

THE LAKE OF THE OZARKS REGION, MISSOURI:  
A STUDY IN RECREATIONAL GEOGRAPHY

Thesis for the Degree of M. A.  
MICHIGAN STATE UNIVERSITY  
Robert Sidney Vogel  
1957

1-24-10-17

THE LAKE OF THE CLARKS REGION, MISSOURI:  
A STUDY IN RECREATIONAL GEOGRAPHY

By  
ROBERT SIDNEY VOGEL

AN ABSTRACT

Submitted to the College of SCIENCE AND ARTS  
Michigan State University of Agriculture and  
Applied Science in partial fulfillment of  
the requirements for the degree of

MASTER OF ARTS

Department of GEOGRAPHY

1957

Approved \_\_\_\_\_

*Charles E. Pugh*

THESIS ABSTRACT

Since the end of World War II, the area surrounding the Lake of the Ozarks of Missouri has become one of the outstanding recreational centers of the Middle Western United States. It has been estimated that nearly five million people, most of whom were tourists or resorters, visited the region during 1955.

Reasons for the development of this area as a recreational center are many and varied; perhaps the most important being, this region is part of the northernmost penetration of the Ozark Highland into the populous prairie areas of the Middlewest. To the north, east, and west are plains unrelieved by hills, forests, or large water bodies suitable for recreational activity. Coupled with this somewhat monotonous landscape are a number of large population centers (St. Louis, Chicago, Des Moines, Omaha, Kansas City, Wichita, etc.) within a one-day automobile drive of the Lake; residing within a 500 mile radius are approximately forty-five million people. Thus, the region offers a potential vacation land to nearly one-fourth of the population of the United States.

The Lake itself is without doubt the most important single attraction for the recreationist. Formed by damming the entrenched meandering Osage River, its winding configur-



ation and many tributary streams afford a total shoreline in excess of 1,300 miles although its length is only a little over 125 miles. Associated in the same general area with the Lake are many large springs and small rivers and creeks. These water bodies, so different from those of the prairies, and the local topography with its many karst expressions and rugged hills, offer the touring or resorting visitor a rather complete change from his normal everyday environment.

In order to accommodate the recreational visitor numerous facilities have been developed. From an economic and landscape dominance standpoint the most important of these have been lodging and resort subdivision developments. Commercial lodging for over 15,000 visitors is now available, and well in excess of 400 subdivisions for cottages have been platted and are in various stages of development. Most of these structures are designed to serve the middle and lower-middle income groups which comprise the largest portion of all visitors. Among other establishments catering to the recreationists are cafes, restaurants, dance halls, taverns, and many specialized services designed to exploit special natural features of the region.

Concentration of recreational facilities has occurred in only a few sections of the region. The major factor influencing the location of these concentrations appears to be accessibility. Since most tourists enter the area by car,

the region owes its recreational development mainly to the advent of the automobile and good roads. This being the case, most concentrations of facilities are along portions of the Lake's shore that are readily accessible by car. Second to accessibility, nearness to a tourist or resorter source appears to be the most important locative factor; that is, given two areas on the Lake with the same physical characteristics and a like degree of accessibility, the area nearest the user's home is the most thoroughly utilized. In this particular region, perhaps as a result of little outstandingly spectacular scenery, special attractions serve only as secondary reasons for concentration. Resort construction at drowned tributary mouths along the shore-line is especially marked. This appears to be the result primarily of early accessibility at these places due to the existence of roads to valley farms prior to lake construction.

The bases for the development of this area as a recreational region appear to be sound; and barring unforeseeable circumstances -- changes in aims of recreationists, major war, depression, etc. -- it should continue to increase in magnitude of development and number of users.

**THE LAKE OF THE OZARKS REGION, MISSOURI:  
A STUDY IN RECREATIONAL GEOGRAPHY**

**By  
ROBERT SIDNEY VOGEL**

**A THESIS**

**Submitted to the College of SCIENCE AND ARTS  
Michigan State University of Agriculture and  
Applied Science in partial fulfillment of  
the requirements for the degree of**

**MASTER OF ARTS**

**Department of GEOGRAPHY**

**1957**

## PREFACE

Although I have not been a resident for nearly ten years, the fact that I was reared in the Lake of the Ozarks Region was responsible for my initial interest in the geography of the area. The relatively recent recreational development of the region provided a particularly interesting thesis subject: the Recreational Geography of the area.

In order to write a thesis of this type, the assistance of a great many people was enlisted. An enumeration of all of those who assisted and contributed to this work would be practically impossible. However, there were a number of people who were especially helpful. Among those to whom I am most indebted are the members of the geography faculty of Michigan State University. Professor E.C. Prophet, the chairman of my thesis committee and Professors C.L. Vinge and L.M. Sommers assisted in every stage of my work and very often imparted to me many valuable ideas.

The accomplishment of my fieldwork was greatly facilitated by many residents of the Lake of the Ozarks Region. Especially valuable assistance was given by W. Wilkerson of Camdenton, Missouri and R. Roberts of Edwards, Missouri.

Among the officials of the State of Missouri who

aided in my research were L. Kennon of the Missouri Resources and Development Commission, J. Jaeger, State Park Director, and many others who were members of the State Conservation Commission, the State Geological Survey, and various other State agencies.

Last, but certainly not least, I would like to acknowledge my obligation to my parents, Mr. and Mrs. P.E. Vogel of Climax Springs, Missouri with whom I lived while engaged in field work for this thesis.

## TABLE OF CONTENTS

CHAPTER	Page
I. INTRODUCTION . . . . .	1
Statement of Problem . . . . .	1
Methods of Investigation . . . . .	3
Definition of Terms . . . . .	5
II. CHARACTERISTICS OF THE REGION . . . . .	7
General . . . . .	7
Regional Location . . . . .	7
Regional Boundaries . . . . .	7
Recreational Sub-regions . . . . .	8
Physical Features . . . . .	9
Physiography . . . . .	9
Hydrography . . . . .	11
Climate . . . . .	18
Biotic Characteristics . . . . .	19
Cultural Features . . . . .	23
Transportation . . . . .	23
General Economic Characteristics . . . . .	29
The Recreationist . . . . .	30
The Local Residents . . . . .	34
III. REGIONAL RECREATIONAL PATTERNS . . . . .	36
General . . . . .	36
The Headwaters Area . . . . .	37

CHAPTER	Page
The Middle-lake Area . . . . .	43
The Gravois Mills-Hurricane Deck Area . .	45
The Camdenton-Linn Creek Area . . . . .	48
The Osage Beach-Bagnell Dam Area . . . . .	57
Non-Lake Shore Developments . . . . .	63
IV. CONCLUSIONS . . . . .	66
BIBLIOGRAPHY . . . . .	68



## LIST OF ILLUSTRATIONS

### Maps

Figure	Page
1. Relative Location and Major Routes of Access to the Lake of the Ozarks Recreational Region. .	2
12. Source of Out-of-State Recreationists to the Lake of the Ozarks Recreational Region . . . . .	32
13. Major Settlements and Recreational Facilities of the Headwaters, Middle-lake, and Non-Lake Shore Areas of the Lake of the Ozarks Recreational Region . . . . .	38
18. The Gravois Mills-Hurricane Deck Area of the Lake of the Ozarks Recreational Region . . . . .	46
19. The Camdenton-Linn Creek Area of the Lake of the Ozarks Recreational Region . . . . .	49
24. The Osage Beach-Bagnell Dam Area of the Lake of the Ozarks Recreational Region . . . . .	58

### Photographs

2. A chert filled stream bed . . . . .	10
3. A typical "ridge-farm" . . . . .	10
4. Bagnell Dam . . . . .	12
5. A floating fishing and boat dock . . . . .	12
6. The Hahatonka Spring . . . . .	17
7. Hatching and breeding pools of the trout hatchery at Gravois Mills . . . . .	17
8. A State highway . . . . .	24
9. A ford on a secondary road . . . . .	24
10. A county highway . . . . .	25

Figure	Page
11. A low water bridge . . . . .	25
14. The Lake of the Ozarks above Warsaw . . . . .	40
15. A typical motel near Warsaw . . . . .	40
16. A typical secondary road . . . . .	42
17. A view of the gently rolling terrain of the Middle-lake Area . . . . .	42
20. A natural bridge at Hahatonka . . . . .	50
21. A poor quality resort . . . . .	50
22. An uvala in the Hahatonka Area . . . . .	52
23. The Hahatonka Area . . . . .	52
25. A better quality resort . . . . .	60
26. A typical resort . . . . .	60
27. A typical novelty stand . . . . .	62
28. A floating dance hall . . . . .	62

## CHAPTER I

### INTRODUCTION

In recent years the Lake of the Ozarks area has attained a high rank among the recreational regions of the central United States. It has been estimated that some 1,850,000 persons vacationed in the region during 1955, and that another 3,000,000 people made one-day visits to the area; these visitors spent an estimated \$42,400,000<sup>1</sup>. The cultural landscape is dominated by improved supervised beaches, curio stores, camp grounds, recreation realty offices, roadside zoos, taverns, dancehalls, and many other facilities designed to serve the recreationist. Not including private tourist homes, nearly 15,000 overnight visitors can be accomodated by currently available cabins, motels and hotels<sup>2</sup>.

#### Statement of Problem

In order to adequately study the recreational geography of the Lake of the Ozarks Region, the thesis problem was approached on a two-fold front: (1) a description of the types and functions of recreational developments and

---

<sup>1</sup>Missouri News Magazine, Missouri Division of Resources and Development, Jefferson City, Missouri, March, 1956.

<sup>2</sup>Ibid.

