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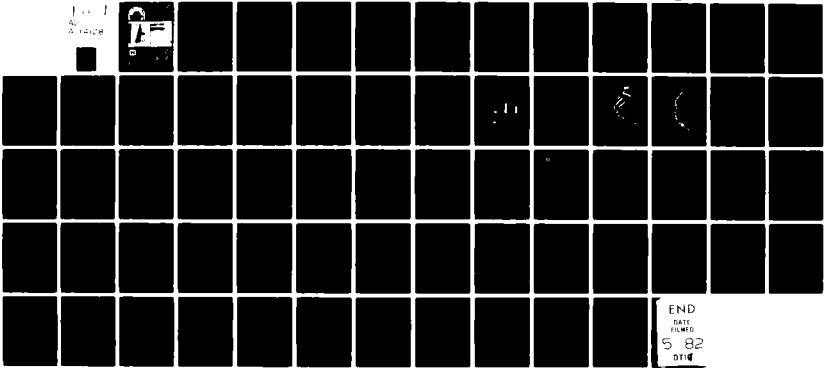

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RECREATION RESEARCH PROGRAM

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DEVELOPMENT AND EVALUATION OF THE CAMPGROUND RECEIPT STUDY

By Gregory L. Curtis, R. Scott Jackson,
William J. Hansen, John A. Rorabacher

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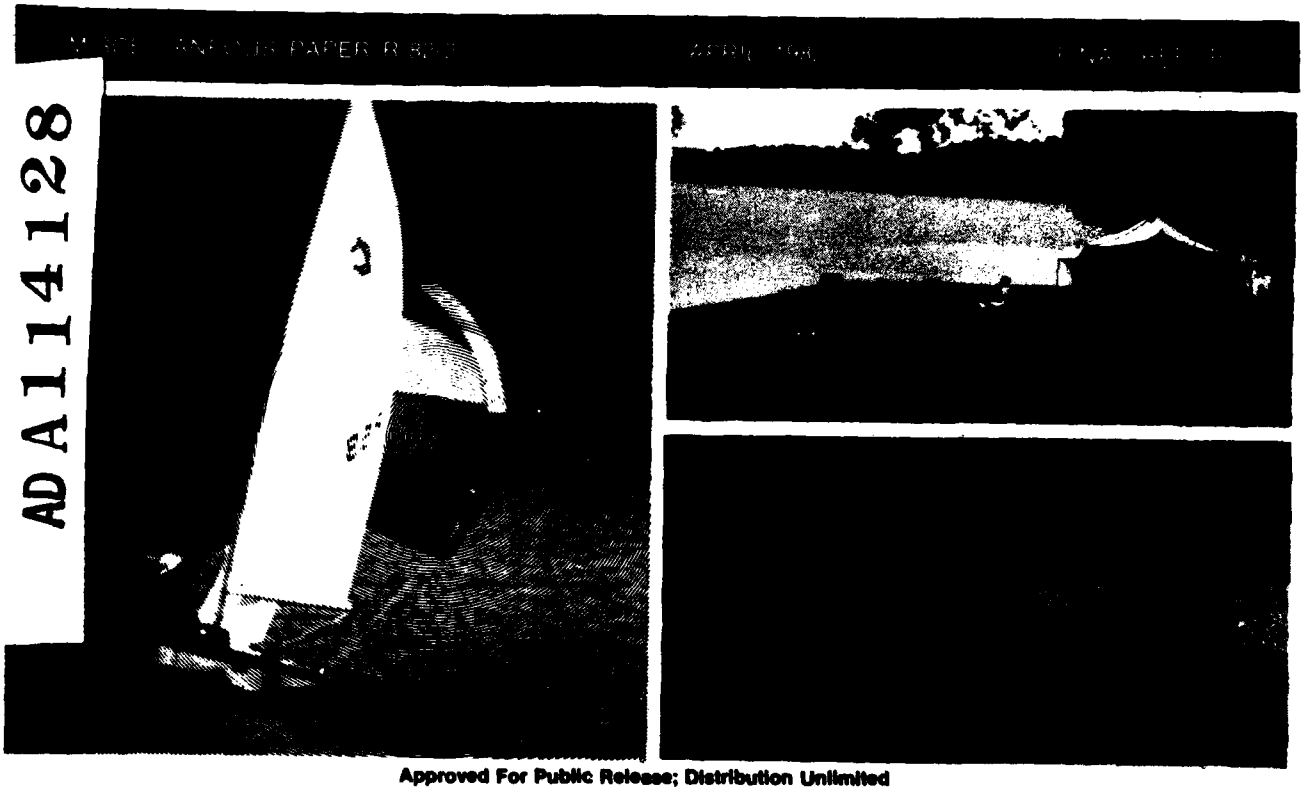

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Little recreation information that describes visitor use patterns and characteristics has been collected systematically at Corps projects.

A system is now being developed to collect longitudinal information concerning visitor characteristics at Corps of Engineers fee campgrounds. This system has proved to be an effective method of collecting reliable trend

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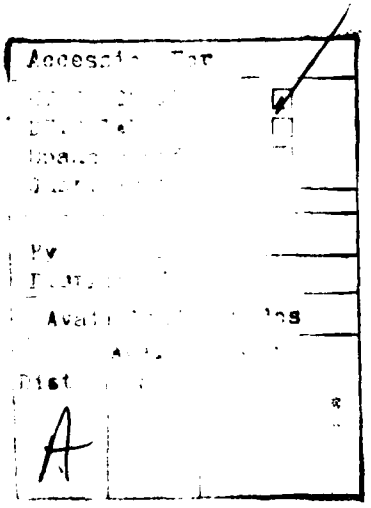
20. Abstract (Continued).

data and is cost-efficient. The Campground Receipt Study (CRS) is the development and field testing of this system. This report describes the development and evaluation of the 1980 test of the CRS.

Examples of some possible analyses of data from the CRS data are presented to illustrate the potential usefulness of the information to all levels of management and planning as well as to recreation researchers within the Corps. The analyses are based on data collected during only a portion of the 1980 recreation season and are, therefore, only presented for illustrative purposes. They indicate the type of information that could be readily provided to decision-makers and researchers through implementation of the CRS procedures. The analyses presented are not intended to be a complete list of uses for the data; other applications can be found within the Corps as well as from other Federal agencies, universities, and private research organizations.



PREFACE

This report describes the development, pilot testing, and evaluation of a program for the longitudinal collection of information concerning characteristics of visitors at Corps of Engineers fee campgrounds. Preliminary results described herein indicate the program can be a cost-efficient and effective method for the long-term monitoring of such factors as equipment usage, duration of visit, and areas of origin of visitors for planning, management, and research purposes.

The authors of this report are members of the Resource Analysis Group (RAG) within the Environmental Laboratory (EL) at the U. S. Army Engineer Waterways Experiment Station (WES), Vicksburg, Miss. Mr. Gregory Curtis was on temporary assignment under the terms of an Intergovernmental Personnel Act Agreement between WES and Michigan State University, East Lansing, Mich. Mr. William Hansen was the Group Leader of the RAG. Mr. R. Scott Jackson was the Leader of the Recreation Research Team. Dr. John Rorabacher was on temporary assignment under the terms of an Intergovernmental Personnel Act Agreement between WES and South Dakota State University, Brookings, S. Dak.

Dr. Adolph Anderson, WES, was the Program Manager of the EL Recreation Research Program. The study was under the supervision of Dr. Conrad J. Kirby, Chief, Environmental Resources Division, EL, and the general supervision of Dr. John Harrison, Chief, EL.

COL Nelson P. Conover, CE, and COL Tilford C. Creel, CE, were the Commanders and Directors of WES during this study. Mr. F. R. Brown was the Technical Director.

The report should be cited as follows:

Curtis, G. L. et al. 1982. "Development and Evaluation of the Campground Receipt Study," Miscellaneous Paper R-82-2, U. S. Army Engineer Waterways Experiment Station, CE, Vicksburg, Miss.

CONTENTS

CONVERSION FACTORS, U. S. CUSTOMARY TO METRIC (SI) UNITS OF MEASUREMENT

U. S. customary units of measurement used in this report can be converted to metric (SI) units as follows:

Multiply	By	To Obtain
acres	4046.873	square metres
miles per hour	1.609347	kilometres per hour
miles (U. S. statute)	1.609347	kilometres

DEVELOPMENT AND EVALUATION OF THE CAMPGROUND RECEIPT STUDY

PART I: INTRODUCTION

Background

1. During the 1960's and 1970's outdoor recreation use on Corps of Engineers lake projects approximately quadrupled, from a reported 120 million recreation days in 1961 to over 457 million in 1980. In excess of 3400 recreation areas on a total of 11.2 million acres* of land and water are currently managed at these projects. The tremendous use of this large and diverse recreation resource has often led to facility and resource deterioration and user conflicts. These problems are compounded by the fact that many areas are no longer used for the purpose that they were originally intended, or a change in visitor behavior has made the original developments inappropriate for present uses.

2. Unfortunately, although some indication of the relative magnitude of the total increase in visitation is known, little is known about concomitant changes in user preferences or behavioral patterns. For example, during FY 80, work was initiated within the U. S. Army Engineer Waterways Experiment Station (WES) Recreation Research Program (RRP) concerning the effects of the energy crisis on visitation patterns at Corps lakes (Propst 1981). It was intended to establish trends, incorporating the crisis period, for several visitation parameters including origin, destination, frequency, duration, type of equipment used, and group size. However, it was soon apparent that the data needed to develop these trends were either of poor or unknown quality, or, in most cases, simply nonexistent. It was, therefore, necessary to conclude the work utilizing secondary data sources, e.g., U. S. Travel Data Center as included in Propst and Abbey (1981). The unavailability of trend data

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* A table of factors for converting U. S. customary units of measurement to metric (SI) units is presented on page 3.

precluded any conclusive analysis of the impacts of the energy crisis on Corps visitation.

Purpose and Scope

3. The purpose of this report is to describe the development, pilot testing, and evaluation of a program for the longitudinal collection of information concerning visitor characteristics at Corps of Engineers fee campgrounds. The program utilized existing fee collection and registration procedures and, therefore, minimized the burden on project personnel as well as on the visiting public. Preliminary results described herein indicated that the program can be a cost efficient and effective method for the long-term monitoring of such factors as equipment usage, duration of visit, and areas of origin for planning, management, and research purposes. In addition, the information collected has immediate application for many management activities.

PART II: CAMPGROUND RECEIPT STUDY

4. As part of the previously described study concerning impacts of the energy crisis on recreation visitation, consideration was given to using historical campground fee receipts as an information source for developing visitation trends. Some potentially useful information is recorded on these forms (e.g., duration of stay) and, because of fiscal requirements, completion is mandatory. It was determined, however, that the length of historical storage varied widely among Corps Districts and was generally too short for developing the trends required for the energy study. In addition, it would have been prohibitively costly to manually retrieve the information from the archived records. The investigation did, however, note the potential usefulness of a modified fee receipt program as a vehicle for the collection of trend information.

User Registration Programs

5. Campground and/or user permit registration information is collected, to a greater or lesser extent, by every land-managing agency. The utilization of these data for other than registration purposes varies from agency to agency, but has generally been very limited.

6. The Bureau of Land Management (BLM) disperses permits to users only where recreational use becomes acute. The permit system allows BLM to reduce visitor concentrations in these areas. When user permits are issued, visitor use estimates are derived from the collected information. However, these sites are the exception rather than the norm on BLM lands (Bloor 1980).

7. The U. S. Fish and Wildlife Service (FWS), much like the BLM, manages large areas that receive relatively low use. At recreation areas where intense use occurs permits are issued. Use estimates are derived for these areas from the information obtained on the permits (Bloor 1980).

8. The user permit program used by the U. S. Forest Service (FS)* provides wider application than the previously mentioned systems. Wilderness users are furnished with regulations for the area and management data are collected through the user permits. The data obtained are used for carrying capacity estimates and identifying visitor dispersion throughout the area. This FS program provides information that can be used for the identification of potential resource problems (Bloor 1980).

Corps Fee Receipt Program

9. The Corps of Engineers has long had a program for the collection of campground use information and user fees. At present, Engineer Form 4457 (Figure 1) is the authorized form for registration of campers and collection of camping fees. Although all data elements on the form are presently used, these uses are primarily related to the day-to-day operation of the campgrounds and maintaining accounting records as fiscal safeguards. Little known use has been made of the information for planning or research purposes.

10. Data collected on the existing ENG Form 4457 provide possibilities for analyzing such factors as changes in camping visitation over time and trends in senior citizen camping use; the demand for and benefits derived from camping on a project-by-project or Corps-wide basis can also be calculated. Bloor (1980) examined these additional uses of user permit data for Lake Shelbyville, a Corps lake located in central Illinois. Using a variety of statistical techniques and information from the user fee permits, Bloor calculated camping visitation, senior citizen visitation, average party size, and average length of stay. These calculations provide at least a point of departure for the determination or prediction of impacts on campsites at various use levels. Bloor also constructed camping demand curves for Lake Shelbyville using the travel cost method and data contained on a separate Camping Registration card used at St. Louis District projects.

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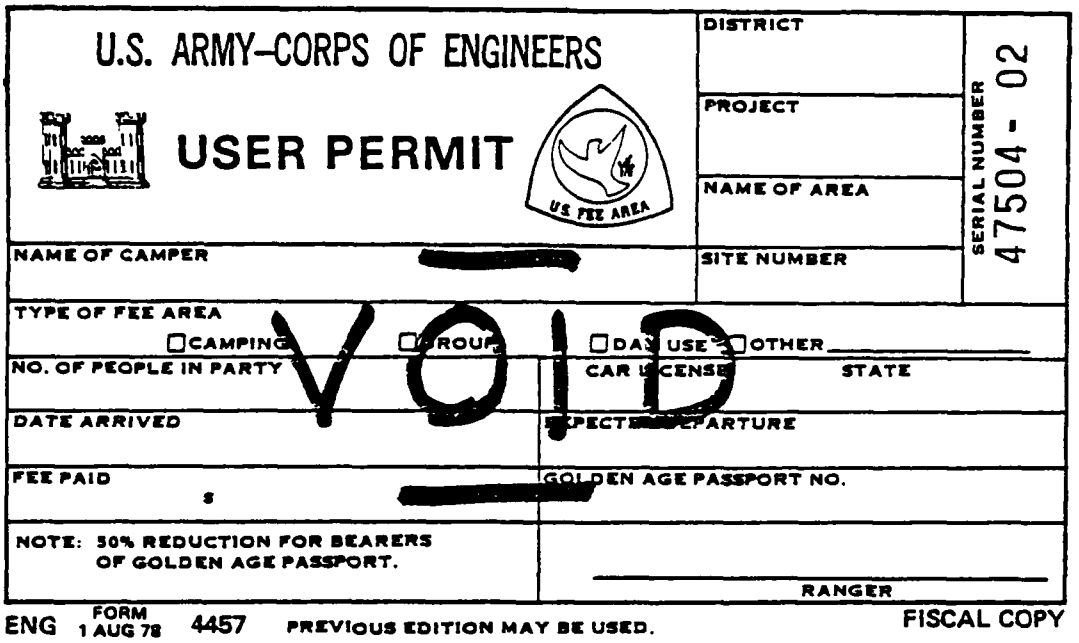
*1966 Wilderness Permit Program, revised in 1976.



U.S. ARMY–CORPS OF ENGINEERS

USER PERMIT

U.S. FEE AREA

DISTRICT

PROJECT

NAME OF AREA

SERIAL NUMBER 47504 - 02

NAME OF CAMPER

SITE NUMBER

TYPE OF FEE AREA

☐ CAMPING ☐ GROUP ☐ DAY USE ☐ OTHER

VOID

NO. OF PEOPLE IN PARTY

CAR LICENSE STATE

DATE ARRIVED

EXPECTED DEPARTURE

FEE PAID $

GOLDEN AGE PASSPORT NO.

NOTE: 50% REDUCTION FOR BEARERS OF GOLDEN AGE PASSPORT.

RANGER

ENG FORM 4457 1 AUG 78 PREVIOUS EDITION MAY BE USED.

FISCAL COPY

Figure 1. ENG Form 4457

11. Computations similar to those done by Bloor have seldom been undertaken for other Corps projects; such computations could contribute significantly to project management and planning. One factor limiting more extensive use of fee receipt data is that, as currently designed, registration forms normally require inefficient and costly manual summarization of the recorded data. Thus, in developing a campground receipt information program, consideration must be given to efficient and timely data processing as well as data collection.

Study Design

12. The Campground Receipt Study (CRS) was established as a pilot program to perform two primary functions. First, it is to develop a workable campground monitoring methodology, including the development of a standardized data collection instrument and procedures. Second, it is to collect reliable information to assist in determining the needs, preferences, and use patterns of fee campground visitors at Corps

projects, with special attention being given to the development of project trend information.

