

1998 Hawn State Park Visitor Survey

Project Completion Report

Submitted to

Missouri Department of Natural Resources Division of State Parks

Prepared by

Dawn K. Fredrickson R. Neil Moisey Ph.D.

Department of Parks, Recreation, & Tourism School of Natural Resources University of Missouri-Columbia

March, 1999

Executive Summary

The purpose of this study was to describe visitors' socio-demographic characteristics, patterns of use, and satisfaction with park facilities, programs and services at Hawn State Park (HSP).

An on-site survey of adult visitors to HSP was conducted from July 1, to August 31, 1998. Over three hundred (305) surveys were collected, with an overall response rate of 100%. Results of the survey have a margin of error of plus or minus 5.7%. The following information summarizes the results of the study.

Socio-demographic Characteristics

- HSP visitors were comprised of nearly equal numbers of males and females, and the average age of the adult visitors to HSP was 44.
- The highest percentage had completed a four-year college degree or a post-graduate degree and had an annual household income of \$25,000-\$50,000.
- The majority of visitors (95%) were Caucasian, 2% were Native American, 2% were Hispanic, 0.3% were Asian, and 0.3% were African American.
- Almost 7% of the visitors reported having a disability.
- Over 82% of visitors were from Missouri with 7.2% from Illinois.

Use-Patterns

- About two-thirds of HSP visitors had visited the park before.
- HSP visitors had visited the park an average of 3.5 times in the past year.
- More than half (60%) of the visitors were day-users.
- Of the visitors staying overnight, almost all (94%) stayed in the HSP campground, and over two-fifths stayed two nights. The average number of nights visitors stayed was 2.2.
- The majority of HSP visitors visited the park with family and/or friends. Almost 10% visited with a club or organized group and less than 10% visited the park alone.
- Average group size of visitors to HSP was 6.1 people per group.
- The most frequent recreation activities in which visitors participated were hiking, picnicking, camping, viewing wildlife, and studying nature.

Satisfaction and Other Measures

- Ninety-nine percent (99%) of the visitors were either very or somewhat satisfied overall.
- Visitors were most satisfied with the campgrounds and least satisfied with park signs.

- The majority of visitors gave high ratings on being free of litter and trash, care of natural resources and being safe.
- Upkeep of park facilities was the area identified as needing the most attention.
- Two-fifths (43%) of visitors with safety concerns either did not have a reason for not rating HSP excellent on safety, felt that no place could be perfectly safe, or complained about problems outside of management control.

- Only 34% of visitors to HSP felt crowded during their visit. One-third of them felt crowded in the campgrounds.
- Weekend visitors' perceptions of crowding were significantly higher than weekday visitors'.
- One-third of the respondents provided additional comments or suggestions, almost 40% of which were positive comments.

Acknowledgements

Conducting and successfully completing a study of this magnitude and complexity could not have been accomplished without the cooperation of many individuals. About 3,900 visitors to Missouri State Parks participated in the 1998 Missouri State Parks Visitor Survey. Over 300 visitors to Hawn State Park voluntarily agreed to provide the information upon which this report is based. In many cases these individuals graciously extended their stay at particular recreation sites so that they could complete the questionnaire. It is clear from their input that these visitors care very much for the recreation resources in the Missouri State Park System. Their efforts will provide invaluable input into the planning process and providing for more effective and responsive management of these resources.

Many thanks also go to the numerous research assistants and students at the University of Missouri who collected the survey data and assisted in the coding and computer data entry of the questionnaires. They are: Li-chen Lin, Tucker Fredrickson, Carrie Robinett, Chris Thoele, and Casey Thornton.

Table of Contents

Executive Summary	11
Acknowledgements	iv
Table of Contents	v
List of Tables	
List of Figures	viii
Introduction	1
Background	
Need for Recreation Research	
Study Purpose	2
Study Area	2
Scope of Study	2
Methodology	3
Sampling Procedures	3
Questionnaire	4
Selection of Subjects	4
Data Collection	4
Data Analysis	4
Results	6
Surveys Collected & Response Rates	6
Sampling Error	6
Socio-demographic Characteristics	7
Age	
Gender	7
Education	7
Income	7
Ethnic Origin	8
Visitors with Disabilities	8
Residence	8
Use Patterns	8
Visit Characteristics	8
Group size	9
Recreation Activity Participation	9
Satisfaction Measures	10
Overall Satisfaction	10
Satisfaction with Park Features	10
Performance Rating	10
Importance-Performance Measures	
Crowding	
Crowding and satisfaction	
Safety Concerns of Visitors	
Additional Visitor Comments	
Discussion	
Management Implications	
Research Recommendations	

Methodology Recommendations and Considerations for Other Parks	18
Survey administration	18
References	20
Appendix A. Hawn State Park User Survey	21
Appendix B. Survey Protocol	23
Appendix C. Prize Entry Form	25
Appendix D. Observation Survey	27
Appendix E. Responses to Survey Questions	29
Appendix F. List of Responses for Safety Concerns (Q 8)	35
Appendix G. List of Responses for Additional Comments (Q 20)	39

List of Tables

Table 1.	HSP Survey Schedule	3
	Surveys Collected by Day of Week	
	Surveys Collected by Time Slot	
Table 4.	Surveys Collected by Date	7
	Surveys Collected by Recreation Area	
Table 6.	Mean Performance and Importance Scores for Park Attributes	10
Table 7.	Locations Where HSP Visitors Felt Crowded During Their Visit	13
Table 8.	Frequency and Percentage of Comments and Suggestions from	
	HSP Visitors	15

List of Figures

Figure 1.	Ethnic Origin of HSP Visitors	8
Figure 2.	Residence of HSP Visitors by Zip Code	8
Figure 3.	Participation in Recreational Activities	9
Figure 4.	Satisfaction with HSP Features	10
Figure 5.	Importance-Performance Matrix of Park Attributes	12
Figure 6.	Comments from Visitors Not Rating HSP Excellent on Safety	14
Figure 7.	Safety Ratings of HSP	16
-	Overall Satisfaction is Lower for Those Who Felt More Crowded	

Introduction

BACKGROUND

In 1939, 15 years after Missouri obtained its first state park, 70,000 visitors were recorded visiting Missouri's state parks (Masek, 1974). Today, more than 16 million people visit the 80 state parks and historic parks Missouri offers (Holst & Simms, 1996). The increase in visits to Missouri state parks and historic sites may be due in part to the diversity of sites, resources, and recreational opportunities provided by the state park system. Visitors to state parks have different characteristics and preferences (Donnelly, Vaske, De Ruiter, & King, 1996), and may be attracted to Missouri's state parks and historic sites because of the diversity of resources and recreational opportunities (Holst, 1991).

The DSP recognizes the importance of this diversity, as is evidenced by the mission of the state park system: "To preserve and interpret the finest examples of Missouri's natural landscapes; to preserve and interpret Missouri's cultural landmarks; and to provide healthy and enjoyable outdoor recreation opportunities for all Missourians and visitors to the state" (Holst, 1990, p. 7).

In order to fulfill its mission, state park managers are challenged to determine what recreational opportunities are most sought after by visitors to state parks and to determine how satisfied those visitors are with state park facilities, services, and programs. In order to ensure continued citizen support for the Parks and Soils sales tax, a tax funding state parks, managers are further challenged to determine whether all demographic populations are benefiting from the recreational opportunities provided at state parks.

To aid in meeting these challenges and to aid in the planning and management processes at recreation sites, surveys of visitors to the various state parks and historic sites should be conducted (TRRU, 1983). Specific information provided by the surveys should include use patterns of visitors to state parks, socio-demographic characteristics of those visitors, and visitor satisfaction of facilities, services, and programs (Lucas, 1985).

NEED FOR RECREATION RESEARCH

Recreation research has been identified as an important component in planning for recreational needs of visitors, particularly research that examines preferences and behaviors of visitors (Manning, 1986; Yoesting, 1981). In the past, it has been assumed that administrators of recreation sites were omniscient, knowing intuitively what the public wanted and should have in the way of recreational opportunities (Manning, 1986; Reid, 1963; Yoesting, 1981). Managers regarded visitors to recreation sites as static, and did not take into consideration that visitor preferences and desires can change. Because site administrators are not omniscient and visitor preferences do change (Cordell & Hartmann, 1983; Ditton, Fedler, Holland, & Graefe, 1982; Donnelly et al., 1996), studies examining the use patterns, socio-demographic

characteristics, and satisfaction of visitors are necessary for planning, implementing, and improving recreational opportunities.

Little site-specific information is available for state parks and historic sites in Missouri. Much of the survey work done for state parks and historic sites has focused on the state park system as a whole. A need exists for site-specific data to compare visitor information between parks, or to measure changing trends in these parks. Also, a need exists for consistent methodology in visitor surveys, in order that such comparisons and measurements can be made. Manning (1986) reported that many surveys, even when conducted by the same agency, were methodologically inconsistent in recreational activity definitions, data collection techniques, sample sizes and response rates, age of respondents, and question wording and sequence. Any comparison of data would be difficult because of the inconsistent methodologies.

