

**FOREST
STATISTICS
for
North Central Georgia
1972**

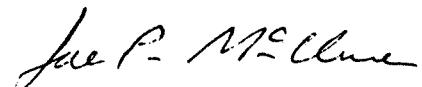
FOREWORD

This report highlights the principal findings of the fourth Forest Survey of the timber resource in North Central Georgia. The survey was started in February and completed in July 1972. Findings of the previous surveys, completed in 1936, 1953, and 1961, provide the basis for measuring changes that have occurred and trends that have developed over the past 36 years. This report primarily emphasizes the changes and trends that have taken place since the last survey.

Forest Survey, authorized by the McSweeney-McNary Forest Research Act of 1928, is a continuing, nationwide undertaking by the regional experiment stations of the Forest Service, USDA. In Florida, Georgia, North Carolina, South Carolina, and Virginia, Forest Survey is an activity of the South-eastern Forest Experiment Station, with headquarters at Asheville, North Carolina. The objective is to inventory periodically the forest lands, their extent, condition, and volume of timber, and ascertain rates of timber growth and depletion. It is necessary to keep this basic information up to date to provide a sound basis for the formulation of forest policies and programs.

The 32-county area covered by this report is one of five Survey Units in Georgia. Similar reports, USDA Forest Service Resource Bulletins SE-19, SE-21, and SE-22, have been issued for Southwest Georgia, Southeast Georgia, and Central Georgia, and a similar report is planned for North Georgia when that Unit is completed. The survey will provide updated statistics on the timber resource for all of Georgia when completed.

The Southeastern Station gratefully acknowledges the cooperation and assistance of the Georgia Forestry Commission and of forest industry in the collection of field data.



JOE P. MCCLURE
Project Leader

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**by
Herbert A. Knight, Resource Analyst**

HIGHLIGHTS

Since 1961 in North Central Georgia--

- area of commercial forest land has decreased by 85,000 acres, or only 2 percent. This small net change in the forest base, however, masks a substantial amount of land-use change. During this 11-year period, 373,000 acres were diverted from commercial forest to other land uses, and 288,000 acres of new forest land were added. About 58 percent of the diversion was to urban development, and most of the remaining diversion was to agricultural uses. Commercial forests currently occupy 4 million acres, or 64 percent of the total land in this 32-county area.
- there has been less forestry activity than in any of the other three Forest Survey Units completed. Although there are some 250,000 acres in plantations, natural stands make up more than 90 percent of the commercial forests. More than half the plantations were established prior to 1961. Three out of every 5 acres now classified as commercial forest showed no evidence of treatment or disturbance over the 11-year remeasurement period. Approximately 35 percent of the total area of commercial forest has either been harvested, thinned, cleaned, or artificially regenerated. Another 5 percent has been significantly disturbed by insects, disease, wildfire, or other damaging agent.
- almost 25 percent of the growing-stock timber removed from the inventory through man's action was not utilized for products. More than 85 percent of this unused timber was removed in conjunction with land clearing or other land-use changes.
- the ownership of more than 1 million acres of commercial forest land has shifted from the farmer to the miscellaneous private class. There has been little change in the total number of acres owned and leased by forest industries. These industries own some 406,200 acres and have another 54,500 acres under long-term lease. Less than 2 percent of the commercial forest land is publicly owned.
- average basal area of all live trees 5 inches d.b.h. and larger has increased from 41 to 63 square feet per acre of commercial forest land. There are also about 645 sapling-size trees per acre, 50 more than in 1961. Only 12 percent of the commercial forest land is less than 60 percent stocked with growing-stock trees.
- volume of softwood growing stock has increased from less than 1.4 to more than 2.4 billion cubic feet, or by 76 percent. In fact, loblolly pine, the predominant species in North Central Georgia, has more than doubled in volume and the volume of shortleaf pine is up by about 22 percent. The increase in softwood volume occurred across the range of diameter classes. The current inventory of softwood growing stock includes 6.7 billion board feet of sawtimber, almost double the amount in 1961.

--volume of hardwood growing stock has increased from about 1.3 to more than 1.8 billion cubic feet, or by 39 percent. Practically all this increase was in oak, sweetgum, and yellow-poplar. There has not been significant increase in the volume of ash, hickory, or maple. Again, the increase in volume occurred across the range of diameters. The current inventory of hardwood growing stock includes 4.5 billion board feet of sawtimber, up by 36 percent.

In 1971--

--net growth of growing stock averaged 79 cubic feet per acre of commercial forest land and totaled 317 million cubic feet. This was a record high average growth per acre for an entire Forest Survey Unit in the Southeast. Almost one-fourth of this growth is attributed to ingrowth; therefore, the area might not sustain this high average growth over time. More than 71 percent of the total net growth was softwood. The net growth of all species included 949 million board feet of sawtimber.

--removals of growing stock totaled 152 million cubic feet, which was only about one-half of the net growth. Net growth exceeded removals on all ownership classes. Almost 70 percent of the timber removals was pine, and the removals of all species included 512 million board feet of sawtimber. Pulpwood production totaled 784,000 cords, down slightly from the record 817,000 cords produced in 1970.

--mortality of growing stock totaled 28 million cubic feet and reduced gross growth by 8 percent. Suppression, disease, weather, insects, and beavers were the leading causes of death; only 2 percent of the mortality was directly attributed to wildfire. About 65 percent of the mortality was softwood. Total mortality included 62 million board feet of sawtimber.

HOW THE FOREST SURVEY IS MADE

The method of survey is essentially a sampling procedure designed to provide reliable statistics primarily at the State and Survey Unit levels. Individual county statistics are presented so that any combination of counties may be added together until the total is large enough to meet the desired degree of reliability. The basic steps of the survey procedure were as follows:

1. Initial estimates of forest and nonforest areas were based on the classification of 21,401 sample clusters systematically spaced on the latest aerial photographs available. A subsample of 1,404 of these 16-point clusters was ground checked, and a linear regression was fitted to the data to develop the relationship between the photo and ground classification of the subsample. This procedure provided a means for adjusting the initial estimates of area for change in land use since date of photography and for photo misclassifications.
2. Estimates of timber volume and forest classifications were based on measurements recorded at 881 ground sample locations systematically distributed within the commercial forest land. A 10-point cluster of plots, measured with a basal area factor of 37.5 square feet per acre, was systematically spaced on an acre at each of these sample locations. Trees less than 5 inches d.b.h. were tallied on fixed-radius plots around the point centers.
3. Equations prepared from detailed measurements collected on the trees tallied at one out of every 20 sample locations in North Central Georgia, and similar measurements taken throughout the Southeast, were used to compute the volumes of individual tally trees. A mirror caliper and sectional aluminum poles were used to obtain the additional measurements on standing trees required to construct the volume equations. The same 5-percent subsample of plots used for the tree-volume study in North Central Georgia also served as a quality control of field measurements.
4. Felled trees were measured at 12 active cutting operations to provide utilization factors for product and species groups and to supplement the standing tree-volume study.
5. Estimates of growth, removals, and mortality were determined from the remeasurement of 918 permanent sample plots which were established in the third survey.

