1999 Lake of the Ozarks State Park Visitor Survey

Project Completion Report

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Prepared by

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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 Lake of the Ozarks State Park (LOSP).

An on-site survey of adult visitors to LOSP was conducted from June through October 1999. Two hundred (200) surveys were collected, with an overall response rate of 94%. Results of the survey have a margin of error of plus or minus 7%. The following information summarizes the results of the study.

Socio-demographic Characteristics

- LOSP visitors were comprised of more males (60%) than females (40%), and the average age of the adult visitor to LOSP was 45.

- Noteworthy is the percentage of visitors who reported incomes higher than $50,000. Although the income category of between $25,000 and $50,000 accounted for the largest percentage (34%) of visitors, half (50%) of visitors reported annual incomes of either between $50,001 and $75,000 or over $75,000.

- The majority (96%) of visitors were Caucasian, 2% were Asian, 1% were Native American, and 0.5% were Hispanic. There were no visitors reporting an ethnic background of African American heritage.

- Seven percent (7%) of the visitors reported having a disability.

- One-third (33%) of the visitors to LOSP were from out of state, with 12% from Illinois and 7% from Iowa.

- Most of the Missouri visitors came from either the St. Louis region (35%), or within 50 miles of LOSP (27%) with the remainder spread throughout the state.

Use-Patterns

- Most (77%) visitors drove less than a day’s drive (less than 150 miles) to visit LOSP. Of those driving 150 miles or less, 13% live within 25 miles of LOSP.

- Sixty-two percent (62%) of LOSP visitors had visited the park before.

- LOSP visitors had visited the park an average of 3.5 times in the past year.

- Over three-fourths of the visitors were staying overnight.

- Of the visitors staying overnight, 79% stayed in the campgrounds at LOSP. The average number of nights visitors stayed was 3.7.

- The majority of LOSP visitors visited the park with family and/or friends.

- The majority (71%) of LOSP campers were aware of the reservation system, but only 42% used the system. Of those campers using the reservation system, 81% were satisfied with it.
The most frequent recreation activities in which visitors participated were walking, camping, viewing wildlife, hiking, picnicking, fishing, swimming, and boating.

**Satisfaction and Other Measures**

- Ninety-nine percent (99%) of LOSP visitors were either satisfied or very satisfied overall.
- First-time visitors were significantly more satisfied than repeat visitors.
- Of the 12 park features, the campgrounds were given the highest satisfaction rating and the camp store was given the lowest satisfaction rating.
- Visitors gave higher performance ratings to the following park attributes: being free of litter and trash, care of natural resources, and disabled accessibility.
- Visitors gave lower performance ratings to the following park attributes: clean restrooms, being safe, and upkeep of park facilities.
- Half (50%) of visitors to LOSP felt some degree of crowding during their visit. The campgrounds were where the majority of visitors felt crowded.
- Visitors who did not feel crowded had a significantly higher overall satisfaction compared to visitors who did feel crowded.
- Half (51%) of the visitors at LOSP did not give park safety an excellent rating.
- Of those visitors responding to the open-ended opportunity to express their safety concerns, the largest percentage commented on what they perceived as a need for increased enforcement of speed limits.
- Although 24% of visitors felt that nothing specific could increase their feeling of safety at LOSP, 29% of visitors did indicate that an increased visibility of park staff and increased law enforcement patrol at LOSP would increase their feeling of safety.
- Visitors who felt the park was safe were more satisfied overall, felt less crowded, gave higher satisfaction ratings to the 12 park features, and gave higher performance ratings to the eight park attributes as well.
- The majority (89%) of visitors reported not being affected by “Party Cove.”
- A little more than half (56%) of visitors would not support a “carry in and carry out” trash system.
- Thirty-six percent (36%) of visitors provided additional comments and suggestions, the majority (23%) of which were positive comments about the park and staff.
Acknowledgements

Conducting and successfully completing a study of this magnitude and complexity could not have been accomplished without the cooperation of many individuals. Almost 2,000 visitors to Missouri State Parks participated in the 1999 Missouri State Parks Visitor Survey. Two hundred visitors to Lake of the Ozarks State Park voluntarily agreed to provide the information upon which this report is based. 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 other individuals provided assistance during the 1999 Missouri State Parks Visitor Survey, without whom the study would not have been a success. The following expressions of gratitude are in acknowledgement of their contributions. Special acknowledgement goes to the staff at Lake of the Ozarks State Park for their willingness to accommodate the survey crew during the study period, and also for their assistance during sampling. Many thanks also go to the research assistants who assisted in data collection and the students at the University of Missouri who assisted in computer data entry of the questionnaires. They are: Tucker Fredrickson, Amy Mahon, Chis Thoele, and Laura Marsch. And finally, grateful recognition is given to David Vaught, Tony Spicci, and Jason Bradshaw for their GIS technical assistance.
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Introduction

NEED FOR RECREATION RESEARCH

In 1939, 15 years after Missouri obtained its first state park, 70,000 visitors were recorded visiting Missouri’s state parks (Masek, 1974). Today, the increase in demand for outdoor recreation experiences has given rise to over 16 million visitors who, each year, visit the 80 parks and historic sites in Missouri’s state park system (Holst & Simms, 1996). Along with this increase in demand for outdoor recreation experiences are other highly significant changes in outdoor recreation. Some of these changes include a change in the nature of vacations with a trend toward shorter, more frequent excursions; an increasing diversity of participation patterns across groups; an increase in more passive activities appropriate for an aging population; an increased concern for the health of the environment; and a realization of the positive contributions the physical environment has on the quality of one’s life (Driver, Dustin, Baltic, Elsner, & Peterson, 1996; Tarrant, Bright, Smith, & Cordell, 1999).

Societal factors responsible for these changes in the way Americans recreate in the outdoors include an aging population; a perceived decline in leisure time and a faster pace of life; geographically uneven population growth; increasing immigration; changes in family structures, particularly an increase in single-parent families; increasing levels of education; a growth in minority populations; and an increasing focus on quality “lifestyle management” (Driver et al., 1996; Tarrant et al, 1999). These factors and their subsequent changes in outdoor recreation participation have important implications for recreation resource managers, who are now faced with recreation resource concerns that are “…people issues and not resource issues alone (McLellan & Siehl, 1988).” This growing social complexity combined with the changes it has created in outdoor recreation participation have given rise to the need for research exploring why and how people recreate in the outdoors as well as how these individuals evaluate the various aspects of their outdoor recreation experiences.

STUDY PURPOSE

Visitor satisfaction tends to be a primary goal of natural resource recreation managers (Peine, Jones, English, & Wallace, 1999) and has been defined as the principal measure of quality in outdoor recreation (Manning, 1986). Visitor satisfaction, however, can be difficult to define because individual visitors are unique. Each visitor may have different characteristics, cultural values, preferences, attitudes, and experiences that influence their perceptions of quality and satisfaction (Manning, 1986).

Because of these differences in visitors, a general “overall satisfaction” question alone could not adequately evaluate the quality of visitors’ experiences when they visit Missouri’s state parks and historic sites. For this reason, it is necessary to gather additional information about visitor satisfaction through questions regarding: a) visitors’
socio-demographic characteristics; b) visitors’ satisfaction with programs, services and facilities; c) visitors’ perceptions of safety; and d) visitors’ perceptions of crowding. Thus, the purpose of this study is to gain information, through these and other questions, about the use patterns, socio-demographic characteristics, and satisfaction with park programs, facilities, and services, of visitors to ten of Missouri’s state parks.

This report examines the results of the visitor survey conducted at Lake of the Ozarks State Park (LOSP), one of the ten parks included in the 1999 Missouri State Parks Visitor Survey. Objectives specific to this report include:

1. Describing the use patterns of visitors to LOSP during the period between June and October 1999.
2. Describing the socio-demographic characteristics of visitors to LOSP.
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 park safety high and those who did not.
5. Gaining information about selected park-specific issues.

**STUDY AREA**

Located in the middle of perhaps one of the most intensively developed and most commercial of Missouri’s tourism landscapes, Lake of the Ozarks State Park remains true to its natural setting and provides an alternative to the visitor seeking to escape the surrounding tourist attractions. The largest park in the state park system with over 17,000 acres surrounding Lake of the Ozarks, LOSP offers many recreational facilities: picnic areas, swimming beaches, campgrounds, camp store, marina, boat launches, horseback riding stables, hiking and riding trails, and camper cabins. Nearby Ozark Caverns offers guided tours of the cave, a visitor center, and a self-guided nature trail through Coakley Hollow Natural Area.

**SCOPE OF STUDY**

The population of the visitor study at LOSP consisted of LOSP visitors who were 18 years of age or older (adults), and who visited LOSP during the study period between June and October 1999.
Methodology

SAMPLING PROCEDURES

A 95% confidence interval was chosen with a plus or minus 5% margin of error. Based upon 1998 visitation data for June through October at LOSP, it was estimated that over 700,000 visitors would visit LOSP during the period between June 1 and October 31, 1999 (DNR, 1998). Therefore, with a 95% confidence interval and a plus or minus 5% margin of error, a sample size of 400 visitors was required (Folz, 1996). A random sample of adult visitors (18 years of age and older) who visited LOSP during the study period were the respondents for this study.

To ensure that visitors leaving LOSP during various times of the day would have equal opportunity for being surveyed, three time slots were chosen for surveying. The three time slots were as follows: Time Slot 1 = 8:00 a.m. - 12:00 p.m., Time Slot 2 = 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 and assigned to the first of the scheduled survey dates. Thereafter, time slots were assigned in ranking order based upon the first time slot. Two time slots were surveyed during each survey day. Visitors were then surveyed during the assigned time slots of the assigned survey day.