STUDY PURPOSE

The purpose of this study is to gain information about visitor use patterns, socio-demographic characteristics, and satisfaction with park programs, facilities, and services.

This report examines the results of the visitor survey conducted at Hawn State Park (HSP), one of the eight parks and sites included in the study. Objectives specific to this report include:

- 1. Describing the use patterns of visitors to HSP during the period between July 1, and August 31, 1998.
- 2. Describing the socio-demographic characteristics of visitors to HSP.
- 3. Determining if there are differences in select groups' ratings of park attributes, satisfaction with park features, overall satisfaction, and perceptions of crowding.
- 4. Determining any differences in select characteristics of visitors who rated highly park safety and those who did not.

STUDY AREA

Located in Ste. Genevieve County, HSP is perhaps one of the most beautiful parks in the Missouri State Park System. This 4,900-acre park, containing stands of native shortleaf pine and hardwoods, appeals to visitors who prefer a more remote and wild setting. Catering to these visitors, HSP offers basic and RV campsites, picnic areas, primitive camping, and hiking on the Whispering Pine Trail and Pickle Creek Trail. HSP's popularity is usually spread by word of mouth, thus crowding has yet to become a significant issue, except during the park's peak season during October.

SCOPE OF STUDY

The population of the visitor study at HSP consisted of all HSP visitors who were 18 years of age or older (adults), and who visited HSP from July 1, to August 31, 1998. These results only reflect summer visitors.

Methodology

SAMPLING PROCEDURES

A 95% confidence interval was chosen with a plus or minus 5.7% margin of error. Based upon 1997 visitation data for July and August at HSP, it was

Table 1 shows the survey schedule along with the time slots used. Three time slots were chosen for surveying and two time slots were surveyed per day. The three time slots were as follows: Time Slot 1 = 8:00 a.m. - 12:00 p.m., Time Slot 2 =

Table 1. Hawn State Park Survey Schedule

Date	Day	Time slot
July 10	Friday	2. 12:00 - 4:00 p.m.
		3. 4:00 - 8:00 p.m.
July 12	Sunday	1. 8:00 a.m 12:00 p.m.
		2. 12:00 - 4:00 p.m.
July 26	Sunday	1. 8:00 a.m 12:00 p.m.
		3. 4:00 - 8:00 p.m.
July 28	Tuesday	2. 12:00 - 4:00 p.m.
		3. 4:00 - 8:00 p.m.
August 9	Sunday	1. 8:00 a.m 12:00 p.m.
		2. 12:00 - 4:00 p.m.
August 11	Tuesday	1. 8:00 a.m 12:00 p.m.
		3. 4:00 - 8:00 p.m.
August 16	Sunday	2. 12:00 - 4:00 p.m.
		3. 4:00 - 8:00 p.m.
August 18	Tuesday	1. 8:00 a.m 12:00 p.m.
		2. 12:00 - 4:00 p.m.
August 29	Saturday	1. 8:00 a.m 12:00 p.m.
		3. 4:00 - 8:00 p.m.
August 30	Sunday	2. 12:00 - 4:00 p.m.
		3. 4:00 - 8:00 p.m.

estimated that a population size of approximately 65,509 visitors would visit HSP during the period between July 1 and August 31, 1998 (DNR, 1998). Therefore, with a 95% confidence interval and a plus or minus 5.7% margin of error, a sample size of 305 was required. A random sample of adult visitors (18 years of age and older) who visited HSP during the study period were the respondents for this study.

12:00 p.m. - 4:00 p.m., and Time Slot 3 = 4:00 p.m. - 8 p.m. A time slot was randomly chosen (Time Slot 2) and assigned to the first of the scheduled survey dates. Thereafter, time slots were assigned in ranking order based on the first time slot. For example, the first survey date would be surveyed during time slots 2 and 3, the second date during slots 1 and 2, the third during slots 3 and 1, and so on. This method was chosen to allow each of the three

time slots to be surveyed at least once during the two-day block, and each time slot to be surveyed at least 6 times over the 10 days. This method was also chosen to allow visitors leaving the park at various times of the day an equal opportunity for being sampled.

QUESTIONNAIRE

The questionnaire used in this study was based on the questionnaire developed by Fink (1997) for the Meramec State Park Visitor Survey. A copy of the questionnaire for this study is provided in Appendix (A).

SELECTION OF SUBJECTS

The survey of visitors at HSP was administered on-site, to eliminate the non-response bias of a mail-back survey. Because an exit survey at the entrance gate of the park would not have been feasible due to the limited space, two recreation areas were identified as areas to survey. Recreation Area 1 included the two campgrounds in HSP, and Area 2 included the picnic areas, playground, and trailheads. All adults (18 years of age and older) in these areas were asked to participate in the survey.

DATA COLLECTION

The surveyor wore a state park T-shirt and walked a roving route between the two recreation areas. During the selected time slot, the surveyor asked every visitor who was 18 years of age and older and in these areas to voluntarily complete the questionnaire, unless he or she had previously filled one out. To increase participation rates, respondents were given the opportunity to enter their name and address into a drawing for a prize package and were

assured that their responses to the survey questions were anonymous and would not be attached to their prize entry form. Willing participants were then given a pencil and a clipboard with the questionnaire and prize entry form attached. Once respondents were finished, the surveyor collected the completed forms, clipboards, and pencils. Survey protocol is given in Appendix B and a copy of the prize entry form is provided in Appendix C.

An observation survey was also conducted to obtain additional information about: date, day, time slot, and weather conditions of the survey day; the number of adults and children in each group of survey participants; and the number of individuals asked to fill out the questionnaire, whether they were respondents, non-respondents, or had already participated in the survey. This number was used to calculate response rate, by dividing the number of useable surveys collected by the number of adult visitors asked to complete a questionnaire. A copy of the observation survey form is provided in Appendix D.

DATA ANALYSIS

The data obtained for the HSP study was analyzed with the Statistical Packages for the Social Sciences (SPSS) (SPSS, 1996).

Frequency distributions and percentages of responses to the survey questions and the observation data were determined. The responses to two open-ended questions, questions 8 and 20, were listed as well as grouped into categories for frequency and percentage calculations. The number of surveys completed by month, by date, by day of

week, by weekend versus weekday, by time slot, and by recreation area were also determined.

Comparisons using t-tests for each group were also made to determine any statistically significant differences (p<.05) in the following selected groups' satisfaction with park features (question 6), ratings of park attributes (question 7), overall satisfaction (question 10), and perceptions of crowding (question 11). The selected groups included:

- 1. First-time visitors versus repeat visitors (question 1).
- 2. Campers versus non-campers (question 3). Non-campers include both day-users and the overnight visitors who did not camp in the HSP campground.
- 3. Weekend visitors versus weekday visitors. Weekend visitors were surveyed on Saturday and Sunday, weekdays were Monday through Friday.
- 4. Recreation Area 1 visitors versus Recreation Area 2.

Other comparisons were made using ttests to determine any statistically significant differences in visitors who rated the park as excellent on being safe versus visitors who rated the park as good, fair, or poor on being safe, for the following categories:

- 1. First-time versus repeat visitors.
- 2. Campers versus non-campers.
- 3. Weekend versus weekday visitors.
- 4. Recreation Area 1 versus Recreation Area 2 visitors.

Differences between visitors who rated the park as excellent on being safe versus those who did not were also compared on the following questions: differences in socio-demographic characteristics, perceptions of crowding, measures of satisfaction with park features, ratings of park attributes, and overall satisfaction.

An additional comparison includes overall satisfaction between visitors who felt some degree of crowding and those who were not at all crowded on their visit.

Results

This section describes the results of the Hawn State Park Visitor Survey. For the percentages of responses to each survey question, see Appendix E. The number of individuals responding to each question is represented as "n=."

SURVEYS COLLECTED & RESPONSE RATES

A total of 305 surveys were collected at HSP during July and August, with 123 collected in July (40.3%) and 182 collected in August (59.7%). Tables 2, 3, 4, and 5 show surveys collected by day of week, by time slot, by date, and by recreation area respectively. Of the 305 surveys collected, 238 (78.0%) were collected on weekends (Saturday and

Sunday) and 67 (22.0%) were collected on weekdays (Monday through Friday). The overall response rate was 100%. No one refused to participate in the survey.

SAMPLING ERROR

With a sample size of 305, a confidence interval of 95%, and a margin of error of plus or minus 5.7%, there is a 95% certainty that the true results of this study are within plus or minus 5.7% of the study findings. For example, from the results that 49.7% of the visitors to HSP during the study period were female, it can be stated that between 44% and 55.4% of the HSP visitors were female.