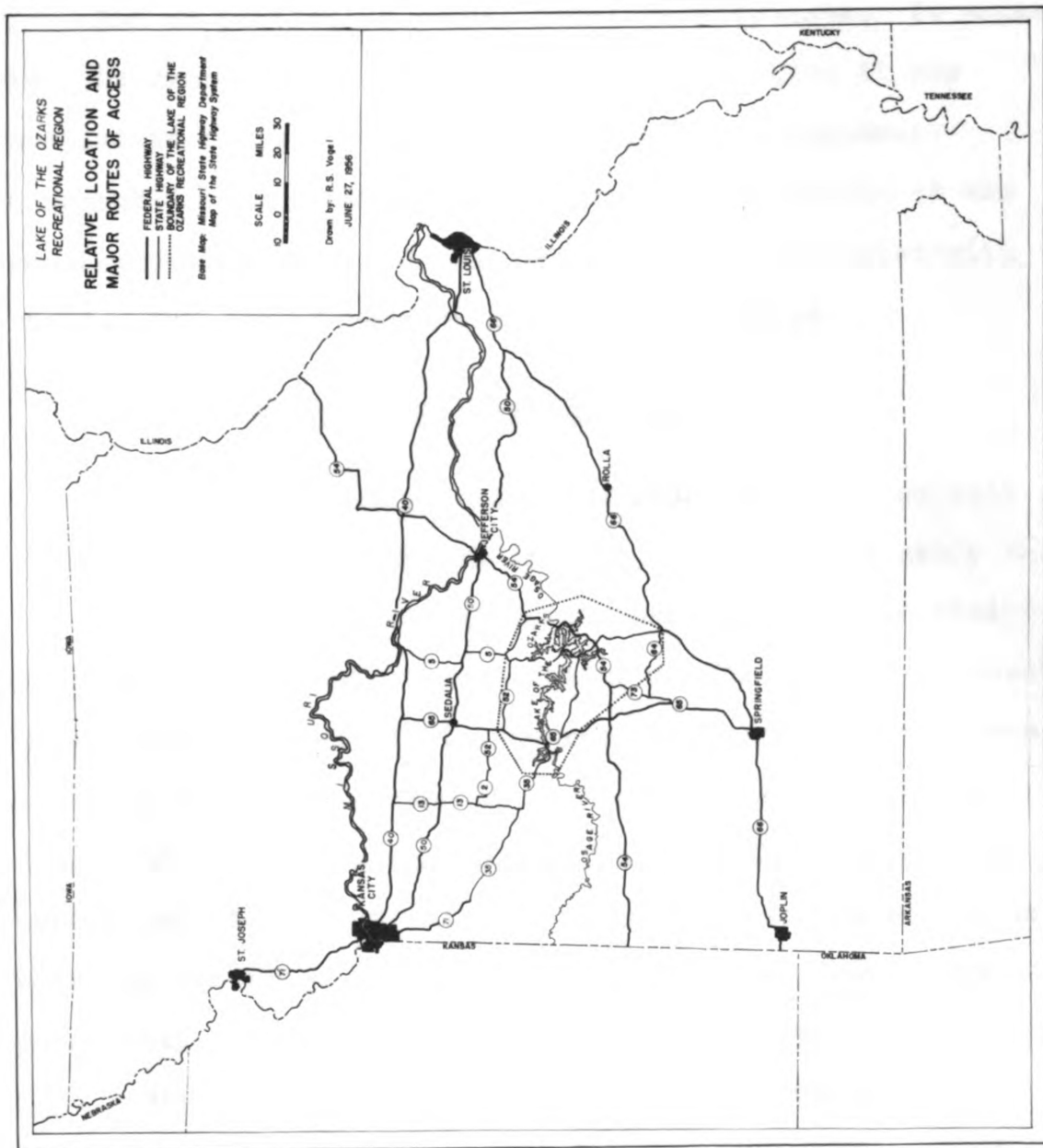


Figure 1. Relative location and major routes of access to the Lake of the Ozarks Recreational Region.

their distribution within the region; and (2) an analysis of the basis for the development of the region as a recreational center, and an analysis of factors involved in the location of particular recreational developments. To emphasize the recreational significance of the region it was decided to adopt a topical, as opposed to a regional, approach in the study. That is, only those facets of the geography of the region that were directly connected with the development of recreation would be studied.

#### Methods of Investigation

During the summer, and in December of 1955, as well as in the latter part of March of 1956, actual field study in the Lake of the Ozarks Region was accomplished. Initial field work consisted of acquainting myself with the recreational "lay-of-the-land" in the region. About ten days were spent in a general survey of the region, in which every "nook-and-corner", using United States Geological Survey topographic and county highway maps as guides, was entered with the intention of determining which areas could most profitably be selected for concentrated study.

Actual concentrated field work was begun with the observation and field mapping of those structures, other than individual private cabins, that had a strictly recreational function. The variety of these forms was literally myriad; however, the most numerically outstanding were motels, hotels, resorts, resort subdivisions, restaurants,

taverns, and dance halls.

To supplement field observation, interviews with a large number of people were conducted. Among those interviewed were recreationists, motel and resort owners, chambers of commerce personnel, realtors, restaurant owners, county office holders, and conservation agents. Topics of interviews varied, depending upon the person interviewed, but in the main were concerned with obtaining information relative to numbers, source, interests and activities of recreationists.

Statistics concerning the source areas of recreationists were obtained by studying guest registers. Approximately one week was spent in interviewing and recording resort subdivision data in the offices of the Records of Deeds of Benton, Camden, and Morgan Counties. Various State agencies concerned with the promotion of recreational activities were visited and their personnel interviewed.

Library research consisted of examining material concerning the general geography of the Lake Region. Particularl emphasis was placed on obtaining information concerning the physiography, hydrography, climate, flora and fauna, and cultural characteristics of the region. Some unpublished or out-of-print materials were examined after receipt on "inter-library loan".<sup>1</sup>

---

<sup>1</sup>A recent unpublished Master's thesis, by Paul M. Mattingly of the University of Missouri Geography Department, concerning the recreational development of the Lake of the Ozarks Region, was requested but was not available on loan for my examination and possible reference.

### Definition of Terms

Many recreational terms are in general use in the English language, but their meanings in some cases are not especially clear. To overcome this confusion, I have defined selected terms as they will be used in this thesis.

Particularly enigmatic are the various terms describing the users of recreational facilities. To mitigate this problem, I have differentiated among tourists, resorters, transients, and recreationists. The tourist is any person who travels, primarily for pleasure, and spends less than two days in the area visited. The resorter is any person visiting an area for the express purpose of recreation; his length of stay may be of any duration exceeding two days.<sup>1</sup> The recreationist is a general term used to include both the tourist and resorter. A transient is an individual traveling through an area whose aims are not, or are only incidentally, concerned with recreation.

Differentiation among recreational lodgings used by recreationists is also rather hazy. In this thesis a hotel is any hostelry designed to serve primarily the transient; it generally furnishes more services than its motor court counterpart; usually all services (e.g. rooms and restaurants) are confined to one structure; and almost all hotels are located in established settlements. The

---

<sup>1</sup>The criterion (more than two-days stay) used to differentiate between tourists and resorters is an arbitrary decision on my part. Basically, however, this definition is meaningful in that it definitely separates the week-end visitor and the vacationist.



motel (or motor court) functions as a place of lodging for either the tourist or the transient; it is always found on major traffic routes or in settlements; and it may be a single (usually "ranch-style") or a multi structured unit. A resort is any hostelry designed to serve (almost exclusively) the recreationist, usually the resorter rather than the tourist; it offers more recreational services than either the motel or hotel. In special cases motels and hotels are engaged in some resort functions.<sup>1</sup>

A resort subdivision is any platted area of privately owned recreational structures (cabins, grocery stores, gas stations, and other recreational forms) that has been surveyed and developed by a realtor or realty organization and recorded in the plat books of the county Records of Deeds.

---

<sup>1</sup>The fact that hotels are multi-storied (as opposed to single-storied motels) is probably best attributed to the fact that space is at a premium in the established settlements. Motels can cover larger areas where land is less expensive. The hotels of this region in many cases pre-date the construction of the Lake of the Ozarks and owe their existence to being located in towns which were served by passenger rail service.

## CHAPTER II

### CHARACTERISTICS OF THE REGION

#### General

##### Regional Location

The Lake of the Ozarks Recreational Region lies south and west of the center of the State of Missouri. The center of the region is slightly south of the intersection of the 38th parallel and the 93rd meridian. Kansas City and St. Louis are approximately 100 and 160 miles respectively from the area. Portions of seven counties are encompassed by the region. In all the region contains nearly 2,000 square miles; about 600 of which are in Benton County, 655 in Camden County, 50 in Dallas County, 25 in Hickory County, 150 in Laclede County, 300 in Miller County, and 300 in Morgan County.

##### Regional Boundaries

Beyond doubt, the core of the region is the artificially formed Lake of the Ozarks. Most recreational activities and facilities are based on the presence of the Lake, and practically all recreational development is either on the Lake shore or in its immediate vicinity. Non-lake shore

developments are restricted to the major traffic arteries leading to the Lake. Practically all of the service establishments in these developments owe their existence to, and function primarily for, the Lake of the Ozarks tourist and resorter.

The exterior boundaries that have been delineated are based on the presence and function of roadside services. Most of the developments lying inside the boundary (see Figure 13) serve primarily the region's tourist and resorter. The Lake of the Ozarks recreationists have but little effect on the business of the roadside services which exist beyond the regional boundary.

#### Recreational Sub-regions

A large part of the region has little or no recreational development. Accessibility and points of natural interest have tended to concentrate the construction of recreational facilities. With the construction of these facilities (and the development of services to recreationists which follows) various natural recreational divisions are differentiated. Five such sub-regions, and a sixth area, which includes all remaining parts of the overall region not included in the first five, have been delineated (see Figure 13). These sub-regions are: (1) The Headwaters Area, (2) the Middle-lake Area, (3) The Gravois Mills-Hurricane Deck Area, (4) The Camdenton-Linn Creek Area, (5) The Osage-Beach Bagnell-Dam Area, and (6) The

## Non-lake Shore Development Area.

### Physical Features

#### Physiography

The topography of the region is responsible for much of the tourist and resort interest in the area. In the final analysis, it is the extreme dissection and incision of streams (particularly the Osage River) that permitted the creation of the Lake of the Ozarks, which is the region's greatest tourist attraction. The recreationist finds the scenery of the area much enhanced by the topography; especially multiple summit levels, resulting from at least two periods of erosion, which accounts for panoramic views that are outstanding. Steep slopes, possibly the result of a heavy chert mantle and/or solution sapping, add to the region's scenic beauty.

Karsting (a result of an extremely soluble bedrock; primarily dolomites, but some limestone, and a few thin lenses and strata of sandstones; and the relatively abundant precipitation in the area) has served to make the region even more attractive to tourists and resorters. Caverns, natural bridges, sinking streams, and many other solution-formed features functioning as tourist attractions are present throughout the area.



Figure 2. A chert-filled stream bed in the Middle-lake Area.



Figure 3. A typical "ridge-farm" with the accordant summit level of the Salem Platform in the background.

1. The first part of the report is a general introduction to the subject of the study.

The second part of the report is a detailed description of the methods used in the study.

## Hydrography

The Lake of the Ozarks is not only the chief hydrographic feature of the region but it is also the chief recreationally attracting feature. The Lake was formed by damming the Osage River in Miller County, only a few hundred yards east of the Camden County line. Built by the Union Electric Company of Missouri, this dam was designed to function solely as a source of electricity.<sup>1</sup> Development of tourist and resort activities, which now makes the production of hydroelectricity of secondary economic importance was but little envisioned. Although power lines from the dam place the hydroelectric unit in a "power pool" for a large portion of Missouri, the turbines function quite often only as standby units.

The dam has a maximum height of 148 feet above bedrock, and a maximum length of 2,543 feet. The surface of the Lake is at an elevation of 660 feet above sea level when it is at full reservoir. However, due to flood control and power requirements, considerable fluctuation in the elevation of the Lake surface is necessitated. The lowest elevation on record was 639.95 feet (February, 1948) and the highest

---

<sup>1</sup>It currently produces an average of 440,000,000 kilowatt hours per year from its eight generators of 21,500 kilowatt capacity each. Most of the statistical material relative to the dam and lake were provided by W.E. Turner and A. Philips, Union Electric Company Hydrologists, in an interview on December 28, 1955.



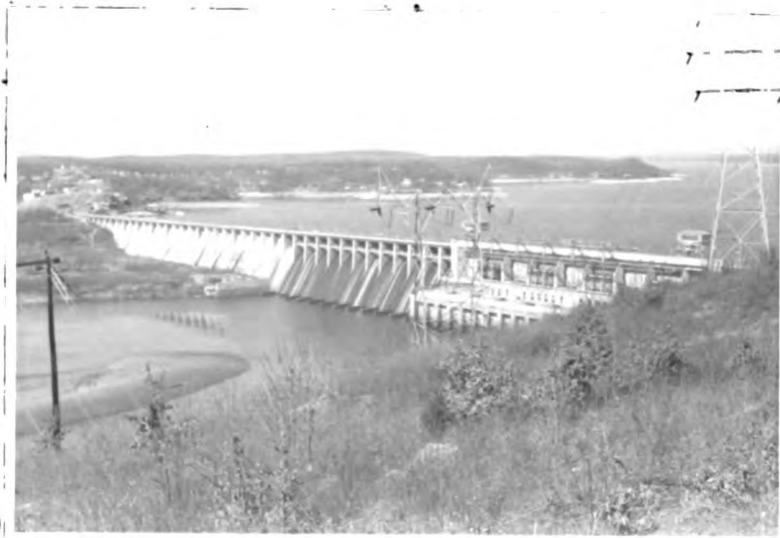


Figure 4. Bagnell Dam with its impounded waters, The Lake of the Ozarks, in the background.



