger could do nothing either. Finally I left in frustration and returned to the locked gate at the Widforss Point Trailhead. While there discussing the situation, a fire control truck pulled up to the gate and unlocked it. I immediately talked to the driver, who looked at my permit, listened to my tale, laughed, and made a derogatory joke about the "patrol ranger" and sent me through. All the trees were already cut and cleared from the road all the way to the basin, our destination trail head. It was too late that day to hike our water in to the rim descent, so we began our trip one day off itinerary and could never make up the time. Everything was successful and we had a safe trip, but the "patrol ranger" caused us unnecessary hassle which resulted in our being unable to maintain our trip permit itinerary as it was issued. (I certainly would not want to depend on this type of person for help or rescue).

I also want to say that the planning of the transit system on the South Rim is not geared to deal with all the hikers using South Kaibab Trailhead. We used to be able to park at South Kaibab Trailhead, but no longer. Now a walk or bus ride from the Backcountry office parking lot to the Trailhead is required (unless someone drops you off on the highway). On the Clearcreek Hike (which this questionnaire evaluates) we had to wait for two hours for a space on the shuttle, as they were totally packed and we couldn't get on. This was not the case on the hike out, as we were able to easily make up the two hours lost waiting for a shuttle space/seat, but less experienced people could easily suffer from a two-hour late start. Perhaps a permit for backpackers to park at Kaibab Trailhead – or at least get priority on the shuttle – would help.

One last thing – helicopters – although necessary in certain situations, the increasing use of helicopters over much of the Backcountry in Grand Canyon severely degrades the experience of the true wilderness. Flight restrictions currently apply to mostly the central corridor, the one place in Grand Canyon where there are so many people at any one time that solitude is irrelevant. Please ban all but emergency flyover in the rest of Grand Canyon. I have taken backpacking trips in Grand Canyon on which I saw no one else anywhere in the Backcountry, only to be tormented by the constant "whop/whop." As a Vietnam Vet I am tormented by the sound of helicopters in the Backcountry. It can totally ruin the experience."

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"I first started backpacking in the Grand Canyon when I worked there some 25 years ago. The permits were free, and it was relatively easy for me to get them. Consequently, I was diligent about obtaining permits. Today I live about 80 miles away. While I am close enough to still do a lot of hiking/backpacking, the cost and hassle of getting permits is so much higher that now I rarely do so. Consequently, much of my recent backpacking in the Canyon has been without getting a permit.

It is one thing for someone that lives hundreds, or thousands, of miles away, to plan a one-time trip to the Grand Canyon, and to invest the time, energy, effort and money in researching choices, setting an itinerary and obtaining a permit. For someone like me, however, it is different. If I have a (suddenly) free weekend, I can consider a quick overnight hike in the Canyon, but time spent getting

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

permits, especially if I want to go somewhere far away from the South Rim Village, is an onerous burden. Or, if I want to spend three nights on the Esplanade, and the weather turns bad before the first night, I can defer a day, or two, because I have that flexibility. Dealing with the Park Service under these kinds of conditions is just plain painful.

Additionally, paying for a permit to a wilderness area that is not maintained by the Park Service is absurd. One pays the same “price” for an overnight stay in Nankoweap as one does for an overnight stay at the Bright Angel Campground.

I have been willing to pay the higher fees for the annual park pass, even though I don’t use the visitors center, the museum, attend ranger talks, etc. But, then, to add an additional charge for backpacking is like adding insult to injury.

My suggestion to the Park Service is to:

Charge backpackers only for using improved campgrounds (BA, IG, Cottonwood, TR, Hermit, et al.). Quite frankly, most of the visitation is made to these places anyway. And, with actual sites, restroom facilities, and water (in some cases), it makes sense to charge for their use. [And, I am willing to pay for this as well.]

Don’t charge for backpacking use of all other areas. If the park wants to charge people for hiking down the North Bass Trail, then they will have to provide improved campground facilities; otherwise don’t charge for this.

Request (but, don’t require) that backpackers in remote areas file a “Hiking Itinerary” with the Backcountry Office that can be accessed if a search needs to be initiated. That is, if the park is alerted about an overdue backpacker, they can access this information. [The issues or searches are from the permit issue, so I’ll not address it more fully here.]

Thanks for your time in considering these comments.”

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“Quick overflights of the Canyon are inherently incompatible with the nature of the place – the sense to time and solitude. The present businesses of that type should be limited in number – reduced over time and eventually eliminated with fair compensation. If they owned permits with a present market value, perhaps groups (Sierra Club?) could be allowed to buy them out and retire the permits at no cost to the taxpayers. I would be willing to contribute to such a cause.”

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“I live and work at Phantom Ranch, thus my trips are usually easy to obtain from Phantom rangers either day before or day of trip. My main concern is people doing trips they’re not prepared for either physically or equipment-wise. Maybe more rangers on patrol and doing backcountry checks.”

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“I carried a small pack raft – made here in Alaska – and used it to cross the Colorado River. It gave us access to the nearly unused north side of the Canyon. We saw NO ONE the several days we were on that side. I appreciate the permit staff allowing us to cross by “turning their heads away” – but this activity should be allowed. Not “running” the river in the small boats – simply using them to cross the river. Guided hiking trips should be allowed as a guide could take a group to areas that are otherwise not used.”

Grand Canyon Backcountry Visitor Study  
April Comments

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

“My husband and I were extremely pleased with our entire experience. Specifically, the system for gaining a backcountry permit on-site was very efficient and organized.”

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“More information about off season, November – March, camping might reduce the April and October rush. A majority of people I’ve talked to won’t go where they have to carry out their toilet paper. They wouldn’t even consider carrying out fecal waste.”

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“The Grand Canyon is the last place on earth to escape to. I’ve been all over the world, too!”

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“Keep the people limits about where they are. Existing backpacking rules seem fine. Reducing aircraft noise would be good. Permit system should not allow person or organization to book huge number of trips/sites. Fine people for breaking rules or ban them from future trips.”

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“The new backcountry toilets are very badly designed.”

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“I would hate to see it get too easy to get a permit in the backcountry. The Bright Angel area is one thing, but if anyone can easily get backcountry area’s permits, people that are not ready for some of these places, could cause a lot of problems that rangers may have to deal with. The same basic system seems to be working over the years I’ve been going. The backcountry is staying pretty clean, but some of the more popular campsites get a little trampled.”

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“Gentlemen, I have been backpacking the Grand Canyon for about 26 years – in about that many outings. I have traveled most every trail in the Canyon – plus a few of the ‘routes’. Currently I go there each spring and fall. It is a very important part of my life.

I really dislike crowds – so I have a few places in the Canyon the few people know about, or they are not willing to spend the effort to get there. I defiantly avoid the ‘corridor’. Have been there only a few times.

Anyway – having watched the management of the Canyon over that many years – I am very, very please with what the Park Service has done with the Grand Canyon. I appreciate the permit system – one can be assured of not being crowded if you choose your schedule carefully. Also, I very much appreciate that the Park Service has worked hard to keep the Canyon free of trash and that visitors respect this most marvelous gift. I appreciate the no dogs policy, the no fires policy, and the carry out your T.P. policy!

There have been outings when I saw zero trash/litter along the way. Other times I have picked up maybe two candy wrappers in a week’s time! Pretty amazing.

There was one ‘incident’ I would like to mention: Probably April ’03 my wife and another couple were backpacking in Surprise Valley. We saw a pair of Rangers on their way toward us. We had a proper permit, signed – and we were on schedule. These Rangers were very young, and carrying 45 cal. Glock handguns on their thighs. They **demand**ed to see our permit – and the first looked it over for the longest time – then when he could find no exception, it was handed to the other in hopes he

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

would find something awry. These two were **looking** to write a citation. I would like to believe that Rangers are there for our assistance – these two were looking for trouble. I can understand them being armed – but I can't understand the blatant display of force.

At times I am tempted to get peeved at the Rangers/Park Service treating us all so child-like, that we really don't know anything about canyoneering. But then I just need to recall when I have witnessed individuals or parties doing something very foolish and yes, life threatening in the Canyon.

Also, since the charge for backcountry permits was instigated the telephone support has improved enormously. Once I faxed a permit application – and it was garbled in the transmission. The person receiving it pieced enough information together to call directory assistance for a number – and called me explaining that I needed to re-apply! Wow! – second mile effort.

In many places I am not excited with what I see the Park Service doing – but in the Grand Canyon they have their head on straight, and their act together. Tell them to keep on. Sincerely yours, (name).”

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- “1. We encountered a large, spread-out group of people coming down the Bill Hall trail on our last day as we were heading out. They all had communication radios on them that were turned on and loud. We could hear the static and conversations from the radios before we saw the people. Limiting group sizes may help.
2. Placing unobtrusive composting toilets on beaches at the river may be helpful. The river was the only place we encountered toilet paper. With the river runners stopping frequently, composting toilets that work (Deer Creek needed some help!) could really be useful.
3. We LOVE the Grand Canyon and definitely will be hiking there again in the future. We are willing to pay more for two reasons:
  - A. Higher fees may keep the park from becoming overcrowded with people that do not appreciate a true wilderness experience.
  - B. We want to do our part to support parks that we are interested in – especially in the times we are now living in.”

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“Make getting the permit easier. I had to call the Backcountry office numerous times, and then fax a permit in four times. It would always come back different than what I wanted. I understand that some campsites I requested were not available, but I had no idea of which ones and which dates were available. Maybe make it more interactive on the Web. Phone calls to the Backcountry office were difficult to get through (it was always busy). The rangers were quite helpful once I did get to speak to them.

The corridor areas are quite crowded, but once I got in the primitive areas it was very uncrowded. I believe you should not allow any more people in the corridor, but could allow one or two more parties in the primitive areas. Threshold areas are probably at their maximum usage also.

Thanks for the effort. Hopefully the NPS will take the results and improve the system.”

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“Four month planning for permit is a good thing because it limits the amount of people in the Backcountry to those serious enough to plan their trip.”

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

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"The Walipi Indians allow helicopter tour operators to land on their reservation and overlook the Colorado River and Canyon. On the river and when camping in this area, the noise and overhead pollution is constant from 7 a.m. to dusk each day. The quality of "the sense of silence" is extremely important to me in wilderness and backcountry experiences. Let's correct that problem. Helicopters are an inappropriate way to experience solitude. For all others these trying to "tread softly" in these wilderness sensitive areas. End this permit!."

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"I think that the management should consider issuing more permits for overnight camping in wild areas (not in campsites). It seems the numbers are much too low considering the high demand (six to ten people per huge sections seem much too strict).

Personally I came from abroad on a trip specifically to do a long hiking trip in the Grand Canyon. Even three months from the time of my trip there were already no camping available anywhere (designated and "wild"). So on the day of my trip I settled on a crazy itinerary which we ended up not doing."

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"It was a great trip. We hope to do another one in a few years. The Bright Angel campground and Phantom Ranch area was a great place to be for two nights."

"I currently like the permit issuance system as long as everyone receives the same consideration no matter that form they use, mail, fax, etc. I do not think those with access to electronic or phone should have precedence over those who use the postal system; as long as every form of application are treated equally is of paramount importance.

I do somewhat resent the amount of trail erosion that is attributed to "mule trains" although I am aware that is how supplies reach the bottom of the Canyon."

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"I have visited the Backcountry 13 times. My first trip was for nine nights. The other 12 were for 14-18 nights. All of the trips were solo."

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"It's fine – it's not broken don't fix it."

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"Encourage the 'real time' Internet reservation system (model it after the BWOAW system). Would be interested in the results of this survey!"

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1. Hikers using commercial guides should be subject to identical permit process as non-commercial guided trips.
2. In educating hiking groups about backcountry etiquette, more emphasis should be placed on the sanctity of water sources. We encountered a group who was washing dishes with dish soap directly in the creek.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

3. The reason why the aircraft somewhat disrupts our trips in the Grand Canyon is because we try to go off the main hiking routes.”

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“The current permit process is fair and a bargain. A price increase is very justified given the experience.

The aircraft corridor over some of the most beautiful, positive and remote parts of the Canyon is a poor solution. The air traffic corridor should be over the most populated areas of the Canyon – Bright Angel/Kaibab Trails and the South Rim Village. It’s so busy few people would notice and the remote areas would be just that – remote – nothing worse than “thump, thump, thump” from 8 a.m. to 5 p.m.! Thank you for asking!”

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“We were very lucky to get the permit. But, obviously people coming from a very long distance are at a disadvantage if they are not able to plan three months in advance. Coming from Europe, this was most likely our only ever trip to Grand Canyon because it is so far and so expensive – so if we had not been able to get this permit it would have been a great disappointment.

The rangers were great especially the little lady at the bottom of the Canyon – her talks were a highlight and well appreciated by everyone.”

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“In my opinion, I would really hate to see the permit issuance process go “online”. I am concerned that too many people would book up spots who would end up not using them. As a result, making it difficult for people who really do want to do. The fact that mail/fax is the only current option for advance reservations may help to “weed out” these people. Although, I would not be opposed to posting openings (closings of campsites in “real time” as a tool for planning trips – similar to Glacier National Park. I have many opinions about things I would like to see happen at Grand Canyon: Complete ban on air tours, no autos at Grand Canyon – only shuttles and “approved” vehicles, moderate increase in fees for park improvements, no cell towers, etc. However, my biggest hope is to control the number of permits obtained by private tour groups. This is the people’s park and not an opportunity for private businesses to make money. I would prefer that NPS handle this. I have been backpacking in several parks but Grand Canyon was my first and has always been a very important place to me. I plan on going back many, many more times. I especially look forward to my next trip in September of 2005 when I will be married at the South Rim at Shoshone Point.

\*I was quite happy to see something like this being done. Especially by U of I. Can’t wait to see results. (name), U of I grad, Class of 1996.”

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“A real-time Internet resource of current water source info. Request hikers (who will encounter typically “questionable” water sources) go to a dedicated NPS Website to make immediate updates as to the: 1) quantity of flow, 2) quality of water, and 3) post any digital photos and map of the best source and date it!

This will work and make hikes safer for such trips that use the Tonto Trail primarily. Source locations that the NPS park rangers seem to be too deficient (in knowledge) over the last 20 years...

- Salt Creek
- Pipe Creek
- Lonetree Canyon (creek)
- Cremation Canyon (creek)

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

- Grapevine
- Cottonwood
- Boucher

This can be fixed so easily. Fix this!"

"Internet-based would be ideal."

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"Some remote trails are heavily eroded, but that's okay if not too heavily used. Although with the current maliciously destructive national administration it is unlikely, the major improvement of backcountry backpacking conditions in the Grand Canyon would be to fund significantly more backcountry rangers. In nearly twenty years of hiking in the Canyon I have encountered rangers below the rim (except on Bright Angel and Kaibab trails and on float trips) only twice, and never on off-trail routes. A larger backcountry staff, with more time to cover the backcountry, would allow each ranger to be less focused on necessary policing and safety issues, less stressed and terse, more able to be fully informing and pleasant during encounters with hikers: the outcome would be positive education of visitors and reduction of abuses through friendly presence. I would be amazed, pleased, and proud of my national park system if I ran into an informed and personable ranger on an off-trail hike on the Butte Fault route. I'm surprised that the Canyon is in as good shape as it is – maintaining and improving backcountry conditions will require:

- funding for increasing staff, staff training, and research;
- not increasing visitor numbers in backcountry;
- further restriction of overflights;
- keeping most folks really happy and informed during quality rim visits and day hikes.

Although I believe that backcountry hikers should inform themselves and be responsible for informed risk assessment, a backcountry ranger staff with more time and personnel to cover backcountry and compile hiker-supplied information could give more up-to-date information about water availability (with enough disclaimers to avoid liability), and this would help to distribute backcountry users more effectively.

Other comments:

- overflights are exciting, but they encourage visitors to see the Canyon as an extension of Imax, and they are the greatest current intrusion on a wilderness experience
- I accept the greater risk of hiking alone, and don't expect to be high priority for busy ranger staff on rescue efforts, but may buy a satellite emergency locator as a rational safety measure
- my worst group encounters (as at Deer Creek gorge) have been commercial raft groups day hiking from the river – I realize that commercial rafters are often very good at protecting the Canyon, but would prefer smaller non-motorized presence

This questionnaire is awkwardly constructed in a typical fashion – separating out into abstract terms like "spiritual" an experience that unifies absorption in detail, reverie, topography consciousness, etc. MORE MONEY FOR PARKS. MORE BACKCOUNTRY RANGERS."

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"More annoying than aircraft overhead was the sound of the buses on the Hermit Loop Road on South Rim. These were easily heard from the campground at Horn Creek.

Aircraft were heard at Hermit Rapids but the buses were way too noticeable in an area accessible to a lot of people.

I hiked that part of Tonto Trail twice before the Park System closed the road and never noticed noise from cars.

I can appreciate the bus service, but they are way too loud!"

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

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"More solar toilets along high use areas – Colorado River, New Hance, Bouchar. Rangers should monitor ham radio repeater on South Rim."

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"Hate the airplanes and helicopters but everyone wants a look. If helicopters are supposed to stay above the Rim, they aren't doing it."

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"Not easy planning the trip. We were told over the phone which backcountry sites were available, however we couldn't pay and reserve them over the phone. We were told as soon as our fax was received, our sites would be booked. However when we called to confirm our fax being received, we were told that there were many people ahead of us and that we may not get any sites. We waited for several weeks, not knowing if we should even bother buying plane tickets since we're from CA. We took a chance, bought our tickets, and didn't find out until about two weeks prior that we did get sites. We were told prior that we may just have to go to the Backcountry Station each day to see if anyone had cancelled or to put our name on a list. I would much prefer being able to book directly online or by the phone instead of stressing that we may not even get to go backpacking at all after planning for months and buying plane tickets. It worked out in the end, but it could've been easier. I have no other complaint. It was a great trip!"

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"Thank you for selecting me to complete this survey. I applied three months in advance for a backcountry permit and was denied. It is frustrating that you can not communicate with the permitting office except by fax – I did not know why my permit was denied as I was flexible on where I went and somewhat flexible on when. When I arrived at the Canyon I was astounded at the number of people in the park. Traffic jams! Granted I live in Alaska, but for a wilderness area it was crazy. It was Spring Break, too, I understand. We went to the permit office and tried to get an overnight permit but could only obtain one for one night along one of the most difficult trails (on the eastern side of the South Rim – I can't remember which – you could look it up). There was no water available on the trail and we were going to have to hike out the next day. We decided to not use the overnight permit although we could have tried to go on another trail or use another campsite (I'm not sure if this is allowed). In any case we hiked down to the horseshoe mesa and out in the same day. After completing that hike I realized the ratings of the trails may be overzealous in that they are not as difficult as I expected. I hike a lot in Juneau but didn't know how the climate in the Grand Canyon would affect me.

Overall, I would have loved to hike in the backcountry of the Grand Canyon and would pay more in the future if it would be an easier process to get a permit. The general park area is so crowded that the only way I'd come back is in the winter, or to the North Rim ( if I was there in the summer) or if there was some way of knowing how crowded the park was. It is so beautiful I can understand why people want to see it but it is not a serene place when it is that crowded. I would love to hike Rim to Rim and maybe I will in the future. Good luck, thanks for trying and I hope to get a permit in the future."

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1. The park rangers and people in the Backcountry office are extremely helpful and competent.
2. Backcountry fire management policies at the North Rim are a disgrace and are dangerous. Given current policies we will be lucky to have any trees standing at the North Rim in another

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

decade. The Park's policy of using huge "back burns" to control small fires is decimating the North Rim forests.

3. There are way too many motorized river rafters on the river. The river raft parties overwhelm the best of the river campsites, leaving the backpackers other less desirable sites. The river rafters also disturb the peace and solitude of the inner Canyon – too many of the riders are only out for a boat ride and a party, not for a wilderness experience.
4. Although I deliberately backpacked in a "no-fly" zone, airplanes should be banned from flying in the park. Since airplane noise is annoying to those seeking peace and quiet, people like me deliberately avoid backpacking in flight zones. The airplanes are thus keeping us from visiting large areas of the Park."

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"The current permit system works well; although I would always prefer to see fewer people on a given trip. I realize that that's unrealistic. The NPS can do the most for Grand Canyon's backcountry by continuing current policy and maintaining as much of Grand Canyon's backcountry as wilderness."

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"Several of the backpack hangers were too close to trees, allowing squirrels/chipmunks to chew off straps from/on our bags by climbing from the trees to the bags.

Having more inexpensive options for overnight stay on the rim would be nice.

Other than tight shoes on one member of our group, we had a fantastic time on our backcountry trip!"

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"I believe the federal budget should provide for the appropriate funds to support the NPS. Without getting into politics, there are too many special interest issues consuming tax dollars that should go to the NPS. The NPS represents the best that America has to offer. It's time the politicians stand behind it with adequate spending."

"I've been coming to the Canyon for 25 years. I've seen lots of changes – especially on the South Rim – most for the good. The crowds must be taken care of and I see the NPS is trying to do it. I am a real backcountry person – please continue to do your best keeping it in as natural state as possible. The toilets are a necessary evil. People will not pack out their toilet paper. I'm very happy the condors are back – it's a real thrill. Please do whatever is needed to keep them healthy and happy. Thank you."

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"Every backcountry planner/ranger I have met has been super friendly, nice, knowledgeable, and helpful. My only complaint was that the guided commercial river groups are too big. About twenty of them surprised us as they hiked past our campsite (which was right on the trail) for a day hike up from the river one morning. Other than that, the other camping groups were small and hardly noticeable."

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"Primitive toilets were located at two campsites. Both were badly in need of cleaning. These toilets are a good idea for campsites that receive a large number of visitors but there should be more toilets at each location or they should have more frequent service to maintain sanitary conditions."

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"The park rangers were extremely friendly and helpful.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

The horse piss puddles are a little annoying. Maybe the people taking horses down can pay a little extra to build a dedicated horse trail or something.”

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“I appreciated the willingness of the park rangers to answer my questions (especially over the phone) regarding obtaining a permit (and changing the itinerary). Initially, I was told over the phone that I wouldn't have any problems with getting my desired itinerary. However – upon receiving my permit, it was different. After making lots of phone calls, I obtained a permit that worked with my friend's schedule (who was flying in from MI). I appreciated the rangers working with me and getting a workable permit.”

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1. I really like the concept of obtaining permits in 'real time' over the Internet.
2. I would prefer to see less people on the trail and less people at the campsite. I took the South Kaibab down to Phantom Ranch campsite, then up Bright Angel. I now realize there are less traveled routes.”

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“I feel it was my responsibility to follow the itinerary, and was upset that I did not. It is difficult to sometimes accurately assess other people's physical shape or the accuracy of their self-assessment. This is especially true if they do not love experience in the Grand Canyon.

In terms of reservations: If you can reserve a year out, I would be concerned many people would block out the dates, especially more experienced, professional hikers or returning hikers. There would also be more cancellations and no-shows. A real-time online service could create situations in which people would make uninformed and potentially dangerous trips, just to get a reservation. It would pressure people to make quick decisions and might not maximize the most efficient use of the available capacity.