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 LOSP was administered on-site, to eliminate the non-response bias of a mail-back survey. Because LOSP has two main entrances separated by an arm of the Lake of the Ozarks, and because both entrances are located on busy highways, an exit survey was not feasible. Therefore, four recreation areas within the park were identified in which to survey: Day Use Area 1 (the public beach, picnic areas, marina and boat launches at Grand Glaize Beach), Day Use Area 2 (the stables and picnic areas off of Highway 134), Day Use Area 3 (the beach, picnic areas, and boat launches of off Highway 134), and the campgrounds of off Highway 134.

To ensure that visitors at the four recreation areas would have an equal opportunity for being surveyed, surveying alternated between the areas. Only one area was surveyed during each time slot. 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 in each of the assigned recreation areas. During the selected time slot, the surveyor asked every visitor who was 18 years of age and older and in the assigned recreation area 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; 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 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 LOSP 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 the open-ended questions were listed as well as grouped into categories for frequency and percentage calculations. The number of surveys completed by weekday versus weekend, by time slot, and by area was also determined.

Comparisons using independent sample 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 8), ratings of park attributes (question 10), overall satisfaction (question 15), and perceptions of crowding (question 16). The selected groups include:

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 LOSP campground or stay in the camper cabins.
3. Weekend visitors versus weekday visitors. Weekend visitors were surveyed on Saturday and Sunday, weekday visitors were surveyed Monday through Friday.

Other comparisons were made using independent sample t-tests 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.
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, measures of performance of park attributes, and overall satisfaction.

Chi-square tests were conducted comparing responses between select groups regarding support for a “carry in and carry out” trash system. The selected groups include:

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

Additional comparisons include:

1. Multiple linear regression analyses to determine which of the satisfaction variables and which of the performance variables most accounted for variation in overall satisfaction.
2. An independent sample t-test comparing overall satisfaction between visitors who felt some degree of crowding and those who were not at all crowded during their visit.
Results

This section describes the results of the Lake of the Ozarks 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 200 surveys were collected at LOSP during the time period between June and October 1999. Tables 1 and 2 show surveys collected by time slot and recreation area, respectively. Of the 200 surveys collected, 157 (78.5%) were collected on weekends (Saturday and Sunday) and 43 (21.5%) were collected on weekdays (Monday through Friday). The overall response rate was 94% (only 13 visitors refused to participate in the survey).

Sampling Error

With a sample size of 200 and a confidence interval of 95%, the margin of error increases from plus or minus 5% to plus or minus 7%. For this study, there is a 95% certainty that the true results of the study fall within plus or minus 7% of the findings. For example, from the results that 40.2% of the visitors to LOSP during the study period were female, it can be stated that between 33.2% and 47.2% of the LOSP visitors were female.

<table>
<thead>
<tr>
<th>Time Slot</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 8 a.m. - 12:00 p.m.</td>
<td>110</td>
<td>55%</td>
</tr>
<tr>
<td>2. 12:00 p.m. - 4 p.m.</td>
<td>68</td>
<td>34%</td>
</tr>
<tr>
<td>3. 4:00 p.m. - 8 p.m.</td>
<td>22</td>
<td>11%</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 1. Surveys Collected by Time Slot

<table>
<thead>
<tr>
<th>Recreation Area</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day Use Area 1</td>
<td>40</td>
<td>20.0%</td>
</tr>
<tr>
<td>Day Use Area 2</td>
<td>17</td>
<td>8.5%</td>
</tr>
<tr>
<td>Day Use Area 3</td>
<td>23</td>
<td>11.5%</td>
</tr>
<tr>
<td>Campgrounds</td>
<td>120</td>
<td>60.0%</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 2. Surveys Collected by Area
**Socio-Demographic Characteristics**

**Age**
The average age of adult visitors to LOSP was 45.2. When grouped into four age categories, 22.4% of the adult visitors were between the ages of 18-34, 53.1% were between the ages of 35-54, 14.1% were between the ages of 55-64, and 10.4% were 65 or over.

**Gender**
Visitors to LOSP were more male than female. Male visitors comprised about 60% (59.8%) of all visitors, and female visitors comprised 40.2% of all visitors.

**Education**
The majority (43.7%) of visitors to LOSP indicated they had completed vocational school or some college. Not quite one-third (29.9%) indicated they had completed grade or high school, and 26.4% indicated having completed a four-year college degree or postgraduate education.

**Income**
The largest percentage (33.9%) of visitors to LOSP reported they had an annual income of between $25,000 and $50,000. The second largest percentage (32.2%) 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 16.1% and 17.8% respectively.

**Ethnic Origin**
Figure 1 indicates the ethnic origin of LOSP visitors. The vast majority (95.9%) of visitors was Caucasian. Less than one percent (0.5%) were Hispanic, 1.0% were Native American, and 2.1% were Asian. There were no visitors reporting an ethnic background of African American and less than one percent (0.5%) of visitors indicated being of an “other” ethnic background.

*Figure 1. Ethnic Origin of LOSP visitors.*
Visitors with Disabilities

Only 6.8% of the visitors to LOSP reported having some type of disability that substantially limited one or more life activities or that required special accommodations. Most of the disabilities reported were mobility-impairing disabilities, but other disabilities included heart problems and visual impairments.

Residence

Two-thirds of the visitors to LOSP were from Missouri (66.8%) with the rest (33.2%) coming from other states, including Illinois (12.4%) and Iowa (6.7%). One visitor was from Great Britain. Within Missouri, 34.8% of the visitors come from the St. Louis region, and 27.1% come from the within 50 miles of LOSP, with the rest of the visitors spread throughout the state. Figure 2 shows the residence of visitors by zip code.

Use Patterns

Trip Characteristics

The majority (72.1%) of visitors to LOSP traveled less than a day’s drive to visit the park (a day’s drive is defined as 150 miles or less, not exceeding 300 miles round trip). Of those traveling less than a day’s drive, 12.9% lived within the immediate vicinity of LOSP (25 miles or less), including Brumley, Osage Beach, Linn Creek, and Montreal. An average group of visitors at LOSP consisted of 2.57 adults and 2.33 children.

Visit Characteristics

Sixty-two percent (62%) of the visitors to LOSP were repeat visitors, with a third (38%) of the visitors being first time visitors. The average number of times all visitors reported visiting LOSP within the past year was 3.5 times.

Figure 2. Residence of LOSP Visitors by Zip Code
Most of the visitors (78.3%) to LOSP during the study period indicated that they were staying overnight, with only 21.7% indicating that they were day-users. Of those staying overnight during their visit, 78.7% stayed in the campgrounds at LOSP, 1.3% stayed in the camper cabins, 16.8% stayed in nearby lodging facilities, 1.9% stayed in nearby campgrounds, and 1.3% stayed with friends and relatives. Of those camping in a campground in LOSP, 79.6% reported camping in an RV, trailer, or van conversion, while 20.4% reported staying in a tent.

Of those reporting overnight stays, 13.5% stayed one night, 31.7% stayed two nights, 19.8% stayed three, 5.6% stayed four nights, 11.9% stayed five nights, and 17.6% stayed 6 or more nights. The average stay for overnight visitors was 3.7 nights. The median number of nights was 3.0, indicating that half of the overnight visitors stayed less than three nights and half of the overnight visitors stayed more than three nights. The highest percentage of visitors stayed two nights.

About 55% (54.6%) of the visitors to LOSP visited the park with family. Twenty-four percent (24.2%) visited with family and friends, while 10.8% visited with friends, and 8.2% visited the park alone.

Those visitors camping at LOSP were asked if they were aware of the reservation system and if they used the reservation system for their visit. The majority (71.1%) of campers were aware of the reservation system, but less than half (41.8%) of campers reported using the reservation system. When asked why they did not use the reservation system, 41.9% of those answering the open-ended question reported that they didn’t think it was necessary, 20.9% reported that their decision to camp was last minute, and 11.6% didn’t like the reservation system or the reservation fee (Figure 3). For responses to this open-ended question, see Appendix E, question 5.

Of those campers who reported using the reservation system, 81% were satisfied with the system and 19% were not. Comments from visitors not satisfied with the system included complaints about the reservation fee, complaints about not being able to get a specific site, the feeling that “first-come, first-serve” was a better system, and other comments.

**Recreation Activity Participation**

Respondents to the survey were asked what activities they participated in during their visit to LOSP. Figure 4 shows the percentage of visitor...
participation in the eight highest activities. Walking was the highest reported (59.2%), camping was the second (54%), and viewing wildlife was the third (44.1%). Hiking (41.3%), picnicking (37.6%), fishing (37.1%), swimming (32.4%), and boating (23.9%) were next.

Figure 4. Participation in Recreational Activities at LOSP

LOSP visitors reported engaging in other activities, including biking (17.4%), studying nature (14.6%), horseback riding (10.3%), attending an interpretive program (8.5%), horseback riding rental (6.6%), boat rental (6.1%), and attending a special event (5.6%). Only 5.6% of visitors reported engaging in an "other" activity, including shopping and playing at the playground.

SATISFACTION MEASURES

Overall Satisfaction
When asked about their overall satisfaction with their visit, only 1% of visitors was either dissatisfied or very dissatisfied with their visit, whereas 99% of visitors were either satisfied or very satisfied. Visitors’ mean score for overall satisfaction was 3.62, based on a 4.0 scale with 4 being very satisfied and 1 being very dissatisfied.

