

Forest Statistics
for the
Piedmont of
South Carolina
1977

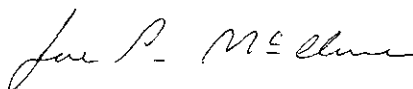
FOREWORD

This report highlights the principal findings of the fifth inventory of the timber resource in the Piedmont of South Carolina. The inventory was started in April 1977 and completed in September 1977. Four previous inventories, completed in 1936, 1947, 1958, and 1967, provide statistics for measuring changes and trends over the past 41 years. In this report, the primary emphasis is on the changes and trends since 1967. Previously reported figures have been adjusted to provide the best estimate of change.

Forest Resources Research, now Renewable Resources Evaluation, authorized by the McSweeney-McNary Forest Research Act of 1928, as amended, and by the Forest and Rangeland Renewable Resources Planning Act of 1974, is a continuing, nationwide undertaking by the regional experiment stations of the Forest Service, U.S. Department of Agriculture. In Florida, Georgia, North Carolina, South Carolina, and Virginia, Renewable Resources Evaluation is administered through the Southeastern Forest Experiment Station, with headquarters in Asheville, North Carolina. The objective of the statewide timber inventories is to periodically measure and evaluate the timber resources. These inventories provide information on the extent and condition of the forest lands, volume of timber, and rates of timber growth and removals. These data and evaluations help provide a basis for the formulation of forest policies and programs and the orderly development and use of the resources.

The 18-county area covered by this report is one of three survey units in South Carolina. Comparable reports for the other two units will be issued as the Statewide inventory progresses. When completed, a final State report will present an in-depth analysis on the timber resource for all of South Carolina.

The Southeastern Station gratefully acknowledges the cooperation and assistance provided by the South Carolina Division of Forestry. Appreciation is also expressed for the excellent cooperation of other public agencies, forest industry, and private landowners in providing information and access to the sample locations.



JOE P. McCLURE
Project Leader

March 1978

Southeastern Forest Experiment Station
Asheville, North Carolina

Forest Statistics
for the
Piedmont of South Carolina

by

Nolan L. Snyder, Associate Mensurationist

CONTENTS

	<u>Page</u>
HIGHLIGHTS	1
HOW THE FOREST SURVEY IS MADE	3
RELIABILITY OF THE DATA	4
DEFINITIONS OF TERMS	6
COUNTY TABLES	
1. Area, by land class	13
2. Area of commercial forest land, by ownership class	14
3. Area of commercial forest land, by forest-type group	15
4. Area of commercial forest land, by stand-size class	16
5. Area of commercial forest land, by site class	16
6. Area of commercial forest land, by stocking classes of growing-stock trees	17
7. Volume of sawtimber and growing stock on commercial forest land, by species group	18
8. Net annual growth of sawtimber and growing stock on commercial forest land, by species group	19
9. Annual removals of sawtimber and growing stock on commercial forest land, by species group	20
UNIT TABLES	
10. Area of commercial forest land, by forest type and ownership class	21
11. Area of commercial forest land, by ownership and stocking classes of growing-stock trees	21
12. Volume of timber on commercial forest land, by class and species group	22
13. Number of growing-stock trees on commercial forest land, by species and diameter class	23
14. Volume of all live trees on commercial forest land, by species and diameter class	24
15. Volume of growing stock on commercial forest land, by species and diameter class	25
16. Volume of sawtimber on commercial forest land, by species and diameter class	26
17. Net annual growth and removals of growing stock on commercial forest land, by species	27
18. Net annual growth and removals of sawtimber on commercial forest land, by species	27
19. Mortality of growing stock and sawtimber on commercial forest land, by species	28
20. Volume of all live trees and growing stock on commercial forest land, by ownership class and species group	29
21. Volume of sawtimber on commercial forest land, by ownership class and species group	29
22. Net annual growth and removals of growing stock on commercial forest land, by ownership class and species group	30
23. Net annual growth and removals of sawtimber on commercial forest land, by ownership class and species group	30
24. Average net volume per acre of sawtimber, growing stock, and other live timber on commercial forest land, by ownership class, major forest type, and species group	31
25. Land area, by class, major forest type, and survey completion date	32
26. Volume of sawtimber, growing stock, and all live timber on commercial forest land, by species group, diameter class, and survey completion date	33

HIGHLIGHTS

Since 1967 in the South Carolina Piedmont—

—area of commercial forest land has increased by 49,000 acres, or by only 1 percent. Some 91,000 acres of commercial forest were diverted to other land uses, while 140,000 acres of new forest were added. About 55 percent of the diversion was to urban development and water use, and the remaining 45 percent to agriculture and noncommercial forest. Ninety-two percent of the land added to forest had been used for agriculture. Commercial forests now occupy 4.5 million acres, or 66 percent of the total land in this 18-county area.

—area of commercial forest land owned by forest industry has increased by 76,000 acres, or by 15 percent, and now totals 596,000 acres. Public holdings have increased by 16,000 acres, or 4 percent, and now total 429,000 acres. Together, farmers and other private nonindustrial landowners possess over 3.5 million acres, or 77 percent of the commercial forest acreage. While size of holding was not determined, one-third of this acreage is broken into distinguishable stands or conditions less than 10 acres in size.

—about 48 percent of the land now classified as commercial forest has been treated or significantly disturbed. Almost 707,000 acres were harvested and nearly 751,000 acres have undergone intermediate cutting. More than 31 percent of the harvesting and 62 percent of the artificial reforestation occurred on lands now owned or leased by forest industries. Less than 7 percent of the intermediate cutting occurred on these industry lands. Of the acres harvested, 143,000 were subsequently artificially regenerated. Altogether, nearly 213,000 acres were artificially reforested. An additional 377,000 acres were disturbed by fire, insects, disease, weather, and other destructive agents.

—area occupied by sawtimber stands has increased by 27 percent. Pole-timber stands have increased in area by 6 percent. There was a decrease in sapling-seedling stands by 382,500 acres, or by 26 percent. Stands 40 or more years old comprise 27 percent of the total acreage in softwood types, and 51 percent of the total acreage in hardwood types.

—area of commercial forest land in pine type has decreased by 5 percent. Over 412,000 acres of pine were harvested, and only 53 percent, or 220,000 acres, remained in pine types. Areas that experienced intermediate cuttings accounted for 17 percent of the decrease in pine type, while almost 118,000 acres reverted to hardwood types due to natural succession.

—average basal area of all live trees 5.0 inches d.b.h. and larger has increased from 51 to 70 square feet per acre of commercial forest land. Despite the increase in average basal area—1 out of every 8 acres—some 547,000 acres of commercial forest land are still either nonstocked or poorly stocked. Consistent with the declines in sapling-seedling stands and pine forest type, the number of softwood saplings decreased by 15 percent. The number of hardwood saplings continued to increase.

—volume of softwood growing stock has increased from 2.3 to nearly 3.4 billion cubic feet, or by 45 percent. Loblolly pine, the predominant softwood species, has almost doubled in volume, and accounted for nearly 80 percent of the increase. An additional 19 percent of the increase was in shortleaf pine and Virginia pine species. The softwood volume increase occurred across all diameter classes. The current inventory of softwood growing stock includes 10.1 billion board feet of sawtimber, 59 percent more than in 1967.