13. In the development of the CRS, four primary constraints had to be considered:

a. The procedures and instruments developed were to place a minimum burden on project personnel.

b. The procedures were to have a minimum impact on the recreation visitor when registering at the campground.

c. The monitoring procedures used must be cost-effective and cost-efficient.

d. The data collected must be valid and reliable.

1979 CRS pretest

14. The CRS was first pretested during the summer of 1979 at selected campgrounds at three projects within the Corps Recreation Research and Demonstration System (RRDS)--Lake Ouachita, West Point Lake, and Shenango River Lake. A supplemental campsite registration form (Figure 2) was used to record visitor characteristics. At the end of

RECREATION RESEARCH PROGRAM
USER IMPACT MONITORING PROJECT
CAMPSITE USE RECORD

RECREATION AREA _____ SITE NO. _____

DATE IN _____ TIME ( ) AM ( ) PM

DATE OUT _____ TIME ( ) AM ( ) PM

ZIP CODE _____

NO. IN GROUP _____

EQUIPMENT - CAMPING:

( ) TENT
( ) POP UP
( ) PICK-UP CAMPER
( ) TRAILER
( ) R V

EQUIPMENT - OTHER THAN PRIMARY MOTOR VEHICLE:

( ) SECOND CAR/TRUCK
( ) MOTORCYCLE
( ) BOAT
( ) TRAILER
( ) BICYCLE

Figure 2. Initial supplementary campsite registration form used in 1979

the pretest, it was concluded that the form needed to be modified. Upon examination of the collected data, it was apparent that groups with more than one type of camping equipment could not be separated from those with only one, and there were insufficient categories for all the different types of equipment being used by the visitors to the projects.

15. The procedures developed for the collection of user data were not burdensome to gate attendants or park rangers once they had become accustomed to the supplemental form. Therefore, no procedural modifications were deemed necessary for subsequent field testing.

1980 CRS program

16. During the summer of 1980, a revised supplemental form (Figure 3) was tested at each of the 15 Recreation Research and Demonstration

PROJECT _____ DATE _____

CAMPSITE USE RECORD

REC AREA _____ SITE NO. _____ ZIP CODE _____

NO. IN GROUP _____ LENGTH OF STAY _____

IS THIS YOUR PRIMARY DESTINATION ___ OR STOPOVER FOR LONGER TRIP ____?

HOW MANY TIMES DID YOU VISIT THIS AREA LAST YEAR? _____

PRIMARY VEHICLE

( ) CAR
( ) TRUCK
( ) VAN
( ) MOTORHOME (INCLUDES CONVERTED BUSES)
( ) OTHER _____

EQUIPMENT (CAMPING)

( ) TENT
( ) POP-UP TRAILER
( ) VAN
( ) PICKUP CAMPER
( ) TRAVEL TRAILER

EQUIPMENT (NON-CAMPING)

( ) SECOND CAR/TRUCK (NON 4 WHEEL DRIVE)
( ) 4 WHEEL DRIVE VEHICLE
( ) MOTORCYCLE
( ) SAILBOAT
( ) CANOE/KAYAK/RAFT
( ) POWERBOAT
( ) BOAT TRAILER
( ) BICYCLE
( ) OTHER _____

Figure 3. 1980 supplemental campsite registration form

Units (RRDU's) having fee campgrounds, with the exception of New Hogan Lake.* The 14 RRDU's involved in the CRS program are shown in Figure 4. Data collection was carried out between 15 May and 15 September at 18 designated fee campgrounds.

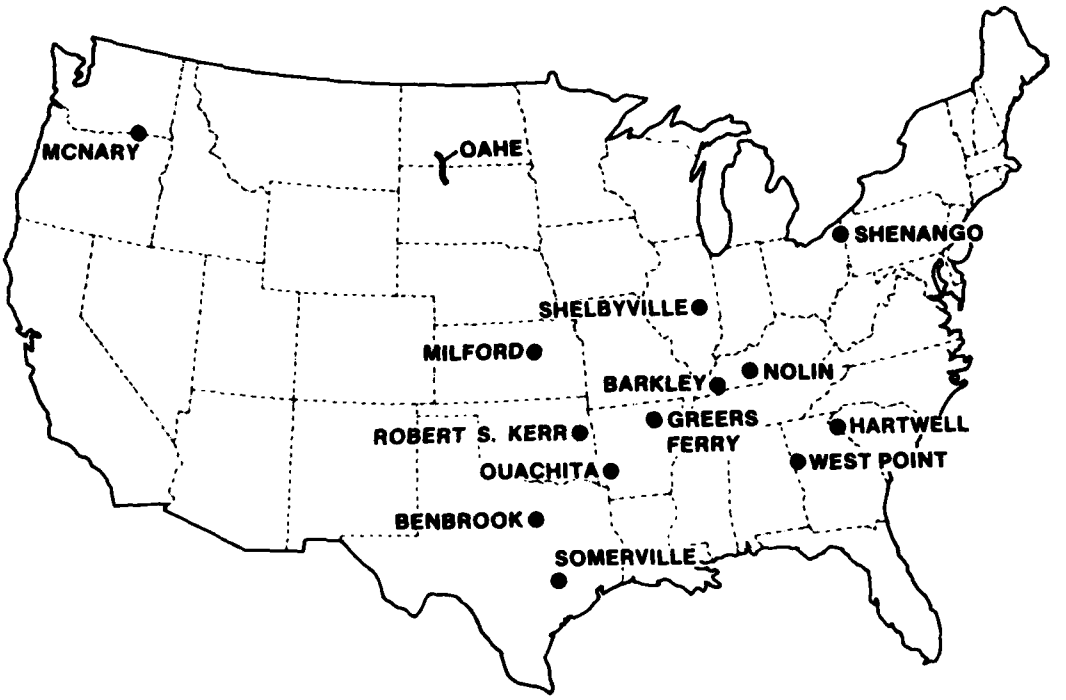


Figure 4. Campground receipt study project locations

17. The 1980 CRS was divided into three operational phases--data collection, data processing, and data analysis. Upon the completion of each phase, an evaluation of the activities for that phase was undertaken to ascertain if the survey procedures addressed the study's basic objectives.

18. The standard fee receipt (ENG Form 4457) was used to register campers and the CRS supplemental form was used to collect the desired visitor data, e.g., point of origin, number in party, length of stay, and information concerning the type(s) of equipment being used by the

* New Hogan Lake did not participate in the 1980 CRS because of a change of management immediately prior to the fee collection period, which was coupled with manpower shortages.

visitor. Gate attendants and park rangers collected the required information primarily through observation. If it were not apparent, the campers were asked for the needed information. It took approximately 30 seconds to complete the supplemental form. During the data collection, 14,690 supplemental forms were completed. Table 1 provides a breakdown of the number of supplemental forms collected at each participating RRDU by recreation area during the 1980 test of the CRS instrument and methodology.

19. Once the supplemental forms were completed, they were keypunched and stored on temporary disk space. When all the data had been processed in this manner, they were subjected to an editing/cleaning program. The data were analyzed using a variety of statistical techniques available through the Statistical Package for the Social Sciences (SPSS),* as implemented on the Honeywell 635 computer.

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* The primary source documentation for this software package is Nie et al. (1975).

Table 1

Number of Supplemental Forms Collected at the CRS RRDU's in 1980

RRDU Project by Recreation Area	Number in Sample
Lake Barkley - Canal	202
Benbrook Lake - Holiday South	307
Lake Ouachita	
Denby Point	515
Brady Mountain	731
Greers Ferry Lake	
Sugar Loaf	877
J. F. Kennedy	348
Hartwell Lake	
Springfield	513
Oconee Creek	756
Coneross Park	378
Lake Shelbyville - Forrest Wood	1,650
McNary Lock and Dam - Hood Park	1,087
Milford Lake - Rolling Hills	700
New Hogan Lake - Acorn	0
Nolin River Lake - Wax	189
Lake Oahe - Downstream North	1,141
Robert S. Kerr - Cowlington Point	260
Shenango River Lake - Shenango	2,820
Somerville Lake - Yegua Creek	907
West Point Lake - Amity	1,309
TOTAL	14,690

PART III: 1980 CRS DATA ANALYSES

20. The CRS data provide Corps recreation planners, managers, and researchers an opportunity to be able to compare visitor use patterns and characteristics between projects, within projects (where more than one recreation area has been monitored), and between different geographical areas. This section examines several of these comparisons using the 1980 CRS data. The analyses are primarily frequency distributions with comparisons made between the primary vehicle, camping equipment, and noncamping equipment used. The use of zip code data to identify the areas of origin of project visitors is also illustrated.

21. The Recreation Analyses Program (RAP) is a FORTRAN program that has been developed to tabulate the characteristics of recreation area usage. It sorts and tabulates the CRS data by project number, recreation area, and site number. The program is designed to process data from up to 20 projects at one time with up to 20 recreation areas per project, and with no limitations on the number of sites per recreation area.

22. Two types of reports are generated by RAP. The first is entitled "Project Report," which analyzes all the CRS variables for each recreation area within a given project (see Appendix A). The second is entitled "Site Specific Data Report," which analyzes the same variables within each recreation area but does so by campsite (see Appendix B).

Project Comparisons

23. Four RRDU's were selected to illustrate the use of the CRS data for comparing visitor use patterns and characteristics between Corps projects. The location of these four projects is shown in Figure 5. It should be remembered that the data are only presented to illustrate the type of comparisons that can be made since they represent data collected only at select fee campgrounds during one portion of one recreation season.

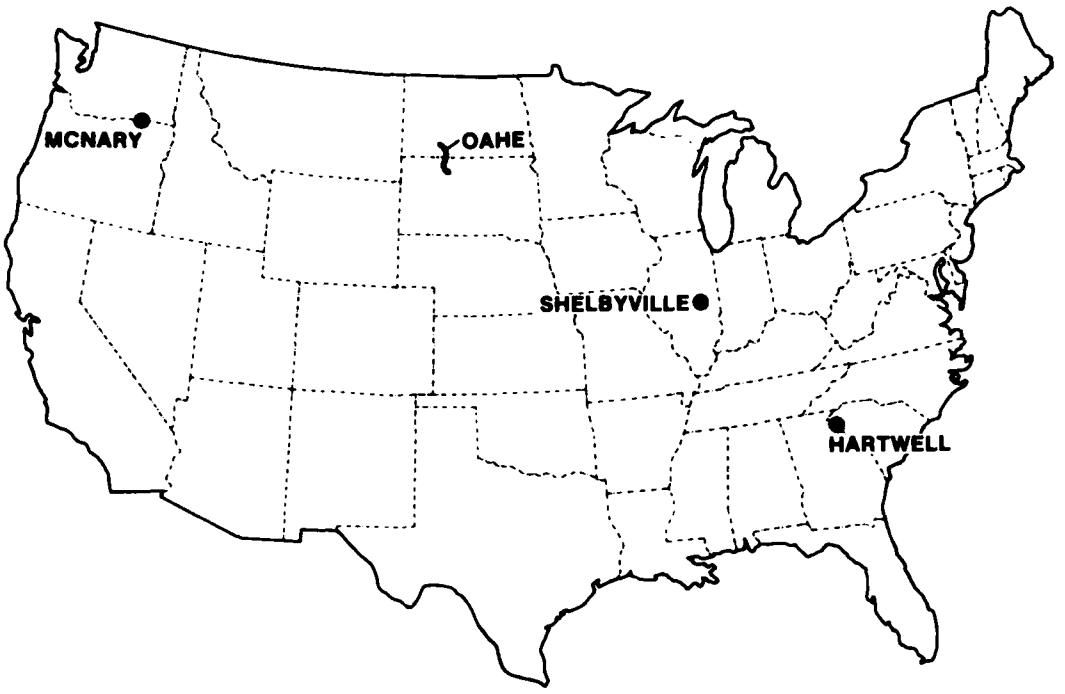


Figure 5. Projects used to illustrate the use of the CRS data

24. As stated above, the 1980 CRS data will be compared using the frequency distributions of three data elements: primary vehicle, type of camping equipment, and presence of certain noncamping equipment. The comparisons of these three data elements by project are shown in Figures 6, 7, and 8, respectively. From these comparisons, some differences between the projects can be seen. Overall, McNary and Oahe have similar distributions in the types of primary vehicle and camping equipment used by their registered visitors. Differences between the two projects occur in the noncamping equipment category. For example, the proportion of the registered visitors at Oahe with powerboats is three times larger than at McNary.

25. Differences between Hartwell and Shelbyville visitors are much more obvious. Both have similar primary vehicle distributions with much smaller precentages of motorhomes than McNary and Oahe. However, in viewing the camping equipment used at each project, Hartwell and Shelbyville both become quite distinct. The use of tents at Hartwell is