No significant difference (p<.05) was found in overall satisfaction between campers and non-campers, with mean overall satisfaction scores of 3.64 and 3.60 respectively. Nor was there a significant difference in overall satisfaction between weekend (3.62) and weekday visitors (3.63). There was, however, a significant difference (p<.05) in overall satisfaction between first-time and repeat visitors. First-time visitors had a significantly higher overall satisfaction score (3.73) than repeat visitors (3.56).

Satisfaction with Park Features
Respondents were also asked to express how satisfied they were with 12 park features. Figure 5 shows the mean scores for the 12 features and also for visitors’ overall satisfaction. The satisfaction score for the campgrounds (3.61) was the highest, with the other scores ranging from 3.53 (boat launches) to the lowest of 2.91 (camp store). A multiple linear regression analysis ($r^2=.78$) of the 12 park features showed that all the variables combined to account for three-fourths of the overall satisfaction rating.
No significant differences were found in mean satisfaction ratings of park features between first time and repeat visitors, or between weekend and weekday visitors. Non-campers (3.44) were significantly (p<.05) more satisfied with the camp store than campers (2.76).

**Performance Rating**

Visitors were asked to rate the park’s performance of eight select park attributes (question 7): being free of litter and trash, having clean restrooms, upkeep of park facilities, having helpful and friendly staff, access for persons with disabilities, care of natural resources, interpretive programs, and being safe. Performance scores were based on a 4.0 scale, with 4 being excellent and 1 being poor.

No significant differences were found between weekend and weekday visitors and their performance ratings of the eight park attributes. First time visitors gave a significantly higher (p<.01) performance rating than repeat visitors regarding LOSP being free of litter and trash (3.74 and 3.50 respectively). Campers gave significantly higher performance ratings (p<.01) than non-campers regarding the park having clean restrooms (3.50 and 3.34 respectively) and disabled accessibility (3.57 and 3.13 respectively). A multiple linear regression analysis (r^2=.37) showed that the eight performance attributes combined to moderately determine overall satisfaction.

**Importance-Performance Measures**

The Importance-Performance (I-P) Analysis approach was used to analyze questions 10 and 14. Mean scores were calculated for the responses of the two questions regarding visitors’ ratings of the performance and importance of the eight select park attributes. Table 3 lists...
the scores of these attributes, which were based on a 4.0 scale of 4 being excellent and 1 being poor, and 4 being very important and 1 being very unimportant.

Figure 6 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 “high importance, high 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 managers, because they exhibit attributes that are not as important to visitors.

Table 3. Mean Performance and Importance Scores for Park Attributes

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Mean Performance Score</th>
<th>Mean Importance Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Being free of litter/trash</td>
<td>3.59</td>
<td>3.82</td>
</tr>
<tr>
<td>B. Having clean restrooms</td>
<td>3.43</td>
<td>3.84</td>
</tr>
<tr>
<td>C. Upkeep of park facilities</td>
<td>3.46</td>
<td>3.80</td>
</tr>
<tr>
<td>D. Having helpful &amp; friendly staff</td>
<td>3.49</td>
<td>3.69</td>
</tr>
<tr>
<td>E1. Access for persons with disabilities</td>
<td>3.48</td>
<td>3.51</td>
</tr>
<tr>
<td>E2. Access for persons with disabilities</td>
<td>3.70</td>
<td>3.77</td>
</tr>
<tr>
<td>F. Care of natural resources</td>
<td>3.51</td>
<td>3.77</td>
</tr>
<tr>
<td>G1. Interpretive programs</td>
<td>3.17</td>
<td>3.65</td>
</tr>
<tr>
<td>G2. Interpretive programs</td>
<td>3.27</td>
<td>3.38</td>
</tr>
<tr>
<td>H. Being safe</td>
<td>3.46</td>
<td>3.84</td>
</tr>
</tbody>
</table>

E1 = All visitors                                  G1 = All visitors
E2 = Disabled visitors only                        G2 = Visitors attending interpretive programs
* 1 = Poor performance or low importance rating, 4 = excellent performance or high importance rating

LOSP was given high importance and performance ratings for being free of litter and trash. Visitors also gave high performance ratings to care of natural resources, but rated this attribute of average importance. Disabled visitors also gave LOSP a high performance rating in its providing disabled accessibility, but rated this attribute of average importance. Characteristics that visitors felt were important but rated LOSP low on performance were having clean restrooms, being safe, and upkeep of park facilities.
**Figure 6. Importance-Performance Matrix of Park Attributes**

**Crowding**

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

<table>
<thead>
<tr>
<th>Perception</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>1</td>
</tr>
<tr>
<td>Slightly</td>
<td>2</td>
</tr>
<tr>
<td>Moderately</td>
<td>3</td>
</tr>
<tr>
<td>Extremely</td>
<td>4</td>
</tr>
<tr>
<td>Crowded</td>
<td>5</td>
</tr>
<tr>
<td>Extremely Crowded</td>
<td>6</td>
</tr>
<tr>
<td>Extremely Crowded</td>
<td>7</td>
</tr>
<tr>
<td>Extremely Crowded</td>
<td>8</td>
</tr>
<tr>
<td>Extremely Crowded</td>
<td>9</td>
</tr>
</tbody>
</table>

Visitors’ overall mean response to this question was 2.5. Half (50.5%) of the visitors to LOSP did not feel at all crowded (selected 1 on the scale) during their visit. The rest (49.5%) 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 17). One-third (32.7%) of the visitors who indicated some degree of crowding answered this open-ended question. Table 4 lists the locations where visitors felt crowded at LOSP. Of those who answered the open-ended question, the majority (65.6%) felt crowded in the campgrounds.

Repeat visitors were significantly (p<.001) more crowded than first time visitors, with a mean crowded score of 2.9 compared to 1.8. Campers also had significantly (p<.05) higher perceptions of crowding when compared to non-campers. Campers had a mean crowded score of 2.8, while non-campers had a mean crowded score of 1.9. Weekend visitors were also significantly (p=.001) more crowded than weekday visitors, with a mean crowded score of 2.7 compared to that of weekday visitors, 1.6.
Crowding and satisfaction

A significant difference (p<.001) 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 3.73, whereas visitors who felt some degree of crowding had a mean overall satisfaction score of 3.51.

SAFETY CONCERNS OF VISITORS

Half (51%) of the visitors to LOSP did not rate the park as excellent for safety. Of those, 39.8% noted what influenced their rating. Their comments were grouped into categories and are shown in Figure 7. Appendix F provides a list of the comments.

Figure 7. Comments from Visitors Not Rating LOSP Excellent on Safety

One-fourth (25.6%) of the open-ended responses were from visitors who either had no reason for not rating safety excellent, or who felt that no place was perfect and could always improve. A large percentage (36%) of the open-ended responses, however, were from visitors who commented on the need for enforcement of speed limits and the need for a more visible park staff.

Visitors were also given a list of nine attributes and were asked to indicate which of the nine would most increase their feeling of safety at LOSP. Although instructed to select only one attribute, many visitors selected more than one; consequently, 183 responses were given by 137 visitors. Figure 8 shows the percentage of responses given by visitors. Most (24%) felt that nothing specific would increase their feeling of safety, but 16.4% felt that increased visibility of park staff would increase safety.

Visitors who felt that more lighting in the park would most increase their feeling of safety were asked to indicate where they felt more lighting was necessary. Thirty-nine percent (38.9%) of those visitors answered this open-ended question. Table 5 shows the
frequency and percentages of their responses. Of those who indicated an “other” safety attribute would most increase safety, 50% suggested more enforcement of speed limits, 16.7% suggested better signage, and 33.4% suggested other solutions or commented on problems outside of management control.

**Figure 8. Percentage of Safety Attributes Chosen by Visitors**

<table>
<thead>
<tr>
<th>Location</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the campgrounds</td>
<td>2</td>
<td>28.6%</td>
</tr>
<tr>
<td>By the restrooms/shower houses</td>
<td>2</td>
<td>28.6%</td>
</tr>
<tr>
<td>Boat launches</td>
<td>2</td>
<td>28.6%</td>
</tr>
<tr>
<td>Along roads/parking lots</td>
<td>1</td>
<td>14.3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

There were no significant differences in the rating of safety by first-time visitors versus repeat visitors, by campers versus non-campers, or by weekend versus weekday users. There were no differences in safety ratings by socio-demographic characteristics. To determine if there were differences in perceptions of crowding, satisfaction with park features, and overall satisfaction, responses were divided into two groups based on how they rated LOSP on being safe. Group 1 included those who rated the park excellent, and Group 2 included those who rated the park as good, fair, or poor.

Group 1 was significantly (p<.001) more satisfied overall and significantly less crowded than Group 2. Group 1 had an overall satisfaction score of 3.81 and a mean crowded score of 2.0, whereas Group 2 had an overall satisfaction score of 3.46 and a mean crowded score of 3.0. Group 1 also had significantly (p<.05) higher satisfaction ratings of the 12 park features than Group 2, as well as significantly higher (p<.001) performance ratings of the eight park attributes.

**LOSP Visitors’ Feelings Regarding “Party Cove”**

Visitors to LOSP were asked if the area known as “Party Cove” had affected their visit. The vast majority (89.4%) of visitors responded that no, Party Cove had not affected their visit. Only 10.6% of visitors felt that Party Cove had affected their visit, and of these, 85% described why. The majority (88.2%) of those describing how Party Cove affected their visit expressed negative feelings regarding the area, many of whom said that they do not go near Party Cove.
Cove for various reasons, including excessive noise, trash, nudity and drunken behavior of others, and boat traffic congestion.