—volume of hardwood growing stock has increased from 1.9 to 2.6 billion cubic feet, or by 37 percent. Yellow-poplar, sweetgum, and the oaks accounted for more than three-fourths of this increase, with red oak being the most abundant hardwood species in the area. Again, substantial gains were recorded across all diameter classes. The current inventory of hardwood growing stock includes 6.8 billion board feet of sawtimber, up by 44 percent.

In 1976—

—net annual growth of growing stock averaged almost 83 cubic feet per acre of commercial forest land—a record high for an entire Survey Unit in the Southeast. This rapid growth rate is largely attributed to the development of young, well-stocked pine stands established on extensive areas of cropland retired between 1940 and the early sixties. Based on the age distribution of all stands and a 20 percent reduction in the number of 2- and 4-inch pine trees, it will be difficult to sustain this high rate of growth without an increase in the rate of regeneration. Altogether, net growth totaled 374 million cubic feet and included 1,242 million board feet of sawtimber. Softwoods accounted for two-thirds of this growth.

—removals of growing stock totaled 171 million cubic feet, which was less than one-half of the net growth. Net growth exceeded removals across all ownership classes. Seventy-five percent of the growing-stock removals were softwood, while nearly 43 percent of the total removals came from miscellaneous privately owned forests. Removal of all species included 573 million board feet of sawtimber.

—mortality of growing stock totaled 43 million cubic feet and reduced gross growth by 10 percent. Insects, disease, and suppression were the leading identifiable causes of death. Softwoods accounted for nearly 71 percent of the mortality. Total mortality included 103 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 23,831 sample clusters systematically spaced on the latest aerial photographs available. A subsample of 1,614 of the 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 provides 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 1,019 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 a portion of the fixed-radius plots around the point centers.

3. Equations prepared from detailed measurements collected on standing trees in the Piedmont Region of South Carolina, 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.

4. Felled trees were measured at 31 active cutting operations. These data will be pooled with similar measurements taken in the State to supplement the standing tree-volume study and to generate utilization factors for product and species groups that will be analyzed at the State level.

5. Estimates of growth, removals, and mortality were determined from the remeasurement of 1,080 permanent sample plots which were established in the fourth 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 - - - - -	0.49
Per billion cubic feet of growing stock - - - - -	5.53
Per billion cubic feet of net annual growth - - - - -	1.46
Per billion cubic feet of annual removals - - - - -	2.59

SAMPLING ERRORS FOR COUNTY AND UNIT TOTALS,¹ IN TERMS OF ONE STANDARD ERROR

COUNTY	COMMERCIAL FOREST AREA	CUBIC-FOOT VOLUME OF GROWING STOCK		
		INVENTORY	GROWTH	REMOVALS
- - - - - <i>SAMPLING ERROR²</i> - - - - -				
ABBEVILLE	2.86	11.29	8.99	28.46
ANDERSON	2.51	7.49	10.01	28.46
CHEROKEE	3.33	12.27	13.45	35.36
CHESTER	1.87	9.55	8.95	31.78
EDGEFIELD	2.44	8.31	9.36	22.99
FAIRFIELD	0.79	7.71	6.23	20.73
GREENVILLE	1.95	6.91	10.87	26.95
GREENWOOD	2.04	12.78	10.61	24.96
LANCASTER	1.44	11.24	13.32	24.50
LAURENS	1.64	8.97	9.90	23.40
MCCORMICK	1.58	9.95	8.77	22.96
NEWBERRY	1.44	6.84	8.08	18.48
OCONEE	1.92	6.95	10.45	29.71
PICKENS	1.75	9.73	9.85	23.87
SALUDA	2.32	12.00	12.59	23.70
SPARTANBURG	2.11	9.88	9.53	33.09
UNION	1.22	8.78	9.14	23.95
YORK	3.25	9.55	9.74	30.96
UNIT TOTAL	0.49	2.25	2.37	6.25

¹ SAMPLING ERROR OF BREAKDOWNS OF COUNTY AND UNIT TOTALS MAY BE COMPUTED WITH THE FOLLOWING FORMULA:

$$E = \frac{(SE) \sqrt{(\text{SPECIFIED VOLUME OR AREA})}}{\sqrt{(\text{VOLUME OR AREA TOTAL IN QUESTION})}}$$

WHERE: E - SAMPLING ERROR OF THE VOLUME OR AREA TOTAL IN QUESTION.
 SE - SPECIFIED SAMPLING ERROR IN TABLE.

² BY RANDOM-SAMPLING FORMULA (IN PERCENT).

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, sweetgum, 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, cucumbertree, 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.

STOCKING STANDARD

D.B.H. CLASS	MINIMUM NUMBER OF TREES PER ACRE FOR FULL STOCKING	MINIMUM BASAL AREA PER ACRE FOR FULL STOCKING	PERCENT STOCKING ASSIGNED EACH TALLY TREE ¹
SEEDLINGS	600	--	5.0
2	560	--	5.4
4	460	--	6.5
6	340	67	5.8
8	240	84	4.8
10	155	85	4.3
12	115	90	4.0
14	90	96	3.8
16	72	101	3.7
18	60	106	3.5
20	51	111	3.5

¹ TREES LESS THAN 5.0 INCHES D.B.H. WERE TALLIED ON A 10-POINT CLUSTER OF CIRCULAR, 1/300-ACRE PLOTS AT EACH SAMPLE LOCATION. TREES 5.0 INCHES D.B.H. AND LARGER WERE TALLIED ON A 10-POINT CLUSTER OF VARIABLE PLOTS USING A BASAL AREA FACTOR OF 37.5 AT EACH SAMPLE LOCATION.

OVERSTOCKED--OVER 130 PERCENT
 FULLY STOCKED--100-130 PERCENT
 MEDIUM STOCKED--60-99 PERCENT
 POORLY STOCKED--16.7-59 PERCENT
 NONSTOCKED--LESS THAN 16.7 PERCENT

*CUBIC FEET OF WOOD PER AVERAGE CORD
 (EXCLUDING BARK)*

D.B.H. CLASS	ALL SPECIES	PINE	OTHER SOFTWOOD	HARDWOOD
6	60.6	61.0	68.2	60.0
8	68.4	68.1	76.0	68.4
10	73.3	73.1	81.4	73.4
12	76.6	76.7	85.2	76.4
14	79.0	79.4	88.2	78.4
16	80.7	81.6	90.4	79.8
18	81.8	83.3	92.3	80.8
20	82.6	84.8	93.8	81.5
22	83.5	86.0	95.1	82.1
24+	84.3	88.0	97.1	83.2
AVERAGE	73.0	72.6	80.2	73.3

COUNTY TABLES

THE COUNTY TABLES ARE INTENDED FOR USE IN COMPILING FOREST RESOURCE ESTIMATES FOR GROUPS OF COUNTIES. BECAUSE THE SAMPLING PROCEDURE USED BY THE FOREST SURVEY WAS INTENDED PRIMARILY TO FURNISH INVENTORY DATA FOR THE SURVEY UNIT AS A WHOLE, INDIVIDUAL COUNTY ESTIMATES HAVE LIMITED AND VARIABLE ACCURACY. AS COUNTY TOTALS ARE BROKEN DOWN BY VARIOUS SUBDIVISIONS, THE POSSIBILITY OF ERROR INCREASES AND IS GREATEST FOR THE SMALLEST ITEMS. THE ORDER OF THIS INCREASE CAN BE COMPUTED WITH THE FORMULA ON PAGE 5.

