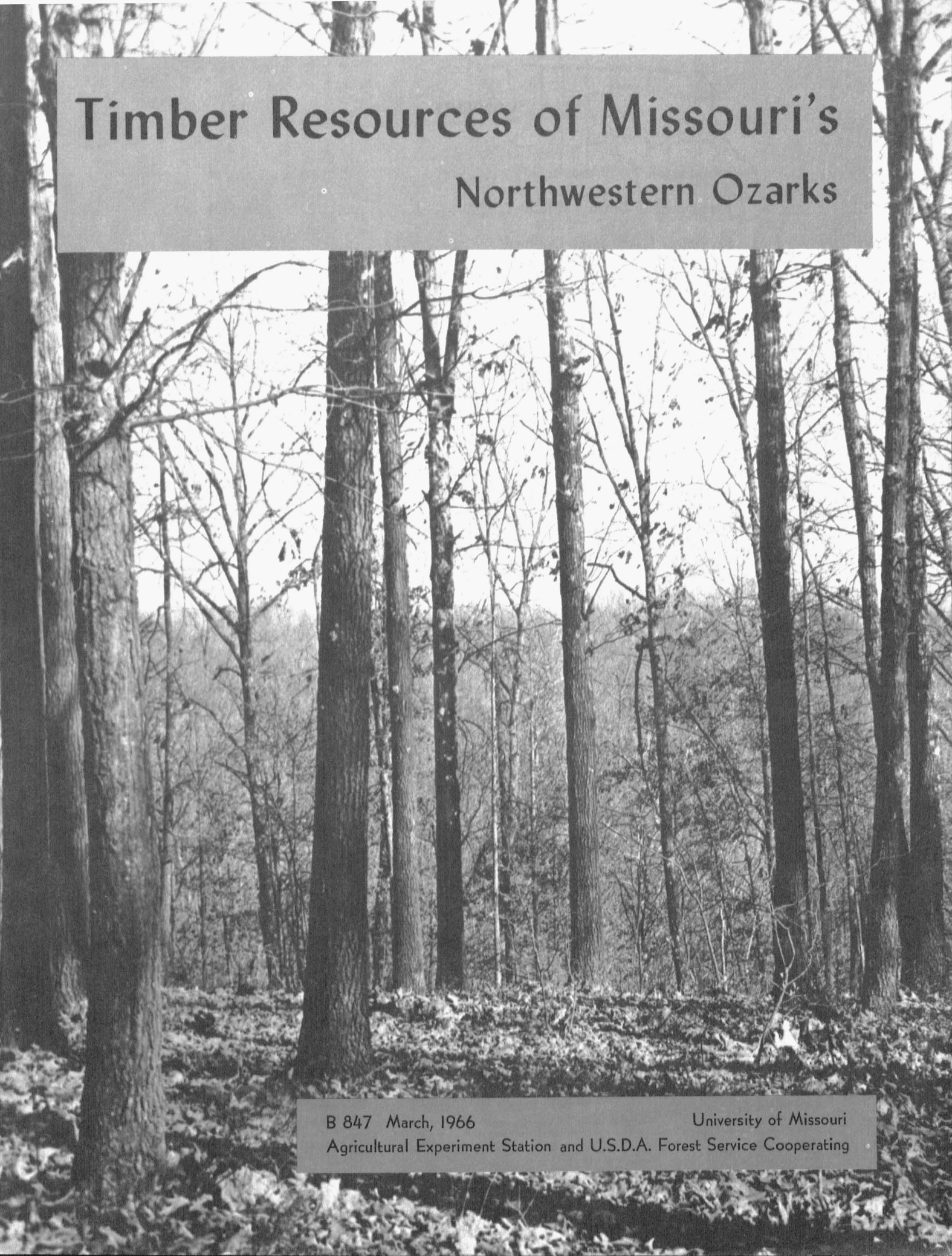
# Timber Resources of Missouri's Northwestern Ozarks



B 847 March, 1966 University of Missouri
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Cover Photo: White, post, and black oaks are the most important timber species in the Northwestern Ozarks Region.


**This bulletin reports on Missouri Agricultural Experiment Station Research Project 399, Forest Survey.**

*Figure 1.—Location of Northwestern Ozark Region in Missouri.*

## FOREWORD

This is the last in a series of five regional reports describing the timber resources of Missouri. It presents statistical data needed in long-range planning to meet future timber demands. In addition, it provides up-to-date information that will help rural communities and forest-based industries make greater use of forest resources.

The first forest survey of Missouri was made in 1947. Changes in timber cutting, land use, and tree growth since then have modified the forest. The resurvey, conducted in 1958 through 1960, reveals the changes that have occurred and the trends that have developed since the first survey.

This report is part of the nationwide Forest Service program to maintain a current account of our forest assets as authorized by Congress in the McSweeney-McNary Forest Research Act of May 22, 1928.

The State of Missouri, aware of the importance of its forest resources, appropriated $80,000 in the 70th session of the Missouri General Assembly to assist in inventorying these resources. This appropriation, supplementing federal funds, provided for a more intensive survey. Thus it is possible to present data by counties for the more heavily forested regions of the state.

The resurvey was conducted by the Lake States Forest Experiment Station in cooperation with the School of Forestry, University of Missouri, which administered the state functions of the survey. The Central States Forest Experiment Station participated in the studies of timber cut, assisted in compiling the data, and prepared this report.

The North Central Region of the U. S. Forest Service surveyed the National Forests in Missouri and the Missouri Conservation Commission and the T. J. Moss Tie Company provided men and equipment to assist in surveying areas of their interest. We gratefully acknowledge these contributions.

We also thank the U. S. Agricultural Stabilization and Conservation Service in Missouri and the Mark Twain and Clark National Forests for providing the field survey crews with office space and aerial photographs.

The resurvey was directed by Clarence D. Chase, leader of the Forest Survey Project at the Lake States Forest Experiment Station. Data were compiled by Burton L. Essex and Arthur G. Horn.

# Timber Resources of Missouri's Northwestern Ozarks

David A. Gansner

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The Northwestern Ozark Region covers 13 counties in south-central Missouri (Fig. 1, see page 3). It includes 5.1 million acres or 11 percent of the state's land area. Forest covers half of this land and influences most local economic activities. It should continue to do so for many years since most of the forest land is not suited for other uses.

Physical, social, and economic conditions in the region are similar to those in the rest of the Ozarks. Virtually all of the area is rural. Less than 5 percent of the state's population lives here and only Phelps and Pulaski Counties average more than 25 people per square mile. Rolla is the only community with more than 10,000 inhabitants.

There are few industries and most of the firms are small. Many of these firms process wood or food and depend on the forests and fields for raw materials. The more than 100 local primary-wood-using establishments provide a major source of income for local residents.

Much of the land area is rough and stony. There are many broad, smooth ridgetops which lend themselves to mechanized farming, but the soil on these areas is shallow and infertile. Hardpans underlie most flat ridges and impede drainage. Even though conditions are not the best, most of the land is farmed. A high percentage of the farmland is wooded and much of the woodland is grazed. Sales of livestock and dairy products contribute the most to farm derived incomes.

The Northwestern Ozarks is a haven for outdoor enthusiasts. The scenery is spectacular, especially in autumn when the leaves change color. Timbered watersheds feed several fishing streams including the Gasconade, Osage, and Big Piney Rivers. Springs, caves, and other natural attractions are numerous. Two of the state's largest lakes, Pomme De Terre Reservior and the Lake of the Ozarks, are located in the region. From early summer to late fall the Lake of the Ozarks bustles with activity and no other region in the state is more dedicated to the tourist.

## Forest Area Is Down 3 Percent

Forest area has decreased 66,000 acres or 3 percent since 1947. Increases occurred in Polk, Cedar, and other counties on the fringe of the prairie where a large amount of abandoned crop and pasture land reverted to forest. These increases, however, were more than offset in other areas by land clearing for residential and other nonforest uses. Significant declines in forest area occurred in Camden, Miller, and Morgan Counties where the Lake of the Ozarks is centered. In spite of the losses, forest still occupies 2,537,000 acres or 50 percent of the land in the Northwestern Ozarks.

The forest is well distributed. No county has less than 100,000 acres of forest and only Cedar, Polk, and St. Clair Counties are less than 40 percent forested. Camden has more forest land than any other county (292,000 acres) and is the most heavily forested (70 percent).

About 146,000 acres (6 percent) of the region's forest are classified noncommercial. Most of the noncommercial forest is unproductive; i.e., incapable of growing commercial crops of timber because of poor site conditions. The remainder is in state parks or other areas where cutting is prohibited.

## Sawtimber Stands Have Doubled

Between surveys many poletimber trees grew to sawtimber size. As a result, the area of sawtimber-size stands doubled (Fig 2).

Nonstocked commercial forest also increased sharply. The Northwestern Ozarks now contain more of this kind of land than any other region in Missouri. One-third of the region's commercial forest has been classified as nonstocked. This includes idle farmland reverting to forest but still in the brushy transitional stage, and stands of trees of too poor quality for growing stock because of fire or other abuse. Idle farmland accounted for most of the increase in nonstocked forest.

The area in poletimber and seedling-and-sapling stands declined, but still accounted for more than half of the commercial forest area.

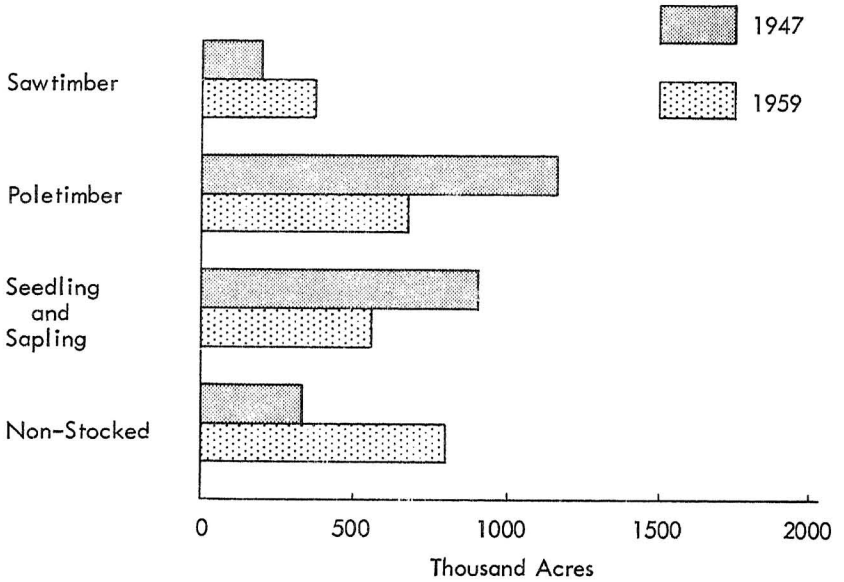


*Figure 2.—Commercial forest area by stand-size class, 1947 and 1959.*

## Hardwoods Prevail

Hardwoods predominate on 99 percent of the commercial forest in the Northwestern Ozarks. Three-fourths of the forest is either black-scarlet oak or post-blackjack oak (Fig. 3). A high percentage of the region's forest is post-blackjack oak, a common type on poor forest sites. Almost one-third of the state's post-blackjack oak forest is located here.

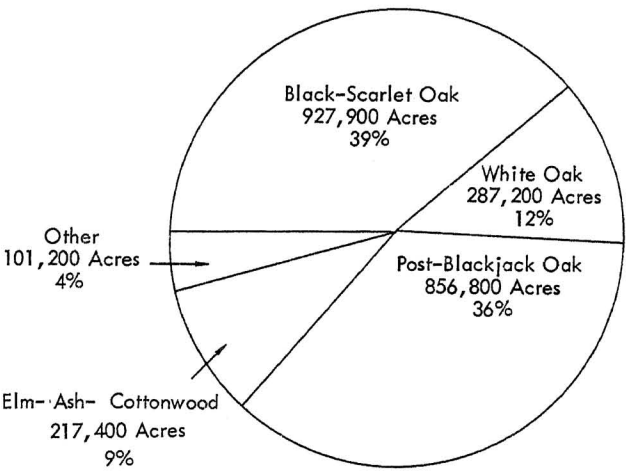


*Figure 3.—Commercial forest area by major forest types, 1959.*

## Farmers Own Most of the Forest

The pattern of forest ownership has not changed significantly since 1947. Ninety-four percent of the forest is privately owned and two-thirds of the private forest is owned by farmers (Fig. 4).

The public owns 139,000 acres of commercial forest. More than three-fourths of this is in the Mark Twain National Forest.

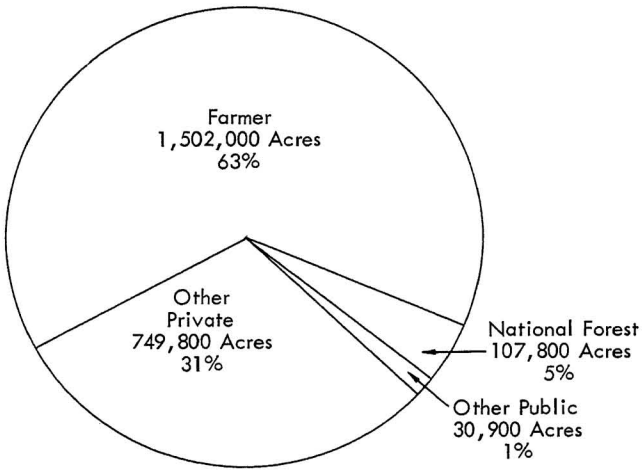


*Figure 4.—Commercial forest area by ownership, 1959.*

## A 13-Percent Increase in Growing-Stock Volume

In the 12 years between inventories, growing-stock volume increased 13 percent—an average of 0.5 cord or 40 cubic feet per commercial forest acre.[1] There are now 6.7 million cords of growing stock in the region (Fig. 5).

Most of the increase was in small timber. Pole-timber volume increased more than 40 percent. At the same time, cutting and an unusual amount of mortality due to drought in the 1950's reduced the

[1]Tables used to compute volumes for 1959 differ from those used to compute volumes for 1947. Adjustments were made in 1947 volumes to permit comparison with 1959 data.

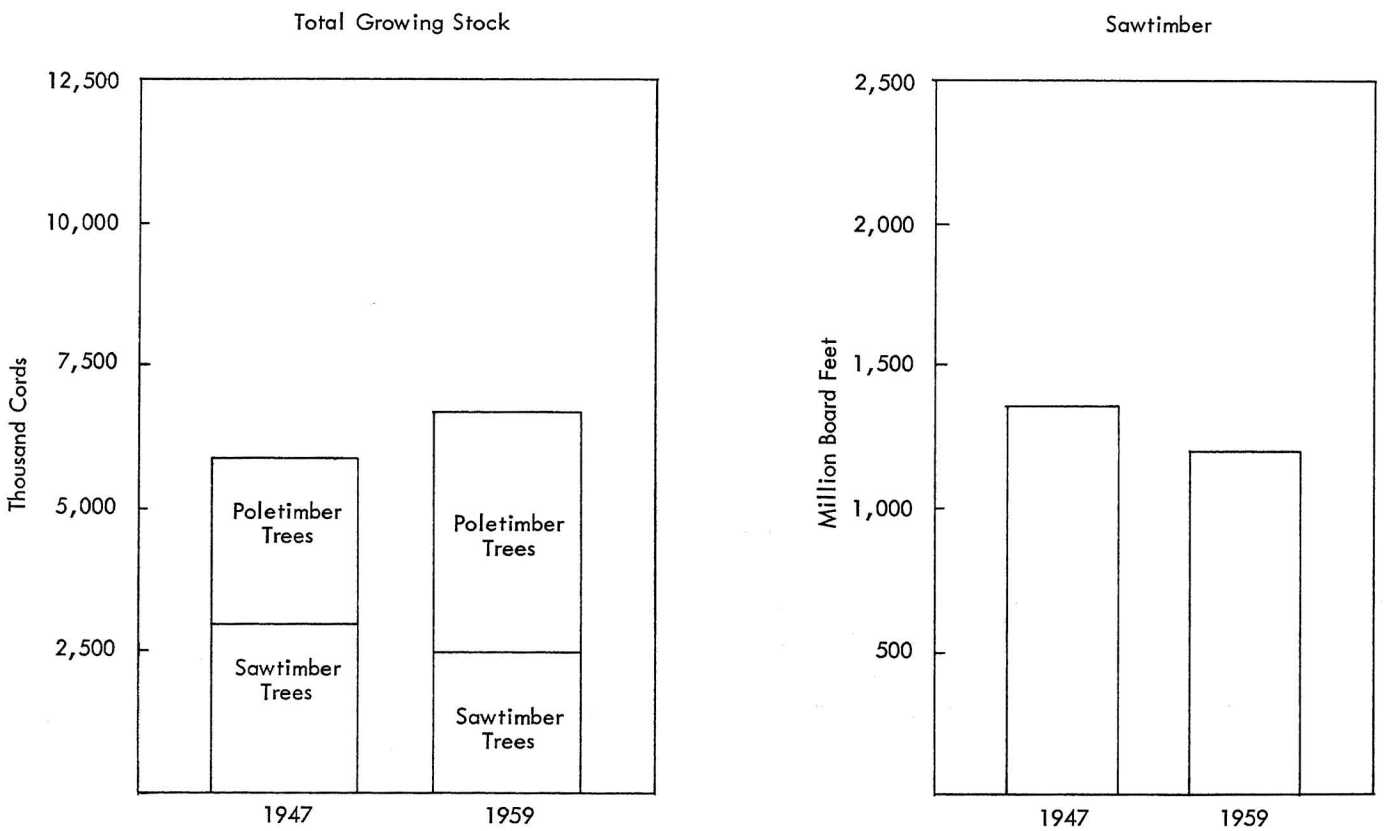


*Figure 5.—Volume of growing stock on commercial forest land, 1947 and 1959.*

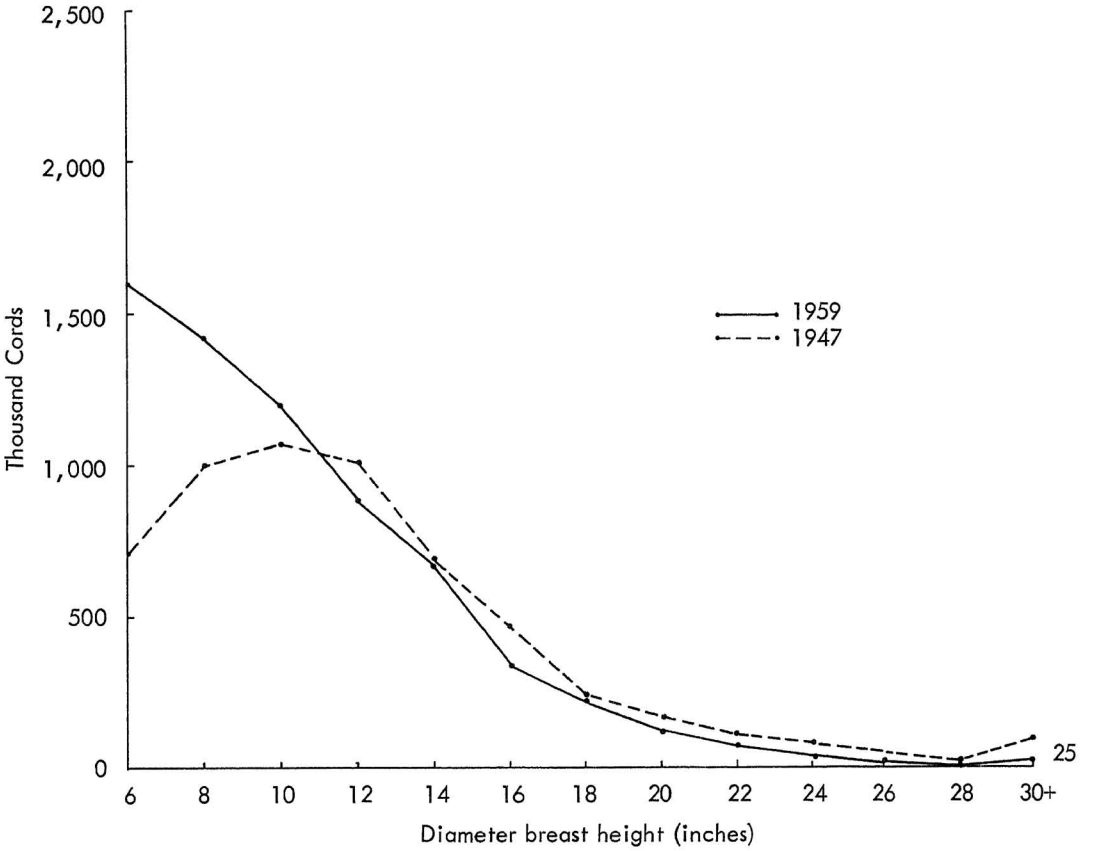


*Figure 6.—Volume of growing stock by tree-diameter classes, 1947 and 1959.*

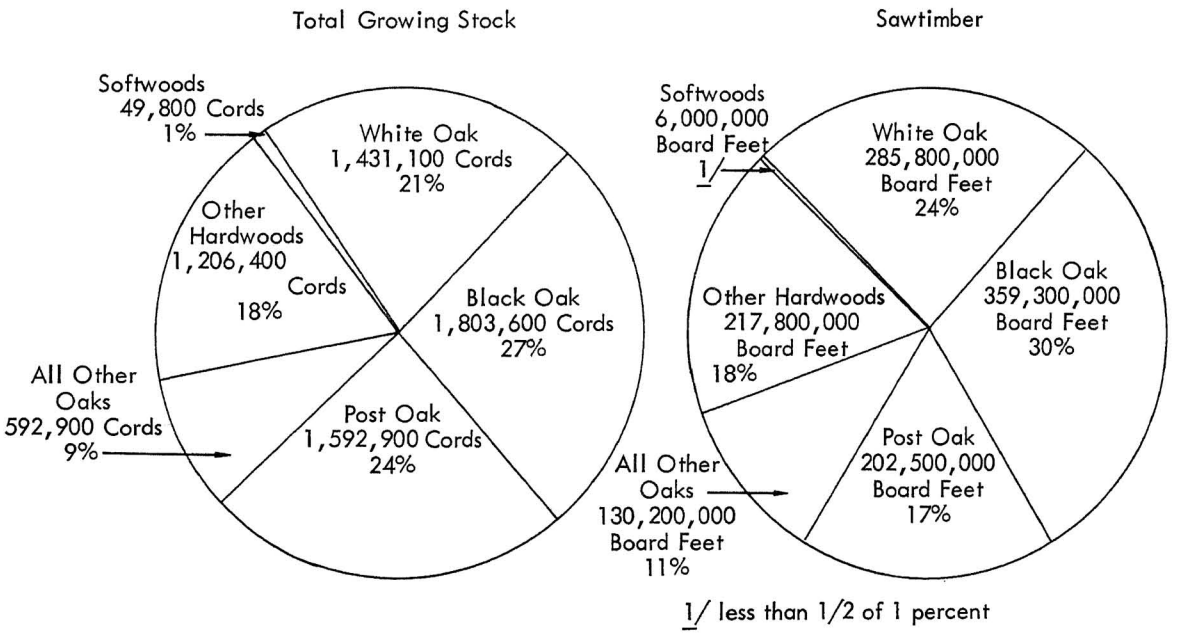


*Figure 7.—Growing stock by major species groups, 1959.*

volume in sawtimber trees. Thus, there has been a significant shift in the distribution of timber by size classes (Fig. 6). Today more than three-fourths of the region's timber volume is in trees less than 13 d.b.h.