Figure 5. A floating fishing and boat dock adapted to changes in lake level.

665.45 feet (during the flood of May, 1943). The top of the dam serves as a roadway for federal highway 54.

The Lake is 129 miles long and covers approximately ninety-five square miles. Due to the complexity of the drainage pattern it has a maximum shoreline length of nearly 1400 miles. This length of shoreline is greatly affected by fluctuations in the surface levels of the Lake; that is, concomitant with a decrease in surface level there is a pronounced decrease in the length of shoreline. The entire Lake border area is extremely dissected; being especially severe in the vicinity of the Lake and its tributaries. Interfluves are narrow, and minor tributaries are, for all practical purposes, numberless. With the creation of the Lake, the floodplain of the Osage, and the valleys of many of the tributaries were drowned, and an inordinate (relative to the total area of the Lake) amount of shoreline was created.

Many of the peculiarities of the Lake are of special significance in its development as a tourist and resort center. The fluctuation in elevation of its surface is a definite problem for resorters; one day the Lake may be at the doorstep of a cabin and a few days later it may be a mile away. Prior to construction of the dam, the Union Electric Company purchased easements on all property to above any possible high-water mark. Thus, control of all lake shore has prevented any possible legal recourse by resort owners if the Lake level changes fully enough to cause a hardship. In order to adjust to Lake fluctuations

most boat docks are of the floating rather than stationary type. Prior to the filling of the Lake, all trees were removed from the valley floors, and even though Lake levels do change there is no creation of navigation hazards or exposure of unsightly stumps and limbs. Swamps and sloughs are negligible problems. Silting has been sufficient, since the creation of the lake, to cover all vegetation on valley floors, and the silt dries out almost immediately when exposed above the water surface. Rock outcrops form almost all of the old valley walls, and the walls themselves are sufficiently steep to prevent the development of undrained or poorly drained areas beyond the valley floor.

The most outstanding stream of the region is the Osage River. This river, since its damming, along with most of its floodplain is now occupied by the Lake. Within the region there are a large number of tributaries whose valleys have been partially inundated by the Lake. Among the largest of these are the Niangua, Pomme de Terre, and Grand Rivers. Both the Grand and the Pomme de Terre are in the Headwaters Area and offer little spectacular scenery and have been but little developed recreationally. On the other hand, the Niangua River follows a serpentine channel through the most rugged part of the region, and much recreational development has occurred along its shores.

Owing to the solubility of the bedrock and chert-filled stream channels, small perennial streams are almost completely absent from the region. Thus, there is little

opportunity for the development of recreational forms and activities on this type of water feature.

There has been but little recreational development along the trunks of the major streams of the region. Where tributary streams are confluent with the Lake there has been, in most places a pronounced development, while upstream from the mouth, few recreational sites have been developed.

Although the Missouri Ozarks is the site of some of the world's largest springs, the Lake of the Ozarks Region contains only two springs of really great magnitude: Bennett's Spring and Hahatonka Spring.<sup>1</sup> There are, however, literally hundreds of springs in the area, all of them smaller than either of the above, but varying in size from a mere trickle

---

<sup>1</sup>The daily discharge of the major springs in the area is as follows:

<u>Spring</u>	<u>Discharge (Gallons per day)</u>
Bennett's	99,500,000
Hahatonka	48,000,000
Armstrong, East	26,000,000
Blue	14,900,000
Wet Glaize and Campground	8,210,000
Gravois Mills	5,700,000
Toronto	4,480,000
Conn	3,300,000
Famous Blue	2,870,000
Armstrong, West	2,060,000
Morrow	1,640,000
Boyle's Mill	780,000
Cullen	756,000
Little Toronto	271,000
Moulder	30,000

Compiled from: Beckman, H.C. and Hinchey, N.S. The Large Springs of Missouri. Vol. XXIX, 2nd ser., Mo. Geol. Surv. and Water Res., Rolla, Mo., 1944, pp 48-128



to a daily discharge of upward of 26,000,000 gallons.

The Niangua River Valley is the area of greatest concentration of the larger springs. Smaller ones are also found on the Little Niangua, Auglaize, and Gravois Creeks.

Historically, springs have functioned as a source of power for grist mills and spas. There are, at present, no actively functioning grist mills or spas in the region.<sup>1</sup> Springs are currently used in relation to recreational activities as trout hatcheries, bait (minnow) hatcheries, commercial trout fishing sites, and as a source of domestic water supply for a few resorts. Since springs in this region maintain an almost constant temperature of fifty-six to fifty-eight degrees Fahrenheit, their waters are, temperature wise, almost ideal for trout raising.

In this region of relatively abundant rainfall, ground-water resources are more than sufficient to meet the current needs of all resorters, tourists, and permanent residents. Due to the physical characteristics of the bedrock (highly soluble calcium and magnesium carbonates) the height of the water table is extremely variable; thus, well depths vary greatly (average from fifty to 150 feet). On the whole, most resorts and tourist camps obtain their domestic water supply from wells. Pollution is definitely a potential

---

<sup>1</sup>There is one grist mill still standing in the Bennett Springs State Park, but it is only a tourist attraction and performs no milling. The development of a spa at Climax Springs is discussed in Chapter III.



Figure 6. The Hahatonka Spring. The island on the right is a hum that rises approximately 100 feet above the water surface.



Figure 7. Hatching and breeding pools of the trout hatchery at Gravois Mills.



THE NEW YORK PUBLIC LIBRARY  
ASTOR LENOX TILDEN FOUNDATION  
100 N. 5TH ST. NEW YORK 17, N.Y.

THE NEW YORK PUBLIC LIBRARY  
ASTOR LENOX TILDEN FOUNDATION  
100 N. 5TH ST. NEW YORK 17, N.Y.

groundwater problem. As yet disposition of sewage has created no problem, but it is highly probable that with further settlement on the limestone and dolomite terranes there will be the problem of trying to maintain purity in the groundwater resources. The absence of natural filtration in the solution-formed groundwater holding cavities make a certain amount of pollution almost inevitable.

### Climate

Considering the extremely high summer temperatures (an average in excess of eighty degrees Fahrenheit in July), experienced in the Lake of the Ozarks Region, it appears, at least superficially, very unusual that the area has developed into a major summer resort. The temperatures actually are no higher and in some cases somewhat less than those of the areas from which tourists and resorters originate; i.e. Kansas City, St. Louis and surrounding prairie states. Certainly the sensible temperatures of the region are less and the diurnal range more.<sup>1</sup>

Other than as an agent of solution weathering, precipitation plays an insignificant role in the total regional recreational picture. The average annual precipitation is about forty inches, with slight maxima in late spring and

---

<sup>1</sup>Although I did not have instruments to make quantitative measurements, it was my observation that air drainage into Ozark valleys, the location of most resorts, accounted for a significant amount of nocturnal cooling.

early fall. Much of the warm season precipitation is of convective origin and is associated with thunderstorms. Frequent droughts may cause fluctuations in Lake levels, and occasional summer squalls may force cancellation of swimming and boating for a few hours. The deer season may be effected by large and unseasonable snow storms (e.g. November 1951, when approximately two feet of snow blanketed the surface during the season), when many hunters are forced to forego their annual week's outing.

Tornadoes are rare in the region and constitute only a minor hazard relative to the tourist and resort industry. However, during 1953 a number of drownings and the destruction of most of one resort subdivision were reported as a direct result of tornado action.

### Biotic Characteristics

The biota of the Lake area not only functions as a major recreational attraction, but also as a raw material source for an important part of the non-recreational economy. The recreationist, relative to the fauna and flora of the region, is either a sportsman looking for game or a sightseer merely enjoying the scenery afforded by the mixed deciduous forest. The native is mainly interested in the forest as a source of lumber, and the fauna as a source of food or income, as well as sport.

About seventy-five per cent of the region is mixed deciduous forest. The major species are the white oak, post

oak, red oak, burr oak, blackjack oak, hickory, walnut, and various elms and ashes. Valley floors, near streams, usually exhibit a large number of sycamores. The eastern red cedar is the only evergreen found in any significant quantities in the area. The only non-forested areas are the more extensive ridges, the valleys, and settlements; in a few rare cases hillsides have been deforested and are used as farms.

The chief recreational function of the forest is as a scenic attraction; particularly during the Spring and Autumn. Secondly it offers habitat for game animals and raw materials for novelties and handicraft products. The red cedar is especially favored for souvenir and novelty manufacture; the largest factory of this type is located at Camdenton and is reputed to do an annual business of about one million dollars.

The outstanding faunal attraction to the region are the fish in the Lake and its tributary streams. Within the area literally hundreds of species of fish and minnows are found; the most outstanding, from a sportsman's view are the crappie, channel catfish, black bass, white bass, and jack salmon. Trout fishing is a popular but artificial sport, since the trout is not native to the area, and is present only where "planted". Trot-lines, containing upward of fifty hooks spaced at regular intervals, are used in fishing for the non-game and larger game fish.<sup>1</sup> This method is

---

<sup>1</sup>The most popular trot-line fish are the paddle-fish (spoonbill catfish), flathead catfish, buffalo and blue catfish.

particularly popular among local inhabitants and has gained the favor of some tourists and resorters. In order to add to the attractiveness of their resorts, many owners have located and marked crappie beds. These beds are usually in old root wads or around stumps, and in less than ten feet of water.

Although there is no legal seasonal limitation on fishing in the Lake of the Ozarks, practically all fishing is confined to the Summer, late Spring, and early Fall months. The reasons for this seasonal concentration are many, but doubtless the prime factor is climate. Only during the warmer months is the fisherman willing to risk the vagaries of the Ozark weather. Among other factors involved in the restriction of fishing to the warm seasons are: (1) the Spring, Summer, and Fall are the seasons when most people are vacationing; (2) it is the consensus of opinion among local fishermen that fish will not bite during the winter; (3) the winter months are a closed season for game fish in all of the tributaries to the Lake; and (4) week-end recreationists are more willing to travel from such places as Kansas City and St. Louis when there is little danger of bad road conditions and daylight hours are longer.

The outstanding animal attraction to the area is the white-tailed deer. The deer population of the State is rather limited and the legal hunting season is only a few days (usually less than a week in the early part of

November). However, since the deer herd in the immediate vicinity of the Lake is one of the largest in the State, the season is important to the resort owners of the area. The end of the deer season is, for all practical purposes, the end of the tourist and resort season in the region.

Deer hunting is restricted by law to residents of Missouri; thus, out-of-state recreationists are almost totally absent from the region during the season. However, all commercial tourist and resort facilities are filled to overflowing, and most private homes entertain a number of guest hunters during deer season week.

Fox hunting, in which the object is not to catch the fox, but to listen to the "music" produced by the baying hounds, is a major sport of the region. This sport, originally engaged in only by natives, has caught the fancy of many recreationists. Squirrel and rabbit hunting is engaged in by a few vacationists but it is not a major sport. Hunting and trapping of skunk, opossum, mink, raccoon, and various small fur-bearing animals is restricted mainly to local residents.

The only game bird of any recreational significance is the quail. At one time, prior to large scale recreational development of various types on the Lake, ducks and geese, in large numbers, used the area as a "stopping-off-place" during their seasonal migrations. During recent years these water birds have almost completely abandoned the region. The quail still excites some interest among

hunters, but since it is a common species, found all over the midwest, few hunters are attracted to the area for this reason alone.

