

TIMBER RESOURCES

of Missouri's Riverborder Region

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Cover Photo: Wooded limestone bluffs overlook the Mississippi River.

FOREWORD

This is the fourth 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 demands. In addition, it provides up-to-date information that will help rural communities and forest-based industries make greater use of their forest resources.

The first forest survey of Missouri was made in 1947. Since then, changes in timber cutting, land use, and tree growth have modified the forest situation. 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.

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

TIMBER RESOURCES

of Missouri's Riverborder Region

The Riverborder Region is a strip of 22 counties adjacent to the Missouri and Mississippi Rivers. It contains 8 million acres or 18 percent of Missouri's land area (Fig. 1).

Proximity to the two major rivers encouraged early settlement and rapid development, so it is not surprising that half of the state's population resides here. However, most of the people are concentrated in the highly industrialized area around St. Louis. Outside the St. Louis complex, the region is predominantly rural.

The Riverborder can be divided into two distinct subregions. North of Scott County lies a network of rolling river hills and bluffs dissected by numerous tributary streams and drainages. This is the beginning of the Ozark hills to the south and west. In counties along the Missouri River, the transition from level prairie on the north to the Ozarks on the south can be seen. From Scott County southward, the topography is quite different. This area, known as the Bootheel, is the northern extremity of the Mississippi Alluvial Plain that extends south through Arkansas and Louisiana to the Gulf of Mexico. Except for Crowley's Ridge and Commerce Hills, the remnants of an old upland, the region is broad and flat, sloping very gently to the south.

In general, most of the land is farmed, as the soils of the Riverborder Region are highly productive. In the northern counties much of the level land produces field crops, such as wheat and corn, and slopes that are not too steep have been cleared for pasture. Timber occupies areas that are too rugged or wet for farming. In the Bootheel, conditions are excellent for intensive farming. The land is flat and fertile, rainfall is plentiful, and the growing season is long. More than 85 percent of the area is in farms and most of the farmland is in field crops, such as corn, cotton, and soybeans. Forests are found primarily on land that cannot be farmed because of periodic flooding and poor surface drainage.

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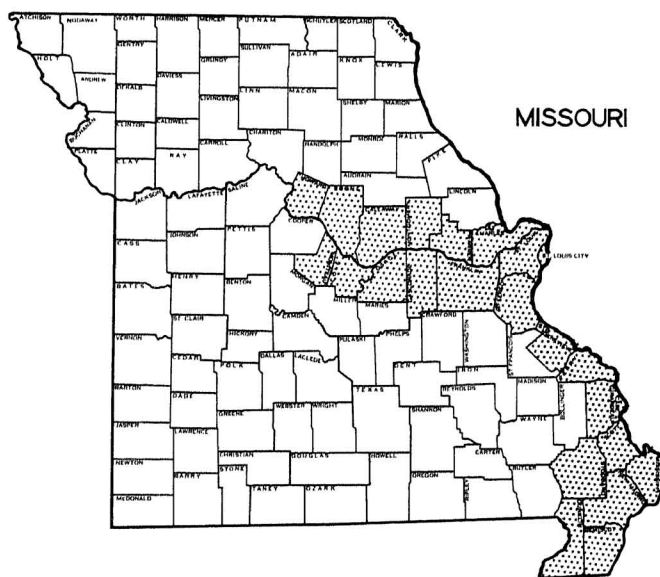


Figure 1—Location of the Riverborder Region in Missouri.

Though only 29 percent of the land in the Riverborder Region is forested, the timberlands still contribute significantly to the region's economic wellbeing. Timber marketing and processing provide both employment and income to local residents. More than 150 local, primary-wood-using industries depend on the region's forest for raw materials and some of the largest sawmills in the state are located in counties bordering the Mississippi River. Other important contributions of the forest are evident if not easily measured. It is difficult to place a dollar value on the satisfaction gained from a visit to one of the many state parks in the region, a hunting trip in the timbered river hills, or a boat ride past a picturesque shore.

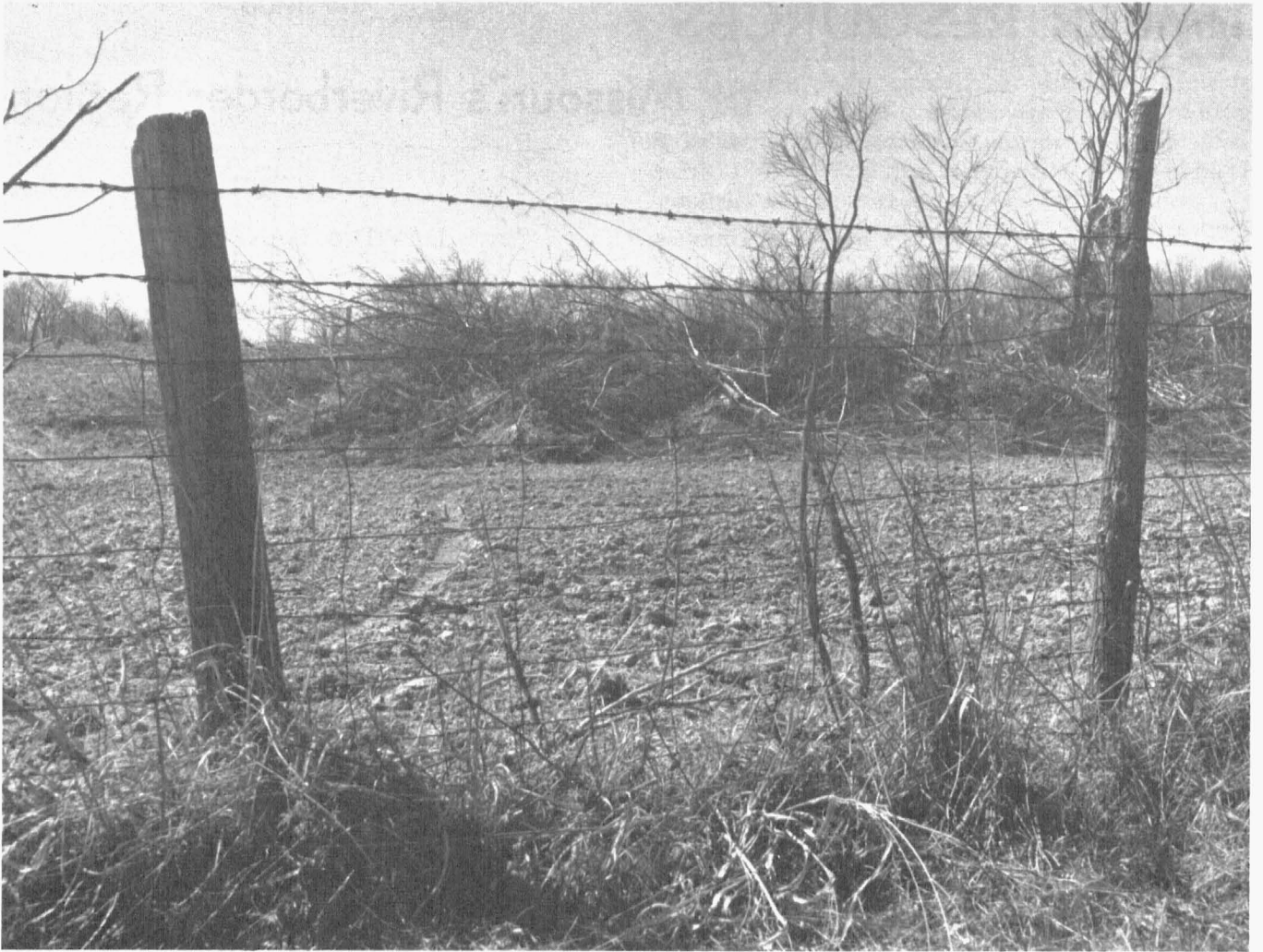


Figure 2—Land clearing for agriculture has removed large areas of forest land from the Bootheel counties.

Forest Acreage Is Down

Since the last inventory, forest area in the Riverborder Region shrank 178,000 acres or 7 percent. Most of the loss was due to extensive clearing in the six Bootheel counties where forest area decreased 39 percent (Fig. 2). Here, some forest land that was too wet for agriculture in 1947 has been drained and cleared for crops.

Forest now occupies 2.3 million acres in the Riverborder. Counties in the northern portion of the region have much more timberland than those in the Bootheel. Stoddard is the only Bootheel county that

is as much as 15 percent forested. But 11 of the 16 northern counties are more than 25 percent forested and 6 are more than 40 percent forested. For example, Franklin has more forest land than any other county in the Riverborder (254,000 acres), while St. Genevieve has a higher proportion of woodland than any other county (53 percent of the county's land area).

Only 20,000 acres, less than 1 percent of the forest land in the region, is noncommercial and most of this is productive timberland that has been set aside in state parks.

Sawtimber Acreage Has Doubled

Many small trees have grown to sawtimber size since the last survey. As a result, the area of sawtimber stands has doubled and now totals 1 million acres (Fig. 3). Sawtimber stands occupy 44 percent of the commercial forest area, compared with only 20 percent in 1947. Well over half the forests in the Bootheel are sawtimber size. This shift in stand size is important because the local wood industries use large timber almost entirely.

The increase in sawtimber stands was accompanied by a corresponding decrease in poletimber stands. There is only half as much poletimber acreage as there was in 1947. Nonstocked stands have increased and seedling and sapling stands have decreased.

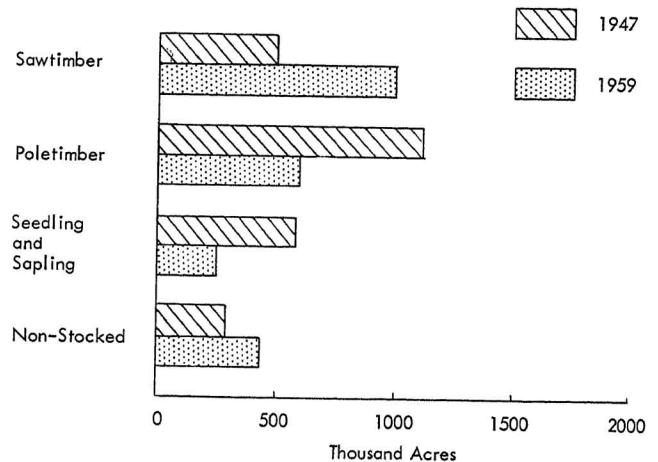
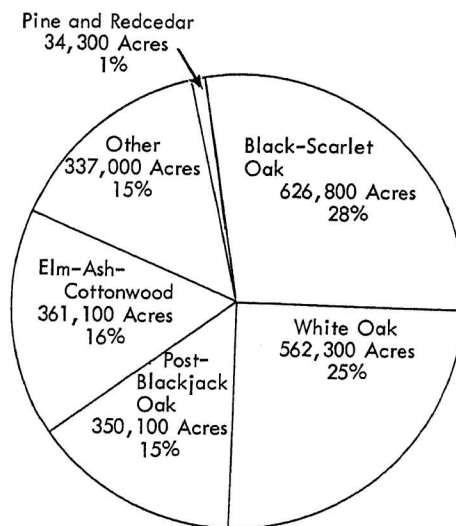


Figure 3—Commercial forest area by stand-size class, 1947 and 1959.

Forest Cover Changes From North to South

Hardwoods predominate on more than 98 percent of the commercial forest in the Riverborder (Fig. 4), but the hardwood species composition in the Bootheel is different from that to the north. Stands in the northern counties are similar to those found in the Missouri Ozarks. Upland oaks and hickory, occasionally mixed with pine, prevail. On the drier sites where soil is shallow, redcedar is common and sometimes occurs in pure stands. The elm-ash-cottonwood type is confined mainly to stream bottoms and major drainages.

In the Bootheel, on the other hand, more than four-fifths of the forest is either oak-gum-cypress or elm-ash-cottonwood—typical bottomland types. Species such as willow oak, cherrybark oak, cypress, and water tupelo, common in this area, are rarely found in other parts of the state.



Total = 2,271,600

Figure 4—Commercial forest area by major forest types, 1959.

Farmers Own Three-Fourths of the Forest

There has been virtually no change in the pattern of commercial forest ownership in the Riverborder since 1947. About 75 percent of the forest is owned by farmers and another 23 percent by other private individuals and concerns (Fig. 5). In the Bootheel almost 90 percent of the woodland is farmer-owned.

Public agencies own only 34,000 acres of commercial forest in the region. A third of it is in the Clark National Forest in St. Genevieve and Perry counties. The remainder is in state and other federal holdings.

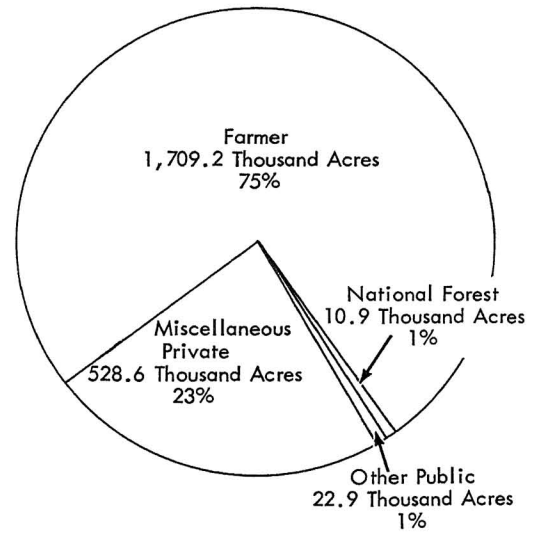


Figure 5—Commercial forest area by ownership, 1959.

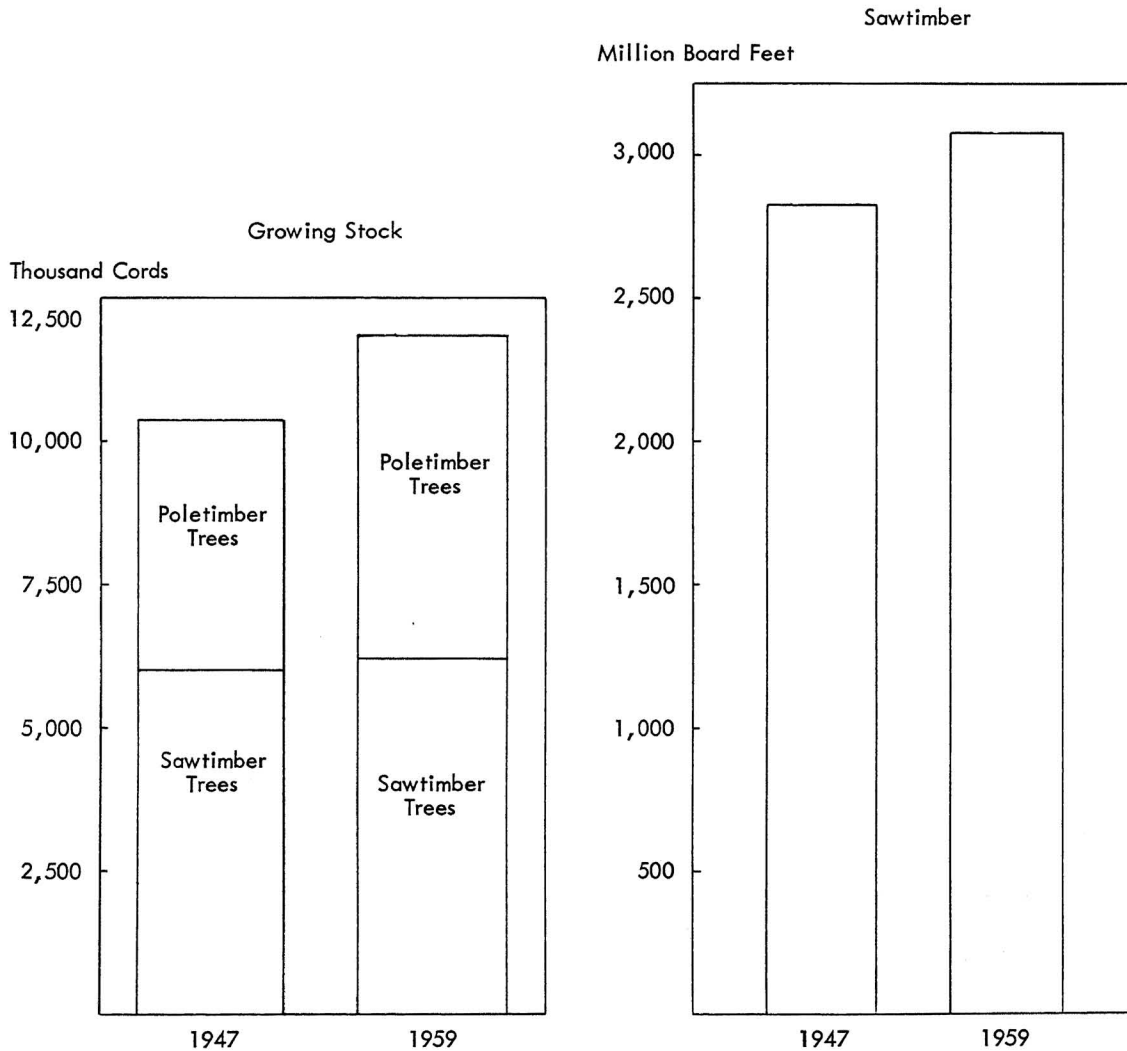


Figure 6—Volume of growing stock on commercial forest land in 1947 and 1959.

Fifteen Percent More Growing Stock

The volume of growing stock in the Riverborder has increased 15 percent to 11.8 million cords since 1947.¹ Included in this volume is more than 3 billion board feet of saw-log material. Sawtimber volume increased 9 percent (Fig. 6). These increases are striking when the fact is considered that forest land was reduced 7 percent between inventories. This, of course, means there has been a considerable increase in the stocking of stands that remained in forest during the 12 years. Volume is up an average of 1 cord of growing stock and 200 board feet of sawtimber per acre. The regional averages of 5.2

cords of growing stock and 1,353 board feet of sawtimber per acre are the highest in the state. Averages in the Bootheel are even higher—6.4 cords of growing stock and 2,026 board feet of sawtimber per acre.

Most of the volume increase has been in small timber. As a result, there has been a shift in the distribution of volume by size classes (Fig. 7). Compared to 1947, a higher proportion of the total volume is in trees of poletimber size. Still, more than half the volume in the region is in sawtimber-size trees—a much higher ratio than in any other region of the state except the sparsely forested prairie.

¹Tables 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.

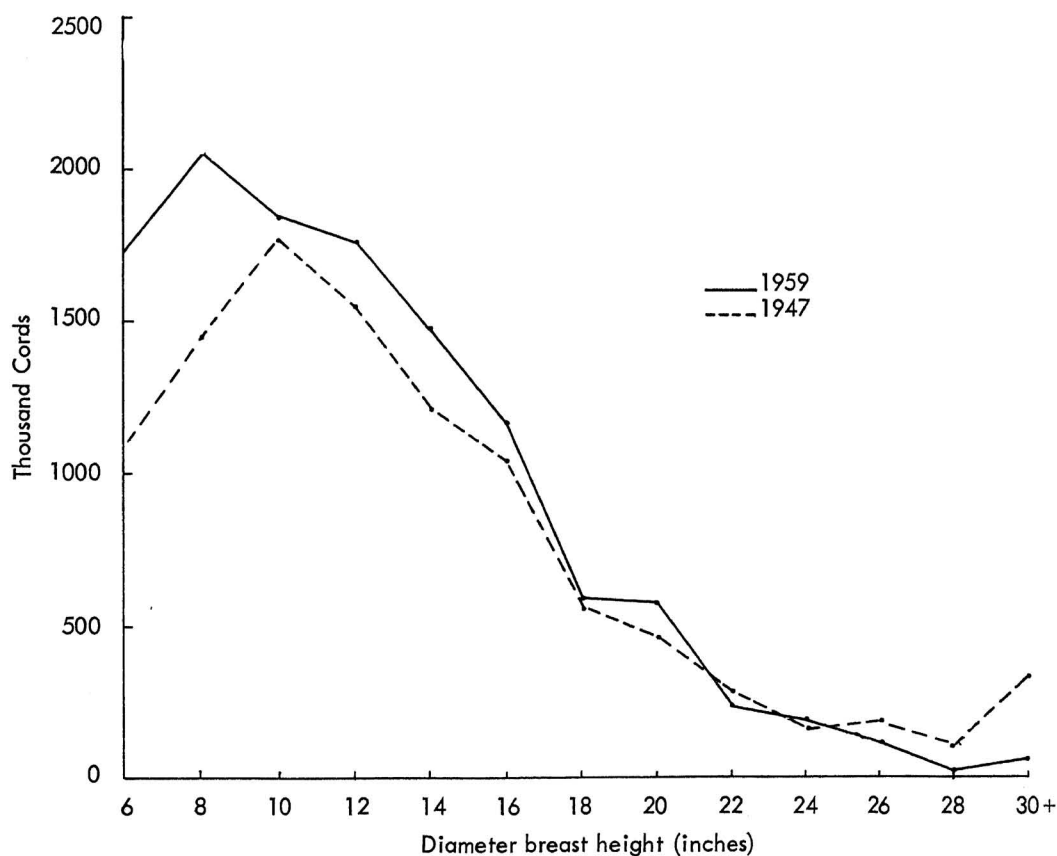


Figure 7—Volume of growing stock by tree-diameter class, 1947 and 1959.

There have also been significant changes in the volume by species. Extensive clearing of bottomland and overcutting reduced the volume of some species, particularly cypress, cottonwood, soft maple, black-

gum, and elm. At the same time, the volume of oak, hickory, and other hard hardwoods was increasing. Hard hardwoods now account for almost 90 percent of the growing stock, compared with 75 percent in 1947 (Fig. 8).