All the heavily used sites should have backcountry toilets. Hermit Creek was pretty bad.

### Grand Canyon Backcountry Visitor Study May Comments

“I realize demand is heavy. Permits are issued first day of each month for fourth month away. Sequence numbers to designate order for permits are given up to five or six days prior to first of month. If I want to take a large group (7-11) the only chance I have competing against the commercial guides is to drive to the Rangers Office (five hours) and take my chances. If I mail a large request of fax it in, it is virtually impossible to get a date. An online system sounds interesting. If possible, I would like a summary.”

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“Instantaneous, electronic permit application/confirmation would be very helpful.”

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“Hello. On my trip I thought I could go down to the Colorado River from the Horseshoe Mesa. I was wrong. I feel maps with distances from point to point (water stops) could be in more detail. On my hike down the Mesa I got extremely dehydrated. By the time I got back up the Mesa I was not able to hold anything down. I consider myself in extremely good shape. I competitively train, and run, bike, and swim over ten hours a week. Due to my dehydration I almost did not get out of the Grand

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

Canyon. I feel water along the trail would help. Also, maps or trail markers with distances on them would be great. The Horseshoe Mesa was a beautiful place. I would love to hike in the Grand Canyon in the future. If you have questions on my trip (name, phone, e-mail).

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“Question 3.15g is misleading. Anything found should be left where it is found, not carried out and turned into the Park.”

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“We are experienced backpackers and some of our answers were based on that background – for example, the video is excellent but didn’t tell us anything new. The NPS does an amazing job allowing visitors into the backcountry – given the number of people they must deal with on an annual basis, the service, facilities, trails, etc. are wonderful.

The large guided groups we have encountered for the last two years were not well prepared, did not know how to camp in the wilderness, and their guides were ineffective. More training and licensing of guides is necessary. Thank you to all the rangers and interns who keep the Grand Canyon grand!”

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“In years past, talking to rangers in the Canyon, it appears that rangers today are only in the backcountry to check permits, the itinerary, and to issue fines for those in the wrong place, wrong time, or with no permits. One ranger called this process a blitz – to cover as much territory in the shortest possible time. My experience in the backcountry over the years has been that it is not an exact science. Sometimes unexpected things happen. Sickness, injuries, heat, no water, other hikers with problems in your campsite. The two times this has happened to my group – the ranger(s) were very uncaring, quick to write a ticket or to threaten to. No rules can be broken or changed, no matter what. This kind of attitude can ruin a vacation. I’ve always believed that rangers were to help protect the wilderness – not to make dollars for the Park. I am tired of paying for permits, to camp, to park, to use high traffic trails (after I’ve paid to get in the Park), to day use an area, to picnic in an area, or even to drive in an area (not all of these are Grand Canyon issues). My complaint is with the rangers’ attitudes: I think they need to lighten up and become people once again, leave the guns at home, and take the dollar signs out of their eyes. I love to meet and visit with new people, but I’m beginning to avoid any contact with a ranger anywhere because of their attitudes. Perhaps not all rangers are like this, and I have not met the exceptions – I hope so.

All other experience with permits, processes, information, etc. have been pleasant.”

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“We were extremely displeased with the fact that the rafters don’t have to follow by the same rules as the hikers. We have to plan an itinerary and be approved for a campsite to avoid overcrowding. They just pull up on a beach. The result is overcrowding and the hikers are the ones who suffer. Not to mention they had the best spot for fishing blocked so I had to hike down and back to get out of the rapids (I’m just being petty now).

Overall, I had a great trip. I saw a condor and a satellite, and was recharged for the headaches of work. My fellow hikers didn’t enjoy their trip as much.”

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“The only complaint I have is the wait from the time you submit your request until you receive confirmation. Two to three weeks seems a little long.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

The Grand Canyon is my sanctuary and the annual trip helps me stay centered. The solitude and reverence for the Canyon are sacred – please don't change that ever.”

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“Regulations could be stricter – fewer people running the river and fewer permits for primitive areas would be nice. There were more people than I expected – now I know there are a lot of people on every trail no matter how remote.”

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“The composting toilets are truly disgusting to use. Perhaps they could be emptied more often or designed differently.”

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“The permit system should make exception for sick hikers who need to hike out sooner or stay longer, depending on the situation. One hiker on a trip became sick and had to rest an extra day.”

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“My only concern is regarding the permitting system. The first day for submission of requests is obviously very busy. I faxed my request on that day (holiday, office closed). Even so, I could not get my itinerary (got one night, not two), and did not hear for several weeks. Suggest that process be more responsive and immediate. I have used the NPS reservation center for many different facilities and have been quite pleased, both using the Web-based system or the call center.

I am not certain how reservations for group or individuals differ. Perhaps this could be clarified.”

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“New Hance Trail rocks!”

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“Posting water availability, especially in the early summer, would be awesome. I arrived late the night before my trip, and left early in the morning for my hike. Luckily I encountered a hiker coming along my route (South Kaibab to Grandview via Tonto Trail) who told me about water.”

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“This study needs to split private vs. commercial river runners.

Aside from corridor trails, the backcountry is in excellent condition. “Crowding” and impacts are negligible.

Commercial overflights and commercial raft trips are out of hand. They need to be severely restricted. The private rafters I met were great; the commercials were arrogant, noisy, and took over any beach camp they wished to, whether occupied or not.

In the NPS, all too often “front country problems lead to backcountry restrictions”. Correct front-country access and development; the backcountry will do just fine. It often seems that backpackers are the only user group the NPS regulates, and that they overcompensate for their inability to regulate concessionaires, outfitters, researchers, and bus tours by over-regulating private backpackers and river-runners.

NPS spends too much time and effort managing and tracking backcountry permits and too little effort in streamlining the process.

Parks Canada has better for backcountry management, and I recommend any NPS backcountry manager spend time in the Canadian Rockies.” (business card)

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

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“The trip was excellent and I have only one negative comment. The NPS exaggerates the dangers. When I requested the permit for my hike along the Hermit Trail, I received the answer that this would be a “life threatening” experience. I told the NPS that I am very experienced but nevertheless they advised me not to do the hike (an alternative was not offered). I ignored the advise, got the permit and did the hike, which showed me that the hike was tough but easy to do if well prepared and not all a “life threatening” experience. I do understand that the NPS tries to prevent inexperienced people running into all sorts of problems, but in my case it leads to a situation that I am inclined to ignore their advice in the future. (name)”

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“Remove the mules from the South Kaibab Trail.”

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“(written in French)”

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“Interaction with the rangers was a highlight of this trip. I returned home after the trip to discover I was experiencing a significant health event during the trek which probably caused the event to be special in a new/different way. Should you like to know more, call me (name and phone).

Park staff – A++++

Permit issuance – A+

Backcountry management – I fully appreciate the challenges and think a good job is being done - but maybe there is something even better in the future.”

-----

“We have hiked numerous times in the Grand Canyon during the last ten years. We (my husband and I) love it! I generally agree with the current Backcountry management policies with the exception of a few things: 1) there should be more restrictions on low flying aircraft, 2) there should be further restrictions on the use of motorized rafts on the river (i.e., motorized rafts may only be used a specific number of months – I don’t know if there are already restrictions in place because I don’t raft). As far as the permit issuance system, I would really support a “real-time” Web-based system where you get instantaneous feedback on your trip. To be honest...the current system is a “pain in the butt”, but I do appreciate the fact that it limits the number of people and groups you may encounter. Generally, I think you are doing a great job at running the backcountry in the Grand Canyon especially with the limited number of staff and decreasing financial support. I like the changes you have made to the South Rim (i.e., buses, reconstruction, etc.). Keep up the good work! We appreciate everything the park staff does to make our backcountry experience so wonderful!! ☺ Thank you for asking my input on this survey.”

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“The current river permit allocation system is unfair. Private boaters are being denied fair and equal access to river permits for the Colorado River, due to the lobbying efforts of the commercial river running business. This needs to be changed to equal numbers of permits being allocated for private and commercial river runners! Thanks.”

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## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

“We thought it was really well set up for the whole process of booking, etc. It was difficult – it took us two years before we got in and made it harder to plan our American Trip. But, we loved the Grand Canyon. Because it was difficult to get an accepted itinerary we went wild and put as many options as we could, which is why we put the Clear Creek Trail. That was definitely too much for us in the heat (100 F) but we just needed to get a permit. The desire to get a permit overrode the difficult factor.”

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“Actually, after years of avoiding GCNP due to stories of problems getting permits, I finally started applying. And, lo and behold, after about twelve trips, I have yet to have a single problem. In fact, I don't think I've ever not got what I requested. From calling on the phone (I usually get through in one or two tries) to getting good information, to getting (and sometimes changing) my permit, every step has been a piece of cake. I think general staff and permit policies/systems get a bad rap.”

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“Real-time Internet registration for permits and better direct contact with park service staff when registering/obtaining permits. All staff managing permits should have the same set of data and immediate Internet access to that database. Better, more detailed maps and database on backcountry features.”

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“I really had no problems with the system. I had done research on a canyon trip a year before, but decided to go somewhere else since my brother (and U of I alumni) had been there before (so I knew rules going into this trip and understood why rules exist). We decided to summit Mt. St. Helens, take PCT to Adams and summit it instead of doing something one of us had done before. It was a perfect trip for me and my dad, though he said he wouldn't care to go back and would rather go places with lots of water.

One Ranger, Maveric, was most helpful, if not overzealous, to the point of making it sound easy\*. It's not. I think if all permit applicants were warned about the Canyon (to the point of peeing pants), then drilled thoroughly by mail once they obtained permits, then again at backcountry office, the Canyon may see fewer overnights and save the rangers some grief. Overall, I enjoyed the trip from getting permit to the Pepsi machine and T.H.'s end. Would like to visit again with brother and cover more ground, see even more. Only serious distraction was constant chopper noise.

\*Much to the aggravation of the other rangers. I liked him though!!”

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“The pit toilets needed emptying. Almost full. Any attempts to lower motorized noise in the Canyon is good.

The Grand Canyon is one of the many sacred “wild places. All need preservation.

I'm a firm believer in the wilderness being able to absorb human fecal material back into its natural cycles.

I love that the Canyon is relatively “inaccessible” to the majority of hikers. It takes a real commitment to have the confidence to go in there (unguided).

Guided trips are not real adventure. They are a service to pseudo outdoors people.”

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“I think the current permit system works well (having used it three times with no problems). The only drawbacks I see are that it really limits spur-of-the-moment trips and you can't have your heart set on

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

a certain itinerary' you've got to be flexible as it often comes back changed a bit. However, I think the four months in advance is necessary to control impact on the park.

It would be handy to have Internet reservations, but I'm satisfied with the paper ones and wouldn't want to pay more. I really don't like the idea of earlier applications because basically says "if you have money, you get preference" and the parks are for the people, not the elite/rich. Thanks."

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"I normally do long (15 day) hikes in relatively remote places and visit popular places in the off-season (winter, early spring). I have over 100 solo days in many different areas. I think that people like me pay the most and get the least. By "improving" old and abandoned trails you create more potential problems for those who are unprepared. The difficulty of the Backcountry should be self-regulatory. You should charge a toll for maintained trails and a fee for paperwork. But when you have to drive sixty miles on a crappy dirt road or walk ten miles down a track because you have not graded it in ten years or through downed trees and rocks that flatten times, to hike off trail or on unmaintained trails then you should out charge a nightly fee. Also, the rangers have almost always been helpful, but I don't normally need them."

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"Being able to see what is available online would help trip planning immensely. By the time you hear back via mail it is too late to modify plans and trips are canceled instead of changed."

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- "1) The help at the Backcountry office is dependent on who you get. For the most part the females are the biggest problem. They assume that it is everyone's first trip and try to change what you have for a plan, before they ask if you have done this type of trip before. Most of the guys ask before they try to change your trip. There has been one exception each way for the 10-12 permits I have put in for.
- 2) Once you are away from the corridor the rangers are a help. In the corridor they act like you are there wrongly. The rangers on the Rim are just a pain (I do not hang out on the Rim, just park and go in). If I cross one between the parking and the trail, here comes the fifth degree.
- 3) Online reservation would lead to more no-shows, restricting the numbers that get to enjoy the Backcountry."

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"I was not clear that stepping up from corridor trails to threshold trails was such a huge leap in difficult."

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"Two things/disagreements:

I want to bring attention to the quota system and limit to nights in zones.

1. We were asked to start hiking one day later than we planned, yet we heard from the author of our guidebook (Grand Canyon Loop Hikes by George Steck) that we were the first party to repeat the route since 1989. People have repeated day one down 150 Mile Canyon as a weekend trip, but not descended farther towards the River. People appear to hike up and maybe roundtrip using Tuckup Canyon as a destination and may reach the River. It became evident that we were grouped for quota with boaters camped on beaches along the Colorado River far from our route. We were essentially competing with boaters for nights in our zone.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

2. Seven night limit per camping “zone”. In my previous trip we started in middle of one zone and ended in middle of another over an eight-day period, so we could have hiked twelve days if needed. But on this trip 150 Mile Canyon is on east side of a zone and return was up Tuckup Canyon on west side of same zone – two days down 150 and five days along Colorado River to Tuckup put us at limit of days in a zone. We were forced to camp three hours beyond Tuckup at Fern Glen Canyon then return next day to begin two-day ascent of Tuckup and loop back to our car. This delay put us late reaching water on ninth night and we felt forced to break rules and camp above this point in Tuckup rather than adhering to the permit and hiking three hours after dark up Cottonwood Canyon. We felt guilty doing this as we want to preserve the wilderness feeling. I suggest the following:

First: Boaters are restricted by geology to beaches while backpackers, days away from River in the same zone, should be counted separately. Backpackers also have a choice to camp higher in most cases when boaters are below on the River. We were equipped for dry camps.

Second: The spacing of zones in areas such as ours perhaps should be flexible for hikers, realizing boaters are making up the big numbers below along the River. Hiking was difficult, averaging three miles per day along the Colorado River with no outlets we could only hike out of our trip area to meet quote, even though we were the only two hikers in the entire zone. I have the feeling ranger staff has to look the other way/or be flexible in the case of hikers sharing zones with boaters. Perhaps there is a resolution, i.e., hiking zones vs. boater zones.

Thanks for working on this project. Feel free to call us – my work 8:00 a.m. to 5:00 p.m. Monday through Friday PST, (name, phone, e-mail).

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“I have interacted with the park staff numerous times since my first visit in 1989. I have never had a truly negative experience; they are always friendly and professional.

On my last trip there was quite a bit of trash and human waste on the beach at Hance Rapids.

‘Real time’ online permit application and approval would certainly be convenient; however, unless severe penalties for frivolous applications and “no-shows”, the system could turn into a disaster. Thanks (name).

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“If staying on the trails is justified (in part) because of the insecure and unsafe act of hiking off-trail, then the trails should be kept as safe as possible...meaning even backcountry trails should be maintained.

One point on the Boucher Trail is outright dangerous (“if you fall, you die”). If the trail is dangerous, then why stay on it?”

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“This booklet says you can make your reservation four months in advance. I thought it was five months but in any case I think a longer time would be a bad idea. Plans change and there might be an increase in unused permits. Three to four months seems about right. Having a permit in hand three months ahead of time helps if you have to coordinate a trip from a long distance away from the Canyon.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

The hotels in the Park have instant online booking. It seems that it would not be much different to set up the Backcountry permits the same way. I would say however that once I wrote down the wrong code for a use area on my permit request. The ranger processing my request noticed the mistake and I was able to get the trip I wanted.”

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“I have, on two occasions, encountered people who were camping in the Backcountry without permits, once at Cottonwood west of Horseshoe, a couple in their early 20s – tent hidden. This May ('04) we encountered two women from Colorado, both rough-looking types, very cagy, at Yuma Point and later at Boucher Creek. This group camped nearly on top of us and I found them to be unsatisfactory. In both instances they didn't try to hide the fact that they didn't have permits. Also, last May we encountered a trio of teens from South Carolina who were separated, lost, and trying to hike from Hermit to Boucher at Noon on two quarts of water. Their plan was to get water at Boucher, then up to Yuma and dry camp the next day with six quarts between them! If I had any complaint it would be of folks getting into the Backcountry illegally, and who shouldn't be there because they don't know what they are doing.”

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“Park staff should ensure that hikers are well-prepared. Thanks.”

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“I don't think people waiting in line at the Backcountry office should be given preference to those that fax or mail their application. The permit system should be as fair as possible with no preference given except by date or order in which the permit applications are received. People waiting in line should put their requests in with all of the rest.”

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“I feel that a few more signs should be added in the Canyon. The signs could tell mileage to certain areas. I had a hard time on one trail trying to identify if I was on the right trail or not. This was very frustrating. On my last leg out of the Canyon from South Rim to North Rim, I had to spend the night on the trail because I was unsure if I was on the right trail or how far to the Rim. (I was actually on the right trail, and a little more than 1.5 miles to the top of the North Rim.)”

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“During Backcountry tip, which was a Rim to Rim, we came across a very large rattlesnake next to the trail and were nearly bit. We were lucky! However, after the experience, and pictures, we realized how dangerous it could have been due to at least two hours to find someone to call for help. We were roughly half down from the North Rim Trail of Bright Angel. We were not prepared should one of us had been bitten.”

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“I hiked the Tanner Trail in part because it is an un-maintained wilderness trail and therefore likely to be less used. I have no desire to hike a main corridor trail with lots of people and established campsites. Current quota system is okay. Online permits would be nice, just to save waiting to find out if I got the permit I requested (which I did).”

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## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

“Way too much regulation. The Canyon is huge and could withstand far more hikers. Even if there was no permit process at all, there would be more than enough open areas to go. I felt like I was regulated by Big Brother.

It is impossible to plot out your exact coordinates months in advance in an area you have never been before. Yet the NPS expects you to do just that. Also, it is impossible in many cases to predict exactly how many hikers you will have in your group months in advance. The information required on the applications is ridiculously burdensome.

Again, the Canyon is HUGE and has many great places that are away from established trails. The NPS's permit process makes it unnecessarily difficult to explore these areas. The only way to explore them is to defy the permit and go off your itinerary. It would be better if backpackers simply signed in at the beginning of their hikes and gave a general description of their directions.”

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“Ranger staff was very helpful in recommending a better trip than I had planned. I am convinced my experience was better for it.

The camp sites were in great shape. Trails were very clear. The few other people we met were very nice.”

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“I really appreciate this opportunity to be involved in this study. My hiking partner and I backpacked in the Grand Canyon twice in the late 70's and early 80's, and have spoken often of going back. As we were approaching our 50<sup>th</sup> birthdays we decided we had to do this soon. We've been out on the trails in California in recent years, improving our skills and equipment.

18 months before the hike we started seriously planning and four months before the hike I applied for the permit via US Priority Mail. Our itinerary was accepted and I had the permit package in my hands within two weeks of mailing it to the Backcountry office. Our trip was to the Nankoweap/Kwagunt creek areas.

The zone system works okay – it is not as free as being able to do whatever you might like to do, but with the number of visitor days some limits need to apply. We were in the canyon for 16 nights and only saw other backpackers on two of those days. We saw river rafters on four other days while along the river.

I found the information package to be helpful, and I believe some video or DVD format is important for the visual impact. Overall the package was thorough and included a description of the only trail in the area recognized by the park service. I phoned the office after getting the permit to ask some detailed questions on water sources, etc. and found the ranger to be quite interested and knowledgeable.

### OUR ONE MAJOR COMPLAINT: AIR TRAFFIC

We both believe the number of helicopters should be severely limited or 'best case' ELIMINATED as a means of sightseeing over National Parks and Monuments/Wilderness areas. These noisy machines with their rotor wash and loud engines have no place in such a peaceful environment.

### NOTE:

- 1) We both realize that our parks are for all to experience the best they can, and not all people have the time or physical ability to enjoy the backcountry as we did.
- 2) Airplanes are not as disturbing and one type in particular was very low impact. The planes we 'liked' the most were red and white in color and of a design similar to airplanes of 1930 to

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

1940 technology – slow moving prop with the wing above the fuselage. These aircraft carry many more people, on one flight, than any helicopters we saw. (At times it seems like two to four choppers were being used to fairly larger groups of people along the same flight paths in close procession – choppers also have a tendency to fly too low, and well below the rim in this northeastern section of the park.)

Writing this reminds me of the tension this air traffic added to our otherwise great experience.

(RAFTS) We were both surprised how ‘quiet’ the newer motorized rafts were, the ones with semi enclosed motor wells, and found them less disturbing than in the past.

We need to find ways to compromise on these issues so our parks and wilderness areas are not despoiled by mechanized travel.

On the idea of guided hiking – I think it would be fun to be a guide but I believe any system should limit the number to below 10 or 20% of all permits, particularly in heavy use areas, and I do not believe any system should be set up that allows people to pay more to gain priority in OUR parks. Wilderness use is elitist enough as it is. Thanks again. (name, address, phone)”

### Grand Canyon Backcountry Visitor Study June Comments

“Campsites at Bright Angel crowded. Trails eroded, difficult to hike, due largely to mule use.”

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“Just to emphasize that I would like to see an improved online registration system.”

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“The first week of June 2004, we (three of us) showed up without notice at the North Rim Backcountry office. The ranger on duty gave invaluable help. He steered to exactly the place that fit our specifications, which was to get away from the hordes of people at the North Rim. He sent us to one of the last remaining virgin stands of ungrazed Ponderosa pine in the world. It was a magnificent and unforgettable experience for myself, my best friend, and my teenage son.”

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“Need more information about Backcountry trails and conditions, wildlife on the Website. Not only about well established trails like Bright Angel, Kaibab, etc. but other possibilities in less explored areas.”

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“I think the current Backcountry permit process is fine. My only recommendations are that the campsite toilets need maintenance and the trails need maintenance.”

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“I would like to take this opportunity to protest the closure of little-used roads to points of remote access.”

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

Recently I was stopped at the park boundary on the Graham Ranch Road while attempting to get to the Schmutz Spring trailhead in Tuckup Canyon. Then I was stopped at the Tuckup Rocky Point Road while attempting to determine if Willow Spring had water.

Wilderness is good, but is the public served by a no-access policy? I think not, and wonder why little-used roads have to be reduced to no-travel.”

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“Especially the upper part of the North Kaibab Trail is very dusty and littered with mule droppings. Less mules?  
Overall an unforgettable experience!”

“Too much litter on the trail and we could tell the animals were being fed often. More education necessary and maybe stronger presence of rangers.”

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“Permit approval or disapproval comes too late to make reservations for air travel and lodging on the Rim before and after the hike.  
Would like to secure a permit online at least six to eight months in advance so travel reservations could be made. Can’t understand why the fees would be increased.  
We hiked on the North Rim (North Bass Trail) during June ’04 and we had a difficult time finding the trailhead. We rarely see a ranger on the North Rim.”