Table 2. Surveys Collected by Day of Week

Day	Frequency	Percent
Sunday	204	66.9%
Tuesday	40	13.1%
Friday	27	8.9%
Saturday	34	<u>11.1%</u>
Total	305	100.0%

Table 3. Surveys Collected by Time Slot

Time Slot	Frequency	Percent
1. 8 a.m 12 p.m.	92	30.2%
2. 12 p.m 4 p.m.	132	43.3%
3. 4 p.m 8 p.m.	81	26.3%
Total	305	100.0%

Table 4. Surveys Collected by Date

Day and Date	Frequency	Percent
Friday, July 10	27	8.9%
Sunday, July 12	48	15.7%
Sunday, July 26	32	10.5%
Tuesday, July 28	16	5.2%
Sunday, August 9	56	18.4%
Tuesday, August 11	14	4.6%
Sunday, August 16	32	10.5%
Tuesday, August 18	10	3.3%
Saturday, August 29	34	11.1%
Sunday, August 30	<u>36</u>	11.8%
Total	305	100.0%

Table 5. Surveys Collected by Recreation Area

Recreation Area	Frequency	Percent
Area 1. Campgrounds	115	37.7%
Area 2. Picnic areas/playground/trailheads	<u>190</u>	62.3%
Total	305	100.0%

SOCIO-DEMOGRAPHIC CHARACTERISTICS

Age

The average age of adult visitors to HSP was 44.3. When grouped into four age categories, 29.4 % of the adult visitors were between the ages of 18-34, 42.1% were between the ages of 35-54, 16.5% were between the ages of 55-64, and 11.5% were 65 years of age or older.

Gender

Visitors to HSP were almost equally male and female. Male visitors comprised 50.3% of all visitors, and female visitors comprised 49.7% of all visitors.

Education

Over one-third (38%) of visitors to HSP indicated they had a four-year college degree or a post-graduate degree. Those who indicated they had some college or vocational school were 36.8%, and 25.1% indicated they had a high school education or less.

Income

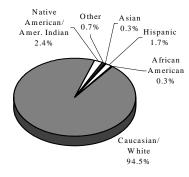
The largest percentage (40.1%) of visitors to HSP reported they had an annual income of between \$25,000 and \$50,000. The second largest percentage (25.3%) of visitors had an income of between \$50,001 and \$75,000. Visitors falling into the "less than \$25,000" category and into the "more than

\$75,000" category were 21.9% and 12.6% respectively.

Ethnic Origin

Figure 1 indicates the ethnic origin of HSP visitors. The vast majority (94.5%) of visitors was Caucasian. Only 1.7% were Hispanic, and 2.4% were Native

Figure 1. Ethnic origin of HSP visitors.



American. Less than one percent were Asian (0.3%) and African American (0.3%).

Visitors with Disabilities

Only 6.5% of the visitors to HSP reported having some type of disability that substantially limited one or more life activities or that required special accommodations. Over half (55.6%) of the disabilities reported were mobilityimpairing disabilities, but ranged from heart problems to hearing and vision problems. For a list of responses to disabilities, see Appendix E, question 17.

Residence

The majority of visitors (82%) were from Missouri while only 7.2% were from Illinois. Oklahoma was the next state with 0.7%. Within Missouri, most visitors came from the St. Louis area (Figure 2).

USE PATTERNS

Visit Characteristics

About two-thirds (63.2%) of the visitors to HSP were repeat visitors, with a little

Figure 2. Residence of HSP Visitors by Zip Code.



over one-third (36.8%) of the visitors being first time visitors. The average number of times all visitors reported visiting HSP within the past year was 3.5 times.

Most of the visitors (59.6%) to HSP during the study period were day-users, whereas 40.4% indicating that they visited the park for more than one day during their visit. Of those staying overnight during their visit, 93.6% stayed in the campground at HSP and only 5.6% stayed at either a friend's or relative's house or at another type of facility. Less than one percent (0.8%) of visitors stayed in a nearby campground. Of those reporting overnight stays, over two-fifths (43.4%) stayed two nights, 30.3% stayed one night, 17.2% stayed three nights, and 9.0% stayed four or more nights. The average number of nights visitors stayed was 2.2 nights.

About half (47.3%) of the visitors to HSP visited the park with family. Less than one-fifth (17.3%) visited with family and friends, while about the same (16.7%) visited with friends, and 8.3% visited the park alone. Almost ten percent (9.0%) indicated visiting the park with a club or organized group, and only 1.3% visited the park with "other" during their visit to HSP.

Group size

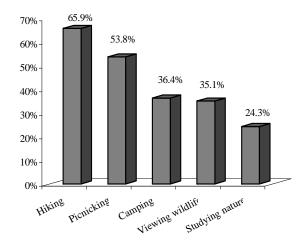
Average group size of visitors to HSP was 6.1 people per group.
Approximately 1,455 adults and 410 children visited HSP during the study period.

RECREATION ACTIVITY PARTICIPATION

Respondents to the survey were asked what activities they participated in during their visit to HSP. Figure 3 shows the percentage of visitor participation in the five highest activities. Hiking was the highest reported (65.9%) and picnicking was second (53.8%). Camping, viewing wildlife, and studying nature were next at 36.4%, 35.1%, and 24.3% respectively.

HSP visitors reported engaging in other activities, including attending a special event (6.9%), backpacking (6.6%), attending a nature program (4.9%), and going on a guided nature hike (1.0%). Only 4.9% of visitors reported engaging in an "other" activity, and these

Figure 3. Participation in recreation activities at HSP.



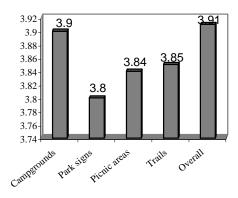
included: visiting the playground, swimming, photography, visiting with friends, attending a club picnic, and participating in the Passport Program.

SATISFACTION MEASURES

Overall Satisfaction

When asked about their overall satisfaction with their visit, there were no respondents who reported being very dissatisfied with their visit and less than one percent (0.7%) reported being somewhat dissatisfied, whereas 99.3% of visitors were either somewhat or very satisfied. Visitors' mean score for overall satisfaction was 3.91, based on a 4.0 scale with 4 being very satisfied and 1 being very dissatisfied.

Figure 4. Satisfaction with HSP features



No significant differences (p<.05) were found in overall satisfaction between first time visitors and repeat visitors, between campers and non-campers, between weekend and weekday users, and between visitors to the two recreation areas.

Satisfaction with Park Features

Respondents were also asked to express how satisfied they were with four park features. Figure 4 shows the mean scores for the four features and also for visitors' overall satisfaction. The satisfaction score for the campgrounds (3.90) was the highest, with the other scores ranging from 3.85 (trails) to the lowest of 3.80 (park signs).

No significant differences (p<.05) were found in mean satisfaction ratings of the park attributes between first time visitors and repeat visitors, between campers and non-campers, between weekend and weekday visitors, or between visitors to the two recreation areas.

PERFORMANCE RATING

Visitors were asked to rate the park's performance of seven select park

Table 6. Mean Performance and Importance Scores for Park Attributes

	Mean Performance	Mean Importance
Attribute	Score*	Score*
A. Being free of litter/trash	3.84	3.94
B. Having clean restrooms	3.32	3.83
C. Upkeep of park facilities	3.62	3.87
D. Having a helpful & friendly staff	3.72	3.60
E ₁ . Access for persons with disabilities	3.66	3.36
E ₂ . Access for persons with disabilities	3.56	3.83
F. Care of natural resources	3.76	3.91
G. Being safe	3.77	3.87

 $[\]overline{E_1}$ = All visitors

 $E_2 = Disabled visitors only$

^{* 1 =} Poor performance or low importance rating, 4 = excellent performance or importance rating

attributes (question 7): being free of litter and trash, having clean restrooms, upkeep of park facilities, having a helpful and friendly staff, access for persons with disabilities, care of natural resources, and being safe. Performance scores were based on a 4.0 scale, with 4 being excellent and 1 being poor.

A significant difference (p<.05) was found between first time and repeat visitors' performance ratings of upkeep of park facilities. First time visitors had a significantly higher mean rating (3.71) regarding upkeep than repeat visitors (3.57). There were no significant differences (p<.05) between the performance ratings of weekend and weekday visitors.

A significant difference (p<.05) was found between campers and noncampers regarding how they rated HSP on having clean restrooms, on upkeep of park facilities, on having helpful and friendly staff, on access for persons with disabilities, on care of natural resources. and on being safe. Campers had significantly higher mean ratings than non-campers in each of these areas. Mean ratings for having clean restrooms was 3.75 and 3.01, respectively; 3.72 and 3.55 for upkeep of park facilities; 3.83 and 3.63 for having helpful and friendly staff; 3.82 and 3.49 for access for disabled persons; 3.83 and 3.72 for care of natural resources; and 3.89 and 3.68 for being safe.

Closely related to the significant differences between campers and noncampers were the significant differences found between visitors to Recreation Area 1 (the campgrounds) and Recreation Area 2 (the picnic areas, playground, and trailheads). Significant differences (p<.05) were found in the mean ratings of park performance regarding having clean restrooms, upkeep of park facilities, having helpful and friendly staff, access for the disabled, and being safe, between visitors to Recreation Area 1 and Recreation Area 2. Recreation Area 1 visitors had significantly higher mean performance ratings for each of these areas when compared to the mean ratings of Recreation Area 2 visitors, as indicated by the following scores. Mean ratings for having clean restrooms were 3.73 and 3.03; 3.73 and 3.56 for upkeep of park facilities; 3.81 and 3.65 for having helpful and friendly staff; 3.83 and 3.51 for disabled accessibility; and 3.88 and 3.70 for being safe.