**SUPPORT OF “CARRY IN/CARRY OUT” TRASH SYSTEM**

LOSP visitors were asked to indicate whether they would be willing for the park to establish a “carry in and carry out” trash removal system, thereby promoting recycling and reducing the burden of handling trash in the park. The majority (56.3%) of visitors would not support such a system, although 43.7% of visitors reported that they would support a “carry in and carry out” system.

There were no significant differences between first time and repeat visitors, and whether each group would support this type of trash system. First time visitors were almost equally in favor of (51.4%) or opposed to (48.6%) a carry in/carry out system, while repeat visitors were more likely to oppose (61%) this type of system.

There was a significant difference (p<.05), however, between weekend and weekday visitors and whether or not they would support the carry in/carry out system. Weekend visitors were more likely to oppose (60.9%) than support (39.5%) the system, whereas weekday visitors were exactly opposite with 60.5% supporting and 39.5% opposing the system. Campers were significantly (p<.001) more likely to oppose (72.3%) establishing this type of system, while non-campers were more likely to support it (69%). Figure 9 shows the percentage of support or opposition between each group.

![Figure 9. Support for “Carry In/Carry Out” Trash System Between Groups](image)

**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 LOSP a better one (question 25). One-third (36%) of the total survey participants responded to this question, with 99 responses given by 72 respondents. The comments and suggestions were listed and grouped by similarities into 13 categories for frequency and percentage calculations. The list of comments and suggestions is found in Appendix G. Table 6 lists the frequencies and percentages of the comments and suggestions by category.

The majority (23.2%) of comments were general positive comments, such as: “Had a wonderful time”, “Excellent park”, and “We always enjoy our stay”. The rest of the comments were categorized based on similar suggestions or comments, such as suggestions about the reservation system, requests for better maintenance and upkeep, and
comments or suggestions regarding the restrooms and shower houses.

Table 6. Frequency and Percentage of Comments and Suggestions from LOSP Visitors

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. General positive comments</td>
<td>23</td>
<td>23.2%</td>
</tr>
<tr>
<td>2. Comments/suggestions about campgrounds/camper cabins</td>
<td>10</td>
<td>10.1%</td>
</tr>
<tr>
<td>3. Comments/suggestions about restrooms/shower houses</td>
<td>10</td>
<td>10.1%</td>
</tr>
<tr>
<td>4. Comments/suggestions about the reservation system</td>
<td>9</td>
<td>9.1%</td>
</tr>
<tr>
<td>5. More staff/rangers patrolling park &amp; enforcing rules</td>
<td>8</td>
<td>8.1%</td>
</tr>
<tr>
<td>6. Provide more trash cans &amp; other comments regarding question 13 (“carry in/carry out” trash system)</td>
<td>8</td>
<td>8.1%</td>
</tr>
<tr>
<td>7. Need newer/additional facilities</td>
<td>6</td>
<td>6.1%</td>
</tr>
<tr>
<td>8. Better maintenance/upkeep</td>
<td>4</td>
<td>4.0%</td>
</tr>
<tr>
<td>9. Suggestions about interpretive programs/information</td>
<td>3</td>
<td>3.0%</td>
</tr>
<tr>
<td>10. Problems with park staff</td>
<td>2</td>
<td>2.0%</td>
</tr>
<tr>
<td>11. Comments/suggestions about park store</td>
<td>2</td>
<td>2.0%</td>
</tr>
<tr>
<td>12. Complaints about lake traffic</td>
<td>2</td>
<td>2.0%</td>
</tr>
<tr>
<td>13. Other.</td>
<td>12</td>
<td>12.1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>99</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>
Discussion

**MANAGEMENT IMPLICATIONS**

The results of this study provide relevant information concerning LOSP visitors. However, the results should be interpreted with caution. The surveys were collected only during the study period from June to October 1999; 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 this period.

**Satisfaction Implications**

Sixty-four percent (64%) of LOSP 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 (62%) combined with their positive comments provide evidence that LOSP visitors are indeed satisfied with their park experience.

Interestingly, first-time visitors were significantly more satisfied with their visit than repeat visitors, although satisfaction scores for both were high. Repeat visitors felt significantly more crowded than first-time visitors, which may have affected their overall satisfaction. Research has shown that repeat visitors often develop an identity to or a familiarity with an area, instilling a sense of ownership for that area (Armistead & Ramthun, 1995). This sense of ownership may lead the repeat visitor to feel encroached upon, thus contributing to a decrease in overall satisfaction.

**Safety Implications**

Visitors’ perceptions of safety are a concern for LOSP managers. Safety was an attribute visitors identified as being of higher importance, but was given a lower performance rating. In fact, half (51%) of visitors did not give the park an excellent safety rating, although 88% did give the park a good or excellent rating (Figure 10). Visitors’ safety concerns also influenced their overall satisfaction and perceptions of crowding, as overall satisfaction was lower and perceptions of crowding were higher for visitors with safety concerns (Figure 11).

**Figure 10. Safety ratings of LOSP.**

Of particular concern to visitors is the visibility of park staff and rangers in the park, as well as enforcement of speed limits and other park rules. Thirty-six percent (36%) of visitors with safety concerns responded to an open-ended question with comments regarding what
they perceived as a need for increased enforcement of speed limits. Out of a list of nine safety attributes, 29% of visitors selected either an increased visibility of park staff or increased law enforcement patrol as the two attributes that would most increase their feeling of safety at LOSP.

**Crowding Implications**

Another concern for managers is visitors’ perception of crowding, particularly in light of LOSP’s location. Crowding is a perceptual construct not always explained by the number or density of other visitors. Expectations of visitor numbers, the behavior of other visitors, and visitors’ perception of resource degradation all play a significant role in crowding perceptions (Peine et al., 1999). Campers had significantly higher perceptions of crowding than non-campers; weekend visitors also were more crowded than weekday visitors; and as mentioned earlier, repeat visitors also expressed a higher perception of crowding than first-time visitors.

Visitors’ perceptions of crowding also influenced their overall satisfaction at LOSP. Visitors who felt crowded had a significantly lower overall satisfaction than visitors who did not feel crowded (Figure 12). In addressing 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 as where visitors felt crowded. Further study could determine if crowding perceptions here are due to the number of people or perhaps the behavior of those in the campgrounds.

**Performance Implications**

Visitors felt that clean restrooms were very important but rated LOSP’s as needing attention. Visitors also felt that upkeep of the park’s facilities was very important, but did not rate LOSP very high in this area.

Restroom cleanliness is often given a lower rating by visitors to state parks (Fredrickson & Moisey, 1998), and in this case could be a result of the large number of daily visitors LOSP experiences during peak season. Non-
campers gave restroom cleanliness a significantly lower rating than campers, suggesting that restrooms in the day use areas may require different management considerations.

**Implications for LOSP’s Interpretive Programs**

Another area of concern for managers at LOSP is the low performance and importance ratings given by visitors regarding LOSP’s interpretive programs. Less than ten percent (8.5%) of visitors indicated attending an interpretive program. The majority (69%) of visitors, when asked how satisfied they were with interpretive programs, reported that they didn’t know how satisfied they were. When asked to rate LOSP’s performance in providing interpretive programs, again the majority (55%) of visitors didn’t know how to rate this attribute. These results suggest that visitors may not be aware of the interpretive programs, and thus do not attend them.

**Implementation of “Carry In and Carry Out” Trash System**

Visitors were almost equally divided on this issue, with 56% of visitors opposed to and 44% of visitors in support of a “carry in/carry out” system of trash removal. However, anecdotal observations from the surveyor suggest that many visitors fear non-compliance by other visitors if this type of trash removal system is implemented. Eight percent (8%) of additional comments and suggestions from visitors also express this fear or the feeling that more trash receptacles and recycling centers are needed. This is an important concern for visitors, as evidenced by the high performance and importance ratings given to the park for being free of litter and trash.

**Conclusion**

LOSP visitors are very satisfied with LOSP, as evidenced by the high percentage of visitors who were repeat visitors, and also by their high satisfaction ratings. LOSP visitors also gave high performance ratings to the park being free of litter and trash, providing disabled access, caring for its natural resources, and having helpful and friendly staff. The majority of LOSP visitors also felt relatively safe at the park, in that 88% of visitors gave either good or excellent ratings to park safety.

The results of the present study suggest some important management and planning considerations for LOSP. Even though LOSP visitors rated their visits and the park features relatively high, attention to safety, crowding, and facility maintenance can positively effect these ratings. Consideration might also be given as to whether implementation of a “carry in/carry out” system of trash removal is necessary.

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 LOSP. The frequency and percentage calculations of survey responses provide useful information concerning socio-
demographic characteristics, use patterns, and satisfaction of LOSP visitors. In addition, the “sub-analysis” of data is important in identifying implications for management of LOSP. (The sub-analysis in the present study included comparisons using Chi-square and ANOVA between selected groups, multiple linear regression, 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.

Data collection should be on a continuum (Peine et al., 1999), which is why additional visitor surveys at LOSP should also be conducted on a regular basis (e.g., every three, four, or five years). Future LOSP studies can identify changes and trends in socio-demographic characteristics, use patterns, and visitors’ satisfaction at LOSP.

The methodology used in this study serves as a standard survey procedure that the DSP can use in the future. Because consistency should be built into the design of the survey instrument, sampling strategy and analysis (Peine et al., 1999), other Missouri state parks and historic sites 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 study period between June and October 1999. Therefore, user studies at LOSP and other parks and historic sites might be conducted during other seasons for comparison between seasonal visitors.

