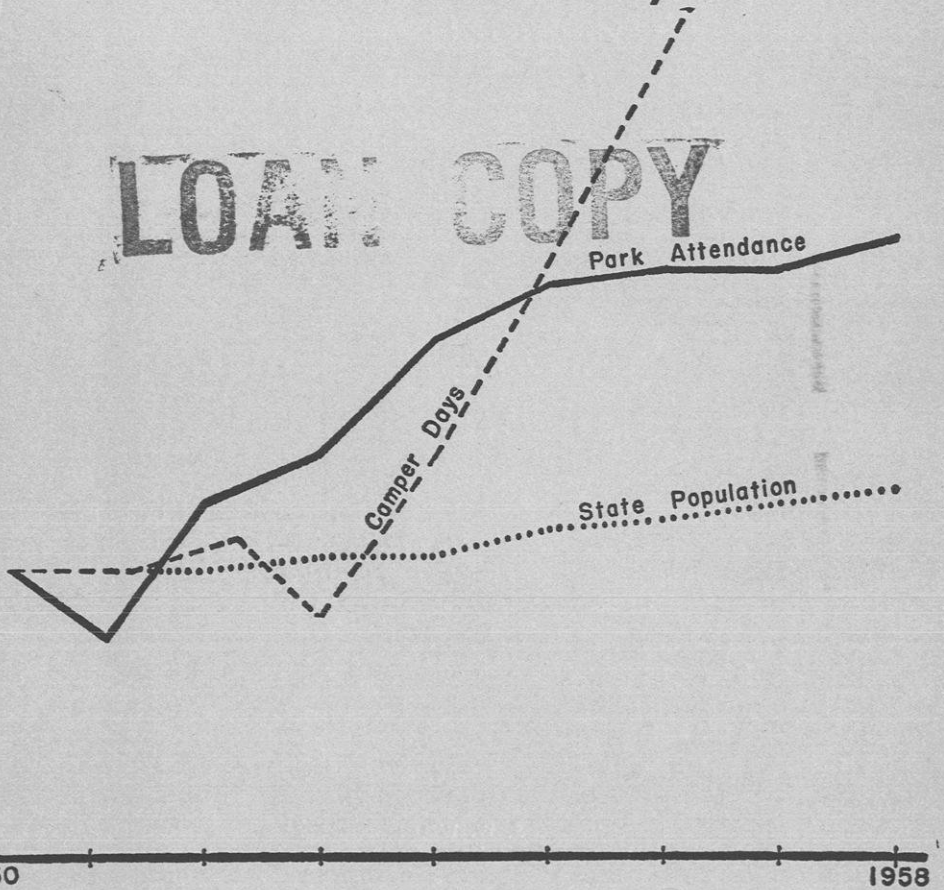
The state park visitor: a report of the Wisconsin park and forest travel study. Number 22 1961

Hutchins, H. Clifton; Trecker, Edgar W., Jr.
Madison, Wisconsin: Wisconsin Conservation Department, 1961

E STATE PARK VISITOR

A Report of the Wisconsin Park and Forest Travel Study



TECHNICAL BULLETIN NUMBER 22

WISCONSIN CONSERVATION DEPARTMENT
Madison 1, Wisconsin

1961

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THE STATE PARK VISITOR

A Report of the Wisconsin Park and Forest Travel Study

by

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A Cooperative Study by
U. S. Department of Commerce, Bureau of Public Roads
State Highway Commission of Wisconsin
University of Wisconsin
Wisconsin Conservation Commission

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ACKNOWLEDGMENTS

The authors are greatly indebted to the cooperating agencies without whose help the study could not have been conducted. Since state park visitors mostly use automobiles and since highway traffic is stimulated by adequate and attractive state parks, the Bureau of Public Roads of the U. S. Department of Commerce and the State Highway Commission of Wisconsin were very interested in the project and contributed financially and included the study on their list of highway research projects. In addition the experience of these agencies in conducting surveys proved invaluable.

As a leading research institution in the state, the University of Wisconsin is interested in studies on the recreational aspects of the state parks and forests and the socio-economic characteristics of state park and forest visitors. The University of Wisconsin released the senior author from some of his academic duties to enable him to spend considerable time on the project.

The State Conservation Commission of Wisconsin is the custodian of the state parks and forests and contributed financially to the project as well as provided manpower, and editorial, stenographic and drafting services.

In the early stages of establishing the study, D. H. Kuenzli of the State Highway Commission, Robert Paddock of the Bureau of Public Roads and John A. Beale, Robert Espeseth and Donald J. Mackie of the Wisconsin Conservation Department focused their efforts on the project and worked out the procedures and details for undertaking it.

We are also indebted to the fine efforts and industry of the interviewers who collected the data: Barry Dempsey, John Langer, Michael Mett, Jerry Miracle, Robert Raudonis, Wilson Riedesel, Gary Rieman, Lon Ruedisili, John Schaefgen, Henry Waschow, William Hoppe and Ronald Morrell. Mark Malik, of the Conservation Department, drew the graphs. Also working on the project were Sharon Rudd, Thomas A. Stein, Elizabeth Knudson and Cyril Alberga.

We are especially grateful for the excellent spirit of cooperation displayed by the 20,262 state park and forest visitors. Without their help this study could never have been conducted.

A brief popular report on the study, "Here's What You Said!", was released in 1959 by the Conservation Department.

Edited by Ruth L. Hine

CONTENTS

ABSTRACT

Since the last World War the number of visitors to the state parks of Wisconsin has increased at an accelerating rate. These large numbers of visitors have served to emphasize the inadequacies in space, facilities for serving the public and maintenance of the parks. Such conditions led to this study.

In the summer of 1958 some 20,262 motorists were interviewed between June 20 and September 2 in twenty-seven state parks and southern state forests and four northern state forest areas to get facts on which planning could be based. This number of interviews amounted to 2 per cent of the total number of cars passing over the park traffic counters during this period. Each car had a passenger load averaging 3.5 persons.

More than one-third (34%) of the state park and forest visitors stated that they had come to the area principally for sightseeing; 19 per cent reported they had come for picnicking, 17 per cent for camping and 14 per cent for swimming. Boating, nature study, fishing, cottage and resort use attracted relatively small numbers. In the northern forests the highest proportions came for cottage use and resort use (23%) and for fishing (20%), and nearly the same proportions as in the state parks (15%) for camping. Camping is the greatest attraction to out-of-state visitors.

Two-thirds of the state park visitors were Wisconsin residents and one-third nonresidents drawn mostly from states adjoining Wisconsin. The resident visitors were drawn about equally from rural counties and from the cities of the state. About one-half visited parks within fifty miles of home.

The average reported income of state park visitors was $5,551, some 15 per cent above the median family income for the United States in 1958. Two thirds of all reported incomes were in the $3,000–$9,000 range. The average reported income of northern forest visitors was nearly $1,000 higher ($6,516) than that of state park visitors.

Two-thirds of all the motorists interviewed had come because of knowing about the park from a previous visit; another 19 per cent had come on the recommendation of another person; direct advertising accounted for 8 per cent of the visitors. The "familiar place" reason was most popular among out-of-state visitors, those from the counties in which the park was located and those with incomes under $3,000.

Four out of five visitors came to the parks for one day only; 4 per cent stayed a week or longer. Generally those who stayed the longest

were the ones who reported the highest incomes. The opposite was also true: those reporting the lowest incomes stayed the shortest periods.

Half of the visitors reported no previous visit to a state park that year. The lowest income group (under $3,000) showed the highest number of previous visits which is explainable because so many of the parks primarily serve day users.

Out-of-state visitors comprised only 39 per cent of the number interviewed, yet made up nearly half (48%) of the recorded visitor-days. Conversely, the visitors from Wisconsin, comprising 61 per cent of the number interviewed, made up only 52 per cent of the aggregate visitor-days.

The pressure of visitors increased to a peak during early August, both in camping and in general use. The proportions of visitors who came for various purposes remained nearly constant for the park system throughout the season.

Scenic-historical parks, so designated because they attracted sightseers in largest numbers, were Copper Falls, Nelson Dewey, Potawatomi, Rib Mountain and Wildcat Mountain State Parks. Parks that attracted the highest proportions of campers were Peninsula, Devil's Lake, Rocky Arbor, and the Northern Highland State Forest. Fishermen were attracted in greatest numbers to the four northern forests (American Legion, Brule River, Flambeau River and Northern Highland) and to Council Grounds State Forest, Merrick and Wyalusing State Parks. Some parks such as Big Foot and Interstate served mostly out-of-state visitors. Brunet Island and Council Grounds were primarily areas which served people from the local county.

Distance of travel to the park tended to determine the type of passenger load. Cars from the greater distances brought more children which suggests that such trips became a family affair. The greatest pressure of park use came on weekends, as much on Saturday and Sunday as during the other five days of the week.

Campers were the most vocal with respect to needed improvements in the parks and forests. There was no rising incidence of complaints, however, as the season advanced, this suggesting good park maintenance.

The average expenditure reported by each of the 17,152 car parties of visitors to the state parks and southern forests was $16.38. Each of the 3,110 car parties of visitors interviewed in the northern forests had an average expenditure approximately three times as great as the park visitors.

Some 85 per cent of the northern forest visitors reported making some expenditures, compared with about half of the visitors to the state parks and southern forests. The cottage-resort users reported the highest expenditures of any visitor group. Out-of-state visitors showed a higher per capita expenditure than Wisconsin resident visitors.

Nearly one-third of all visitors interviewed favored direct payment of fees for park use either on an annual basis using a windshield sticker (17%) or on a day-use basis (13%). Other respondents offered a variety of financing suggestions.

INTRODUCTION

The state parks and forests of Wisconsin have experienced a tremendous expansion in recreational use. Conservation Department records show that since World War II, visitations to the state parks have increased 246 per cent. Camping has increased 188 per cent since 1950, the first year accurate statistics on camper-days were maintained. The graph on the front cover shows the relation between increases in visitations and camper-days and the growth in the state's population since 1950. The popularity of the state forests for recreation has similarly increased. The increasing population of Wisconsin coupled with a higher standard of living, additional disposable income, increased leisure and greater mobility, leave little doubt that this trend will continue. One estimate (Clawson, 1959c) suggests that by the year 2,000 the national demand for recreation in state parks and similar areas may be sixteen or more times greater than it is today.

New Problems

This tremendous increase in demand upon the state parks and forests to satisfy the public's need for outdoor, non-urban recreation has created problems that, for the most part, were not anticipated before the war: facilities which had been quite sufficient were suddenly found to be inadequate; structures, roads and sanitary systems constructed during the depression-inspired public works programs became worn out and obsolete; moreover, the "inexorable problem of space" described by Paul Sears (1958) has become very real in picnic and camping grounds. In several Wisconsin parks, campers seem to be using each other's tent stakes for support in sort of a symbiotic relationship. Overnight the park administrator came face to face with the multi-headed monster of inadequate facilities, too little space and insufficient funds for improving the situation.

The solution to the problem is a program of acquisition, development and administration of parks, designed to meet the present and future public needs. To implement this program requires long-range planning based on fact, not fancy. Such planning requires an understanding of the public need for outdoor, non-urban recreation and of the place of state parks and forests in the total picture; a knowledge of the design and development of appropriate recreational facilities; an inventory of suitable areas; and a knowledge of visitor characteristics together with a firm prediction of future needs.

Purposes of the Study

This study was undertaken to provide information which could be put to immediate use in overcoming present deficiencies in the Wisconsin state park system, and which would afford a firm statistical base for projecting estimates of future space requirements for non-urban recreation. No less important was the desire of the sponsors to learn something more about that "subspecies" of *Homo sapiens* that is flocking to outlying recreation places in ever greater numbers. Specifically the kinds of data sought were:

- The number, times (of week and season), duration and frequency of recreational visits to state parks and forests during the three summer months.
- The trip origins and recreational purposes of park and forest visitors.
- The income level of people who visit state parks and forests in Wisconsin for recreational purposes.
- The principal routes of travel used by recreation seekers within twenty miles of each park or forest.
- The amount and character of financial expenditures by recreation-minded visitors within twenty miles of each park or forest.
- The type of publicity or other influences that attracted people to Wisconsin parks and forests.
- The subjective opinions of visitors as to how the parks and operation of them might be improved and how better state park facilities might be financed.

Data on each of these factors are presented following a description of the Wisconsin state park and forest system, which comprised the areas of study, and an explanation of the research procedures used. Some of the detailed data such as principal routes of travel used near the parks appear only in the Appendix.

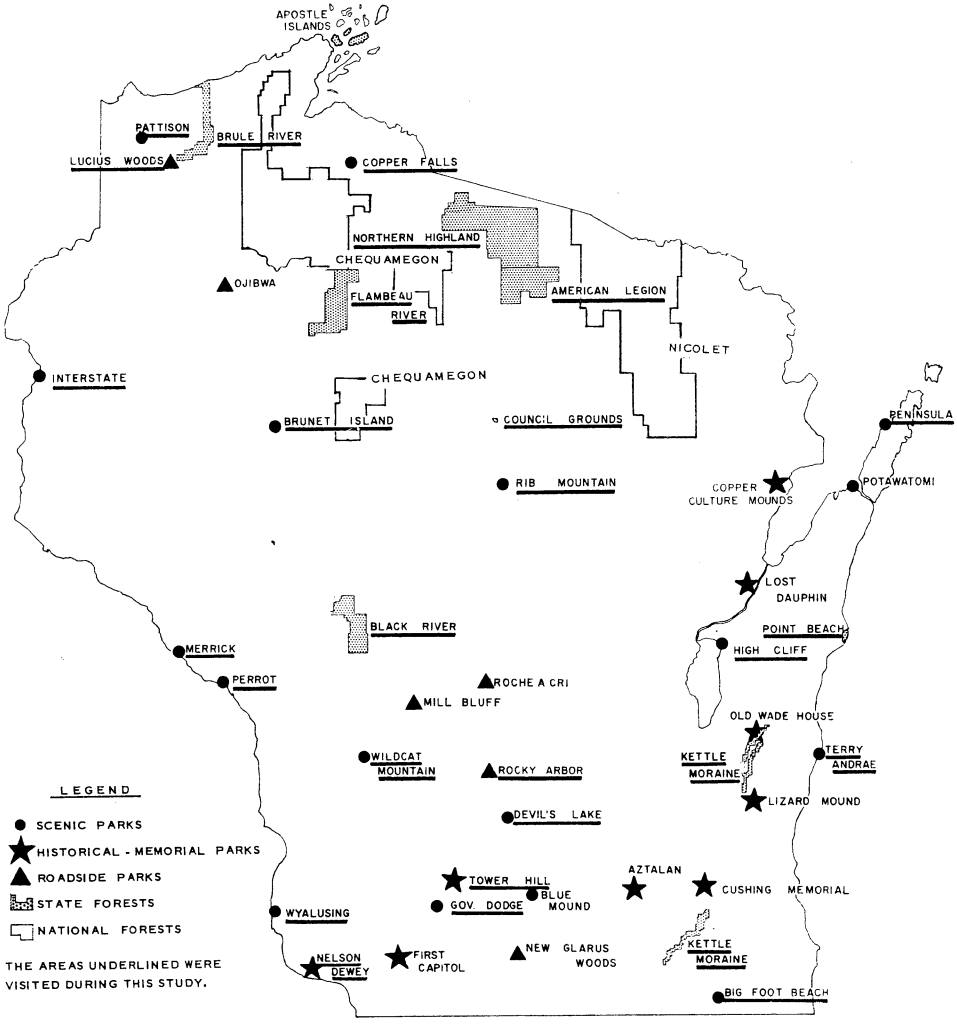

Figure 1. The state parks and forests of Wisconsin.

WISCONSIN'S STATE PARK AND FOREST SYSTEM

The State of Wisconsin, through the Conservation Department's Forests and Parks Division, administers thirty-two state park properties. These range from 2 to 3,641 acres and total 19,714 acres. Although no definite policy or set of standards has been prescribed for qualifying and classifying areas as state parks, in general these properties fall into three classifications: scenic parks, historic and memorial parks, and roadside parks. Another class of recreationally important properties is the state forests. Several state forests are managed almost exclusively for recreation. A third group of properties administered by the Conservation Department will be only mentioned here since they were not investigated in this study; these are the public hunting and fishing grounds managed by the Game Management and Fish Management Divisions. Also of great importance for recreation are the two national forests in Wisconsin, but since they are not under state jurisdiction, they were not studied.

State Parks

The scenic parks are relatively large areas of scenic interest. Each contains some distinctive feature of state-wide importance. Preserved in these parks are excellent samples of Wisconsin physiography: Lake Michigan shore line; Mississippi River bluffs; the deeply dissected, non-glaciated driftless area; highest waterfall; point of highest elevation in the state; limestone ledges and cliffs of the Niagara escarpment; and others. Although there may be gaps, samples of the more important and unusual scenic features of the Wisconsin landscape are included in the scenic parks. These parks are fairly well distributed throughout the state.

The historic and memorial parks preserve distinctive aspects of early Wisconsin history. Included are the home of the first governor, an early American inn, an ancient Indian village and the location of the first state capitol. These are relatively small in acreage and are equipped for picnicking but with few exceptions are not intended for overnight use.

Roadside parks are relatively small areas associated with well-traveled highways. They are not to be confused with waysides administered by the State Highway Commission. Although some of these parks contain interesting bits of scenery, they are relatively small in acreage and are intended for short stops: a brief rest from driving, a

picnic, or an overnight camp. The facilities at roadside parks are not as highly developed nor extensive as at the scenic parks.

State Forests

Generally, the primary management goal in the state forests is timber production. However, under the multiple-use concept, providing public recreational opportunities is becoming important in these areas. In fact, many of the restrictions and procedures established for managing state forests were inspired by a desire to protect their recreational potential. Moreover, the recreational opportunities in several state forests are so great that timber production is scarcely considered and these areas are managed like state parks. The acreage in the eight state forests is 364,839 ranging from 278 to over 127,000 acres.

Five of Wisconsin's state forests are managed primarily for timber production. They are, however, extremely important recreationally. Features contained within these areas include: portions of the state's most famous trout stream, the Brule; one of the better canoe streams, the Flambeau; a portion of the Highland Lake District in Vilas and Oneida Counties, an excellent canoe and fishing area including prime muskellunge range; a large block of old-growth hardwood hemlock forest; and several very popular deer areas. That the number of camper days on one state forest, Northern Highland, during 1958 was greater than all but two state parks attests to the value of these areas in satisfying recreational needs.

The remaining three state forests are managed principally for recreation. With the exception of hunting allowed on two properties, these areas are managed much like state parks. In fact, some of these forests may be misclassified. Two forests, located in southeastern Wisconsin, may never be important timber producers although they may satisfy some local needs in the future. Recreation will probably continue to be a primary emphasis in managing these three state forests.

PROCEDURES USED IN THIS STUDY

The procedures are discussed in greater detail than one would normally expect in a report of this nature because the experience gained in preparing for, conducting, and interpreting the results of this study may be useful in planning future research. It is doubtful that the procedures used here are the best that could be devised. Nevertheless, by

knowing what has been achieved and how, it is likely that others may improve the methods used in this field of research.

The Research Instrument

Considering the kinds of information sought, we felt that the most effective instrument for collecting data was the interview questionnaire (Appendix A). The personal interview questionnaire was selected over mail-back types because the interview affords greater control over the responses and eliminates certain sources of sample bias; the interviewer can explain any questions which are not clear and, if adequately trained, can assess the meaning of the respondent's answers. Faced with an interviewer, the respondent is psychologically forced to provide answers whether or not he is interested in the topic or thinks he has the time to spend. With the mail-back questionnaire, many who are not sufficiently interested or think they do not have sufficient time will not bother to respond. Representativeness cannot be assumed in any sample based on a mail-back questionnaire when the return is less than 100 per cent. Thus the advantages of the personal interview approach seemed to outweigh the greater cost of conducting such a survey.