The largest increase in volume occurred on oak species which contain more than four-fifths of the growing-stock volume (Fig. 7). Three species—black oak, post oak, and white oak—contain almost three-fourths of the regional volume.

## Supplies of High-Quality Timber Are Decreasing

Since 1947 cutting and mortality have reduced the volume of sawtimber in the Northwestern Ozarks by 12 percent. This decline amounts to an average of about 25 board feet per commercial forest acre. The current regional average of 503 board feet per acre is about 300 board feet short of the average for the state as a whole.

Substantial losses in sawtimber volume were recorded for almost all of the region's important timber species—especially in the larger size classes where high quality is concentrated. The volume in trees under 15 inches d.b.h. is down 1 percent, but the volume in larger trees is down 25 percent. Now, only one-fifth of the sawtimber volume is medium or better quality.

A look at the current growth-cut ratio shows that sawtimber volume is now increasing. The annual growth of sawtimber exceeds the annual cut by about 35 million board feet. This surplus is increasing the sawtimber resource at a rate of approximately 3 percent per year. But most of the increase is in small sawtimber which will not reach quality size for many years. High-quality timber of preferred species is still being cut faster than it is growing and if the trend continues, the supply of this timber will soon become very short in relation to demand.

## Most Growth Is on Small Timber

The region's growing-stock volume is increasing at an average annual rate of 358,000 cords or 5.4 percent before allowing for cutting. Saplings just reaching merchantable poletimber size (ingrowth) account for half of the total growth. Only 3 percent of the growth occurs on trees of sawtimber size (Fig. 8).

Saw-log volume is growing at an average annual rate of 58.5 million board feet or 4.9 percent before cutting. More than 90 percent of the sawtimber growth is the result of poletimber trees growing into the sawtimber size class. Because of the high mortality rate in large timber, caused by the prolonged drought of the late 1950's, growth on the original sawtimber volume is very low. In fact, high mortality caused a net reduction in volume or negative growth for a few species.

More than a third of the current sawtimber growth is on white oak. White oak sawtimber is increasing at a rate of more than 7 percent per year before cutting. Growth on red oak species, which were particularly susceptible to the drought, is only 6.7 million board feet or 1.4 percent. As the effects of the drought wear off, we can expect a rise in growth rates generally and for red oaks particularly.

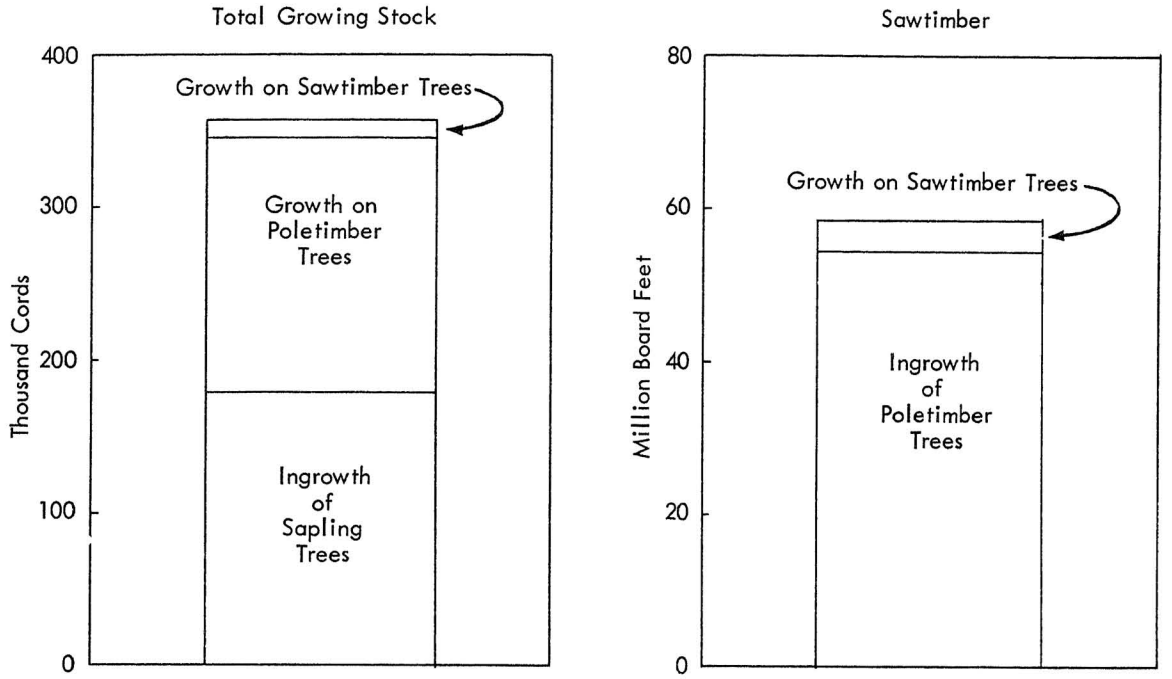


*Figure 8.—Periodic annual net growth on commercial forest land, 1959.*

## Annual Cut Is 100,000 Cords

About 100,000 cords of growing stock, including 25 million board feet of sawtimber, were cut from the Northwestern Ozarks during 1958. This was only about one-tenth of all the timber cut from the state that year.

Most of the cut was from small growing stock —over half from trees of poletimber size. Oak species accounted for the largest share of the total and white oak led all the species.

The cutting drain of 1958 was about 2 percent of both the growing-stock and sawtimber volume in the region.

## Large Amount of Small, Low-Grade Timber Could Be Harvested

The volume of timber that can be harvested annually during the next decade, while maintaining a well-balanced distribution of age classes and building a progressively desirable quality and quantity of growing stock, is called the desirable cut. In the Northwestern Ozarks, the desirable cut for the period 1959 to 1968 is about 200,000 cords. This is almost twice the actual rate of cutting (Fig. 9). The desirable cut of sawtimber, 50 million board feet per year, exceeds the current cut by about 25 million board feet. But the ratio of actual to desirable cut is not the same for all species and sizes of timber. Most of the desirable cut should come from small, low-grade hardwoods which have limited markets. For a few important timber species such as walnut, the actual cut already exceeds the recommended cut and the amount of overcutting is highest on large trees where quality is concentrated (Fig. 10).

In addition to growing stock, there are about 5 million cords of nongrowing-stock material available for consumption. This is sound volume in cull trees and hardwood limbs that do not meet present merchantability standards for saw logs or round pulpwood, but can be used for such products as fuelwood, charcoal, local-use lumber, and pulpwood chips.

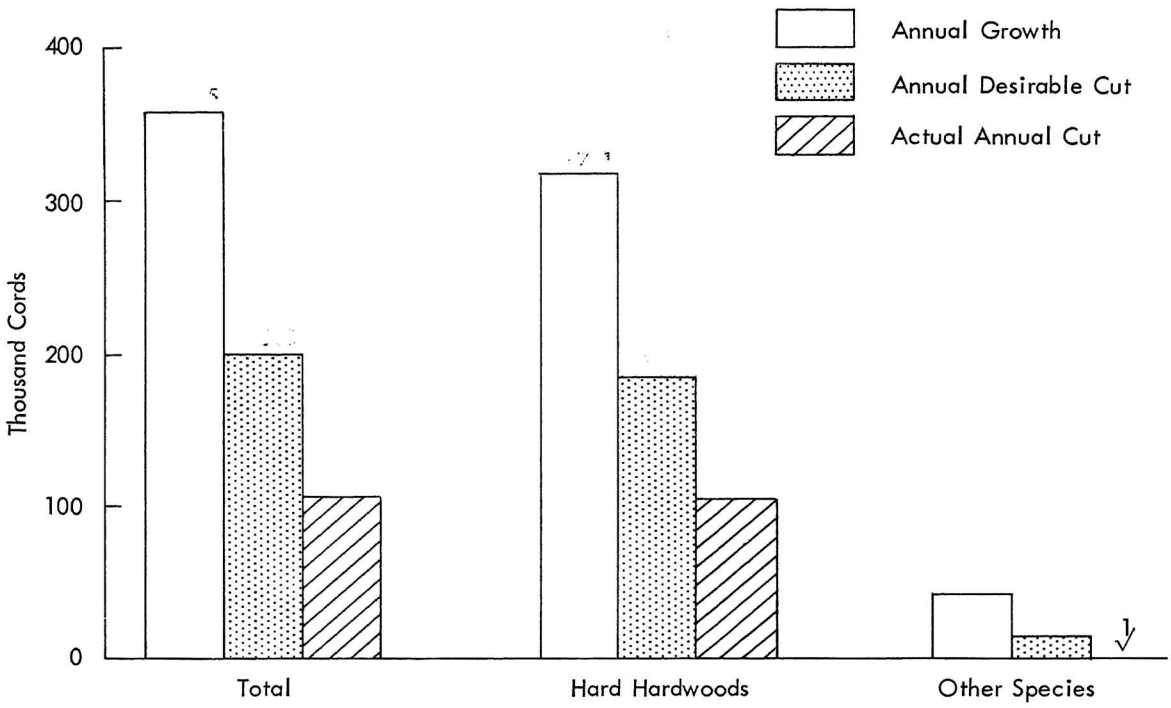


*Figure 9.—Growth, desirable cut, and actual cut of growing stock to major groups by species, 1959.*

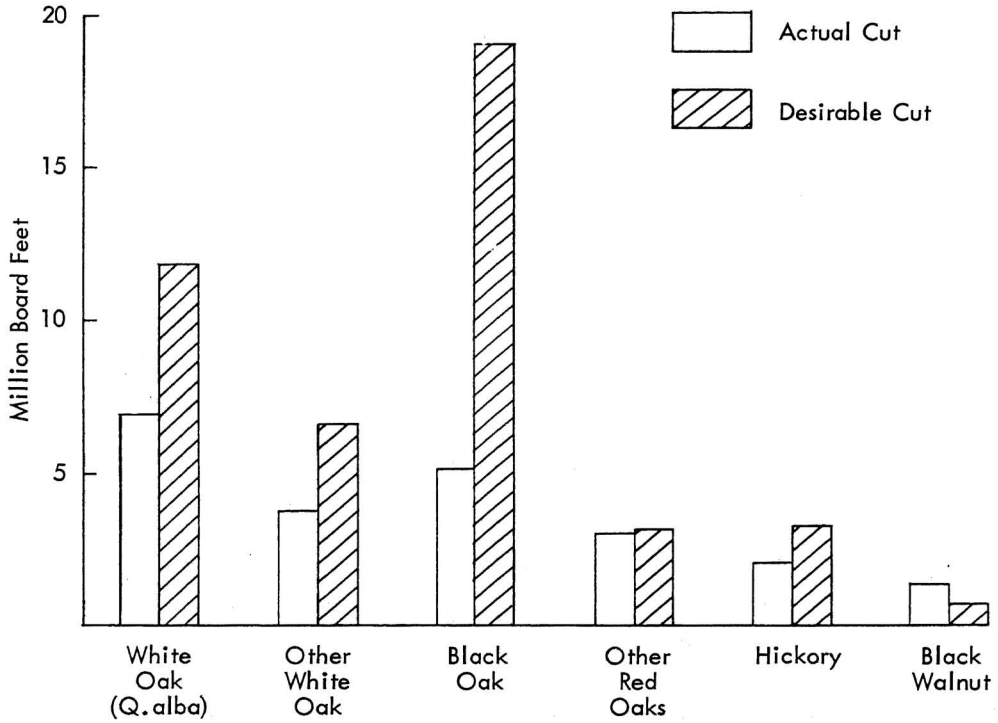


*Figure 10.—Desirable cut and actual cut of sawtimber for selected species groups, 1959.*

# A Need for Forestry

Most of the forest land in the Northwestern Ozarks is poorly stocked and produces far below its capacity. Only 30 percent of the standing trees are suitable for future management (crop and storage trees). Forty percent of the trees are cull and another 30 percent should be harvested soon because they are old, rough, or defective.

The kind of cutting needed to improve the forests of the Northwestern Ozarks has been determined, but unfortunately, it is not being practiced. High-quality trees of preferred species continue to be cut at a faster rate than they are growing, and if this trend continues, traditional forest industries can expect shortages of higher quality timber. The two factors of added fire protection and insufficient commercial markets for small trees has meant a continuing increase in the volume of small and low-grade trees. The addition of any new industry that could utilize this material would certainly benefit both the forest and local economy.

Improving the region's forests is the job of woodland owners, but the impetus must be supplied by forest scientists. Few of the region's woodland owners are managing their forest land for timber crops, and they probably will not invest in timber-growing enterprises until they have been convinced that an investment in forestry will pay dividends. The problem of selling forestry in a region such as the Northwestern Ozarks is particularly challenging because the productive capacity of much of the forest land is low. More scientific investigation is needed to determine where and how the limited funds available for forestry can be used most efficiently. Recent studies by the Columbia Forest Research Center and the University of Missouri School of Forestry are expected to shed much light on this problem.

# Appendix

## FOREST SURVEY PROCEDURE

The sampling procedure adopted is used with some variation by forest survey units throughout the nation. Information is obtained from aerial photographs and from sample plots examined on the ground.

To attain desired statistical accuracy, triple sampling was employed. First, a very large number of points were examined on the aerial photographs to determine the proportions of forest and nonforest. Then some of these were analyzed further and measured to estimate forest type, stand size, density, and site. Finally, a sample of these photo plots was systematically selected for ground examination. Classification of these plots on the ground was used as a check on photo classifications. Trees were measured to estimate timber volume, growth, and mortality.

The information thus gathered was edited, coded, and punched for machine computing and tabulation.

## ACCURACY OF DATA

Estimates of forest area and timber volume are subject to two kinds of errors: sampling errors that arise from the use of sampling procedures, and nonsampling errors caused by mistakes in judgment, recording of measurements, and calculation.

Sampling errors are measurable. They are held to a minimum through sampling design. Barring the effects of nonsampling errors, the probabilities are two out of three that the actual areas and volumes are within the standard errors shown in the accompanying tables.

Nonsampling errors are not measurable and their effects are kept to a minimum through close supervision, adequate training, and rechecking of all phases of the work.

Appendix Tables 1 and 2 can be used to determine the accuracy of both area and volume estimates. In Table 1, the probabilities are two out of three that:

a. When an area is reported as 1,000,000 acres, the actual acreage is within ± 6.1 percent of 1,000,000 acres or between 939,000 and 1,061,000 acres.

b. The actual volume on an area of 1,000,000 acres will be within ± 7.1 percent of the volume reported for that 1,000,000 acres.

In table 2, the probabilities are two out of three that when a volume of growing stock is reported as 1,000,000 cords, the actual volume is within ± 11.8 percent of 1,000,000 cords or between 882,000 and 1,118,000 cords.

Note that sampling error for any one class within a survey region would be greater than for the region as a whole, whether the class considered is type, species, ownership, or others. Generally the smaller the area or volume, the higher the sampling error. Although subject to large error, the estimates for small units represent the best available information and will serve as a guide for planning the management of resources. The occurrence of a (—) in the statistical tables of this report indicates no units were measured by the inventory.

TABLE 1--GUIDE FOR JUDGING ACCURACY BY SIZE OF AREA, NORTHWESTERN OZARK REGION, MISSOURI, 1959

| Commercial Forest Land (thousand acres) | Standard Error of Sampling (percent) | |
|---|---|---|
| | Area | Total Volume |
| 2,390 | 3.9 | 4.6 |
| 1,000 | 6.1 | 7.1 |
| 500 | 8.6 | 10.0 |
| 100 | 19.2 | 22.4 |
| 50 | 27.2 | 31.7 |
| 25 | 38.4 | 44.8 |
| 10 | 60.8 | 70.8 |

TABLE 2--GUIDE FOR JUDGING VOLUME ACCURACY, NORTHWESTERN OZARK REGION, MISSOURI, 1959

| Growing Stock Volume (thousand cords) | Sampling Error (percent) |
|---|---|
| 6,677 | 4.6 |
| 1,000 | 11.8 |
| 500 | 16.7 |
| 100 | 37.4 |
| 50 | 52.9 |
| 25 | 74.9 |

## DEFINITION OF TERMS

### Classes of Land Use

**Land Area**—Dry land and land temporarily or partially covered with water, including streams less than 1/8 mile wide and ponds smaller than 40 acres.

**Forest Land**—Includes areas at least 10 percent stocked with species of forest trees that are capable of producing timber or other wood products, as well as land from which the trees have been removed to less than 10 percent stocking, as long as this land has not been developed for other uses. The minimum size of tract recognized as forest is 1 acre; the minimum width for a wooded strip is 120 feet.

**Commercial Forest Land**—Forest land that is producing, or is capable of producing, crops of industrial wood (usually saw logs and pulpwood but excluding fuelwood) and is not withdrawn from timber utilization by statute or administrative regulation.

**Noncommercial Forest Land**—(a) Forest land, such as state parks, that qualifies as commercial forest, but is withdrawn from timber utilization through statute, ordinance, or administrative order (shown as *productive-reserved),* or (b) forest land that is incapable of yielding a stand averaging at least one 13-foot saw log per tree (shown as *unproductive).*

### Stand-Size and Stocking Classes

**Sawtimber**—Stands having a minimum net volume in live merchantable sawtimber trees of commercial species of 1,500 board feet per acre, International ¼-inch rule (this is equal to approximately 1,300 board feet by the Scribner Decimal C rule).

**Poletimber**—Stands failing to meet the specifications for sawtimber but at least 10 percent stocked with trees 5 inches d.b.h. or larger and with at least half of the minimum stocking in poletimber-size trees.

**Seedling and Sapling (Restocking Stands)**—Stands failing to meet the minimum requirements for either sawtimber or poletimber stands but at least 10 percent stocked with trees of commercial species and at least 5 percent stocked with seedlings and saplings.

*Satisfactorily stocked:* Stands that are 40 percent or more stocked with present or potential growing-stock trees.

*Poorly stocked:* Stands that are from 10 to 39 percent stocked with present or potential growing-stock trees.

**Nonstocked**—Areas of commercial forest land not qualifying as sawtimber, poletimber or seedling and sapling stands. These areas may contain some volume but less than 10 percent of the growing space is effectively utilized by growing stock.

### Tree-Size Classes

**Sawtimber Trees**—Live merchantable softwoods 9 inches d.b.h. and larger, and hardwoods 11 inches d.b.h. and larger.

**Poletimber Trees**—Trees of softwood species between 5.0 and 8.9 inches d.b.h. and of hardwood species between 5.0 and 10.9 inches d.b.h.

**Seedlings and Saplings**—Trees less than 5 inches d.b.h.

**Cull Trees**—Live trees of sawtimber or poletimber size with 50 percent or more of the gross volume of the stem unusable due to defects or deformities.

**Hardwood Limbs**—Live merchantable hardwood sawtimber limbs with a minimum diameter of 4 inches inside bark.

### Forest Types

**Forest Type**—A classification of forest land based on the species forming a plurality of stocking. Plurality is based on gross cubic volume in sawtimber and poletimber stands, and on the number of trees in seedling and sapling stands. Nonstocked forest land is classified with the forest type best suited to the soil.