TABLE 1. --AREA, BY LAND CLASS AND COUNTY, 1977

COUNTY	ALL LAND ¹	FOREST LAND			NONFOREST LAND ²	
		TOTAL	COMMERCIAL FOREST	UNPRODUCTIVE FOREST		PRODUCTIVE-RESERVED
----- ACRES -----						
ABBEVILLE	325,249	220,533	219,883	--	650	104,716
ANDERSON	477,332	208,201	208,201	--	--	269,131
CHEROKEE	252,781	155,752	154,802	--	950	97,029
CHESTER	374,532	290,814	290,619	--	195	83,718
EDGEFIELD	308,297	234,637	234,637	--	--	73,660
FAIRFIELD	442,192	386,015	386,015	--	--	56,177
GREENVILLE	508,208	299,821	278,448	--	21,373	208,387
GREENWOOD	289,866	206,286	205,672	--	614	83,580
LANCASTER	322,050	235,933	235,604	--	329	86,117
LAURENS	456,691	305,701	305,701	--	--	150,990
MCCORMICK	244,090	207,036	206,778	--	258	37,054
NEWBERRY	407,824	315,829	315,829	--	--	91,995
OCONEE	399,670	284,580	280,294	--	4,286	115,090
PICKENS	320,775	214,980	209,464	--	5,516	105,795
SALUDA	286,161	187,758	187,758	--	--	98,403
SPARTANBURG	531,182	271,268	271,227	--	41	259,914
UNION	329,600	272,386	272,352	--	34	57,214
YORK	440,887	269,252	264,752	--	4,500	171,635
TOTAL	6,717,387	4,566,782	4,528,036	--	38,746	2,150,605

¹ FROM U. S. BUREAU OF THE CENSUS, LAND AND WATER AREA OF THE UNITED STATES, 1970.

² INCLUDES 73,608 ACRES OF WATER ACCORDING TO SURVEY STANDARDS OF AREA CLASSIFICATION BUT DEFINED BY THE BUREAU OF THE CENSUS AS LAND.

TABLE 2. --AREA OF COMMERCIAL FOREST LAND, BY OWNERSHIP CLASS AND COUNTY, 1977

COUNTY	ALL OWNERSHIPS	OWNERSHIP CLASS							MISCELLANEOUS PRIVATE	
		NATIONAL FOREST	MISCELLANEOUS FEDERAL	STATE	COUNTY AND MUNICIPAL	FOREST INDUSTRY ¹	FARMER	CORPORATE		INDIVIDUAL
								INDIVIDUAL		
-- ACRES --										
ABBEVILLE	219,883	18,437	1,056	--	272	56,392	88,663	22,556	52,507	
ANDERSON	208,201	--	6,998	6,063	343	7,260	101,319	35,558	50,660	
CHEROKEE	154,802	--	--	--	88	11,668	91,767	10,652	40,627	
CHESTER	290,619	11,082	--	340	617	47,818	105,650	43,746	81,366	
EDGEFIELD	234,637	29,462	--	--	235	50,711	62,695	5,331	86,203	
FAIRFIELD	386,015	12,748	--	3,000	60	83,194	101,377	14,087	171,549	
GREENVILLE	278,448	--	--	41	2,539	6,895	136,655	37,714	94,604	
GREENWOOD	205,672	7,896	--	710	1,379	30,949	71,293	17,961	75,484	
LANCASTER	235,604	--	--	194	318	28,905	64,399	45,191	96,597	
LAURENS	305,701	19,663	--	944	1,123	56,331	144,252	17,813	65,575	
MCCORMICK	206,778	50,782	26,400	922	597	41,883	35,314	3,799	47,081	
NEWBERRY	315,829	55,231	--	--	599	54,836	102,520	9,445	93,198	
OCONEE	280,294	74,125	5,378	2,993	2,127	919	63,407	58,880	72,465	
PICKENS	209,464	--	818	9,805	65	1,638	43,710	61,635	91,793	
SALUDA	187,758	2,531	--	--	196	29,160	82,442	23,049	50,380	
SPARTANBURG	271,227	--	--	6,131	2,065	19,543	119,041	14,555	109,892	
UNION	272,352	56,749	--	90	83	48,227	59,631	9,995	97,577	
YORK	264,752	--	--	4,682	790	20,048	118,911	36,274	84,047	
TOTAL	4,528,036	338,706	40,650	35,915	13,496	596,377	1,573,046	468,241	1,461,605	

¹ NOT INCLUDING 31,759 ACRES OF FARMER-OWNED AND MISCELLANEOUS PRIVATE LANDS LEASED TO FOREST INDUSTRY.

TABLE 3. --AREA OF COMMERCIAL FOREST LAND, BY FOREST-TYPE GROUP AND COUNTY, 1977

COUNTY	ALL TYPE GROUPS	FOREST-TYPE GROUP								
		WHITE PINE-HEMLOCK	SPRUCE-FIR	LONGLEAF-SLASH	LOBLOLLY-SHORTLEAF	OAK-PINE	OAK-HICKORY	OAK-GUM-CYPRESS	ELM-ASH-COTTONWOOD	MAPLE-BEECH-BIRCH
		-- ACRES --								
ABBEVILLE	219,883	--	--	--	83,725	59,758	66,095	--	10,385	--
ANDERSON	208,201	--	--	--	68,758	42,948	81,297	--	15,198	--
CHEROKEE	154,802	--	--	--	68,310	23,762	62,730	--	--	--
CHESTER	290,619	--	--	--	191,915	34,720	55,235	--	8,749	--
EDGEFIELD	234,637	--	--	--	120,854	27,429	83,899	--	2,455	--
FAIRFIELD	385,015	--	--	--	280,058	46,896	50,951	--	8,110	--
GREENVILLE	278,448	--	--	--	74,509	26,278	177,661	--	--	--
GREENWOOD	205,672	--	--	--	118,256	41,936	32,899	--	12,581	--
LANCASTER	235,604	--	--	--	88,245	41,398	105,961	--	--	--
LAURENS	305,701	--	--	--	155,697	40,093	100,418	--	9,493	--
MCCORMICK	206,778	--	--	--	133,851	24,393	42,892	--	5,642	--
NEWBERRY	315,829	--	--	--	213,696	32,619	48,679	--	20,835	--
OCONEE	280,294	4,632	--	--	100,365	65,593	109,704	--	--	--
PICKENS	209,464	8,742	--	--	46,321	34,969	119,432	--	--	--
SALUDA	187,758	--	--	4,580	113,490	22,901	46,787	--	--	--
SPARTANBURG	271,227	--	--	--	127,896	54,271	79,903	--	9,157	--
UNION	272,352	--	--	--	122,984	27,209	104,965	--	17,194	--
YORK	264,752	--	--	--	128,969	26,427	100,548	--	8,808	--
TOTAL	4,528,036	13,374	--	4,580	2,237,899	673,600	1,470,056	--	128,527	--

