

*Characteristics of  
Private Nonindustrial  
Forest Landowners  
in Alabama*

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# *Characteristics of Private Nonindustrial Forest Landowners in Alabama*

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THE STATE OF ALABAMA is well endowed with timber. It has been estimated by the Southern Forest Experiment Station of the USDA Forest Service that there are 21,742,000 acres of forest land in the State. Of this amount, 16,667,100 acres are owned by private nonindustrial owners. This group, the subject of this study, owns 76.7 per cent of Alabama's total forest land and 66.5 per cent of its total land area.

Forest-based industries make up one of the most important sectors of the economy of the State of Alabama. The Southern Forest Institute reported in 1968 that Alabama was second only to Georgia in the production of pulpwood (round wood and chips). During the same year the Alabama Forestry Commission reported that the sawmills in the State produced 867.9 million board feet of pine and 305.5 million board feet of hardwood lumber. In addition 44.3 million board feet of pine logs and 24.4 million board feet of hardwood logs were shipped out of the State, and 525.3 thousand crossties, 122.2 tons of stumpwood, and 375.1 thousand poles and pilings were produced.

Much has been said and written about the future demand for wood and what must be done to satisfy this demand. Many who are familiar with this problem have concluded that the supply will have to come from private nonindustrial forest land holdings. To make rational plans concerning this supply of wood it is necessary to know something about the people who possess it.

## **STUDY METHODS**

For the purpose of this study, the private nonindustrial forest landowner was defined as a landowner who had at least 20 acres of forest land regardless of how much nonforested land he may

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have owned. All industrial, State, Federal, and municipal ownerships were excluded.

All 67 counties in the State were sampled by a multistage sampling design in which the counties were the primary sampling units. Three townships were randomly selected in each county. Within these townships two sections were then randomly selected and two persons (owning 20 acres or more of forest land) were randomly selected from each section. Townships without at least two sections containing two forest landowners other than wood-based industries were discarded and new townships drawn. In this way variance among townships and within townships as well as among sections could be determined. Data were obtained through personal interviews with landowners.

The survey produced two different types of answers. The first type was quantitative, such as total number of acres owned, total number of forest land acres owned, and length of tenure. The second type of answer produced a discrete variable such as "yes" or "no." (See Appendix for questionnaire.)

The totals, means, and standard error of the means were calculated for the total sample. These represented the total population. The same was done for each of the 67 counties. A two-tailed "t" test was performed for each characteristic to determine whether the means of the individual counties differed significantly from statewide means. For those characteristics whose statistics could not be analyzed in the above manner because they were binomial in nature (yes or no) a test of proportionality was used. This also was a two-tailed test. Each county proportion was compared with the State proportion to determine if there was a significant difference.

All testing for significance was at the 0.05 level of probability. Differences reported were significant at this level.

## **OWNERS AND LAND AREA**

The results of this study indicate that, on the average, the private nonindustrial landowner, with 20 or more acres of forest land, had 62.6 per cent of his holdings in forest land.

The respondents to the questionnaire used in this study possessed 2.0 per cent of the total land area in the State and 2.0 per cent of the State's forest land.

## **ACREAGE OWNED, ALL CLASSES OF LAND**

The total acreage owned by respondents was slightly in excess of 660,000 acres. The average number of acres owned was 717.0,

with a range of 20 to 80,070 acres. The median was 157 acres, and the mode was 80 acres.

In 11 of the counties average acreage owned did not differ from the State average, Figure 1. However, 45 of the counties had lower averages and 11 of the counties had higher averages than that for the entire State.

### FOREST LAND ACRES OWNED

The respondents to this survey owned slightly more than 402,000 acres of forest land. The average forest land holding across the State was 436.9 acres while the range was from 20 to 66,400 acres and the median was 80 acres.

Eleven of the county averages did not differ from the State average of 436.9 acres, but 41 counties had lower and 15 had higher averages than the State, Figure 2.

Forest land holdings were arbitrarily divided into six ownership area classes.

Slightly more than one-third of the respondents owned less than 60 acres of timberland and slightly more than three-fourths of them owned less than 250 acres, Table 1. The small woodland owner has been defined by the USDA Forest Service as being an owner having less than 5,000 acres of forest land. Only nine respondents, approximately 1 per cent of those sampled, would not fit this definition of a small forest landowner.

