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## Rural Land Ownership and use in Tennessee

University of Tennessee Agricultural Experiment Station

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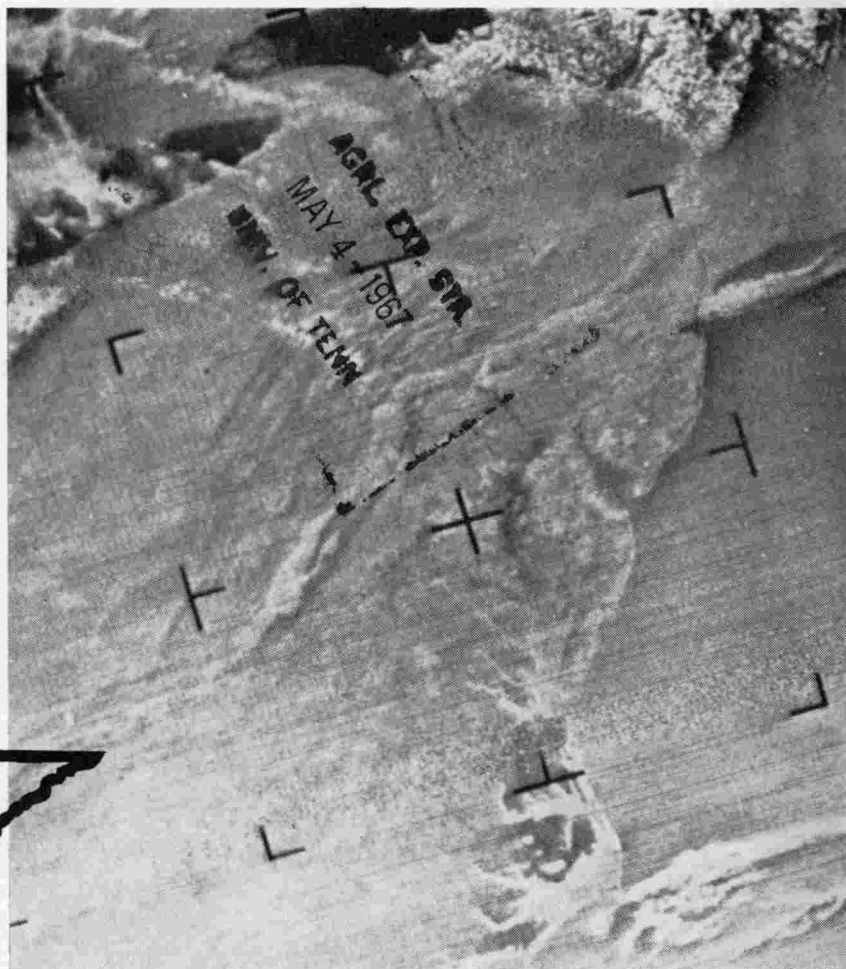
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BULLETIN 412 NOVEMBER 1966

The University of Tennessee  
Agricultural Experiment Station  
John A. Ewing, Director  
Knoxville



## RURAL LAND OWNERSHIP AND USE IN TENNESSEE

by Joe A. Martin and Joe W. McLeary

## COVER

THE NIMBUS I WEATHER SATELLITE, from 430 miles up, and on Sunday, September 6, 1964, was able to photograph just the east part of Tennessee—subject of this bulletin, "Rural Land Ownership in Tennessee."

At top left of the photo are Lake Erie and Lake Ontario, as well as such notable landmarks as Cape Cod, Boston Bay, Long Island Sound, Delaware Bay, and Chesapeake Bay. The photo shows Tennessee's central location in regard to the heavily-populated eastern one-third of the United States.

Other states shown whole or in part that are a part of the series in Southeast Land Tenure Research Committee studies are Georgia, North Carolina, South Carolina, and Virginia. (Photo courtesy of the National Aeronautics and Space Administration.)

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## PREFACE

THIS report is the fifth in a series coming from a study of rural land ownership in the Southeast undertaken in 1960 by the Southeast Land Tenure Research Committee in cooperation with the Natural Resource Economics Division, Economic Research Service, U. S. Department of Agriculture. Data for the study were obtained by personal interviews with a sample of landowners in the states of Alabama, Florida, Georgia, North Carolina, South Carolina, Tennessee, and Virginia. This report is based on the survey data for Tennessee.

The basic findings of the regional study were reported in: "Ownership of Rural Land in the Southeast," by Roger W. Strohehn, U. S. Department of Agriculture, Agricultural Economics Report 46, December 1963. Other reports that have been published from the study are: "White and Nonwhite Owners of Rural Land in the Southeast," by Robert F. Boxley, Jr., U. S. Department of Agriculture, Economic Research Service 238, June 1965; "Rural Land Ownership in the Georgia Piedmont and Coastal Plain," by J. R. Allison and Oscar Steanson, Georgia Agricultural Experiment Station, Mimeo Series N. S. 178, July 1963; and "Rural Land Ownership and Use in Alabama," by Howard A. Clonts and J. H. Yeager, Agricultural Experiment Station, Auburn University, Bulletin 356, November 1964.

The Southeast Land Tenure Research Committee was reorganized in 1962 as the Southern Land Economics Research Committee. The Committee is currently composed of the following State and Agency representatives:

Alabama—Joseph H. Yeager  
Arkansas—Henry J. Meenen  
Florida—John Reynolds  
Georgia—John R. Allison  
Louisiana—John E. Waldrop  
Mississippi—John C. Crecink  
North Carolina—Dale M. Hoover  
Puerto Rico—Leslie Hernandez  
South Carolina—Lonnie Talbert  
Tennessee—Joe A. Martin  
Virginia—W. L. Gibson  
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C.S.R.S.-U.S.D.A.—A. T. M. Lee  
TVA—Roger Woodworth  
Farm Foundation—R. J. Hildreth

Southern Agricultural Experiment Station Directors Representative—John A. Ewing—Tennessee

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Station, University of  
Tennessee, Knoxville

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## SUMMARY

IN 1960 there were approximately 253,000 owners of rural land in Tennessee who held an estimated 18 million acres. Individual owners represented 97% of the owners, 92% of the acres, and 96% of the value. Corporations and government ownerships represented the remainder in each case.

About 95% of the owners were residents of Tennessee. Two percent of the land owners lived in other states of the Southeast, and 3% lived outside the region.

Individual owners included husband and wife, single men, single women, partnership or estates, and individual plus partnership or estate. By far the most important of these was the husband and wife group. They accounted for 70% of the owners, 69% of the acreage and 71% of the value. Approximately 70% of the acreage was operated by owners. Eighty-five percent of the owners lived in rural areas and 15% lived in urban areas. Many of these rural residents, however, held land only as a place to live. Most of the owners who operated their land lived in rural areas while the non-operators were almost equally divided between rural and urban residents.

Land was classified into three groups: 1) farmland, 2) commercial forest and 3) other rural land. Husband and wife was the dominant type of owner in all three of these land classifications. Single women and forestry corporations owned 27% and 13% respectively, of land held as commercial forest only. Laborers, business or professional people, and government and municipal agencies were important holders of other rural land. Individuals who reported their occupation as farmer—either full-time, part-time, or retired—owned over four-fifths of the farmland, two-thirds of the forestland, and about one-fourth of all other rural land in Tennessee. All together farmers held almost three-fourths of the rural land in the state.

A classification of kind of land held by location of owner's residence showed that owners of farmland only were usually rural residents and owners of commercial forestland only were usually urban residents.

Most farmland was acquired by purchase and had a higher debt ratio than did commercial forest, which was acquired largely by gift or inheritance. Other rural land was acquired largely by methods other than purchase, but showed a higher debt ratio. The reason for this was the high value represented by buildings on other rural land held largely for residential purposes.

The modal age of owners was 55-64 years. About 60% of the land was held by people over 55 years of age. In general, the average size ownership unit increased as the age of the owners increased.

Eighty-five percent of the owners with an equal proportion of the land held their land free of debt. The debt against encumbered land amounted to only one-third its estimated market value.

Changes in use involved less than 3% of the rural land in the state over the 5-year period 1955-60.

Land used for urban purposes increased 42% and idle land increased 7% between 1955-1960. These increases came as a result of a net decrease in cropland and woodland, mainly cropland. Full-time farmers contributed most to the transfer of land from cropland to idle land. Housewives, laborers, and retired farmers contributed most to the transfer of land to urban uses.

Approximately 7% of the owners, representing 9% of the acreage, reported that they had plans for the sale or transfer of their land. Only 11% of the owners had made wills providing for the disposition of their land after their death. Eight percent of the farmers reported having made a will. This compared with 33% for business people, 29% for retired owners, and 16% for housewives.



# Rural Land Ownership and Use in Tennessee

by

Joe A. Martin and Joe W. McLeary\*

## INTRODUCTION

**O**WNERSHIP patterns of rural land have far-reaching implications for the economic and social structure of the state. The way in which land is held and the persons who own the land can have an important bearing on the production and distribution of wealth. Such factors as number, age, tenure and occupation of owners, kind of land held, mortgaged indebtedness, and concentration of ownership affect the operation and use of rural land. This study was designed to uncover some of these characteristics of land ownership in Tennessee.

Ownership is the connecting link between man and land; it is ownership that fixes responsibility for the way land is used.<sup>1</sup> As the connecting link between land and its uses, ownership has long been of interest to Americans. This interest is shared by the owners individually and by the general public. To the individual, land ownership and use provide a means of earning a living. Also land ownership has served as a goal in itself for such reasons as: security in old age, social status, and an estate to pass on to heirs. Society also shares an interest in the ownership and use of rural land because of the importance of land as a means of producing food and fiber.