IMPORTANCE-PERFORMANCE MEASURES

The Importance-Performance (I-P) Analysis approach was used to analyze questions 8 and 15. Mean scores were calculated for the responses of the two questions regarding visitors' ratings of the performance and importance of seven select park attributes. Table 6 lists the scores of these attributes, which were based on a 4.0 scale of 4 being excellent and 1 being poor.

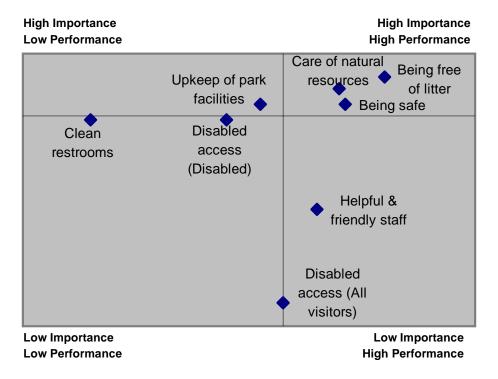


Figure 5. Importance-Performance Matrix of Park Attributes

Figure 5 shows the Importance-Performance (I-P) Matrix. The mean scores were plotted on the I-P Matrix to illustrate the relative performance and importance rating of the attributes by park visitors.

The I-P Matrix is divided into four quadrants to provide a guide to aid in possible management decisions. For example, the upper right quadrant is labeled "higher importance, higher performance" and indicates the attributes in which visitors feel the park is doing a good job. The upper left quadrant indicates that management may need to focus on these attributes, because they are important to visitors but were given a lower performance rating. The lower left and right quadrants are less of a concern for management, because they exhibit attributes that are not as important to visitors.

HSP is rated high on being free of litter and trash, care of the natural resources, and being safe. A characteristic that visitors felt was important but rated HSP low on performance was upkeep of park facilities.

There were no significant differences between the ratings of importance regarding upkeep of park facilities for first time visitors and repeat visitors, campers and non-campers, weekend and weekday visitors, or visitors to the two recreation areas.

CROWDING

Visitors to HSP were asked how crowded they felt during their visit. The following nine-point scale was used to determine visitors' perceptions of crowding:

1	2	3	4	5	6	7	8	9	
Not at	all	Sli	ghtly		Mode	erately	Е	xtreme	ly
Crowd	led	Cro	wded		Croy	vded	(Crowde	d

Visitors' overall mean response to this question was 1.77. The majority (66.0%) of visitors to HSP did not feel at all crowded (selected 1 on the scale) during their visit. The rest (34.0%) felt some degree of crowding (selected 2-9 on the scale) during their visit.

Visitors who indicated they felt crowded during their visit were also asked to specify where they felt crowded (question 12). One-third (34.0%) of the visitors who indicated some degree of crowding answered this open-ended question. Table 7 lists the locations where visitors felt crowded at HSP. Of those who reported feeling crowded, the majority (34.3%) felt crowded in the campgrounds and campsites and 17.1% felt crowded in the picnic areas. Only 5.7% indicated they felt crowded in an "other" location, and these included

feeling crowded at the playground and feeling crowded in a tent.

A significant difference (p<.001) was found in visitors' perceptions of crowding between weekday visitors and weekend visitors. Weekend visitors had a significantly higher mean crowded score (1.91) than had weekday visitors (1.30). No significant differences were found in visitors' perceptions of crowding between first time and repeat visitors, between campers and non-campers, and between visitors to the two recreation areas.

Crowding and satisfaction

A significant difference (p<.05) was found in visitors' mean overall satisfaction with their visit and whether they felt some degree of crowding or not. Visitors who did not feel crowded had a mean overall satisfaction score of 3.94, whereas visitors who felt some degree of crowding had a mean overall satisfaction score of 3.86.

Table 7. Locations Where HSP Visitors Felt Crowded During Their Visit

Location	Frequency	Percent
Campgrounds/campsites	12	34.3%
Picnic areas	6	17.1%
Parking areas	5	14.3%
Trails	4	11.4%
Pickle Creek	4	11.4%
Crowded because of others' behavior	2	5.7%
Other	2	5.7%
Total	35	100.0%

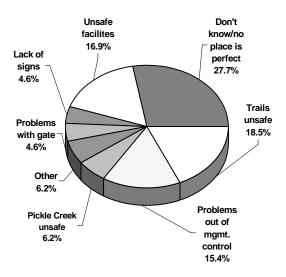
SAFETY CONCERNS OF VISITORS

Only 23.0% of visitors did not rate the park as excellent for safety, all of whom rated the park as good with no one giving the park a fair or poor rating. Of these, 81.5% noted what influenced their rating. Their comments were grouped into categories and are shown in Figure 6. Appendix F provides a list of the comments.

The majority (27.8%) of the responses were either responses from visitors who did not have any reason for not rating the park excellent on being safe or responses reflecting the belief that no place is perfect and there is always room for improvement. Almost one-fifth (18.5%) of the responses related to the trails being unsafe. Almost 17% (16.9%) of the responses fell into unsafe facilities, including poor maintenance, problems with restrooms, and lack of running water. Fifteen percent (15.4%) of the responses were about problems out of management control. The rest (21.6%) of the responses were divided into the following categories: Pickle Creek being unsafe, problems with the entrance gate, lack of signs, and an "other" category.

There were no significant differences in the rating of safety by first-time visitors versus repeat visitors, by weekend versus weekday users, and by sociodemographic characteristics of visitors. However, there were significant differences (p<.001) in the ratings of safety between campers and noncampers and between visitors to the two recreation areas. Campers had a significantly higher safety rating (3.89) than non-campers (3.68), and visitors in

Figure 6. Comments from Visitors Not Rating HSP Excellent on Safety



Recreation Area 1 (the campgrounds) had a significantly higher safety rating (3.88) than visitors in Recreation Area 2 (the picnic areas and trailheads) (3.70).

To determine if there were differences in perceptions of crowding, satisfaction with park features, rating of park attributes, and overall satisfaction, responses were divided into two groups based on how they rated HSP on being safe. Group 1 included those who rated the park excellent, and Group 2 included those who rated the park as good.

There were no significant differences in perceptions of crowding, in satisfaction with park features, and in overall satisfaction between Group 1 and Group 2. There were no significant differences in the ratings of park attributes between Group 1 and Group 2 except in the ratings of the park being free of litter and trash. Group 1 had a significantly higher (p<.05) mean performance rating (3.86)

regarding the park being free of litter and trash than Group 2 (3.72).

ADDITIONAL VISITOR COMMENTS

Respondents to the survey were also given the opportunity to write any additional comments or suggestions on how DNR could make their experience at HSP a better one (question 20). One-third (32.8%) of the total survey participants responded to this question, with 128 responses given by 100 respondents. The comments and suggestions were listed and grouped by similarities into 10 categories for frequency and percentage calculations. The list of comments and suggestions is

found in Appendix G. Table 8 lists the frequencies and percentages of the comments and suggestions by category. Almost 40% (39.8%) of the comments were positive comments, including such comments as: "A beautiful park," "Great park," and "It's one of the nicest parks I've been to." The rest (60.2%) of the comments were categorized based on similar suggestions or complaints, such as suggestions and complaints about the campgrounds, complaints about the lack of running water, or an "other" category for suggestions and complaints not fitting into any other category.

Table 8. Frequency and Percentage of Comments and Suggestions from HSP Visitors

Category	Frequency	Percent
1. General positive comments	51	39.8%
2. Problems with restrooms	15	11.7%
3. Lack of running water & other problems	13	10.2%
4. Need newer facilities/better maintenance of facilities	9	7.0%
5. Need more trails & other suggestions relating to trails	9	7.0%
6. Better signage/more signs/more information	8	6.3%
7. Need more campsites/bigger campgrounds & other		
suggestions relating to campgrounds	7	5.5%
8. People being inconsiderate or breaking rules	6	4.7%
9. Need additional trash cans/trash bags	5	3.9%
10. Other	5	3.9%
Total	128	100.0%

Discussion

MANAGEMENT IMPLICATIONS

The results of this study provide relevant information concerning HSP visitors. However, the results should be interpreted with caution. The surveys were collected only during the summer months of July, and August; therefore, visitors who visit during other seasons of the year are not represented in the study's sample. The results, however, are still very useful to park managers and planners, because much of the annual visitation occurs during these two months.

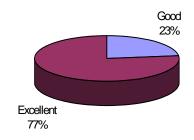
Over 91% of HSP visitors reported that they were very satisfied with their visit to the park. Williams (1989) states that visitor satisfaction with previous visits is a key component of repeat visitation. The high percentage of repeat visitation (63%) combined with their positive comments provide evidence that HSP visitors are indeed satisfied with their park experience. Almost 40% of the visitors who gave comments or suggestions provided positive comments concerning HSP and its staff.

