

STATE OF ARKANSAS  
ARKANSAS GEOLOGICAL SURVEY

# WEALTH OF ARKANSAS

BY

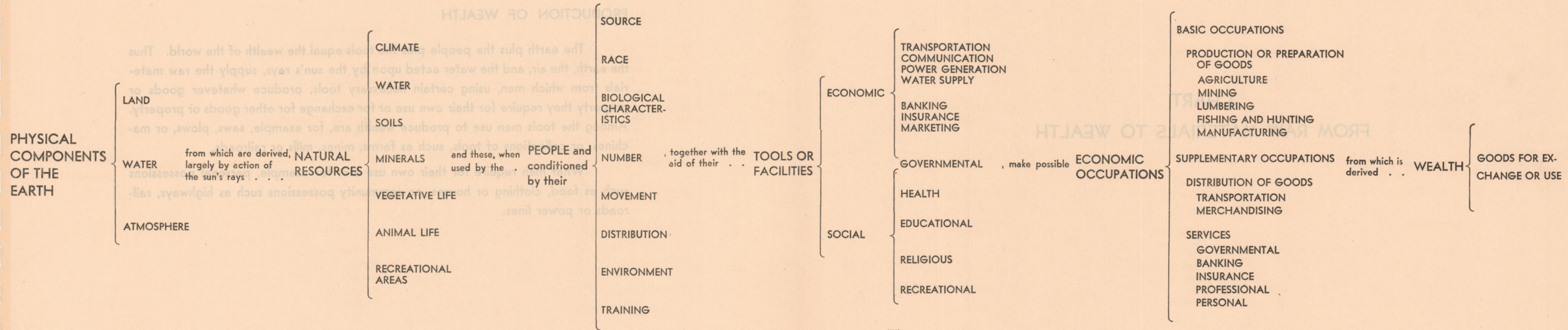
GEORGE C. BRANNER  
State Geologist  
Vice Chairman, State Planning Board

Illustrated By  
H. A. THOMAS AND OTHERS

LITTLE ROCK

1 9 3 9

# FROM RAW MATERIALS TO WEALTH



## PRODUCTION OF WEALTH

The earth plus the people plus the tools equal the wealth of the world. Thus the earth, the air, and the water acted upon by the sun's rays, supply the raw materials from which men, using certain necessary tools, produce whatever goods or property they require for their own use or for exchange for other goods or property. Among the tools men use to produce wealth are, for example, saws, plows, or machines, or collections of tools, such as farms, mines, mills or railroads.

What men require for their own use are, for example, personal possessions such as food, clothing or houses, or community possessions such as highways, railroads or power lines.

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FOREWORD . . . . .

This book is about wealth, particularly wealth in Arkansas. By wealth is meant goods or property which men use or exchange for other goods or property. The classes of wealth which are found in Arkansas will be discussed in this book, as well as the reasons for their existence and the possibilities for producing still more wealth.

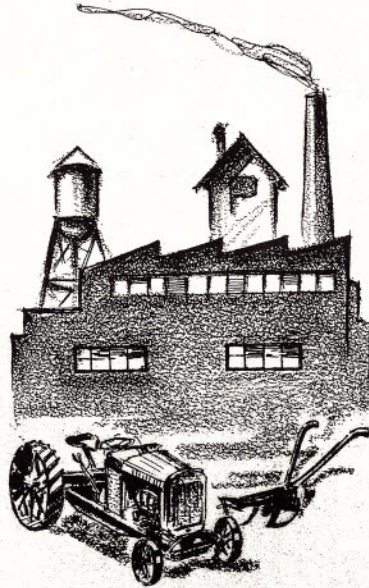
On the next page is a chart showing how the materials of the earth are converted into wealth by the people with the use of their tools.



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**THE  
EARTH**

**THE  
PEOPLE**

**THE  
TOOLS**

**WEALTH**

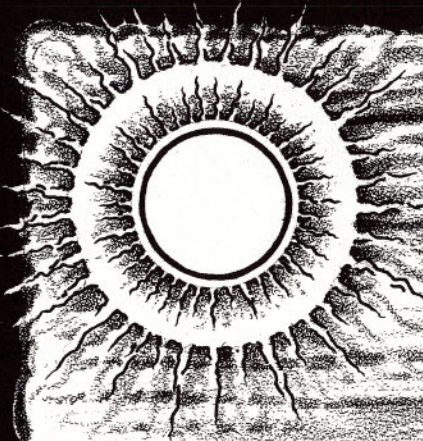
## PART I THE EARTH

### EARTH, AIR, WATER

The first section of this book will deal with the principal factor in wealth production—the earth. Also included are the water on the earth, the air above it, and combinations of earth, water and air which men recognize as "natural resources," and from which wealth is derived.

What kind of a thing is the earth?





**PART ONE**  
**THE EARTH**



## IRON CORE, ROCK SHELL

Scientists generally accept the theory that the earth has a central core of nickel-iron having a radius of about 2,000 miles. This core slowly grades into a heavy rock, which is believed to be altered meteoric stone. The transition zone is estimated to be about 1,000 miles thick. This altered meteoric stone continues toward the surface through a thickness of about 965 miles. The last 35 miles of thickness is believed to be light weight crystalline rock, principally granite. In some places this extends to the surface of the earth, but it is usually covered by a rind of water-laid sediments never more than a few miles thick. This rind consists mostly of sandstone, limestone or compact clay. However, only about three-tenths of this outer rock surface is exposed as . . . . .

SEDIMENTS,  
GRANITE,  
& BASALT  
*ABOUT 35 MI. THICK*

MIXED METEORIC STONE  
& NICKEL IRON  
*ABOUT 1000 MILES THICK*

NICKEL-IRON  
CORE  
*RADIUS ABOUT 2000 MI.*

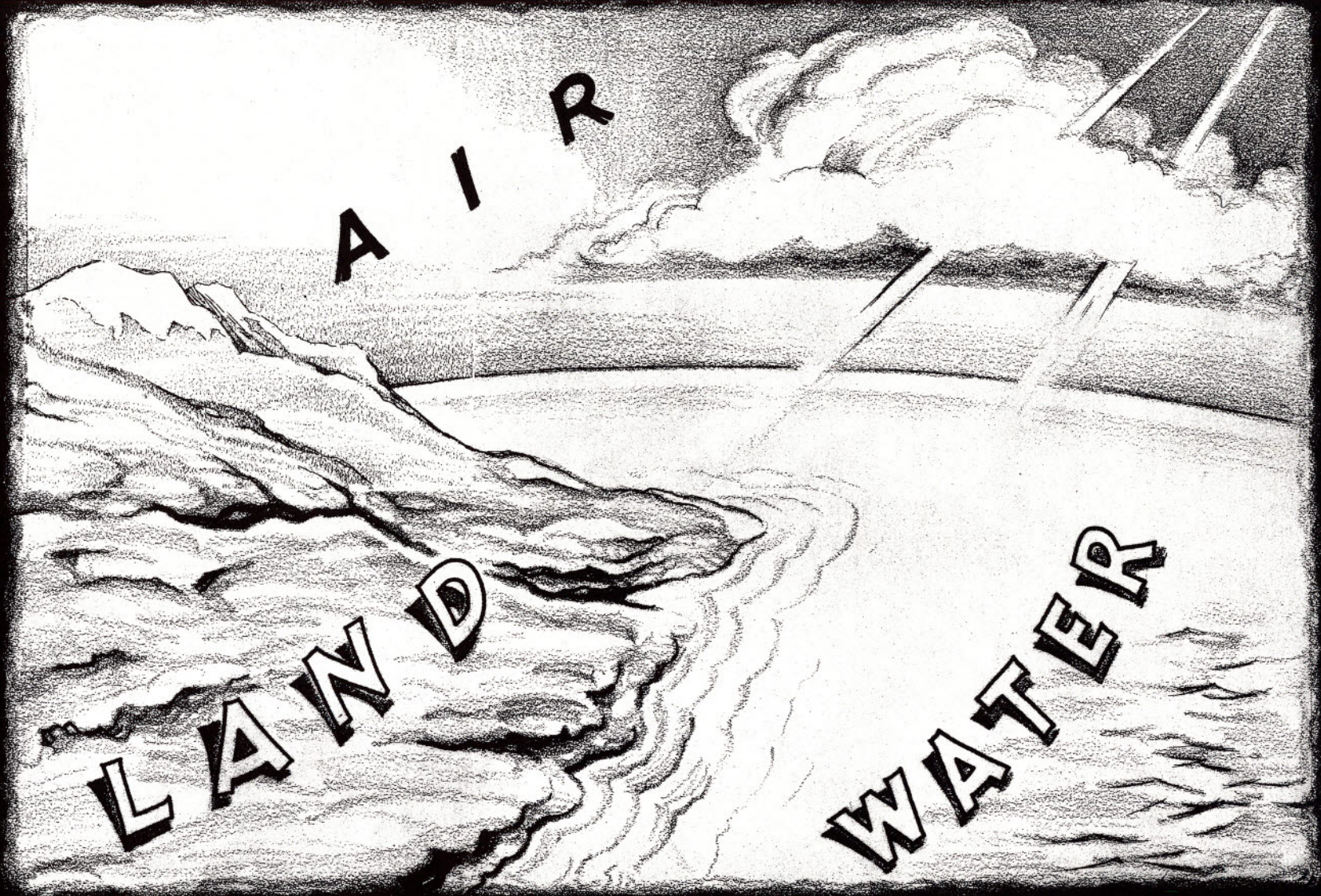
METEORIC STONE  
*ABOUT 965 MI. THICK*

THE  
EARTH

SEVEN-TENTHS WATER

. . . . . about seven-tenths of the earth's surface is covered by water.

While the positions of the seas are usually considered as fixed . . . . .



AIR

LAND

WATER

## WATER-BUILT LAND

. . . . . the seas have not always been where they are today as they have been slowly shifting their boundaries for hundreds of millions of years. This shifting is thought, by scientists, to be due to movements of the crust of the earth caused partly by the continual contraction of the earth and partly to the slow movement of portions of the earth which have different densities, or weight. These movements have caused the rigid crust to warp irregularly and, as a result, the high and low areas of the earth's surface have been created, with the seas naturally occupying the lower portions. Mountain chains have been squeezed up along the lines of contact between great blocks of the earth's crust during these movements.

Movements are also believed to be influenced by the slow but steady transportation, by streams, of great masses of weathered materials from the land to the sea bottoms. These materials, which have accumulated as sediments over long periods of time, become land areas by being slowly lifted above the sea.

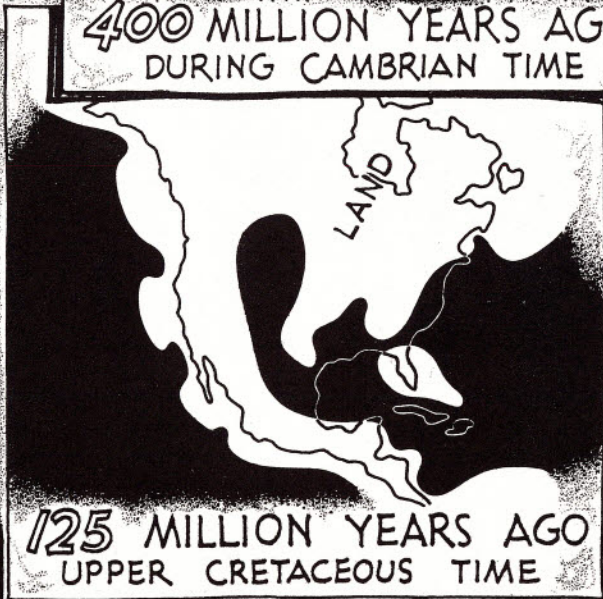
# THE SHIFTING SEAS OVER NORTH AMERICA



400 MILLION YEARS AGO  
DURING CAMBRIAN TIME



250 MILLION YEARS AGO  
LATE CARBONIFEROUS TIME



125 MILLION YEARS AGO  
UPPER CRETACEOUS TIME



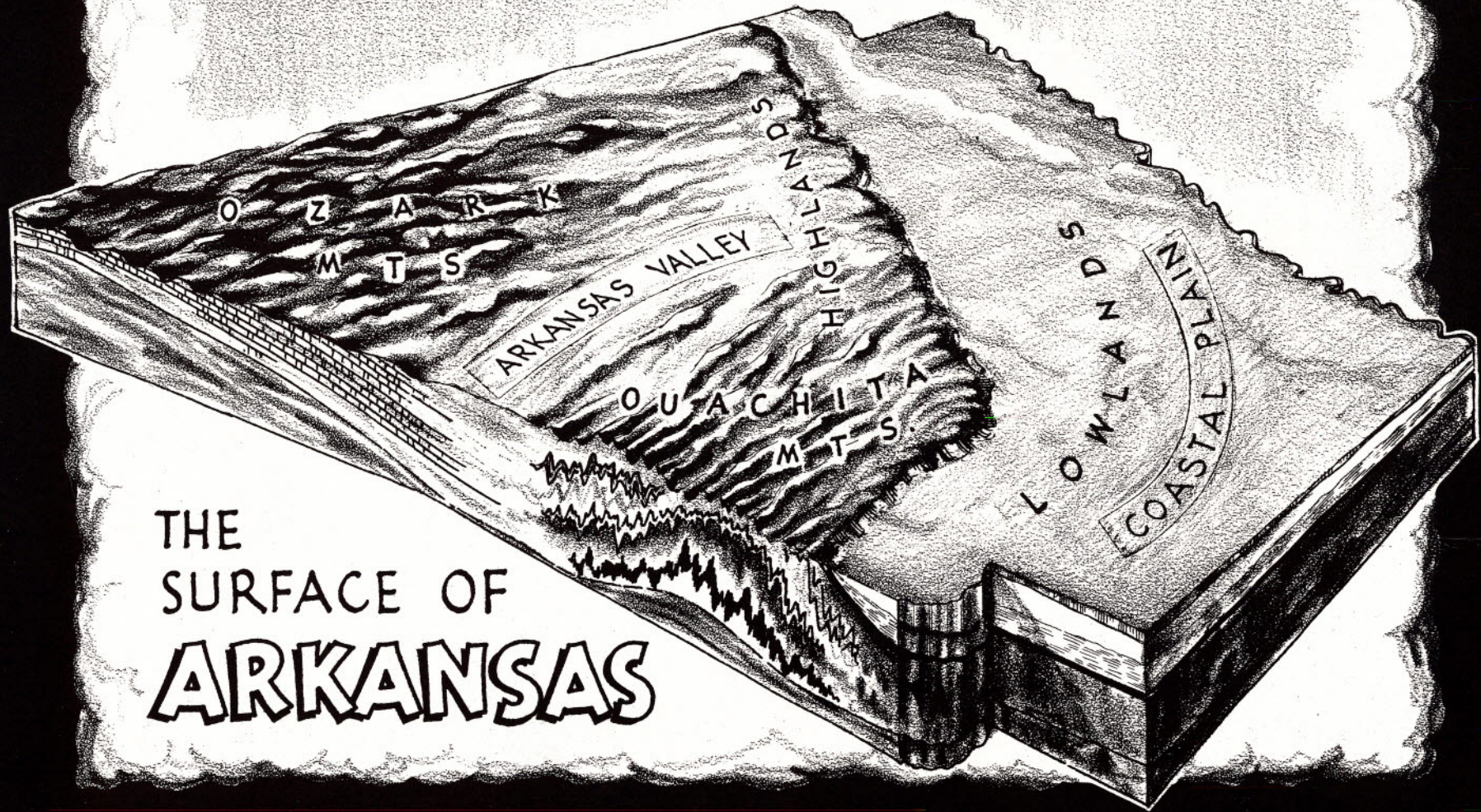
THE LAST FEW MILLION YEARS

## ARKANSAS'S PORTION

All but about fourteen square miles of the surface of Arkansas is made up of material that was once deposited in water as clay, lime or sand. These deposits slowly hardened during millions of years into beds of sedimentary rocks. If sections of all of these beds were measured at their thickest points their aggregate thickness would be about 50,000 feet. Within the state, however, these rocks are unevenly distributed and are probably not more than 12,000 feet thick at any one place. The fourteen square miles of surface rocks which are not made of hardened clay, lime or sand, are crystalline rocks. These were molten at one time, and crystallized as they slowly cooled. They are found principally in Pulaski, Saline, Hot Spring and Garland counties.

The sedimentary rocks found in the Ozark Mountains lie almost flat, while those found in the Ouachita Mountains are much folded. The Arkansas Valley, which lies between the two mountain areas, is a trough which has been filled to a depth of thousands of feet with hardened mud and sand beds. The comparatively low lands of southern and eastern Arkansas, known as the "Coastal Plain," were originally deposited as sediments in the waters which covered that area. These beds were exposed as a result of the warping of the earth's surface which caused the sea bottom to rise and the sea to slowly recede to its present position in the Gulf of Mexico.





THE  
SURFACE OF  
**ARKANSAS**

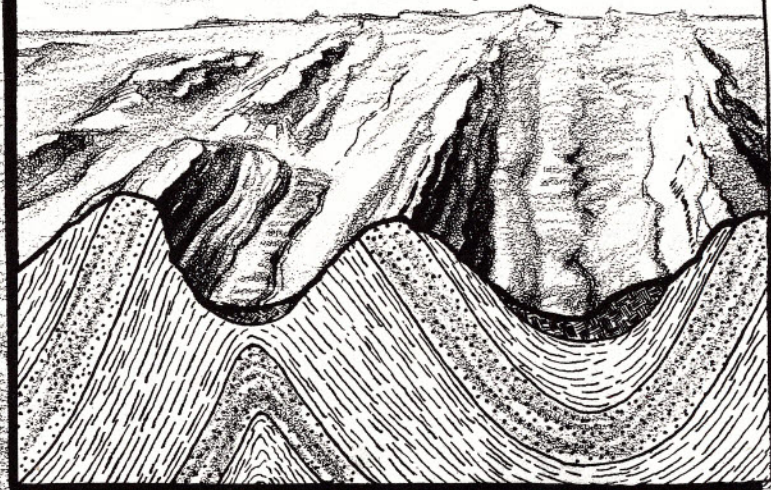
## CARVING THE LAND

Rain and running water have slowly carved out hills and valleys from the exposed rocks of Arkansas. Some of these rocks are hard and resist weathering, while others are soft and wear down much faster. This difference in resistance to weathering, as well as the composition and position of the bedded rocks in Arkansas, has largely determined the height, size, and shape of the mountains and the drainage patterns of the streams. The flat-lying rocks of the Ozark Mountains have usually worn down to flat plateaus, and, as a consequence, the streams in this area branch irregularly, like the branches of a vine. In the Ouachita Mountains, where the beds of rock are folded, the rocks usually wear down so as to form long, east-west ridges. The hard sandstones form the ridges, while the soft clays or mudstones, which are more easily worn away, make up the valleys. The streams there, for the most part, flow east or west in these valleys. In the Coastal Plain, the surface formations are usually neither hardened nor folded and gently incline toward the south and south-east, and consequently the streams there meander irregularly.

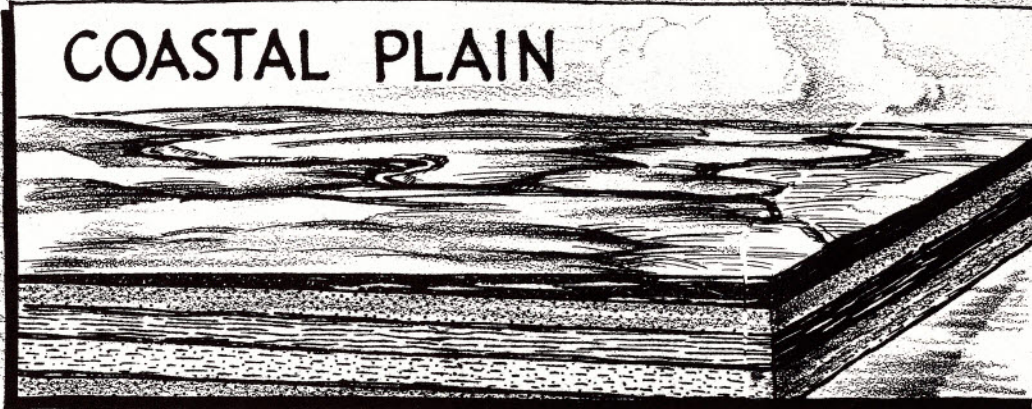
OZARK PLATEAUS



OUACHITA MTS.



COASTAL PLAIN

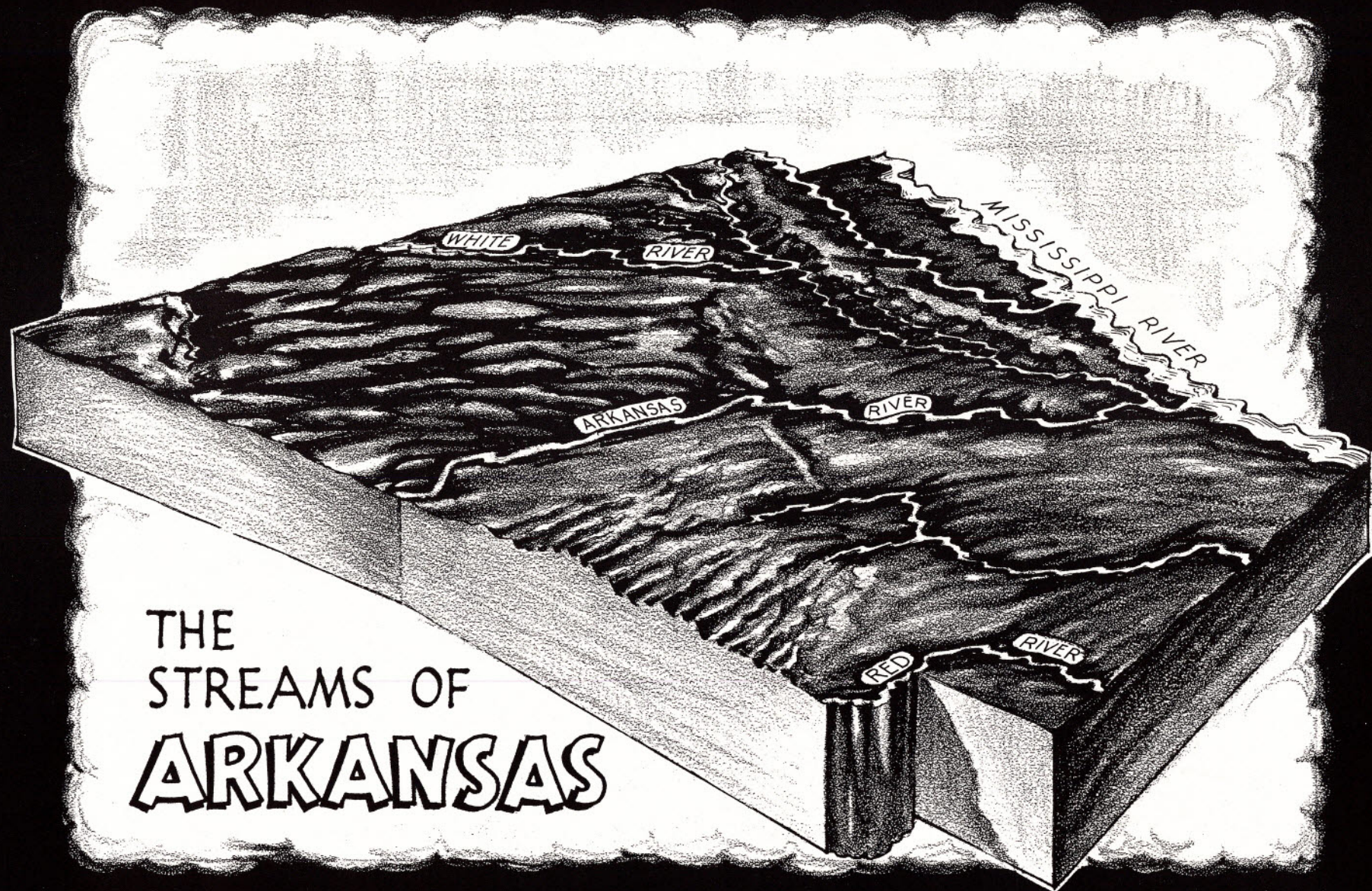


# LAND SHAPES

## RUNNING WATER

Because the state is located just west of the lowest part of the Mississippi Valley, the surface of Arkansas may be considered as a plane gently tilted to the southeast. During the ages in which the rocks have been exposed to the action of the weather, vast amounts of material have been removed by the rain and the streams. Since these rocks were exposed to weather action, it is estimated that a vertical thickness of about five miles has been removed from the Ouachita Mountains and a lesser amount from the Ozark Mountains. Today, the Arkansas River alone, carries away each year about 30,000,000 tons of sand and clay, in addition to much dissolved material, and much of both of these come from the surface of Arkansas.