### Cultural Features

#### Transportation

Transportation facilities for recreationists into and within the region are limited primarily to the automobile. Railroads are nearly non-existent; two lines (the Rock Island and the St. Louis and San Francisco) breach the region in its peripheral areas, touching the "gateway" towns of Versailles, Eldon and Lebanon. Prior to World War II, branch lines, with one train daily, connected Warsaw and Bagnell with major rail networks; but with their abandonment, the heart of the region was left without rail service. Few tourists and resorters use rail facilities to enter the area.

Commercial airlines are completely absent. Doubtless, some tourists do use this type of facility for portions of their vacation trips, but the number doing so is negligible. A few small private airports have been constructed but have had hardly any effect on recreation.

Although bus travel is unimportant in the area, the larger towns (Warsaw, Lebanon, Camdenton, and Eldon) and a few small settlements on highways 54, 65 and 5 are served by bus lines. A franchise has recently been granted



Figure 8. A State highway (route 35) in the Headwaters Area.



Figure 9. A ford on a secondary road in the Middlelake Area.







Figure 10. A county highway in the Camdenton-Linn Creek Area.



Figure 11. A low water bridge spanning the Little Niangua River.

1. The first part of the document is a list of the names of the persons who have been appointed to the various offices of the Board of Directors of the Corporation.

2. The second part of the document is a list of the names of the persons who have been appointed to the various offices of the Board of Directors of the Corporation.

a bus company whose main route will be highway 54. This line will serve an area west of Camdenon which, heretofore, has been without bus service.

To more than anything else the recent popularity of tourism in the Lake of the Ozarks Region is indebted to the automobile. Prior to the construction of major highways and the introduction of cars the region was virtually isolated.

Good routes to the Lake area are available from most of the surrounding population centers. However, it is only recently that good secondary roads connecting points within the area have been built; and even today, along the southern and western extensions of the Lake, secondary and tertiary roads are lacking or of a poor quality. Essentially the only roads in the area that are surfaced are the major national and parts of the state highways.

From the north and west the greatest number of tourists and resorters come from the Kansas City area and major highways are available for the entire route. The region is a minimum road distance of ninety miles (at Warsaw) from Kansas City. St. Louis is about 160 highway miles from the closest part of the region, and Springfield about 60 miles. All of these major tourist routes are along good highways, some of them four-laned for part of their distance.

A preponderance of secondary roads are graded and

graveled. The gravel used on these roads is the ubiquitous chert of the Ozark Region. This chert, present in channels and flood plains of most Ozark streams, may be procured at no cost other than for transportation. Although the chert is cheap, it tends to break into sharp, angular fragments, and automobile tires are often adversely effected. The proximity of bedrock to the surface and the presence of a pronounced hardpan in the "B" horizon of most soils has, combined with the cheapness of chert gravel, permitted the construction of these roads without great cost. Many of the roads leading into subdivision developments have merely been bulldozed out of the forest and surfaced with gravel.

In those places where recreational development has advanced to any marked extent, the Missouri State Highway Department has constructed graded and graveled "Lake Roads". These roads are of about the same quality as the county highways (see Figure 6).

The only bad roads in the area are those connecting hill farms with major routes, and some private roads connecting individual developments. Even these are passable at all times except during flood periods when valleys may be under water for a short time.

A major problem in building public roads has been the severity of topographic dissection. Many of the original roads were constructed to connect farms with marketing centers, and as such were built atop the sinuate

ridges of the region. A large portion of the present day secondary roads were formed from this nucleus, and maintain the same winding configuration. Rather than being a hindrance to recreational development, this sinuosity, which results in a constant change in scenery, seems to be appreciated by the tourist. Regardless of the aesthetic value of these curving roads, distances between points are increased, and costs of construction and maintenance are magnified.

The presence of the Lake and its many tributary streams has, cost-wise, made bridge construction a major road building problem. Below Warsaw, the Lake is spanned by only four bridges and Bagnell Dam. With the exception of bridges across the Pomme de Terre near Fairfield and the Little Niangua near its confluence with the Lake, the smaller streams are either unbridged or are spanned with "low-water" structures. The low-water bridges are little better than the fords, except that they furnish solid footing for crossing the streams.

Although roads in general are passable at all times, their quality requires enhancement if a maximum ease of movement within the area is to be achieved. In some areas, especially in the central and headwaters portions of the region, the past scarcity of roads of any type has militated against recreational development.

## General Economic Characteristics

Relative to the total income, recreation is by far the dominant economic activity of the region. The Lake of the Ozarks Association (a chamber of commerce type group) estimates that over forty million dollars were spent in the area by tourists and resorters during 1955. The 1950 federal census<sup>1</sup> indicates that farming is the dominant industry relative to the total number of people employed. In 1950 Camden County<sup>2</sup> had 2,144 employed men in the labor force; of this number, 958 were either farmers or employed on farms. The total value of farm products sold in Camden County was \$1,746,875 or \$1,898 per farm, the net income was only \$395,900 or \$428 per farm. This very low income forces the native farmers to seek part-time employment in the business of recreation as laborers, guides, general handymen, and in a few cases to establish businesses of their own.

Regardless of the absolute accuracy of the forty million dollar figure quoted above, the business of recreation is the major economic activity by an overwhelming margin. One attraction alone, whose entrance

---

<sup>1</sup>Unless otherwise noted, all economic statistics in this section and all population figures in this thesis are taken from this census.

<sup>2</sup>Camden County, in the heart of the Lake of the Ozarks Region, is used because it is the most nearly typical of area as a whole.

fee is \$1.25 per person, attracts more than 100,000 visitors per year; the income thus derived is about one-third that of the net farm income of the county in which it is located.

### The Recreationist

The Lake of the Ozarks is well located relative to large population centers. The metropolitan areas of Kansas City, St. Louis, Chicago, Des Moines, Omaha, Lincoln, Wichita, Oklahoma City, Tulsa, Little Rock, and many smaller cities are within a distance of a one-day drive of the region. According to the 1950 census the area lying within a radius of 500 miles of the Lake Region contained more than one-fourth of the population of the entire United States (some 45,000,000 people).

In an attempt to ascertain the source of recreationists, the registers of two types of attractions were studied; one a free attraction, the other commercial. The free attraction was the forest-fire lookout towers which are built atop commanding heights and are of sufficient height themselves to offer a commanding panorama of the Ozarks. The commercial attraction was the Bridal Cave near Camdenton. In neither of these places is registration of visitors compulsory, and information from other sources indicates that recreationists from out of state register more frequently than do those from Missouri.



The addresses of the 1368 registrants were studied and the following table compiled:

<u>HOME STATE OF RECREATIONIST</u>	<u>PER CENT OF TOTAL</u>
Missouri	30.0
Iowa	17.0
Kansas	13.2
Illinois	10.9
Nebraska	6.5
Michigan	3.8
Minnesota	3.1
Other <sup>1</sup>	15.1

If the Missouri registrants are excluded from the above table, the proportionated total supplied by the various states is as follows:<sup>2</sup>

<u>HOME STATE OF RECREATIONIST</u>	<u>PER CENT OF TOTAL</u>
Iowa	25.1
Kansas	18.8
Illinois	15.2
Nebraska	8.5
Michigan	5.3
Minnesota	4.5
Wisconsin	2.2
Indiana	2.2
Other	18.0

---

<sup>1</sup>Ohio, California, Wisconsin, Colorado, Indiana, South Dakota, Arkansas, New Jersey, Texas, New York, Washington, Arizona, Georgia, Mississippi, New Mexico, Oklahoma, Oregon, Massachusetts, Nevada, Maine, Florida, as well as Washington D.C., Canada, Germany and Hawaii were represented in the registers. None of these represented more than two per cent of the total registrants.

<sup>2</sup>To cross-check these figures various people were interviewed, including chamber of commerce personnel, motel owners, and the owners of the Bridal Cave Development Company, Inc. It was the consensus of opinion that these figures were relatively accurate, but that Illinois supplies proportionately more tourists and resorters than these statistics would indicate.

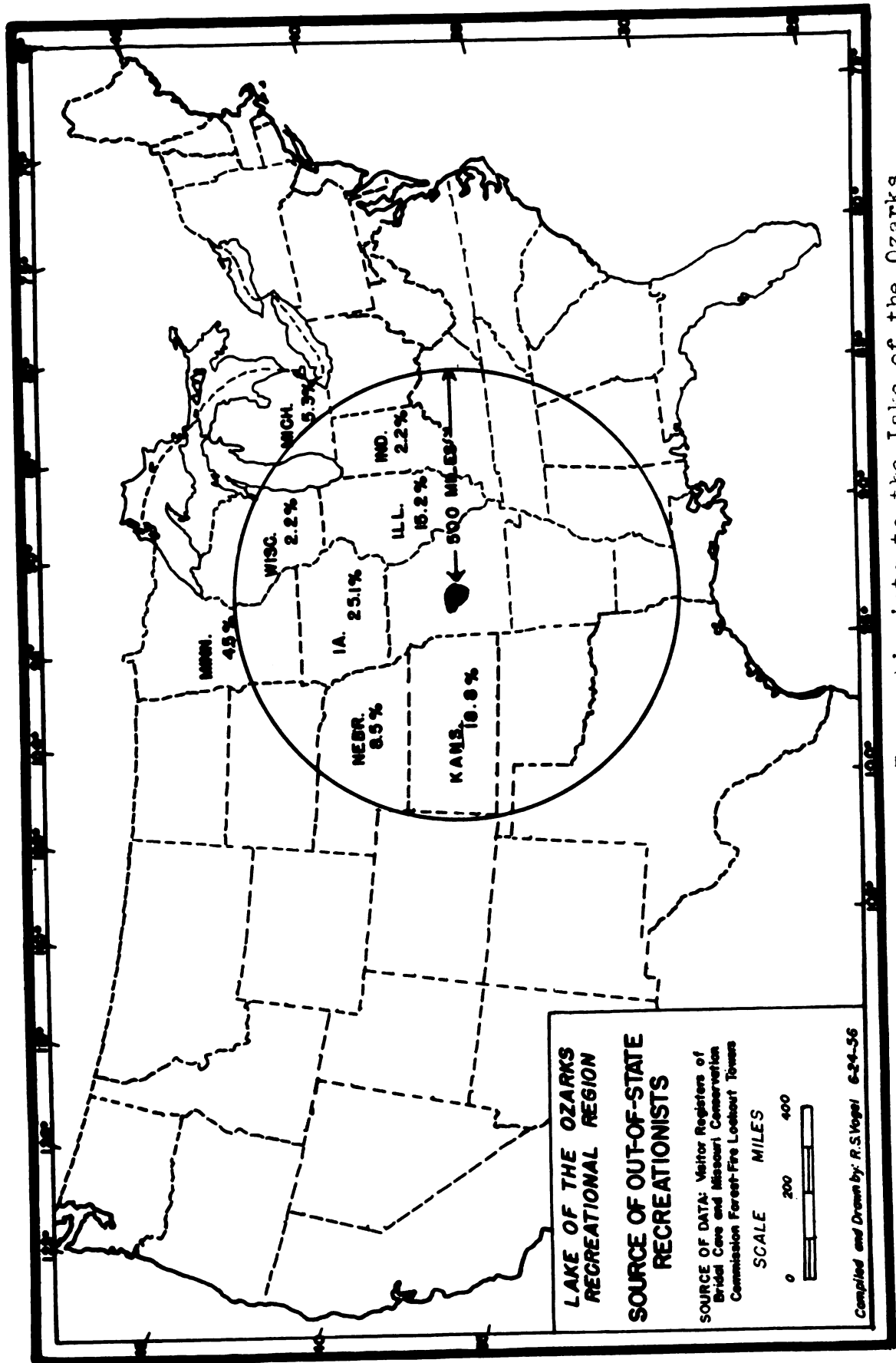


Figure 12. Source of Out-of-State Recreationists to the Lake of the Ozarks Recreational Region.