**Methodology Recommendations and Considerations for LOSP and Other Parks**

The on-site questionnaire and the methodology of this study were designed to be applicable to other Missouri state parks. Exit surveys provide the most robust sampling strategy to precisely define the visitor population (Peine et al., 1999); therefore, it is recommended that exit surveys be conducted at other state parks and historic sites if at all possible.

**Survey Administration**

The prize package drawing and the one-page questionnaire undoubtedly helped attain the high response rate in the present study. Continued use of the one-page questionnaire and the prize package drawing is suggested. 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 engage the surveyor in further conversation about the park. For this reason, and because the surveyor was required to walk a roving route in the various recreation areas, an assistant to help administer the surveys would be helpful.

Achieving the highest possible response rate (within the financial constraints) should be a goal of any study. To achieve higher response rates, the following comments are provided. The most frequent reason that visitors declined to fill out a survey was because they did not have enough time.
Most non-respondents were very pleasant and provided positive comments about the park. Some even asked if they could take a survey and mail it back. One recommendation would be to have self-addressed, stamped envelopes available in future surveys to offer to visitors only after they do not volunteer to fill out the survey on-site. This technique may provide higher response rates, with minimal additional expense. One caution, however, is to always attempt to have visitors complete the survey on-site, and to only use the mail-back approach when it is certain visitors would otherwise be non-respondents.
# References


Appendix A. Lake of the Ozarks State Park Visitor Survey
Lake of the Ozarks State Park

The Missouri Department of Natural Resources and the University of Missouri are seeking your evaluation of Lake of the Ozarks 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.

1. Is this your first visit to Lake of the Ozarks State Park? (Check only one box.)
   - yes
   - no
   If no, how many times have you visited this park in the past year? ________

2. During this visit to the park, are you staying overnight? (Check only one box.)
   - yes
   - no
   If yes, how many nights are you staying at or near the park during this visit? ________
   If no, (skip to question 6.)

3. If staying overnight, where are you staying? (Check only one box.)
   - campground in Lake of the Ozarks State Park
   - tent
   - RV/trailer/camper
   - camper cabin in Lake of the Ozarks State Park
   - nearby lodging facilities
   - nearby campground
   - friends/relatives
   - other (Please specify.)

4. If camping at Lake of the Ozarks State Park, were you aware of the reservation system? (Check only one box.)
   - yes
   - no

5. If camping at Lake of the Ozarks State Park, did you use the reservation system? (Check only one box.)
   - no
   - if no, why not? ________
   - yes
   - if yes, were you satisfied with the system?
     - yes
     - no
     - why were you dissatisfied?

6. With whom are you visiting the park? (Check only one box.)
   - alone
   - family
   - family and friends
   - club or organized group
   - friends
   - other (Please specify.)

7. Which recreational activities have you engaged in during this park visit?
   (Check all that apply.)
   - picnicking
   - walking
   - fishing
   - boating
   - camping
   - boating rental
   - swimming
   - horseback riding
   - hiking
   - horseback riding rental
   - bicycling
   - tour of Ozark Caverns
   - viewing wildlife
   - studying nature
   - attending interpretive program
   - attending special event
   - other (Please specify.)

8. How satisfied are you with each of the following in Lake of the Ozarks State Park? (Check one box for each feature.)

   a. campgrounds
   b. park signs
   c. picnic areas
   d. swim beaches
   e. boat launches
   f. trails
   g. marina
   h. camp store
   i. horseback riding rental
   j. camper cabins
   k. cave tours
   l. interpretive programs

9. Within Lake of the Ozarks State Park, there is an area designated for a large group boat mooring (Party Cove). Has this feature affected your visit to Lake of the Ozarks State Park? (Check only one box.)
   - no
   - yes
   If yes, how? ________

10. How do you rate Lake of the Ozarks State Park on each of the following? (Check one box for each feature.)

     a. being free of litter/trash
     b. having clean restrooms
     c. upkeep of park facilities
     d. having a helpful & friendly staff
     e. access for persons with disabilities
     f. care of natural resources
     g. interpretive programs
     h. being safe

   - Excellent
   - Good
   - Fair
   - Poor
   - Don't Know

PLEASE TURN SURVEY OVER.
11. If you did not rate this park as excellent on being safe, what influenced your rating?

12. Which of the following would most increase your feeling of being safe at Lake of the Ozarks State Park? (Check only one box.)

- [ ] more lighting
- [ ] improved behavior of others
- [ ] increased visibility of park staff
- [ ] less crowding
- [ ] nothing specific
- [ ] less traffic congestion
- [ ] improved upkeep of facilities
- [ ] increased law enforcement patrol

13. Do you support establishing a “carry in and carry out” system as a means of promoting recycling and reducing the burden of handling trash in this park? (Check only one box.)

- [ ] yes
- [ ] no

14. When visiting any state park, how important are each of these items to you? (Check one box for each feature.)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Very Important</th>
<th>Important</th>
<th>Unimportant</th>
<th>Very Unimportant</th>
<th>Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. being free of litter/trash</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b. having clean restrooms</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c. upkeep of park facilities</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d. having a helpful &amp; friendly staff</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>e. access for persons with disabilities</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>f. care of natural resources</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>g. interpretive programs</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>h. being safe</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

15. Overall, how satisfied are you with this visit to Lake of the Ozarks State Park? (Check only one box.)

<table>
<thead>
<tr>
<th>Satisfaction Level</th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

16. During this visit, how crowded did you feel? (Circle one number.)

- [ ] Not at all
- [ ] Slightly Crowded
- [ ] Moderately Crowded
- [ ] Extremely Crowded

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

18. What is your age? ☐

19. Gender? ☐ female ☐ male

20. What is the highest level of education you have completed? (Check only one box.)

- [ ] grade school
- [ ] vocational school
- [ ] graduate of 4-year college
- [ ] high school
- [ ] some college
- [ ] post-graduate education

21. What is your ethnic origin? (Check only one box.)

- [ ] Asian
- [ ] African American
- [ ] Native American/American Indian
- [ ] Hispanic
- [ ] Caucasian/White
- [ ] Other (Please specify.)

22. Do you have a disability that substantially limits one or more life activities or might require special accommodations? (Check only one box.)

- [ ] yes
- [ ] no

If yes, what disability or disabilities do you have?

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

24. What is your annual household income?

- [ ] less than $25,000
- [ ] $25,000 - $50,000
- [ ] over $75,000

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

THANK YOU FOR YOUR HELP.
YOU ARE ALWAYS WELCOME IN MISSOURI STATE PARKS.
Appendix B. Survey Protocol
Protocol for Lake of the Ozarks State Park Visitor 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 Lake of the Ozarks 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 Lake of the Ozarks 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 may 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, 1999. Winners will be notified by telephone or mail. Redemption of gift certificates is based on dates of availability through August 31, 2000.

Name: _______________________________
Address: ____________________________
______________________________
Phone #: (____) ____________________
Appendix D. Observation Survey
### 1999 Lake of the Ozarks State Park Visitor Survey

**Date**

**Day of Week**

**Time Slot**

**Weather**

**Temperature**

**Park/Site**

<table>
<thead>
<tr>
<th>Survey #’s</th>
<th># of Adults</th>
<th># of Children</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
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<td>18</td>
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<td>19</td>
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<td>20</td>
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<td>21</td>
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<td>25</td>
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<td>26</td>
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<td>31</td>
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<td>32</td>
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<td>33</td>
<td></td>
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<td></td>
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<tr>
<td>34</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Time Slot Codes:**

- Time Slot 1 = 8:00 - 12:00 p.m.
- Time Slot 2 = 12:00 - 4:00 p.m.
- Time Slot 3 = 4:00 - 8:00 p.m.

**Weather Codes (examples):**

- Hot & Sunny
- Cold & Rainy
- Cloudy
- Windy
- Sunny
- Humid
Appendix E. Responses to Survey Questions
Lake of the Ozarks State Park Visitor Survey

1. **Is this your first visit to Lake of the Ozarks State Park? (n=200)**
   - yes  38.0%
   - no  62.0%

   **If no, how many times have you visited this park in the past year? (n=121)**
   The responses from this open-ended question were grouped into the following 7 categories:
   - 0   11.8%
   - 1   29.1%
   - 2   23.6%
   - 3   13.6%
   - 4-10 14.5%
   - 11-20 4.5%
   - 21+  2.7%
   The average # of times repeat visitors visited the park in the past year was 3.6 times.

2. **During this visit to the park, are you staying overnight? (n=198)**
   - yes  78.3%
   - no  21.7%

   **If yes, how many nights are you staying overnight at or near the park during this visit? (n=126)**
   The responses from this open-ended question were grouped into the following 6 categories:
   - 1   13.5%
   - 2   31.7%
   - 3   19.8%
   - 4-5 17.5%
   - 6-10 14.4%
   - 11+  3.2%
   The average # of nights respondents visiting the park for more than one day stayed was 3.7.

3. **If staying overnight, where are you staying? (n=155)**
   - campground in Lake of the Ozarks State Park  78.7%
   - tent  20.4%
   - RV   79.6%
   - camper cabin in Lake of the Ozarks State Park  1.3%
   - nearby lodging facilities  16.8%
   - nearby campground  1.9%
   - friends/relatives  1.3%
4. If camping in the Lake of the Ozarks State Park, were you aware of the reservation system? (n=128)
   yes  71.1%
   no   28.9%

5. If camping at Lake of the Ozarks State Park, did you use the reservation system? (n=122)
   no   58.2%
   yes  41.8%

   **If no, why not?** There were 43 responses to this open-ended question, and they are as follows:

   **Didn’t think it was necessary**
   Advised not necessary this time of year.
   After summer season.
   Called but they said we didn't need reservations.
   Cheaper to get sites on day of outing.
   Confident.
   Did not think we needed to.
   Didn't believe we needed to.
   Didn't feel it was necessary.
   Didn't think about it.
   Didn't think we needed to.
   Felt campsite available.
   Never had to before.
   Never had to in the past.
   Off season vacationing.
   Too many open sites.
   Too much trouble to call ahead.
   We get a place anyway.
   We will next time.