6. Ownership information was collected from local contacts, correspondence, and public records. In those counties where the sample missed a particular ownership class, temporary sample plots were added and measured to describe the forest conditions within the ownership class.
7. All field data were sent to Asheville for editing and were punched into cards and stored on magnetic tape for machine computing, sorting, and tabulation. Final estimates were based on statistical summaries of the data.

RELIABILITY OF THE DATA

Statistical analysis of these data indicates the following sampling errors in terms of one standard error (two times out of three):

	<u>Percent</u>
Per million acres of commercial forest land - - - - -	1.23
Per billion cubic feet of growing stock - - - - -	4.76
Per billion cubic feet of net annual growth - - - - -	1.43
Per billion cubic feet of annual removals - - - - -	2.89

DEFINITIONS OF TERMS

Acceptable trees.--Growing-stock trees of commercial species that meet specified standards of size and quality, but not qualifying as desirable trees.

Basal area.--The area in square feet of the cross section at breast height of a single tree or of all the trees in a stand, usually expressed as square feet of basal area per acre.

Commercial forest land.--Forest land producing or capable of producing crops of industrial wood and not withdrawn from timber utilization.

Commercial species.--Tree species presently or prospectively suitable for industrial wood products.

Cropland.--Land under cultivation within the past 24 months, including orchards and land in soil-improving crops, but excluding land cultivated in developing improved pasture. Also includes idle farmland.

Desirable trees.--Growing-stock trees of commercial species having no serious defects in quality limiting present or prospective use for timber products, of relatively high vigor, and containing no pathogens that may result in death or serious deterioration before rotation age.

Diameter class.--A classification of trees based on diameter outside bark, measured at breast height ($4\frac{1}{2}$ feet above the ground). D.b.h. is the common abbreviation for "diameter at breast height." Two-inch diameter classes are commonly used in Forest Survey, with the even inch the approximate midpoint for a class. For example, the 6-inch class includes trees 5.0 through 6.9 inches d.b.h., inclusive.

Farm.--Either a place operated as a unit of 10 or more acres from which the sale of agricultural products totaled \$50 or more annually, or a place operated as a unit of less than 10 acres from which the sale of agricultural products for the year amounted to at least \$250.

Farm operator.--A person who operates a farm, either doing the work himself or directly supervising the work.

Farmer-owned lands.--Lands owned by farm operators.

Forest industry lands.--Lands owned by companies or individuals operating wood-using plants.

Forest land.--Land at least 16.7 percent stocked by forest trees of any size, or formerly having had such tree cover, and not currently developed for nonforest use.

Forest type.--A classification of forest land based upon the species forming a plurality of live-tree stocking.

Longleaf-slash pine.--Forests in which longleaf or slash pine, singly or in combination, comprises a plurality of the stocking. (Common associates include oak, hickory, and gum.)

Loblolly-shortleaf pine.--Forests in which loblolly pine, shortleaf pine, or other southern yellow pines, except longleaf or slash pine, singly or in combination, comprise a plurality of the stocking. (Common associates include oak, hickory, and gum.)

Oak-pine.--Forests in which hardwoods (usually upland oaks) comprise a plurality of the stocking but in which pines comprise 25 to 50 percent of the stocking. (Common associates include gum, hickory, and yellow-poplar.)

Oak-hickory.--Forests in which upland oaks or hickory, singly or in combination, comprise a plurality of the stocking, except where pines comprise 25 to 50 percent, in which case the stand would be classified oak-pine. (Common associates include yellow-poplar, elm, maple, and black walnut.)

Oak-gum-cypress.--Bottomland forests in which tupelo, blackgum, sweet-gum, oaks, or southern cypress, singly or in combination, comprises a plurality of the stocking, except where pines comprise 25 to 50 percent, in which case the stand would be classified oak-pine. (Common associates include cottonwood, willow, ash, elm, hackberry, and maple.)

Elm-ash-cottonwood.--Forests in which elm, ash, or cottonwood, singly or in combination, comprises a plurality of the stocking. (Common associates include willow, sycamore, beech, and maple.)

Gross growth.--Annual increase in net volume of trees in the absence of cutting and mortality.

Growing-stock trees.--Live trees of commercial species qualifying as desirable or acceptable trees.

Growing-stock volume.--Net volume in cubic feet of growing-stock trees 5.0 inches d.b.h. and over from a 1-foot stump to a minimum 4.0-inch top diameter outside bark of the central stem, or to the point where the central stem breaks into limbs. (Net volume in primary forks is included.)

Hardwoods.--Dicotyledonous trees, usually broad-leaved and deciduous.

Soft hardwoods.--Soft-textured hardwoods such as boxelder, red and silver maple, buckeye, hackberry, loblolly-bay, silverbell (in mountains), butternut, sweetgum, yellow-poplar, cucumber-tree, magnolia, sweetbay, water tupelo, blackgum, sycamore, cottonwood, black cherry, willow, basswood, and elm.

Hard hardwoods.--Hard-textured hardwoods such as Florida and sugar maple, birch, hickory, dogwood, persimmon (forest grown), beech, ash, honeylocust, holly, black walnut, mulberry, all commercial oaks, and black locust.

Idle farmland.--Includes former croplands, orchards, improved pastures and farm sites not tended within the past 2 years, and presently less than 16.7 percent stocked with trees.

Improved pasture.--Land currently improved for grazing by cultivation, seeding, irrigation, or clearing of trees or brush.

Industrial wood.--All roundwood products except fuelwood.

Land area.--The area of dry land and land temporarily or partly covered by water such as marshes, swamps, and river flood plains (omitting tidal flats below mean high tide); streams, sloughs, estuaries, and canals less than 1/8 of a statute mile in width; and lakes, reservoirs, and ponds less than 40 acres in area.

Logging residues.--The unused portions of trees cut or killed by logging.

Miscellaneous Federal lands.--Federal lands other than National Forests, lands administered by the Bureau of Land Management, and Indian lands.

Miscellaneous private lands - corporate.--Lands owned by private corporations other than forest industry.

Miscellaneous private lands - individual.--Privately owned lands other than forest-industry, farmer-owned, or corporate lands.

Mortality.--Number or sound-wood volume of live trees dying from natural causes during a specified period.

National Forest land.--Federal lands which have been legally designated as National Forests or purchase units, and other lands under the administration of the Forest Service, including experimental areas and Bankhead-Jones Title III lands.

Net annual growth.--The increase in volume for a specific year.

Net volume.--Gross volume less deductions for rot, sweep, or other defect affecting use for timber products.

Noncommercial forest land.--(a) Unproductive forest land incapable of yielding crops of industrial wood because of adverse site conditions, and (b) productive-reserved forest land.