Since the use of land is determined to a great extent by ownership, it is important to clarify what is meant by the term ownership. Private ownership of a parcel of land is never absolute. Society, through the state, reserves certain rights in land in the interest of the general welfare. Property in land may be thought of as a "bundle of rights," which may be divided in many different ways among different people and society as a whole. As an illustration, the most common form of land ownership in Tennessee is that held by man and wife with undivided interests and rights of survivorship. If the land is mortgaged, the mortgagor has certain

\* Professor of Agricultural Economics and former assistant in Agricultural Economics respectively.

<sup>1</sup> Gene Wunderlich and Russell W. Bierman. "What Do We Mean by Ownership?" *The 1958 Yearbook of Agriculture*, Alfred Stefferud, editor (Washington: Government Printing Office, 1958), p. 287.

legal rights in the land. Also the same land may be operated by a lease holder; he too holds certain legal rights through contract. And finally, the state has reserved the rights of taxation, eminent domain, and police power.

In this study a land owner was defined as any person, corporation, institution, or unit of government holding land by sole ownership or having a part interest in a multiple-ownership arrangement. Husband and wife were regarded as one owner with ownership ordinarily being attributed to the husband. Interest in this study was centered on owners of rural land as individuals.

Land accounts for approximately 40% of the total investment in agriculture in Tennessee.<sup>2</sup> Thus the distribution of agricultural wealth in the state is determined to a great extent by the patterns of land ownership.

The distribution of land ownership is also related to adjustment problems in agriculture. Long-run adjustments in agriculture are being made and must continue to be made as changes occur in technology and economic conditions. For example, the number of farms decreased by approximately one-third from 1940 to 1959. While the total land in farms has declined some during this period, the average size of farms has increased from 74.7 to 102.0 acres. Farms of less than 180 acres decreased in number by more than 40% while farms larger than 180 acres increased slightly in number. Along with the change in number and size of farms, there has been a corresponding change in the type of productive inputs used. The number of tractors and dollars spent on fuel and oil has increased and the number of horses and mules has decreased. Part owners have increased while the number of full owners and tenants have decreased.

The pronounced trend toward larger and more highly-mechanized farms is largely the result of economic pressure on farmers to reduce cost of production per unit of output. Unit cost of production can be reduced by spreading the cost of labor and machinery over more acres.

The transfer of control of land is necessary for the consolidation of small farms into larger, more efficient ones as advances in technology take place. Consolidation of small units into larger ones may take place by an actual transfer of the ownership of land or by renting land.

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<sup>2</sup> Federal Reserve Bank of Atlanta, *Bankers Farm Bulletin*, Vol. XIII, No. 10 (Atlanta: Federal Reserve Bank of Atlanta, October, 1961), p. 1, and United States Department of Agriculture.

## OBJECTIVES OF THE STUDY

THE major purpose of this study was to provide an overall inventory of rural land ownership in Tennessee, and to develop inferences about future ownership distribution of agricultural land resources. Many types of basic data are either not available in the *Census of Agriculture* or are available only for farmlands operated during the census year. Information from this survey used in connection with information available in the *Census of Agriculture* should provide a more complete and useful inventory of land ownership in Tennessee. Specifically, the objectives of this study were:

- 1) to determine how rural land is distributed by kind and value among various types of owners,
- 2) to determine the extent of land ownership concentration,
- 3) to determine how ownership was acquired,
- 4) to determine the estate held in the land,
- 5) to determine the amount and security of the ownership interest,
- 6) to learn what plans owners have for disposing of their land, and
- 7) to determine the relationship between ownership characteristics, kind of land held, land use, and changes in land use.

## PROCEDURE

THE data used in this study were taken from a 1960 survey of land ownership in the 7 Southeastern states made by the Economic Research Service, United States Department of Agriculture. That part of the data applicable to Tennessee forms the basis of this study. This included questionnaires from 539 sample land owners in 13 counties in Tennessee, 3 of which were in the western, 5 in the middle, and 5 in the eastern part of the state. Figure 1 shows the counties sampled.

Sampling errors for the total Southeastern region survey were computed by considering the variability between counties within strata within states. Computations for Tennessee were made by using that average variance for the region and applying the number of counties enumerated in Tennessee, which was about one seventh of the total number of counties in the region. The overall sampling rate was approximately 1/1000. Estimates and sampling errors are shown in Appendix Table I.

An owner's total holdings (ownership unit) consisted of all land held by him in sole ownership plus his proportionate share of all multiple-ownership arrangements in which he was a participant. Land held by life estate and land being acquired under pur-

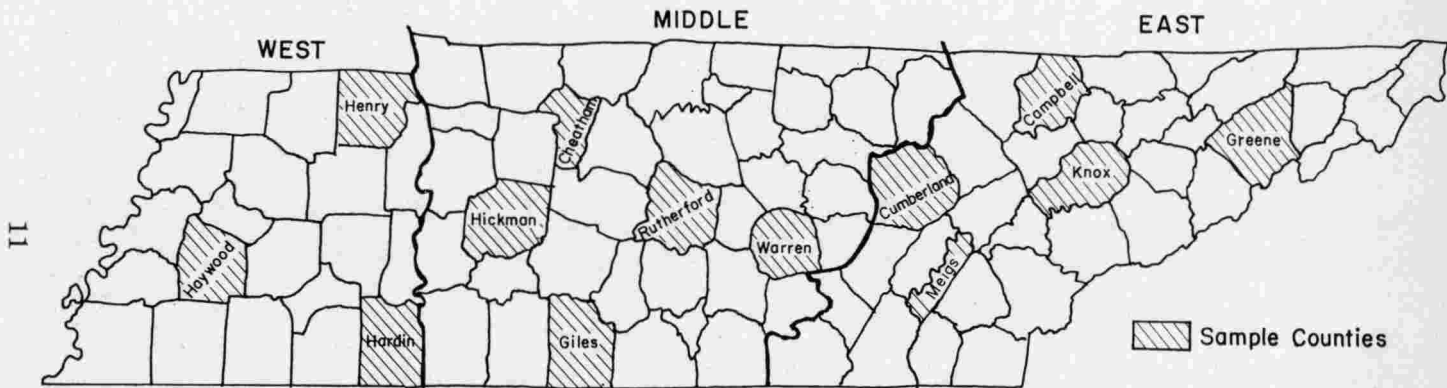


Figure 1. Sampled counties with the three divisions of Tennessee, 1960.

chase contract were considered owned. All owners who lived on the rural land that they owned were eligible for enumeration. Owners not living on their land were eligible unless they owned less than 3 acres.

Emphasis in this study was on ownership of all rural land, not just farmland.

## CHARACTERISTICS OF OWNERS

### Number and Types of Owners

FROM the sample it was estimated that approximately 253,000 owners held about 18 million acres of rural land in Tennessee.<sup>3</sup> The *Census of Agriculture* in 1960 shows there were about 158,000 farm operators and approximately 16 million acres of land in farms.<sup>4</sup> The difference between the survey estimate and the census figure is one of definition. All owners of rural land were included in the data from which the estimates were made. In the Census, only farm operators and farmland were included.

The owners were distributed across the state in this way: 17% in West Tennessee, 44% in Middle, and 39% in East Tennessee. Average size ownership units for West and Middle Tennessee were 81 and 85 acres, respectively, and only 65 acres for East Tennessee. For the state as a whole, 77 acres was the average size of ownership unit.

*Individual and institutional ownership.* Individual ownership units, which included husband and wife, single men, single women, partnership or estates, and individual plus partnerships or estates accounted for approximately 97% of the owners. The remaining 3% was divided between corporations and government and municipal agencies. This latter group may be called institutional owners to distinguish them from the individual owners.

Acres owned by each of the two groups were not divided in the same ratio as the owners. Distribution of acres was 92% for individuals and 7% for institutional owners. Ownership of 1% of the land could not be readily established. Individual owners were found to hold an average of 73 acres while institutional owners held 204 acres on the average. This averaging process, however, covers up the great range in the size of holdings of individuals. One-half of the owners held only 10% of the land; the other one-half owned 90% of the land.

Distribution of ownership by value, in many cases, was more

<sup>3</sup> See Appendix Table I for sampling error.

<sup>4</sup> United States Bureau of the Census, *United States Census of Agriculture: 1959, Vol. I, Part 31, Tennessee* (Washington: Government Printing Office, 1961), p. 1.

meaningful than distribution by acres. Institutional owners were found to account for 4% of the total value of land owned while representing 3% of the owners and 7% of the acreage. This suggests that for the state as a whole, land held by individuals is valued more highly per acre than land held by corporations and government.

Over the state, the average value per acre of rural land—and buildings on this land—was \$103. For West, Middle, and East Tennessee the corresponding figures were \$112, \$81, and \$124, respectively. The higher value per acre in East Tennessee was due to the greater number of rural-nonfarm residences in that section, and the high value associated with this type of land.

Per acre values are shown for the three principal kinds of land in Table 1 as enumerated for the sample. Other rural land had the highest value per acre. When only individual owners were considered the value per acre of the three kinds of land became \$136, \$45, and \$190 for farmland, commercial forest, and other rural land, respectively. The higher per acre value of other rural land which includes unused farmland, rural nonfarm residences, rural commercial, etc., points out the high value associated with rural land held only as a place of residence. Per acre values of farmland and commercial forest were about the same for all owners and individual owners only.