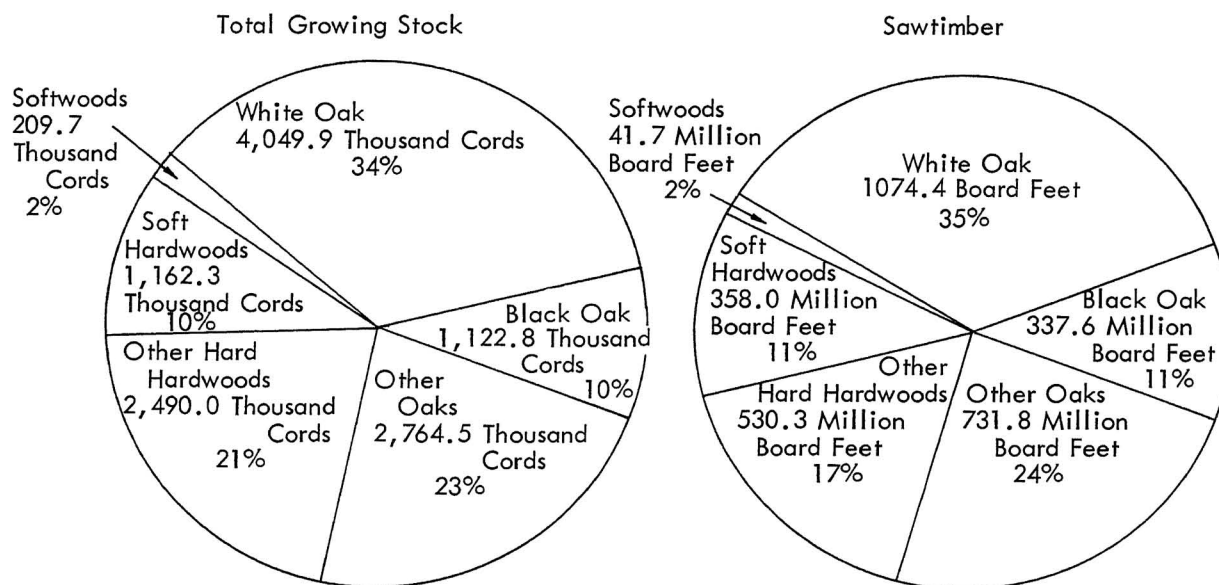


Figure 8—Growing stock by major species groups, 1959.

High-Quality Timber Has Declined

The volume of high-quality timber in the region has been reduced since 1947. Less than one-fifth of today's sawtimber volume is of medium or better quality. Cutting of large trees and land clearing have both contributed to this decline. However, the preponderance of small trees accounts for the lack of high-quality timber.

Sawtimber volume in trees over 15 inches d.b.h. (the minimum size preferred by most primary-wood-using industries) is down 4 percent. Reductions in timber of this size were even more for species such as white oak and cottonwood, which are in great demand. By contrast, large hickory timber which has limited markets increased sharply.

There have been increases in small sawtimber for nearly all the important timber species. If no great increase in cutting occurs and timber management practices continue to advance as in recent years, many of these small trees will reach the size where they will contain high quality logs in the next few decades. Thus, supplies for the long term appear adequate, but the outlook for the immediate future is not as bright. Currently, the volume of high-quality material of preferred species is being cut faster than it is being grown and, if the trend continues, high-quality material could be in very short supply within the next few years.

Most of the Growth on Small Timber

Growing-stock volume is increasing at an average annual rate of more than 500,000 cords or 4.3 percent before allowances are made for cutting. Pole-timber trees, and saplings just reaching merchantable poletimber size, account for four-fifths of this total growth. (See Fig. 9.)

Sawtimber volume is growing 4.7 percent or 140 million board feet a year before cutting. Two-thirds of the sawtimber growth is the result of poletimber trees attaining sawtimber size. On an average per-acre basis, growth amounts to 0.23 cords of growing stock and 63 board feet of sawtimber per year.

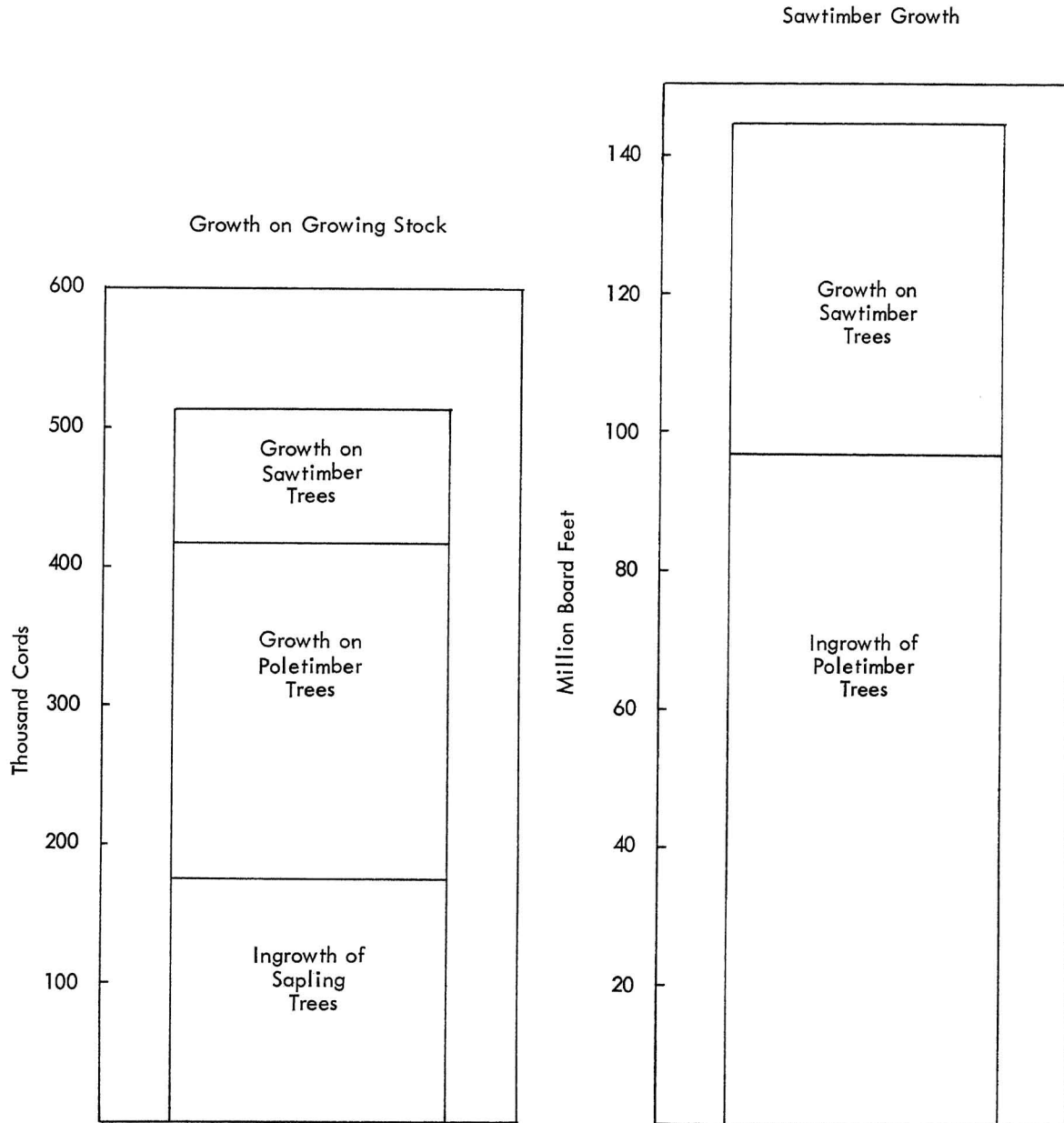


Figure 9—Periodic Annual net growth on commercial forest land, 1959.

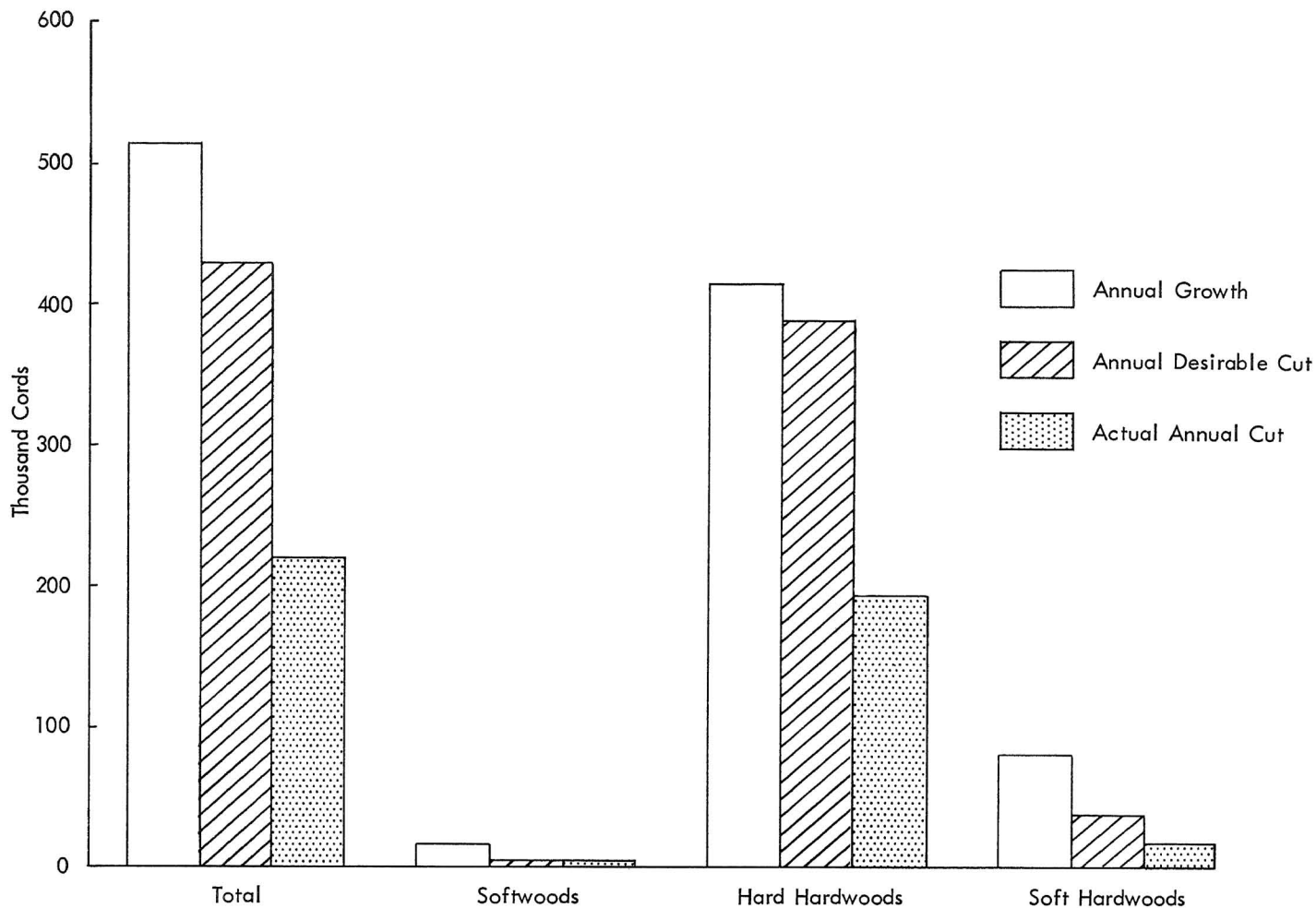


Figure 10—Comparison of growth, desirable cut, and actual cut of growing stock by major groups of species, 1959.

More than 85 percent of the current sawtimber growth is in hard hardwoods (Fig. 10). Over half of the total is in white oak species.

The growth rates of 4.3 percent for total growing stock, and 4.7 percent for sawtimber, are lower than in most other regions of the state. This may seem strange considering that the productive capacity of Riverborder forest land is generally higher. The primary reason is that Riverborder stands have

higher average stocking; i.e., the volume base upon which percentage growth rates are computed is higher, so the rate is lower. Riverborder forests, like those of the Ozarks, are recovering from past abuse. As the rebuilding process continues, and the stocking of larger timber increases, percentage volume growth rates will decline even further. At the same time, however, value growth in these forests will increase sharply.

Annual Cut Is 218, 000 Cords

About 218,000 cords of growing stock, including 89.6 million board feet of sawtimber, were cut from the Riverborder Region in 1958. This was more than one-fifth of the volume harvested in the state that year.

Almost 90 percent of the volume harvested in the region came from sawtimber-size trees—mainly trees over 15 inches d.b.h.

Nine-tenths of the regional cut was hard hardwoods. White oaks (white oak, post oak, swamp white oak, etc.) alone accounted for two-thirds of the total. But almost half of the cut in the Bootheel was soft hardwoods including cottonwood, elm, and sycamore.

The cut in 1958 was about 2 percent of the total growing stock and 3 percent of the total sawtimber volume in the region.

Large Amount of Small Low-Grade Timber Available for Cutting

Desirable cut is the volume of timber that can be harvested annually during the next decade, while striving for a well-balanced distribution of age classes and improving the quality and quantity of growing stock. In the Riverborder, the desirable cut for the period 1959 through 1968 is 430,000 cords. The present rate of cutting in the region is only half of that recommended (Fig. 10). But the ratio of actual to desirable cut is not the same for all size classes or species. For example, the cut of poletimber could be increased sixfold and still not exceed the desirable cut, and about four times as much hickory and elm growing stock could be harvested each year. Before it could be cut profitably, new markets would have to be found for this material. The actual cut of softwoods, on the other hand, already exceeds the desirable cut and the cottonwood harvest is more than

three times that recommended.

The desirable cut of sawtimber is estimated at 125 million board feet per year. This exceeds the current harvest by about 35 million board feet. Again, the desirable cut is not the same for all size classes and species, so this surplus can be misleading (Fig. 11). Actually, large high-quality sawtimber of most of the important timber species in the region is being cut too heavily.

In addition to growing stock, 8.3 million cords of nongrowing stock are available for consumption. This is sound volume in cull trees and hardwood limbs. It does 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.

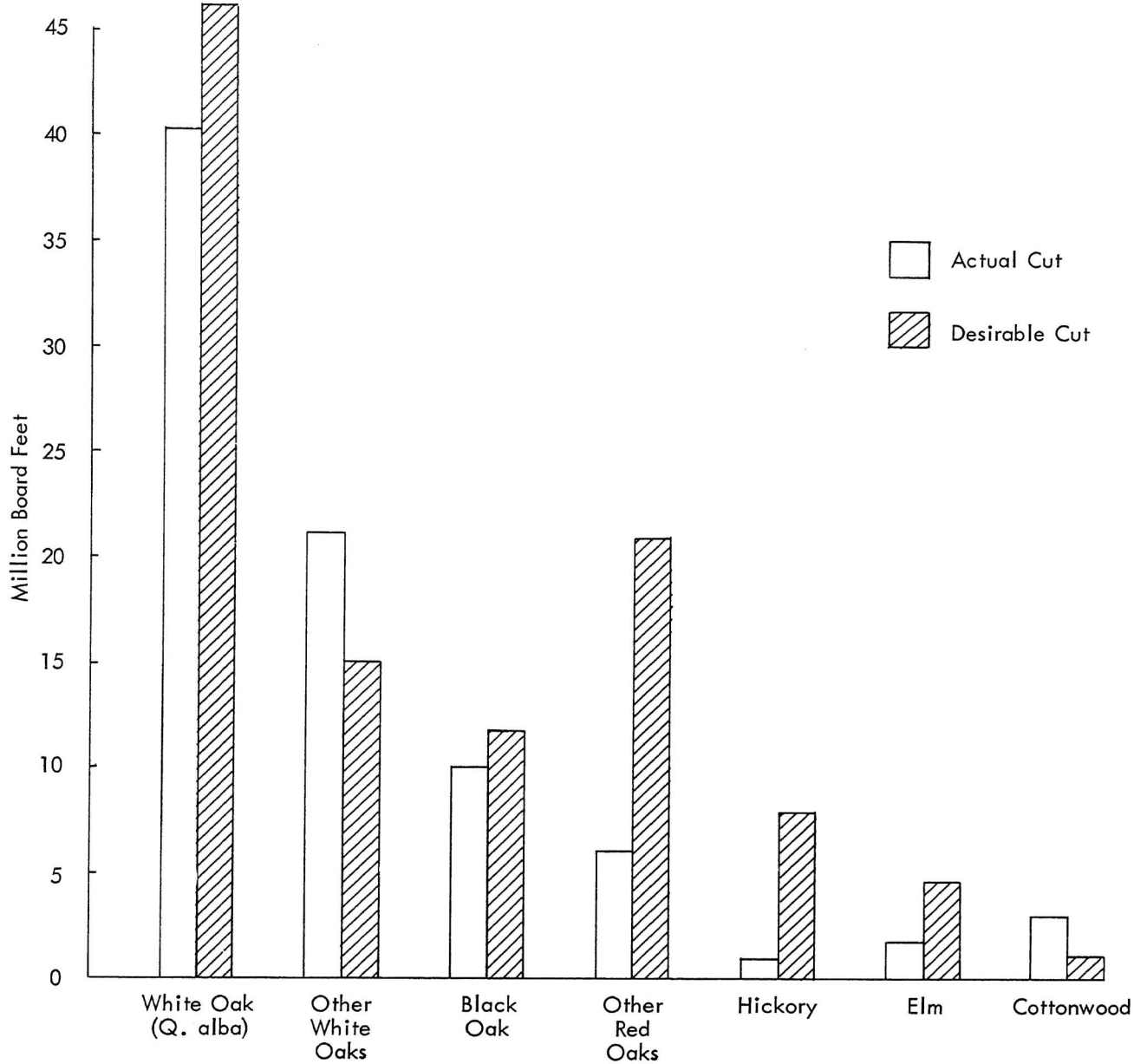


Figure 11—Desirable cut and actual cut of sawtimber for selected species groups, 1959.

The Opportunity for Forestry

Scientific forest management is needed to improve the Riverborder Region's woodlands. They are producing far below their potential. Only 44 percent of the present trees are suitable for future management (crop and storage trees). Twenty-nine percent are cull and another 27 percent should be harvested soon because they are too old, rough, or defective to manage for commercial products.

Because markets for small and low-grade growing stock are lacking, there is an ever-increasing excess of this material. Even more important, the large, high-quality trees of preferred species are being overcut, and unless this trend is halted local timber-based industries may encounter shortages in the kind of timber they have been accustomed to using.

Timber-growing opportunities are certainly as favorable in the Riverborder as in any other region of Missouri. Most woodlands are readily accessible, local markets are plentiful, and an excellent road and river system links these markets with the forest resource. The productivity of forest land is generally higher than in other regions of the state, and some of the best timber sites in Missouri are found here (Fig. 12). These comparative advantages imply that higher returns per unit of labor and capital invested are attainable from forestry in the Riverborder Region.

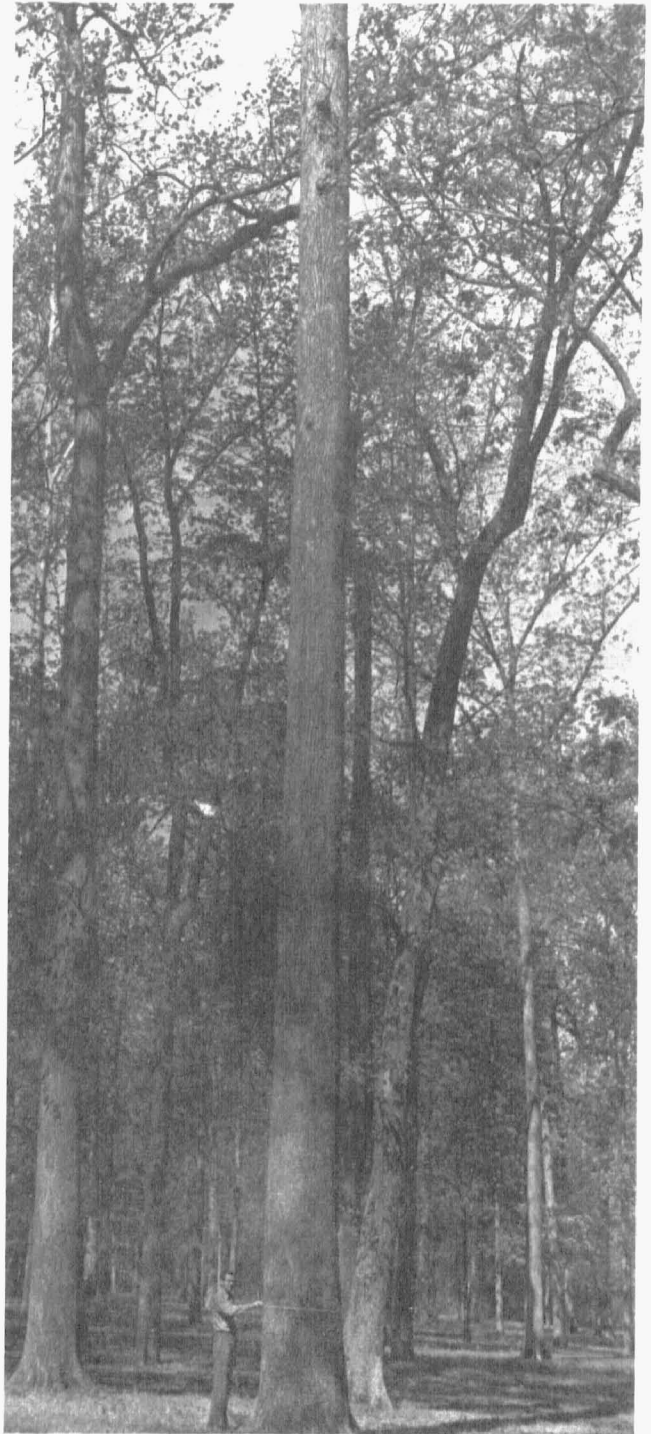


Figure 12—Some of the most productive forest sites in the state are found on Mississippi and Missouri River bottomland.

Appendix

FOREST SURVEY PROCEDURE

The sampling procedure adopted for Missouri 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 large number of points were examined on the aerial photographs to determine the proportions of forest and nonforest. Then some of these were further analyzed and measured to estimate forest type, stand size, stand density, and site productivity. 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 supervision, training, and rechecking of all phases of the work.

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 of commercial forest is reported as 1,000,000 acres, the actual acreage is within ± 7.2 percent of 1,000,000 acres or between 928,000 and 1,072,000 acres.
- b. The actual volume on an area of 1,000,000 acres will be within ± 8.3 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 ± 19.0 percent of 1,000,000 cords or between 810,000 and 1,190,000.