   **Last minute decision**
   Husband forgot to call.
   Last minute decision.
   Last minute.
   Not enough time plan.
   Poor planning.
   Spur of the moment.
   Was not sure we were staying here.
   We usually decide at the last minute.
   We were out driving and discovered it and decided to try to get in.

   **Didn’t like reservation system or fee**
   Because of the extra charge.
   I don't like how it is set up. Not enough first-come first-served.
   I feel the park should be first come, first served.
   Not fair. There were open sites in the reservation area this summer but I couldn't use them.
   We don't like it…think it is unfair.

   **Couldn’t get specific site**
   The spot we wanted was not reservable.
   Wanted other specific sites -- not reservable.

   **Other**
   Called but lady at front office was not helpful.
   Didn't know which to reserve and when to do so.
   Friends reserved.
   Had conflicting info from park people on use of reservation system. Was told when called ahead I would not need reservation but when came found out different.
   No reason.
   Too much trouble.
   Tried to but didn't know about the 48 hours prior.
   Was done by family members for us.
   We came with friends.
If yes, were you satisfied with the system? (n=42)
yes  81%
no   19%

Why were you dissatisfied?  Nine visitors responded to this open-ended question and their comments are as follows:
$5 fee too high.
Caters to out of state people.
Could not get the sites wanted. Was very inconvenient.
It was inconvenient.
Lots of vacant sites during the week causes MO Parks lots of lost revenue.
Takes away from weekend camping. First come, first served is best!
Too expensive.
Too much for the reservation fee...other places is only $2.
We are used to coming every chance we get and we don't always know ahead of time. We camped with family and sites we wanted were reserved for 1 night and we could not camp together.

6. With whom are you visiting the park? (n=194)
alone  8.2%  family & friends  24.2%  club or organized group  2.1%
family  54.6%  friends    10.8%  other       0.0%

7. Which recreational activities have you engaged in during this park visit?
   picnicking  37.6%  walking    59.2%  viewing wildlife  44.1%
   fishing     37.1%  boating    23.9%  studying nature  14.6%
   camping    54.0%  boat rental  6.1%  attending interpretive program  8.5%
   swimming  32.4%  horseback riding  10.3%  attending special event  5.6%
   hiking    41.3%  horseback riding rental  6.6%  other     5.6%
   bicycling  17.4%  tour of Ozark Caverns  5.2%

12 visitors participated in an “other” activity. Their responses are as follows:
Checking it out.  Osage Caverns.
Children’s playground.  Picking nuts.
Duck hunting.  Playground
Family research.  Roller blading.
Hay ride.  Shopping.

In addition to percentages of responses, a mean score was calculated for each feature in questions 8, 10, 14, and 15. The score is based on a 4.0 scale with 4 = very satisfied, 3 = satisfied, 2 = dissatisfied, and 1 = very dissatisfied (Q. 8 & 15); 4 = excellent, 3 = good, 2 = fair, and 1 = poor (Q. 10); and 4 = very important, 3 = important, 2 = unimportant, and 1 = very unimportant (Q. 14). The mean score is listed in parenthesis following each feature.
8. How satisfied are you with each of the following in Lake of the Ozarks State Park?

<table>
<thead>
<tr>
<th>Service</th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Dissatisfied</th>
<th>Very Dissatisfied</th>
<th>Don’t Know</th>
<th>n=</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campgrounds (3.61)</td>
<td>51.6%</td>
<td>28.0%</td>
<td>0.0%</td>
<td>1.1%</td>
<td>19.2%</td>
<td>182</td>
</tr>
<tr>
<td>Park signs (3.41)</td>
<td>42.0%</td>
<td>54.3%</td>
<td>1.1%</td>
<td>0.5%</td>
<td>2.1%</td>
<td>188</td>
</tr>
<tr>
<td>Picnic areas (3.51)</td>
<td>43.1%</td>
<td>41.4%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>15.5%</td>
<td>174</td>
</tr>
<tr>
<td>Swimming beaches (3.42)</td>
<td>33.9%</td>
<td>42.4%</td>
<td>1.2%</td>
<td>0.0%</td>
<td>22.4%</td>
<td>165</td>
</tr>
<tr>
<td>Boat launches (3.53)</td>
<td>30.4%</td>
<td>23.4%</td>
<td>1.3%</td>
<td>0.0%</td>
<td>44.9%</td>
<td>158</td>
</tr>
<tr>
<td>Trails (3.46)</td>
<td>33.5%</td>
<td>37.8%</td>
<td>0.6%</td>
<td>0.0%</td>
<td>28.0%</td>
<td>164</td>
</tr>
<tr>
<td>Marina (3.30)</td>
<td>14.8%</td>
<td>22.8%</td>
<td>2.7%</td>
<td>0.0%</td>
<td>59.7%</td>
<td>149</td>
</tr>
<tr>
<td>Camp store (2.91)</td>
<td>14.6%</td>
<td>30.4%</td>
<td>10.1%</td>
<td>5.1%</td>
<td>39.9%</td>
<td>158</td>
</tr>
<tr>
<td>Horseback riding rental (3.29)</td>
<td>11.0%</td>
<td>15.8%</td>
<td>1.4%</td>
<td>0.7%</td>
<td>71.2%</td>
<td>146</td>
</tr>
<tr>
<td>Camper cabins (3.39)</td>
<td>5.0%</td>
<td>7.9%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>87.1%</td>
<td>139</td>
</tr>
<tr>
<td>Cave tours (3.35)</td>
<td>6.6%</td>
<td>12.5%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>80.9%</td>
<td>136</td>
</tr>
<tr>
<td>Interpretive programs</td>
<td>11.1%</td>
<td>18.1%</td>
<td>2.1%</td>
<td>0.0%</td>
<td>68.8%</td>
<td>144</td>
</tr>
</tbody>
</table>

9. Within Lake of the Ozarks State Park, there is an area designated for a large group boat mooring (Party Cove). Has this feature affected your visit to Lake of the Ozarks State Park? (n=188)

<table>
<thead>
<tr>
<th>Response</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td></td>
<td>89.4%</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td>10.6%</td>
</tr>
</tbody>
</table>

If yes, how? The following is a list of responses to this open-ended question.

- Came after season.
- Too close to children and Girl Scout Pin Oak Campground!
- Convenient.
- Too loud!!
- Could not believe the nudity.
- Too many boats are running crazy.
- Do not go in this area.
- Too many boats in one spot.
- Don’t come.
- Too much drinking.
- Don’t go near it.
- We can’t fish there now.
- I think it’s ridiculous.
- We fished there (trash).
- Makes boat traffic terrible around park area.
- Not a family area…should be banned.
- The area should be for families, not nudity.

10. How do you rate Lake of the Ozarks State Park on each of the following?

<table>
<thead>
<tr>
<th>Category</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Don’t Know</th>
<th>n=</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being free of litter/trash (3.59)</td>
<td>64.6%</td>
<td>30.8%</td>
<td>3.5%</td>
<td>1.0%</td>
<td>0.0%</td>
<td>198</td>
</tr>
<tr>
<td>Having clean restrooms (3.43)</td>
<td>51.5%</td>
<td>33.7%</td>
<td>7.1%</td>
<td>2.0%</td>
<td>5.6%</td>
<td>196</td>
</tr>
<tr>
<td>Upkeep of park facilities (3.46)</td>
<td>52.0%</td>
<td>41.8%</td>
<td>5.1%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>196</td>
</tr>
<tr>
<td>Having a helpful/friendly staff (3.49)</td>
<td>53.5%</td>
<td>33.3%</td>
<td>5.6%</td>
<td>1.0%</td>
<td>6.6%</td>
<td>198</td>
</tr>
<tr>
<td>Access for persons with disabilities (3.48)</td>
<td>33.7%</td>
<td>29.8%</td>
<td>2.2%</td>
<td>0.0%</td>
<td>34.3%</td>
<td>178</td>
</tr>
<tr>
<td>Care of natural resources (3.51)</td>
<td>47.9%</td>
<td>43.3%</td>
<td>1.0%</td>
<td>0.0%</td>
<td>7.7%</td>
<td>194</td>
</tr>
<tr>
<td>Interpretive programs (3.27)</td>
<td>19.2%</td>
<td>19.8%</td>
<td>4.7%</td>
<td>1.2%</td>
<td>55.2%</td>
<td>172</td>
</tr>
<tr>
<td>Being safe (3.46)</td>
<td>49.0%</td>
<td>39.1%</td>
<td>4.2%</td>
<td>1.0%</td>
<td>6.8%</td>
<td>192</td>
</tr>
</tbody>
</table>
11. If you did not rate this park as excellent on being safe, what influenced your rating?