**Table 1. Value per acre by kind of land owned, by type of owner, Tennessee, 1960**

Type of owner	Farmland	Commercial forest	Other rural land	Total all land
Husband and wife	\$138	\$ 47	\$245	\$113
Single man	169	55	88	126
Single woman	118	35	395	123
Partnership or estate	142	46	66	89
Individual plus partnership or estate	113	27	112	81
Total for individual owners only	136	45	190	111
Forestry corporation	—	47	24	14
Other private corporation	—	37	24	29
Government and municipal agencies	—	—	341	341
Total all owners	131	44	140	104

*Types of owners.* Individual and institutional owners were divided into smaller groups for purposes of analysis. By far the most important type of owner was husband and wife. They accounted for 70% of the owners, 69% of the acres owned, and 71% of

the value. Husband and wife owners held an average of 75 acres which is very close to the 76.5-acre average for the state.

Other individual owners (single men, single women, partnership or estates, and individual plus partnership or estates) were relatively less important than husband and wife both in percentage of owners and acres owned (Figure 2). Only one group of individual owners (individual plus partnership or estate) held a larger average ownership unit than husband and wife. The average for this group was 138 acres.

Government and municipalities was the only group of institutional owners in West Tennessee of any importance representing

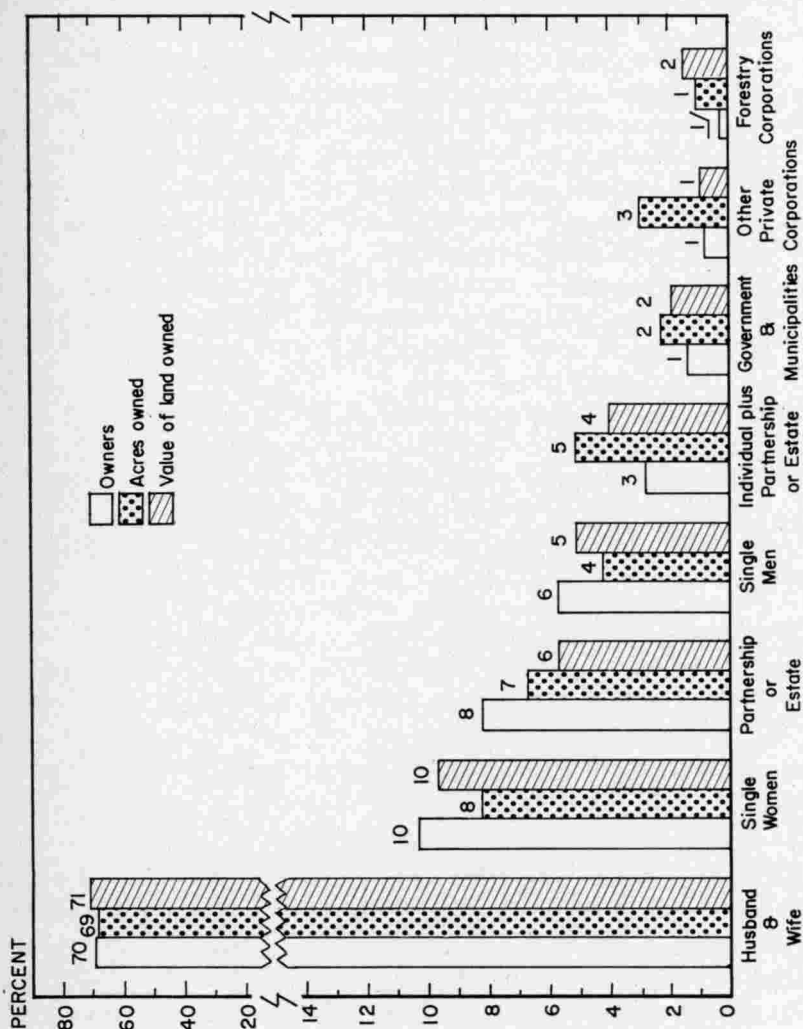


Figure 2. Percentage of owners, acres owned, and value of land owned by types of owners, Tennessee, 1960.

<sup>1</sup> Less than 0.5%.

4% of the owners and 3% of the total acres. In East Tennessee institutional owners were more important in respect to the acres owned. Approximately 17% of the rural land in East Tennessee was held by institutional owners, but they accounted for only 2% of the owners. Institutional ownership was practically nil in Middle Tennessee.

From the above discussion it is clear that individual owners are the most important in Tennessee. Adjustment and change will come primarily through the patterns of individual land ownership. For this reason this study was concerned almost entirely with individual ownership. Unless otherwise stated, the data in the remaining sections of this report have been presented in terms of individual units of ownership.

### Residence of Owners

Location of the owners' residences is a determining factor in the way land is used. Owners who live in urban sections or a long driving distance from their land are slower to make changes than are owners who live on their land and actively participate in the managerial decisions involving the operation of the land.

Each owner was classified by residence into one of the following three groups: in-state—Tennessee; not-in-state, but in Southeast; outside Southeast.

Almost all the owners (95%) lived in the state; 2% lived in another state in the region; the remaining 3% lived outside the Southeastern region. Scarcely any absentee ownership was reported in West Tennessee: only 1% of owners in that section lived outside the Southeast. In Middle and East Tennessee, 5% of the land owners lived outside the state.

Of all the owners, 85% lived in rural sections and 15% lived in urban areas. The 85% of owners living in rural areas held about 80% of the land. The 15% of owners living in urban areas held approximately 20% of rural land in the state (Table 2).

### Occupation of Owners

People own land for many different reasons. Some own land as an investment hedge against inflation, some for speculative reasons, some to farm, and some as a place of residence, while others own land because of the conditions of the ownership right in the land. The occupation of the owner frequently determines why the land is held, and, therefore, how it is used.

Full-time farmers were the largest group of individual owners



**Table 2. Individual owners and acres of rural land owned by location of owners' residence; percentage distribution by size of holding, Tennessee, 1960**

Size	Rural residents		Urban residents		
	Owners	Acres	Owners	Percent	Acres
Acres		Percent			
Less than 10	21	1	1		1
10- 20	11	2	3		1
21- 50	13	7	3		2
51-100	21	22	6		7
101-500	18	44	2		9
Over 500	1	4	1		1
Total	85	80	15		20

<sup>1</sup> Less than 0.5%.

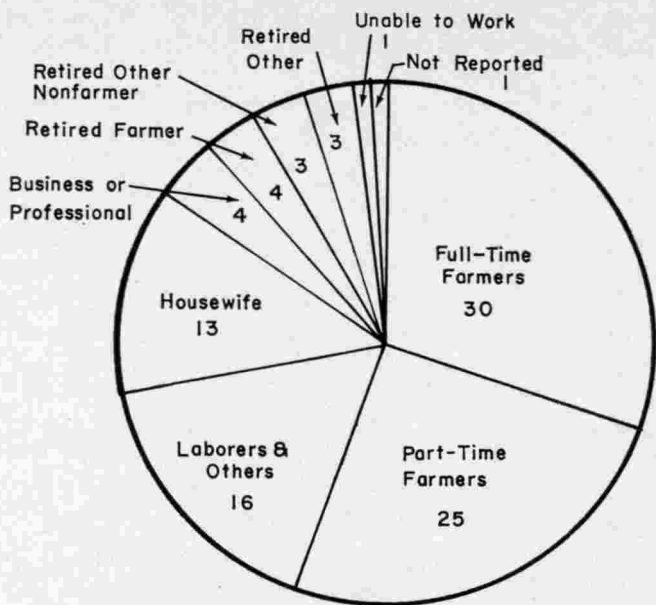
and they accounted for 30% of the owners and 40% of the rural land (Figure 3). The next largest group was part-time farmers. This group accounted for 25% of the owners and 24% of the acres. Average size holdings for farmers and part-time farmers were 87 and 63 acres, respectively.

Moving across the state from west to east, there was a decline in the proportion of owners who are full-time farmers and an increase in part-time farmers (Table 3). This would indicate that the importance of agriculture decreases and non-agricultural employment increases as one moves across the state from west to east.

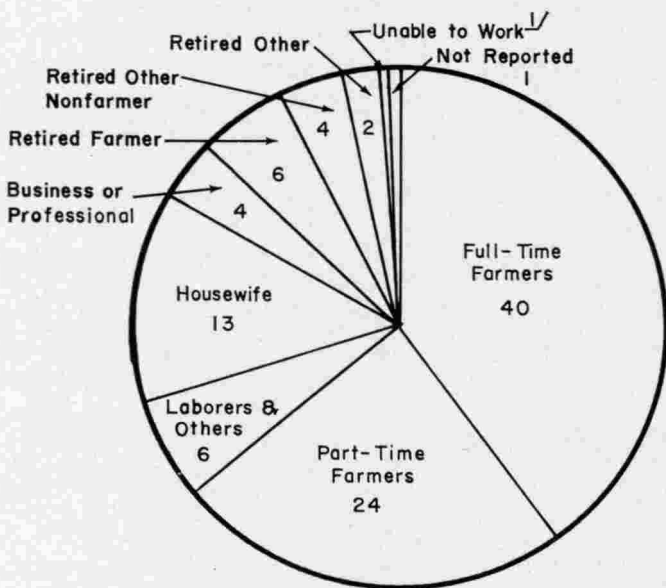
In addition to full-time and part-time farmers, there was one other group who had retired from some other occupation and were now farming. This group represented about the same proportion of owners and acreage owned in each of the three sections of the state, and accounted for 3% of the owners and 4% of the acreage for the state as a whole. Including all three groups mentioned above, individuals engaged in farming accounted for 49% of the owners and 68% of the acreage owned. The remainder of the land was held by people in occupations other than farming.

