

CIRCULAR 191  
JUNE 1971

Attitude of Alabama Nonindustrial  
Forest Landowners Toward Leasing  
Their Land to Woodbased Industries



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# Attitude of Alabama Nonindustrial Forest Landowners Toward Leasing Their Land To Woodbased Industries

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## INTRODUCTION

**G**ROWING OF TIMBER and management of forest lands are economic and technical endeavors. The forest landowner is best equipped to make economic decisions about his timber lands. He can decide how these lands fit into his overall activities on both a short- and/or long-run basis. On the other hand, he often lacks the technical knowledge and ability to manage his forest lands so they will make optimum contributions toward his objectives. A possible solution to the landowner's problem is leasing all or a portion of his land to a wood-based industry, which could provide technical management and rental payments in return for the use of the land for tree growing.

## STUDY METHODS

The data upon which this study is based were collected primarily for a research project on the Marketing Practices of Forest Products by Nonindustrial Landowners in Alabama.<sup>2</sup> The sampling design was of the multistage type with the primary sampling unit being the county. From each county three townships were randomly selected. From each township two sections were randomly selected, and from each section two landowners, having

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<sup>2</sup> Supported partially by federal funds, provided under the provisions of the Hatch Act, and partially by State funds made available to the Agricultural Experiment Station, Auburn University, Auburn, Alabama 36830.

20 or more acres of forest land, were randomly selected as respondents to a questionnaire. Each of these 804 persons was personally interviewed by a member of the study team. If it were found that a respondent had not sold any timber from the land in the last 10 years, the interview was terminated and the respondent was replaced. However, the information obtained in the preliminary stages of the interview was not destroyed. Included in this material were the responses to the question; "Would you be interested in a long-term (25 years or more) or in a short-term (less than 25 years) lease?" A total of 912 individual landowners were included in the final sample. Interviewers volunteered no explanation of leasing arrangements and did not discuss possible advantages or disadvantages.

Of the 912 respondents, only 183 individuals (20.1 per cent) indicated that they were interested in long-term leasing and 193 individuals (21.2 per cent) in short-term leasing. Inasmuch as there was no significant difference (at the  $P = 0.05$  level) between the number of respondents interested in long-term and short-term leasing, all references to leasing henceforth will consider the population that was interested in long-term leasing.