TABLE 1. DISTRIBUTION OF OWNERS, BY FOREST LAND AREA OWNED

Ownership area <i>Acres</i>	Respondents		Accumulated respondents
	<i>No.</i>	<i>Pct.</i>	<i>Pct.</i>
20-59 .....	348	37.7	37.7
60-249 .....	375	40.6	78.6
250-499 .....	89	9.6	87.9
500-749 .....	35	3.8	91.7
759-999 .....	10	1.1	92.8
1,000 + .....	67	7.2	100.0
Totals .....	924	100.0	-----

### FOREST LAND AS A PER CENT OF TOTAL AREA OWNED

For all respondents the forest land averaged 62.6 per cent of the total land owned, while the range was from 4.0 to 100.0 per cent, the median was 62.5 per cent, and the mode was 100.0 per cent. The percentage of forest land owned by the respondents of this study is consistent with the percentage of forest land in

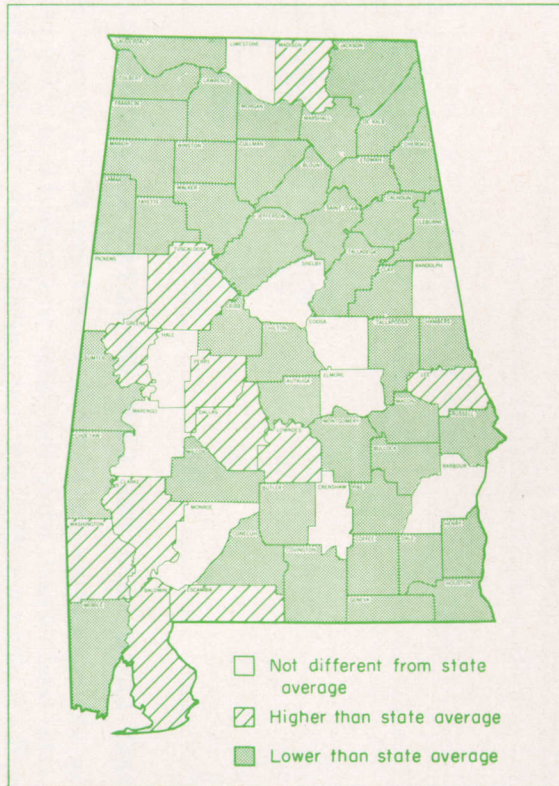


FIG. 1. Acreage owned, all classes of land.

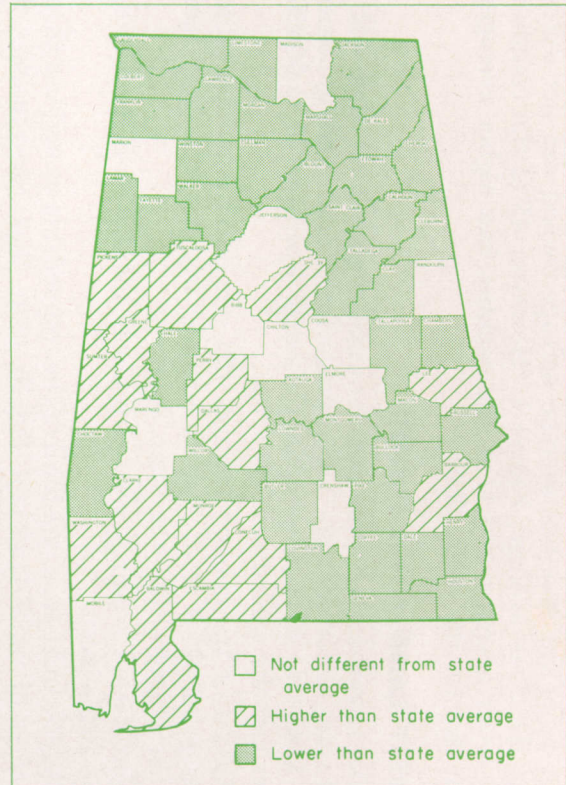


FIG. 2. Forest land acres owned.

the State, estimated at 66.5 per cent including industrial, State, Federal, and municipal ownerships. Thus the proportion of forest land in the sample is representative of the State of Alabama.