Noncommercial species.--Tree species of typically small size, poor form, or inferior quality which normally do not develop into trees suitable for industrial wood products.

Nonforest land.--Land that has never supported forests and lands formerly forested where timber management is precluded by development for other uses.

Nonstocked land.--Commercial forest land less than 16.7 percent stocked with growing-stock trees.

Other Federal lands.--Federal lands other than National Forests, including lands administered by the Bureau of Land Management, Bureau of Indian Affairs, and other Federal agencies.

Other public lands.--Publicly owned lands other than National Forests.

Overstocked areas.--Areas where growth of trees is significantly reduced by excessive numbers of trees.

Poletimber trees.--Growing-stock trees of commercial species at least 5.0 inches in d.b.h. but smaller than sawtimber size.

Productive-reserved forest land.--Forest land sufficiently productive to qualify as commercial forest land, but withdrawn from timber utilization through statute or administrative designation.

Rangeland.--Land on which the natural plant cover is composed principally of native grasses, forbs, or shrubs valuable for forage.

Rotten trees.--Live trees of commercial species that do not contain at least one 12-foot saw log, or two noncontiguous saw logs, each 8 feet or longer, now or prospectively, primarily because of rot or missing sections, and with less than one-third of the gross tree volume in sound material.

Rough trees.--(a) Live trees of commercial species that do not contain at least one 12-foot saw log, or two noncontiguous saw logs, each 8 feet or longer, now or prospectively, primarily because of roughness, poor form, splits, and cracks, and with less than one-third of the gross tree volume in sound material; and (b) all live trees of noncommercial species.

Salvable dead trees.--Standing or down dead trees that are considered merchantable by Forest Survey standards.

Saplings.--Live trees 1.0 to 5.0 inches in diameter at breast height.

Saw log.--A log meeting minimum standards of diameter, length, and defect, including logs at least 8 feet long, sound and straight, and with a minimum diameter inside bark for softwoods of 6 inches (8 inches for hardwoods).

Saw-log portion.--That part of the bole of sawtimber trees between the stump and the saw-log top.

Saw-log top.--The point on the bole of sawtimber trees above which a saw log cannot be produced. The minimum saw-log top is 7.0 inches d.o.b. for softwoods and 9.0 inches d.o.b. for hardwoods.

Sawtimber trees.--Live trees of commercial species containing at least a 12-foot saw log, or two noncontiguous saw logs, each 8 feet or longer, and with at least one-third of the gross board-foot volume between the 1-foot stump and minimum saw-log top being sound. Softwoods must be at least 9.0 inches and hardwoods at least 11.0 inches in diameter at breast height.

Sawtimber volume.--Net volume of the saw-log portion of live sawtimber in board-foot International 1/4-inch rule.

Seedlings.--Live trees less than 1.0 inch in diameter at breast height that are expected to survive and develop.

Site class.--A classification of forest land in terms of inherent capacity to grow crops of industrial wood based on fully stocked natural stands.

Class 1.--Sites capable of producing 165 or more cubic feet per acre annually.

Class 2.--Sites capable of producing 120 to 165 cubic feet per acre annually.

Class 3.--Sites capable of producing 85 to 120 cubic feet per acre annually.

Class 4.--Sites capable of producing 50 to 85 cubic feet per acre annually.

Class 5.--Sites incapable of producing 50 cubic feet per acre annually, but excluding unproductive sites.

Softwoods.--Coniferous trees, usually evergreen, having needles or scale-like leaves.

Pines.--Yellow pine species which include loblolly, longleaf, slash, shortleaf, pitch, Virginia, Table-Mountain, sand, and spruce pine.

Other softwoods.--White pine, hemlock, cypress, eastern redcedar, white-cedar, spruce, and fir.

Stand-size class.--A classification of forest land based on the size class of growing-stock trees on the area.

Sawtimber stands.--Stands at least 16.7 percent stocked with growing-stock trees, with half or more of total stocking in sawtimber or poletimber trees, and with sawtimber stocking at least equal to poletimber stocking.

Poletimber stands.--Stands at least 16.7 percent stocked with growing-stock trees of which half or more of this stocking is in poletimber and sawtimber trees, and with poletimber stocking exceeding that of sawtimber.

Sapling-seedling stands.--Stands at least 16.7 percent stocked with growing-stock trees of which more than half of the stocking is saplings and seedlings.

State, county, and municipal lands.--Lands owned by States, counties, and local public agencies or municipalities, or lands leased to these governmental units for 50 years or more.

Stocking.--The degree of occupancy of land by trees, measured by basal area or the number of trees in a stand and spacing in the stand, compared to a minimum standard, depending on tree size, to fully utilize the growth potential of the land. (See page 12.)

Timber removals.--The net volume of growing-stock trees removed from the inventory by harvesting; cultural operations, such as stand improvement; land clearing, or changes in land use.

Unproductive forest land.--Forest land incapable of producing 20 cubic feet per acre of industrial wood under natural conditions, because of adverse site conditions.

Upper-stem portion.--That part of the main stem or fork of sawtimber trees above the saw-log top to a minimum top diameter of 4.0 inches outside bark or to the point where the main stem or fork breaks into limbs.

Urban and other areas.--Areas within the legal boundaries of cities and towns; suburban areas developed for residential, industrial, or recreational purposes; school yards; cemeteries; roads; railroads; airports; beaches; powerlines and other rights-of-way; or other nonforest land not included in any other specified land use class.

Table 9.--Annual removals of sawtimber and growing stock on commercial forest land, by species group and county, 1971