## **RESULTS**

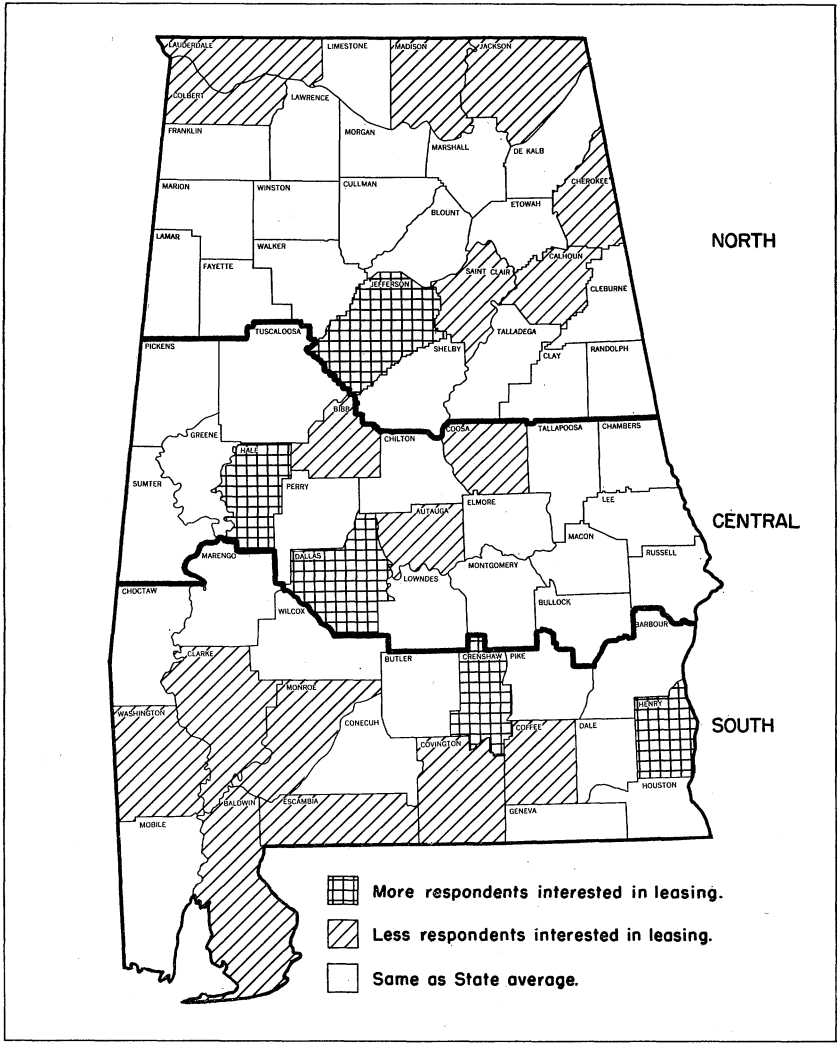
### **Major Forest Types of Alabama**

Statewide, 8 out of every 10 persons interviewed were not interested in leasing. The proportion in each county was tested against the State average. In 45 counties (67.1 per cent of the total) replies did not differ from the State proportion, Figure 1. In 17 counties (24.5 per cent) a larger proportion of respondents was interested in leasing; in 5 counties (8.4 per cent) a larger proportion was not interested.

The four major forest types in Alabama are mapped in Figure 2. When Figures 1 and 2 are compared, it is obvious that there is no definite relationship between the type of timber and the desire to lease.

### **Total Area**

The total land area owned by respondents in this survey was slightly less than 656,000 acres, or 1.7 per cent of the total land area of Alabama. Of these 656,000 acres, 83.7 per cent was controlled by respondents not interested in leasing and 16.3 per cent by those interested in leasing.



**FIG. 1. Respondents interested in leasing by county proportions.**

The mean total acreage for those interested in leasing was 585.3. The range was from 20 to 10,080 acres with a median of 160 acres and a mode of 80 acres. On the other hand, those not interested in leasing had an average holding of 750.9 acres. The range was from 20 to 80,700 acres. The median was 160 acres and the mode was 80 acres. The effect on the mean of the extreme value at the