Although less than one-fourth (23%) of visitors did not report an excellent rating of the park as being safe, management should not dismiss their safety concerns. While the majority (43%) of visitors with safety concerns either did not have a reason for not rating HSP excellent on being safe, felt that no place could be perfectly safe, or complained about problems outside management control, a large percentage (18%) of visitors felt that trail conditions were unsafe. Another 17% of safety comments were

directed at unsafe facilities and poor maintenance. To address the safety concerns of HSP visitors, one solution would be posting signs cautioning visitors of trail difficulty and placing more prominent trail markers. Maintenance schedules of park facilities might need to be reviewed. The possibility of providing running water in the picnic areas might be taken under consideration.

To put the issue of park safety into perspective, 77% rated the park as excellent, 23% rated the park as good, while no one gave the park a fair or poor rating regarding safety (Figure 7). Visitor comments indicate that safety is largely a perceptual issue, an issue that did not influence their overall satisfaction or perceptions of crowding. Management at HSP should be commended for providing an environment in which visitors felt safe. Additional research could focus on the effectiveness of approaches that address visitor safety perceptions (e.g., increased signage).

Figure 7. Safety ratings of HSP.



Although crowding was not an issue identified by the majority of HSP visitors, one third (34%) of visitors expressed some degree of crowding. Crowding is a perceptual construct not always explained by the number or density of other visitors. Expectations of visitor numbers and the behavior of other visitors also play a significant role in crowding perceptions.

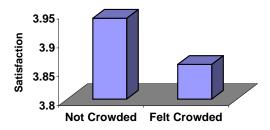
HSP visitors who felt crowded had significantly lower satisfaction ratings than visitors who did not feel crowded (Figure 8). Weekend visitors also felt significantly more crowded than weekday visitors, and campers felt significantly more crowded than non-campers.

As perceptions of crowding are inversely correlated to overall satisfaction, park managers should address the issue of crowding. One option is to review comments relating to crowding and consider options that would reduce crowding perceptions. For example, most comments listed the campgrounds and campsites as where they felt crowded. Further study could determine if crowding perceptions here are due to the number of people or perhaps the behavior of those at the campgrounds.

Visitors felt that upkeep of park facilities were very important but rated HSP's upkeep as needing attention. Non-campers rated the park lower (3.6) on upkeep of park facilities than campers (3.8). Visitors to Recreation Area 2 also rated the park lower (3.6) on upkeep of park facilities than visitors to Recreation Area 1 (3.7). Closely related to visitors' ratings of facility upkeep are visitors' ratings of having clean restrooms. Both non-campers and visitors to Recreation

Area 2 rated the restrooms lower (3.0 for both) than campers and Recreation Area 1 visitors (3.8 and 3.7 respectively). Since non-campers typically do not use the restroom facilities and other facilities in the campground, this finding suggests more time could be spent maintaining the pit toilet and other facilities in the picnic areas. Another suggestion is that flush toilets and running water be provided in the picnic and trailhead areas.

Figure 8. Overall Satisfaction is Lower For Those Who Felt More Crowded



The results of the present study suggest some important management and planning considerations for HSP. Even though HSP visitors rated their visits and the park features relatively high, attention to crowding, safety, and facility maintenance can positively effect these ratings.

Just as important, on-going monitoring of the effects of management changes will provide immediate feedback into the effectiveness of these changes. On-site surveys provide a cost effective and timely vehicle with which to measure management effectiveness and uncover potential problems.

RESEARCH RECOMMENDATIONS

The results of the present study serve as baseline visitor information of HSP. The frequency and percentage calculations of survey responses provide useful information concerning sociodemographic characteristics, use patterns, and satisfaction of HSP visitors. In addition, the "sub-analysis" of data is important in identifying implications for management of HSP. (The sub-analysis in the present study included comparisons using Chi-square and ANOVA between selected groups and the Importance-Performance analysis.) Additional relevant information may be determined from further sub-analysis of existing data. Therefore, it is recommended additional sub-analysis be conducted to provide even greater insight to management of the park.

Additional visitor surveys at HSP should also be conducted on a regular basis (e.g., every three, four, or five years). Future HSP studies can identify changes and trends in socio-demographic characteristics, use patterns, and visitors' satisfaction at HSP.

The methodology used in this study serves as a standard survey procedure that the DSP can use in the future. Other Missouri state parks should be surveyed similarly to provide valid results for comparisons of visitor information between parks, or to measure change over time in other parks. The present study was conducted only during the summer season. Therefore, user studies in parks and historic sites might be conducted during other seasons for comparison between summer visitors and visitors during other seasons.

METHODOLOGY RECOMMENDATIONS AND CONSIDERATIONS FOR OTHER PARKS

The on-site questionnaire and the methodology of this study were designed to be applicable to other Missouri state parks.

Survey administration

The prize package drawing and the onepage questionnaire undoubtedly helped attain the response rate in the present study. Also, the fact that the surveyor approached visitors on foot while they were in the various recreation areas greatly contributed to the high response rate. Many visitors expressed appreciation that they were being asked their opinion, and would often take the opportunity to further comment to the surveyor their feelings about HSP. For this reason, and because the surveyor was required to walk a roving route between the recreation areas, an assistant to help administer the surveys would be helpful.

Achieving the highest possible response rate (within the financial restraints) should be a goal of any study. To achieve higher response rates, the following comments are provided.

Because no one refused to participate in the study, it is recommended that future surveys at HSP continue as roving route surveys. It is recommended for these future surveys that self-addressed stamped envelopes be available to offer to visitors only if they do not volunteer to fill out the survey on-site. This technique may provide higher response rates in future surveys, with minimal additional expense.

One caution, however, is to always attempt to have visitors complete the survey on-site, and to only use the mailback approach when it is certain visitors would otherwise be a non-respondent.

References

Cordell, H. K., & Hartmann, L. A. (1983). Trends in outdoor recreation in the two decades since ORRRC.

<u>Proceedings of the Southeastern</u>

<u>Recreation Researchers' Conference</u>,

Asheville, North Carolina, 1-42.

Ditton, R. B., Fedler, A. J., Holland, S. M., & Graefe, A. R. (1982). A user/setting approach to understanding recreational experiences. Proceedings of the Southeastern Recreation Researchers' Conference, Asheville, North Carolina, 237-252.

Donnelly, M. P., Vaske, J. J., DeRuiter, D. S., & King, T. B. (1996). Personoccasion segmentation of state park visitors. <u>Journal of Park and Recreation</u> <u>Administration</u>, 14, 95-106.

Fink, D. A. (1997). Meramec State Park user survey. Unpublished master's research project, University of Missouri, Columbia.

Holst, S. (1990). The mission: A question of balance. <u>Missouri Resources Review</u>, 7(2), 6-11.

Holst, S. (1991). Parks in peril. <u>Missouri</u> Resource Review, 8, (3), 2-7.

Holst, S., & Simms, L. (1996). Park & soils: A decade of success for camps and crops. <u>Missouri Resources</u>, 13(2), 8-15.

Lucas, R. C. (1985). <u>Visitor</u> characteristics, attitudes, and use patterns in the Bob Marshall Wilderness Complex, 1970-82 (Research Paper INT-345). Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station.

Manning, R. E. (1986). <u>Studies in outdoor recreation</u>. Corvallis, OR: Oregon State University Press.

Masek, M. L. R. (1974). <u>A park user fee survey for the Missouri state parks.</u> Unpublished master's thesis, University of Missouri, Columbia.

Missouri Department of Natural Resources. (1998). [Missouri state park attendance]. Unpublished raw data.

Reid, L. M. (1963). <u>Outdoor recreation</u> preferences: A nationwide study of user <u>desires</u>. East Lansing, MI: Michigan State University.

Statistical Package for the Social Sciences (1996). Version 6.1 [Computer software]. Chicago: SPSS.

Tourism and Recreation Research Unit (TRRU). (1983). <u>Recreation site survey manual.</u> New York: E. & F. N. Spon.

Williams, D. R. (1989). Great expectations and the limits to satisfaction: a review of recreation and consumer satisfaction research. Outdoor Recreation Benchmark 1988: Proceedings of the National Outdoor Recreation Forum, Tampa, Florida, 422-438.

Yeosting, D. R. (1981). Research utilization in decision-making. In T. L. Napier (Ed.), <u>Outdoor recreation planning</u>, <u>perspectives</u>, <u>and research</u> (pp. 13-18). Dubuque, IA: Kendall/Hunt Publishing Company.