39 visitors (38% of those who did not rate the park as excellent on being safe) responded to this question with 39 responses. The 39 responses were divided into 6 categories. Frequencies and percentages of responses in each category are listed.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of law enforcement</td>
<td>14</td>
</tr>
<tr>
<td>No reason/no place is perfect</td>
<td>10</td>
</tr>
<tr>
<td>Poor upkeep</td>
<td>7</td>
</tr>
<tr>
<td>Need additional facilities</td>
<td>4</td>
</tr>
<tr>
<td>Being crowded</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
</tr>
</tbody>
</table>

12. Which of the following would most increase your feeling of being safe at Lake of the Ozarks State Park?

183 responses were given by 137 visitors.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>More lighting</td>
<td>18</td>
</tr>
<tr>
<td>Less crowding</td>
<td>18</td>
</tr>
<tr>
<td>Nothing specific</td>
<td>44</td>
</tr>
<tr>
<td>Improved upkeep of facilities</td>
<td>13</td>
</tr>
<tr>
<td>Increased law enforcement patrol</td>
<td>24</td>
</tr>
<tr>
<td>Improved behavior of others</td>
<td>18</td>
</tr>
<tr>
<td>Increased visibility of park staff</td>
<td>30</td>
</tr>
<tr>
<td>Less traffic congestion</td>
<td>8</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>183</strong></td>
</tr>
</tbody>
</table>

7 visitors (38.9% of those who indicated more lighting would most increase their feeling of safety) reported where they felt more lighting was necessary. Their answers were grouped into the following 4 categories. Frequencies and percentages of each category are listed.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campgrounds/campsites</td>
<td>2</td>
</tr>
<tr>
<td>Restrooms/shower houses</td>
<td>2</td>
</tr>
<tr>
<td>Boat launches</td>
<td>2</td>
</tr>
<tr>
<td>Along roads/parking lots</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7</strong></td>
</tr>
</tbody>
</table>

13. Do you support a “carry in and carry” out system as a means of promoting recycling and reducing the burden of handling trash in this park? (n=203)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>43.7%</td>
</tr>
<tr>
<td>no</td>
<td>56.3%</td>
</tr>
</tbody>
</table>
14. When visiting any state park, how important are each of these items to you?

<table>
<thead>
<tr>
<th>Item</th>
<th>Very Important</th>
<th>Important</th>
<th>Unimportant</th>
<th>Very Unimportant</th>
<th>Don’t Know</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. being free of litter/trash (3.82)</td>
<td>82.3%</td>
<td>17.7%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>198</td>
</tr>
<tr>
<td>b. having clean restrooms (3.84)</td>
<td>84.7%</td>
<td>14.8%</td>
<td>0.5%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>196</td>
</tr>
<tr>
<td>c. upkeep of park facilities (3.80)</td>
<td>79.6%</td>
<td>20.4%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>196</td>
</tr>
<tr>
<td>d. having a helpful/friendly staff (3.69)</td>
<td>69.6%</td>
<td>29.4%</td>
<td>0.5%</td>
<td>0.0%</td>
<td>0.5%</td>
<td>194</td>
</tr>
<tr>
<td>e. access for disabled persons (3.51)</td>
<td>48.1%</td>
<td>35.7%</td>
<td>2.7%</td>
<td>0.5%</td>
<td>13.0%</td>
<td>185</td>
</tr>
<tr>
<td>f. care of natural resources (3.77)</td>
<td>77.0%</td>
<td>22.5%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.5%</td>
<td>191</td>
</tr>
<tr>
<td>g. interpretive programs(3.38)</td>
<td>34.4%</td>
<td>35.0%</td>
<td>5.0%</td>
<td>0.6%</td>
<td>25.0%</td>
<td>180</td>
</tr>
<tr>
<td>i. being safe (3.84)</td>
<td>82.4%</td>
<td>16.1%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>1.6%</td>
<td>193</td>
</tr>
</tbody>
</table>

15. Overall, how satisfied are you with this visit to Lake of the Ozarks State Park?

<table>
<thead>
<tr>
<th>Satisfied</th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Dissatisfied</th>
<th>Very Dissatisfied</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean score = 3.62</td>
<td>63.6%</td>
<td>35.4%</td>
<td>0.5%</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

16. During this visit, how crowded did you feel? (n=198)

On a scale of 1-9, with 1 = Not at all crowded and 9 = Extremely crowded, the mean response was 2.5.

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

A total of 32 open-ended responses were given by 32 visitors. The 32 responses were divided into 5 categories. Frequencies and percentages of responses in each category are listed.

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>campgrounds/campsites</td>
<td>21</td>
<td>65.6%</td>
</tr>
<tr>
<td>restrooms/shower houses</td>
<td>4</td>
<td>12.5%</td>
</tr>
<tr>
<td>swimming beaches</td>
<td>4</td>
<td>12.5%</td>
</tr>
<tr>
<td>on the lake</td>
<td>2</td>
<td>6.3%</td>
</tr>
<tr>
<td>everywhere</td>
<td>1</td>
<td>3.1%</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

18. What is your age? (n=192)

Responses were divided into the following 4 categories:

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-34</td>
<td>22.4%</td>
</tr>
<tr>
<td>35-54</td>
<td>53.1%</td>
</tr>
<tr>
<td>55-64</td>
<td>14.1%</td>
</tr>
<tr>
<td>65-85</td>
<td>10.4%</td>
</tr>
</tbody>
</table>

(Average age = 45.2)

19. Gender? (n=194)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>40.2%</td>
</tr>
<tr>
<td>Male</td>
<td>59.8%</td>
</tr>
</tbody>
</table>

20. What is the highest level of education you have completed? (n=197)

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>grade school</td>
<td>3.0%</td>
</tr>
<tr>
<td>vocational school</td>
<td>10.2%</td>
</tr>
<tr>
<td>graduate of 4-year college</td>
<td>14.2%</td>
</tr>
<tr>
<td>high school</td>
<td>26.9%</td>
</tr>
<tr>
<td>some college</td>
<td>33.5%</td>
</tr>
<tr>
<td>post-graduate education</td>
<td>12.2%</td>
</tr>
</tbody>
</table>
21. What is your ethnic origin? (n=195)
   Asian   2.1%  African American  0.0%  Native American/American Indian  1.0%
   Hispanic  0.5%  Caucasian/White  95.9%  Other         0.5%

22. Do you have a disability that substantially limits one or more life activities or might require special accommodations? (n=191)
   yes    6.8%
   no  93.2%

If yes, what disability or disabilities do you have? (n=9)
The following is a list of all responses to this open-ended question.
   Bad back.
   Bad leg.
   Child in stroller.
   Heart and lung.
   Heart disability.
   Orthopedic.
   Orthopedic.
   Son has mobility, vision and hearing disabilities.
   Visually impaired.

23. What is your 5-digit zip code (or country of residence, if you live outside the U.S.)? (n=193)
The states with the highest percentages of respondents were:
   Missouri (66.8%)
   Illinois (12.4%)
   Iowa (6.7%)

24. What is your annual household income? (n=180)
   less than $25,000  16.1%  $50,001 - $75,000  32.2%
   $25,000 - $50,000  33.9%  over $75,000   17.8%

25. Please write any additional comments about your park visit or suggestions on how the Missouri Department of Natural Resources can make your experience in Lake of the Ozarks State Park a better one.
72 of the 200 visitors (36%) responded to this question. A total of 99 responses were given, and were divided into 13 categories. Frequencies and percentages of responses in each category are listed.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. General positive comments</td>
<td>23</td>
</tr>
<tr>
<td>2. Comments/suggestions about campgrounds/camper cabins</td>
<td>10</td>
</tr>
<tr>
<td>3. Comments/suggestions about restrooms/shower houses</td>
<td>10</td>
</tr>
<tr>
<td>4. Comments/suggestions about reservation system</td>
<td>9</td>
</tr>
<tr>
<td>5. More staff/rangers patrolling park &amp; enforcing rules</td>
<td>8</td>
</tr>
<tr>
<td>6. Provide more trash cans &amp; other comments regarding question 13 (“carry in/carry out” trash system)</td>
<td>8</td>
</tr>
<tr>
<td>7. Need newer/additional facilities</td>
<td>6</td>
</tr>
<tr>
<td>8. Better maintenance/upkeep</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Suggestions about interpretive programs/information</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>9</td>
<td>Problems with park staff</td>
</tr>
<tr>
<td>10.</td>
<td>Comments/suggestions about park store</td>
</tr>
<tr>
<td>11.</td>
<td>Complaints about lake traffic</td>
</tr>
<tr>
<td>12.</td>
<td>Other</td>
</tr>
<tr>
<td>13.</td>
<td>Total</td>
</tr>
</tbody>
</table>
Appendix F. List of Responses for Safety Concerns (Q 11)
Responses to Question # 8
If you did not rate this park as excellent on being safe (Question 10, letter h.), what influenced your rating?

Enforcement of speed limits and increased visibility of park staff
- Drivers too fast on roads. Please monitor, warn and ticket speeders to keep kids safe.
- Enforce slower speed limit.
- Enforcement of speed and ONE WAY.
- Enforcement of speed limits in campground.
- Enforcement of traffic flow. Continuous abuse of ONE WAY by vehicles.
- I am at a loss for words, did not view any park attendants.
- I don't know what the park does to be safe. We had items stolen from our camp.
- No lifeguard on beach.
- Not many people when we visited---didn't see any park staff.
- People drive too fast through the camping area. Children are at risk.
- People drive too fast.
- People speeding through the camping area.
- People with vehicles sticking out in the roadway.
- Traffic drives a little fast coming down the big hill from 1-2.

No reason/no place is perfect
- Appears quite safe.
- Don't know enough for excellent.
- Have not spent enough within the park.
- Haven't seen enough of it.
- I have only been in the park 1 1/2 hours.
- It's a park.
- Just arrived.
- Nothing is perfectly safe.
- Safety is personal responsibility…shouldn't require state legislation.
- There is always room for improvement, especially in the "safety area".