County	Sawtimber				Growing stock			
	All species	Pine	Other softwood	Soft hardwood	All species	Pine	Other softwood	Hard hardwood
- - - - - Million board feet - - - - -								
Banks	17.5	15.3	--	0.7	1.5	5.0	3.3	1.2
Barrow	11.1	9.6	--	--	1.5	3.4	2.8	--
Carroll	20.3	15.5	--	2.4	2.4	4.4	3.3	0.6
Clarke	10.9	2.4	--	7.2	1.3	3.6	0.4	0.5
Clayton	5.1	1.0	--	--	4.1	1.5	0.6	2.7
Cobb	34.1	31.6	--	1.2	1.3	8.3	7.7	--
Coweta	32.5	21.4	--	10.4	0.7	10.5	7.6	0.2
De Kalb	20.5	13.3	--	2.2	5.0	5.1	2.9	0.4
Douglas	3.1	3.1	--	--	0.7	0.7	--	(1/)
Elbert	6.5	5.5	--	0.3	0.7	3.1	--	0.2
Fayette	13.2	6.4	--	3.0	3.8	4.5	2.1	1.1
Forsyth	21.3	19.9	--	--	1.4	5.3	5.0	--
Franklin	4.5	4.5	--	--	1.7	1.2	0.1	0.1
Fulton	21.1	16.9	--	2.7	1.5	5.4	4.3	--
Gwinnett	21.0	12.1	--	4.2	4.7	5.9	3.7	--
Hall	22.6	21.7	--	--	0.9	7.8	7.1	--
Haralson	16.1	4.5	--	5.1	6.5	4.9	1.4	--
Hart	9.3	0.7	--	8.6	--	3.4	0.8	--
Heard	11.5	10.5	--	--	1.0	4.3	3.6	--
Henry	23.5	19.4	--	2.1	2.0	7.0	5.9	--
Jackson	14.8	13.5	--	1.3	--	4.6	4.2	--
Madison	9.3	2.7	--	--	4.2	2.4	2.9	0.1
Meriwether	17.1	6.7	--	2.7	7.7	5.5	2.6	--
Newton	12.2	9.2	--	--	3.0	2.6	1.8	--
Oconee	2.1	1.4	--	0.7	--	1.3	0.8	--
Oglethorpe	33.7	25.9	--	5.9	1.9	9.4	7.1	--
Paulding	30.8	21.9	--	5.4	3.5	10.7	6.7	--
Polk	8.6	7.7	--	--	0.9	3.0	2.5	--
Rockdale	1.3	1.3	--	--	--	0.2	0.2	--
Spalding	26.4	18.9	--	6.5	1.0	4.9	3.2	--
Troup	21.2	15.8	--	5.4	--	8.7	6.6	--
Walton	8.5	6.7	--	1.1	0.7	2.3	1.6	--
Total	511.7	367.0	--	83.3	61.4	152.3	105.7	0.2
								26.5
								19.9

(1/ Less than 50,000 cubic feet.

Table 10.--Area of commercial forest land, by forest type and ownership class, 1972

Forest type	All ownerships	Ownership class					
		National Forest	Other public	Forest industry	Farmer	Misc. Private	
- - - - - Thousand acres - - - - -							
Softwood types:							
Longleaf pine	4.3	--	--	4.3	--	--	
Slash pine	4.8	--	--	4.8	--	--	
Loblolly pine	1,542.3	0.2	25.6	156.3	402.6	957.6	
Shortleaf pine	491.7	--	16.5	60.3	142.8	272.1	
Virginia pine	52.7	0.4	--	--	8.8	43.5	
Eastern redcedar	9.4	--	--	--	9.4	--	
Total	2,105.2	0.6	42.1	225.7	563.6	1,273.2	
Hardwood types:							
Oak-pine	781.1	--	12.7	73.5	247.9	447.0	
Oak-hickory	829.8	--	12.0	80.3	312.9	424.6	
Southern scrub oak	9.2	--	--	--	--	9.2	
Oak-gum-cypress	107.5	--	--	12.9	36.5	58.1	
Elm-ash-cottonwood	166.4	3.8	--	13.8	92.7	56.1	
Total	1,894.0	3.8	24.7	180.5	690.0	995.0	
All types	3,999.2	4.4	66.8	406.2	1,253.6	2,268.2	

Table 11.--Area of commercial forest land, by ownership and stocking classes of growing-stock trees, 1972

Ownership classes	All classes	Stocking percentage ^{1/}					
		Over 130	100-130	60-99	16.7-59	Less than 16.7	
- - - - - Thousand acres - - - - -							
National Forest							
National Forest	4.4	--	0.3	4.1	--	--	
Other public	66.8	3.9	31.5	22.7	4.6	4.1	
Forest industry	406.2	23.9	116.7	198.2	59.5	7.9	
Farmer	1,253.6	36.3	366.7	687.5	149.3	13.8	
Misc. private	2,268.2	60.9	695.6	1,260.9	237.4	13.4	
All ownerships	3,999.2	125.0	1,210.8	2,173.4	450.8	39.2	

1/ See stocking standards on page 12.

Table 12.--Volume of timber on commercial forest land,
by class and species group, 1972

Class of timber	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
- - - - - Million cubic feet - - - - -					
Sawtimber trees:					
Saw-log portion	2,246.3	1,355.0	0.7	392.2	498.4
Upper-stem portion	293.4	127.5	0.1	73.0	92.8
Total	2,539.7	1,482.5	0.8	465.2	591.2
Poletimber trees	1,742.9	936.0	3.9	363.4	439.6
All growing-stock trees	4,282.6	2,418.5	4.7	828.6	1,030.8
Rough trees:					
Sawtimber-size trees	98.2	14.6	0.5	36.4	46.7
Poletimber-size trees	207.8	27.8	--	80.2	99.8
Total	306.0	42.4	0.5	116.6	146.5
Rotten trees:					
Sawtimber-size trees	48.3	0.6	--	23.6	24.1
Poletimber-size trees	11.5	--	--	8.4	3.1
Total	59.8	0.6	--	32.0	27.2
Salvable dead trees:					
Sawtimber-size trees	7.7	3.6	0.4	0.6	3.1
Poletimber-size trees	1.1	1.1	--	--	--
Total	8.8	4.7	0.4	0.6	3.1
Total, all timber	4,657.2	2,466.2	5.6	977.8	1,207.6

Table 13.--Number of growing-stock trees on commercial forest land, by species and diameter class, 1972

Species	All classes	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 and larger	Diameter class (inches at breast height)			
												Thousand trees			
Softwood:															
Longleaf pine	2,000	720	372	366	303	128	74	--	24	13	--				
Slash pine	2,226	1,469	589	127	41	--	--	--	--	--	--				
Loblolly pine	233,573	114,923	58,797	28,828	15,697	8,753	4,110	1,559	580	306	20				
Shortleaf pine	119,609	63,208	30,214	15,465	7,441	2,305	649	250	57	17	3				
Spruce pine	20	--	--	--	--	--	13	--	--	7	--				
Pitch pine	29	--	--	29	--	--	--	--	--	--	--				
Virginia pine	7,886	3,843	2,545	881	452	106	46	13	--	--	--				
Eastern redcedar	1,614	1,263	269	27	55	--	--	--	--	--	--				
Total softwoods	366,957	185,426	92,786	45,723	23,989	11,292	4,892	1,822	661	343	23				
Hardwood:															
Select white oaks ^{1/}	18,851	7,452	3,832	3,305	1,722	1,194	671	217	178	247	33				
Select red oaks ^{2/}	8,901	4,122	1,819	1,189	702	469	350	133	53	57	7				
Other white oaks	13,965	6,094	3,777	1,872	1,067	510	312	133	124	65	11				
Other red oaks	44,022	19,423	10,675	6,504	3,409	1,946	1,049	452	283	236	45				
Hickory	18,594	8,646	4,525	2,079	1,656	824	468	238	92	60	6				
Hard maple	81	81	--	--	--	--	--	--	--	--	--				
Soft maple	7,190	2,775	1,523	1,294	760	297	250	134	88	63	6				
Beech	497	97	102	--	43	112	13	52	24	50	4				
Sweetgum	47,771	23,375	11,739	6,691	3,010	1,714	669	302	142	127	2				
Blackgum	4,359	1,594	1,092	842	405	177	142	74	16	17	--				
Ash	5,019	1,307	1,363	837	709	392	184	112	47	68	--				
Basswood	96	85	--	--	--	--	11	--	--	--	--				
Black walnut	336	180	126	--	22	--	--	--	8	--	--				
Yellow-poplar	25,631	9,307	4,946	4,215	3,270	1,724	1,076	567	242	270	14				
Elm	3,671	1,775	823	391	297	281	64	26	--	--	14				
Black cherry	1,777	751	751	260	--	15	--	--	--	--	--				
Sycamore	598	73	180	102	66	82	62	21	--	--	12				
River birch	1,585	701	324	74	180	135	74	62	23	4	8				
Other eastern hardwoods	2,608	994	648	425	415	33	50	30	8	5	--				
Total hardwoods	205,552	88,832	48,245	30,080	17,733	9,905	5,445	2,553	1,328	1,295	136				
All species	572,509	274,258	141,031	75,803	41,722	21,197	10,337	4,375	1,989	1,638	159				