Note that sampling error for any one class within a survey region is greater than that for the region as a whole, whether the class considered is type, species, ownership, or other. Generally the smaller the area of 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, RIVERBORDER REGION, MISSOURI, 1959

Commercial Forest Land (thousand acres)	Standard Error of Sampling (percent)	
	Area	Total Volume
2,272	4.8	5.5
1,000	7.2	8.3
500	10.2	11.8
100	22.8	26.3
50	32.2	37.2
25	43.4	52.6

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

Growing Stock Volume (thousand cords)	Sampling Error (percent)
11,799	5.5
1,000	19.0
500	26.8
100	60.0
50	84.8

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 1/4-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. or larger, and hardwoods 11 inches d.b.h. or 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 at least 50 percent white oak.

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

Oak-Gum-Cypress—Bottomland stands at least 50 percent tupelo, blackgum, sweetgum, oaks, or southern cypress, singly or in combination except where pines comprise 25 to 49 percent (oak-pine) of the stand.

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

Maple-Beech—Stands at least 50 percent hard maple or beech, singly or in combination.

Species Groups

Softwoods—Coniferous species which in this region include cypress, 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 4x4x8 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 may be 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 catas-

trophic losses. It is expressed in board feet (International ¼-inch rule) of sawtimber and in 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 percent 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, Conflicting 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 10 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 oaks" 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	<i>Pinus echinata</i> Mill.
Cypress	<i>Taxodium distichum</i> (L.) Rich.
Redcedar (eastern)	<i>Juniperus virginiana</i> L.

Hardwood Species

HARD HARDWOODS:

White oak	<i>Quercus alba</i> L.
Post oak	<i>Q. stellata</i> Wangenh.

Other white oaks include:

Swamp white oak	<i>Q. bicolor</i> Willd.
Swamp chestnut oak	<i>Q. michauxii</i> Nutt.
Overcup oak	<i>Q. lyrata</i> Walt.
Bur oak	<i>Q. macrocarpa</i> Michx.
Chinkapin oak	<i>Q. muehlenbergii</i> Engelm.
Black oak	<i>Q. velutina</i> Lamb.
Scarlet oak	<i>Q. coccinea</i> Muenchh.
Northern red oak	<i>Q. rubra</i> L.

Other red oaks include:

Blackjack oak	<i>Q. marilandica</i> Muench.
Cherrybark oak	<i>Q. falcata</i> var. <i>pagodaefolia</i> Ell.
Pin oak	<i>Q. palustris</i> Muenchh.
Shumard oak	<i>Q. shumardii</i> Buckl.
Shingle oak	<i>Q. imbricaria</i> Michx.
Southern red oak	<i>Q. falcata</i> Michx.
Water oak	<i>Q. nigra</i> L.
Willow oak	<i>Q. phellos</i> L.

Hickory Group A includes:

Shellbark hickory	<i>C. laciniosa</i> (Michx. f.) Loud.
Shagbark hickory	<i>Carya ovata</i> (Mill.) K. Koch
Mockernut hickory	<i>C. tomentosa</i> Nutt.

Hickory Group B includes:

All other hickories	<i>Carya</i> spp.
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Hard maple includes:

Black maple	<i>Acer nigrum</i> Michx. f.
Sugar maple	<i>A. saccharum</i> Marsh.
Black Walnut	<i>Juglans nigra</i> L.
Ash	<i>Fraxinus</i> spp.

Other hard hardwoods include:

Beech (American)	<i>Fagus grandifolia</i> Ehrh.
Birch (river)	<i>Betula nigra</i> L.
Black locust	<i>Robinia pseudoacacia</i> L.
Honey locust	<i>Gleditsia triacanthos</i> L.
Yellowwood	<i>Cladrastis lutea</i> (Michx. f.) K. Koch

Soft hardwoods:

Elm	<i>Ulmus</i> spp.
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Soft maple includes:

Boxelder	<i>Acer negundo</i> L.
Red maple	<i>A. rubrum</i> L.
Silver maple	<i>A. saccharinum</i> L.
Sweetgum	<i>Liquidambar styraciflua</i> L.

Blackgum includes:

Water tupelo	<i>Nyssa aquatica</i> L.
Black tupelo	<i>N. sylvatica</i> Marsh.
Yellow-poplar	<i>Liriodendron tulipifera</i> L.
Cottonwood (eastern)	<i>Populus deltoides</i> Bartr.

Other soft hardwoods include:

Basswood (American)	<i>Tilia americana</i> L.
Black cherry	<i>Prunus serotina</i> Ehrh.
Buckeye (Ohio)	<i>Aesculus glabra</i> Willd.
Butternut	<i>Juglans cinerea</i> L.
Catalpa (northern)	<i>Catalpa speciosa</i> Warder
Hackberry	<i>Celtis occidentalis</i> L.
Kentucky coffeetree	<i>Gymnocladus dioica</i> (L.) K. Koch
Magnolia (cucumbertree)	<i>Magnolia acuminata</i> L.
Sugarberry	<i>Celtis laevigata</i> Willd.
Sycamore (American)	<i>Platanus occidentalis</i> L.
Willow	<i>Salix</i> spp.

Statistical Tables

The following 104 tables in the Appendix present forest resource data for the Riverborder Region and for each of its 22 counties.

TABLE 3--LAND AREA BY COUNTIES
RIVERBORDER REGION, MISSOURI, 1959

County	Land area ^{1/}	Nonforest	Forest Land			
			Area	Percent Forest	Non-commercial	Commercial Forest
	Acres	Acres	Acres	Percent	Acres	Acres
Boone	437,200	346,200	91,000	20.8	200	90,800
Callaway	534,400	354,400	180,000	33.7	400	179,600
Cape Girardeau	368,600	282,800	85,800	23.3	3,000	82,800
Cole	246,400	159,000	87,400	35.5	200	87,200
Dunklin	347,500	316,700	30,800	8.9	100	30,700
Franklin	596,500	342,200	254,300	42.6	7,400	246,900
Gasconade	332,800	168,700	164,100	49.3	400	163,700
Howard	300,100	235,400	64,700	21.6	200	64,500
Jefferson	426,900	211,100	215,800	50.6	500	215,300
Mississippi	263,000	230,800	32,200	12.2	1,000	31,200
Moniteau	267,500	199,200	68,300	25.5	200	68,100
Montgomery	341,100	243,600	97,500	28.6	200	97,300
New Madrid	434,600	390,600	44,000	10.1	100	43,900
Osage	384,600	185,700	198,900	51.7	400	198,500
Pemiscot	312,300	291,400	20,900	6.7	--	20,900
Perry	304,600	204,500	100,100	32.9	300	99,800
St. Charles	359,000	272,400	86,600	24.1	200	86,400
St. Genevieve	320,000	152,100	167,900	52.5	2,600	165,300
St. Louis	356,800	287,900	68,900	19.3	2,400	66,500
Scott	267,600	243,400	24,200	9.0	100	24,100
Stoddard	535,700	453,300	82,400	15.4	100	82,300
Warren	274,000	147,900	126,100	46.0	300	125,800
Total	8,011,200	5,719,300	2,291,900	28.6	20,300	2,271,600

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

TABLE 4--FOREST LAND AREA BY TYPE AND STAND-SIZE CLASS
RIVERBORDER REGION, MISSOURI, 1959
(ACRES)

Forest Type	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Commercial Forest						
Pine	17,000	--	3,900	11,100	2,000	--
Redcedar	17,300	--	8,700	--	--	8,600
Hardwood-Redcedar	182,100	27,800	32,000	4,100	9,800	108,400
Oak-Pine	14,100	4,000	--	10,100	--	--
Black-Scarlet Oak	626,800	280,200	178,300	46,500	28,400	93,400
White Oak	562,300	390,900	110,800	17,600	14,700	28,300
Post-Blackjack Oak	350,100	52,700	167,200	26,600	21,400	82,200
Oak-Gum-Cypress	134,800	77,300	19,100	8,400	9,500	20,500
Elm-Ash-Cottonwood	361,100	162,700	76,300	16,000	17,600	88,500
Maple-Beech	6,000	4,800	--	--	--	1,200
All Commercial Forest	2,271,600	1,000,400	596,300	140,400	103,400	431,100
Percent by Size-Class	100.0	44.0	26.2	6.2	4.6	19.0
Noncommercial Forest						
Productive-Reserved	14,900	9,100	3,600	1,100	100	1,000
Unproductive	5,400	--	--	--	--	5,400
All Forest Area	2,291,900	1,009,500	599,900	141,500	103,500	437,500

TABLE 5--COMMERCIAL FOREST LAND BY OWNERSHIP AND STAND-SIZE CLASS
RIVERBORDER 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	10,900	4,000	3,600	1,200	400	1,700
Other	8,000	2,000	1,000	1,000	2,000	2,000
State	14,900	5,600	4,600	200	--	4,500
Farmer-Owned	1,709,200	811,500	430,700	107,200	72,300	287,500
Forest Industry	1,400	500	400	100	100	300
Miscellaneous Private	527,200	176,800	156,000	30,700	28,600	135,100
All Ownerships	2,271,600	1,000,400	596,300	140,400	103,400	431,100

TABLE 6--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
RIVERBORDER REGION, MISSOURI, 1959

Ownership Class	Growing Stock (thousand cords)				Sawtimber (million board feet)			
	Total	Softwood	Soft Hardwoods	Hard Hardwoods	Total	Softwoods	Soft Hardwoods	Hard Hardwoods
Federally Owned or Managed								
National Forest	53.0	0.9	3.8	48.3	12.7	0.1	1.1	11.5
Other	28.3	1.9	5.6	20.8	8.5	.9	2.8	4.8
State	69.8	1.0	5.0	63.8	16.8	.1	1.5	15.2
Farmer-Owned	9,256.2	168.6	889.2	8,198.4	2,463.7	37.5	299.7	2,126.5
Forest Industry	6.4	1/	.5	5.9	1.6	1/	.1	1.5
Miscellaneous Private	2,385.5	37.3	258.2	2,090.0	570.5	3.1	52.8	514.6
All Ownerships	11,799.2	209.7	1,162.3	10,427.2	3,073.8	41.7	358.0	2,674.1

1/ Insignificant amount.

TABLE 7--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
RIVERBORDER REGION, MISSOURI, 1959

Species	Growing Stock (thousand cords)			Sawtimber (million board feet)				Cull Trees (thousand cords)	Hardwood Limbs
	Total	Poletimber Trees	Sawtimber Trees	Total	In Sawtimber Stands	Other Stands 500-1500 Board Feet	Under 500 Feet		
Softwoods									
Pine, Shortleaf	56.3	33.6	22.7	11.3	3.1	6.9	1.3	--	--
Cypress	61.5	3.7	57.8	28.2	23.9	3.7	.6	9.5	--
Redcedar	91.9	85.5	6.4	2.2	1.6	.5	.1	27.6	--
Total Softwoods	209.7	122.8	86.9	41.7	28.6	11.1	2.0	37.1	--
Hard Hardwoods									
Oak, White	4,049.9	1,895.9	2,154.0	1,074.4	943.9	81.5	49.0	386.8	2,144.1
Oak, Post	1,085.2	775.2	310.0	149.5	104.8	26.8	17.9	253.6	307.1
Oak, Other White	359.7	158.2	201.5	98.0	80.1	12.5	5.4	128.5	187.2
Oak, Black	1,122.8	438.2	684.6	337.6	268.6	47.5	21.5	266.6	661.3
Oak, Scarlet	19.5	11.0	8.5	4.1	.7	2.3	1.1	5.4	8.2
Oak, Northern Red	769.0	164.9	604.1	303.4	256.6	29.9	16.9	176.8	568.9
Oak, Other Red	531.1	179.4	351.7	176.8	130.3	34.6	11.9	146.8	342.3
Hickory, Group A	494.1	278.5	215.6	107.9	87.3	13.9	6.7	45.4	208.7
Hickory, Group B	515.0	325.3	189.7	95.4	75.7	11.8	7.9	62.2	182.9
Maple, Hard	231.2	144.0	87.2	43.1	37.9	3.6	1.6	91.3	72.1
Walnut, Black	146.3	69.4	76.9	36.1	29.2	4.8	2.1	45.3	70.1
Ash	424.9	237.0	187.9	89.0	84.5	3.2	1.3	125.8	170.8
Other	678.5	352.3	326.2	158.8	148.4	6.3	4.1	285.7	266.1
Total Hard Hardwoods	10,427.2	5,029.3	5,397.9	2,674.1	2,248.0	278.7	147.4	2,019.0	5,189.8
Soft Hardwoods									
Elm	538.3	282.8	255.5	131.2	98.3	22.9	10.0	183.7	251.7
Maple, Soft	101.1	28.0	73.1	36.1	24.0	8.7	3.4	66.8	59.5
Sweetgum	150.0	55.5	94.5	46.2	40.5	4.0	1.7	21.8	85.1
Blackgum	51.6	17.6	34.0	14.9	8.8	4.5	1.6	25.4	27.0
Yellow-Poplar	19.0	10.7	8.3	4.1	3.1	.8	.2	.3	4.2
Cottonwood	76.0	3.6	72.4	35.3	25.8	6.0	3.5	15.3	62.4
Other 1/	226.3	42.1	184.2	90.2	48.1	29.0	13.1	49.7	170.2
Total Soft Hardwoods	1,162.3	440.3	722.0	358.0	248.6	75.9	33.5	363.0	170.2
Total Hardwoods	11,589.5	5,469.6	6,119.9	3,032.1	2,496.6	354.6	180.9	2,382.0	5,849.9
All Species	11,799.2	5,492.4	6,206.8	3,073.8	2,525.2	365.7	182.9	2,419.1	5,849.9

1/ Mainly sycamore

TABLE 8--PROPORTION OF TREES BY SPECIES AND TREE QUALITY CLASS
RIVERBORDER 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	78	15	3	4	--	--
Cypress	100	4	12	27	16	13	28
Redcedar	100	11	42	5	4	37	1
Total Softwoods	100	20	37	6	4	31	2
Hard Hardwoods							
Oak, White	100	12	47	10	14	12	5
Oak, Post	100	2	37	10	23	20	8
Oak, Other White	100	1	18	6	26	41	8
Oak, Black	100	17	38	7	11	14	13
Oak, Scarlet	100	34	--	1	32	8	25
Oak, Northern Red	100	14	26	21	6	17	16
Oak, Other Red	100	3	26	9	18	30	14
Hickory, Group A	100	5	45	5	30	9	6
Hickory, Group B	100	12	40	4	22	18	4
Maple, Hard	100	2	27	4	31	28	8
Walnut, Black	100	19	23	12	8	28	10
Ash	100	6	33	7	16	27	11
Other	100	4	22	9	27	20	18
Total Hard Hardwoods	100	8	36	9	19	19	9
Soft Hardwoods							
Elm	100	2	28	5	31	25	9
Maple, Soft	100	--	11	13	7	25	44
Sweetgum	100	6	43	7	30	5	9
Blackgum	100	--	51	6	13	13	17
Yellow-Poplar	100	30	64	6	--	--	--
Cottonwood	100	23	33	21	--	--	23
Other 1/	100	7	26	14	17	30	6
Total Soft Hardwoods	100	3	28	7	26	23	13
Total Hardwoods	100	8	36	9	19	19	9
All Species	100	8	36	8	19	20	9

1/ Mainly sycamore.

TABLE 9--DISTRIBUTION OF GROWING STOCK VOLUME BY SPECIES AND DIAMETER CLASS
RIVERBORDER REGION, MISSOURI, 1959

	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	56.3	13.3	20.3	15.4	7.3	11.3	7.7	3.6	--	--	--	--
Cypress	61.5	--	3.7	--	57.8	28.2	--	1.5	8.0	14.0	3.6	1.1
Redcedar	91.9	52.5	33.0	6.3	.1	2.2	--	2.2	--	--	--	--
Total Softwoods	209.7	65.8	57.0	21.7	65.2	41.7	7.7	7.3	8.0	14.0	3.6	1.1
Hard Hardwoods												
Oak, White	4,049.9	413.7	731.0	751.2	2,154.0	1,074.4	--	727.8	246.1	75.5	25.0	--
Oak, Post	1,085.2	294.7	272.5	208.0	310.0	149.5	--	99.3	32.7	10.2	7.3	--
Oak, Other White	359.7	63.4	44.3	50.5	201.5	98.0	--	47.4	28.4	16.3	5.3	.6
Oak, Black	1,122.8	142.4	164.9	130.9	684.6	337.6	--	106.6	113.9	82.7	27.9	6.5
Oak, Scarlet	19.5	1.2	--	9.8	8.5	4.1	--	4.1	--	--	--	--
Oak, Northern Red	769.0	23.1	58.0	83.8	604.1	303.4	--	130.5	118.4	40.0	13.5	1.0
Oak, Other Red	531.1	44.5	60.1	74.8	351.7	176.8	--	93.0	41.7	26.9	14.3	.9
Hickory, Group A	494.1	91.7	146.1	40.7	215.6	107.9	--	46.3	35.8	25.8	--	--
Hickory, Group B	515.0	133.9	92.7	98.7	189.7	95.4	--	44.5	34.0	11.4	4.2	1.3
Maple, Hard	231.2	63.4	40.0	40.6	87.2	43.1	--	22.5	8.3	5.0	5.9	1.4
Walnut, Black	146.3	16.4	15.7	37.3	76.9	36.1	--	23.7	6.9	5.5	--	--
Ash	424.9	96.1	78.2	62.7	187.9	89.0	--	36.9	31.9	12.5	7.7	--
Other	678.5	125.0	144.8	82.5	326.2	158.8	--	76.0	65.1	14.7	2.2	.8
Total Hard Hardwoods	10,427.2	1,509.5	1,848.3	1,671.5	5,397.9	2,674.1	--	1,458.6	763.2	326.5	113.3	12.5
Soft Hardwoods												
Elm	538.3	116.3	81.4	85.1	255.5	131.2	--	63.8	30.0	17.1	11.9	8.4
Maple, Soft	101.1	--	6.7	21.3	73.1	36.1	--	12.2	15.2	6.0	1.0	1.7
Sweetgum	150.0	15.1	27.7	12.7	94.5	46.2	--	16.4	15.2	9.7	4.9	--
Blackgum	51.6	8.8	1.4	7.4	34.0	14.9	--	4.4	8.3	1.0	1.2	--
Yellow-Poplar	19.0	--	10.7	--	8.3	4.1	--	4.1	--	--	--	--
Cottonwood	76.0	1.1	1.6	.9	72.4	35.3	--	5.4	10.1	1.9	17.2	.7
Other	226.3	9.1	14.4	18.6	184.2	90.2	--	21.7	23.3	32.8	8.4	4.0
Total Soft Hardwoods	1,162.3	150.4	143.9	146.0	722.0	358.0	--	128.0	102.1	68.5	44.6	14.8
Total Hardwoods	11,589.5	1,659.9	1,992.2	1,817.5	6,119.9	3,032.1	--	1,586.6	865.3	395.0	157.9	27.3
All Species	11,799.2	1,725.7	2,049.2	1,839.2	6,185.1	3,073.8	7.7	1,593.9	873.3	409.0	161.5	28.4

TABLE 10--QUALITY OF SAW-LOG MATERIAL BY SPECIES AND LOG GRADE
RIVERBORDER REGION, MISSOURI, 1959

Species	Log Grades (percent)				Trees Graded Number
	All Grades	Grades 2 or Better	Grade 3	Tie and Timber	
Cypress	100.0	20.2	40.7	39.1	6
Oak, White	100.0	15.1	55.0	29.9	96
Oak, Post	100.0	16.7	36.2	47.1	19
Oak, Other White	100.0	25.2	18.8	56.0	18
Oak, Black	100.0	28.0	39.2	32.8	34
Oak, Northern Red	100.0	34.1	34.8	31.1	21
Oak, Other Red	100.0	19.6	22.0	58.4	43
Hickory	100.0	6.5	21.9	71.6	25
Ash	100.0	42.8	34.6	22.6	24
Elm	100.0	31.8	23.9	44.3	52
Sweetgum	100.0	12.8	35.9	51.3	17
Other Soft Hardwoods	100.0	27.0	9.5	63.5	15
Other Hard Hardwoods	100.0	6.7	26.3	67.0	13
All Species	100.0	19.5	37.1	43.4	383

TABLE 11--PERIODIC ANNUAL NET GROWTH ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
RIVERBORDER REGION, MISSOURI, 1959

Species	Growing Stock (thousand cords)				Sawtimber (million board feet)				
	Total	Ingrowth	Growth On		Total	In Sawtimber Stands		In Other Stands	
			Poletimber	Sawtimber		Ingrowth	Growth	Ingrowth	Growth
Softwoods									
Pine, Shortleaf	3.1	1.0	1.4	0.7	1.2	--	0.1	0.9	0.2
Cypress	.8	--	.2	.6	.3	--	.2	--	.1
Redcedar	12.2	8.7	3.3	.2	.8	.1	.1	.6	--
Total Softwoods	16.1	9.7	4.9	1.5	2.3	.1	.4	1.5	.3
Hard Hardwoods									
Oak, White	142.6	27.9	71.4	43.3	59.8	28.7	19.9	10.0	1.2
Oak, Post	39.6	13.3	21.5	4.8	9.7	4.2	1.0	3.8	.7
Oak, Other White	19.6	8.4	8.3	2.9	4.5	2.0	1.4	1.1	--
Oak, Black	17.9	10.6	13.7	-6.4	2.9	2.1	-2.0	3.9	-1.1
Oak, Scarlet	.9	--	.5	.4	.6	.4	--	--	.2
Oak, Northern Red	20.5	2.4	6.5	11.5	10.8	1.9	5.5	3.1	.3
Oak, Other Red	33.9	14.7	9.8	9.4	9.2	1.4	4.3	3.0	.5
Hickory, Group A	23.0	4.9	12.1	6.0	4.9	1.0	2.5	.8	.6
Hickory, Group B	27.3	10.6	14.0	2.7	4.9	2.5	.5	1.0	.9
Maple, Hard	6.1	.6	4.3	1.2	1.3	.3	.5	.4	.1
Walnut, Black	19.2	5.8	8.9	4.5	6.3	2.0	1.9	1.9	.5
Ash	22.4	10.0	7.6	4.8	4.3	.6	2.3	1.3	.1
Other	42.1	21.8	24.6	-4.3	4.4	3.8	-1.1	2.6	-.9
Total Hard Hardwoods	415.1	131.0	203.2	80.9	123.6	50.9	36.7	32.9	3.1
Soft Hardwoods									
Elm	61.0	26.2	28.9	5.9	10.0	2.4	3.3	5.1	-.8
Maple, Soft	3.1	.3	-.5	3.3	2.5	.9	.7	--	.9
Sweetgum	10.9	2.1	4.7	4.1	3.3	1.0	1.8	.3	.2
Blackgum	3.4	1.1	.8	1.5	1.2	.4	.5	--	.3
Yellow-Poplar	.8	--	.6	.2	.2	--	.2	--	--
Cottonwood	1.3	.2	.2	.9	.5	--	.2	.1	.2
Other ^{1/}	1.1	.2	.7	.2	.8	.1	.1	.6	--
Total Soft Hardwoods	81.6	30.1	35.4	16.1	18.5	4.8	6.8	6.1	.8
Total Hardwoods	496.7	161.1	238.6	97.0	142.1	55.7	43.5	39.0	3.9
All Species	512.8	170.8	243.5	98.5	144.4	55.8	43.9	40.5	4.2

^{1/} Mainly sycamore.