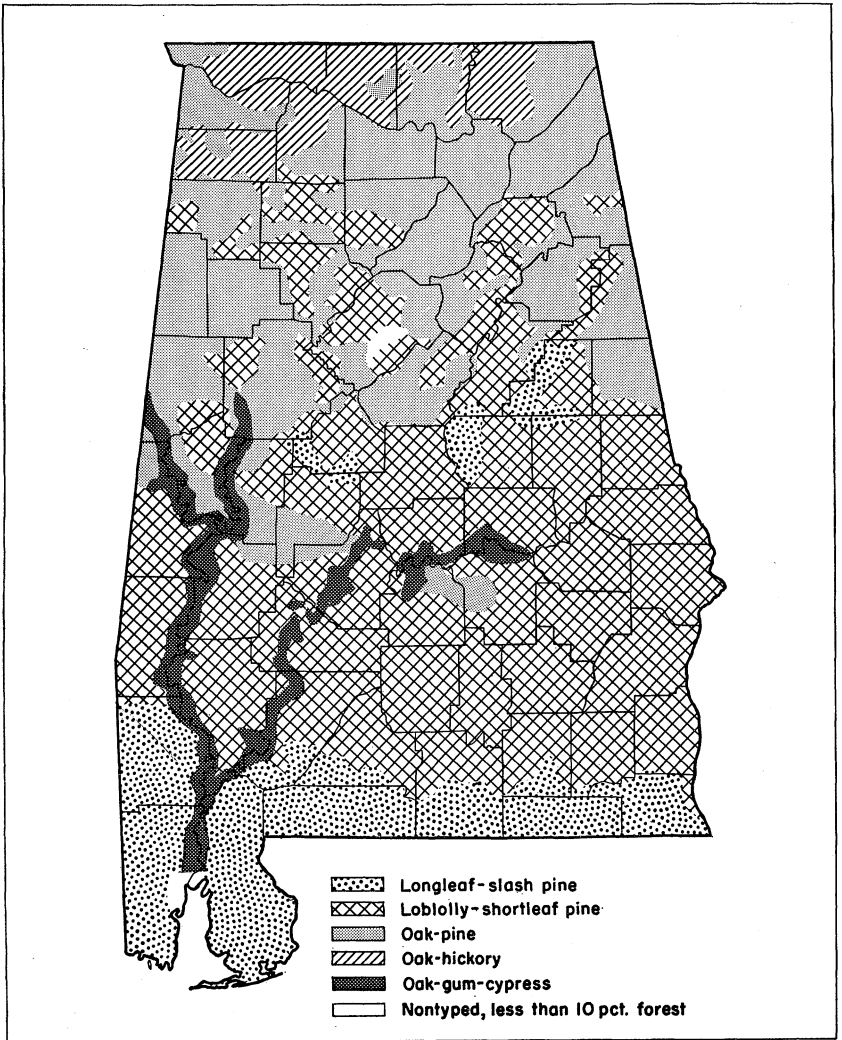


FIG. 2. Major forest types in Alabama.

upper end of the range clearly indicates that the median and the modal values are more representative of the actual situation.

Respondents were tabulated by size of total ownership in eight arbitrary acreage classes, Table 1. Most ownerships were in the 121-250 acre class; this was true both of those interested in leasing and of those not interested. In the group interested in leasing, 58.4 per cent owned 121 acres or more; of those not interested,

TABLE 1. NUMBER OF RESPONDENTS INTERESTED AND NOT INTERESTED  
IN LEASING, BY SIZE OF TOTAL OWNERSHIP

| Acreage class<br><i>Acres</i> | Interested in leasing |             | Not interested in leasing |             |
|-------------------------------|-----------------------|-------------|---------------------------|-------------|
|                               | <i>No.</i>            | <i>Pct.</i> | <i>No.</i>                | <i>Pct.</i> |
| 20-40.....                    | 21                    | 11.5        | 74                        | 10.2        |
| 41-80.....                    | 31                    | 17.0        | 141                       | 19.3        |
| 81-120.....                   | 24                    | 13.1        | 111                       | 15.2        |
| 121-250.....                  | 41                    | 22.4        | 166                       | 22.8        |
| 251-500.....                  | 28                    | 15.3        | 111                       | 15.2        |
| 501-1,000.....                | 17                    | 9.3         | 59                        | 8.1         |
| 1,001-5,000.....              | 18                    | 9.8         | 55                        | 7.5         |
| 5,001 +.....                  | 3                     | 1.6         | 12                        | 1.7         |
| Totals.....                   | 183                   | 100.0       | 729                       | 100.0       |

55.3 per cent exceeded this ownership. Eleven and four-tenths per cent of those interested in leasing had more than 1,000 acres, compared with 9.2 per cent of the group not interested in leasing.

### Forest Land Area

The respondents to this survey controlled a total of 399,000 acres of forest land, or 1.8 per cent of all the forest land in Alabama. The sample also represents 2.4 per cent of the forest land area of Alabama not owned by wood-based industrial, State, Federal, or municipal organizations and therefore potentially available for leasing on the basis of this sample. Eighty per cent of this acreage is owned by persons not interested in leasing.

The mean forest land acreage owned by the group interested in leasing was 426.3. The range was from 20 to 10,500 acres with a median of 92 acres and a mode of 80 acres. Those not interested in leasing had an average forest land holding of 439.1 acres. The range was from 20 to 66,400 acres with a median of 80 acres and a mode of 20 acres. Among both groups, those owning forest land in the 20-40 acre size class were most numerous, with the 41-80

TABLE 2. NUMBER OF RESPONDENTS INTERESTED AND NOT INTERESTED  
IN LEASING, BY SIZE OF FOREST OWNERSHIP

| Acreage class<br><i>Acres</i> | Interested in leasing |             | Not interested in leasing |             |
|-------------------------------|-----------------------|-------------|---------------------------|-------------|
|                               | <i>No.</i>            | <i>Pct.</i> | <i>No.</i>                | <i>Pct.</i> |
| 20-40.....                    | 42                    | 22.9        | 225                       | 30.9        |
| 41-80.....                    | 40                    | 21.8        | 163                       | 22.3        |
| 81-120.....                   | 25                    | 13.7        | 93                        | 12.8        |
| 121-250.....                  | 31                    | 16.9        | 103                       | 14.1        |
| 251-500.....                  | 21                    | 11.5        | 65                        | 8.9         |
| 501-1,000.....                | 8                     | 4.4         | 38                        | 5.2         |
| 1,001-5,000.....              | 14                    | 7.7         | 35                        | 4.8         |
| 5,001 +.....                  | 2                     | 1.1         | 7                         | 1.0         |
| Totals.....                   | 183                   | 100.0       | 729                       | 100.0       |