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“The current permitting system, well actually the fee structure, is designed to penalize the more experienced Backcountry user who uses and/or requires fewer facilities and has much less negative impact on the Canyon. The average overnight stay (in the Corridor, on average) is about two nights – but this “average” stay requires: purified water, a sewage system, electricity, two maintained trails, two suspension bridges, various footbridges, picnic tables, “squirrel poles”, multiple 24/7 rangers on duty, mules, and fucking helicopters! How much does all this extraneous shit cost, \$500.00 per user night? \$1,000.00? More?

My average off-trail trip lasts six nights and requires NOTHING from the Park Service, and yet I am paying more because of the “per-night” fee. The fee needs to be changed to a flat fee – say \$20 per person – to more fairly address the facility impact of the short-time user.

Not to mention how much less impact on the Canyon itself is generated by the experienced user. I have packed out all manner of trash: sleeping bags, tarps, clothing, frying pans, trash, used toilet paper, cigarette butts, makeup – you name it – that was ditched by moronic newbies because it was “too heavy” to carry out. I know I’m not alone in this, as my friends have done it, too. Therefore, I have a net POSITIVE impact on the Canyon – hell, the Park Service should be paying me to hike!

Well, I don’t really expect that, but changing to a flat fee would be nice.

P.S. – ban motorized river parties!!!”

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“I was disappointed by the fact that all four of our possible itineraries were rejected, even though we applied three months ahead of time. When we were there, the number of other groups was perfect.

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## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

"The pile of equipment at the campsite and food left in boxes."

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"Do everything possible to keep cattle out of the park."

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"I have always been greatly satisfied with the Backcountry staff. They are knowledgeable and very friendly.

I only wish they had offered me the annual Backcountry pass that waives the \$10 fee. I had taken at least five trips before they offered that. I also wish they would add another phone line for permit requests as well as extend the hours the phone line is open."

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"I would love to see more trails maintained so that they are okay for the average Canyon backpacker: North Bass, Boucher, etc. I have done many Canyon trails on day hikes as well as backpacking but I would love to do more, maintaining the more difficult trails would enable me to do this."

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"Ranger communication by phone was excellent. All questions answered well."

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"At Phantom Ranch a trail should be available from campsite to concession area that is free of mule dung!  
Need stronger ranger presence on overcrowded Bright Angel Trail. We encountered a large group of 20-30 young males running down the trail while we were coming up. VERY DANGEROUS. Better and more frequent trail markings noting distances to campsites."

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"The permit issuance system without a doubt must be overhauled and better use of computer technology utilized. The ideas mentioned in this survey hold promise.

To me the most important issue is the overuse of the Backcountry. Perhaps more appropriate is the misuse of the Backcountry, since once a person or group is in the Backcountry they are on the honor system to conduct themselves accordingly. The amount of toilet paper around campsites during my last two hikes in primitive areas tells me some folks can not be trusted or relied upon. The most rudimentary type of facility would help, after all only so many cat holes can be dug. Education and accountability should be emphasized. Greater visibility of rangers in the Backcountry would assist in keeping people in line. As with the US and Russia during the Cold War, "trust but verify". (name) Please let me know if I can be of further assistance."

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"No other comments.

The questions do not really cover when you are backpacking in remote areas and camping in "at large" – you find a spot that is comfortable."

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## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

"I liked the quick response after faxing in my trip request. An online direct system would be even better.

I've done two commercial Backcountry trips (this last one was not). The guide was outstanding and very respectful of the park and regulations (Grand Canyon Hikes was the company.)

The disappointment in my last (solo) trip was due to natural things (too many bugs) which in itself are all part of the wild, natural experience. The Park Service Backcountry permit system (faxing it in) is a great improvement over the old system where you must go to the Backcountry office (in this case on the North Rim). That shoots almost a full day by the time you get back to a remote trailhead like I went to.

In question 2.3 (about the video) I listed "neutral" in my answers. That is because I already knew that information, but many people probably don't and it is a good idea to send one along with the permit."

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"I have found the park staff to be extremely helpful and friendly.

I like the permit issuance system. I live in Flagstaff and appreciate the fact that locals get the opportunity to purchase permits first.

I've had to change a trip because one day of a four-day trip was maxed out on the number of groups – although still well under the maximum number of people. It would be nice if rangers had some leeway in overriding that – especially in remote areas where only a couple of groups are allowed. Thank you."

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"An excellent experience, plentiful drinking water, helpful staff. Four large riverboats passed while we were at the river. Didn't notice any litter. Lots of people making the trip to Indian Gardens – past there it was serene and quiet."

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1. The only part that really disappointed me was the litter. It would be great to see more signed up (drew a no littering sign).
2. I truly appreciate the fact that the NPS and U of I are doing this to better the Grand Canyon. And who am "I"? Just a person who loves all outdoors, so thank you."

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"I think rafters should have regulations regarding taking over campsites where backpackers already are camped. I don't mind sharing an area, I expect to when I stay at Granite Rapids, and I usually like the interactions with the rafters. This time and a couple other times, the raft trip literally set up camp all around me, tied their ropes one inch away from me, walked on my ground cloth, etc. – didn't even ask. I protested but it was 20 to one. The commercial trips are usually fine, I guess the private ones know there's nothing I can do and take advantage of it. They should have to display a permit number and have a system of fines is reported – some consequences rather than who has the largest number of people. My trip was great except for this group and the overhead noise of the constant helicopters."

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"Keep the Backcountry rugged and inhospitable. Limit permits issued. I don't like the current permit issuance system. You get one shot over the fax machine. You can't call to verify if the fax has been received."

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## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

“My attempt to find the Tuckup trailhead was a failure – very confusing. I had tried using a state atlas with Backcountry roads printed on it, but there were many more roads on the BLM land. I suppose I should have consulted with rangers, or a better book, but neither were available as I approached the Pipe Springs remote station. (I did not want to drive to North Rim and back to Toromeap Road.)”

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“The deterioration of the forests.”

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“The current reservation system sucks, unless one appears in person. Previously, when attempting to get a reservation, I had no second choice. In every instance my application became void. On one trip, I had to make four reservations to make a two-day trip—ridiculous!!! This definitely needs to be changed. The Grand Canyon has too many fat-assed purists who can’t walk to the first water station on Bright Angel. Tour buses are too numerous. All gift shops except Verkamps should be closed. Hopi House is an abomination as an architectural structure. There is so much out of sync at Grand Canyon, it would take a book. I think I’ll write such a book. (name)”

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“The trailhead at Bill Hall Trail is in need of toilet facilities. We noticed toilet paper scattered all over the place a few paces from the car parking.”

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“It was a wonderful experience in every way—with one exception. The ranger who gave the amphitheater presentation Tuesday evening, June 8, 2004, on the South Rim – I believe it was titled something like ‘The history, wildlife, and wonders of the Grand Canyon’ – was terrible. Usually the rangers are wonderful. I have such fond memories over the last 30 years of the programs at various national parks. They are usually very special, a highlight. This guy on June 8 was tacky, not elegant, just didn’t get it, missed the mark. He made us cringe!”

“Everything was fabulous with one minor exception – the necessity to mail in the wilderness application. I had to submit an application four times.

First time – told campground (Bright Angel) was full. (My fault – I didn’t request alternatives.)

Second time – I gave three alternative campsites, all in wilderness areas but application was rejected because I didn’t check off the proper box at top.

Third time – application tentatively approved providing I swore on a stack of Bibles (a slight exaggeration) that my brother and I were experienced Backcountry hikers and would not require the Park Service to chopper us out.

Fourth time – approved! (over one month later)”

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“I definitely felt that the information sent out with our permit, describing what the trails we would be hiking on were like, was extremely accurate (which is essential). Also, we received a very different itinerary than the ones we originally applied for. But I can’t complain because the ranger who handled our permit was looking out for our best interests, which was noted in the letter he sent with the permit. He said that he felt the changes he made would allow us a safer, more enjoyable hike. I like knowing that he took the effort to consider our itinerary and our safety. And as it turned out the itinerary he gave us was awesome! The people in the Backcountry office were extremely helpful and friendly, not to mention knowledgeable! We stopped in the office the day before we started our trip, and asked questions about where to park our car. The ranger who helped us gave us great directions on what to do and where to go.”

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

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“Get rid of noise pollution, e.g., aircrafts. Commercial hiking groups should not be allowed. And lastly, I think it’s time that Phantom Ranch changes its menu. Thanks. (name)”

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“I think the Grand Canyon Backcountry is well conserved. We picked our route because it is less traveled than some others in park and our agilities were up to it. We saw a ton of wildlife – the highpoint of the trip. Only downside was aircraft noise, which was to be expected given our trail. Hated that.”

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“There were a lot of loose gravel/small rocks on our trail. It would have been nicer if those could have been cleared.”

### Grand Canyon Backcountry Visitor Study July Comments

“I was very impressed with the park rangers. The gentleman at the Backcountry office was excellent. He gave me a lot of great advice and he did things quickly so that I could leave quickly due to the time of my arrival. The information and service at the Phantom Lodge was also excellent.”

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“Excellent ranger staff - knowledgeable.  
With the vast amount of mule use in the corridor, they really should have receptacles to catch waste!  
It is not that difficult to do.  
Internet reservations would be great!”

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“The park staff has always seemed willing to go out of their way to be helpful. I live nearby and spend time at the Canyon and don’t like the Internet, but I realize not everyone is as lucky. So I’m happy with any system that preserves the Canyon and keeps the experience as close to true wilderness as possible. (but compost toilets are nice) (name)”

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“Extremely helpful man in Backcountry office. My enjoyment of both Grand Canyon and later Zion was based in part on his positive attitude and kindness. Ensuring such good ranger service is crucial to a positive natural park experience.”

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“Backcountry staff needs to be more pro-active. Presently just re-active.”

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“We had a remarkable adventure in many ways...  
Because our backpack permit did not arrive in the mail as it was supposed to, we stopped at the Backcountry office to obtain a printout of our permit. We knew the permit had been processed because the charge had shown up on our VISA card. The bad news was that we had to take the time to find the office and go through this step, which we probably would not have otherwise. The good

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

news was that the rangers were wise enough to advise us that our planned hike down the Kaibab was not a good idea – we were getting started too late in the day, and it was too hot, although we felt we had adequate water. This was a couple of weeks after a (very fit) hiker had died out on the trail.

So, we needed their advice and hiked down the Bright Angel instead. While I did not enjoy the overabundance of other folks, nor the multiple mule trains, at least we were on a better route for our level of experience and intentions. In all we felt this turn of events was rather providential. In hindsight – if we had received the permit in the mail, we would have just gone to the Kaibab and started down, not realizing the potentially bad situation we were getting into.

Unfortunately I injured a knee hiking into the Canyon. The injury made it impossible for me to continue with my family to our destination. The good news is that we were on Bright Angel and not Kaibab. Kaibab would have been dangerous given my condition. Also we were near the Indian Springs Camp area, so we were able to stop there and, as it turned out, spend the night. The ranger there was pleasant, but I was a bit disturbed that she did not have much to offer if it turned out we could not have stayed there for the night. I think she was following protocol, but I felt my only alternative was to rest, and try to hike out in the middle of the night with a bum knee – I don't know that I could have done it. I think it would be helpful if Rangers had more options to offer – such as keeping one campsite as “emergency reserve” for an injury situation, or at least explaining the emergency rescue options, although I'm sure those are expensive, and not practical for many situations. As it was, I felt her attitude was sort of: ‘Gee, tough luck, greenhorn...’

Other than that – the trip was beautiful, and a great family experience. My two sons hiked to the bottom of Angel and spent the night at the camp near the river.

Oh yes – while the general information was good regarding the fact that it is HOT and you need lots of water – I don't recall reading anywhere that it could be 130 degrees – which it was (in the sun) – and that without shade this temperature can kill you (which the ranger had indicated). More specifics regarding the dangerous conditions would be appropriate. We saw many people hiking with little kids and elderly folks and others who looked VERY unprepared. I wonder if there should not be a “checkpoint” part way down the trail (like not more than one mile in) where rangers would look over folks and their gear to recommend whether they are prepared to go farther...(it seems they do this informally, but apparently not effectively).

Hope this helps.”

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“It is possible to arrive at campsite without permit. The information is there, but less informed/prompted to inform themselves there could be a better checking of permits and permit obligations.”

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“Park rangers were wonderfully helpful and courteous (and patient).  
Need a place for the rescue copter to take people on the North Rim.  
Strongly encourage that rangers recommend hikers NOT camp in the Deer Creek/Thunder River area in July and August. Even if you plan well for the heat...it's still just too hot there.  
Seven previous Grand Canyon Backcountry trips went fine. First July trip – too hot = last July trip. ☺  
It would be nice to have an 800 number to call to talk to the Backcountry office. Not having that, it would be nice to not have to dial 27 times before getting through. ☺  
An Internet reservation system would be wonderful!”

“The number one item that detracts from hiking in the Grand Canyon is noise from planes and helicopters. This should not be allowed.”

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

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“On corridor trails in the summer it would be nice if the shuttle were available earlier. Also, if you are waiting on a permit, the Backcountry office does not open until the sun is really blazing. Open earlier and let the people get moving.

The portable toilets at Deer Creek and Upper Tapeats were more disgusting than normal this year, especially Deer Creek. The tourists from the river had really messed it up.

Both of them are sitting right out in the open. It would be nice if they could be placed under a tree or behind some brush. Everyone in the area can see you on the throne at Upper Tapeats – for me digging holes is much preferable.

For us, the current permit system is fair and equitable. It bugs me a bit that locals and guides can get in on the first open day, ahead of the faxed-in permits, but it never impacted my plans.”

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“I and my two sons, ages 15 and 7, enjoyed ourselves very much and plan on returning in 2005. The only thing I would be concerned about is the way they are changing the trail. Whenever they installed the juniper tree logs it made it much harder to hike. It seems to me the trails are being made for the mules instead of people.”

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“I have been Backcountry camping on the North Rim for about ten years. This last trip, the increased annoyance of bugs and manure was very disappointing.”

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“I think that it would be very sorry if folks couldn't show up and go camping that same day because people had reserved all the spots too far in advance. Please leave a few spots for those of us who don't have the luxury to plan in advance!

Trip itineraries, though I'm sure are appropriate to regulate the use of the areas, don't matter much to some of us. The campsite we wanted to use was on the river, but our itinerary showed one a mile back, supposedly because the river sites were already full. Turned out there wasn't a soul in sight at the river, but a few groups were camped at our planned spot. Regardless, we would have found us a spot in the vicinity of the river. Please allow the campers/hikers a little freedom to explore and enjoy themselves.

The Grand Canyon was very beautiful, and my friends had an awesome time together in the Backcountry. We had plenty of solitude, sights, and sounds. On the whole, I did not find the Backcountry in the Grand Canyon to be altogether very intriguing, but it was a good trip.”

“The first time my wife and I hiked the Grand Canyon (around 1989), by the time we acquired our permit and hit the trail it was 12:00 Noon. That process took too long – end of June. That is the wrong time to start hiking. Also, we met a Backcountry ranger. It was an interrogation, not a greeting. Yes, he left us know he was in charge and had a gun! We had our permit on our pack – everything was in order. Good grief!!! In my working profession, we do not have attitudes.

On second hike to Grand Canyon with wife and two sons, permit sent in by fax. No problems – saw no rangers on trail. Rangers in Backcountry office were helpful.”

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## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

“My father turned 60 this year and this was his first backpacking trip ever. I lived and worked in Grand Canyon National Park for four and a half years and have dealt with the BRO on many occasions, with positive results each time. If there is a problem with the entire system, it is the nickel and diming that happens at Grand Canyon. It's \$20.00 to get in, \$10.00 per party and the per-person per night fee. Start adding it up, throw in gear and it starts getting priced out of many people's range. It is not like backpackers get much in return. I've never seen a ranger in the Backcountry outside of the main corridor. Hermit Trail does not look like it's seen a trail crew in 20 years. When one gets into dispersed camping zones with no trails and no facilities, one is forced to wonder if the fees are going for anything other than remodeling yet another failed attempt at rail transit on the South Rim.”

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“I thought that the current permit issuance system, while tedious, worked well and probably served to weed out some who would not respect Backcountry rules. It still would have been nice to register online.

We visited a ranger office on the North Rim and were very happy with the help and guidance we received. The ranger also told us that the office would be closed next year due to lack of funds. I think that while it may be necessary, it will diminish the quality of the Backcountry experience.

Backcountry camping on the North Rim was excellent. Few people, beautiful wilderness, and helpful rangers.”

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“We had no disappointments. This was my seventh time into the Canyon. I took three friends who had never been in – all younger than I – all of us were physically fit and had trained for the trip. The rangers warned us that we were planning a dangerous three days and typed it on the bottom of the permit. It reminded us to train properly and to carry our two gallons of water daily. I called the Backcountry office three times for information – each time they were friendly and very helpful. I believe your phone and fax system of getting permits worked great. (name, address)”

“It was the most beautiful experience and view of my life...and I have traveled a lot and did a lot of backcountry. I live in Canada and I have never seen anything as beautiful as the Grand Canyon.”

P.S: Vote for Kerry.”

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“All you are doing a great job!

I was told that the Phantom Ranch (BAT) only serves reserved meals. Well, this time we were down the campground was not fully occupied. We were welcome in the Phantom Ranch restaurant. Might be due to capacity? If service is limited to reservation, it's okay, so it's told in the information flyer. If service is every time possible, please tell so.

I saw a ranger some 300 feet down towards Indian Garden. I think he'll ask special customers if it is really good to hike on downhill. I think he should ask them a level higher, because I saw families with children and babies who never will return on their own feet when they are tired, exhausted or dehydrated.

A lovely place! Gigantic!

Sorry, I hadn't time to complete earlier! Wish I was there!”

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

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“As mentioned previously, I was a little distraught that the ranger recommended such a difficult trail to me. I let it be known that this trip was my first to the Grand Canyon as well as my first overnight trip in a desert area. Had I been just slightly less prepared, I would have been in serious trouble. As it was, I almost cut my trip short before reaching the bottom of the Canyon due to the trail’s difficulty.”

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“The permit issuance system should allow for more ‘impromptu’ trips as some cannot plan a trip months in advance (as is necessary to receive a permit for certain hikes). I live nearby Yosemite National Park, and have been on many day hikes and overnight hikes there. At Yosemite, permits for overnight hikes are awarded both by reservation as well as day-of which is particularly convenient for the ‘impromptu’ hike. Yosemite, like the Grand Canyon and other parks, is hugely popular: if permits can be awarded on the day of a hike, this system can work anywhere. Also, there’s no fee for a backcountry permit in Yosemite (which is appropriate). In any case, permits should be possible online via the real-time system mentioned, and for no extra charge.”

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- “1) Helicopters drone all day long.
  - 2) Recommend including exposure descriptions (detailed) for each trail. Trail descriptions sent were otherwise outstanding. (By exposure I mean for people afraid of heights.)
  - 3) If possible, remove all equipment left behind. We found lots of junk left in canisters at Hermit Camp – some of this was river running equipment.
  - 4) One in my group recommended emphasizing importance of insulating pad, since the ground at night can be as hot as during the day.
  - 5) The rangers told us it could be 120 degrees during the day and maybe 80 degrees at night. For us, our thermometers registered 130 degrees, 113 in the shade, and the ‘coolest’ at night was 92 degrees.
  - 6) We had major problems with our tents due to winds all night at Hermit Camp. Recommend wind-resistant equipment, internal guy system in tents, etc.”

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“I had no problem getting a permit. The ranger was very informative. We chose an area that was not very heavily used.

I do not like the idea of putting everything online. I’m not a computer geek. Why should they have first preference?

The major task for Grand Canyon National Park, in my opinion, is to determine how to accommodate the largest possible number of participants while causing the least possible impact on the environment.

I think South Rim has done a great job with the Rim walkway and shuttle system. It was vastly more efficient than during our first visit in 1983.

I think the North Rim could be a much more accessible location if Park Service will very carefully develop it. ‘Minimum environmental impact’ does not require us to ‘save every single tree’ in my opinion. It means we avoid causing erosion, avoid annihilating species, and we support existing wildlife. That can be done while providing human access. Thanks for seeking improvement.”

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

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“Less regulation is better! No more than absolutely necessary.”

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“A detailed map showing all camping areas and distances between each; the map currently used on the Website does not accurately portray the distances. My permitted campsite areas were too far away from Phantom Ranch, where I had reserved meals, but it was not apparent from the map how far away they were. That is why we decided to stay at the Phantom Ranch dorms when we found out they had room instead of hiking three miles away to our permitted area.”

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“I would like to encourage the Park Service to carefully consider suggestions and recommendations presented to it by the Grand Canyon Hikers and Backpackers Association (of which I am a member). This group of serious citizens has formulated many thoughtful ideas concerning these very issues.”

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“It was one of the hardest things I have ever done. The video was very informative. But we didn’t prepare for the heavy loads on our backs. We did it but it was difficult. It was a great experience.”

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My husband, (name), and I went Backcountry camping in the Grand Canyon for our honeymoon. It was a wonderful experience. We both really had a great time, and will remember it forever! I would also like you to know that the ranger that issued us the pass was very helpful. We really didn’t have a plan, and he told us what trails were best to take, what we would need, and also advised us that we needed water purification pills as the water wasn’t working right at the bottom. It was all very helpful information, and it allowed us to have a fabulous trip!!”

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“I really felt the entire process of obtaining a permit was set up appropriately. One question would be what if I didn’t buy a permit. I didn’t see a ranger. I like the honor system but I wonder how many people a year use the trails that are not accounted for.

Anyway, good work at the Park. I personally went to the North Rim and was impressed with the setup of facilities, but I’ve heard the South Rim is amusement park-ish. This I am not a big fan of. If people are to experience the wonders of nature they should be exposed to the subtle slow processes of nature. We could all gain from better knowledge of natural systems within the Canyon and elsewhere.”

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“If the hikers would read and heed all the information they are given before they go into the Canyon, people wouldn’t get in trouble.

My son (14 years) and I were able to befriend a young man (15 years) who was sent to walk out because his cousins got heat exhaustion. We have been in contact with the young man since returning to Ohio. (He was from Texas.) I was impressed with the park rangers and their knowledge and love for the Canyon. The rangers can make you excited for being there. I enjoyed being with just my son, knowing what we were doing not many from our small town had ever done.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

Our experience was great! Speechless and brings tears to this 46-year-old man's eyes thinking about the trip.

Was really hard to return to reality."

"The current system (for getting permits) works well for me because I know how it works and apply at the earliest possible dates and almost always get just what I want. I would not want it to be opened up any further in advance. A computer system where one could see what sites are available would on the one hand be more convenient, but the current costs are at a good level and I wouldn't want to pay more, and I wouldn't want a system that made it so easy all the spots disappeared as soon as they were available."

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"We weren't prepared for how HOT it was going to be at night. We ended up not sleeping and leaving after Midnight to hike out. I wish we had believed that it would be really hot."

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"Provision for recycling at North Rim Grand Canyon.  
Advise people making reservations for North Rim that they need to bring all of the water due to wells being polluted (campers, etc.). Thanks for doing this. (name)

P.S. – See you at Thunder River (cartoon added).