There being no adequate statistical foundation or base data on park-use in Wisconsin, we felt that every reasonable effort should be made to construct one. A list of questions was developed that would provide the desired data. Since the tabulating was to be done by IBM machines the interview schedule was precoded, i.e., the questions and the most likely answers were placed on the schedule in such manner as to enable efficient transfer of the information onto punched cards for machine analysis. There was one change in the interview sequence which is not apparent on the interview schedule (Appendix A): question 36 pertaining to income level was asked after question 40 on park financing. We felt that this income question was the one which respondents would be most likely to refuse to answer. By asking it last, a refusal would not affect the other answers; and since the respondent answered this question by marking the appropriate income class on the interview schedule, it seemed a logical point to conclude the interview.

Sampling

We decided to concentrate on the Wisconsin state parks that individually attracted more than 1 per cent of the total number of vehicles entering all state parks during 1957, the year prior to the field work in the summer of 1958 (Fig. 1). We recognize that Wisconsin park

attendance records are, at best, estimates and subject to a great deal of variation. Although we recognize the inadequacies in present methods used to collect park attendance statistics, for the moment we must state that, despite the errors, these data were the best available for determining in advance a suitable sample of park visitors. Since there was no previous information concerning the degree of random variation that could be expected among state park visitors, we arbitrarily attempted to obtain a sample that was equivalent to 2 per cent of the total reported visitations to the selected parks during the summer of 1957. The data were to be collected over the entire 1958 summer season from June 20 to September 2 to further insure a representative sample and to measure variations in park use as the season progressed.

In theory, if the variants in a sample are drawn at random from the group or population being measured, that sample has the greatest chance of being representative, provided, of course, that there is no bias and the sample is of sufficient size to reduce sampling error to a reasonable minimum. A combination of all possible dates and corresponding 1957 daily traffic counts during the proposed study period for all of the selected parks could have been constructed. By any one of several methods of random sampling, a list could have been drawn which theoretically would have produced the desired number of interviews and randomly distributed the days of interviewing among the parks selected for study. However, there was a great probability that such a method would have produced a schedule impractical and uneconomical to follow because of the added time and cost of the extra travel involved.

The method finally chosen was similar to that used in a tourist study in Connecticut (Lee, 1956). To spread the interviewing equally over the study period, the data were collected in three cycles around the state. Scheduling of interviews at the various parks was arranged to obtain a number of interviews approximately equivalent to 2 per cent of the reported visitations at each park during 1957. With four exceptions each of the selected parks was sampled on a week end and during the week.[1] Parks which required three days of interviewing to obtain the desired sampling were scheduled on a week end, an early-week day and a mid-week day. Consideration of travel expenses and distances between parks dictated the sequence of visits to individual parks in each of the three cycles. Those state forests for which adequate

[1] Tower Hill State Park was sampled twice on week ends and not during the week. Lucius Woods State Park, Merrick State Park, and Perrot State Park were sampled twice on week days and not on week ends.

1957 attendance records were available[2] were fitted into the schedule on the basis of expected traffic.[3] To fill in the schedule, the remaining state parks with a reported 1957 attendance less than but near 1 per cent of the total 1957 attendance were added where convenient.

The reliability of this method can be measured somewhat by the results. The number of interviews which were obtained in twenty-seven state parks and forests for which 1957 records were maintained was 17,152. (Throughout the report this group of properties is referred to as the state parks and southern state forests or simply state parks.) The degree of sampling of individual areas ranged from 0.4 to 5.1 per cent of the traffic counts recorded during the 1958 study period.[4] The arithmetic mean was 2.0 per cent and the median was 1.6 per cent. An additional 3,110 interviews were taken in the four northern state forests. Since no attendance records (except at developed campgrounds) were maintained in these areas, the degree of sampling cannot be estimated.

The field collection of data began at Devil's Lake State Park on June 20, 1958. The first cycle was completed July 20, the second on August 15, and the third on September 2. During this period approximately 360 man-days were spent interviewing and about 30 man-days in coding. In many instances interviewers coded during slack periods in traffic. This kept the amount of time devoted solely to coding at a minimum. During the study period six state parks and southern state forests were sampled three times, fifteen were sampled twice, and six sampled once. Of the northern state forests, the Northern Highland was sampled on four days, the American Legion on three and the Brule River and the Flambeau River State Forests each on one day.

Field Collection of Data

The method used to collect the data was similar to that used by state highway departments and the United States Bureau of Public

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[2] Point Beach State Forest, Council Grounds State Forest and public recreation areas on the Kettle Moraine State Forest.

[3] No attendance figures were available for the Northern Highland, American Legion, Brule River, and Flambeau River State Forests. The basis for scheduling was a judgment from experience and all data from these properties were treated separately from those obtained at the state parks and state forests having attendance records.

[4] During the interview period (June 20–September 2) 879,754 vehicles were recorded in these twenty-seven areas. This is 60.2 per cent of their total 1958 reported attendance.

Roads in conducting origin-destination studies. It has been used in several national park visitor surveys[5] and by Connecticut (Lee, 1956) and Kansas (Harding, 1953) in obtaining information about the tourist industry in those states. This method involves the use of a team of interviewers who halt vehicular traffic at predetermined check points and obtain the desired information from vehicle occupants. Usually the driver supplies most of the answers. The team consists of three to twenty interviewers; the exact number is determined by the type of operation, the sampling procedure, and the amount of traffic.

In this study the interviewing staff consisted of a forester from the Conservation Department's Forests and Parks Division who was project supervisor and responsible for the administration of the study, and ten college students who acted as interviewers. The interviewers were divided into teams (crews) of three and four men each. A member of each crew was appointed crew chief and made responsible for the functioning of his crew.[6]

Prior to commencing field collection of data the interviewing staff was given an intensive two-day training session at Devil's Lake State Park. Personnel from the Conservation Department's Park Planning Section also attended this session in the event that they would be needed occasionally to provide additional help during the summer. This training consisted of a discussion of the project and its purposes, an explanation of the interview schedule and the coding instructions for transferring the data onto a form usable for IBM procedures. Considerable practice was given in interviewing and coding. The use and maintenance of portable traffic counters were discussed as were the procedures for establishing check-points. Part of one day was spent in a field trial; the crews set up check-points at various exits from the park and collected and coded interviews. Although interviewers did not become proficient in using the interview schedule for at least two weeks, this training period was essential to the success of the study. Not until the first cycle was completed and the staff familiar with each property, the peculiarities of the park visitors and their questions and responses, were operations smooth and the interviewers reasonably qualified.

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[5] These surveys were conducted by the National Park Service, the U. S. Bureau of Public Roads and the highway departments of the state in which the national park was located. See references for a list of these studies.

[6] See Appendix B, *Manual of Procedures*, for the exact duties of each interviewer, crew chief and the project supervisor.

Check-points in each park and southern forest studied were established at locations where traffic could be halted as it was leaving the park and after it had passed all public-use areas and points of interest (Fig. 1). They were located only on major roads; when practical, minor roads were blocked, forcing all traffic to pass through a check-point. Check-points established in the northern forests were located on paved roads traversing the forest area. They were located on county trunk highways where the major portion of the traffic consisted of persons using the area rather than passing through to another destination. The approximate locations of check-points in the northern forests were determined by contacting the forest managers and obtaining their advice on traffic patterns within the forest boundaries.

Each crew was provided with a set of park and forest maps showing the suggested locations of the check-points. Prior to the start of interviewing at each park (usually the previous day), the project supervisor or the crew chief selected the exact locations where check-points were to be established. In all instances they were located inside the park boundary where the Conservation Commission exercised jurisdiction over the road. This precluded the possibility of challenging the authority to establish a check-point.[7] Road conditions, sight distance, and natural and cultural features were considered in locating check-points in both state forests and state parks.

Warning flags, informational signs and portable traffic counters were the principal items of equipment used on the check-points. The layout for a check-point in a state park and in a state forest is shown in Appendix B. In setting up the traffic counter, the rubber hose over which the cars passed extended slightly less than halfway across the road in order that only vehicles passing through the check-point would be counted. At several properties park personnel served as flagmen on days when there was a large amount of traffic.

Originally the daily interview period was 6:00 a.m. to 9:00 p.m. As the summer progressed, the period of sunlight became shorter and necessitated an adjustment of the length of the interview period for safety purposes. In the fading light the interviewers and warning equipment were difficult to see by motorists. Although the daily length of the interview period varied, check-points were operated during the times of greatest park use and it is reasonably certain that most of the visitors on a given interview day were contacted. The one exception was Devil's Lake State Park where the influence of a beer and dance

[7] Although no serious incidents arose, the authority to halt traffic on county trunk highways in the state forests was questionable.

A checkpoint established on a busy Sunday afternoon at Pattison State Park. Five interviewers are completing questionnaires at the entrance on the main roadway after the park visitors have left all public-use areas.

hall resulted in considerable vehicular traffic after the check-points in this park were closed.

Not only did weather affect the degree of park use on a given day, but it also affected the operation of check-points and the ability to obtain interviews. Normally, the check-points were operated regardless of the weather. Interviewing ceased only because of hard rain resulting in drivers and interviewers becoming unduly wet and interview forms so damp it was difficult to write on them.

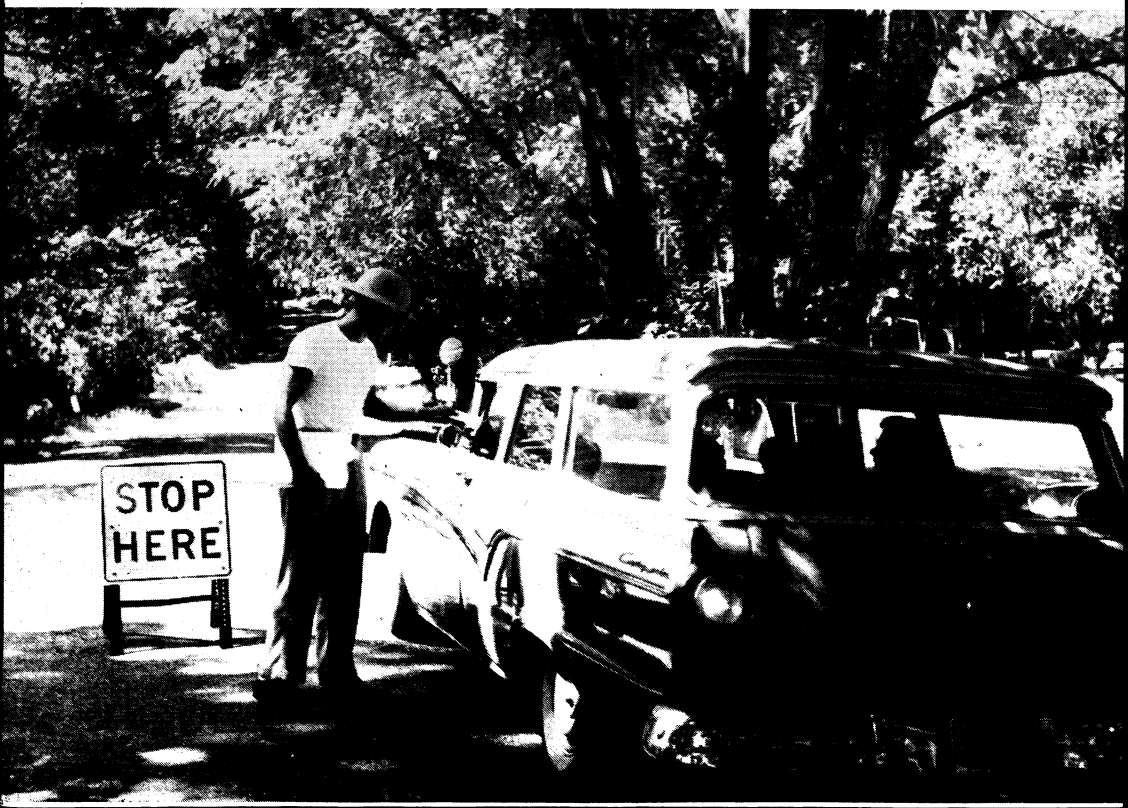
When a vehicle entered the check-point, the interviewer would halt it, briefly explain why the car was being stopped and then proceed through the interview schedule. Upon completing the interview, the interviewer would thank the driver and hand him a small card which briefly explained the project and the state park system. These cards proved extremely useful in identifying motorists who had been interviewed earlier in the day.

On days when traffic was moderate and only two or three interviewers were on duty at one time, the interviewer would move back to the next vehicle in line as an interview was completed. This moved traffic faster and prevented bad public relations resulting from men

standing about apparently doing nothing. However, on days when the volume of traffic was high and many interviewers were on duty at one time, we found it more efficient to wait until all interviews for a group of cars were completed and then move another group up to be interviewed. Under these circumstances the faster interviewers were stationed at the exit end of the check-point. Thus, as interviews were completed the vehicles could proceed without being forced to wait for a slow interview. Although interviewers were encouraged to provide park visitors with as much information as possible, during these busy periods extraneous conversation between interviewer and respondent was at a minimum.

An attempt was made to check all vehicles leaving the park during the interview period. If a vehicle had been contacted earlier in the day, a second interview was not obtained. The drivers of vehicles whose occupants were in the park (or forest) for purposes other than recreational were queried regarding the state of vehicle registration, number of persons per car and purpose of visit, and allowed to proceed. In only a very few instances when traffic volume resulted in a long back-up of vehicles at a check-point were vehicles allowed to pass through without being contacted.

A questionnaire completed, the interviewer thanks the park visitor for his cooperation and hands him a card explaining the purpose of the survey.



In almost all instances vehicles were delayed only as long as was necessary to obtain the interview. The hours of the staff were arranged to have the maximum number of interviewers on duty during the periods of peak traffic without resulting in unreasonable amounts of overtime. On the average, the length of time required to obtain an interview ranged from two to three minutes. Of course, if any explanation was necessary or if the respondent asked any questions, the interview took longer.

Public acceptance to being stopped and interviewed was very good. On several busy days it was necessary to hold cars in line as much as ten minutes for short periods, and on one day, up to fifteen minutes. A small percentage of the motorists complained to the interviewers about being forced to wait in line. However, the Conservation Department did not receive any letters objecting to being delayed. Those who were somewhat upset at being delayed probably felt, in retrospect, that the delay was not a sufficient nuisance to warrant a written complaint. We do not feel that the relatively minor public irritation at being delayed significantly affected the results of the study.

Analysis of Data

Coded interviews were sent to the Madison office once a week by railway express. The information on these interviews was punched on IBM cards at the University of Wisconsin Numerical Analysis Laboratory. Card-punching began on July 5 and all data were punched on cards and verified by mid-September.

Although several methods of tabulation could have been used to put the data in usable form, the number of interviews (one IBM card per interview) required a method involving a minimum of machine time. All available IBM machines at the University of Wisconsin, the State Highway Commission and the Conservation Department were in such great demand that none could be used on one project for any long period of time. Thus it was decided to use an IBM "650" digital computer operated by the Highway Commission as the principal machine for tabulating the data.

It may be well to interject here a few brief comments on how this machine handled the data. In our problem the "650" was used, not as a computer but as a large adding machine. A program or set of instructions on what the machine was supposed to do was developed for the problem. Interview (input) cards were fed into the machine and certain information obtained and stored on a magnetic drum. The method of storing information is similar to storing sound on magnetic

tape through the use of a tape recorder. Each input card, then, would add more information to that already stored. At specified places in the program or when all the input cards had been read by the machine, this stored information was punched into output cards. The information, or answers, contained on the output cards were printed on an IBM "407" accounting machine.

A list of comparisons between various kinds of data obtained from the interview schedule was developed (Appendix C). This list was to provide us with data that we could interpret and relate to the kinds of information sought in the study. From this list a set of programs for the "650" was developed. Due to varying complexities of the programs, the machine speed varied from 40 to 110 input cards per minute for our problem. The tabulated data were received as a series of frequency distributions. We transferred this information to previously prepared tables and computed percentages. The data were then systematically analyzed and interpreted, the results comprising the body of this report.

CHARACTERISTICS OF THE STATE PARK VISITOR

Purpose of Visit

The visitor to Wisconsin state parks and forests during the summer months comes for one or more of a variety of reasons, most of which are recreational in character. The 95 per cent of the state park visitors who reported recreational reasons for their visits in 1958 came for sightseeing (34%), picnicking (19%), camping (17%), swimming (14%), transient use of summer cottages or resorts (3%), fishing (2%), and a scattering of other purposes including golfing, hiking, nature study, research, visiting friends and just "driving through" (Fig. 2). The recreational users of the four northern state forests included substantially larger proportions of those who were attracted to cottages or resorts (27%)[8] or who came for fishing (20%) and "other" purposes (23%), and about the same proportion of campers (18%). Those who reported business purposes for their visits (5% in parks, 20% in northern forests[9]) were mostly suppliers, servicemen and park employees on their daily rounds.

[8] Within the boundaries of the northern state forests there are tracts of private land, many of which contain resorts or summer cottages. Summer cottages and resorts are found within the boundaries of only a few state parks.

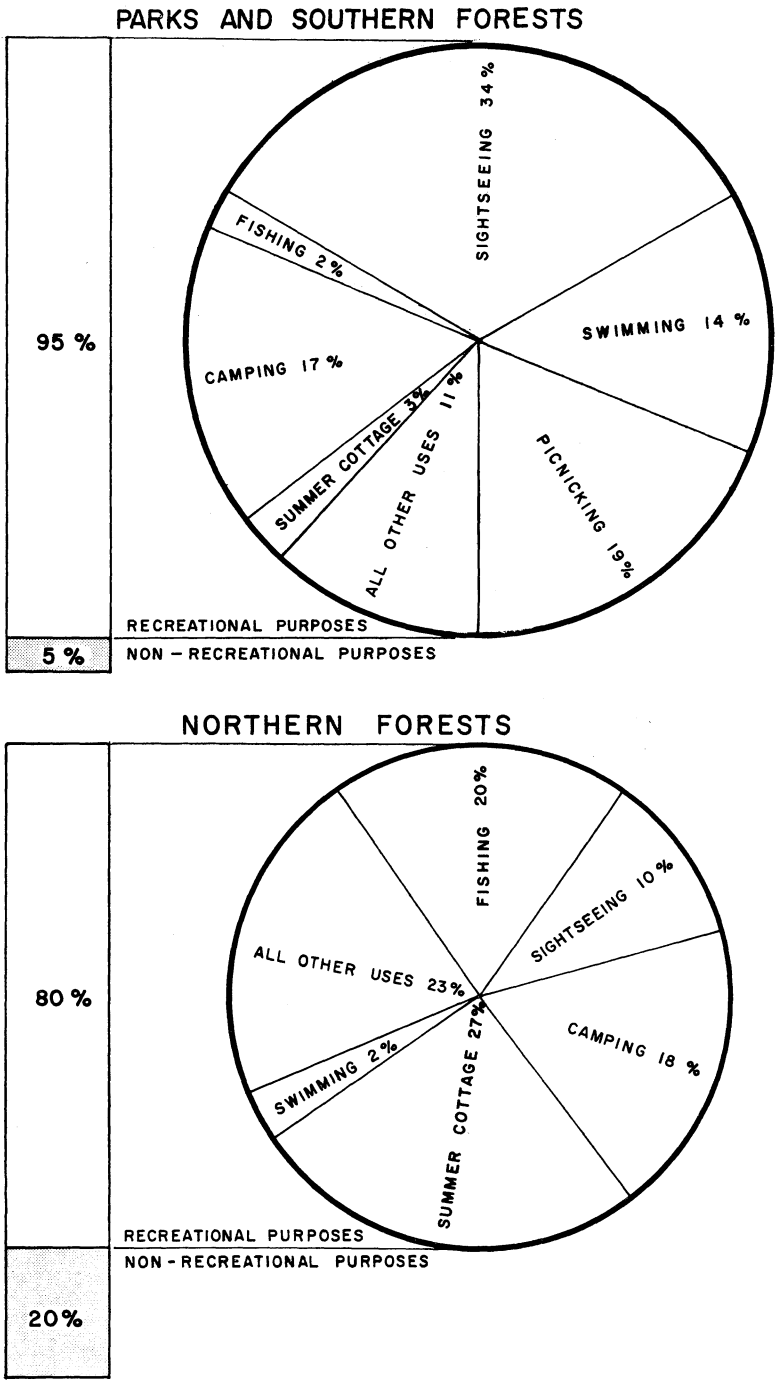


Figure 2. Purpose of visit as shown by 17,152 interviews taken in the state parks and southern Wisconsin state forests and 3,110 interviews taken in the state forests.