Poor upkeep
- Bad docks.
- Bathrooms did not look like they were repainted. Rusted stalls were too small.
- Don't cut weeds around campsite.
- Picnic tables are falling apart.
- Rotten ties.
- The boat docks should be replaced. Too many ants in beach area.
- The broken glass along the shoreline.

Need additional facilities
- Bathroom needed.
- Bike trail specifically for kids.
- No water hook-ups.
- There was no lighting between campgrounds and bathhouse.
**Being crowded**
- Close to development—a lot of people.
- Really, because it is so crowded, I feel that influences safety. More people, more different types of people.

**Other**
- The skunk in campground #4.
- Trails are rocky in places, but it is acceptable.
Appendix G. List of Responses for Additional Comments (Q 25)
Responses to Question #25
Please write any additional comments about your park visit or suggestions on how the Missouri Department of Natural Resources can make your experience in Lake of the Ozarks State Park a better one.

General positive comments
- Excellent park.
- Glad to see new boat ramp and parking going in.
- Had a good stay.
- Had a wonderful time.
- I rated excellent because the naked guy with a hatchet was thrown out in a timely manner. I would like amphitheater programs after Labor Day. We do most of our camping before Memorial Day and after Labor Day. Handicap site is alone. I would like to see more sites around it so we can camp with the handicap people in our group.
- I think the "carry-in carry-out" limits your freedom to enjoy. This is the best park we have been in. Please don't charge a thing.
- I'm glad the lake has some banks without boat docks.
- It was great! Frequent visibility of park staff was wonderful.
- Keep up the good work!
- Love it!
- Loved the hay ride and horse ride.
- Outpost cabins are nice, poor drinking water, brown unsafe to drink.
- Pretty area.
- See you next time.
- So far, so good.
- Staff was very friendly.
- The park was nice and we enjoyed our stay. Maybe you could attract more fish for bank fisherman.
- Very beautiful. Lots of tables and barbeque pits. Very clean.
- Very friendly staff and host. Thank you.
- Very nice park…always enjoy being here.
- Very open and easy to know where you are.
- We always enjoy our stay. We come yearly.
- We really like the MO State Parks System compared to other state parks in different states. Facilities are much more modern and plentiful!! That's a big plus!!

Comments/suggestions about campgrounds/camper cabins
- Do not change reservation system. Pull tent campers from RV pads and provide more with electric hook-ups. Do not go with carry-out trash program, it is hard for young families and may force them to leave early. Need more full hook-up sites for RVs.
- Electricity, water, campsites.
- I rated excellent because the naked guy with a hatchet was thrown out in a timely manner. I would like amphitheater programs after Labor Day. We do most of our camping before Memorial Day and after Labor Day. Handicap site is alone. I would like to see more sites around it so we can camp with the handicap people in our group.
- I think that you need new/more showers in the first campground area and more swings at the playground. Thanks.
- I think the park should have more water spickets and more electric sites by the water.
- It would be real nice to start a senior discount program for camping.
- Larger capacity hot water heater for showers.
- Make more trails from campsites to waters' edge for easier access for fishing, more and easier access to water spickets. More electric sites near water.
- More hot water in showers.

**Comments/suggestions about restrooms/shower houses**
- Bathrooms are made for skinny people. Re-do for normal size. Doors swing in and make it hard to close or open door!
- Hot water in shower.
- Hot water in showers would be good.
- I would like soap in bathrooms.
- Keep campground store open through week. Keep at least one shower house open year round. Keep water available at freeze proof hydrant year round.
- Low water pressure for flushing toilets in ladies' restroom.
- More hot water in shower. Soap dispensers in restroom.
- No smoking in bathrooms!

**Comments/suggestions about reservation system**
- Do away with advanced registration. Have first come, first served.
- Do not change reservation system. Pull tent campers from RV pads and provide more with electric hook-ups. Do not go with carry-out trash program, it is hard for young families and may force them to leave early. Need more full hook-up sites for RVs.
- Go back to having only some campsites reservable.
- Hate the reservation system. Too many were reserved. We saw people driving around for an hour and a half.
- I don't like the reservation system.
- I think the new reservation system stinks!
- No reservations!
- The reservation policy is bad.
- This survey needs to be taken at 2 or 3 different times throughout the year because at times, the park is extremely full and has a lot of the big boats on the lake which affects smaller fishing boats. I think you have too many campsites that are reservation only.

**More staff/rangers patrolling park & enforcing rules**
- Need park rangers to slow traffic down between sites 32 and 41.
- Better speed control. No 3am airplanes low-flying center area (green areas behind 64-65). More dumpsters and recycle.
- I would like to see more recycle cans. Maybe they would be used rather than thrown out. Slower traffic around children. I don't think most people will carry out.
- Keep the glass off the shore line. Hold people responsible for cleaning up their campsites.
- Need park rangers to slow traffic down between sites 32 and 41.
- Park personnel do more "playing around" at the bathrooms instead of cleaning. Camp hosts allow their "friends and relatives" to disobey the rules. Enforce "quiet hour."
Don't allow people to "clean fish" at the water fountains. Keep grass cut and cut weeds with weed-eater.

- People parking overnight on empty campground lots and people who park vehicles by shower houses all night and block the handicap parking. Didn't see anyone make them move it either.

**Provide more trash cans & other comments regarding question 13 ("carry in/carry out" trash system)**

- Better speed control. No 3am airplanes low-flying center area (green areas behind 64-65). More dumpsters and recycle.
- Could have recycling facilities. I don't think it would be respected if there was a "carry in and carry out" system. The hiking trails were MOST important. Second is a clean restroom.
- Do not change reservation system. Pull tent campers from RV pads and provide more with electric hook-ups. Do not go with carry-out trash program, it is hard for young families and may force them to leave early. Need more full hook-up sites for RVs.
- I think the "carry-in carry-out" limits your freedom to enjoy. This is the best park we have been in. Please don't charge a thing.
- I would like to see more recycle cans. Maybe they would be used rather than thrown out. Slower traffic around children. I don't think most people will carry out.
- Keep dumpsters.
- Need more dumpsters around campground.
- Please consider limiting air traffic after 10pm. We were buzzed twice on Friday, 6/18 at 3am and 4:30am by very large planes. Unacceptable! Need more dumpsters and recycle bins for cans, glass, etc.

**Need newer/additional facilities**

- Better docks, access or deck on opposite side for boaters to picnic, but not swim. Keep swimming area as is. Too many "excessively" fast and large boats.
- I think that you need new/more showers in the first campground area and more swings at the playground. Thanks.
- More bathrooms, food stands or shops in the park.
- Picnic tables closer to the beach area. Better boat docks.
- Swimming pool. More playgrounds.

**Better maintenance/upkeep**

- Better docks, access or deck on opposite side for boaters to picnic, but not swim. Keep swimming area as is. Too many "excessively" fast and large boats.
- Keep the glass off the shore line. Hold people responsible for cleaning up their campsites.
- Outpost cabins are nice, poor drinking water, brown unsafe to drink.
- Park personnel do more "playing around" at the bathrooms instead of cleaning. Camp hosts allow their "friends and relatives" to disobey the rules. Enforce "quiet hour."
  Don't allow people to "clean fish" at the water fountains. Keep grass cut and cut weeds with weed-eater.
Suggestions about interpretive programs/information
- I rated excellent because the naked guy with a hatchet was thrown out in a timely manner. I would like amphitheater programs after Labor Day. We do most of our camping before Memorial Day and after Labor Day. Handicap site is alone. I would like to see more sites around it so we can camp with the handicap people in our group.
- Maps of the park would be useful. It was Saturday so the park office was closed.
- Would like to see interpretive program be better planned and executed.

Problems with park staff
- Park personnel do more "playing around" at the bathrooms instead of cleaning. Camp hosts allow their "friends and relatives" to disobey the rules. Enforce "quiet hour." Don't allow people to "clean fish" at the water fountains. Keep grass cut and cut weeds with weed-eater.
- Please ask the park personnel to keep their radio volume lower in the early hours. The maintenance crew on Saturday morning had their 2-way radios blaring.

Comments/suggestions about park store
- Keep campground store open through week. Keep at least one shower house open year round. Keep water available at freeze proof hydrant year round.
- The store closed earlier than the sign stated. A note was later put on the door. It caused inconvenience to us.

Complaints about lake traffic
- Better docks, access or deck on opposite side for boaters to picnic, but not swim. Keep swimming area as is. Too many "excessively" fast and large boats.
- I have noticed more noise from the lake in the last two years, such as wave runners.

Other
- Better speed control. No 3am airplanes low-flying center area (green areas behind 64-65). More dumpsters and recycle.
- Could have recycling facilities. I don't think it would be respected if there was a "carry in and carry out" system. The hiking trails were MOST important. Second is a clean restroom.
- Drunk in big boat.
- Firewood is high.
- I sure didn't expect a survey!
- I would like to see more recycle cans. Maybe they would be used rather than thrown out. Slower traffic around children. I don't think most people will carry out.
- I'll know better how to answer some of the questions later in the week.
- Keep campground store open through week. Keep at least one shower house open year round. Keep water available at freeze proof hydrant year round.
- Please consider limiting air traffic after 10pm. We were buzzed twice on Friday, 6/18 at 3am and 4:30am by very large planes. Unacceptable! Need more dumpsters and recycle bins for cans, glass, etc.
- The park was nice and we enjoyed our stay. Maybe you could attract more fish for bank fisherman.
This survey needs to be taken at 2 or 3 different times throughout the year because at times, the park is extremely full and has a lot of the big boats on the lake which affects smaller fishing boats. I think you have too many campsites that are reservation only.