Housewives represented 13% of both the owners and land owned. This group was most important in the middle section of the state where they represented 15% of the owners and 17.5% of the land owned.

Those owners whose occupation was business or professional represented 4% of the owners and accounted for 4% of the land. All three sections of the state showed a larger percentage of owners than of acreage held in the laborers and others group. For the state as a whole, laborers and others represented 16% of the owners and owned only 6% of the land.



A. Percentage Distribution of Owners



B. Percentage Distribution of Acres

Figure 3. Percentage distribution of owners and acres of land owned by occupation, Tennessee, 1960.

<sup>1</sup> Less than 0.5%

**Table 3. Individual owners and acres of rural land owned, percentage distribution by occupation, Tennessee and three Divisions of the State, 1960**

Occupation	West		Middle		East		State	
	Owners	Acres	Owners	Acres	Owners	Acres	Owners	Acres
	----- Percent -----							
Full-time farmer	36	44	35	42	23	31	30	40
Part-time farmer	15	17	26	23	28	29	25	24
Housewife	14	10	15	18	11	7	13	13
Business or professional	4	3	2	2	5	8	4	4
Laborers and others	14	2	13	5	21	12	16	6
Retired farmer	6	16	2	2	4	4	4	6
Retired other	3	4	2	1	3	4	3	2
Retired other, now farmer	6	3	3	5	3	3	3	4
Unable to work	—	—	—	—	2	1	1	<sup>1</sup>
Not reported	2	1	2	2	—	—	1	1
Total	100	100	100	100	100	99	100	100

<sup>1</sup> Less than 0.5%.

Approximately 7% of the owners were retired and they owned about 8% of the land. A large percent of both owners and land owned in the retired groups was accounted for by retired farmers. The retired farmer group held larger-than-average size holdings, while the reverse was true for those retired from other occupations.

### Age of Owners

The ownership of land tends to be concentrated in the hands of older people. Owners over 55 years of age accounted for slightly less than one-half of all owners but held almost 60% of the rural land (Table 4). In general the average size of ownership unit in-

**Table 4. Rural land ownership by age classes, Tennessee, 1960**

Age of owners	Percent owners	Percent acres
Under 25	1	<sup>1</sup>
25-34	13	10
35-44	19	14
45-54	19	17
55-64	22	28
65-74	20	20
75 and over	6	9

<sup>1</sup> Less than 0.5%.

creased as the age of owners increased up through the 55-64 age group.

The age at which owners acquired their first land is shown in Table 5. The first acquisitions were heavily concentrated in the interval between 25 and 34 years of age, and over 50% of the owners reported that they acquired their first holding before reaching 44 years of age. Only one-third of the owners in 1960 were less than 44 years of age. This pattern of land acquisition and present age of owner reflects the high rate of outmigration of youth from rural areas, a trend toward fewer and larger farms, and the increase in average age of farm operators in the state.

**Table 5. Age of owners in 1960 and age at time of first acquisition of rural land**

Age, 1960	Age at which owner first owned rural land						75 & over
	Under 25	25-34	35-44	45-54	55-64	65-74	
	-----Percent-----						
Under 25	100	—	—	—	—	—	—
25-34	36	64	—	—	—	—	—
35-44	30	59	11	—	—	—	—
45-54	13	44	36	7	—	—	—
55-64	21	36	27	13	3	—	—
65-74	20	25	22	19	13	2	—
75 and over	26	31	14	11	9	9	—

The recent trends in migration and choice of occupation by young people from rural areas are also reflected in Table 6 which shows the occupational and age classes of owners. It may be noted that there were no full-time farmers in the less-than-25-year age group reported in the sample.<sup>5</sup> A later analysis in the report (Table 10) indicates that almost 80% of the owners under 25 years of age acquired their land either through gift or inheritance. One other point stands out with regard to the age-occupational distribution of land owners: farmers and housewives are concentrated in the upper age classes in contrast to other occupational groups. As for those in the category of housewife, one may surmise from their age distribution that a major part of these owners are surviving widows of deceased farmers.

### Tenure of Owners

Age, occupation, sex, residence and other characteristics of owners can affect the separation of ownership and use of land, and

<sup>5</sup> There was considerable sampling error in this survey, but the error in this case was not great. The 1960 *Census of Agriculture* reported only 287 operators of commercial farms under 25 years of age in the state who owned at least part of the land they were farming.

**Table 6. Percentage owners and acres of rural land owned by age and occupation, Tennessee, 1960**

Occupation	Age groups													
	Under 25		25-34		35-44		45-54		55-64		65-74		75 & over	
	Ow.	Ac.	Ow.	Ac.	Ow.	Ac.	Ow.	Ac.	Ow.	Ac.	Ow.	Ac.	Ow.	Ac.
Farmer	—	—	9	7	13	10	19	18	31	37	25	25	4	3
Part-time farmer	3	2	22	21	31	27	25	27	15	20	4	4	<sup>1</sup>	<sup>1</sup>
Housewife	1	1	6	2	12	7	10	1	23	18	26	36	22	35
Business or professional	27	27	<sup>1</sup>	<sup>1</sup>	29	26	15	30	28	14	1	3	—	—
Laborers and others	7	13	23	18	25	17	26	27	13	16	5	9	—	—
Retired farmer	—	—	—	—	—	—	—	—	24	31	43	35	33	35
Retired other	—	—	—	—	—	—	1	3	13	<sup>1</sup>	66	73	13	24
Retired other, now farmer	—	—	—	—	—	—	—	—	16	50	78	47	6	3
Unable to work	—	—	—	—	—	—	—	—	—	—	100	100	—	—

<sup>1</sup> Less than 0.5%.

thus tenure. The various tenure classes reported are listed and defined below:

**Full-owner operators:** those who operate land which they own; they do not rent land to or from others.

**Part-owner operators:** those who operate land which they own and rent additional land from others.

**Full-owner operator-landlords:** those who operate some of the land they own, but also rent out some land.

**Part-owner operator-landlords:** those who operate part of their own land, but also rent to and from others.

**Nonoperator-landlords:** those who operate none of their land, but rent land to others.

**Nonoperators:** those who operate none of their land and rent none of it to others. Land held by this group was idle or abandoned.

The largest tenure group, in terms of both owners and acreage owned, was the full-owner operator group, which represented 40% of the owners and 41% of the acreage owned (Figure 4). Those owners classified as nonoperators represented the next largest group (22%), but only held 6% of the land. Included in this group

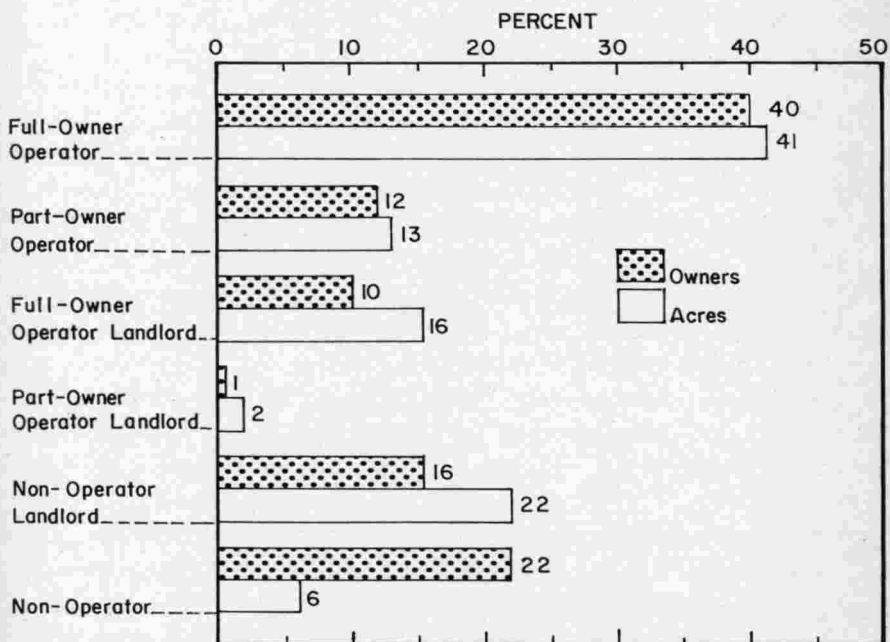


Figure 4. Percentage distribution of owners and acres of land owned by tenure, Tennessee, 1960.

were owners who held rural land only for a place of residence. This group held an average of only 18 acres compared to an average of 69 acres for the full-owner operators. In each of the three sections of the state the same patterns were observed for these two groups with only one minor exception. Nonoperator-landlords represented a larger percentage of owners in West Tennessee than did nonoperators. An explanation might have been the relatively high proportion of owners in West Tennessee who were retired farmers. Also West Tennessee is not as industrialized as the other sections; thus there is reason to believe that fewer people in that section own and use rural land only as a place of residence. Part-owner operators which accounted for about 12% of the owners and 13% of the rural land are of increasing importance in agriculture. As the tenant classes have diminished among farm operators in recent years, the part-owner farm operator has become more important. The percentage of farm operators in the state who were part-owners increased from 7.5% in 1945 to 18.3% in 1960.

Combining the four operator groups: full- and part-owner operators and full- and part-operator landlords, it was found that they represented 63% of the owners and 72% of the acreage owned. The nonoperator groups (nonoperator-landlords and nonoperators) accounted for the remaining 37% of the owners and 28% of the acreage.