The next thing to consider is the atmosphere.

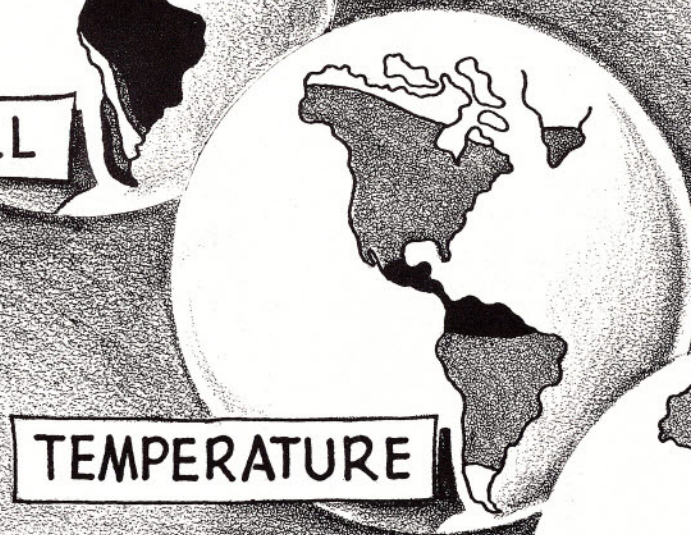


THE  
STREAMS OF  
**ARKANSAS**

## AIR, TEMPERATURE, MOISTURE

The air above the earth extends to a height of about 150 miles, with the lowest and heaviest portion being about 50 miles thick. Air is a mixture of about four-fifths nitrogen and one-fifth oxygen, with a very small quantity of other gases, and moisture. The moisture in the air, falling as rain, and the temperature, humidity and movement of the air have a tremendously important effect on the land and the people. Arkansas lies in a belt of the earth in which the rainfall is classed as moderate to high, the temperature as moderate and the humidity as moderate to high. In general . . . . .

# CLIMATE

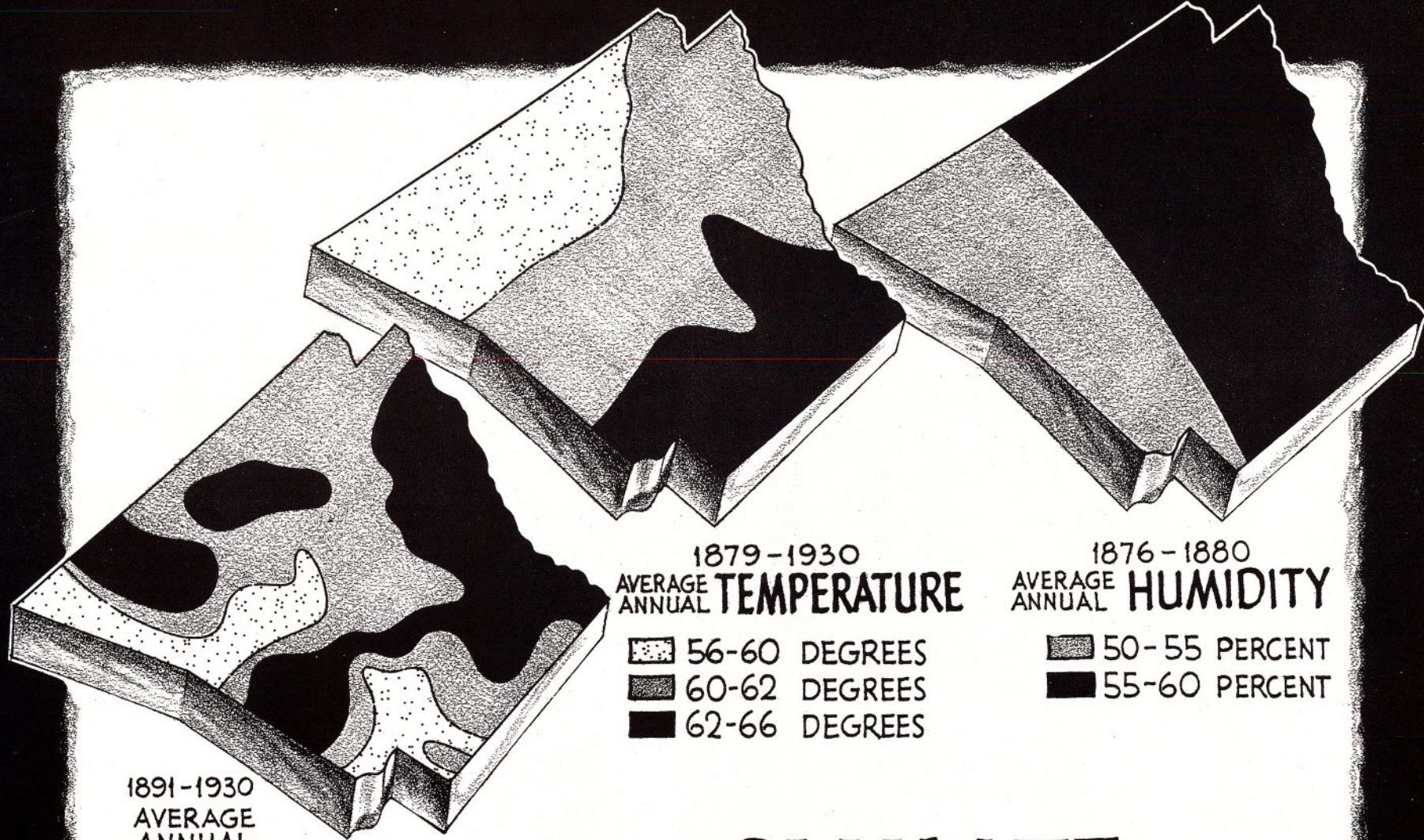


LEGEND  
■ HIGH  
■ MODERATE  
□ LOW




## WEATHER

. . . . . the climate of Arkansas may be described as mild. The rainfall is moderate to high and fairly evenly distributed throughout the year, although slightly higher in March, April and May and slightly lower in August, September and October than during the remainder of the year. The temperatures are usually unmarked by extremes of either heat or cold. The summer humidity is fairly high but not as high as that along the Gulf Coast or in the Great Lakes region.







1879-1930  
AVERAGE ANNUAL **TEMPERATURE**




-  56-60 DEGREES
-  60-62 DEGREES
-  62-66 DEGREES

1876-1880  
AVERAGE ANNUAL **HUMIDITY**

-  50-55 PERCENT
-  55-60 PERCENT

1891-1930  
AVERAGE ANNUAL

**RAINFALL**

-  40-45 INCHES
-  45-50 INCHES
-  50-55 INCHES

**CLIMATE**

## UTILIZING LAND, WATER, AIR

Land, water and air, acted upon by the sun's rays, combine to produce raw materials, certain of which are termed natural resources and from which men have derived all of their wealth. These resources are known as climate, waters, soils, minerals, forests, wild life and areas useful for recreation. These will be described separately as they apply to Arkansas.



**LAND**

**AIR**

**WATER**

CLIMATE

WILD LIFE

FORESTS

MINERALS  
SOILS

NATURAL  
RESOURCES

AREAS FOR RECREATION

WATERS

## GROWING TIME

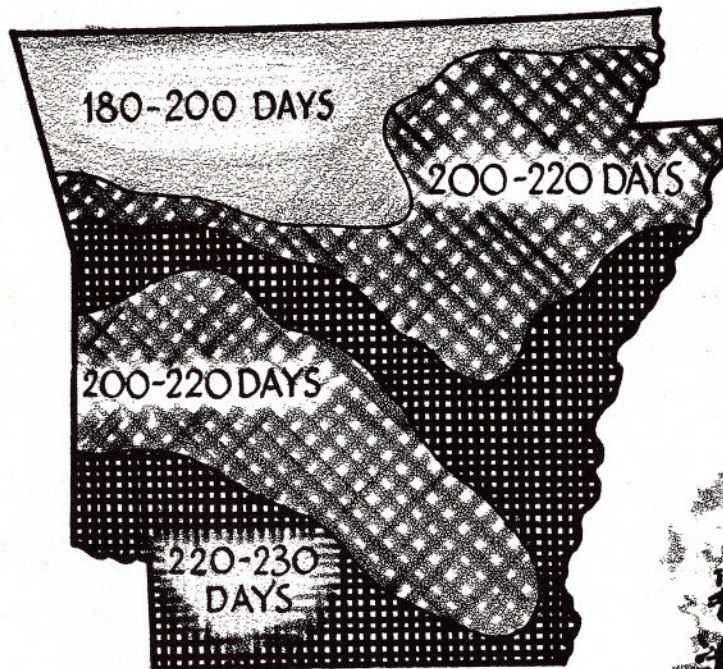
The moderate rainfall, mild temperature and fairly high summer humidity are responsible for the long growing season in Arkansas for farm crops and timber. As would be expected, the longer growing season is in the lowlands of the state where the season length varies from 220 to 230 frostless days in each year. The shorter growing season is in the northern highland part of the state where the season length varies from 180 to 200 frostless days. Due to this long growing season shortleaf and loblolly pine attain marketable size for sale as pulpwood in from 12 to 15 years and as sawlogs in from 35 to 60 years. This rate of growth is about the same as that of Louisiana, Mississippi, Alabama, Georgia, South Carolina and northern Florida.



COTTON



CORN



RICE



PINE FORESTS

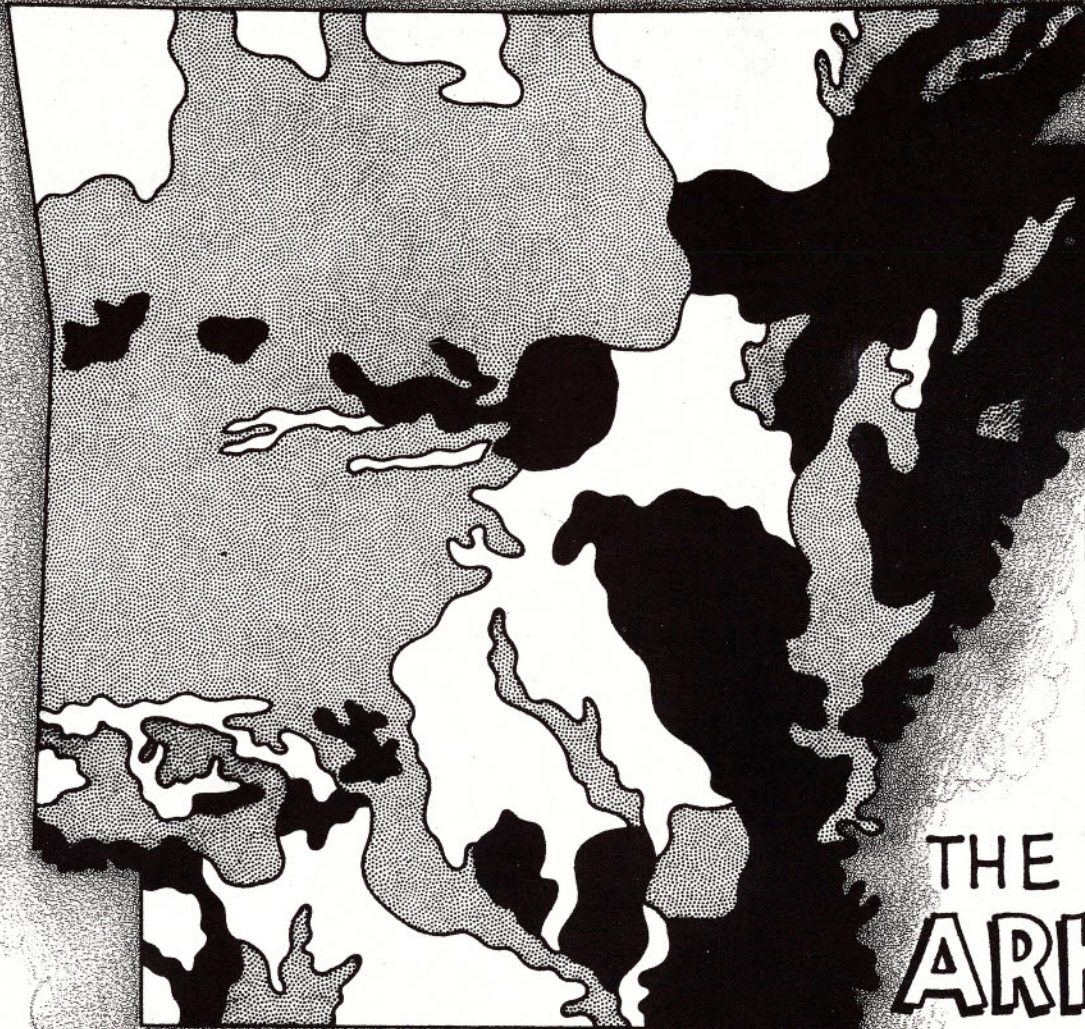
# GROWING SEASON

CONSECUTIVE FROSTLESS DAYS


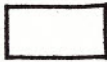

## SOIL ASSETS

The most fertile soils of Arkansas are located principally in the northeastern, eastern, southeastern and southwestern parts of the state which include the lowlands adjacent to the Mississippi, the St. Francis, the Cache, the White, the Black, the Arkansas and the Red rivers. Soils of medium fertility are located in the rolling hill and flat lands of southern and east-central Arkansas and in those areas which make up the high plateaus in the northwestern and northern parts of the state. The low fertility soils are confined principally to the rocky hill lands of the Ozark and Ouachita mountains. The soils which are classed as having high fertility make up about 30 per cent of the states area, those of medium fertility about 20 per cent and those of low fertility about 50 per cent.

In discussing minerals it must be borne in mind that . . . . .



FERTILITY

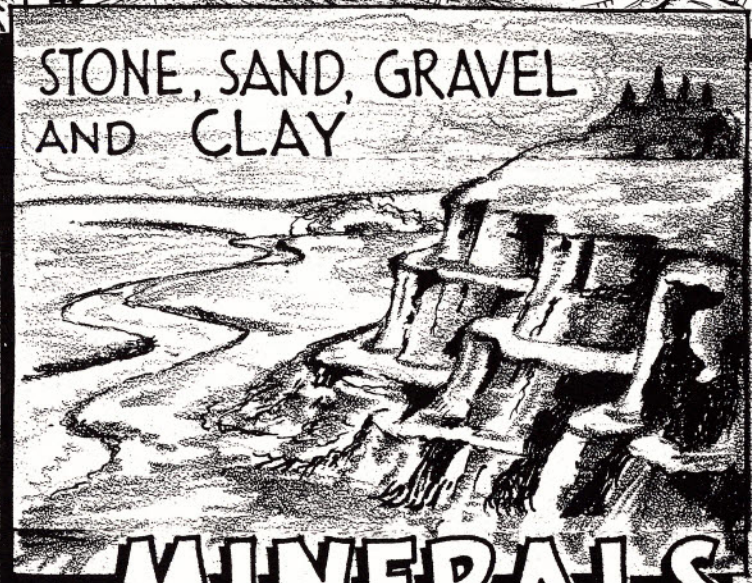
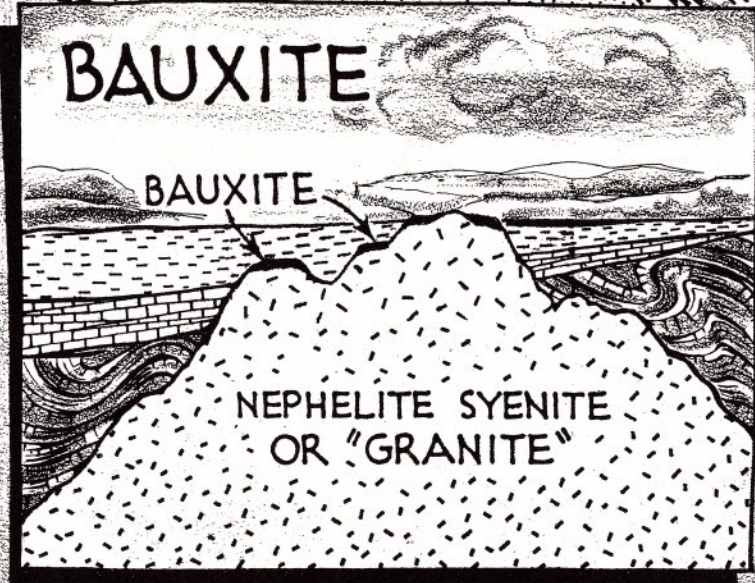
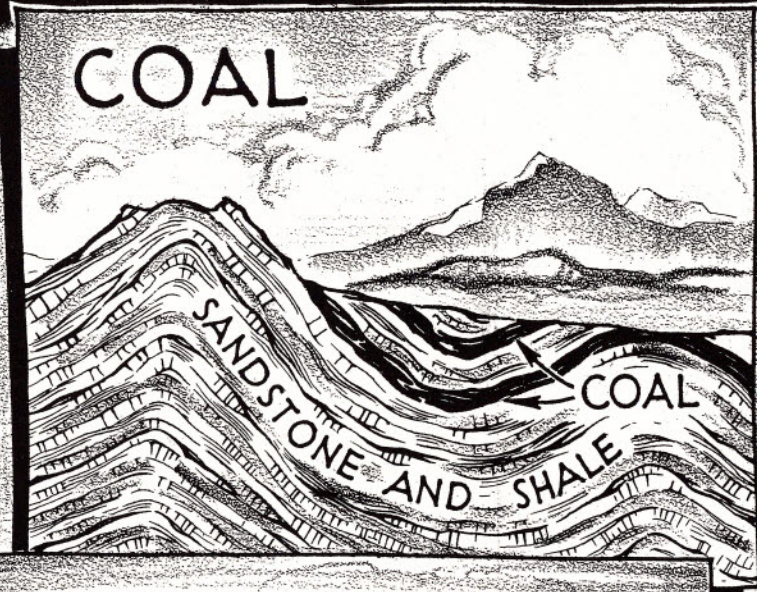
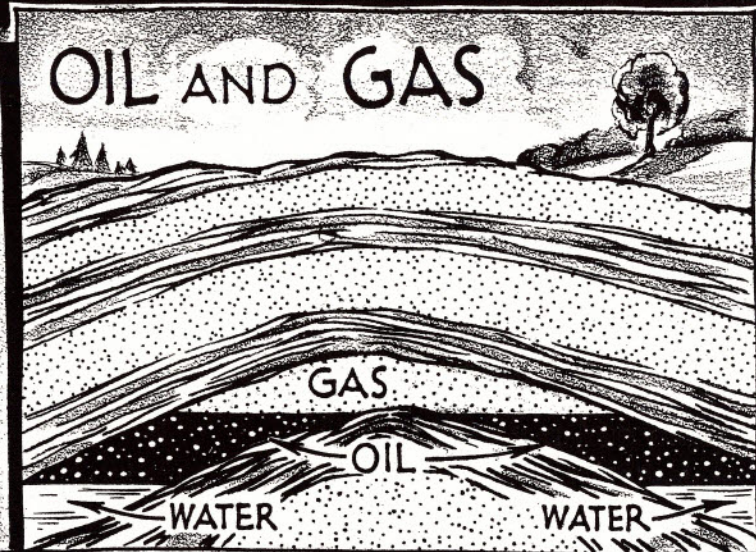
-  HIGH
-  MEDIUM
-  LOW

THE SOILS OF  
**ARKANSAS**

## WATER-LAID MINERALS

. . . . . very nearly all of the valuable minerals found in Arkansas owe their occurrence to the fact that they have been concentrated or distributed by the action of water. For instance, oil and gas owe their origin either to vegetable or animal remains laid down in ancient seas. Coal is the result of the slow alteration of vegetable matter which has been preserved by water-laid sediments. Bauxite is the result of the alteration of crystalline rocks by water. Zinc and lead minerals have been concentrated by water circulating through water-laid rocks. Sandstones, shales, clays, chinks, and limestones are accumulations of sediment laid down under water.



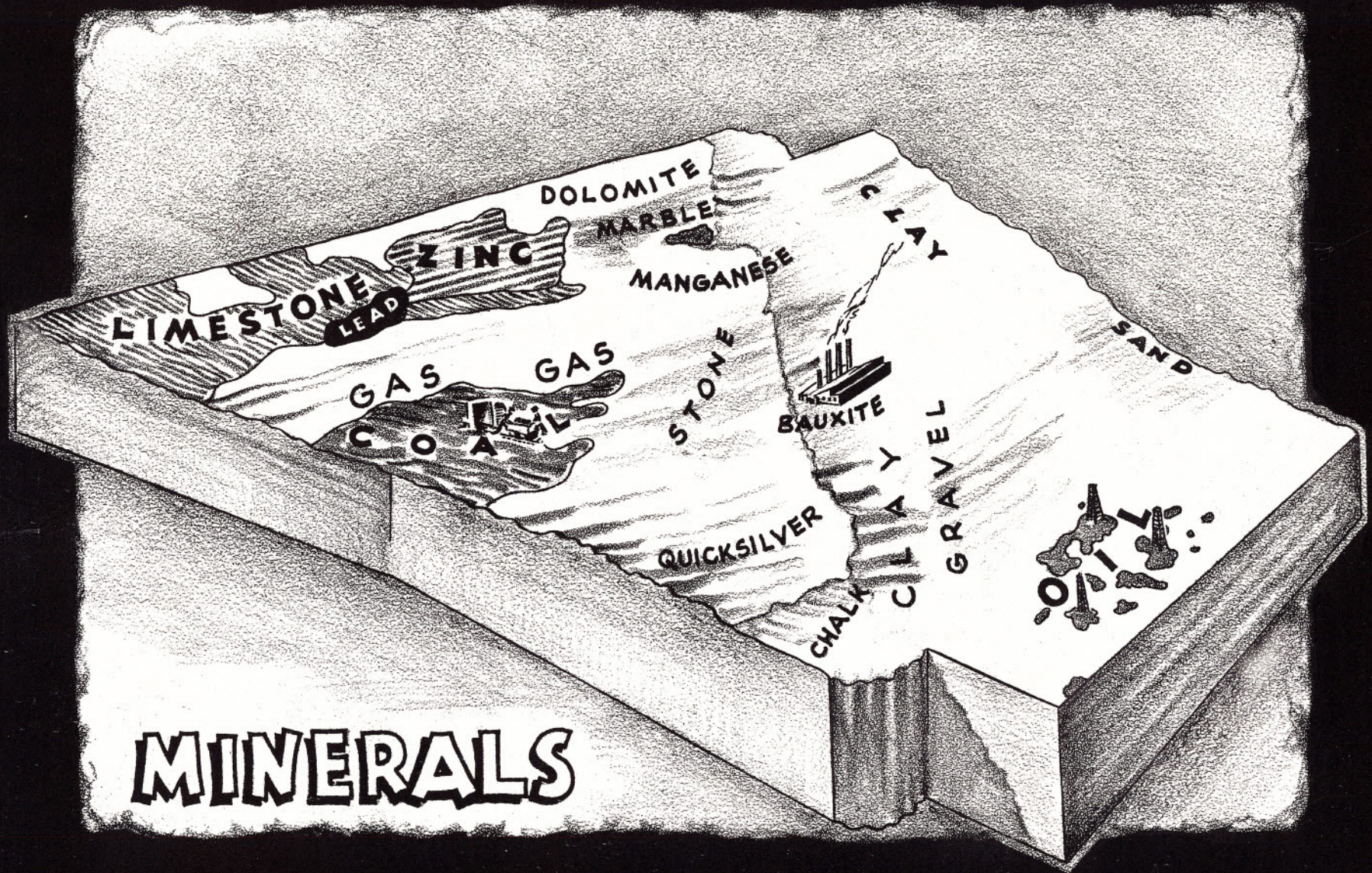


# MINERALS

## BURIED WEALTH

Of the total value of all minerals produced in Arkansas during the 57 year period from 1880-1936, about 82 per cent were fuel minerals, consisting of oil, coal and natural gas; about 13 per cent were non-metallic minerals consisting principally of clay products, bauxite (used for making chemicals and abrasives), stone, sand and gravel; and about 5 per cent were metallic minerals consisting principally of bauxite (used for making aluminum), lead, zinc and manganese. Minerals which, in aggregate value, made up about 71 per cent of the total value of all the minerals produced during this same period, came from the western portion of the Coastal Plain, where oil and gas, bauxite, clay products, sand and gravel have been the principal products; those making up about 24 per cent came from the Arkansas Valley, where the coal basin and gas fields are located; those making up about 3 per cent came from the Ozarks, which have produced principally stone, zinc and manganese; those making up about one per cent came from the Ouachita Mountains, where novaculite, stone and mineral waters have been the principal products; and those making up about one per cent came from the eastern portion of the lowland portion of the state, where sand and gravel have been the principal products.