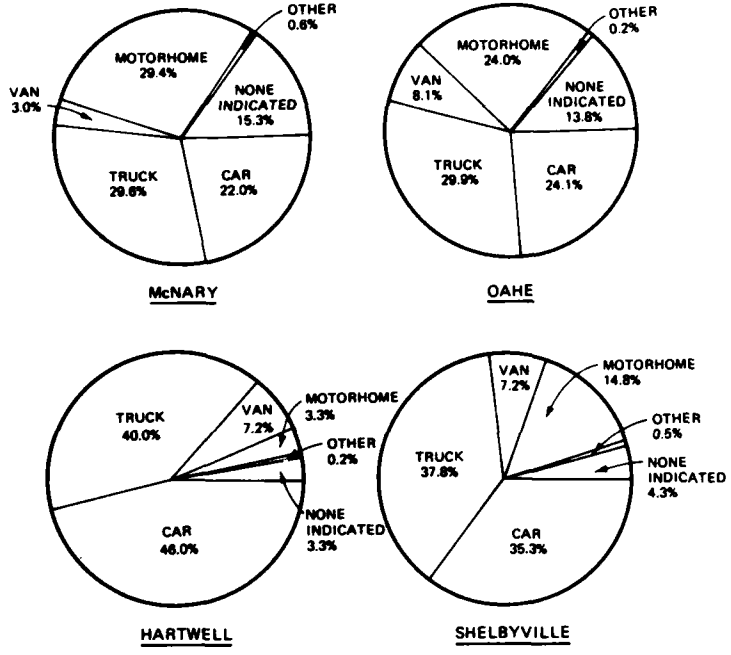


Figure 6. Primary vehicle use by project

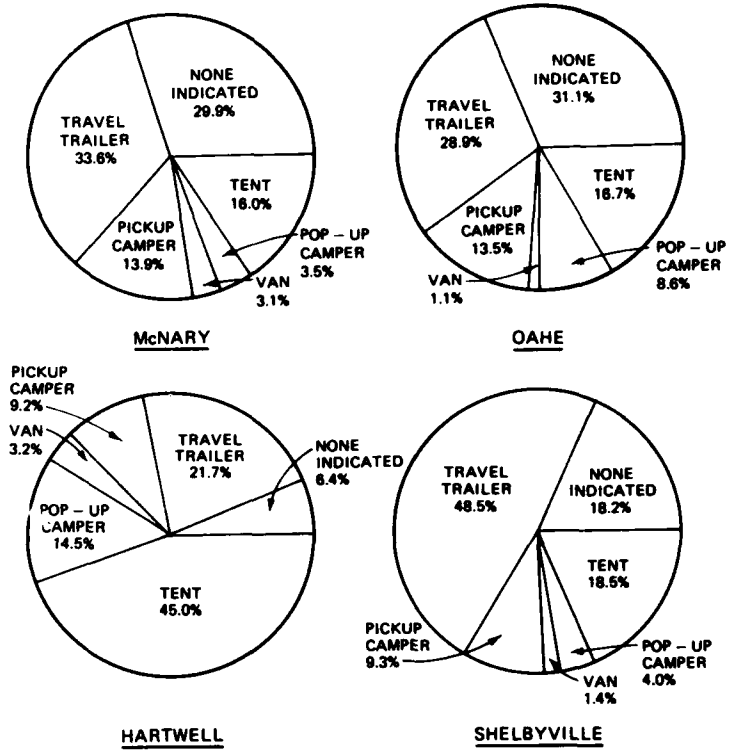


Figure 7. Camping equipment use by project

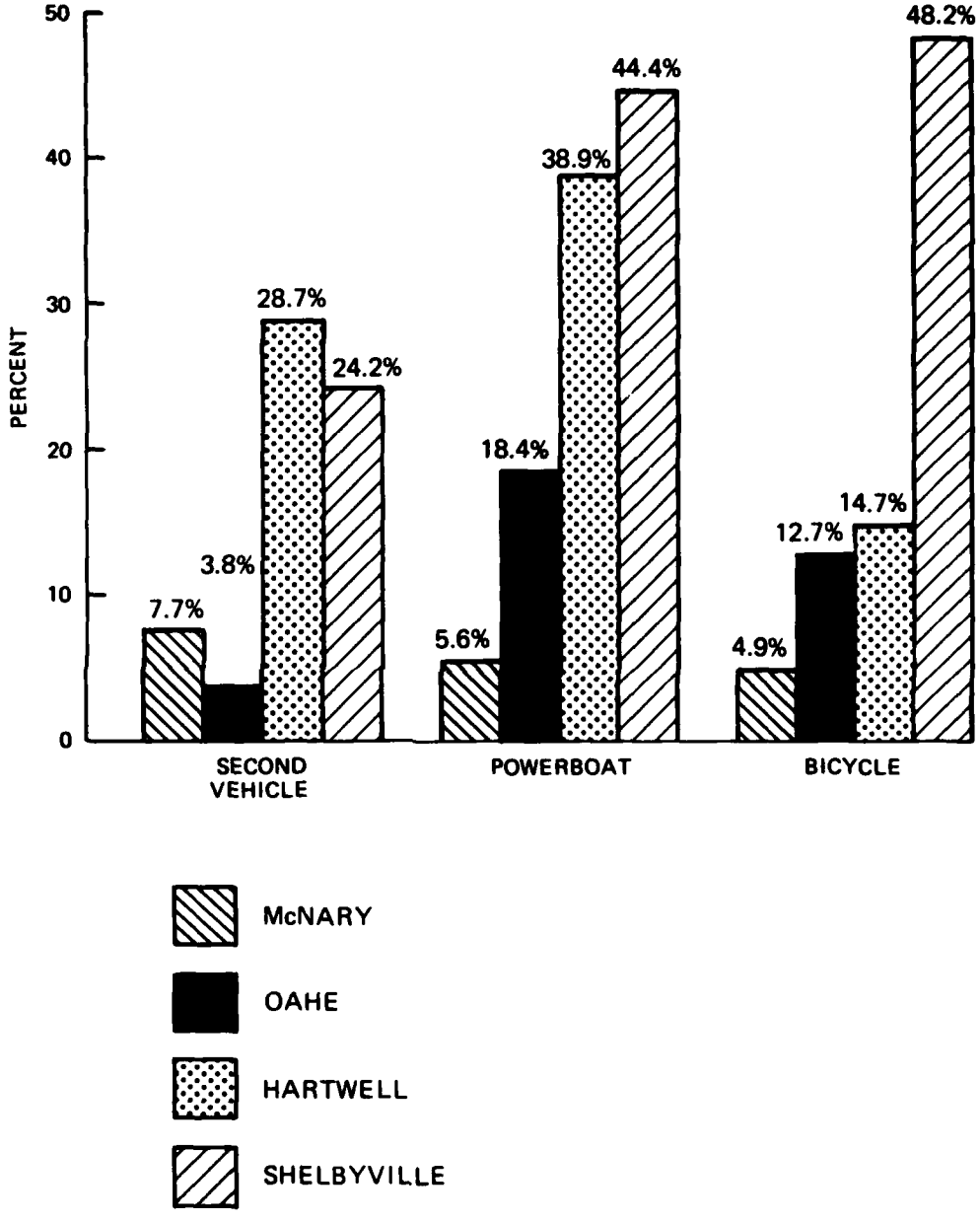


Figure 8. Noncamping equipment use by project

much greater than the use of tents at the other projects. Likewise, the use of travel trailers at Shelbyville is much larger than at the other projects. Another difference that is apparent at Shelbyville is the abundance of bicycles. Nearly half of the visitors had bicycles with them, which is three times greater than the percentage at the other projects.

Recreation Area Comparisons

26. Three projects collected CRS data in 1980 at more than one recreation area: Ouachita, Greers Ferry, and Hartwell. The differences between the two recreation parks at Greers Ferry Lake (Sugar Loaf and J. F. Kennedy) are presented for illustrative purposes. Maps of the two parks show some of the physical differences between these areas (Figures 9 and 10). Sugar Loaf Park has more campsites than J. F. Kennedy Park and also has more supportive facilities (e.g. the beach and marina). However, J. F. Kennedy Park has electrical outlets at each campsite and waterborne sanitary facilities with some showers available.

27. The visitor use patterns and characteristics also differ between the two parks (Figures 11 and 12). Motorhomes and travel trailers are used by a much larger percentage of J. F. Kennedy visitors. Tents, on the other hand, make up over half of the camping equipment used at Sugar Loaf Park. This is twice the proportion used at J. F. Kennedy Park. The presence of powerboats also differs at the two parks. The percentage of visitors at Sugar Loaf Park that had a powerboat was nearly six times greater than at J. F. Kennedy Park.

Regional Comparison

28. Another possible application of the CRS data is to compare visitor characteristics at projects in different geographic regions of the country. For example, four of the study sites (Lakes Shelbyville, Shenango, Nolin, and Barkley) are located in proximity to each other in the north-central portion of the country. Likewise, five study projects