acre class a close second, Table 2. In the interested group, 41.6 per cent of ownerships included 121 or more acres of forest land. In the noninterested group, 34.0 per cent were of this size or larger. Only 5.8 per cent of the respondents in the group not interested in leasing had holdings of more than 1,000 acres of forest, while 8.8 per cent of those interested in leasing owned more than 1,000 forested acres.

### Forest Land as a Per Cent of Total Area

Among those interested in leasing, the mean per cent of total ownership in forest was 68.5, the range was 8.4 to 100.0 per cent, the median was 70.0 per cent, and the mode was 100.0 per cent. The respondents not interested in leasing had a mean of 61.0 per cent, a range of 4.0 to 100.0 per cent, a median of 62.5 per cent, and a mode of 100.0 per cent.

The largest percentage of respondents interested in leasing fell into the 100.0 per cent forested class. Ownerships that were 100 per cent forested were also more numerous than any partially forested class. Among those not interested in leasing, ownerships from 50.0 to 59.0 per cent forested were most numerous. Slightly more than 75 per cent of those interested in leasing had at least 50 per cent of their holdings in forest land, while slightly more than 66 per cent of those not interested in leasing owned lands that were at least 50 per cent forested.

TABLE 3. NUMBER OF RESPONDENTS INTERESTED AND NOT INTERESTED IN LEASING, BY PER CENT OF OWNERSHIP IN FOREST

| Ownership in forest | Interested in leasing |             | Not interested in leasing |             |
|---------------------|-----------------------|-------------|---------------------------|-------------|
|                     | <i>No.</i>            | <i>Pct.</i> | <i>No.</i>                | <i>Pct.</i> |
| 1-10 .....          | 2                     | 1.1         | 9                         | 1.2         |
| 11-19 .....         | 5                     | 2.8         | 32                        | 4.4         |
| 20-29 .....         | 8                     | 4.4         | 48                        | 6.6         |
| 30-39 .....         | 9                     | 4.9         | 64                        | 8.8         |
| 40-49 .....         | 15                    | 8.2         | 74                        | 10.2        |
| 50-59 .....         | 22                    | 12.1        | 129                       | 17.7        |
| 60-69 .....         | 23                    | 12.6        | 92                        | 12.6        |
| 70-79 .....         | 28                    | 15.4        | 81                        | 11.1        |
| 80-89 .....         | 18                    | 9.9         | 64                        | 8.8         |
| 90-99 .....         | 12                    | 6.6         | 49                        | 6.7         |
| 100 .....           | 40                    | 22.0        | 87                        | 11.9        |
| Totals .....        | 182                   | 100.0       | 729                       | 100.0       |

### Age of Respondent

The average age of those interested in leasing was 54.8 years, with a range of 23 to 89 years, a median of 54 years, and a mode of 52 years. The group not interested in leasing had a slightly



higher average age, 58.4 years, with a range of 21 to 95 years, a median of 60 years, and a mode of 55 years.

TABLE 4. NUMBER OF RESPONDENTS INTERESTED AND NOT INTERESTED IN LEASING, BY AGE CLASS

| Age class<br><i>Years</i> | Interested in leasing |             | Not interested in leasing |             |
|---------------------------|-----------------------|-------------|---------------------------|-------------|
|                           | <i>No.</i>            | <i>Pct.</i> | <i>No.</i>                | <i>Pct.</i> |
| Less than 30.....         | 3                     | 1.7         | 8                         | 1.1         |
| 30-39.....                | 21                    | 11.7        | 57                        | 7.9         |
| 40-49.....                | 40                    | 22.2        | 131                       | 18.1        |
| 50-59.....                | 57                    | 31.7        | 167                       | 23.1        |
| 60-69.....                | 38                    | 21.1        | 189                       | 26.1        |
| 70-79.....                | 17                    | 9.4         | 135                       | 18.7        |
| 80-89.....                | 4                     | 2.2         | 32                        | 4.4         |
| 90-99.....                | 0                     | 0.0         | 4                         | 0.6         |
| Totals.....               | 180                   | 100.0       | 723                       | 100.0       |

The largest age group among those interested in leasing was the 50 to 59 year class; among those not interested there were more respondents in the 60 to 69 year group than in any other.