As to the timber lands of the state . . . . .



# MINERALS

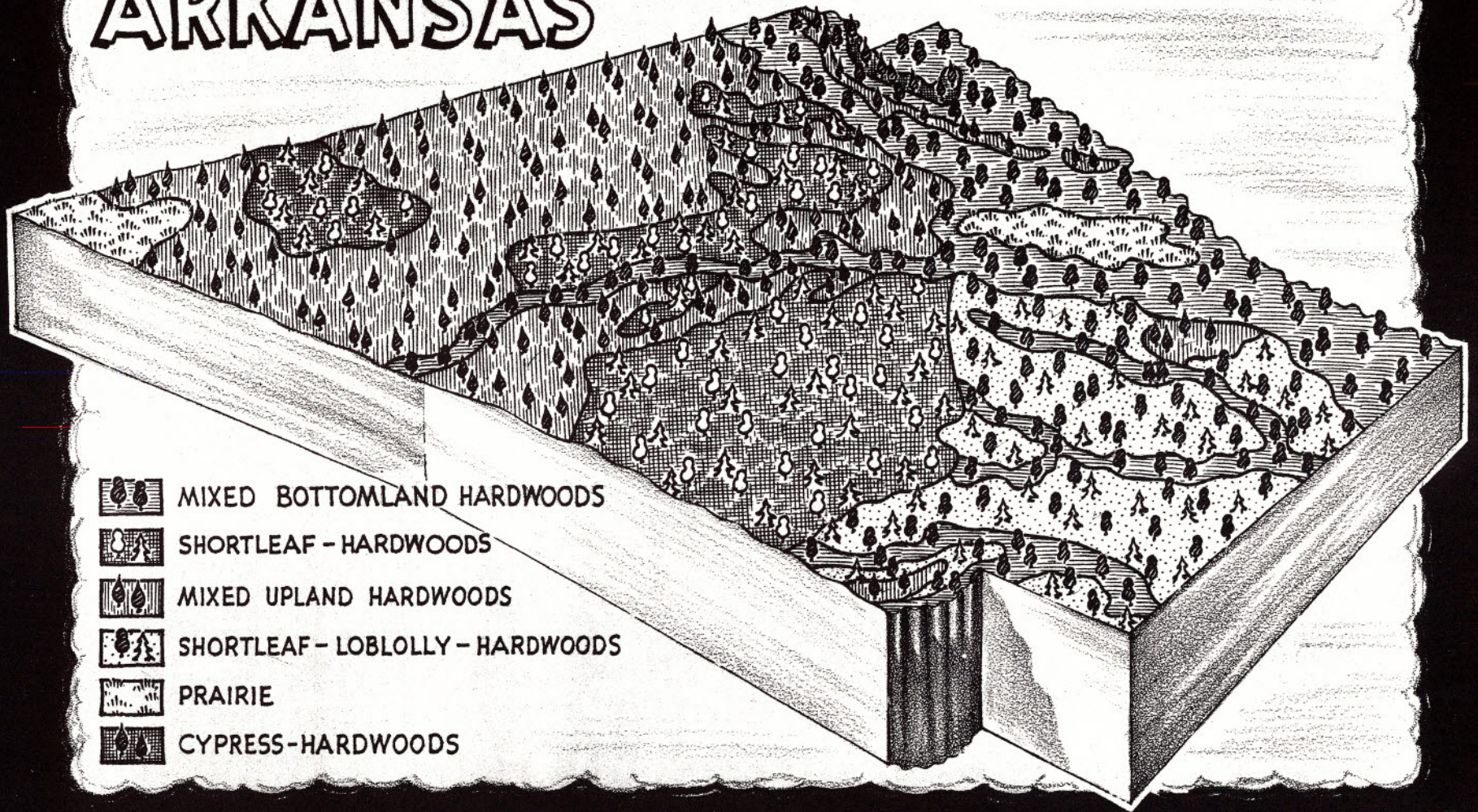
## WEALTH FROM TREES

. . . . . the forests of Arkansas cover nearly 22,000,000 acres, or about two-thirds of the state. Before the coming of the white man they probably covered 32,000,000 acres or about 95 per cent of the state's area. Shortleaf pine, oak, gum, hickory and ash are the principal tree types which grow in the Ozark and Ouachita mountains and the Arkansas Valley. Loblolly and shortleaf pine predominate in the rolling lowlands of southern Arkansas. Oak, elm, ash, tupelo and cypress are the principal tree types of the river bottom and flat lowlands of eastern and southern Arkansas.

The table below shows, by groups, the principal tree types and the percentage of the state's area in which each group is found:

	Per Cent of Total Area of State
Mixed Bottomland Hardwoods: Oak, elm, ash, tupelo and cypress . . . . .	30.4
Shortleaf-Hardwoods: Shortleaf pine, gum, oak and hickory	24.6
Mixed Upland Hardwoods: Oak, hickory and ash . . . . .	24.3
Shortleaf-Loblolly-Hardwoods: Shortleaf pine and loblolly pine, gum, oak and hickory . . . . .	16.6
Prairie: Prairie grassland . . . . .	3.6
Cypress-Hardwoods: Cypress, oak, elm, ash and tupelo . . . . .	.5
	100.0

# THE FORESTS OF ARKANSAS



## WATERED LAND

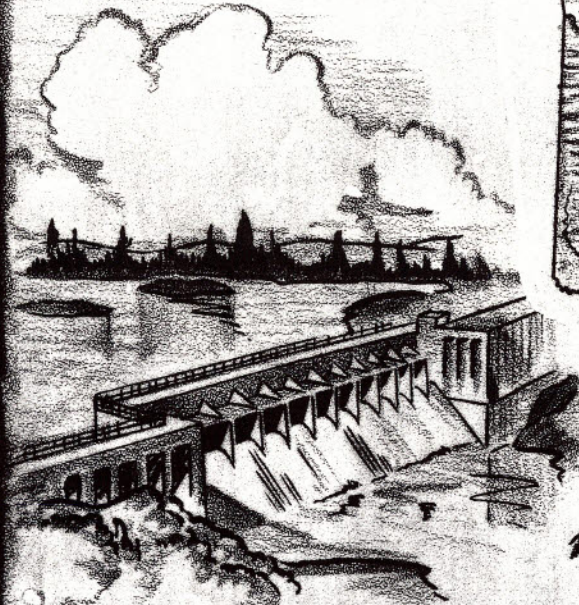
The rain which falls on the surface of Arkansas is one of its most valuable resources. From 40 to 55 inches of rain falls each year and is the source of the ground water and much of the surface water. These waters make possible the growth of crops and timber and are vital to both rural and city life and are also important for the generation of power and for irrigation. The rice industry of the state owes its existence almost entirely to the abundance of underground water in eastern Arkansas. The water-using industries such as the paper, bottled water, beverage, and ice manufacturing industries are also dependent for their existence on adequate water supplies. The navigation of the 2,551 miles of navigable streams in the state is, of course, wholly dependent on surface drainage. Lakes, springs, rivers, and streams attract hundreds of thousands of tourists every year.

The surface drainage of the state every year carries enough water to cover the state to a depth of about four feet.

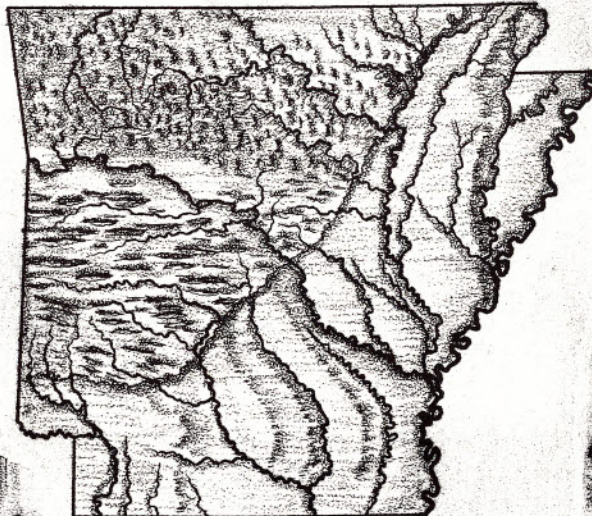
Largely because of the abundance of surface water . . . . .

# USABLE WATERS

**SURFACE  
WATER**



**MUNICIPAL SUPPLIES  
AND WATER POWER**



**IRRIGATION**

**GROUND  
WATER**



**HEALTH AND  
RECREATIONAL RESORTS**

## WILD LIFE

. . . . . Arkansas has always been a state in which game and fish have abounded. Deer, squirrels, rabbits, turkey and quail are found throughout the field and forest areas. Opossum, raccoon, mink, skunk, and fox are trapped for their pelts. The streams and lakes of eastern Arkansas are famous hunting grounds for waterfowl. Lake Catherine and Lake Hamilton in the Ouachita Mountains are especially noted for the fine fishing they provide. The principal game fish in the streams and lakes of Arkansas are bass, crappie, bream, perch, cat, and trout. Fish taken from the streams for commercial purposes include buffalo, carp, drum, and cat. Mussels, gathered for their pearl shell, occur in quantity in the Black and Spring Rivers and in the lower stem of White River.

The climate, mountains, surface waters, and fish and game of Arkansas have combined to create . . . . .





**GAME**



**FISH**



**WATERFOWL**



**MUSSEL SHELLS**

## PLAYGROUNDS

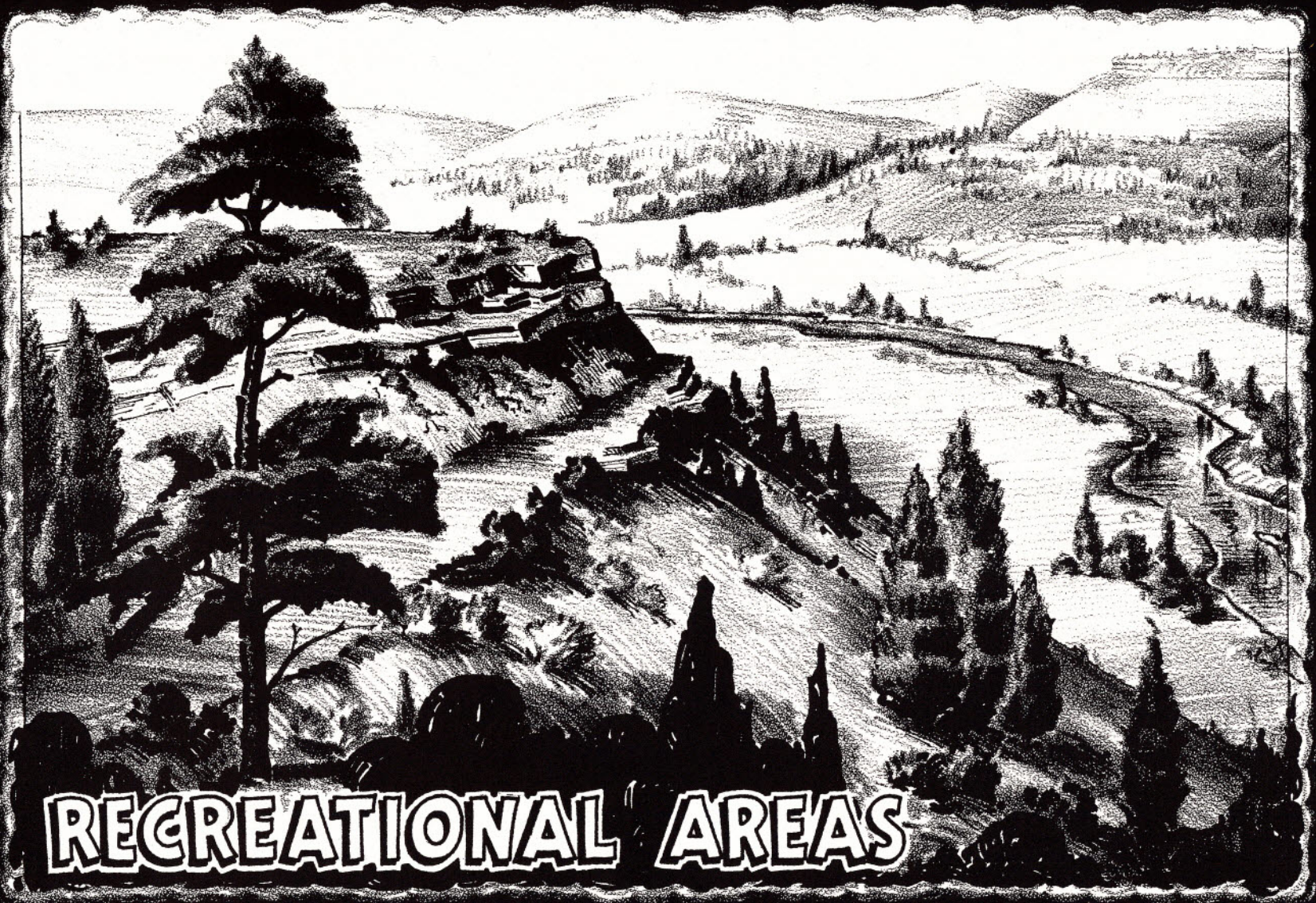
. . . . . many attractive recreational areas, some of which are comparatively undeveloped. Over 500 square miles of mountainous area in the central part of the Ozark Mountains rise to more than 2,000 feet above sea level. There are 752 natural and 35 artificial lakes in the state which altogether total over 97,000 acres of surface water. About two-thirds of the state is covered by forests. Western Arkansas contains two great National Forest areas, the Ouachita National Forest and the Ozark National Forest, which include 1,874,000 acres.

## SUMMARY

### PART I

### THE EARTH

Land, water and air have combined to provide Arkansas with an unusual variety of natural resources. Her climate is mild and her lowland soils are particularly rich. Minerals, particularly the fuels and non-metals, occur in abundance. Forests cover about two-thirds of the state. Both surface and ground waters are usually abundant. Wild life abounds and is protected in great forest and mountain areas. Playgrounds, especially in the Ozark and Ouachita mountains, attract hundreds of thousands of visitors every year.

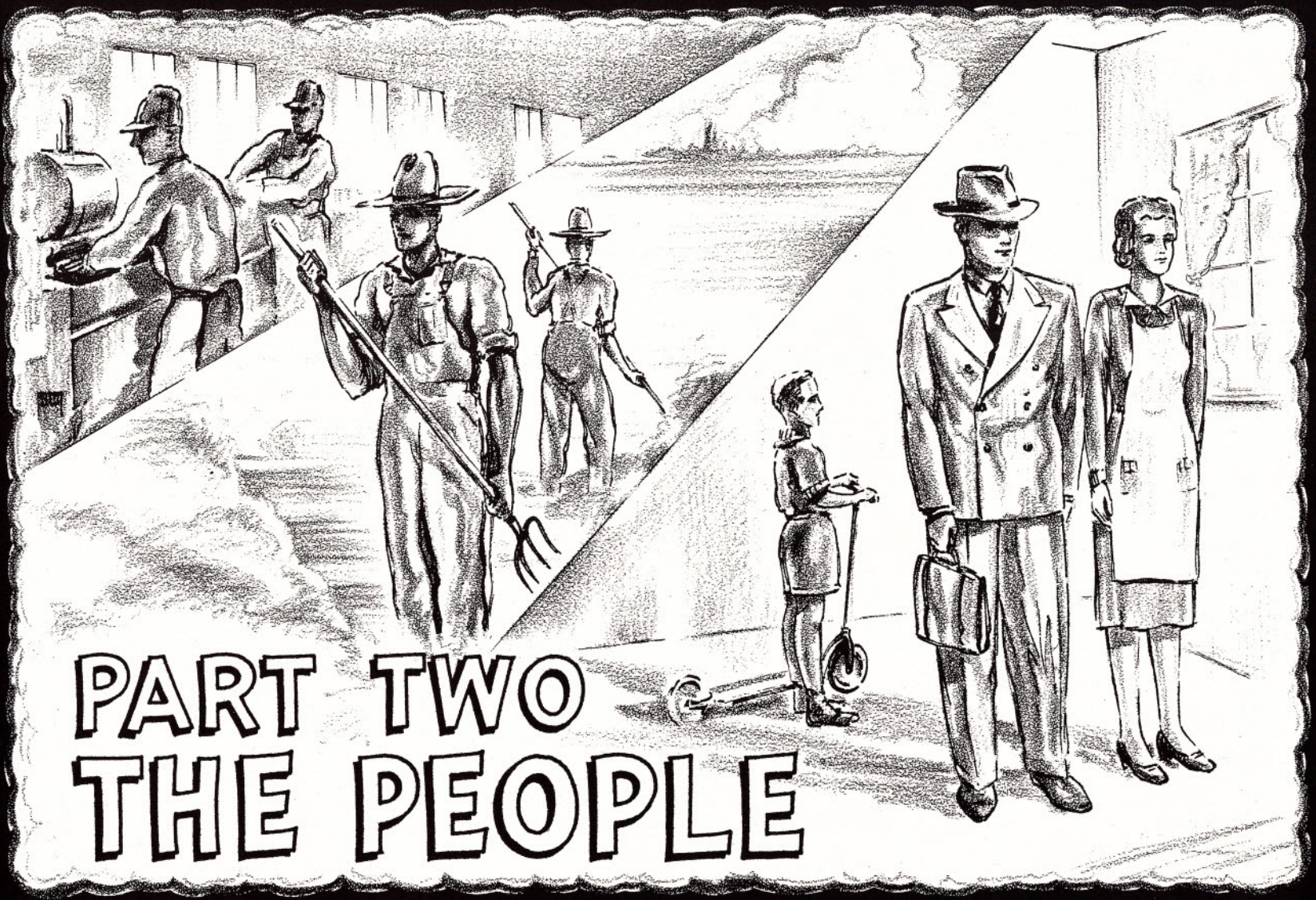


**RECREATIONAL AREAS**

## PART II

### THE PEOPLE

The second section of this book will deal with the people who live in Arkansas and use the state's resources to produce wealth. What are the facts concerning their number, characteristics, and occupations?



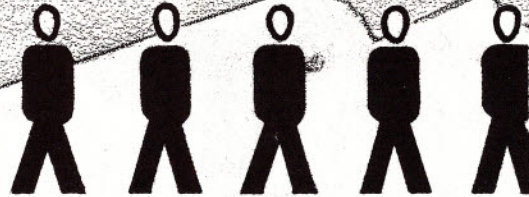
**PART TWO**  
**THE PEOPLE**

## MEN, WOMEN AND CHILDREN

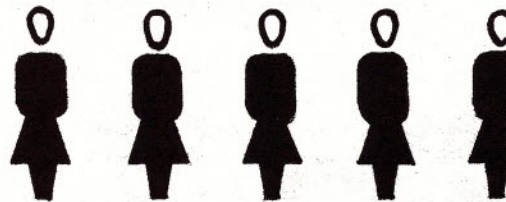
Census figures show that 1,854,482 persons were living in Arkansas in 1930. Of these, 494,949, or 27 per cent, were men over 21 years of age; 473,282, or 25 per cent were women over 21 years of age; and 886,251, or 48 per cent were minors.

# THE PEOPLE OF ARKANSAS

**MEN**  
OVER 21 YEARS OF AGE



**WOMEN**  
OVER 21 YEARS OF AGE



**MINORS**



**1930**

EACH FIGURE  
EQUALS 100,000 PERSONS

## SOUTHERN HERITAGE

When Arkansas Territory was organized in 1819, it had a total population (not including Indians) of 14,273 persons, most of whom were squatters. Following that year, however, and more particularly after 1836 when the territory was admitted to the Union as a slave-owning state, planters, slave owners, and others began to move into Arkansas. Most of these came from Tennessee, others from Kentucky, Virginia, North and South Carolina and Georgia. These people were largely of Scotch, Scotch-Irish and English ancestry.

As a slave-owning state possessing business and political interests common to the other southern states Arkansas became definitely identified with this group. After the Civil War many people began to come into the state from the North and East, and with the construction of new roads and railways, the rate of immigration increased.



1819 - TERRITORIAL GOVERNMENT  
POPULATION - 14,273



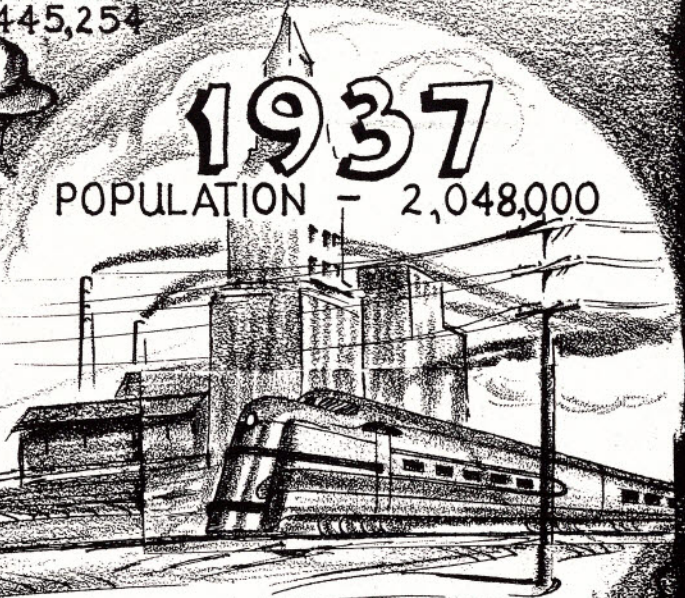
1836 - STATEHOOD  
POPULATION - 69,700



1862 - CIVIL WAR  
POPULATION - 445,254



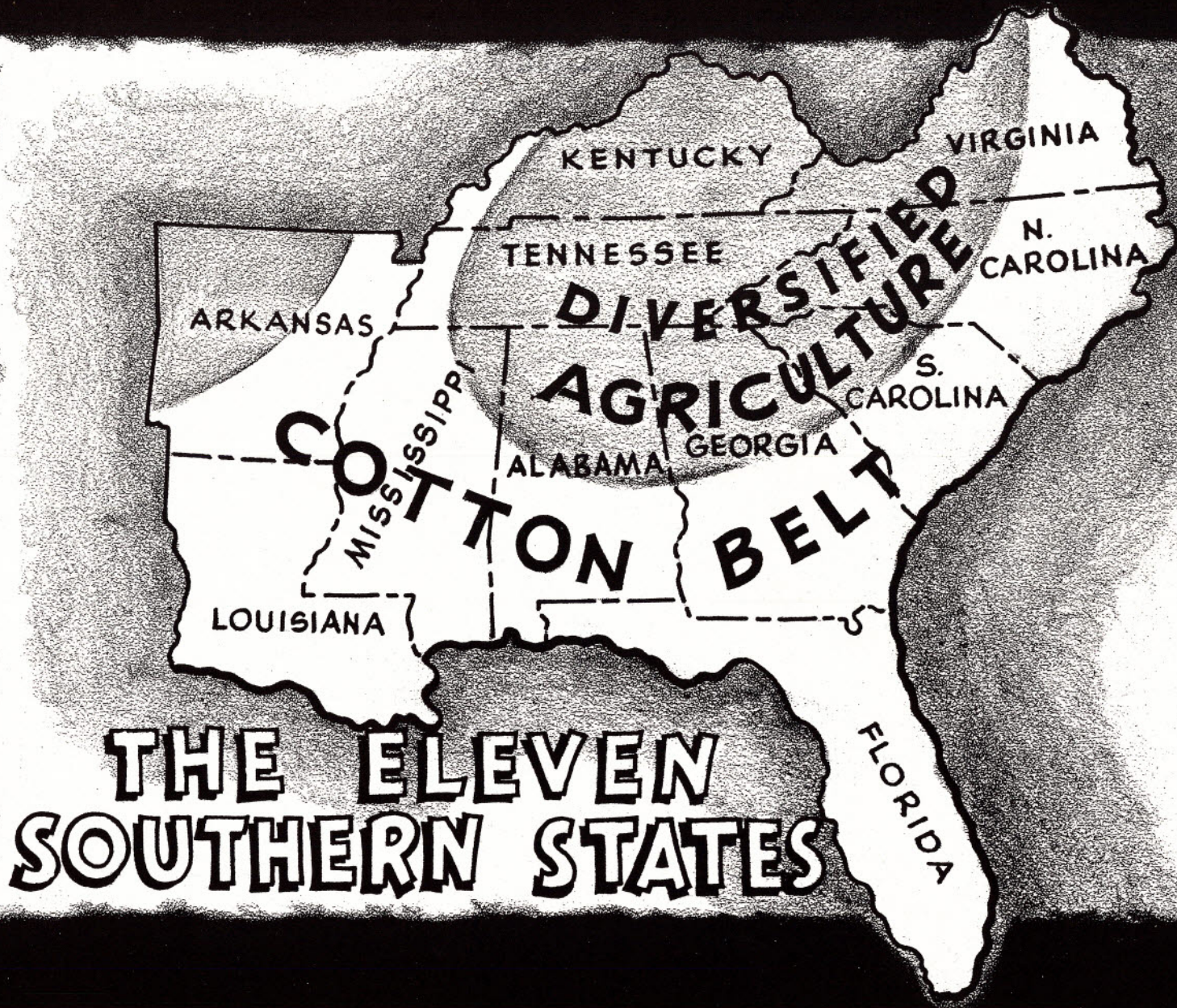
1937  
POPULATION - 2,048,000



# THE GROWTH OF ARKANSAS

## ELEVEN SOUTHERN STATES

It will prove useful to compare the various social and economic factors of Arkansas with those of other states in the southern and southeastern group. This group includes Arkansas, Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North and South Carolina, Tennessee and Virginia. These eleven states have much in common as the physical character of the land, the climate, the traditions, and the occupations of the people are strikingly similar. The word "south" where used in this book refers to these eleven states.