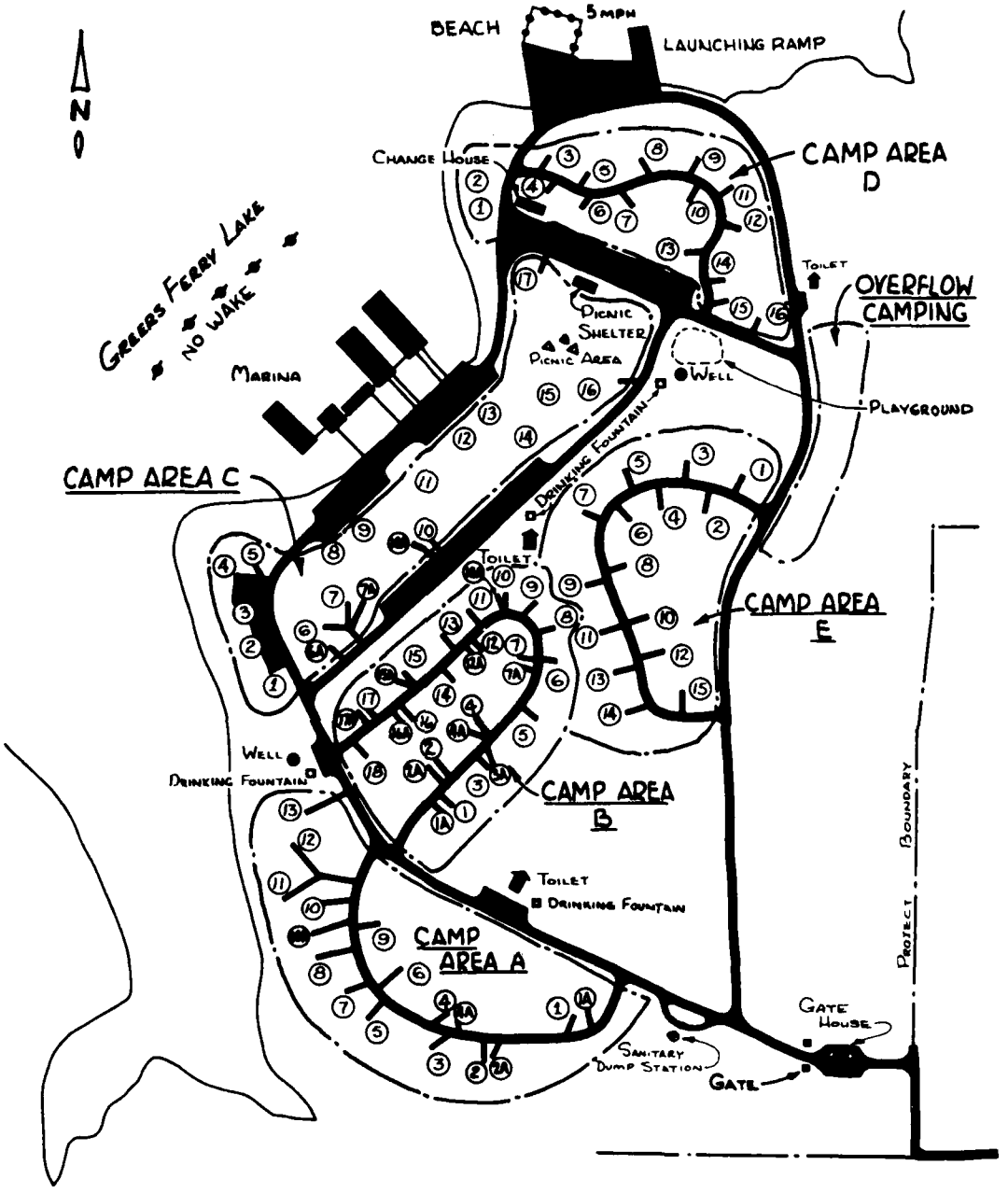


Figure 9. Sugar Loaf Park

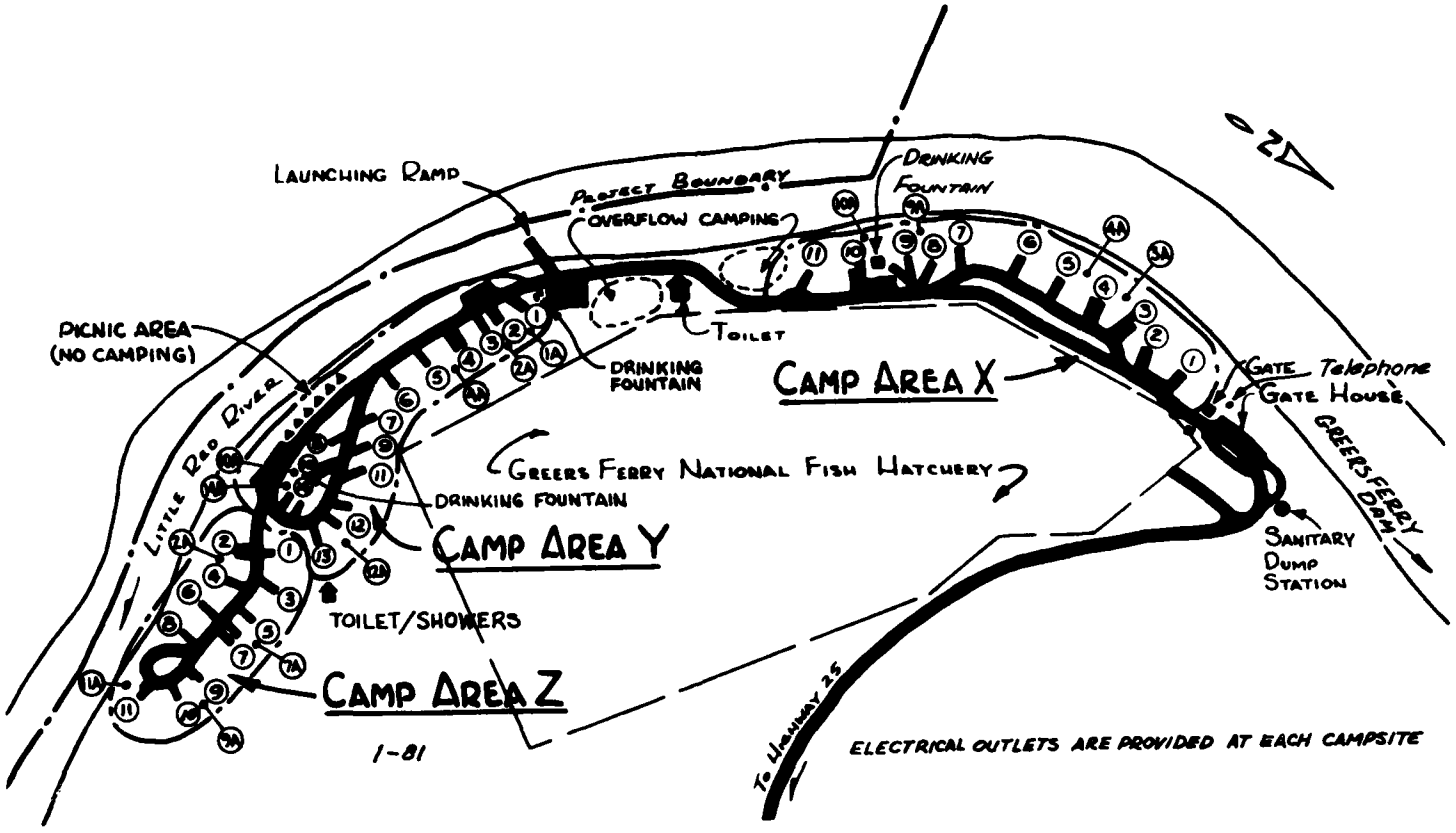


Figure 10. John F. Kennedy Park

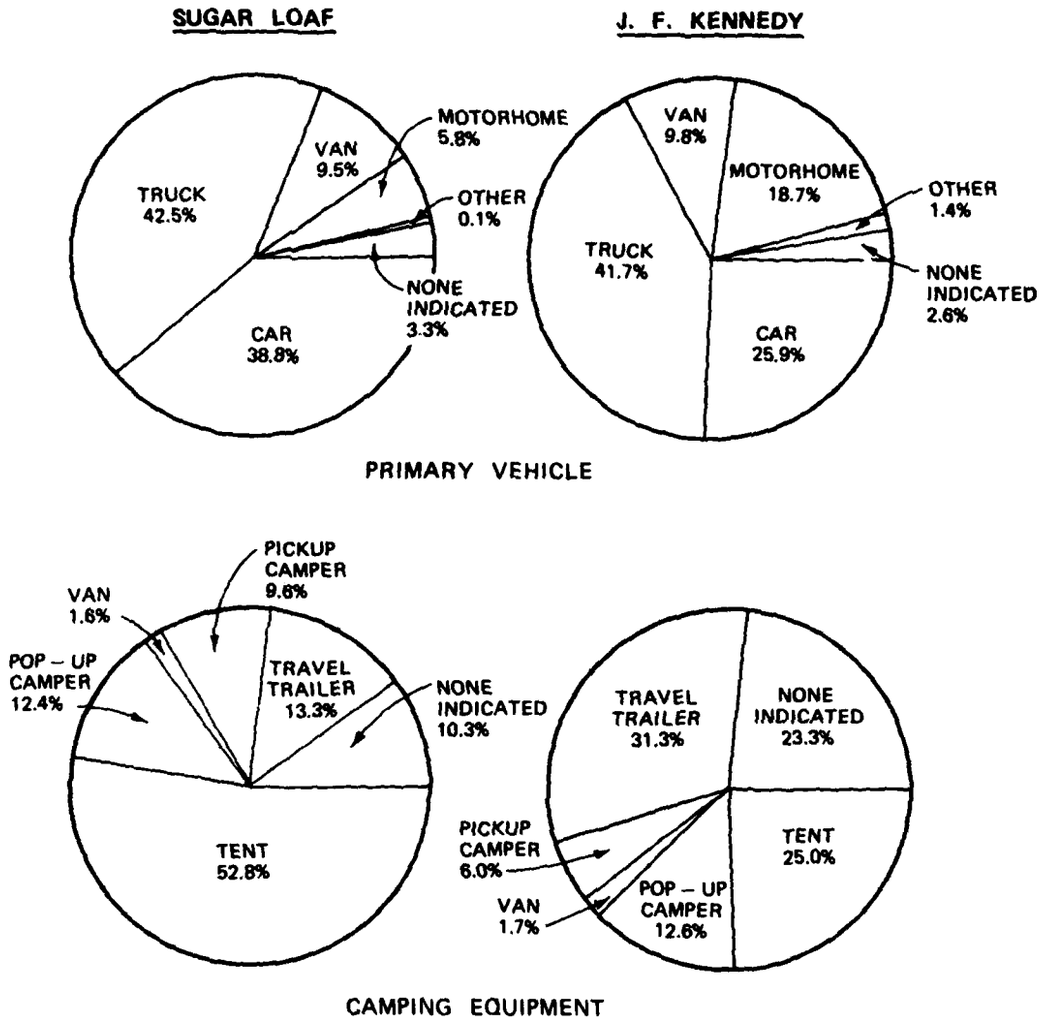


Figure 11. Vehicle and camping equipment use by recreation area, Greers Ferry

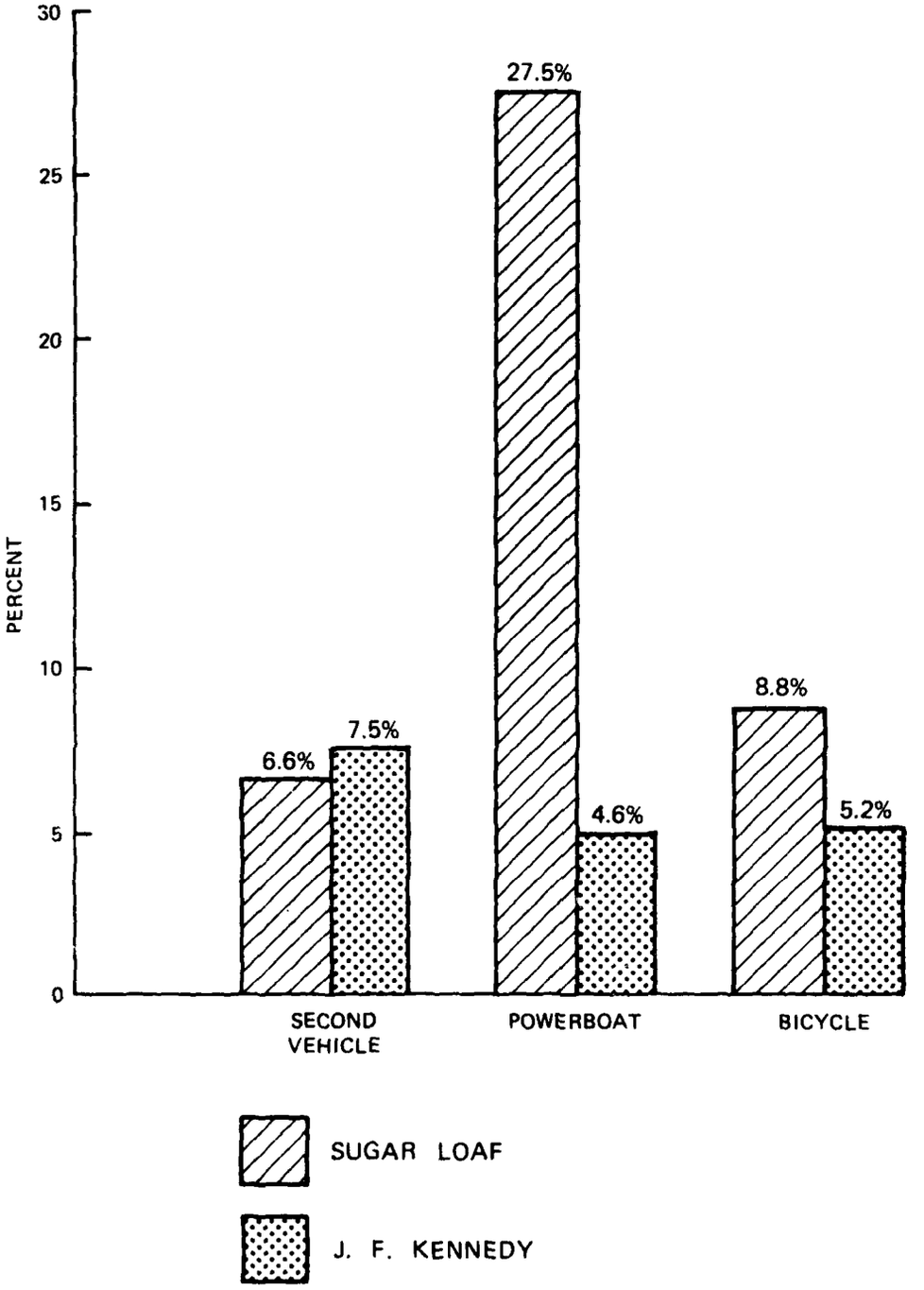


Figure 12. Noncamping equipment use by recreation area, Greers Ferry

(Greers Ferry, R. S. Kerr, Ouachita, Benbrook, and Somerville) are situated in the southwest. Combining the data from all the projects within each region allows for comparison of characteristics between geographic areas (Figures 13 and 14).

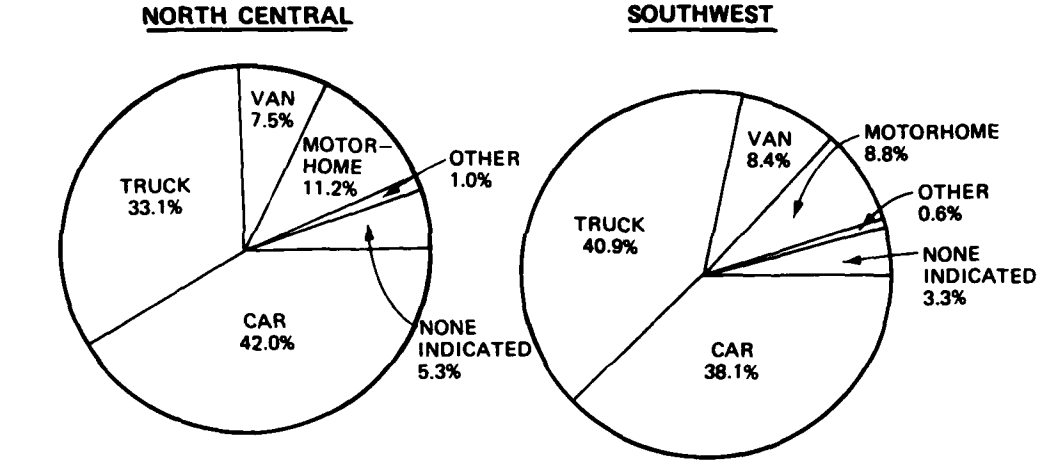
29. The most significant difference between the two regions is the much higher proportionate use of tents by registered campers in the southwest. Almost one half of these visitors used tents; the proportion being twice as large as for travel trailers, the next most popular type of camping equipment. In the north-central region, the travel trailer was the most popular type of camping equipment used (35.5 percent), being only slightly more popular than the use of tents (30.1 percent). The type of preferred camping equipment would have obvious implications for facility design. Another significant difference indicated by the data is the higher percentage of users with secondary vehicles in the north-central region (25.8 percent) and bicycles (32.9 percent) than in the southwest (15.3 and 10.8 percent, respectively).

Total CRS Sample

30. Combining all of the 1980 CRS data from all projects produces the results shown in Figure 15. These data can be compared with any of the preceding analyses to determine how a particular subset of these data relates to the total. For example, a comparison can be made between the primary vehicles of the total CRS sample and the project comparisons (Figure 6). The use of cars as the primary vehicle for all 15 CRS projects is 36.5 percent. From Figure 6, only Shelbyville is close to this overall percentage. Hartwell has a higher proportion of cars used by visitors and McNary and Oahe both have much lower percentages.

Origin Data

31. An important element in planning and managing recreation areas is knowing the market areas and travel patterns of project visitors.



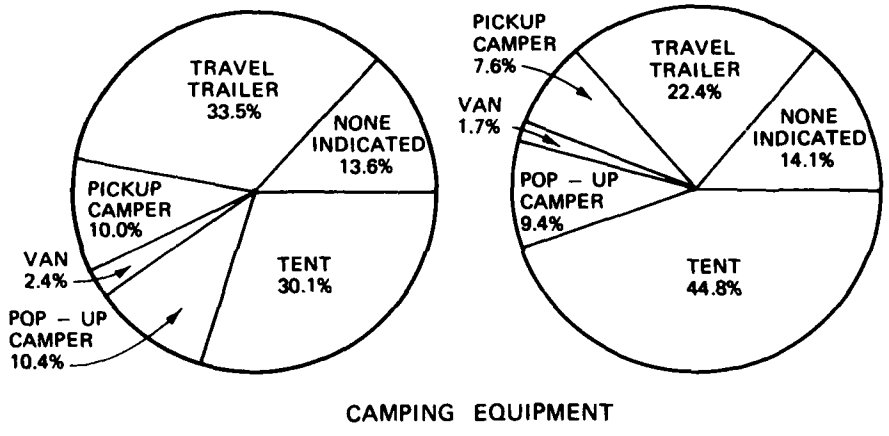


Figure 13. Vehicle and equipment use by region

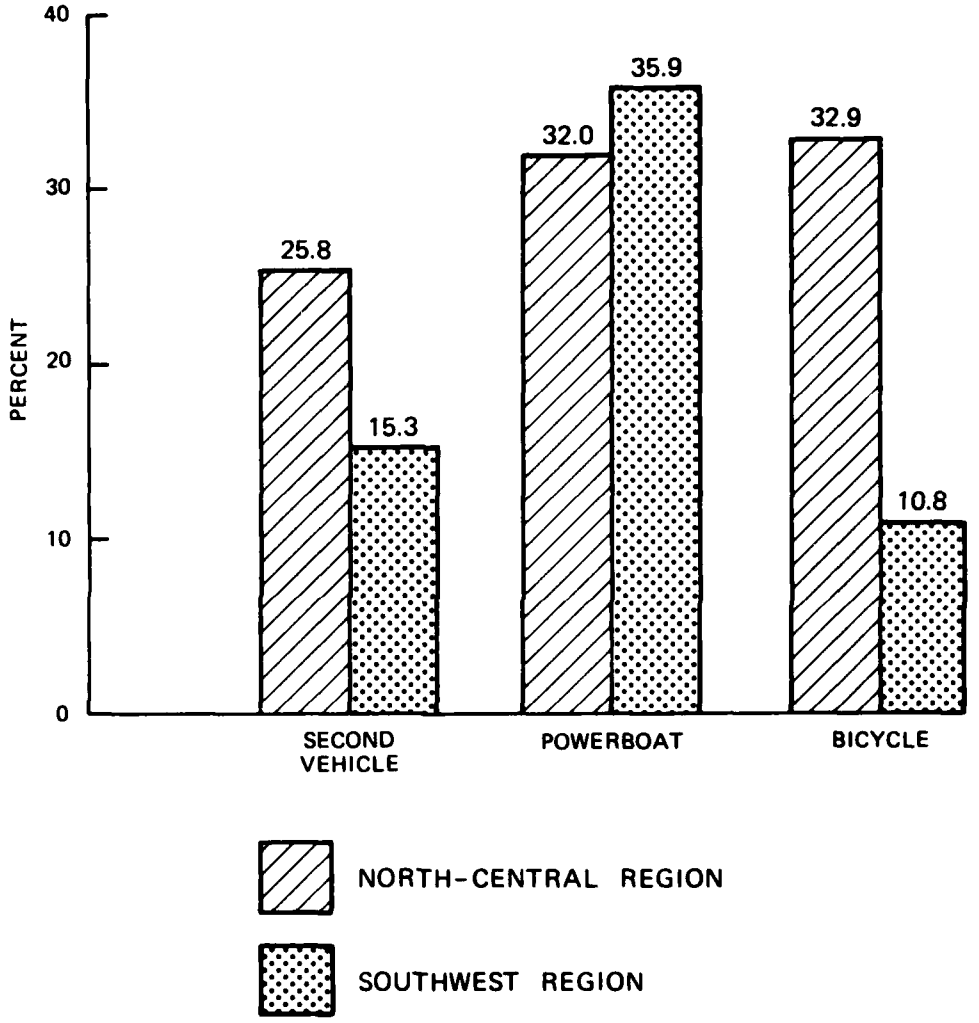
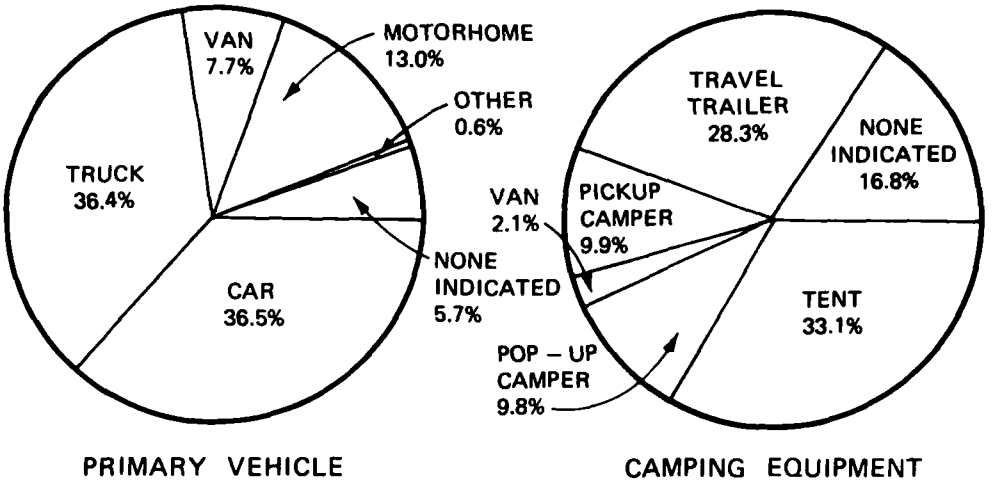


Figure 14. Noncamping equipment use by region



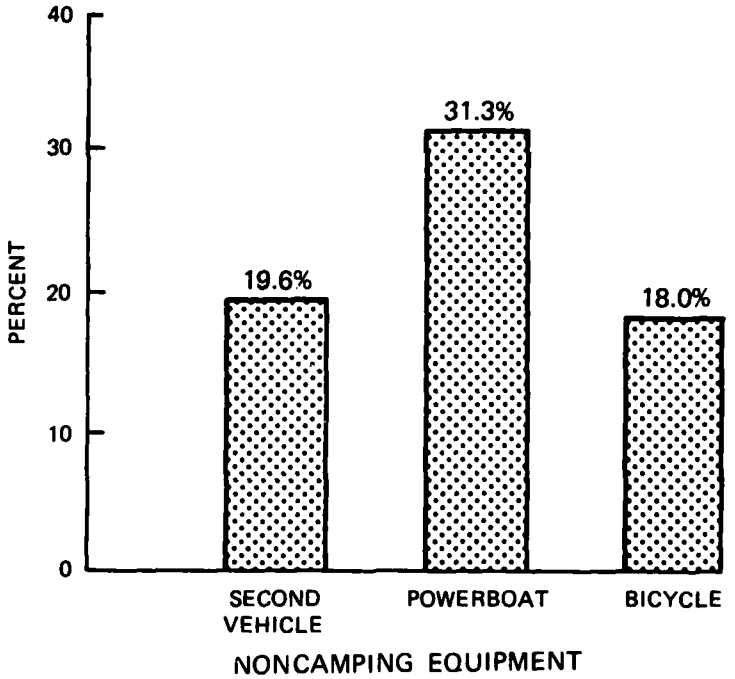


Figure 15. Vehicle and equipment use for total CRS sample

One method of identifying the areas of origin of these visitors is through the collection and analysis of zip code information. Visitor zip codes were collected along with the other CRS data. An example of the type of information that can be generated from these data is presented in the following paragraphs using visitor zip codes collected at Shenango River Lake, located in Pennsylvania near the Ohio border.

32. Initially, two zones of influence were identified by Shenango River Lake: counties located within 50 road miles of the Lake, and counties located within 51 to 100 road miles. The basis for inclusion in either of these zones was the road mileage (determined from State highway maps) between each county's major population center and the fee campground at which the data were collected. It was then necessary to identify all zip codes within each of the counties located in these two zones. This was accomplished by referencing the "U. S. Postal Service 1981 National Zip Code and Post Office Directory" which contains a list of zip codes by county for all counties in the United States.

33. A FORTRAN program was then written which would tally by county the number of registration forms containing zip codes that matched the county lists. Any zip code on a registration form that was not included on a county list was printed out so that its location could be determined. It was discovered that six zip codes within the two zones had been missed. This was a result of some post office substations or branches not having the same zip code as their parent post office. The parent post office is the only one printed in the county listing of zip codes. Adjustments were made to include these six codes on the lists for the appropriate counties. Also identified were 12 forms with nonexistent zip codes and 73 forms with codes from counties beyond 100 road miles of the project.