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"It was a wonderful experience. There were some hikers that stayed at sites without the proper permits, but we visited at the hottest time of year so it was still relatively empty."

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"I enjoyed the Web process and speed for obtaining my Backcountry permit. Would like to see it all via Web."

### Grand Canyon Backcountry Visitor Study August Comments

"Permit system and system for booking campsites on Rim (backpacker spaces vs. normal spaces, etc. at Methen) was difficult to understand from Website for visitors with no previous experience of USA national parks. A clear step-by-step guide for a backpacker (without own transport) should be provided, explaining exactly what you need to organize/obtain for an overnight trip or for a day hike. I wasted a lot of time trying to work out the difference between park entry fees, wilderness permits, day hike/overnight, Backcountry camping/Rim camping, etc.

Also, online permit booking would help a lot. I sent off for permit four months early, but heard nothing for over a month. Was concerned about planning rest of USA trip without Grand Canyon confirmed."

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"Trail damage by mules was VERY bad."

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## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

“More composting toilets on all designated camps. Strict description about visitors not burning firewood or cutting vegetation. “Softer, more defined footprint”.

Rangers should be more educators than cops. Teaching and conservation attitude should be fostered.”

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“Permit system was very easy and well-managed. Trip was fantastic, but nothing can be done about the temperature!”

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“Our two-day hiking trip was perfect!”

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“Everything was satisfactory with one glaring exception. I did several separate camping trips in the fall requiring Backcountry or overnight permits. The night before I started my three-day Backcountry trip I camped at Point. Sublime, for which I paid the \$10 fee plus a \$5 additional per/night fee. The next two nights were spent in the Tapeats Creek/Saddle Canyon area, for which I had to pay an additional \$10 fee, plus \$10 in nightly fees. It is ridiculous to expect one to pay this \$10 fee multiple times for consecutive days, yet due to regulation red tape, I had to. I have no problem paying \$5/night, and a one-time application fee. I feel like a sucker having to re-pay the one-time fee.”

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“Your form with its dark lines is hard to read.”

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“To begin with, I would like to say that I am very satisfied with my trip into the Grand Canyon. Views, animals, and the atmosphere combined with a test of our physical abilities was something everyone can enjoy.

Sadly, we had some problems to make our trip in ‘the proper’ way. We didn’t have a car. We couldn’t foresee the time we will reach the park, thus we couldn’t even call the Backcountry office before getting on the site. That is why we couldn’t obtain our permits (what is even more important, we didn’t know they are required). Having problems with our permit, we decided to go from the southern to northern rim without camping. Now I know we were not able to do that. Fortunately, a helpful park ranger solves our problem in a particularly fair way. We were not forced to camp or go – the decision was ours. Only bad memory – smell of mule making our struggle up even more nasty.”

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“I would like to see more money spent on trail maintenance, even on some sections of the washouts on trails like Hermit, Boucher, Tanner, Hance and Grandview, because more and more people are coming every year to the Backcountry. I realize it’s a tough job to keep things in balance. But people need more options than the corridor trails of the Kaibab or Bright Angel. Finally, one last thing – the Grand Canyon is “big magic” and can’t really be surveyed. It draws people from all over the world and holds some forever.”

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“The only things I was disappointed by were the heavy traffic along our route and the large number of obnoxiously loud groups at our campsites. Otherwise, I couldn’t have asked for a better experience.”

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

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“We had the possibility to book the second campground overnighiting at Indian Garden, one day before the trip, in the Backcountry office (Canyon village).

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“Our map shows water, but not as drinking water. If I knew I could drink this water without filtration I would not have carried in so much weight in in (Gatorade). I would have carried some in powder form. If there were more shelters in camp that might take a lot of stress off a camper, knowing that if it pours (rains) they will still be able to stay dry. I only saw 1 (one) ranger and it was not a pleasant one at best.”

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“Out of the three times I have been granted a permit, I have only been able to get it for the last week in August, even if I applied early as possible.”

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“No real complaints: Backcountry office is helpful, friendly, and persevering. Permit procedures should be updated with some principles in mind:  
Equity – extra advance fees are unfair. As current practice of locals queuing up in person on first of month to get priority access (although I acknowledge this doesn't often have a significant effect, it's got the wrong optics).  
Respect for resource – I trust ranger judgment over scheduling algorithms. Rangers can be flawed, but as a software engineer I know computers are worse.  
Filter, educate the newbies – Need to encourage good behavior, participation; but deter frivolous or speculating permits, while still serving the Grand Canyon 'junkies' who go 'further'.  
Biggest Backcountry management problem – Motors on boats and planes. Nothing ruins a Backcountry experience more than droning overflights or motorized rafts. Much of Backcountry, including river, should be designated wilderness.  
Personally would prefer to see fewer other people in Backcountry, but also want more people to experience, and thus learn to respect, the place. Delicate balance...  
Current policy on toilets, ammocans, is about right. Should be handled on case-by-case basis as use patterns evolve. Definitely most of Backcountry should have no facilities.  
Worst day in the Canyon beats best day anywhere else (except possibly Canyonlands, San Juan River area...)”

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“Too many and too large groups of mules cause bad trail conditions and disturb the normal hikers (blocking the way, smell of urine and excrements).”

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“As I took my godson I did an easy trip this year – Kaibab Trail, Bright Angel Grand Canyon, Bright Angel trail.

The number of groups with horses and mules were disgusting. I would strongly recommend to reduce those – no day rides!!! The smell of the waste was at some parts extremely strong – disgusting. This is what really disturbs/destroys the sound/smell of nature.”

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## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

"We didn't stay overnight, but we hiked on some of the same trails that we would have on a Backcountry overnight and had a lovely experience. Trails were well marked and in good condition. Park staff was friendly."

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"I recognize that the Bright Angel trail is a multi-use, heavy-use area that is different from the more wilderness areas of the Canyon. I have different expectations and standards for what I experience on the Bright Angel, and my comments on my most recent trip are specific to the Bright Angel. For instance, for 3.8g, the mule droppings are expected and tolerated on the Bright Angel, but would be appalling if encountered on, for instance, the Tanner or Bass. I expect the crowds on the Bright Angel, but would be offended on the, say, North Bass. This mostly applies to 3.6, 3.7, 3.8, and 3.11. Regarding 3.9 in, I had a very good trip, but have been on (and 'can imagine') much better Canyon backpacks in the more wilderness areas. Regarding 3.10b, I disagree with a longer (one year) advance period as people are more likely to change plans and forget to cancel, thus wasting permit slots. Also, allowing very early book-ups is discriminatory to the planning-challenged among us. Regarding disappointments of the trip, it would be nice to have a campfire at night, and I would be appreciative if the NPS could bring down some firewood on muleback and set up a central campfire in the Indian Gardens campground, and perhaps at the river campground as well."

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"No negative commentary.  
Very happy with my visit.  
I wish the permit issuance system was offered over the Internet.  
Possible more information on seasonal weather patterns (e.g., it rains in the afternoon frequently in August) would be helpful."

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"There were controlled burns near us on the North Rim that filled the Canyon with smoke and were the occasion for numerous helicopters. The smoke especially detracted. We could not see the grand vistas."

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"The helicopter noise reminded me of suburbanites cutting their lawns on a Saturday morning. Very intrusive on my ability to experience all the other wilderness values at the Rim."

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"Please allow for permits to be received more than the current 120 days!"

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"Deer Creek to Surprise Valley – Bill Hall  
In areas like Deer Creek, where there is a lot of day use by boat people, there are a lot of trails that go nowhere. It was very difficult for me to find the right trail out. I had to stay at Deer Creek an extra night. I found the trailhead out at Noon time. By then it was too late in the day to reach my water stash at Esplanade's Area. In heavily used areas, sign-arrows-markers need to be seen to distinguish trails through maze. And there is no written trail description for this loop route."

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"This is a trip that I have wanted to take since I became fascinated by the Grand Canyon on my first visit almost 25 years ago. It was everything that I had hoped and more. I prepared myself physically



## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

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“For one of the biggest and best National Parks in the system, Grand Canyon Backcountry trail markings were the absolute worst I’ve ever seen. Trail markings were beyond bad – they were dangerous. Also, trail maps were very inconsistent (water locations, campsites left off, etc., distances).”

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“Build the railroad!

“I am disappointed by spending huge dollars in study and infrastructure designed around lite rail to reduce vehicle traffic and then not building it. I am disappointed the Backcountry permit office and dedicated rangers are found in trailers in a parking lot. They and visitors deserve much better. The difficulty in reservation (mail or fax only – no phone) seems intended to keep space available for the dedicated as opposed to making space most easily available – by phone or Internet. It would be a big change to go to a real time user driven Web based process. Park personnel would need to track the changes in cancellations. Would space be reserved quickly and then end up cancelled such that it was more difficult for others to reserve on shorter notice? We (local population and organized groups) can go to the Canyon to reserve dates. Steve Sullivan and crew absolutely rock ‘the system’ (his program). It’s easy for rangers to operate and makes alternative planning for users. Their office is incredibly service oriented to masses of humanity. They do really hard work very well, making the Backcountry as fairly accessible as possible while protecting resource conditions and visitor safety. Yeah – Backcountry/river permits office! Thanks.”

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“Because we were able to get reservations at Phantom Ranch, we didn’t travel on the permit date and didn’t need the permit. Because we got our reservations near the permit dates, and because there is a ‘no refund’ policy, I lacked time and motivation to call and cancel my permit. I believe you should refund impact fees when a permit is cancelled before the day the permit starts. Keep the \$10 permit fee but refund the impact fees since there is no impact. I believe this policy would increase the chances of last minute applicants getting a permit.

My two phone requests for permit applications (two to three weeks apart) were not filled for several weeks even though I was told both times it would go out that day. When the second request was more than a week overdue I called a third time and was told about the Internet option. I faxed in the download and received my permit in a few days. Several days later, the two requested applications came in the mail on the same day.”

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“Greater level of information on Backcountry hiking outside of the main highways linking North and South Rim on Website would be useful. Also, encouraging use of other trails may positively impact crowding situation.

All in all, I’m very satisfied with the balance struck between use and conservation.”

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“There was no part of the trip that was disappointing. It was a simply perfect trip. We took the time to plan and stayed by our plan. (name) has hiked the Canyon two other times but this time we did it Rim to Rim. It was my first hike ever!! A life changing hike – my heart and soul ache to return. It is good planning that makes things work. We love every hard, hot, ‘hiker A’ walk aching legs, steps that we took. My name is (name) and God bless the Park Service for the AWESOME job they do. Who could complain!! Thanks for allowing us to participate!! (names and phone).”

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

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“Was disappointed that the new visitor center at Grand Canyon does not have a 20-minute video like all other National Parks. Much can be learned about the area and park by having this. Grand Canyon did have this at the old visitor center. (name, address, and phone)”

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“I clicked on to grandcanyon.com or usnationalparks.com or something to try and find out how to go about hiking the Grand Canyon. It took me one hour of computer and phone call to find a plan. Next time I would probably try the North Rim and Waterfall Route.

In 1999 my mom and I checked out the 100-year-old original book, U.S. Bureau of Land Management, Department of Interior by then Westley Powell book and map, and I was interested in visiting this place. ‘Exploration of Colorado River...’”

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“I still pretty much like things the way they are or are changing into. It still seems easy enough to hike on main trails if I want to hike with people or hike and camp on more primitive trails if I want to get away. I have never (10-15 years) had a problem getting a permit. I recognize that cost is a factor and can/will be used to control use...oh well... The only thing I don't like are the airplanes and they are still only over certain trails and can be avoided. Still, I would like to get rid of them!

Sorry this is late...I'm kind of lazy.”

“My trip was along South Kaibab to Bright Angel so there were no aircraft overhead which is wonderful. I have hiked Hermit and Boucher Trails and the fucking helicopters drive in INSANE!!! I HATE THEM!! That area is one of several small loop options and is absolutely beautiful. How about moving the flight corridor further west since there is not way the Park will take a firm stand and disallow them altogether.”

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“Very helpful Backcountry office. Helped me plan trip (i.e., find water, remote areas). Limits on use are okay with me to enhance solitude. Water at Phantom Ranch area and on Bright Angel was very nice.”

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“The permit system is a pain. It makes it very difficult to plan trips will in advance. I do understand that it is necessary to ration permits, but I'd rather pay more money in advance and know that I could get a permit. Allow the market mechanism (price) to ration permits, not this existing awkward approach. In other words, there is excess demand for permits only because the price of permits is too low. Raise the price and you will be able to eliminate the existing system.

One final thought: I object to the mule trains, with mules littering the trails with animal waste.”

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

### Grand Canyon Backcountry Visitor Study September Comments

"The trip that we made in September, 2004 was the fourth time down to Phantom Ranch. We just love the area and hike. I got a camping permit to use as a backup, but got dorm and cabin so didn't use it (wasted money).

There were four females and two males in our group. We all stayed in dorms the first night. Because of a cranky lady I asked for a cabin the second night – it was available. The third night I lacked one male in the dorm, so we had our tent and etc. taken down in a duffle and back out which cost us \$107.60. We didn't use it because I was able to get a dorm for my husband (the four ladies stayed in the cabin) after we got down there (wasted money).

In 1998 when we planned our trip you could call Bright Angel Transportation Desk, four days before, and get what you still need. Now it's two and that caused us to have to take our tent. Would be nice to have that changed."

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"Many people staying at Phantom Ranch (the rooms, not the campground) had planned their trip years in advance; I would hate to see the entire Backcountry experience restricted to those who plan so far in advance. If some spaces could be filled further in advance, that would be fine; but some spaces should be available with at most the current month-or-two lag.

It would even be fine with me if some spaces were reserved for the day before a hike; I enjoyed meeting some young Australian hikers who were on a day hike because they couldn't get a camping permit.

Also, I personally enjoyed backpacking, but would not oppose letting people just hike, having their bags brought in by mule."

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"Hiking out on day three we encountered too many day hikers that were obviously ignorant of basic rules, i.e., common sense like not feeding wildlife, not yielding to uphill backpackers, no idea of trail conditions, kids not quite under control, etc.

The South Kaibab was a lot rougher than I anticipated but not so much as to detract from overall experience.

I believe the Park Service is and has been doing a great job in handling such a large area with so many visitors."

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"Mostly, I would prefer to enjoy the Canyon by river trip. If you folks have any influence in that permit system, I say more permits to private boaters. If I can't get there by boat, I guess I'll just have to walk.

Also, I'd say the ringtail cats are problematic critters. But it's their home after all. Thank you."

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"Having to apply for a Backcountry permit by post and months in advance is not good. Okay, I understand that the park gets very busy, especially in the prime months. So a system of reserving is

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

needed. I think online booking is the way to go. You would also need to keep the post-booking option running as not all people use or like using the Web, but let's face it, the majority do. This would mean that in the less busy months people would get permits (problem is that people who book a last minute trip won't use the post option).

I strongly agree that the amount of people let access the park needs to be controlled and limited. Thanks!"

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"Encourage threshold or wilderness hikers to report current water situations when they come out of the Canyon."

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"From our experience, level of controls and numbers of permits issued for different categories of zone are about right."

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"Looking back on my many trips (25 or more) to the Backcountry, the only consistent complaint I may have is that sometimes the trail is hard to follow, thus creating the condition of wandering back and forth looking for it! Tramping on vegetation – creating 'braided' trails, etc. This occurs along the Tonto, along the 'slick rock' areas on the thunder river trail (destroying cryptobiotic soil) and where the trail crosses rock falls and talus slopes. Generally 'marking' the trails better would stop some of the erosion and vegetation damage.

Also – it would be very nice to have ammo cans for food storage at well used Backcountry campground, Deer Creek, Cottonwood below Horseshoe Mesa, etc. Anywhere there's water! Grand Canyon ROCKS!

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"Although I haven't taken any recent overnight trips in the Grand Canyon, I usually do at least a couple of extended day hikes per year. My impression from the day hikes is that the Backcountry is mostly cleared, unlettered and the trails well maintained.

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"We found that the warnings given for non-corridor trails were exaggerated. Trails labeled as difficult were not as difficult/dangerous as we had been led to believe. One thing that might be included in a list of things to bring along is light hiking boots due to the heat."

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"I felt hikers who hiked down to Phantom Ranch in one day in the heat of summer and hiked out early the next morning were not getting the benefit of the Canyon. I also felt that some of the visitors that were allowed to come down by mule were far too unhealthy and it presented a big risk factor.

The trail map for the North Kaibab trail was not very helpful – we kept thinking we should be farther than we were."

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"Because this was my second trip to the Backcountry of the Grand Canyon, I was aware of the early reservation system. I got my application online, mailed it in, and got a response very quickly. I got exactly what I requested and was surprised at how fast the process was.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

As far as the campsites go, I was happy. I stayed in Phantom Ranch where the campsites are extremely close and there is little or no privacy. However, I understand that it is done this way in order to make as little impact on the park as necessary. That fact alone makes me extremely pleased! I had a wonderful time and was happy with my entire trip!"

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"Grand Canyon is a wilderness area – no motorized traffic, bicycles or hang gliders allowed – why then are there motor rigs on the Colorado? Park Service makes too much money – they are corrupt! Same goes for the Air Tourism (helicopters and planes over the Canyon). I could go on and on. This is the same as snow machines in Yellowstone. If we have a wilderness area and you can not get yourself into and out of said area, then I guess you don't get to go. I don't have a computer, probably last person on the planet, too! A Web-based permit application process will just increase the visitation to this park. I don't want more people here! I would like less in fact – I consistently must choose routes rather than trails to keep away from the European and Asian tourists. The permit system is okay as is. Save the money and put in more composting toilets here and there throughout the Backcountry. Also, I have in the past traveled across Native American land to get to a trailhead – not on my most recent trip though, so your survey does not reflect my opinion on that (I followed the directions and had to skip that question). My opinion is I should not have to pay a fee to cross a corner of the reservation to get to the trailhead – I think the Park Service should re-route Pasture Wash Road around the reservation. We should not drive across their land – plus it's not quite as regulated as one might think. When I did it they collected \$20 and I got the distinct feeling it was beer money – considering the drinking that was going on when I was there and the smell of alcohol on the Native American 'ranger'".

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"Trip was fantastic! It was a drag, though, when fifty rafters descended on Deer Spring."  
"I am extremely disappointed in the Backcountry law enforcement rangers. They seem more interested in finding something a visitor did wrong instead of providing customer service. They need to be friendly and treat each visitor with the respect they deserve and paid for through user fees. Perhaps they need cross-trained with resource management."

- Permits should be available on the Web.
- Rangers should be available by phone.
- More permits should be available for western Grand Canyon on both the North and South Rims.
- Aircraft overflights should be eliminated in the western portion of Grand Canyon.
- The NPS should place road signs to Grand Canyon National Park trailheads like Kaibab Point, Hundred and Fifty Mile, Tuweap, etc. They should adopt the BLM Road numbers that end at the Park boundary as the BLM has encouraged the Park to use consistent low key signing so visitors do not become lost on their way to the trailhead and end up driving in proposed wilderness.

Please send me a copy of the survey results."

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"I appreciate the information given to prepare for our trip and I'm always surprised at how people don't prepare for hiking in the Canyon. Besides the information I was sent by NPS I purchased a book called "Grand Canyon National Park" by Frommers. This book provided me with so much more information than given by NPS. We were very prepared and even a little over-prepared and were able to enjoy our trip because of it. NPS could use this book to improve their information they provide to hikers/backpackers."

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

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“Very dangerous section near the eastern part of Grapevine Creek along the Tonto trail (drew picture). We had to hike off-trail to get around it. At the very least, that section should be marked with a sign recommending that hikers go around it. I wrote a letter to the Backcountry office describing this in detail.”

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- “ - As a Leave No Trace Master Educator, I would like to see a stronger and more consistent message about no trace techniques sent to Backcountry users. For example, using the LNT logo and seven simple principles in trip packets and at trailheads would help folks easily identify the no-impact message.
- Knowing the importance of “Plan Ahead and Prepare,” I would like to see more requirements for Backcountry users before permit issuance – hikers should consistently have to submit detailed information about their backpacking experience and skills.
- Implementing a new, online permit process might allow rangers to spend more time on Backcountry patrols, providing more positive contact and education for backpackers.”
- “ - It would have been nice to have the road access to the trailhead signed a bit better.
- I believe a little bit of trail maintenance should be done on the less frequently used Backcountry trails.
- The current permit issuance system has always worked for me, but since I mail in my request I worry whether I will get it in on the first day of the month, 4 months prior. I wonder if it wouldn't be better if requests couldn't be considered on the first day of your 'first choice', 4 months prior. If you didn't get your first choice, then your request would be considered on the first day of your second choice, 4 months prior, etc.
- Group leaders should be encouraged to call the Park Service if they have to cancel their trip, so others could take the available space.
- My only real disappointment on my most recent trip was seeing invasive weed species on the Powell Plateau. I hated seeing weeds established there and am concerned about their spread.”

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“I would definitely like to see an online reservation system similar to that for the developed campgrounds at the Grand Canyon. This would be very useful in trip planning and securing permits for groups. The current printed form does not seem like an effective system because you have to choose numerous potential itineraries, and then you might not get one. This is the main reason I did not submit the form, but instead chose to visit the Backcountry office in person.”

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“I am disappointed that amongst all the wilderness in the Backcountry, that a motor is allowed on a boat in the Colorado River and aircraft noise is so apparent in some locations.”

- “● There should always be use areas where a small group of hikers can go and not see other hikers for days on end.
- There should be more Backcountry rangers hiking the Backcountry.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

- Instant Internet reservation should not be possible. I feel it would invite people to make reservations they will never use. The system, as it stands, is just complicated enough to only encourage the seriously interested.
- Cell phones should never work in the Grand Canyon!!! (I left mine on the Rim)
- Sorry this is so late. I was in the middle of moving. My new address is (address). Thanks for asking. (name)

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"I believe the present system works well. I am disappointed in the litter, disposed items and trash I found in the Canyon. I hiked several pounds of this out. I know this is not the fault of the Park staff – but I believe more emphasis should be placed on carrying one's trash out of the Canyon."

"Trips to Deer Creek and Bass incredibly superior to Boucher/Hermit due to air traffic from sightseeing planes. More remote areas are at times heavily disturbed by Air Force traffic that per Park officials feel free to ignore no fly zones. Very prevalent in corridor areas. Almost every time we have gone into the Canyon we have met one party that is not on their permit plan due to being ill prepared. Overall, the balance is very appropriate and evidence of man outside of designated camp areas is minimal."

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"For the most part I have found the Park staff polite, helpful, and courteous. However, on occasion, I'll talk to people on the Park staff who through their attitude seem to be trying to discourage people from visiting the Park. I can appreciate their passion for wanting to protect this resource, but when it manifests itself as belligerence and condescension, I can't help but feel they should go into a different line of work. It's happened enough, not all the time, but enough so that now I just get the permit and seek additional information if I need it from another source. I'm tired of trying to couch a question as innocuous as 'What's your weather been like over the last few days?' in such a way as to not upset their sensibilities.