TABLE 4. --AREA OF COMMERCIAL FOREST LAND, BY STAND-SIZE CLASS AND COUNTY, 1977

COUNTY	ALL STANDS	STAND-SIZE CLASS			NONSTOCKED AREAS
		SAWTIMBER	POLETIMBER	SAPLING-SEEDLING	
-- ACRES --					
ABBEVILLE	219,883	34,539	103,649	81,695	--
ANDERSON	208,201	96,590	96,639	14,972	--
CHEROKEE	154,802	28,132	70,007	52,293	4,370
CHESTER	290,619	70,004	112,248	108,367	--
EDGEFIELD	234,637	100,648	55,849	78,140	--
FAIRFIELD	386,015	129,871	160,962	91,127	4,055
GREENVILLE	278,448	127,837	110,372	40,239	--
GREENWOOD	205,672	79,901	44,499	73,535	7,737
LANCASTER	235,604	56,839	86,923	85,345	6,497
LAURENS	305,701	92,864	134,091	78,746	--
MCCORMICK	206,778	108,141	52,204	46,433	--
NEWBERRY	315,829	159,789	117,858	34,755	3,427
OCONEE	280,294	124,346	104,481	51,467	--
PICKENS	209,464	99,962	61,354	48,148	--
SALUDA	187,758	76,373	73,905	37,480	--
SPARTANBURG	271,227	88,388	123,835	54,426	4,578
UNION	272,352	107,979	102,403	61,970	--
YORK	264,752	61,937	144,374	58,441	--
TOTAL	4,528,036	1,644,140	1,755,653	1,097,579	30,664

TABLE 5. --AREA OF COMMERCIAL FOREST LAND, BY SITE CLASS AND COUNTY, 1977

COUNTY	ALL CLASSES	SITE CLASS				
		1	2	3	4	5
-- ACRES --						
ABBEVILLE	219,883	--	--	27,031	161,648	31,204
ANDERSON	208,201	--	--	40,528	162,607	5,066
CHEROKEE	154,802	--	--	17,480	131,655	5,667
CHESTER	290,619	--	--	23,519	250,196	16,904
EDGEFIELD	234,637	2,455	--	44,278	168,312	19,592
FAIRFIELD	386,015	--	--	44,013	292,106	49,896
GREENVILLE	278,448	--	--	95,574	167,109	15,765
GREENWOOD	205,672	--	4,194	52,413	140,679	8,386
LANCASTER	235,604	--	--	15,697	182,914	36,993
LAURENS	305,701	--	6,555	51,411	232,748	14,987
MCCORMICK	206,778	--	--	46,762	138,333	21,683
NEWBERRY	315,829	--	--	79,951	226,616	9,262
OCONEE	280,294	4,529	9,266	23,564	146,714	96,221
PICKENS	209,464	--	--	24,747	145,378	39,339
SALUDA	187,758	--	--	47,492	135,686	4,580
SPARTANBURG	271,227	--	9,156	44,447	179,442	38,182
UNION	272,352	--	5,421	57,935	187,223	21,773
YORK	264,752	4,405	--	35,234	181,069	44,044
TOTAL	4,528,036	11,389	34,592	772,076	3,230,435	479,544

TABLE 6. --AREA OF COMMERCIAL FOREST LAND, BY STOCKING CLASSES OF GROWING-STOCK TREES, BY COUNTY, 1977

COUNTY	ALL CLASSES	STOCKING PERCENTAGE ¹				
		OVER 130	100-130	60-99	16.7-59	LESS THAN 16.7
-- -- -- -- ACRES -- -- -- --						
ABBEVILLE	219,883	4,039	82,804	118,562	14,478	--
ANDERSON	208,201	5,162	121,866	60,566	20,607	--
CHEROKEE	154,802	--	52,295	63,178	34,959	4,370
CHESTER	290,619	5,977	142,223	117,902	24,517	--
EDGEFIELD	234,637	--	73,362	129,927	31,348	--
FAIRFIELD	386,015	--	164,072	180,247	37,641	4,055
GREENVILLE	278,448	5,256	57,816	180,354	35,022	--
GREENWOOD	205,672	12,580	86,984	81,598	16,773	7,737
LANCASTER	235,604	9,200	87,258	117,940	14,709	6,497
LAURENS	305,701	4,697	142,631	140,889	17,484	--
MCCORMICK	206,778	--	91,668	95,772	19,338	--
NEWBERRY	315,829	26,094	151,669	98,592	36,047	3,427
OCONEE	280,294	--	50,028	149,675	80,591	--
PICKENS	209,464	2,079	50,598	134,401	22,386	--
SALUDA	187,758	18,796	90,393	69,129	9,440	--
SPARTANBURG	271,227	4,578	118,739	116,530	26,802	4,578
UNION	272,352	7,671	116,801	108,677	39,203	--
YORK	264,752	4,405	88,008	137,104	35,235	--
TOTAL	4,528,036	110,534	1,769,215	2,101,043	516,580	30,664

¹ SEE STOCKING STANDARDS ON PAGE 12.

TABLE 7. -- VOLUME OF SAWTIMBER AND GROWING STOCK ON COMMERCIAL FOREST LAND, BY SPECIES GROUP AND COUNTY, 1977

COUNTY	SAWTIMBER				GROWING STOCK					
	ALL SPECIES	PINE	OTHER SOFTWOOD	SOFT HARDWOOD	HARD HARDWOOD	ALL SPECIES	PINE	OTHER SOFTWOOD	SOFT HARDWOOD	HARD HARDWOOD
ABBEVILLE	689,320	302,384	5,793	215,406	165,737	257,180	97,983	5,283	75,864	78,050
ANDERSON	779,065	314,192	8,373	193,176	263,324	307,461	127,964	2,173	59,229	118,095
CHEROKEE	354,100	196,010	1,706	44,428	111,956	158,699	77,652	659	19,937	60,451
CHESTER	730,848	460,387	4,120	106,134	160,207	293,323	178,026	4,544	48,852	61,901
EDGEFIELD	1,433,246	1,154,416	2,854	170,579	105,397	399,378	292,359	4,906	60,151	45,662
FAIRFIELD	1,107,055	884,473	5,668	120,162	96,752	415,502	300,493	4,420	58,489	52,100
GREENVILLE	989,120	291,772	8,690	235,140	453,518	386,597	132,725	1,954	89,732	162,186
GREENWOOD	1,217,978	888,031	2,046	177,390	150,511	345,712	239,568	1,031	57,530	47,583
LANCASTER	1,516,592	224,025	7,352	127,076	158,239	237,948	113,089	4,252	51,712	68,395
LAURENS	1,037,430	549,711	5,080	229,196	253,443	400,295	200,243	5,307	94,623	100,122
MCCORMICK	1,109,470	864,504	4,131	132,941	107,894	304,906	217,507	2,907	40,842	43,650
NEWBERRY	1,721,735	1,324,929	14,674	210,342	171,590	542,055	389,959	8,182	72,637	71,287
OCONEE	908,038	409,753	122,351	78,630	297,304	341,234	164,855	23,857	29,707	122,855
PICKENS	786,296	171,198	24,371	204,954	385,773	271,733	63,125	6,057	61,543	141,008
SALUDA	899,504	706,268	1,294	46,650	145,292	300,222	220,663	4,437	27,848	51,274
SPARTANBURG	931,578	445,925	6,553	186,205	292,495	364,137	178,216	2,291	62,282	121,348
UNION	1,104,002	478,154	4,657	287,101	334,090	366,812	167,024	2,211	81,875	115,702
YORK	664,710	239,866	6,340	227,277	191,227	310,705	126,666	4,615	79,878	99,546
TOTAL	16,980,187	9,905,998	236,653	2,992,787	3,844,749	6,003,659	3,288,117	81,096	1,072,731	1,561,715