1/ Includes white and swamp chestnut oaks.

2/ Includes cherrybark, northern red, and Shumard oaks.

Table 14.--Volume of all live trees on commercial forest land, by species and diameter class, 1972

Species	All classes	Diameter class (inches at breast height)										Million cubic feet -					
		5.0- 6.9	7.0- 8.9	8.0- 10.9	9.0- 12.9	10.0- 14.9	11.0- 14.9	12.0- 16.9	13.0- 16.9	14.0- 18.9	15.0- 20.9		16.0- 20.9	17.0- 20.9	18.0- 20.9	19.0- 20.9	21.0- 20.9
<hr/>																<hr/>	
Softwood:																	
Longleaf pine	21.6	1.7	1.9	4.4	5.3	3.1	2.6	--	--	--	1.6	1.0	--	--	--	--	--
Slash pine	9.5	4.3	3.0	1.3	0.9	--	--	--	--	--	--	--	--	--	--	--	--
Loblolly pine	1,666.7	270.8	327.3	303.1	268.6	219.5	143.1	70.8	35.0	25.5	3.0	0.4	0.4	0.4	0.4	0.4	0.4
Shortleaf pine	716.0	148.4	180.8	164.4	126.9	57.3	22.3	11.1	3.3	1.1	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Spruce pine	1.1	--	--	--	--	--	--	0.5	--	--	--	--	--	--	--	--	--
Pitch pine	0.2	--	--	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--
Virginia pine	46.4	10.5	15.1	8.6	6.6	3.3	1.6	0.7	--	--	--	--	--	--	--	--	--
Eastern redcedar	5.2	2.5	1.4	0.4	0.6	0.3	--	--	--	--	--	--	--	--	--	--	--
Total softwoods	2,466.7	438.2	529.5	482.4	408.9	283.5	170.1	82.6	39.9	28.2	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Hardwood:																	
Select white oaks ^{1/}	222.6	24.0	22.7	37.0	29.6	31.4	23.4	10.8	11.4	25.9	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Select red oaks ^{2/}	96.0	13.4	13.2	14.4	12.4	12.4	12.0	6.0	3.7	7.4	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Other white oaks	122.8	16.9	22.2	18.6	19.5	12.3	10.5	6.2	8.0	6.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Other red oaks	394.5	53.2	65.5	69.5	55.0	47.0	36.2	20.6	16.7	21.7	9.1	9.1	9.1	9.1	9.1	9.1	9.1
Hickory	170.9	23.6	27.7	24.1	31.6	20.8	17.2	11.7	6.5	6.2	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Hard maple	1.4	0.9	0.3	--	0.2	--	--	--	--	--	--	--	--	--	--	--	--
Soft maple	116.1	15.5	17.2	20.0	15.6	12.5	11.3	9.1	5.5	8.1	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Beech	19.7	0.5	1.0	--	1.4	3.3	1.0	3.0	2.3	6.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Sweetgum	386.7	57.7	74.5	79.4	60.0	49.5	26.8	16.3	9.2	12.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Blackgum	53.5	7.3	9.2	12.6	8.7	4.5	5.0	3.9	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Ash	78.7	6.2	9.7	11.7	16.1	11.7	7.2	5.7	3.6	6.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Basswood	0.9	0.3	--	--	--	0.3	--	--	--	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Black walnut	2.1	0.4	0.8	--	0.3	0.2	--	--	--	0.4	--	--	--	--	--	--	--
Yellow-poplar	332.0	27.4	33.5	49.7	60.3	48.4	41.7	26.1	14.9	25.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Elm	36.8	5.5	5.8	6.2	5.8	7.9	2.3	1.5	--	1.8	--	--	--	--	--	--	--
Black cherry	16.9	6.1	5.4	3.7	0.9	0.8	--	--	--	--	--	--	--	--	--	--	--
Sycamore	10.4	0.4	1.5	1.2	0.9	2.0	2.3	0.9	0.4	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
River birch	22.7	2.3	2.7	1.3	5.1	3.2	2.7	2.7	2.6	1.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Other eastern hardwoods	97.0	34.4	22.4	13.8	14.2	4.7	3.4	2.3	0.3	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Total hardwoods	2,181.7	296.0	335.3	363.2	337.6	272.6	203.3	126.7	85.3	132.6	29.1	29.1	29.1	29.1	29.1	29.1	29.1
All species	4,648.4	734.2	864.8	845.6	746.5	556.1	373.4	209.3	125.2	160.8	32.5	32.5	32.5	32.5	32.5	32.5	32.5

^{1/} Includes white and swamp chestnut oaks.^{2/} Includes cherrybark, northern red, and Shumard oaks.

Table 15.--Volume of growing stock on commercial forest land, by species and diameter class, 1972