In the group interested in leasing, 19.4 per cent of the respondents were 65 or older, while in the other group 35.3 per cent were 65 or older.

### Sex of Respondent

For the group that stated that they would be interested in leasing, 72.5 per cent were males and 27.5 per cent were females. For the group of respondents not interested in leasing, 79.8 per cent were males and 20.2 per cent were females.

### Occupation of Respondent

“Farmers” were more numerous than any other category among both the interested and uninterested groups. “Retired” persons made up the next largest group among those interested in leasing, while “employees” (those working for wages) were the second largest group among those not interested.

TABLE 5. RESPONDENTS INTERESTED AND NOT INTERESTED IN LEASING, BY OCCUPATION

| Occupation        | Interested in leasing |             | Not interested in leasing |             |
|-------------------|-----------------------|-------------|---------------------------|-------------|
|                   | <i>No.</i>            | <i>Pct.</i> | <i>No.</i>                | <i>Pct.</i> |
| Retired.....      | 36                    | 19.8        | 193                       | 26.7        |
| Professional..... | 17                    | 9.3         | 34                        | 4.7         |
| Business.....     | 24                    | 13.2        | 78                        | 10.8        |
| Farmer.....       | 49                    | 26.9        | 214                       | 29.6        |
| Employee.....     | 38                    | 20.9        | 144                       | 20.0        |
| All others.....   | 18                    | 9.9         | 59                        | 8.2         |
| Totals.....       | 181                   | 100.0       | 722                       | 100.0       |

Occupations making up a larger percentage of interested than of noninterested owners included professional, business, "all others," and employees, though the difference in the latter group was small.

### Education of Respondent

Among both groups the largest proportion of respondents attended high school, Figure 3, though not all of them graduated. Of the respondents who were willing to lease their property, 69.8 per cent had at least 9 years of formal education, while 62.0 per cent of those not wishing to lease their property had this much schooling. In the interested in leasing group, 14.3 per cent had attended college and 7.1 per cent had gone beyond 16 years of formal education. For the other group the percentages were 11.8 and 2.6, respectively.