Averages of 6 of the counties differed from the State average, Figure 3. The averages in 34 of the counties were lower and in 27 higher than the State average.

Slightly more than 70 per cent of the respondents had at least one-half of their total holdings in forest lands, Table 2. Almost 30 per cent had at least 80 per cent forest land and 13.9 per cent owned forest land only.

TABLE 2. FOREST LAND OWNED AS A PER CENT OF TOTAL ACREAGE OWNED

Class		Respondents		Accumulated respondents
<i>Pct.</i>	<i>No.</i>	<i>Pct.</i>	<i>Pct.</i>	
1-10.....	12	1.3	1.3	
11-19.....	36	3.9	5.2	
20-29.....	60	6.5	11.7	
30-39.....	75	8.1	19.8	
40-49.....	92	10.0	29.8	
50-59.....	148	16.0	45.8	
60-69.....	116	12.6	58.4	
70-79.....	110	11.9	70.3	
80-89.....	81	8.8	79.1	
90-99.....	65	7.0	86.1	
100.....	129	13.9	100.0	

### AGE OF OWNERS

The average age for all respondents was 57.6 years while the range was from 21 to 95 years, the median age was 60 years, and the modal age was 57 years.

In 11 of the counties there was no difference between the county and State means, Figure 4. Twenty-two of the counties had a higher average age and 34 had a lower average age.

TABLE 3. AGE CLASSES OF OWNERS

Age class	Respondents		Accumulated respondents
<i>Years</i>	<i>No.</i>	<i>Pct.</i>	<i>Pct.</i>
Less than 29.....	11	1.2	1.2
30-39.....	80	9.0	10.2
40-49.....	167	18.7	28.9
50-59.....	228	25.5	54.4
60-69.....	217	24.3	78.7
70 and older.....	190	21.3	100.0
Total.....	893	100.0	-----

More than 71.1 per cent of the respondents were at least 50 years old and 45.6 per cent or almost one-half were 60 years old or older.

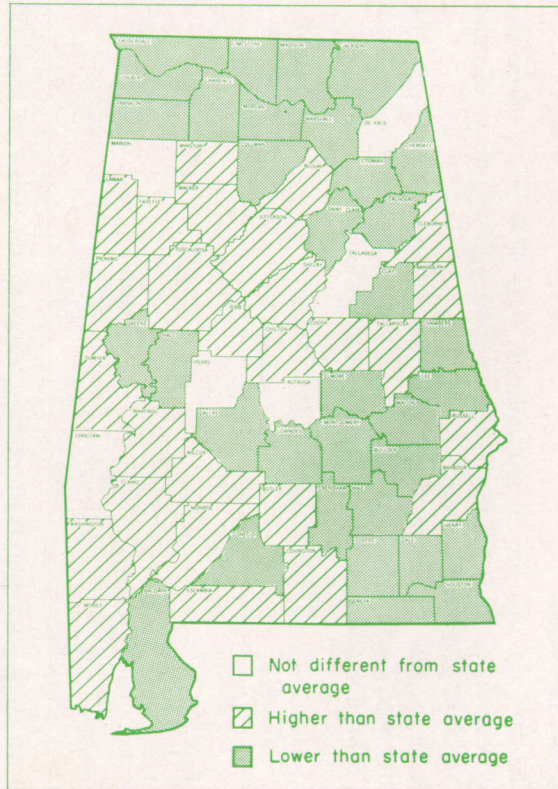


FIG. 3. Proportion of forest land in sample ownership.