**Pine**—Stands that are at least 50 percent pine (usually shortleaf pine ).

**Redcedar**—Stands that are at least 50 percent redcedar.

**Hardwood-redcedar**—Stands at least 50 percent hardwood, and 25 to 49 percent redcedar.

**Oak-Pine**—Stands at least 50 percent hardwood (usually upland oaks), and 25 to 49 percent hard pine.

**Black-Scarlet Oak**—Stands that are at least 50 percent hickory, upland oaks, or a combination of them, except where pines or redcedar comprise 25 to 49 percent, or white oak or post and blackjack oak exceed 50 percent of the stand.

**White Oak**—Stands that are at least 50 percent white oak.

**Post-Blackjack Oak**—Stands that are at least 50 percent post oak, blackjack oak, or a combination of them.

**Elm-Ash-Cottonwood**—Stands that are at least 50 percent elm, ash, cottonwood, or any combination of them.

### Species Groups

**Softwoods**—Coniferous species which in this region include shortleaf pine and redcedar.

**Soft Hardwoods**—Soft-textured, broad-leaved species including elm, soft maple, sweetgum, blackgum, yellow-poplar, cottonwood, and sycamore.

**Hard Hardwoods**—Firm-textured, broad-leaved species including all of the oaks and hickories, hard maple, birch, black walnut, and ash.

### Timber Volume

**Net Timber Volume**—Volume of wood in live merchantable trees from stump to a minimum diameter inside bark of the central stem, or to a point where the central stem becomes unmerchantable for other reasons.
**Growing Stock**—Net timber volume of live merchantable sawtimber and poletimber trees from stump to a minimum 4-inch-top diameter inside bark of the central stem. The unpeeled volume in cubic feet was computed from a Lake States Composite Volume Table and corrected for bark thickness by species and diameter class. This volume can be converted to cords using the factor, 79 cubic feet of peeled wood equals 1 cord of unpeeled wood. This is a standard cord (a stacked pile 4 x 4 x 8 feet).

**Sawtimber Material**—Net timber volume of live merchantable sawtimber between the stump and a point in the top of the stem at which utilization is limited by large branches, forks, or other defects, or by a diameter inside bark of 8 inches (6 inches for softwoods). This volume is expressed in board feet by the International ¼-inch rule which approximates green lumber tally. Conversion to the Scribner rule maybe achieved (roughly) by multiplying volumes by 0.85. Sawtimber volume was computed using a Lake States Composite Volume Table and was corrected for form-class differences by species and diameter classes. Numerous bark thickness and form-class measurements were made in Missouri to provide satisfactory corrections for the composite volume tables.

### Growth

**Periodic Annual Net Growth**—The change during the inventory year in net volume of growing stock on commercial forest land from natural causes exclusive of catastrophic losses. It is expressed in board feet (International ¼-inch rule) of sawtimber and unpeeled cords of growing stock. Net growth includes growth on trees that were of volume size at the beginning of the year and survived to the end, plus the volume of smaller trees growing into volume size during the year, plus the net volume increment of growing stock that was cut or died during the year, minus the net volume of growing-stock trees that died during the year, and minus the net volume of growing-stock trees that became cull during the year.
**Ingrowth of Sawtimber**—The net board-foot volume of trees that first became sawtimber trees during the inventory year as measured at the end of the year.

### Cut

**Desirable Cut**—The net volume of merchantable timber that may be cut annually during the current decade while (1) developing a reasonably even distribution of age classes during the optimum rotation selected for each type, and (2) progressively improving growing-stock volume and quality to meet the future needs for desired products. The volume cut includes both harvest and intermediate commercial cuttings (yielding a least 3 cords total volume or 500 board feet International ¼-inch rule of sawtimber volume). Cull-tree and hardwood-limb volumes are not included. A large amount of "high grading" will reduce the desirable cut. But if utilization is closer than anticipated by the Forest Survey, the desirable cut will increase. Desirable cut is based upon forest practices that improve the stands. It must be reduced if timber is allowed to die or overcutting takes place.

**Current Annual Timber Cut of Growing Stock**—The net volume of live sawtimber and poletimber that is being cut annually for forest products from commercial forest land. It includes both roundwood products and merchantable material left in the woods. Timber production was surveyed in 1958 to estimate the amount of timber removed from each of the Forest Survey Regions and ownership groups in the state. The four sources of data used to arrive at the estimate were:

1. Production reports from forest industries
2. Stump counts from forest inventory plots
3. Cutting records from industrial and public landowners
4. Utilization factors based on woods study

### Regeneration Classes

**Restocking Satisfactorily**—Areas that are at least 5 per-

cent stocked with pine or redcedar, have a seed source, and are likely to regenerate naturally to pine or redcedar. Or, areas at least 20 percent stocked with commercial hardwoods of any size.

**Restocking Unsatisfactorily, Conflicing Uses**—Areas not suitable for planting because of uses other than forestry.

### Tree Classes

**Crop Tree**—A sound, vigorous, dominant, or codominant growing-stock tree that has good form and a good crown. The tree must be the most desirable species for the site and must have a butt log of Grade 2 or better potential.

**Good Storage Tree**—A good growing-stock tree that does not meet all the specifications of a crop tree, but in form and soundness is a suitable leave tree.

**Poor Storage Tree**—A poor growing-stock tree that would normally be removed in harvest or intermediate cuttings, but may be left if desired.

**Harvest Tree**—A poor growing-stock tree that is diseased, of poor form or crown, and not likely to survive ten years.

**Poor Pole**—A poletimber-size, growing-stock tree that cannot be classed as crop, storage, or harvest because it is unlikely to produce merchantable sawtimber. Sawtimber ingrowth is not computed for these trees.

**Sound Cull**—Nongrowing stock. Fifty percent or more of the gross volume is defective and less than half of the defect is rot.

**Rotten Cull**—Nongrowing stock. Fifty percent or more of the gross volume is defective and more than half of the defect is rot.

### Log Grades

Log grading was done for sawtimber-size trees using the hardwood log grades for standard lumber developed by the Forest Products Laboratory, the standard specifications for logs of southern pines, and the standard specifications for tie-and-timber logs. In grading, the "12-foot rule" was used. Under this rule, the tree is divided into 16-foot sections insofar as possible, and the best 12-foot portion in each section is graded.

### Miscellaneous Definitions

**D.b.h. (Diameter at breast height)**—Diameter of the tree in inches, outside bark, measured at 4½ feet above the average ground level.

**Diameter Class**—In this report, data are presented in 2-inch-diameter classes that include diameters from 1.0 inch below to 0.9 inch above the stated midpoint; e.g., trees 5.0 inches d.b.h. to and including trees 6.9 inches d.b.h. are included in the 6-inch class. Corresponding limits apply to other diameter classes.

### Commercial Tree Species

Commercial tree species for which data are presented in the tables of this report are listed below. Species that are major components of species groups such as "other white oak" or "other hard hardwoods" are also shown. The common and scientific names are based on "Check List of Native and Naturalized Trees of the United States (including Alaska)" by Elbert L. Little, Jr.

#### Softwood Species

| | |
|---|---|
| Shortleaf pine | *Pinus echinata* Mill. |
| Redcedar (eastern) | *Juniperus virginiana* L. |

#### Hardwood Species

| | |
|---|---|
| Hard hardwoods: | |
| White oak | *Quercus alba* L. |
| Post oak | *Q. stellata* Wangenh. |
| Other white oak includes: | |
| Swamp white oak | *Q. bicolor* Willd. |
| Swamp chestnut oak | Q. *michauxii* Nutt. |
| Overcup oak | *Q. lyrata* Walt. |
| Bur oak | *Q. macrocarpa* Michx. |
| Chinkapin oak | *Q. muehlenbergii* Engelm. |
| Black oak | *Q. velutina* Lam. |
| Scarlet oak | *Q. coccinea* Muenchh. |
| Northern red oak | *Q. ruba* L. |
| Other red oak includes: | |
| Blackjack oak | *Q. marilandica* Muenchh. |
| Pin oak | *Q. palustris* Muenchh. |
| Shingle oak | *Q. imbricaria* Michx. |
| Southern red oak | *Q. falcata* Michx. |
| Hickory Group A includes | |
| Shagbark hickory | *Carya ovata* (Mill.) K. Koch |
| Shellbark hickory | *C. laciniosa* (Michx. f.) Loud. |
| Mockernut hickory | *C. tomentosa* Nutt |
| Hickory Group B includes: | |
| All other hickories | *Carya* spp. |

| | |
|---|---|
| Hard maple includes: | |
| Black maple | *Acer nigrum* Michx. f. |
| Sugar maple | *A. saccharum* Marsh. |
| Black Walnut | *Juglans nigra* L. |
| Ash | *Fraxinus* spp. |
| Other hard hardwood includes: | |
| Birch (river) | *Betula nigra* L. |
| Black locust | *Robinia pseudoacacia* L. |
| Honeylocust | *Gleditsia triacanthos* L. |
| Soft hardwoods: | |
| Elm | *Ulmus* spp. |
| Maple, soft includes: | |
| Boxelder | *Acer negundo* L. |
| Red maple | *A. rubrum* L. |
| Silver maple | *A. saccharinum* L. |
| Cottonwood (eastern) | *Populus deltoides* Bartr. |
| Other soft hardwood includes: | |
| Basswood (American) | *Tilia americana* L. |
| Black cherry | *Prunus serotina* Ehrh. |
| Blackgum (black tupelo) | *Nyssa sylvatica* Marsh. |
| Buckeye (Ohio) | *Aesculus glabra* Willd. |
| Butternut | *Juglans cinerea* L. |
| Hackberry | *Celtis occidentalis* L. |
| Sweetgum | *Liquidambar styraciflua* L. |
| Sycamore (American) | *Platanus occidentalis* L. |
| Willow | *Salix* spp. |

# *Statistical Tables*

The following 68 tables in the Appendix present forest resource data for the Northwestern Ozark Region and for each of its 13 counties. The counties are arranged in alphabetical order.

TABLE 3--FOREST LAND AREA BY TYPE AND STAND-SIZE CLASS
NORTHWESTERN OZARK REGION, MISSOURI, 1959
(ACRES)

| Forest Type | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| Commercial Forest | | | | | | |
| Pine | 10,300 | 300 | 3,100 | 3,800 | 2,500 | 600 |
| Redcedar | 15,400 | -- | 2,800 | 1/ | -- | 12,600 |
| Hardwood-Redcedar | 71,300 | 5,100 | 4,500 | 1,000 | 16,000 | 44,700 |
| Oak-Pine | 4,200 | 1,000 | 3,100 | 1/ | 1/ | 100 |
| Black-Scarlet Oak | 927,900 | 169,400 | 290,900 | 152,800 | 100,800 | 214,000 |
| White Oak | 287,200 | 84,800 | 115,600 | 26,700 | 11,300 | 48,800 |
| Post-Blackjack Oak | 856,800 | 50,600 | 218,600 | 90,400 | 111,800 | 385,400 |
| Elm-Ash-Cottonwood | 217,400 | 54,900 | 34,700 | 21,700 | 15,200 | 90,900 |
| All Commercial Forest | 2,390,500 | 366,100 | 673,300 | 296,400 | 257,600 | 797,100 |
| Percent by Size-Class | 100.0 | 15.3 | 28.2 | 12.4 | 10.8 | 33.3 |
| Noncommercial Forest | | | | | | |
| Productive-Reserved | 14,700 | 3,900 | 4,700 | 1,100 | 1,700 | 3,300 |
| Unproductive | 131,800 | -- | -- | -- | -- | 131,800 |
| All Forest Area | 2,537,000 | 370,000 | 678,000 | 297,500 | 259,300 | 932,200 |

1/ Insignificant amount.

TABLE 4--COMMERCIAL FOREST LAND BY OWNERSHIP AND STAND-SIZE CLASS
NORTHWESTERN OZARK REGION, MISSOURI, 1959
(ACRES)

| Ownership Class | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| Federally Owned or Managed | | | | | | |
| National Forest | 107,800 | 25,200 | 41,400 | 15,300 | 7,900 | 18,000 |
| Other | 25,000 | 4,200 | 6,800 | 3,200 | 2,000 | 8,800 |
| State | 5,900 | 1,000 | 1,600 | 700 | 500 | 2,100 |
| Farmer-Owned | 1,502,000 | 217,500 | 447,700 | 175,700 | 155,700 | 505,400 |
| Miscellaneous Private | 749,800 | 118,200 | 175,800 | 101,500 | 91,500 | 262,800 |
| All Ownerships | 2,390,500 | 366,100 | 673,300 | 296,400 | 257,600 | 797,100 |

TABLE 5--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
NORTHWESTERN OZARK REGION, MISSOURI, 1959

| Ownership Class | Growing Stock (thousand cords) | | | | Sawtimber (million board feet) | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | Softwoods | Soft Hardwoods | Hard Hardwoods | Total | Softwoods | Soft Hardwoods | Hard Hardwoods |
| Federally Owned or Managed | | | | | | | | |
| National Forest | 436.4 | 9.8 | 2.0 | 424.6 | 55.0 | 1.7 | 0.1 | 53.2 |
| Other | 32.7 | -- | 9.5 | 23.2 | 6.1 | -- | 1.9 | 4.2 |
| State | 11.6 | -- | -- | 11.6 | 2.1 | -- | -- | 2.1 |
| Farmer-Owned | 4,071.2 | 26.4 | 241.5 | 3,803.3 | 773.8 | 3.5 | 53.5 | 716.8 |
| Miscellaneous Private | 2,124.8 | 13.6 | 160.4 | 1,950.8 | 364.6 | .8 | 39.0 | 324.8 |
| All Ownerships | 6,676.7 | 49.8 | 413.4 | 6,213.5 | 1,201.6 | 6.0 | 94.5 | 1,101.1 |

TABLE 6--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
NORTHWESTERN OZARK REGION, MISSOURI, 1959

| Species | Growing Stock (thousand cords) | | | Sawtimber (million board feet) | | | | Cull Trees (thousand cords) | Hardwoods Limbs (thousand cords) |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Poletimber Trees | Sawtimber Trees | Total | In Sawtimber Stands | Other Stands 500-1500 Board Feet | Other Stands Under 500 Feet | | |
| Softwoods | | | | | | | | | |
| Pine, Shortleaf | 27.1 | 15.1 | 12.0 | 6.0 | 0.6 | 2.3 | 3.1 | 0.1 | -- |
| Redcedar | 22.7 | 22.7 | -- | -- | -- | -- | -- | 18.0 | -- |
| Total Softwoods | 49.8 | 37.8 | 12.0 | 6.0 | 0.6 | 2.3 | 3.1 | 18.1 | -- |
| Hardwoods | | | | | | | | | |
| Oak, White | 1,431.1 | 853.2 | 577.9 | 285.8 | 154.8 | 62.6 | 68.4 | 324.1 | 570.4 |
| Oak, Post | 1,592.9 | 1,173.4 | 419.5 | 202.5 | 51.6 | 64.1 | 86.8 | 481.2 | 415.9 |
| Oak, Other White | 107.3 | 79.7 | 27.6 | 13.4 | 6.4 | 3.1 | 3.9 | 58.1 | 25.6 |
| Oak, Black | 1,803.6 | 1,070.8 | 733.3 | 359.3 | 218.2 | 68.5 | 72.6 | 627.7 | 703.8 |
| Oak, Scarlet | 9.0 | 2.2 | 6.8 | 3.3 | -- | 1.7 | 1.6 | 4.5 | 6.6 |
| Oak, Northern Red | 253.5 | 78.9 | 174.6 | 88.1 | 46.8 | 18.7 | 22.6 | 101.8 | 165.1 |
| Oak, Other Red | 223.1 | 172.8 | 50.3 | 25.4 | 5.2 | 9.2 | 11.0 | 292.9 | 49.1 |
| Hickory, Group A | 138.6 | 77.9 | 60.7 | 29.8 | 8.4 | 10.1 | 11.3 | 58.2 | 57.7 |
| Hickory, Group B | 301.1 | 238.0 | 63.1 | 31.4 | 20.3 | 5.0 | 6.1 | 106.1 | 60.2 |
| Maple, Hard | 7.2 | 4.6 | 2.6 | 1.3 | -- | .6 | .7 | 4.0 | 2.2 |
| Walnut, Black | 182.0 | 101.1 | 80.9 | 37.6 | 13.2 | 11.8 | 12.6 | 35.8 | 73.0 |
| Ash | 26.6 | 16.2 | 10.4 | 4.9 | 2.0 | 1.4 | 1.5 | 38.5 | 9.4 |
| Other | 137.5 | 99.2 | 38.3 | 18.3 | 17.3 | .4 | .6 | 123.1 | 30.7 |
| Total Hard Hardwoods | 6,213.5 | 3,967.5 | 2,246.0 | 1,101.1 | 544.2 | 257.2 | 299.7 | 2,256.0 | 2,169.7 |

TABLE 6 (continued)

| Species | Growing Stock (thousand cords) | | | Sawtimber (million board feet) | | | | Cull Trees (thousand cords) | Hardwoods Limbs (thousand cords) |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Poletimber Trees | Sawtimber Trees | Total | In Sawtimber Stands | Other Stands 500-1500 Board Feet | Other Stands Under 500 Feet | | |
| Soft Hardwoods | | | | | | | | | |
| Elm | 239.9 | 141.1 | 98.8 | 51.2 | 37.6 | 6.5 | 7.1 | 115.6 | 98.2 |
| Maple, Soft | 17.3 | 12.1 | 5.2 | 2.6 | 2.6 | -- | -- | 18.2 | 4.3 |
| Cottonwoods | .2 | -- | .2 | .1 | -- | -- | .1 | -- | .2 |
| Other 1/ | 156.0 | 71.5 | 84.5 | 40.6 | 28.4 | 5.7 | 6.5 | 37.1 | 76.6 |
| Total Soft Hardwoods | 413.4 | 224.7 | 188.7 | 94.5 | 68.6 | 12.2 | 13.7 | 170.9 | 179.3 |
| Total Hardwoods | 6,626.9 | 4,192.2 | 2,434.7 | 1,195.6 | 612.8 | 269.4 | 313.4 | 2,426.9 | 2,349.0 |
| All Species | 6,676.7 | 4,230.0 | 2,446.7 | 1,201.6 | 613.4 | 271.7 | 316.5 | 2,445.0 | 2,349.0 |

1/ Mainly sycamore.

## TABLE 7--PROPORTION OF TREES BY SPECIES AND TREE QUALITY CLASS NORTHWESTERN OZARK REGION, MISSOURI, 1959 (PERCENT)

| Species | Total | Tree Class | | | | | |
|---|---|---|---|---|---|---|---|
| | | Crop and Good Storage | Poor Storage | Harvest | Poor Pole | Sound Cull | Rotten Cull |
| Softwoods | | | | | | | |
| Pine, Shortleaf | 100 | 35 | 65 | -- | -- | -- | -- |
| Redcedar | 100 | -- | 40 | -- | -- | 59 | 1 |
| Total Softwoods | 100 | 4 | 43 | -- | -- | 52 | 1 |
| Hard Hardwoods | | | | | | | |
| Oak, White | 100 | 4 | 37 | 7 | 22 | 23 | 7 |
| Oak, Post | 100 | 2 | 29 | 7 | 31 | 24 | 7 |
| Oak, Other White | 100 | -- | 8 | 3 | 35 | 47 | 7 |
| Oak, Black | 100 | 5 | 31 | 6 | 21 | 18 | 19 |
| Oak, Scarlet | 100 | -- | -- | 46 | -- | -- | 54 |
| Oak, Northern Red | 100 | 14 | 21 | 8 | 13 | 14 | 30 |
| Oak, Other Red | 100 | -- | 3 | 1 | 32 | 31 | 33 |
| Hickory, Group A | 100 | 2 | 31 | 3 | 25 | 22 | 17 |
| Hickory, Group B | 100 | 4 | 22 | 4 | 33 | 24 | 13 |
| Maple, Hard | 100 | -- | 64 | 6 | -- | 21 | 9 |
| Walnut, Black | 100 | 17 | 19 | 5 | 30 | 19 | 10 |
| Ash | 100 | -- | 3 | 1 | 23 | 55 | 18 |
| Other | 100 | 1 | 14 | 3 | 20 | 52 | 10 |
| Total Hard Hardwoods | 100 | 4 | 26 | 6 | 26 | 25 | 13 |
| Soft Hardwoods | | | | | | | |
| Elm | 100 | 1 | 17 | 5 | 37 | 33 | 7 |
| Maple, Soft | 100 | -- | 3 | 2 | 26 | 52 | 17 |
| Other 1/ | 100 | 21 | 32 | 2 | 13 | 28 | 4 |
| Total Soft Hardwoods | 100 | 4 | 19 | 4 | 32 | 34 | 7 |
| Total Hardwoods | 100 | 4 | 26 | 6 | 26 | 25 | 13 |
| All Species | 100 | 4 | 26 | 5 | 26 | 26 | 13 |

1/ Mainly sycamore.