TABLE 12--ANNUAL NET DESIRABLE CUT ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
RIVERBORDER REGION, MISSOURI, 1959

Species	Growing Stock (thousand cords)			Sawtimber (million board feet)			(thousand cords) Cull Trees and Hardwood Limbs
	Total	Poletimber Trees	Sawtimber Trees	Total	Sawtimber Stands	Other Stands	
Softwood							
Pine, Shortleaf	0.2	0.2	--	--	--	--	--
Cypress	2.9	--	2.9	1.4	1.4	--	0.5
Redcedar	1.1	1.1	--	--	--	--	1.4
Total Softwoods	4.2	1.3	2.9	1.4	1.4	--	1.9
Hard Hardwoods							
Oak, White	142.8	50.4	92.4	46.1	43.1	3.0	111.3
Oak, Post	57.1	36.0	21.1	10.2	8.6	1.6	33.6
Oak, Other White	18.5	8.7	9.8	4.8	4.3	.5	15.5
Oak, Black	28.4	4.7	23.7	11.7	10.9	.8	36.2
Oak, Scarlet	.2	--	.2	.1	.1	--	.5
Oak, Northern	36.6	4.5	32.1	16.1	15.6	.5	39.0
Oak, Other Red	16.7	7.6	9.1	4.6	4.0	.6	16.2
Hickory, Group A	16.5	7.9	8.6	4.3	4.2	.1	10.6
Hickory, Group B	14.2	7.0	7.2	3.6	2.6	1.0	10.0
Maple, Hard	7.1	3.7	3.4	1.7	1.2	.5	7.4
Walnut, Black	4.7	2.8	1.9	.9	.9	--	3.9
Ash	12.4	5.5	6.9	3.3	3.3	--	12.7
Other	32.9	18.3	14.6	7.1	6.9	.2	26.2
Total Hard Hardwoods	388.1	157.1	231.0	114.5	105.7	8.8	323.1
Soft Hardwoods							
Elm	20.1	11.2	8.9	4.6	4.1	.5	18.1
Maple, Soft	6.5	3.1	3.4	1.7	1.3	.4	6.1
Sweetgum	3.5	.4	3.1	1.5	1.2	.3	3.8
Blackgum	1.6	.9	.7	.3	.3	--	1.9
Cottonwood	2.0	--	2.0	1.0	.8	.2	2.4
Other 1/	4.0	1.0	3.0	1.5	1.4	.1	5.3
Total Soft Hardwoods	37.7	16.6	21.1	10.6	9.1	1.5	37.6
Total Hardwoods	425.8	173.7	252.1	125.1	114.8	10.3	360.7
All Species	430.0	175.0	255.0	126.5	116.2	10.3	362.6

1/ Mainly sycamore.

TABLE 13--PERIODIC ANNUAL NET GROWTH ON COMMERCIAL FOREST LAND BY COUNTY AND SPECIES GROUP
RIVERBORDER REGION, MISSOURI, 1959

County	Growing Stock (thousand cords)				Sawtimber (million board feet)			
	Total	Softwoods	Soft Hardwoods	Hard Hardwoods	Total	Softwoods	Soft Hardwoods	Hard Hardwoods
Boone	17.2	0.2	4.1	12.9	4.6	--	1.0	3.6
Callaway	44.2	.4	6.5	37.3	11.4	--	1.4	10.0
Cape Girardeau	26.5	.1	4.4	22.0	9.3	--	1.1	8.2
Cole	20.1	.7	3.2	16.2	5.9	.1	.8	5.0
Dunklin	9.8	.2	4.1	5.5	2.7	.1	.9	1.7
Franklin	57.1	1.1	3.6	52.4	16.3	.1	.9	15.3
Gasconade	27.7	.2	2.3	25.2	8.5	--	.5	8.0
Howard	13.5	1/	3.5	10.0	4.1	--	1.0	3.1
Jefferson	31.1	1.7	3.2	26.2	7.2	.4	.7	6.1
Mississippi	10.6	.2	4.5	5.9	2.9	1/	1.0	1.9
Moniteau	11.5	.3	1.4	9.8	2.8	--	.3	2.5
Montgomery	25.6	.4	4.8	20.4	7.9	--	1.2	6.7
New Madrid	13.5	.2	6.2	7.1	3.7	.1	1.4	2.2
Osage	39.8	1.1	3.4	35.3	9.7	--	.7	9.0
Pemiscot	7.1	.1	3.2	3.8	1.9	1/	.7	1.2
Perry	30.0	3.8	4.0	22.2	8.8	.3	.9	7.6
St. Charles	18.9	.1	2.8	16.0	5.7	--	.6	5.1
St. Genevieve	33.5	4.1	1.7	27.7	9.3	1.1	.3	7.9
St. Louis	12.5	.8	1.4	10.3	3.5	--	.4	3.1
Scott	6.1	1/	2.0	4.1	1.5	1/	.4	1.1
Stoddard	22.2	.3	8.8	13.1	5.7	.1	1.8	3.8
Warren	34.3	.1	2.5	31.7	11.0	--	.5	10.5
Total	512.8	16.1	81.6	415.1	144.4	2.3	18.5	123.6

1/ Insignificant amount.

TABLE 14--ANNUAL NET DESIRABLE CUT ON COMMERCIAL FOREST LAND BY COUNTY AND SPECIES GROUP
RIVERBORDER REGION, MISSOURI, 1959

County	Growing Stock (thousand cords)				Sawtimber (million board feet)				Cull Trees and Hard-wood Limbs (thousand cords)
	Total	Softwoods	Soft Hardwoods	Hard Hardwoods	Total	Softwoods	Soft Hardwoods	Hard Hardwoods	
Boone	14.1	1/	1.8	12.3	3.9	--	0.5	3.4	12.5
Callaway	38.2	--	2.9	35.3	10.1	--	.7	9.4	28.7
Cape Girardeau	22.8	--	2.0	20.8	8.2	--	.5	7.7	20.2
Cole	16.9	.1	1.5	15.3	5.1	--	.4	4.7	14.7
Dunklin	7.0	.5	2.0	4.5	2.1	--	.6	1.3	5.8
Franklin	51.3	.1	1.6	49.6	14.8	--	.4	14.4	40.5
Gasconade	24.8	--	1.0	23.8	7.8	--	.3	7.5	24.1
Howard	11.1	--	1.6	9.5	3.4	--	.5	2.9	10.9
Jefferson	26.5	.2	1.5	24.8	6.1	--	.4	5.7	22.7
Mississippi	7.6	.5	2.2	4.9	2.4	.2	.7	1.5	6.5
Moniteau	9.8	--	.6	9.2	2.5	--	.1	2.4	8.5
Montgomery	21.4	--	2.1	19.3	6.9	--	.6	6.3	19.2
New Madrid	9.5	.6	3.0	5.9	3.1	.3	1.0	1.8	8.3
Osage	35.1	.1	1.6	33.4	8.9	--	.4	8.5	27.0
Pemiscot	5.1	.4	1.5	3.2	1.7	.2	.5	1.0	4.4
Perry	23.1	.3	1.8	21.0	7.5	--	.4	7.1	19.6
St. Charles	16.5	1/	1.3	15.2	5.1	--	.3	4.8	14.8
St. Genevieve	27.3	.4	.7	26.2	7.6	--	.2	7.4	22.2
St. Louis	10.4	.1	.6	9.7	3.1	--	.2	2.9	9.4
Scott	4.5	.1	1.0	3.4	1.3	.1	.3	.9	3.4
Stoddard	15.9	.8	4.3	10.8	4.8	.4	1.3	3.1	13.2
Warren	31.1	--	1.1	30.0	10.1	--	.3	9.8	26.0
Total	430.0	4.2	37.7	388.1	126.5	1.4	10.6	114.5	362.6

1/ Insignificant amount.

TABLE 15--REGENERATION ON COMMERCIAL FOREST LAND BY TYPE AND STOCKING CLASS
RIVERBORDER REGION, MISSOURI, 1959
(ACRES)

Forest Type	Total	Restocking Satisfactorily			Restocking Unsatisfactorily	
		Restocking Naturally to Pine	Restocking Naturally to Redcedar	Stocked with Hardwood	Unfavorable Planting Chance	Conflicting Uses
Pine	17,000	12,700	--	4,300	--	--
Redcedar	17,300	--	17,300	--	--	--
Hardwood-Redcedar	182,100	--	182,100	--	--	--
Oak-Pine	14,100	10,600	--	3,500	--	--
Black-Scarlet Oak	626,800	6,900	90,200	529,700	--	--
White Oak	562,300	--	87,200	473,700	--	1,400
Post-Blackjack Oak	350,100	--	112,400	237,700	--	--
Oak-Gum-Cypress	134,800	--	--	121,300	4,500	9,000
Elm-Ash-Cottonwood	361,100	--	26,200	313,800	10,400	10,700
Maple-Beech	6,000	--	--	4,800	1,200	--
All Types	2,271,600	30,200	515,400	1,688,800	16,100	21,100

TABLE 16--CURRENT ANNUAL TIMBER CUT (INCLUDING LOGGING RESIDUE) BY SPECIES
RIVERBORDER REGION, MISSOURI, 1959 ^{1/}

Species	Growing Stock (thousand cords)			Sawtimber (million board feet)			Cull Trees and Hardwood Limbs (thousand cords)
	Total	Poletimber Trees	Sawtimber Trees	Total	In Sawtimber Stands	In Other	
Softwoods							
Cypress	2.9	0.2	2.7	1.1	0.1	1.0	--
Redcedar	1.6	.7	.9	.4	.4	--	--
Total Softwoods	4.5	.9	3.6	1.5	.5	1.0	--
Hard Hardwoods							
Oak, White	82.8	5.5	77.3	40.2	34.6	5.6	83.7
Oak, Post	47.2	3.5	43.7	15.5	13.2	2.3	47.1
Oak, Other White	11.2	.7	10.5	5.6	4.9	.7	11.2
Oak, Black	22.2	2.0	20.2	10.0	5.6	4.4	19.6
Oak, Scarlet	4.1	.2	3.9	2.0	1.1	.9	7.1
Oak, Northern Red	5.6	.9	4.7	2.2	1.2	1.0	4.8
Oak, Other Red	3.7	.2	3.5	1.8	1.0	.8	4.2
Hickory, Group A	7.3	5.6	1.7	.8	--	.8	2.0
Hickory, Group B	.2	^{2/}	.2	.1	--	.1	2.0
Maple, Hard	.7	.4	.3	.2	--	.2	.5
Walnut, Black	1.9	.7	1.2	.6	--	.6	1.4
Ash	1.5	1.1	.4	.1	--	.1	.5
Other	6.1	3.3	2.8	1.2	--	1.2	4.0
Total Hard Hardwoods	194.5	24.1	170.4	80.3	61.6	18.7	188.1
Soft Hardwoods							
Elm	5.6	2.1	3.5	1.7	1.1	.6	4.7
Maple, Soft	1.5	.3	1.2	.6	.4	.2	1.2
Sweetgum	.9	^{2/}	.9	.4	.3	.1	.8
Blackgum	1.5	.4	1.1	.5	.3	.2	1.1
Yellow-Poplar	.8	^{2/}	.8	.4	.3	.1	.8
Cottonwood	6.3	.7	5.6	2.9	1.9	1.0	6.1
Other ^{3/}	2.6	.3	2.3	1.3	.8	.5	2.7
Total Soft Hardwoods	19.2	3.8	15.4	7.8	5.1	2.7	17.4
Total Hardwoods	213.7	27.9	185.8	88.1	66.7	21.4	205.5
All Species	218.2	28.8	189.4	89.6	67.2	22.4	205.5

^{1/} Based on timber production studies conducted for 1958.

^{2/} Insignificant amount.

^{3/} Mainly sycamore.

TABLE 17--CURRENT ANNUAL TIMBER CUT BY OWNERSHIP CLASS AND SPECIES GROUP
RIVERBORDER REGION, MISSOURI, 1959 ^{1/}

Ownership Class	Growing Stock (thousand cords)				Sawtimber (million board feet)			
	Total	Softwoods	Soft Hardwoods	Hard Hardwoods	Total	Softwoods	Soft Hardwoods	Hard Hardwoods
Federal	0.4	--	0.2	0.2	0.2	--	0.1	0.1
State	.4	--	.2	.2	.2	--	.1	.1
Miscellaneous Private	217.4	4.5	18.8	194.1	89.2	1.5	7.5	80.2
All Ownerships	218.2	4.5	19.2	194.5	89.6	1.5	7.7	80.4

^{1/} Based on timber production studies conducted for 1958.

TABLE 18--CURRENT ANNUAL TIMBER CUT BY SPECIES GROUP AND DIAMETER CLASS
RIVERBORDER REGION, MISSOURI, 1959 ^{1/}
(THOUSAND CORDS)

Species	Total	Inch-Diameter Class			
		6-10	12-14	16-18	20+
Softwoods	4.5	1.0	1.3	0.8	1.4
Oaks	176.8	13.0	47.4	77.4	39.0
Other Hard Hardwoods	17.7	11.1	1.5	2.1	3.0
Soft Hardwoods	19.2	3.8	8.7	2.7	4.0
All Species	218.2	28.9	58.9	83.0	47.4

^{1/} Based on timber production studies conducted for 1958.

COUNTY TABLES

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

Ownership Class	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
State	2,400	900	700	100	(1/)	700
Farmer-Owned	67,000	24,700	19,400	14,400	3,000	5,500
Miscellaneous Private	21,400	6,200	7,100	3,600	1,600	2,900
All Ownerships	90,800	31,800	27,200	18,100	4,600	9,100

1/ Insignificant amount.

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

Forest Type	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Commercial Forest						
Pine	9,100	--	--	9,100	--	--
Hardwood-Redcedar	9,100	--	--	--	--	9,100
Black-Scarlet Oak	13,600	--	13,600	--	--	--
White Oak	31,800	18,200	4,500	4,500	4,600	--
Elm-Ash-Cottonwood	27,200	13,600	9,100	4,500	--	--
All Commercial Forest	90,800	31,800	27,200	18,100	4,600	9,100
Percent by Size-Class	100.0	35.0	30.0	19.9	5.1	10.0
Noncommercial Forest-Unproductive	200	--	--	--	--	200
All Forest Area	91,000	31,800	27,200	18,100	4,600	9,300

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

Species	Growing Stock (thousand cords)			Sawtimber (million board feet)				Cull Trees (thousand cords)	Hardwood Limbs
	Total	Poletimber Trees	Sawtimber Trees	Total	In Sawtimber Stands	Other Stands			
						500-1500 Board Feet	Under 500 Feet		
Softwoods									
Pine, Shortleaf	--	--	--	0.1	0.1	--	--	--	--
Redcedar	2.2	2.0	0.2	--	--	--	--	0.8	--
Total Softwoods	2.2	2.0	.2	.1	.1	--	--	.8	--
Hard Hardwoods									
Oak, White	131.5	62.8	68.7	34.0	29.9	2.6	1.5	15.5	67.8
Oak, Post	12.6	10.7	1.9	.9	.7	.1	.1	3.4	1.8
Oak, Other White	17.9	9.1	8.8	4.3	3.3	.7	.3	6.6	8.2
Oak, Black	35.9	22.1	13.8	6.7	1.1	3.9	1.7	10.1	13.1
Oak, Scarlet	.5	--	.5	.2	--	.1	.1	--	.4
Oak, Northern Red	25.7	7.6	18.1	9.1	4.5	3.0	1.6	11.9	17.1
Oak, Other Red	12.5	4.6	7.9	3.9	1.2	1.9	.8	1.9	7.6
Hickory, Group A	24.4	15.6	8.8	4.4	3.1	.9	.4	2.0	8.5
Hickory, Group B	8.8	5.6	3.2	1.5	1.3	.1	.1	.7	2.9
Maple, Hard	8.7	7.2	1.5	.7	.7	--	--	4.0	1.2
Walnut, Black	5.0	2.2	2.8	1.3	1.1	.1	.1	3.1	2.5
Ash	22.7	11.0	11.7	5.5	5.4	.1	--	5.3	10.6
Other	18.4	10.8	7.6	3.7	3.0	.5	.2	11.2	6.2
Total Hard Hardwoods	324.6	169.3	155.3	76.2	55.3	14.0	6.9	75.7	147.9
Soft Hardwoods									
Elm	31.0	15.3	15.7	7.9	4.8	2.2	.9	11.2	15.2
Maple, Soft	5.0	2.1	2.9	1.5	.8	.5	.2	3.2	2.5
Blackgum	.8	.4	.4	.2	--	.1	.1	.7	--
Cottonwood	7.3	--	7.3	3.6	2.4	.9	.3	1.6	6.3
Other 1/	13.0	2.7	10.3	4.9	1.7	2.2	1.0	2.6	9.2
Total Soft Hardwoods	57.1	20.5	36.6	18.1	9.7	5.9	2.5	19.3	33.2
Total Hardwoods	381.7	189.8	191.9	94.3	65.0	19.9	9.4	95.0	181.1
All Species	383.9	191.8	192.1	94.4	65.1	19.9	9.4	95.8	181.1

1/ Mainly sycamore.

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

Ownership Class	Growing Stock (thousand cords)				Sawtimber (million board feet)			
	Total	Soft		Hard Hardwoods	Total	Soft		Hard Hardwoods
		Softwoods	Hardwoods			Softwoods	Hardwoods	
State	11.1	0.2	0.7	10.2	2.7	1/	0.2	2.5
Farmer-Owned	284.8	1.5	37.8	245.5	71.9	.1	14.0	57.8
Forest Industry	.1	--	--	.1	--	--	--	--
Miscellaneous Private	87.9	.5	18.6	68.8	19.8	--	3.9	15.9
All Ownerships	383.9	2.2	57.1	324.6	94.4	.1	18.1	76.2

1/ Insignificant amount.

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

Ownership Class	All Stands	Sawtimber	Poletimber	Non-stocked
Farmer-Owned	133,200	57,400	47,400	28,400
Miscellaneous Private	46,400	14,400	17,300	14,700
All Ownerships	179,600	71,800	64,700	43,100

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

Forest Type	All Stands	Sawtimber	Poletimber	Non-stocked
Commercial Forest				
Hardwood-Redcedar	14,400	--	--	14,400
Black-Scarlet Oak	86,200	43,100	28,700	14,400
White Oak	28,700	21,500	7,200	--
Post-Blackjack Oak	14,400	--	14,400	--
Elm-Ash-Cottonwood	35,900	7,200	14,400	14,300
All Commercial Forest	179,600	71,800	64,700	43,100
Percent by Size-Class	100.0	40.0	36.0	24.0
Noncommercial Forest-				
Unproductive	400	--	--	400
All Forest Area	180,000	71,800	64,700	43,500

TABLE 20c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
CALLAWAY 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	Under 500 Feet			
Softwoods										
Redcedar	3.7	3.5	0.2	0.1	0.1	--	--	1.8	--	
Total Softwoods	3.7	3.5	.2	.1	.1	--	--	1.8	--	
Hard Hardwoods										
Oak, White	333.9	180.1	153.8	76.9	68.6	5.2	3.1	23.3	153.5	
Oak, Post	86.7	69.2	17.5	8.4	7.3	.7	.4	11.0	17.3	
Oak, Other White	40.9	23.9	17.0	8.2	6.5	1.1	.6	12.6	15.7	
Oak, Black	135.4	50.3	85.1	42.0	31.7	7.1	3.2	28.9	82.3	
Oak, Scarlet	2.0	1.3	.7	.3	--	.2	.1	.8	.6	
Oak, Northern Red	84.2	18.9	65.3	32.8	27.6	3.3	1.9	15.1	61.5	
Oak, Other Red	33.5	13.4	20.1	10.1	3.0	5.0	2.1	8.1	19.6	
Hickory, Group A	58.0	34.8	23.2	11.6	8.6	2.0	1.0	2.3	22.4	
Hickory, Group B	46.0	35.8	10.2	5.2	4.3	.5	.4	3.6	10.0	
Maple, Hard	27.0	19.9	7.1	3.4	3.4	--	--	8.5	5.7	
Walnut, Black	17.7	10.7	7.0	3.3	3.0	.2	.1	5.7	6.4	
Ash	38.8	22.8	16.0	7.6	7.4	.1	.1	8.6	14.6	
Other	30.3	25.1	5.2	2.4	2.0	.3	.1	18.6	4.0	
Total Hard Hardwoods	934.4	506.2	428.2	212.2	173.4	25.7	13.1	147.1	413.6	
Soft Hardwoods										
Elm	61.0	35.8	25.2	13.1	6.2	4.9	2.0	16.2	25.1	
Maple, Soft	7.7	1.6	6.1	3.0	.6	1.7	.7	4.5	4.9	
Blackgum	1.0	.5	.5	.2	.2	--	--	1.3	.4	
Cottonwood	2.6	--	2.6	1.3	.6	.5	.2	.3	2.3	
Other 1/	20.9	4.6	16.3	8.0	--	5.6	2.4	4.2	15.1	
Total Soft Hardwoods	93.2	42.5	50.7	25.6	7.6	12.7	5.3	26.5	47.8	
Total Hardwoods	1,027.6	548.7	478.9	237.8	181.0	38.4	18.4	173.6	461.4	
All Species	1,031.3	552.2	479.1	237.9	181.1	38.4	18.4	175.4	461.4	

1/ Mainly sycamore.