1998 Hawn	State	Park	Visitor	Survey
1770 Huwn	nune	1 urk	visuoi	Sui ve

Appendix A. Hawn State Park User Survey

	campgrour picnic area				5.	Which recrea visit? (Check			you e	ngaged i	in duri	ng this	park
			HAWN STAT	E PARK		,	11 5	,					
The Missouri Department of Natural Resources is seeking your evaluation of Hawn State Park. This survey is voluntary and completely anonymous. Your cooperation is important in helping us make decisions about managing this park. Thank you for your time.				6.	 □ picnicking □ backpacking □ attending special event □ hiking □ studying nature □ going on guided nature hike □ camping □ viewing wildlife □ attending nature program □ other (<i>Please specify</i>.) 6. How satisfied are you with each of the following in Hawn State Park 								
1.	Is this y	our f	irst visit to Hawn State P	ark? (Check only one box.)		(Check one bo	x jor eacn jea	ture.)					
	□ yes □ no	If n	o, how many times have	you visited this park in the past		campground park signs	Very Satisfied □	Somewh Satisfie		omewhat issatisfied	Dissa	ery atisfied	Don't Know
		jeu			c.	picnic areas							
2.	During	g this	visit to the park, are you	staying overnight?	d.	·							
	□ yes	dur	es, how many nights are ring this visit? no, skip to question 4.)	you staying at or near the park –	7.	How do you r one box for ea							Don't
			• •			1		E		Good	Fair	Poor	Know
3.	If stayi	ing ov	ernight, where are you s	taying? (Check only one box.)	a. h	being free of land having clean re							
		by ca	nd in Hawn State Park mpground atives	☐ nearby lodging facilities ☐ other (<i>Please specify</i> .)	c. d. e. f.	upkeep of park having a helpf access for pers care of natural being safe	c facilities ful & friendly s sons with disal						
4.	With w	vhom	are you visiting the park	? (Check only one box.)				_					_
	□ alon □ fami	e	☐ family and friends ☐ friends	☐ club or organized group☐ other (<i>Please specify</i> .)	8.	If you did not your rating?	rate this par	k as exc	cellent	on being	g safe,	what ir	nfluence

PLEASE TURN SURVEY OVER.

HAWN STATE PARK

								only one box.)
9.	When visiting any state park, how important are each of these items to you? (Check one box for each feature.)							☐ grade school ☐ vocational school ☐ graduate of 4-year college ☐ high school ☐ some college ☐ post-graduate education
b. c. d.	being free of litter/trash having clean restrooms upkeep of park facilities having a helpful & friendly staff access for persons with disabilities care of natural resources being safe		Somewhat Important		Very Unimportan	Don't t Know		What is your ethnic origin? (Check only one box.) □ Asian □ African American □ Native American/American Indian □ Hispanic □ Caucasian/White □ Other (Please specify.) Do you have a disability that substantially limits one or more life activities or might require special accommodations? □ yes □ yes □ no
10. Overall, how satisfied are you with this visit to Hawn State Park? (Check only one box.) Very Somewhat Somewhat Very					Very			What is your 5-digit zip code (or country of residence, if you live outside the U.S.)? What is your annual household income?
11.	Satisfied Satisfied During this visit, how		Dissati □ I did you	1	Dissatisfied □ le one numb			□ less than \$25,000 □ \$50,001 - \$75,000 □ \$25,000 - \$50,000 □ over \$75,000
11. During this visit, how crowded did you feel? (Circle one number.) 1 2 3 4 5 6 7 8 9 Not at all Slightly Moderately Extremely Crowded Crowded Crowded						9 emely	20.	Please write any additional comments about your park visit or suggestions on how the Missouri Department of Natural Resources can make your experience in Hawn State Park a better one.
12.	If you felt crowded on	this visi	t, where d	lid you feel	crowded?			
13.	What is your age?							
14.	What is your gender?		female	□ mal	e			THANK YOU FOR YOUR HELP. YOU ARE ALWAYS WELCOME IN MISSOURI STATE PARKS.

15. What is the highest level of education you have completed? (Check

1002	Hawn	State	Park	Visitor	Survey
1990	пажи	State	Park	VISILOF	Survey

Appendix B. Survey Protocol

Protocol for Hawn State Park User Survey

Hi, my name is _____, and I am conducting a survey of park visitors for Missouri state parks. The information that I am collecting will be useful for future management of Hawn State Park.

The survey is one page, front and back side, and only takes about 3-5 minutes to complete. Anyone who is 18 or older may complete the survey, and by completing the survey, you have the opportunity to enter your name in a drawing for a prize package of \$100 worth of concession coupons. Your participation is voluntary, and your responses will be completely anonymous.

Your input is very important to the management of Hawn State Park. Would you be willing to help by participating in the survey?

[If no,] Thank you for your time. Have a nice day.

[If yes,]

Here is a pencil and clipboard with the survey attached (for each respondent). Please complete the survey on both sides. When finished, return the survey(s), clipboard(s), pencils, and prize entry form(s) to me.

Thank you for taking time to complete the survey. Your help is greatly appreciated. Have a nice day.

Appendix C. Prize Entry Form

WIN A PRIZE PACKAGE OF CONESSION COUPONS WORTH \$100

Enter a drawing to win \$100 worth of gift certificates! These certificates are good for any concessions at any state park or historic site. Concessions include cabin rentals, canoe rentals, boat rentals, restaurant dining, horseback riding, etc.

You many enter the drawing by simply filling out the back of this entry form and returning it to the surveyor. Your name, address, and telephone number will be used only for this drawing; thus, your survey responses will be anonymous. The drawing will be held November 1, 1998. Winners will be notified by telephone or mail. Redemption of gift certificates is based on dates of availability through August 31, 1999.

Name:				
Address:				
Phone #:	()		

100	8 Hawn	Ctata	Dank	Vicitor	Cuma
199	о пажк	siaie	Park	visuor	Surve

Appendix D. Observation Survey

Date _	Day of Week	Time Slot
Weather	Temperature	Park/Site

	Survey #'s	# of Adults	# of Children	Area
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

Time Slot Codes: Weather Codes (examples):

Time Slot $1 = 8:00 - 12:00 \text{ p.m.}$	Hot & Sunny	Windy
Time Slot $2 = 12:00 - 4:00 \text{ p.m.}$	Cold & Rainy	Sunny
Time Slot $3 = 4:00 - 8:00 \text{ p.m.}$	Cloudy	Humid

1000	77	C	D 1	T 7	C
1998	Hawn	State	Park	Visitor	Survey

Appendix E. Responses to Survey Questions

Hawn State Park Visitor Survey

1. Is this your first visit to Hawn State Park? (n=304)

yes 36.8% no 63.2%

If no, how many times have you visited this park in the past year? (n=170)

The responses from this open-ended question were grouped into the following 7 categories:

0 11.2% 1 27.1% 2 26.5% 3 10.0% 4-10 20.6% 11-20 3.5% 50+ 1.2%

The average # of times both repeat visitors and all respondents visited the park in the past year was 3.5 times.

2. During this visit to the park, are you staying overnight? (n=297)

yes 40.4% no 59.6%

If yes, how many nights are you staying overnight at or near the park during this visit? (n=99)

The responses from this open-ended question were grouped into the following 4 categories:

1 30.3% 2 43.4% 3 17.2% 4-7 9.0%

The average # of nights respondents visiting the park for more than one day stayed was 2.2.

3. If staying overnight, where are you staying? (n=125)

campground in Hawn State Park	93.6%
nearby campground	0.8%
friends/relatives	3.2%
other	2.4%

4. With whom are you visiting the park? (n=300)

alone	8.3%	family & friends	17.3%	club or organized group	9.0%
family 4	7.3%	friends	16.7%	other	1.3%

5. Which recreational activities have you engaged in during this park visit? (n=305)

picnicking	g 53.8%	backpacking	6.6%	attending special event	6.9%
hiking	65.9%	studying nature	24.3%	going on guided nature hike	1.0%
camping	36.4%	viewing wildlife	35.1%	attending nature program	4.9%
other	4.9%				

In addition to percentages of responses, a mean score was calculated for each feature in questions 6, 7, 9, and 10. The score is based on a 4.0 scale with 4 = very satisfied, 3 = somewhat satisfied, 2 = somewhat dissatisfied, and 1 = very dissatisfied (Q. 6 & 10); 4 = excellent, 3 = good, 2 = fair, and 1 = poor(Q. 7); and 4 = very important, 3 = somewhat important, 2 = somewhat unimportant, and 1 = very unimportant(Q. 9). The mean score is listed in parenthesis following each feature.

6. How satisfied are you with each of the following in Hawn State Park?

		Very	Somewhat	Somewhat	Very	
		Satisfied	Satisfied	Dissatisfied	Dissatisfied	
a.	campground (3.90)	91.0%	8.0%	1.1%	0.0%	n=188
b.	park signs (3.80)	82.5%	15.3%	1.5%	0.7%	n=275
c.	picnic areas (3.84)	85.5%	13.7%	0.8%	0.0%	n=241
d.	trail (3.85)	86.6%	12.1%	0.8%	0.4%	n=239

7. How do you rate Hawn State Park on each of the following?

=301
=268
=290
=250
=177
=290
=283
=2 =1 =2

8. If you did not rate this park as excellent on being safe, what influenced your rating?

53 visitors (81.5% of those who did not rate the park as excellent on being safe) responded to this question with 65 responses. The 65 responses were divided into 8 categories. Frequencies and percentages of responses in each category are listed.