TABLE 8--DISTRIBUTION OF GROWING STOCK VOLUME BY SPECIES AND DIAMETER CLASS
NORTHWESTERN OZARK REGION, MISSOURI, 1959

| Species | Growing Stock by Inch Diameter Classes (thousand cords) | | | | | Sawtimber by Inch Diameter Classes (million board feet) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | 6 | 8 | 10 | 12+ | Total | 10 | 12-14 | 16-18 | 20-22 | 24-28 | 30+ |
| Softwoods | | | | | | | | | | | | |
| Pine, Shortleaf | 27.1 | 9.4 | 5.7 | 2.8 | 9.2 | 6.0 | 1.4 | 4.5 | 0.1 | -- | -- | -- |
| Redcedar | 22.7 | 15.5 | 7.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total Softwoods | 49.8 | 24.9 | 12.9 | 2.8 | 9.2 | 6.0 | 1.4 | 4.5 | 0.1 | -- | -- | -- |
| Hard Hardwoods | | | | | | | | | | | | |
| Oak, White | 1,431.1 | 252.8 | 323.2 | 277.2 | 577.9 | 285.5 | -- | 207.3 | 54.2 | 13.7 | 5.5 | 5.1 |
| Oak, Post | 1,592.9 | 478.6 | 379.7 | 315.1 | 419.5 | 202.5 | -- | 152.0 | 41.1 | 8.2 | 1.2 | -- |
| Oak, Other White | 107.3 | 29.3 | 31.0 | 19.4 | 27.6 | 13.4 | -- | 10.0 | 3.4 | -- | -- | -- |
| Oak, Black | 1,803.6 | 383.2 | 346.5 | 340.6 | 733.3 | 359.3 | -- | 201.1 | 84.3 | 50.6 | 23.3 | -- |
| Oak, Scarlet | 9.0 | -- | .2 | 2.0 | 6.8 | 3.3 | -- | 3.3 | -- | -- | -- | -- |
| Oak, Northern Red | 253.5 | 24.1 | 24.0 | 30.8 | 174.6 | 88.1 | -- | 48.4 | 28.3 | 7.6 | 3.8 | -- |
| Oak, Other Red | 223.1 | 96.9 | 65.7 | 10.2 | 50.3 | 25.4 | -- | 8.6 | 8.8 | 8.0 | -- | -- |
| Hickory, Group A | 138.6 | 29.5 | 29.3 | 19.1 | 60.7 | 29.8 | -- | 20.6 | 7.4 | 1.8 | -- | -- |
| Hickory, Group B | 301.1 | 112.6 | 77.2 | 48.2 | 63.1 | 31.4 | -- | 21.4 | 10.0 | -- | -- | -- |
| Maple, Hard | 7.2 | 4.6 | -- | -- | 2.6 | 1.3 | -- | 1.3 | -- | -- | -- | -- |
| Walnut, Black | 182.0 | 43.7 | 20.3 | 37.1 | 80.9 | 37.6 | -- | 22.9 | 12.4 | 2.3 | -- | -- |
| Ash | 26.6 | 10.5 | -- | 5.7 | 10.4 | 4.9 | -- | .8 | 4.1 | -- | -- | -- |
| Other | 137.5 | 47.6 | 30.6 | 21.0 | 38.3 | 18.3 | -- | 12.9 | 5.4 | -- | -- | -- |
| Total Hard Hardwoods | 6,213.5 | 1,513.4 | 1,327.7 | 1,126.4 | 2,246.0 | 1,101.1 | -- | 710.6 | 259.4 | 92.2 | 33.8 | 5.1 |
| Soft Hardwoods | | | | | | | | | | | | |
| Elm | 239.9 | 46.2 | 62.3 | 32.6 | 98.8 | 51.2 | -- | 27.6 | 16.3 | 5.5 | 1.8 | -- |
| Maple, Soft | 17.3 | 9.1 | -- | 3.0 | 5.2 | 2.6 | -- | 2.6 | -- | -- | -- | -- |
| Cottonwood | .2 | -- | -- | -- | .2 | .1 | -- | -- | .1 | -- | -- | -- |
| Other 1/ | 156.0 | 10.4 | 21.1 | 40.0 | 84.5 | 40.6 | -- | 16.1 | 7.8 | 7.7 | 3.4 | 5.6 |
| Total Soft Hardwoods | 413.4 | 65.7 | 83.4 | 75.6 | 188.7 | 94.5 | -- | 46.3 | 24.2 | 13.2 | 5.2 | 5.6 |
| Total Hardwoods | 6,626.9 | 1,579.1 | 1,411.1 | 1,202.0 | 2,434.7 | 1,195.6 | -- | 756.9 | 283.6 | 105.4 | 39.0 | 10.7 |
| All Species | 6,676.7 | 1,604.0 | 1,424.0 | 1,204.8 | 2,443.9 | 1,201.6 | 1.4 | 761.4 | 283.7 | 105.4 | 39.0 | 10.7 |

1/ Mainly sycamore.

TABLE 9--QUALITY OF SAW LOG MATERIAL BY SPECIES GROUP AND LOG GRADE
NORTHWESTERN OZARK REGION, MISSOURI, 1959

| Species | Log Grades (percent) | | | | Trees Graded (number) |
|---|---|---|---|---|---|
| | All Grades | Grades 2 or Better | Grade 3 | Tie and Timber | |
| Oak, White | 100.0 | 11.3 | 36.2 | 52.5 | 36 |
| Oak, Post | 100.0 | 33.0 | 21.3 | 45.7 | 47 |
| Oak, Black | 100.0 | 18.5 | 45.2 | 36.3 | 41 |
| Oak, Northern Red | 100.0 | 13.0 | 17.6 | 69.4 | 10 |
| Hickory | 100.0 | -- | 54.1 | 45.9 | 12 |
| Walnut, Black | 100.0 | 46.3 | 42.4 | 11.3 | 13 |
| Other Hardwoods | 100.0 | 35.1 | 26.2 | 38.7 | 12 |
| All Species | 100.0 | 21.3 | 35.0 | 43.7 | 171 |

TABLE 10--PERIODIC ANNUAL NET GROWTH ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
NORTHWESTERN OZARK REGION, MISSOURI, 1959

| Species | Growing Stock (thousand cords) | | | | Sawtimber (million board feet) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Growth On | | | In Sawtimber Stands | | In Other Stands | |
| | Total | Ingrowth | Poletimber Trees | Sawtimber Trees | Total | Ingrowth | Growth | Ingrowth | Growth |
| Softwoods | | | | | | | | | |
| Pine, Shortleaf | 1.4 | -- | 0.9 | 0.5 | 0.1 | -- | -- | -- | 0.1 |
| Redcedar | 1.6 | 0.3 | 1.3 | -- | .1 | -- | -- | 0.1 | -- |
| Total Softwoods | 3.0 | .3 | 2.2 | .5 | .2 | -- | -- | .1 | .1 |
| Hard Hardwoods | | | | | | | | | |
| Oak, White | 80.7 | 27.2 | 40.3 | 13.2 | 21.0 | 2.2 | 2.9 | 12.4 | 3.5 |
| Oak, Post | 99.3 | 50.7 | 43.0 | 5.6 | 14.1 | 1.6 | .2 | 10.0 | 2.3 |
| Oak, Other White | 10.8 | 7.2 | 4.7 | -1.1 | .6 | .5 | -.2 | .5 | -.2 |
| Oak, Black | 23.6 | 9.5 | 25.5 | -11.4 | 6.4 | 4.6 | 1.1 | 8.5 | -7.8 |
| Oak, Scarlet | 2.0 | 1.5 | -- | .5 | .2 | -- | -- | -- | .2 |
| Oak, Northern Red | 7.5 | 1.0 | 3.1 | 3.4 | 2.9 | -- | 1.0 | 1.4 | .5 |
| Oak, Other Red | 11.1 | 20.4 | -3.9 | -5.4 | -2.8 | -- | .1 | -- | -2.9 |
| Hickory, Group A | 3.4 | 3.8 | 2.0 | -2.4 | -.9 | -- | .3 | .4 | -1.6 |
| Hickory, Group B | 25.9 | 14.6 | 10.0 | 1.3 | 2.1 | .5 | .2 | 1.0 | .4 |
| Maple, Hard | .3 | -- | .3 | -- | 1/ | -- | -- | -- | 1/ |
| Walnut, Black | 28.0 | 9.3 | 15.6 | 3.1 | 5.0 | .6 | .8 | 2.5 | 1.1 |
| Ash | 3.8 | 4.0 | .9 | -1.1 | -.5 | -- | .1 | -- | -.6 |
| Other | 20.7 | 12.5 | 7.2 | 1.0 | 2.3 | .7 | .5 | 1.1 | -- |
| Total Hard Hardwoods | 317.1 | 161.7 | 148.7 | 6.7 | 50.4 | 10.7 | 7.0 | 37.8 | -5.1 |
| Soft Hardwoods | | | | | | | | | |
| Elm | 31.8 | 15.7 | 13.4 | 2.7 | 4.9 | .7 | 1.4 | 2.9 | -.1 |
| Maple, Soft | 1.9 | -- | 1.7 | .2 | .4 | -- | .1 | .3 | -- |
| Other 2/ | 3.7 | -- | 2.4 | 1.3 | 2.6 | .9 | .3 | 1.1 | .3 |
| Total Soft Hardwoods | 37.4 | 15.7 | 17.5 | 4.2 | 7.9 | 1.6 | 1.8 | 4.3 | .2 |
| Total Hardwoods | 354.5 | 177.4 | 166.2 | 10.9 | 58.3 | 12.3 | 8.8 | 42.1 | -4.9 |
| All Species | 357.5 | 177.7 | 168.4 | 11.4 | 58.5 | 12.3 | 8.8 | 42.2 | -4.8 |

1/ Insignificant amount.
2/ Mainly sycamore.

TABLE 11--ANNUAL NET DESIRABLE CUT ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
NORTHWESTERN OZARK REGION, MISSOURI, 1959

| Species | Growing Stock (thousand cords) | | | Sawtimber (million board feet) | | |
|---|---|---|---|---|---|---|
| | Total | Poletimber Trees | Sawtimber Trees | Total | In Sawtimber Stands | In Other Stands |
| Softwoods | | | | | | |
| Pine, Shortleaf | 0.1 | 0.1 | -- | -- | -- | -- |
| Total Softwoods | .1 | .1 | -- | -- | -- | -- |
| Hard Hardwoods | | | | | | |
| Oak, White | 44.6 | 20.8 | 23.8 | 11.8 | 9.0 | 2.8 |
| Oak, Post | 39.7 | 27.1 | 12.6 | 6.1 | 4.3 | 1.8 |
| Oak, Other White | 4.2 | 3.2 | 1.0 | .5 | .2 | .3 |
| Oak, Black | 62.2 | 23.7 | 38.5 | 18.9 | 15.1 | 3.8 |
| Oak, Northern Red | 7.1 | 1.2 | 5.9 | 3.0 | 1.9 | 1.1 |
| Oak, Other Red | 2.5 | 2.3 | .2 | .1 | -- | .1 |
| Hickory, Group A | 5.8 | 3.2 | 2.6 | 1.3 | .7 | .6 |
| Hickory, Group B | 8.5 | 4.7 | 3.8 | 1.9 | 1.6 | .3 |
| Walnut, Black | 1.8 | .5 | 1.3 | .6 | .1 | .5 |
| Ash | .5 | .5 | -- | -- | -- | -- |
| Other | 7.5 | 5.2 | 2.3 | 1.1 | 1.0 | .1 |
| Total Hard Hardwoods | 184.4 | 92.4 | 92.0 | 45.3 | 33.9 | 11.4 |
| Soft Hardwoods | | | | | | |
| Elm | 10.5 | 5.5 | 5.0 | 2.6 | 2.2 | .4 |
| Maple, Soft | .4 | -- | .4 | .2 | .2 | -- |
| Other 1/ | 2.9 | .8 | 2.1 | 1.0 | 1.0 | -- |
| Total Soft Hardwoods | 13.8 | 6.3 | 7.5 | 3.8 | 3.4 | .4 |
| Total Hardwoods | 198.2 | 98.7 | 99.5 | 49.1 | 37.3 | 11.8 |
| All Species | 198.3 | 98.8 | 99.5 | 49.1 | 37.3 | 11.8 |

1/ Mainly sycamore.

TABLE 12--PERIODIC ANNUAL NET GROWTH ON COMMERCIAL FOREST LAND BY COUNTY AND SPECIES GROUP
NORTHWESTERN OZARK REGION, MISSOURI, 1959

| County | Growing Stock (thousand cords) | | | | Sawtimber (million board feet) | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | Softwoods | Soft Hardwoods | Hard Hardwoods | Total | Softwoods | Soft Hardwoods | Hard Hardwoods |
| Benton | 28.1 | 0.7 | 2.2 | 25.2 | 3.8 | -- | 0.3 | 3.5 |
| Camden | 47.2 | .3 | 2.9 | 44.0 | 8.8 | -- | .7 | 8.1 |
| Cedar | 13.3 | 1/ | 1.0 | 12.3 | 2.2 | -- | .2 | 2.0 |
| Dallas | 19.2 | 1/ | 1.0 | 18.2 | 2.8 | -- | .2 | 2.6 |
| Hickory | 16.1 | .1 | 3.4 | 12.6 | 3.2 | -- | .8 | 2.4 |
| Laclede | 34.1 | .1 | 3.2 | 30.8 | 4.6 | -- | .7 | 3.9 |
| Maries | 24.2 | .3 | 1.0 | 22.9 | 4.2 | 0.1 | .1 | 4.0 |
| Miller | 32.1 | .2 | 5.6 | 26.3 | 5.2 | -- | .9 | 4.3 |
| Morgan | 31.6 | .1 | 4.0 | 27.5 | 6.3 | -- | 1.3 | 5.0 |
| Phelps | 37.0 | 1.0 | 2.5 | 33.5 | 5.2 | .1 | .4 | 4.7 |
| Polk | 14.9 | 1/ | 1.9 | 13.0 | 2.6 | -- | .5 | 2.1 |
| Pulaski | 39.0 | 1/ | 4.7 | 34.3 | 6.2 | -- | .9 | 5.3 |
| St. Clair | 20.7 | .2 | 4.0 | 16.5 | 3.4 | -- | .9 | 2.5 |
| Total | 357.5 | 3.0 | 37.4 | 317.1 | 58.5 | .2 | 7.9 | 50.4 |

1/ Insignificant amount.

TABLE 13--ANNUAL NET DESIRABLE CUT ON COMMERCIAL FOREST LAND BY COUNTY AND SPECIES GROUP
NORTHWESTERN OZARK REGION, MISSOURI, 1959

| County | Growing Stock (thousand cords) | | | | Sawtimber (million board feet) | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | Softwoods | Soft Hardwoods | Hard Hardwoods | Total | Softwoods | Soft Hardwoods | Hard Hardwoods |
| Benton | 15.3 | -- | 0.8 | 14.5 | 3.2 | -- | 0.2 | 3.0 |
| Camden | 26.4 | -- | 1.1 | 25.3 | 7.3 | -- | .3 | 7.0 |
| Cedar | 7.4 | -- | .3 | 7.1 | 1.8 | -- | .1 | 1.7 |
| Dallas | 10.8 | -- | .4 | 10.4 | 2.4 | -- | .1 | 2.3 |
| Hickory | 8.6 | -- | 1.3 | 7.3 | 2.5 | -- | .4 | 2.1 |
| Laclede | 19.3 | -- | 1.3 | 18.0 | 4.0 | -- | .3 | 3.7 |
| Maries | 13.5 | -- | .3 | 13.2 | 3.6 | -- | .1 | 3.5 |
| Miller | 17.2 | -- | 2.1 | 15.1 | 4.3 | -- | .5 | 3.8 |
| Morgan | 17.2 | -- | 1.4 | 15.8 | 4.9 | -- | .6 | 4.3 |
| Phelps | 21.3 | .1 | .9 | 20.3 | 5.0 | -- | .2 | 4.8 |
| Polk | 8.2 | -- | .7 | 7.5 | 2.1 | -- | 2 | 1.9 |
| Pulaski | 22.1 | -- | 1.7 | 20.4 | 5.5 | -- | .4 | 5.1 |
| St. Clair | 11.0 | -- | 1.5 | 9.5 | 2.5 | -- | .4 | 2.1 |
| Total | 198.3 | .1 | 13.8 | 184.4 | 49.1 | -- | 3.8 | 45.3 |

TABLE 14--REGENERATION ON COMMERCIAL FOREST LAND BY TYPE AND STOCKING CLASS
NORTHWESTERN OZARK REGION, MISSOURI, 1959
(ACRES)

| Forest Type | Total | Restocking Satisfactorily | | | Restocking Unsatisfactorily |
|---|---|---|---|---|---|
| | | Restocking Naturally to Pine | Restocking Natrually to Redcedar | Stocked with Hardwoods | Because of Conflicting Uses |
| Pine | 10,300 | 7,700 | -- | 2,600 | -- |
| Redcedar | 15,400 | -- | 15,400 | -- | -- |
| Hardwood-Redcedar | 71,300 | -- | 58,300 | 13,000 | -- |
| Oak-Pine | 4,200 | 3,200 | -- | 1,000 | -- |
| Black-Scarlet Oak | 927,900 | 7,000 | 62,800 | 858,100 | -- |
| White Oak | 287,200 | -- | 22,100 | 265,100 | -- |
| Post-Blackjack Oak | 856,800 | -- | 155,800 | 694,500 | 6,500 |
| Elm-Ash-Cottonwood | 217,400 | -- | 27,900 | 178,400 | 11,100 |
| All Types | 2,390,500 | 17,900 | 342,300 | 2,012,700 | 17,600 |

TABLE 15--CURRENT ANNUAL TIMBER CUT INCLUDING LOGGING RESIDUES BY SPECIES AND KIND OF MATERIAL
NORTHWESTERN OZARK REGION, MISSOURI, 1959

| Species | Growing Stock (thousand cords) | | | Sawtimber (million board feet) | | | Cull Trees and Hardwood Limbs (thousand cords) |
|---|---|---|---|---|---|---|---|
| | Total | Poletimber | Sawtimber | Total | In Sawtimber Stands | In Other Stands | |
| Oak, White | 40.5 | 27.1 | 13.4 | 6.9 | 0.3 | 6.6 | 21.2 |
| Oak, Post | 22.7 | 15.1 | 7.6 | 2.7 | .1 | 2.6 | 11.9 |
| Oak, Other White | 5.4 | 3.6 | 1.8 | 1.0 | 1/ | 1.0 | 2.9 |
| Oak, Black | 13.4 | 3.3 | 10.1 | 5.1 | -- | 5.1 | 11.6 |
| Oak, Scarlet | 2.3 | .3 | 2.0 | 1.0 | -- | 1.0 | 2.1 |
| Oak, Northern Red | 3.7 | 1.4 | 2.3 | 1.1 | -- | 1.1 | 2.9 |
| Oak, Other Red | 2.0 | .2 | 1.8 | .9 | -- | .9 | 1.9 |
| Hickory, Group A | 6.3 | 2.6 | 3.7 | 1.8 | .1 | 1.7 | 4.4 |
| Hickory, Group B | .6 | 1/ | .6 | .2 | 1/ | .2 | .4 |
| Maple, Hard | 1.1 | .3 | .8 | .4 | 1/ | .4 | .9 |
| Walnut, Black | 3.0 | .4 | 2.6 | 1.3 | .1 | 1.2 | 2.7 |
| Ash | 1.2 | .4 | .8 | .4 | 1/ | .4 | .9 |
| Other Hardwoods | 2.4 | 1.1 | 1.3 | .6 | 1/ | .6 | 1.6 |
| All Species | 104.6 | 55.8 | 48.8 | 23.4 | .6 | 22.8 | 65.4 |

1/ Insignificant amount.

TABLE 16--CURRENT ANNUAL TIMBER CUT INCLUDING LOGGING RESIDUE BY OWNERSHIP CLASS AND SPECIES GROUP
NORTHWESTERN OZARK REGION, MISSOURI, 1959

| Ownership Class | Growing Stock (thousand cords) | | | | Sawtimber (million board feet) | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | Softwoods | Soft Hardwoods | Hard Hardwoods | Total | Softwoods | Soft Hardwoods | Hard Hardwoods |
| National Forest | 2.0 | -- | 1/ | 2.0 | 1.0 | -- | 1/ | 1.0 |
| State | 1/ | -- | -- | 1/ | 1/ | -- | -- | 1/ |
| Miscellaneous Private | 102.6 | -- | -- | 102.6 | 22.4 | -- | -- | 22.4 |
| All Ownerships | 104.6 | -- | 1/ | 104.6 | 23.4 | -- | 1/ | 23.4 |

1/ Insignificant amount.

TABLE 17--CURRENT ANNUAL TIMBER CUT BY SPECIES GROUP AND DIAMETER CLASS
NORTHWESTERN OZARK REGION, MISSOURI, 1959
(THOUSAND CORDS)

| Species | Total | Inch-Diameter Class | | | |
|---|---|---|---|---|---|
| | | 6-10 | 12-14 | 16-18 | 20+ |
| Oaks | 90.0 | 51.0 | 9.2 | 19.0 | 10.8 |
| Other Hardwoods | 14.6 | 4.8 | 7.2 | 2.6 | -- |
| All Species | 104.6 | 55.8 | 16.4 | 21.6 | 10.8 |

TABLE 18--LAND AREA BY COUNTIES
NORTHWESTERN OZARK REGION, MISSOURI, 1959

| County | Land Area 1/ | Nonforest | Forest Land | | | |
|---|---|---|---|---|---|---|
| | | | Area | Percent Forest | Non-commercial | Commercial Forest |
| | Acres | Acres | Acres | Percent | Acres | Acres |
| Benton | 474,900 | 241,800 | 233,100 | 49.1 | 12,600 | 220,500 |
| Camden | 419,200 | 127,500 | 291,700 | 69.6 | 27,300 | 264,400 |
| Cedar | 317,400 | 208,500 | 108,900 | 34.3 | 5,900 | 103,000 |
| Dallas | 343,700 | 186,600 | 157,100 | 45.7 | 8,700 | 148,400 |
| Hickory | 262,400 | 136,400 | 126,000 | 48.0 | 6,800 | 119,200 |
| Laclede | 492,800 | 237,400 | 255,400 | 51.8 | 13,100 | 242,300 |
| Maries | 336,600 | 154,000 | 182,600 | 54.2 | 9,900 | 172,700 |
| Miller | 385,900 | 191,600 | 194,300 | 50.3 | 13,000 | 181,300 |
| Morgan | 381,500 | 178,600 | 202,900 | 53.2 | 11,000 | 191,900 |
| Phelps | 433,300 | 173,900 | 259,400 | 59.9 | 11,500 | 247,900 |
| Polk | 410,900 | 283,600 | 127,300 | 31.0 | 6,900 | 120,400 |
| Pulaski | 352,700 | 130,000 | 222,700 | 63.1 | 10,300 | 212,400 |
| St. Clair | 447,400 | 271,800 | 175,600 | 39.2 | 9,500 | 166,100 |
| Total | 5,058,700 | 2,521,700 | 2,537,000 | 50.2 | 146,500 | 2,390,500 |

1/ From areas of the United States, 1950 Bureau of the Census.