* FACTORS FOR CONVERTING TO CORDS ARE SHOWN ON PAGE 12.

TABLE 8. --NET ANNUAL GROWTH OF SAWTIMBER AND GROWING STOCK ON COMMERCIAL FOREST LAND, BY SPECIES GROUP AND COUNTY, 1976

COUNTY	SAWTIMBER					GROWING STOCK				
	ALL SPECIES	PINE	OTHER SOFTWOOD	SOFT HARDWOOD	HARD HARDWOOD	ALL SPECIES	PINE	OTHER SOFTWOOD	SOFT HARDWOOD	HARD HARDWOOD
	-- THOUSAND BOARD FEET --					-- THOUSAND CUBIC FEET --				
ABBEVILLE	46,092	23,611	229	12,404	9,848	15,039	6,773	575	4,154	3,537
ANDERSON	55,658	27,830	155	9,820	17,853	18,172	9,281	229	2,693	5,969
CHEROKEE	29,132	14,998	87	3,255	10,792	8,638	4,801	30	984	2,823
CHESTER	56,971	43,120	248	5,740	7,863	20,794	14,868	684	2,348	2,894
EDGEFIELD	87,734	71,455	118	9,273	6,888	22,742	17,817	37	2,900	1,988
FAIRFIELD	93,405	78,404	412	7,187	7,402	31,108	25,412	263	2,878	2,555
GREENVILLE	70,114	33,319	234	15,993	20,568	22,382	10,812	69	4,381	7,120
GREENWOOD	84,159	68,724	115	7,614	7,706	21,278	16,468	129	2,726	1,955
LANCASTER	46,863	30,301	554	7,339	8,669	16,481	10,245	258	2,861	3,117
LAURENS	84,501	54,204	974	13,854	15,469	27,526	17,666	285	4,378	5,197
MCCORMICK	64,581	52,875	657	5,275	5,774	17,927	13,701	130	1,894	2,202
NEWBERRY	127,765	103,699	954	10,215	12,897	35,824	28,990	517	2,764	3,553
OCONEE	57,258	27,307	5,246	6,093	18,612	20,752	11,353	1,092	1,845	6,462
PICKENS	50,487	14,491	2,084	14,268	19,644	13,337	3,702	410	3,419	5,806
SALUDA	76,106	65,897	44	2,768	7,397	20,635	17,133	17	1,420	2,065
SPARTANBURG	74,244	35,097	296	13,723	25,128	20,916	11,136	906	2,808	6,066
UNION	79,347	47,584	196	12,471	19,096	20,696	12,532	97	3,291	4,776
YORK	57,237	26,914	848	11,743	17,732	19,565	10,404	380	3,760	5,021
TOTAL	1,241,654	819,830	13,451	169,035	239,338	373,812	243,094	6,108	51,504	73,106

TABLE 9. --ANNUAL REMOVALS OF SAWTIMBER AND GROWING STOCK ON COMMERCIAL FOREST LAND, BY SPECIES GROUP AND COUNTY, 1976

COUNTY	SAWTIMBER					GROWING STOCK				
	ALL SPECIES	PINE	OTHER SOFTWOOD	SOFT HARDWOOD	HARD HARDWOOD	ALL SPECIES	PINE	OTHER SOFTWOOD	SOFT HARDWOOD	HARD HARDWOOD
	THOUSAND BOARD FEET					THOUSAND CUBIC FEET				
ABBEVILLE	22,864	20,029	--	--	2,835	6,790	5,418	--	84	1,288
ANDERSON	11,328	7,464	--	971	2,893	4,541	3,168	124	387	862
CHEROKEE	14,021	4,894	--	2,532	6,595	4,079	2,069	--	475	1,535
CHESTER	10,047	3,179	--	956	5,912	4,599	2,031	54	890	1,624
EDGEFIELD	43,406	41,009	--	1,053	1,344	11,451	10,841	--	309	301
FAIRFIELD	54,723	43,203	535	9,501	1,484	17,955	14,832	261	2,074	788
GREENVILLE	26,545	5,654	--	4,186	16,705	8,323	2,811	--	1,069	4,443
GREENWOOD	79,190	67,361	--	1,130	10,699	18,873	15,551	--	701	2,621
LANCASTER	28,185	24,136	--	--	4,049	8,861	7,498	--	125	1,238
LAURENS	28,874	14,006	544	9,139	5,185	9,325	4,748	202	2,422	1,954
MCCORMICK	30,696	27,494	--	2,498	704	10,138	9,479	--	438	221
NEWBERRY	70,086	63,138	501	3,815	2,632	16,566	14,069	189	1,376	932
OCONEE	27,434	12,038	2,229	2,454	10,713	8,525	3,505	409	880	3,731
PICKENS	38,994	23,778	1,657	--	13,559	10,741	5,969	349	132	4,291
SALUDA	43,017	39,455	--	971	2,591	12,041	11,111	--	388	542
SPARTANBURG	5,752	3,016	--	925	1,811	4,096	3,364	--	181	551
UNION	28,935	21,537	--	3,244	4,154	9,890	8,015	71	711	1,093
YORK	8,581	5,777	--	2,804	--	4,667	2,829	--	1,056	782
TOTAL	572,678	427,168	5,466	46,179	93,865	171,462	127,308	1,659	13,698	28,797