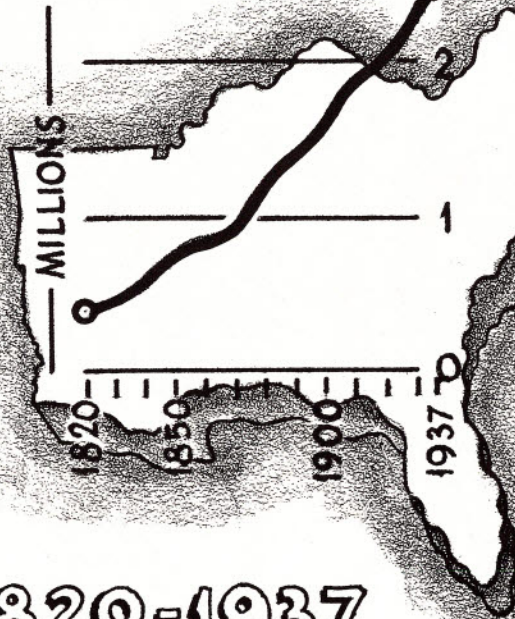


**THE ELEVEN  
SOUTHERN STATES**

## GROWING POPULATION

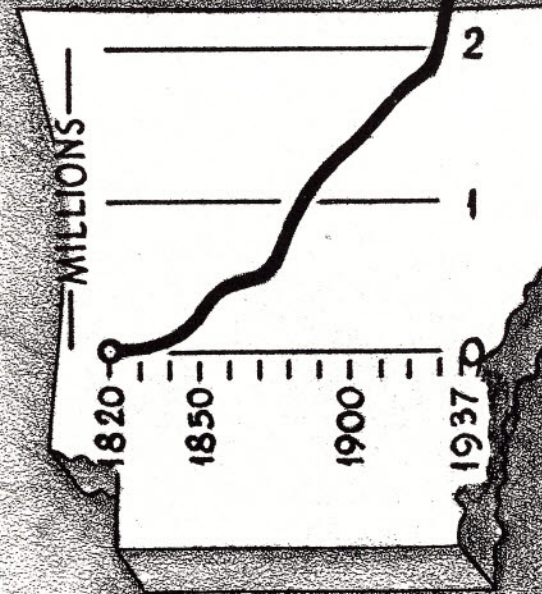
The population of Arkansas has increased slowly but steadily since the days of its early settlement. The average increase in population from 1920 to 1937 for the eleven southern states was 443,786, or 21 per cent. The increase in Arkansas during that period was 295,776 persons, or 17 per cent. The population of the state in July, 1937 was estimated to be 2,048,000.

## AVERAGE GROWTH OF ELEVEN SOUTHERN STATES



1820-1937

## GROWTH OF ARKANSAS



# GROWTH OF POPULATION

## FLOWING POPULATION

Since the beginning of the twentieth century the development of the automobile and the construction of hard-surfaced highways have greatly influenced the rate of the migration of people throughout the country and the populations of the several states have been subject to comparatively rapid changes as new opportunities for profitable employment have been found.

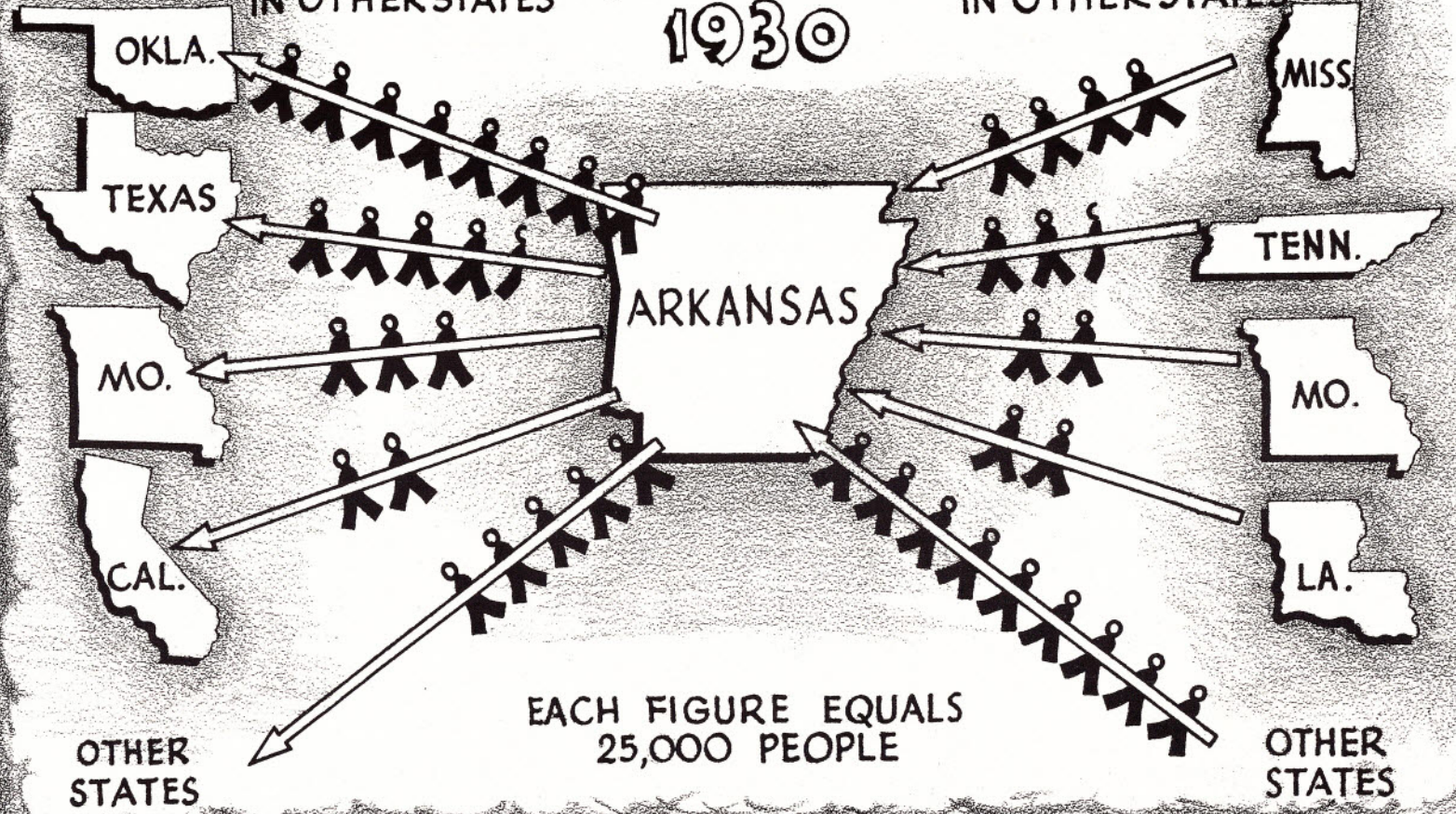
In 1930 it was estimated that 492,426 persons, or about 27 per cent of the number living in Arkansas, had been born in other states. Thus, about one-fourth of the people who were living in Arkansas in 1930, had moved there from other states at some time during the preceding 70 years, more or less. During the same period, 675,710 persons, which is about 36 per cent of the 1930 population, had left Arkansas for other states. The result of this inflow and outflow of population during the 70 year period was a net reduction of the population by a number equal to about 10 per cent of the 1930 population.

# MOVEMENT IN AND OUT OF ARKANSAS

BORN IN ARKANSAS LIVING  
IN OTHER STATES

PRIOR TO  
1930

LIVING IN ARKANSAS BORN  
IN OTHER STATES



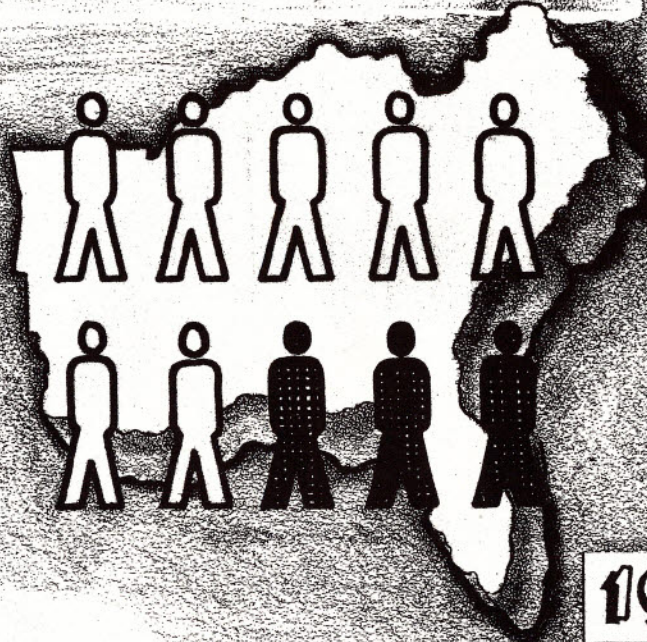
## BIRTHPLACE AND COLOR

It is estimated that in 1930 in the eleven southern states an average of 1,542,481 persons, or about 96 per cent of the average white population had parents who were native to the United States; an average of 46,194, or 3 per cent, had parents who were born in foreign countries; and an average of 23,984, or one per cent, had one parent who was foreign born. In Arkansas in this same year 1,329,205 persons, or 97 per cent of the white population, had parents who were native to the United States; 26,303 white persons, or 2 per cent of the white population, had parents who were born in foreign countries; and 19,398 white persons, or one per cent had one parent who was foreign born.

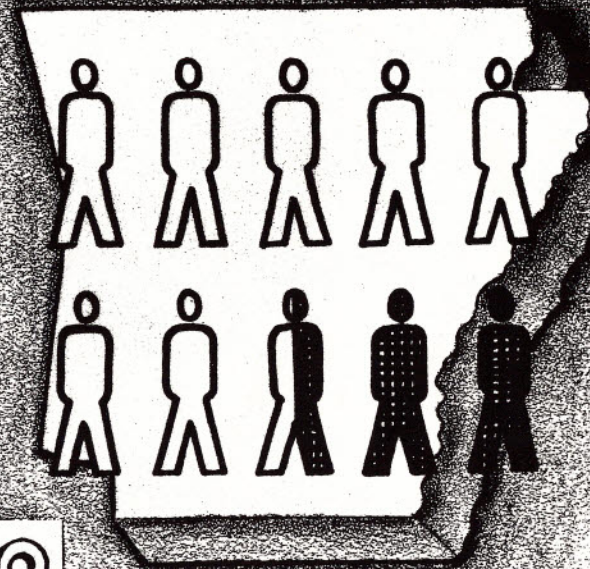
In 1930 the average negro population of the eleven southern states was 707,134, or 31 per cent. The negro population of Arkansas during that year was 478,463, which was 26 per cent of the population.



AV. OF ELEVEN  
SOUTHERN STATES



ARKANSAS



1930

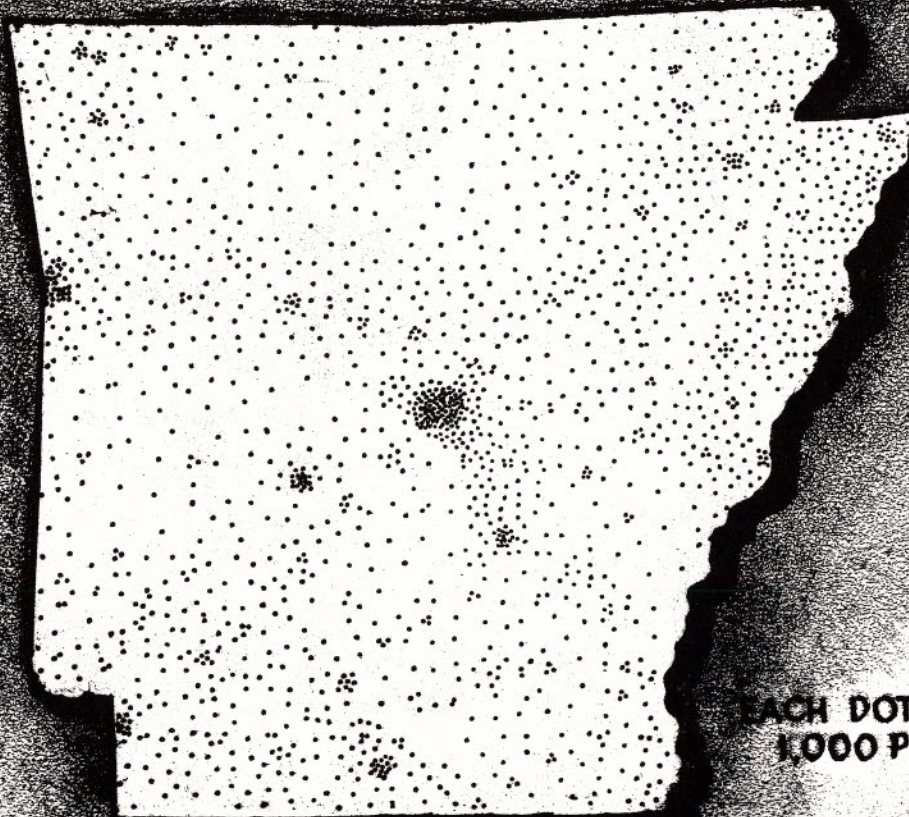
WHITE & NEGRO  
EACH MAN EQUALS 10%

PRINCIPAL  
**RACES**

## WHERE THEY LIVE

The population of Arkansas is rather evenly distributed. Of the nine largest cities only one, Little Rock, has a population of over 50,000, one, Fort Smith, has a population of between 25,000 and 50,000, and seven, Blytheville, El Dorado, Hot Springs, Jonesboro, North Little Rock, Pine Bluff, and Texarkana, have populations of between 10,000 and 25,000. The fertility of the soil naturally causes certain areas to be more densely populated than others. This is especially apparent in northeastern Arkansas, as is shown on the opposite page. It will also be noticed that the mountainous portions of the Ozark and Ouachita mountain areas, where the soils have a low average of fertility, are relatively thinly populated.

1930



EACH DOT EQUALS  
1,000 PEOPLE

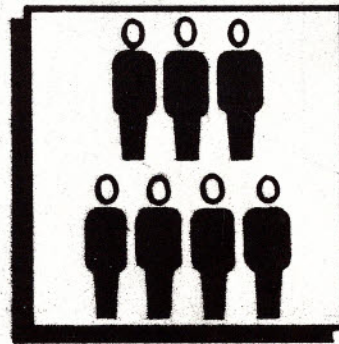
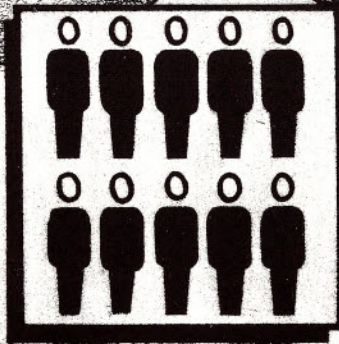
# DISTRIBUTION OF PEOPLE

## WHAT DENSITY?

Arkansas is above the average size of the other eleven southern states and her population is somewhat smaller than the average of these states. As a result, the state has a comparatively low density of population. In 1930 the average density of population of the eleven southern states was estimated at 51 persons per square mile. The density of Arkansas was 35.

AV. OF ELEVEN  
SOUTHERN STATES

ARKANSAS



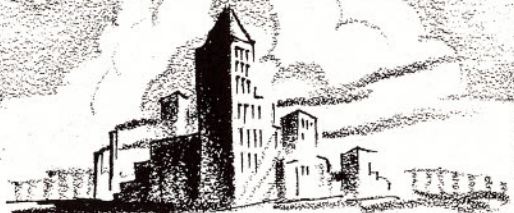
EACH SYMBOL  
EQUALS 5 PERSONS

1930

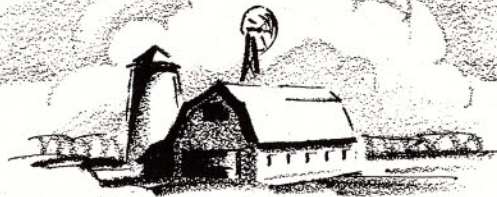
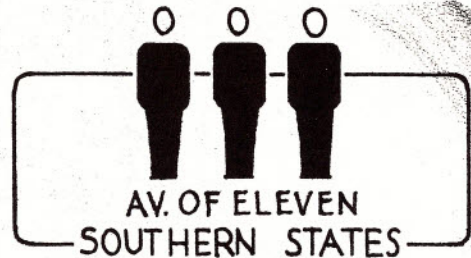
**DENSITY** OF **POPULATION**  
PER SQUARE MILE

## COUNTRY AND CITY

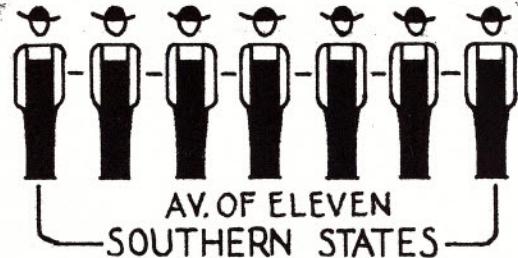
In 1930, in the eleven southern states, an average of 1,630,370 persons, or about 70 per cent of the population, lived in the rural areas or in towns with a population of less than 2,500 persons, and an average of 692,439 persons, or 30 per cent, lived in towns or cities of more than 2,500. In Arkansas during the same year, 1,471,604 persons, or 79 per cent of the population, lived in the rural areas or in towns of less than 2,500, while only 382,878 persons, or 21 per cent, lived in towns or cities of more than 2,500 population.



**URBAN**



**RURAL**



1930

EACH FIGURE EQUALS 10% TOTAL POPULATION

**URBAN & RURAL POPULATION**

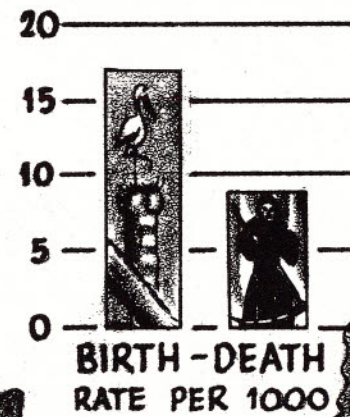
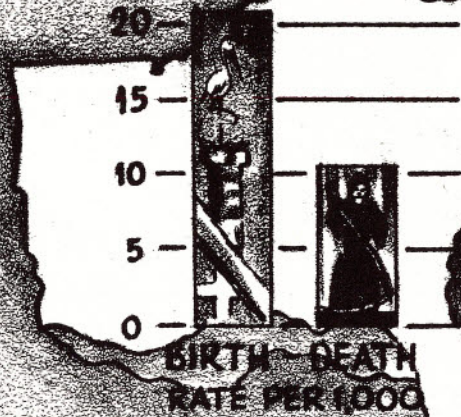
## BIRTH AND DEATH

The average annual birth rate for 1937 for the eleven southern states was 20.3 per thousand population. The rate in Arkansas was 17.0 per thousand. In the same year the average death rate for the eleven southern states was 10.9 per thousand, while that for Arkansas was 9.0 per thousand. The average excess of births over deaths per thousand in the eleven southern states in 1937 was therefore 9.4 and in Arkansas 8.0. As the death rate of the people of Arkansas is slightly below the average prevailing throughout the southern states, their health can be said to be above the average.



AV. OF ELEVEN  
SOUTHERN STATES

ARKANSAS



1937

**BIRTH AND DEATH RATES**

## SCHOOLING

1936 school records indicate that an average of 21 per cent of the population of the eleven southern states attended grammar school. In Arkansas 20.2 per cent attended. During the same year an average of 3.7 per cent of the population of the southern states attended high school. In Arkansas the percentage was 3.1. An average of 7/10 of one per cent of the population of the eleven southern states attended college; in Arkansas the percentage was 4/10 of one per cent.

The grammar school, high school and college attendance in Arkansas is, therefore, slightly less than the average of the eleven southern states.



AV. of ELEVEN SOUTHERN STATES



ARKANSAS



COLLEGE



HIGH SCHOOL



ELEMENTARY

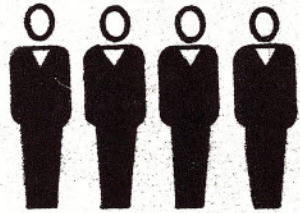
# EDUCATION

STUDENTS ENROLLED 1935-'36

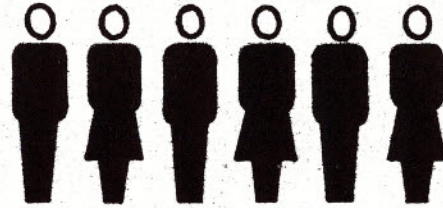
EACH FIGURE EQUALS 1 %  
TOTAL POPULATION

## WORKING FOR A LIVING

The average number of persons gainfully occupied in 1930 in the eleven southern states was 880,923, or 38 per cent of the population while 62 per cent were dependent. The number of gainfully occupied persons in Arkansas during that year was 667,845, or 36 per cent, and the remainder, or 64 per cent, were dependent. Arkansas' employment level was therefore, in 1930, two per cent less than the average for the eleven southern states.