Wisconsin resident visitors to the state parks and forests most frequently reported going there for picnicking, sightseeing, swimming; the out-of-state visitors reported coming for boating, camping, summer cottage and resort use more frequently than for other purposes. The greatest attraction to park visitors from nearby states is camping although higher-than-average proportions of these people reported coming for fishing, boating and cottage and resort use. The northern forests attract somewhat greater proportions of the fishermen and resort users from out-of-state than from within the state.

Trip Origins

Nearly two-thirds of the summer visitors to state parks and southern forests (63%) in 1958 were Wisconsin residents and one-third (37%) were from outside the state. Within Wisconsin, the twenty-nine counties north of a line from Green Bay west approximately through Marshfield to the Mississippi River generated one-fifth (20%) of the visitor use while the forty-two counties in the southern half of the state generated four-fifths of the resident uses of state parks and forests (Fig. 3). The six standard metropolitan counties[10] (Brown, Dane, Douglas, Kenosha, Milwaukee, Racine) produced 37 per cent of the state park visitors from within Wisconsin and 33 per cent of the northern forest visitors, about half of these coming from Milwaukee County alone. The fifteen counties encompassing the largest cities in the southern half of the state produced nearly three-fifths (56%) of all state park and forest use from within the state.

It is perhaps significant that the twenty-nine northernmost counties of the state had at that time 18 per cent of the population but generated 20 per cent of the park use. The twenty-seven southern counties without major cities had 19 per cent of the population and generated 24 per cent of the number of park and forest visitors. The fifteen southern counties with major cities had 63 per cent of the population but generated only 56 per cent of the park and forest use. These findings may be attributable in part to the location of state parks and for-

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[9] The distinction is made between the twenty-seven state parks and forest recreation areas that serve a park function and the four northern state forests, Brule River, Flambeau River, American Legion and Northern Highland. The former are usually referred to here as the "parks" or "state parks" and the latter as the "northern forests." The new Black River State Forest was not established until after the study was underway and is not included.

[10] A standard metropolitan county is one which usually contains at least one city of 50,000 or more.

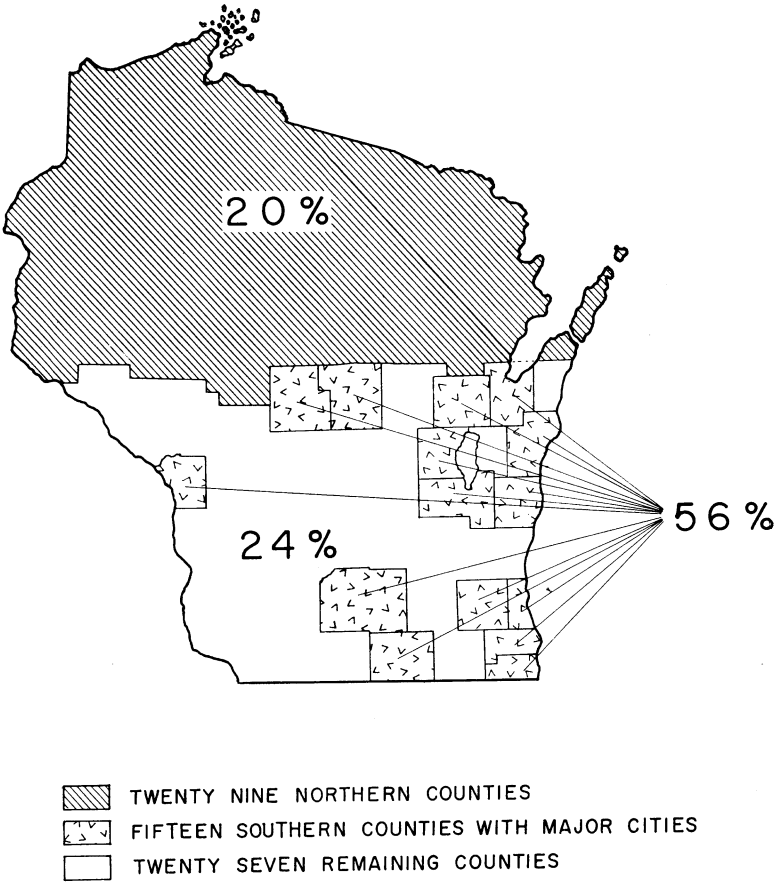
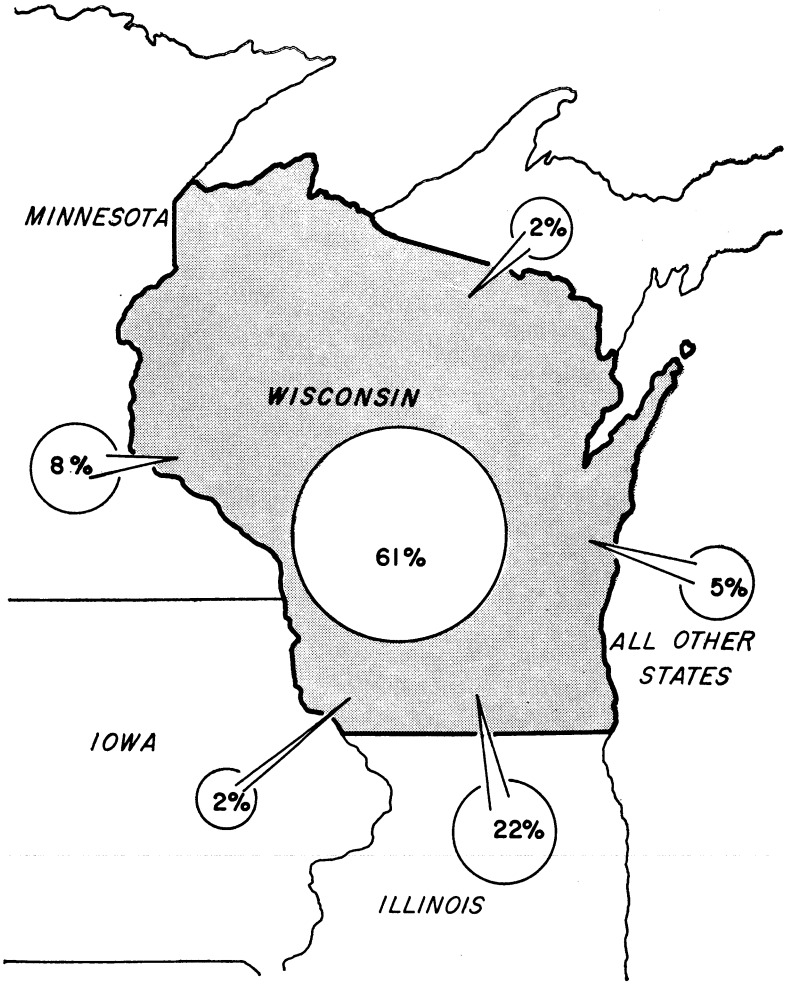


Figure 3. County distribution of trip origins of 9,833 Wisconsin residents interviewed in the state parks and southern state forests.

ests in Wisconsin; nevertheless they suggest, contrary to the beliefs of some, that people from the small towns and rural areas make as much, if not more, use of state parks as city people.

Slightly more than a third of all Wisconsin state park and forest visitors came from outside the state (39%), and they were drawn chiefly from nearby states (Fig. 4). Illinois supplied more than half (55%) of all nonresident park patrons, these going in greatest numbers to Big Foot Beach, Devil's Lake, Peninsula, Potawatomi, Rocky Arbor and Whitewater Lake State Parks. More than a fifth of all out-of-state visitors (23%) were residents of Minnesota; these visitors were



Fgure 4. Distribution of trip origins of recreational visitors in the state parks and forests. (Based on 17,882 interviews.)

found mostly at parks on or near the Minnesota border, namely, Merrick, Interstate, Pattison and Lucius Woods. Actually three out of every five motorists interviewed at Interstate Park had Minnesota licenses. Iowa and Michigan contributed relatively few visitors but still more than any of the remaining states. There was at least one motorist interviewed from each of the states except Alaska, Hawaii and New Hampshire. A few were from Canada.

Although some ranged far more widely, most of the park patrons interviewed had come less than fifty miles from their homes to a park. Of the 521 Dane County (Madison area) residents interviewed, 39 per cent were at Devil's Lake (35 miles), 16 per cent were at Tower Hill (35 miles), 11 per cent were at Rocky Arbor (55 miles), and 11 per cent were at peninsula (175 miles). Of the 1,848 Milwaukee county residents interviewed 30 per cent were found at Mauthe Lake (45 miles), 21 per cent were at Peninsula (155 miles), 15 per cent were at Terry Andrae (45 miles) and 11 per cent were at Devil's Lake (115 miles). Milwaukee County alone furnished some 58 per cent of all visitors at Mauthe Lake, 32 per cent of all visitors at Terry Andrae and 17 per cent of all at Peninsula State Park as well as more than 20 per cent of the visitors at two of the northern forests.

Reported Incomes

The typical visitor to Wisconsin state parks and northern forests reported an income somewhat above the average for all United States families (Fig. 5). The median reported income of 15,401 visitors to the several state parks was $5,551 or 15 per cent higher than the 1958 median family income of $4,827 for the United States (Gaston, 1960). Among the state park visitors, less than a sixth (16%) reported incomes under $3,000; another two-fifths (40%) were in the $3,000–$6,000 range; 28 per cent reported being in the $6,000 to $9,000 group; 9 per cent reported between $9,000 and $12,000 while the remaining 7 per cent indicated still higher incomes. The median income reported by 3,110 visitors to the four northern forests, $6,516, was nearly a thousand dollars higher than in the state parks.

Some 60 per cent of the visitors who had come to a particular park or forest recreation area for one day only reported incomes of less than $6,000; 40 per cent reported $6,000 or more. At the other extreme only 37 per cent of those staying six days or longer reported incomes of less than $6,000 while 63 per cent reported $6,000 or more. Actually the median reported income rises with length of stay from a low of $5,305 among one-day visitors to a high of $7,299 among those staying two weeks or longer. Income levels for northern forest visitors are somewhat higher and show similar relationships.

The highest median incomes were found among those occupying summer cottages or resorts: $7,730 for those in the state forests; $7,219 for those within state parks. Next highest were the campers with a median of $6,700 for those interviewed in the state parks and $6,085

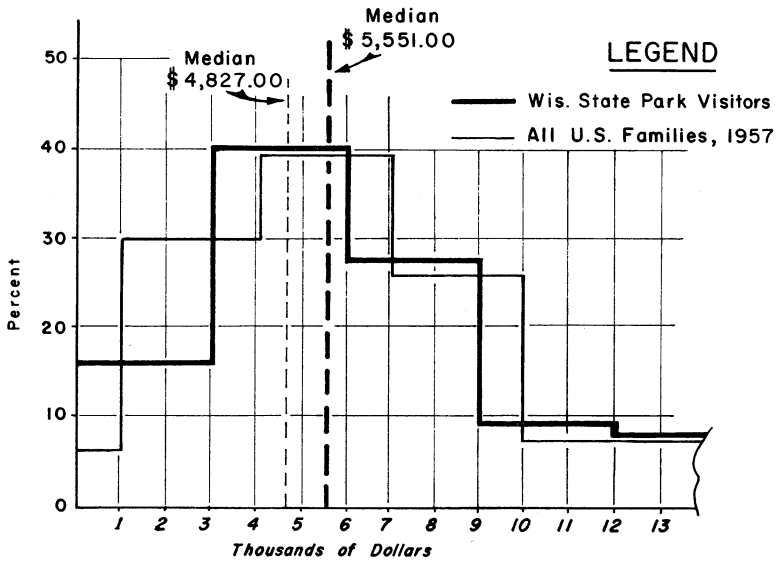


Figure 5. Comparison of annual incomes reported on 15,401 interviews taken in the state parks, and the average U. S. family incomes for 1958 as reported in the 1960 edition of the *Economic Almanac*.

for those in state forests. Sightseers in the state parks reported incomes with a median of $5,296 while those in the state forests reported a median of $6,021. Fishermen interviewed in the state parks reported a median income of $4,837 but those in the state forests had a considerably higher median income of $6,024. Manifestly there were economic differences between the people visiting in the state parks and the four northern forests.

In terms of reported income, four out of five (80%) of the motorists in the "under $3,000" class said they had come to that particular park because they had come to know it from a previous visit or visits that year. The highest proportions of those who said they had come as a result of the recommendations of another person were in the higher income groups, i.e. in the several income groups above the average. In general, the data show that visitors to the four northern forests reported higher income levels than visitors to the state parks and southern forests. Here the "familiar place" reason for coming was given in greatest proportions by visitors in the $15,000 to $21,000 income groups.

Reason for Visit to This Park

Two-thirds of all motorists interviewed in the state parks (67%) reported coming to the park as a result of knowing about it from a previous visit. In other words, it was a familiar place which they had come to like well enough to want to return. Another 19 per cent of the park and forest visitors were attracted by word of mouth advertising, i.e. by the recommendations of other persons. Direct advertising through magazines and newspapers, Wisconsin highway maps and road signs accounted for 8 per cent of the visitors. Travel agencies, correspondence with the Conservation Department, campers guides and "driving through" were the responses given by relatively few motorists. As might be expected, the "familiar place" reason was much more popular among those who visited the parks for picnicking (72%), swimming (78%), boating (78%) and fishing (74%) than for other park users. Advertising was revealed to be half again more effective in attracting campers than other park and forest users.

Among the out-of-state visitors, more than half gave the "familiar place" reason for their visits (Fig. 6). Of those from Illinois, 56 per cent reported they came because of a previous visit and 26 per cent reported learning about the park from another person. Direct advertising was at least twice as effective in attracting out-of-state visitors as it was in bringing Wisconsin residents to the state parks and forests and it was relatively more effective in the more distant states than in those states adjoining Wisconsin. The responses in the northern forests did not vary greatly from those in parks.

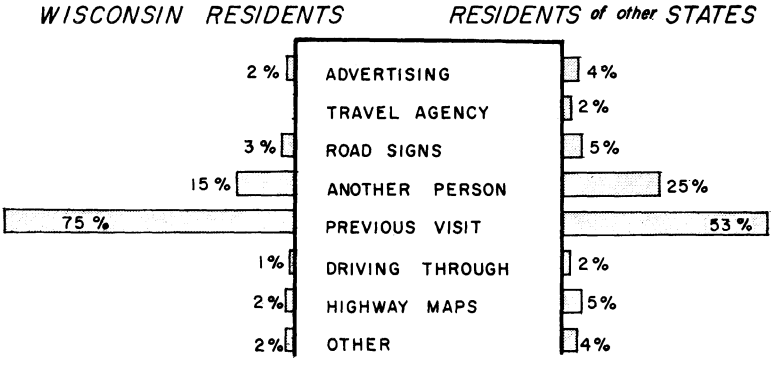


Figure 6. Comparison of the various means by which park visitors are attracted to the state parks and forests. (Based on 17,681 interviews taken in the state parks and all state forests.)

Within Wisconsin a high proportion (over 85%) of the motorists from ten counties having a major state park within their borders indicated that they had come because it was a "familiar place". On the other hand, the park visitors from four counties with major cities not close to a state park (Kenosha, Oshkosh,[11] Racine, Waukesha) responded in much the same manner as out-of-state visitors (learned of park from another person 25%; familiar place 55%, approximately) when asked how they had learned about that particular park, a fact that suggests some parts of the Wisconsin population have fewer opportunities than others as far as state parks are concerned.

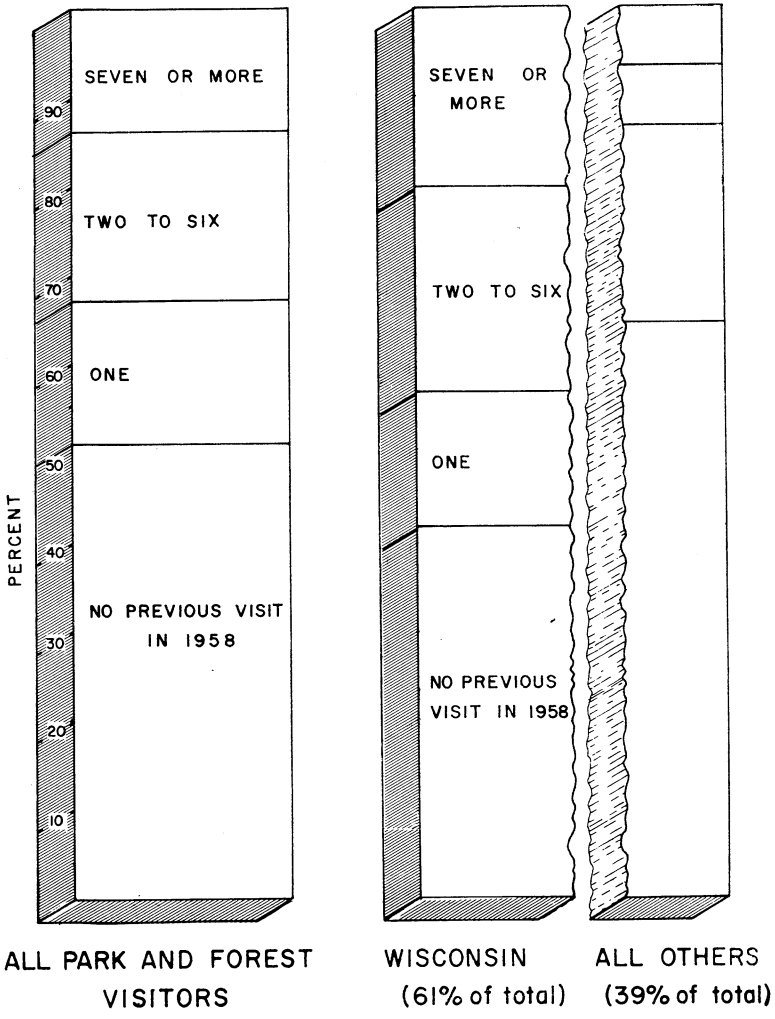
Previous Visits

More than half (51%) of the motorists interviewed in the state parks and northern forests reported having made no previous visit to any state park or forest that year (Fig. 7). Some 16 per cent reported one previous visit and 19 per cent reported two to six previous visits. Another 14 per cent reported seven or more earlier visits. The number of visitors reporting one or more previous visits rose about 10 per cent from the beginning to the end of the season. The lowest (under $3,000) income group showed by far the greatest number of previous visits during the season while one previous visit was most frequently reported among all but the highest and lowest income groups.

Motorists from Wisconsin counties containing a major state park showed only half as great a proportion with no previous visits as the motorists from counties with no state park. The proportion of visitors reporting seven or more previous visits was four times as great for the several counties with major state parks as for the other counties. In short, people make greater use of the parks when the parks are nearby. The six standard metropolitan counties in the state do not differ materially from the other counties with respect to this factor.

Among the non-resident visitors, 62 per cent of those interviewed in parks and 69 per cent of those interviewed in the northern forests reported no previous visits that year. Of the visitors from Illinois there were two reporting no previous visits for every one who reported one or more earlier visits. The same was substantially true for visitors from Indiana, Iowa and Michigan. Minnesota motorists, on the other hand, showed a larger than normal percentage with one or more previous visits, possibly because those who did visit Wisconsin state parks lived near enough to those parks to reach them often.

[11] High Cliff State Park, some thirty miles from Oshkosh, was almost completely undeveloped at the time of the study.



Figue 7. The number of previous visits to the state parks and state forests in 1958. (Based on 17,882 interviews taken in the state parks and all state forests.)

THE RECREATIONAL IMPACT ON THE STATE PARKS AND FORESTS

The busy season, from the standpoint of recreational use in the state parks and forests, begins about mid-June and extends to Labor Day. There is evidence, subject to sampling errors, that the pressure of numbers continues to increase well into August before the rate of increase begins to decline. The data corresponds quite closely with the daily variation of motor vehicle traffic throughout the state as shown by studies of the State Highway Commission (Fig. 8). (After Labor Day there is a sharp decrease in state park and forest visitors according to the monthly figures submitted by the park managers.) Only 44 per cent of the visitors during the entire period from June 20 to September 2 (the dates of the survey) had been counted before July 27, the beginning of the second half of the interviewing period; 56 per cent came thereafter.