## COUNTY TABLES

TABLE 19a--COMMERCIAL FOREST LAND BY OWNERSHIP AND STAND-SIZE CLASS
BENTON COUNTY, MISSOURI, 1959
(ACRES)

| Ownership Class | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| State | 400 | 100 | 100 | 100 | 1/ | 100 |
| Farmer-Owned | 146,800 | 8,000 | 48,500 | 26,900 | 11,000 | 52,400 |
| Miscellaneous Private | 73,300 | 4,400 | 19,100 | 15,500 | 6,500 | 27,800 |
| All Ownerships | 220,500 | 12,500 | 67,700 | 42,500 | 17,500 | 80,300 |

1/ Insignificant amount.

TABLE 19b--FOREST LAND AREA BY TYPE AND STAND-SIZE CLASS
BENTON COUNTY, MISSOURI, 1959
(ACRES)

| Forest Type | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| Commercial Forest | | | | | | |
| Pine | 2,500 | -- | 2,500 | -- | -- | -- |
| Hardwood - Redcedar | 2,500 | -- | -- | -- | -- | 2,500 |
| Black - Scarlet Oak | 102,900 | 7,500 | 40,200 | 17,500 | 10,000 | 27,700 |
| White Oak | 17,500 | 2,500 | 7,500 | 2,500 | 2,500 | 2,500 |
| Post - Blackjack Oak | 62,600 | 2,500 | 12,500 | 7,500 | 5,000 | 35,100 |
| Elm - Ash - Cottonwood | 32,500 | -- | 5,000 | 15,000 | -- | 12,500 |
| All Commercial Forest | 220,500 | 12,500 | 67,700 | 42,500 | 17,500 | 80,300 |
| Percent by Size-Class | 100.0 | 5.7 | 30.7 | 19.3 | 7.9 | 36.4 |
| Noncommercial Forest | | | | | | |
| Unproductive | 12,600 | -- | -- | -- | -- | 12,600 |
| All Forest Area | 233,100 | 12,500 | 67,700 | 42,500 | 17,500 | 92,900 |

TABLE 19c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
BENTON COUNTY, MISSOURI, 1959

| Species | Growing Stock (thousand cords) | | | Sawtimber (million board feet) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | In | Other Stands | | | |
| | Total | Poletimber Trees | Sawtimber Trees | Total | Sawtimber Stands | 500-1500 Board Feet | Under 500 Feet | Cull Trees (thousand cords) | Hardwood Limbs (thousand cords) |
| Softwoods | | | | | | | | | |
| Pine, Shortleaf | 10.3 | 8.7 | 1.6 | 0.8 | -- | 0.3 | 0.5 | -- | -- |
| Redcedar | .6 | .6 | -- | -- | -- | -- | -- | 0.7 | -- |
| Total Softwoods | 10.9 | 9.3 | 1.6 | .8 | -- | .3 | .5 | .7 | -- |
| Hard Hardwoods | | | | | | | | | |
| Oak, White | 109.8 | 71.8 | 38.0 | 18.9 | 4.8 | 6.5 | 7.6 | 27.4 | 37.7 |
| Oak, Post | 118.1 | 84.8 | 33.3 | 16.2 | 2.4 | 5.8 | 8.0 | 39.1 | 33.3 |
| Oak, Other White | 8.8 | 5.7 | 3.1 | 1.7 | .1 | .7 | .9 | 4.9 | 3.3 |
| Oak, Black | 150.4 | 105.9 | 44.5 | 21.8 | 7.7 | 6.3 | 7.8 | 64.1 | 42.7 |
| Oak, Scarlet | .9 | -- | .9 | .4 | -- | .2 | .2 | .8 | .8 |
| Oak, Northern Red | 17.0 | 7.0 | 10.0 | 4.9 | .2 | 2.1 | 2.6 | 11.9 | 9.2 |
| Oak, Other Red | 22.4 | 18.3 | 4.1 | 2.1 | -- | .9 | 1.2 | 24.2 | 4.1 |
| Hickory, Group A | 12.2 | 8.2 | 4.0 | 1.9 | .1 | .8 | 1.0 | 7.3 | 3.7 |
| Hickory, Group B | 24.9 | 21.1 | 3.8 | 1.9 | .7 | .5 | .7 | 10.6 | 3.6 |
| Maple, Hard | 3.2 | .6 | 2.6 | 1.3 | -- | .6 | .7 | .6 | 2.2 |
| Walnut, Black | 19.9 | 9.6 | 10.3 | 4.9 | .4 | 2.2 | 2.3 | 4.6 | 9.5 |
| Ash | 2.5 | 1.6 | .9 | .4 | -- | .2 | .2 | 3.2 | .7 |
| Other | 10.6 | 10.6 | -- | -- | -- | -- | -- | 12.2 | -- |
| Total Hard Hardwoods | 500.7 | 345.2 | 155.5 | 76.4 | 16.4 | 26.8 | 33.2 | 210.9 | 150.8 |
| Soft Hardwoods | | | | | | | | | |
| Elm | 17.4 | 14.1 | 3.3 | 1.8 | .4 | .7 | .7 | 11.7 | 3.5 |
| Maple, Soft | 1.6 | 1.6 | -- | -- | -- | -- | -- | 2.0 | -- |
| Other 1/ | 4.8 | .1 | 4.7 | 2.2 | .2 | .9 | 1.1 | 3.5 | 4.2 |
| Total Soft Hardwoods | 23.8 | 15.8 | 8.0 | 4.0 | .6 | 1.6 | 1.8 | 17.2 | 7.7 |
| Total Hardwoods | 524.5 | 361.0 | 163.5 | 80.4 | 17.0 | 28.4 | 35.0 | 228.1 | 158.5 |
| All Species | 535.4 | 370.3 | 165.1 | 81.2 | 17.0 | 28.7 | 35.5 | 228.8 | 158.5 |

1/ Mainly sycamore.

TABLE 19d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
BENTON COUNTY, MISSOURI, 1959

| Ownership Class | Growing Stock (thousand cords) | | | | Sawtimber (million board feet) | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | Softwoods | Soft Hardwoods | Hard Hardwoods | Total | Softwoods | Soft Hardwoods | Hard Hardwoods |
| State | 1.0 | -- | -- | 1.0 | 0.6 | | | 0.6 |
| Farmer-Owned | 352.8 | 7.2 | 14.6 | 331.0 | 55.7 | 0.7 | 2.4 | 52.6 |
| Miscellaneous Private | 181.6 | 3.7 | 9.2 | 168.7 | 24.9 | .1 | 1.6 | 23.2 |
| All Ownerships | 535.4 | 10.9 | 23.8 | 500.7 | 81.2 | .8 | 4.0 | 76.4 |

TABLE 20a--COMMERCIAL FOREST LAND BY OWNERSHIP AND STAND-SIZE CLASS
CAMDEN COUNTY, MISSOURI, 1959
(ACRES)

| Ownership Class | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| State | 200 | 1/ | 100 | 1/ | 1/ | 100 |
| Farmer-Owned | 176,200 | 38,300 | 56,700 | 2,900 | 18,200 | 60,100 |
| Miscellaneous Private | 88,000 | 20,800 | 22,300 | 1,700 | 10,700 | 32,500 |
| All Ownerships | 264,400 | 59,100 | 79,100 | 4,600 | 28,900 | 92,700 |

1/ Insignificant amount.

TABLE 20b--FOREST LAND AREA BY TYPE AND STAND-SIZE CLASS
CAMDEN COUNTY, MISSOURI, 1959
(ACRES)

| Forest Type | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| Commercial Forest | | | | | | |
| Hardwood - Redcedar | 15,000 | -- | 2,500 | -- | -- | 12,500 |
| Black - Scarlet Oak | 111,500 | 34,100 | 34,100 | 4,600 | 11,300 | 27,400 |
| White Oak | 27,500 | 17,500 | 10,000 | -- | -- | -- |
| Post - Blackjack Oak | 102,900 | 5,000 | 30,000 | -- | 17,600 | 50,300 |
| Elm - Ash - Cottonwood | 7,500 | 2,500 | 2,500 | -- | -- | 2,500 |
| All Commercial Forest | 264,400 | 59,100 | 79,100 | 4,600 | 28,900 | 92,700 |
| Percent by Size- Class | 100.0 | 22.4 | 29.9 | 1.7 | 10.9 | 35.1 |
| Noncommercial Forest | | | | | | |
| Productive-Reserved | 11,500 | 3,500 | 3,600 | 400 | 1,200 | 2,800 |
| Unproductive | 15,800 | -- | -- | -- | -- | 15,800 |
| All Forest Area | 291,700 | 62,600 | 82,700 | 5,000 | 30,100 | 111,300 |

TABLE 20c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
CAMDEN COUNTY, MISSOURI, 1959

| Species | Growing Stock (thousand cords) | | | Sawtimber (million board feet) | | | | Cull Trees (thousand cords) | Hardwood Limbs (thousand cords) |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Poletimber Trees | Sawtimber Trees | Total | In Sawtimber Stands | Other Stands 500-1500 Board Feet | Other Stands Under 500 Feet | | |
| Softwoods | | | | | | | | | |
| Redcedar | 5.3 | 5.3 | -- | -- | -- | -- | -- | 4.6 | -- |
| Total Softwoods | 5.3 | 5.3 | -- | -- | -- | -- | -- | 4.6 | -- |
| Hard Hardwoods | | | | | | | | | |
| Oak, White | 208.0 | 120.8 | 87.2 | 43.5 | 33.6 | 4.5 | 5.4 | 32.1 | 86.8 |
| Oak, Post | 196.4 | 145.7 | 50.7 | 25.0 | 7.6 | 7.3 | 10.1 | 55.7 | 51.4 |
| Oak, Other White | 8.2 | 6.2 | 2.0 | .9 | .3 | .3 | .3 | 4.5 | 1.7 |
| Oak, Black | 291.6 | 150.7 | 140.9 | 68.6 | 56.3 | 5.4 | 6.9 | 74.0 | 134.4 |
| Oak, Scarlet | .6 | -- | .6 | .1 | -- | 1/ | .1 | .2 | .2 |
| Oak, Northern Red | 45.0 | 5.7 | 39.3 | 20.4 | 15.4 | 2.3 | 2.7 | 7.8 | 38.2 |
| Oak, Other Red | 19.6 | 16.4 | 3.2 | 1.7 | .1 | .7 | .9 | 31.8 | 3.3 |
| Hickory, Group A | 18.1 | 10.9 | 7.2 | 3.9 | 2.2 | .8 | .9 | 5.1 | 7.6 |
| Hickory, Group B | 43.6 | 30.0 | 13.6 | 6.7 | 5.9 | .3 | .5 | 12.1 | 12.8 |
| Maple, Hard | .9 | .9 | -- | -- | -- | -- | -- | .1 | -- |
| Walnut, Black | 23.4 | 12.1 | 11.3 | 5.3 | 3.8 | .7 | .8 | 3.9 | 10.3 |
| Ash | 1.1 | .8 | .3 | .3 | .2 | .1 | 1/ | 1.9 | .6 |
| Other | 15.4 | 12.8 | 2.6 | 1.2 | 1.2 | -- | -- | 7.7 | 2.0 |
| Total Hard Hardwoods | 871.9 | 513.0 | 358.9 | 177.6 | 126.6 | 22.4 | 28.6 | 236.9 | 349.3 |
| Soft Hardwoods | | | | | | | | | |
| Elm | 7.4 | 5.0 | 2.4 | 1.3 | 1.0 | .1 | .2 | 6.3 | 2.5 |
| Maple, Soft | 2.9 | .5 | 2.4 | 1.2 | 1.2 | -- | -- | .5 | 2.0 |
| Other 2/ | 21.7 | 9.9 | 11.8 | 5.9 | 3.9 | .9 | 1.1 | 4.9 | 11.1 |
| Total Soft Hardwoods | 32.0 | 15.4 | 16.6 | 8.4 | 6.1 | 1.0 | 1.3 | 11.7 | 15.6 |
| Total Hardwoods | 903.9 | 528.4 | 375.5 | 186.0 | 132.7 | 23.4 | 29.9 | 248.6 | 364.9 |
| All Species | 909.2 | 533.7 | 375.5 | 186.0 | 132.7 | 23.4 | 29.9 | 253.2 | 364.9 |

1/ Insignificant amount.
2/ Mainly sycamore.

TABLE 20d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
CAMDEN COUNTY, MISSOURI, 1959

| Ownership Class | Growing Stock (thousand cords) | | | | Sawtimber (million board feet) | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | Softwoods | Soft Hardwoods | Hard Hardwoods | Total | Softwoods | Soft Hardwoods | Hard Hardwoods |
| State | 1.8 | -- | -- | 1.8 | 0.3 | -- | -- | 0.3 |
| Farmer-Owned | 599.3 | 3.5 | 19.5 | 576.3 | 127.2 | -- | 5.0 | 122.2 |
| Miscellaneous Private | 308.1 | 1.8 | 12.5 | 293.8 | 58.5 | -- | 3.4 | 55.1 |
| All Ownerships | 909.2 | 5.3 | 32.0 | 871.9 | 186.0 | -- | 8.4 | 177.6 |

TABLE 21a--COMMERCIAL FOREST LAND BY OWNERSHIP AND STAND-SIZE CLASS
CEDAR COUNTY, MISSOURI, 1959
(ACRES)

| Ownership Class | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| State | 300 | 100 | 100 | 1/ | 1/ | 100 |
| Farmer-Owned | 68,500 | 8,400 | 17,100 | 11,700 | 6,700 | 24,600 |
| Miscellaneous Private | 34,200 | 4,600 | 6,700 | 6,700 | 3,900 | 12,300 |
| All Ownerships | 103,000 | 13,100 | 23,900 | 18,400 | 10,600 | 37,000 |

1/ Insignificant amount.

TABLE 21b--FOREST LAND AREA BY TYPE AND STAND-SIZE CLASS
CEDAR COUNTY, MISSOURI, 1959
(ACRES)

| Forest Type | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| Commercial Forest | | | | | | |
| Black - Scarlet Oak | 39,600 | 5,200 | 10,600 | 7,900 | 5,300 | 10,600 |
| White Oak | 8,000 | 5,300 | 2,700 | -- | -- | -- |
| Post - Blackjack Oak | 44,800 | 2,600 | 7,900 | 7,900 | 5,300 | 21,100 |
| Elm - Ash - Cottonwood | 10,600 | -- | 2,700 | 2,600 | -- | 5,300 |
| All Commercial Forest | 103,000 | 13,100 | 23,900 | 18,400 | 10,600 | 37,000 |
| Percent by Size-Class | 100.0 | 12.7 | 23.2 | 17.9 | 10.3 | 35.9 |
| Noncommercial Forest | | | | | | |
| Unproductive | 5,900 | -- | -- | -- | -- | 5,900 |
| All Forest Area | 108,900 | 13,100 | 23,900 | 18,400 | 10,600 | 42,900 |

TABLE 21c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
CEDAR COUNTY, MISSOURI, 1959

| Species | Growing Stock (thousand cords) | | | Sawtimber (million board feet) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | In | Other Stands | | | |
| | Total | Poletimber Trees | Sawtimber Trees | Total | Sawtimber Stands | 500-1500 Board Feet | Under 500 Feet | Cull Trees (thousand cords) | Hardwood Limbs (thousand cords) |
| Softwoods | | | | | | | | | |
| Redcedar | 0.6 | 0.6 | -- | -- | -- | -- | -- | 0.5 | -- |
| Total Softwoods | .6 | .6 | -- | -- | -- | -- | -- | .5 | -- |
| Hard Hardwoods | | | | | | | | | |
| Oak, White | 51.7 | 26.8 | 24.9 | 12.4 | 7.9 | 2.1 | 2.4 | 10.6 | 24.7 |
| Oak, Post | 73.3 | 50.6 | 22.7 | 10.9 | 3.5 | 3.1 | 4.3 | 22.1 | 22.4 |
| Oak, Other White | 2.2 | 1.9 | .3 | .1 | -- | 1/ | .1 | 1.7 | .2 |
| Oak, Black | 70.3 | 44.3 | 26.0 | 12.7 | 7.2 | 2.4 | 3.1 | 27.0 | 24.9 |
| Oak, Scarlet | .3 | -- | .3 | .1 | -- | 1/ | .1 | .3 | .2 |
| Oak, Northern Red | 6.1 | 2.8 | 3.3 | 1.6 | .3 | .6 | .7 | 3.7 | 3.0 |
| Oak, Other Red | 8.9 | 6.8 | 2.1 | 1.0 | -- | .4 | .6 | 13.3 | 1.9 |
| Hickory, Group A | 5.8 | 1.9 | 3.9 | 1.8 | .8 | .5 | .5 | 2.8 | 3.5 |
| Hickory, Group B | 11.3 | 7.7 | 3.6 | 1.6 | 1.2 | .2 | .2 | 4.9 | 3.1 |
| Maple, Hard | -- | -- | -- | -- | -- | -- | -- | .1 | -- |
| Walnut, Black | 7.5 | 4.2 | 3.3 | 1.6 | .1 | .8 | .7 | 1.8 | 3.1 |
| Ash | .6 | .3 | .3 | .2 | -- | .1 | .1 | 1.4 | .4 |
| Other | 5.3 | 5.3 | -- | -- | -- | -- | -- | 5.6 | -- |
| Total Hard Hardwoods | 243.3 | 152.6 | 90.7 | 44.0 | 21.0 | 10.2 | 12.8 | 95.3 | 87.4 |
| Soft Hardwoods | | | | | | | | | |
| Elm | 8.3 | 6.1 | 2.2 | 1.2 | .4 | .4 | .4 | 5.1 | 2.3 |
| Maple, Soft | .7 | .7 | -- | -- | -- | -- | -- | .9 | -- |
| Other 2/ | 1.8 | -- | 1.8 | .9 | .1 | .4 | .4 | 1.2 | 1.7 |
| Total Soft Hardwoods | 10.8 | 6.8 | 4.0 | 2.1 | .5 | .8 | .8 | 7.2 | 4.0 |
| Total Hardwoods | 254.1 | 159.4 | 94.7 | 46.1 | 21.5 | 11.0 | 13.6 | 102.5 | 91.4 |
| All Species | 254.7 | 160.0 | 94.7 | 46.1 | 21.5 | 11.0 | 13.6 | 103.0 | 91.4 |

1/ Insignificant amount.
2/ Mainly sycamore.