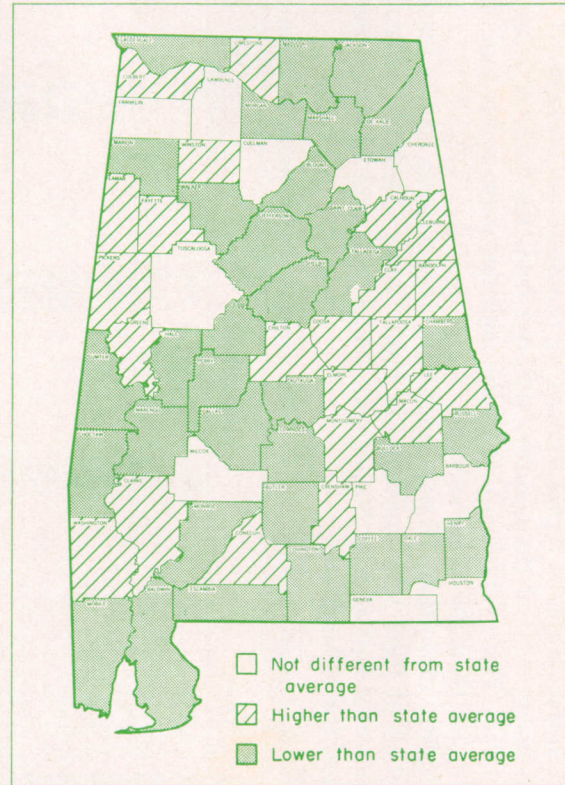


FIG. 4. Average age of owners.



## SEX OF OWNERS

For the State 79.7 per cent of the respondents were males. In 56 of the counties the percentage did not differ from the State mean, Figure 5. In 3 of the counties there was a smaller proportion and in 8 of the counties a higher proportion of male landowners than the average for the State.

## OCCUPATION OF OWNERS

The occupation represented most frequently was that of "farmer." Included in this category were those respondents who indicated that they were farmers but were supplementing their income by running stores or working at some other occupation on a part-time basis. A portion of the respondents classified as "retired" were at one time or another "farmers." In the "all others" classification there were more "homemakers" than any other occupation. "Farmer" was the most frequently represented occupation in 26 counties, "retired" in 12 counties, and "employee" (those working for wages) in 12 counties. In the remaining 17 counties no one occupation predominated since two or more occupations were represented with equal frequency.

TABLE 4. OCCUPATION OF RESPONDENTS

Occupation	Respondents	
	No.	Pct.
Farmer.....	278	30.1
Retired.....	209	22.5
Employee.....	197	21.3
Businessman.....	102	11.1
Professional.....	47	5.1
All others.....	91	9.9
Totals.....	924	100.0

## DOMICILE OF OWNERS

Statewide, 78.4 per cent of the forest landowners responding to this study lived on their property. The remaining 24.6 per cent were considered absentee landowners. In 48 counties, the county proportion did not differ from that of the State, Figure 6. There were 8 of the counties that had more absentee landowners and 11 counties had a higher proportion of the landowners living on their property than was the case for the State.

## HOW OWNER'S PROPERTY WAS ACQUIRED

In reply to this question 68.4 per cent of the respondents stated that they purchased their property, 21.7 per cent had inherited the property they now controlled, and 9.9 per cent had purchased

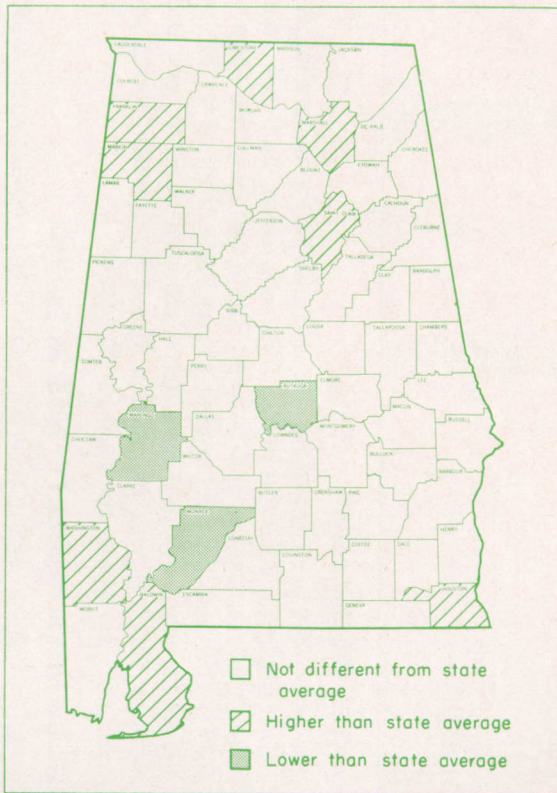


FIG. 5. Sex of owner.