TABLE 10. --AREA OF COMMERCIAL FOREST LAND, BY FOREST TYPE AND OWNERSHIP CLASS, 1977

FOREST TYPE	ALL OWNERSHIPS	OWNERSHIP CLASS				
		NATIONAL FOREST	OTHER PUBLIC	FOREST INDUSTRY	FARMER	MISC. PRIVATE
----- ACRES -----						
SOFTWOOD TYPES:						
WHITE PINE-HEMLOCK	13,374	4,632	--	--	--	8,742
SPRUCE-FIR	--	--	--	--	--	--
LONGLEAF PINE	--	--	--	--	--	--
SLASH PINE	4,580	--	--	--	4,580	--
LOBLOLLY PINE	1,435,852	158,717	30,935	304,080	354,036	588,084
SHORTLEAF PINE	598,929	31,539	20,660	53,926	225,636	267,168
VIRGINIA PINE	178,021	4,632	--	3,613	90,148	79,628
SAND PINE	--	--	--	--	--	--
EASTERN REDCEDAR	20,464	--	--	2,864	17,600	--
POND PINE	--	--	--	--	--	--
SPRUCE PINE	--	--	--	--	--	--
PITCH PINE	4,633	4,633	--	--	--	--
TABLE-MOUNTAIN PINE	--	--	--	--	--	--
TOTAL	2,255,853	204,153	51,595	364,483	692,000	943,622
HARDWOOD TYPES:						
OAK-PINE	673,600	44,906	5,995	57,538	278,545	286,616
OAK-HICKORY	1,465,651	75,441	32,471	147,122	574,784	635,833
CHESTNUT OAK	4,405	--	--	--	--	4,405
SOUTHERN SCRUB OAK	--	--	--	--	--	--
OAK-GUM-CYPRESS	--	--	--	--	--	--
ELM-ASH-COTTONWOOD	128,527	14,206	--	27,234	27,717	59,370
MAPLE-BEECH-BIRCH	--	--	--	--	--	--
TOTAL	2,272,183	134,553	38,466	231,894	881,046	986,224
ALL TYPES	4,528,036	338,706	90,061	596,377	1,573,046	1,929,846

TABLE 11. --AREA OF COMMERCIAL FOREST LAND, BY OWNERSHIP AND STOCKING CLASSES OF GROWING-STOCK TREES, 1977

OWNERSHIP CLASSES	ALL CLASSES	STOCKING PERCENTAGE ¹				
		OVER 130	100-130	60-99	16.7-59	LESS THAN 16.7
----- ACRES -----						
NATIONAL FOREST	338,706	--	149,313	152,150	37,243	--
OTHER PUBLIC	90,061	878	41,477	30,768	16,938	--
FOREST INDUSTRY	596,377	22,344	308,199	223,233	31,437	11,164
FARMER	1,573,046	22,051	570,004	767,017	200,426	13,548
MISC. PRIVATE	1,929,846	65,261	700,222	927,875	230,536	5,952
ALL OWNERSHIPS	4,528,036	110,534	1,769,215	2,101,043	516,580	30,664

¹ SEE STOCKING STANDARDS ON PAGE 12.

TABLE 12. --VOLUME OF TIMBER ON COMMERCIAL FOREST LAND, BY CLASS AND SPECIES GROUP, 1977

CLASS OF TIMBER	ALL SPECIES	PINE	OTHER SOFTWOOD	SOFT HARDWOOD	HARD HARDWOOD
----- THOUSAND CUBIC FEET -----					
SAWTIMBER TREES:					
SAW-LOG PORTION	3,279,325	1,904,050	40,706	555,009	779,560
UPPER-STEM PORTION	499,535	262,105	5,604	96,410	135,416
TOTAL	3,778,860	2,166,155	46,310	651,419	914,976
POLETIMBER TREES	2,224,799	1,121,962	34,786	421,312	646,739
ALL GROWING-STOCK TREES	6,003,659	3,288,117	81,096	1,072,731	1,561,715
ROUGH TREES:					
SAWTIMBER-SIZE TREES	205,432	36,453	1,270	69,307	98,402
POLETIMBER-SIZE TREES	375,945	53,092	2,838	128,323	191,692
TOTAL	581,377	89,545	4,108	197,630	290,094
ROTTEN TREES:					
SAWTIMBER-SIZE TREES	29,305	556	212	10,535	18,002
POLETIMBER-SIZE TREES	4,565	--	--	1,903	2,662
TOTAL	33,870	556	212	12,438	20,664
SALVABLE DEAD TREES:					
SAWTIMBER-SIZE TREES	3,967	3,781	186	--	--
POLETIMBER-SIZE TREES	3,568	3,491	77	--	--
TOTAL	7,535	7,272	263	--	--
TOTAL, ALL TIMBER	6,626,441	3,385,490	85,679	1,282,799	1,872,473

TABLE 13. --NUMBER OF GROWING-STOCK TREES ON COMMERCIAL FOREST LAND, BY SPECIES AND DIAMETER CLASS, 1977

SPECIES	ALL CLASSES	DIAMETER CLASS (INCHES AT BREAST HEIGHT)												19.0- 20.9	21.0- 28.9	29.0 AND LARGER	
		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	18.0- 19.9	19.0- 20.9	20.0- 21.9	21.0- 22.9	22.0- 23.9				
THOUSAND TREES																	
SOFTWOOD:																	
LONGLEAF PINE	249	126	46	35	--	17	25	--	--	--	--	--	--	--	--	--	--
SLASH PINE	1,157	739	385	33	--	--	--	--	--	--	--	--	--	--	--	--	--
SHORTLEAF PINE	130,831	61,671	38,911	7,814	2,636	998	998	323	323	323	323	323	323	323	323	323	323
LOBLOLLY PINE	227,454	91,116	60,539	20,208	10,775	5,416	5,416	2,167	2,167	2,167	2,167	2,167	2,167	2,167	2,167	2,167	2,167
POND PINE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
VIRGINIA PINE	35,157	15,838	9,887	2,393	1,015	234	234	131	131	131	131	131	131	131	131	131	131
PITCH PINE	660	123	174	156	11	11	11	21	21	21	21	21	21	21	21	21	21
TABLE-MOUNTAIN PINE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPRUCE PINE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAND PINE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EASTERN WHITE PINE	708	--	198	87	96	83	75	51	51	51	51	51	51	51	51	51	51
EASTERN HEMLOCK	605	256	149	70	65	32	12	--	--	--	--	--	--	--	--	--	--
SPRUCE AND FIR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BALDCYPRESS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PONDCEYPRESS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CEDARS	12,992	8,512	2,875	1,185	317	17	37	20	20	20	20	20	20	20	20	20	20
TOTAL SOFTWOODS	409,813	178,381	113,164	61,572	31,049	14,598	6,808	2,713	859	634	35	35	35	35	35	35	35
HARDWOOD:																	
SELECT WHITE OAKS	34,251	13,508	8,295	5,581	2,990	1,924	1,126	409	187	208	23	23	23	23	23	23	23
SELECT RED OAKS	8,1612	3,059	1,702	1,407	1,042	554	368	203	62	68	7	7	7	7	7	7	7
CHESTNUT OAK	4,322	1,221	941	962	1,572	290	150	116	8	8	6	6	6	6	6	6	6
OTHER WHITE OAKS	10,858	5,648	2,056	1,380	1,111	403	128	64	36	26	43	43	43	43	43	43	43
OTHER RED OAKS	56,765	23,166	14,147	8,064	5,465	2,738	1,645	779	374	344	9	9	9	9	9	9	9
HICKORY	20,766	9,073	5,446	2,371	1,791	1,029	528	256	153	110	9	9	9	9	9	9	9
YELLOW BIRCH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HARD MAPLE	716	391	39	213	22	28	11	--	--	5	--	--	--	--	--	--	--
SOFT MAPLE	11,128	4,906	2,642	1,783	836	455	250	97	90	63	6	6	6	6	6	6	6
BEECH	1,566	395	324	255	318	99	34	38	16	84	3	3	3	3	3	3	3
SWEETGUM	49,561	24,635	12,126	5,782	3,323	1,647	927	663	248	177	13	13	13	13	13	13	13
TUPELO AND BLACKGUM	3,629	1,649	1,043	520	179	109	101	9	--	19	--	--	--	--	--	--	--
ASH	6,349	2,868	1,178	904	554	433	193	132	62	18	7	7	7	7	7	7	7
COTTONWOOD	133	88	56	28	111	31	23	65	30	63	45	45	45	45	45	45	45
BASSWOOD	--	--	--	--	45	--	--	--	--	--	--	--	--	--	--	--	--
YELLOW-POPLAR	20,066	5,578	3,782	3,297	2,731	1,842	1,265	681	509	367	14	14	14	14	14	14	14
BAY AND MAGNOLIA	150	75	51	32	--	--	--	--	--	--	--	--	--	--	--	--	--
BLACK CHERRY	1,031	855	107	69	--	--	--	--	--	--	--	--	--	--	--	--	--
BLACK WALNUT	418	201	--	88	47	18	13	35	--	--	--	--	--	--	--	--	--
SYCAMORE	1,556	72	340	115	385	316	79	72	59	102	6	6	6	6	6	6	6
BLACK LOCUST	409	30	174	24	24	8	--	8	--	--	--	--	--	--	--	--	--
ELM	10,967	6,410	2,484	994	694	175	115	62	16	6	11	11	11	11	11	11	11
OTHER EASTERN HARDWOODS	6,323	2,893	1,579	643	477	283	201	118	93	46	--	--	--	--	--	--	--
TOTAL HARDWOODS	250,035	106,684	58,512	34,518	22,717	12,474	7,187	3,807	1,960	1,784	193	193	193	193	193	193	193
ALL SPECIES	659,849	285,265	171,676	96,090	53,766	27,072	13,995	6,520	2,819	2,418	228	228	228	228	228	228	228