34. Results of the tallies are presented in Figure 16. A total of 2820 supplemental forms were collected at Shenango during 1980. Of these, 766 did not have a zip code recorded and, as previously mentioned, 12 had nonexistent codes. Of the 2042 forms with legitimate zip codes, 1462 (71.6 percent) had codes from counties within the 50-mile zone of influence, 507 (24.8 percent) had codes from counties within the 51- to

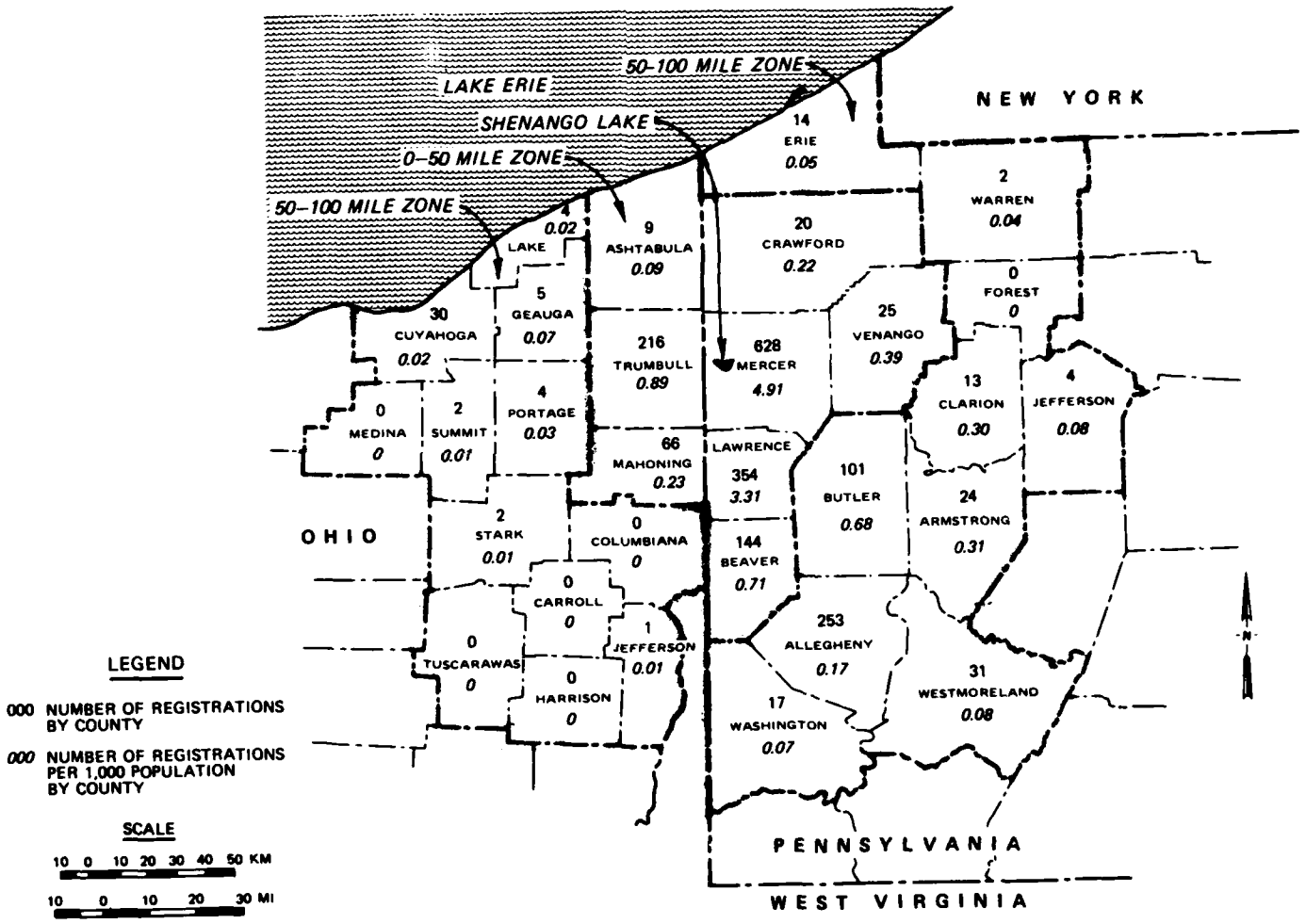


Figure 16. Shenango River Lake visitor zip code tallies

100-mile zone of influence, and 73 (3.6 percent) had codes from counties outside this area. Of the latter number, 21 were from counties within Pennsylvania, 6 within Ohio, and 46 within other states.

35. One unexpected aspect of the zip code tallies was the very large proportion of registration forms occurring in Pennsylvania. The 50-mile zone in Pennsylvania accounted for 57.3 percent of all zip codes recorded. An additional 22.5 percent occurred in the 100-mile zone. This means nearly 80 percent of all the recorded zip codes came from portions of the two zones within Pennsylvania. Ohio's 50- and 100-mile zones accounted for 14.3 and 2.4 percent, respectively. That is, only 17 percent of the total came from Ohio counties within the two zones. Clearly, visitors from Pennsylvania were the dominate users of the study area during the 1980 CRS.

36. The information provided above has many potential applications in planning and management (e.g., developing campground use estimation and benefit valuation models). In the example, only the number of registration forms were tallied by zip code. When used in conjunction with responses to party size and length of stay, like information could be presented for numbers of visitors as well as total recreation days of use by area of origin.

Data Analyses Summary

37. From the analyses presented, differences in visitor use patterns and characteristics between projects, within projects, and between geographic areas can be seen from the CRS data. Because of procedural changes, it is not feasible to compare the 1979 and 1980 data as a trend analysis. However, the present data do provide the initial data base for comparisons with future years of information on recreation use at the study projects.

38. The applications of the CRS data presented herein are not exclusive. In fact, it would be impossible at this time to list all the uses that could be made of the CRS data bank. A few examples of these would include comparisons among sites at a project, monthly changes of

recreation areas and projects, computations of occupancy rates, and trend analyses for individual recreation sites, areas, and projects.

39. Two important points need to be made at this time. The first is to stress that the CRS data, at present, only include fee campers. This is the only group that has campground receipts issued to them. The second is that the data analyses presented herein were done for illustration purposes only. Because of some limitations in the data (to be discussed in the next section), the analyses presented should not be used for management decisions.

40. The primary intent of the 1980 CRS was to field test a revised data collection instrument. This objective has been accomplished. In addition, a year's worth of data has been collected that represents an initial description of recreation use and camper characteristics at a sample of Corps fee campgrounds. There are some limitations to the data that may preclude their use as being representative of all fee campers at the projects studied.

41. The CRS data were not collected during the entire fee collection period at the participating projects. This may result in missing part or an entire portion of the fee collection season. As a consequence, the data may not provide a complete description of use for the projects over an average camping season.

42. Along with the limited data collection period mentioned above, the CRS data were collected on forms that were not mandatory. That is, when surveyors were confronted with large influxes of visitors, e.g. at the beginning of weekends or holidays, the CRS forms were not required to be filled out. This fact may also result in an incomplete depiction of the projects during peak use periods.

43. When using the 1980 CRS data to describe individual projects, it should be noted that only one recreation area was used at most of the projects.* From the comparisons made between the two recreation areas at Greers Ferry (Figures 11 and 12), it should be apparent that it may

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* Lake Ouachita and Greers Ferry Lake had two recreation areas and Hartwell Lake had three during the 1980 CRS.

be misleading to use one fee area to represent all fee campers at an entire project.

44. The three preceding limitations do not reflect problems with the CRS methods, but are the outcome of field testing these methods. When the CRS becomes fully operational, none of these limitations should exist. One problem was discovered during the 1980 CRS that was not the result of the field tests. Discussions with individual surveyors revealed differences in the interpretations of some of the individual data elements.* Even though individual surveyor bias does, therefore, exist, it is not believed that the effect would adversely change the 1980 data.

Revisions for 1981 CRS

45. Changes incorporated into the CRS during 1981 should eliminate the data limitations mentioned previously. These changes include modifications to the survey instrument and the provision of more definitive guidance for recording information.

46. The revisions in the survey instrument are essentially directed toward simplifying both the questions and response coding, and combining the supplemental form information requirements with those of the ENG Form 4457. The later change is very significant since it not only eliminates the need for, and associated logistical problems with, the supplemental form, but also increases the accountability and, therefore, the validity of the recorded information.

47. The revised survey instrument (Figure 17) is designated as ENG Form 4457 (TEST). It should reduce the time required for the attendants and/or park rangers to collect and code the information required by the project for fiscal accountability and the calculation of campground visitation, and at the same time secure the information required by the CRS researchers. The inclusion of an extra carbon copy in the receipt pad provides an input form for keypunching of the

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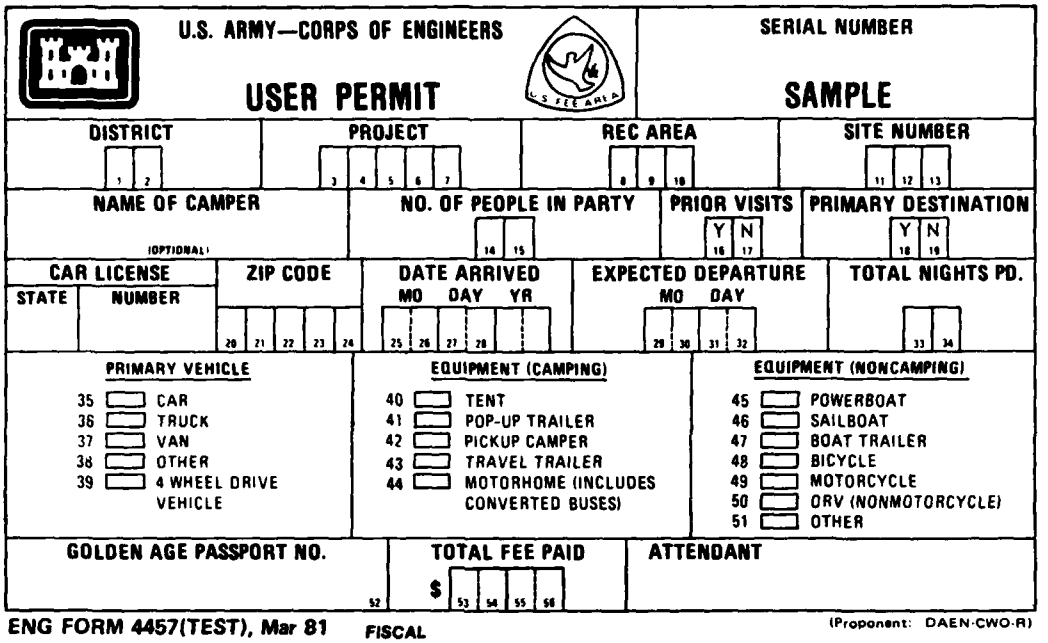
* For example, how the surveyor handled a case where one camping group arrived in two types of vehicles. Which one should be coded as the primary vehicle?


U.S. ARMY—CORPS OF ENGINEERS

USER PERMIT

SERIAL NUMBER

SAMPLE

DISTRICT (1 2) | PROJECT (3 4 5 6 7) | REC AREA (8 9 10) | SITE NUMBER (11 12 13)

NAME OF CAMPER (OPTIONAL) | NO. OF PEOPLE IN PARTY (14 15) | PRIOR VISITS Y N (16 17) | PRIMARY DESTINATION Y N (18 19)

CAR LICENSE: STATE | NUMBER | ZIP CODE (20 21 22 23 24) | DATE ARRIVED MO DAY YR (25 26 27 28) | EXPECTED DEPARTURE MO DAY (29 30 31 32) | TOTAL NIGHTS PD. (33 34)

PRIMARY VEHICLE
35 ☐ CAR
36 ☐ TRUCK
37 ☐ VAN
38 ☐ OTHER
39 ☐ 4 WHEEL DRIVE VEHICLE

EQUIPMENT (CAMPING)
40 ☐ TENT
41 ☐ POP-UP TRAILER
42 ☐ PICKUP CAMPER
43 ☐ TRAVEL TRAILER
44 ☐ MOTORHOME (INCLUDES CONVERTED BUSES)

EQUIPMENT (NONCAMPING)
45 ☐ POWERBOAT
46 ☐ SAILBOAT
47 ☐ BOAT TRAILER
48 ☐ BICYCLE
49 ☐ MOTORCYCLE
50 ☐ ORV (NONMOTORCYCLE)
51 ☐ OTHER

GOLDEN AGE PASSPORT NO. (52) | TOTAL FEE PAID $ (53 54 55 56) | ATTENDANT

ENG FORM 4457(TEST), Mar 81 FISCAL (Proponent: DAEN-CWO-R)

Figure 17. ENG Form 4457 (TEST)

information without interfering with the other uses of the fee receipt.

48. Use of this revised form will correct two of the limitations found in 1980 data. Since the new form replaces the ENG Form 4457, its use is mandatory, which means information will be collected during the entire fee season from all users of the fee area.

49. The procedural changes primarily concern providing additional instructions to gate attendants and park rangers in the use of the ENG Form 4457 (TEST). More explicit instructions are provided on the individual data elements to lessen the interpretation bias encountered in the 1980 data.

50. With the modifications mentioned above, the 1981 CRS should be free of the limitations encountered with the 1980 data. Also, with the use of ENG Form 4457 (TEST), less burden will be placed on personnel collecting the information. In summary, revisions made for the 1981 CRS will make it easier to collect the data, as well as produce better results.

PART IV: CONCLUSIONS

51. With the inception of the CRS, many new types of data become available for Corps recreation and resource planners and managers. Information obtained in the CRS can assist decisionmakers in conducting a wide range of analyses. These would include:

a. Determining whether existing facilities are meeting current user needs.

b. Deciding whether a master plan update is needed.

c. Determining and coordinating staffing requirements using peak use period analysis.

d. Establishing resource capacity control criteria through comparisons between field observation and site visitation figures.

e. Assisting in the development of management plans to more evenly distribute facility and site usage.

f. Determining the impact of external factors such as fuel cost and availability on recreation use patterns.

The potential applications of systematically collected trend data, beyond that which are already being collected using the existing ENG Form 4457, are many and varied in function and in their levels of application. These data can be used effectively at the project level, at the District level, at the Division level, and, as data are finally aggregated, at the Office, Chief of Engineers, level for planning and management purposes.

52. In addition to the obvious planning and management applications of trend data, the CRS data can be utilized by recreation researchers since it would complement the existing recreation data bases of the Corps and other Federal agencies.

53. With the establishment of the CRS, the Corps has a data base available that is founded on a representative sample of Corps projects (RRDS). With this data base, not only can current use patterns be examined, but over time changes in visitor use patterns or visitor characteristics can be monitored and evaluated, thereby resulting in the formulation of more responsive management decisions at all levels within the Corps.

54. While the CRS has been initiated at a representative sample of Corps projects, it is recognized that there may often be a need to collect like information at other projects. The ENG Form 4457 (TEST), however, being an Accountable Form, can only be used at those projects authorized by OCE. For this reason, the supplemental form used in previous years of the CRS has been revised to be consistent with the Form 4457 (TEST) and compatible to the RAP. Any District or project desiring to analyze visitor characteristics using the CRS procedures can, therefore, do so by utilizing the supplemental form in conjunction with RAP. This should especially be considered prior to updating a master plan or when considering major changes in facility development or management.

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Propst, D. B. 1981 (Aug). "Impact of the Energy Crisis on Corps of Engineers Recreation Program," Miscellaneous Paper R-81-2, U. S. Army Engineer Waterways Experiment Station, CE, Vicksburg, Miss.

Propst, D. B., and Abbey, R. V. 1981 (Mar). "A Methodology for the Systematic Collection, Storage, and Retrieval of Trend Data for the U. S. Army Engineers Recreation Program," Miscellaneous Paper R-81-1, U. S. Army Engineer Waterways Experiment Station, CE, Vicksburg, Miss.

APPENDIX A: RECREATION ANALYSIS PROGRAM (RAP) "PROJECT REPORTS" FOR ALL 1980 RECREATION AREAS

Appendix A includes RAP "Project Reports" for the 18 recreation areas included in the 1980 field test. Each report provides tabulations and frequency distributions for the data recorded from each area. Following are definitions and descriptions of the abbreviations and terms used.

NO.	Number of receipts (tabulation) on which the item was checked.
ABS PCT (also PCT)	The absolute percent of receipts on which the item was checked. It is the number of receipts on which the item was checked (NO.) divided by the total number of receipts collected (CAMPING PERMITS).
REL PCT	The relative percent of receipts on which the item was checked. It is the number of receipts on which the item was checked (NO.) divided by the total number of receipts collected less the number of receipts with missing data (CAMPING PERMITS - MISSING).
MISSING	Number of receipts on which no information was checked for that category.
CAMPING PERMITS	Total number of receipts collected for that area during the study period.
CAMPING PARTICIPANTS	Sum of number of "people in group" from each receipt.
PERSONS/GROUP, AVG.	Average number of persons per group (party). Both absolute (ABS) and relative (REL) averages are provided. The absolute average is CAMPING PARTICIPANTS divided by CAMPING PERMITS; the relative average excludes those receipts for which "number in group" was not recorded.
DAYS PAID	Sum of "length of stay" from each permit.
LENGTH OF STAY/GROUP, AVG.	Average length of stay. Again both absolute and relative averages are provided based on total receipts and total receipts less receipts with missing data, respectively.
TOTAL REC. DAYS OF USE	Total recreation days of use. A recreation day of use is defined as a visit by an individual to a recreation area for any portion or all of a 24-hr period. The number of recreation days of use for each receipt is equal to the "number in group" times the "length of stay." These products are summed for all receipts.

PRIOR VISITS	Indicates whether or not camping party had been at project before. Counts of YES and NO responses are provided as well as absolute and relative percentages of each.