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

Ownership Class	Growing Stock (thousand cords)				Sawtimber (million board feet)			
	Total	Softwoods	Soft		Total	Softwoods	Soft	
			Hardwoods	Hardwoods			Hardwoods	Hardwoods
Farmer-Owned	795.1	2.7	62.4	730.0	186.7	0.1	20.0	166.6
Miscellaneous Private	236.2	1.0	30.8	204.4	51.2	--	5.6	45.6
All Ownerships	1,031.3	3.7	93.2	934.4	237.9	.1	25.6	212.2

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

Ownership Class	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Farmer-Owned	64,400	45,800	8,500	5,500	--	4,600
Miscellaneous Private	18,400	11,500	3,100	1,400	--	2,400
All Ownerships	82,800	57,300	11,600	6,900	--	7,000

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

Forest Type	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Commercial Forest						
Black-Scarlet Oak	42,300	31,100	4,400	4,500	--	2,300
White Oak	11,900	11,900	--	--	--	--
Post-Blackjack Oak	2,400	2,400	--	--	--	--
Oak-Gum-Cypress	7,200	2,400	2,400	2,400	--	--
Elm-Ash-Cottonwood	14,200	4,700	4,800	--	--	4,700
Maple-Beech	4,800	4,800	--	--	--	--
All Commercial Forest	82,800	57,300	11,600	6,900	--	7,000
Percent by Size-Class	100.0	69.2	14.0	8.3	--	8.5
Noncommercial Forest						
Productive-Reserved	2,800	2,100	300	300	--	100
Unproductive	200	--	--	--	--	200
All Forest Area	85,800	59,400	11,900	7,200	--	7,300

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

Species	Growing Stock (thousand cords)			Sawtimber (million board feet)				Cull Trees (thousand cords)	Hardwood Limbs
	Total	Poletimber Trees	Sawtimber Trees	Total	In		500-1500 Board Feet		
					Sawtimber Stands	Other Stands			
					Under 500 Feet				
Softwoods									
Redcedar	0.7	0.4	0.3	0.1	0.1	--	--	0.1	--
Total Softwoods	.7	.4	.3	.1	.1	--	--	.1	--
Hard Hardwoods									
Oak, White	182.3	71.4	110.9	55.3	53.6	1.1	0.6	11.1	110.4
Oak, Post	33.3	12.0	21.3	10.4	7.6	1.7	1.1	2.7	21.4
Oak, Other White	17.6	8.1	9.5	4.7	4.5	.1	.1	4.7	9.0
Oak, Black	80.6	13.6	67.0	33.2	30.9	1.6	.7	8.6	65.0
Oak, Scarlet	.4	.4	--	--	--	--	--	.2	--
Oak, Northern Red	55.5	6.9	48.6	24.5	23.9	.4	.2	7.2	45.9
Oak, Other Red	16.0	4.7	11.3	5.6	3.4	1.6	.6	2.0	10.8
Hickory, Group A	32.5	15.7	16.8	8.6	8.1	.3	.2	1.1	16.6
Hickory, Group B	26.1	14.9	11.2	5.7	5.7	--	--	1.4	10.9
Maple, Hard	48.3	17.9	30.4	15.2	15.2	--	--	7.7	25.4
Walnut, Black	6.8	3.5	3.3	1.7	1.7	--	--	1.7	3.3
Ash	22.0	14.3	7.7	3.6	3.5	.1	--	6.0	6.9
Other	29.0	18.1	10.9	5.5	5.0	.3	.2	12.1	9.2
Total Hard Hardwoods	550.4	201.5	348.9	174.0	163.1	7.2	3.7	66.5	334.8
Soft Hardwoods									
Elm	32.4	14.6	17.8	9.1	7.1	1.4	.6	6.5	17.5
Maple, Soft	1.5	--	1.5	.7	.2	.3	.2	2.0	1.2
Sweetgum	--	--	--	--	--	--	--	.3	--
Blackgum	5.2	.3	4.9	2.2	2.2	--	--	.4	4.0
Yellow-Poplar	7.8	5.2	2.6	1.3	1.3	--	--	--	2.4
Cottonwood	2.1	--	2.1	1.0	.8	.1	.1	.2	1.7
Other 1/	12.3	1.2	11.1	5.4	2.5	2.0	.9	2.2	10.2
Total Soft Hardwoods	61.3	21.3	40.0	19.7	14.1	3.8	1.8	11.6	37.0
Total Hardwoods	611.7	222.8	388.9	193.7	177.2	11.0	5.5	78.1	371.8
All Species	612.4	223.2	389.2	193.8	177.3	11.0	5.5	78.2	371.8

1/ Mainly sycamore.

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

Ownership Class	Growing Stock (thousand cords)				Sawtimber (million board feet)			
	Total	Soft		Hard Hardwoods	Total	Soft		Hard Hardwoods
		Softwoods	Hardwoods			Softwoods	Hardwoods	
Farmer-Owned	471.5	0.5	41.0	430.0	152.1	0.1	15.4	136.6
Miscellaneous Private	140.9	.2	20.3	120.4	41.7	--	4.3	37.4
All Ownerships	612.4	.7	61.3	550.4	193.8	.1	19.7	174.0

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

Ownership Class	All Stands	Sawtimber	Poletimber	Non-stocked
Farmer-Owned	65,700	35,800	18,100	11,800
Miscellaneous Private	21,500	8,900	6,500	6,100
All Ownerships	87,200	44,700	24,600	17,900

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

Forest Type	All Stands	Sawtimber	Poletimber	Non-stocked
Commercial Forest				
Hardwood-Redcedar	15,600	2,200	2,200	11,200
Black-Scarlet Oak	20,100	11,200	4,500	4,400
White Oak	22,400	17,900	4,500	--
Post-Blackjack Oak	11,200	2,200	6,700	2,300
Elm-Ash-Cottonwood	17,900	11,200	6,700	--
All Commercial Forest	87,200	44,700	24,600	17,900
Percent by Size-Class	100.0	51.3	28.2	20.5
Noncommercial Forest- Unproductive	200	--	--	200
All Forest Area	87,400	44,700	24,600	18,100

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

Species	Growing Stock (thousand cords)			Sawtimber (million board feet)				Cull Trees (thousand cords)	Hardwood Limbs
	Total	Poletimber Trees	Sawtimber Trees	Total	Other Stands				
					In Sawtimber Stands	500-1500 Board Feet	Under 500 Feet		
Softwoods									
Redcedar	6.8	6.1	0.7	0.3	0.2	0.1	--	1.4	--
Total Softwoods	6.8	6.1	.7	.3	.2	.1	--	1.4	--
Hard Hardwoods									
Oak, White	186.9	91.0	95.9	47.9	40.7	4.5	2.7	13.8	95.6
Oak, Post	35.2	24.5	10.7	5.1	4.6	.3	.2	7.7	10.5
Oak, Other White	15.1	6.4	8.7	4.2	3.6	.4	.2	8.2	8.0
Oak, Black	34.7	11.6	23.1	11.2	8.9	1.6	.7	9.4	21.9
Oak, Scarlet	.7	.5	.2	.1	--	.1	--	.2	.2
Oak, Northern Red	30.7	6.5	24.2	12.0	10.9	.7	.4	10.0	22.5
Oak, Other Red	11.5	3.9	7.6	4.0	2.0	1.4	.6	3.9	7.7
Hickory, Group A	22.4	12.2	10.2	5.0	4.1	.6	.3	2.1	9.7
Hickory, Group B	17.5	10.4	7.1	3.6	2.9	.4	.3	1.9	6.9
Maple, Hard	9.1	5.6	3.5	1.7	1.1	.4	.2	5.4	2.8
Walnut, Black	6.9	3.5	3.4	1.7	1.5	.1	.1	2.9	3.3
Ash	20.4	8.7	11.7	5.5	5.3	.1	.1	5.7	10.6
Other	15.3	9.3	6.0	2.9	2.6	.2	.1	9.9	4.9
Total Hard Hardwoods	406.4	194.1	212.3	104.9	88.2	10.8	5.9	81.1	204.6
Soft Hardwoods									
Elm	26.8	12.9	13.9	7.2	5.3	1.4	.5	9.5	13.8
Maple, Soft	4.2	2.0	2.2	1.0	.7	.2	.1	2.8	1.6
Blackgum	.5	.3	.2	.1	.1	--	--	.2	.2
Cottonwood	3.2	--	3.2	1.6	1.6	--	--	.5	2.8
Other 1/	10.5	2.6	7.9	3.8	.8	2.1	.9	2.1	7.2
Total Soft Hardwoods	45.2	17.8	27.4	13.7	8.5	3.7	1.5	15.1	25.6
Total Hardwoods	451.6	211.9	239.7	118.6	96.7	14.5	7.4	96.2	230.2
All Species	458.4	218.0	240.4	118.9	96.9	14.6	7.4	97.6	230.2

1/ Mainly sycamore.

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

Ownership Class	Growing Stock (thousand cords)				Sawtimber (million board feet)			
	Total	Soft		Hard	Total	Soft		Hard
		Softwoods	Hardwoods			Softwoods	Hardwoods	
Farmer-Owned	352.9	5.1	30.3	317.5	93.2	0.2	10.7	82.3
Miscellaneous Private	105.5	1.7	14.9	88.9	25.7	.1	3.0	22.6
All Ownerships	458.4	6.8	45.2	406.4	118.9	.3	13.7	104.9

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

Ownership Class	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Farmer-Owned	27,500	16,700	2,200	1,700	2,400	4,500
Miscellaneous Private	3,200	600	600	1,300	300	400
All Ownerships	30,700	17,300	2,800	3,000	2,700	4,900

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

Forest Type	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Commercial Forest						
Black-Scarlet Oak	1,500	1/	700	200	500	100
White Oak	800	800	--	--	--	--
Post-Blackjack Oak	400	400	--	--	--	--
Oak-Gum-Cypress	17,700	9,700	1,800	1,200	1,500	3,500
Elm-Ash-Cottonwood	10,300	6,400	300	1,600	700	1,300
All Commercial Forest	30,700	17,300	2,800	3,000	2,700	4,900
Percent by Size-Class	100.0	56.3	9.1	9.8	8.8	16.0
Noncommercial Forest-Unproductive	100	--	--	--	--	100
All Forest Area	30,800	17,300	2,800	3,000	2,700	5,000

1/ Insignificant amount.

TABLE 23c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
DUNKLIN 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	In Other Stands		
Softwoods								
Cypress	10.1	0.6	9.5	4.6	3.9	0.7	1.5	--
Total Softwoods	10.1	.6	9.5	4.6	3.9	.7	1.5	--
Hard Hardwoods								
Oak, White	5.7	1.1	4.6	2.1	2.1	--	.1	4.2
Oak, Post	3.3	1.7	1.6	.7	.7	--	.5	1.4
Oak, Other White	9.4	3.3	6.1	3.1	2.7	.4	.7	5.9
Oak, Black	4.3	2.8	1.5	.8	.6	.2	.3	1.6
Oak, Scarlet	.1	--	.1	.1	.1	--	--	.2
Oak, Northern Red	.3	.2	.1	--	--	--	.1	--
Oak, Other Red	41.9	10.2	31.7	16.0	14.3	1.7	7.2	31.0
Hickory, Group A	2.6	1.1	1.5	.7	.5	.2	.5	1.3
Hickory, Group B	10.6	5.0	5.6	2.8	2.6	.2	.7	5.4
Maple	--	--	--	--	--	--	.1	--
Walnut, Black	.6	.4	.2	.1	.1	--	.2	.2
Ash	15.3	9.1	6.2	3.0	3.0	--	2.6	5.6
Other	45.8	18.0	27.8	13.7	13.4	.3	14.6	23.0
Total Hard Hardwoods	139.9	52.9	87.0	43.1	40.1	3.0	27.6	79.8
Soft Hardwoods								
Elm	13.1	8.5	4.6	2.2	2.0	.2	3.3	4.2
Maple, Soft	7.4	1.8	5.6	2.8	2.6	.2	4.6	4.6
Sweetgum	21.9	8.0	13.9	6.8	5.9	.9	2.5	12.5
Blackgum	2.2	.3	1.9	.9	.4	.5	.7	1.6
Yellow-Poplar	.5	.1	.4	.2	.1	.1	--	--
Cottonwood	4.2	.3	3.9	1.9	1.5	.4	1.0	3.4
Other 1/	10.2	1.4	8.8	4.4	4.2	.2	2.4	8.3
Total Soft Hardwoods	59.5	20.4	39.1	19.2	16.7	2.5	14.5	34.6
Total Hardwoods	199.4	73.3	126.1	62.3	56.8	5.5	42.1	114.4
All Species	209.5	73.9	135.6	66.9	60.7	6.2	43.6	114.4

1/ Mainly sycamore.

TABLE 23d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
DUNKLIN 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	199.3	10.1	57.1	132.1	64.5	4.6	18.5	41.4
Miscellaneous Private	10.2	--	2.4	7.8	2.4	--	.7	1.7
All Ownerships	209.5	10.1	59.5	139.9	66.9	4.6	19.2	43.1

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

Ownership Class	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
State	200	100	--	--	--	100
Farmer-Owned	186,100	100,300	52,100	3,700	3,100	26,900
Miscellaneous Private	60,600	25,100	19,100	900	1,500	14,000
All Ownerships	246,900	125,500	71,200	4,600	4,600	41,000

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

Forest Type	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Commercial Forest						
Redcedar	4,600	--	4,600	--	--	--
Hardwood-Redcedar	13,800	4,600	--	--	--	9,200
Black-Scarlet Oak	53,200	28,600	20,500	--	--	4,100
White Oak	87,700	69,200	13,900	--	--	4,600
Post-Blackjack Oak	64,500	23,100	27,600	--	4,600	9,200
Elm-Ash-Cottonwood	23,100	--	4,600	4,600	--	13,900
All Commercial Forest	246,900	125,500	71,200	4,600	4,600	41,000
Percent by Size-Class	100.0	50.8	28.8	1.9	1.9	16.6
Noncommercial Forest						
Productive-Reserved	6,800	3,600	2,600	--	--	600
Unproductive	600	--	--	--	--	600
All Forest Area	254,300	129,100	73,800	4,600	4,600	42,200

TABLE 24c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
FRANKLIN 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	Under 500 Feet		
Softwoods									
Redcedar	11.0	9.3	1.7	0.6	0.6	--	--	4.9	--
Total Softwoods	11.0	9.3	1.7	.6	.6	--	--	4.9	--
Hard Hardwoods									
Oak, White	659.5	310.6	348.9	173.9	156.6	10.8	6.5	52.6	347.0
Oak, Post	167.6	116.0	51.6	24.9	22.0	1.7	1.2	37.0	51.1
Oak, Other White	23.3	11.1	12.2	5.9	4.9	.7	.3	12.0	11.3
Oak, Black	152.3	64.8	87.5	43.3	37.1	4.3	1.9	28.4	84.8
Oak, Scarlet	2.3	1.5	.8	.4	--	.3	.1	.3	.8
Oak, Northern Red	90.1	16.6	73.5	36.7	32.4	2.8	1.5	17.6	68.8
Oak, Other Red	21.6	10.6	11.0	5.4	1.9	2.5	1.0	12.4	10.5
Hickory, Group A	54.7	32.1	22.6	11.2	9.6	1.1	.5	4.8	21.7
Hickory, Group B	55.4	35.9	19.5	9.8	8.2	1.0	.6	7.3	18.8
Maple, Hard	19.7	14.6	5.1	2.4	2.4	--	--	6.4	4.0
Walnut, Black	21.5	12.8	8.7	4.1	3.4	.5	.2	4.2	8.0
Ash	21.2	11.6	9.6	4.5	4.3	.1	.1	11.6	8.6
Other	23.9	19.4	4.5	2.2	1.1	.8	.3	10.8	3.7
Total Hard Hardwoods	1,313.1	657.6	655.5	324.7	283.9	26.6	14.2	205.4	639.1
Soft Hardwoods									
Elm	35.3	17.1	18.2	9.4	6.1	2.3	1.0	13.5	18.0
Maple, Soft	2.6	--	2.6	1.3	--	.9	.4	3.1	2.2
Blackgum	3.1	1.6	1.5	.7	.5	.2	--	1.2	1.3
Cottonwood	1.3	--	1.3	.6	--	.4	.2	--	1.1
Other 1/	8.8	1.0	7.8	3.8	--	2.7	1.1	2.9	7.2
Total Soft Hardwoods	51.1	19.7	31.4	15.8	6.6	6.5	2.7	20.7	29.8
Total Hardwoods	1,364.2	677.3	686.9	340.5	290.5	33.1	16.9	226.1	688.9
All Species	1,375.2	686.6	688.6	341.1	291.1	33.1	16.9	231.0	668.9

1/ Mainly sycamore.

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

Ownership Class	Growing Stock (thousand cords)				Sawtimber (million board feet)			
	Total	Softwoods	Hardwoods		Total	Softwoods	Hardwoods	
			Soft	Hard			Soft	Hard
State	0.9	--	0.1	0.8	0.2	--	(1/)	0.2
Farmer-Owned	1,067.5	8.2	34.2	1,025.1	267.6	.4	12.4	254.8
Miscellaneous Private	306.8	2.8	16.8	287.2	73.3	.2	3.4	69.7
All Ownerships	1,375.2	11.0	51.1	1,313.1	341.1	.6	15.8	324.7

1/ Insignificant amount.

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

Ownership Class	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Farmer-Owned	121,100	53,400	17,800	9,700	20,200	20,000
Miscellaneous Private	42,600	13,300	6,500	2,400	10,100	10,300
All Ownerships	163,700	66,700	24,300	12,100	30,300	30,300

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

Forest Type	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Commercial Forest						
Hardwood-Redcedar	6,100	6,100	--	--	--	--
Black-Scarlet Oak	48,500	12,100	12,100	6,100	18,200	--
White Oak	48,500	36,400	6,100	--	--	6,000
Post-Blackjack Oak	54,600	6,100	6,100	6,000	12,100	24,300
Elm-Ash-Cottonwood	6,000	6,000	--	--	--	--
All Commercial Forest	163,700	66,700	24,300	12,100	30,300	30,300
Percent by Size-Class	100.0	40.8	14.8	7.4	18.5	18.5
Noncommercial Forest-Unproductive	400	--	--	--	--	400
All Forest Area	164,100	66,700	24,300	12,100	30,300	30,700

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

Species	Growing Stock (thousand cords)			Sawtimber (million board feet)				Cull Trees (thousand cords)	Hardwoods Limbs
	Total	Poletimber Trees	Sawtimber Trees	Total	In Sawtimber Stands	Other Stands			
						500-1500 Board Feet	Under 500 Feet		
Softwoods									
Redcedar	2.0	2.0	--	--	--	--	--	0.8	--
Total Softwoods	2.0	2.0	--	--	--	--	--	.8	--
Hard Hardwoods									
Oak, White	286.6	120.5	166.1	82.9	75.8	4.4	2.7	36.6	165.4
Oak, Post	94.9	60.5	34.4	16.7	7.5	5.5	3.7	45.1	34.3
Oak, Other White	10.5	4.4	6.1	2.9	2.3	.4	.2	6.1	5.5
Oak, Black	50.4	17.6	32.8	16.2	11.3	3.4	1.5	26.6	31.7
Oak, Scarlet	1.7	.5	1.2	.6	--	.4	.2	.1	1.2
Oak, Northern Red	42.5	6.9	35.6	17.7	14.1	2.3	1.3	9.2	33.2
Oak, Other Red	15.6	9.3	6.3	3.2	1.8	1.0	.4	15.1	6.2
Hickory, Group A	25.0	12.2	12.8	6.4	4.7	1.1	.6	3.2	12.4
Hickory, Group B	33.3	21.8	11.5	5.8	3.7	1.2	.9	7.6	11.1
Maple, Hard	6.4	4.5	1.9	1.0	1.0	--	--	4.1	1.7
Walnut, Black	6.2	.6	5.6	2.7	2.7	--	--	2.3	5.2
Ash	15.0	9.4	5.6	2.7	2.7	--	--	5.4	5.2
Other	42.5	22.1	20.4	9.9	9.9	--	--	15.7	16.6
Total Hard Hardwoods	630.6	290.3	340.3	168.7	137.5	19.7	11.5	177.1	329.7
Soft Hardwoods									
Elm	27.0	11.6	15.4	8.0	7.4	.4	.2	6.2	15.3
Maple, Soft	.9	--	.9	.5	.5	--	--	1.1	.8
Sweetgum	--	--	--	--	--	--	--	.7	--
Blackgum	2.0	1.1	.9	.4	.2	.1	.1	1.0	.8
Others 1/	1.7	--	1.7	.8	.8	--	--	1.3	1.5
Total Soft Hardwoods	31.6	12.7	18.9	9.7	8.9	.5	.3	10.3	18.4
Total Hardwoods	662.2	303.0	359.2	178.4	146.4	20.2	11.8	187.4	348.1
All Species	664.2	305.0	359.2	178.4	146.4	20.2	11.8	188.2	348.1

1/ Mainly sycamore.