TABLE 21d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
CEDAR COUNTY, MISSOURI, 1959

| Ownership Class | Growing Stock (thousand cords) | | | | Sawtimber (million board feet) | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | Softwoods | Soft Hardwoods | Hard Hardwoods | Total | Softwoods | Soft Hardwoods | Hard Hardwoods |
| State | 0.5 | -- | -- | 0.5 | 0.1 | -- | -- | 0.1 |
| Farmer-Owned | 167.8 | 0.4 | 6.6 | 160.8 | 31.5 | -- | 1.2 | 30.3 |
| Miscellaneous Private | 86.4 | .2 | 4.2 | 82.0 | 14.5 | -- | .9 | 13.6 |
| All Ownerships | 254.7 | .6 | 10.8 | 243.3 | 46.1 | -- | 2.1 | 44.0 |

TABLE 22a--COMMERCIAL FOREST LAND BY OWNERSHIP AND STAND-SIZE CLASS
DALLAS COUNTY, MISSOURI, 1959
(ACRES)

| Ownership Class | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| State | 1,600 | 100 | 300 | 300 | 300 | 600 |
| Farmer-Owned | 98,000 | 9,400 | 35,900 | 13,300 | 18,500 | 20,900 |
| Miscellaneous Private | 48,800 | 4,900 | 14,100 | 7,900 | 12,200 | 9,700 |
| All Ownerships | 148,400 | 14,400 | 50,300 | 21,500 | 31,000 | 31,200 |

TABLE 22b--FOREST LAND AREA BY TYPE AND STAND-SIZE CLASS
DALLAS COUNTY, MISSOURI, 1959
(ACRES)

| Forest Type | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| Commercial Forest | | | | | | |
| Hardwood - Redcedar | 2,400 | -- | -- | -- | -- | 2,400 |
| Black - Scarlet Oak | 69,300 | 9,600 | 12,000 | 19,100 | 19,000 | 9,600 |
| White Oak | 19,200 | -- | 7,200 | -- | 2,400 | 9,600 |
| Post - Blackjack Oak | 52,700 | 4,800 | 26,300 | 2,400 | 9,600 | 9,600 |
| Elm - Ash - Cottonwood | 4,800 | -- | 4,800 | -- | -- | -- |
| All Commercial Forest | 148,400 | 14,400 | 50,300 | 21,500 | 31,000 | 31,200 |
| Percent by Size-Class | 100.0 | 9.7 | 33.9 | 14.5 | 20.9 | 21.0 |
| Noncommercial Forest | | | | | | |
| Productive-Reserved | 200 | -- | -- | 100 | 100 | -- |
| Unproductive | 8,500 | -- | -- | -- | -- | 8,500 |
| All Forest Area | 157,100 | 14,400 | 50,300 | 21,600 | 31,100 | 39,700 |

TABLE 22c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
DALLAS COUNTY, MISSOURI, 1959

| Species | Growing Stock (thousand cords) | | | Sawtimber (million board feet) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Poletimber Trees | Sawtimber Trees | Total | In Sawtimber Stands | Other Stands: 500-1500 Board Feet | Other Stands: Under 500 Feet | Cull Trees (thousand cords) | Hardwood Limbs (thousand cords) |
| Softwoods | | | | | | | | | |
| Redcedar | 0.3 | 0.3 | -- | -- | -- | -- | -- | 0.5 | -- |
| Total Softwoods | .3 | .3 | -- | -- | -- | -- | -- | .5 | -- |
| Hard Hardwoods | | | | | | | | | |
| Oak, White | 64.6 | 43.4 | 21.2 | 10.6 | 2.7 | 3.6 | 4.3 | 22.1 | 21.2 |
| Oak, Post | 137.8 | 100.6 | 37.2 | 18.0 | 4.0 | 5.9 | 8.1 | 32.1 | 37.0 |
| Oak, Other White | 5.3 | 3.9 | 1.4 | .6 | .1 | .2 | .3 | 3.5 | 1.1 |
| Oak, Black | 87.9 | 47.1 | 40.8 | 19.9 | 11.7 | 3.6 | 4.6 | 42.4 | 39.0 |
| Oak, Scarlet | .3 | -- | .3 | .2 | -- | .1 | .1 | .6 | .4 |
| Oak, Northern Red | 9.2 | 4.6 | 4.6 | 2.3 | -- | 1.0 | 1.3 | 5.3 | 4.3 |
| Oak, Other Red | 9.5 | 8.7 | .8 | .5 | -- | .2 | .3 | 19.7 | 1.0 |
| Hickory, Group A | 6.5 | 4.1 | 2.4 | 1.2 | .2 | .5 | .5 | 3.4 | 2.3 |
| Hickory, Group B | 17.4 | 15.2 | 2.2 | 1.1 | .7 | .2 | .2 | 7.2 | 2.1 |
| Maple, Hard | .1 | .1 | -- | -- | -- | -- | -- | .1 | -- |
| Walnut, Black | 12.9 | 8.1 | 4.8 | 2.3 | .5 | .9 | .9 | 2.8 | 4.5 |
| Ash | .4 | .2 | .2 | .1 | .1 | -- | -- | 1.0 | .2 |
| Other | 8.5 | 8.5 | -- | -- | -- | -- | -- | 5.7 | -- |
| Total Hard Hardwoods | 360.4 | 244.5 | 115.9 | 56.8 | 20.0 | 16.2 | 20.6 | 145.9 | 113.1 |
| Soft Hardwoods | | | | | | | | | |
| Elm | 10.5 | 7.8 | 2.7 | 1.5 | .4 | .5 | .6 | 5.7 | 2.9 |
| Maple, Soft | -- | -- | -- | -- | -- | -- | -- | .5 | -- |
| Other 1/ | .9 | .1 | .8 | .3 | .2 | 2/ | .1 | .7 | .6 |
| Total Soft Hardwoods | 11.4 | 7.9 | 3.5 | 1.8 | .6 | .5 | .7 | 6.9 | 3.5 |
| Total Hardwoods | 371.8 | 252.4 | 119.4 | 58.6 | 20.6 | 16.7 | 21.3 | 152.8 | 116.6 |
| All Species | 372.1 | 252.7 | 119.4 | 58.6 | 20.6 | 16.7 | 21.3 | 153.3 | 116.6 |

1/ Mainly sycamore
2/ Insignificant amount.

TABLE 22d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
DALLAS COUNTY, MISSOURI, 1959

| Ownership Class | Growing Stock (thousand cords) | | | | Sawtimber (million board feet) | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | Softwoods | Soft Hardwoods | Hard Hardwoods | Total | Softwoods | Soft Hardwoods | Hard Hardwoods |
| State | 2.9 | -- | -- | 2.9 | 0.2 | -- | -- | 0.1 |
| Farmer-Owned | 245.4 | 0.2 | 7.0 | 238.2 | 40.1 | -- | 1.0 | 39.1 |
| Miscellaneous Private | 123.8 | .1 | 4.4 | 119.3 | 18.4 | -- | .8 | 17.6 |
| All Ownerships | 372.1 | .3 | 11.4 | 360.4 | 58.6 | -- | 1.8 | 56.8 |

TABLE 23a--COMMERCIAL FOREST LAND BY OWNERSHIP AND STAND-SIZE CLASS
HICKORY COUNTY, MISSOURI, 1959
(ACRES)

| Ownership Class | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| Farmer-Owned | 79,500 | 13,900 | 11,000 | 9,700 | 9,600 | 35,300 |
| Miscellaneous Private | 39,700 | 7,500 | 4,300 | 5,600 | 5,600 | 16,700 |
| All Ownerships | 119,200 | 21,400 | 15,300 | 15,300 | 15,200 | 52,000 |

TABLE 23b--FOREST LAND AREA BY TYPE AND STAND-SIZE CLASS
HICKORY COUNTY, MISSOURI, 1959
(ACRES)

| Forest Type | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| Commercial Forest | | | | | | |
| Redcedar | 3,100 | -- | -- | -- | -- | 3,100 |
| Hardwood - Redcedar | 12,200 | 3,100 | -- | -- | 3,000 | 6,100 |
| Black - Scarlet Oak | 49,000 | 9,200 | 9,200 | 12,200 | 9,200 | 9,200 |
| White Oak | 3,100 | -- | 3,100 | -- | -- | -- |
| Post - Blackjack Oak | 27,500 | -- | 3,000 | 3,100 | -- | 21,400 |
| Elm - Ash - Cottonwood | 24,300 | 9,100 | -- | -- | 3,000 | 12,200 |
| All Commercial Forest | 119,200 | 21,400 | 15,300 | 15,300 | 15,200 | 52,000 |
| Percent by Size-Class | 100.0 | 18.0 | 12.8 | 12.8 | 12.8 | 43.6 |
| Noncommercial Forest | | | | | | |
| Unproductive | 6,800 | -- | -- | -- | -- | 6,800 |
| All Forest Area | 126,000 | 21,400 | 15,300 | 15,300 | 15,200 | 58,800 |

TABLE 23c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
HICKORY COUNTY, MISSOURI, 1959

| Species | Growing Stock (thousand cords) | | | Sawtimber (million board feet) | | | | Cull Trees (thousand cords) | Hardwood Limbs (thousand cords) |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Poletimber Trees | Sawtimber Trees | Total | In Sawtimber Stands | Other Stands 500-1500 Board Feet | Other Stands Under 500 Feet | | |
| Softwoods | | | | | | | | | |
| Redcedar | 1.2 | 1.2 | -- | -- | -- | -- | -- | 1.5 | 10.2 |
| Total Softwoods | 1.2 | 1.2 | -- | -- | -- | -- | -- | 1.5 | -- |
| Hard Hardwoods | | | | | | | | | |
| Oak, White | 32.9 | 22.6 | 10.3 | 5.1 | 1.4 | 1.7 | 2.0 | 12.2 | 10.2 |
| Oak, Post | 55.5 | 38.2 | 17.3 | 8.3 | 1.0 | 3.1 | 4.2 | 24.2 | 17.0 |
| Oak, Other White | 6.5 | 5.1 | 1.4 | .6 | .4 | .1 | .1 | 4.3 | 1.1 |
| Oak, Black | 64.5 | 39.1 | 25.4 | 12.4 | 8.8 | 1.6 | 2.0 | 28.1 | 24.3 |
| Oak, Scarlet | .1 | -- | .1 | .1 | -- | 1/ | .1 | .1 | .2 |
| Oak, Northern Red | 8.2 | 2.6 | 5.6 | 2.8 | 1.2 | .7 | .9 | 8.2 | 5.2 |
| Oak, Other Red | 14.8 | 5.3 | 9.5 | 4.7 | 3.1 | .7 | .9 | 11.4 | 9.1 |
| Hickory, Group A | 7.1 | 3.5 | 3.6 | 2.0 | 1-0 | .4 | .6 | 2.3 | 3.9 |
| Hickory, Group B | 19.2 | 11.2 | 8.0 | 4.0 | 3.6 | .2 | .2 | 5.8 | 7.7 |
| Maple, Hard | .4 | .4 | -- | -- | -- | -- | -- | .3 | -- |
| Walnut | 17.2 | 5.0 | 12.2 | 5.6 | 4.8 | .4 | .4 | 2.4 | 10.9 |
| Ash | 4.1 | 1.6 | 2.5 | 1.2 | .8 | .2 | .2 | 4.5 | 2.3 |
| Other | 19.7 | 8.3 | 11.4 | 5.4 | 5.4 | -- | -- | 13.9 | 9.1 |
| Total Hard Hardwoods | 250.2 | 142.9 | 107.3 | 52.2 | 31.5 | 9.1 | 11.6 | 117.7 | 101.0 |
| Soft Hardwoods | | | | | | | | | |
| Elm | 16.1 | 8.6 | 7.5 | 3.9 | 2.9 | .5 | .5 | 8.8 | 7.5 |
| Maple, Soft | 4.4 | 1.6 | 2.8 | 1.4 | 1.4 | -- | -- | 2.6 | 2.3 |
| Other 2/ | 17.7 | 9.8 | 7.9 | 3.8 | 3.5 | .2 | .1 | 2.9 | 7.2 |
| Total Soft Hardwoods | 38.2 | 20.0 | 18.2 | 9.1 | 7.8 | .7 | .6 | 14.3 | 17.0 |
| Total Hardwoods | 288.4 | 162.9 | 125.5 | 61.3 | 39.3 | 9.8 | 12.2 | 132.0 | 118.0 |
| All Species | 289.6 | 164.1 | 125.5 | 61.3 | 39.3 | 9.8 | 12.2 | 133.5 | 118.0 |

1/ Insignificant amount.
2/ Mainly sycamore.

TABLE 23d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
HICKORY COUNTY, MISSOURI, 1959

| Ownership Class | Growing Stock (thousand cords) | | | | Sawtimber (million board feet) | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | Softwoods | Soft Hardwoods | Hard Hardwoods | Total | Softwoods | Soft Hardwoods | Hard Hardwoods |
| Farmer-Owned | 189.5 | 0.8 | 23.3 | 165.4 | 41.3 | -- | 5.4 | 35.9 |
| Miscellaneous Private | 100.1 | .4 | 14.9 | 84.8 | 20.0 | -- | 3.7 | 16.3 |
| All Ownerships | 289.6 | 1.2 | 38.2 | 250.2 | 61.3 | -- | 9.1 | 52.2 |

TABLE 24a--COMMERCIAL FOREST LAND BY OWNERSHIP AND STAND-SIZE CLASS
LACLEDE COUNTY, MISSOURI, 1959
(ACRES)

| Ownership Class | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| National Forest | 25,100 | 4,300 | 9,500 | 4,000 | 2,400 | 4,900 |
| State | 1,800 | 300 | 500 | 200 | 200 | 600 |
| Farmer-Owned | 143,700 | 13,300 | 46,200 | 16,000 | 17,300 | 50,900 |
| Miscellaneous Private | 71,700 | 7,200 | 18,100 | 9,200 | 10,200 | 27,000 |
| All Ownerships | 242,300 | 25,100 | 74,300 | 29,400 | 30,100 | 83,400 |

TABLE 24b--FOREST LAND AREA BY TYPE AND STAND-SIZE CLASS
LACLEDE COUNTY, MISSOURI, 1959
(ACRES)

| Forest Type | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| Commercial Forest | | | | | | |
| Pine | 1,800 | -- | 100 | 900 | 600 | 200 |
| Redcedar | 400 | -- | 200 | 1/ | -- | 200 |
| Hardwood - Redcedar | 200 | -- | -- | 200 | -- | 1/ |
| Oak - Pine | 500 | 100 | 400 | -- | -- | -- |
| Black - Scarlet Oak | 89,700 | 10,400 | 27,600 | 18,600 | 8,400 | 24,700 |
| White Oak | 14,800 | 4,700 | 2,700 | 2,800 | 2,300 | 2,300 |
| Post - Blackjack Oak | 120,900 | 5,200 | 40,900 | 6,900 | 16,500 | 51,400 |
| Elm - Ash - Cottonwood | 14,000 | 4,700 | 2,400 | -- | 2,300 | 4,600 |
| All Commercial Forest | 242,300 | 25,100 | 74,300 | 29,400 | 30,100 | 83,400 |
| Percent by Size- Class | 100.0 | 10.4 | 30.7 | 12.1 | 12.4 | 34.4 |
| Noncommercial Forest | | | | | | |
| Productive-Reserved | 500 | 1/ | 100 | 100 | 100 | 200 |
| Unproductive | 12,600 | -- | -- | -- | -- | 12,600 |
| All Forest Area | 255,400 | 25,100 | 74,400 | 29,500 | 30,200 | 96,200 |

1/ Insignificant amount.

TABLE 24c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
LACLEDE COUNTY, MISSOURI, 1959

| Species | Growing Stock (thousand cords) | | | Sawtimber (million board feet) | | | | Cull Trees (thousand cords) | Hardwood Limbs (thousand cords) |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Poletimber Trees | Sawtimber Trees | Total | In Sawtimber Stands | Other Stands 500-1500 Board Feet | Other Stands Under 500 Feet | | |
| Softwoods | | | | | | | | | |
| Pine, Shortleaf | 2.1 | 1.5 | 0.6 | 0.3 | 0.1 | 0.2 | -- | -- | -- |
| Redcedar | .5 | .5 | -- | -- | -- | -- | -- | 0.4 | -- |
| Total Softwoods | 2.6 | 2.0 | .6 | .3 | .1 | .2 | -- | .4 | -- |
| Hard Hardwoods | | | | | | | | | |
| Oak White | 94.8 | 52.6 | 42.2 | 20.8 | 9.7 | 5.5 | 5.6 | 23.8 | 41.5 |
| Oak, Post | 222.8 | 175.3 | 47.5 | 22.8 | 3.9 | 8.2 | 10.7 | 61.1 | 46.9 |
| Oak, Other White | 11.7 | 8.9 | 2.8 | 1.4 | .7 | .3 | .4 | 5.5 | 2.7 |
| Oak , Black | 147.9 | 94.8 | 53.1 | 26.1 | 11.1 | 8.1 | 6.9 | 60.4 | 51.1 |
| Oak, Scarlet | 1.3 | .4 | .9 | .5 | -- | .3 | .2 | .4 | 1.0 |
| Oak, Northern Red | 20.5 | 8.0 | 12.5 | 6.2 | 3.2 | 1.3 | 1.7 | 9.3 | 11.7 |
| Oak, Other Red | 26.5 | 22.4 | 4.1 | 2.1 | -- | 1.0 | 1.1 | 36.5 | 4.1 |
| Hickory, Group A | 11.7 | 8.4 | 3.3 | 1.4 | .2 | .6 | .6 | 6.1 | 2.7 |
| Hickory, Group B | 36.6 | 33.4 | 3.2 | 1.6 | .5 | .4 | .7 | 10.0 | 3.1 |
| Maple, Hard | .3 | .3 | -- | -- | -- | -- | -- | .1 | -- |
| Walnut, Black | 12.8 | 10.1 | 2.7 | 1.3 | .4 | .4 | .5 | 2.2 | 2.5 |
| Ash | 1.8 | 1.3 | .5 | .2 | .1 | .1 | 1/ | 2.5 | .4 |
| Other | 8.7 | 7.9 | .8 | .4 | .4 | -- | -- | 8.6 | .7 |
| Total Hard Hardwoods | 597.4 | 423.8 | 173.6 | 84.8 | 30.2 | 26.2 | 28.4 | 226.5 | 168.4 |
| Soft Hardwoods | | | | | | | | | |
| Elm | 29.0 | 18.5 | 10.5 | 5.4 | 4.0 | .7 | .7 | 10.7 | 10.3 |
| Maple, Soft | .6 | .6 | -- | -- | -- | -- | -- | .9 | -- |
| Other 2/ | 6.2 | .4 | 5.8 | 2.8 | 2.6 | .1 | .1 | 1.2 | 5.3 |
| Total Soft Hardwoods | 35.8 | 19.5 | 16.3 | 8.2 | 6.6 | .8 | .8 | 12.8 | 15.6 |
| Total Hardwoods | 633.2 | 443.3 | 189.9 | 93.0 | 36.8 | 27.0 | 29.2 | 239.3 | 184.0 |
| All Species | 635.8 | 445.3 | 190.5 | 93.3 | 36.9 | 27.2 | 29.2 | 239.7 | 184.0 |

1/ Insignificant amount.
2/ Mainly sycamore.

TABLE 24d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
LACLEDE COUNTY, MISSOURI, 1959

| Ownership Class | Growing Stock (thousand cords) | | | | Sawtimber (million board feet) | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | Softwoods | Soft Hardwoods | Hard Hardwoods | Total | Softwoods | Soft Hardwoods | Hard Hardwoods |
| National Forest | 78.5 | 2.1 | 0.4 | 76.0 | 9.2 | 0.3 | -- | 8.9 |
| State | 1.0 | -- | -- | 1.0 | .2 | -- | -- | .2 |
| Farmer-Owned | 366.6 | .3 | 21.6 | 344.7 | 57.0 | -- | 4.8 | 52.2 |
| Miscellaneous Private | 189.7 | .2 | 13.8 | 175.7 | 26.9 | -- | 3.4 | 23.5 |
| All Ownerships | 635.8 | 2.6 | 35.8 | 597.4 | 93.3 | .3 | 8.2 | 84.8 |

TABLE 25a--COMMERCIAL FOREST LAND BY OWNERSHIP AND STAND-SIZE CLASS
MARIES COUNTY, MISSOURI, 1959
(ACRES)

| Ownership Class | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| State | 300 | 100 | 100 | 1/ | 1/ | 100 |
| Farmer-Owned | 115,000 | 19,000 | 34,800 | 16,000 | 9,300 | 35,900 |
| Miscellaneous Private | 57,400 | 10,300 | 13,600 | 9,300 | 5,400 | 18,800 |
| All Ownerships | 172,700 | 29,400 | 48,500 | 25,300 | 14,700 | 54,800 |

1/ Insignificant amount.