LAKE BARKLEY

PROJECT REPORT

FROM 519 TO 827

PROJECT NO. 7 REC AREA NO. 1

VARIABLES MONITORED

PRIMARY VEHICLE	NO.	ABS PCT	REL PCT	EQUIPMENT(CAMPING)	NO.	ABS PCT	REL PCT	EQUIPMENT(NON-CAMPING)	NO.	PCT
CAR	62	30.7	35.8	TENT	19	9.4	9.6	POWERBOAT	62	30.7
TRUCK	96	47.5	55.5	POP-UP TRAILER	19	9.4	9.6	SAILBOAT	0	0.
VAN	14	6.9	8.1	PICKUP CAMPER	22	10.9	11.2	BOAT TRAILER	58	28.7
OTHER	0	0.	0.	TRAVEL TRAILER	112	55.4	56.9	BICYCLE	25	12.4
4 WHEEL DR	5	2.5	2.9	MOTORHOME	25	12.4	12.7	MOTORCYCLE	7	3.5
MISSING	29			MISSING	5			ORV	0	0.
								OTHER	3	1.5

A3

USER CHARACTERISTICS					PRIOR VISITS						PRIMARY DESTINATION					
					YES			NO			YES			NO		
					NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT
CAMPING PERMITS		202			131	64.9	64.9	71	35.1	35.1	0	0.	0.	0	0.	0.
CAMPING PARTICIPANTS		582														
PERSONS/GROUP,AVG.	(ABS)	2.88	(REL)	3.10												
DAYS PAID		1005														
LENGTH OF STAY/GROUP,AVG.	(ABS)	4.98	(REL)	5.02												
TOTAL REC DAYS OF USE		2816			(MISSING 0)						(MISSING 202)					
NO. GOLDEN AGE PASSPORTS RECORDED		0														
TOTAL FEES PAID	$	0.														

(202 PERMITS SHOW $0.0 FEE)
(14 PERMITS SHOW ZERO PERSONS IN PARTY)
(2 PERMITS SHOW ZERO NIGHTS PAID)

PROJECT REPORT

BENBROOK LAKE

FROM 515 TO 907

PROJECT NO. 12 REC AREA NO. 1

VARIABLES MONITORED

PRIMARY VEHICLE	NO.	ABS PCT	REL PCT	EQUIPMENT(CAMPING)	NO.	ABS PCT	REL PCT	EQUIPMENT(NON-CAMPING)	NO.	PCT
CAR	90	29.3	35.3	TENT	28	9.1	10.2	POWERBOAT	65	21.2
TRUCK	143	46.6	56.1	POP-UP TRAILER	22	7.2	8.0	SAILBOAT	4	1.3
VAN	21	6.8	8.2	PICKUP CAMPER	24	7.8	8.7	BOAT TRAILER	65	21.2
OTHER	1	0.3	0.4	TRAVEL TRAILER	160	52.1	58.2	BICYCLE	17	5.5
4 WHEEL DR	0	0.	0.	MOTORHOME	41	13.4	14.9	MOTORCYCLE	5	1.6
MISSING	52			MISSING	32			ORV	0	0.
								OTHER	5	1.6

A4

USER CHARACTERISTICS					PRIOR VISITS						PRIMARY DESTINATION					
					YES			NO			YES			NO		
					NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT
CAMPING PERMITS		307														
CAMPING PARTICIPANTS		913														
PERSONS/GROUP,AVG.	(ABS)	2.97	(REL)	3.00	148	48.2	48.2	159	51.8	51.8	0	0.	0.	0	0.	0.
DAYS PAID		990														
LENGTH OF STAY/GROUP,AVG.	(ABS)	3.22	(REL)	3.24												
TOTAL REC DAYS OF USE		2854				(MISSING 0)						(MISSING 307)				
NO. GOLDEN AGE PASSPORTS RECORDED		0														
TOTAL FEES PAID	$	0.														

(307 PERMITS SHOW $0.0 FEE)
(3 PERMITS SHOW ZERO PERSONS IN PARTY)
(1 PERMITS SHOW ZERO NIGHTS PAID)

GREERS FERRY LAKE

PROJECT REPORT

FROM 516 TO 831

PROJECT NO. 14 REC AREA NO. 1

VARIABLES MONITORED

PRIMARY VEHICLE	NO.	ABS PCT	REL PCT	EQUIPMENT(CAMPING)	NO.	ABS PCT	REL PCT	EQUIPMENT(NON-CAMPING)	NO.	PCT
CAR	340	38.8	42.6	TENT	463	52.8	56.4	POWERBOAT	241	27.5
TRUCK	373	42.5	46.7	POP-UP TRAILER	109	12.4	13.3	SAILBOAT	2	0.2
VAN	83	9.5	10.4	PICKUP CAMPER	84	9.6	10.2	BOAT TRAILER	222	25.3
OTHER	1	0.1	0.1	TRAVEL TRAILER	117	13.3	14.3	BICYCLE	77	8.8
4 WHEEL DR	12	1.4	1.5	MOTORHOME	51	5.8	6.2	MOTORCYCLE	20	2.3
MISSING	79			MISSING	56			ORV	0	0.
								OTHER	2	0.2

A5

USER CHARACTERISTICS					PRIOR VISITS						PRIMARY DESTINATION					
					YES			NO			YES			NO		
					NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT
CAMPING PERMITS		877														
CAMPING PARTICIPANTS		3252														
PERSONS/GROUP,AVG.	(ABS)	3.71	(REL)	3.79	462	52.7	52.7	415	47.3	47.3	0	0.	0.	0	0.	0.
DAYS PAID		2226														
LENGTH OF STAY/GROUP,AVG.	(ABS)	2.54	(REL)	2.59												
TOTAL REC DAYS OF USE		8345				(MISSING	0)					(MISSING	877)			
NO. GOLDEN AGE PASSPORTS RECORDED		0														
TOTAL FEES PAID	$	0.														

(877 PERMITS SHOW $0.0 FEE)
(20 PERMITS SHOW ZERO PERSONS IN PARTY)
(16 PERMITS SHOW ZERO NIGHTS PAID)

GREERS FERRY LAKE

PROJECT REPORT

FROM 513 TO 831

PROJECT NO. 14 REC AREA NO. 2

VARIABLES MONITORED

PRIMARY VEHICLE	NO.	ABS PCT	REL PCT	EQUIPMENT(CAMPING)	NO.	ABS PCT	REL PCT	EQUIPMENT(NON-CAMPING)	NO.	PCT
CAR	90	25.9	32.7	TENT	87	25.0	26.9	POWERBOAT	16	4.6
TRUCK	145	41.7	52.7	POP-UP TRAILER	44	12.6	13.6	SAILBOAT	0	0.
VAN	34	9.8	12.4	PICKUP CAMPER	21	6.0	6.5	BOAT TRAILER	21	6.0
OTHER	5	1.4	1.8	TRAVEL TRAILER	109	31.3	33.6	BICYCLE	18	5.2
4 WHEEL DR	2	0.6	0.7	MOTORHOME	65	18.7	20.1	MOTORCYCLE	6	1.7
MISSING	73			MISSING	24			ORV	0	0.
								OTHER	1	0.3

USER CHARACTERISTICS

CAMPING PERMITS		348		
CAMPING PARTICIPANTS		1035		
PERSONS/GROUP,AVG.	(ABS)	2.97	(REL)	3.13
DAYS PAID		1089		
LENGTH OF STAY/GROUP,AVG.	(ABS)	3.13	(REL)	3.17
TOTAL REC DAYS OF USE		3315		
NO. GOLDEN AGE PASSPORTS RECORDED		0		
TOTAL FEES PAID	$	0.		

PRIOR VISITS

YES NO.	YES ABS PCT	YES REL PCT	NO NO.	NO ABS PCT	NO REL PCT
205	58.9	58.9	143	41.1	41.1

(MISSING 0)

PRIMARY DESTINATION

YES NO.	YES ABS PCT	YES REL PCT	NO NO.	NO ABS PCT	NO REL PCT
0	0.	0.	0	0.	0.

(MISSING 348)

(348 PERMITS SHOW $0.0 FEE)
(17 PERMITS SHOW ZERO PERSONS IN PARTY)
(4 PERMITS SHOW ZERO NIGHTS PAID)

PROJECT REPORT

HARTWELL LAKE

FROM 500 TO 728

PROJECT NO. 10 REC AREA NO. 1

VARIABLES MONITORED

PRIMARY VEHICLE	NO.	ABS PCT	REL PCT	EQUIPMENT(CAMPING)	NO.	ABS PCT	REL PCT	EQUIPMENT(NON-CAMPING)	NO.	PCT
CAR	285	55.6	58.0	TENT	248	48.3	52.0	POWERBOAT	143	27.9
TRUCK	167	32.6	34.0	POP-UP TRAILER	65	12.7	13.6	SAILBOAT	1	0.2
VAN	36	7.0	7.3	PICKUP CAMPER	27	5.3	5.7	BOAT TRAILER	161	31.4
OTHER	1	0.2	0.2	TRAVEL TRAILER	119	23.2	24.9	BICYCLE	80	15.6
4 WHEEL DR	26	5.1	5.3	MOTORHOME	19	3.7	4.0	MOTORCYCLE	16	3.1
MISSING	22			MISSING	36			ORV	0	0.
								OTHER	2	0.4

USER CHARACTERISTICS					PRIOR VISITS						PRIMARY DESTINATION					
					YES			NO			YES			NO		
					NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT
CAMPING PERMITS		513			309	60.2	60.2	204	39.8	39.8	0	0.	0.	0	0.	0.
CAMPING PARTICIPANTS		2048														
PERSONS/GROUP,AVG.	(ABS)	3.99	(REL)	4.03												
DAYS PAID		1449														
LENGTH OF STAY/GROUP,AVG.	(ABS)	2.82	(REL)	2.92												
TOTAL REC DAYS OF USE		6071			(MISSING 0)						(MISSING 513)					
NO. GOLDEN AGE PASSPORTS RECORDED		0														
TOTAL FEES PAID	$	0.														

(513 PERMITS SHOW $0.0 FEE)
(5 PERMITS SHOW ZERO PERSONS IN PARTY)
(17 PERMITS SHOW ZERO NIGHTS PAID)

PROJECT REPORT

HARTWELL LAKE

FROM 515 TO 828

PROJECT NO. 10 REC AREA NO. 2

VARIABLES *MONITORED*

PRIMARY VEHICLE	NO.	ABS PCT	REL PCT
CAR	295	39.0	41.3
TRUCK	369	48.8	51.6
VAN	50	6.6	7.0
OTHER	1	0.1	0.1
4 WHEEL DR	8	1.1	1.1
MISSING	41		

EQUIPMENT(CAMPING)	NO.	ABS PCT	REL PCT
TENT	352	46.6	48.2
POP-UP TRAILER	112	14.8	15.3
PICKUP CAMPER	101	13.4	13.8
TRAVEL TRAILER	141	18.7	19.3
MOTORHOME	25	3.3	3.4
MISSING	25		

EQUIPMENT(NON-CAMPING)	NO.	PCT
POWERBOAT	407	53.8
SAILBOAT	1	0.1
BOAT TRAILER	400	52.9
BICYCLE	148	19.6
MOTORCYCLE	5	0.7
ORV	0	0.
OTHER	0	0.

USER CHARACTERISTICS

CAMPING PERMITS				756
CAMPING PARTICIPANTS				3131
PERSONS/GROUP,AVG.	(ABS)	4.14	(REL)	4.15
DAYS PAID				2747
LENGTH OF STAY/GROUP,AVG.	(ABS)	3.63	(REL)	3.67
TOTAL REC DAYS OF USE				11635

NO. GOLDEN AGE PASSPORTS RECORDED 0

TOTAL FEES PAID $ 0.

(756 PERMITS SHOW $0.0 FEE)
(1 PERMITS SHOW ZERO PERSONS IN PARTY)
(8 PERMITS SHOW ZERO NIGHTS PAID)

PRIOR VISITS

YES NO.	YES ABS PCT	YES REL PCT	NO NO.	NO ABS PCT	NO REL PCT	NO.
563	74.5	74.5	193	25.5	25.5	0

(MISSING 0)

PRIMARY DESTINATION

YES NO.	YES ABS PCT	YES REL PCT	NO NO.	NO ABS PCT	NO REL PCT
0	0.	0.	0	0.	0.

(MISSING 756)

PROJECT REPORT

HARTWELL LAKE

FROM 515 TO 831

PROJECT NO. 10 REC AREA NO. 3

VARIABLES MONITORED

PRIMARY VEHICLE	NO.	ABS PCT	REL PCT	EQUIPMENT(CAMPING)	NO.	ABS PCT	REL PCT	EQUIPMENT(NON-CAMPING)	NO.	PCT
CAR	178	47.1	52.2	TENT	141	37.3	42.2	POWERBOAT	91	24.1
TRUCK	122	32.3	35.8	POP-UP TRAILER	62	16.4	18.6	SAILBOAT	3	0.8
VAN	32	8.5	9.4	PICKUP CAMPER	24	6.3	7.2	BOAT TRAILER	92	24.3
OTHER	1	0.3	0.3	TRAVEL TRAILER	98	25.9	29.3	BICYCLE	14	3.7
4 WHEEL DR	19	5.0	5.6	MOTORHOME	11	2.9	3.3	MOTORCYCLE	10	2.6
MISSING	37			MISSING	44			ORV	0	0.
								OTHER	2	0.5

A9

USER CHARACTERISTICS					PRIOR VISITS						PRIMARY DESTINATION					
					YES			NO			YES			NO		
					NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT
CAMPING PERMITS		378														
CAMPING PARTICIPANTS		1450														
PERSONS/GROUP,AVG.	(ABS)	3.84	(REL)	3.88	239	63.2	63.2	139	36.8	36.8	0	0.	0.	0	0.	0.
DAYS PAID		976														
LENGTH OF STAY/GROUP,AVG.	(ABS)	2.58	(REL)	2.65												
TOTAL REC DAYS OF USE		3897			(MISSING 0)						(MISSING 378)					

NO. GOLDEN AGE PASSPORTS RECORDED 0

TOTAL FEES PAID $ 0.

(378 PERMITS SHOW $0 0 FEE)
(4 PERMITS SHOW ZERO PERSONS IN PARTY)
(10 PERMITS SHOW ZERO NIGHTS PAID)

PROJECT REPORT

ROBERT S KERR

FROM 523 TO 906

PROJECT NO. 15 REC AREA NO. 1

VARIABLES MONITORED

PRIMARY VEHICLE	NO.	ABS PCT	REL PCT	EQUIPMENT(CAMPING)	NO.	ABS PCT	REL PCT	EQUIPMENT(NON-CAMPING)	NO.	PCT
CAR	64	24.6	29.1	TENT	81	31.2	34.2	POWERBOAT	132	50.8
TRUCK	136	52.3	61.8	POP-UP TRAILER	14	5.4	5.9	SAILBOAT	1	0.4
VAN	16	6.2	7.3	PICKUP CAMPER	46	17.7	19.4	BOAT TRAILER	128	49.2
OTHER	0	0.	0.	TRAVEL TRAILER	76	29.2	32.1	BICYCLE	23	8.8
4 WHEEL DR	13	5.0	5.9	MOTORHOME	34	13.1	14.3	MOTORCYCLE	12	4.6
MISSING	40			MISSING	23			ORV	0	0.
								OTHER	4	1.5

A10

USER CHARACTERISTICS					PRIOR VISITS						PRIMARY DESTINATION					
					YES			NO			YES			NO		
					NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT
CAMPING PERMITS		260														
CAMPING PARTICIPANTS		1225														
PERSONS/GROUP,AVG.	(ABS)	4.71	(REL)	4.80												
DAYS PAID		812			160	61.5	61.5	100	38.5	38.5	0	0.	0.	0	0.	0.
LENGTH OF STAY/GROUP,AVG.	(ABS)	3.12	(REL)	3.16												
TOTAL REC DAYS OF USE		3756				(MISSING	0)					(MISSING	260)			

NO. GOLDEN AGE PASSPORTS RECORDED 0

TOTAL FEES PAID $ 0.

(260 PERMITS SHOW $0.0 FEE)
(5 PERMITS SHOW ZERO PERSONS IN PARTY)
(3 PERMITS SHOW ZERO NIGHTS PAID)

****

McNARY LOCK AND DAM

PROJECT REPORT

FROM 515 TO 901

PROJECT NO. 5 REC AREA NO. 1

VARIABLES MONITORED

PRIMARY VEHICLE	NO.	ABS PCT	REL PCT	EQUIPMENT(CAMPING)	NO.	ABS PCT	REL PCT	EQUIPMENT(NON-CAMPING)	NO.	PCT
CAR	239	22.0	39.7	TENT	174	16.0	16.7	POWERBOAT	61	5.6
TRUCK	322	29.6	53.5	POP-UP TRAILER	38	3.5	3.6	SAILBOAT	1	0.1
VAN	33	3.0	5.5	PICKUP CAMPER	151	13.9	14.5	BOAT TRAILER	56	5.2
OTHER	7	0.6	1.2	TRAVEL TRAILER	365	33.6	35.0	BICYCLE	53	4.9
4 WHEEL DR	4	0.4	0.7	MOTORHOME	320	29.4	30.7	MOTORCYCLE	22	2.0
MISSING	485			MISSING	44			ORV	0	0.
								OTHER	1	0.1

A11

USER CHARACTERISTICS

CAMPING PERMITS		1087														
CAMPING PARTICIPANTS		3424														
PERSONS/GROUP,AVG.	(ABS)	3.15	(REL)	3.15												
DAYS PAID		1736														
LENGTH OF STAY/GROUP,AVG.	(ABS)	1.60	(REL)	1.60												
TOTAL REC DAYS OF USE		5453														
NO. GOLDEN AGE PASSPORTS RECORDED		0														
TOTAL FEES PAID	$	0.														