Analysis indicates that the preponderance of out-of-state recreationists (about seventy per cent) come from states that share a common boundary with Missouri and that an overwhelming majority (ninety per cent) are derived from states within 500 miles of the Lake of the Ozarks Region.

Like the tourist, the owners of the private cabins in the resort subdivisions are residents of Missouri, or are from closely located areas. R.J. Roberts, Secretary of the Headwaters Association, states that most of these people are from the Kansas City area.<sup>1</sup> This is particularly true in the western and central portions of the Lake area; in the eastern section large numbers of private summer and week-end cabins are owned by St. Louisans.

These statistics seem to indicate the importance of propinquity in the selection of a vacation goal by the tourist or resorter. The fact that the Lake of the Ozarks is near to, and easily accessible from the states of Kansas, Nebraska, Iowa, and Illinois is apparently a primary, if not controlling factor in the development of this area.

Many writers and researchers in recreation are of the opinion that the primary aim of the individual in vacationing and touring, is to expose himself to as complete a change in environment as is possible or practicable. The Lake of the Ozarks Region, penetrating as it does, into the prairies of the Middle-west offers to many people the nearest change of this type. The farmer of Iowa, Nebraska,

---

<sup>1</sup>Personal correspondence, February 10, 1956.

Kansas, and Illinois and the residents of the major metropolitan areas to the west, north and east are thus attracted to the region. The hills of Kentucky, Tennessee, Arkansas, and much of Oklahoma do not differ markedly from the hills of the northern Ozarks. The large hydroelectric projects of the Tennessee Valley and in southern Missouri and Arkansas have formed artificial lakes that are comparable to anything the Lake of the Ozarks has to offer the recreationist. Thus, the paucity of visitors from states adjoining Missouri on the south can be attributed primarily to a lack of landscape differences between their homes and this area.

#### The Local Residents

The Lake of the Ozarks area is one of the more sparsely populated sections of Missouri. According to the 1950 census the population of the seven counties partially encompassed by the region was 75,665. Since most of Dallas and Hickory, and large parts of Laclede, Miller, and Morgan Counties lie outside the Lake of the Ozarks Recreational Region, the regional population is much less, probably about 50,000. Of this number about 17,000 are residents of established settlements. Without the inclusion of the residents of the towns, it is found that the density of population in the region is only about sixteen people per square mile.

Racially, the area is composed almost exclusively of Caucasians. Permanent non-white residents, overall, amount

to less than one-tenth of one per cent of the total population. Only 188 negroes reside in the seven counties, and many of them are in the farming areas outside the region, or are employed in the peripheral towns.

There are rather large enclaves of German settlers and descendants of German settlers in the region. This group is located mainly in the northern fringe area of the Lake area, with Cole Camp, Lincoln, and Stover being particularly prominent in this respect. The largest ethnic group in the region is composed of descendants of the original English and Scotch-Irish settlers who moved into the area during the early and middle Nineteenth Century from Kentucky and Tennessee. It is these people that make up the much maligned "hillbilly" group, that is promoted (at times somewhat surreptitiously) as a recreational resource. The customs of the hillbilly are of much interest to the tourist. Chief among these customs that have been an attraction are the local variations on the square dance and the fox chase. The native population also furnishes labor (fishing guides, motel and hotel maids, waitresses, etc.) for the resort industry.

## CHAPTER III

### REGIONAL RECREATIONAL PATTERNS

#### General

Recreational development on the Lake of the Ozarks has been characterized by a headward diminution of recreational forms and activities. The area nearest the dam has been the recreational heart of the region, and concentration of development has in general diminished with distance away from this section. Certainly, there are exceptions to this generalization in that construction of facilities has tended to follow major routes into the area; hence, at least minor developments have occurred at points of easiest access. Also, particular points of scenic interest have been focii of recreational development. On the whole, however, with other things being equal (mainly scenic qualities and accessibility), the most extensive development has been in the vicinity of the dam.

Reasons for this phenomenon are not obvious, but probably the presence of the dam is the chief factor involved. The dam, when constructed, was one of the largest in the United States, and no trip through the region was complete without a view of this "man-made marvel"; even today, the dam is a major attraction. The early impetus thus given

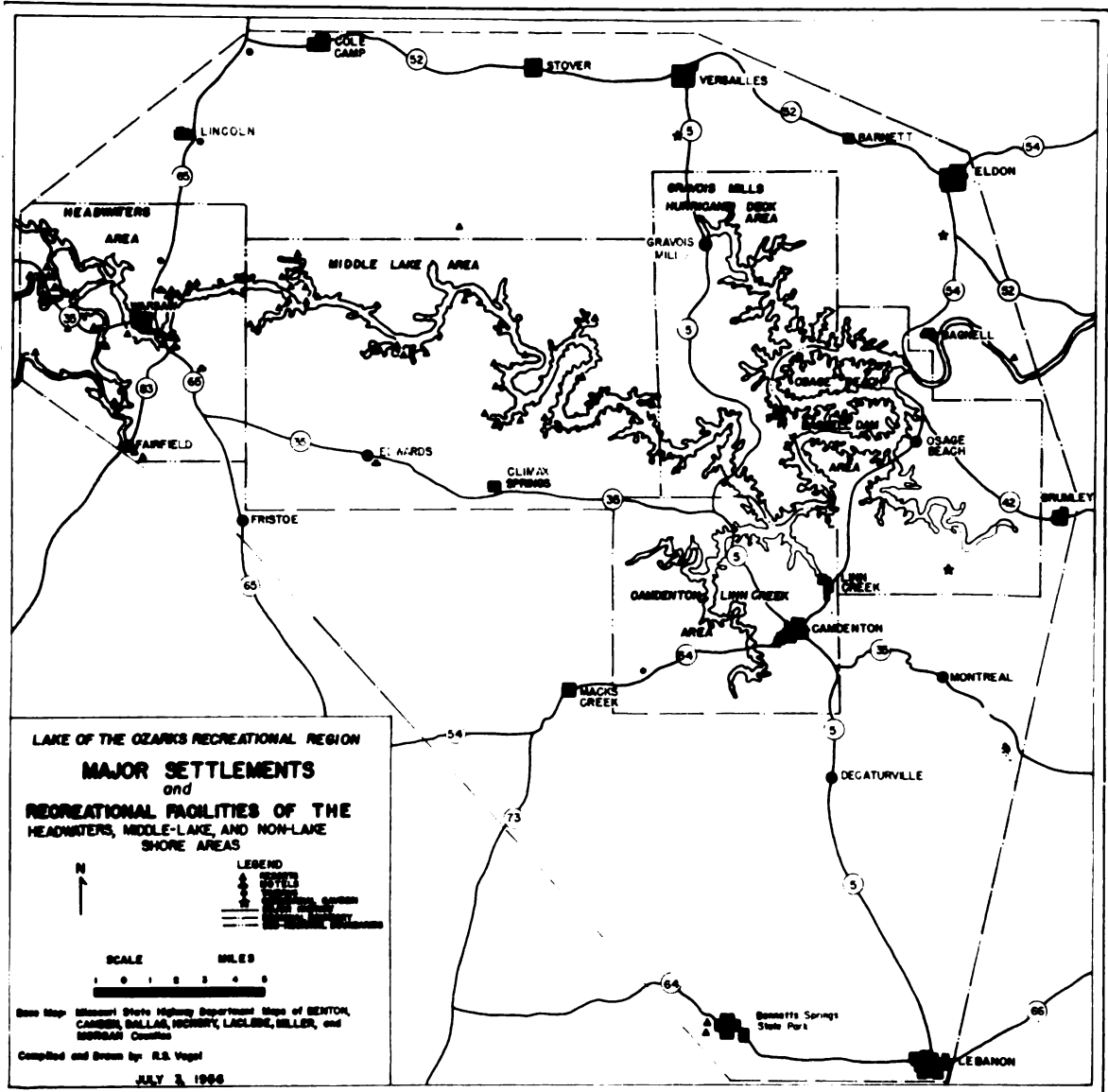
the development of this section has been carried over to the present. Doubtless, accessibility and natural scenic beauty of the area were at least secondary reasons for the build-up. When the dam was built only two major highways entered the region, one on the east and the other on the west. The eastern portion of the region is the more scenically attractive area; the tourist, of course, would choose this route for any drive through the region.

Although there is a regional concentration of the phenomena associated with recreation near the dam, other areas have smaller developments. The remainder of this chapter is concerned with the discussion of the sub-regions which have been differentiated on a recreational concentration basis.

#### The Headwaters Area

This section lies on the western margin of the Lake of the Ozarks Recreational Region. It is the area that is nearest to Kansas City and has been provided with excellent roads connecting with the Kansas City area. Overall this section is the least scenic of the entire region; hills are rolling but not especially rugged, slopes are relatively gentle, the lake does not occupy all of the former floodplain of the Osage River, and much of the adjacent area is a relatively flat plain.

The chief settlement in the area is Warsaw, the pre-lake head of navigation on the Osage River. Warsaw, with a



**Figure 13.** Major Settlements and Recreational Facilities of the Headwaters, Middle-Lake and Non-Lake Shore Areas of the Lake of the Ozarks Recreational Region.



population of less than one thousand, is not strictly a recreational town as it is also the county seat of Benton County and a rural trading center. Recreational development (depending entirely, or in part, on the tourist and resorter) within the town is restricted to three resorts, three taverns, one hotel, a sporting goods store, and three restaurants. Certainly, the one moving picture theater, three grocery stores, three drug stores, and many garages and service stations, as well as other enterprises gain part of their patronage from the visiting recreationist. The "city" also provides an excellent public park and golf course, but they are little utilized by resorters and tourists. A small gun-stock factory<sup>1</sup> using native walnut timber as a raw material is located immediately adjacent to the town's eastern limits.

Outside of Warsaw three motels and one hotel (just across the lake from the town) are found in the area. Commercial resorts are located near Fairfield on the Pomme de Terre arm of the Lake, near Warsaw on the South Grand and Osage Rivers, and at various points along the lake shore of the former Valley of the Osage River. A fish hatchery is in process of construction north of Warsaw, though not in operation as yet, it is designed to furnish bait for visiting fishermen.

Resort subdivisions have been the outstanding recreat-

---

<sup>1</sup>Locally reputed to be the largest gun-stock factory in the United States.



Figure 14. The Lake of the Ozarks above Warsaw. The lake is about eighteen feet below full reservoir and is occupying only the former channel of the Osage River.



Figure 15. A typical motel near Warsaw.

[illegible]

• *Journal of the American Academy of Child and Adolescent Psychiatry*, 1999, 38, 10, 1293-1300.

ional development in this section. Some of the first subdivisions in the entire lake area were platted in this area. For about fifteen years, between 1935 and 1950, little actual construction took place. However, since 1950, the Kansas City resorters have "flocked" into the area and literally hundreds of cabins have been built. Early subdivision developments were rather shoddy and contained many tar-paper shacks and outdoor privies. Since many of the current builders of cabins are planning to retire to the region, present construction is of a better quality and more pleasing appearance.

The South Grand River, confluent with the lake just above Warsaw, is the only stream along which significant recreational development has occurred. This is likely due to the fact that a major highway closely parallels its shore for about ten miles and that it is somewhat closer than the lake itself to Kansas City. Possibly the fact that the lake is not particularly scenic in this area may be responsible, at least partially, for the Grand's development.

Although of little recreational significance, one of the most interesting developments in the entire Lake of the Ozarks Region is in this section; an eating establishment owned and operated by a Negro. It is credited with being one of the most frequented facilities of its type; even the natives of the area patronize it. This is especially remarkable since the region has, historically, been a "Jim Crow" area.