TABLE 25b--FOREST LAND AREA BY TYPE AND STAND-SIZE CLASS
MARIES COUNTY, MISSOURI, 1959
(ACRES)

| Forest Type | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| Commercial Forest | | | | | | |
| Hardwood - Redcedar | 6,300 | -- | -- | -- | -- | 6,300 |
| Black - Scarlet Oak | 46,300 | 14,700 | 14,800 | 8,400 | 6,300 | 2,100 |
| White Oak | 50,600 | 14,700 | 21,100 | -- | 2,100 | 12,700 |
| Post - Blackjack Oak | 65,300 | -- | 12,600 | 16,900 | 6,300 | 29,500 |
| Elm - Ash - Cottonwood | 4,200 | -- | -- | -- | | 4,200 |
| All Commercial Forest | 172,700 | 29,400 | 48,500 | 25,300 | 14,700 | 54,800 |
| Percent by Size-Class | 100.0 | 17.0 | 28.1 | 14.7 | 8.5 | 31.7 |
| Noncommercial Forest | | | | | | |
| Unproductive | 9,900 | -- | -- | -- | -- | 9,900 |
| All Forest Area | 182,600 | 29,400 | 48,500 | 25,300 | 14,700 | 64,700 |

TABLE 25c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
MARIES COUNTY, MISSOURI, 1959

| Species | Growing Stock (thousand cords) | | | Sawtimber (million board feet) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | In | Other Stands | | | |
| | Total | Poletimber Trees | Sawtimber Trees | Total | Sawtimber Stands | 500-1,500 Board Feet | Under 500 Feet | Cull Trees (thousand cords) | Hardwood Limbs (thousand cords) |
| Softwoods | | | | | | | | | |
| Pine, Shortleaf | 3.0 | -- | 3.0 | 1.5 | -- | 0.5 | 1.0 | -- | -- |
| Redcedar | 1.0 | 1.0 | -- | -- | -- | -- | -- | 1.7 | -- |
| Total Softwoods | 4.0 | 1.0 | 3.0 | 1.5 | -- | .5 | 1.0 | 1.7 | -- |
| Hard Hardwoods | | | | | | | | | |
| Oak, White | 161.6 | 97.1 | 64.5 | 31.6 | 20.5 | 5.1 | 6.0 | 34.6 | 63.1 |
| Oak, Post | 98.6 | 73.9 | 24.7 | 12.0 | 2.5 | 4.0 | 5.5 | 31.7 | 24.6 |
| Oak, Other White | 4.0 | 3.1 | .9 | .4 | -- | .2 | .2 | 3.6 | .8 |
| Oak, Black | 117.4 | 56.5 | 60.9 | 30.1 | 22.3 | 3.4 | 4.4 | 46.1 | 59.0 |
| Oak, Scarlet | .5 | -- | .5 | .2 | -- | .1 | .1 | .2 | .4 |
| Oak, Northern Red | 18.4 | 4.0 | 14.4 | 7.1 | 4.1 | 1.4 | 1.6 | 5.8 | 13.3 |
| Oak, Other Red | 15.1 | 12.9 | 2.2 | 1.2 | -- | .5 | .7 | 18.7 | 2.3 |
| Hickory, Group A | 10.1 | 5.1 | 5.0 | 2.7 | .6 | 1.0 | 1.1 | 2.7 | 5.2 |
| Hickory, Group B | 17.0 | 12.6 | 4.4 | 2.2 | 1.6 | .3 | .3 | 6 9 | 4.2 |
| Maple, Hard | -- | -- | -- | -- | -- | -- | -- | .3 | -- |
| Walnut, Black | 9.5 | 5.9 | 3.6 | 1.5 | .3 | .6 | .6 | 3.4 | 2.9 |
| Ash | .9 | .6 | .3 | .1 | -- | 1/ | .1 | 1.7 | .2 |
| Other | 1.2 | 1.2 | -- | -- | -- | -- | -- | 4.9 | -- |
| Total Hard Hardwoods | 454.3 | 272.9 | 181.4 | 89.1 | 51.9 | 16.6 | 20.6 | 160.6 | 176.0 |
| Soft Hardwoods | | | | | | | | | |
| Elm | 9.2 | 6.8 | 2.4 | 1.3 | .5 | .4 | .4 | 4.9 | 2.5 |
| Maple, Soft | .5 | .5 | -- | -- | -- | -- | -- | .7 | -- |
| Other 2/ | 1.0 | .3 | .7 | .3 | .3 | -- | -- | 1.1 | .6 |
| Total Soft Hardwoods | 10.7 | 7.6 | 3.1 | 1.6 | .8 | .4 | .4 | 6.7 | 3.1 |
| Total Hardwoods | 465.0 | 280.5 | 184.5 | 90.7 | 52.7 | 17.0 | 21.0 | 167.3 | 179.1 |
| All Species | 469.0 | 281.5 | 187.5 | 92.2 | 52.7 | 17.5 | 22.0 | 169.0 | 179.1 |

1/ Insignificant amount.
2/ Mainly sycamore.

TABLE 25d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
MARIES COUNTY, MISSOURI, 1959

| Ownership Class | Growing Stock (thousand cords) | | | | Sawtimber (million board feet) | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | Softwoods | Soft Hardwoods | Hard Hardwoods | Total | Softwoods | Soft Hardwoods | Hard Hardwoods |
| State | 0.9 | -- | -- | 0.9 | 0.2 | -- | .. | 0.2 |
| Farmer-Owned | 309.4 | 2.6 | 6.5 | 300.3 | 63.4 | 1.2 | 0.9 | 61.3 |
| Miscellaneous Private | 158.7 | 1.4 | 4.2 | 153.1 | 28.6 | .3 | .7 | 27.6 |
| All Ownerships | 469.0 | 4.0 | 10.7 | 454.3 | 92.2 | 1.5 | 1.6 | 89.1 |

TABLE 26a--COMMERCIAL FOREST LAND BY OWNERSHIP AND STAND-SIZE CLASS
MILLER COUNTY, MISSOURI, 1959
(ACRES)

| Ownership Class | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| Farmer-Owned | 120,900 | 22,400 | 45,300 | 10,800 | 14,600 | 27,800 |
| Miscellaneous Private | 60,400 | 12,200 | 17,800 | 6,200 | 8,500 | 15,700 |
| All Ownerships | 181,300 | 34,600 | 63,100 | 17,000 | 23,100 | 43,500 |

TABLE 26b--FOREST LAND AREA BY TYPE AND STAND-SIZE CLASS
MILLER COUNTY, MISSOURI, 1959
(ACRES)

| Forest Type | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| Commercial Forest | | | | | | |
| Black - Scarlet Oak | 64,800 | 11,300 | 25,300 | 11,200 | 8,500 | 8,500 |
| White Oak | 37,900 | 14,600 | 11,600 | -- | -- | 11,700 |
| Post - Blackjack Oak | 52,500 | 2,900 | 17,500 | 5,800 | 11,700 | 14,600 |
| Elm - Ash - Cottonwood | 26,100 | 5,800 | 8,700 | -- | 2,900 | 8,700 |
| All Commercial Forest | 181,300 | 34,600 | 63,100 | 17,000 | 23,100 | 43,500 |
| Percent by Size-Class | 100.0 | 19.1 | 34.8 | 9.4 | 12.7 | 24.0 |
| Noncommercial Forest | | | | | | |
| Productive-Reserved | 2,500 | 400 | 1,000 | 500 | 300 | 300 |
| Unproductive | 10,500 | -- | -- | -- | -- | 10,500 |
| All Forest Area | 194,300 | 35,000 | 64,100 | 17,500 | 23,400 | 54,300 |

TABLE 26c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
MILLER COUNTY, MISSOURI, 1959

| Species | Growing Stock (thousand cords) | | | Sawtimber (million board feet) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | In | Other Stands | | | |
| | Total | Poletimber Trees | Sawtimber Trees | Total | Sawtimber Stands | 500-1500 Board Feet | Under 500 Feet | Cull Trees (thousand cords) | Hardwood Limbs (thousand cords) |
| Softwoods | | | | | | | | | |
| Pine, Shortleaf | 1.7 | -- | 1.7 | 0.8 | -- | 0.2 | 0.6 | -- | -- |
| Redcedar | .9 | 0.9 | -- | -- | -- | -- | -- | 0.9 | -- |
| Total Softwoods | 2.6 | .9 | 1.7 | .8 | -- | .2 | .6 | .9 | -- |
| Hard Hardwoods | | | | | | | | | |
| Oak, White | 145.5 | 82.8 | 62.7 | 30.9 | 21.6 | 4.3 | 5.0 | 30.7 | 61.7 |
| Oak, Post | 121.9 | 93.3 | 28.6 | 14.0 | 3.4 | 4.4 | 6.2 | 27.5 | 28.7 |
| Oak, Other White | 9.6 | 6.5 | 3.1 | 1.7 | .9 | .3 | .5 | 5.0 | 3.2 |
| Oak, Black | 130.4 | 78.9 | 51.5 | 25.3 | 16.4 | 4.0 | 4.9 | 48.6 | 49.6 |
| Oak, Scarlet | .5 | -- | .5 | .3 | -- | .2 | .1 | .5 | .6 |
| Oak, Northern Red | 31.9 | 7.9 | 24.0 | 12.2 | 7.3 | 2.2 | 2.7 | 9.3 | 22.9 |
| Oak, Other Red | 14.9 | 11.8 | 3.1 | 1.5 | -- | .7 | .8 | 19.9 | 2.9 |
| Hickory, Group A | 10.0 | 6.6 | 3.4 | 2.0 | .3 | .8 | .9 | 3.2 | 3.9 |
| Hickory, Group B | 20.7 | 16.0 | 4.7 | 2.4 | 1.8 | .3 | .3 | 6.5 | 4.6 |
| Maple, Hard | .5 | .5 | -- | -- | -- | -- | -- | .4 | -- |
| Walnut, Black | 22.0 | 13.0 | 9.0 | 4.1 | .4 | 1.8 | 1.9 | 3.2 | 8.0 |
| Ash | 1.8 | 1.1 | .7 | .3 | -- | .1 | .2 | 3.5 | .6 |
| Other | 10.9 | 9.8 | 1.1 | .5 | .5 | -- | -- | 12.1 | .8 |
| Total Hard Hardwoods | 520.6 | 328.2 | 192.4 | 95.2 | 52.6 | 19.1 | 23.5 | 170.4 | 187.5 |
| Soft Hardwoods | | | | | | | | | |
| Elm | 28.1 | 15.3 | 12.8 | 6.4 | 5.1 | .6 | .7 | 13.4 | 12.3 |
| Maple, Soft | 1.1 | 1.1 | -- | -- | -- | -- | -- | 1.5 | -- |
| Other 1/ | 33.2 | 22.8 | 10.4 | 5.0 | 1.8 | 1.5 | 1.7 | 8.9 | 9.4 |
| Total Soft Hardwoods | 62.4 | 39.2 | 23.2 | 11.4 | 6.9 | 2.1 | 2.4 | 23.8 | 21.7 |
| Total Hardwoods | 583.0 | 367.4 | 215.6 | 106.6 | 59.5 | 21.2 | 25.9 | 194.2 | 209.2 |
| All Species | 585.6 | 368.3 | 217.3 | 107.4 | 59.5 | 21.4 | 26.5 | 195.1 | 209.2 |

1/ Mainly sycamore.

TABLE 26d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
MILLER COUNTY, MISSOURI, 1959

| Ownership Class | Growing Stock (thousand cords) | | | | Sawtimber (million board feet) | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | Softwoods | Soft Hardwoods | Hard Hardwoods | Total | Softwoods | Soft Hardwoods | Hard Hardwoods |
| Farmer-Owned | 383.9 | 1.7 | 38.1 | 344.1 | 72.9 | 0.7 | 6.7 | 65.5 |
| Miscellaneous Private | 201.7 | .9 | 24.3 | 176.5 | 34.5 | .1 | 4.7 | 29.7 |
| All Ownerships | 585.6 | 2.6 | 62.4 | 520.6 | 107.4 | .8 | 11.4 | 95.2 |

TABLE 27a--COMMERCIAL FOREST LAND BY OWNERSHIP AND STAND-SIZE CLASS
MORGAN COUNTY, MISSOURI, 1959
(ACRES)

| Ownership Class | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| State | 100 | 1/ | 1/ | 1/ | 1/ | 100 |
| Farmer-Owned | 127,900 | 28,600 | 38,900 | 12,500 | 12,400 | 35,500 |
| Miscellaneous Private | 63,900 | 15,600 | 15,300 | 7,200 | 7,300 | 18,500 |
| All Ownerships | 191,900 | 44,200 | 54,200 | 19,700 | 19,700 | 54,100 |

1/ Insignificant amount.

TABLE 27b--FOREST LAND AREA BY TYPE AND STAND-SIZE CLASS
MORGAN COUNTY, MISSOURI, 1959
(ACRES)

| Forest Type | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| Commercial Forest | | | | | | |
| Black - Scarlet Oak | 83,800 | 14,700 | 24,700 | 9,900 | 9,900 | 24,600 |
| White Oak | 44,300 | 14,800 | 19,700 | 9,800 | -- | -- |
| Post - Blackjack Oak | 49,100 | 4,900 | 9,800 | -- | 4,900 | 29,500 |
| Elm - Ash - Cottonwood | 14,700 | 9,800 | -- | -- | 4,900 | -- |
| All Commercial Forest | 191,900 | 44,200 | 54,200 | 19,700 | 19,700 | 54,100 |
| Percent by Size-Class | 100.0 | 23.0 | 28.2 | 10.3 | 10.3 | 28.2 |
| Noncommercial Forest | | | | | | |
| Unproductive | 11,000 | -- | -- | -- | -- | 11,000 |
| All Forest Area | 202,900 | 44,200 | 54,200 | 19,700 | 19,700 | 65,100 |

TABLE 27c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
MORGAN COUNTY, MISSOURI, 1959

| Species | Growing Stock (thousand cords) | | | Sawtimber (million board feet) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | In | Other Stands | | | |
| | Total | Poletimber Trees | Sawtimber Trees | Total | Sawtimber Stands | 500-1500 Board Feet | Under 500 Feet | Cull Trees (thousand cords) | Hardwood Limbs (thousand cords) |
| Softwoods | | | | | | | | | |
| Redcedar | 1.6 | 1.6 | -- | -- | -- | -- | -- | 1.4 | -- |
| Total Softwoods | 1.6 | 1.6 | -- | -- | -- | -- | -- | 1.4 | -- |
| Hard Hardwoods | | | | | | | | | |
| Oak, White | 188.1 | 100.2 | 87.9 | 43.7 | 27.4 | 7.5 | 8.8 | 42.5 | 87.2 |
| Oak, Post | 97.4 | 69.3 | 28.1 | 13.5 | 4.1 | 3.9 | 5.5 | 30.7 | 27.7 |
| Oak, Other White | 12.3 | 8.5 | 3.8 | 1.9 | 1.4 | .2 | .3 | 4.1 | 3.6 |
| Oak, Black | 151.9 | 84.8 | 67.1 | 32.7 | 23.3 | 4.2 | 5.2 | 52.4 | 64.0 |
| Oak, Scarlet | .5 | -- | .5 | .2 | -- | .1 | .1 | .2 | .4 |
| Oak, Northern Red | 28.5 | 7.4 | 21.1 | 10.6 | 6.9 | 1.7 | 2.0 | 10.3 | 19.9 |
| Oak, Other Red | 11.9 | 10.7 | 1.2 | .6 | -- | .1 | .1 | 16.2 | 1.2 |
| Hickory, Group A | 12.1 | 7.0 | 5.1 | 2.4 | .3 | 1.0 | 1.1 | 3.8 | 4.6 |
| Hickory, Group B | 18.6 | 16.4 | 2.2 | 1.2 | .5 | .3 | .4 | 8.4 | 2.3 |
| Maple, Hard | .6 | .6 | -- | -- | -- | -- | -- | .2 | -- |
| Walnut, Black | 8.2 | 5.8 | 2.4 | 1.0 | .4 | .3 | .3 | 1.6 | 1.9 |
| Ash | 4.0 | 3.8 | .2 | .1 | .1 | -- | -- | 3.6 | .2 |
| Other | 10.3 | 8.5 | 1.8 | .9 | .9 | -- | -- | 8.8 | 1.5 |
| Total Hard Hardwoods | 544.4 | 323.0 | 221.4 | 108.8 | 65.3 | 19.5 | 24.0 | 182.8 | 214.5 |
| Soft Hardwoods | | | | | | | | | |
| Elm | 31.2 | 12.0 | 19.2 | 9.8 | 8.7 | .5 | .6 | 12.8 | 18.8 |
| Maple, Soft | -- | -- | -- | -- | -- | -- | -- | .7 | -- |
| Other 1/ | 12.6 | .8 | 11.8 | 5.7 | 5.2 | .2 | .3 | .6 | 10.7 |
| Total Soft Hardwoods | 43.8 | 12.8 | 31.0 | 15.5 | 13.9 | .7 | .9 | 14.1 | 29.5 |
| Total Hardwoods | 588.2 | 335.8 | 252.4 | 124.3 | 79.2 | 20.2 | 24.9 | 196.9 | 244.0 |
| All Species | 589.8 | 337.4 | 252.4 | 124.3 | 79.2 | 20.2 | 24.9 | 198.3 | 244.0 |

1/ Mainly sycamore.

TABLE 27d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
MORGAN COUNTY, MISSOURI, 1959

| Ownership Class | Growing Stock (thousand cords) | | | | Sawtimber (million board feet) | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | Softwoods | Soft Hardwoods | Hard Hardwoods | Total | Softwoods | Soft Hardwoods | Hard Hardwoods |
| State | 1.1 | -- | -- | 1.1 | 0.2 | -- | -- | 0.2 |
| Farmer-Owned | 387.7 | 1.1 | 26.7 | 359.9 | 83.9 | -- | 9.1 | 74.8 |
| Miscellaneous Private | 201.0 | .5 | 17.1 | 183.4 | 40.2 | -- | 6.4 | 33.8 |
| All Ownerships | 589.8 | 1.6 | 43.8 | 544.4 | 124.3 | -- | 15.5 | 108.8 |

TABLE 28a--COMMERCIAL FOREST LAND BY OWNERSHIP AND STAND-SIZE CLASS
PHELPS COUNTY, MISSOURI, 1959
(ACRES)

| Ownership Class | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| National Forest | 48,600 | 13,200 | 17,600 | 6,800 | 3,400 | 7,600 |
| State | 300 | 100 | 100 | 1/ | 1/ | 100 |
| Farmer-Owned | 132,700 | 14,200 | 31,700 | 16,600 | 10,900 | 59,300 |
| Miscellaneous Private | 66,300 | 7,800 | 12,500 | 9,600 | 5,200 | 31,200 |
| All Ownerships | 247,900 | 35,300 | 61,900 | 33,000 | 19,500 | 98,200 |

1/ Insignificant amount.

TABLE 28b--FOREST LAND AREA BY TYPE AND STAND-SIZE CLASS
PHELPS COUNTY, MISSOURI, 1959
(ACRES)

| Forest Type | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| Commercial Forest | | | | | | |
| Pine | 4,800 | 300 | 500 | 2,100 | 1,500 | 400 |
| Redcedar | 6,800 | -- | 2,400 | -- | -- | 4,400 |
| Hardwood - Redcedar | 4,400 | -- | 2,000 | 400 | 2,000 | -- |
| Oak - Pine | 2,600 | 600 | 1,900 | -- | -- | 100 |
| Black - Scarlet Oak | 90,800 | 24,600 | 25,900 | 11,600 | 5,600 | 23,100 |
| White Oak | 23,900 | 4,400 | 10,800 | 700 | 2,000 | 6,000 |
| Post - Blackjack Oak | 106,400 | 3,400 | 16,400 | 14,100 | 8,400 | 64,100 |
| Elm - Ash - Cottonwood | 8,200 | 2,000 | 2,000 | 4,100 | -- | 100 |
| All Commercial Forest | 247,900 | 35,300 | 61,900 | 33,000 | 19,500 | 98,200 |
| Percent by Size-Class | 100.0 | 14.2 | 25.0 | 13.3 | 7.9 | 39.6 |
| Noncommercial Forest | | | | | | |
| Unproductive | 11,500 | -- | -- | -- | -- | 11,500 |
| All Forest Area | 259,400 | 35,300 | 61,900 | 33,000 | 19,500 | 109,700 |

TABLE 28c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
PHELPS COUNTY, MISSOURI, 1959

| Species | Growing Stock (thousand cords) | | | Sawtimber (million board feet) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Poletimber Trees | Sawtimber Trees | Total | In Sawtimber Stands | Other Stands: 500-1500 Board Feet | Other Stands: Under 500 Feet | Cull Trees (thousand cords) | Hardwood Limbs (thousand cords) |
| Softwoods | | | | | | | | | |
| Pine, Shortleaf | 8.7 | 4.4 | 4.3 | 2.2 | 0.5 | 0.9 | 0.8 | 0.1 | -- |
| Redcedar | 7.4 | 7.4 | -- | -- | -- | -- | -- | 2.3 | -- |
| Total Softwoods | 16.1 | 11.8 | 4.3 | 2.2 | .5 | .9 | .8 | 2.4 | -- |
| Hard Hardwoods | | | | | | | | | |
| Oak, White | 128.9 | 83.7 | 45.2 | 22.3 | 7.5 | 8.3 | 6.5 | 30.8 | 44.5 |
| Oak, Post | 147.8 | 109.5 | 38.3 | 18.3 | 3.0 | 6.8 | 8.5 | 63.9 | 37.6 |
| Oak, Other White | 9.3 | 8.3 | 1.0 | .4 | -- | .2 | .2 | 4.7 | .8 |
| Oak, Black | 224.8 | 141.0 | 83.8 | 41.1 | 17.4 | 13.9 | 9.8 | 63.7 | 80.5 |
| Oak, Scarlet | 1.8 | 1.1 | .7 | .3 | -- | .2 | .1 | .1 | .6 |
| Oak, Northern Red | 19.3 | 11.1 | 8.2 | 4.2 | .3 | 1.8 | 2.1 | 6.8 | 7.8 |
| Oak, Other Red | 23.0 | 19.8 | 3.2 | 1.6 | -- | .9 | .7 | 32.8 | 3.1 |
| Hickory, Group A | 14.8 | 8.7 | 6.1 | 2.9 | .4 | 1.2 | 1.3 | 8.0 | 5.6 |
| Hickory, Group B | 34.7 | 29.0 | 5.7 | 2.9 | 1.0 | .9 | 1.0 | 9.7 | 5.6 |
| Maple, Hard | .5 | .5 | -- | -- | -- | -- | -- | .1 | -- |
| Walnut, Black | 14.1 | 7.5 | 6.6 | 3.1 | .5 | 1.2 | 1.4 | 3.1 | 6.0 |
| Ash | .3 | -- | .3 | .1 | -- | .1 | -- | 1.0 | .2 |
| Other | 9.4 | 2.9 | 6.5 | 3.0 | 2.4 | .3 | .3 | 4.1 | 5.0 |
| Total Hard Hardwoods | 628.7 | 423.1 | 205.6 | 100.2 | 32.5 | 35.8 | 31.9 | 228.8 | 197.3 |
| Soft Hardwoods | | | | | | | | | |
| Elm | 13.4 | 10.7 | 2.7 | 1.4 | .3 | .5 | .6 | 4.2 | 2.7 |
| Maple, Soft | .1 | .1 | -- | -- | -- | -- | -- | .6 | -- |
| Cottonwood | .2 | -- | .2 | .1 | -- | -- | .1 | -- | .2 |
| Other 1/ | 13.6 | 6.4 | 7.2 | 3.4 | 1.9 | .7 | .8 | .5 | 6.4 |
| Total Soft Hardwoods | 27.3 | 17.2 | 10.1 | 4.9 | 2.2 | 1.2 | 1.5 | 5.3 | 9.3 |
| Total Hardwoods | 656.0 | 440.3 | 215.7 | 105.1 | 34.7 | 37.0 | 33.4 | 234.1 | 206.6 |
| All Species | 672.1 | 452.1 | 220.0 | 107.3 | 35.2 | 37.9 | 34.2 | 236.5 | 206.6 |

1/ Mainly sycamore.