With regard to the permit system, I will work within the framework as it exists, once you learn the particular system. My only regret with the NPS permit system in general is that there is no consistency across the whole National Park System. I wish they would adopt a national universal system for all parks administered by the NPS. It's a different set of hoops you have to jump through for each park.

I think there should be one universal system throughout, with a few exceptions made for particular areas. Obviously you can't give permits for, say, the Virgin River Narrows six months in advance, so I would agree there must be some differences. But I don't understand why the Grand Canyon can't take a page from, say, the Yosemite playbook. It wouldn't surprise me if equal numbers of people enjoy the Yosemite Backcountry as they do GCNP Backcountry, but their permit system is infinitely easier and more convenient. In fact, it would be great if all national park permit systems were administered that way. I hope this helps your efforts."

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1. I'm happy with the current rules.
2. More ability to see available options would be nice.
3. Allowing people to sign up 12 months ahead for permits is a bad idea – it removes flexibility, causes more people to have to cancel, intensifies the perception of shortage.
4. No special privileges for commercial permits.
5. No groups greater than 11 people, commercial or not, in Backcountry. Maybe okay in the corridor."

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## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

“For the first time ever my first request for permit (e-mailed with proof it went through) was lost or ignored. It took me several weeks to realize that I needed to resubmit the original request. Otherwise I think the NPS is doing an excellent job.”

“Park staff was extremely helpful and willing to accommodate needs and deal with any potential problems. My original application was faxed but became lost and the staff was able to remedy the problems and ensure our coming to the Canyon (our first time). Thank you!!”

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“The permit issuance system was quite fine. Everything the Website said you had to do, I did, and I received my permit without any problem. The permit was issued for our third choice of overnight campgrounds. I guess it would have been nice to receive a call saying that our first choice was not available and that we would be receiving an itinerary for our third choice. All in all it was no big deal though. We really don't have any complaints about the system. It was very helpful to receive the information and the video. That was a big plus in helping us plan our trip.”

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“Backpacking in the Grand Canyon with friends and sometimes with family has become the high point of the year. In remote areas such as Royal Arch I do not strongly object to seeing a few other groups but I prefer encountering none.”

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“The hours available to call the Backcountry office are ridiculously short (1 p.m. – 5 p.m.) Mountain! The operators there (rangers) were extremely patient and very helpful.

Trips from Chicago on School breaks need to be planned a year in advance...at least other plans could be made if Backcountry is not available! Four months is way to short if you don't live in Arizona.

My wife will never go without more bathrooms (pit toilets).

P.S. – People leave toilet paper behind!”

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“I'd just like to say that it was a great experience. My only complaint is the overhead aircraft and the difficult and expense of getting to the Park by public transport (i.e., from Flagstaff). Sorry it took so long – I'm studying internationally.”

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“A great place to visit and I plan to return to the South Rim and hike to the Colorado.”

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“Heavy car traffic (and parking) on South Rim. I would like to see a traffic mitigation plan, such as off-site parking with shuttle service, to the Rim, etc.”

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“The system of obtaining Backcountry permits is complicated and not flexible. We did not obtain permit in advance but we obtained permit one day before our trip in Backcountry office in Grand

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

Canyon. It is very difficult to plan the trip around national parks, especially if Grand Canyon is only one stop among others.

Real-time reservation system should be good way to improve this situation.”

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“I was slightly disappointed I could not get a refund for a member of the group who was unable to hike due to a sprained ankle. I was surprised not seeing a ranger in three days – no big deal though. We requested one night at river, one at the springs but got a permit for the river for two nights – probably due to the large group at the springs. We did end up staying the second night 1-1/2 mile up toward the springs. It wasn’t a designated campsite. I was concerned about the hike out. I was the only girl and the weakest hiker. The hike out was surprising and seemingly easier than the trip in. I hope the process stays the same and more regulations are not imposed and fees are not increased. The airplanes were very annoying – very obvious to an individual seeking the peace of nature.

P.S. – I used to be a resident in Grand Canyon Village.”

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“Permit system should be modernized.”

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“I believe the current system works fine with one exception. I believe there should be less preferential treatment given to the Grand Canyon Field Institute for the remote areas. I believe they are no more than a commercial guide company. I say this having taken one of their trips.

I also think that a background check of experience should be done on anyone applying for a permit in the very remote parts of the Canyon.

Thanks for the opportunity to voice my opinion.”

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“Faxing permit requests on a first come, first serve basis, on the first of the month is very difficult. Would rather complete applications electronically on Internet – real time.

Very disappointed in having to put up with these Rim to Rim day hikers. Way too many – and this detracted/interfered with the solitude we were seeking, and interfered with enjoyment of nature. Most of these Rim to Rim hikers were very inconsiderate. They did not move off the trail to yield the right of way to hikers going “up-trail”. They were preoccupied with setting or breaking personal time records hiking Rim to Rim.”

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“I like the fact that Backcountry permits are slightly difficult to obtain. To me, this means that only people who are serious about backpacking in the Grand Canyon are likely to attempt applying for a permit.

I am against any improvements in the Backcountry, such as pit toilets, signs, trail markers, campsites, etc., except in the three to four most visited areas.

I am also against any motors on the Colorado River. It is a wilderness area and should be completely motor free. Maybe an exception for life threatening injuries only.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

The only disappointment or dissatisfaction I had on my last trip was the garbage I saw along the Colorado River's edge as I hiked downstream and back a mile. What I saw most were plastic water bottles, bits of white Styrofoam, and empty aluminum cans."

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"We have hiked in Grand Canyon frequently in the past few years as we live only about 1-1/4 hours from the South Rim. Only recently have we backpacked overnight and we plan to do this much more in the future. The first 30 hours of our hike we saw nobody. This is exactly what we wanted and were thrilled over this. We worry that someday we will set up camp and unexpectedly be converged on by a river rafting party. I think river runners should be limited to sites unlikely to be frequented by backpackers. Rafters have unlimited options for camping but trails from the Rims are not as frequent. Have rafters camp elsewhere. Thanks. (name)"

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"I feel the park staff has done a remarkable job over the past 25 years I have been hiking there. They have never failed to be professional, courteous and helpful. How they manage to keep the Canyon as pristine as it is with the number of visitors they see each year is beyond me. Possibly, this is the result of educating the public about the fragile environment, and the special awareness Backcountry travelers have about this.

I think the current permit system works well. Four months lead time for a permit is adequate for serious parties planning trips. Thoughtful choices for your second and third trail choices will result in memorable hikes even if you don't get your first choice. I have never had a bad hike in the Canyon, even if it was not my first choice.

As I prefer hiking primitive trails in out of the way areas, I must admit to a bit of "culture shock" when you reach the river and meet rafting parties. However, they too have a right to be there. They have always been courteous and pleasant encounters, and are usually as surprised to see us as we are them. I would like to think all Backcountry hikers are aware of their responsibility to have a safe and well planned trip. Rescue or help is not always immediately available and may be hours or days away. A sobering thought if you should break a leg in an isolated place. I feel the current rules in place for Backcountry travel are well thought out and serve their purpose. Designated campsites have always been clean, litter free, and well maintained. Primitive areas and trails have always been pristine and the results of 'low impact' camping practices are best witnessed here. I am not particularly in favor of expanding amenities in these areas to suit the hikers, but more in favor of educating hikers to respect these areas and their appropriate environments.

The Grand Canyon has always been a special place. Thanks to the efforts of many we have managed to keep it that way. Keep up the good work...take nothing but pictures and leave nothing but footprints."

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"Over the past three years I have spent over 100 nights in the Backcountry. I strongly disagree with the Fee Demo Project. I don't believe we need to pay for hiking in the Backcountry. All that money goes to the South Rim, paving roads and building bathrooms for the Rim visitors. I have not seen the money used in any other way. The Backcountry should be left alone, and people who visit should be warned it is an extremely harsh place. If fees go up, I and other people I know will not pay, therefore not getting a Backcountry permit. There are not enough rangers in the Backcountry to worry about getting caught, especially in the more remote regions. Thanks. (name)"

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## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

“Overall I am very with the Backcountry system at GCNP. Sometimes I hike with family or friends. Mostly I hike alone. I seek solitude and quiet, and enjoy observing wildlife and discovering traces of the past (historic and archaeologic). I am respectful and don't harm such places. I don't use tents and don't make any kind of fire, unless I am with others (it's a social thing to cook and share an approved fire). I leave no trace, and even pick up trash when I see it – even packing out toilet paper – but sometimes bury toilet paper when very nasty.

I usually choose 'at large' or remote campsites when I go alone, and am usually happy with them; however, twice I wanted to have one night in an unapproved area 1) because I was late and tired, 2) because the areas were so perfect (Pipe Creek area and Dripping Springs). I actually stayed at Pipe Springs area as it was late at night. I wish that these two areas could be available for camping, and wonder why they aren't. I understand that not everyone would 'leave no trace' as I do, and so I can live with the current restrictions. Aircraft in the Hermit area is annoying, but you get used to it, and I think they (air tours) do a good job of staying away from heavily used areas.

I know Backcountry rangers cover the areas. I just didn't see one last trip. I like to test my skills at staying alive, and feel confident that most times I will encounter someone during my trip who could send for help if needed.”

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“Our main interest is off-corridor trails. The current designated campsites areas are too restrictive and certainly the campsites in those areas are too close together.”

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- “1) Sanitary facilities – toilets in Backcountry are inappropriate. This could be a wilderness. Make people pack it out. It is done in other parks.
- 2) Although there were no motor river trips during my last hike, previously I had seen them. Motors in the Grand Canyon Backcountry are inappropriate.
- 3) The air tours on this trip (Hermit and Bright Angel) were beyond belief. They are completely inappropriate; they destroy the spirit of the Grand Canyon!!
- 4) I am generally happy with the permit system. The ability to go up a day before permits are available, get on waiting list, and therefore get an advantage over people who fax on first day permits are available, is quite unfair to those who do not live close by. It is easy to rig the system! Easy for outfitters to beat-out individuals.”
- 5) On Kaibab and Bright Angel trails, there is too much trail maintenance. It is unnecessary and wastes soil, that just washes away, and has to be mined.

Grand Canyon Backcountry Visitor Study  
October Comments

“Nice trip. I think it smart for the Park to recommend one of the major trails to first timers – but they were too busy for my Backcountry tastes. Next time I will go to a more remote area.”

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“Some problems I have had in the past:

- 1) Submitting more than one permit request at a time – other request(s) is/are ignored.
- 2) By the time you find out your request is denied, it may be too late to find something else.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

3) Lack of information on remote areas.”

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“I’ve done two trips in the Canyon, both on the Boucher. Received the permit within two weeks of applying – remote area with few people. Most of the questions didn’t really apply.

I’ll likely continue to do that trail over the more beaten path.”

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- I. Using the Internet for the permitting system is a must.
- II. I don’t care what fees you are receiving from the planes, the flights must be strictly reduced – you are ruining the Canyon.”

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“I would like to see more trails on the North Rim going east/west.”

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“I strongly agree with limiting the number of people in the Backcountry to keep the areas pristine; however, if one area is full or reserved, it would be nice to know instantaneously, so people could just choose another area. With the current system you have to wait to find out if your reservation was accepted, and if not you must reapply and wait. It makes organizing a trip (buying tickets, taking time off from work) very difficult.

What I enjoy most about being in the Backcountry is how remote it is. There are so few areas left where you can go and be away from cities, people, cars, and cell phones. The desert is so beautiful and fragile.

I am against commercially guided hikes in the Canyon. In keeping with the spirit of great Grand Canyon explorers, Bouchart and Pernasi, summits, secret waterfalls and canyons, and Indian ruins need to be earned. I have tried and have been turned around twice now trying to submit Brahma Temple. Each time I make new discoveries of the Canyon and myself. This is what keeps me coming back.”

“I would very much like to see an online, real-time reservation system. I live locally and would love to be able to download a permit for weekend camping if weather were good, without having to travel to the Backcountry office. Limits would need to be placed so that commercial operators would not buy up all the corridor sites. This is a big problem with the BLM Website – Coyote Buttes is immediately bought up by guide companies, then resold. Perhaps limiting to one or two permits per leader per month would solve this issue. I think this system, Web based, would encourage use and also perhaps make it easier to cancel permits, allowing use by others. Thanks!”

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- “1) A real-time, interactive way of applying for permits would help; one in which you can find out, on the spot, if a campsite is unavailable, and then chose another (by phone, online, etc.).
- 2) More pit toilets in Backcountry areas would help (e.g., at Boucher Creek, Cottonwood and Hance Creek by Horseshoe Mesa.)
- 3) Backcountry trails need a lot of work – in particular the Boucher, Hance, and Grandview (above Hance Creek). Parts of them are becoming a safety hazard, and as they deteriorate more people will cut switchbacks/hike off trail because the trails aren’t worth using.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

4) Overall, kudos to USNPS at GCNP for doing such a good job with limited resources!"

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"Overall I think the existing system adequately protects the Backcountry and provides a good experience for visitors. However, group sizes should be reduced and airplane flyovers banned.

A side note – the Hance Creek area shows signs of heavy use from camping (numerous small trails and campsites). Perhaps designated camping areas should be established."

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"It was a wonderful trip – not disappointed in anything. The permit system worked just fine – it's worth the wait, effort, and expense. You have to limit the number of people using the Backcountry, so the current permit system is necessary."

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"Have visited the Kaibab Plateau every year for last ten years. Finally went in last year, and knew it would be heavily traveled (North Rim trail to Cottonwood) so I had no problems with that. I was very excited just to get in on a last minute pass. Tried twice before to get a plan in advance but was always late and misunderstood. Seems that how I saw my route desired was not interpreted the same way by others assigning permits.

So last year, and again this year, I went in to the Backcountry office and asked what was available (I figured that Sublime would be available so I had counted on that in advance).

Would like to get a longer trip worked up in the future."

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"I do not recall any information in regard to caves, thus I left it blank rather than guess (3.12 I)."

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"I live in Ukraine and enjoyed my backpacking in Grand Canyon a lot. I was very happy to get a permit almost immediately, because my trip to Grand Canyon wasn't planned ahead. I do understand and respect the all permit system, but it's hard for me to think that getting a permit can be on a way of people who want to get new experience and see the beauty of Grand Canyon. Getting a permit a year ahead would have made my backpacking trip impossible."

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"The ranger I dealt with in the Backcountry office was very helpful, very informative, and was obviously personally familiar with all of the Backcountry. I think his name was Ayers. I thought the system of organization for the use of the Backcountry is very well run, and I think the usage levels are about right. Once leaving the main trails, a backpacker can be isolated very quickly (that is good!).

My recent camping trip to the Grand Canyon was one of the best of my life."

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- Good survey.
- I like the process but wish it could be done online, as your questions describe (real time, etc.).
- The fee structure is ridiculously cheap.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

- Sometimes I see parties in obvious trouble. I wish the NPS could exercise some control over qualifications (there should be equipments checks! – water, shoes, etc., as was done a few decades ago), but I suspect the legal implications are prohibiting.
- I found the Backcountry rangers to be amazingly pleasant and patient. Much better than a few years ago!”

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“Experience as following:

- First trip to the Canyon, it is nearly impossible to find anything negative about the whole experience.
  - I would like more access, so I can gain access every chance; but I know that limiting access is critical to maintaining the Canyon.
  - My wish is that access is based on sustained access to the Canyon. We can not be the remote action which prevents future visitors from experiencing this natural wonder.
  - Good luck...
- I am glad to have the opportunity to provide feedback on my experience.”

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“I have almost 3,000 miles of backpacking over 28 years in the Canyon. The BCO rangers are very inexperienced and not knowledgeable about the Canyon. They are never helpful and often give inaccurate and dangerous information. The BCO needs more tenure in their staff. I’ve hiked all the trails, routes and sub-routes in the Canyon on the south side of the Colorado. The BCO staff haven’t hiked much of the Canyon, and consequently are of no value to me.”

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“I think the Park staff does a great job with the resources they have.”

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- The Park entrance fee is too high.
- No phone number listed in phone book or newspaper for the Backcountry office – hard to find the direct number to the Backcountry office. I do not want to be connected to the general park phone number for reservations.
- The large (school, college, tour?) groups that hike the corridor trails from Rim to Rim either running or day hiking need to be informed in etiquette hiking – they are rude, inconsiderate hikers – need to be fined if they don’t comply.
- I commend the two male park rangers at the Backcountry office – they were very polite, helpful and informative (we went down the Hermit Trail in October, 2004). They were not arrogant but took an interest in our having a wonderful Grand Canyon experience.
- I grew up at the Grand Canyon and graduated from high school there. I love the Grand Canyon – it’s a very, very special place to me. I hike and raft it whenever I can. I think the Park is doing a good job at protecting it and keeping it clean. Thank you. We need more user days for the private boaters!”

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“I am completely satisfied with system. I would like to browse availability online for a permit but would not want to pay extra for this type of service.”

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## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

"I love the Canyon trips, especially the North Rim tougher areas. I don't like airplanes or motorized boats. I find the permit system difficult but manageable. I appreciate the management of Backcountry with the numbers restrictions. I feel numbers could be increased on the north side but I love the isolation and few people seen."

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"Camping spaces at Cottonwood are too small.  
Recommend inner Canyon temperature be posed at trailheads or Backcountry office.  
Took over two hours after Midnight to get through on faxline."

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- I've made four trips to GCNP and two of four times no one was at the gate to collect my money because I arrived around 11:00 p.m. I'd like to see more money for parks but I find it hard to believe it wouldn't be cost effective to man the gate 24/7. Additionally, the fee could be higher and very few would mind because almost everyone has already spent 10 to 100 times the \$20 entrance fee. While I understand the desire to keep the parks affordable, the low fees are actually a subsidy to the wealthy, especially those visiting from other countries.
- Regarding the Backcountry experience, I think it is perfect and shouldn't be changed much. I like the four-month reservation policy better than the two-year policy for Phantom Ranch or a river trip. The two-year policy makes you want to say why bother. With children, it's really hard to look ahead two years and know their schedules.
- I suggest looking for ways to make more Phantom Ranch meals available for backpackers. It really enhances the experience and I think it might better manage the waste."

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"Considering the amount of people visiting and camping in the Canyon, I would say an excellent job is being done.  
Having a reservation system online and current would be great.  
I would be willing to pay a greater non-refundable reservation fee if it would free up more permits.  
P.S. – This was our first backpacking trip and will be hard to beat! (name)

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"I thoroughly enjoy my time and conversations with the Backcountry staff – it is a devoted and dedicated group that I respect a great deal! My only thoughts on management suggestions are these:

- 1) It is my opinion that the resource and areas are best protected when Backcountry rangers have assigned areas that they monitor and primarily patrol (although not exclusively!). Just my two cents – but during the years that the policies were implemented that way it seemed easier to get the best information on a particular place and it seemed that the areas did better (i.e., illegal campsites recovered faster, conditions noted faster...)
- 2) The current permit system has always worked fine for me – however there is a widespread perception that it is skewed in favor of commercial guides. Some balance in how the system is worked would improve that perception. I'd be a fan of using a system like BLM has for Coyote Buttes/Paria.

P.S. – Please contact me if my handwriting can't be read!"

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"Education of all aspect of the Backcountry is imperative by the ranger. Personal encounter of finding the opposite can time frustrate a hiker expectations.  
I. Water sources

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

- II. Boundaries
- III. Route finding

Lastly, wilderness is what it is! Do not expect nothing!"

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"My Backcountry permit was "lost" and "found" twice but nobody could explain why. I sent a letter certified mail to the Backcountry office. Although they signed for it, they claimed they never received it. It was very frustrating dealing with them."

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"My most recent trip was the Royal Arch Loop. We did miss a couple key turns on the route but recovered quickly – all part of the experience. It was a Class AA hike but would recommend it for experienced hikers only."

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Comment #1 – Reference: Form of Questionnaire – unless I read questions incorrectly, you wanted input about most recent backpacking trip. Responses would vary considerably depending on whether "last" trip was one to a heavy use area – like Hermit or Bright Angel – or more remote area, like our last trip to Tanner. Conditions, appearances, density of backpackers is entirely different and affect responses given. Time of year is also significant factor.

Comment #2 – Okay, so if you want to, for example, get a permit in April, you go to the Backcountry office first thing on December 1. Only to find out that they started handing out numbers the afternoon before, 11/30. Reservation system needs to be impartial in that respect.

Comment #3 – Backcountry rangers at Backcountry office are very helpful. Those who patrol the trails, on other hand, are oftentimes officious and, well, super regulatory. They need to lighten up a bit.

Comment #4 – Overall, trail maintenance over past few years has improved; regulations in place seem to slow (but not stop) evidence of human encroachment and habitation, and we appreciate overall changes in regulation of Backcountry use."

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"The Canyon is a very special place to me and my hiking friends. I have been there many, many, many times."

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"I have experienced excellent staff response and backpacking experiences. There should not be any early reservation system beyond what is now required. Guided trips should not be allowed – they are dangerous for the individuals. Guides will take hikes to areas beyond the skill level of the participants. On my last trip, Grandview to South Kaibab, I observed a family with a possible "guide" who was lost (they were going from South Kaibab to Grandview). The family was tired and they were many hours from the rim."

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"I am very comfortable in obtaining a permit from the Backcountry office. I have tried to call on numerous occasions and it is very difficult to reach someone. I would especially like to be able to obtain a permit over the Internet."

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

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"I've only had positive experiences with the GCNP permitting system. However, I feel this is in part due to the fact I request permits "off-the-beaten-path".

Thus, I've never not gotten a permit I've wanted, have not encountered a lot of people and when talking to rangers about the routes, they seem to enjoy chatting with someone that has done some research, is asking the right questions or unique questions...not just another person asking about the South Kaibab or Bright Angel loop.

The only thing that disappointed me was the worst weather in five years of regular trips to GCNP...and that the snow/rain stymied our route due to mud (didn't want to trash trail), rain, etc. We all still had fun despite hiking out in 12-18" of snow."

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"Stretch of Tonto between Hermit Camp and Monument Creek is extremely washed out even though the surrounding trails are narrow. Have rock slides, etc. This particular stretch presents a safety hazard for in excess of areas and behind. Trail stabilization in these sections is warranted."

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"The NPS is doing a tremendous job managing the park and its crush of visitors. Flightseeing should be much further reduced. They should fly higher and be much less visible and audible and less frequently seen by Backcountry visitors. Keep the periodic floods going, but better yet: REMOVE THE GLEN CANYON DAM!!! Fix the trail off the east side of Horseshoe Mesa. Thank you very much. (name)

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"We learned that although we could not change the existing permit, we could add a day or two to it at the last minute. This turned out well as we would have had to leave in very heavy rain and mud on the first day. We stuck to the permit on the other two nights and the weather was fine. We noted that both sites were not fully occupied – as others probably had to change plans, too.