Species	:	All	:	Diameter class (inches at breast height)						Million cubic feet -
				5.0-	7.0-	9.0-	11.0-	13.0-	15.0-	
classes	:	5.0-	:	7.0-	:	9.0-	:	11.0-	:	17.0-
classes	:	6.9	:	8.9	:	10.9	:	12.9	:	16.9
classes	:	1,636.7	261.0	316.8	295.2	267.3	217.3	142.4	70.8	34.7
Longleaf pine		21.3	1.7	1.9	4.4	5.3	3.1	2.6	--	1.3
Slash pine		8.9	3.7	3.0	1.3	0.9	--	--	--	1.0
Loblolly pine		1,704.9	142.8	177.5	163.1	126.9	56.4	22.3	11.1	3.3
Shortleaf pine		1.1	--	--	--	--	0.5	--	--	0.4
Spruce pine		0.2	--	--	0.2	--	--	--	--	0.6
Pitch pine		45.4	9.9	14.7	8.6	6.6	3.3	1.6	0.7	--
Virginia pine		4.7	2.5	1.4	0.2	0.6	--	--	--	--
Eastern redcedar		2,423.2	421.6	515.3	473.0	407.6	280.1	169.4	82.6	39.3
Total softwoods										27.9
										3.4
Softwood:										
Longleaf pine		209.9	20.7	22.2	36.4	29.3	30.8	22.7	10.2	10.6
Slash pine		89.8	13.0	12.0	12.9	11.6	12.4	12.0	5.7	5.6
Loblolly pine		109.7	15.7	20.3	17.6	15.8	11.5	9.6	5.2	6.2
Shortleaf pine		360.5	48.6	57.4	63.9	51.4	44.9	32.9	19.1	19.3
Spruce pine		153.5	19.7	24.2	20.8	28.1	19.9	16.2	11.3	5.9
Pitch pine		0.4	--	--	--	--	--	--	--	1.5
Virginia pine		73.1	8.3	8.4	13.2	12.5	6.8	8.1	5.9	4.2
Eastern redcedar		13.4	0.3	0.6	--	0.6	2.9	0.4	2.4	1.1
Hickory		343.9	48.6	63.7	70.1	56.0	45.6	24.7	15.0	16.6
Hard maple		38.0	3.9	5.7	8.5	6.3	4.1	4.6	3.2	1.6
Soft maple		65.4	3.9	8.3	9.5	13.4	10.3	6.5	4.7	5.6
Beech		0.6	0.3	--	--	--	--	0.3	--	0.5
Sweetgum		1.9	0.4	0.8	--	0.3	--	--	0.4	0.7
Blackgum		311.9	25.0	30.5	47.5	59.7	45.9	38.8	25.5	14.1
Ash		27.8	3.9	4.2	3.5	4.8	6.9	1.9	1.1	1.4
Basswood		9.7	2.0	4.6	2.7	--	0.4	--	--	--
Black walnut		9.4	0.4	1.5	0.9	0.9	2.0	2.0	0.9	0.8
Yellow-poplar		19.2	2.3	2.4	0.6	3.4	3.2	2.3	1.3	0.4
Elm		21.3	2.5	3.4	4.7	6.5	0.8	1.5	1.1	0.5
Black cherry		1,859.4	219.9	270.2	312.9	300.6	248.4	184.5	113.7	76.0
Sycamore										110.1
River birch										23.1
Other eastern hardwoods										
Total hardwoods										
All species		4,282.6	644.5	785.5	785.9	708.2	528.5	353.9	196.3	115.3
										138.0
										26.5

1/ Includes white and swamp chestnut oaks.
 2/ Includes cherrybark, northern red, and Shumard oaks.

Table 16.—Volume of sawtimber on commercial forest land, by species and diameter class, 1972

Species	All classes	Diameter class (inches at breast height)									
		9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	21.0- 29.0 and larger	Million board feet	
Softwood:											
Longleaf pine	91.4	19.0	26.1	4.1	16.8	14.8	--	8.2	6.5	--	--
Slash pine	8.7	4.6	--	--	--	--	--	--	--	--	--
Loblolly pine	4,878.5	1,028.7	1,169.2	1,087.3	779.2	415.2	213.0	164.7	21.2	21.2	21.2
Shortleaf pine	1,638.0	584.6	557.6	280.5	121.1	63.8	20.3	7.2	2.9	2.9	2.9
Spruce pine	5.4	--	--	--	2.5	--	--	2.9	--	--	--
Pitch pine	0.7	0.7	--	--	--	--	--	--	--	--	--
Virginia pine	82.4	28.9	26.5	15.3	7.8	3.9	--	--	--	--	--
Eastern redcedar	3.4	0.8	2.6	--	--	--	--	--	--	--	--
Total softwoods	6,708.5	1,667.3	1,786.1	1,399.9	925.4	482.9	241.5	181.3	24.1	24.1	24.1
Hardwood:											
Select white oaks ^{1/}	558.1	--	95.5	118.9	96.9	47.6	52.3	113.7	33.2	33.2	33.2
Select red oaks ^{2/}	207.7	--	36.8	46.5	48.9	25.1	13.2	31.3	5.9	5.9	5.9
Other white oaks	245.5	--	54.4	47.0	43.2	25.4	33.8	31.0	10.2	10.2	10.2
Other red oaks	815.6	--	171.3	176.9	144.9	90.4	78.1	106.5	47.4	47.4	47.4
Hickory	376.5	--	95.1	79.8	73.1	55.1	31.1	32.9	9.4	9.4	9.4
Hard maple	--	--	--	--	--	--	--	--	--	--	--
Soft maple	172.0	--	38.6	25.3	32.9	26.1	19.7	23.4	6.0	6.0	6.0
Beech	49.5	--	2.3	10.8	1.4	.9	6.4	17.2	2.1	2.1	2.1
Sweetgum	705.3	--	196.8	193.5	119.5	77.8	50.0	64.2	3.5	3.5	3.5
Blackgum	78.0	--	20.4	15.3	19.4	14.8	3.4	4.7	--	--	--
Ash	176.1	--	42.2	38.9	27.4	21.9	14.4	31.3	--	--	--
Basswood	1.0	--	--	--	1.0	--	--	--	--	--	--
Black walnut	2.0	--	0.9	--	--	--	1.1	--	--	--	--
Yellow-poplar	944.3	--	207.5	193.1	183.9	131.6	77.7	133.1	17.4	17.4	17.4
Elm	63.9	--	16.7	26.6	7.9	5.2	--	7.5	--	--	--
Black cherry	1.4	--	--	1.4	--	--	--	--	--	--	--
Sycamore	25.9	--	2.6	7.4	8.2	3.8	--	3.9	--	--	--
River birch	55.2	--	11.8	12.3	9.5	10.0	5.6	1.8	4.2	4.2	4.2
Other eastern hardwoods	41.1	--	21.3	2.7	7.0	5.3	1.6	3.2	--	--	--
Total hardwoods	4,519.1	--	1,014.2	996.4	825.1	549.4	388.4	606.3	139.3	139.3	139.3
All species	11,227.6	1,667.3	2,800.3	2,396.3	1,750.5	1,032.3	629.9	787.6	163.4	163.4	163.4

^{1/}

Includes white and swamp chestnut oaks.

^{2/}

Includes cherrybark, northern red, and Shumard oaks.