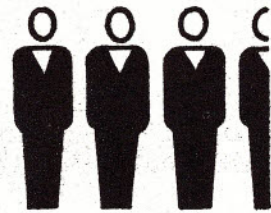


GAINFULLY OCCUPIED

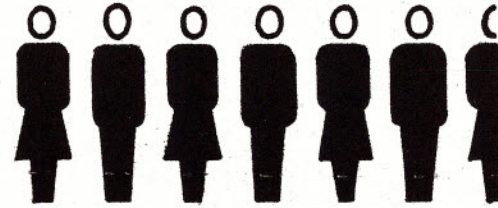


DEPENDENTS

AV. OF ELEVEN  
SOUTHERN STATES



GAINFULLY OCCUPIED



DEPENDENTS

ARKANSAS

1930

EACH FIGURE REPRESENTS  
10% TOTAL POPULATION

**EMPLOYMENT**

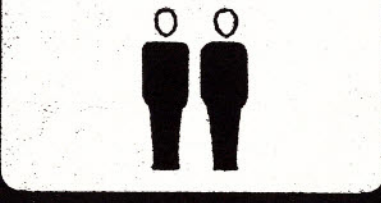
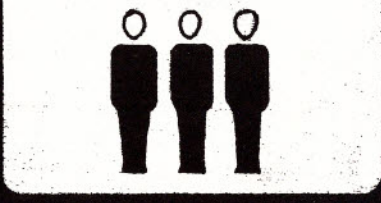
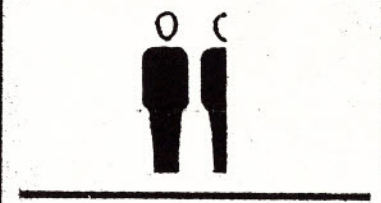
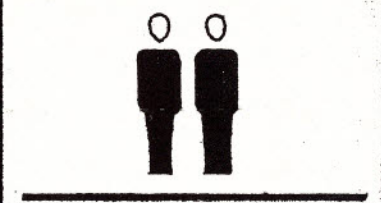
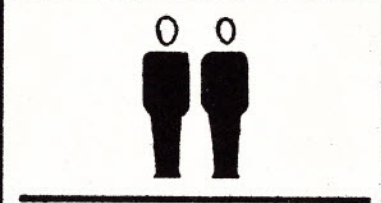
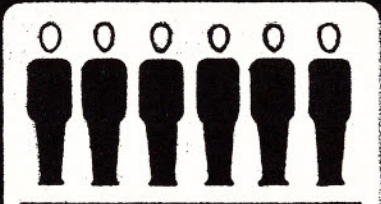
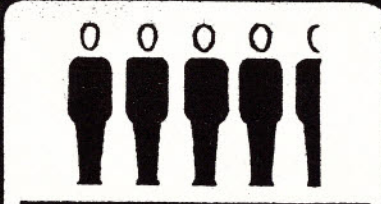
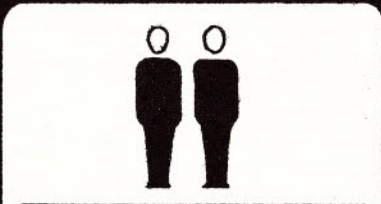
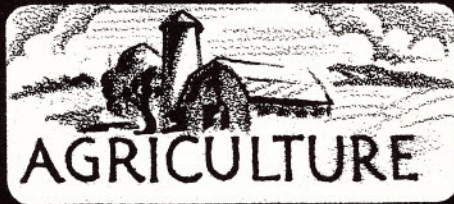
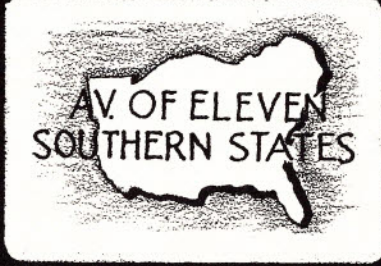
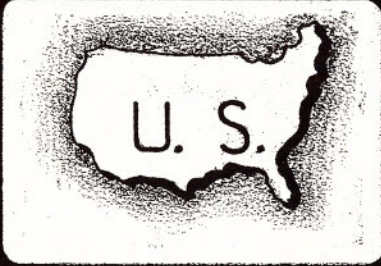
## WHAT THE WORKERS DO

A comparison of the kinds of occupations followed in Arkansas with those followed in the eleven southern states and in the United States is of much interest. The following table shows the several percentages of the populations in these three groups which, in 1930, were engaged in the principal gainful occupations:

	United States (per cent)	Eleven southern states (per cent)	Arkansas (per cent)
Agriculture . . . . .	21	44	58
Manufacturing and mechanical industries . .	29	20	12
Trade, transportation, and communication .	21	14	13
All others . . . . .	29	22	17
	<u>100%</u>	<u>100%</u>	<u>100%</u>

The importance of the forests of Arkansas, to employment, is indicated by the fact that, in 1935, 18,045 persons, or 60 per cent of all those within the state engaged in manufacturing were dependent for their occupations upon the forests for raw material supply.

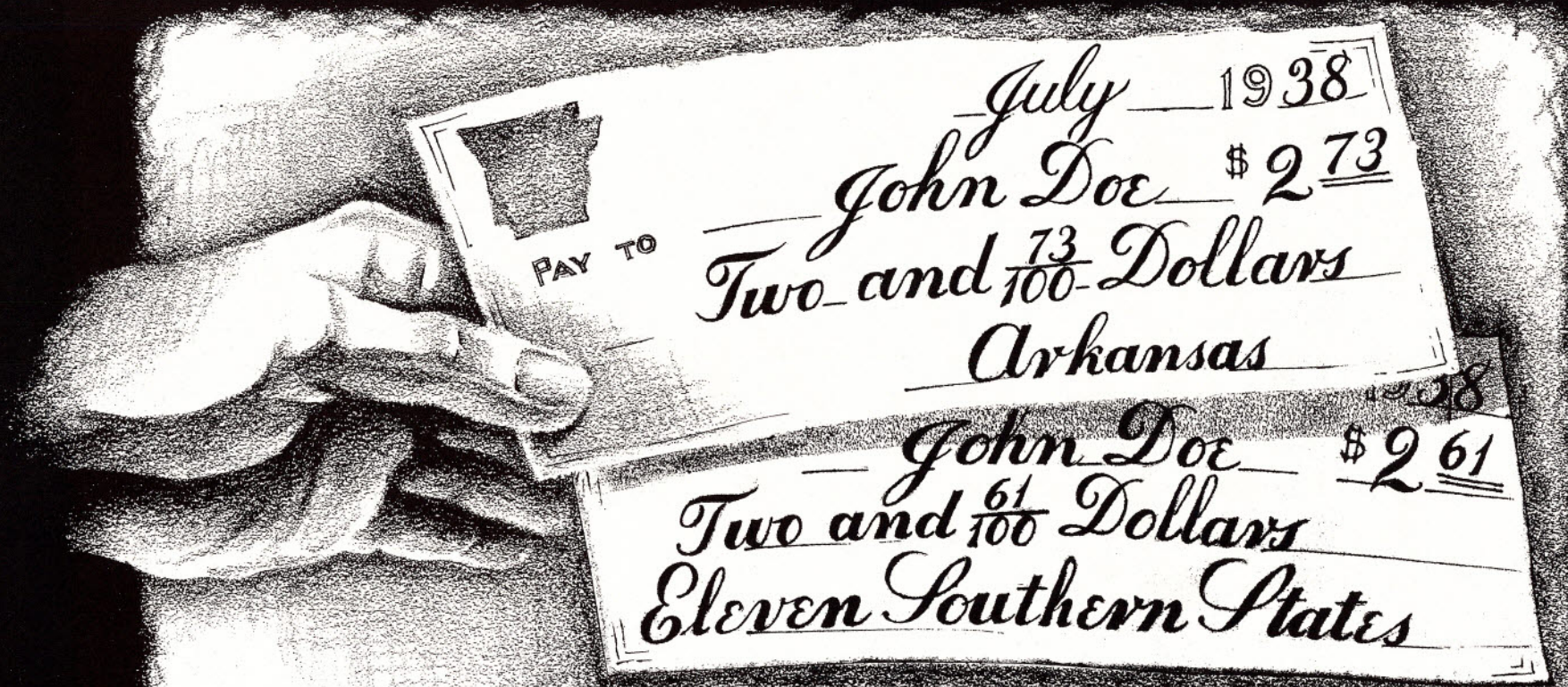
OCCUPATIONS  
1930  
EACH FIGURE EQUALS 10 %



## DAILY WAGE

In July, 1938, the weighted average daily wage paid to those who were employed in the manufacturing industries in the eleven southern states was slightly less than the average paid in Arkansas (\$2.61 compared to \$2.73). The weighted average wage paid for the same type of labor in the same year and month in six New England states, Maine, New Hampshire, Vermont, Massachusetts, Rhode Island and Connecticut, was \$3.45 per day.





**AVERAGE DAILY WAGE**

SUMMARY  
PART II  
THE PEOPLE

As one of the original slave-owning states, Arkansas has always contributed to and been a part of the traditions of the South in both business and government. To make a useful comparison between Arkansas and other states, it should be compared with those states which have more or less similar backgrounds and which have common social and economic problems. These states are Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North and South Carolina, Tennessee and Virginia as the traditions, the physical character of the land, the climate and the occupations of the people in these states are much the same as those in Arkansas.

During the period from 1920 to 1937 the growth of population in Arkansas has been slightly less than the average of the eleven southern states. Population, however, is a more flexible factor than it once was, as it is so much easier and cheaper to travel now than before the day of the automobile and the hard-surfaced road, and people move quickly into any area which offers opportunity for profitable

employment. In 1930, one-fourth of the people living in Arkansas had moved into the state from other states some time during the period from about 1860 to 1930, and during the same period a number equivalent to about one-third of the 1930 population had left Arkansas to live in other states. Due to greater outflow than inflow, the population was reduced during the 70-year period by a number equal to about 10 per cent of the 1930 population.

In 1930 the percentage of colored persons in Arkansas was a little less than the average of the eleven southern states. In the same year the percentage of persons living in the rural sections of Arkansas was a little higher and the density of the state population was a little lower. The birth and death rates of the state were slightly lower and the school and college attendance of the people and the percentage gainfully employed were slightly lower than the average.

The percentage of people employed in agriculture was somewhat higher in Arkansas in 1930 than the percentage of those similarly employed in the eleven southern states. The proportion employed in the manufacturing and mechanical industries was noticeably less, although the daily wage paid in these industries in Arkansas was slightly higher.

## PART III

### THE TOOLS

#### TOOLS THE PEOPLE USE

The natural resources and the number, characteristics and occupations of the people who live in Arkansas have been described. The next factors in wealth production to be considered are the tools or instruments that the people use to produce wealth. These may be individual tools, such as saws, plows or machines, or they may be collections of tools, such as farms, mines, mills or railroads. Only those collective tools which are in common use will be discussed.



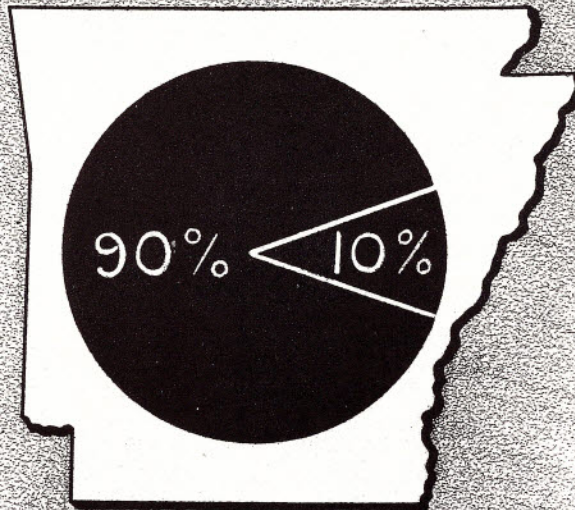
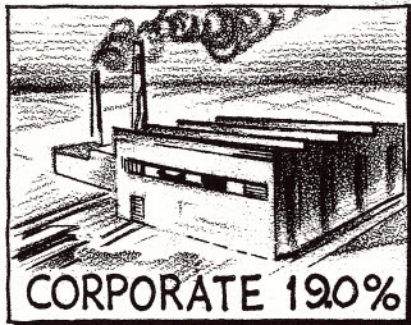
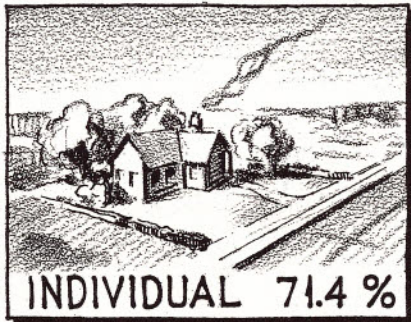
**PART THREE**  
**THE TOOLS**

## WHO OWNS THE LAND

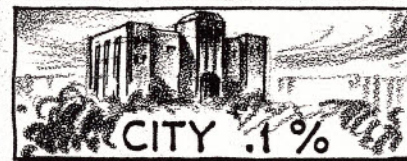
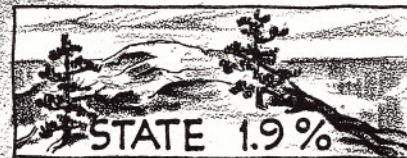
Before the people can utilize the tools to produce wealth from the land on which they live, they must have the right to use both the tools and the land. This right is guaranteed by both the federal and state governments.

Ninety per cent of the land in Arkansas is privately owned and the remaining 10 per cent is publicly owned. Of the 90 per cent of privately owned lands, individuals own about 71 and companies and corporations own about 19. Of the 10 per cent of publicly owned land, about 7 belongs to the federal government, 2 to the state, and one to county and city governments.

**PRIVATELY OWNED**  
90 PERCENT



**PUBLICLY OWNED**  
10 PERCENT



1938

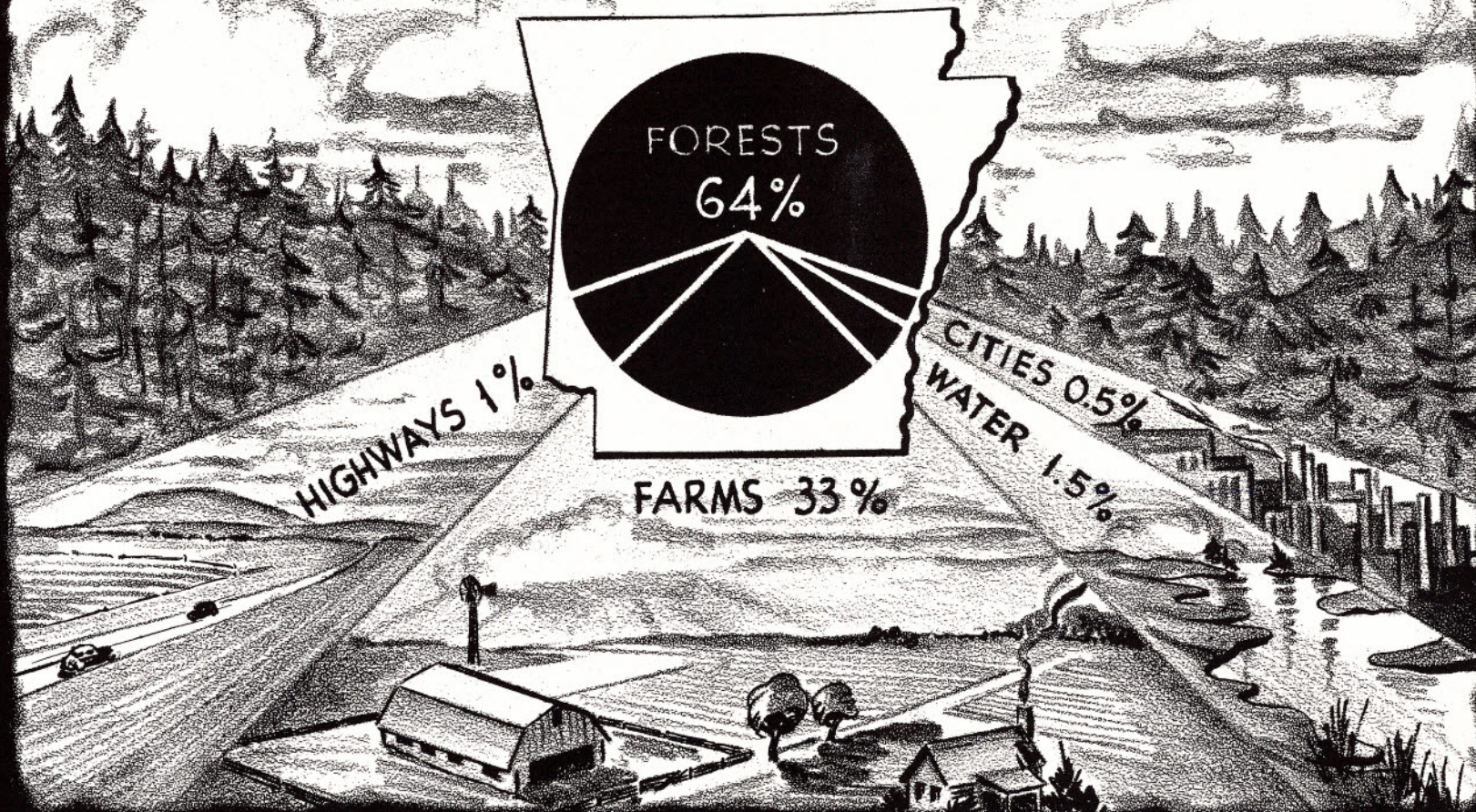
# LAND OWNERSHIP IN ARKANSAS

## USE OF THE LAND

Those who own or have the right to use the land of Arkansas have utilized about 64 per cent of it for the timber crop and about 33 per cent of it to raise farm crops. One per cent is used for highways, one and one-half per cent is occupied by lakes and streams and about one-half of one per cent by cities and rural incorporated towns with populations of more than 2,500 persons.



# LAND USE IN ARKANSAS 1938



## CARRYING GOODS AND PEOPLE

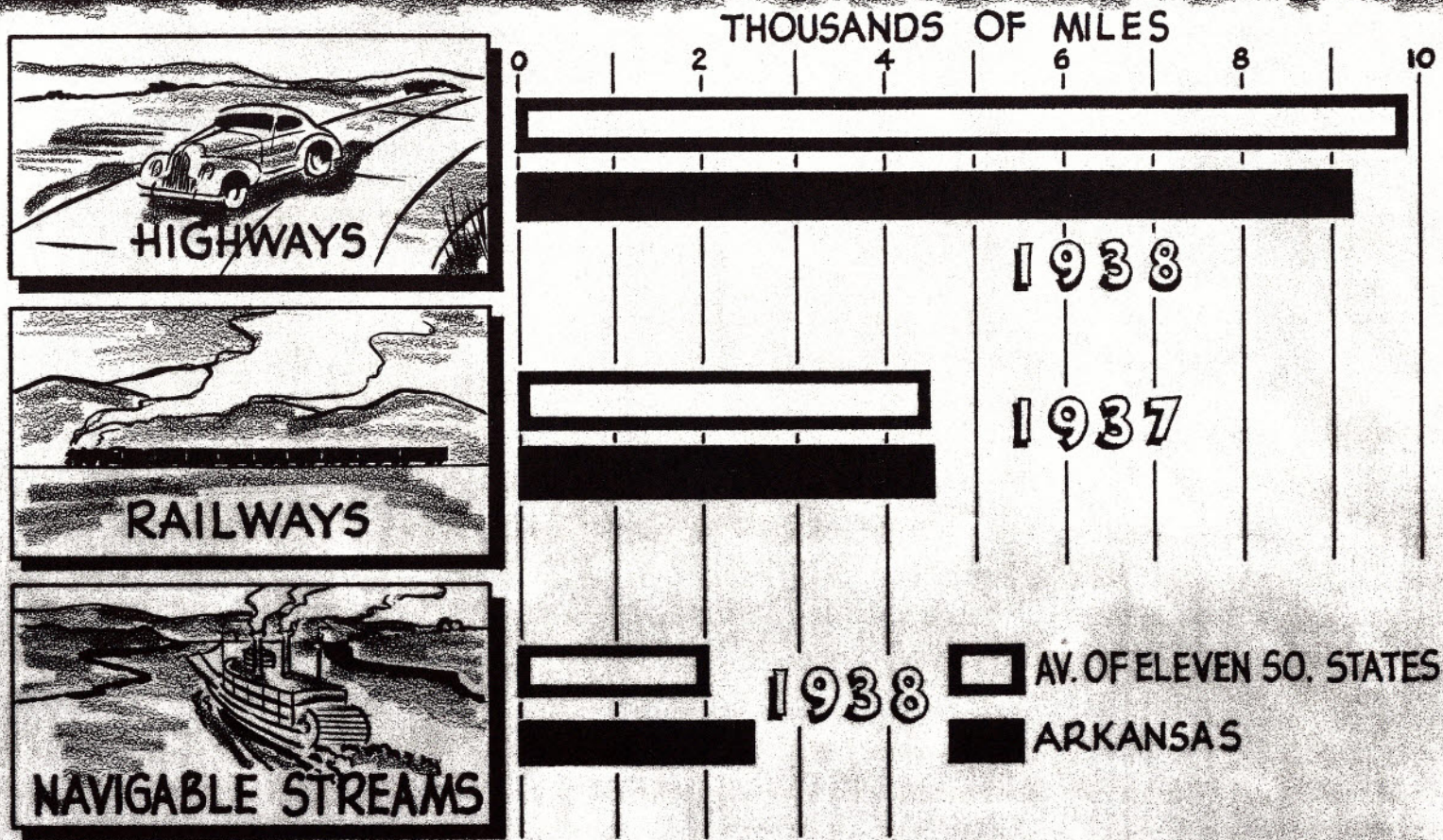
Transportation facilities are among the most important tools used by those who produce wealth. These consist of highway and railway systems, navigable streams, and airway systems.

In 1938 the eleven southern states had an average of 9,830 miles of state-owned and maintained highways. Arkansas had 9,229 miles of such highways, or 94 per cent of the average.

In 1937 the eleven southern states had an average of 4,543 miles of railways. Arkansas had 4,577 miles, or 101 per cent of the average.

In 1938 the eleven southern states had an average of 2,006 miles of navigable streams. Arkansas had 2,551 miles, or 127 per cent of the average.

In 1937 the eleven southern states had an average of 485 miles of airways. Arkansas had 278 miles, or 57 per cent of the average.



# TRANSPORTATION FACILITIES

## SENDING WORDS

Modern telephone, telegraph and radio systems are of vital importance in business.

In 1932, the average number of telephones in the eleven southern states was 132,568. Arkansas had 86,676 telephones, or 65 per cent of the average. The average number of telephones per capita in the eleven southern states for the same year was .056. Arkansas had .045, or 81 per cent of the average.

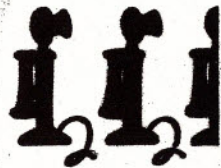
In 1938, the average number of miles of telegraph lines in the eleven southern states was 36,212. Arkansas had 23,437 miles, or 65 per cent of the average.

In 1938, the average number of radio broadcasting stations in the eleven southern states was eleven and Arkansas had the same number.

AVERAGE OF ELEVEN  
SOUTHERN STATES

ARKANSAS

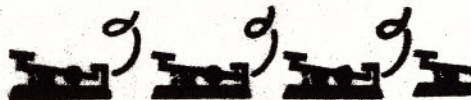
TELEPHONES  
1932



EACH SYMBOL EQUALS  
50,000 TELEPHONES



TELEGRAPH  
1938



EACH SYMBOL EQUALS  
10,000 MILES OF  
TELEGRAPH LINES



RADIO  
1938



EACH SYMBOL EQUALS  
11 RADIO STATIONS



COMMUNICATION

## POWER FROM MINERAL FUELS

The energy available for mineral fuels is another important tool which is used to carry on important wealth-producing activities. All of the eleven southern states, however, do not produce these mineral fuels. In 1937 only six produced coal, four produced oil, and five produced natural gas. All three of these are produced in Arkansas.

In 1936 the six southern coal producing states were Alabama, Arkansas, Georgia, Kentucky, Tennessee, and Virginia. These produced an average of 13,028,024 short tons. Arkansas's production was 1,622,787 short tons, or 12 per cent of the average. This represented 2 per cent of the total production of 78,168,143 short tons for the six states.

In 1937 the four southern oil producing states in the south were Arkansas, Kentucky, Louisiana, and Tennessee. These produced an average of 26,928,000 barrels. Arkansas's production was 11,681,000 barrels, or 43 per cent of the average. This represented 11 per cent of the total production of 107,712,000 barrels for the four states.

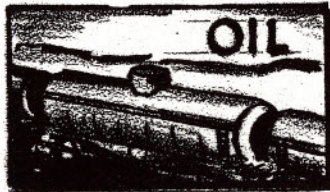
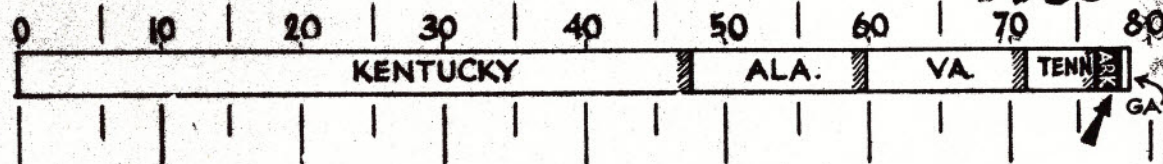
In 1936 the five southern natural gas producing states were Arkansas, Kentucky, Louisiana, Mississippi, and Tennessee. These produced an average of 70,871,800,000 cubic feet, while Arkansas produced 8,500,000,000 cubic feet. This was 12 per cent of the average for the five states, or 2 per cent of their total production of 354,359,000,000 cubic feet.