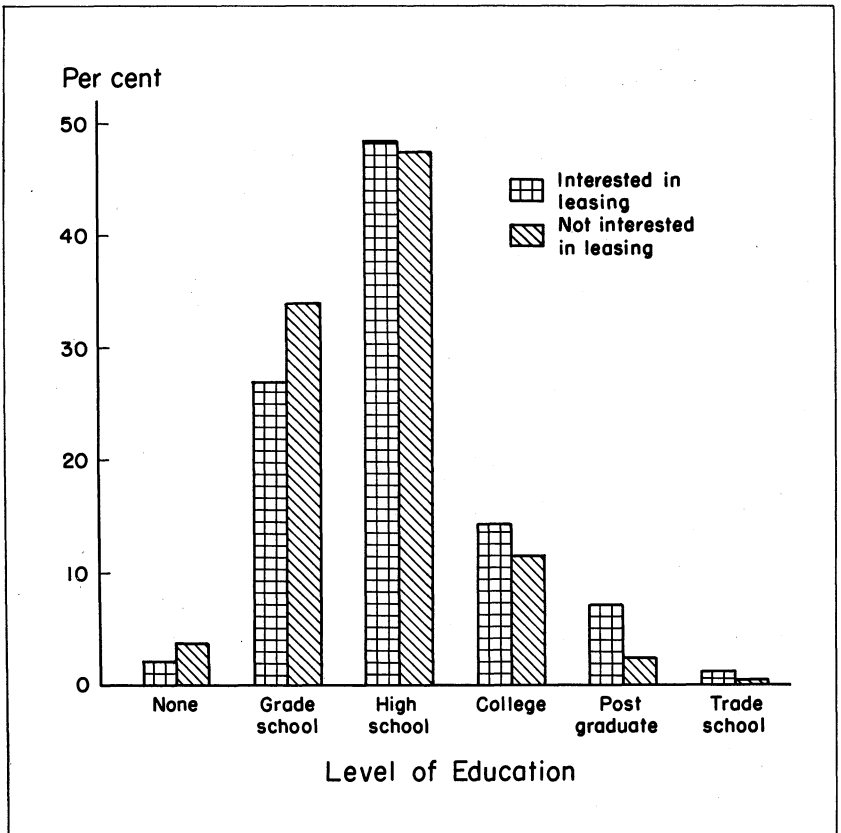


FIG. 3. Interested and not interested by education.

### Length of Tenure of Respondent

The average length of tenure for those interested in leasing was 21.7 years, a range of 2 to 70 years, a median of 14 years, and a mode of 25 years. The respondents not interested in leasing had an average tenure of 24.8 years, a range of 1 to 70 years, a median of 21 years, and a mode of 20 years.

Among those interested in leasing there were proportionally more respondents in the 1 to 10 year class than in any other, followed by the 21 to 30 year class, Table 6. For the other group, the 11 to 20 year class had more respondents, followed by the 21 to 30 year class. In both groups only slightly more than 26 per cent of the respondents had more than 30 years of tenure.

TABLE 6. NUMBER OF RESPONDENTS INTERESTED AND NOT INTERESTED IN LEASING, BY LENGTH OF TENURE CLASSES

| Tenure class<br><i>Years</i> | Interested in leasing |             | Not interested in leasing |             |
|------------------------------|-----------------------|-------------|---------------------------|-------------|
|                              | <i>No.</i>            | <i>Pct.</i> | <i>No.</i>                | <i>Pct.</i> |
| 1-10.....                    | 45                    | 27.1        | 130                       | 19.1        |
| 11-20.....                   | 38                    | 22.9        | 188                       | 27.6        |
| 21-30.....                   | 39                    | 23.5        | 182                       | 26.7        |
| 31-40.....                   | 22                    | 13.3        | 80                        | 11.7        |
| 41-50.....                   | 10                    | 6.0         | 61                        | 9.0         |
| 51 +.....                    | 12                    | 7.2         | 40                        | 5.9         |
| Totals.....                  | 166                   | 100.0       | 681                       | 100.0       |

### Number of Years Property Was in The Family

The average time the property was owned by the respondent's family was 36.5 years for those interested in leasing. The range for this group was from 2 to 109 years with the median being 25 years and the mode 30 years. For those not interested in leasing, the average was 37.7 years with a range of 1 to 250 years, a median of 27 years, and a mode of 20 years. The property of 57.1 per cent of the respondents interested in leasing was in the family 30 or more years. For the group not interested in leasing, the percentage was 43.4.

TABLE 7. NUMBER OF RESPONDENTS INTERESTED AND NOT INTERESTED IN LEASING, BY DURATION OF FAMILY OWNERSHIP

| Ownership class<br><i>Years</i> | Interested in leasing |             | Not interested in leasing |             |
|---------------------------------|-----------------------|-------------|---------------------------|-------------|
|                                 | <i>No.</i>            | <i>Pct.</i> | <i>No.</i>                | <i>Pct.</i> |
| 1-10.....                       | 19                    | 11.3        | 92                        | 13.1        |
| 11-20.....                      | 20                    | 11.9        | 143                       | 20.4        |
| 21-30.....                      | 33                    | 19.7        | 162                       | 23.1        |
| 31-40.....                      | 35                    | 20.8        | 78                        | 11.2        |
| 41-50.....                      | 17                    | 10.1        | 74                        | 10.6        |
| 51 +.....                       | 44                    | 26.2        | 151                       | 21.6        |

### Race of Respondent

Of the respondents interested in leasing, 85.7 per cent were white and 14.3 per cent were nonwhite. For the group not interested in leasing, the percentages were 92.9 and 7.1, respectively.

### How Respondents' Property Was Acquired

Of the respondents interested in leasing, 53.3 per cent purchased their property, 32.8 per cent purchased a portion and inherited the remainder, and 13.9 per cent inherited all their holdings. In the other group, 69.9 per cent of the respondents purchased their lands, 18.6 per cent had a combination of purchase and inheritance, and 11.5 per cent inherited all of their property.