		Frequency	Percent
1.	Don't know/no reason/no place is perfe	ect 18	27.7%
2.	Trails unsafe	12	18.5%
3.	Unsafe facilities/poor maintenance	11	16.9%
4.	Problems out of management control	10	15.4%
5.	Pickle Creek unsafe	4	6.2%
6.	Lack of signs	3	4.6%
7.	Problems with entrance gate	3	4.6%
8.	Other	4	6.2%
	T	otal 65	100%

9. When visiting any state park, how important are each of these items to you?

		Very	Somewhat	Somewhat	Very
		Important	Important	Unimportant	Unimportant
a.	being free of litter/trash (3.94)	94.8%	4.5%	0.7%	0.0% n=290
b.	having clean restrooms (3.83)	85.1%	12.9%	2.0%	0.0% n=295
c.	upkeep of park facilities (3.87)	87.7%	11.3%	1.0%	0.0% n=292
d.	having helpful/friendly staff (3.60)	67.7%	26.4%	4.5%	1.4% n=288
e.	access for disabled persons (3.36)	57.9%	25.8%	10.4%	5.8% n=240
f.	care of natural resources (3.91)	91.8%	7.5%	0.7%	0.0% n=293
g.	being safe (3.87)	89.2%	8.8%	2.0%	0.0% n=295

10. Overall, how satisfied are you with this visit to Hawn State Park?

	Very	Somewhat	Somewhat	Very	
	Satisfied	Satisfied	Dissatisfied	Dissatisfied	
(Mean score = 3.91)	91.8%	7.5%	0.7%	0.0%	n=292

11. During this visit, how crowded did you feel? (n=294)

On a scale of 1-9, with 1 = Not at all crowded and 9 = Extremely crowded, the mean response was 1.77.

12. If you felt crowded on this visit, where did you feel crowded?

A total of 35 open-ended responses were given by 34 visitors. The 35 responses were divided into 7 categories. Frequencies and percentages of responses in each category are listed.

	<u>Frequency</u>	Percent
campgrounds/campsites	12	34.3%
picnic areas	6	17.1%
parking areas	5	14.3%
trails	4	11.4%
Pickle Creek	4	11.4%
crowded because of others' behavior	2	5.7%
other	2	5.7%
То	tal 35	100%

13. What is your age? (n=289)

Responses were divided into the following 4 categories:

18-34 29.4% 35-54 42.1% 55-65 16.5% 65+ 11.5% (Average age = 44.3)

14. Gender? (n=288)

Female 49.7% Male 50.3%

15. What is the highest level of education you have completed? (n=294)

grade school	3.7%	vocational school	ol 4.1%	graduate of 4-year college	20.7%
high school	21.4%	some college	32.7%	post-graduate education	17.3%

16. What is your ethnic origin? (n=291)

Asian	0.3%	African American 0.3%	Native American/American Indian	2.4%
Hispanic	1.7%	Caucasian/White 94.5%	Other	0.7%

17. Do you have a disability that substantially limits one or more life activities or might require special accommodations? (n=291)

yes 6.5% no 93.5%

If yes, what disability or disabilities do you have? (n=18)

The following is a list of all responses to this open-ended question.

Have a son -- spinal cord injury, wheelchair/walker. Heart attack.

Spinal cord disability -- wheelchair. Heart and lung disease.

Left leg is stiff...got a limp.

Back surgery.

Wheelchair.

Heart bypass.

Trouble walking.

Blind left eye.

My husband. Total left replacement back surgery.

Hip replacement. Hearing impaired.

Anemia. Bad heart and poor breathing.

Arthritis. Knee replacement.

18. What is your 5-digit zip code (or country of residence, if you live outside the U.S.)? (n=)

The states with the highest percentages of respondents were:

Missouri 82.% Illinois 7.2% Oklahoma 0.7%

19. What is your annual household income? (n=269)

less than \$25,000	21.9%	\$50,001 - \$75,000	25.3%
\$25,000 - \$50,000	40.1%	over \$75,000	12.6%

20. Please write any additional comments about your park visit or suggestions on how the Missouri Department of Natural Resources can make your experience in Hawn State Park a better one.

100 of the 305 visitors (32.8%) responded to this question. A total of 128 responses were given, and were divided into 10 categories. Frequencies and percentages of responses in each category are listed.

		<u>Frequency</u>	Percent
1.	General positive comments	51	39.8%
2.	Problems with restrooms	15	11.7%
3.	Lack of running water & other problems	13	10.2%
4.	Need newer facilities/better maintenance of facilities	9	7.0%
5.	Need more trails & other suggestions relating to trails	9	7.0%
6.	Better signage/more signs/more information	8	6.3%
7.	Need more campsites/bigger campgrounds & other		
	suggestions relating to campgrounds	7	5.5%
8.	People being inconsiderate or breaking rules	6	4.7%
9.	Need additional trash cans/trash bags	5	3.9%
10.	Other	5	3.9%
	Total	128	100%

1008	Hawn	State	Park	Visitor	Survey
1990	пажп	siaie	Park	visuor	surve

Appendix F. List of Responses for Safety Concerns (Q 8)

Responses to Question #8

If you did not rate this park as excellent on being safe ($Question\ 7$, $letter\ g.$), what influenced your rating?

Don't know/no reason/no place is perfect

- Didn't really understand the question.
- Don't know.
- Feel safe enough and come here alone. Feel presence of park staff here.
- Have not had an emergency to rate.
- Haven't been here overnight.
- Haven't seen entire facility.
- Haven't stayed here since '96, but hadn't heard about anything.
- Natural hazards.
- No place is really safe during these times.
- Not aware of security or precautions taken in related areas.
- Not knowing what question was asking completely.
- Not thoroughly familiar with safety features of park.
- Nothing is 100% safe.
- Rate it good, with a little room to improve.
- Safe from what?
- Some inherent danger in hiking. I wouldn't want excellent.
- Trails are rugged -- natural danger.
- We just drove down to check the park out and let our kids play. Thank you.

Trails unsafe

- Lousy trail maintenance and lack of proper construction.
- More trail signs -- mileage markers.
- Need of mile markers.
- On the trail (red part of loop trail), couple of edges I would be afraid to take our three year old.
- Restroom by trail. Need logs across stream.
- Somewhere we should have been informed of difficulty of trail. Having visited other parks which had easy trails, this trail was much more difficult and we should have been informed of changes in vertical elevation and of the need for hiking boots for safety. Many steep, rocky areas.
- The rocks and curves.
- The trails are very rough in spots.
- Trail difficulty.
- Trail should maybe be marked that it's a bit rough.
- Trails are rugged -- natural danger.
- Trash -- a lot of cigarette butts on the trails!
- Weedy trails, narrow for children. Poison ivy.

Unsafe facilities/poor maintenance

- Need more water for drinking.
- Need water and restrooms are dark.
- Need water and restrooms are dark.
- No running water. Locked restrooms.
- No running water. Locked restrooms.
- People with dogs do not pick up after them. To me, this is very bad for children, running around in the park. Also, the outdoor restrooms are not lighted and the stink is awful.
- Remote access, no lighting.
- Tall grass. Hornets flying around picnic area.
- The bathroom is awful.
- Thick brush -- snakes. Area is very clean.
- Trash -- a lot of cigarette butts on the trails!

Problems out of management control

- Only because of the possibility of spider bites. Where would you go for quick treatment?
- People with dogs do not pick up after them. To me, this is very bad for children, running around in the park. Also, the outdoor restrooms are not lighted and the stink is awful.
- Poison ivy.
- Remote access, no lighting.
- Sex offenders should be required to register at office before camping. Need light at main gate.
- Snakes in woodlot.
- Tall grass. Hornets flying around picnic area.
- Thick brush -- snakes. Area is very clean.
- Too far from St. Louis.
- We have young children and found a hornets' nest on our campsite.

Pickle Creek unsafe

- Crossing Pickle Creek between red and green trails.
- Have to be careful on the rocks; slippery when wet.
- Restroom by trail. Need logs across stream.

Lack of signs

- More trail signs -- mileage markers.
- Need more signs, as I turned on Hawn State Road and went the wrong way. A sign should be put there.
- No signs on bluffs.

Problems with entrance gate

- Gate combo posted at restrooms for anyone -- not just campers.
- Not changing the gate code frequently enough.
- Sex offenders should be required to register at office before camping. Need light at main gate.

Other

- Good -- no nature area, park is an excellent safe area.
- Perception of hunters nearby; may get on park property.
- We didn't see much staff.
- Weedy trails, narrow for children. Poison ivy.

	1998 Hawn State Park Visitor Survey
	1770 Hami State Land Visitor Survey
Appendix G. List of Responses for Addition	al Comments (Q 20)

Responses to Question #20

Please write any additional comments about your park visit or suggestions on how the Missouri Department of Natural Resources can make your experience in Hawn State Park a better one.