TABLE 28d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
PHELPS COUNTY, MISSOURI, 1959

| Ownership Class | Growing Stock (thousand cords) | | | | Sawtimber (million board feet) | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | Softwoods | Soft Hardwoods | Hard Hardwoods | Total | Softwoods | Soft Hardwoods | Hard Hardwoods |
| National Forest | 209.3 | 7.0 | 1.0 | 201.3 | 28.0 | 1.3 | 0.1 | 26.6 |
| State | .9 | -- | -- | 0.9 | 0.1 | -- | -- | 0.1 |
| Farmer-Owned | 304.5 | 6.0 | 16.0 | 282.5 | 54.2 | .7 | 2.8 | 50.7 |
| Miscellaneous Private | 157.4 | 3.1 | 10.3 | 144.0 | 25.0 | .2 | 2.0 | 22.8 |
| All Ownerships | 672.1 | 16.1 | 27.3 | 628.7 | 107.3 | 2.2 | 4.9 | 100.2 |

TABLE 29a--COMMERCIAL FOREST LAND BY OWNERSHIP AND STAND-SIZE CLASS
POLK COUNTY, MISSOURI, 1959
(ACRES)

| Ownership Class | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| State | 600 | 100 | 200 | 100 | 1/ | 200 |
| Farmer-Owned | 79,900 | 12,800 | 16,900 | 12,400 | 13,700 | 24,100 |
| Miscellaneous Private | 39,900 | 6,900 | 6,600 | 7,200 | 8,000 | 11,200 |
| All Ownerships | 120,400 | 19,800 | 23,700 | 19,700 | 21,700 | 35,500 |

1/ Insignificant amount.

TABLE 29b--FOREST LAND AREA BY TYPE AND STAND-SIZE CLASS
POLK COUNTY, MISSOURI, 1959
(ACRES)

| Forest Type | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| Commercial Forest | | | | | | |
| Hardwood - Redcedar | 9,900 | 2,000 | -- | -- | 2,000 | 5,900 |
| Black - Scarlet Oak | 33,400 | 3,900 | 13,800 | 5,900 | 3,900 | 5,900 |
| White Oak | 2,000 | 2,000 | -- | -- | -- | -- |
| Post - Blackjack Oak | 59,200 | 7,900 | 9,900 | 13,800 | 13,800 | 13,800 |
| Elm - Ash - Cottonwood | 15,900 | 4,000 | -- | -- | 2,000 | 9,900 |
| All Commercial Forest | 120,400 | 19,800 | 23,700 | 19,700 | 21,700 | 35,500 |
| Percent by Size-Class | 100.0 | 16.4 | 19.7 | 16.4 | 18.0 | 29.5 |
| Noncommercial Forest | | | | | | |
| Unproductive | 6,900 | -- | -- | -- | -- | 6,900 |
| All Forest Area | 127,300 | 19,800 | 23,700 | 19,700 | 21,700 | 42,400 |

TABLE 29c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
POLK COUNTY, MISSOURI, 1959

| Species | Growing Stock (thousand cords) | | | Sawtimber (million board feet) | | | | Cull Trees (thousand cords) | Hardwood Limbs (thousand cords) |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Poletimber Trees | Sawtimber Trees | Total | In Sawtimber Stands | Other Stands: 500-1500 Board Feet | Other Stands: Under 500 Feet | | |
| Softwoods | | | | | | | | | |
| Redcedar | 0.4 | 0.4 | -- | -- | -- | -- | -- | 1.4 | -- |
| Total Softwoods | .4 | .4 | -- | -- | -- | -- | -- | 1.4 | -- |
| Hard Hardwoods | | | | | | | | | |
| Oak, White | 39.6 | 23.0 | 16.6 | 8.1 | 5.0 | 1.4 | 1.7 | 8.2 | 16.2 |
| Oak, Post | 91.7 | 64.2 | 27.5 | 13.4 | 5.6 | 3.3 | 4.5 | 26.5 | 27.5 |
| Oak, Other White | 7.2 | 5.1 | 2.1 | .9 | .7 | .1 | .1 | 4.1 | 1.7 |
| Oak, Black | 59.3 | 35.5 | 23.8 | 11.9 | 6.6 | 2.4 | 2.9 | 25.6 | 23.3 |
| Oak, Scarlet | .3 | -- | .3 | .2 | -- | .1 | .1 | .2 | .4 |
| Oak, Northern Red | 8.3 | 2.2 | 6.1 | 3.0 | 1.7 | .6 | .7 | 6.0 | 5.6 |
| Oak, Other Red | 16.9 | 9.6 | 7.3 | 3.7 | 2.0 | .7 | 1.0 | 20.3 | 7.1 |
| Hickory, Group A | 4.8 | 2.5 | 2.3 | .9 | .3 | .3 | .3 | 2.8 | 1.7 |
| Hickory, Group B | 13.9 | 11.1 | 2.8 | 1.4 | .5 | .4 | .5 | 6.1 | 2.7 |
| Maple, Hard | .2 | .2 | -- | -- | -- | -- | -- | .2 | -- |
| Walnut, Black | 7.4 | 3.2 | 4.2 | 2.0 | 1.1 | .4 | .5 | 1.8 | 3.9 |
| Ash | 3.3 | 1.3 | 2.0 | .9 | .6 | .1 | .2 | 3.9 | 1.7 |
| Other | 4.6 | 3.9 | .7 | .4 | .4 | -- | -- | 9.3 | .7 |
| Total Hard Hardwoods | 257.5 | 161.8 | 95.7 | 46.8 | 24.5 | 9.8 | 12.5 | 115.0 | 92.5 |
| Soft Hardwoods | | | | | | | | | |
| Elm | 15.9 | 7.7 | 8.2 | 4.3 | 3.7 | .3 | .3 | 6.3 | 8.2 |
| Maple, Soft | 1.3 | 1.3 | -- | -- | -- | -- | -- | 1.5 | -- |
| Other 1/ | 3.4 | .5 | 2.9 | 1.3 | 1.1 | .1 | .1 | 2.4 | 2.5 |
| Total Soft Hardwoods | 20.6 | 9.5 | 11.1 | 5.6 | 4.8 | .4 | .4 | 10.2 | 10.7 |
| Total Hardwoods | 278.1 | 171.3 | 106.8 | 52.4 | 29.3 | 10.2 | 12.9 | 125.2 | 103.2 |
| All Species | 278.5 | 171.7 | 106.8 | 52.4 | 29.3 | 10.2 | 12.9 | 126.6 | 103.2 |

1/ Mainly sycamore.

TABLE 29d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
POLK COUNTY, MISSOURI, 1959

| Ownership Class | Growing Stock (thousand cords) | | | | Sawtimber (million board feet) | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | Softwoods | Soft Hardwoods | Hard Hardwoods | Total | Softwoods | Soft Hardwoods | Hard Hardwoods |
| State | 0.5 | -- | -- | 0.5 | 0.1 | -- | -- | 0.1 |
| Farmer-Owned | 183.1 | 0.3 | 12.6 | 170.2 | 35.5 | -- | 3.3 | 32.2 |
| Miscellaneous Private | 94.9 | .1 | 8.0 | 86.8 | 16.8 | -- | 2.3 | 14.5 |
| All Ownerships | 278.5 | .4 | 20.6 | 257.5 | 52.4 | -- | 5.6 | 46.8 |

TABLE 30a--COMMERCIAL FOREST LAND BY OWNERSHIP AND STAND-SIZE CLASS
PULASKI COUNTY, MISSOURI, 1959
(ACRES)

| Ownership Class | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| Federally Owned or Managed | | | | | | |
| National Forest | 34,100 | 7,700 | 14,300 | 4,500 | 2,100 | 5,500 |
| Other | 25,000 | 4,200 | 6,800 | 3,200 | 2,000 | 8,800 |
| State | 300 | 100 | 100 | 1/ | 1/ | 100 |
| Farmer-Owned | 102,100 | 20,500 | 32,500 | 18,300 | 5,000 | 25,800 |
| Miscellaneous Private | 50,900 | 11,200 | 12,800 | 10,500 | 3,000 | 13,400 |
| All Ownerships | 212,400 | 43,700 | 66,500 | 36,500 | 12,100 | 53,600 |

1/ Insignificant amount.

TABLE 30b--FOREST LAND AREA BY TYPE AND STAND-SIZE CLASS
PULASKI COUNTY, MISSOURI, 1959
(ACRES)

| Forest Type | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| Commercial Forest | | | | | | |
| Pine | 1,200 | -- | -- | 800 | 400 | -- |
| Redcedar | 600 | -- | 200 | -- | -- | 400 |
| Hardwood - Redcedar | 400 | -- | -- | 400 | -- | -- |
| Oak - Pine | 1,100 | 300 | 800 | -- | -- | -- |
| Black - Scarlet Oak | 93,000 | 24,200 | 30,300 | 16,900 | 3,400 | 18,200 |
| White Oak | 29,400 | 4,300 | 14,700 | 6,400 | -- | 4,000 |
| Post - Blackjack Oak | 72,500 | 6,900 | 18,400 | 12,000 | 8,200 | 27,000 |
| Elm - Ash - Cottonwood | 14,200 | 8,000 | 2,100 | -- | 100 | 4,000 |
| All Commercial Forest | 212,400 | 43,700 | 66,500 | 36,500 | 12,100 | 53,600 |
| Percent by Size-Class | 100.0 | 20.6 | 31.3 | 17.2 | 5.7 | 25.2 |
| Noncommercial Forest | | | | | | |
| Unproductive | 10,300 | -- | -- | -- | -- | 10,300 |
| All Forest Area | 222,700 | 43,700 | 66,500 | 36,500 | 12,100 | 63,900 |

TABLE 30c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
PULASKI COUNTY, MISSOURI, 1959

| Species | Growing Stock (thousand cords) | | | Sawtimber (million board feet) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Poletimber Trees | Sawtimber Trees | Total | In Sawtimber Stands | Other Stands: 500-1500 Board Feet | Other Stands: Under 500 Feet | Cull Trees (thousand cords) | Hardwood Limbs (thousand cords) |
| Softwoods | | | | | | | | | |
| Pine, Shortleaf | 1.3 | 0.5 | 0.8 | 0.4 | -- | 0.2 | 0.2 | -- | -- |
| Redcedar | .2 | .2 | -- | -- | -- | -- | -- | 0.4 | -- |
| Total Softwoods | 1.5 | .7 | .8 | .4 | -- | .2 | .2 | .4 | -- |
| Hard Hardwoods | | | | | | | | | |
| Oak, White | 150.1 | 92.8 | 57.3 | 28.1 | 11.7 | 8.1 | 8.3 | 27.2 | 56.1 |
| Oak, Post | 131.9 | 97.9 | 34.0 | 16.0 | 5.6 | 4.5 | 5.9 | 40.3 | 32.8 |
| Oak, Other White | 8.6 | 6.1 | 2.5 | 1.2 | .6 | .3 | .3 | 4.2 | 2.3 |
| Oak, Black | 245.4 | 148.3 | 97.1 | 47.7 | 29.4 | 9.2 | 9.1 | 57.7 | 93.4 |
| Oak, Scarlet | 1.2 | .7 | .5 | .3 | -- | .2 | .1 | .2 | .6 |
| Oak, Northern Red | 23.8 | 10.8 | 13.0 | 6.4 | 2.7 | 1.7 | 2.0 | 5.7 | 12.0 |
| Oak, Other Red | 18.9 | 16.1 | 2.8 | 1.3 | -- | .7 | .6 | 28.5 | 2.4 |
| Hickory, Group A | 15.7 | 7.4 | 8.3 | 3.9 | .8 | 1.4 | 1.7 | 6.8 | 7.6 |
| Hickory, Group B | 28.2 | 23.7 | 4.5 | 2.2 | .5 | .8 | .9 | 10.8 | 4.2 |
| Maple, Hard | .5 | .5 | -- | -- | -- | -- | -- | .9 | -- |
| Walnut, Black | 13.2 | 8.8 | 4.4 | 2.1 | .5 | .7 | .9 | 1.6 | 4.1 |
| Ash | .7 | .2 | .5 | .2 | .1 | 1/ | .1 | 1.8 | .4 |
| Other | 17.8 | 6.0 | 11.8 | 5.7 | 5.3 | .1 | .3 | 8.3 | 9.6 |
| Total Hard Hardwoods | 656.0 | 419.3 | 236.7 | 115.1 | 57.2 | 27.7 | 30.2 | 194.0 | 225.5 |
| Soft Hardwoods | | | | | | | | | |
| Elm | 17.4 | 9.1 | 8.3 | 4.3 | 3.6 | .3 | .4 | 7.0 | 8.2 |
| Maple, Soft | .6 | .6 | -- | -- | -- | -- | -- | 1.7 | -- |
| Other 2/ | 33.8 | 20.0 | 13.8 | 6.7 | 5.3 | .7 | .7 | 3.4 | 12.6 |
| Total Soft Hardwoods | 51.8 | 29.7 | 22.1 | 11.0 | 8.9 | 1.0 | 1.1 | 12.1 | 20.8 |
| Total Hardwoods | 707.8 | 449.0 | 258.8 | 126.1 | 66.1 | 28.7 | 31.3 | 206.1 | 246.3 |
| All Species | 709.3 | 449.7 | 259.6 | 126.5 | 66.1 | 28.9 | 31.5 | 206.5 | 246.3 |

1/ Insignificant amount.
2/ Mainly sycamore.

TABLE 30d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
PULASKI COUNTY, MISSOURI, 1959

| Ownership Class | Growing Stock (thousand cords) | | | | Sawtimber (million board feet) | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | Softwoods | Soft Hardwoods | Hard Hardwoods | Total | Softwoods | Soft Hardwoods | Hard Hardwoods |
| Federally Owned or Managed | | | | | | | | |
| National Forest | 148.6 | 0.7 | 0.6 | 147.3 | 17.8 | 0.1 | -- | 17.7 |
| Other Federal | 32.7 | -- | 9.5 | 23.2 | 6.1 | -- | 1.9 | 4.2 |
| State | 1.0 | -- | -- | 1.0 | .2 | -- | -- | .2 |
| Farmer-Owned | 335.2 | .5 | 21.7 | 313.0 | 67.5 | .2 | 4.5 | 62.8 |
| Miscellaneous Private | 191.8 | .3 | 20.0 | 171.5 | 34.9 | .1 | 4.6 | 30.2 |
| All Ownerships | 709.3 | 1.5 | 51.8 | 656.0 | 126.5 | .4 | 11.0 | 115.1 |

TABLE 31a--COMMERCIAL FOREST LAND BY OWNERSHIP AND STAND-SIZE CLASS
ST. CLAIR COUNTY, MISSOURI, 1959
(ACRES)

| Ownership Class | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| Farmer-Owned | 110,800 | 8,700 | 32,200 | 8,600 | 8,500 | 52,800 |
| Miscellaneous Private | 55,300 | 4,800 | 12,600 | 4,900 | 5,000 | 28,000 |
| All Ownerships | 166,100 | 13,500 | 44,800 | 13,500 | 13,500 | 80,800 |

TABLE 31b--FOREST LAND AREA BY TYPE AND STAND-SIZE CLASS
ST. CLAIR COUNTY, MISSOURI, 1959
(ACRES)

| Forest Type | All Stands | Sawtimber | Poletimber | Seedlings and Saplings | | Non-stocked |
|---|---|---|---|---|---|---|
| | | | | Satisfactorily Stocked | Poorly Stocked | |
| Commercial Forest | | | | | | |
| Redcedar | 4,500 | -- | -- | -- | -- | 4,500 |
| Hardwood - Redcedar | 18,000 | -- | -- | -- | 9,000 | 9,000 |
| Black - Scarlet Oak | 53,800 | -- | 22,400 | 9,000 | -- | 22,400 |
| White Oak | 9,000 | -- | 4,500 | 4,500 | -- | -- |
| Post - Blackjack Oak | 40,400 | 4,500 | 13,400 | -- | 4,500 | 18,000 |
| Elm - Ash - Cottonwood | 40,400 | 9,000 | 4,500 | -- | -- | 26,900 |
| All Commercial Forest | 166,100 | 13,500 | 44,800 | 13,500 | 13,500 | 80,800 |
| Percent by Size-Class | 100.0 | 8.1 | 27.0 | 8.1 | 8.1 | 48.7 |
| Noncommercial Forest | | | | | | |
| Unproductive | 9,500 | -- | -- | -- | -- | 9,500 |
| All Forest Area | 175,600 | 13,500 | 44,800 | 13,500 | 13,500 | 90,300 |

TABLE 31c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
ST. CLAIR COUNTY, MISSOURI, 1959

| Species | Growing Stock (thousand cords) | | | Sawtimber (million board feet) | | | | Cull Trees (thousand cords) | Hardwood Limbs (thousand cords) |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Poletimber Trees | Sawtimber Trees | Total | In Sawtimber Stands | Other Stands 500-1500 Board Feet | Other Stands Under 500 Feet | | |
| Softwoods | | | | | | | | | |
| Redcedar | 2.7 | 2.7 | -- | -- | -- | -- | -- | 1.7 | -- |
| Total Softwoods | 2.7 | 2.7 | -- | -- | -- | -- | -- | 1.7 | -- |
| Hard Hardwoods | | | | | | | | | |
| Oak, White | 55.5 | 35.6 | 19.9 | 9.8 | 1.0 | 4.0 | 4.8 | 21.9 | 19.5 |
| Oak, Post | 99.7 | 70.1 | 29.6 | 14.1 | 5.0 | 3.8 | 5.3 | 26.3 | 29.0 |
| Oak, Other White | 13.6 | 10.4 | 3.2 | 1.6 | 1.2 | .2 | .2 | 8.0 | 3.1 |
| Oak, Black | 61.8 | 43.4 | 18.4 | 9.0 | -- | 4.0 | 5.0 | 37.6 | 17.6 |
| Oak, Scarlet | .7 | -- | .7 | .4 | -- | .2 | .2 | .7 | .8 |
| Oak, Northern Red | 17.3 | 4.8 | 12.5 | 6.4 | 3.5 | 1.3 | 1.6 | 11.7 | 12.0 |
| Oak, Other Red | 20.7 | 14.0 | 6.7 | 3.4 | -- | 1.5 | 1.9 | 19.6 | 6.6 |
| Hickory, Group A | 9.7 | 3.6 | 6.1 | 2.8 | 1.2 | .8 | .8 | 3.9 | 5.4 |
| Hickory, Group B | 15.0 | 10.6 | 4.4 | 2.2 | 1.8 | .2 | .2 | 7.1 | 4.2 |
| Maple, Hard | -- | -- | -- | -- | -- | -- | -- | .6 | -- |
| Walnut, Black | 13.9 | 7.8 | 6.1 | 2.8 | -- | 1.4 | 1.4 | 3.4 | 5.4 |
| Ash | 5.1 | 3.4 | 1.7 | .8 | -- | .4 | .4 | 8.5 | 1.5 |
| Other | 15.1 | 13.5 | 1.6 | .8 | .8 | -- | -- | 21.9 | 1.3 |
| Total Hard Hardwoods | 328.1 | 217.2 | 110.9 | 54.1 | 14.5 | 17.8 | 21.8 | 171.2 | 106.4 |
| Soft Hardwoods | | | | | | | | | |
| Elm | 36.0 | 19.4 | 16.6 | 8.6 | 6.6 | 1.0 | 1.0 | 18.7 | 16.5 |
| Maple, Soft | 3.5 | 3.5 | -- | -- | -- | -- | -- | 4.1 | -- |
| Other 1/ | 5.3 | .4 | 4.9 | 2.3 | 2.3 | -- | -- | 5.8 | 4.3 |
| Total Soft Hardwoods | 44.8 | 23.3 | 21.5 | 10.9 | 8.9 | 1.0 | 1.0 | 28.8 | 20.8 |
| Total Hardwoods | 372.9 | 240.5 | 132.4 | 65.0 | 23.4 | 18.8 | 22.8 | 199.8 | 127.2 |
| All Species | 375.6 | 243.2 | 132.4 | 65.0 | 23.4 | 18.8 | 22.8 | 201.5 | 127.2 |

1/ Mainly sycamore.

TABLE 31d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
ST. CLAIR COUNTY, MISSOURI, 1959

| Ownership Class | Growing Stock (thousand cords) | | | | Sawtimber (million board feet) | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | Softwoods | Soft Hardwoods | Hard Hardwoods | Total | Softwoods | Soft Hardwoods | Hard Hardwoods |
| Farmer-Owned | 246.0 | 1.8 | 27.3 | 216.9 | 43.6 | -- | 6.4 | 37.2 |
| Miscellaneous Private | 129.6 | .9 | 17.5 | 111.2 | 21.4 | -- | 4.5 | 16.9 |
| All Ownerships | 375.6 | 2.7 | 44.8 | 328.1 | 65.0 | -- | 10.9 | 54.1 |