As part of the study, respondents were requested to provide information pertaining to the highways they used to reach the park where they were contacted. They were asked only about the highways traveled in the last 20 miles to their destination. No attempt has been made to analyze these data in the body of the report. Appendix D shows the proportionate use of highways within 20 miles of each state park and southern Wisconsin state forest. The relation of the state trunk system to the state parks and forests is presented in Figure 12.

Despite the fact that out-of-state visitors constituted only 39 per cent of the number of motorists interviewed, they made up almost half (47.5%) of the total recreational impact upon the state parks (number of visitors times length of stay in days). Wisconsin residents constituted 61 per cent of the number of visitors to state parks but accounted for only slightly more than half (52.5%) of the aggregate use in terms of visitor-days (Table 1). The data on aggregate days of recreational use of the four northern forests differ only in small degree: the Wisconsin residents contributed 54 per cent of the visitor impact, compared to 46 per cent for nonresidents in spite of the fact that 68 per cent of the visitors were Wisconsin residents.

The data reveal no great changes as the season advanced in proportions of visitors who came for sightseeing, picnicking or camping. As with total visits camping increases slowly to a high point in the first half of August, then drops off rather sharply.

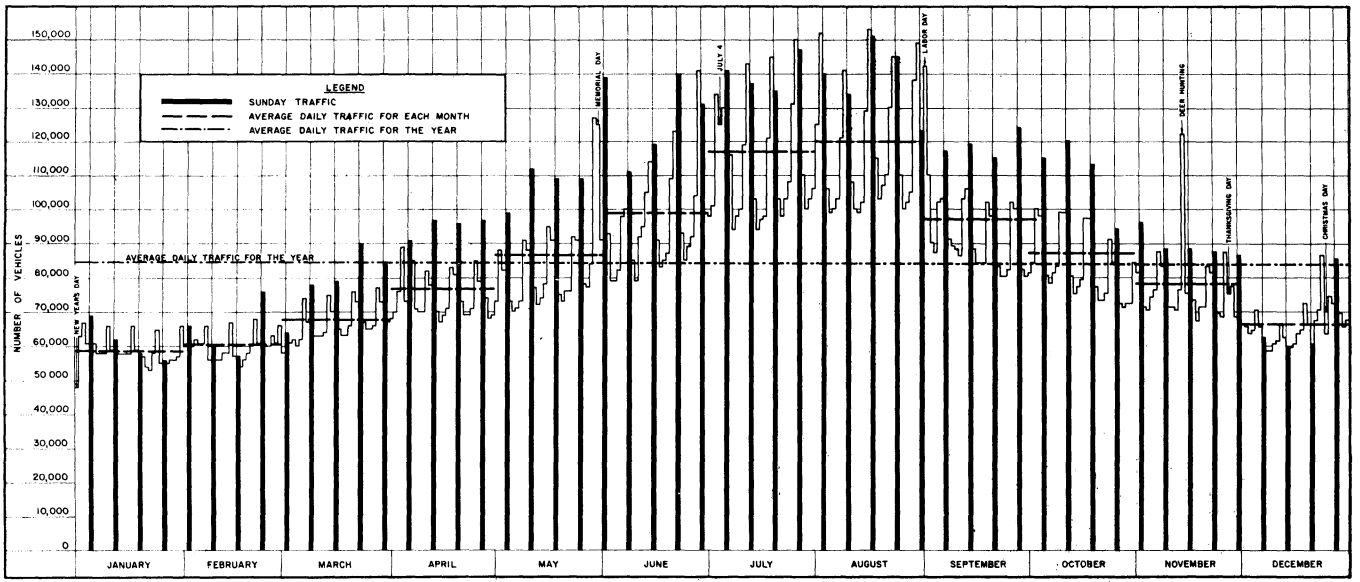


Figure 8. Traffic volumes by days, 1958. (Composite for 18 permanent recorder stations located on the rural state trunk highway system.)

TABLE 1

Aggregate Days of State Park Use by Wisconsin Residents and Nonresidents
(Based on 16,004 interviews taken in the state parks and southern Wisconsin state forests)

Duration of Stay (In Days)	Wisconsin Car Parties*			Out-of-State Car Parties			All Car Parties
	No.	Per Cent	Aggreg. Days	No.	Per Cent	Aggreg. Days	Aggregate Days
1	8,553	87.5	8,553	4,449	71.4	4,449	13,002
2	465	4.8	930	673	10.8	1,346	2,276
3	254	2.5	762	306	4.9	918	1,680
4	115	1.2	460	201	3.2	804	1,264
5	72	0.7	360	133	2.1	665	1,025
6	55	0.6	330	84	1.3	504	834
7–13 (x10)	186	1.9	1,860	266	4.2	2,660	4,520
14 plus (x15)	78	0.8	1,170	114	1.9	1,710	2,880
Totals	9,778	100.0	14,425	6,226	100.0	13,056	27,481
Per Cent	61.0		52.5	39.0		47.5	100.0

*Since each car party represents 3.5 persons, on the average, the figures for "aggregate days" are inexact but do reveal the same proportions as with a constant multiplier.

Uses of the Parks

Certain of the state parks, i.e., those where half or more of the motorists interviewed gave their principal purpose as sightseeing, can be considered to be primarily scenic or historical parks; these are Copper Falls, Nelson Dewey, Potawatomi, Rib Mountain and Wildcat Mountain (Appendix E, Table 1). Some other parks at which a major segment of the visitors reported picnicking or swimming as their principal purpose, appear to be primarily intensive-use areas serving a local or metropolitan park function; these are Big Foot Beach, High Cliff, Mauthe Lake, Pattison, Terry Andrae and Tower Hill.

The most popular park and forest areas for the family camping fraternity were Peninsula, Devil's Lake, and Rocky Arbor State Parks plus Northern Highland State Forest. Fishing was a major attraction at the four northern forests and at Council Grounds State Forest, Merrick, and Wyalusing State Parks. Summer cottage and resort users were found most frequently in the northern forests, rarely in the parks except for a few at Devil's Lake, Merrick and Lucius Woods. Boating, hiking, and nature study do not appear to be primary purposes for

significant numbers of visitors to any of the state parks or forests. The remaining parks appear to serve the usual diversified functions of a state park.

Generally speaking, people go to the state parks in preference to the northern forests for sightseeing (34% *vs.* 8%) and for picnicking (19% *vs.* 1%). They go to the northern forests in preference to the parks for fishing (16% *vs.* 2%) and for summer cottages and resorts (22% *vs.* 3%). Campers appear to go in nearly equal proportions to the state parks (17%) and to the northern forests (15%).

Certain of the parks appear to serve primarily local populations. Two areas (Brunet Island, Council Grounds) had more than 50 per cent of their patronage from the county in which the park is located; nine others had a higher proportion of visitors from the home county than the average of 23 per cent for all state parks and southern forests. Seven areas including Northern Highland and Flambeau River State Forests attracted less than 10 per cent of their visitors from the local county. Seven state park areas and Northern Highland State Forest drew more than 40 per cent of all their visitors from beyond the boundaries of Wisconsin, four of these parks (Big Foot, Interstate, Pattison, Merrick) being on or near the boundaries of adjoining states and the other three (Devil's Lake, Rocky Arbor, Peninsula) well away from adjoining states. Two areas, Mauthe Lake and Terry Andrae, drew substantial proportions (58% and 32%) of their visitors from Milwaukee County (Appendix E, Table 2).

Length of Stay

Four out of every five motorists (80%) interviewed in state parks reported having been in the park one day or less (Appendix E, Table 3). The comparable proportions among visitors to the northern forests was little more than half as great, 43 per cent, suggesting that people tend to stay longer in the forest environment than in the more highly developed parks. Out-of-state visitors stay longer in the parks and forests than Wisconsin residents, more than twice as high a proportion staying two days or longer than did Wisconsin (or Minnesota) residents. Of the state park and southern forest visitors, 19 per cent stayed two days or longer; 4 per cent remained for a week or more.[12] In the

[12] In order to distinguish clearly between the day visitors (those who were interviewed leaving the park on the same day they came) from those who stayed one or more nights, it was necessary to classify the over-night visitor as having stayed two days even though he might have been within the park boundaries less than twenty-four hours.

northern forests which have many resorts within their borders, 55 per cent of the visitors reported having stayed two days or longer and 15 per cent had been there for a week or more.

All of the major state parks and southern forests showed a high incidence of one-day use, most of them being in the 80–98 per cent range with Devil's Lake and Peninsula State Parks the only ones as low as 67 per cent and 63 per cent day use respectively. The northern forests except Brule River (near the city of Superior) had more than half of their visitors staying two days or longer.

As might be anticipated, there was a higher proportion of day-uses by the populations of counties having a state park or forest within their borders or which are immediately adjacent to one. More than 97 per cent of the park users from Chippewa, Douglas and Marathon Counties who were interviewed said they had been in the park one day or less; the proportions from a dozen other counties were nearly as high. On the other side of the picture there were appreciably lower proportions of one-day visits (from 59 per cent in Kenosha County to 75 per cent in Milwaukee County) from residents of counties in the heavily urbanized southeastern corner of Wisconsin where there are few state parks or forests within easy driving distance. Except for Milwaukee County, the only counties from which 100 or more motorists were interviewed in the four northern forests were Marathon, Oneida and Vilas, a fact which re-emphasizes proximity as an element in the use of recreation areas.

Weekly Pattern of Visits

During the summer months, visitors flock to the state parks and forests on week ends—as many on Saturdays and Sundays together as during the other five days of the week.[13] Next most popular were the Wednesdays, Tuesdays and Mondays, in that order, then the Fridays with about two-thirds as much and Thursdays in last place. Stated another way, the visitor load is four times as great on Saturdays as on Thursdays and roughly twice as great on either Saturday or Sunday as on Monday, Tuesday, or Wednesday. Generally speaking the greatest proportions of visitors interviewed on week ends were from out-of-

[13] These data are corrected to the equivalent of full days of interviewing since the crews did not work a full day at each park or forest each visit. The data give the day of ending the visit to the park but since four-fifths of all motorists interviewed made one-day visits to the parks, the inadequacies with respect to identification of all the days covered by the visit is not considered to be great.

state or were from Wisconsin cities while the visitors interviewed at midweek were from Wisconsin small towns and rural areas.

Some 47 per cent of the visitors who reported coming to the parks for sightseeing came on Sunday (26%) or on Saturday (21%) while an equally high proportion of picnickers came on Sunday alone (Fig. 9). Saturday is unquestionably the most popular day for other day uses. Even the campers and cottage and resort users were interviewed in largest numbers on Saturday, presumably after staying over one or more nights.

The average passenger load of the 20,262 vehicles checked was 3.5 persons. The most frequently occurring load in both the parks and the northern forests was two adults. One adult alone was found next most frequently but this finding should be discounted since these data include all business as well as recreational visitors to the parks and forests (Appendix E, Table 4). Two adults—two children combinations, with nearly as many, was followed by two adults—three children, then two adults—one child. Parties visiting the northern forests showed no great variations from this pattern.

The typical passenger loads vary among groups that visit the parks and forests for different recreational purposes. In all instances, however, except camping in state parks, the two adults—no children pattern was most frequently found. The sightseers were generally adults, while the picnickers more frequently brought along two, three, or four children. Nearly half of the camping parties included children while well over half of the fishing parties included no children. One adult—one child combinations were encountered in a somewhat surprising number of cases. The forests attracted a higher proportion of cars with only adults than the parks.

Car parties from counties which are farthest from state park areas seem to include children more frequently than those from counties near to parks and forests. Kenosha and Racine Counties showed 41 per cent and 39 per cent respectively of all cars with two adults and one to four children while Douglas County, with several park areas nearby, had only 19 per cent with this type of passenger load. For comparative purposes similar calculations were made for three counties which have small cities as well as a state park within their borders, Grant, Marathon and Polk. In these instances the percentages of cars with two adults and one to four children were 23 per cent, 26 per cent and 24 per cent respectively, which suggests that visits to the distant parks are more of a "family occasion" than the casual visit to a nearby recreation area.

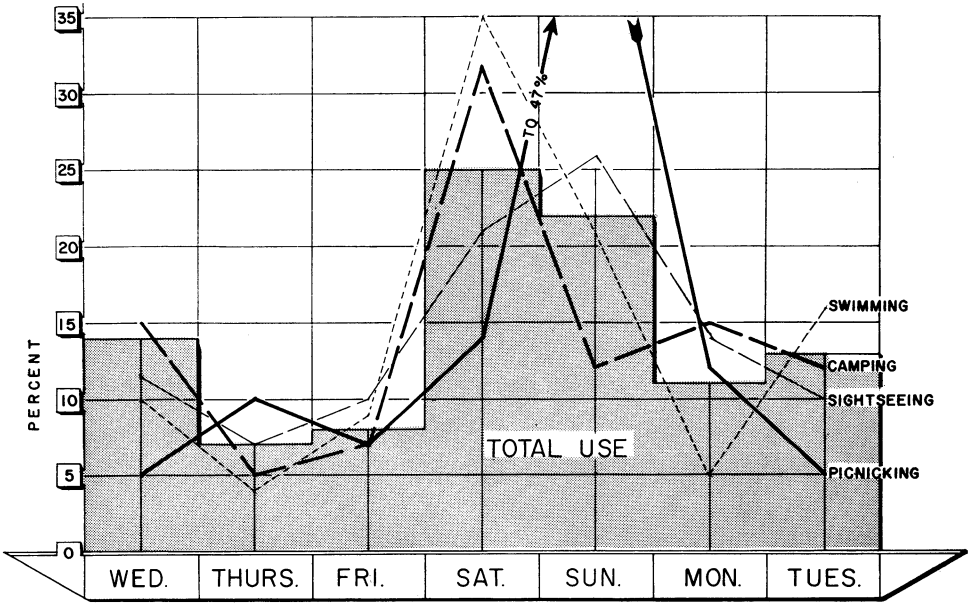


Figure 9. Daily variation in the degree of recreational use received by the state parks. Gray bar chart depicts the average daily use during the interview period for all uses. The four lines show the average daily use for the four principal recreational uses.

Complaints and Suggested Improvements

More than half (60%) of all the visitors to the parks and forests had no improvements to suggest in response to a direct question. Since four out of five of these visitors had been in the park or forest for a day or less when interviewed, it appears that many of them had little opportunity to be critical or they just accepted what they found. Nor is there any apparent distinction by income levels in the number of suggested improvements. Those who came for camping were most vocal with regard to needed improvements.

A charting of the percentages of those making suggestions for improvements on successive interview days shows that criticisms and suggestions tend to increase with the pressure of visitors, just as might be expected (Fig. 10). There were high points of criticism both in mid-July and in mid-August but there was no evidence, for the park system as a whole, of a cumulative increase in complaints and suggestions such as might indicate that the maintenance staffs were not able to

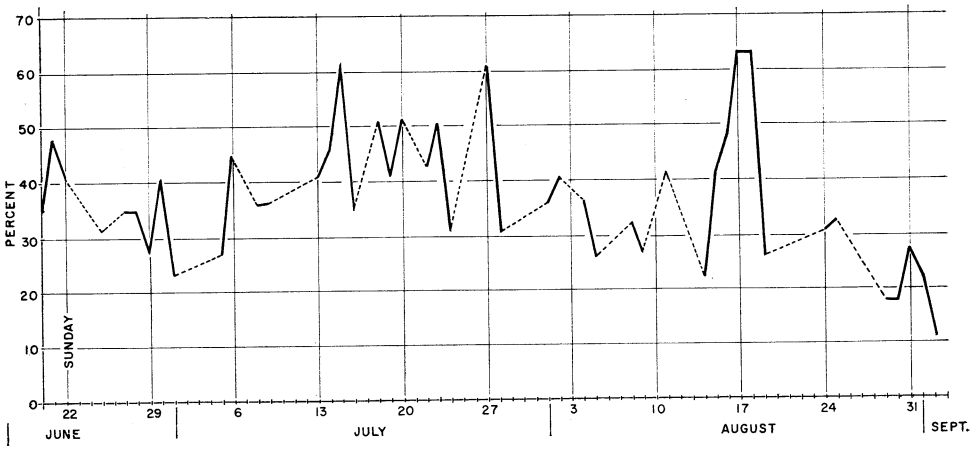


Figure 10. Daily variation in complaints of all types received in the state parks and southern Wisconsin state forests. (Dotted lines indicate periods when interviewing was not conducted in these types of properties.)

cope with the pressure of visitors; they "rolled with the punches", so to speak, then snapped back quickly when the pressure was relieved.

The complaints with regard to inadequate roads and parking areas were most pronounced among one-day visitors to the parks and forests who were Wisconsin residents, particularly at Big Foot Beach, Interstate, Terry Andrae and Nelson Dewey State parks on Saturday and Sundays (all parks with a high proportion of out-of-state use). For some reason, the highest proportion of complaints relative to this deficiency came from persons reporting the lowest incomes. The inadequacies of toilets were pointed out most frequently by the campers, particularly the short-term campers from outside Wisconsin and those who had made one or more previous visits. These complaints were most frequent at Big Foot Beach, Rocky Arbor and Council Grounds and, again, on Saturdays and Sundays.

The complaints with regard to the insufficiency of picnic tables and fireplaces came most often from urban Wisconsin residents making Sunday visits to Rocky Arbor, Mauthe Lake and Big Foot Beach, also to Council Grounds, Terry Andrae and Point Beach. The complaints regarding campsites came largely from urban Wisconsin residents who had stayed two to five days; they were heaviest on Saturdays, Sundays and Mondays and among those in the middle income groups ($3,000 up to $12,000), particularly among those who had made one or more previous visits to the park or forest that year.

The comments on inadequacies in the supplies of drinking water were heard in substantial numbers only at Nelson Dewey and Wildcat Mountain State Parks, but fairly consistently also at other areas among those who had been in the park or forests for two days or more. "Too crowded" was a comment heard most frequently at Big Foot Beach, Mauthe Lake and Rocky Arbor, particularly on Sundays and from urban Wisconsin residents. The relatively few protests about poor maintenance came mostly from the long-term visitors. Other improvements suggested by the motorists interviewed were "beach improvements" said in several different ways; better shower and laundry facilities, presumably for campers; marked trails; separated campsites; pest control and a scattering of others. Table 2 shows a breakdown of complaints in the state parks and southern state forests.

TABLE 2

Analysis of Responses to the Question, "What is There About This Park That You Feel is Most in Need of Improvements?" (Based on 16,152 interviews taken in the state parks and southern Wisconsin forests)

Complaint	Number of Responses	Per Cent
General park maintenance	1,302	18.7
Roads, parking and trails	1,298	17.9
Beaches	850	11.7
Toilets	733	10.1
Picnic areas	729	10.0
Campsites	684	9.4
Crowded conditions	424	5.8
Drinking water	328	4.5
Boat ramps	127	1.7
Police protection	81	1.1
Lack of natural areas	55	0.8
Miscellaneous complaints	602	8.3
Total	7.273*	100.0

*Of the total 16,152, over 55% or 8,879 respondents did not express an opinion.

Most notable, perhaps, among the facts brought out, were the evidences of crowding and overtaxing of otherwise adequate facilities on the week ends; the greater number of adverse criticisms and suggestions from those who had been in the parks or forests for two days or more; the clustering of several types of complaints at several of the parks with heavy visitor impact, particularly Big Foot Beach, Council Grounds, Mauthe Lake, Rocky Arbor and Terry Andrae; the greater

number of complaints from among the urban residents of Wisconsin than from among rural visitors or non-residents; the greater number of complaints from those who reported previous visits to the parks that year; and the absence of comment or complaint from three of every five motorists interviewed.

ECONOMIC FACTORS IN STATE PARK USE

The economics of state parks involves both input and output. Park and forest visitors spend money which appreciably affects the economy of the region. But recreation places cost money if they are to be made and kept sufficiently attractive to bring visitors to the region.