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

Ownership Class	Growing Stock (thousand cords)				Sawtimber (million board feet)			
	Total	Soft		Hard Hardwoods	Total	Soft		Hard Hardwoods
		Softwoods	Hardwoods			Softwoods	Hardwoods	
Farmer-Owned	515.3	1.5	21.2	492.6	140.0	--	7.6	132.4
Miscellaneous Private	148.9	.5	10.4	138.0	38.4	--	2.1	36.3
All Ownerships	664.2	2.0	31.6	630.6	178.4	--	9.7	168.7

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

Ownership Class	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Farmer-Owned	48,100	25,800	5,900	2,200	3,600	10,600
Miscellaneous Private	16,400	6,400	2,200	500	1,800	5,500
All Ownerships	64,500	32,200	8,100	2,700	5,400	16,100

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

Forest Type	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Commercial Forest						
Hardwood Redcedar	5,300	--	--	--	--	5,300
Black-Scarlet Oak	8,100	--	2,700	--	--	5,400
White Oak	21,500	13,400	5,400	--	2,700	--
Elm-Ash-Cottonwood	29,600	18,800	--	2,700	2,700	5,400
All Commercial Forest	64,500	32,200	8,100	2,700	5,400	16,100
Percent by Size-Class	100.0	49.9	12.5	4.2	8.4	25.0
Noncommercial Forest-Unproductive	200	--	--	--	--	200
All Forest Area	64,700	32,200	8,100	2,700	5,400	16,300

TABLE 26c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
HOWARD 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 Other Stands		Under 500 Feet		
					Sawtimber Stands	500-1500 Board Feet			
Softwoods									
Redcedar	1.6	1.4	0.2	0.1	0.1	--	--	0.5	--
Total Softwoods	1.6	1.4	.2	.1	.1	--	--	.5	--
Hard Hardwoods									
Oak, White	111.0	51.8	59.2	29.3	25.0	2.7	1.6	11.5	58.5
Oak, Post	5.8	4.6	1.2	.6	.6	--	--	2.4	1.2
Oak, Other White	11.9	5.1	6.8	3.3	2.9	.3	.1	4.7	6.3
Oak, Black	12.9	4.1	8.8	4.4	1.9	1.7	.8	6.8	8.6
Oak, Scarlet	.4	.4	--	--	--	--	--	.1	--
Oak, Northern Red	15.7	4.9	10.8	5.3	3.8	1.0	.5	4.8	9.9
Oak, Other Red	7.5	3.6	3.9	2.0	1.5	.3	.2	1.6	3.9
Hickory, Group A	13.6	7.1	6.5	3.2	2.9	.2	.1	2.6	6.2
Hickory, Group B	6.9	3.6	3.3	1.7	1.2	.3	.2	.6	3.3
Maple, Hard	2.8	1.5	1.3	.6	.6	--	--	2.2	1.0
Walnut, Black	4.9	1.5	3.4	1.6	1.1	.4	.1	1.2	3.1
Ash	24.3	11.3	13.0	6.2	5.4	.6	.2	6.0	11.9
Other	35.5	19.5	16.0	7.8	7.6	.1	.1	16.5	13.1
Total Hard Hardwoods	253.2	119.0	134.2	66.0	54.5	7.6	3.9	61.0	127.0
Soft Hardwoods									
Elm	21.7	6.9	14.8	7.4	6.5	.6	.3	12.5	14.2
Maple, Soft	4.7	1.8	2.9	1.4	.9	.3	.2	3.5	2.3
Sweetgum	--	--	--	--	--	--	--	.3	--
Blackgum	.6	.3	.3	.1	--	.1	--	.3	.2
Cottonwood	9.2	--	9.2	4.5	3.6	.7	.2	1.7	8.0
Other 1/	12.6	2.6	10.0	4.8	3.5	.9	.4	1.7	9.1
Total Soft Hardwoods	48.8	11.6	37.2	18.2	14.5	2.6	1.1	20.0	33.8
Total Hardwoods	302.0	130.6	171.4	84.2	69.0	10.2	5.0	81.0	160.8
All Species	303.6	132.0	171.6	84.3	69.1	10.2	5.0	81.5	160.8

1/ Mainly sycamore.

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

Ownership Class	Growing Stock (thousand cords)				Sawtimber (million board feet)			
	Total	Softwoods	Soft		Total	Softwoods	Soft	
			Hardwoods	Hardwoods			Hardwoods	Hardwoods
Farmer-Owned	231.7	1.2	32.7	197.8	66.2	0.1	14.3	51.8
Miscellaneous Private	71.9	.4	16.1	55.4	18.1	--	3.9	14.2
All Ownerships	303.6	1.6	48.8	253.2	84.3	.1	18.2	66.0

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

Ownership Class	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Farmer-Owned	157,000	34,900	52,500	20,500	6,900	42,200
Miscellaneous Private	58,300	8,700	19,200	5,100	3,500	21,800
All Ownerships	215,300	43,600	71,700	25,600	10,400	64,000

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

Forest Type	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Commercial Forest						
Redcedar	2,600	--	--	--	--	2,600
Hardwood-Redcedar	17,900	5,100	5,100	--	2,600	5,100
Black-Scarlet Oak	48,700	15,400	12,800	7,700	--	12,800
White Oak	43,500	17,900	12,800	2,500	2,600	7,700
Post-Blackjack Oak	79,500	2,600	33,300	15,400	2,600	25,600
Elm-Ash-Cottonwood	23,100	2,600	7,700	--	2,600	10,200
All Commercial Forest	215,300	43,600	71,700	25,600	10,400	64,000
Percent by Size-Class	100.0	20.3	33.3	11.9	4.8	29.7
Noncommercial Forest-Unproductive	500	--	--	--	--	500
All Forest Area	215,800	43,600	71,700	25,600	10,400	64,500

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

Species	Growing Stock (thousand cords)			Sawtimber (million board feet)				Cull Trees (thousand cords)	Hardwood Limbs (thousand cords)
	Total	Pole Timber Trees	Sawtimber Trees	Total	Sawtimber Stands	Other Stands			
						500-1500 Board Feet	Under 500 Feet		
Softwoods									
Pine, Shortleaf	6.6	1.9	4.7	2.3	--	1.9	0.4	--	--
Redcedar	10.1	9.9	.2	.1	--	.1	1/	3.0	--
Total Softwoods	16.7	11.8	4.9	2.4	--	2.0	.4	3.0	--
Hard Hardwoods									
Oak, White	248.7	129.7	119.0	59.0	35.5	14.7	8.8	41.7	117.7
Oak, Post	139.1	108.1	31.0	15.0	5.4	5.7	3.9	45.3	30.8
Oak, Other White	16.8	8.0	8.8	4.3	2.7	1.1	.5	10.9	8.2
Oak, Black	69.8	44.5	25.3	12.5	7.1	3.7	1.7	26.3	24.5
Oak, Scarlet	1.1	.6	.5	.2	--	.1	.1	.3	.4
Oak, Northern Red	44.7	15.0	29.7	14.8	10.7	2.6	1.5	16.1	27.8
Oak, Other Red	13.5	5.8	7.7	3.8	1.2	1.8	.8	12.6	7.4
Hickory, Group A	29.0	19.5	9.5	4.8	2.6	1.5	.7	5.4	9.3
Hickory, Group B	35.8	24.0	11.8	5.8	2.4	2.0	1.4	8.6	11.1
Maple, Hard	11.5	8.5	3.0	1.5	.8	.5	.2	6.5	2.5
Walnut, Black	10.3	4.5	5.8	2.7	1.6	.8	.3	4.0	5.2
Ash	16.8	11.1	5.7	2.6	1.5	.8	.3	9.6	5.0
Other	19.0	15.5	3.5	1.7	.6	.8	.3	11.9	2.8
Total Hard Hardwoods	656.1	394.8	261.3	128.7	72.1	36.1	20.5	199.2	252.7
Soft Hardwoods									
Elm	23.3	16.5	6.8	3.6	1.8	1.3	.5	18.1	6.9
Maple, Soft	1.9	--	1.9	.8	--	.6	.2	2.7	1.3
Blackgum	3.1	.7	2.4	1.0	--	.7	.3	2.3	1.8
Cottonwood	2.9	--	2.9	1.4	.9	.4	.1	.2	2.5
Other 2/	14.4	3.1	11.3	5.6	1.0	3.2	1.4	3.0	10.6
Total Soft Hardwoods	45.6	20.3	25.3	12.4	3.7	6.2	2.5	26.3	23.1
Total Hardwoods	701.7	415.1	286.6	141.1	75.8	42.3	23.0	225.5	275.8
All Species	718.4	426.9	291.5	143.1	75.8	44.3	23.4	228.5	275.8

1/ Insignificant amount.

2/ Mainly sycamore.

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

Ownership Class	Growing Stock (thousand cords)				Sawtimber (million board feet)			
	Total	Softwoods	Soft		Total	Softwoods	Soft	
			Hardwoods	Hardwoods			Hardwoods	Hardwoods
Farmer-Owned	555.4	12.4	30.5	512.5	112.5	1.8	9.7	101.0
Miscellaneous Private	163.0	4.3	15.1	143.6	31.0	.6	2.7	27.7
All Ownerships	718.4	16.7	45.6	656.1	143.5	2.4	12.4	128.7

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

Ownership Class	All Stand	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Farmer-Owned	28,700	18,500	2,500	300	3,800	3,600
Miscellaneous Private	2,500	700	700	300	500	300
All Ownerships	31,200	19,200	3,200	600	4,300	3,900

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

Forest Type	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Commercial Forest						
White Oak	400	400	--	--	--	--
Post-Blackjack Oak	400	400	--	--	--	--
Oak-Gum-Cypress	16,000	10,900	1,800	400	1,200	1,700
Elm-Ash-Cottonwood	14,400	7,500	1,400	200	3,100	2,200
All Commercial Forest	31,200	19,200	3,200	600	4,300	3,900
Percent by Size-Class	100.0	61.5	10.3	1.9	13.8	12.5
Noncommercial Forest						
Productive-reserved	900	600	100	1/	--	100
Unproductive	100	--	--	--	--	100
All Forest Area	32,200	19,800	3,300	600	4,400	4,100

1/ Insignificant amount.

TABLE 28c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
MISSISSIPPI 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	In Other Stands		
Softwoods								
Cypress	10.1	0.3	9.8	4.7	4.3	0.4	1.2	--
Total Softwoods	10.1	.3	9.8	4.7	4.3	.4	1.2	--
Hard Hardwoods								
Oak, White	3.6	.3	3.3	1.6	1.6	--	.1	3.2
Oak, Post	3.4	1.8	1.6	.8	.8	--	.5	1.7
Oak, Other White	9.9	3.1	6.8	3.4	3.0	.4	.8	6.5
Oak, Black	1.0	.1	.9	.4	.4	--	.1	.8
Oak, Scarlet	.1	--	.1	--	--	--	--	--
Oak, Northern Red	.2	.2	--	--	--	--	--	--
Oak, Other Red	44.7	10.0	34.7	17.5	16.2	1.3	7.3	33.9
Hickory, Group A	2.5	1.0	1.5	.8	.6	.2	.5	1.5
Hickory, Group B	12.7	5.7	7.0	3.5	3.2	.3	.8	6.7
Maple, Hard	--	--	--	--	--	--	.1	--
Walnut, Black	.6	.4	.2	.1	.1	--	.4	.2
Ash	18.9	11.1	7.8	3.7	3.7	--	2.8	7.2
Other	53.3	18.0	35.3	17.2	16.3	.9	15.7	28.8
Total Hard Hardwoods	150.9	51.7	99.2	49.0	45.9	3.1	29.1	90.5
Soft Hardwoods								
Elm	15.6	9.5	6.1	3.1	2.3	.8	4.5	6.0
Maple, Soft	8.7	2.1	6.6	3.3	3.1	.2	4.1	5.5
Sweetgum	22.5	7.1	15.4	7.5	6.7	.8	2.7	13.8
Blackgum	1.7	.2	1.5	.6	.4	.2	.7	1.1
Yellow-Poplar	.5	.1	.4	.2	.1	.1	--	--
Cottonwood	5.4	.8	4.6	2.3	1.7	.6	1.5	4.1
Other 1/	12.2	2.1	10.1	5.0	4.7	.3	3.0	9.4
Total Soft Hardwoods	66.6	21.9	44.7	22.0	19.0	3.0	16.5	39.9
Total Hardwoods	217.5	73.6	143.9	71.0	64.9	6.1	45.6	130.4
All Species	227.6	73.9	153.7	75.7	69.2	6.5	46.8	130.4

1/ Mainly sycamore.

TABLE 28d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
MISSISSIPPI 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	216.5	10.1	63.9	142.5	72.9	4.7	21.1	47.1
Miscellaneous Private	11.1	--	2.7	8.4	2.8	--	.9	1.9
All Ownerships	227.6	10.1	66.6	150.9	75.7	4.7	22.0	49.0

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

Ownership Class	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Farmer-Owned	49,900	14,200	20,300	2,000	1,700	11,700
Miscellaneous Private	18,200	3,500	7,400	500	800	6,000
All Ownerships	68,100	17,700	27,700	2,500	2,500	17,700

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

Forest Type	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Commercial Forest						
Hardwood-Redcedar	7,600	2,500	--	--	--	5,100
Black-Scarlet Oak	17,700	5,000	5,100	2,500	--	5,100
White Oak	15,100	5,100	10,000	--	--	--
Post-Blackjack Oak	15,100	2,500	10,100	--	--	2,500
Elm-Ash-Cottonwood	12,600	2,600	2,500	--	2,500	5,000
All Commercial Forest	68,100	17,700	27,700	2,500	2,500	17,700
Percent by Size-Class	100.0	26.0	40.6	3.7	3.7	26.0
Noncommercial Forest-Unproductive	200	--	--	--	--	200
All Forest Area	68,300	17,700	27,700	2,500	2,500	17,900

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

Species	Growing Stock (thousand cords)			Sawtimber (million board feet)				Cull Trees (thousand cords)	Hardwood Limbs
	Total	Poletimber Trees	Sawtimber Trees	Total	Sawtimber Stands	Other Stands			
						500-1500 Board Feet	Other 500 Feet		
Softwoods									
Redcedar	2.4	2.1	0.3	0.1	0.1	--	--	0.7	--
Total Softwoods	2.4	2.1	.3	.1	.1	--	--	.7	--
Hard Hardwoods									
Oak, White	99.6	55.4	44.2	21.8	11.4	6.5	3.9	11.1	43.5
Oak, Post	37.3	24.8	12.5	6.0	3.7	1.4	.9	9.9	12.3
Oak, Other White	7.9	4.3	3.6	1.9	1.3	.4	.2	5.1	3.6
Oak, Black	23.7	10.3	13.4	6.6	3.5	2.2	.9	8.3	12.9
Oak, Scarlet	.4	.2	.2	.1	--	.1	--	.1	.2
Oak, Northern Red	19.1	6.3	12.8	6.4	4.0	1.5	.9	7.4	12.0
Oak, Other Red	6.2	2.5	3.7	2.0	.4	1.1	.5	3.6	3.9
Hickory, Group A	11.5	8.7	2.8	1.6	.9	.5	.2	2.1	3.1
Hickory, Group B	12.4	7.4	5.0	2.5	1.5	.6	.4	2.0	4.8
Maple, Hard	4.5	3.9	.6	.4	.4	--	--	2.0	.7
Walunt, Black	4.3	2.5	1.8	.9	.4	.3	.2	1.3	1.7
Ash	9.3	6.3	3.0	1.5	.6	.7	.2	3.9	2.9
Other	8.6	6.4	2.2	1.1	.6	.3	.2	5.6	1.8
Total Hard Hardwoods	244.8	139.0	105.8	52.8	28.7	15.6	8.5	62.4	103.4
Soft Hardwoods									
Elm	8.5	6.3	2.2	1.1	.5	.4	.2	9.2	2.1
Maple, Soft	1.2	--	1.2	.5	--	.4	.1	1.5	.8
Blackgum	.9	.5	.4	.2	--	.1	.1	.3	.4
Cottonwood	2.3	--	2.3	1.1	.9	.1	.1	.2	1.9
Other 1/	6.8	1.7	5.1	2.4	1.0	1.0	.4	1.2	4.5
Total Soft Hardwoods	19.7	8.5	11.2	5.3	2.4	2.0	.9	12.4	9.7
Total Hardwoods	264.5	147.5	117.0	58.1	31.1	17.6	9.4	74.8	113.1
All Species	266.9	149.6	117.3	58.2	31.2	17.6	9.4	75.5	113.1

1/ Mainly sycamore.

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

Ownership Class	Growing Stock (thousand cords)				Sawtimber (million board feet)			
	Total	Softwoods	Soft		Total	Softwoods	Soft	
			Hardwoods	Hardwoods			Hardwoods	Hardwoods
Farmer-Owned	206.2	1.8	13.2	191.2	45.7	0.1	4.2	41.4
Miscellaneous Private	60.7	.6	6.5	53.6	12.5	--	1.1	11.4
All Ownerships	266.9	2.4	19.7	244.8	58.2	.1	5.3	52.8

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

Ownership Class	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
State	700	300	200	(1/)	(1/)	200
Farmer-Owned	73,000	40,700	14,900	4,000	--	13,400
Forest Industry	100	--	--	100	--	--
Miscellaneous Private	23,500	10,200	5,400	1,000	--	6,900
All Ownerships	97,300	51,200	20,500	5,100	(1/)	20,500

1/ Insignificant amount.

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

Forest Type	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Commercial Forest						
Hardwood-Redcedar	15,400	--	--	--	--	15,400
Black-Scarlet Oak	25,600	15,400	5,100	--	--	5,100
White Oak	15,300	10,200	5,100	--	--	--
Post-Blackjack Oak	15,400	--	10,300	5,100	--	--
Elm-Ash-Cottonwood	25,600	25,600	--	--	--	--
All Commercial Forest	97,300	51,200	20,500	5,100	--	20,500
Percent by Size-Class	100.0	52.6	21.1	5.2	--	21.1
Noncommercial Forest-Unproductive	200	--	--	--	--	200
All Forest Area	97,500	51,200	20,500	5,100	--	20,700

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

Species	Growing Stock (thousand cords)			Sawtimber (million board feet)				Cull Trees (thousand cords)	Hardwood Limbs
	Total	Poletimber Trees	Sawtimber Trees	Total	In Sawtimber Stands	Other Stands			
						500-1500 Board Feet	Under 500 Feet		
Softwoods									
Redcedar	3.8	3.4	0.4	0.1	0.1	--	--	1.7	--
Total Softwoods	3.8	3.4	.4	.1	.1	--	--	1.7	--
Hard Hardwoods									
Oak, White	145.3	62.6	82.7	41.2	36.6	2.9	1.7	12.8	82.2
Oak, Post	52.1	43.1	9.0	4.4	3.6	.5	.3	5.9	9.0
Oak, Other White	17.8	3.4	14.4	7.1	6.1	.7	.3	7.3	13.6
Oak, Black	45.0	8.0	37.0	18.3	16.7	1.1	.5	9.7	35.9
Oak, Scarlet	.7	.2	.5	.2	--	.2	1/	.2	.4
Oak, Northern Red	41.8	5.9	35.9	18.1	15.8	1.5	.8	8.2	33.9
Oak, Other Red	19.2	7.4	11.8	5.8	4.3	1.1	.4	5.5	11.2
Hickory, Group A	27.5	11.3	16.2	8.1	7.8	.2	.1	1.9	15.7
Hickory, Group B	19.0	12.8	6.2	3.1	2.5	.4	.2	2.0	5.9
Maple, Hard	11.6	6.9	4.7	2.2	2.2	--	--	5.6	3.7
Walnut, Black	8.9	2.3	6.6	3.1	2.8	.2	.1	2.1	6.0
Ash	42.1	20.8	21.3	10.1	10.0	.1	--	8.0	19.4
Other	82.1	41.6	40.5	19.5	19.5	--	--	28.4	32.6
Total Hard Hardwoods	513.1	226.3	286.8	141.2	127.9	8.9	4.4	97.6	269.5
Soft Hardwoods									
Elm	49.8	17.7	32.1	16.5	15.7	.6	.2	9.0	31.7
Maple, Soft	8.4	3.5	4.9	2.4	2.1	.2	.1	3.7	4.0
Sweetgum	--	--	--	--	--	--	--	1.2	--
Blackgum	.9	.5	.4	.2	--	.1	.1	.2	.4
Cottonwood	2.8	--	2.8	1.3	1.3	--	--	.5	2.3
Other 2/	4.4	1.5	2.9	1.4	1.4	--	--	3.0	2.6
Total Soft Hardwoods	66.3	23.2	43.1	21.8	20.5	.9	.4	17.6	41.0
Total Hardwoods	579.4	249.5	329.9	163.0	148.4	9.8	4.8	115.2	310.5
All Species	583.2	252.9	330.3	163.1	148.5	9.8	4.8	116.9	310.5

1/ Insignificant amount.

2/ Mainly sycamore.

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

Ownership Class	Growing Stock (thousand cords)				Sawtimber (million board feet)			
	Total	Soft		Hard Hardwoods	Total	Soft		Hard Hardwoods
		Softwoods	Hardwoods			Softwoods	Hardwoods	
State	3.5	1/	0.3	3.2	0.9	1/	0.1	0.8
Farmer-Owned	445.2	2.8	44.2	398.2	127.3	.1	17.0	110.2
Forest Industry	.1	--	--	.1	--	--	--	--
Miscellaneous Private	134.4	1.0	21.8	111.6	34.9	--	4.7	30.2
All Ownerships	583.2	3.8	66.3	513.1	163.1	.1	21.8	141.2

1/ Insignificant amount.