### Reasons For Not Wanting To Lease

More than 50 per cent of the respondents who were not interested in leasing their property felt this way because they did not wish to give up control of their holdings. Some respondents went on to add that by maintaining control they could obtain more income and provide better management than by leasing. Approximately 13 per cent of those not wanting to lease stated that it was not worth the effort. Many indicated that they didn't feel that the income would be sufficiently high to justify the effort.

TABLE 8. NUMBER OF RESPONDENTS, BY REASON FOR NOT WANTING TO LEASE

| Reason                                      | Respondents |       |
|---|-------------|-------|
|   | No.         | Pct.  |
| Do not wish to give up control.....         | 383         | 52.5  |
| No reason—just do not want to.....          | 106         | 14.5  |
| Not enough land or income to fool with..... | 95          | 13.1  |
| Too old.....                                | 66          | 9.1   |
| Other use for the land.....                 | 30          | 4.1   |
| All the other reasons.....                  | 49          | 6.7   |
| Totals.....                                 | 729         | 100.0 |

## CONCLUSIONS

From the data presented it appears that those interested in leasing are characterized by relatively small total ownerships but a high proportion of forest land to total acreage. The owner interested in leasing is younger than his counterpart who is not interested. Proportionally more women were willing to lease their property than are men. This may be due to the fact that more men lived on the property they owned and actually worked the acreage, whereas most women were otherwise occupied and many wanted to be relieved of making decisions for the forest land. With regard to occupation, it appears that farmers, employees, and retired persons were most interested in leasing. In the case of employees, as with women, it may be that they were unable to devote the time required for proper management and wanted to be relieved of this responsibility. Proportionally more professional people (physicians, lawyers, etc.) were inclined toward leasing. The more education an owner had, the more he was inclined toward leasing. The shorter the length of tenure, the greater was the tendency toward leasing. Proportionally more people who did not purchase their property were willing to lease than those who purchased, and finally, more nonwhites than whites were willing to lease.

From the interviews it was apparent that many respondents did not understand exactly what leasing would entail. Many of them were not aware of the fact that they could lease a portion of their land and retain control over the remaining acreage. A vast majority felt that if they leased, they would have to lease all or nothing. Many respondents were not familiar with leasing at all. Inasmuch as there is no standard lease and each company considers each potential tract differently, no attempt was made to explain leasing to the interviewers.

If leasing is to be a method of obtaining the objectives of the landowner, he must know what leasing is. This information can come from several sources such as County Extension Service, universities, the U.S. Forest Service, and from woodbased industries themselves.





## AGRICULTURAL EXPERIMENT STATION SYSTEM OF ALABAMA'S LAND-GRANT UNIVERSITY

With an agricultural research unit in every major soil area, Auburn University serves the needs of field crop, live-stock, forestry, and horticultural producers in each region in Alabama. Every citizen of the State has a stake in this research program, since any advantage from new and more economical ways of producing and handling farm products directly benefits the consuming public.



### Research Unit Identification

★ Main Agricultural Experiment Station, Auburn.

1. Tennessee Valley Substation, Belle Mina.
2. Sand Mountain Substation, Crossville.
3. North Alabama Horticulture Substation, Cullman.
4. Upper Coastal Plain Substation, Winfield.
5. Forestry Unit, Fayette County.
6. Thorsby Foundation Seed Stocks Farm, Thorsby.
7. Chilton Area Horticulture Substation, Clanton.
8. Forestry Unit, Coosa County.
9. Piedmont Substation, Camp Hill.
10. Plant Breeding Unit, Tallassee.
11. Forestry Unit, Autauga County.
12. Prattville Experiment Field, Prattville.
13. Black Belt Substation, Marion Junction.
14. Tuskegee Experiment Field, Tuskegee.
15. Lower Coastal Plain Substation, Camden.
16. Forestry Unit, Barbour County.
17. Monroeville Experiment Field, Monroeville.
18. Wiregrass Substation, Headland.
19. Brewton Experiment Field, Brewton.
20. Ornamental Horticulture Field Station, Spring Hill.
21. Gulf Coast Substation, Fairhope.