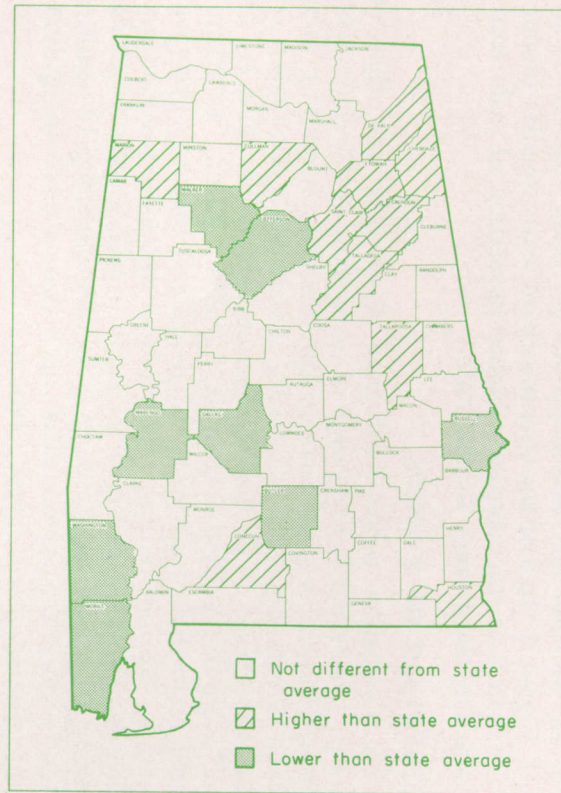


FIG. 6. Domicile of owners.

some of their land and inherited a portion of their land. The proportion of ownerships acquired by purchase did not differ from the State mean in approximately 70 per cent of the counties, Figure 7.

### OWNER'S EDUCATION

For the purpose of this study, grade school was defined as 1 through 8 years; high school, 9 through 12 years; college, 13 through 16 years; and post graduate, anything beyond 16 years of formal education.

Slightly less than one-half of all respondents attended high school, Table 5. All did not graduate. In 39 of the counties the most frequently given answer was "high school," and "grade school" was most frequently given in 20 of the counties.

TABLE 5. EDUCATION OF OWNERS

Education level	Respondents	
	<i>No.</i>	<i>Pct.</i>
None.....	30	3.3
Grade school.....	321	35.0
High school.....	416	45.0
College.....	121	13.2
Post graduate.....	28	3.1
Totals.....	916	100.0

### WHERE THE LANDOWNER WAS RAISED

In response to the question — where were you raised — on a farm or in the city? — 90.1 per cent stated that they were raised on a farm. In 63 of the counties the respondents raised on the farm did not differ from the proportion for the entire State, Figure 8. The remaining 4 counties had lower proportions.

### WHERE THE FATHER OF THE FOREST LANDOWNER WAS RAISED

Proportionally more of the fathers of the respondents were raised on farms than were the respondents themselves. Statewide, 94.8 per cent of the owners' fathers were raised on farms and the remaining 5.2 per cent were raised in the city. In 63 of the counties the proportions did not differ from that of the State, Figure 9. In 4 of the counties the proportion of respondents whose fathers were farm-reared was lower.

### EDUCATION OF FOREST LANDOWNER'S FATHER

In general the father of the forest landowner had less formal education than did the forest landowner himself. The largest