Figure 16. A typical secondary road in the Middle-lake Area.



Figure 17. A view of the gently rolling terrain of which most of the Middle-lake Area is composed.



This Headwaters Area is one of two sections (the other is the Middle-lake Area) which appear to be destined for a rather dramatic increase in recreational development in the near future. Most of the better sites along more scenic sections of the lake have already been occupied and this area has a considerable amount of shore-line that is not now used.

### The Middle-lake Area

This is the least developed, from a recreational viewpoint of all the sections of the Lake of the Ozarks Recreational Region. Until after World War II, no state or federal highways entered the area. Along the southern boundary of this section state highway 35, a gravel road,<sup>1</sup> now passes; in many places it is as much as fifteen miles from this road to the lake. Secondary roads of a good quality have been lacking, but with state assistance, this deficiency is rapidly being overcome. There are no bridges spanning the lake in this area; thus, the region is effectively split into two sections; the North Shore and the South Shore. These sections, separated by only one-fourth to one-half mile of water, are by land transportation scores of miles from each other.

Beyond doubt, this lack of easy access has been a major factor militating against development; however, the area is also lacking in major points of natural scenic interest. A

---

<sup>1</sup>An oil surface was applied to this road during the summer of 1956.

spa development occurred at Climax Springs late in the nineteenth century, but was soon abandoned when potential patients and resorters were unable to find easy transportation to the bath-houses and hotel that were constructed.

There is only one motel in this section, at Edwards, ten miles from a major highway and about fifteen miles, by road, from the lake. Perhaps with the surfacing of route 35 which passes in front of the motel, its currently poor location will not be quite as disadvantageous. Four restaurants, two of which operate seasonally, are located in this section. The few resorts found here are of a poorer quality than their counterparts in other sections; in many cases they are not even furnished with running water.

The leading recreational form in the area is the resort subdivision. As in other sections of the region, earlier developments were of a poor quality, and current developments are of a much better type. Almost all current subdivision contracts have construction restrictions which prevent the building of unsightly shacks.

The development of resort subdivisions at points where tributary streams are confluent with the lake is especially marked in this section. The reasons for this apparent magnetic power of stream mouths are somewhat obscure. However, among the several advantages they have over other lake front locations are that they are more secluded (relative to the main lake), afford river as well as lake fishing, and are a good source of minnows for bait. Prior to the



construction of the dam and the filling of the lake, the river valleys were almost all in farms and were served by passable roads. Therefore, they were accessible to resorters from the very inception of recreational activity in the area.

Platting of subdivisions has been accelerated in this section since World War II.<sup>1</sup> Among the most recent developments has been Duncan's Point, the only all Negro subdivision in the entire Lake of the Ozarks Region.

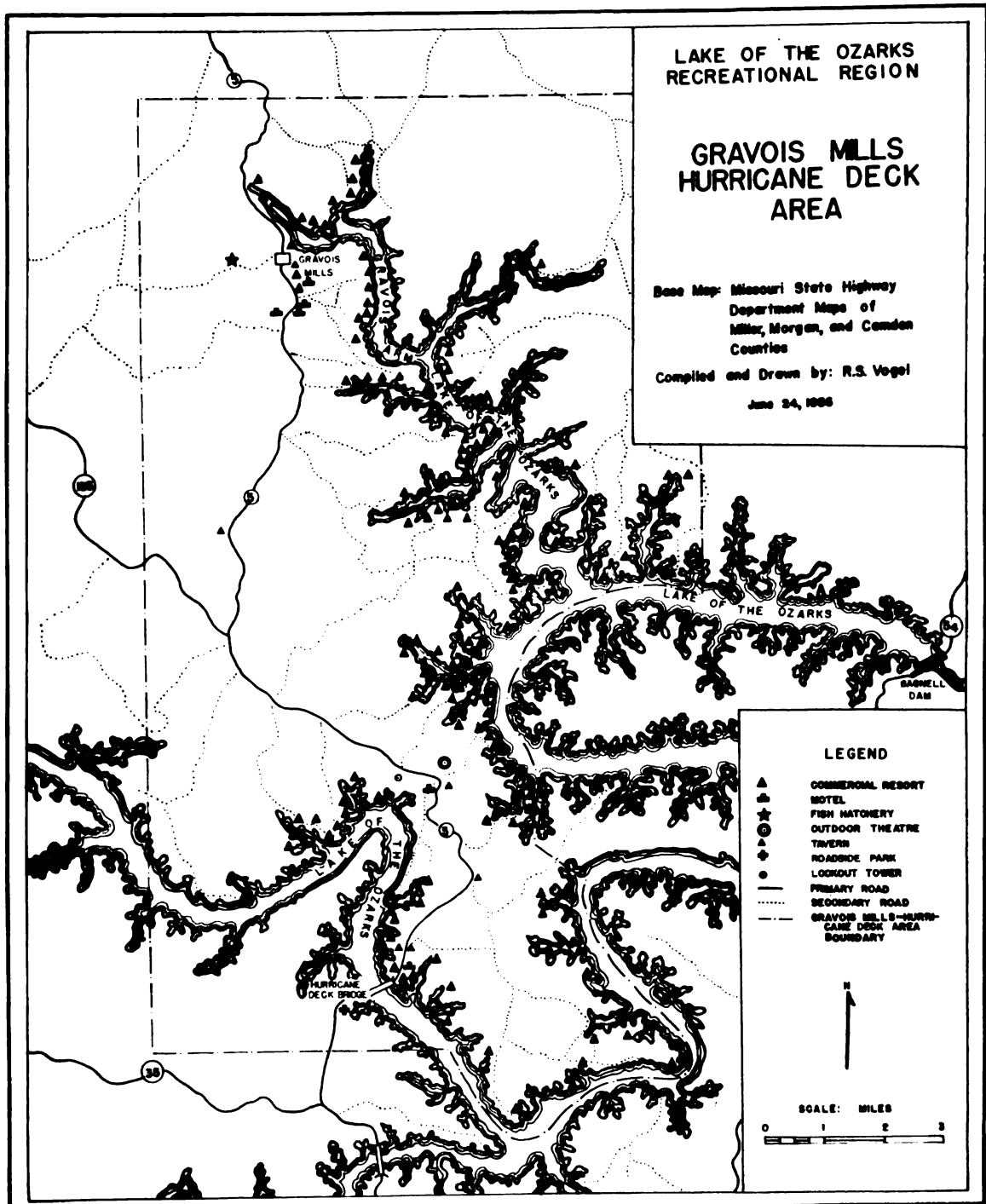
Like the Headwaters Area, it is likely that this section will, with increased accessibility and as a result of earlier utilization of better natural sites in other areas, in the near future experience rapid recreational growth.

#### The Gravois Mills-Hurricane Deck Area

This area gets its name from the Gravois Mills Springs and the Hurricane Deck bridge which lie in the northern and southern portions of the area respectively. Until 1949, the only bridge across the Osage River portion of the Lake of the Ozarks between Warsaw and Bagnell Dam, was the Hurricane Deck "toll-bridge". There was a pronounced development of recreational facilities along route 5 to the north of the bridge; and to the south, along the same highway there was a gap of

---

<sup>1</sup>This is true of the entire Lake of the Ozarks Region. Of the 370 registered resort subdivisions in Camden, Benton and Morgan Counties, fifty-four per cent (201) were recorded between January 1, 1950 and April 1, 1956.



**Figure 18.** The Gravois Mills- Hurricane Deck Area of the Lake of the Ozarks Recreational Region.

about six miles with hardly any development. Recently the toll was removed and the first evidences (gas stations and small commercial resorts) of developments south of the bridge are now coming into being.

The recreational forms in this area are relatively diverse with the commercial resort the outstanding feature. More than 125 (see Figure 18) resorts are in this rather small area. At Gravois Mills the springs (see Figure 7) have been developed as a fish hatchery. Coincident with the hatchery, the owners of the Gravois Mills development have established areas where public trout fishing is available for a fee.

Victor Inn, a dance hall and tavern near the Hurricane Deck bridge, is a major tourist attraction. The local square dancers who perform here have gained some fame by becoming the winners of several "world's championship" square dance contests.

The importance of propinquity in the development of a recreational area seems to be best demonstrated by this section. Along with the Headwaters Area, it is the most readily accessible spot for the recreationist from Kansas City.<sup>1</sup> Although it has more scenic diversity than the Headwaters Area, it certainly fails to compare favorably with other parts of the Lake of the Ozarks Recreational Region.

---

<sup>1</sup>Although of less numerical significance than the resorther from Kansas City, the number of visitors from Sedalia is especially marked in this section

Perhaps the relatively clear water of the Gravois arm of the lake gives it some advantage over other areas; however, nearness to a source of resorters, seems to be the most important factor in this concentration of resort developments.

### The Camdenton-Linn Creek Area

Prior to construction of Bagnell Dam, the county seat of Camden County was at (Old) Linn Creek. The filling of the lake covered the town with water and two new towns were established, (new) Linn Creek and Camdenton. The county seat was moved to the latter, and during its twenty-five years of existence, it has become the largest, an estimated population of 1200, town on the lake. Linn Creek, on the other hand, has remained a small settlement, and is currently in danger of being engulfed by the expanding Camdenton.<sup>1</sup> The relative youth of these towns have enabled them to present a physically attractive appearance. Much of the construction in the area has taken place within the last ten years and, in general, the whole section has a "freshly-scrubbed look".

This section is scenically differentiated from the rest of the Lake of the Ozarks Region by the presence of large-scale karst phenomena at Hahatonka, an area of about 5,000 acres just south and east of Camdenton's city limits.

---

<sup>1</sup>The Linn Creek public schools have already been incorporated into the Camdenton system and camdenton is rapidly expanding northward along route 54 toward Linn Creek.





Figure 20. A natural bridge at Hahatonka. This bridge spans the uvala shown in Figure 22.



Figure 21. A poorer quality resort at the confluence of the Lake of the Ozarks and the Little Niangua River.

...the ... of ...  
...the ... of ...  
...the ... of ...  
...the ... of ...

...the ... of ...  
...the ... of ...  
...the ... of ...  
...the ... of ...

Practically every type of karst form and the various features associated with karsting are in evidence here. Among these features are dolines, a natural bridge (see Figure 20), an uvala (see Figure 22), a gulf, a sinking stream, large springs, many caverns, and a very large hum (see Figure 6). Most visitors consider this the most beautiful portion of the Lake of the Ozarks Region. One observer described the area as follows:

Hahatonka .... is justly regarded with pride by Missourians, for it is one of the most picturesque and interesting parts of the state .... For miles may be seen steep bluffs rising almost perpendicularly and surrounding deep canyons filled with caves, holes, castellated bluffs of limestone and natural bridges all formed by the erosion of great underground streams. The village of Hahatonka is only a name for a store and a few scattered houses, -- but a place so richly endowed by nature can well afford to be lacking in those things which only bear witness to the ingenuity of man .... A first approach to this wonderful region at sunset is like entering a new world of grandeur and beauty. One stands spellbound under the magical influence that steals slowly over the scene, as the light fades away behind the rugged hills and leaves its softened glory on the lake.<sup>1</sup>

The commercialization of this area has been a late development; until recently it was privately owned and visitors wishing to view its "wonders" were welcomed. About 1950 the owners of the area decided to exploit the natural features; and guided tours, both of the caverns and other points of interest are now available. A "Castle-on-the-Rhine" type of edifice was built by an early owner of

---

<sup>1</sup>Ross, Berta, "Hahatonka," Bulletin of the Bradley Geological Field Station, Drury College, I Part 2 (1905), 68.