Table 17.--Net annual growth and removals of growing stock on commercial forest land, by species, 1971

Species	:	:
	: Net annual growth	: Annual timber removals
	:	:
<u>- - Million cubic feet - -</u>		
Softwood:		
Yellow pines	225.2	105.7
Other eastern softwoods	1.3	0.2
Total softwoods	<u>226.5</u>	<u>105.9</u>
Hardwood:		
Select white and red oaks	14.1	6.8
Other white and red oaks	23.6	6.5
Hickory	4.6	3.0
Hard maple	--	--
Sweetgum	17.8	10.8
Ash, walnut, and black cherry	2.9	1.2
Yellow-poplar	19.1	10.9
Blackgum	0.7	1.4
Other eastern hardwoods	7.5	5.8
Total hardwoods	<u>90.3</u>	<u>46.4</u>
All species	<u>316.8</u>	<u>152.3</u>

Table 16.--Net annual growth and removals of sawtimber on commercial forest land, by species, 1971

Species	: Net annual growth : Annual timber removals	
	: : - - Million board feet - -	
Softwood:		
Yellow pines	684.6	367.0
Other eastern softwoods	0.8	--
Total softwoods	685.4	367.0
Hardwood:		
Select white and red oaks	50.6	22.7
Other white and red oaks	64.5	16.4
Hickory	12.3	10.1
Hard maple	--	--
Sweetgum	34.1	37.5
Ash, walnut, and black cherry	7.7	3.8
Yellow-poplar	67.2	31.7
Blackgum	3.0	3.8
Other eastern hardwoods	24.4	18.7
Total hardwoods	263.8	144.7
All species	949.2	511.7

Table 19.--Mortality of growing stock and sawtimber on commercial forest land, by species, 1971

Species	: Growing stock : Sawtimber	
	: : Million cubic feet Million board feet	
Softwood:		
Yellow pines	18.3	40.8
Other eastern softwoods	0.1	0.3
Total softwoods	18.4	41.1
Hardwood:		
Select white and red oaks	1.0	2.9
Other white and red oaks	2.6	5.1
Hickory	0.2	0.4
Hard maple	--	--
Sweetgum	1.5	3.4
Ash, walnut, and black cherry	1.3	2.3
Yellow-poplar	0.2	0.6
Blackgum	0.1	0.3
Other eastern hardwoods	3.1	6.3
Total hardwoods	10.0	21.3
All species	28.4	62.4

Table 20.--Volume of all live trees and growing stock on commercial forest land, by ownership class and species group, 1972

Ownership class	All live trees					Growing stock				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
<u>Million cubic feet</u>										
National Forest	9.8	1.3	--	3.5	5.0	9.5	1.3	--	3.5	4.7
Other public	78.6	49.6	--	14.1	14.9	73.1	49.6	--	12.9	10.6
Forest industry	149.3	243.2	--	101.7	104.4	409.2	239.3	--	83.8	86.1
Farmer	1,484.1	700.2	2.3	337.7	443.9	1,364.1	690.2	1.8	285.2	386.9
Miscellaneous private	2,626.6	1,467.2	2.9	520.2	636.3	2,426.7	1,438.1	2.9	443.2	542.5
All ownerships	4,648.4	2,461.5	5.2	977.2	1,204.5	4,282.6	2,418.5	4.7	828.6	1,030.8

Table 21.--Volume of sawtimber on commercial forest land, by ownership class and species group, 1972

Ownership class	Small sawtimber ^{1/}					Large sawtimber ^{2/}				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
<u>Million board feet</u>										
National Forest	12.3	--	--	6.7	5.6	20.6	8.2	--	5.7	6.7
Other public	112.5	87.6	--	11.8	13.1	101.0	60.0	--	27.9	13.1
Forest industry	747.1	521.6	--	126.6	98.9	338.1	148.0	--	83.1	107.0
Farmer	2,034.2	1,346.7	1.5	289.0	397.0	1,409.2	495.6	--	359.1	554.5
Miscellaneous private	3,957.8	2,894.0	1.9	526.7	535.2	2,491.8	1,143.4	--	586.8	764.6
All ownerships	6,863.9	4,819.9	3.4	960.8	1,049.8	4,363.7	1,855.2	--	1,062.6	1,445.9

^{1/} Volume of sawtimber trees less than 15.0 inches at d.b.h.^{2/} Volume of sawtimber trees 15.0 inches and larger at d.b.h.

Table 22.--Net annual growth and removals of growing stock on commercial forest land, by ownership class and species group, 1971

Ownership class	Net annual growth						Annual timber removals					
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	Other	Annual timber removals
Million cubic feet												
National Forest	0.4	0.1	--	0.1	0.2	--	--	--	--	--	--	--
Other public	6.0	4.7	--	0.7	0.6	2.2	0.8	--	--	0.9	0.5	0.5
Forest industry	32.1	23.8	--	4.6	3.7	13.8	10.5	0.1	1.1	2.1		
Farmer	96.7	63.7	1.2	14.7	17.1	50.3	32.1	0.1	12.3	5.8		
Miscellaneous private	181.6	132.9	0.1	23.9	24.7	86.0	62.3	--	12.2	11.5		
All ownerships	316.8	225.2	1.3	44.0	46.3	152.3	105.7	0.2	26.5	19.9		

Table 23.--Net annual growth and removals of sawtimber on commercial forest land, by ownership class and species group, 1971

Ownership class	Net annual growth						Annual timber removals					
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	Other	Annual timber removals
Million board feet												
National Forest	1.3	0.3	--	0.5	0.5	--	--	--	--	--	1.4	--
Other public	15.0	11.6	--	1.4	2.0	2.0	0.6	--	--	1.4	--	--
Forest industry	90.1	63.7	--	14.5	11.9	47.2	38.2	--	--	2.8	6.2	
Farmer	291.4	203.2	0.4	36.3	51.5	157.6	100.1	--	--	38.2	19.3	
Miscellaneous private	551.4	405.8	0.4	72.2	73.0	304.9	228.1	--	--	40.9	35.9	
All ownerships	949.2	684.6	0.8	124.9	138.9	511.7	367.0	--	--	83.3	61.4	

Table 24.--Average net volume per acre of sawtimber, growing stock, and other live timber^{1/} on commercial forest land, by ownership class, major forest type, and species group, 1972