*Tenure and type of owners.* Husband and wife represented the largest percentage of owners and acres owned in all the tenure groups. However, the importance of this type of owner diminished in the nonoperator-landlord and nonoperator groups. This suggests that upon the death of one spouse, the surviving owner tends to quit operating the land and rent it out or leave it idle. Other types of owners, such as single men, single women, partnership or estates, and individual plus partnership or estates were more important in the nonoperator groups.

*Tenure and residence of owners.* A major proportion of the four tenure groups composed of operators and operator-landlords resided in rural areas. Owners in this group who resided in urban areas held only 10% of the land owned by the group. Nonoperator-landlords were almost equally divided between rural and urban as to the owner's residence. This group included many retired farmers who had moved to urban places to live. The average size holding for the nonoperator-landlord group was approximately 95 acres.

*Tenure and age of owners.* Full ownership of land is a long-

Table 7. Individual owners and acres of rural land by tenure; percentage distribution by age, Tennessee, 1960

Age group	Full-owner operator		Part-owner operator		Full-owner operator landlord		Part-owner operator landlord		Nonoperator landlord		Nonoperator	
	Owners	Acres	Owners	Acres	Owners	Acres	Owners	Acres	Owners	Acres	Owners	Acres
	-----Percent-----											
Under 25	2	1	—	—	—	—	—	—	10	5	11	32
25-34	15	11	12	13	6	8	41	17	6	5	16	2
35-44	20	17	25	16	16	16	27	22	4	3	23	25
45-54	19	21	27	29	9	9	24	35	17	13	16	5
55-64	20	32	27	25	35	34	8	26	20	17	15	12
65-74	21	15	9	17	31	31	—	—	26	32	12	9
75 & over	3	3	—	—	3	2	—	—	17	25	7	15
All ages	100	100	100	100	100	100	100	100	100	100	100	100



run goal for many people. Therefore, a high percentage of the full owners are expected to be in the older age groups (Table 7).

Part-owner operatorship is apparently one of the steps on the tenure ladder to full ownership. Part-owner operators and the part-owner operator landlords are, on the average, younger.

Nonoperator landlords had a modal age of 65-74 years. This group of owners is made up largely of retired farmers. The relatively low modal age of 35-44 years for the tenure group classified as nonoperators may be explained by the kind of owners in this group. As stated previously, this group is made up mostly of owners who hold land primarily as a place of residence.

*Tenure of owners by color.* Approximately 95% of the owners were "white" owners. The remaining 5% were classified as "non-white." Table 8 shows the distribution of owners by color and by tenure. In East Tennessee all the owners reported in the sample were "white," while in Middle and West Tennessee about 93% were reported as "white." Nonoperator landlords and nonoperators were the most numerous type of "non-white" owners in Middle Tennessee. In West Tennessee the most numerous type of "non-white" owners were full-owner operators.

## METHOD OF ACQUISITION

**E**ACH owner in this study was classified as having acquired his land in one of the following methods:

purchase from relatives;

purchase from non-relatives;

gift or inheritance of full interest—refers to acreage received as a gift or inheritance with no others sharing in the interest;

gift or inheritance of part interest and purchase of rest—refers to acreage received as a gift or inheritance shared with other parties plus acreage purchased from the remaining parties, and

gift or inheritance of part interest without purchase of rest—refers to acreage received as a gift or inheritance shared with other parties with no acreage purchased from the remaining parties' shares.

Table 9 shows the percentage distribution of owners and acreage owned by each method of acquisition listed above for the three sections of the state and for the state as a whole. Eighty-five percent of the owners acquired land by purchase, and they owned approximately 71% of the land. Twenty-five percent of the owners, accounting for 29% of the land, acquired land through gift or in-

**Table 8. Individual owners and acres of rural land owned by tenure; percentage distribution by color of owner, Tennessee and three Divisions of the State, 1960**

Color of owner and section of state	Full-owner operator		Part-owner operator		Full-owner operator landlord		Part-owner operator landlord		Nonoperator landlord		Nonoperator	
	Owners	Acres	Owners	Acres	Owners	Acres	Owners	Acres	Owners	Acres	Owners	Acres
-----Percent-----												
West												
White	29	31	11	9	16	19	1	3	19	23	19	4
Non-white	4	4	—	—	1	1	—	—	2	6	—	—
Total	33	35	11	9	17	20	1	3	21	29	19	4
25 Middle												
White	41	46	16	15	9	14	1	1	10	16	17	4
Non-white	2	1	1	1	—	—	—	—	2	2	3	1
Total	43	47	16	16	9	14	1	1	12	18	20	5
East												
White	37	36	8	11	10	16	1	3	19	26	25	9
Non-white	—	—	—	—	—	—	—	—	—	—	—	—
Total	37	36	8	11	10	16	1	3	19	26	25	9
State												
White	38	41	12	13	10	16	1	2	15	20	21	6
Non-white	2	1	1	1	1	1	—	—	1	1	1	1
Total	40	42	12	14	10	16	1	2	16	21	22	6

<sup>1</sup> Less than 0.5%.

**Table 9. Individual owners and acres of rural land owned, percentage distribution by method of acquisition, Tennessee and three Divisions of the State, 1960<sup>1</sup>**

Section	Purchase from				Gift or inheritance of					
	Relatives		Non-relatives		Full interest		Part interest and purchase of rest		Part interest without purchase of rest	
	Owners Percent	Acres	Owners Percent	Acres	Owners Percent	Acres	Owners Percent	Acres	Owners Percent	Acres
West	8	6	76	72	21	20	1	1	4	2
Middle	25	16	57	53	16	16	7	13	4	2
East	29	22	60	49	18	22	5	6	1	1
State	24	16	61	56	17	18	5	9	2	2

<sup>1</sup> Percentages of owners may add to more than 100.0 since an owner may appear in more than one column.

heritance. The fact that the percentage of owners total 110% indicates that 10% of the owners acquired land by a combination of methods.

In general, the three sections of the state followed very closely the pattern for the state as a whole concerning the percentage of acreage and owners who acquired their land either by purchase or by gratuities. However, a breakdown of these two broad categories indicated a wider range of variation between the sections. About 9 out of 10 of the owners in West Tennessee who purchased their land did so from non-relatives, while in Middle and East Tennessee about one-third of the owners who purchased land did so from relatives. A majority of the owners in all three sections who received their land by gift or inheritance acquired full interest in the land. In West Tennessee, acquisition of full interest by gift or inheritance was more prevalent than in the other two sections. In Middle and East Tennessee, gift or inheritance of part interest with purchase of the rest was more important than in West Tennessee. Acquisition by gift or inheritance of part interest without purchase of the rest was about of equal importance in West and Middle Tennessee and of less importance in East Tennessee.

*Method of acquisition by type of owner.* A majority (about 80%) of husband and wife owners, accounting for an equal proportion of the acreage, acquired their land by purchase. Thirteen percent of these owners and acreage was acquired by gift or inheritance of full interest. The remaining husband and wife owners acquired their land by gift or inheritance of part interest and purchase of the remainder.

The next largest group of individual owners in the state was single women. Purchase was also the most important method of acquisition for this group. Fifty-eight percent of these owners acquired land by this method. However, purchase acquisition was not as important to this group as to the husband and wife group. Thirty-three percent of the single women owners acquired their land by gift or inheritance of full interest, but they accounted for 68% of the acreage held by this group.

Single men were very similar to husband and wife as to their method of land acquisition. Approximately 85% of the owners in this group acquired about an equal percent of the acreage by purchase from non-relatives. The other two types of owners, partnership or estate and individual plus partnership or estate, acquired most of their land by gift or inheritance of part interest without purchase of the rest.

In general, the methods of land acquisition in the three regions

were similar for the various types of owners except for one noticeable variation. Single women in West Tennessee acquired a much larger percentage of their land by purchase than was true in other areas. Most of the land purchased by single women in West Tennessee was purchased from non-relatives, which indicates that investment motives for holding land were probably more important for single women in this area than in the other areas.

*Method of acquisition by tenure.* A majority of the owners in all tenure groups acquired their land by purchase; however, part-owner operator landlords acquired the largest part of their land by purchase from relatives.

Acquisition by gift or inheritance of part interest without purchase of rest was of more importance to the nonoperator groups than to the operator groups. All three sections of the state were remarkably similar in this respect.

*Method of acquisition by kind of land owned.* Purchase was the most frequent method of acquiring farmland; approximately 85% was acquired by purchase. The largest part of this was purchased from non-relatives and consisted of larger-than-average size holdings. Farmland purchased from relatives consisted mainly of small holdings. All other types of land, except commercial forest, were acquired mainly through purchase, but in varying degrees.

For those who hold commercial forestland only, three-fifths of both the owners and land owned was acquired by gift or inheritance of full interest. That a higher proportion of commercial forestland was transferred through inheritance should be expected. This form of transfer from one generation to the next is essential in commercial forestland if individual ownership is to prevail under present conditions due to the long time element required in timber production.

*Method of acquisition by age of owner.* Inheritance and gift were the primary means of acquisition for owners less than 25 years of age (Table 10). Almost 8 out of 10 owners in this age class had acquired their land through gratuities. Acquisitions by purchase were reported to have occurred primarily between the ages of 25 and 65 years with considerable concentration between 25 and 45 years of age.