Figure 22. An uvala in the Hahatonka area. The walls of this canyon are in excess of 100 feet in height.



Figure 23. The Hahatonka area. The valley in the right foreground contains a "sinking" stream.



Hahatonka on a palisade overlooking his private lake. This structure burned in 1942, and its ruins are currently a favorite point of interest for tourists.

The spring at Hahatonka has been, until the Fall of 1955, merely a part of the scenery of the area. At that time, a large motel type resort and small restaurant were opened immediately adjacent to the spring.<sup>1</sup> Recently an announcement to the effect that the Hahatonka Spring was to be dammed to form a privately owned fishing lake was made.<sup>2</sup> The dam is to be only 665 feet above sea level and will serve primarily to keep the impounded waters of the Lake of the Ozarks from mixing with the spring water during high lake levels. The small lake will be open to the public at all times and fishing will be allowed after the payment of a yet unannounced fee. As is normally the case in privately owned and stocked lakes in Missouri, state game rules established by the Missouri Conservation Commission will be observed.

Bridal Cave, some two miles from Camdenton and immediately adjacent to the Lake of the Ozarks, is probably the outstanding tourist attraction in the entire region. The

---

<sup>1</sup>At the time that I was last engaged in field-work in this area, the motel had just recently opened to the public and very little tourist or resort activity could be noted. It seems highly probable that the resort will be much used when it becomes better known and projected improvements are made.

<sup>2</sup>The Reveille, Vol. 77, No. 52, Camdenton, Mo., April 27, 1956

developers of this cavern claim a total of over 100,000 visitors during 1955.<sup>1</sup> Relative to size, Bridal Cave is hardly outstanding, the portion open to tourists is only about one hundred yards long.<sup>2</sup> The outstanding feature of the cavern is the prodigious quantity of dripstone lining the walls and in many cases blocking passages. The owners claim "more driptstone per square foot than in any other known cave or cavern". After viewing the tremendous quantities of "onyx" (calcite and possibly some aragonite) deposits in the form of stalagmites, stalactites, and the so-called "drapolites", I would hesitate to question the validity of this claim. In no place where the cavern is open to inspection is the limestone and dolomite of the cavern wall exposed.

From a promotional standpoint the developers of Bridal Cave have disinterred, possibly invented, the "ancient Indian legend" of the wedding of "Irona and Prince Buffalo in the beautiful stalactite adorned Bridal Cave".<sup>3</sup> Whatever the

---

<sup>1</sup>In attempting to ascertain the source of tourists to the area, I was allowed to inspect the visitor register to the cave and although all visitors did not register, the actual number of visitors would appear to be much less than the claimed 100,000. Regardless of the validity of this figure, this cave is generally conceded to be the most visited of the commercially operated caverns of the Lake of the Ozarks Region.

<sup>2</sup>A local inhabitant informs that the cave has been explored for approximately two miles. I would question this. In this particular area I have visited many of the caverns and none of them have even approximated this length.

<sup>3</sup>Quoted from an undated advertising brochure published by the Bridal Cave Development Company, Incorporated.

legitimacy of this legend, it has been effective in attracting tourists and in many cases wedding parties. Mr. W. Wilkerson, a co-owner of the cave, stated that marriages have been so frequent that he really could give no accurate estimate of the number that had taken place since the opening of the cave in 1949. All wedding expenses for those married in the cave are borne by the owners of the cave; the expense thus incurred is more than compensated for by the attendant publicity given such weddings in newspapers and magazines.

Probably the primary reason for the popularity of Bridal Cave is its location and accessibility. Situated only a little over two miles from Camdenton it is almost in the center of the most widely visited portion of the Lake of the Ozarks Region. In an area where secondary roads are characteristically of gravel construction, the developers of the cave have surfaced the road leading to the cavern entrance, and the cave itself is only some fifty feet from the lake surface. Thus, with a boat dock and a more than adequate road, the cave is one of the most readily accessible tourist attractions in the area.

Those people engaged in the tourist and resort industry in this Camdenton-Linn Creek Area are among the most progressive in the entire Lake of the Ozarks Region. They are aware of their fortunate position at the point of meeting between the tourists from the east and the west, and are more than ready to capitalize on the situation.

Practically every type of recreational facility found anywhere in the Lake of the Ozarks Region is found in this section. Camdenton alone has three hotels and thirteen motels. Among the other recreational forms found in this section are two large dance halls, a 13,000 seat rodeo arena, an especially fine golf course, seven taverns and almost a score of eating establishments. Resort development is especially concentrated along the Niangua River arm of the Lake of the Ozarks, particularly where it is confluent with the Little Niangua.

A large number of activities designed to appeal to the recreationist have been introduced by promoters in this area. Chief among these is the J-Bar-H Rodeo, a national championship rodeo which is advertised and promoted as the nation's second largest. This event normally takes place during the second week and week-end of July. During the 1955 season the rodeo attracted an audience of nearly 50,000.

Local merchants, resort owners, and other business men who are, at least in part, dependent upon tourist and resort trade, annually sponsor the "Dogwood Festival" at Camdenton. This event is supposed to occur coincidentally with the flowering of the dogwood blossom. However, owing to the vagaries of the Ozark spring and the necessity for long term planning in preparation for the fete, it is a rare occasion when both events occur concurrently. The festival is normally held during the middle part of May, a median date for the flowering of the dogwood, and ushers in the main

tourist season. The festival includes a parade of floats, selection of a queen, and various types of entertainment, usually "hillbilly" radio musicians.

In 1955 an annual national square dance contest was staged for the first time in Camdenton. About 700 contestants were entered in the first contest and in May of 1956 the second contest found over 1700 competing dancers.

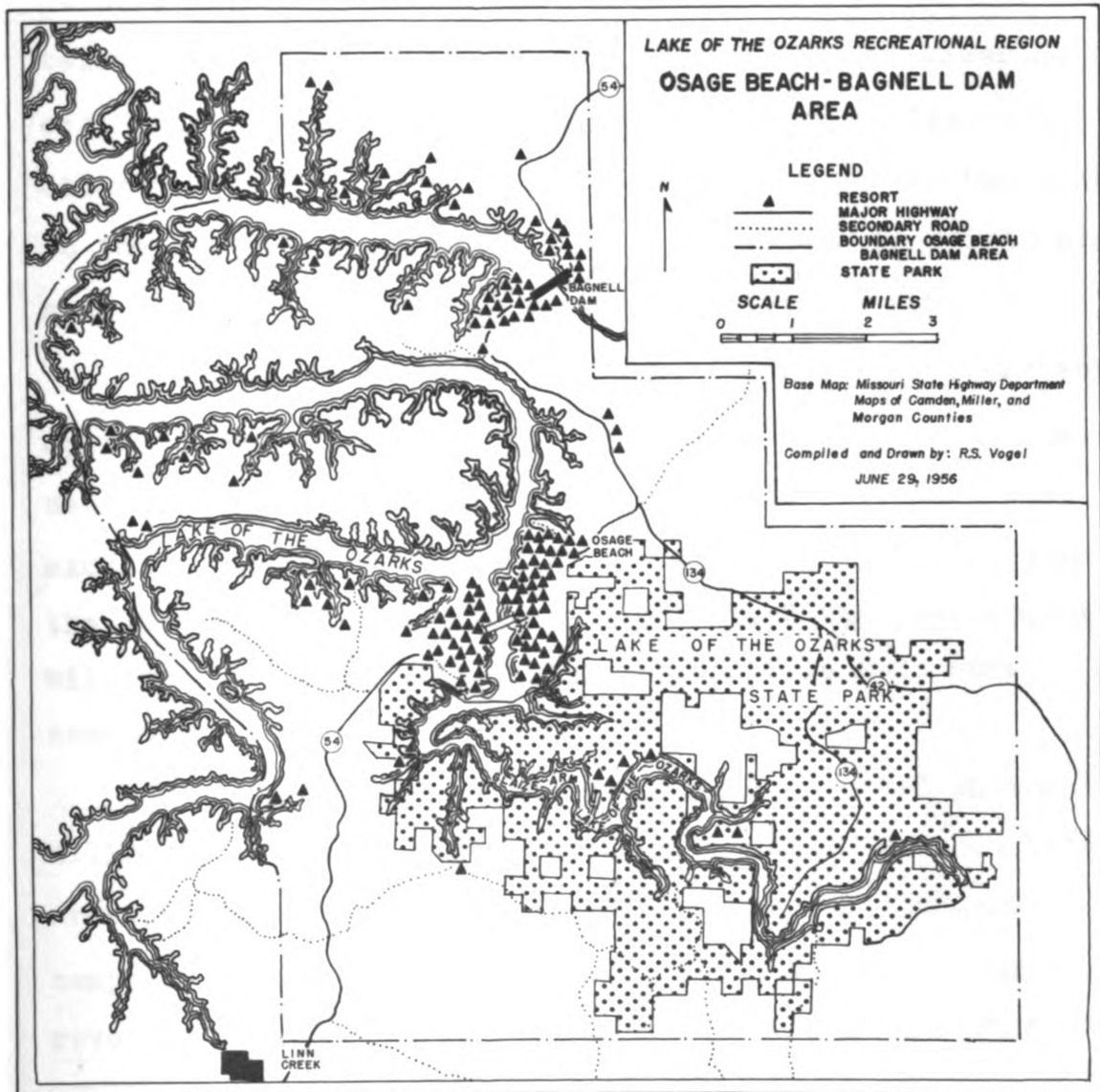
#### The Osage Beach-Bagnell Dam Area

Relative to recreation this area is the most thoroughly utilized portion of the entire Lake of the Ozarks Recreational Region. Route 54, which bisects this section, is for much of its length an urban development, recreational structures dot both sides of the road. Likewise, the lake-shore is almost entirely in recreational use. The largest concentrations of recreational forms are at Bagnell Dam, Osage Beach, and on both ends of the Grand Glaize bridge.

The outstanding attraction to this section is the Bagnell Dam. It is the general consensus of opinion that this structure attracts more viewers than any other feature in the region. Probably as a result of the area's early development and subsequent weeding-out of poorer quality establishments, the best quality resorts, restaurants, and other recreational service establishments are found here.

Although types of tourist and resort structures and activities run the gamut from roadside zoos to yacht clubs, the major feature in the area is the commercial resort.





**Figure 24.** The Osage Beach-Bagnell Dam Area of the Lake of the Ozarks Recreational Region.

Unlike the typical resort of other sections, these, due to intense local rivalry, furnish a multitude of services to the recreationist. All of them have cooking facilities, free boats, free fishing docks, available fish bait, and guides; and in addition, many of them offer recreation rooms, television, dancing facilities, air conditioned sleeping quarters, playgrounds for children, sell or furnish free many other "extra" services. Also unlike other areas, the cost to the recreationist of resorts near the dam is fairly high,<sup>1</sup> some of them in excess of twenty-five dollars per day.

Recently a commercial cavern, Ozark Caverns, has been opened in this section. It is some seven miles from the nearest well-traveled hard-surfaced road. Although some excursion boats are scheduled to visit the cavern during the 1956 season, it appears unlikely that the development will become a major attraction unless it is made more accessible.

The Lake of the Ozarks State Park, located on the Miller-Camden County boundary near Bagnell Dam is in this area. It was originally a Civilian Conservation Corps camp; and with the dissolution of the C.C.C. the land reverted to the federal government.<sup>2</sup> In 1946 the State of

---

<sup>1</sup>In general, the Lake of the Ozarks Recreational Region offers low-priced vacations. Many of the resorts are available for from two to five dollars per day. Rarely does lodging cost more than five dollars.