Amount and Kind of Expenditures

Half of all respondents in state parks (49%) reported some expenditures for food and drink, one-third (33%) for car expenses and one-fifth (20%) for lodging. In the northern forests, 80 per cent of the visitors interviewed had spent something for food and drink, 73 per cent had spent some money on their car and 57 per cent reported having spent something for lodging.

The average reported expenditure of the 17,152 car parties of visitors to the state parks, made within 20 miles of the checkpoint, was $16.38. This figure includes nearly half of the number of motorists interviewed (49%) who reported spending nothing within the 20-mile range. Of this total reported expenditure, some 17 per cent went for lodging, 41 per cent was expended for food and drink, 14 per cent was for car expenses and the remaining 28 per cent was spent for other items such as rental of boats, golfing fees and the like.

Visitors to the four northern state forests reported spending about three times as much, on the average, as visitors to the state parks, probably because of the greater distances involved for most people and the typically longer stay. The percentages of expenditure reported by 3,110 carloads of visitors to the northern forests corresponded closely to those of state park visitors for food and drink and for car expenses but were nearly 50 per cent higher for lodging and almost 25 per cent lower for "other" expenditures. These data are shown graphically in Figure 11.

Important as they are to some, these data can only be considered as approximations of the truth for two principal reasons, both procedural in nature: one, because they are based on the recollections of the mo-

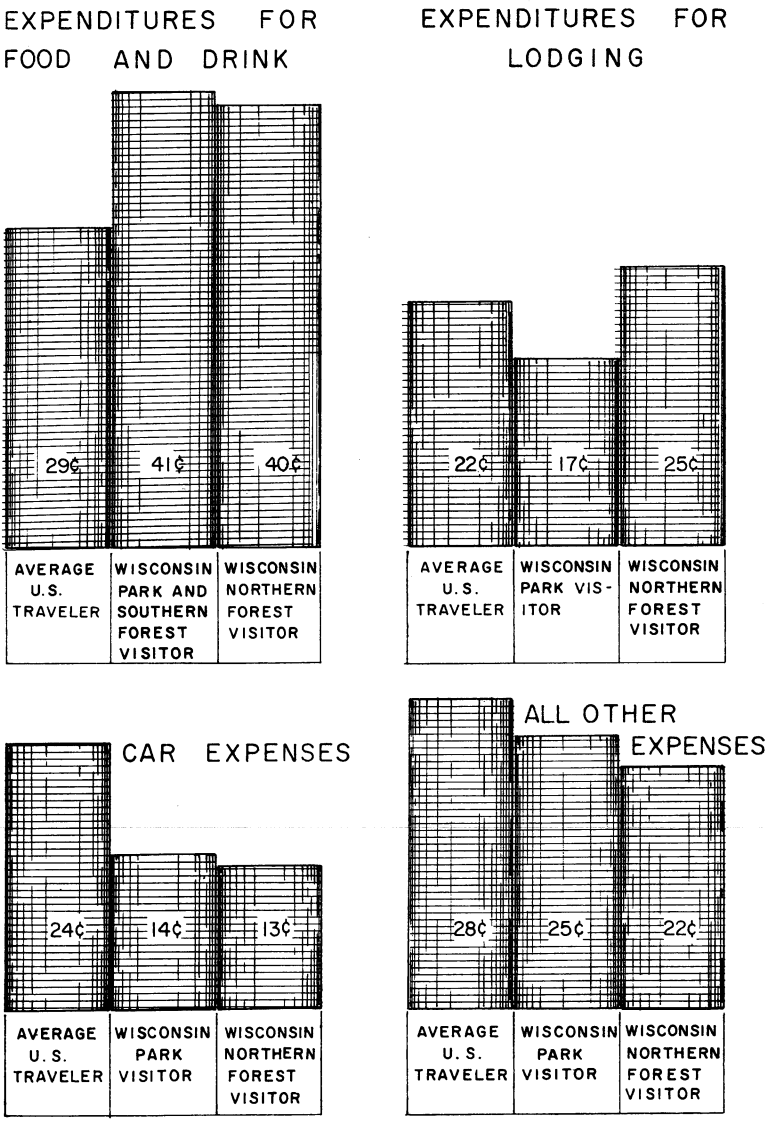


Figure 11. Comparison of the state park visitor and the northern state forest visitor regarding expenditures within a 20-mile radius of the property in which the interview was taken. (Based on 3,110 interviews taken in the northern state forests and 17,153 taken in the state parks and southern Wisconsin state forests.)

torist both as to how much he and his party had spent and where they had spent it; and two, because the class intervals chosen for tabulating the data were so large as to distort the true averages in some degree.[14]

Some 55 per cent of the visitors to the state parks and southern state forests reported making expenditures within 20 miles of the checkpoint while 85 per cent of the northern state forest visitors reported such expenditures. The highest proportions of these spenders were found at Peninsula, Devil's Lake, Copper Falls and Big Foot Beach State Parks, also at Northern Highland State Forest. Except for Copper Falls these are all areas which attract large proportions of out-of-state visitors. In most instances these same parks and one state forest are highest in each category of expenditure. At the other extreme, several parks, identified earlier as being among those having a primarily local clientele, show the least proportions reporting any expenditures; these are Brunet Island, Nelson Dewey, Tower Hill and Wildcat Mountain State Parks. There appear to be no significant variations in expenditures among car parties of different age and family composition.

Sources of Major Expenditures

As would be expected, there were wide variations in expenditures of visitors coming to the parks and northern forests for different purposes. Three out of five (61%) of the picnic parties reported having made no expenditures within 20 miles of the park. At the other extreme—again, as would be expected—the summer cottage-resort users reported nearly four times the average expenditure per car party. Both of these generalizations also characterize the expenditures for lodging, for food and drink and for car expenses. In the northern forests the cottage and resort users spent the most for lodging, campers the least; the cottage and resort users likewise spent the most for food and drink and for car expenses, sightseers the least.

Stated somewhat differently (see Table 3) the largest proportions of the park sightseers and picnickers reported having spent nothing near the park. Nearly half of those who came for swimming or for boating reported spending nothing and as many more spent less than $50. Nearly two-thirds (64%) of the campers reported having spent from $1 to $50 near the park. Some 40 per cent of the summer cottage and resort users and 16 per cent of the fishing parties reported having spent more than $100.

[14] The reported figure of $16.38 is based on a 10 per cent hand tabulation of the 20,262 interview schedules using an interval of $5.00. This was done as a check on the representativeness of the computer tabulations with $20.00 intervals.

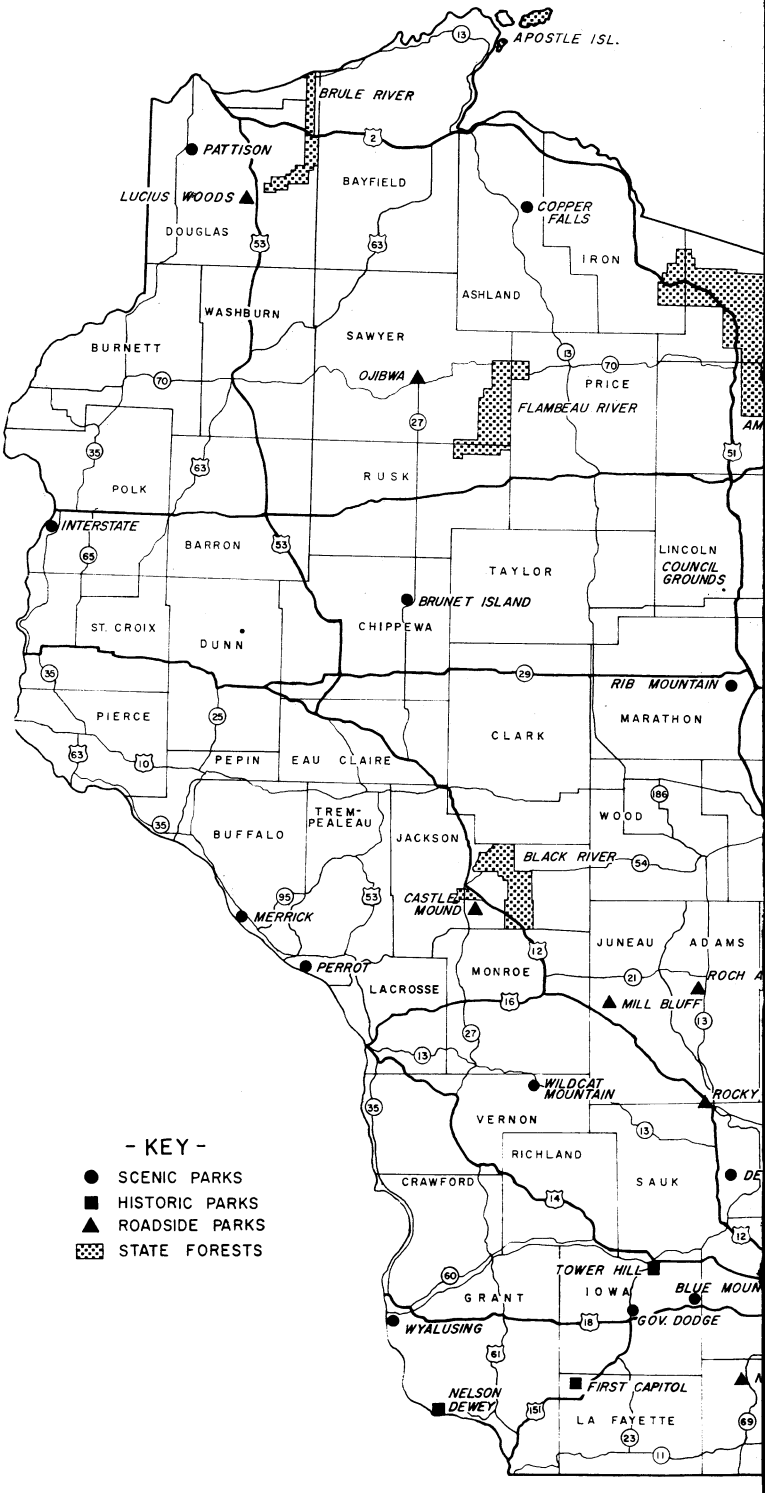
TABLE 3

Reported Total Expenditures of 17,695 State Park and Forest Visitors Coming for Various Recreational Purposes

Purposes	Purposes Reported Expenditures None	$1–49	$50–99	$100–over	Total
Sightseeing	57%	35%	4%	4%	100%
Picnicking	62%	36%	1%	1%	100%
Swimming	47%	44%	5%	4%	100%
Boating	46%	47%	4%	3%	100%
Fishing	33%	39%	12%	16%	100%
Camping	16%	64%	13%	7%	100%
Summer cottage use	20%	24%	16%	40%	100%
Other	51%	34%	5%	10%	100%
All reported purposes	46%	41%	6%	7%	100%

In terms of length of stay, more than half (58%) of the one-day visitors to state parks and southern forests reported no expenditures and another 37 per cent reported having spent from $1 to $50. Of those who stayed from two to six days, 11 per cent reported having spent nothing, 71 per cent from $1 to $50 and the remaining 18 per cent more than $50. Among the parties which had stayed seven days or longer, only 6 per cent reported no expenditure, 26 per cent an expenditure of $1 to $50, 33 per cent an expenditure of $50 to $100 and 36 per cent an expenditure of $100 or more. The same relationships were found among visitors to the northern forests. Thus the assumption that expenditures vary in direct proportion to length of stay appears to be verified.

In considering the means of financing state parks, the question arises as to whether out-of-state visitors spend more in the vicinity of state parks and forests than residents. On a per capita basis, the answer is affirmative; they do spend more. Figure 13 reveals that 47 per cent of the urban Wisconsin resident visitors and 32 per cent of the rural Wisconsin resident visitors reported having spent $1 or more while 66 per cent of the out-of-state visitors reported such expenditures. Some 5 per cent of the urban and 2 per cent of the rural Wisconsin resident visitors reported having spent $50 or more compared with 17 per cent of the out-of-state visitors reporting such expenditures.


APOSTLE ISL.
BRULE RIVER
PATTISON
LUCIUS WOODS
BAYFIELD
DOUGLAS
COPPER FALLS
IRON
ASHLAND
WASHBURN
SAWYER
BURNETT
OJIBWA
PRICE
FLAMBEAU RIVER
POLK
RUSK
INTERSTATE
BARRON
TAYLOR
LINCOLN
COUNCIL GROUNDS
BRUNET ISLAND
ST. CROIX
DUNN
CHIPPEWA
RIB MOUNTAIN
PIERCE
MARATHON
CLARK
PEPIN
EAU CLAIRE
WOOD
TREMPEALEAU
BUFFALO
JACKSON
BLACK RIVER
CASTLE MOUND
MERRICK
JUNEAU
ADAMS
PERROT
MONROE
LACROSSE
MILL BLUFF
WILDCAT MOUNTAIN
VERNON
RICHLAND
CRAWFORD
SAUK
TOWER HILL
GRANT
IOWA
BLUE MOUN
GOV. DODGE
WYALUSING
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LA FAYETTE
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SCENIC PARKS
HISTORIC PARKS
ROADSIDE PARKS
STATE FORESTS

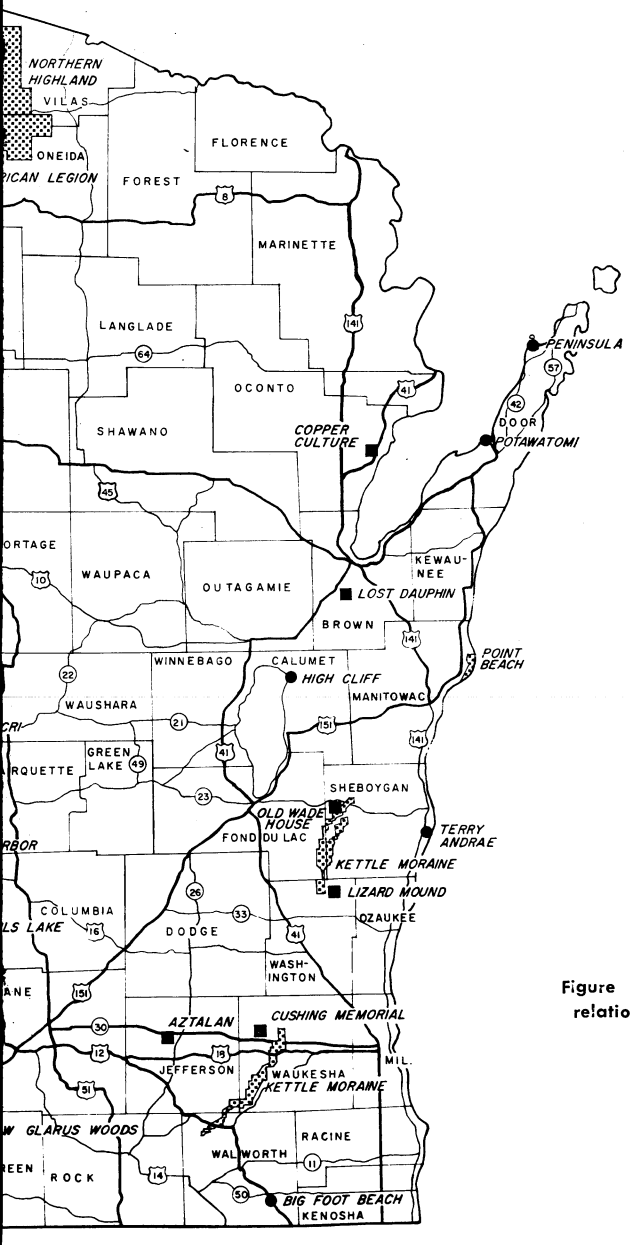

Figure 12. State highway trunk system in relation to the state parks and forests.

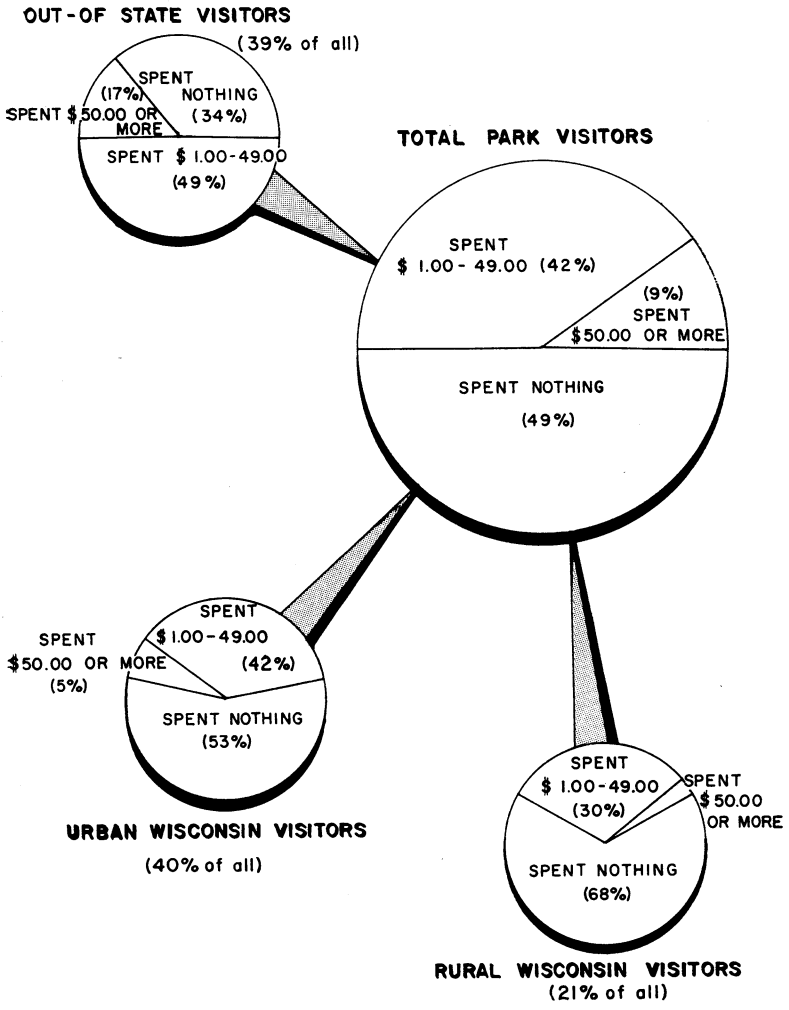

Figure 13. Variation of total expenditures within a 20-mile radius of the place of interview between urban and rural Wisconsin resident and nonresident visitors. (Based on 15,681 interviews taken in the state parks and southern Wisconsin state forests.)

On an absolute basis, the answer is likewise affirmative. Using arbitrary averages of $10 for each of those in the $1 to $49 category and $60 for those who reported spending $50 or more, the 6,172 out-of-state visitors made an average expenditure 50 per cent greater than the 9,509 visitors coming to the parks from within Wisconsin.

There is some evidence of a direct or positive relationship between reported income level and amount of expenditures near the state park or forest. From Table 4 it is evident that there are more of the lower income groups reporting the lower expenditures and higher proportions of the higher income groups reporting the higher expenditures. Simple calculations, however, using the midpoint of each expenditure group as the hypothetical average (arbitrarily $600 in the "above $500" group), show that the four lower income groups far exceed the four upper income groups in aggregate expenditures. Possibly as significant as anything else is the fact that half (49%) of all the state park and forest visitors interviewed reported spending nothing.

Suggestions for Financing Parks

A few more than half of all motorists interviewed (54%) gave an answer to the free-response question: In your opinion how should Wisconsin meet the cost of better state park facilities? A third of these (17% of all) indicated preference for a windshield sticker sold at an annual fee and good for unlimited use of all state parks for a year. Another 13 per cent of all indicated a preference for a daily or day-use entrance fee. Some 8 per cent of all suggested higher legislative appropriations for parks, 5 per cent would allocate part of some (unspecified) existing tax revenue, 4 per cent indicated a willingness to pay higher camp fees and the remaining 7 per cent suggested a variety of other means.