## FINANCIAL ARRANGEMENTS

**I**N Table 11 all owners and all lands are divided into three categories based on indebtedness in 1960. The largest category of owners was those who held their land free of debt. This group made up about 85% of the owners, and they held about 85% of the

**Table 10. Age of owner in 1960 and method and date of acquisition of 1960 holdings**

Age, 1960	Acquisition other than by purchase	Acquisition by purchase					
		Before 1920	1921-30	1931-40	1941-50	1951-55	1956-60
----- Percent -----							
Under 25	79	—	—	—	—	—	21
25-34	10	—	—	2	17	23	48
35-44	11	—	—	6	37	31	15
45-54	15	—	1	19	44	11	9
55-64	12	9	16	28	25	6	4
65-74	17	18	1	19	17	11	6
75 & over	31	37	6	14	11	—	—

rural land. The remaining 15% of the owners with debt against their land reported mortgage as the most common type of contract. A few owners in East Tennessee reported that purchase contracts were used as a form of financing, but these owners represented a negligible part of the total in that section.<sup>6</sup>

**Table 11. Individual owners and acres of rural land owned, percentage distribution by financial arrangement, Tennessee and three Divisions of the State, 1960\***

Item	West		Middle		East		State	
	Owners	Acres	Owners	Acres	Owners	Acres	Owners	Acres
----- Percent -----								
Debt free	90	83	85	86	84	86	85	85
Mortgaged	11	17	15	14	17	14	15	15
Purchase contract	—	—	—	—	1	1	1	1

\* Percentages of owners will add to more than 100.0 in some cases since some owners appear in more than 1 position.

<sup>1</sup> Less than 0.5%.

*Financial arrangements by kind of land.* Owners of commercial forest and a combination of commercial forest and other land held approximately 94% of their land free of debt, whereas owners with holdings containing farmland held a smaller proportion of

<sup>6</sup> Purchase contracts are sometimes used with low equity financing. The contract provides for transfer of title to the buyer when a specified part of the price has been paid.

their land free of debt (approximately 84%). West Tennessee, characterized by a large proportion of farmland, showed a higher percentage of its land to be held under mortgage than did the other sections.

On mortgaged land the debt remaining amounted to about one-third its value. However, this is an average of all kinds of land. Table 12 shows the ratio of real estate debt to the value of the encumbered land, along with a summary of the method of acquisition

**Table 12. Ratio of real estate debt to value of indebted land, and methods of acquisition, percentage distribution by kind of land, Tennessee, 1960**

Kind of land	Ratio	Method of Acquisition	
		Purchase	Gratuities
Percentage of acreage			
Farmland only	.36	75	25
Commercial forest only	.10	33	67
Other rural land only	.57	45	55
Farmland plus commercial forest	.30	71	29
Farmland plus other	.19	66	34
Commercial forest plus other	.53	86	14
Farmland plus commercial forest plus other	.34	75	25
All kinds	.33	71	29

of each kind of land. Most of the categories which include farmland owed about one-third of the value on the land. One exception was the farmland plus other group which owed only 19% of the value. Of all the groups that included farmland, this group reported the largest percentage acquired by gratuities of various kinds, and this is probably the reason for the low ratio of debt to value.

A majority of the acreage of commercial forest and other rural land was acquired by methods other than purchase (Table 12). It could be expected, therefore, that the ratio of debt to value would be lower than for farmland. This was the case for commercial forest, in which only 10% of the value was owed. But for other rural land the indebtedness amounted to 57% of the land value in spite of the fact that a large part of other rural land was acquired by gift or inheritance. The reason, perhaps, is that much rural land is used for residential purposes. This kind of land is usually more valu-

able because of its location and improvements and one may expect a higher ratio of real estate debt.

*Financial arrangements by tenure.* The nonoperator groups held the largest proportion of their land debt free. Over 90% of the land held by the two nonoperator groups was held debt free as compared to less than 85% for operator groups (Table 13). The two groups that included part-owners held a higher proportion of their land under mortgage than any other group. Part-owners tended to be younger than other owners and therefore had had less time to accumulate the capital necessary to gain full equity in their land. In general, the amount of equity in land closely followed the average age of the different tenure groups. Both equity and age usually increase from part-owners to full-owners to nonoperators.

### CONCENTRATION OF LAND OWNERSHIP

THE rural land in Tennessee was not equally divided among the estimated 253,000 owners in 1960. There were a few very large ownership units, but most were very small units.

An analysis of concentration was made by arraying the sample ownership units in order from smallest to largest. This was done for all owners, then for individual owners only. The array of owners was then divided into deciles such that each contained 10% of the sample. The percentage of acreage and value was then tabulated for each decile. Table 14 shows the results of these tabulations.

The average size unit of 77 acres was found within the seventh decile of owners as arrayed in Table 14. In other words, approximately two-thirds of the owners held an average of less than 77 acres, while 30% of the owners held larger-than-average size units. The two-thirds of the owners holding below-average size units owned only 26% of the land. The remaining 74% of the acreage was held by owners of above-average size units.

The extent of concentration stands out best by comparing the extremes of the distribution; in case of all owners, the first decile held less than 0.5% of the acreage, while the tenth decile owned about 40% of land.

One would expect an uneven distribution of owners and acreage when "all owners" were considered because of the very large holdings of a few institutional types of owners. When these institutional owners were excluded and only individual owners were considered, the distribution was somewhat less uneven, but concentration of ownership was still strongly evident.



**Table 13. Acres owned debt free and mortgaged; percentage distribution by tenure, Tennessee and three Divisions of the State, 1960**

Tenure	West		Middle		East		State	
	Debt free	Mortgaged	Debt free	Mortgaged	Debt free	Mortgaged	Debt free	Mortgaged
	----- Percent -----							
Full-owner operator	74	26	88	12	81	19	84	16
Part-owner operator	100	—	70	30	90	10	79	21
Full-owner operator landlord	74	26	89	11	81	19	83	17
Part-owner operator landlord	53	47	100	—	49	51	61	39
Nonoperator landlord	95	5	89	11	96	4	93	7
Nonoperator	100	—	92	8	93	7	94	6
Total	83	17	86	14	86	14	85	15

**Table 14. Concentration of land ownership for all owners and for individual owners only in order of size of holding from smallest to largest, Tennessee, 1960**

Percent owners	All owners		Individual owners	
	Percent acres	Percent value	Percent acres	Percent value
10	1	3	1	5
20	1	8	1	10
30	3	12	3	17
40	5	17	6	24
50	10	21	11	31
60	17	29	19	44
70	26	34	30	50
80	39	42	43	63
90	60	75	61	76
100	100	100	100	100

<sup>1</sup> Less than 0.5%.

Acreage owned is not the only measure of concentration. Quality of soil, nearness to market, expected future value, and many other factors are important in determining the value of a parcel of land. Value of the land may also be used to measure the concentration of landed wealth. The columns headed "percent value" in Table 14 show the percentage of the total value of rural land held by the corresponding percentage of owners as shown in column 1. It was found that the value was more evenly distributed than acreage. The seventh decile which showed 26% of the acreage owned by "all owners" and 30% by individuals shows 34% and 50% of the value for these two groups, respectively. By comparing the extremes of the distribution, we see that the first decile held 5% of the value, while the tenth decile owned 24% of the total estimated value of rural land.

*Concentration curves.* In Figure 5 a cumulative percentage distribution of owners was plotted on the horizontal axis and a cumulative percentage distribution of acres or values was plotted on the vertical axis. If perfect equality existed between the magnitudes being measured, the concentration curve would be a straight line running diagonally across the graph. Therefore, deviations away from this line of perfect equality are a measure of concentration.

% OF ACREAGE  
OR VALUE

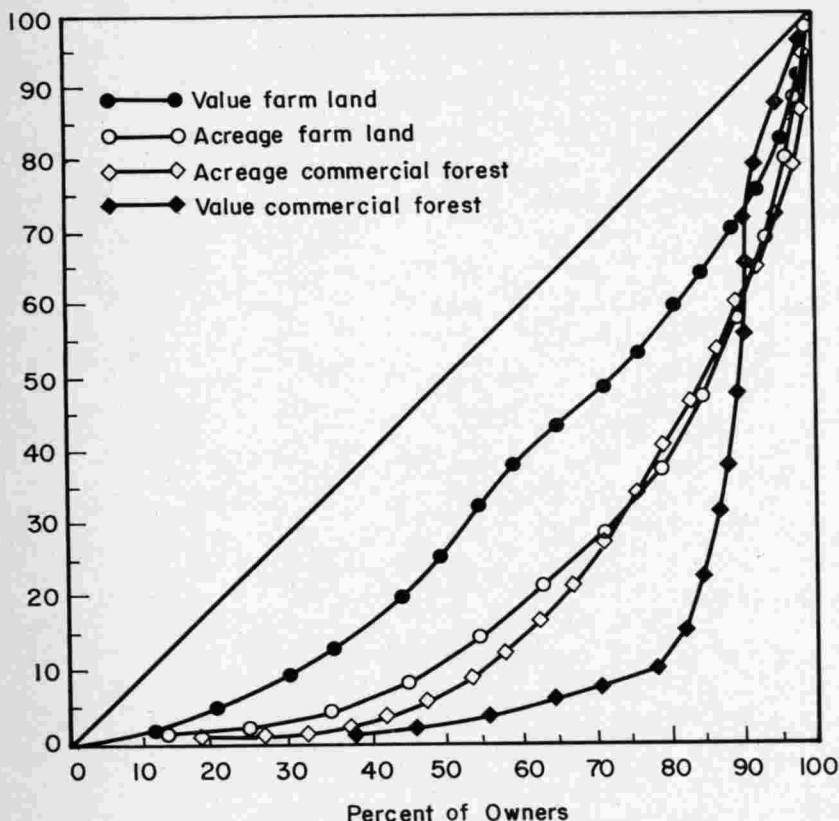


Figure 5. Concentration of acreage and value of rural land ownership in Tennessee, 1960.