**COAL**

SIX STATES  
PRODUCING\*

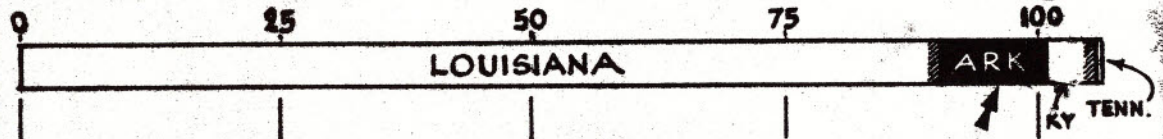
COAL - MILLIONS OF SHORT TONS 1936



**OIL**

FOUR STATES  
PRODUCING\*

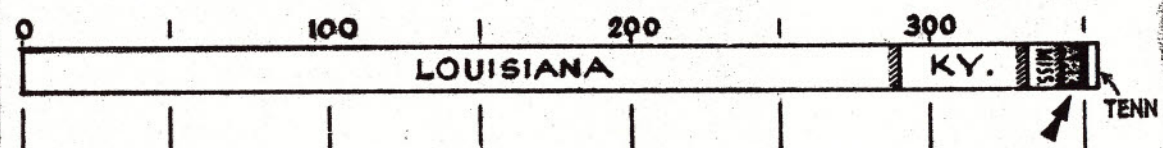
OIL - MILLIONS OF BARRELS 1937



**GAS**

FIVE STATES  
PRODUCING\*

GAS - BILLIONS OF CUBIC FEET 1936



\* WITHIN THE ELEVEN SOUTHERN STATES

# FUEL PRODUCTION

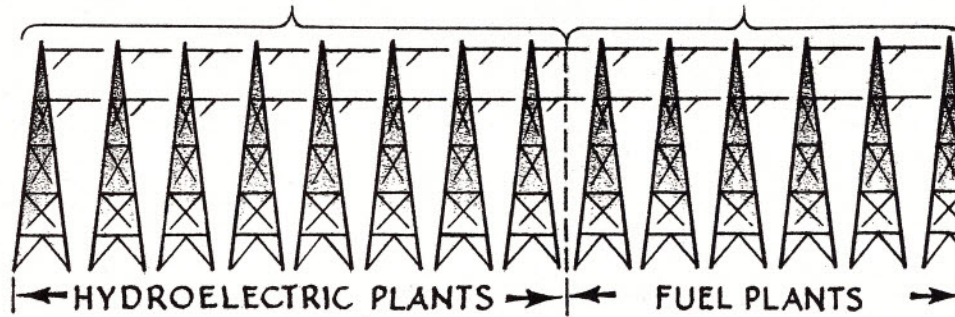
## ELECTRICITY

In 1937 the average of the electric energy produced by hydro-electric, steam, and combustion engine plants in the eleven southern states was 1,380,451,000 kilowatt hours. The Arkansas production for that year was 277,691,000 kilowatt hours, or 20.1 per cent of the average.

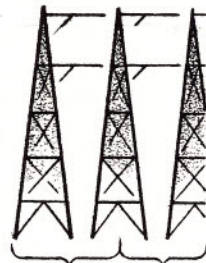
The total hydro-electric power available in Arkansas is estimated at about 393,738 kilowatts (527,800 horse power) and the amount developed in 1937 was about 66,705 kilowatts (89,417 horse power). Power from this source was, therefore, only 17 per cent developed up to that year.



AV. OF ELEVEN  
SOUTHERN STATES



ARKANSAS



EACH SYMBOL EQUALS  
100,000,000 K. W. H.  
(ANNUAL PRODUCTION)

1937

FUEL PLANTS  
HYDROELECTRIC PLANTS

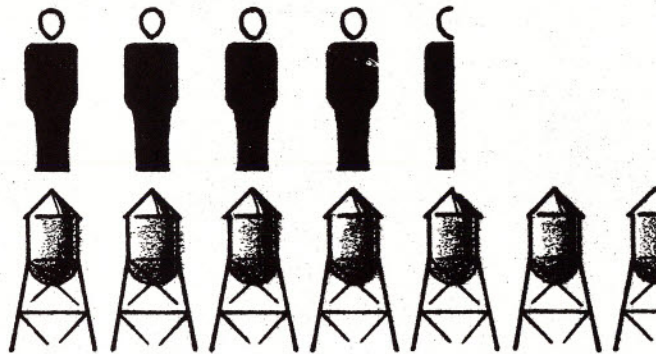
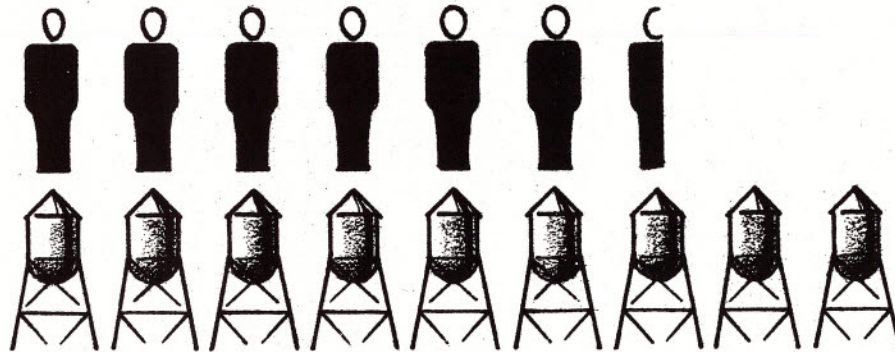
**ELECTRIC POWER**

## WATER SYSTEMS

Cities and towns which have developed water systems are usually able to supply plenty of water of good quality for domestic and industrial uses. During 1937 the average number of systems operated in the eleven southern states was 229, while 169 systems or 74 per cent of the average were in operation in Arkansas. In the same year the average number of persons served in the eleven southern states were 3,278 per system, while the average number served in Arkansas was 2,266, or 75 per cent of the average.

AV. OF ELEVEN  
SOUTHERN STATES

ARKANSAS



EACH MAN EQUALS 500 PERSONS (URBAN POP.) PER MUNICIPAL WATER SYSTEM  
EACH TANK EQUALS 25 MUNICIPAL WATER SYSTEMS - 1937

# MUNICIPAL WATER SYSTEMS

## FUNDS TO OPERATE AND PROTECT

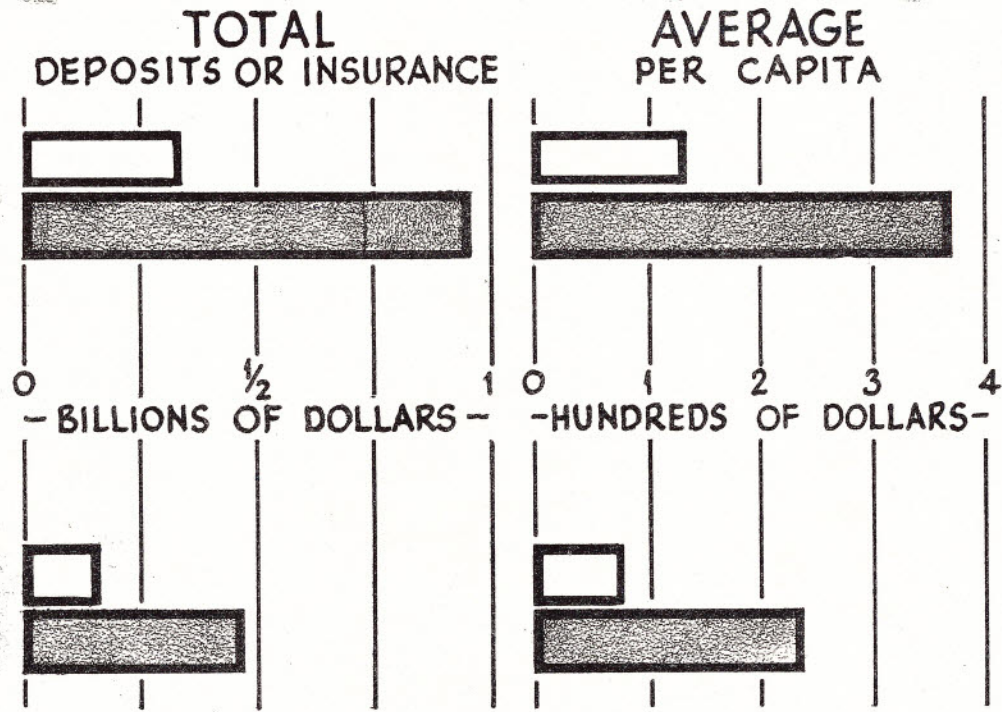
Banks and insurance organizations are essential tools of business as banks supply operating funds and insurance companies provide protection to lives and property.

For the year ending June 30, 1937, the average of the bank deposits in the eleven southern states was \$340,231,000. Bank deposits in Arkansas during the same year amounted to \$163,387,000 which was 48 per cent of the average. The average per capita deposit in the eleven southern states was \$132.36. In Arkansas this deposit was \$79.78 or 60 per cent of the average.

During 1936 the average life insurance in force in the eleven southern states amounted to \$956,748,000, and in Arkansas it was \$480,691,000, or 50 per cent of the average. During the same year the average life insurance in force per capita in the eleven southern states was \$376.92. In Arkansas it was \$237.61, or 63 per cent of the average.

AV. OF ELEVEN  
SOUTHERN STATES

ARKANSAS



 BANK DEPOSITS 1937  
 ORDINARY, INDUSTRIAL AND GROUP LIFE INSURANCE IN FORCE 1936

# BANKING AND LIFE INSURANCE

## MARKET PLACE

The following table shows the number and per capita establishments for the wholesale and retail houses of the eleven southern states and for Arkansas for the year 1935:

	Eleven southern states (average)	Arkansas	Per cent of average
Wholesale establishments . . . . .	2,012	1,504	75
Per capita establishments . . . . .	.0008	.0008	100
Retail establishments . . . . .	24,005	18,292	76
Per capita establishments . . . . .	.010	.009	90

The above figures indicate that the number of the wholesale and retail establishments in Arkansas is three-fourths of the average in the eleven southern states. However, on a per capita basis, the number of wholesale establishments is 100 per cent and the retail establishments 90 per cent of the average of the southern states.

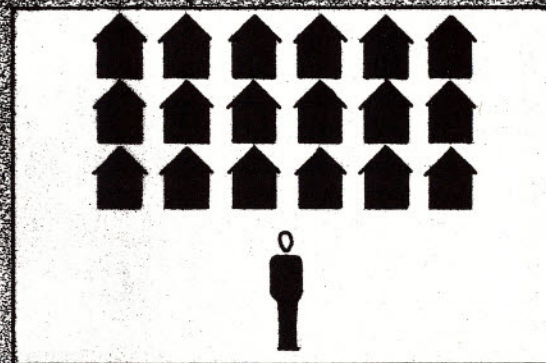
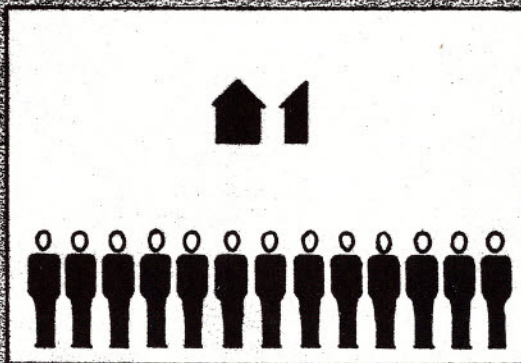
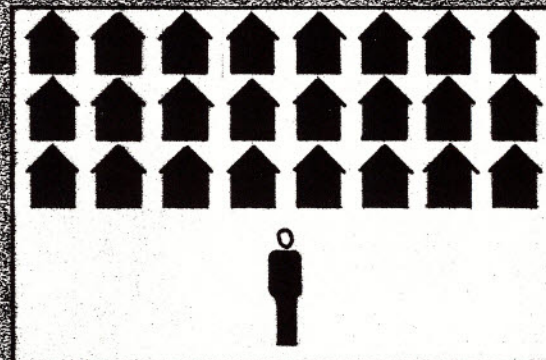
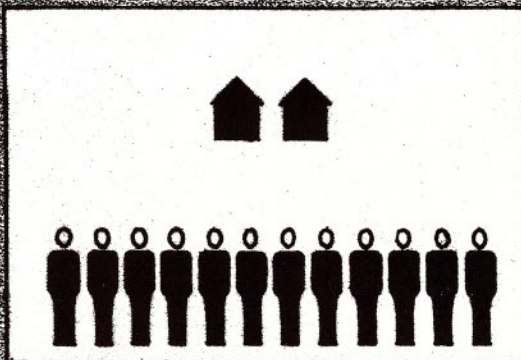
1935

AV. OF ELEVEN  
SOUTHERN STATES

ARKANSAS

WHOLESALE

RETAIL



EACH BUILDING EQUALS 1000 ESTABLISHMENTS  
EACH MAN EQUALS 100 PERSONS PER ESTABLISHMENT

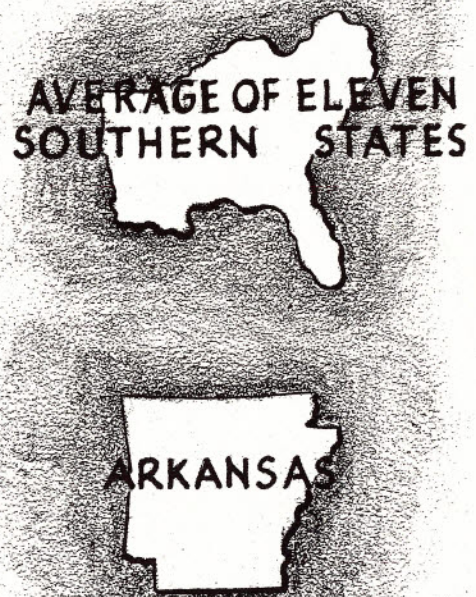
**WHOLESALE AND RETAIL ESTABLISHMENTS**

## SERVICE FOR SALE

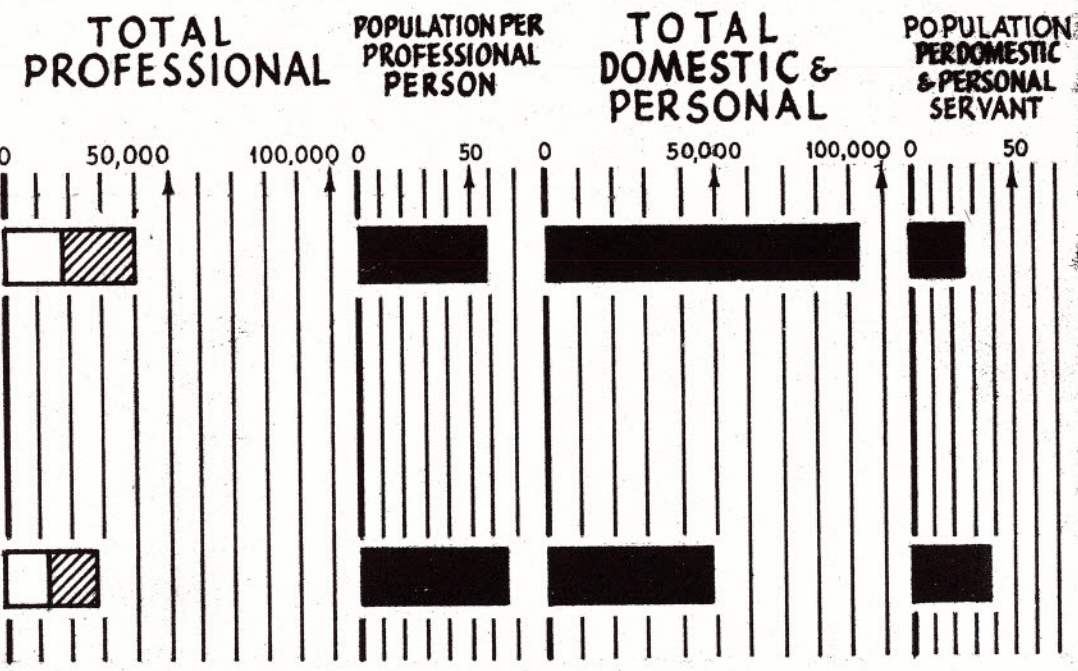
In 1930 the average number of persons engaged in professional services in the eleven southern states was 39,819. Of these 17,725 were teachers and 22,094 were in other professions. The population per professional person during that year was 59 and the professional person per capita was .017. In Arkansas during the same year 27,909 persons were engaged in professional services. Of these 13,083 were teachers and 14,826 were in other professions. The population per professional person was 66 and the professional persons per capita was .015. During the same year the teachers per capita in the eleven southern states was .008 and in Arkansas .007.

The average number of persons in domestic and personal services in the eleven southern states in 1930 was 92,326 and the population for each domestic and personal servant was 26. During the same year in Arkansas the total number in domestic and personal service was 49,481 and the population for each domestic and personal servant was 38. The domestic and personal servants per capita in the eleven southern states during the same year was .04, in Arkansas .03.





**PROFESSIONAL      DOMESTIC & PERSONAL**



□ TEACHERS      ▨ OTHERS

1930

**PROFESSIONAL, DOMESTIC AND PERSONAL SERVICE**

## INSTITUTIONS FOR SERVICE

The most important institutions which serve the public are schools, libraries, churches, and hospitals.

During the school year 1935-1936 the average number of pupils for each teacher in the eleven southern states was 34 while in Arkansas the average number was 36.

In 1934 the average number of persons in the eleven southern states to each volume in the libraries was 2.1, while in Arkansas the average was 4.2.

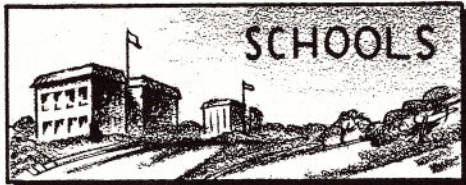
In 1926 the average number of persons to each church for the eleven southern states was 350, while the average in Arkansas was 326.

During 1937 in the eleven southern states the average number of persons for each available hospital bed was 185, while in Arkansas the average was 180.

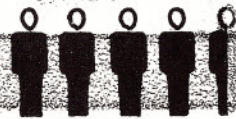
# SERVICE INSTITUTIONS

AV. OF ELEVEN  
SOUTHERN STATES

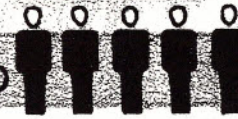
ARKANSAS



SCHOOLS



1935-36



33.6 PUPILS PER TEACHER    35.5 PUPILS PER TEACHER  
EACH FIGURE EQUALS SEVEN PUPILS



LIBRARIES



1934



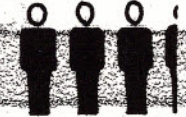
2 PERSONS PER VOLUME    4.2 PERSONS PER VOLUME  
EACH FIGURE EQUALS ONE PERSON



CHURCHES



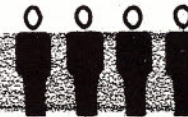
1926



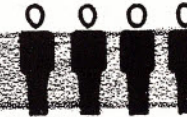
350 PERSONS PER CHURCH    326 PERSONS PER CHURCH  
EACH FIGURE EQUALS 100 PERSONS



HOSPITALS



1937

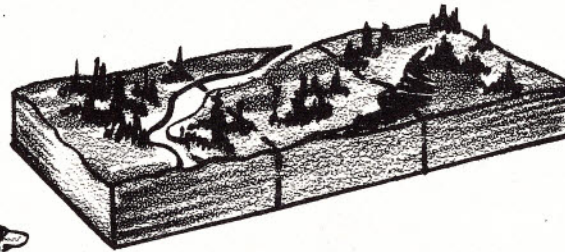


185 PERSONS PER BED    180 PERSONS PER BED  
EACH FIGURE EQUALS 50 PERSONS

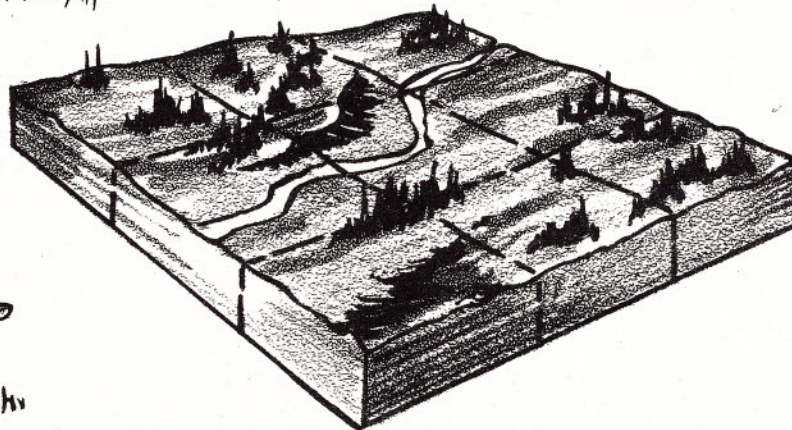
## PLAYGROUNDS

The recreational facilities in Arkansas far exceed the average found in the eleven southern states. Considering only public parks and national forests, in 1935 an average area of three-tenths of an acre per capita was available to those who live in the eleven southern states while in Arkansas nine-tenths of an acre or three times the average was available.

AV. OF ELEVEN  
SOUTHERN STATES



ARKANSAS



EACH PORTION OF SYMBOL EQUALS ONE TENTH ACRE PER CAPITA

# RECREATIONAL FACILITIES

PARKS AND NATIONAL FORESTS - 1935

SUMMARY  
PART III  
THE TOOLS

The use of the collective tools which are available for the production of wealth is dependent on the right to use both the tools and the land. In Arkansas this right is guaranteed by the federal and state governments. In 1938, ninety per cent of the land of Arkansas was privately owned and ten per cent was owned by the federal, state, and municipal governments. During the same year 64 per cent of the land was forested and 33 per cent was used for farming. Of the remaining four per cent, highways occupied one per cent, water 1.5 per cent, and cities, .5 per cent.

The highway mileage of Arkansas is slightly below the average of the eleven southern states. The mileage of the railways and the navigable streams of Arkansas is slightly higher than the average. The electrical energy produced in the state is about one-fifth of the average. The number of municipal water systems in use in Arkansas is only slightly below the average for the eleven southern states.

The average deposit in banks per capita in Arkansas is about two-thirds of the average for the eleven southern states, as is also the average per capita of life in-

insurance in force. The total number of wholesale and retail establishments in Arkansas is less than the average for the eleven southern states. The number per capita is the same for the wholesale and slightly less for the retail.

The number of persons engaged in professional and personal services in Arkansas is somewhat below the average for the eleven southern states, although the number of persons engaged per capita is only slightly below the average.

Of the service institutions, Arkansas has about the same number of pupils per teacher in the schools, about twice the number of persons for each volume in the libraries, slightly less than the average number of persons for each church and slightly less persons for each bed available in the hospitals than the average of the eleven southern states.

Considering only public parks and national forests the area available for recreation per capita in Arkansas is three times the average per capita in the eleven southern states.