TABLE 4

Total Expenditures Within Twenty Miles of the Park Reported by 15,401 State Park Visitors With Different Income Levels

Income	All Visitors		Amount Spent					
	No.	Per Cent	Nothing	$1–49	$50–99	$100–499	$500–more	Total
Under $3,000	2,387	(15%)	60%	37%	2%	1%	---	100%
$ 3,000– 5,999	6,182	(40%)	53%	41%	4%	2%	---	100%
$ 6,000– 8,999	4,336	(28%)	41%	46%	7%	6%	---	100%
$ 9,000–11,999	1,318	(9%)	37%	44%	9%	9%	1%	100%
$12,000–14,999	487	(3%)	33%	46%	9%	11%	1%	100%
$15,000–17,999	232	(2%)	39%	40%	8%	11%	2%	100%
$18,000–20,999	139	(1%)	47%	37%	5%	9%	2%	100%
$21,000–more	196	(2%)	31%	33%	8%	21%	7%	100%
All Visitors	15,401	(100%)	49%	42%	5%	4%	---	100%

Of the visitors to the four northern forests, nearly two-thirds (63%) gave no suggestion for better financing the state parks. Approximately equal proportions of those responding favored the annual sticker fee (5.6%), the daily entrance fee (5.3%) and higher camping fees (5.8%). Some 8 per cent proposed higher general fund appropriations. From these responses it seems clear that a substantial proportion of the users of Wisconsin state parks and forests are willing to pay more for the values received.

The comparative responses of Wisconsin residents and out-of-state visitors are shown in Figure 14. Actually a slightly higher percentage of out-of-state visitors than of Wisconsin residents suggested use of the annual windshield sticker fee (31% *vs.* 29%), possibly because the majority of out-of-state visitors came from Illinois and Minnesota where such annual fees are used. At the same time, Illinois residents were overwhelmingly (2:1) in favor of daily entrance fees. The out-of-state visitors likewise favored a daily entrance fee in greater proportions (27% *vs.* 21%) than Wisconsin resident visitors. On the other hand, Wisconsin residents more frequently suggested higher legislative appropriations for the state park system or the allocation of part of some existing state tax for this purpose.

Among resident state park users, the number favoring an annual sticker fee was more than twice as great in the two counties with major state parks on the western edge of Wisconsin (Douglas, Polk) than in any other counties. These Wisconsin residents were probably familiar with the state parks windshield sticker used in Minnesota and may have felt the visitors should have some direct part in paying for the parks they use. There was no clear pattern of rural-urban differences among Wisconsin residents on the means of better support for the state park system. Among out-of-state visitors, except Minnesota, the daily entrance fee is favored (about 4:3) over the annual sticker fee.

The highest proportion of those who expressed an opinion regarding better means of financing the state park system was found among those who came for camping and boating; the lowest proportion was found among the summer cottage and resort users and those who came for sightseeing. This may be explainable in part by the fact that camping and boating require provision of at least minimal facilities by the park authorities while the cottager and sightseer require no such provisions except roads.

Of the picnickers who responded to the question of financing the park system, 35 per cent favored the annual sticker fee while 29 per cent favored the daily fee and 14 per cent suggested higher general

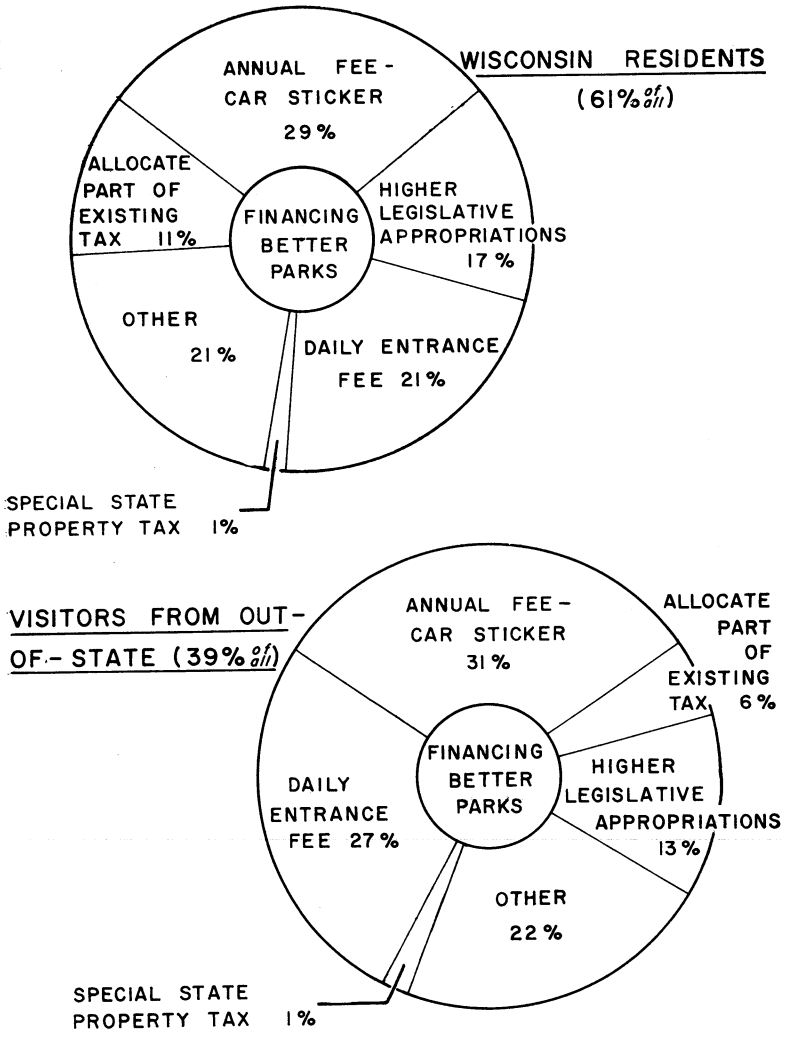

Figure 14. Analysis of resident and nonresident responses to the question, "In your opinion how should Wisconsin meet the cost of better state park facilities?" (Based only on interviews which showed a positive response to this question.)

fund appropriation; of the swimmers responding, 36 per cent favored the annual sticker fee and 27 per cent the daily fee while 14 per cent suggested higher appropriations. Of the sightseers responding 32 per cent favored the annual sticker and 24 per cent the daily fee; of the campers responding 26 per cent favored the annual sticker fee and 19

per cent the daily fee. One of every six campers who responded to the question voluntarily suggested higher camping fees. More than twice as many "boaters" favored the daily fee as favored the annual fee.

It is possibly significant that in both the parks and forests, respondents reporting the higher income levels ($9,000 up) favored the daily fee over the annual sticker fee. Also, while suggested by fewer respondents, the numbers proposing higher general fund appropriations for support of the state park system increased with amount of income reported. Increases in the state property tax levy and the earmarking of part of some existing tax for the state park system were least favored by all classifications of park users.

Visitors to the parks and forests who make the most intensive use of these areas in terms of length of stay and use of different facilities have a clearer knowledge of the problems and deficiencies of the state park system and are more willing to express their feelings.

Relationship Between Purpose and Response

There was a very significant relationship between a respondent's stated purpose of visit and his indication of an opinion on both the question pertaining to recommended methods of financing the state park system, and the question regarding suggested improvements in the recreational area visited. The responses of the four principal state park users—sightseers, picnickers, swimmers and campers—to both these questions are compared in Table 5. In this analysis we are concerned only with whether or not a visitor had an opinion regarding improvements and park financing and not what his opinion, if any, might have been.

On the basis of a chi-square analysis we found that campers are more likely to express an opinion on what improvements are desirable and on an adequate means of financing the state park system while sightseers are more likely not to hold an opinion regarding these two questions. If holding an opinion is an indication of interest in the state park system and the awareness of the problems of financing, maintenance and improvement inherent to it, then we would rank campers as most aware and interested followed by picnickers, swimmers and sightseers. This is in the same order we would rank these park users on the basis of their closeness of contact with a state park, its environment, its facilities and condition.

TABLE 5

Analysis of the Relationship Between a Respondent's Primary Purpose of Visit and His Response to Questions on State Park Financing and Improvements*

Response	Purpose of Visit				Totals
	Sight-seeing	Swim-ming	Picnick-ing	Camp-ing	
Expressed an opinion on both questions	1,135	770	962	1,271	4,138
Expressed an opinion on financing and none on improvements	1,712	526	792	556	3,586
Expressed an opinion on improvements and none on financing	773	446	568	545	2,332
Expressed no opinion on both questions	2,147	574	847	416	4,037
Totals	5,767	2,316	3,169	2,841	14,093

*Analysis is based on 14,093 interviews taken in the state parks and southern Wisconsin state forests on which one of the four principal uses was listed as the primary purpose of visit.

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APPENDIX A

Wisconsin Park and Forest Travel Study 1958

Interview Schedule

1–2 Interviewer _____

3–5 Date of Interview _____

6–7 Checkpoint _____

8–9 State of car registration _____

10–11 Number of persons in car

Adults 18 and up	Children
1 one	1 one
2 two	2 two
3 three	3 three
4 four	4 four
5 five	5 five
6 six	6 six
7 seven or more	7 seven or more
8 none	8 none

12–13 For what recreational purpose did you come to this park?

01 sightseeing
02 picnicking
03 swimming
04 boating
05 fishing
06 hiking
07 nature study
08 camping
11 research
12 summer cottage—resort user
13 business or service
14 other _____

14–15 In what county (of Wisconsin) did your trip originate?

_____

16 When did you first enter the park on this trip? _____

_____

17–26 What highways did you use in traveling the last twenty miles to this park?

1_____ 2_____ 3_____ 4_____

27 How many other visits have you made to Wisconsin state parks and forests this year?

1 one	5 five
2 two	6 six
3 three	7 seven or more
4 four	8 none

1–2	3–5	6–7	8–9	10–11	12–13	14–15	16	17–19	20–22

28–35 Will you please estimate how much money your party has spent on this trip within twenty miles of the park?

28–29 for lodging $_____

30–31 for food and drink $_____

32–33 for car expense $_____

34–35 other $_____

36 Will you please check your income level?

1 under $3,000
2 $ 3,000– 5,999
3 $ 6,000– 8,999
4 $ 9,000–11,999
5 $12,000–14,999
6 $15,000–17,999
7 $18,000–20,999
8 $21,000 or more

37 How did you learn about the attractions of this particular park?

1 advertising
2 travel agency
3 road signs
4 another person
5 previous visit or 'familiar place'
6 driving through only
7 other _____

38–39 What is there about this park that you feel is most in need of improvement?

01 not enough campsites
02 not enough picnic tables & fireplaces
03 inadequate drinking water supply
04 inadequate toilets
05 inadequate policing
06 inadequate roads, parking areas
07 poor maintenance
08 not enough natural area
11 lack of boat ramps
12 too crowded
13 other _____

40 In your opinion how should Wisconsin meet the cost of better state park facilities?

1 daily entrance fee
2 annual fee for car sticker
3 higher appropriations by legislature
4 special state tax levy on property
5 allocating part of some existing tax
6 other _____

23–4	25–6	27	28–9	30–31	32–3	34–5	36	37	38–9	40

APPENDIX B
Manual of Procedures

Purposes

To learn the numbers, times, duration and frequency of recreational visits to state parks and forests during the three summer months;

To ascertain the income level of people who visit state parks and forests in Wisconsin;

To find the principal routes of travel used by recreation seekers within the last fifty miles of the park or forest;

To determine the amount and character of financial expenditures within a fifty-mile radius of each park or forest by recreation visitors;

To obtain public reactions, if possible, as to desirable methods of financing a better state park system;

To gain experience in preparing for, conducting and making effective use of research in park use which will help in more extensive studies to be planned.

General Instructions to Interviewers

Interviewers will question drivers detained in the interview lane and record the information on the Survey Schedule. Drivers should be approached in a courteous, businesslike manner and interviewers should be as brief as practicable in getting the desired information, so that the vehicle can be on its way as soon as possible. If the driver is reluctant to answer the questions, he should be assured that the requested information will be kept confidential and he will not become further involved personally since neither name, license number or other identification is recorded. Upon completing an interview, the interviewer should thank the motorist for his cooperation. *Please do not fail to do this!*

Some drivers may refuse to give the information requested; the best policy is to let them proceed rather than waste time in argument. Interviewers should use the pleasant approach and maintain a good attitude to avoid creating antagonistic atmosphere. There is no justification for sarcasm, wise-cracks or losing one's temper while interviewing motorists. Interviewers should present a neat appearance. No particular attire is required but each interviewer should be clean shaven each day and should wear clean clothes.

In making interviews, speed is desirable but accuracy and completeness must not be sacrificed for speed. Information not recorded correctly cannot be coded and both operations might be wasted as well as the motorist's time.

Interviews will be conducted from 6 a.m. until dark or other authorized time. At park and forest check points only out-going traffic will

be interviewed. At forest check points traffic may be interviewed traveling in one direction or both directions as determined by the Project Supervisor. All preliminary arrangements must be made before starting time so that actual interviewing may begin promptly at the time scheduled.

Interviewers will be supplied with forms, maps, pencils, writing board, signs, flags and other necessary equipment.

(Detailed instruction on use of form in another section.)

Duties of Project Supervisor

The project supervisor will be in direct charge of all field and administrative operations in connection with this survey. He should spend a maximum of time in the fields working with the party chiefs while the survey is in progress to further insure that the required survey methods are being complied with and that field operations are running smoothly. He will be the liaison between the central office and the survey parties in all matters.

During the training period he should assist in the training of interviewers and party chiefs and issue instructions which may be necessary for good field operations. At such locations where all parties come together he should be there to help clear up situations and questions arising with the parties and to carry on additional training as necessary. It will be his responsibility to see that necessary supplies are available to the parties at all times.

Each party chief will submit to him, by mail or personal contact, a weekly progress report so that a graphic record can be kept on the progress of the survey. Any decisions on scheduling changes or other major situations will be made by the supervisor. He should check time sheets and expense vouchers submitted by party chiefs to insure proper preparation and prompt payment of salaries and expenses.

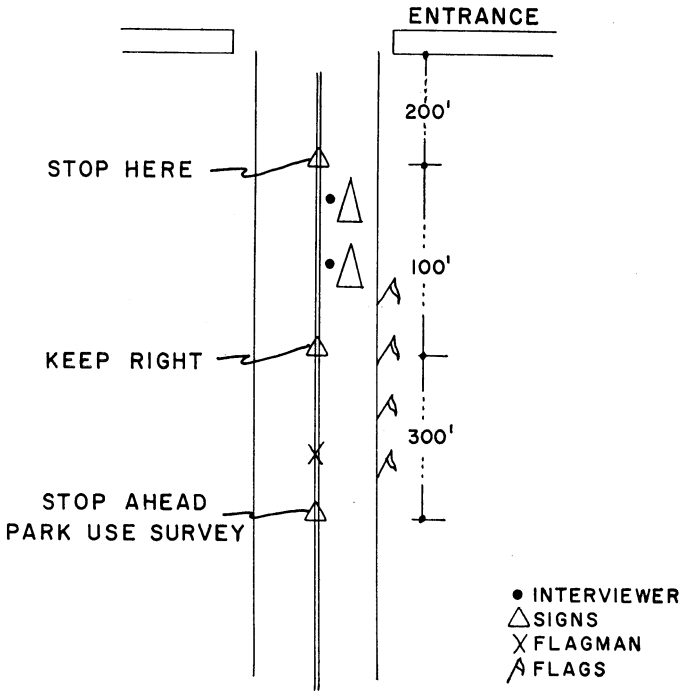
The basic elements in the survey are the interviews and the coded punch cards. Since all of the information to be used in the findings and report will be obtained from them, it is incumbent upon the supervisor to demand careful interviews and proper coding of the data. He will be responsible for the compilation of these data and submission of a final report on the survey.

Duties of Party Chiefs

Each party chief will be responsible for all field details necessary for successful operation of his assigned stations and for completion of the work.

He should make necessary transportation arrangements and see that the party arrives in sufficient time to set up equipment before operations are scheduled to begin. He should assign the place for each

LAYOUT OF INTERVIEW STATIONS
(STATE PARKS)



member to work and see that he is supplied with forms, pencils, writing boards, etc., and is ready to start at the scheduled time.

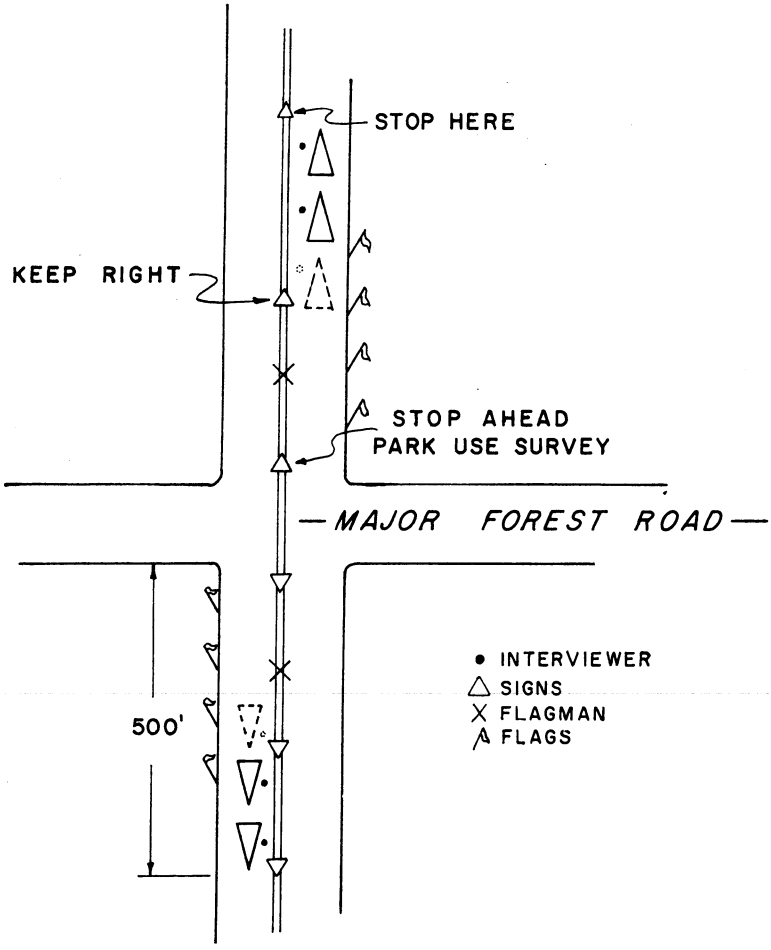
He should advise the interviewers, as necessary, and offer suggestions which will help them to obtain interviews in an efficient and courteous manner. He will be required to complete an 8-hour period of interviewing each day and make necessary arrangements in case of sickness, injury. etc., so that operations continue smoothly. Lunch should be eaten during periods of low traffic volume.

The party chief should periodically check interview forms and at the end of each day place in envelopes marked with the date and station of interview check point for editing and coding at a later time.

He should assist with and check preparation of time sheets and ex-

LAYOUT OF INTERVIEW STATIONS

(STATE FORESTS)



pense account vouchers maintained by interviewers. These records must be submitted to the project supervisor (central office) at the required time for prompt payment of salaries and expenses.

The party chief should submit a weekly progress report to the project supervisor, noting any deviation from schedule so that consideration can be given to completing these areas at a later time.

Coding Instructions

The purpose of coding is to translate the data collected by the interviewers into certain combinations of numbers, known as codes, which can be punched on tabulating cards to facilitate analysis. After these cards are punched and verified they can be mechanically sorted and tabulated to produce any desired combination of items for analyzing the uses of parks and forests and related items.

To facilitate coding operations and reduce interviewing time, the interview schedules are designed so that several of the entries made by the interviewers are self-coding; that is, in making these entries a number is written or circled which represents the numerical code as well as the answer for the inquiry. These numbers, plus the items which were written on the schedule and need to be coded, will be entered in the appropriate place at the bottom of the interview form when the forms are edited. These numbers can then be used directly by the card punchers without further reference to the interview schedules. In some instances (Items 6–7, 8–9, 14–15, 17–18) the interviewer will write in the response on the interview schedule, leaving the coding to be done during the editing by reference to codes in the *Directions to Interviewers and Editors.*

Complete and accurate information for analysis can be obtained only from correctly punched cards, and accuracy of the cards depends to a great extent upon the care used in coding the interview data. Proper code numbers for each item must be carefully selected and entered in the appropriate spaces. In writing code numbers, neatness and legibility are of paramount importance. Poorly formed or indistinct numerals are easily misinterpreted by punch operators, resulting in errors, ruined cards, and inefficient work. The diligence and care applied to this work by the coders will contribute greatly to the success of the study.