PRIOR VISITS

YES			NO					
NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT
438	40.3	40.3	649	59.7	59.7	0	0.	0.

(MISSING 0)

PRIMARY DESTINATION

YES			NO		
NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT
0	0.	0.	0	0.	0.

(MISSING 1087)

(1087 PERMITS SHOW $0.0 FEE)
(1 PERMITS SHOW ZERO PERSONS IN PARTY)
(4 PERMITS SHOW ZERO NIGHTS PAID)

****

MILFORD LAKE

PROJECT REPORT

FROM 515 TO 901

PROJECT NO. 3 REC AREA NO. 1

VARIABLES MONITORED

PRIMARY VEHICLE	NO.	ABS PCT	REL PCT	EQUIPMENT(CAMPING)	NO.	ABS PCT	REL PCT	EQUIPMENT(NON-CAMPING)	NO.	PCT
CAR	201	28.8	43.2	TENT	113	16.2	18.1	POWERBOAT	217	31.0
TRUCK	168	24.0	36.1	POP-UP TRAILER	44	6.3	7.1	SAILBOAT	1	0.1
VAN	94	13.4	20.2	PICKUP CAMPER	93	13.3	14.9	BOAT TRAILER	217	31.0
OTHER	0	0.	0.	TRAVEL TRAILER	191	27.3	30.6	BICYCLE	14	2.0
4 WHEEL DR	3	0.4	0.6	MOTORHOME	186	26.6	29.8	MOTORCYCLE	15	2.1
MISSING	234			MISSING	75			DRV	0	0.
								OTHER	1	0.1

A12

USER CHARACTERISTICS					PRIOR VISITS						PRIMARY DESTINATION					
					YES			NO			YES			NO		
					NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT
CAMPING PERMITS		699														
CAMPING PARTICIPANTS		2452														
PERSONS/GROUP,AVG.	(ABS)	3.51	(REL)	3.53	424	60.7	60.7	275	39.3	39.3	0	0.	0.	0	0.	0.
DAYS PAID		1755														
LENGTH OF STAY/GROUP,AVG.	(ABS)	2.51	(REL)	2.51												
TOTAL REC DAYS OF USE		6198			(MISSING 0)						(MISSING 699)					

NO. GOLDEN AGE PASSPORTS RECORDED 0

TOTAL FEES PAID $ 0.

(699 PERMITS SHOW $0.0 FEE)
(5 PERMITS SHOW ZERO PERSONS IN PARTY)
(1 PERMITS SHOW ZERO NIGHTS PAID)

NOLIN RIVER LAKE

PROJECT REPORT

FROM 0 TO 831

PROJECT NO. 6 REC AREA NO. 1

VARIABLES MONITORED

PRIMARY VEHICLE	NO.	ABS PCT	REL PCT
CAR	59	31.2	47.2
TRUCK	54	28.6	43.2
VAN	11	5.8	8.8
OTHER	0	0.	0.
4 WHEEL DR	3	1.6	2.4
MISSING	64		

EQUIPMENT(CAMPING)	NO.	ABS PCT	REL PCT
TENT	83	43.9	52.9
POP-UP TRAILER	13	6.9	8.3
PICKUP CAMPER	35	18.5	22.3
TRAVEL TRAILER	14	7.4	8.9
MOTORHOME	14	7.4	8.9
MISSING	32		

EQUIPMENT(NON-CAMPING)	NO.	PCT
POWERBOAT	66	34.9
SAILBOAT	0	0.
BOAT TRAILER	71	37.6
BICYCLE	1	0.5
MOTORCYCLE	1	0.5
ORV	0	0.
OTHER	3	1.6

A13

USER CHARACTERISTICS					PRIOR VISITS	YES ABS PCT	YES REL PCT	NO	NO ABS PCT	NO REL PCT	NO	PRIMARY DESTINATION YES ABS PCT	YES REL PCT	NO	NO ABS PCT	NO REL PCT
CAMPING PERMITS		189			NO.											
CAMPING PARTICIPANTS		694			62	32.8	32.8	127	67.2	67.2	0	0.	0.	0	0.	0.
PERSONS/GROUP,AVG.	(ABS)	3.67	(REL)	3.83												
DAYS PAID		367			(MISSING 0)							(MISSING 189)				
LENGTH OF STAY/GROUP,AVG.	(ABS)	1.94	(REL)	2.09												
TOTAL REC DAYS OF USE		1294														
NO. GOLDEN AGE PASSPORTS RECORDED		0														
TOTAL FEES PAID	$	0.														

(189 PERMITS SHOW $0.0 FEE)
(8 PERMITS SHOW ZERO PERSONS IN PARTY)
(13 PERMITS SHOW ZERO NIGHTS PAID)

LAKE OAHE

PROJECT REPORT

FROM 0 TO 901

PROJECT NO. 4 REC AREA NO. 1

VARIABLES MONITORED

PRIMARY VEHICLE	NO.	ABS PCT	REL PCT	EQUIPMENT(CAMPING)	NO.	ABS PCT	REL PCT	EQUIPMENT(NON-CAMPING)	NO.	PCT
CAR	275	24.1	38.1	TENT	191	16.7	18.3	POWERBOAT	210	18.4
TRUCK	341	29.9	47.2	POP-UP TRAILER	98	8.6	9.4	SAILBOAT	1	0.1
VAN	92	8.1	12.7	PICKUP CAMPER	154	13.5	14.8	BOAT TRAILER	221	19.4
OTHER	2	0.2	0.3	TRAVEL TRAILER	330	28.9	31.7	BICYCLE	145	12.7
4 WHEEL DR	12	1.1	1.7	MOTORHOME	274	24.0	26.3	MOTORCYCLE	32	2.8
MISSING	419			MISSING	99			ORV	0	0.
								OTHER	3	0.3

USER CHARACTERISTICS					PRIOR VISITS						PRIMARY DESTINATION					
					YES			NO			YES			NO		
					NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT
CAMPING PERMITS		1141			478	41.9	41.9	663	58.1	58.1	0	0.	0.	0	0.	0.
CAMPING PARTICIPANTS		3389														
PERSONS/GROUP,AVG.	(ABS)	2.97	(REL)	3.07												
DAYS PAID		2799														
LENGTH OF STAY/GROUP,AVG.	(ABS)	2.45	(REL)	2.54												
TOTAL REC DAYS OF USE		8438			(MISSING 0)						(MISSING 1141)					

NO. GOLDEN AGE PASSPORTS RECORDED 0

TOTAL FEES PAID $ 0.

(1141 PERMITS SHOW $0.0 FEE)
(37 PERMITS SHOW ZERO PERSONS IN PARTY)
(37 PERMITS SHOW ZERO NIGHTS PAID)

PROJECT REPORT

LAKE OUACHITA

FROM 500 TO 831

PROJECT NO. 2 REC AREA NO. 1

VARIABLES MONITORED

PRIMARY VEHICLE	NO.	ABS PCT	REL PCT	EQUIPMENT(CAMPING)	NO.	ABS PCT	REL PCT	EQUIPMENT(NON-CAMPING)	NO.	PCT
CAR	236	45.8	49.6	TENT	306	59.4	64.2	POWERBOAT	179	34.8
TRUCK	193	37.5	40.5	POP-UP TRAILER	55	10.7	11.5	SAILBOAT	7	1.4
VAN	45	8.7	9.5	PICKUP CAMPER	47	9.1	9.9	BOAT TRAILER	249	48.3
OTHER	2	0.4	0.4	TRAVEL TRAILER	57	11.1	11.9	BICYCLE	22	4.3
4 WHEEL DR	8	1.6	1.7	MOTORHOME	12	2.3	2.5	MOTORCYCLE	11	2.1
MISSING	39			MISSING	38			ORV	0	0.
								OTHER	3	0.6

A15

USER CHARACTERISTICS

CAMPING PERMITS		515			
CAMPING PARTICIPANTS		2007			
PERSONS/GROUP,AVG.	(ABS)	3.90	(REL)	4.00	
DAYS PAID		1289			
LENGTH OF STAY/GROUP,AVG.	(ABS)	2.50	(REL)	2.61	
TOTAL REC DAYS OF USE		5211			
NO. GOLDEN AGE PASSPORTS RECORDED		0			
TOTAL FEES PAID		$ 0.			

PRIOR VISITS

YES NO.	YES ABS PCT	YES REL PCT	NO NO.	NO ABS PCT	NO REL PCT	MISSING NO.	MISSING ABS PCT	MISSING REL PCT
274	53.2	53.2	241	46.8	46.8	0	0.	0.

(MISSING 0)

PRIMARY DESTINATION

YES NO.	YES ABS PCT	YES REL PCT	NO NO.	NO ABS PCT	NO REL PCT
0	0.	0.	0	0.	0.

(MISSING 515)

(515 PERMITS SHOW $0.0 FEE)
(13 FERMITS SHOW ZERO PERSONS IN PARTY)
(21 PERMITS SHOW ZERO NIGHTS PAID)

LAKE OUACHITA

PROJECT REPORT

FROM 500 TO 814

PROJECT NO. 2 REC AREA NO. 2

VARIABLES MONITORED

PRIMARY VEHICLE	NO.	ABS PCT	REL PCT	EQUIPMENT(CAMPING)	NO.	ABS PCT	REL PCT	EQUIPMENT(NON-CAMPING)	NO.	PCT
CAR	332	45.4	48.5	TENT	504	68.9	72.1	POWERBOAT	375	51.3
TRUCK	265	36.3	38.7	POP-UP TRAILER	66	9.0	9.4	SAILBOAT	24	3.3
VAN	77	10.5	11.3	PICKUP CAMPER	26	3.6	3.7	BOAT TRAILER	369	50.5
OTHER	8	1.1	1.2	TRAVEL TRAILER	70	9.6	10.0	BICYCLE	153	20.9
4 WHEEL DR	6	0.8	0.9	MOTORHOME	39	5.3	5.6	MOTORCYCLE	21	2.9
MISSING	47			MISSING	32			ORV	0	0.
								OTHER	7	1.0

A16

USER CHARACTERISTICS					PRIOR VISITS						PRIMARY DESTINATION					
					YES			NO			YES			NO		
					NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT
CAMPING PERMITS		731			418	57.2	57.2	313	42.8	42.8	0	0.	0.	0	0.	0.
CAMPING PARTICIPANTS		3164														
PERSONS/GROUP,AVG.	(ABS)	4.33	(REL)	4.39												
DAYS PAID		2164														
LENGTH OF STAY/GROUP,AVG.	(ABS)	2.96	(REL)	3.10												
TOTAL REC DAYS OF USE		9626				(MISSING	0)					(MISSING	731)			
NO. GOLDEN AGE PASSPORTS RECORDED		0														
TOTAL FEES PAID	$	0.														

(731 PERMITS SHOW $0.0 FEE)
(10 PERMITS SHOW ZERO PERSONS IN PARTY)
(32 PERMITS SHOW ZERO NIGHTS PAID)

LAKE SHELBYVILLE

PROJECT REPORT

FROM 0 TO 902

PROJECT NO. 1 REC AREA NO. 2

VARIABLES MONITORED

PRIMARY VEHICLE	NO.	ABS PCT	REL PCT	EQUIPMENT(CAMPING)	NO.	ABS PCT	REL PCT	EQUIPMENT(NON-CAMPING)	NO.	PCT
CAR	582	35.3	43.6	TENT	306	18.5	19.6	POWERBOAT	732	44.4
TRUCK	624	37.8	46.7	POP-UP TRAILER	66	4.0	4.2	SAILBOAT	0	0.
VAN	119	7.2	8.9	PICKUP CAMPER	154	9.3	9.8	BOAT TRAILER	727	44.1
OTHER	9	0.5	0.7	TRAVEL TRAILER	800	48.5	51.1	BICYCLE	795	48.2
4 WHEEL DR	2	0.1	0.1	MOTORHOME	245	14.8	15.7	MOTORCYCLE	22	1.3
MISSING	315			MISSING	85			ORV	0	0.
								OTHER	139	8.4

USER CHARACTERISTICS					PRIOR VISITS						PRIMARY DESTINATION					
					YES			NO			YES			NO		
					NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT
CAMPING PERMITS		1650														
CAMPING PARTICIPANTS		5486														
PERSONS/GROUP,AVG.	(ABS)	3.32	(REL)	3.43	1297	78.6	78.6	353	21.4	21.4	0	0.	0.	0	0.	0.
DAYS PAID		7163														
LENGTH OF STAY/GROUP,AVG.	(ABS)	4.34	(REL)	4.53												
TOTAL REC DAYS OF USE		23952				(MISSING 0)						(MISSING 1650)				

NO. GOLDEN AGE PASSPORTS RECORDED 0

TOTAL FEES PAID $ 0.

(1650 PERMITS SHOW $0.0 FEE)
(50 PERMITS SHOW ZERO PERSONS IN PARTY)
(70 PERMITS SHOW ZERO NIGHTS PAID)

SHENANGO RIVER LAKE

PROJECT REPORT

FROM 0 TO 829

PROJECT NO. 8 REC AREA NO. 1

VARIABLES MONITORED

PRIMARY VEHICLE	NO.	ABS PCT	REL PCT	EQUIPMENT(CAMPING)	NO.	ABS PCT	REL PCT	EQUIPMENT(NON-CAMPING)	NO.	PCT
CAR	1338	47.4	54.5	TENT	1054	37.4	39.4	POWERBOAT	694	24.6
TRUCK	834	29.6	34.0	POP-UP TRAILER	406	14.4	15.2	SAILBOAT	20	0.7
VAN	221	7.8	9.0	PICKUP CAMPER	277	9.8	10.4	BOAT TRAILER	584	20.7
OTHER	38	1.3	1.5	TRAVEL TRAILER	703	24.9	26.3	BICYCLE	779	27.6
4 WHEEL DR	159	5.6	6.5	MOTORHOME	260	9.2	9.7	MOTORCYCLE	84	3.0
MISSING	367			MISSING	144			ORV	0	0.
								OTHER	53	1.9

USER CHARACTERISTICS					PRIOR VISITS						PRIMARY DESTINATION					
					YES			NO			YES			NO		
					NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT
CAMPING PERMITS		2820			1625	57.6	57.6	1195	42.4	42.4	0	0.	0.	0	0.	0.
CAMPING PARTICIPANTS		1345														
PERSONS/GROUP,AVG.	(ABS)	4.02	(REL)	4.16												
DAYS PAID		7755														
LENGTH OF STAY/GROUP,AVG.	(ABS)	2.75	(REL)	3.07												
TOTAL REC DAYS OF USE		32832			(MISSING 0)						(MISSING 2820)					
NO. GOLDEN AGE PASSPORTS RECORDED		0														
TOTAL FEES PAID	$	0.														

(2820 PERMITS SHOW $0.0 FEE)
(91 PERMITS SHOW ZERO PERSONS IN PARTY)
(291 PERMITS SHOW ZERO NIGHTS PAID)

SOMERVILLE LAKE

PROJECT REPORT

FROM 500 TO 901

PROJECT NO. 13 REC AREA NO. 1

VARIABLES MONITORED

PRIMARY VEHICLE	NO.	ABS PCT	REL PCT	EQUIPMENT(CAMPING)	NO.	ABS PCT	REL PCT	EQUIPMENT(NON-CAMPING)	NO.	PCT
CAR	351	38.7	45.4	TENT	298	32.9	37.4	POWERBOAT	407	44.9
TRUCK	357	39.4	46.2	POP-UP TRAILER	59	6.5	7.4	SAILBOAT	21	2.3
VAN	55	6.1	7.1	PICKUP CAMPER	50	5.5	6.3	BOAT TRAILER	396	43.7
OTHER	6	0.7	0.8	TRAVEL TRAILER	296	32.6	37.2	BICYCLE	115	12.7
4 WHEEL DR	25	2.8	3.2	MOTORHOME	104	11.5	13.1	MOTORCYCLE	38	4.2
MISSING	134			MISSING	111			ORV	0	0.
								OTHER	8	0.9

USER CHARACTERISTICS					PRIOR VISITS						PRIMARY DESTINATION					
					YES			NO			YES			NO		
					NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT
CAMPING PERMITS		907														
CAMPING PARTICIPANTS		3418														
PERSONS/GROUP,AVG.	(ABS)	3.77	(REL)	3.90	664	73.2	73.2	243	26.8	26.8	0	0.	0.	0	0.	0.
DAYS PAID		2773														
LENGTH OF STAY/GROUP,AVG.	(ABS)	3.06	(REL)	3.16												
TOTAL REC DAYS OF USE		9052				(MISSING 0)						(MISSING 907)				

NO. GOLDEN AGE PASSPORTS RECORDED 0

TOTAL FEES PAID $ 0.