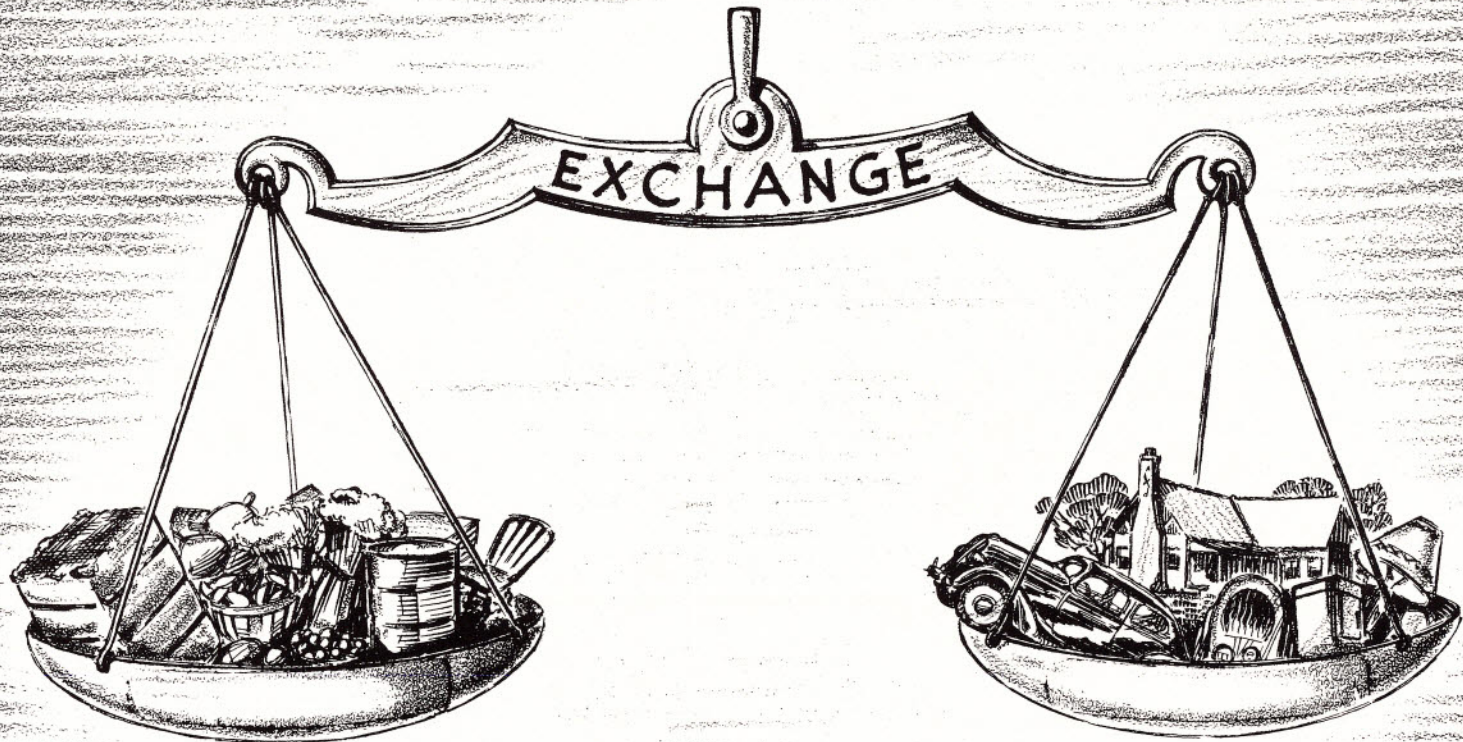
## PART IV

### WEALTH

#### GOODS FOR EXCHANGE OR USE

Perhaps the most interesting part of this study is the classification and evaluation of the products or wealth which the people of Arkansas, with the use of their tools, obtain from the natural resources of the state. Two main classes of goods or wealth are produced in Arkansas: raw materials and manufactured materials. Raw materials include most of the agricultural, forest, mineral and wild life products, and are derived directly from the land and water with comparatively little labor added. Manufactured materials, such as gasoline, cottonseed oil, furniture, canned goods and textiles are products which have been materially changed in form by the addition of labor.





**PART FOUR**

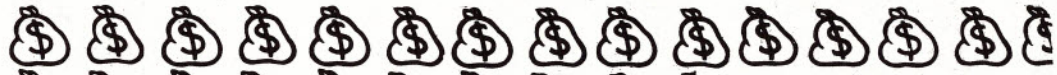
**WEALTH**

## BASIC PRODUCTS

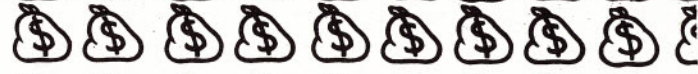
In 1935 the four most important groups of products—agricultural, mineral, timber and lumber, and manufactured—had the following aggregate values in the eleven southern states:

North Carolina .....	\$1,447,969,520
Virginia .....	935,133,545
Kentucky .....	791,296,936
Georgia .....	770,880,542
Tennessee .....	755,509,961
Louisiana .....	700,442,265
Alabama .....	595,485,779
South Carolina .....	459,365,754
Mississippi .....	336,083,724
ARKANSAS .....	313,934,308
Florida .....	280,673,218

N. CAROLINA



VIRGINIA



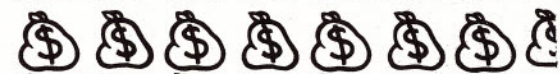
KENTUCKY



GEORGIA



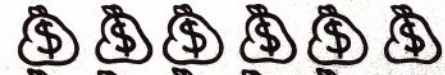
TENNESSEE



LOUISIANA



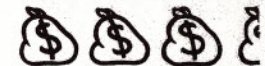
ALABAMA



S. CAROLINA



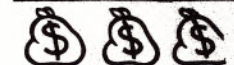
MISSISSIPPI



**ARKANSAS**



FLORIDA



**TOTAL**

1935  
EACH SYMBOL EQUALS \$100,000,000

# COMMODITY PRODUCTION

IN THE ELEVEN SOUTHERN STATES

## COMPARATIVE VALUE

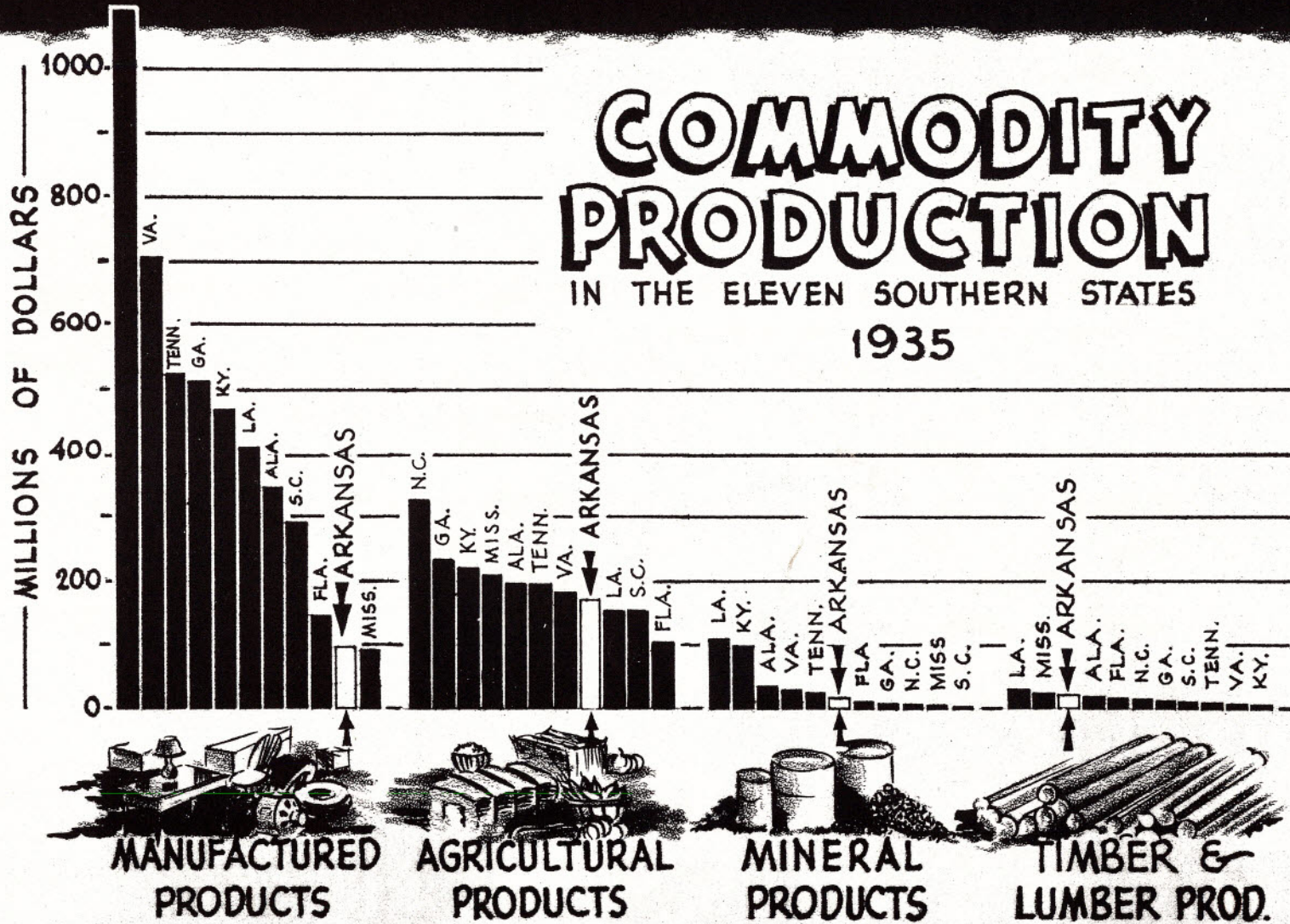
Opposite is a graph showing the value, in 1935, of the most important products of each of the eleven southern states. These products have been divided into four major groups and are shown in the order of their descending maximum value—(1) manufactured, (2) agricultural, (3) mineral, and (4) timber and lumber products. It is to be noted that Arkansas ranks tenth in the value of manufactured products (value \$97,272,122), eighth in agricultural value (\$173,878,000), sixth in mineral value (\$17,608,569), and third in timber and lumber products value (\$25,175,617). The comparative figures for 1935 indicate that the value of the manufactured products in Arkansas was 22 per cent of the average of the eleven southern states, the value of the agricultural products was 88 per cent of the average, the value of the mineral products was 56 per cent of the average, and the value of the timber and lumber products was 141 per cent.

In Arkansas it is to be noted that the agricultural products have the greatest value, manufactured products are second, lumber and timber products, third, and mineral products, fourth.

# COMMODITY PRODUCTION

IN THE ELEVEN SOUTHERN STATES

1935

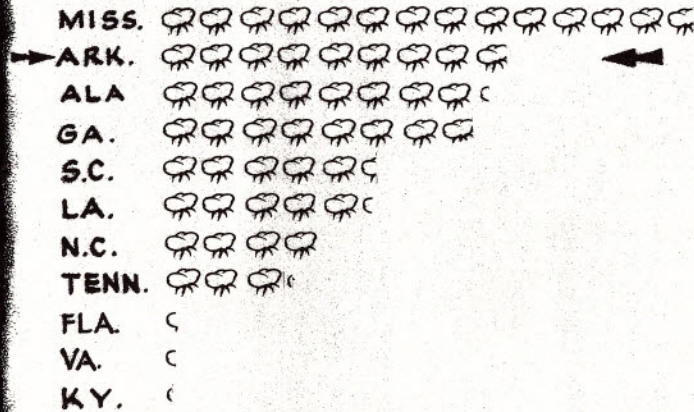


## AGRICULTURAL PRODUCTS

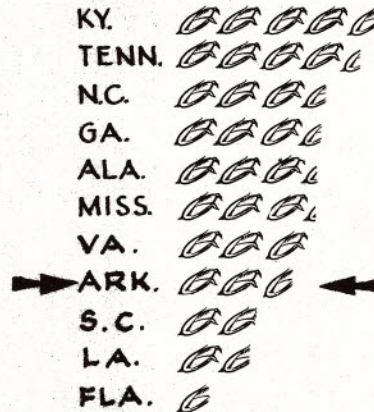
In 1937 the value of the agricultural products of Arkansas was the greatest of the four principal commodity groups.

The three most valuable agricultural products of Arkansas in that year were, first, cotton and cottonseed (\$88,767,000), second, animal and animal products (\$58,585,000), and third, corn (\$24,384,000). The value of all other agricultural products, including government payments to farmers, amounted to \$44,642,000. The value of these products in 1937 in the eleven southern states is shown in the graph on the opposite page. The graph shows that Arkansas was second in the value of cotton and cottonseed, seventh in the value of animals and animal products, eighth in the value of corn, and tenth in the aggregate value of all other agricultural products.

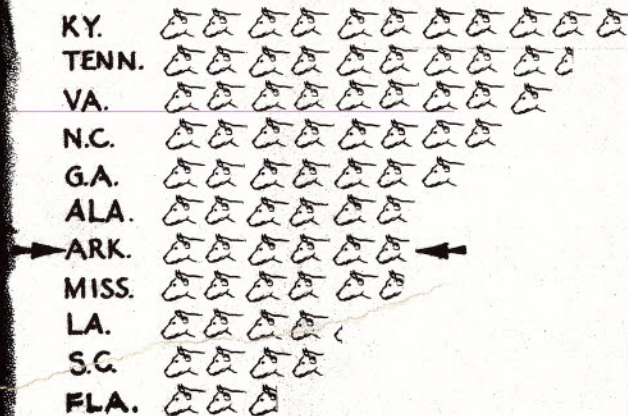
### COTTON & COTTONSEED



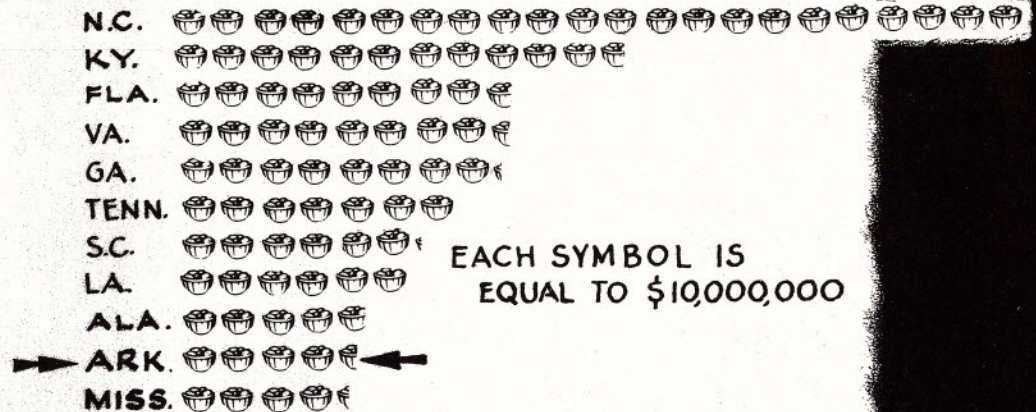
### CORN



### ANIMALS & ANIMAL PRODUCTS



### ALL OTHER



EACH SYMBOL IS  
EQUAL TO \$10,000,000

**AGRICULTURAL PRODUCTS**  
THE ELEVEN SOUTHERN STATES

1937

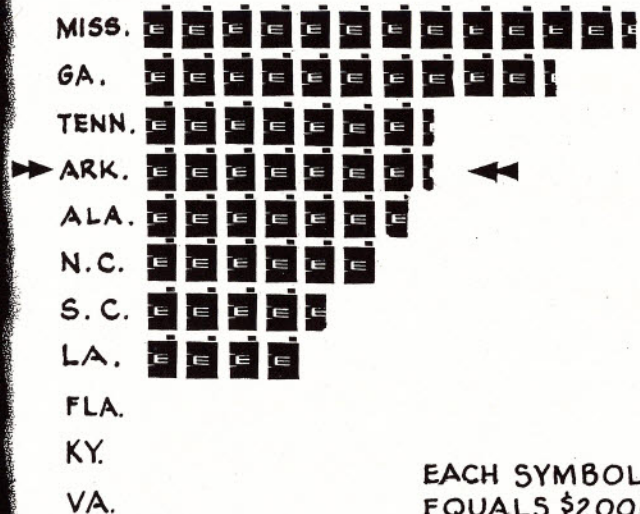
## MANUFACTURED AND FOREST PRODUCTS

In Arkansas in 1935 manufactured products ranked second in the value of the four principal commodity groups and of these products the three most valuable were cottonseed products (\$14,795,000), petroleum products (\$10,476,049) and furniture (\$4,668,482). All other manufactured products were valued at \$67,332,591. In the eleven southern states, during that year, Arkansas ranked fourth in the value of cottonseed products, third in the value of petroleum products, fifth in the value of furniture and eleventh in the aggregate value of all other manufactured goods. It is of interest to know that, in terms of dollars, 31% of the manufactured products of Arkansas in 1935 were produced by plants dependent chiefly on the forests for their raw materials. The value of these products was \$37,429,003.

The value of the timber and lumber products in 1935 was third among the four principal commodity groups. The value of these products compared to those of the eleven southern states is shown in the graph opposite page 108, "Commodity Production." In 1935 Arkansas ranked third in the value of these products in the eleven southern states with a value of \$25,175,617.

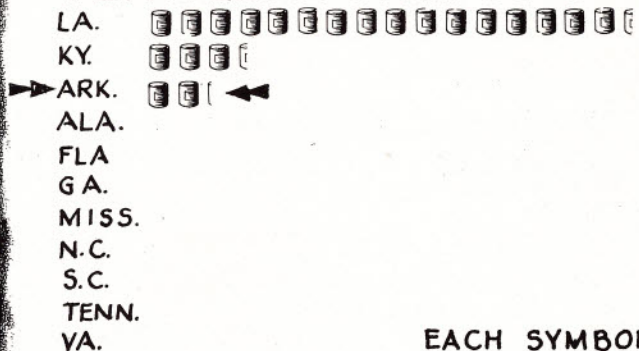


### COTTONSEED PRODUCTS



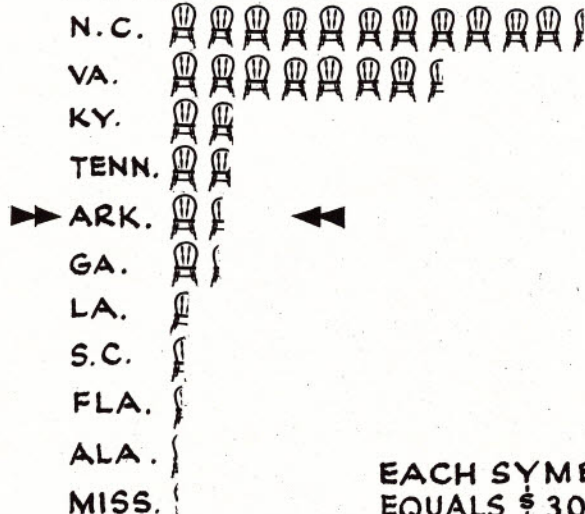
EACH SYMBOL  
EQUALS \$2,000,000

### PETROLEUM PRODUCTS



EACH SYMBOL  
EQUALS \$5,000,000

### FURNITURE



EACH SYMBOL  
EQUALS \$3,000,000.

### ALL OTHERS

N.C.	\$ 1,046,925,075
VA.	686,068,269
TENN.	498,601,578
GA.	485,077,940
KY.	443,605,959
LA.	329,177,158
ALA.	312,399,852
S.C.	277,112,189
FLA.	142,602,618
MISS.	68,952,787
ARK.	67,332,591





**MANUFACTURED PRODUCTS**  
THE ELEVEN SOUTHERN STATES

1935

## MINERAL PRODUCTS

In Arkansas, in 1936, mineral products ranked fourth in the value of the four principal commodity groups. The three most valuable minerals produced during that year were petroleum (\$8,160,000), coal (\$5,064,000) and bauxite (\$2,089,000). The value of all other mineral products was \$6,203,698. In 1936 Arkansas was second among the eleven southern states in the value of petroleum, fifth in the value of coal, first in the value of bauxite and ninth in the aggregate value of all other mineral products.

## PETROLEUM

LA.   
 ARK.   
 KY.   
 TENN.  EACH SYMBOL IS  
 EQUIVALENT TO \$5,000,000

ALA, FLA, GA, MISS, N.C, S.C. & VA. do not  
 produce petroleum.







## BAUXITE

ARK.   
 ALA & GA. 

EACH SYMBOL IS  
 EQUIVALENT TO \$200,000






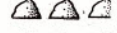





FLA, KY, LA, MISS, N.C, S.C, TENN, & VA. do not  
 produce bauxite.

## COAL

KY.   
 ALA.   
 VA.   
 TENN.   
 ARK.   
 GA.  EACH SYMBOL IS  
 EQUIVALENT TO \$5,000,000

FLA, LA, MISS, N.C, & S.C. do not  
 produce coal.

## ALL OTHERS

LA.   
 KY.   
 TENN.  EACH SYMBOL IS  
 ALA.  EQUIVALENT TO \$5000,000  
 VA.   
 FLA.   
 GA.   
 N.C.   
 ARK.   
 MISS.   
 S.C. 

**MINERAL PRODUCTS** 1936  
 THE ELEVEN SOUTHERN STATES

## MINOR PRODUCTS

Raw materials of minor importance produced in Arkansas in 1936 included fish and game, surface and ground water which was stored and treated for sale, and generated electricity. Figures showing the value of these products for the eleven southern states are not available, but for Arkansas, in the 1936, their values were as follows:

Fish and game products.....	\$6,250,000.00
Water sales .....	5,425,679.00
Electricity generated .....	4,024,176.95

MILLIONS OF DOLLARS

# WILD LIFE PRODUCTS



FURS

FISH

SHELLS  
PEARLS

# WATER SALES



GROUND WATER

SURFACE WATER

# ELECTRICITY GENERATED



STEAM

HYDROELECTRIC  
COMBUSTION ENGINE

ARKANSAS  
PRODUCTS  
1936

## ALL PRODUCTS

Following is a table showing the products of Arkansas in 1936, together with their total value:

	Value	Per cent
Agricultural products (includes the value of 64 field, truck and orchard crops, the value of the production of meat animals, the value of animal products sold and consumed on the farm and government payments to farmers).....	\$215,934,000	54.5
Manufactured products (estimated) .....	111,862,940	28.2
Lumber and timber products (estimated) .....	31,497,050	7.9
Mineral products .....	21,516,894	5.4
Wild life products .....	6,250,000	1.6
Water sales .....	5,425,679	1.4
Electricity generated .....	4,024,177	1.0
Total.....	\$396,510,740	100.0

ELECTRICITY 1.0%

WATER 1.4%

WILD LIFE 1.6%

MINERALS 5.4%

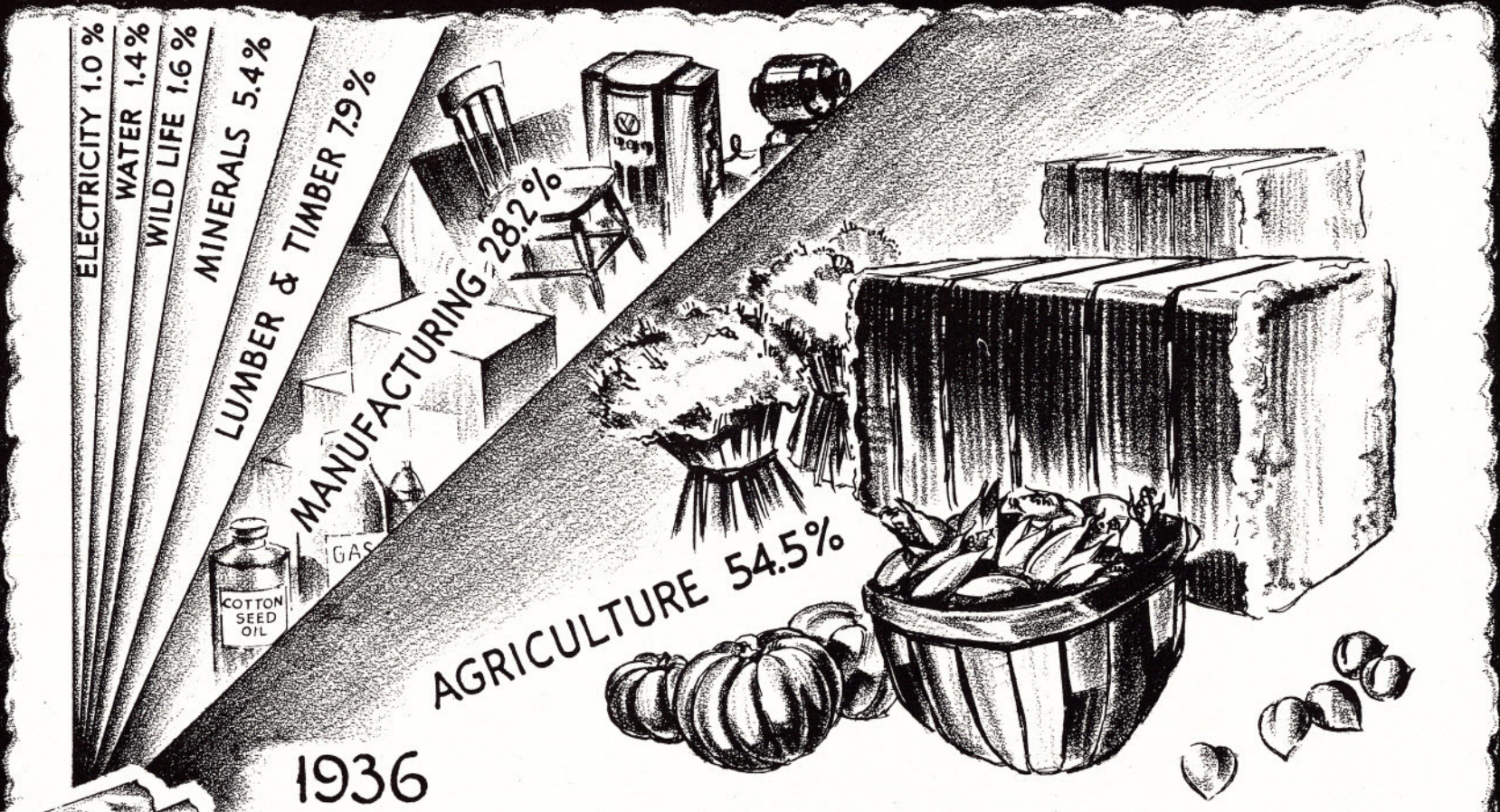
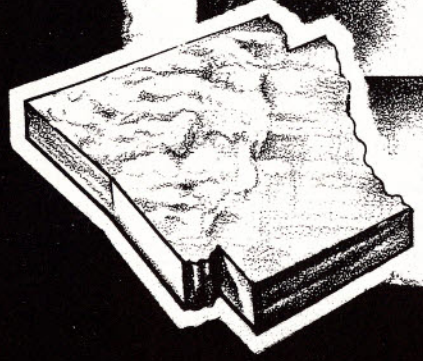
LUMBER & TIMBER 7.9%