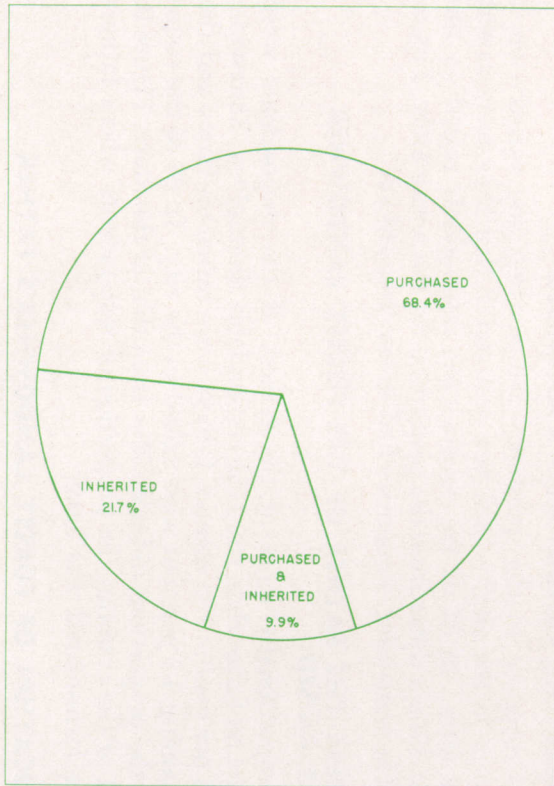


FIG. 7. How land was acquired.

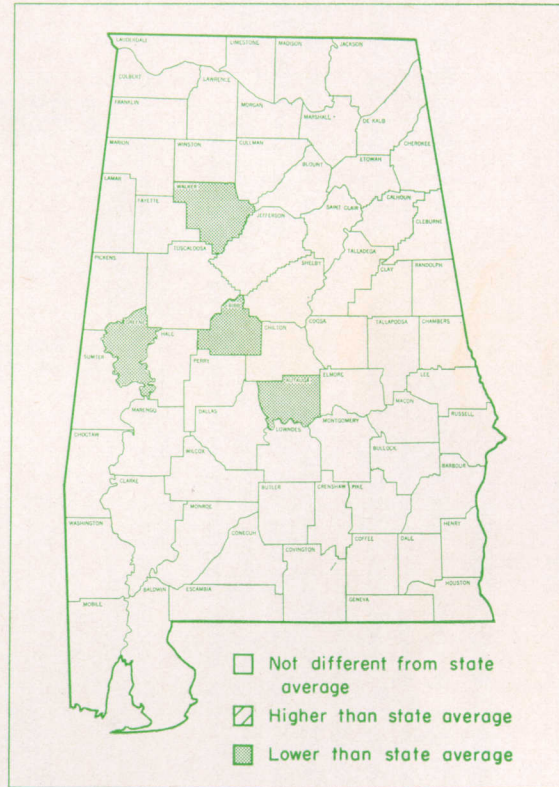


FIG. 8. Where landowner was raised.

class was "grade school" with 55.8 per cent of the total, followed by "high school" with 19.0 per cent, and "no formal education" with 17.6 per cent.

TABLE 6. EDUCATION OF FOREST LANDOWNER'S FATHER

Education level	Respondents	
	No.	Pct.
None.....	144	17.6
Grade school.....	458	55.8
High school.....	156	19.0
College.....	45	5.5
Post graduate.....	17	2.1
Totals.....	820	100.0

The most frequently given answer in 53 of the counties was "grade school."

### TENURE OF FOREST LANDOWNER

The average length of tenure for respondents was 24.2 years. Both the median and mode were 20 years, and the range was from 1 to 70 years. In 5 of the counties average tenure did not differ from the State average, in 26 of the counties average tenure was higher, and in 36 it was lower than the State average, Figure 10.

TABLE 7. LENGTH OF TENURE OF FOREST LANDOWNERS

Tenure class	Respondents		Accumulated
	No.	Pct.	respondents
<i>Years</i>			<i>Pct.</i>
1-9.....	141	17.2	17.2
10-19.....	204	24.8	42.0
20-29.....	238	28.9	70.9
30-39.....	113	13.7	84.6
40 or more.....	127	15.4	100.0
Total.....	823	100.0	-----

Based on the average age of the forest landowner and the average length of tenure, it appears that the average forest landowner still holds lands which he purchased in his early thirties.

### LENGTH OF TIME PROPERTY WAS IN FAMILY

Statewide, the average length of time that the land of the respondents was in the family was 37.5 years. The median was 25 years, the mode was 20 years, and the range was from 1 to 250 years. For 10 of the counties there was no difference between the county and State means, Figure 11. Thirty-three of the counties had lower averages and 24 of the counties had higher averages than the State.