Directions for Interviewers and Editors

1–2 Write in your own name or code number when you are doing the interviewing. Code as follows:

01
02
03
04
05
06
07
08
11
12
13
14

3–5 Write the date of interview in numbers; e.g., 6/17. These numbers are self-coding (the example being 617) except that the first 9 days of the month are to be coded 701 for 7/1, 807 for 8/7, etc.

6–7 Write the name or code number of state park or forest in which interview is taken. In several parks and most forest areas there is more than one checkpoint which will be designated A, B, C or D by the Project Supervisor; e.g., Pattison A and Pattison B. Always enter the letter after the park or forest name in areas where there is more than one checkpoint. Code as follows:

01	American Legion A	31	Mauthe Lake
02	American Legion B	32	Merrick
03	American Legion C	33	Nelson Dewey
04	Big Foot Beach	34	No. Highland A
05	Brule River A	35	No. Highland B
06	Brule River B	36	No. Highland C
07	Brule River C	37	Pattison A
08	Brunet Island	38	Pattison B
11	Copper Falls	41	Peninsula A
12	Council Grounds	42	Peninsula B
13	Devil's Lake A	43	Perrot
14	Devil's Lake B	44	Point Beach A
15	Devil's Lake C	45	Point Beach B
16	Devil's Lake D	46	Potawatomi A
17	Flambeau River A	47	Potawatomi B
18	Flambeau River B	48	Rib Mountain
21	Governor Dodge	51	Rocky Arbor
22	High Cliff	52	Terry Andrae
23	Interstate A	53	Tower Hill
24	Interstate B	54	Whitewater Lake
25	Interstate C	55	Wildcat Mt. A
26	Lapham Peak	56	Wildcat Mt. B
27	Long Lake	57	Wyalusing
28	Lucius Woods	58	_____

8–9 Use full state name or appropriate abbreviation for all state, territorial or national names. Code as follows:

01	Ala.	17	Kas.
02	Ariz.	18	Ky.
03	Ark.	21	La.
04	Cal.	22	Maine
05	Col.	23	Md.
06	Conn.	24	Mass.
07	Del.	25	Mich.
08	D. C.	26	Minn.
11	Fla.	27	Miss.
12	Ga.	28	Mo.
13	Idaho	31	Mont.
14	Ill.	32	Neb.
15	Ind.	33	Nev.
16	Iowa	34	N. H.

35 N. J.
36 N. M.
37 N. Y.
38 N. C.
41 N. D.
42 Ohio
43 Okla.
44 Ore.
45 Penna.
46 R. I.
47 S. C.
48 S. D.
51 Tenn.
52 Texas
53 Utah
54 Vt.
55 Va.
56 Wash.
57 West Va.
58 Wis.
61 Wyo.
62 Alaska
63 Hawaii
64 Virgin Islands
65 Canada
66 Mexico
67 Other _____

10–11 There are two code numbers to be circled on this item. In most cases the number and (adult) status of car occupants will be evident. When in doubt as to age, ask: "Are all these (you) young people under (over) 18 years of age?" In editing, use the two circled code numbers as a double digit.

Buses should be treated in the same manner as passenger cars on all items through 17–26. When editing, write the appropriate code number in the proper numbered column at the bottom of the Interview Schedule through Item 17–26, then draw a horizontal line through the remaining columns to indicate to the punch card operator that no further data were secured.

12–13 The principal purpose of the motorist in coming to the park is what is desired.The interviewer might first ask the motorist: "Did you come to this park for recreation?" Then proceed to find out the particular recreational purpose for which he came, if any. When the motorist indicates that he is in the park on a business or service call or that he is merely passing through the park, do not question him further. Thank him and go on to the next car. When editing such a schedule, place the code numbers in the proper columns at the bottom of the schedule and draw a line through the columns not used.

The resident of a cottage or resort *within the park boundaries* raises a problem. Here the interviewer must distinguish between the permanent resident and the transient. The permanent resident; e.g., resort owner, should be treated in the same manner as the driver of a business vehicle. The transient, even if in the park for the whole summer, should be asked all questions and treated in the same manner as someone entering from outside the park. If difficulty is encountered in estimating his expenditures, try to get him to make an estimate on a weekly basis and then write in the words "per week" beside the ex-

penditures item on the schedule so the editor can calculate his aggregate expenditures to date from the period of time he has been in the park.

14–15 For Wisconsin cars, write in the name of the county or its abbreviation. For out-of-state cars, use X. Code as follows:

01	Adams	45	Marathon
02	Ashland	46	Marinette
03	Barron	47	Marquette
04	Bayfield	48	Milwaukee
05	Brown	51	Monroe
06	Buffalo	52	Oconto
07	Burnett	53	Oneida
08	Calumet	54	Outagamie
11	Chippewa	55	Ozaukee
12	Clark	56	Pepin
13	Columbia	57	Pierce
14	Crawford	58	Polk
15	Dane	61	Portage
16	Dodge	62	Price
17	Door	63	Racine
18	Douglas	64	Richland
21	Dunn	65	Rock
22	Eau Claire	66	Rusk
23	Florence	67	St. Croix
24	Fond du Lac	68	Sauk
25	Forest	71	Sawyer
26	Grant	72	Shawano
27	Green	73	Sheboygan
28	Green Lake	74	Taylor
31	Iowa	75	Trempealeau
32	Iron	76	Vernon
33	Jackson	77	Vilas
34	Jefferson	78	Walworth
35	Juneau	81	Washburn
36	Kenosha	82	Washington
37	Kewaunee	83	Waukesha
38	La Crosse	84	Waupaca
41	Lafayette	85	Waushara
42	Langlade	86	Winnebago
43	Lincoln	87	Wood
44	Manitowoc	88	X (out of state)

16 Write the date of entering the park in the space provided. Have pocket calendar handy for reference. In editing, this date is to be compared to the date of interview to get duration of stay in the park. Note that an overnight stay is to be coded as 2 for two days.

Check this response against the response to Item 12–13. Assume that a stay of overnight or longer will have involved either camping (08) or staying in a cottage or resort (12) since there are no public accommodations in Wisconsin state parks. If a

discrepancy appears and it is not possible to question further, code this item (16) as 0 in the column at the bottom of the schedule. Code as follows:

1 one day (day use only)
2 two days—over one night
3 three days—over two nights
4 four days—etc.
5 five days—
6 six days—
7 seven to thirteen days
8 fourteen days or more

17–26 Keep map open and available for quickly checking the highway numbers or letters indicated by the motorist. All highways noted will have equal weight or value in the tabulations. In terms of the expected uses of these data, it is desirable that you note first the highway used in entering the park and then the others, working outward from the park. Since there are spaces for only two numbered highways and two lettered highways, the ones nearest the park should be listed where there is a choice. One code system is used for each of the two numbered highways and another for each of the two lettered highways.

In editing, use the 000 or the 00 code numbers in columns not used; i.e., when there is no second, third or fourth highway to be noted. The code follows:

Columns 17–19 and 20–22

001	2	043	53	085	108
002	8	044	54	086	111
003	10	045	55	087	112
004	11	046	56	088	113
005	12	047	57	091	114
006	13	048	58	092	118
007	14	051	59	093	120
008	16	052	60	094	122
011	17	053	61	095	123
012	18	054	63	096	127
013	20	055	64	097	130
014	21	056	65	098	131
015	23	057	67	101	133
016	25	058	70	102	136
017	27	061	71	103	137
018	28	062	73	104	141
021	29	063	77	105	144
022	30	064	80	106	147
023	32	065	81	107	151
024	33	066	82	108	153
025	35	067	83	111	154
026	36	068	84	112	155
027	37	071	86	113	159
028	39	072	87	114	162

031	40	073	88	115	163
032	41	074	89	116	169
033	42	075	93	117	173
034	45	076	95	118	177
035	46	077	96	121	179
036	47	078	97	122	182
037	48	081	99	123	183
038	50	082	104	124	191
041	51	083	106	125	---
042	52	084	107		

Columns 23–24 and 25–26

01	A	26	V	53	QQ
02	B	27	W	54	RR
03	C	28	X	55	SS
04	D	31	Y	56	TT
05	E	32	Z	57	UU
06	F	33	AA	58	VV
07	G	34	BB	61	WW
08	H	35	CC	62	XX
11	I	36	DD	63	YY
12	J	37	EE	64	ZZ
13	K	38	FF	65	DL
14	L	41	GG	66	OK
15	M	42	HH	67	GE
16	N	43	II	68	GN
17	O	44	JJ	71	DA
18	P	45	KK	72	DE
21	Q	46	LL	73	ZC
22	R	47	MM	74	ZD
23	S	48	NN	75	EW
24	T	51	OO	76	---
25	U	52	PP		

27 When the motorist has visited several of the state parks and forests, it is probably safest to ask him to name the areas visited while the interviewer keeps count. Circle the appropriate code number.

28–35 The purpose of this question is to learn the amount of expenditures by park visitors within about twenty miles of the checkpoint. Use the motorist's figure to the nearest dollar, writing in the information according to type of expenditure.

After the interview schedules were printed, it became evident that data on total expenditures were needed; accordingly the code that follows was changed by substituting "Total Expenses" for "Other". The interviewer is, therefore, directed to use Item 34–35 on the interview schedule as the place for noting total expenditures for the motorist and his party.

The interviewers should agree in advance on which communities will be considered as being within twenty miles of the checkpoint.

Since there is no place on the schedule as revised to note expenditures other than for lodging (28–29), food and drink (30–31) and car expenses (32–33), the figures reported as Total Expense (Item 34–35) may be greater than the sum of the three specified types of expenditure. This will occur when the respondent has paid golf fees or boat rentals, for example. There is no place for noting such "other" expenditures except as they are revealed in the Total Expenses.

In editing, when the motorist gives only an estimate of his total expenditures not broken down by type, Items 28–29, 30–31 and 32–33 should be coded as 00 in each case and the appropriate code noted for 34–35 Total Expenses. The codes follow:

28–29 Lodging

01	$1–19
02	$20–39
03	$40–59
04	$60–79
05	$80–99
06	$100 or more
07	none

30–31 Food and Drink

01	$1–19
02	$20–39
03	$40–59
04	$60–79
05	$80–99
06	$100 or more
07	none

32–33 Car Expense

01	$1–19
02	$20–39
03	$40–59
04	$60–79
05	$80–99
06	$100 or more
07	none

34–35 Total Expense

01	$1–49
02	$50–99
03	$100–149
04	$150–199
05	$200–249
06	$250–299
07	$300–349
08	$350–399
11	$400–449
12	$450–499
13	$500 or more
14	none

36 To avoid possible embarrassment from stating his annual income in the presence of other passengers, hand the interview schedule and pencil to the motorist and ask him the question just as it is stated on the schedule. When he has checked the appropriate annual income and handed back the schedule, circle the code number beside his check mark.

37 Write in the motorist's answer to the question after "other" if his response does not fit any of the coded responses. This question is designed to find out how the motorist learned about that particular park. If necessary, ask "How did you learn about this park?"

38–39 Take the first answer of the motorist since that is likely to represent what is uppermost in his mind. If, after a quick judgment, his answer does not fit any of the coded responses, write in the sense of his answer after "other" and circle 8. This is a free-response question; do not suggest responses to the motorist.

40 Ask the question just as stated on the schedule. Answers such as "A sales tax" should be coded as 3 inasmuch as the proceeds of such a tax would normally become available through legislative appropriation. A response such as "Fees for bathhouse" should be written in and coded as "other". This is a free-response question; do not suggest answers to the motorist.

General Instructions

Ask all motorists all questions with the few exceptions noted herein. Motorists who have been interviewed previously in that park on that day need not be re-interviewed.

In editing the completed schedules, write the code number that is circled for any particular question in the column at the bottom of the schedule that is directly below the appropriate Item number. The code numbers 0 or 00 or 000 are to be used only for "No Response" or "Not Ascertainable". Be sure to use the number of zeros corresponding to the number of (IBM card) columns reserved for that particular item when coding a "No Response".

Sample of Explanatory Card
Handed to Respondents by Interviewers

MAY WE ASK YOU A FEW QUESTIONS ABOUT YOUR TRIP?

This is a study of the patrons of Wisconsin state parks and forests conducted by the Wisconsin Conservation Department and Highway Commission in cooperation with the University of Wisconsin. All information will be treated statistically with no identification of individuals by name, license number or other means. Your cooperation for about three minutes will make for better parks.

Wisconsin has among its natural resources 31 State Parks and 8 State Forests which provide a wide variety of scenic, historic, scientific and natural attractions as well as unlimited possibilities for outdoor recreation. We invite you to visit others of these areas.

Weekly Progress Report

Party_____

Week Ending_____ Party Chief_____

Area or Check Point	Date	Mileage	Number of Interviews	Car Count	% of Coverage	Man Hours

Schedule of Visits to Parks and Forests in Sample

Date			Team I (4 men)	Team II (3 men)	Team III (3 men)
June	18	W	½ training	½ training	½ training
	19	Th	training	training	training
	20	F	Devils Lake	Devils Lake	Devils Lake
	21	Sa	editing	Tower Hill	½ edit/½ travel
	22	Su	Wildcat Mt.	Wyalusing	Nelson Dewey
	23	M	½ travel/½ off	½ travel/½ off	½ travel/½ off
	24	Tu	off	off	off
	25	W	Brunet Island	Merrick	Perrot
	26	Th	½ travel/½ off	½ travel/½ off	½ travel/½ off
	27	F	Interstate	Interstate	Interstate
	28	Sa	½ travel/½ Patt.	½ travel/½ Patt.	½ travel/½ Patt.
	29	Su	½ Pattison/½ off	½ Pattison/½ off	½ Pattison/½ off
	30	M	Lucius Woods	off	off
July	1	Tu	½ trav/½ Cop. Fls.	Brule River	Brule River
	2	W	½ Cop. Fls./½ trav.	½ trav/½ editing	½ trav/½ editing
	3	Th	editing	editing	editing
	4	F	off	off	off
	5	Sa	Council Grounds	Northern Highland	Northern Highland
	6	Su	Rib Mountain	Northern Highland	Northern Highland
	7	M	travel	travel	travel
	8	Tu	Potawatomi	Potawatomi	Potawatomi
	9	W	Peninsula	Peninsula	Peninsula
	10	Th	off	off	off
	11	F	off	off	off
	12	Sa	½ off/½ travel	½ off/½ travel	½ off/½ travel
	13	Su	Point Beach	Point Beach	Point Beach

Date		Team I (4 men)	Team II (3 men)	Team III (3 men)
14	M	½ trav/½ White L.	½ trav/½ Mauthe L.	½ trav/½ Mauthe L.
15	Tu	½ White L./½ Big Ft.	½ Mauthe/½ travel	½ Mauthe/½ Long L.
16	W	½ Big Ft./½ travel	Lapham Peak	½ Long L./½ off
17	Th	off	off	½ off/½ travel
18	F	Nelson Dewey	½ off/½ travel	Wildcat Mt.
19	Sa	Wyalusing	Governor Dodge	off
20	Su	off	Tower Hill	Rocky Arbor
21	M	off	off	off
22	Tu	Devils Lake	Devils Lake	Devils Lake
23	W	½ trav./½ High Cl.	½ trav/½ Terry An.	½ trav/½ Terry An.
24	Th	½ High Cl./½ off	½ Terry An./½ off	½ Terry An./½ off
25	F	off	off	off
26	Sa	off	off	off
27	Su	Mauthe Lake	Mauthe Lake	Mauthe Lake
28	M	Point Beach	Point Beach	Point Beach
29	Tu	½ travel/½ off	½ travel/½ off	½ travel/½ off
30	W	off	off	off
31	Th	off	off	off
Aug. 1	F	Potawatomi	Potawatomi	Potawatomi
2	Sa	Peninsula	Peninsula	Peninsula
3	Su	travel	travel	travel
4	M	Rib Mountain	editing	editing
5	Tu	Council Grounds	Northern Highland	Northern Highland
6	W	Northern Highland	Northern Highland	Northern Highland
7	Th	travel	travel	travel
8	F	Pattison	Pattison	Pattison
9	Sa	½ trav/½ Interstate	½ trav/½ Interstate	½ trav/½ Interstate
10	Su	½ Interstate/½ trav.	½ Interstate/½ trav.	½ Interstate/½ trav.
11	M	Castle Mound	Brunet Island	Brunet Island
12	Tu	off	off	off
13	W	off	off	off
14	Th	½ off/½ travel	½ trav/½ Merrick	½ trav/½ Perrot
15	F	Rocky Arbor	½ Merrick/½ travel	½ Perrot/½ travel
16	Sa	Devils Lake	Devils Lake	Devils Lake
17	Su	½ trav/½ Big Foot	½ trav/½ Terry An.	½ trav/½ Terry An.
18	M	½ Big Foot/½ travel	½ Terry An./½ off	½ Terry An./½ off
19	Tu	off	off	off
20	W	Point Beach	Point Beach	Point Beach
21	Th	½ trav/½ off	½ trav/½ off	½ trav/½ off
22	F	off	off	off
23	Sa	off	off	off
24	Su	Potawatomi	Potawatomi	Potawatomi
25	M	Peninsula	Peninsula	Peninsula
26	Tu	travel	travel	travel
27	W	off	off	off
28	Th	editing	editing	editing
29	F	½ trav/½ Cop. Fls.	½ trav/½ Flamb. R.	½ trav/½ Flamb. R.
30	Sa	½ Cop. Fls./½ travel	½ Flamb./½ travel	½ Flamb./½ travel
31	Su	Lucius Woods	Brunet Island	Brunet Island
Sept. 1	M	½ trav/½ Interstate	½ trav/½ Interstate	½ trav/½ Interstate
2	Tu	½ Interstate/½ travel	½ Interstate/½ travel	½ Interstate/½ travel
3	W	½ travel/½ editing	½ travel/½ editing	½ travel/½ travel
4	Th	editing	editing	editing
5	F	off	½ editing/½ off	editing
6	Sa	off	off	off
TOTALS		57½ work/23 off 4½ editing (18 man days)	57½ work/23 off 5½ editing (16½ man days)	57½ work/23 off 6½ editing (19½ man days)

APPENDIX C

List of Data Tabulations

Bivariate Tabulations

Date in interviews *vs*
- Purposes in visiting park
- Duration of stay in park
- Factors needing improvement
- Income level

Checkpoint *vs*
- State of car registration
- Number of persons in car
- Purpose in visiting park
- County of trip origin
- Duration of stay in park
- Highways used
- Expenditures on trip
- Income level of respondent
- Factors needing improvement

State of car registration *vs*
- Purpose in visiting park
- Duration of stay in park
- Other visits to state parks
- Means of learning about park
- Means of financing parks

Purpose in visiting park *vs*
- Number of persons in car
- Duration of stay in park
- County of trip origin
- Expenditures on trip
- Income level of respondent
- Means of learning about park

Number of other visits *vs*
- Factors needing improvement
- Means of financing

County of trip origin *vs*
- Date of interview
- Number of persons in car
- Duration of stay in park
- Other visits to state parks
- Means of learning about park
- Means of financing parks
- Factors needing improvement
- Total expenditures
- Income level

Duration of stay in park *vs*
- Other visits to state parks
- Total expenditures on trip
- Income level of respondent
- Factors needing improvement

Income level of respondent *vs*
- Expenditures on trip
- Means of learning about park
- Factors needing improvement
- Means of financing parks
- Other visits to state parks

Total expenditures *vs*
- Number of persons in car

Trivariate Tabulations

Checkpoint by recreational purpose by number of previous visits
Recreational purpose by factors needing improvement by means of financing

APPENDIX D

Proportionate Use of Roads Within Twenty Miles of Each State Park and Southern Forest