Forest type, species group, and class of material	Ownership class											
	All ownerships		National Forest		Other public		Forest industry		Farmer		Misc. private	
	Board feet	Cubic feet	Board feet	Cubic feet	Board feet	Cubic feet	Board feet	Cubic feet	Board feet	Cubic feet	Board feet	Cubic feet
Pine types:												
Growing stock:												
Softwood	2,321	894	--	--	2,378	982	2,319	868	2,260	929	2,346	880
Hardwood	325	153	--	--	277	155	279	126	358	169	319	151
Total	2,646	1,047	--	--	2,655	1,137	2,598	994	2,618	1,098	2,665	1,031
Other timber:												
Softwood	--	17	--	--	--	--	--	14	--	15	--	18
Hardwood	--	28	--	--	--	28	--	19	--	32	--	28
Total	--	45	--	--	--	28	--	33	--	47	--	46
Oak-pine types:												
Growing stock:												
Softwood	1,644	517	--	--	2,715	673	1,705	496	1,723	517	1,545	513
Hardwood	1,164	527	--	--	937	332	965	453	1,180	551	1,194	533
Total	2,808	1,044	--	--	3,652	1,005	2,670	949	2,903	1,068	2,739	1,046
Other timber:												
Softwood	--	9	--	--	--	--	--	11	--	6	--	10
Hardwood	--	78	--	--	--	128	--	102	--	68	--	78
Total	--	87	--	--	--	128	--	113	--	74	--	88
Upland hardwood types:												
Growing stock:												
Softwood	504	138	--	--	989	194	120	60	324	104	696	176
Hardwood	2,369	944	--	--	2,828	868	1,829	754	2,293	954	2,518	976
Total	2,873	1,082	--	--	3,817	1,062	1,949	814	2,617	1,058	3,214	1,152
Other timber:												
Softwood	--	2	--	--	--	--	--	--	--	2	--	3
Hardwood	--	158	--	--	--	153	--	195	--	133	--	168
Total	--	160	--	--	--	153	--	195	--	135	--	171
Bottomland hardwood types:												
Growing stock:												
Softwood	447	91	1,813	304	--	--	757	173	328	62	454	95
Hardwood	3,399	1,207	5,501	1,812	--	--	4,799	1,696	3,021	1,104	3,413	1,185
Total	3,846	1,298	7,314	2,116	--	--	5,556	1,869	3,349	1,166	3,867	1,280
Other timber:												
Softwood	--	--	--	--	--	--	--	--	--	--	--	--
Hardwood	--	252	--	63	--	--	--	302	--	254	--	245
Total	--	252	--	63	--	--	--	302	--	254	--	245
All types:												
Growing stock:												
Softwood	1,677	606	1,813	304	2,192	736	1,648	589	1,472	552	1,781	635
Hardwood	1,130	465	5,501	1,812	979	349	1,023	418	1,277	537	1,064	435
Total	2,807	1,071	7,314	2,116	3,171	1,085	2,671	1,007	2,749	1,089	2,845	1,070
Other timber:												
Softwood	--	11	--	--	--	--	--	10	--	8	--	13
Hardwood	--	81	--	63	--	82	--	89	--	88	--	75
Total	--	92	--	63	--	82	--	99	--	96	--	88
All timber	2,807	1,163	7,314	2,179	3,171	1,167	2,671	1,106	2,749	1,185	2,845	1,158

^{1/} Rough and rotten trees.

Table 25.--Land area, by class, major forest type,
and survey completion date, 1953, 1961, and 1972

Land use class	Survey completion date			Change 1961-1972					
	1953	1961 ^{2/}	1972						
	- - - - Thousand acres - - - -								
Forest land:									
Commercial forest land:									
Pine and oak-pine types	2,320.2	2,794.1	2,886.3	+ 92.2					
Hardwood types	1,201.7	1,290.5	1,112.9	-177.6					
Total	3,521.9	4,084.6	3,999.2	- 85.4					
Noncommercial forest land:									
Productive-reserved	2.5	5.6	7.5	+ 1.9					
Unproductive	5.3	--	--	--					
Total	7.8	5.6	7.5	+ 1.9					
Nonforest land:									
Cropland	1,857.1	1,051.2	657.7	-393.5					
Pasture and range	477.5	633.8	795.6	+161.8					
Other	390.5	419.0	713.9	+294.9					
Total	2,725.1	2,104.0	2,167.2	+ 63.2					
All land ^{1/}	6,254.8	6,194.2	6,173.9	- 20.3					

^{1/} Excludes all water areas.

^{2/} These figures differ slightly from reported figures because of revisions in the estimates of land area.

Table 26.--Volume^{1/} of sawtimber, growing stock, and all live timber on commercial forest land, by species group, diameter class, and survey completion date

Species group	Year	All classes	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0 and larger												
SAWTIMBER (in million board feet)																							
GROWING STOCK (in million cubic feet)																							
Softwood	1953	2,552.3	--	--	874.4	737.0	1445.1	276.2	126.1	53.7	39.8												
	1961	3,364.4	--	--	1,131.1	1,032.4	600.4	305.1	113.7	108.2	73.5												
	1972	6,708.5	--	--	1,667.3	1,786.1	1,399.9	925.4	482.9	241.5	205.4												
Hardwood	1953	2,712.2	--	--	--	558.5	584.7	427.2	336.6	276.9	528.3												
	1961	3,318.7	--	--	--	785.7	670.3	528.6	447.0	332.8	554.3												
	1972	4,519.1	--	--	--	1,014.2	996.4	825.1	549.4	388.4	745.6												
Softwood	1953	1,107.4	228.3	286.8	248.0	168.2	89.1	50.5	21.6	8.8	6.1												
	1961	1,374.8	270.4	323.6	320.9	235.6	120.2	55.8	19.5	17.6	11.2												
	1972	2,423.2	424.6	515.3	473.0	407.6	280.1	169.4	82.6	39.3	31.3												
Hardwood	1953	1,091.5	105.5	155.1	205.9	165.5	145.8	95.5	69.6	54.2	94.4												
	1961	1,337.0	143.1	178.9	240.2	232.9	167.1	118.2	92.5	65.1	99.0												
	1972	1,859.4	219.9	270.2	312.9	300.6	248.4	184.5	113.7	76.0	133.2												
ALL LIVE TIMBER (in million cubic feet)																							
Softwood	1953	1,130.0	235.8	294.9	253.1	168.7	90.1	50.8	21.6	8.9	6.1												
	1961	1,402.1	279.3	332.7	327.3	236.4	121.6	56.1	19.5	17.9	11.3												
	1972	2,466.7	438.2	529.5	482.4	408.9	283.5	170.1	82.6	39.9	31.6												
Hardwood	1953	1,278.2	142.5	192.5	239.0	186.0	160.0	105.3	77.6	60.8	114.5												
	1961	1,565.9	193.4	222.0	278.9	261.6	183.4	130.2	103.1	73.1	120.2												
	1972	2,181.7	296.0	335.3	363.2	337.6	272.6	203.3	126.7	85.3	161.7												

1/ To provide a basis for valid comparisons, adjustments have been made to allow for differences in volume tables and sawtimber specifications used in previous surveys.

Knight, Herbert A.
1972. Forest statistics for North Central Georgia, 1972.
Southeast. For. Exp. Stn., USDA For. Serv. Resour.
Bull. SE-24, 34 pp.

Since 1961, some 373,000 acres of commercial forest land in the 32-county area of North Central Georgia have been diverted to other uses. Over the same period, 288,000 acres of new forest land were added, for a net decrease of 85,000 acres. Net growth has exceeded removals of growing-stock timber; volume of softwood has increased by 76 percent and hardwood volume has increased by 39 percent. Only 12 percent of the commercial forests are less than 60 percent stocked with growing-stock trees. The net growth averaged 79 cubic feet per acre in 1971, a record high for an entire Forest Survey Unit in the Southeast.

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Southeastern Forest Experiment Station
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