We also learned that we could have added ourselves to someone else's permit (just by adding people), if of course you could find someone's going your way and they agreed. Not so much a policy as an agreement campers could make on their own to work the system."

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"The permit system seems to work fairly well. It has remained quite consistent for several years now. (Many years ago, it seemed to change every couple of months.) I definitely preferred when we didn't need a permit system. I wish there was another way to handle the problems; but, I don't have a better solution.

### PROBLEM – Last trip

One evening, about 15 minutes before dark, a representative of the Grand Canyon Field Institute named Ken Walters stormed into our camp loudly proclaiming (shouting?), "You're in our campsite! You'll have to move!" We had been in this campsite for a long time – legally. There were no indications of restricted use, reserved for Grand Canyon Field Institute groups, etc.

Whatever thoughts I had before about commercial operations in the Backcountry, I am now strongly against them! (See my answer to Question #3.9x.)

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

Commercial groups will cause problems for private users. Commercial groups will think they should have some special right to campsites. They will want priorities for dates, locations, numbers, etc.

The Grand Canyon Field Institute should not be conducting commercial Backcountry trips – end then now!

They should not be allowed to use euphemisms for activities. Such things as trips for study, ecology, research, students, officials, etc., are merely ways to hide their commercial activities.

Does the Grand Canyon Field Institute have a valid reason to exist?

Over the years, I have had many contacts with river runners, both private and commercial, without any problems.

Question #3.9b – The disappointment was caused by contact with the Grand Canyon Field Institute.

Question #3.9o – I would have to answer this “strongly agree” except for the “over 11”. This would be based on the Grand Canyon Field Institute contact/encounter.”

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“When the NPS first started charging permit fees I thought the money was to be used for trail maintenance and staff. Since the fees began I have little evidence of how or where the money is going. In fact, I see less of park rangers on the trails now than prior to charging fees. I suspect the money is being used to provide larger/nicer offices and more staff at NPS Headquarters than at the parks.

“My trip was on the Thunder River Trail from Indian Hollow to Lower Tapeats and back...third time in (1982, 1993, 2004) and want to return if possible in September of 2005. I’m glad there are no more helicopters in that area (quite a few in 1982!) but I did notice a large number of commercial jets flying directly overhead while on the Esplanade, which of course takes me right out of feeling like I’m in “wilderness” – surely they could fly over Lake Mead or Lake Powell? On previous trips (August, 1982; September, 1993) saw a lot of river runners but not on this one – too late in season?”

The Grand Canyon is one of the last best places in a world we seem bent on destroying. I’d like to see it preserved in as wild a state as possible, along with Greater Yellowstone, High Sierra, Olympic National Park, North Cascades, the Utah National Parks, et al. Thanks!

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“Permit system is generally a pain, but I understand the need and support it. I have never encountered a ranger except on Corridor Trails and then only near “tourist” spots (Indian Garden, Phantom Ranch). I would like to see motorized river traffic ended, i.e., wilderness designation for the river. I definitely do not want to see the permit application window increased past four months. I have difficulty committing to exact dates that far out, let alone longer. I have been using itineraries that include hiking out on the Bright Angel (due to convenience to vehicle), but I plan to avoid it in the future due to mules, day hikers, etc.”

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“I would be reluctant to make it “easier” to get a Backcountry permit. I believe some people would register for the permit (or more than one at a time) just to hold a spot in case they wanted to go. Having it three or four months in advance (instead of a year) ensures that a group is more likely to go. Perhaps a Denali type of permit registration is more in order. Backcountry permits are issued only in person.”

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## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

“There should be more trail maintenance for trails outside the main corridor.  
There should be parking allowed at all trail heads.

Park rangers should inquire on previous Canyon hiking experience before they try to terrorize you about the trip you’re planning. I’ve been humiliated in front of my kids, scouts and friends on a number of occasions about the trip I was about to embark on, on a number of occasions, including the last one I took. I have over 3,000 miles of hiking in the Canyon and believe I know my limits.”

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“The areas of the Grand Canyon that I enjoy going to are very remote, e.g., Tuweep, Tuckup, Parashaunt, etc. The money that I pay for permits does nothing for these areas. Roads are not maintained and trails improved. This is fine by me. If increases in permit fees do occur I hope that the high use areas that need improvements and patrolling, etc. pay those costs. I do support that limiting of backpackers and river trips to keep the Backcountry from getting crowded. I also support the Park’s “non-maintenance” policy of the areas that I enjoy going to. This helps it stay remote.”

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“I have visited Tapeats Cave and Horseshoe Mesa Cave. I would like to visit other caves in Grand Canyon but they are closed to the public.”

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“We love hiking the Grand Canyon and hope it is always preserved. The current lottery system is not perfect, but allowing more than four month advanced booking makes planning difficult. Perhaps allowing a few slots earlier would be okay, but not all. Selling slots online the way stadiums sell seats would be great. I am in favor of charging the early bookers more. This might reduce the rush on the first of every month.”

### Grand Canyon Backcountry Visitor Study November Comments

“I always keep to my itinerary but sometimes encounter other group on the trail that do not. It would be great to reserve space online.  
I’d like to keep the four-month maximum on reservations – if it goes up to one year, I’m afraid it will be more difficult to get reservations on shorter notice because weekends will book up farther in advance.”

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“Disappointed that we never encountered a ranger in five days of hiking. The ranger at the Backcountry office had not been in the Canyon or the trail we were doing for a long time and couldn’t answer our questions.”

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“I think you’ll get completely confusing data from this survey. My answers would differ if I received this in the summer of 2004 when my most recent trip was Tanner/Beamer/Escalante.

Although my response to aircraft noise remains constant for all my trips – too much – too loud, too often – it sucks.”

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## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

"I would have liked to be informed about additional camping (overnight options other than Bright Angel campground, which is notoriously full. Also immediate reservation online would be great! Otherwise, it was a great trip. I plan another one soon. Thank you."

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"The difficulty we had with this trip was with the weather conditions. We spent the entire first day (which was meant to be hiking) trying to figure out how to get to the Nankoweep trailhead. There had been a huge snowstorm – and nobody knew if the roads would be plowed (to the trail). I called the police, the Backcountry office, the road service, everyone – and no one knew – so we had to drive all of the possible routes to the trail to find out ourselves whether or not we could get there. We couldn't and by the time we found it out, it was too late to get a new permit. The offices were closed. Luckily when we arrived to Phantom Ranch, we were able to camp there with permission from the ranger. More communication between the road conditions and Park services would be helpful.

Sorry this was late – I've been out of town! Good luck!"

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"Mule waste is very disappointing on Bright Angel Trail."

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"Live time reservation for Backcountry permit.  
More food boxes and/or pack poles at more campsites.  
Trail work at rock slides.  
Pretty much leave everything else alone."

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"Being able to acquire Backcountry permits online would be a great asset."

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"My only comment is the ranger at the bottom of the Canyon went from site to site telling us to hide our food the minute we got to the site because wildlife would get to it. It would have been nice to at least have a few minutes to put stuff together before being reprimanded.

The Park Service does a great job!"

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"Only disappointment was finding three empty liquor bottles at the east edge of Horseshoe Mesa overlooking Red Canyon. We wanted to remove them, but had three days more of backpacking, and very full packs.

Tonto Trail is pristine in most places.

Bright Angel is a ridiculous mud pit, heavily fertilized by mule feces.

Would love to see the shuttle system extended to Lipan Point and the Watchtower! SHUTTLES RULE! NO CARS!

Would love to see a reduction of motorized traffic on the Colorado in the Park's boundaries.

We ♥ NPS!"

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

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“There weren’t any aspects of disappointment. All went as I planned. I hike one week a year in the Grand Canyon for the past ten years.”

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“I do not mind paying to cover administration money for Backcountry permits, but it becomes very costly to take five people (say a family) for four days into the wilderness.

Let’s allow people the chance to experience the wilderness without having to spend so much money. Simpler times somewhere in the world. Thanks for the work – good luck!”

“South Bass Trail is fantastic!”

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“I loved EVERYTHING EXCEPT the helicopters! We went down Hermit Trail and up Boucher. There were so many helicopters every day, it was hard to keep the illusion that we were in true wilderness.”

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“I drove to the Grand Canyon. I failed to call the Backcountry office in advance to ask about the hike and about parking the vehicle at the trailhead. I asked a ranger at the gate if I could park at the trailhead (Hermit Trail since I had a permit) and was advised to park it near the lodge and take the shuttle. I feel the rangers are not informed well about the rules. There are so many backpackers year round. It is important that the rangers are knowledgeable enough about the park to direct visitors properly.

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“The only thing that was at all unpleasant were the day hikers near the head of Bright Angel Trail – they were not only unprepared to hike safely (wrong footwear causing them to slip and slide on the mud), but they also did not seem to be aware of the need to give way to hikers going up.

Other than that, we had an excellent time, and were thrilled to have experienced the Canyon during a wonderful time of year (November). Thanks to the rangers for being there for us.”

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“The Park and Backcountry seems to be very well-managed. It’s great that the numbers of people are limited. We went from the Hermit-Dripping Springs junction to Hermit Creek Campground (via Boucher Creek) without seeing anyone else – 30 hours! Only the helicopters overhead were annoying. We saw a group of about five bighorn sheep!

We didn’t take the warnings about the condition of Boucher Trail as seriously as we should have. We reached Boucher Creek as the sun was going down. If we had been stuck on that descent in the dark, it would have been very dangerous.

About automated reservations over the Internet: In a way, the current manual process may serve to weed out the uncommitted, casual hikers. That may be a good thing. Thanks! (name)”

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“Permit issuance was fast. However, online instant confirmation would be the best option.”

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

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“Love hiking in Grand Canyon.  
Spectacular scenery.  
The Backcountry office does a good job.  
If you want more information, you can page me at (number). (name)”

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“We had a wonderful time. Tanner Trail is fine – should not be improved.”

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- “1) I strongly feel hikers should be allowed to plan a year in advance, and apply for a permit, and that such a permit should be inexpensive compared to a permit applied for a month or two before the planned hike date. Permits should be costlier as the day approaches.
- 2) It would be a great thing if NPS or the US Geological Survey in coordination with NPS or any other agency can come up with maps (topographic or otherwise) that are updated and reviewed on a regular (say, yearly) basis with proper consideration given to detail.”

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“It wasn’t very easy to get a permit, and I was surprised it cost money, since I’m used to the California National Parks, which are free. The ranger dissuaded me from taking the length of trip I wanted, unnecessarily. I had fun, despite all the rain.”

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“I think staff does a pretty good job managing a wonderful resource that many want to enjoy. Keep it clean, quiet and available! Thanks!”

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“There are two parks – the corridor park (The Village, Indian Gardens, Phantom, etc.) and the wilderness park (the rest of the Canyon).

The overwhelming usage is in the corridor, and most of the questions in the survey are relevant to that usage. The restrictions that apply to visitor use in the corridor are generally unnecessary in the far areas. The restriction of only three consecutive nights in a use area makes sense in the more congested and smaller use areas, but not in the vast, rarely visited use areas in the eastern and western Canyon.

The survey did not really address the use of those areas, where other campers, litter, and toilet paper are rarely, if ever, seen. I just hope that any new regulations stemming from the results of this survey recognize that the special conditions of the corridor are not applicable to the far areas, and that those areas ought to be governed by a separate management plan.”

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“I was issued a permit to enter the Kaibab trailhead and exit the Grandview. I hired a cab to follow me to the Grandview trailhead where I parked my vehicle. The cab dropped me off back at the Kaibab Trail (\$25). What no one brought to my attention that day was the Kaibab Trail was closed one mile down due to a rockslide. The lodge failed to inform me, the Park Service did not notify me, and the cab driver said nothing. It was snowing hard and I was stranded. I decided to go down the

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

Kaibab and ran into the trail crew. They said by law I had to return via the way I came. I explained my dilemma and they finally agreed to let me continue. It could have backfired on me.

If I am issued a permit for a trail and that trail closes, I would expect notification by fax or phone before I drive there and spend time and money only to be stranded. (initials)”

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“Need to accommodate experienced backpackers and approve trips that are more demanding. Too much focus on scaring beginners.”

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“My trip was in November, and we went to Hance Creek so we saw very few people – just what I wanted. Tamarisk seemed like a bigger problem than trash or human waste in the places we visited. We were at the edge of the “no-fly” corridor, so we saw a few planes in the distance but not enough to disturb us. Overflights in the Hermit Trail are very annoying.”

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“ ‘Not applicable’ should be an option on some questions. For example, we were in a remote area where there were no campsites per se. So the questions (such as 3.7) did not apply regarding campsites.”

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- “1) Minor problem = the Backcountry office lost my paid permit for a few days; however, I received my permit in adequate time.
- 2) I am supremely displeased by the amount of sightseeing aircraft above the Grand Canyon. The noise from the aircraft is an environmental impact that should have been dealt with many years ago.”

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“All the mule dropping on the main corridor trails severely detracts the experience of hiking on those trails. I strongly support eliminating as much mule usage on these trails as possible.”

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“The Backcountry park rangers have always been helpful both in answering questions and in helping to set up itineraries for the Backcountry backpacking trips. I have never been denied a permit, even when I “dropped in” unannounced in the summer season. They helped find a way for me to make a six-day Backcountry trip when it seemed that no places were available at first. I did encounter a problem (two actually) on a backpacking trip to Deer Creek Falls and Thunder River. My son (27 at the time) accompanied me on the trip. We each stashed one gallon of water on the way down, at the halfway point. We spent a couple of nights in the Deer Creek area and then went on to Thunder River. There, the toilets seemed to be overwhelmed by the number of visitors. The smell was terrible and there was fecal matter and toilet paper underfoot 30-40 feet surrounding the toilet – probably because campers could not get close enough to the toilet.

On the way back up to the rim, somebody had found one of the gallons we had cached and taken it. That caused us to continue our climb out non-stop because we did not have enough water to spend the night. When we reported the problem at the Backcountry office on the North Rim, there did not seem to be too much concern: There should be more emphasis on the danger of taking others’ water. It could be life-threatening.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

Coincidentally, I graduated from the U of I in Champaign.”

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“There is an old degrading sleeping bag below the saddle of Isis and Shiva in the Trinity drainage that needs to be hauled out. It’s at the base of the small cave on the west side of the drainage.

The real-time Website permit system would be very helpful. My concern is that this would make it too easy for anyone to get a permit, and increase Backcountry use by those who don’t respect the Canyon.

I think cell towers on the rims would be helpful for emergency call phone use. They could be camouflaged to look like rocks or trees.”

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“- Not that I mind the slightest, I have never once seen a ranger in the Backcountry. But personally, I almost prefer it that way.

- Rodents, especially mice, are a problem at most campsites. More education to Backcountry user, especially first time or inexperienced users, should be mandated to keep sites clean and free of rodents.

- Trail runners and extreme athletes need to be more aware of backpackers and give them more lee-way on trails (I have also been nearly knocked over by trail runners, many of whom do not show proper trail etiquette).”

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“I had to change the number of people on my permit twice, and was pleased with the helpfulness of Backcountry staff in doing this.

Being able to receive permits via the Internet would be a great improvement to the current system.”

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“I understand the use of mules in the Backcountry, but hate the amount of animal waste on the trails. The last thing I want to be inhaling as I hike out is mule feces. Maybe they should wear horse diapers, and have a designated dump site. I also do not like all the aircraft. It ruins the feeling of solitude when a helicopter or biplane flies over.

As for permits, I have been in other National Parks where no permit fee is required, just an entrance fee. I have to pay almost \$60 to go hiking for three days, not to mention food costs. I also feel that Grand Canyon cares more for tourists and not Backcountry users. Many things catered towards tourists. As a whole, I love Grand Canyon, but these few things bother me.

Great survey and study!!”

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“I was overall satisfied with our trip. I feel like the rangers do an excellent job and they were friendly and helpful. Unfortunately it seems that there is a lot of red tape and bureaucracy (sp?) involved in managing the park and Backcountry, but it is worth it if they are able to keep the impact at a

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

minimum. We encountered quite a few people for being winter. I can't imagine what it's like during peak season and I don't think I would ever consider going there during those times due to the crowds and the amount of time needed to plan ahead. Overall, based on the immense popularity of the Canyon, it seems like they are doing okay. As with everything in the outdoor I would like to see less facilities and more "wilderness". Could I be sent a copy of the published results? (name and address)"

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"Internet permit issuance would be great if it allows me to choose from what's available."

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- Permit system worked for us, but it was fall (November), so not sure how it is in high season.
- Internet booking sounds interesting; however, would like to know preventive measures are in place to disallow overbooking and consequent non-usage of sites.
- Rangers (in office, on trail, and at campsite) were competent, sobering, and incredibly encouraging.
  
- As noted in responses, animal feces on trail was highly distracting and with the added aspect of heavy rains, the trail was poop slop (we called it 'suck mud'). Would love to see poop bags utilized on the animals – both humans and animals should be required to carry waste out.
- Overall, an excellent adventure – epic! Yahoo!"

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"There are plenty of historic informative centers, vendors, and other amenities to attract crowds above the rim. Below should be managed as the wilderness it has always been. I enjoyed the adventure of finding routes without signs or well marked routes/trails. The Park does well to emphasize risk for areas that are more remote.

I like bundled annual permits. I always purchase the annual parks pass and would welcome a National Park pass/Backcountry pass. Perhaps a few 'per-person-per-night' vouchers could be included with the pass as incentive to buy. Additional trips would then require additional 'per person per night' fees.

If any of this needs clarification, please write or call (number). It would be my pleasure to speak with you. Thanks. (name and occupation)

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- We need more pit toilets. If you require people to camp at specific campsites there should be a pit toilet at them, i.e., Hermit and Hance Rapid and Granite. Pit toilets are very much needed along the river corridor – not enough space to crap all over it.
- Permits cost too much money. Why should I pay for a permit to go to an area that is not patrolled or maintained? Plus, I already paid \$20 to get in. Other National Parks do not charge such a large fee.
- We should be allowed to access the South Rim boundary road instead of having to go through a tiny corner of Havasupai land. \$25 is outrageous just to get to the Bass trailhead.
- You should not let river rats have fires if backpackers can't.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

- I should be allowed to ride my bike to Caps Solitude. Wilderness, schmilderness – there are motors on the river. It's hypocritical and my bike doesn't make noise or carry a blender/generator or 30 people.
- Too many overflights – a helicopter has a noise shadow of 12 miles in either direction that's 24 miles total 360 degrees around. That sucks – it's all day long, too. Have overflights go over the corridor, not where it's undeveloped.
- Don't close the Backcountry office from Noon to 1:00 p.m. for lunch if you want us to get a permit.

### Grand Canyon Backcountry Visitor Study December Comments

"Getting a permit for our trip was very easy because we went in December."

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"Even Backcountry office personnel don't know status of water sources. Website or bulletin board outside Backcountry office perhaps?"

Make hikers aware that latest trails illustrated Grand Canyon map is wrong between Escalante and 75 Mile Canyons."

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"The existing permit system has discouraged me from using the Park for much of the year. I have increased my visits during the off-season winter months when permits are more abundant and reservations are not always required.

I most value the solidarity and remoteness of my experience, and try to avoid the corridor trails whenever possible; however, realize the important of those trails to large numbers of people in experiencing the Grand Canyon. I do not consider myself a greedy environmentalist who wishes to shut everyone unlike themselves out of the Park Backcountry. I'm extremely happy with the accessibility of the Park to users or private aircraft, with the airport at Tusayan reducing congestion in the Park for persons like myself. The "no-fly" zones over the wilderness areas are very effective in banning low flying aircraft. The most noticeable aspect of aircraft were the jetliners flying high overhead, while the tour operators and private aircraft were almost non-existent."

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"Only that we weren't in as good as shape as we thought."

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"While in the military and for work, I've traveled the world. I've seen many beautiful and wondrous sights. If I were to put them all together, they would not begin to compare to my trip to the Grand Canyon! Thanks for everything, (name)."

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"There should be a way to be refunded for the days/nights not spent in the Backcountry if hiking out early. Also, the \$20 fee to get in should be waived for those who purchased permits ESPECIALLY if

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

the hike is greater than seven days. The \$20 parking cost thing should be good for entire trip and not expire after seven days!

The Bright Angel is disappointing.  
Very well placed trail markers.”

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“On our last trip (2004/2005, New Year’s) the rain/snow made exiting Bright Angel Trail a challenge. However, compounding that was the tremendous amount of mud/slop that the mule trips stirred up. It seemed that the mule trips should have been postponed until the Trail had a chance to dry a little.

Rangers/Park staff we encountered (Indian Gardens and Bright Angel Trail) were not as friendly as prior trips.

Overall we had a great time! We enjoy going in the colder season. It’s nice to have the chance to hike inside the Canyon rather than just view it from the top.”

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“One thing that really bothered me was some of the other people on the trail. They were throwing things down into the Canyon despite signs. They also were very loud and many seemed unprepared.”

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“We (11) registered as two groups because we were afraid the few large group campsites would be taken and then we wouldn’t be able to get a Backcountry permit. (I don’t know if that is true but that was what we were led to believe.)

I think (or would like to see) large groups should be able to use Backcountry campgrounds even if large group areas are already taken. The only requirement should be that the group not use sites adjacent to each other to prevent tramping of vegetation between sites.”

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1. Do not restrict any more, as the number of rules is already excessive. People need to be able to visit their own parks when their schedule allows. And don’t start requiring human waste to be packed out – most people aren’t going to ever do that one no matter if you turn them into lawbreakers by requiring it.
2. An Internet registration system should be implemented. It’s past time to join the modern world (on the Rim, not the Backcountry, that is ☺).
3. I noticed one very salient deficiency/omission in the information provided in the printed materials and video. While it was mentioned that in winter there are often icy conditions near the Rim and that in-step crampons are highly recommended, there was no mention that inexpensive in-step crampons are available at the Park store. I didn’t learn this until I was there and just happened to talk to the ranger about it at the Backcountry office. This information definitely needs to be conveyed as one available option.
4. Phantom Ranch has a pay phone. Strongly suggest to them that the stock for sale in their canteen a phone card. Since I didn’t already have a Q-West phone card, I couldn’t use it!
5. Don’t start restricting personal electronics such as exemplified in Question 3.12 (cell and satellite phone, notebook computers, PDA, GPS, etc.).”

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

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“Living in Arizona, I have the luxury of going to the Backcountry office to obtain my permits. This is the easiest way to get a permit. The rangers are knowledgeable and helpful. The online system was a pain in the ass. I didn’t get the dates or trips which worked for me.”

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“To me the best part about the current permit system is how it limits the number of people in each area. The fact that you encounter so few, if any, people on your trips makes the Canyon such a special place. I think they do a great job.”

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“Note – Wrote a letter to family – some information below is repeated – you may have a copy if you wish.