TABLE 14. --VOLUME OF ALL LIVE TREES ON COMMERCIAL FOREST LAND, BY SPECIES AND DIAMETER CLASS, 1977

SPECIES	ALL CLASSES	DIAMETER CLASS (INCHES AT BREAST HEIGHT)									
		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
----- THOUSAND CUBIC FEET -----											
SOFTWOOD:											
LONGLEAF PINE	2,954	530	369	317	--	452	948	--	--	--	338
SLASH PINE	4,330	1,754	2,272	304	--	--	--	--	--	--	--
SHORTLEAF PINE	902,585	161,475	246,249	215,148	145,988	74,619	38,856	15,391	2,720	2,139	--
LOBLOLLY PINE	2,187,297	245,270	392,822	424,527	386,161	303,440	214,933	113,634	52,060	49,122	5,328
POND PINE	--	--	--	--	--	--	--	--	--	--	--
VIRGINIA PINE	272,005	50,849	71,781	67,909	41,695	25,278	7,445	5,156	884	1,008	--
PITCH PINE	9,047	628	1,055	1,801	3,359	566	702	936	--	--	--
TABLE-MOUNTAIN PINE	--	--	--	--	--	--	--	--	--	--	--
SPRUCE PINE	--	--	--	--	--	--	--	--	--	--	--
SAND PINE	--	--	--	--	--	--	--	--	--	--	--
EASTERN WHITE PINE	23,448	--	1,082	1,098	1,686	2,173	2,693	2,344	1,551	9,828	993
EASTERN HEMLOCK	7,135	588	960	730	979	1,011	454	--	--	2,413	--
SPRUCE AND FIR	--	--	--	--	--	--	--	--	--	--	--
BALDCYPRESS	--	--	--	--	--	--	--	--	--	--	--
POND CYPRESS	--	--	--	--	--	--	--	--	--	--	--
CEDARS	54,833	19,945	15,049	11,385	4,562	491	1,031	642	1,349	379	--
TOTAL SOFTWOODS	3,463,634	481,039	731,639	723,219	584,430	408,030	267,062	138,103	58,564	64,889	6,659
HARDWOOD:											
SELECT WHITE OAKS	399,764	47,024	59,357	70,166	58,549	54,590	41,304	24,170	13,746	23,663	7,195
SELECT RED OAKS	131,313	12,712	14,310	20,174	22,715	21,124	15,010	11,576	4,425	6,682	2,585
CHESTNUT OAK	69,864	5,873	8,181	11,752	12,034	9,387	7,316	6,674	824	6,546	1,277
OTHER WHITE OAKS	104,510	19,515	16,379	16,756	22,226	12,540	4,654	3,389	2,959	4,594	1,498
OTHER RED OAKS	636,907	81,626	99,539	100,279	108,075	74,267	63,228	41,360	24,631	31,931	11,971
HICKORY	222,433	28,421	34,709	28,077	34,739	30,878	24,140	15,681	10,175	13,031	2,582
YELLOW BIRCH	--	--	--	--	--	--	--	--	--	--	--
HARD MAPLE	10,259	2,681	1,032	3,122	467	1,170	575	--	503	709	--
SOFT MAPLE	174,593	31,646	29,938	30,207	24,783	16,084	13,972	6,865	6,952	9,160	4,986
BEECH	35,406	1,577	2,063	3,888	6,634	3,113	2,296	2,459	1,906	10,849	621
SWEETGUM	479,791	73,975	86,776	78,194	74,005	47,728	40,504	35,473	18,607	21,609	2,920
TUPELO AND BLACKGUM	42,871	9,198	9,723	8,723	4,983	3,552	4,286	709	--	1,697	--
ASH	97,029	12,109	13,381	16,075	15,113	14,949	8,071	7,801	4,788	3,567	1,175
COTTONWOOD	32,370	--	1,723	454	2,160	801	1,114	3,902	2,442	7,423	12,351
BASSWOOD	1,347	565	--	--	782	--	--	--	--	--	--
YELLOW-POPLAR	356,632	19,483	28,177	41,891	53,524	53,552	49,768	36,032	33,012	36,409	4,784
BAY AND MAGNOLIA	1,562	350	677	375	--	--	--	--	160	--	--
BLACK CHERRY	16,308	5,907	3,950	4,297	1,593	561	--	--	--	--	--
BLACK WALNUT	9,420	1,477	--	1,797	1,141	496	706	2,117	--	1,686	--
SYCAMORE	49,185	1,229	3,313	2,977	8,012	9,771	3,288	4,799	5,229	9,523	1,044
BLACK LOCUST	5,508	1,338	2,141	1,001	300	--	334	394	--	--	--
ELM	95,518	23,707	19,455	16,810	17,347	5,946	4,808	2,882	1,306	1,439	1,818
OTHER EASTERN HARDWOODS	182,682	57,172	35,050	28,157	19,066	10,757	11,130	6,216	8,926	5,617	591
TOTAL HARDWOODS	3,155,272	437,585	469,874	485,172	488,248	371,266	296,504	212,499	140,591	196,135	57,398
ALL SPECIES	6,618,906	918,624	1,201,513	1,208,391	1,072,678	779,296	563,566	350,602	199,155	261,024	64,057