The farther a particular concentration curve lies from the diagonal line, the higher the degree of concentration.

Acreage was more concentrated than values as shown in Figure 5. That is, acreage was more unevenly distributed than value. Also the concentration of acreage between "all owners" and "individual owners" was very similar. However, the concentration of value between these two groups of owners was much farther apart.

*Concentration by kind of land.* In Figure 6 the concentration of acreage and value was shown by the kind of land owned. Farmland and commercial forest were more concentrated than other land. The reason for this is that farming and commercial forestry require larger units for efficient operation than is the case for other types of land uses.

% OF ACREAGE  
OR VALUE

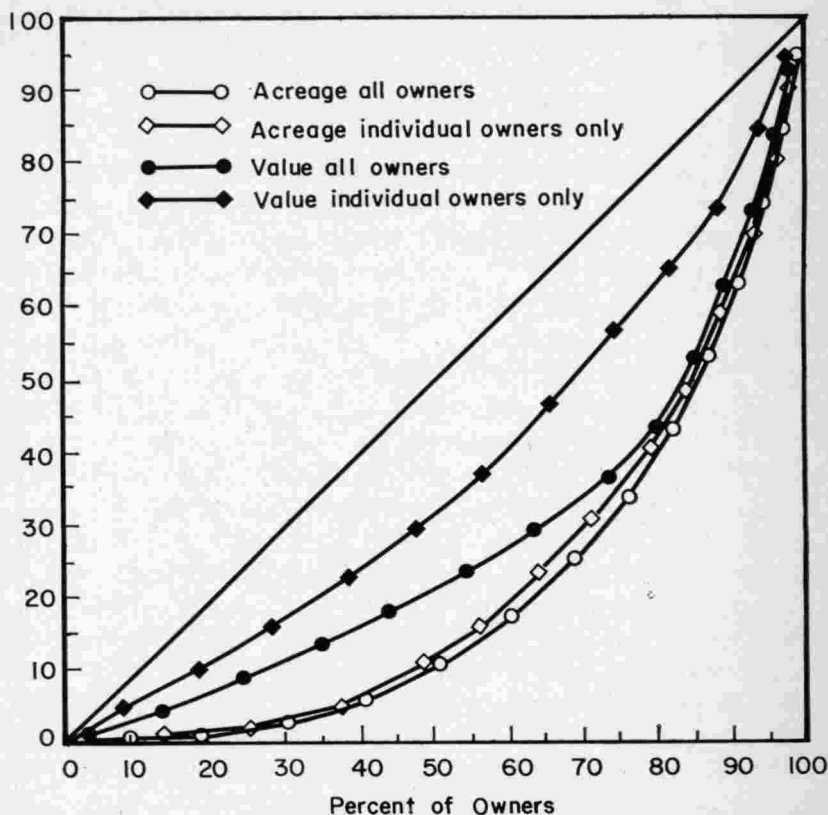


Figure 6. Concentration of acreage and value of rural land ownership for farm land and commercial forest in Tennessee, 1960.

Differences in the amount of land required per operating unit in the various uses provide an explanation for the relatively high degree of concentration of ownership of rural land. Given the uses and number of owners of rural land in Tennessee, it would be undesirable and uneconomical to have an equal distribution of land among all owners. The owner who holds land primarily as a place for rural residence wants and needs only a small acreage, while commercial farmers and forestland owners need and use large acreages per unit. In the future we may expect an increasing amount of concentration of land ownership in the state because the size of the operating unit in both farming and commercial forestry will increase and also because of the increases in numbers of rural non-farm residents.

When value was used as a measure of concentration, the results were as shown by the dotted lines in Figure 6. Commercial forest was the most highly concentrated in terms of value. It was interesting to note that the value of commercial forest was more concentrated than acreage. This supports the well established belief that generally the small forestland owner does not do as good a job in forest management as the larger commercial forest owner.

The value of farmland was less concentrated than the acreage of farmland. Here the effect of investment in building rural residences by part-time farmers and others who carry on small-farm operations was evident. The value of farmland depended largely on the type of farming for which the land was used, as well as size.

### TRANSFER PLANS

ALL owners were classified into 1 of 9 groups depending on the plans that they had for transferring their land. These 9 groups were: 1) plan to sell on open market; 2) plan to sell to relatives; 3) transfer by trust; 4) transfer by gift; 5) no plans to transfer within 2 or 3 years; 6) sell part on open market and part to relatives; 7) sell part on open market and no plan for the rest; 8) sell part to relatives and no plan for rest; and 9) transfer part as gift and no plan for rest. Owners were further sub-classified into age groups and kind of land owned.

Approximately 93% of the owners, which accounted for 91% of the acreage, reported having no plan to transfer their land. About 5% of the owners, representing 6% of the land, reported plans to sell on the open market. The remaining 2% of the owners and 3% of the land were scattered among the other seven transfer plans.

The owners reporting "no plan" for transfer were distributed fairly evenly over all age groups, with the highest concentration in the 55-64 year age group. Twenty-two percent of the owners and 28% of the acreage owned were in this age group. Owners reporting plans to sell on the open market represented only a small percentage of the total owners, but most of these owners were in the 35-44 age group. Each of the three sections of the state followed the above mentioned characteristics closely.

### LAND USES AND CHANGES IN USE

#### Land Uses

CERTAIN kinds of land tend to become associated with particular groups of individuals through the process of land transfer.

Significant ownership patterns in the kind of land held were found by different classifications of the owners.

For the purpose of this study, rural land was classified into three categories. An owner's total holding consisted of one of the following three kinds of land or combinations of the three:

**Farmland:** includes farmsteads, cropland, orchards, open pasture, and woodland pasture.

**Commercial forest:** includes land used for producing timber products.

**Other rural land:** includes unused farmland, rural nonfarm residence, and rural commercial land.

Table 15 shows the importance of each kind or kinds of land in the three sections of the state. The largest percentage of the owners held farmland only or farmland plus the other kinds of land. No owners of commercial forestland only were reported in the western section. Less than 1% of the owners in Middle Tennessee held forestland only, while in East Tennessee over 4% of the owners did so. Commercial forestland in West Tennessee was held in combination with other kinds of land.

In general, throughout the state owners of farmland only, other

**Table 15. Individual owners and acreage of rural land owned by kind of land, Tennessee and three Divisions of the State, 1960**

Kind of land	West		Middle		East		State	
	Owners	Acres	Owners	Acres	Owners	Acres	Owners	Acres
	----- Percent -----							
Farmland only	27	18	27	19	20	11	24	16
Commercial forest only	—	—	1	<sup>1</sup>	4	5	2	2
Other rural land only	17	3	14	2	11	2	13	2
Farmland plus commercial forest	13	18	38	53	33	55	32	47
Farmland plus other	17	17	6	8	8	5	9	9
Commercial forest plus other	2	1	4	2	10	2	6	2
Farmland plus commercial forest plus other	24	43	10	15	14	20	14	22
Total	100	100	100	100	100	100	100	100

<sup>1</sup> Less than 0.5%.

rural land only, and commercial forest plus other had smaller-than-average size holdings. Those owners who reported owning commercial forest in combination with farmland had larger-than-average size acreages.

*Kind of land by type of owner.* Three-fourths of the owners of farmland were husband and wife. The remaining one-fourth was divided among other individual owners in this way: single men, 8%; single women, 10%; partnership or estate, 4%; and individual plus partnership or estates, 2%. Acreage owned by each type of owner was divided in almost the same ratio as the proportion of owners they represented.

Husband and wife also represented the largest percentage of owners holding commercial forest (50%). Single men represented about the same percentage of owners of commercial forest as they did farmland—8% in both cases. Single women, however, accounted for a much larger proportion of commercial forest owners (27%) than they did of farmland owners (10%).

For land classified as other rural land, husband and wife represented the largest percent of owners (54%), but held only 13% of the acreage. A high percentage of the acreage of this kind of land was held by government and corporate owners. Private corporations held 15% of other rural land while government agencies held 23%. When only individual owners of other rural land were considered, owners and acreage were divided in about the same ratio as the farmland was divided.

Approximately 60% of the owners, who accounted for approximately 78% of the land, owned some combination of the three kinds of land (Table 16). Farmland plus commercial forest was the most frequent combination; 32% of the owners held this combination, and accounted for 47% of the land (Table 15). Within this group, husband and wife were, by far, the most important type of owner. They represented 80% of both owners and acreage owned.

The next most popular combination of the three kinds of land was a combination of all three—farmland plus commercial forest plus other. Fourteen percent of the owners held 20% of the land in this combination.

Almost of equal importance in both owners and acreage owned were the two groups reported as farmland plus other and commercial forest plus other. Husband and wife also represented the largest percentage of owners in these two groups, but not as large as in the other groups. Partnership or estate was an important type of ownership unit in the farmland plus other group. Single men

were an important type of owner in the commercial forest plus other group.

*Kind of land by location of owner's residence.* Approximately 84% of the owners of farmland lived in rural areas, and they owned 76% of the farmland. The owners of farmland that lived in urban areas owned a larger-than-average size unit. Most owners of farmland only who lived in urban places were retired farmers or business or professional people.

Approximately 70% of the owners of commercial forest, holding an equal percentage of the land, lived in urban areas. Owners of commercial forests usually held this kind of land as a long-term investment.