1. A little weak on definitions:  
Backcountry IGBA, Horseshoe (my ‘w’) of camp at Will (my x). Suggest types A, B, C...I, II, III)
2. Today walked from my home into “Mount Stirling Wilderness Area”. Does this count?
3. Take some research of my notes – some by mail, some groups.
4. Utah Flats (fourth time) still old incorrect statement. No map – camp #31 “was” #1.
5. I x None - \*Visited by ranger in w – first we saw one on trail, second ditto.
6. There are so many of us ‘not paying to concessionaires’. Trudgers with heavy load that have to share the mule destroyed trails – my legacy to future generations would be to let the backpackers have their own trail - Kaibab (s) visibility type – with suggested graded (voluntary suggested usage) sites, beginner to free wheelers – we have this grandiose gift of nature here – pack all the people into the corridor, discourage exploration and limit initiative – just like the concessionaires – ‘our way or none’ – but I don’t suppose you will cover this ground – wish you much luck in improving the system – so unique – worldwide.

\*Almost forgot to mention exhaustion overnight stop – dropped pack about 2:00 p.m., looked for exit (Utah Flats Piano Alley) not recognizable from previous trip due to heavy exfoliation – camped, short of two mile corridor limit, one night exited next day with help of ranger.”

“It would be much easier to plan a trip using a Web-based system so that you knew what was available.

I would rather have no waste facilities – makes you feel like you aren’t really getting away – although I understand the necessity.

My next trip will be to areas even less used – more difficult to get to.

I think it is vital to keep some areas that not everyone can go to – in the sense that is it a tougher trail, have to pack water, etc., so those who need to ‘get away from it all’ still can.” (some very nice pictures)

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“We had a wonderful trip! Lots of rain for one day. Will be back next couple of years (Mount Zion next). Thanks ☺.”

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

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"I believe that there should be more user days allocated to private boaters and less user days allocated to commercial outfits. Commercial guides should also be counted in commercial user days. Motor boats should not be allowed on the Colorado River and helicopter tours and all other air traffic should be restricted stringently."

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"One of the main reasons we go to Vasey's Paradise is to fish. In 1987, there were numerous large fish. We mainly catch and release with barbless hooks and are very experienced fisherman. However, the fishing has diminished greatly since that first trip, in number and size. I believe the main cause for this decline is due to poor resource management by the Arizona Game and Fish. They allow bait fishing which I believe is the number one reason for this decline. The second would be the number of fishermen (pressure). I have discussed these conditions with park rangers over the phone, and they agree with these problems but feel that they have no power to change state laws and/or regulations."

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"The permit issuance system is rather mediocre. Those that can drive to the Backcountry office have a clear advantage in getting their ideal itinerary. Fortunately, I can drive if I feel so inclined, but an Internet based permit system would be good. The only problem with such a system would be the likelihood that individuals would sign up for very difficult trails and would lack the necessary experience level. These more difficult trails seem to be open even during times of high use on the main corridor. Trails and special and specific warnings would need to be given to individuals regarding the primitive areas of the Park.

Finally, I wish that the mule trips could be discontinued. I know that this will likely never happen for various reasons, but the mules create disgusting trail conditions. Not only in terms of the mule feces and urine that hikers must avoid stepping in, but also the severe trail destruction that these animals cause on the corridor trails."

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"Keep it a little difficult to get a permit. With the pressure that the Backcountry gets, there needs to be limiting factors. I want my grandsons to still be able to get away and not see another soul for three days if they want to."

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"Overall, our trip was great (South Kaibab to Bright Angel for two nights, with day hike to Ribbon Falls, then up Bright Angel to Indian Gardens for a night). I think it would have been unpleasant in busier seasons – too many people, and probably flies from all the livestock manure. Christmas was a good time to go. Next time we'll do less popular trails."

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"Yes, the time of this trip was 23-25 of December, 2004. Please take this into consideration when evaluating responses. It was a perfect and challenging time to visit the Grand Canyon. The Backcountry fee I paid was too expensive. A priority list should be considered for locals who want to enjoy their immediate surroundings. Indian Creek was a big disappointment – way too many people and human activity occurring. Hiking from Monument Creek to Indian Gardens was a great hike, but you should develop a Backcountry option that is more accommodating."

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## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

"I had a great time in the Backcountry. At the time of year we went (20-21 December) we had great weather but the paths were very dangerous. At the top they were icy but more dangerous was the slick mud further down. All of us almost fell on numerous occasions. It concerns me how thick and deep the mud was and whether as many donkeys should be going up and down if it is going to make the path un-walkable for hikers. Apart from that, everything was great!

Actually – one more thing. It would be great if more maps are put in beside water fountains so that it is clearer if the water is drinkable and, if not, where drinking water can be found."

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"Trails were badly eroded due to mule trains and wet weather at higher elevations (constant runoff from ice kept trails muddy)."

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- Trails – Generally in very good shape, the most used corridor trails should be repaired and kept in good shape. Mule traffic should be limited to Bright angel and companies using it should be charged for maintenance. Kaibab should be excluded from mule commercial traffic.
- Toilets – A primitive pit toilet similar to one at Clessa Butte should be installed in Backcountry lightly used campgrounds like Cottonwood, Grapevine Trail, etc. In heavily used places bacteria toilet similar to one close to Tipoff should be installed. We noticed that toilets in Indian Garden next to the campground are damaged. Somebody used large amounts of chlorine, killing all bacteria. These type of toilets are working for years in Canada, e.g., Pacific River National Park.
- Indian Garden – For a first time (we visited this place six times in the last ten years) we did not notice any park attendant. For the first time water was not purified but treated with chlorine, that can damage any carrying container. It tasted ugly, so we had to purify our own supply. We are also for a voluntary permit refunded by completion of the multi-day backpacking trips. It adds security and helps cultivate rescue if there is a problem on a trail and a group is not coming back on time.

Overall, over the years our experience with Grand Canyon National Park is superb quality (we only visited it during a winter). Very good job done by rangers."

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"The noise from sightseeing aircraft is simply awful. Reducing/eliminating those flights is the most important thing that could be done to improve the Backcountry experience."

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"My trip was very enjoyable. I witnessed more than one hiker who appeared to be in danger of not being able to hike to their destination before dark. Either people don't respect the magnitude of the hike or they overrate their ability."

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"I am a visitor from England traveling the USA for a year in a motor home with my husband. The process of applying for the permit was very difficult for us being on the road constantly and left us having to plan right at the last minute despite having two months notice of intent. The package that finally reached us gave no useable information on the trail (Bright Angel) that we could have to use in December; not even telling us that it was the South Rim we'd have to access the trail from.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

I also tried to book meals at the Phantom Ranch and feel more effort could be made to link these facilities and be more flexible. We had two vegetarians in the party yet the mix of veggie and carnivore meals could not be adjusted two weeks ahead of the required date – very poor customer service.

At the campsite, our water was cut off due to a pipe leak – according to the ranger. It was noticeable that those staying at Phantom Ranch still had water to shower, etc. while at the campsite – lower down the water pipe – had to flush toilets with a bucket from the river. And you have no class system in the USA? Think again.”

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“The answers were based on my most recent trip which is not characteristic of my 35-plus overnight Backcountry trips. Most of my trips into the Canyon are to the undeveloped primitive areas. This most recent trip was in the heavily traveled Bright Angel corridor which I normally avoid. The Park rules for travel in the main corridor are appropriate.

I would like to see better transportation services to the trailheads outside of the main village, e.g., Grandview and Moran Point. I would like to see a ‘listserv’ site for those who travel to the more remote areas. There used to be one on Google but it is no longer there.”

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“I think commercial guided hikes should be allowed as long as the groups are very small (no larger than 6-8 people). Hiring a commercial guide should be allowed, too. I found overuse of the main corridor trails by the mules disturbing.

I was extremely pleased with the cleanliness of the trails and campsites. In four long days, I have not seen any piece of litter along the trail or at campsites (with the one exception of a tent buried in a creek – somebody camped too close to the creek).”

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“I have probably done 16 trips in the last 28 years. Always in December or January. The campgrounds are usually not crowded at all 0 to 5 other campgrounds.

I really like the trail work you have done in the last year – very noticeable.

The only problem I ever had was 2002 or 2003 when a ranger went into my tent. I did not think that was right. Other than that I did not like the trapping of the brown trout. All other experiences are very satisfactory. I will be back next December.”

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“Kaibab Trail was heavily eroded behind steps but still much better than many trails we’ve been on. The Backcountry office was nice and easy to work with.

We had a fun time. I believe our experience was better because we were there in winter with fewer visitors.”

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“I think that the planes/helicopters should not fly over the Backcountry areas. They make the nice quiet areas noisy. In the front country there is already lots of noise so let them fly there. They will be less noticeable.”

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

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- Everything was great, and usually always is.
- Permit system works fine for me. Backcountry office has always been very helpful whether by fax, phone or in person.
- I don't think anything should be changed regarding permits, procedures or Backcountry camping areas – other than stop trying to civilize the Backcountry. Less facilities, less rules, more rangers patrolling.
- Problem as I see is that there are groups in the Backcountry without permits. Almost every trip I have met folks without permits. In fact, one told me why bother. "What are they going to do, make me go get one?" The folks that I talked to without permits seem to be locals (i.e., Arizona residents) or foreigners. I met three different groups on Horseshoe Mesa without permits in one day! Cremation Creek is another problem with unpermitted hikers.
- Rangers should be commended for their patience in dealing with so many idiots.
- Last thought! Might help to require Backcountry groups to have an experienced leader with prior Grand Canyon experience, i.e., on file, or hire a commercial guide. Would require names of all group members to be loaded in database. Eliminate first timers from Backcountry.
- One more – do not allow cell phone towers or Internet access in Backcountry – I'm sure someone will suggest it!"

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"Backcountry office rangers have been helpful and friendly. One ranger tried to discourage us on a trip. Rangers may be overly cautious and perhaps should more carefully gage expertise of hikers when providing advice. Trail descriptions appear to overstate dangers and demands of trails. Of course, as George Steck and others have commented, it is difficult to rate trails. Phone contact very hard because of time limits and hour differences between here and there, but I have figured out how to use it by calling right at 1:00 p.m. on the button. Permit system is essential and it works well given demands and goal of minimizing impact. During my hikes I never met more than two groups on the trail and that was only once (seven people total). The exception was Deer Creek when a kayak self-support flotilla and a sausage boat arrived about the same time and the little Canyon was literally overrun. Our quiet enjoyment of the falls was interrupted, although one member of the kayak group, helmet cam and all, put us on the throne room. Nights one have either had the place to myself or shared with only one other group. The exception was Clear Creek where all available campsites are clustered in one location, and there are 2-3 other groups each night. The 12/04 South Canyon trip was an aberration because we shared the campsite with a large 11-12 person group. They may not have had a permit. River traffic - had two encounters with rafters, one private (Tapeats at the River), one commercial (New Hance Rapid), one with a raft (Nankoweap) combined commercial group – all positive. Sausage boat at Deer Creek negative. Kayakers fine. Airplanes – don't remember any at South Canyon, but they were really bad at Boucher-Hermit and Nankoweap. Really detracted from the wilderness experience. River traffic non-existent at South Canyon.

Trail litter 3.6a, 3.7h, 3.8a – none in South Canyon. On other trips very minor. Some tiny scraps, usually Power Bar wrappers or such like. Campsite litter 3.6b, 3.7i, 3.8b – again small bits, nothing major in South Canyon and on all trips. I found a tent peg at South Canyon. Trail erosion/conditions 3.6j, 3.7e, 3.8j – These are unmaintained trails, erosion is a problem, trails are difficult and treacherous with exposure. This is a given from the outset. Stay on the rim or in the corridor if the conditions are a problem. Fecal waste 3.9v – I am all for this, but give me a foolproof system that will make it safe and minimize risk of spills. Right number of people in Backcountry 3.9u – generally true. See comments above under Permit System. But, some places do not lend themselves to large crowds. South Canyon does not lend itself to groups of 15 or more. Backpackers should be limited here and river trippers as well. River people can access places hikers can't and should be permitted to those locations for camping so they don't compete with hikers in smaller venues. Nankoweap would accommodate river parties and hikers in larger numbers. Rescue 3.9s – I have no doubt that if I have a serious emergency in Canyon and Park rangers are advised about it they would do their best

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

to come to my aid. But, I do not expect rescue. I have to plan that there will be no rescue and avoid placing myself in harm's way. Disappointment 3.9b – I felt there were too many of us in South Canyon at the River. So I was disappointed with that one aspect of my trip. But, they had been there before and did answer some questions about the features on and around the River. They were somewhat standoffish but opened some after we “shared” 14 hours of rain. Alone, solitude, own boss 3.1lh, k, u – I have never backpacked alone in the Grand Canyon; I have hiked alone, usually when others were tired or uninterested in exploring on the Tonto Trail (from Indian Garden) or Upper Ribbon Falls (to see ruins while camped at Cottonwood). I have been a trip leader and group member; just whatever it takes to get me into a place I haven't been to before. Risks, thrills, danger 3.1lo, s, v – I do not consider myself a thrill seeker. Risks and dangers are endemic to the Canyon – extremes of heat and cold, rattlesnakes in Upper Tapeats and Mystic Falls Canyon, exposure on precipitous ledges, treacherous trail surfaces, steep ascents and descents, a flash flood in South Canyon, etc. But you know these risks and prepare to encounter them and cope. It is extremely satisfying to go in and come out all in one piece and it's then high five time. The wild beauty of the place is thrilling. It is exhilarating to climb from Nankoweap Creek back up to the trailhead in a day with time to spare to drive to Jacob Lake to rent a room and have dinner, even though you shredded a tire on Buffalo Ranch Road and had to stop to put on the spare, after having to hike two miles back to the Ranch to find two cowboys to loan you a lug wrench when the one supplied by the rental car company did not fit. Of course, one commentator argues that we are hard wired to face and overcome danger to survive. But, our civilized lifestyle does not require us to use our survival skills and we miss the experience, so we recreate the experience by placing ourselves in dangerous situations that call upon us to employ those skills.

Ranger contact – No direct contact for South Canyon trip. Everything done by Internet or fax.

Arch sites – I love visiting ruin and rock art sites. I divide my time between the Grand Canyon and Southeast Utah – Cedar Mesa and Comb Ridge, branching out to Canyonlands this spring. I plan hikes in the Grand Canyon to involve such sites. The ability of the prehistoric people who made these structures and created the rock art to adapt and survive in this harsh environment is amazing. But, even they were driven out from time to time by droughts.

Bill, I would appreciate receiving a copy of the report of the study, if that is not contrary to the provisions of your grant. Thanks. (name)”

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“If water is contaminated by uranium or other things, have some indication.  
Mules should not be allowed on same trails as people.  
Biodegradable toilet paper should be allowed – not carried out.”

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“There are way too many mules on too many trails. It smells and the trails are in disrepair. It generally greatly worsens the experience. This should be greatly curtailed.  
A permit system that lets you make reservations in real time would be nice.”

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“Grand Canyon is a special place on earth and must be protected without compromise. Already there are lots of groups that one encounters on the trails. One wonders if too much impact is being made. I believe the Park should reduce the number of permits available each day. I visited Grand Canyon on a rainy day, and there were lots of people. I can't imagine how it would be if it was a sunny day. However, I must also add that Grand Canyon is so spectacular that I doubt anyone will ever get disappointed there.”

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## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

"I thoroughly enjoyed my trip, and I appreciated the fact that it was at a time of year where the number of visitors is lower. While I understand the need to protect Park and limit use, I would hope that there would be a system that would allow someone to hike/camp overnight somewhere in the Canyon without having to wait months.

Lastly, since I am not an expert in the Canyon geology, ecosystem, erosion, etc., I appreciate that I have to defer my wants/desires regarding access to the Canyon to those who know what impact various uses and intensity of use will have on Canyon long-term. The Grand Canyon is a national treasure that deserves preservation and protection. Thanks!"

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"Better description of possible water source in the summertime should be included on the map."

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"I was quite satisfied with everything except that we experienced unusually cold weather, even for December. We are aware that we may not have been so satisfied had we visited at a busier time of year. All four of my backpacking trips have been at Christmas; three in the 1970's and the recent one. I did not experience any disappointing changes in that time, except that there were a lot more day hikers on the Kaibab and Bright Angel trails, but not really an excessive number.

I did think it was a bit ridiculous to be asked not to use the tables in the Bright Angel campground for cooking on just because some complete klutz had once managed to spill boiling water on his crotch. So we were asked to place our stove on the ground, which is, of course, a lot less convenient. You can't treat everyone as if they possess the same abilities as the clumsiest loser you have ever seen. Cooking from a relatively awkward position (on the ground) increased the possibility of spilling the pot, albeit in a less dangerous manner."

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"New Hance Trail is too difficult to follow."

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"The sightseeing flights over the Canyon are an abomination. At the very least, the minimum altitude should be 20-25 feet. Preferably, all sightseeing flights should be banned."

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"It would be nice if Backcountry water sources could be rated on a scale, updated weekly, and posted at information areas around the Park and the Internet. The scale might be something like this:

1. Certain
2. Likely
3. Unlikely
4. Dry

The South Rim visitor areas are great."

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- As far as overflights during our last trip, most overflights that were experienced were airliners at high altitude, but they are still audible. They are not quite as disturbing as the planes and helicopters that can be heard on the Hermit Rest Trail. The "Dragon Corridor" (I believe it is called) is too close to the village/Hermit area.

## OVERNIGHT BACKCOUNTRY VISITORS AT GRAND CANYON NATIONAL PARK

- The dissatisfaction of animal waste came from the South Kaibab Trail!
- Some of your questions in 3.15 are tricky. Perhaps they can use clarification, e.g., g) historic/archaeological objects found in Backcountry should be turned in to Park immediately...well, obviously you should turn it in if you took it, but you shouldn't have removed it in the first place, so the question could be answered either way."

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"It is one of the best managed parks I have dealt with (although I normally use 'through hiker' permits elsewhere).

If charging more at other parks would improve their conditions (GSMNP in the east in a mess), it should be done.

Finally, pack animals destroy trails, destroy the hiker experience and do not belong in National Parks."

**APPENDIX D  
QUESTIONNAIRE AND FREQUENCY DISTRIBUTIONS**

# Grand Canyon National Park

## Overnight Backcountry Visitor Study

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Thank you for choosing to participate in this study! Your opinions and ideas are important to the staff of Grand Canyon National Park. They will help the National Park Service (NPS) plan for the future and improve service for backcountry visitors. We would like to know a few things about your backcountry hiking experience, your opinions about the permit system and your opinions about NPS policies.

The survey is 16 pages long and will take approximately 40 minutes to complete. Please fill in all appropriate blanks and boxes. All of your responses will be held confidential and results will be reported in aggregate so that individual responses cannot be identified. When complete, return the questionnaire in the self-addressed, postage-paid envelope. As soon as we receive your questionnaire we will take your name off of our mailing list. We *WILL NOT* share our mailing list with any other parties.

If you have questions regarding this study please contact Bill Stewart at (217) 244-4532.

### SECTION 1: PAST BACKPACKING EXPERIENCE

- 1.1 How many overnight backpacking trips have you taken: Number of trips
- |                                             | 1   | 2-3 | >3  |
|---------------------------------------------|-----|-----|-----|
| a) In the last 12 months? _____<br>(number) | 40% | 34% | 26% |
| b) In the last 5 years? _____<br>(number)   | 17% | 16% | 67% |
- 1.2 How many different parks, backcountry, and/or wilderness areas have you visited for an overnight backpacking trip? Number of other areas
- |                   | 1   | 2-3 | 4-5 | >5  |
|-------------------|-----|-----|-----|-----|
| _____<br>(number) | 22% | 22% | 13% | 43% |
- 1.3 What year did you go on your first overnight backpacking trip? Age of first trip  
(Estimate as closely as possible)
- |       | <15 | 15-20 | >20 |
|-------|-----|-------|-----|
| _____ | 24% | 21%   | 55% |
- 1.4 How many overnight backpacking trips have you taken in Grand Canyon? (Record number in spaces below.) Number of trips
- |                                             | 1   | 2-3 | >3  |
|---------------------------------------------|-----|-----|-----|
| a) In the last 12 months? _____<br>(number) | 80% | 15% | 5%  |
| b) In the last 5 years? _____<br>(number)   | 55% | 21% | 24% |
- 1.5 What year did you go on your first overnight backpacking trip in Grand Canyon? (Estimate as closely as possible) Age of first trip
- |       | <15 | 15-20 | >20 |
|-------|-----|-------|-----|
| _____ | 2%  | 5%    | 93% |
- 1.6 What would you say were your two or three main reasons for your most recent overnight backpacking trip in the Grand Canyon? (Use space below.)

Adventure, awe inspiring, backpacking with friends, beauty, canyon itself, challenge, dinner at Phantom Ranch, education, enjoy wilderness, experience the canyon, experience solitude, explore, family trip, hike in a remote area, never been there, peace, preparation for after life, rafting, rest and relaxation, spiritual renewal, to reach the bottom, wilderness of the canyon, wonder of world.

## SECTION 2: TRIP PLANNING

2.1 As you know, a permit is needed for an overnight backpacking trip in Grand Canyon, and these permits are available by advance reservation. We are interested in your evaluation of several aspects of this permit and reservation system. Please answer all of the following questions that pertain to your most recent trip to Grand Canyon.

a) Did you obtain your permit by advance reservation? (Check one)

75% Yes

24% No (skip to question "2.2".)

b) How did you first learn of the advance reservation system? (Check one)

22% By word-of-mouth from family or friends

9% Called the park for information

9% Visited the park's Backcountry Office

48% Internet

12% Other, please specify: \_\_\_\_\_

c) How did you receive the permit application form? (Check one.)

4% Wrote the park and they sent me the form.

7% Called the park and they sent me the form.

12% Personal visit to the Backcountry Office.

75% Internet to download the form.

2% Other: Made copies of forms from previous years.

0% I don't remember.

d) How did you return your completed permit application to the park? (Check one.)

19% By mail.

11% Personal visit to the Backcountry Office.

69% Fax.

1% Other: \_\_\_\_\_

0% I don't remember

e) In the future how would you prefer to make your reservation? (Check all that apply)

8% Through the mail

17% Telephone

11% Personal visit to the Backcountry Office

35% Internet to download the proper forms

21% Fax

66% By using the internet to make an instantaneous electronic reservation.

f) Approximately how far in advance did you apply for your permit? (Record in days.)

\_\_\_\_\_ Days

Less than 2 weeks

2 weeks to < 3 months

3 months or greater

7%

29%

64%

2.2 a) Did you receive a backcountry trip planner (a newspaper with maps, hiking information, etc.) from the NPS? (Check one.)

75% Yes

25% No (Skip to question 2.3.)

b) Please rate your satisfaction with the following aspects of the backcountry trip planner packet.

(Check one response for each item.)

	Very Satisfied	Satisfied	Neutral	Unsatisfied	Very Unsatisfied
Map of backcountry	19	45	25	9	1
Explanation of reasons for permit and reservation system	35	49	15	1	1
Description of low impact camping techniques	36	47	14	2	0
Description of how permit and reservation system work	31	49	17	2	0
Information on safety in the backcountry	42	48	10	0	0
Information on water sources and water quality in the backcountry	37	47	10	6	1

2.3 a) Did you receive a video when making your reservation?