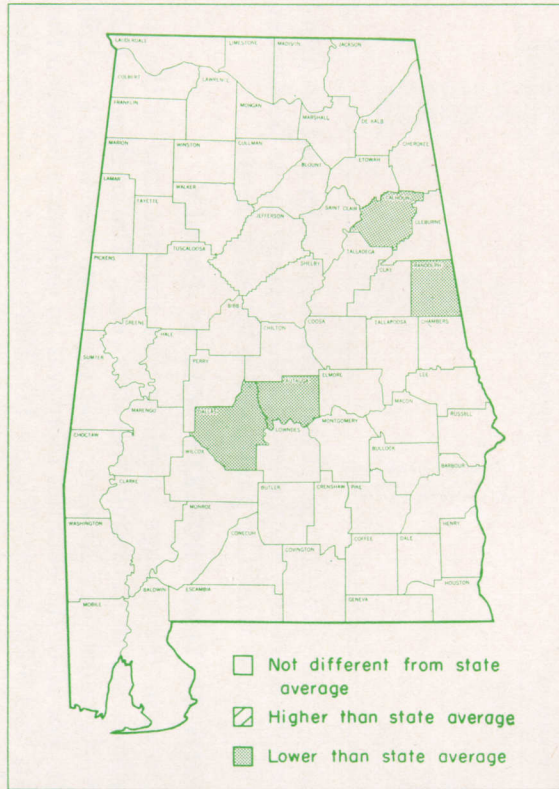


FIG. 9. Where landowner's father was raised.

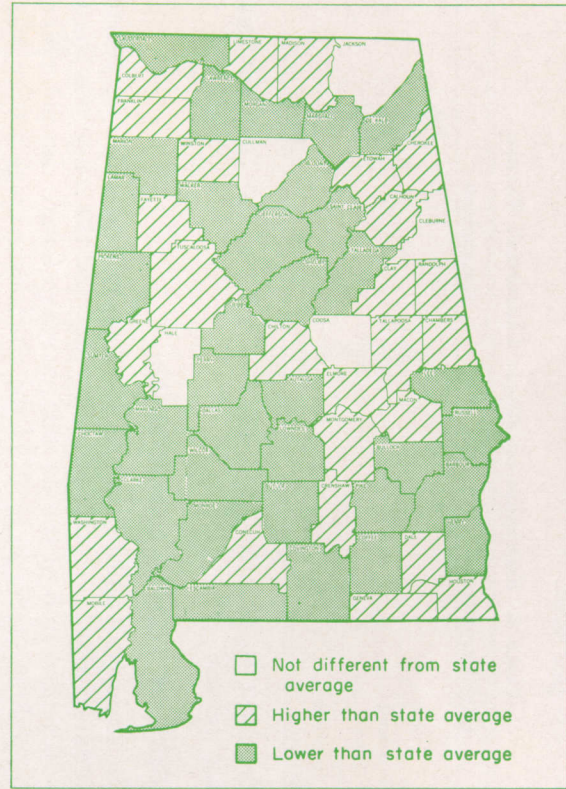


FIG. 10. Tenure of forest landowner.

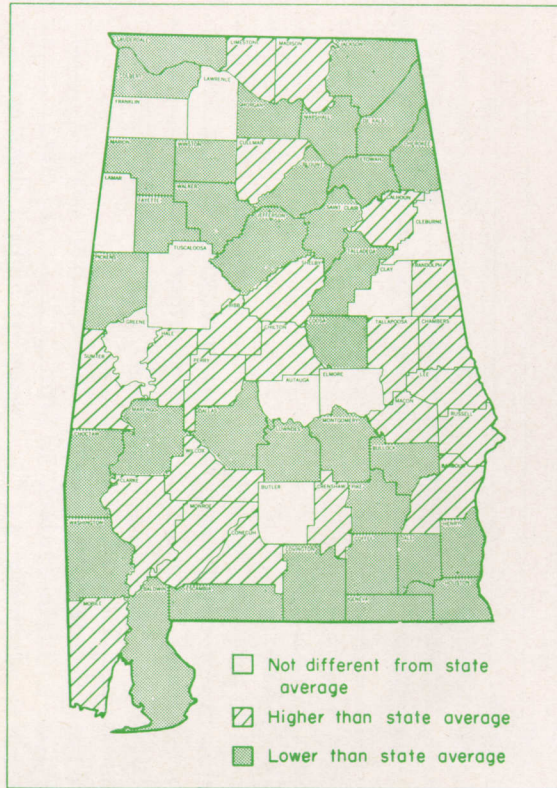


FIG. 11. Length of time property was in family.