MANUFACTURING 28.2%

AGRICULTURE 54.5%

1936

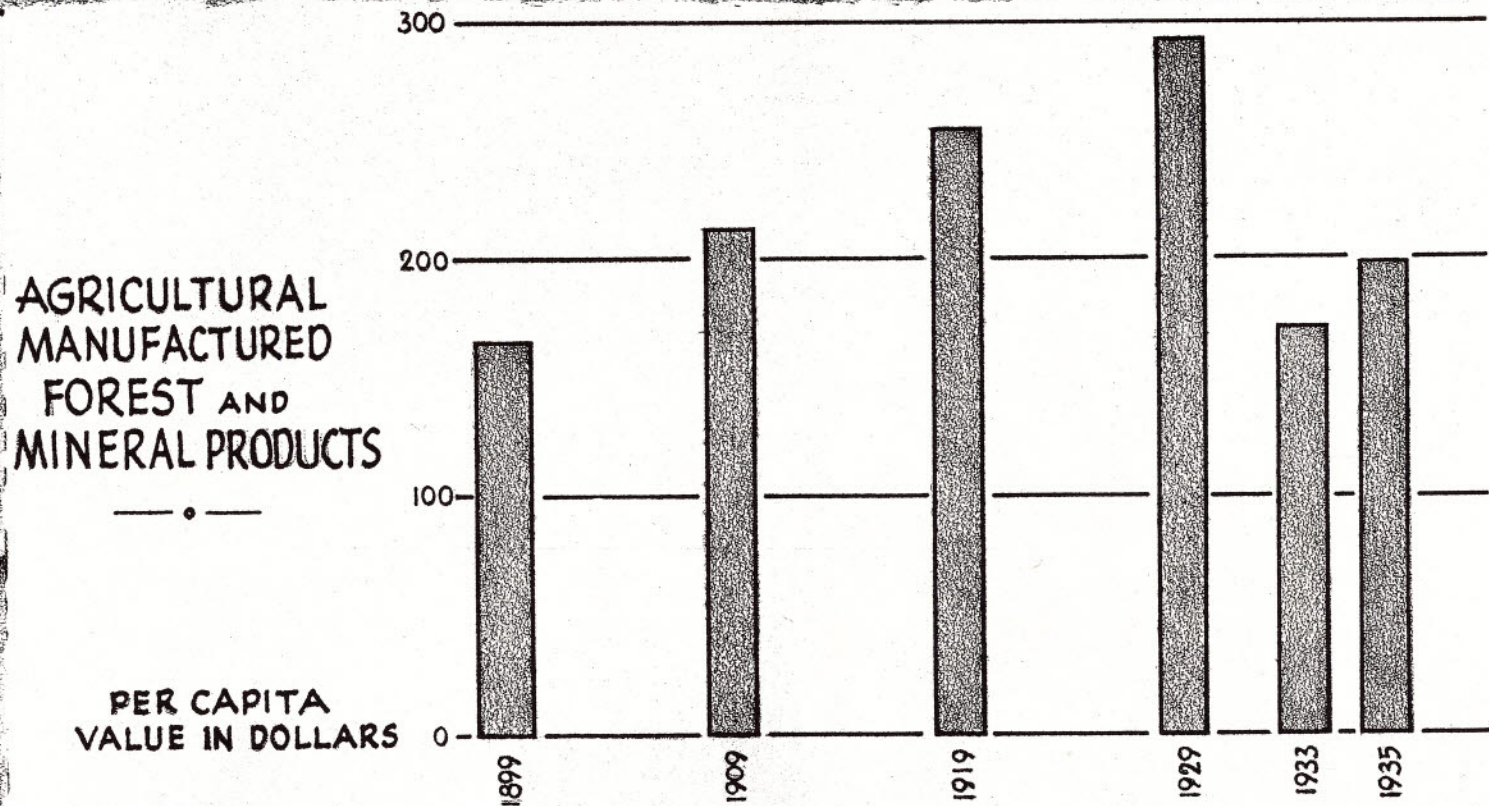
# ARKANSAS PRODUCTS



## PER CAPITA VALUE OF PRODUCTS

The per capita value in Arkansas of the aggregate of the agricultural, manufactured, forest and mineral products increased from \$164.14 in 1899 to \$291.53 in 1929. The economic depression of 1929 caused a marked decrease to \$168.94 in 1933. By 1935 the value had recovered to \$197.29.





**PER CAPITA VALUE  
of ARKANSAS PRODUCTS**

**1899-1935**

## INCOME TO SPEND

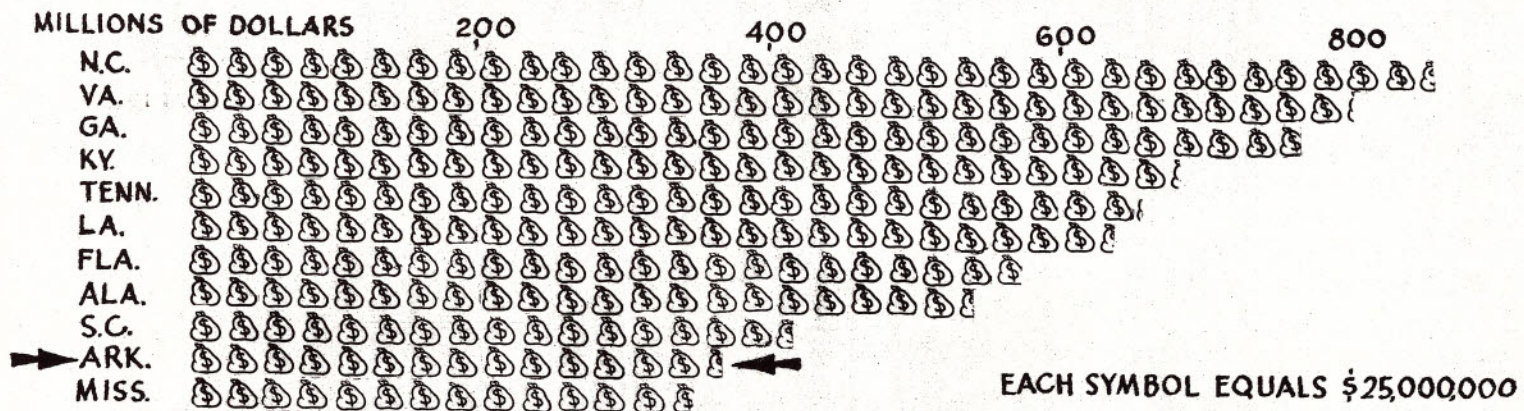
The total income of any group determines its power to purchase goods, and is, therefore, an important index to its welfare. The total accountable and per capita income of those who live in the several eleven southern states for 1935 is shown in the graph opposite. It is to be noted that Arkansas ranks 10th in the total accountable income received and 10th in the per capita income.

The following tables give the figures for the total and per capita income for the southern states:

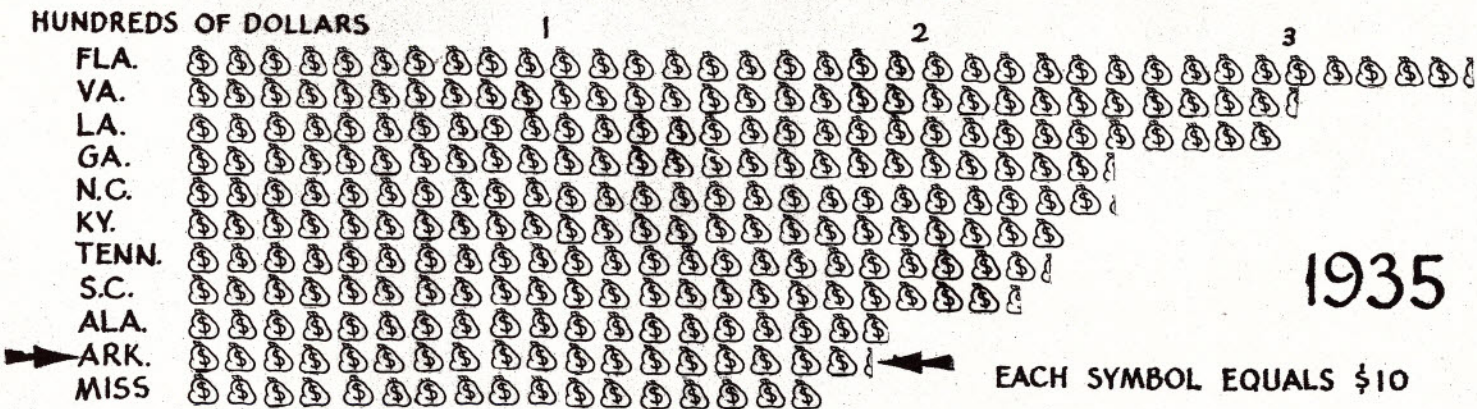
Total Accountable <sup>1</sup> Income Received		Per Capita Accountable Income	
North Carolina	\$863,000,000	Florida	\$352.00
Virginia	804,000,000	Virginia	305.00
Georgia	768,000,000	Louisiana	300.00
Kentucky	682,000,000	Georgia	253.00
Tennessee	654,000,000	North Carolina	252.00
Louisiana	636,000,000	Kentucky	240.00
Florida	569,000,000	Tennessee	232.00
Alabama	536,000,000	South Carolina	224.00
South Carolina	413,000,000	Alabama	189.00
ARKANSAS	363,000,000	ARKANSAS	182.00
Mississippi	342,000,000	Mississippi	170.00

<sup>1</sup>Includes salaries and wages, entrepreneurial income, dividends, interest, net rents and royalties and other accountable income (such as pensions paid by the government, relief payments, government private work and direct, etc.).

# TOTAL ACCOUNTABLE INCOME RECEIVED



# PER CAPITA TOTAL ACCOUNTABLE INCOME



## TOURISTS AND OTHER TRAVELERS

Travelers and those in search of recreation bring a great deal of money into every state and the importance of their trade in the eleven southern states is shown in the graph on the opposite page. This trade, however, cannot be classed as a primary productive activity but is dependent on or supplemental to the primary activities. It is, therefore, being considered separately. In 1937 Arkansas was second among the eleven southern states in the number of tourists, and seventh in the amount of money expended by visitors. The estimated number of visitors and the amount expended by them in the southern states during that year was as follows:

	Number of Visitors		Expenditures
Virginia .....	14,410,992	Florida .....	\$235,000,000
ARKANSAS .....	5,952,000	Virginia .....	140,407,173
Mississippi .....	2,948,000	Georgia .....	100,000,000
Georgia .....	2,500,000	Alabama .....	100,000,000
Tennessee .....	2,500,000	Tennessee .....	75,000,000
Louisiana .....	2,500,000	Kentucky .....	66,759,092
Florida .....	2,100,000	ARKANSAS .....	50,000,000
Kentucky .....	1,714,335	Louisiana .....	50,000,000
Alabama .....	1,500,000	South Carolina .....	50,000,000
North Carolina .....	1,250,000	North Carolina .....	40,000,000
South Carolina .....	1,250,000	Mississippi .....	14,371,500

FLORIDA



VIRGINIA



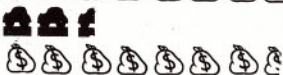
GEORGIA



ALABAMA



TENNESSEE



KENTUCKY



→ ARKANSAS



LOUISIANA



S. CAROLINA



N. CAROLINA



MISSISSIPPI



ESTIMATED ANNUAL

EACH CAR EQUALS 1,000,000 TOURISTS  
EACH MONEY BAG EQUALS \$ 10,000,000.

# TOURIST TRADE

1937

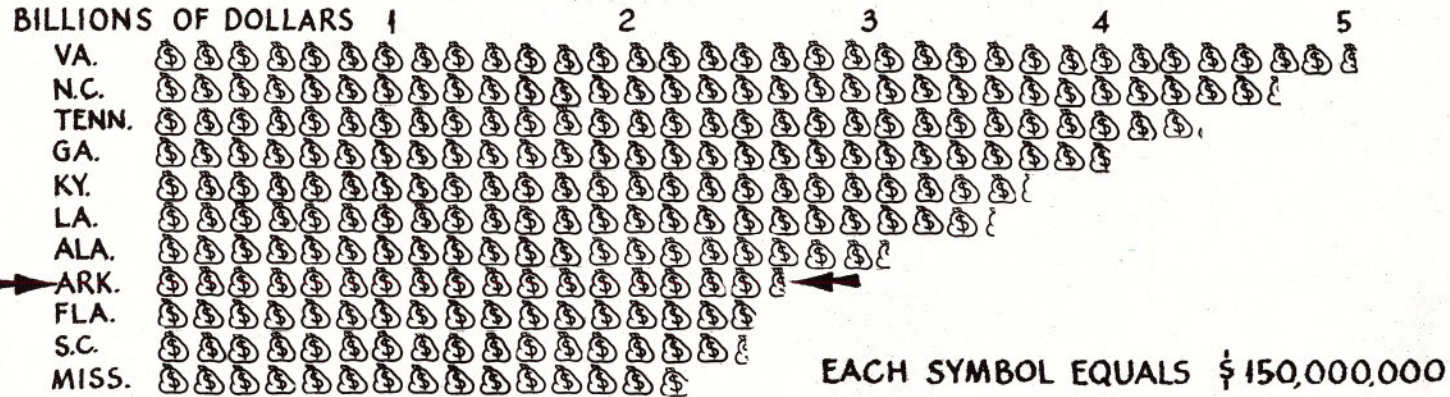
## LAND AND PROPERTY

The estimated wealth of the several eleven southern states, in 1930, based on the value of all the physical property, public and private, is shown in the graph opposite. It is to be noted that Arkansas is eighth among the eleven southern states.

The values for each of the eleven southern states are as follows:

	Estimated Total Wealth		Wealth Per Capita
Virginia .....	\$5,046,000,000	Virginia .....	\$2,081
North Carolina .....	4,719,000,000	Florida .....	1,710
Tennessee .....	4,373,000,000	Tennessee .....	1,667
Georgia .....	4,005,000,000	Louisiana .....	1,662
Kentucky .....	3,664,000,000	North Carolina .....	1,482
Louisiana .....	3,506,000,000	ARKANSAS .....	1,430
Alabama .....	3,065,000,000	South Carolina .....	1,423
ARKANSAS .....	2,655,000,000	Kentucky .....	1,399
Florida .....	2,532,000,000	Georgia .....	1,377
South Carolina .....	2,476,000,000	Alabama .....	1,155
Mississippi .....	2,237,000,000	Mississippi .....	1,110

# ESTIMATED WEALTH, PUBLIC & PRIVATE · 1930



# PER CAPITA ESTIMATED WEALTH · · · · 1930



## SUMMARY

### PART IV

### WEALTH

In 1935 the aggregate value of the four major groups of Arkansas products, which, in the order of their value, include (1) agricultural, (2) mineral, (3) lumber and timber, and (4) manufactured products, was \$313,934,050. Arkansas was tenth, during that year, in the eleven southern states in the aggregate value of these four groups of products. The average aggregate value of these four groups in 1935 in the eleven southern states was \$671,525,050. The Arkansas value was 46.7 per cent of this figure. This situation is largely due to the comparatively low value of Arkansas's manufactured products.

In 1935, Arkansas stood tenth in the value of manufactured products in the eleven southern states, eighth in the value of agricultural products, third in the value of timber and lumber, and sixth in the value of mineral products.

In the order of their descending value, the three principal agricultural products of Arkansas in 1937 were (1) cotton and cotton seed, (2) animals and animal products, and (3) corn. In that year Arkansas ranked second in the eleven southern



states in the value of cotton and cotton seed produced, seventh in the value of animals and animal products, eighth in the value of corn and tenth in the value of all other agricultural products.

The manufactured products having the greatest value in Arkansas in 1935 were cottonseed products, petroleum products, and furniture. In that year, Arkansas ranked fourth in the eleven southern states in the value of cottonseed products, third in the value of petroleum products, fifth in the value of furniture and eleventh in the value of all other manufactured products.

The three most valuable mineral products in Arkansas in 1936 were petroleum, coal and bauxite. During that year, Arkansas ranked second in the eleven southern states in the value of petroleum, fifth in the value of coal, first in the value of bauxite, and ninth in the value of all other mineral products.

In 1936 the value of the fish and game products of Arkansas was \$6,250,000; the amount of water sales, \$5,425,679 and the value of the electricity generated, \$4,024,177.

The value of all of the basic products of Arkansas in 1936 is estimated at \$396,510,074. Agricultural products accounted for 54.5 per cent of this sum; manu-

factured products, 28.2 per cent; lumber and timber, 7.9 per cent; mineral products, 5.4 per cent; and all other products, 4.0 per cent.

The per capita value of the aggregate of the four major groups of Arkansas's products increased from \$164.14 in 1899 to \$291.53 in 1929. The economic depression, beginning in 1929, caused a decrease to \$168.94 in 1933, but in 1935 the value had increased to \$197.29.

Arkansas ranked tenth among the eleven southern states in 1935 in the total accountable income received by the people of the state from all sources and tenth in the per capita income.

Tourist and travel trade has become an important source of revenue to every state. Arkansas ranked seventh in the eleven southern states in the amount of money expended by tourists and travelers (\$50,000,000) in 1937, and second in the number of visitors (5,952,000).

In the total value of all physical property, public and private, Arkansas ranked eighth among the eleven southern states in 1930 with a value of \$2,655,000,000. The per capita wealth was \$1,430 which was sixth among the eleven southern states.

## LOOKING BACKWARD AND LOOKING FORWARD

### LOOKING BACKWARD

Arkansas is particularly favored among the southern states with the climate, water and soils necessary for the production of agricultural and forest wealth. The reserves of minerals, particularly the fuels and non-metals, are large. The population of Arkansas, which is almost entirely native to the United States, has a rather even distribution over the state and has a slightly lower average density than the average of the South. About 57 per cent of those gainfully employed are engaged in agriculture. About 12 per cent are engaged in manufacturing and mechanical industries. Transportation facilities are about the average of the South; marketing facilities are near the average and financial facilities below. Professional services available and school attendance are slightly below the average and recreational facilities are much above.

Agricultural products now make up over half of the value of the four basic products and have a slightly higher per capita value than in 1899. Manufactured products make up about one-fourth of the value of the basic products and have increased in per capita value more than three-fold since 1899. Forest products make up about eight per cent of the value of the basic products and their per capita value is somewhat lower than it was in 1899. Mineral products make up about five per cent of the value of the basic products and have increased in per capita value nearly five-fold since 1899.

## LOOKING FORWARD

As an integral part of the South, the future development of the resources of Arkansas is largely dependent upon the economic elements which determine the extent to which goods may be profitably produced in the South, such as demand, supply, price, cost of transportation, competition, credit, insurance rates, taxes, and restrictive laws. Improvement of the economic situation in Arkansas is therefore closely related to the improvement of these conditions in the southern states.

Due in part to the efforts of state, federal and other agencies which have undertaken to improve the agricultural situation in the state during the last ten years, agriculture seems to be on a sounder foundation at present than it has been for some time past. The problems of agriculture are better understood today and farms are, generally speaking, in better condition than they have been for many years.

Due to the progressive application of conservation measures to the growth of timber, timber growing is approaching a condition of perpetual yield and, for this reason, timber-using industries of the state are today on a sounder foundation than they have ever been.

Conservation measures, which have been applied to oil production, the major mineral industry of the state, have resulted in minimizing waste and placing the oil and gas fields on a long life production basis.

Although the per capita value of the manufactured products of Arkansas has increased over three-fold since 1899 the most readily apparent deficiency in the economic life of the state is the relatively undeveloped condition of its industry. This is

indicated by the fact that the state stood tenth in the value of her manufactured products among the eleven southern states in 1935.

Before the investment of capital necessary to any major industrial development can be justified, it is necessary that an economic and social background equitable to industry be fairly well built up. This requires, particularly, adjustment of inequitable restrictive legislation and taxation, both federal and state, and the existence of an attitude toward industry which will make the capital invested in it reasonably secure. The application of discriminatory freight rates and the existence of unproductive absentee ownership or control of basic resources are examples of well-known situations for which corrective measures have long been under consideration. To the end of contributing toward the improvement of the industrial background of the state, the program, now being followed, of encouraging the establishment of small industrial units, backed by Arkansas capital for the processing or fabricating of Arkansas's resources, seems wise. The continuation of the present program of long term planning, legislative action, and support of public agencies now engaged in investigating, inventorying, and conserving basic resources, all directed to economic ends, seems vital.

With her resources, people, tools and established productive capacity, the place of Arkansas within the business structure of the South is important, and the future of the state's economic life under progressive and informed leadership is definitely encouraging.

## SOURCES OF INFORMATION

### PART I

Rainfall, Temperature, Humidity and Growing Seasons: U. S. Weather Bureau.

Soils: Soil Productivity Map, University of Arkansas, Agricultural Experiment Station.

Minerals: U. S. Bureau of Mines.

Forests: Arkansas Forestry Commission.

Recreational Areas: Lakes, Arkansas Geological Survey; National Forests, U. S. Forestry Service.

### PART II

Population, Movement, Races, Distribution, Density, Urban and Rural Population, Birth and Death Rates and Occupations: U. S. Bureau of the Census.

Eleven Southern States: "Southern Regions of the United States," by Howard W. Odum.

Education: Office of Education.

Average Daily Wage: "Monthly Labor Review," U. S. Department of Labor.

### PART III

Land Ownership: U. S. Bureau of the Census, Arkansas Forestry Commission, U. S. Forestry Service, State Planning Board, State Highway Department, Farm Security Administration, State Park Commission, Arkansas Gazette, U. S. Department of the Interior, National Park Service, Rock Island Railroad, Missouri Pacific Railroad and estimates.

Land Use: Arkansas Forestry Commission, U. S. Bureau of the Census and estimates.

Transportation: Highways, Bureau of Public Roads, Department of Agriculture; Railways, Interstate Commerce Commission; Navigable Streams, Office of Chief of Engineers, U. S. Army; Airways, Bureau of Airways Map.

Communication: Telephones, Bureau of the Census; Telegraph, Postal Telegraph-Cable Co. and Western Union Telegraph Co.; Radio Stations, U. S. Department of Commerce.

Fuels: U. S. Bureau of Mines.

Electric Power: Federal Power Commission.

Municipal Water Systems: State Health Departments of Ala., Ark., Fla., Ga., Ky., La., Miss., N. C., S. C., Tenn., and Va.

Banking: Comptroller of Currency, U. S. Treasury Department.

Wholesale and Retail Establishments: U. S. Bureau of the Census.

Professional, Domestic and Personal Service: U. S. Bureau of the Census.

Service Institutions: Schools, Office of Education: Libraries, American Library Association and the Office of Education; Churches, U. S. Bureau of the Census; Hospitals, "Journal of American Medical Association."

Recreational Areas: National Park Service, Recreational Survey sponsored by the State Planning Board, and the U. S. Forestry Service.

#### PART IV

Agricultural Products: U. S. Dept. of Agriculture.

Manufactured Products: U. S. Bureau of the Census.

Lumber and Timber Products: U. S. Bureau of the Census.

Mineral Products: U. S. Bureau of Mines.

All Products Arkansas; 1935: Agricultural Products, Agricultural Extension Service; Minerals, U. S. Bureau of Mines; Electricity Generated, State Dept. of Public Utilities; Water Sales, Arkansas Geological Survey; Wild Life Products, Arkansas Game and Fish Commission.

Per Capita Value of Arkansas Products: U. S. Bureau of the Census, U. S. Department of Agriculture, U. S. Geological Survey, U. S. Bureau of Mines, Arkansas Bureau of Mines, Mfr. and Agri., U. S. Bureau of Labor, Arkansas Cotton Trade Association.

Income: National Industrial Conference Board.

Tourist Trade: U. S. Travel Bureau.

Estimated Wealth: National Industrial Conference Board.