50% Yes

50% No (Skip to question 2.4)

b) Did you watch the video that you received?

84% Yes

16% No (Skip to question 2.4)

c) Rate the extent to which you agree or disagree with the following statements about the video you received.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The video helped me prepare for my hike.	23	51	20	5	2
I was better informed about disposing of trash and human waste because of the video.	25	45	23	5	2
Watching the video helped me to have a safer hike.	24	44	25	6	1
Information from the video was <u>not</u> useful.	2	5	14	45	35

d) What way would you prefer to receive the information presented on the video? (Check one)

- 35% Video like the one I received
- 24% Internet Website
- 27% CD ROM / DVD
- 9% Brochure through the mail
- 3% Face-to-face conversation with rangers at the Backcountry Office
- 1% Over the phone with a ranger at the Backcountry Office

e) What information was not on the video that would have been useful to you in planning for your backcountry trip? (Please indicate below.)

Water sources, trail-specific video, seasonal issues (what to bring, conditions to expect), better transportation/shuttle information, how to get in shape, practical info on human waste disposal or dishwashing.

2.4 a) Did you stop by the Backcountry Office for information? (Check one.)

- 66% Yes
- 34% No (Skip to question 2.6.)

b) How long did you have to stand in line at the Backcountry Office? (Check one)

- 53% No line
- 5% 16-30 minutes
- 25% 0 to 5 minutes
- 1% 31 to 60 minutes
- 9% 6 to 10 minutes
- 2% Over an hour
- 5% 11-15 minutes

c) Please rate your satisfaction with the following aspects of the trip planning services located at the Backcountry Office. (Check one response for each item.)

	Very Satisfied	Satisfied	Neutral	Unsatisfied	Very Unsatisfied
Promptness of service	62	30	7	1	1
Helpfulness of rangers on duty	74	21	4	1	0
Rangers' knowledge of the backcountry	66	26	7	1	0
Usefulness of rangers in helping with trip planning	55	28	16	2	0
Information on safety in the backcountry	46	36	18	0	0
Information on water sources and water quality in the backcountry	52	32	13	3	0

2.5 Please indicate any information you did not receive from the Backcountry Office that would have been helpful to plan your hike.

Water sources; more detailed maps; up-to-date information on trail and campsite conditions; more information on shuttle, park, and transportation; clarification about radioactivity in streams; more accurate information on hiking distances, lengths, and times; rangers were extremely knowledgeable, helpful, patient, cautious, variable in advice given.

2.6 a) Did you telephone the Backcountry Office for information? (Check one)

- 42% Yes
- 58% No (Skip to question 2.7.)

b) Please rate your satisfaction with the following aspects of the telephone information service.  
(Check one response for each item)

	Very Satisfied	Satisfied	Neutral	Unsatisfied	Very Unsatisfied
Ability to contact the office by telephone	26	38	13	17	7
Information received	45	40	10	2	3
Helpfulness of ranger	57	34	5	2	2

2.7 When did you receive your backcountry permit?

If you received your permit the day of your trip check this box. *15% checked.*

	< 2 weeks	2 weeks to < three months	> three months
If not, indicate the number of days before your trip that you received your permit:	19%	48%	18%

2.8 a) Which of the following statements best describes the trip you took in the backcountry? (Check one)

- 72% The trip allowed by my permit was just what I wanted. (Skip to question c.)
- 25% The trip allowed by my permit was generally what I wanted.
- 3% The trip allowed by my permit was not what I wanted.

b) What was it about the trip, allowed by your permit, that was not as you wanted? (Check all that apply.)

- 24% I didn't get to go when I preferred.
- 3% I preferred to go to more developed areas.
- 17% I preferred to go to less developed areas.
- 27% I preferred a longer trip.
- 11% I didn't get to go to the attraction areas I preferred.
- 38% Other, please specify: \_\_\_\_\_

Hiked too far, not in use area I preferred, did not stay by river, asked for 4 person and only got 3 person, Bright Angel and Indian Garden were empty but not allowed more than 4 days per site, Bright Angel was full, campsites were assigned. Grand Canyon is over-regulated, had trouble finding route, saw law enforcement rangers, injury - could not go as far as desired, itinerary was better than we requested, took long time before we found out we couldn't go on first choice, level of difficulty was too great, ranger told us wrong information about water sources, no flexibility, rafter took the only true spot, different dates, different direction, wanted a loop hike.

c) Did you stay on your permit itinerary? (Check one)

- 83% Yes (Skip to question 3.1.)
- 17% No
- 0% Don't Know

d) We are interested in reasons for not following your permit itinerary. Listed below are circumstances that may have caused your trip to be different from your permit. (Check all that apply.)

2%	The campsite area of my permit was too crowded.	2%	I did not think it was important to stay on my permit itinerary.
2%	My food supply was low so the hike ended earlier.	13%	I (or someone in my group) was either injured or became ill.
0%	I did not understand my permit itinerary.	3%	I was looking for more solitude and I hiked off my permit itinerary.
14%	I (or someone in my group) was tired and we needed to hike out early.	6%	I saw another place I wanted to explore.
9%	Changing weather made me leave earlier.	1%	I was not sure if I was on the right trail.

66% Other, please specify:

First day was too difficult and chose not to return on it, 1/2 day ahead of schedule so hiked halfway up on last day, got last minute reservations at Phantom Ranch, bad weather, changing weather, missed Cedar Creek campsite, became dark, late arrival, original permit, too dangerous due to ice, trail closed, water supply low.

### SECTION 3: YOUR BACKCOUNTRY TRIP

We are interested in the type of conditions you encountered in the Grand Canyon's backcountry, and the influence those conditions may have had on your recent trip.

3.1 We are interested in the number of other groups you encountered during the days of your trip. Please check the category that best characterizes the number of groups you encountered each day of your trip.

# of groups encountered	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
0	7	9	12	18	18	24
1-3	22	27	26	30	24	29
4-7	24	21	16	15	18	9
8-10	12	11	10	9	8	9
11+	32	30	34	27	30	30
Don't know / Can't remember	2	2	2	1	2	0
Percent of sample who responded	95%	91%	66%	32%	16%	9%

3.2 Similarly for the nights of your trip, how many groups were camped within sight or sound of you?

<b># of groups camped within sight or sound of you?</b>	<b>Night 1</b>	<b>Night 2</b>	<b>Night 3</b>	<b>Night 4</b>	<b>Night 5</b>	<b>Night 6</b>
<b>0</b>	21	28	40	45	46	52
<b>1-2</b>	20	21	21	18	19	16
<b>3-5</b>	22	21	17	14	11	10
<b>6+</b>	34	30	21	23	23	22
<b>Don't know / Can't remember</b>	2	2	1	0	0	0
<b>Percent of sample who responded</b>	98%	72%	38%	20%	13%	8%

3.3 Which kinds of user groups did you encounter during your backcountry trip? (Check all that apply)

- 85% Day hikers
- 96% Overnight backpackers
- 67% Groups using horses / mules
- 19% River trips using motorized watercraft
- 26% River runners
- 12% Commercially guided hikers
- 19% Aircraft tours overhead

3.4 a) Did the number of groups you met in the backcountry cause you to change your planned trip schedule?

- 3% Yes
- 97% No (Skip to question 3.5)

b) How did you change your planned trip schedule? (check all that apply)

- 30% Camped in a different area along my planned route.
- 24% Hiked a different route.
- 26% Hiked out early.
- 0% Other, please specify: \_\_\_\_\_

3.5 How many times did you meet a ranger in the backcountry during your trip? (Estimate as closely as possible)

<u>                    </u> (number)	0	1	2-3	>3 times
	26%	16%	36%	22%

3.6 How would you rate the extent to which each of the following conditions was apparent during your trip?  
(Check one response for each item.)

	Not Apparent At All	Slightly Apparent	Moderately Apparent	Very Apparent	Extremely Apparent
a) Litter along trails	61	34	4	1	0
b) Litter at campsites	61	34	3	1	0
c) Human waste along trails	88	10	1	0	0
d) Human waste at camp areas	87	10	1	1	0
e) Toilet paper along trails	85	13	2	1	0
f) Toilet paper at camp areas	86	10	3	1	0
g) Livestock waste along trails or in campsites	25	11	20	24	20
h) Aircraft overhead	38	35	16	7	4
i) Number of other groups camped within sight or sound of you	15	28	29	20	8
j) Trail erosion	12	37	33	12	6
k) Motorized equipment on river trips	75	17	5	2	1
l) Vegetation damage from trampling or cutting	50	40	9	2	0

3.7 We are interested in how satisfied you were with the backcountry conditions. Please indicate your level of satisfaction for each of the following items. (Check one response for each item.)

	Very Satisfied	Satisfied	Neutral	Unsatisfied	Very Unsatisfied
a) Number of other groups you met along the trail	32	43	20	4	1
b) Number of other groups camped within sight or sound of you	32	40	21	6	1
c) Size of other groups that you encountered	32	45	21	2	0
d) Physical conditions of campsites	54	38	6	2	0
e) Physical conditions of trails	40	45	10	4	1
f) Sanitary facilities in the backcountry	43	41	12	4	1
g) Spacing of designated campsites	29	47	17	6	1

3.7 Continued...

	Very Satisfied	Satisfied	Neutral	Unsatisfied	Very Unsatisfied
h) Litter along trails	56	34	6	4	0
i) Litter at campsites	55	36	6	2	1
j) Human waste along trails	66	27	5	1	0
k) Human waste at camp areas	67	26	5	2	1
l) Toilet paper along trails	64	27	6	3	1
m) Toilet paper at camp areas	65	26	6	2	1
n) Livestock waste along trails or in campsites	27	22	25	17	10
o) Aircraft overhead	37	27	20	11	5
p) Trail erosion	28	42	21	8	1
q) Motorized equipment on river trips	49	23	25	3	1
r) Vegetation damage from trampling or cutting	39	42	15	4	0

3.8 How would you rate the extent to which the presence of each of these conditions disturbed you?  
(Check one response for each item.)

	Not at all Disturbing	Slightly Disturbing	Moderately Disturbing	Very Disturbing	Extremely Disturbing
a) Litter along the trail	65	20	8	5	3
b) Litter at campsites	71	16	6	4	2
c) Human waste along trails	83	7	3	4	4
d) Human waste at camp areas	83	7	2	4	5
e) Toilet paper along trails	79	9	3	6	4
f) Toilet paper at camp areas	82	8	3	4	4
g) Livestock waste along trails or in campsites	44	22	19	9	7
h) Aircraft overhead	58	17	13	7	5
i) Number of other groups camped within sight or sound of you	53	32	11	3	1
j) Trail erosion	58	25	13	4	1

3.8 Continued...

	Not at all Disturbing	Slightly Disturbing	Moderately Disturbing	Very Disturbing	Extremely Disturbing
k) Motorized equipment on river trips	82	10	4	2	2
l) Vegetation damage from trampling or cutting	66	21	9	2	1

3.9 We are interested in your opinions about a number of backcountry items. Rate the extent to which you agree or disagree with each of the following statements. (Check one response for each item.)

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
a) Backpacking and river running parties are compatible with one another.	23	48	22	7	1
b) I was disappointed with some aspects of my trip.	3	17	10	37	33
c) I am very attached to the Grand Canyon.	57	29	11	1	2
d) There should be a limit to the size of groups using the backcountry.	37	45	13	5	1
e) Backcountry ranger patrols are necessary and appropriate.	41	42	13	3	1
f) Primitive sanitary facilities (e.g., pit toilets) should be available at more camping areas within the backcountry	10	25	40	21	4
g) The Grand Canyon is the best place for backpacking.	24	27	38	10	2
h) It was easy to follow the route specified on my permit.	54	39	4	3	1
i) I thoroughly enjoyed my visit to the backcountry at Grand Canyon.	78	20	1	1	1
j) I do not want to visit any more areas like the backcountry at Grand Canyon.	1	1	2	18	78
k) The Grand Canyon is very special to me.	62	30	7	1	1
l) My trip to the backcountry at Grand Canyon was well worth the cost.	74	22	3	1	1
m) I cannot imagine a better trip than the one I took in the backcountry at Grand Canyon	24	28	30	15	3
n) Backpacking at the Grand Canyon is more important to me than backpacking anywhere else.	16	16	40	22	6
o) Encountering a large backpacking group (over 11 people) detracted from my trip	7	15	37	29	13
p) Aircraft over the backcountry did <u>not</u> detract from the enjoyment of my trip.	17	31	23	19	10
q) Too many aircraft fly over the backcountry.	12	19	35	24	9

3.9 Continued...

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
r) The backcountry in Grand Canyon is used by too many people.	1	9	39	44	7
s) Park rangers will rescue me if I get into trouble in the backcountry.	6	26	31	30	8
t) Park rangers exaggerate the dangers of backpacking.	2	11	15	48	24
u) The NPS allows about the right number of people in the backcountry of Grand Canyon.	9	56	28	6	1
v) Backcountry users should be required to carry out their fecal wastes.	5	8	20	42	25
w) Animal-proof food storage cans should be available at all campsites in the park's backcountry	22	38	18	17	5
x) Commercial guided hikes should be allowed in the backcountry.	3	20	28	28	21
y) Hiring a guide for a backpacking trip should <u>not</u> be allowed.	12	14	33	33	8
z) I was well informed about appropriate behavior to protect park resources.	37	56	5	2	0
aa) I was well prepared for my trip.	53	4	3	2	0

3.10 a) Would you prefer using a “real time” web-based system to apply for a backcountry permit where you can examine the current status of all campsites, plan a trip based on sites availability, submit your plan electronically, and receive an instantaneous, on line, approval?

- 81% Yes
- 10% No (skip to question 3.10 .b)
- 9% Don't Care

Grand Canyon overnight backcountry permit fee is \$10 per permit plus \$5 per person per night. Would you be willing to pay an extra \$5 (*or \$10, or \$25 - the number varied across 9 different versions of this questionnaire*) for this service in addition to the other fees that you pay?

- 66% Yes
- 34% No

b) According to current regulation, backcountry permit applications cannot be submitted earlier than the first day of the month, four months prior to your proposed start date. Given that the demand exceeds the number of permits, would you support changing the regulation so that you can apply as early as one year prior to your planned start date, paying a higher permit fee for those applications submitted earlier than the current four-month earliest allowable time?

- 30% Yes
- 60% No (skip to question 3.11)
- 10% Don't Care

If yes, would you be willing to pay an extra \$5 (*or \$10, or \$25 - the number varied across 9 different versions of this questionnaire*) for this service in addition to the other fees that you pay?

- 78% Yes
- 22% No

3.11 The following are experiences that visitors might seek in the Grand Canyon. Please indicate how important each of the following experiences were to you for your trip in Grand Canyon backcountry. You may notice some apparent repetition among the items, but this is for the purpose of increasing accuracy of the results.  
(Check one response for each item.)

	<b><u>Degree of Importance</u></b>				
	Extremely Unimportant	Unimportant	Neither	Important	Extremely Important
a) Enjoying the sounds of nature	0	1	4	45	50
b) Developing your outdoor abilities and skills	1	5	14	54	27
c) Depending on your skills to deal with wilderness conditions	0	4	15	55	26
d) Learning about the Park's history	0	6	18	61	15
e) Releasing or reducing some built-up tensions	2	7	24	45	22
f) Talking to new and varied people	7	20	31	36	6
g) Studying nature	0	3	15	58	24
h) Experiencing solitude	1	2	10	45	42
i) Doing something with your family	3	4	22	41	30
j) Learning about the park's natural wonders	0	1	7	62	30
k) Being alone	2	9	28	38	23
l) Getting away from crowded situations	0	3	7	50	40
m) Experiencing peace and calm	0	2	3	49	47
n) Observing other people in the area	25	32	32	9	2
o) Experiencing the risks involved	4	11	29	44	13
p) Enjoying the smells of nature	0	4	14	55	27
q) Testing your abilities	1	6	15	55	25
r) Learning what you are capable of	1	5	15	54	25
s) Having thrills	6	15	27	36	16

3.11 *Continued...*

	<b><u>Degree of Importance</u></b>				
	Extremely Unimportant	Unimportant	Neither	Important	Extremely Important
t) Being self-sufficient in a wilderness area	0	4	12	54	29
u) Being your own boss	4	10	34	37	16
v) Chancing dangerous situations	13	29	34	19	5
w) Knowing others are nearby	18	41	29	12	1
x) Being near others who could help you if you need them	12	34	27	25	2
y) Bringing your family closer together	5	7	29	43	17
z) Reflecting on your spiritual values	4	11	26	39	20
aa) Being with others who enjoy the same thing you do	3	8	17	54	19
bb) Meeting other people in the area	16	27	29	26	3
cc) Being in an area where human influence is not noticeable	1	3	11	50	36
dd) Encountering wildlife	0	2	9	54	35
ee) Being in a wilderness setting	0	0	2	38	60

3.12 Please check any of the items you may have carried with you and used on your recent backcountry trip.

	<b>Carried</b>	<b>Used</b>
Cell Phone	21%	3%
Laptop Computer	0%	0%
Personal Digital Assistant (e.g. Palm Pilot)	1%	0%
Pager	0%	0%
Satellite Phone	2%	1%
GPS Unit	14%	11%
Other, please specify: <u>camera, compass, radios, walkie talkies</u>	9%	

If you used any of these items while on your backcountry trip please describe the reasons for using them. (Record below)

3.13 a) Did you visit any archaeological sites on your backcountry trip?

36% Yes

60% No (skip to question 3.16)

4% Don't Know (skip to question 3.16)

b) Did you plan in advance to visit the archaeological sites on your backcountry trip?

27% Yes

73% No

c) What did you do at these sites? (Check all that apply)

98% Looked at the site

8% Walked inside of the archaeological site

3% Handled the artifacts or stones

0% Can't remember what I did

75% Left everything as I found it

11% Other, please specify:

0% Tried to fix it up a little

Took pictures; read about it in a guidebook; read NPS display; danced

d) Rate the degree to which you felt the following at the archaeological sites you visited.

(Check one response for each item.)

	<u>Extent of Feeling</u>				
	Not	Slight	Moderate	Very	Extreme
Humbled	16	18	34	25	7
Respect for the site	0	3	17	46	35
Bored	81	9	9	0	0
Excited	8	18	39	26	11
A sense of sacredness	12	15	32	31	11
Tempted to take an artifact home	92	3	3	1	1
Fascinated	3	12	29	35	22

- 3.14 a) Did you travel across any Native American tribal lands to get to the trailhead of your hike in Grand Canyon?  
 14% Yes  
 79% No (skip to question 3.15)  
 8% Don't know (skip to question 3.15)

b) Across what tribal land did you travel? (name tribe) Navajo 52%; Havasupai 18%; Hopi 2%; Can't remember 2%; Haulapai 1%; Anasazi 1%

c) Did you pay for an additional permit to travel across tribal lands?

13% Yes

87% No

Fee

	\$5	\$10	\$20	\$25	\$40	\$50	\$75 or greater
d) If yes, how much was the permit fee?	5%	37%	18%	20%	7%	6%	8%

e) If no, were you aware that an extra permit was required to travel across tribal lands?

22% Yes

78% No

3.15 Please mark whether you believe the following statements to be true or false.

(Check one response for each item.)

\* correct answer

**TRUE FALSE**

a) Campfires are not allowed in the backcountry.

\* 94 6

b) Pets may be taken into the backcountry as long as they are on a leash.

5 \* 95

c) Only water obtained from the Colorado River needs to be purified before drinking.

6 \* 94

d) Toilet paper (used outside of restrooms) should be packed out of the backcountry, not burned or buried.

\* 91 9

e) Food scraps should be scattered widely to avoid attracting or concentrating wild animals.

14 \* 86

f) Plants, rocks, and animals may not be collected, except when a special permit for research purposes is obtained.

\* 91 9

g) Historic and archaeological objects found in the backcountry should be turned in to the park immediately upon completion of the trip.

32 \* 68

h) Organic garbage and burnable trash may be disposed of properly in the backcountry, but non-biodegradable or unburnable trash must be packed out.

17 \* 83

I) It is all right to camp in a use-area other than the one scheduled on your permit if the other use area is not occupied.

5 \* 95

j) Backcountry permits need to be signed by the visitor before they are valid.

\* 96 4

k) Hikers need a valid Arizona State fishing license to fish in the Colorado River and its tributaries.

\* 95 5

l) A permit (other than your backcountry permit) is required to enter all caves, except the cave on Horseshoe Mesa.

\* 59 41

3.16 If you had the opportunity would you take another backpacking trip in Grand Canyon?

96% Yes, likely.

1% No, unlikely. If you answered "no," why not? Please explain below:

3% Not Sure

**SECTION 4: TELL US ABOUT YOURSELF**

4.1 Now we would like to ask you a few questions about yourself.

- a) How many people (including you) were in your group? (Record number.) One person 11%; Two 42%; Greater than or equal to three 46%
- b) How would you best describe your group? (Check one)
  - 43% Family
  - 33% Friends
  - 12% Family and friends
  - 3% Organized group (scouts, club, etc.)
  - 10% Alone

4.2 What year were you born? (Record year) Less than 23 years 2%; 23-35 years 29%; Greater than 35 years 70%

4.3 What is your sex? (Check one)

- 74% Male
- 26% Female

4.4 a) Do you consider yourself Spanish, Hispanic, or Latino?

- 2% Yes
- 95% No
- 3% Do not wish to answer.

b) What race or races do you consider yourself to be? (Check all that apply)

- 1% American Indian or Alaska Native
- 3% Asian
- 1% Black or African American
- 0% Native Hawaiian or Other Pacific Islander
- 91% White
- 6% Do not wish to answer.

4.5 What is the highest level of education you have completed so far? (please circle)

<i>Elementary</i>				<i>High School</i>				<i>College</i>				<i>Graduate Study</i>			
5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
0	0	0	0	0	1%	0%	5%	2%	8%	4%	28%	7%	16%	6%	23%

4.6 Which category best represents your total annual household (before taxes) income? (Check one.)

- 4% less than \$10,000
- 5% \$10,000 - \$19,999
- 8% \$20,000 - \$34,999
- 11% \$35,000 - \$49,999
- 14% \$50,000 - \$64,999
- 11% \$65,000 - \$79,999
- 10% \$80,000 - \$94,999
- 38% \$95,000 or more

4.7 How would you characterize the area in which you live? (Check one)

- 46% City larger than 150,000 population
- 10% City of 75,001-150,000 population
- 23% City of 10,001-75,000 population
- 13% Town of 1,000-10,000 population
- 3% Town with less than 1,000 population
- 3% Farm or ranch
- 2% Other

4.8 Do you have any other comments or observations that you would like to bring to the attention of the park staff? We especially want your reaction to the current backcountry management policies and permit issuance system, and/or anything about your trip that disappointed you. (Use space below.)

68% wrote comments

***Thank you*** for your patience in completing this questionnaire. Please return the questionnaire to us in the envelope provided -- postage has already been paid.