(907 PERMITS SHOW $0.0 FEE)
(30 PERMITS SHOW ZERO PERSONS IN PARTY)
(30 PERMITS SHOW ZERO NIGHTS PAID)

WEST POINT LAKE

PROJECT REPORT

FROM 515 TO 830

PROJECT NO. 9 REC AREA NO. 1

VARIABLES MONITORED

PRIMARY VEHICLE	NO.	ABS PCT	REL PCT	EQUIPMENT(CAMPING)	NO.	ABS PCT	REL PCT	EQUIPMENT(NON-CAMPING)	NO.	PCT
CAR	349	26.7	31.7	TENT	420	32.1	33.3	POWERBOAT	494	37.7
TRUCK	642	49.0	58.4	POP-UP TRAILER	146	11.2	11.6	SAILBOAT	5	0.4
VAN	104	7.9	9.5	PICKUP CAMPER	116	8.9	9.2	BOAT TRAILER	486	37.1
OTHER	1	0.1	0.1	TRAVEL TRAILER	400	30.6	31.7	BICYCLE	160	12.2
4 WHEEL DR	4	0.3	0.4	MOTORHOME	187	14.3	14.8	MOTORCYCLE	25	1.9
MISSING	209			MISSING	48			ORV	0	0.
								OTHER	5	0.4

USER CHARACTERISTICS				PRIOR VISITS						PRIMARY DESTINATION					
				YES			NO			YES			NO		
				NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT	NO.	ABS PCT	REL PCT
CAMPING PERMITS		1309		811	62.0	62.0	498	38.0	38.0	0	0.	0.	0	0.	0.
CAMPING PARTICIPANTS		4880													
PERSONS/GROUP,AVG.	(ABS)	3.73	(REL) 3.76												
DAYS PAID		3850													
LENGTH OF STAY/GROUP,AVG.	(ABS)	2.94	(REL) 2.99												
TOTAL REC DAYS OF USE		13973		(MISSING 0)						(MISSING 1309)					
NO. GOLDEN AGE PASSPORTS RECORDED		0													
TOTAL FEES PAID	$	0.													

(1309 PERMITS SHOW $0.0 FEE)
(10 PERMITS SHOW ZERO PERSONS IN PARTY)
(20 PERMITS SHOW ZERO NIGHTS PAID)

APPENDIX B: AN EXAMPLE OF THE RECREATION ANALYSIS PROGRAM (RAP) "SITE SPECIFIC DATA REPORT"

Appendix B includes a "Site Specific Data Report" from the 1980 CRS data collected at Lake Ouachita. The information is the same as that contained in the "Project Report" but it is summarized by individual campsite. Definitions and abbreviations are the same as for Appendix A.

SITE SPECIFIC DATA REPORT

PROJECT NO. 2 REC AREA NO. 2

SITE NO.	TOT DAYS OCCUPIED	NO. OF GROUPS	AVG NO. IN PARTY	TOT REC DAYS	TENT (PCT)	POP-UP (PCT)	PICK-UP (PCT)	TRAVEL TRAILER (PCT)	MOTORHOME (PCT)
0	16	5	4.2	68	80.0	0.	0.	0.	20.0
1	31	12	4.2	126	41.7	0.	0.	16.7	16.7
				(REL PCT)	55.6	0.	0.	22.2	22.2
							(3 PERMITS SHOW ZERO CAMPING EQUIPMENT)		
2	19	10	3.9	78	60.0	10.0	0.	10.0	0.
				(REL PCT)	75.0	12.5	0.	12.5	0.
							(2 PERMITS SHOW ZERO CAMPING EQUIPMENT)		
3	28	10	3.9	115	40.0	10.0	0.	20.0	10.0
				(REL PCT)	50.0	12.5	0.	25.0	12.5
							(2 PERMITS SHOW ZERO CAMPING EQUIPMENT)		
4	47	13	5.6	256	61.5	15.4	0.	23.1	0.
5	26	13	3.3	83	38.5	23.1	15.4	7.7	7.7
				(REL PCT)	41.7	25.0	16.7	8.3	8.3
							(1 PERMITS SHOW ZERO CAMPING EQUIPMENT)		
							(1 PERMITS SHOW ZERO PEOPLE)		
6	16	4	4.5	74	50.0	25.0	25.0	0.	0.
7	25	11	5.2	132	72.7	9.1	9.1	9.1	9.1
8	18	8	4.1	90	12.5	37.5	0.	25.0	25.0
							(1 PERMITS SHOW ZERO NIGHTS PAID)		
9	50	10	4.9	213	50.0	0.	10.0	10.0	20.0
				(REL PCT)	55.6	0.	11.1	11.1	22.2
							(1 PERMITS SHOW ZERO CAMPING EQUIPMENT)		
							(1 PERMITS SHOW ZERO NIGHTS PAID)		
10	22	10	4.4	102	60.0	0.	0.	0.	30.0
				(REL PCT)	66.7	0.	0.	0.	33.3
							(1 PERMITS SHOW ZERO CAMPING EQUIPMENT)		
							(1 PERMITS SHOW ZERO PEOPLE)		
							(1 PERMITS SHOW ZERO NIGHTS PAID)		
11	41	11	3.6	152	27.3	27.3	9.1	18.2	9.1
				(REL PCT)	30.0	30.0	10.0	20.0	10.0
							(1 PERMITS SHOW ZERO CAMPING EQUIPMENT)		
							(1 PERMITS SHOW ZERO NIGHTS PAID)		
12	22	12	4.1	99	75.0	16.7	0.	0.	8.
				(REL PCT)	81.8	18.2	0.	0.	0.
							(1 PERMITS SHOW ZERO CAMPING EQUIPMENT)		
							(2 PERMITS SHOW ZERO NIGHTS PAID)		
13	47	11	3.5	192	45.5	0.	0.	36.4	9.1
				(REL PCT)	50.0	0.	0.	40.0	10.0
							(1 PERMITS SHOW ZERO CAMPING EQUIPMENT)		
14	44	13	4.4	214	23.1	30.8	7.7	7.7	23.1
				(REL PCT)	25.0	33.3	8.3	8.3	25.0
							(1 PERMITS SHOW ZERO CAMPING EQUIPMENT)		

(CONTINUED.....)

SITE SPECIFIC DATA REPORT

PROJECT NO. 2 REC AREA NO. 2

SITE NO.	TOT DAYS OCCUPIED	NO. OF GROUPS	AVG NO. IN PARTY	TOT REC DAYS	TENT (PCT)	POP-UP (PCT)	PICK-UP (PCT)	TRAVEL TRAILER (PCT)	MOTORHOME (PCT)
15	24	9	4.4	75	100.0	0.	0.	0.	0.
						(1 PERMITS SHOW ZERO NIGHTS PAID)			
16	31	11	4.7	132	100.0	0.	0.	0.	0.
17	43	13	3.8	168	100.0	0.	0.	0.	0.
						(1 PERMITS SHOW ZERO NIGHTS PAID)			
18	24	9	2.3	63	100.0	0.	0.	0.	0.
19	43	16	4.3	183	87.5	0.	0.	6.3	0.
				(REL PCT)	93.3	0.	0.	6.7	0.
						(1 PERMITS SHOW ZERO CAMPING EQUIPMENT)			
20	49	17	4.4	206	58.8	23.5	0.	17.6	0.
21	51	13	3.5	197	38.5	23.1	7.7	23.1	7.7
22	45	12	4.1	285	58.3	8.3	8.3	16.7	8.3
23	3	1	2.0	6	0.	0.	100.0	0.	0.
24	4	3	1.7	11	33.3	0.	0.	0.	0.
				(REL PCT)	100.0	0.	0.	0.	0.
						(2 PERMITS SHOW ZERO CAMPING EQUIPMENT)			
						(1 PERMITS SHOW ZERO PEOPLE)			
						(1 PERMITS SHOW ZERO NIGHTS PAID)			
25	6	2	4.5	27	100.0	0.	0.	0.	0.
26	1	1	2.0	2	100.0	0.	0.	0.	0.
28	4	1	4.0	16	100.0	0.	0.	0.	0.
30	7	1	6.0	42	100.0	0.	0.	0.	0.
32	6	2	3.0	14	50.0	0.	0.	50.0	0.
33	3	1	4.0	12	100.0	0.	0.	0.	0.
34	4	1	9.0	36	100.0	0.	0.	0.	100.0
35	34	12	2.8	101	100.0	0.	0.	0.	0.
						(2 PERMITS SHOW ZERO NIGHTS PAID)			
36	36	13	3.1	119	100.0	0.	0.	0.	0.
37	36	15	3.3	133	100.0	0.	0.	0.	0.
38	46	18	3.1	139	100.0	0.	0.	0.	0.
						(1 PERMITS SHOW ZERO NIGHTS PAID)			
39	12	7	3.9	48	100.0	0.	0.	0.	0.
40	42	14	5.4	252	100.0	0.	0.	0.	0.
						(1 PERMITS SHOW ZERO NIGHTS PAID)			

(CONTINUED.....)

SITE SPECIFIC DATA REPORT

PROJECT NO. 2 REC AREA NO. 2

SITE NO.	TOT DAYS OCCUPIED	NO. OF GROUPS	AVG NO. IN PARTY	TOT REC DAYS	TENT (PCT)	POP-UP (PCT)	PICK-UP (PCT)	TRAVEL TRAILER (PCT)	MOTORHOME (PCT)
41	36	14	4.9	201	100.0	0.	0.	0.	0.
						(	1 PERMITS SHOW ZERO NIGHTS PAID)		
42	26	11	4.2	108	100.0	0.	0.	0.	0.
						(	1 PERMITS SHOW ZERO NIGHTS PAID)		
43	22	11	4.5	100	81.8	0.	0.	0.	9.1
				(REL PCT)	90.0	0.	0.	0.	10.0
						(	1 PERMITS SHOW ZERO CAMPING EQUIPMENT)		
						(	1 PERMITS SHOW ZERO NIGHTS PAID)		
44	29	11	4.5	130	36.4	18.2	9.1	18.2	18.2
				(REL PCT)	40.0	20.0	10.0	20.0	20.0
						(	1 PERMITS SHOW ZERO CAMPING EQUIPMENT)		
45	46	12	3.8	177	50.0	25.0	16.7	8.3	0.
						(	1 PERMITS SHOW ZERO NIGHTS PAID)		
46	49	15	4.9	226	60.0	20.0	6.7	0.	6.7
				(REL PCT)	69.2	23.1	7.7	0.	7.7
						(	2 PERMITS SHOW ZERO CAMPING EQUIPMENT)		
						(	2 PERMITS SHOW ZERO NIGHTS PAID)		
47	54	16	4.5	240	81.3	0.	0.	12.5	0.
				(REL PCT)	86.7	0.	0.	13.3	0.
						(	1 PERMITS SHOW ZERO CAMPING EQUIPMENT)		
48	35	12	3.8	137	83.3	16.7	0.	0.	0.
49	47	18	4.7	224	55.6	16.7	0.	27.8	0.
						(	1 PERMITS SHOW ZERO PEOPLE)		
						(	1 PERMITS SHOW ZERO NIGHTS PAID)		
50	44	14	4.9	227	64.3	14.3	7.1	7.1	0.
				(REL PCT)	69.2	15.4	7.7	7.7	0.
						(	1 PERMITS SHOW ZERO CAMPING EQUIPMENT)		
						(	1 PERMITS SHOW ZERO PEOPLE)		
						(	1 PERMITS SHOW ZERO NIGHTS PAID)		
51	45	17	3.6	159	58.8	5.9	5.9	29.4	5.9
52	31	13	4.6	125	53.8	15.4	7.7	15.4	7.7
						(	2 PERMITS SHOW ZERO NIGHTS PAID)		
53	42	16	4.6	217	68.8	0.	6.3	18.8	0.
				(REL PCT)	73.3	0.	6.7	20.0	0.
						(	1 PERMITS SHOW ZERO CAMPING EQUIPMENT)		
						(	2 PERMITS SHOW ZERO PEOPLE)		
						(	1 PERMITS SHOW ZERO NIGHTS PAID)		
54	38	13	5.4	209	69.2	7.7	7.7	15.4	0.
						(	2 PERMITS SHOW ZERO NIGHTS PAID)		

(CONTINUED.....)

SITE SPECIFIC DATA REPORT

PROJECT NO. 2 REC AREA NO. 2

SITE NO.	TOT DAYS OCCUPIED	NO. OF GROUPS	AVG NO. IN PARTY	TOT REC DAYS	TENT (PCT)	POP-UP (PCT)	PICK-UP (PCT)	TRAVEL TRAILER (PCT)	MOTORHOME (PCT)
55	40	16	3.9	162	62.5	12.5	6.3	12.5	6.3
						(	1 PERMITS SHOW ZERO PEOPLE)		
						(	2 PERMITS SHOW ZERO NIGHTS PAID)		
56	34	14	4.1	139	64.3	7.1	7.1	7.1	14.3
						(	1 PERMITS SHOW ZERO NIGHTS PAID)		
57	54	15	4.4	245	73.3	0.	13.3	0.	13.3
						(	1 PERMITS SHOW ZERO PEOPLE)		
						(	1 PERMITS SHOW ZERO NIGHTS PAID)		
58	35	10	3.3	112	50.0	0.	10.0	10.0	20.0
				(REL PCT)	55.6	0.	11.1	11.1	22.2
						(	1 PERMITS SHOW ZERO CAMPING EQUIPMENT)		
59	36	8	5.4	201	62.5	25.0	0.	12.5	0.
60	45	13	4.5	189	30.8	15.4	0.	38.5	7.7
				(REL PCT)	33.3	16.7	0.	41.7	8.3
						(	1 PERMITS SHOW ZERO CAMPING EQUIPMENT)		
						(	1 PERMITS SHOW ZERO PEOPLE)		
61	37	11	4.5	149	36.4	9.1	0.	54.5	0.
62	45	10	5.4	249	40.0	40.0	0.	0.	10.0
				(REL PCT)	44.4	44.4	0.	0.	11.1
						(	1 PERMITS SHOW ZERO CAMPING EQUIPMENT)		
63	35	12	4.7	139	58.3	8.3	8.3	0.	16.7
				(REL PCT)	70.0	10.0	10.0	0.	20.0
						(	2 PERMITS SHOW ZERO CAMPING EQUIPMENT)		
64	31	11	5.8	213	54.5	18.2	9.1	9.1	0.
				(REL PCT)	60.0	20.0	10.0	10.0	0.
						(	1 PERMITS SHOW ZERO CAMPING EQUIPMENT)		
65	50	11	4.1	165	63.6	27.3	0.	0.	0.
				(REL PCT)	70.0	30.0	0.	0.	0.
						(	1 PERMITS SHOW ZERO CAMPING EQUIPMENT)		
66	6	5	6.0	35	100.0	0.	0.	0.	0.
						(	1 PERMITS SHOW ZERO NIGHTS PAID)		
67	28	13	4.2	119	100.0	0.	0.	0.	0.
68	24	7	4.1	93	100.0	0.	0.	0.	0.
						(	1 PERMITS SHOW ZERO NIGHTS PAID)		
69	48	13	4.1	227	100.0	0.	0.	0.	0.
70	38	14	6.4	249	92.9	0.	0.	0.	7.1
71	28	10	5.4	199	64.3	0.	0.	0.	0.
				(REL PCT)	69.2	0.	0.	0.	0.
						(	1 PERMITS SHOW ZERO CAMPING EQUIPMENT)		

FROM 500 TO 814

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In accordance with letter from DAEN-RDC, DAEN-ASI dated 22 July 1977, Subject: Facsimile Catalog Cards for Laboratory Technical Publications, a facsimile catalog card in Library of Congress MARC format is reproduced below.

Development and evaluation of the campground receipt study / by Gregory L. Curtis...[et al.] (Environmental Laboratory, U.S. Army Engineer Waterways Experiment Station). -- Vicksburg, Miss. : The Station ; Springfield, Va. : available from NTIS, 1982.
59 p. in various pagings ; ill. ; 27 cm. -- (Miscellaneous paper ; R-82-2)
Cover title.
"April 1982."
Final report.
"Recreation Research Program."
"Prepared for Office, Chief of Engineers, U.S. Army."

1. Camping. 2. Recreation. 3. Recreation areas. I. Curtis, Gregory L. II. Recreation Research Program. III. United States. Army. Corps of Engineers. Office of the Chief of Engineers. IV. U.S. Army Engineer Waterways Experiment Station. Environmental Laboratory. V. Series: Miscellaneous paper (U.S. Army Engineer Waterways Experiment Station) ; R-82-2.
TA7.W34m no.R-82-2