<sup>2</sup>All information relating to size, history and users of this park was obtained by personal correspondence with H.K. Irwin, Park Service Supervisor.



**Figure 25.** A better quality resort in the Osage Beach-Bagnell Dam Area.



**Figure 26.** A typical resort in the Osage Beach-Bagnell Dam Area. The exterior of the cabins have a veneer of locally quarried sandstone.

1. The first part of the report is a general introduction to the subject of the study. It discusses the importance of the study and the objectives of the research.

2. The second part of the report is a detailed description of the methodology used in the study. It includes information about the sample size, the data collection methods, and the statistical analysis techniques used.

Missouri, in cooperation with the national government, took over its management and made it a state park and game reserve. Containing nearly 17,000 acres it is the largest of the State's twenty-five parks. It has about eighty-nine miles of lake front and about, at full reservoir, 4,000 acres of water surface. Most of the area is in excess of 800 feet in elevation. Facilities for recreationists include six organized camps, with facilities for 937 persons, each of which has offices, an infirmary, mess hall, recreation lodge, swimming pool and other services. Through October 1, about 90,000 people used the bathing beaches in 1955. The total number of users of the area is unknown since no accurate count of sightseers, picnickers, and the like is kept, but an estimate of one-half million per year seems conservative. New swimming, boating and picnicking facilities are now under construction. A franchise for providing riding horses to park users has been granted a local group.

Many activities, both spectator and participating, are available to the resorter and tourist in the vicinity of the dam. Only in this section do regularly scheduled excursion boats ply the lake; one such boat has an orchestra for dancing and is practically a floating night-club. A flying boat, available to those tourists desiring an aerial view of the section, has anchorage near the west end of the dam. Boat races, both sailboat and speedboat, are a regular



Figure 27. A typical novelty stand near Bagnell Dam.



Figure 28. A floating dance hall. This boat cruises in the vicinity of Bagnell Dam.



occurrence during the summer. This is the only portion of the Lake of the Ozarks Region in which water-skiing has attained popularity; on fair summer days large numbers of enthusiasts for this sport may be observed around the dam and near the Grand Glaize bridge.

An "Annual All-girl Rodeo" was inaugurated at Osage Beach during the 1955 tourist season. Initial response was not great; but it is likely that, with further promotion, it will become an important attraction.

#### Non-Lake Shore Developments

Even though the biggest portion of the Lake of the Ozarks Recreational Region is in this category, very little actual development of recreational activities and facilities has occurred in these areas. In general, the only effect they have on the Lake of the Ozarks recreationist is in offering restaurant, occasional lodging, and supply services.

All of the gateway towns of the region are in this section. These towns usually have other than a purely recreational function. For instance, Lebanon is a county seat, rural marketing center, and a place of residence for employees of nearby Fort Leonard E. Wood; Eldon was once a railroad repair center, and is now a major rural marketing center; and Stover and Cole Camp are both marketing centers for fairly large and productive agricultural areas. However, to enter the Lake of the Ozarks Recreational Region, the



recreationist must pass through the gateway towns, and since he does, many of the facilities along the major routes are designed to "part him from his dollar".

Bennett's Springs State Park is the one non-lake shore area that is a major recreational center. It covers only 730 acres, but is the most visited of all state parks, some 513,115 people used the area during 1955.<sup>1</sup> It is readily accessible on route 64 from Lebanon. The spring which has been stocked with large quantities of trout and bass, from the state-owned fish hatchery operated in conjunction with the park, is the recreational center for the park.<sup>2</sup>

The State Park Board maintains cabin and hotel facilities in the park that are capable of accommodating 116 people. More than half of the cabins have cooking facilities and rent for four to ten dollars and fifty cents per day, depending upon the number of users. The largest cabins have a maximum capacity of six persons. The hotel, which is only capable of accommodating sixteen persons, has rooms for rent at two dollars and fifty cents and three dollars and fifty cents per day.

Two small resorts have been developed on the Niangua

---

<sup>1</sup>All data relative to Bennett's Springs State Park was furnished by Joseph Jaeger, State Director of Parks, in a personal interview on March 30, 1956.

<sup>2</sup>Approximately 30,000 licenses for trout fishing were sold at Bennett's Springs during 1955. Since "trout tags" may be purchased anywhere in the State, this figure is not indicative of the total number of fishermen visiting the park.

River immediately adjacent to the State Park; apparently their major source of customers is the park users who are unable to find facilities within the park and are unwilling to return to Lebanon or Camdenton for lodging.

Stark's Cavern, south of Eldon on route 54, and Jacob's Cave, south of Versailles on route 5 are in this non-lake shore section. Although both of these caverns have been operated commercially for a longer period of time, neither of them is comparable to Bridal Cave in the total number of visitors.

Fish hatcheries have been developed near Stover and Toronto. The latter obtains its water from the Wet Glaize and Campground Springs. Although some ornamental fish are raised, the majority of those produced are merely used for bait on the Lake of the Ozarks and in adjacent areas.

A small subdivision and resort have been developed on Lake Placid about ten miles north of the Lake of the Ozarks in Morgan County near the Benton County line. A major dance hall development, attracting most of its customers from the Lake of the Ozarks tourist and resort group, is located at the intersection of routes 52 and 65.

## CHAPTER IV

### CONCLUSIONS

A number of interesting patterns are observable in this Lake of the Ozarks Recreational Region, but to imply that any of them might have universal application for other recreational regions would be an overstatement. However, certain generalizations, based on evidence gathered in writing this thesis, would appear to be valid for other regions of the same type. That is, given a relatively large area of natural scenic attraction and an adequate source of recreational users; the portion of that area nearest the user, if accessible, will be developed first. Propinquity and accessibility<sup>1</sup> are apparently of equal importance, followed by special scenic attractions,<sup>2</sup> in determining the location of recreational development. Perhaps in other regions whose cores are artificially formed lakes, there would be a concentration of development on tributary mouths; but again, the primary basis for this development would be relative accessibility.

---

<sup>1</sup>Certainly propinquity and accessibility are closely related terms in the context in which they are used in this thesis. However, it appears that differences in developed recreational areas are in some places caused merely by nearness to a tourist source, and in others by the degree of accessibility.

<sup>2</sup>Possibly in other regions, where very spectacular special attractions are available, this statement would not hold true.

Although the Lake of the Ozarks Region is currently dominated by recreational activity and development, it appears that this dominance will be increased in the future. Since the region is incapable, at present, of supporting any other type of major economic activity, a furthering of the business of recreation seems to be indicated if the area is to be utilized to its fullest extent. Current trends indicate that: (1) more privately owned cabins and summer homes will be constructed; (2) the greatest expansion of recreational facilities will occur in the Middle-lake and Headwaters Areas; and (3) the quality of the resorts and other facilities in all sections of the region will, with more intense development and increased competition, be up-graded in quality. Intensive non-lake shore growth of recreational forms and activities does not appear to be indicated for the near future; perhaps meager private development will be experienced in the form of float-trips and small resorts.

## BIBLIOGRAPHY

- Anon. A History of Camden County. (Unknown Publisher), 1888.
- Ball, Sydney H. and Smith, A.F. The Geology of Miller County. Missouri Bureau of Geology and Mines, Vol. I, 2nd Ser., 1903.
- Beckman, H.C. and Hinchey, N.S. The Large Springs of Missouri. Missouri Geological Survey and Water Resources, Vol. XXIX, 2nd Ser., 1944.
- Branson, E.B. Geology of Missouri. The University of Missouri Studies, No. 3, 1944.
- Bolon, Harry C. Surface Waters of Missouri (Stream Flow Records). Missouri Geological Survey and Water Resources, Vol. XXXIV, 2nd Ser., 1952.
- Emerson, Frederick V. Geography of Missouri. The University of Missouri Bulletin, Educational Series, Vol. I, No.4, 1912.
- Marbut, Curtis F. The Geology of Morgan County. Missouri Bureau of Geology and Mines, Vol. VII, 2nd Ser., 1907.
- Missouri Conservation Commission. For Fishermen Only. 1954.
- Missouri Resources and Development Commission. Lake of the Ozarks Country of Missouri. 1954.
- Sauer, Carl O. The Geography of the Ozark Highland of Missouri. The Geographical Society of Chicago, Bulletin 7, 1920.
- Schweitzer, Paul. Report on Mineral Waters. Missouri Geological Survey, Vol. III, 1892.
- U.S. Bureau of Census. Eighteenth Census of the U.S.: 1950. Population. 1952.
- \_\_\_\_\_. 1950 U.S. Census of Agriculture. 1952.

### Articles and Periodicals

Missouri Conservationist. Missouri Conservation Commission, 1954-1956.

Missouri News Magazines. Missouri Division of Resources and Development. 1955-1956.

Ross, Berta. Hahatonka. Bulletin Bradley Geological Field Station, Drury College, Springfield, Mo., Vol. I, Pt. 2, 1905, pp 68-71.

Sherer, George H. Geology of the Hahatonka District, Camden County. Bulletin of the Bradley Geological Field Station, Drury College, Springfield, Mo., Vol. I, Pt. 2, pp 58-67.

Tarr, R.S. Intrenched and Incised Meanders. Journal of Geology, Vol. XXXII, 1934, pp 583-600.

The Benton County Guide, Warsaw, Mo., 1954-1956.

The Reveille. Camdenton, Mo., 1954-1956.

Weiss, Ralph B. Some Aspects of the Cave Region of the Central Ozark Plateau of Missouri. The Compass, Vol. XXXI, No. 2 (Jan.) 1954, pp 86-87

### Principal Map Sources

Missouri State Highway Department. Map of Benton County, 1949, 1:63,600.

\_\_\_\_\_. Map of Camden County, 1949, 1:63,600

\_\_\_\_\_. Map of Dallas County, 1949, 1:63,600

\_\_\_\_\_. Map of Hickory County, 1949, 1: 63,600

\_\_\_\_\_. Map of Laclede County, 1949, 1: 63,600

\_\_\_\_\_. Map of Miller County, 1949, 1: 63,600

\_\_\_\_\_. Map of Morgan County, 1949, 1: 63,600

U.S. Geological Survey. Bagnell Dam Quadrangle, 1934, 1: 24,000

\_\_\_\_\_. Barnumton Quadrangle, 1934, 1: 24,000

U.S. Geological Survey. Hahatonka Quadrangle, 1934,  
1: 24,000.

\_\_\_\_\_. Irontown Ferry Quadrangle, 1934, 1: 24,000.

\_\_\_\_\_. Knobby Creek Quadrangle, 1934, 1: 24,000.

\_\_\_\_\_. Macks Creek Quadrangle, 1934, 1: 62,500.

\_\_\_\_\_. Purvis Quadrangle, 1934, 1: 24,000.

\_\_\_\_\_. Toronto Quadrangle, 1934, 1: 62,500.

#### Other Sources

Headwaters Association. Various Advertising Brochures.

Lake of the Ozarks Association. Various Advertising Brochures.

Mattingly, Paul F. "A Description of Resort Distribution at the Lake of the Ozarks", (2 page manuscript submitted for future publication in the Missouri News Magazine), 1956.

Missouri Division of Resources and Development. "Report of 1953 Advertising" (Mimeo), 1954.

Missouri Division of Resources and Development. "Report of 1954 Advertising" (Mimeo), 1955.

[REDACTED]

10 59

15 Jun 59

~~DEC 18 1958~~

~~JAN 18 1959~~

~~FEB 18 1959~~

~~JUN 28 1961~~

~~JUL 6 1961~~

~~SEP 18 1961~~

~~OCT 20 1961~~

~~JUN 1 1964~~

Q 1-172325



MICHIGAN STATE UNIVERSITY LIBRARIES



3 1293 03177 7513