Recreation Area	No. Interviews	Roads Used by Park Visitors			
Big Foot Beach S. P.	1,151	Wis 120–69%	US 12—18%	Wis 50—7%	Wis 36—6%
Brunet Island S. P.	519	Wis 64—38%	Wis Park Rd.—34%	Wis 27—28%	
Copper Falls S. P.	412	Ashland Co. J.—35%	Wis 169—34%	Wis 13—28%	Wis 77—3%
Council Grounds S. F.	238	Wis 107—59%	Wis 64—34%	US 51—7%	
Devil's Lake S. P.	4,767	Wis 123—41%	Wis 159—24%	US 12—23%	Wis 113—12%
Governor Dodge S. P.	107	Wis 23—74%	US 18—17%	US 151—9%	
High Cliff S. P.	332	Tn Rd—43%	Wis 114—27%	US 10—16%	Wis 55—14%
Long Lake (KMSF)	191	Sheboygan Co. F—38%	Park Roads—29%	US 45—18%	Wis 67—15%
Lucius Woods S. P.	106	US 53—88%	Douglas Co. A—8%	Douglas Co. P—4%	
Mauthe Lake (KMSF)	2,441	Fond du Lac Co. GG—37%	Sheboygan Co. S—29%	US 45—28%	Fond du Lac Co. SS—6%
Merrick S. P.	163	Wis 35—94%	Wis 95—4%	Wis 54—2%	
Nelson Dewey S. P.	396	Grant Co. VV—46%	Wis 133—39%	US 61—8%	Wis 35—7%
Pattison S. P.	1,749	Wis 35—62%	Douglas Co. B—19%	Douglas Co. A—16%	Park Road—3%
Peninsula S. P.	2,535	Wis 42—84%	Wis 57—13%	Door Co. F—2%	Door Co. A & Q—1%
Point Beach S. F.	1,739	Wis 42—43%	Park Road—27%	Park Road—16%	Wis 177—14%
Potawatomi S. P.	1,241	Door Co. C—41%	Wis 57—25%	Wis 42—23%	Door Co. S—11%
Rib Mountain S. P.	1,010	Marathon Co. N—56%	US 51—22%	Wis 29—21%	Wis 153—1%
Rocky Arbor S. P.	687	US 12—61%	US 16—30%	US 51—5%	Wis 23—4%
Terry Andrae S. P.	1,621	Sheboygan Co. KK—52%	US 141—44%	Wis 32—2%	Wis 23—2%
Tower Hill S. P.	616	Wis 23—57%	US 14—37%	US 18—3%	US 151—3%
Wildcat Mountain S. P.	154	Wis 33—81%	Wis 131—19%		
Wyalusing S. P.	965	Grant Co. C—38%	US 18—34%	Grant Co. X—16%	Grant Co. P—12%
Interstate S. P.	1,370	US 18—82%	Wis 35—14%	Wis 87—3%	Wis 46—1%

APPENDIX E

Basic Statistics

This appendix presents, in tabular form, some of the basic data used to support the findings in the body of the report. Also included in this appendix are data not considered of sufficient general significance to be discussed in detail in the report, but of informational value to the operation, administration and planning of the Wisconsin state park system and, thus, warranting presentation here.

TABLE 1

Proportion, by Percentage, of Primary Purpose of Visit of Respondents Interviewed in the State Parks and Forests

State Park	Sight-seeing	Picnicking	Swimming	Camping	Fishing	Boating	Hiking	Nature Study	Summer Cottage	Research	Business	Other	Number of Interviews
Big Foot Beach	10.5	23.7	39.5	12.2	2.6	7.9	----	----	0.7	0.1	1.1	1.5	818
Brunet Island	45.7	13.7	14.5	16.7	2.0	----	----	----	0.2	----	4.7	2.5	510
Copper Falls	62.3	11.9	----	10.1	3.1	----	----	----	----	1.2	8.8	2.7	159
Devil's Lake	27.4	5.9	17.4	23.9	1.8	0.6	0.5	----	8.3	0.1	7.9	6.2	3,560
Governor Dodge	69.5	8.5	8.5	4.9	1.2	----	1.2	----	1.2	----	2.4	2.4	82
High Cliff	32.0	12.9	50.3	----	0.7	----	0.7	----	----	----	2.7	0.7	147
Interstate	34.5	23.5	10.9	9.2	1.6	0.3	0.2	0.1	0.1	----	6.5	12.8	1,346
Lucius Woods	50.9	17.5	2.6	9.6	----	0.9	----	----	5.3	----	8.8	4.4	114
Merrick	26.2	17.1	2.7	10.7	17.1	----	----	----	6.4	----	13.4	6.4	187
Nelson Dewey	66.0	20.9	----	3.1	----	----	----	----	----	----	4.2	5.8	191
Pattison	22.6	18.2	39.5	7.9	0.4	----	----	----	0.2	0.1	2.9	8.1	1,157
Peninsula	34.9	5.0	4.8	31.2	2.2	0.4	0.6	0.2	2.5	0.1	4.3	13.9	2,273
Perrot	31.3	21.3	----	8.8	8.8	1.2	1.2	----	----	----	12.5	15.0	80
Potawatomi	60.6	15.4	0.8	12.0	1.5	0.7	0.5	0.3	0.7	----	2.2	5.2	591
Rib Mountain	69.9	18.7	----	5.9	----	----	0.5	0.2	----	----	3.2	1.5	589
Rocy Arbor	20.6	50.2	0.2	23.4	----	----	----	----	----	----	1.1	4.3	610
Terry Andrae	28.3	31.6	18.8	14.2	0.1	----	----	----	0.6	----	3.5	2.5	882
Tower Hill	39.0	50.0	----	3.6	0.3	0.3	0.3	0.3	0.3	----	2.2	3.8	364
Wildcat Mountain	49.6	41.8	----	1.6	----	----	----	----	0.8	----	0.8	5.4	129
Wyalusing	33.2	37.8	----	15.3	7.4	0.7	0.5	0.2	0.2	----	1.2	3.4	431
State Forest													
American Legion	6.0	0.5	0.5	13.3	21.2	----	----	----	15.5	----	14.5	28.5	799
Brule River	15.2	0.7	----	2.0	7.9	----	----	0.7	14.6	----	31.8	27.2	151
Council Grounds	44.3	18.8	0.7	12.1	12.7	4.7	----	----	0.7	----	3.3	2.7	149
Flambeau River	14.8	0.5	----	2.6	14.3	----	----	0.5	12.2	----	18.0	36.5	189
Kettle Moraine													
Lapham Park	80.0	8.9	----	2.2	----	----	----	----	----	----	6.7	2.2	45
Long Lake	15.7	8.4	27.7	23.0	4.8	1.2	----	----	1.2	----	6.0	12.0	83
Mauthe Lake	23.1	37.4	17.2	16.0	1.2	0.1	0.3	0.1	0.1	0.1	1.7	2.9	953
Whitewater Lake	28.1	7.3	2.1	3.1	10.4	2.1	----	----	24.0	----	19.8	3.1	96
Northern Highland	8.1	1.3	2.2	17.2	14.9	0.1	----	0.1	25.5	0.1	21.2	9 4	1,971
Point Beach	41.0	19.0	9.0	9.8	0.2	0.1	0.5	0.1	1.8	0.1	6.9	11.5	1,529

TABLE 2

Places of Visitor Origin for the Several State Parks and Forests (19,801 interviews)*

State Park or Forest and County in Which Located		Source of Visitors				
Areas	County	Home County	Milwaukee County	All Other Counties	Other States	Total
Parks and southern forests						
Big Foot Beach	Walworth	6%	4%	9%	81%[1]	100%
Brunet Island	Chippewa	52%	3%	28%	17%	100%
Copper Falls	Ashland	18%	8%	49%	25%	100%
Council Grounds	Lincoln	55%	8%	23%	14%	100%
Devil's Lake	Sauk	18%	6%	28%	48%	100%
High Cliff	Calumet	8%	----	89%	3%	100%
Interstate	Polk	13%	1%	22%	64%[2]	100%
Lucius Woods	Douglas	44%	1%	27%	28%	100%
Mauthe Lake	**	22%	58%	14%	6%	100%
Merrick	Buffalo	24%	2%	33%	41%	100%
Nelson Dewey	Grant	45%	5%	26%	24%	100%
Pattison	Douglas	44%	2%	10%	44%	100%
Peninsula	Door	6%	17%	34%	43%	100%
Point Beach	Manitowoc	48%	5%	38%	9%	100%
Potawatomi	Door	15%	8%	49%	28%	100%
Rib Mountain	Marathon	37%	8%	36%	19%	100%
Rocky Arbor	Juneau	3%	9%	43%	45%	100%
Terry Andrae	Sheboygan	30%	32%	20%	18%	100%
Tower Hill	Iowa	9%	3%	75%	13%	100%
Wildcat Mountain	Vernon	36%	3%	48%	13%	100%
Wyalusing	Grant	29%	7%	34%	30%	100%
All visitors—parks		23%	11%	29%	37%	100%
Northern forests						
American Legion	Oneida	13%	13%	46%	28%	100%
Brule River	Douglas	42%	3%	16%	39%	100%
Flambeau River	Pierce, Rusk and Sawyer	6%	22%	38%	34%	100%
Northern Highlands	Iron and Vilas	8%	21%	30%	41%	100%
All visitors—forests		8%	15%	47%	30%	100%

*State Park and forest areas where fewer than 100 interviews were taken are not included in the table.

**Part of Kettle Moraine State Forest, which is located in Fond du Lac, Jefferson, Sheboygan, Walworth, Washington, and Waukesha counties.

[1]Some 74% of all visitors interviewed were in cars with Illinois licenses.

[2]Some 60% of all visitors interviewed were in cars with Minnesota licenses.

TABLE 3

Length of Stay of Visitors to Wisconsin State Parks and Forests

Place of Residence	Number	No Resp.	One-Day Visits	Two-Six-Day Visits	Longer Visits	All Visits
(Twenty-seven State Parks)	16,302*	1.8%	79.7%	14.5%	4.0%	100.0%
Wisconsin	9,939	1.7%	86.0%	9.6%	2.7%	100.0%
Minnesota	1,467	4.0%	87.3%	7.8%	0.9%	100.0%
Iowa	390	1.3%	69.0%	24.6%	5.1%	100.0%
Michigan	177	-----	67.8%	30.5%	1.7%	100.0%
Illinois	3,495	1.5%	63.7%	26.4%	8.4%	100.0%
Indiana	153	2.0%	62.7%	31.4%	3.9%	100.0%
Other states	681	1.6%	67.8%	24.0%	6.6%	100.0%
(Four northern forests)	2,495*	2.8%	42.6%	39.3%	15.3%	100.0%
Wisconsin	1,555	2.6%	46.2%	40.3%	10.9%	100.0%
Illinois	644	2.6%	34.3%	39.9%	23.2%	100.0%
Other states	296	4.0%	42.2%	32.1%	21.7%	100.0%
All Parks and Forests	18,797*	2.0%	74.9%	17.6%	5.5%	100.0%

*These data corrected to eliminate motorists who were in the park or forest for business rather recreational purposes.

TABLE 4

Composition of Passenger Load for Park and Forest Visitors With Different Purposes (Based on 17,152 interviews in twenty-seven state parks; 3110 interviews in four state forests)

Passenger Load	Purpose of Visit							
	All Purposes		Sightseeing		Camping		Fishing	
	Parks	Forests	Parks	Forests	Parks	Forests	Parks	Forests
One adult, no children	11.6%	19.9%	8.2%	-------	6.7%	7.7%	20.6%	8.2%
One adult, one child	-------	-------	-------	-------	-------	5.5%	6.1%	-------
Two adults, no children	21.8%	26.3%	28.8%	28.7%	18.6%	20.8%	30.5%	33.9%
Two adults, one child	7.6%	7.7%	8.2%	10.1%	9.7%	8.2%	6.4%	9.4%
Two adults, two children	11.5%	8.2%	9.0%	6.2%	19.7%	15.5%	7.7%	8.2%
Two adults, 3 children	7.7%	-------	6.1%	5.8%	12.3%	11.5%	-------	-------
Two adults, 4 children	-------	-------	-------	-------	5.6%	-------	-------	-------
Three adults, no children	-------	6.6%	6.4%	6.6%	-------	5.3%	5.1%	9.4%
Four adults, no children	5.0%	5.2%	7.0%	10.5%	-------	-------	-------	7.8%
All other combinations	34.8%	26.1%	26.3%	32.1%	27.4%	25.5%	23.6%	23.1%
Totals	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE 5

Means of Financing Better State Parks and Forests Proposed by Motorists Reporting Different Income Levels.* (Based upon the responses of 9,326 visitors; an additional 9,938 visitors, who gave no response to the question, are not included)

Type of Financing	Income								
	Under $3,000	$3,000–5,999	$6,000–8,999	$9,000–11,999	$12,000–14,999	$15,000–17,999	$18,000–20,999	$21,000–more	Av.
Daily entrance fee	20%	23%	25%	25%	26%	32%	26%	22%	25%
Annual fee—car sticker	37%	35%	29%	22%	19%	17%	22%	15%	24%
Higher legislative appropriations	17%	14%	14%	17%	20%	18%	22%	31%	19%
Special state property tax	-----	1%	1%	1%	1%	1%	-----	-----	1%
Allocating part of existing tax	9%	10%	8%	9%	7%	9%	11%	10%	9%
Other	17%	17%	23%	26%	27%	23%	19%	22%	22%
Totals	100%	100%	100%	100%	100%	100%	100%	100%	100%

*At the time this question was asked, the state park system was financed by monies from the Fish and Game Fund, State General Fund and park receipts.

TABLE 6

How Park and Forest Visitors Were Influenced to Visit Wisconsin Parks and Forests (Based upon 17,859 interviews)

	Illinois	Indiana	Iowa	Michigan	Minnesota	Wisconsin	Others	All Visitors
Advertising	4%	6%	4%	5%	2%	2%	6%	2%
Travel agency	1%	2%	3%	2%	1%	-----	4%	1%
Road signs	4%	7%	8%	8%	5%	3%	8%	3%
Another person	26%	30%	34%	27%	17%	15%	28%	19%
Previous visit	56%	35%	32%	36%	69%	75%	36%	67%
Driving through	2%	2%	3%	2%	2%	1%	4%	2%
Map	4%	12%	7%	11%	2%	2%	3%	3%
Other	3%	6%	9%	9%	2%	2%	11%	3%
Total	100%	100%	100%	100%	100%	100%	100%	100%

TABLE 7

Length of Stay of Visitors to the Several State Parks and Forests (18,425 interviews)

Area	Length of Stay			
	One Day	Two–Six Days	Seven or More Days	Total
Parks and southern forests				
Big Foot Beach	88%	11%	1%	100%
Brunet Island	85%	15%	----	100%
Copper Falls	90%	8%	2%	100%
Council Grounds	88%	10%	2%	100%
Devil's Lake	67%	24%	9%	100%
High Cliff	98%	1%	1%	100%
Interstate	93%	7%	----	100%
Lucius Woods	86%	12%	2%	100%
Mauthe Lake	85%	13%	2%	100%
Merrick	88%	10%	2%	100%
Nelson Dewey	96%	4%	----	100%
Pattison	93%	6%	1%	100%
Peninsula	63%	24%	13%	100%
Point Beach	90%	9%	1%	100%
Potawatomi	85%	13%	2%	100%
Rib Mountain	94%	6%	----	100%
Rocky Arbor	80%	19%	1%	100%
Terry Andrae	86%	13%	1%	100%
Tower Hill	96%	4%	----	100%
Wildcat Mountain	99%	1%	----	100%
Wyalusing	85%	15%	----	100%
Total parks	81%	15%	4%	100%
Northern forests				
American Legion	48%	40%	12%	100%
Brule River	93%	7%	----	100%
Flambeau River	56%	18%	26%	100%
Northern Highlands	38%	44%	18%	100%
Total forests	44%	40%	16%	100%

TABLE 8

Number of Previous Visits to Wisconsin Parks and Forests Reported by Motorists From Various States

State of Trip Origin (Number of Interviews in parenthesis)	No Previous Visit This Year	One Previous Visit This Year	Two–Six Previous Visits This Year	Seven–More Previous Visits This Year	Total
Illinois (4,014)	64%	17%	13%	6%	100%
Indiana (204)	78%	15%	4%	3%	100%
Iowa (406)	70%	14%	12%	4%	100%
Michigan (213)	72%	17%	8%	3%	100%
Minnesota (1,416)	55%	19%	18%	8%	100%
Wisconsin (10,855)	42%	15%	23%	20%	100%
All others (772)	71%	15%	10%	4%	100%
All visitors	51%	16%	19%	14%	100%

TABLE 9

Percentage and Frequency of Visitors Reporting Previous Visits to Wisconsin State Parks and Forests During 1958 Compared to the Date of Interview

Number Previous Visits	Interview Period										Total	
	Jun 21–Jul 2		Jul 3–Jul 6		Jul 17–Jul 30		Jul 31–Aug 13		Aug 14–Sep 2			
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
None	1,155	52.4	1,350	49.6	1,745	50.9	988	46.1	2,490	47.1	7,728	49.0
One	306	13.9	371	13.6	542	15.8	342	16.0	960	18.1	2,521	16.0
Two	156	7.1	199	7.3	237	6.9	214	10.0	421	8.0	1,227	7.8
Three	103	4.7	142	5.2	162	4.7	109	5.1	257	4.8	773	4.9
Four	74	3.4	108	4.0	111	3.2	65	3.0	166	3.1	524	3.3
Five	47	2.1	60	2.2	82	2.4	44	2.0	112	2.1	345	2.2
Six	28	1.3	57	2.1	51	1.5	26	1.2	95	1.8	257	1.6
Seven	334	15.2	435	16.0	496	14.5	354	16.5	788	14.9	2,407	15.3

Note: Data are presented in two-week periods. However, since the total interview period was eleven weeks, the data taken in the last three weeks are combined into one period.

TABLE 10

Total Expenditures Within Twenty Miles of the Park as Listed by 17,730 Visitors Reporting Various Lengths of Stay

Length of Stay	Expenditure							Total
	Nothing	$1–49	$50–99	$100–149	$150–199	$200–249	$250–more	
One day (76%)*	58%	37%	2%	1%	1%	----	1%	100%
Two days (8%)	17%	72%	8%	2%	1%	----	----	100%
Three days (5%)	7%	68%	16%	5%	2%	1%	1%	100%
Four days (3%)	5%	56%	20%	10%	4%	3%	2%	100%
Five days (2%)	3%	49%	24%	12%	6%	2%	4%	100%
Six days (1%)	2%	44%	33%	12%	5%	2%	2%	100%
Seven to thirteen days (4%)	3%	27%	32%	17%	8%	6%	7%	100%
Fourteen or more days (1%)	9%	13%	18%	15%	12%	10%	23%	100%
All Visitors (100%)	46%	41%	6%	3%	1%	1%	2%	100%

*Figure in parenthesis is percentage of total respondents who stayed that length of time.

TABLE 11

Percentages of 20,252 Visitors Coming to Wisconsin Parks and Forests for Various Purposes on Different Days of Week*

Purpose	Av.	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
Sightseeing	30%	26%	14%	10%	12%	7%	10%	21%	100%
Picnicking	16%	47%	12%	5%	5%	10%	7%	14%	100%
Swimming	12%	21%	5%	16%	10%	4%	9%	35%	100%
Fishing	4%	14%	3%	12%	18%	12%	6%	35%	100%
Camping	16%	12%	15%	14%	15%	5%	7%	32%	100%
Summer cottage	6%	7%	3%	21%	32%	2%	6%	29%	100%
Business	7%	5%	8%	21%	25%	14%	10%	17%	100%
Other**	9%	17%	14%	14%	16%	3%	9%	27%	100%
Total	100%	22%	11%	13%	14%	7%	8%	25%	100%

*These figures are adjusted to full "interview days", i.e. a Wednesday, for example, during which all three interview crews worked both half days.

**Includes boating, hiking, nature study, research, golf, visiting, driving through, and a scattering of other declared (primary) purposes.

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