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

Ownership Class	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Farmer-Owned	40,000	24,300	3,100	1,200	5,200	6,200
Miscellaneous Private	3,900	900	900	900	600	600
All Ownerships	43,900	25,200	4,000	2,100	5,800	6,800

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

Forest Type	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Commercial Forest						
Black-Scarlet Oak	200	--	--	--	200	--
White Oak	600	600	--	--	--	--
Post-Blackjack Oak	600	600	--	--	--	--
Oak-Gum-Cypress	23,000	13,400	2,900	1,100	2,000	3,600
Elm-Ash-Cottonwood	19,500	10,600	1,100	1,000	3,600	3,200
All Commercial Forest	43,900	25,200	4,000	2,100	5,800	6,800
Percent by Size-Class	100.0	57.4	9.1	4.8	13.2	15.5
Noncommercial Forest-Unproductive	100	--	--	--	--	100
All Forest Area	44,000	25,200	4,000	2,100	5,800	6,900

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

Species	Growing Stock (thousand cords)			Sawtimber (million board feet)			Cull Trees (thousand cords)	Hardwood Limbs
	Total	Poletimber Trees	Sawtimber Trees	Total	In Sawtimber Stands	In Other Stands		
Softwoods								
Cypress	12.4	0.6	11.8	5.7	4.9	0.8	1.9	--
Total Softwoods	12.4	.6	11.8	5.7	4.9	.8	1.9	--
Hard Hardwoods								
Oak, White	4.3	.4	3.9	2.0	2.0	--	.1	4.0
Oak, Post	4.9	2.6	2.3	1.0	1.0	--	.6	2.1
Oak, Other White	13.9	4.4	9.5	4.6	4.0	.6	1.0	8.8
Oak, Black	2.0	.1	1.9	.9	.8	.1	.2	1.7
Oak, Scarlet	.1	--	.1	.1	.1	--	--	.2
Oak, Northern Red	.3	.3	--	--	--	--	.1	--
Oak, Other Red	57.4	13.8	43.6	22.0	19.9	2.1	10.0	42.6
Hickory, Group A	3.6	1.6	2.0	.9	.7	.2	.5	1.7
Hickory, Group B	16.6	9.2	7.4	3.6	3.3	.3	1.2	6.9
Maple, Hard	--	--	--	--	--	--	.2	--
Walnut, Black	.9	.6	.3	.1	.1	--	.6	.2
Ash	18.6	10.8	7.8	3.7	3.7	--	3.5	7.2
Other	59.9	20.9	39.0	19.1	18.0	1.1	21.3	32.0
Total Hard Hardwoods	182.5	64.7	117.8	58.0	53.6	4.4	39.3	107.4
Soft Hardwoods								
Elm	21.1	12.0	9.1	4.5	3.6	.9	5.4	8.6
Maple, Soft	11.0	3.1	7.9	3.9	3.7	.2	6.0	6.4
Sweetgum	31.4	10.2	21.2	10.4	9.2	1.2	4.0	19.2
Blackgum	3.0	.3	2.7	1.2	.7	.5	1.2	2.2
Yellow-Poplar	.8	.2	.6	.3	.2	.1	--	--
Cottonwood	6.6	.3	6.3	3.1	2.3	.8	1.9	5.5
Other ^{1/}	16.8	3.2	13.6	6.7	6.3	.4	4.2	12.7
Total Soft Hardwoods	90.7	29.3	61.4	30.1	26.0	4.1	22.7	54.6
Total Hardwoods	273.2	94.0	179.2	88.1	79.6	8.5	62.0	162.0
All Species	285.6	94.6	191.0	93.8	84.5	9.3	63.9	162.0

^{1/} Mainly sycamore.

TABLE 31d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
NEW MADRID COUNTY, MISSOURI, 1959

Ownership Class	Growing Stock (thousand cords)				Sawtimber (million board feet)			
	Total	Soft		Hard	Total	Soft		Hard
		Softwoods	Hardwoods	Hardwoods		Softwoods	Hardwoods	Hardwoods
Farmer-Owned	271.8	12.4	87.0	172.4	90.4	5.7	29.0	55.7
Miscellaneous Private	13.8	--	3.7	10.1	3.4	--	1.1	2.3
All Ownerships	285.6	12.4	90.7	182.5	93.8	5.7	30.1	58.0

TABLE 32a--COMMERCIAL FOREST LAND BY OWNERSHIP AND STAND-SIZE CLASS
OSAGE COUNTY, MISSOURI, 1959
(ACRES)

Ownership Class	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Farmer-Owned	146,500	46,000	61,000	8,400	7,000	24,100
Miscellaneous Private	52,000	11,500	22,500	2,100	3,400	12,500
All Ownerships	198,500	57,500	83,500	10,500	10,400	36,600

TABLE 32b--FOREST LAND AREA BY TYPE AND STAND-SIZE CLASS
OSAGE COUNTY, MISSOURI, 1959
(ACRES)

Forest Type	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Commercial Forest						
Hardwood-Redcedar	36,600	5,300	5,200	--	5,200	20,900
Black-Scarlet Oak	41,800	--	20,900	10,500	5,200	5,200
White Oak	52,200	36,600	15,600	--	--	--
Post-Blackjack Oak	52,200	5,100	36,600	--	--	10,500
Elm-Ash-Cottonwood	15,700	10,500	5,200	--	--	--
All Commercial Forest	198,500	57,500	83,500	10,500	10,400	36,600
Percent by Size-Class	100.0	29.0	42.1	5.3	5.2	18.4
Noncommercial Forest-Unproductive	400	--	--	--	--	400
All Forest Area	198,900	57,500	83,500	10,500	10,400	37,000

TABLE 32c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
OSAGE 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	Under 500 Feet		
Softwoods									
Redcedar	10.3	10.0	0.3	0.1	0.1	--	--	3.8	--
Total Softwoods	10.3	10.0	.3	.1	.1	--	--	3.8	--
Hard Hardwoods									
Oak, White	404.8	202.7	202.1	100.6	83.3	10.8	6.5	41.0	200.8
Oak, Post	162.5	129.5	33.0	16.0	6.6	5.6	3.8	33.0	32.9
Oak, Other White	24.1	9.0	15.1	7.2	4.3	1.9	1.0	12.0	13.7
Oak, Black	84.8	48.8	36.0	17.8	9.5	5.8	2.5	24.6	34.9
Oak, Scarlet	1.8	.8	1.0	.5	--	.3	.2	.1	1.0
Oak, Northern Red	51.7	18.1	33.6	16.8	11.9	3.1	1.8	14.9	31.5
Oak, Other Red	21.2	9.8	11.4	5.9	1.4	3.2	1.3	12.6	11.4
Hickory, Group A	35.3	23.7	11.6	5.8	3.9	1.3	.6	4.6	11.2
Hickory, Group B	40.0	26.7	13.3	6.7	4.9	1.1	.7	5.8	12.9
Maple, Hard	10.3	7.5	2.8	1.4	1.4	--	--	5.2	2.3
Walnut, Black	10.8	4.3	6.5	3.0	1.6	1.0	.4	4.6	5.8
Ash	21.9	9.0	12.9	6.1	5.8	.2	.1	11.1	11.7
Other	16.4	8.9	7.5	3.7	2.9	.6	.2	10.0	6.2
Total Hard Hardwoods	885.6	498.8	386.8	191.5	137.5	34.9	19.1	179.5	376.3
Soft Hardwoods									
Elm	35.4	17.5	17.9	9.2	7.7	1.1	.4	11.2	17.6
Maple, Soft	5.6	2.4	3.2	1.6	.9	.5	.2	2.7	2.6
Blackgum	3.0	1.6	1.4	.6	.2	.3	.1	.7	1.1
Cottonwood	1.9	--	1.9	.9	.9	--	--	.4	1.6
Other 1/	2.0	1.0	1.0	.5	--	.4	.1	1.8	.9
Total Soft Hardwoods	47.9	22.5	25.4	12.8	9.7	2.3	.8	16.8	23.8
Total Hardwoods	933.5	521.3	412.2	204.3	147.2	37.2	19.9	196.3	400.1
All Species	943.8	531.3	412.5	204.4	147.3	37.2	19.9	200.1	400.1

1/ Mainly sycamore

TABLE 32d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
OSAGE COUNTY, MISSOURI, 1959

Ownership Class	Growing Stock (thousand cords)				Sawtimber (million board feet)			
	Total	Softwoods	Soft		Total	Softwoods	Soft	
			Hardwoods	Hardwoods			Hardwoods	Hardwoods
Farmer-Owned	731.6	7.7	32.1	691.8	160.4	0.1	10.0	150.3
Miscellaneous Private	212.2	2.6	15.8	193.8	44.0	--	2.8	41.2
All Ownerships	943.8	10.3	47.9	885.6	204.4	.1	12.8	191.5

TABLE 33a--COMMERCIAL FOREST LAND BY OWNERSHIP AND STAND-SIZE CLASS
PEMISCOT COUNTY, MISSOURI, 1959
(ACRES)

Ownership Class	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Farmer-Owned	19,000	12,800	1,200	600	1,300	3,100
Miscellaneous Private	1,900	500	400	500	200	300
All Ownerships	20,900	13,300	1,600	1,100	1,500	3,400

TABLE 33b--FOREST LAND AREA BY TYPE AND STAND-SIZE CLASS
PEMISCOT COUNTY, MISSOURI, 1959
(ACRES)

Forest Type	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Commercial Forest						
Black-Scarlet Oak	200	--	--	--	200	--
White Oak	200	200	--	--	--	--
Post-Blackjack Oak	200	200	--	--	--	--
Oak-Gum-Cypress	12,900	8,500	1,100	500	700	2,100
Elm-Ash-Cottonwood	7,400	4,400	500	600	600	1,300
All Commercial Forest	20,900	13,300	1,600	1,100	1,500	3,400
Percent by Size-Class	100.0	63.6	7.6	5.3	7.2	16.3
Noncommercial Forest-Unproductive	<u>1/</u>	--	--	--	--	<u>1/</u>
All Forest Area	20,900	13,300	1,600	1,100	1,500	3,400

1/ Insignificant amount.

TABLE 33c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
PEMISCOT 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	In Other Stands		
Softwoods								
Cypress	8.6	0.4	8.2	4.1	3.6	0.5	1.1	--
Total Softwoods	8.6	.4	8.2	4.1	3.6	.5	1.1	--
Hard Hardwoods								
Oak, White	2.3	.1	2.2	1.1	1.1	--	--	2.2
Oak, Post	2.2	1.1	1.1	.6	.6	--	.3	1.2
Oak, Other White	7.6	2.5	5.1	2.7	2.4	.3	.6	5.2
Oak, Black	.8	--	.8	.4	.3	.1	.1	.8
Oak, Northern Red	.1	.1	--	--	--	--	--	--
Oak, Other Red	33.6	7.5	26.1	13.1	12.2	.9	5.6	25.4
Hickory, Group A	1.9	.7	1.2	.5	.5	--	.4	1.0
Hickory, Group B	8.2	4.0	4.2	2.0	1.9	.1	.7	3.8
Maple, Hard	--	--	--	--	--	--	.1	--
Walnut, Black	.4	.3	.1	--	--	--	.2	--
Ash	10.1	6.0	4.1	2.0	2.0	--	2.0	3.8
Other	30.2	11.1	19.1	9.4	9.1	.3	10.4	15.8
Total Hard Hardwoods	97.4	33.4	64.0	31.8	30.1	1.7	20.4	59.2
Soft Hardwoods								
Elm	9.7	5.9	3.8	1.9	1.7	.2	2.6	3.6
Maple, Soft	6.1	1.6	4.5	2.2	2.1	.1	3.3	3.6
Sweetgum	16.5	5.4	11.1	5.5	5.1	.4	1.9	10.1
Blackgum	1.4	.2	1.2	.5	.2	.3	.5	.9
Yellow-Poplar	.3	.1	.2	.1	.1	--	--	--
Cottonwood	4.0	.3	3.7	1.8	1.5	.3	.9	3.2
Other 1/	8.8	1.4	7.4	3.6	3.4	.2	1.5	6.8
Total Soft Hardwoods	46.8	14.9	31.9	15.6	14.1	1.5	10.7	28.2
Total Hardwoods	144.2	48.3	95.9	47.4	44.2	3.2	31.1	87.4
All Species	152.8	48.7	104.1	51.5	47.8	3.7	32.2	87.4

1/ Mainly sycamore.

TABLE 33d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
PEMISCOT 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	145.5	8.6	44.9	92.0	49.6	4.1	15.0	30.5
Miscellaneous Private	7.3	--	1.9	5.4	1.9	--	.6	1.3
All Ownerships	152.8	8.6	46.8	97.4	51.5	4.1	15.6	31.8

TABLE 34a--COMMERCIAL FOREST LAND BY OWNERSHIP AND STAND-SIZE CLASS
PERRY COUNTY, MISSOURI, 1959
(ACRES)

Ownership Class	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
National Forest	1,400	800	300	--	--	300
Farmer-Owned	74,300	45,400	12,400	1,500	--	15,000
Miscellaneous Private	24,100	11,400	4,600	400	--	7,700
All Ownerships	99,800	57,600	17,300	1,900	--	23,000

TABLE 34b--FOREST LAND AREA BY TYPE AND STAND-SIZE CLASS
PERRY COUNTY, MISSOURI, 1959
(ACRES)

Forest Type	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Commercial Forest						
Pine	3,900	--	3,900	--	--	--
Redcedar	1,900	--	--	--	--	1,900
Hardwood-Redcedar	1,900	--	1,900	--	--	--
Oak-Pine	1,900	1,900	--	--	--	--
Black-Scarlet Oak	42,300	23,100	5,800	1,900	--	11,500
White Oak	19,200	19,200	--	--	--	--
Post-Blackjack Oak	9,500	1,900	3,800	--	--	3,800
Oak-Gum-Cypress	3,800	3,800	--	--	--	--
Elm-Ash-Cottonwood	15,400	7,700	1,900	--	--	5,800
All Commercial Forest	99,800	57,600	17,300	1,900	--	23,000
Percent by Size-Class	100.0	57.7	17.3	1.9	--	23.1
Noncommercial Forest-Unproductive	300	--	--	--	--	300
All Forest Area	100,100	57,600	17,300	1,900	--	23,300

TABLE 34c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
PERRY 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	Under 500 Feet		
Softwoods									
Pine, Shortleaf	33.3	28.9	4.4	2.1	0.8	1.1	0.2	--	--
Redcedar	3.6	3.1	.5	.1	.1	--	--	1.3	--
Total Softwoods	36.9	32.0	4.9	2.2	.9	1.1	.2	1.3	--
Hard Hardwoods									
Oak, White	209.2	86.1	123.1	62.6	58.4	2.6	1.6	14.6	124.9
Oak, Post	51.7	33.6	18.1	8.4	6.6	1.1	.7	8.3	17.3
Oak, Other White	17.6	5.3	12.3	5.8	5.2	.4	.2	4.9	11.1
Oak, Black	80.9	24.0	56.9	27.9	27.2	.5	.2	14.9	54.7
Oak, Scarlet	1.3	.9	.4	.3	--	.2	.1	.3	.6
Oak, Northern Red	53.5	9.1	44.4	22.9	21.5	.9	.5	8.4	42.9
Oak, Other Red	13.6	4.5	9.1	4.8	3.5	.9	.4	2.6	9.3
Hickory, Group A	28.3	12.7	15.6	7.4	7.3	.1	--	1.4	14.3
Hickory, Group B	30.4	18.6	11.8	5.8	5.7	.1	1/	2.3	11.1
Maple, Hard	12.5	7.8	4.7	2.4	2.4	--	--	3.9	4.0
Walnut, Black	8.9	4.0	4.9	1.9	1.5	.3	.1	1.4	3.7
Ash	20.1	9.1	11.0	5.3	5.3	--	--	5.9	10.2
Other	28.4	17.7	10.7	5.1	4.9	.1	.1	12.0	8.5
Total Hard Hardwoods	556.4	233.4	323.0	160.6	149.5	7.2	3.9	80.9	312.6
Soft Hardwoods									
Elm	28.2	13.6	14.6	7.3	5.9	1.0	.4	6.6	14.0
Maple, Soft	3.5	1.3	2.2	1.2	.4	.6	.2	1.8	2.0
Sweetgum	--	--	--	--	--	--	--	.3	--
Blackgum	7.1	3.1	4.0	1.7	1.7	--	--	1.3	3.1
Yellow-Poplar	6.2	4.2	2.0	1.0	1.0	--	--	--	1.8
Cottonwood	1.7	--	1.7	.9	.5	.3	.1	.4	1.6
Other 2/	9.0	1.6	7.4	3.9	2.3	1.1	.5	1.5	7.4
Total Soft Hardwoods	55.7	23.8	31.9	16.0	11.8	3.0	1.2	11.9	29.9
Total Hardwoods	612.1	257.2	354.9	176.6	161.3	10.2	5.1	92.8	342.5
All Species	649.0	289.2	359.8	178.8	162.2	11.3	5.3	94.1	342.5

1/ Insignificant amount.
2/ Mainly sycamore.

TABLE 34d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
PERRY COUNTY, MISSOURI, 1959

Ownership Class	Growing Stock (thousand cords)				Sawtimber (million board feet)			
	Total	Softwoods	Hardwoods	Hardwoods	Total	Softwoods	Soft Hardwoods	Hard Hardwoods
Federally Owned or Managed								
National Forest	8.0	(1/)	0.6	7.4	2.2	(1/)	0.2	2.0
Framer-Owned	493.3	27.5	36.9	428.9	138.6	1.7	12.4	124.5
Miscellaneous Private	147.7	9.4	18.2	120.1	38.0	.5	3.4	34.1
All Ownerships	649.0	36.9	55.7	556.4	178.8	2.2	16.0	160.6

1/ Insignificant amount.

TABLE 35a--COMMERCIAL FOREST LAND BY OWNERSHIP AND STAND-SIZE CLASS
ST. CHARLES COUNTY, MISSOURI, 1959
(ACRES)

Ownership Class	All Stands	Sawtimber	Poletimber	Non-stocked
State	5,300	2,000	1,700	1,600
Farmer-Owned	61,100	34,800	15,400	10,900
Miscellaneous Private	20,000	8,700	5,600	5,700
All Ownerships	86,400	45,500	22,700	18,200

TABLE 35b--FOREST LAND AREA BY TYPE AND STAND-SIZE CLASS
ST. CHARLES COUNTY, MISSOURI, 1959
(ACRES)

Forest Type	All Stands	Sawtimber	Poletimber	Non-stocked
Commercial Forest				
Hardwood-Redcedar	4,500	--	--	4,500
Black-Scarlet Oak	27,300	13,700	9,100	4,500
White Oak	36,500	27,300	4,500	4,700
Oak-Gum-Cypress	4,500	4,500	--	--
Elm-Ash-Cottonwood	13,600	--	9,100	4,500
All Commercial Forest	86,400	45,500	22,700	18,200
Percent by Size-Class	100.0	52.7	26.3	21.0
Noncommercial Forest- Unproductive	200	--	--	200
All Forest Area	86,600	45,500	22,700	18,400

TABLE 35c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
ST. CHARLES 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	Under 500 Feet		
Softwoods									
Redcedar	0.7	0.7	--	--	--	--	--	0.9	--
Total Softwoods	.7	.7	--	--	--	--	--	.9	--
Hard Hardwoods									
Oak, White	187.8	76.0	111.8	55.6	51.4	2.6	1.6	21.7	111.0
Oak, Post	16.1	10.0	6.1	3.0	3.0	--	--	4.5	6.2
Oak, Other White	13.3	5.9	7.4	3.6	3.1	.3	.2	6.4	6.9
Oak, Black	56.7	27.5	29.2	14.4	10.8	2.5	1.1	8.2	28.2
Oak, Scarlet	.2	.2	--	--	--	--	--	.1	--
Oak, Northern Red	39.6	6.8	32.8	16.4	14.9	1.0	.5	9.2	30.8
Oak, Other Red	7.7	1.7	6.0	3.0	1.4	1.1	.5	2.0	5.8
Hickory, Group A	27.1	17.4	9.7	4.9	4.4	.3	.2	2.0	9.5
Hickory, Group B	10.8	7.2	3.6	1.9	1.9	--	--	1.5	3.6
Maple, Hard	11.2	9.2	2.0	1.0	1.0	--	--	6.3	1.7
Walnut, Black	5.8	2.1	3.7	1.7	1.3	.3	.1	2.6	3.3
Ash	12.1	8.5	3.6	1.7	1.5	.1	.1	5.3	3.2
Other	13.8	11.3	2.5	1.1	.3	.6	.2	6.3	1.9
Total Hard Hardwoods	402.2	183.8	218.4	108.3	95.0	8.8	4.5	76.1	212.1
Soft Hardwoods									
Elm	19.7	14.0	5.7	3.0	1.1	1.4	.5	10.7	5.8
Maple, Soft	1.3	--	1.3	.6	--	.4	.2	1.8	1.0
Blackgum	.8	.4	.4	.2	--	.1	.1	4.0	.4
Cottonwood	.4	--	.4	.2	--	.1	.1	--	.4
Other 1/	17.2	3.9	13.3	6.5	2.2	3.0	1.3	3.7	12.3
Total Soft Hardwoods	39.4	18.3	21.1	10.5	3.3	5.0	2.2	20.2	19.9
Total Hardwoods	441.6	202.1	239.5	118.8	98.3	13.8	6.7	96.3	232.0
All Species	442.3	202.8	239.5	118.8	98.3	13.8	6.7	97.2	232.0

1/ Mainly sycamore.

TABLE 35d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
ST. CHARLES COUNTY, MISSOURI, 1959

Ownership Class	Growing Stock (thousand cords)				Sawtimber (million board feet)			
	Total	Soft		Hard Hardwoods	Total	Soft		Hard Hardwoods
		Softwoods	Hardwoods			Softwoods	Hardwoods	
State	25.0	0.4	1.8	22.8	6.0	1/	0.6	5.4
Farmer-Owned	321.8	.2	25.2	296.4	88.6	--	7.8	80.8
Miscellaneous Private	95.5	.1	12.4	83.0	24.2	--	2.1	22.1
All Ownerships	442.3	.7	39.4	402.2	118.8	--	10.5	108.3

1/ Insignificant amount.