General positive comments

- A beautiful park.
- A posted weather report at the restrooms would be nice each morning so we know if we should wait the rain out. Don't change anything else. I feel it changed dramatically since the concrete pads and shower houses were added. It used to have the feel of a rustic campsite in a pine and oak forest. Now everything is so much concrete to look at. The bath house is great but the huge concrete drive ways and loss of the trees have changed the feel in a negative way.
- All personnel very nice and helpful.
- Appreciate your lights coming on in restroom when door is open to save on bugs. Concern: make handout on flash flooding if necessary.
- As is!
- Beautiful park.
- Been coming here for 25 years, as camper and ex-employee.
- Even though we live in the country, we never cease to appreciate our Hawn Park.
- Excellent park and people, keep up the good work.
- First time visit. I came at suggestion of a friend who thought it was one of the prettiest parks in area.
- Great park!
- Great park...need mile markers.
- Great place.
- Great program, keep up the good job.
- Hawn is one of the best in the park system.
- Hawn State Park has been one of the nicest parks we have stayed at. Thank you!
- I am new to MO State Parks. Visited 3. Those rank high compared to other states!!
- I camped a year ago for our family reunion and I loved it. Was quiet and very restful.
- I enjoy hiking on your trails.
- I have been in a lot of state parks around the country, but none as nice as Missouri's.
- I wish other state parks were as nice as Hawn State Park.
- It's one of the nicest parks I've been to.
- Keep up the good work.
- MO state parks are better than any private campground I've ever camped at.
- Need more electric hookups. Very nice park.
- Need more electrical hookups. Very nice place to camp.
- One of the best parks in MO.
- Overall very nice
- Restroom with shower closer to reserved area. Much appreciation to reserved campsites.
- South trail needed trimming, otherwise it was great.
- Stream was lovely.
- Thank you for your time.

- The concrete walks to the picnic tables and bathrooms are great.
- This is a really beautiful park and very well kept.
- Very beautiful park! Thanks
- Very beautiful shut-in area. Would love more info on the ecology of the area.
- Very happy with park.
- Very nice bath house.
- Very nice.
- Very peaceful.
- Very pleased. I would be glad to come back.
- We drove 7 hours from St. Joseph to get here and we didn't think to call and see when the gates of the park close. We arrived at 10:30 with 3 small children asleep in the car. The superintendent was nice enough to let us enter the park. We really appreciate the understanding of our mistake and predicament. Thank you so much!
- We have found Hawn to be a family oriented park. We appreciate the lack of teenagers drinking and playing loud music. We have camped here many times; we like the lack of rowdiness at night. Keep up the good work! Hawn is our favorite park! Thanks!
- We like it here!
- We love MO parks.
- We love the trails.
- We were here Sun.-Wed. The bathrooms were not cleaned until Tues. and they needed it on Sunday. It would be nice if park office was open Mon. and Tues. Staff is very friendly and helpful!
- We would love to see cabins erected that would be available for rent. Your park is beautiful and we've been visiting here for the last 10 years!
- Well satisfied with present operations.
- We've been coming to this state park for years and the improvements like new restrooms and pads for campers are nice.
- Wonderful!! Except no water and no signs. Sub-host couldn't care less about water problem; hard to determine where to camp (no explanation).

Problems with restrooms

- Better trail signs...cleaner restrooms...and upgrade outhouse to restroom status.
- Fix light in restroom. Fix pump for water.
- I don't care for the outhouses. People should scoop up after dogs or they should not be allowed in the park.
- More parking. Have flush toilets in the picnic area. Also have running water in the picnic area.
- More restrooms and running water.
- No hot water in the shower and this made shower unpleasant.
- No running water...no trash cans....poor to sad bathrooms
- Restroom with shower closer to reserved area. Much appreciation to reserved campsites.
- Showers not working right.
- Since there is not daily trash pick up, the restrooms are not as clean and supplied.

- Some showers not working.
- The only problem is no hot water in showers. It's a shame people feel the need to trash the restrooms.
- There is never hot water for the showers!
- Too many people bring dogs that end up barking too much. Not enough campsites with electric hookups. No toilet paper in restrooms, grass around campsite needs cut.
- We were here Sun.-Wed. The bathrooms were not cleaned until Tues. and they needed it on Sunday. It would be nice if park office was open Mon. and Tues. Staff is very friendly and helpful!

Lack of running water and other problems

- Fix light in restroom. Fix pump for water.
- Get your water system working.
- It would be nice to have electric and water at the pavilion.
- More parking. Have flush toilets in the picnic area. Also have running water in the picnic area.
- More restrooms and running water.
- Need to have water faucets at picnic areas.
- No running water...no trash cans....poor to sad bathrooms
- No water at our picnic area.
- The drink water supply is shut off.
- The only problem was none of the water faucets worked.
- Turn the water back on in picnic area. Put trashcans closer together in picnic area. Also, ice machines.
- Water broke.
- Water was turned off in campground where we wanted to stay. Our favorite campground.

Need newer facilities/better maintenance of facilities

- Cut the grass a little bit more often, no one likes tall grasses.
- Grass needs to be mowed badly.
- It would be nice to have electric and water at the pavilion.
- More parking. Have flush toilets in the picnic area. Also have running water in the picnic area.
- My kids enjoyed the playground. I think it could be a little bigger with more equipment.
- Need to have a road to the shelter to unload. No parking, just to unload and then move the car. If you are disabled it is hard to carry ice chest, chairs, etc.
- Plant more dogwood trees.
- Recycling bins for soda cans.
- Wonder why there is only one pavilion that can be reserved. Have a roadway from parking lot to pavilion as a unloading zone.

Need more trails and other suggestions relating to trails

- A couple of benches along the trail.
- At Pickle Springs, good trail but would like to have a few benches along the trail. Most people can't walk that long without a break.
- Better trail signs...cleaner restrooms...and upgrade outhouse to restroom status.
- Few spots on trail need trimming.
- In the picnic areas, to continue with a paved sidewalk up to the trailhead.
- It was hard to find the green (Pickle Creek) trail.
- MO parks in general, and Hawn, in particular, need more trails, better constructed and much better maintained. As hikers, we are bitterly disappointed in Missouri's state parks.
- South trail needed trimming, otherwise it was great.
- State parks need more hiking trails.

Better signage/more signs/more information

- A posted weather report at the restrooms would be nice each morning so we know if we should wait the rain out. Don't change anything else. I feel it changed dramatically since the concrete pads and shower houses were added. It used to have the feel of a rustic campsite in a pine and oak forest. Now everything is so much concrete to look at. The bath house is great but the huge concrete drive ways and loss of the trees have changed the feel in a negative way.
- Appreciate your lights coming on in restroom when door is open to save on bugs. Concern: make handout on flash flooding if necessary.
- Better trail signs...cleaner restrooms...and upgrade outhouse to restroom status.
- Geological guide....flower/fauna guide.
- Great park...need mile markers.
- Very beautiful shut-in area. Would love more info on the ecology of the area.
- Wonderful!! Except no water and no signs. Sub-host couldn't care less about water problem; hard to determine where to camp (no explanation).
- You could put up mile markers on the trail.

Need more campsites/bigger campgrounds and other suggestions relating to campgrounds

- A more secluded campground.
- Camping area needs to be enlarged.
- Need more electric hookups. Very nice park.
- Need more electrical hookups. Very nice place to camp.
- The 14/14 day when park is empty is not practical.
- Too many people bring dogs that end up barking too much. Not enough camp sites with electric hookups. No toilet paper in restrooms, grass around campsite needs cut.
- Wonderful!! Except no water and no signs. Sub-host couldn't care less about water problem; hard to determine where to camp (no explanation).

People being inconsiderate or breaking rules

- At night when people leave bright lights on all night.
- I don't care for the outhouses. People should scoop up after dogs or they should not be allowed in the park.
- Keep beer-drinking parties out of the park.
- Music too loud from other campers.
- Too many people bring dogs that end up barking too much. Not enough camp sites with electric hookups. No toilet paper in restrooms, grass around campsite needs cut.
- We have stayed in several state parks and the only complaint has been other campers being loud late at night or early in the morning.

Need additional trash cans/trash bags

- Garbage can at each campsite, or have one by the shower house.
- Never received trash bag.
- No running water...no trash cans....poor to sad bathrooms
- Turn the water back on in picnic area. Put trashcans closer together in picnic area. Also, ice machines.
- Where is my trash bag? Two days now and still haven't received one.

Other

- A posted weather report at the restrooms would be nice each morning so we know if we should wait the rain out. Don't change anything else. I feel it changed dramatically since the concrete pads and shower houses were added. It used to have the feel of a rustic campsite in a pine and oak forest. Now everything is so much concrete to look at. The bath house is great but the huge concrete drive ways and loss of the trees have changed the feel in a negative way.
- Keep government funds to a minimum (that means hardly anything).
- We were here Sun.-Wed. The bathrooms were not cleaned until Tues. and they needed it on Sunday. It would be nice if park office was open Mon. and Tues. Staff is very friendly and helpful!
- We would love to see cabins erected that would be available for rent. Your park is beautiful and we've been visiting here for the last 10 years!
- Would like to see store of some kind that has ice and food. I know Johnson's Shut-Ins has one which is very helpful.