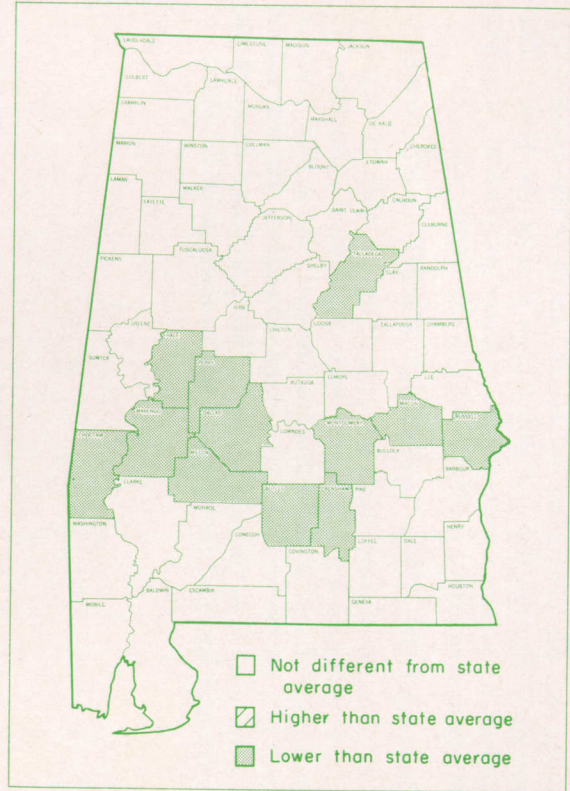


FIG. 12. Forest landowner's race.

## FOREST LANDOWNER'S RACE

For the entire State 91.3 per cent of the forest landowners were white and 8.7 per cent were non-white. In 55 of the counties the proportional division did not differ from that of the State. The remaining 12 of the counties had a lower proportion of white forest landowners than the State in general, Figure 12.

## IN SUMMATION—THE "AVERAGE" FOREST LANDOWNER

The "average" forest landowner in Alabama with 20 acres or more of forest land is a white male who owns, on the average, 717 acres of land of which 437 acres are forested. He is 57.6 years of age and is a farmer with a high school education. He was raised on a farm and lives on his property. He purchased most of his property and has held his property for an average of 24 years.

## APPENDIX

### ALABAMA FOREST LAND OWNERSHIP CHARACTERISTIC STUDY

1. County \_\_\_\_\_
2. Name \_\_\_\_\_
3. Address \_\_\_\_\_
4. Legal description: R \_\_\_\_\_ T \_\_\_\_\_ Sec \_\_\_\_\_
5. Area: a) total in property all sections \_\_\_\_\_ acres;  
b) woodland \_\_\_\_\_ acres; c) per cent in woodland \_\_\_\_\_ %
6. Age: \_\_\_\_\_
7. Sex: \_\_\_\_\_
8. Occupation: \_\_\_\_\_
9. Live on property: a) Yes \_\_\_\_\_ b) No \_\_\_\_\_
10. How was property acquired: a) purchased \_\_\_\_\_  
b) inherited \_\_\_\_\_ c) other \_\_\_\_\_
11. Education: a) \_\_\_\_\_ years; b) highest degree \_\_\_\_\_ major \_\_\_\_\_
12. Were you raised on a) farm \_\_\_\_\_; b) city \_\_\_\_\_
13. Where was father raised: a) farm \_\_\_\_\_; b) city \_\_\_\_\_
14. Fathers education: a) \_\_\_\_\_ years b) highest degree \_\_\_\_\_  
c) major \_\_\_\_\_
15. Length of tenure: a) \_\_\_\_\_ years; b) years in family \_\_\_\_\_.