TABLE 36a--COMMERCIAL FOREST LAND BY OWNERSHIP AND STAND-SIZE CLASS
ST. GENEVIEVE COUNTY, MISSOURI, 1959
(ACRES)

Ownership Class	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
National Forest	9,500	3,200	3,300	1,200	400	1,400
Farmer-Owned	116,900	42,300	40,500	15,200	3,900	15,000
Miscellaneous Private	38,900	10,600	14,800	3,800	1,800	7,900
All Ownerships	165,300	56,100	58,600	20,200	6,100	24,300

TABLE 36b--FOREST LAND AREA BY TYPE AND STAND-SIZE CLASS
ST. GENEVIEVE COUNTY, MISSOURI, 1959
(ACRES)

Forest Type	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Commercial Forest						
Pine	4,000	--		2,000	2,000	--
Redcedar	8,200	--	4,100	--	--	4,100
Hardwood-Redcedar	28,600	2,000	12,300	4,100	2,000	8,200
Oak-Pine	12,200	2,100	--	10,100	--	--
Black-Scarlet Oak	61,200	31,600	17,700	3,900	--	8,000
White Oak	18,400	12,200	6,200	--	--	--
Post-Blackjack Oak	28,600	4,100	18,300	100	2,100	4,000
Oak-Gum-Cypress	2,100	2,100	--	--	--	--
Elm-Ash-Cottonwood	2,000	2,000	--	--	--	--
All Commercial Forest	165,300	56,100	58,600	20,200	6,100	24,300
Percent by Size-Class	100.0	33.9	35.5	12.2	3.7	14.7
Noncommercial Forest						
Productive-Reserved	2,100	1,100	600	200	--	200
Unproductive	500	--	--	--	--	500
All Forest Area	167,900	57,200	59,200	20,400	6,100	25,000

TABLE 36c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
ST. GENEVIEVE 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	Under 500 Feet		
Softwoods									
Pine, Shortleaf	16.4	2.8	13.6	6.8	2.2	3.9	0.7	--	--
Redcedar	24.3	23.3	1.0	.4	.1	.2	.1	5.0	--
Total Softwoods	40.7	26.1	14.6	7.2	2.3	4.1	.8	5.0	--
Hard Hardwoods									
Oak, White	226.7	116.3	110.4	55.1	48.0	4.5	2.6	24.7	110.0
Oak, Post	117.1	85.2	31.9	15.3	11.8	2.1	1.4	22.4	31.4
Oak, Other White	30.1	17.1	13.0	6.3	4.7	1.1	.5	11.3	12.0
Oak, Black	103.0	39.2	63.8	31.5	27.1	3.0	1.4	26.1	61.7
Oak, Scarlet	2.8	1.8	1.0	.5	--	.3	.2	2.2	1.0
Oak, Northern Red	64.8	11.7	53.1	26.6	22.3	2.7	1.6	14.7	49.9
Oak, Other Red	19.0	11.0	8.0	4.0	1.8	1.6	.6	7.9	7.7
Hickory, Group A	36.4	18.1	18.3	9.5	6.3	2.1	1.1	2.4	18.4
Hickory, Group B	38.6	24.8	13.8	7.0	4.1	1.7	1.2	6.3	13.4
Maple, Hard	22.5	12.4	10.1	4.9	2.4	1.7	.8	9.4	8.2
Walnut, Black	9.9	5.1	4.8	2.3	1.7	.4	.2	2.4	4.5
Ash	18.2	11.4	6.8	3.2	3.1	.1	--	5.9	6.1
Other	6.1	4.2	1.9	.9	.9	--	--	5.9	1.5
Total Hard Hardwoods	695.2	358.3	336.9	167.1	134.2	21.3	11.6	141.6	325.8
Soft Hardwoods									
Elm	15.3	8.7	6.6	3.5	2.4	.8	.3	5.6	6.7
Maple, Soft	1.0	--	1.0	.5	--	.3	.2	.8	.8
Blackgum	.8	.4	.4	.1	.1	--	--	1.7	.2
Cottonwood	1.5	--	1.5	.7	.7	--	--	.2	1.2
Other 1/	4.5	.8	3.7	1.8	1.8	--	--	.7	3.4
Total Soft Hardwoods	23.1	9.9	13.2	6.6	5.0	1.1	.5	9.0	12.3
Total Hardwoods	718.3	368.2	350.1	173.7	139.2	22.4	12.1	150.6	338.1
All Species	759.0	394.3	364.7	180.9	141.5	26.5	12.9	155.6	338.1

1/ Mainly sycamore.

TABLE 36d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
ST. GENEVIEVE COUNTY, MISSOURI, 1959

Ownership Class	Growing Stock (thousand cords)				Sawtimber (million board feet)			
	Total	Softwoods	Hardwoods		Total	Softwoods	Hardwoods	
			Soft	Hard			Soft	Hard
Federally Owned or Managed National Forest	45.0	0.9	3.2	40.9	10.5	0.1	0.9	9.5
Farmer-Owned	554.1	29.7	13.3	511.1	133.6	5.4	4.5	123.7
Miscellaneous Private	159.9	10.1	6.6	143.2	36.8	1.7	1.2	33.9
All Ownerships	759.0	40.7	23.1	695.2	180.9	7.2	6.6	167.1

TABLE 37a--COMMERCIAL FOREST LAND BY OWNERSHIP AND STAND-SIZE CLASS
ST. LOUIS COUNTY, MISSOURI, 1959
(ACRES)

Ownership Class	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
	3,300	1,200	1,000	100	1/	1,000
Farmer-Owned	48,500	23,000	7,000	12,200	--	6,300
Miscellaneous Private	14,700	5,800	2,600	3,000	--	3,300
All Ownerships	66,500	30,000	10,600	15,300	1/	10,600

1/ Insignificant amount.

TABLE 37b--FOREST LAND AREA BY TYPE AND STAND-SIZE CLASS
ST. LOUIS COUNTY, MISSOURI, 1959
(ACRES)

Forest Type	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Commercial Forest						
Hardwood-Redcedar	5,300	--	5,300	--	--	--
Black-Scarlet Oak	18,800	14,100	--	4,700	--	--
White Oak	31,800	10,600	5,300	10,600	--	5,300
Elm-Ash-Cottonwood	10,600	5,300	--	--	--	5,300
All Commercial Forest	66,500	30,000	10,600	15,300	--	10,600
Percent by Size-Class	100.0	45.1	16.0	23.0	--	15.9
Noncommercial Forest						
Productive-Reserved	2,300	1,700	--	600	--	--
Unproductive	100	--	--	--	--	100
All Forest Area	68,900	31,700	10,600	15,900	--	10,700

TABLE 37c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
ST. LOUIS 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	Under 500 Feet		
Softwoods									
Redcedar	8.1	7.7	0.4	0.1	--	0.1	--	0.3	--
Total Softwoods	8.1	7.7	.4	.1	--	.1	--	.3	--
Hard Hardwoods									
Oak, White	118.7	59.2	59.5	29.7	26.5	2.0	1.2	17.2	59.3
Oak, Post	16.5	10.5	6.0	2.9	2.3	.4	.2	5.3	6.0
Oak, Other White	10.2	5.0	5.2	2.6	2.4	.1	.1	3.7	5.0
Oak, Black	26.5	7.9	18.6	9.1	8.5	.4	.2	6.2	17.8
Oak, Scarlet	.2	.2	--	--	--	--	--	.1	--
Oak, Northern Red	26.9	8.1	18.8	9.4	8.6	.5	.3	6.0	17.6
Oak, Other Red	4.0	2.1	1.9	.9	.9	--	--	1.1	1.7
Hickory, Group A	10.0	4.7	5.3	2.7	1.9	.5	.3	1.4	5.2
Hickory, Group B	11.5	6.9	4.6	2.3	1.5	.5	.3	1.0	4.4
Maple, Hard	10.6	6.2	4.4	2.3	.9	1.0	.4	5.3	3.9
Walnut, Black	3.8	1.9	1.9	1.0	1.0	--	--	1.1	2.9
Ash	9.0	5.8	3.2	1.5	1.5	--	--	3.4	2.9
Other	9.3	6.5	2.8	1.4	1.2	.1	.1	5.9	2.3
Total Hard Hardwoods	257.2	125.0	132.2	65.8	57.2	5.5	3.1	57.7	128.1
Soft Hardwoods									
Elm	6.1	3.3	2.8	1.4	1.3	.1	--	4.5	2.7
Maple, Soft	.7	--	.7	.3	--	.2	.1	1.6	.5
Blackgum	1.4	.7	.7	.3	.1	.1	.1	.8	.6
Cottonwood	4.4	--	4.4	2.1	1.9	.1	.1	.5	3.7
Other 1/	7.3	.4	6.9	3.3	2.0	.9	.4	.7	6.2
Total Soft Hardwoods	19.9	4.4	15.5	7.4	5.3	1.4	.7	8.1	13.7
Total Hardwoods	277.1	129.4	147.7	73.2	62.5	6.9	3.8	65.8	141.8
All Species	285.2	137.1	148.1	73.3	62.5	7.0	3.8	66.1	141.8

1/ Mainly sycamore.

TABLE 37d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
ST. LOUIS COUNTY, MISSOURI, 1959

Ownership Class	Growing Stock (thousand cords)				Sawtimber (million board feet)			
	Total	Softwoods	Hardwoods		Total	Softwoods	Hardwoods	
			Soft	Hard			Soft	Hard
State	15.1	0.2	1.1	13.8	3.7	0.1	0.3	3.3
Farmer-Owned	208.6	5.9	12.6	190.1	54.7	--	5.6	49.1
Miscellaneous Private	61.5	2.0	6.2	53.3	14.9	--	1.5	13.4
All Ownerships	285.2	8.1	19.9	257.2	73.3	.1	7.4	65.8

TABLE 38a--COMMERCIAL FOREST LAND BY OWNERSHIP AND STAND-SIZE CLASS
SCOTT COUNTY, MISSOURI, 1959
(ACRES)

Ownership Class	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Farmer-Owned	20,900	10,900	3,600	1,800	1,300	3,300
Miscellaneous Private	3,200	400	1,000	1,300	200	300
All Ownerships	24,100	11,300	4,600	3,100	1,500	3,600

TABLE 38b--FOREST LAND AREA BY TYPE AND STAND-SIZE CLASS
SCOTT COUNTY, MISSOURI, 1959
(ACRES)

Forest Type	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Commercial Forest						
Black-Scarlet Oak	8,400	3,300	1,800	2,100	800	400
White Oak	2,100	2,100	--	--	--	--
Post-Blackjack Oak	100	100	--	--	--	--
Oak-Gum-Cypress	7,300	3,000	1,700	900	300	1,400
Elm-Ash-Cottonwood	5,500	2,800	1,100	100	400	1,100
Maple-Beech	700	--	--	--	--	700
All Commercial Forest	24,100	11,300	4,600	3,100	1,500	3,600
Percent by Size-Class	100.0	46.9	19.1	12.9	6.2	14.9
Noncommercial Forest-Unproductive	100	--	--	--	--	100
All Forest Area	24,200	11,300	4,600	3,100	1,500	3,700

TABLE 38c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
SCOTT COUNTY, MISSOURI, 1959

Species	Growing Stock (thousand cords)			Sawtimber (million board feet)			Cull Trees (thousand cords)	Hardwood Limbs
	Total	Poletimber Trees	Sawtimber Trees	Total	In Sawtimber Stands	In Other Stands		
Softwoods								
Cypress	3.1	0.3	2.8	1.2	1.0	0.2	0.6	--
Total Softwoods	3.1	.3	2.8	1.2	1.0	.2	.6	--
Hard Hardwoods								
Oak, White	17.8	5.9	11.9	5.8	5.5	.3	.7	11.6
Oak, Post	1.4	.8	.6	.2	.2	--	.4	.4
Oak, Other White	3.5	1.4	2.1	1.0	.9	.1	.2	1.9
Oak, Black	9.3	3.9	5.4	2.7	2.1	.6	.9	5.3
Oak, Scarlet	.3	--	.3	.1	.1	--	--	.2
Oak, Northern Red	3.7	.4	3.3	1.8	1.2	.6	.5	3.4
Oak, Other Red	22.6	8.7	13.9	6.9	6.3	.6	3.4	13.3
Hickory, Group A	3.7	2.5	1.2	.6	.6	--	.4	1.2
Hickory, Group B	14.7	8.6	6.1	3.0	2.6	.4	.5	5.8
Maple, Hard	--	--	--	--	--	--	.1	--
Walnut	1.5	1.4	.1	--	--	--	.1	--
Ash	7.1	4.3	2.8	1.3	1.3	--	1.4	2.5
Other	18.2	7.2	11.0	5.4	5.2	.2	7.8	9.0
Total Hard Hardwoods	103.8	45.1	58.7	28.8	26.0	2.8	16.4	54.6
Soft Hardwoods								
Elm	8.7	5.8	2.9	1.4	1.1	.3	1.7	2.7
Maple, Soft	2.5	.6	1.9	1.0	.9	.1	1.4	1.7
Sweetgum	9.5	4.2	5.3	2.6	2.1	.5	1.2	4.8
Blackgum	1.8	.7	1.1	.5	.3	.2	1.2	.9
Yellow-Poplar	.7	.2	.5	.3	.1	.2	.1	--
Cottonwood	2.7	.9	1.8	.9	.4	.5	.6	1.6
Other 1/	3.6	.5	3.1	1.5	1.4	.1	.8	2.8
Total Soft Hardwoods	29.5	12.9	16.6	8.2	6.3	1.9	7.0	14.5
Total Hardwoods	133.3	58.0	75.3	37.0	32.3	4.7	23.4	69.1
All Species	136.4	58.3	78.1	38.2	33.3	4.9	24.0	69.1

1/ Mainly sycamore.

TABLE 38d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
SCOTT COUNTY, MISSOURI, 1959

Ownership Class	Growing Stock (thousand cords)				Sawtimber (million board feet)			
	Total	Soft		Hard	Total	Soft		Hard
		Softwoods	Hardwoods	Hardwoods		Softwoods	Hardwoods	Hardwoods
Farmer-Owned	129.4	3.1	28.3	98.0	36.7	1.2	7.9	27.6
Miscellaneous Private	7.0	--	1.2	5.8	1.5	--	.3	1.2
All Ownerships	136.4	3.1	29.5	103.8	38.2	1.2	8.2	28.8

TABLE 39a--COMMERCIAL FOREST LAND BY OWNERSHIP AND STAND-SIZE CLASS
STODDARD COUNTY, MISSOURI, 1959
(ACRES)

Ownership Class	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Federal	8,000	2,000	1,000	1,000	2,000	2,000
Farmer-Owned	67,100	39,200	8,200	2,300	5,800	11,600
Miscellaneous Private	7,200	1,400	2,400	1,700	700	1,000
All Ownerships	82,300	42,600	11,600	5,000	8,500	14,600

TABLE 39b--FOREST LAND AREA BY TYPE AND STAND-SIZE CLASS
STODDARD COUNTY, MISSOURI, 1959
(ACRES)

Forest Type	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Commercial Forest						
Black-Scarlet Oak	12,700	3,400	3,100	2,400	3,300	500
White Oak	6,000	6,000	--	--	--	--
Post-Blackjack Oak	1,000	1,000	--	--	--	--
Oak-Gum-Cypress	40,300	19,000	7,400	1,900	3,800	8,200
Elm-Ash-Cottonwood	21,800	13,200	1,100	700	1,400	5,400
Maple-Beech	500	--	--	--	--	500
All Commercial Forest	82,300	42,600	11,600	5,000	8,500	14,600
Percent by Size-Class	100.0	51.8	14.1	6.1	10.3	17.7
Noncommercial Forest-Unproductive	100	--	--	--	--	100
All Forest Area	82,400	42,600	11,600	5,000	8,500	14,700

TABLE 39c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
STODDARD 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	In Other Stands		
Softwoods								
Cypress	17.2	1.5	15.7	7.9	6.2	1.7	3.2	--
Total Softwoods	17.2	1.5	15.7	7.9	6.2	1.7	3.2	--
Hard Hardwoods								
Oak, White	37.0	12.0	25.0	12.7	12.3	.4	1.4	25.3
Oak, Post	9.2	5.3	3.9	2.0	2.0	--	1.9	4.1
Oak, Other White	21.0	8.1	12.9	6.0	4.8	1.2	1.5	11.4
Oak, Black	14.0	4.9	9.1	4.5	3.2	1.3	2.4	8.8
Oak, Scarlet	.9	--	.9	.4	.4	--	--	.8
Oak, Northern Red	4.8	1.2	3.6	1.7	1.0	.7	1.0	3.2
Oak, Other Red	100.3	31.9	68.4	34.2	29.3	4.9	17.2	66.2
Hickory, Group A	9.0	5.2	3.8	2.0	1.5	.5	1.6	3.9
Hickory, Group B	30.0	17.5	12.5	6.7	5.7	1.0	2.7	12.8
Maple, Hard	--	--	--	--	--	--	.6	--
Walnut, Black	2.9	2.4	.5	.3	.3	--	.8	.6
Ash	27.4	17.1	10.3	4.8	4.8	--	6.5	9.2
Other	78.8	29.2	19.6	24.0	23.3	.7	28.0	40.3
Total Hard Hardwoods	335.3	134.8	200.5	99.3	88.6	10.7	65.6	186.6
Soft Hardwoods								
Elm	29.1	19.4	9.7	5.5	4.6	.9	7.9	10.6
Maple, Soft	14.1	4.1	10.0	5.0	4.5	.5	8.6	8.2
Sweetgum	48.2	20.6	27.6	13.4	11.5	1.9	6.7	24.7
Blackgum	7.8	2.2	5.6	2.5	1.2	1.3	4.0	4.5
Yellow-Poplar	2.2	.6	1.6	.7	.2	.5	.2	--
Cottonwood	9.1	1.0	8.1	3.9	2.3	1.6	2.7	6.8
Other 1/	18.5	2.5	16.0	7.9	7.1	.8	3.4	14.9
Total Soft Hardwoods	129.0	50.4	78.6	38.9	31.4	7.5	33.5	69.7
Total Hardwoods	464.3	185.2	279.1	138.2	120.0	18.2	99.1	256.3
All Species	481.5	186.7	294.8	146.1	126.2	19.9	102.3	256.3

1/ Mainly sycamore.

TABLE 39d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
STODDARD COUNTY, MISSOURI, 1959

Ownership Class	Growing Stock (thousand cords)				Sawtimber (million board feet)			
	Total	Soft		Hard	Total	Soft		Hard
		Softwoods	Hardwoods	Hardwoods		Softwoods	Hardwoods	Hardwoods
Federal	28.3	1.9	5.6	20.8	8.5	0.9	2.8	4.8
Farmer-Owned	430.8	15.3	118.4	297.1	132.5	7.0	34.8	90.7
Miscellaneous Private	22.4	--	5.0	17.4	5.1	--	1.3	3.8
All Ownerships	481.5	17.2	129.0	335.3	146.1	7.9	38.9	99.3

TABLE 40a--COMMERCIAL FOREST LAND BY OWNERSHIP AND STAND-SIZE CLASS
WARREN COUNTY, MISSOURI, 1959
(ACRES)

Ownership Class	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
State	3,000	1,100	1,000	--	<u>1/</u>	900
Farmer-Owned	93,200	64,600	16,700	--	3,100	8,800
Forest Industry	1,300	500	400	<u>1/</u>	100	300
Miscellaneous Private	28,300	16,100	6,100	--	1,600	4,500
All Ownerships	125,800	82,300	24,200	<u>1/</u>	4,800	14,500

1/ Insignificant amount.

TABLE 40b--FOREST LAND AREA BY TYPE AND STAND-SIZE CLASS
WARREN COUNTY, MISSOURI, 1959
(ACRES)

Forest Type	All Stands	Sawtimber	Poletimber	Seedlings and Saplings		Non-stocked
				Satisfactorily Stocked	Poorly Stocked	
Commercial Forest						
Black-Scarlet Oak	48,400	29,100	9,700	--	--	9,600
White Oak	67,700	53,200	9,700	--	4,800	--
Elm-Ash-Cottonwood	9,700	--	4,800	--	--	4,900
All Commercial Forest	125,800	82,300	24,200	--	4,800	14,500
Percent by Size-Class	100.0	65.4	19.3	--	3.8	11.5
Noncommercial Forest-Unproductive	300	--	--	--	--	300
All Forest Area	126,100	82,300	24,200	--	4,800	14,800

TABLE 40c--NET TIMBER VOLUME ON COMMERCIAL FOREST LAND BY SPECIES AND KIND OF MATERIAL
WARREN 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	Under 500 Feet		
Softwoods									
Redcedar	0.6	0.6	--	--	--	--	--	0.6	--
Total Softwoods	.6	.6	--	--	--	--	--	.6	--
Hard Hardwoods									
Oak, White	446.7	199.9	246.8	123.3	118.0	3.3	2.0	35.2	246.0
Oak, Post	32.3	19.6	12.7	6.2	6.2	--	--	5.5	12.7
Oak, Other White	19.4	9.3	10.1	4.9	4.5	.3	.1	7.2	9.4
Oak, Black	98.8	32.1	66.7	32.8	27.9	3.4	1.5	19.5	64.3
Oak, Scarlet	1.5	1.5	--	--	--	--	--	.3	--
Oak, Northern Red	73.1	13.2	59.9	30.4	27.5	1.9	1.0	13.2	57.0
Oak, Other Red	8.0	2.4	5.6	2.7	2.4	.2	.1	3.2	5.2
Hickory, Group A	35.1	20.6	14.5	7.2	6.7	.3	.2	2.2	13.9
Hickory, Group B	29.7	18.9	10.8	5.4	4.6	.5	.3	3.0	10.4
Maple, Hard	14.5	10.4	4.1	2.0	2.0	--	--	7.6	3.3
Walnut, Black	7.7	2.4	5.3	2.5	2.2	.2	.1	2.4	4.9
Ash	13.6	7.5	6.1	2.9	2.7	.1	.1	5.3	5.5
Other	13.7	11.5	2.2	1.1	1.0	.1	--	7.1	1.9
Total Hard Hardwoods	794.1	349.3	444.8	221.4	205.7	10.3	5.4	111.7	434.5
Soft Hardwoods									
Elm	19.5	9.9	9.6	4.9	3.2	1.2	.5	7.8	9.4
Maple, Soft	1.1	--	1.1	.6	--	.4	.2	2.0	1.0
Blackgum	2.5	1.3	1.2	.5	.3	.1	.1	.7	.9
Cottonwood	.4	--	.4	.2	--	.1	.1	--	.4
Other 1/	10.8	2.3	8.5	4.2	--	3.0	1.2	1.8	7.9
Total Soft Hardwoods	34.3	13.5	20.8	10.4	3.5	4.8	2.1	12.3	19.6
Total Hardwoods	828.4	362.8	465.6	231.8	209.2	15.1	7.5	124.0	454.1
All Species	829.0	363.4	465.6	231.8	209.2	15.1	7.5	124.6	454.1

1/ Mainly sycamore.

TABLE 40d--NET TIMBER VOLUME BY OWNERSHIP AND SPECIES GROUP
WARREN 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	14.2	0.2	1.0	13.0	3.3	1/	0.3	3.0
Farmer-Owned	627.9	.3	22.0	605.6	178.0	--	7.8	170.2
Forest Industry	6.2	--	.5	5.7	1.6	1/	.1	1.5
Miscellaneous Private	180.7	.1	10.8	169.8	48.9	--	2.2	46.7
All Ownerships	829.0	.6	34.3	794.1	231.8	--	10.4	221.4

1/ Insignificant amount.