Most of the private owners of land classified as other rural land were reported to be rural residents. This kind of land, which includes unused or abandoned farmland and rural nonfarm land, was held mostly by people who owned the land for a place of residence but worked in off-farm occupations.

Most of the owners of farmland plus commercial forest (78%) lived in rural areas, and they owned 81% of the land held in this combination.

The three remaining combinations of land—farmland plus other, commercial forest plus other, and farmland plus commercial forest plus other—were held mostly by owners reporting their residence as rural. They owned about the same percentage of land as the percentage of owners they represented.

*Kind of land by occupation of owner.* Table 16 presents a classification by kind and combination of kinds of land held by the various occupational groups. Table 17 shows in summary the total estimated acreage distribution for each of the four types of land uses among the various occupational groups. Over 80% of the farmland was held by people engaged in farming, either on a full-time or part-time basis or by retired farmers. Housewives, holding 11% of the farmland, were the principal nonfarm occupational group owning farmland. Some of these owners no doubt depended upon farming as their main source of income; how many is not known.

Sixty percent of the commercial forestland in the state was owned by farmers and part-time farmers. Other major owners of commercial forestland were housewives, laborers and others, and business and professional people. The latter two groups were the only groups who were holding commercial forestland only. Other occupational groups owning commercial forestland also held other kinds of land (Table 16).

Twenty-five percent of the idle and abandoned land was owned



Table 16. Ownership of various types and combination of types of land by occupation of owners, Tennessee, 1960

Occupation	Farmland only		Commercial forest only		Other rural land only		Farmland plus commercial forest		Farmland plus other		Commercial forest plus other		Farmland plus commercial forest plus other	
	Ow.	Ac.	Ow.	Ac.	Ow.	Ac.	Ow.	Ac.	Ow.	Ac.	Ow.	Ac.	Ow.	Ac.
	-----Percent-----													
Farmer	32	19	—	—	—	—	42	51	8	8	—	—	18	22
Part-time farmer	37	21	—	—	—	—	43	59	4	4	<sup>1</sup>	<sup>1</sup>	16	16
Housewife	16	13	—	—	23	3	29	49	11	12	10	5	11	18
Business or professional	21	7	29	23	11	14	16	16	16	21	1	<sup>1</sup>	6	19
Laborers and others	1	<sup>1</sup>	6	12	49	9	7	20	4	10	24	19	9	30
Retired farmer	3	3	—	—	18	<sup>1</sup>	5	14	39	28	4	3	31	52
Retired other	15	33	—	—	22	1	15	19	7	13	26	11	15	23
Retired other, now farmer	50	19	—	—	—	—	42	70	4	4	—	—	4	7
Unable to work	—	—	—	—	—	—	—	—	100	100	—	—	—	—
Not reported	11	1	—	—	24	30	65	69	—	—	—	—	—	—

<sup>1</sup> Less than 0.5%.

**Table 17. Distribution of various types of land uses by occupation of owners, Tennessee, 1960**

Occupation	Farmland		Commercial forest		Idle and abandoned land		Land used for urban purposes	
	Acres	%	Acres	%	Acres	%	Acres	%
Farmer	4,293,525	46	1,830,542	35	238,826	17	2,334	3
Part-time farmer	2,453,120	26	1,306,429	25	123,654	8	4,750	5
Housewife	1,041,726	11	608,224	12	349,937	25	25,103	26
Business and professional	133,022	1	347,683	7	180,581	13	1,922	2
Laborers and others	154,668	2	584,701	11	288,952	21	38,378	40
Retired farmer	615,715	7	146,058	3	147,457	11	13,689	14
Retired other	284,193	3	92,603	2	13,279	1	7,671	8
Retired other, now farmer	330,362	4	238,128	4	4,426	<sup>1</sup>	—	—
Unable to work	16,073	<sup>1</sup>	—	—	9,822	1	1,786	2
Not reported	26,119	<sup>1</sup>	76,608	1	41,932	3	—	—
Total	9,348,523	100	5,230,976	100	1,398,866	100	95,633	100

<sup>1</sup> Less than 0.5%.

by housewives; laborers and others held about 21% of this land. Farmers, retired farmers, and part-time farmers all together owned over one-third of the idle and abandoned land.

About 95% of the urbanized land in rural areas of the state was owned by five of the occupational groups (Table 17). They were, in descending order of importance, laborers and others, housewife, retired farmer, retired other, and part-time farmer. This pattern of ownership of urbanized land was not unexpected. Urbanized land was defined as land occupied by a cluster of small-lot residences. People in these occupational categories living in rural areas usually reside in these urbanized neighborhoods.

### Land Use Changes

In order to examine some of the changes in land use between 1955-60, four classifications were made: 1) cropland included open pasture land as well as cultivated land; 2) woodland included both commercial forest and woodland pasture; 3) urbanized land included land used for residential purposes, and commercial and industrial tracts; and 4) idle land included all unused farmland, cut-over and abandoned timberland, and other rural land.

Tables 18 and 19 present a summary of changes among these uses from 1955 to 1960. Tables 18 and 19 differ from the other tables in this study in that all land including urban land owned by respondents was included rather than rural land only. The figures presented are for land uses in 1955 and in 1960.

Approximately 433,000 acres changed uses between 1955 and 1960. About 68,000 acres of this was merely an exchange between uses, leaving approximately 365,000 acres that represented a net change.

The data in Table 18 show that land in cropland and woodland has shifted to urban uses and idle land. Also, the data indicate that all sections of the state have experienced the same trend.

The largest absolute change in land use between 1955 and 1960 was the net change of approximately 100,000 acres from cropland and woodland to idle land. In percentage terms the increase in idle land was relatively small, only 7%. On the other hand, land used for urbanized purposes showed a net increase of only about 33,000 acres, but this was the greatest percentage change—42%. Cropland showed a net decrease of approximately 83,000 acres, or slightly over 1%. Woodland decreased approximately 49,000 acres, which was less than 1%.

In West Tennessee urbanized land increased by 77% which was almost double the percent increase in the other two divisions of the

**Table 18. Changes in land use, Tennessee and three separate divisions, 1955-1960**

Land use	1955 utilization	1960 utilization	Net increase or decrease	Percent change	Acres				
<b>West</b>									
Cropland	1,926,688	1,911,664	- 15,024	- 1					
Woodland	838,347	817,439	- 20,908	- 3					
Urbanized land	13,922	24,624	+ 10,702	+ 77					
Idle land	357,995	383,225	+ 25,230	+ 7					
<b>Middle</b>									
Cropland	3,773,130	3,762,584	- 10,546	- 1 <sup>1</sup>					
Woodland	3,672,498	3,647,306	- 25,192	- 1					
Urbanized land	27,965	36,282	+ 8,317	+ 30					
Idle land	831,430	858,851	+ 27,421	+ 3					
<b>East</b>									
Cropland	2,229,272	2,171,661	- 57,611	- 3					
Woodland	2,491,336	2,487,960	- 3,376	- 1 <sup>1</sup>					
Urbanized land	36,169	50,283	+ 14,114	+ 39					
Idle land	161,874	208,747	+ 46,873	+ 29					
<b>State</b>									
Cropland	7,929,090	7,845,909	- 83,181	- 1					
Woodland	7,002,181	6,952,705	- 49,476	- 1					
Urbanized land	78,056	111,189	+ 33,133	+ 42					
Idle land	1,351,299	1,450,823	+ 99,524	+ 7					

<sup>1</sup> Less than 0.5%.

state. However, the absolute increase of 10,702 acres in urbanized land in West Tennessee was only slightly larger than in the Middle

**Table 19. Changes in land use by kind of change, Tennessee and three separate divisions, 1955-1960**

Changes in land use, 1955-1960	West	Middle	East	State	Acres				
Cropland to woodland	1,835	7,222	31,312	40,369					
Cropland to urbanized land	9,345	6,451	6,573	22,369					
Cropland to idle land	33,811	58,665	90,470	182,946					
Woodland to cropland	25,233	38,684	33,716	97,633					
Woodland to urbanized land	—	—	703	703					
Woodland to idle land	—	—	2,985	2,985					
Idle land to cropland	4,734	23,108	37,028	64,870					
Idle land to woodland	2,490	6,270	2,716	11,476					
Idle land to urbanized land	1,357	1,866	6,838	10,061					

section and somewhat below the absolute increase in East Tennessee.

In East Tennessee idle land increased by 29%, which was a large increase compared to the other sections. The 3% decrease in cropland in this section was the highest in the state. Most of the increase in idle land came from previous cropland, as shown in Table 19. Also, a large part of the increase in urban land came from cropland, with most of the remainder from idle land.

Part-time farmers were most important in transferring land from cropland to idle land. None of the active farmer groups reported a transfer directly from cropland to urbanized land. Housewives, laborers and others, and retired farmers contributed most to the transfer of land to urbanized uses.

## APPENDIX

**Appendix Table I. Ownership and acreage estimates and sampling errors for Tennessee**

	Estimate	Standard error of estimate	Coefficient of variation of estimate  Percent
Farmland			
Owners	194,985	25,192	12.92
Acres	9,846,606	1,690,662	17.17
Commercial forest			
Owners	134,303	29,238	21.77
Acres	6,006,774	1,773,800	29.53
Other rural land			
Owners	102,968	24,764	24.05
Acres	2,303,896	1,162,085	50.44
Total rural land			
Owners	253,191	34,459	13.61
Acres	18,157,276	2,540,203	13.99

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