TABLE 15. -- VOLUME OF GROWING STOCK ON COMMERCIAL FOREST LAND, BY SPECIES AND DIAMETER CLASS, 1977

SPECIES	ALL CLASSES	DIAMETER CLASS (INCHES AT BREAST HEIGHT)									
		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
-- THOUSAND CUBIC FEET --											
SOFTWOOD:											
LONGLEAF PINE	2,616	530	369	317	--	452	948	--	--	--	--
SLASH PINE	4,086	1,754	2,028	304	--	--	--	--	--	--	--
SHORTLEAF PINE	883,874	156,630	239,941	211,742	143,380	73,482	38,856	15,391	2,313	2,139	--
LOBLOLLY PINE	2,132,901	229,448	376,518	411,527	381,001	302,100	214,152	113,634	52,060	47,133	5,328
POND PINE	--	--	--	--	--	--	--	--	--	--	--
VIRGINIA PINE	256,791	47,274	66,061	63,490	41,007	24,466	7,445	5,156	884	1,008	--
PITCH PINE	7,849	354	1,055	1,801	2,791	566	346	936	--	--	--
TABLE-MOUNTAIN PINE	--	--	--	--	--	--	--	--	--	--	--
SPRUCE PINE	--	--	--	--	--	--	--	--	--	--	--
SAND PINE	--	--	--	--	--	--	--	--	--	--	--
EASTERN WHITE PINE	23,236	--	1,082	1,098	1,686	2,173	2,693	2,344	1,551	9,616	993
EASTERN HEMLOCK	7,135	588	960	730	979	1,011	454	--	--	2,419	--
SPRUCE AND FIR	--	--	--	--	--	--	--	--	--	--	--
BALDCYPRESS	--	--	--	--	--	--	--	--	--	--	--
PONDYPRESS	--	--	--	--	--	--	--	--	--	--	--
CEDARS	50,725	18,380	13,775	10,648	4,317	203	1,031	642	1,349	379	--
TOTAL SOFTWOODS	3,369,213	454,958	701,790	701,657	575,161	404,453	265,925	138,103	58,157	62,688	6,321
HARDWOOD:											
SELECT WHITE OAKS	369,476	39,370	54,292	65,755	56,051	53,179	40,893	21,848	12,228	20,129	5,731
SELECT RED OAKS	115,679	10,687	11,642	17,732	19,247	19,150	14,108	10,867	4,262	6,682	1,302
CHESTNUT OAK	52,936	3,089	6,257	10,501	9,461	7,349	5,230	5,655	396	4,998	--
OTHER WHITE OAKS	81,880	14,915	11,446	14,588	18,109	9,669	4,389	2,881	2,324	2,271	1,088
OTHER RED OAKS	568,664	66,933	87,379	89,954	98,763	69,832	56,730	37,563	22,595	29,234	9,681
HICKORY	205,718	24,966	33,256	26,097	33,711	28,691	21,515	13,931	10,175	11,201	2,175
YELLOW BIRCH	--	--	--	--	--	--	--	--	--	--	--
HARD MAPLE	7,875	1,287	485	2,752	394	1,170	575	--	503	709	--
SOFT MAPLE	104,976	16,356	16,893	19,974	16,074	11,058	8,355	4,678	5,021	5,303	1,264
BEECH	29,070	1,065	1,832	3,238	5,945	2,774	1,601	2,045	1,217	8,912	441
SWEETGUM	431,557	60,191	75,336	70,894	67,001	45,297	38,964	35,171	17,174	18,961	2,568
TUPELO AND BLACKGUM	26,420	3,930	6,285	5,856	2,845	2,437	3,307	390	--	1,370	--
ASH	73,390	8,334	7,781	10,824	11,854	12,439	7,717	7,278	3,795	2,193	1,175
COTTONWOOD	31,004	--	357	454	2,160	801	1,114	3,902	2,442	7,423	12,351
BASSWOOD	1,042	260	--	--	782	--	--	--	--	--	--
YELLOW-POPLAR	340,406	16,874	26,590	40,738	52,777	51,559	48,612	34,925	32,796	31,980	3,555
BAY AND MAGNOLIA	1,177	350	452	375	--	--	--	--	--	--	--
BLACK CHERRY	3,855	2,565	585	704	--	--	--	--	--	--	--
BLACK WALNUT	7,107	599	--	971	725	496	567	2,117	--	1,632	--
SYCAMORE	42,974	296	2,282	1,939	7,502	9,022	2,963	4,035	4,785	9,106	1,044
BLACK LOCUST	2,246	473	788	291	300	--	--	394	--	--	--
ELM	72,261	16,879	14,949	11,313	13,146	4,632	4,808	2,882	1,306	528	1,818
OTHER EASTERN HARDWOODS	64,733	7,449	9,806	7,539	8,635	7,895	7,758	5,055	6,171	4,425	--
TOTAL HARDWOODS	2,634,446	296,868	368,694	402,489	425,482	337,650	269,206	195,617	127,190	167,057	44,193
ALL SPECIES	6,003,659	751,826	1,070,484	1,104,146	1,000,643	742,103	535,131	333,720	185,347	229,745	50,514

TABLE 16.--VOLUME OF SAWTIMBER ON COMMERCIAL FOREST LAND, BY SPECIES AND DIAMETER CLASS, 1977

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	29.0 AND LARGER
----- THOUSAND BOARD FEET -----									
SOFTWOOD:									
LONGLEAF PINE	8,925	1,184	--	2,333	5,408	--	--	--	--
SLASH PINE	1,085	1,085	--	--	--	--	--	--	--
SHORTLEAF PINE	2,127,796	778,207	643,886	372,528	214,803	90,374	14,216	13,782	--
LOBLOLLY PINE	7,166,515	1,437,900	1,678,427	1,526,196	1,184,835	668,918	323,649	308,631	37,959
POND PINE	--	--	--	--	--	--	--	--	--
VIRGINIA PINE	574,085	219,762	169,257	111,446	36,651	26,545	4,771	5,653	--
PITCH PINE	27,592	5,870	11,389	2,835	1,961	5,537	--	--	--
TABLE-MOUNTAIN PINE	--	--	--	--	--	--	--	--	--
SPRUCE PINE	--	--	--	--	--	--	--	--	--
SAND PINE	--	--	--	--	--	--	--	--	--
EASTERN WHITE PINE	123,652	4,139	7,116	10,491	14,106	12,822	9,012	59,519	6,447
EASTERN HEMLOCK	28,146	2,283	3,942	4,782	2,355	--	--	14,784	--
SPRUCE AND FIR	--	--	--	--	--	--	--	--	--
BALDCYPRESS	--	--	--	--	--	--	--	--	--
POND CYPRESS	--	--	--	--	--	--	--	--	--
CEDARS	84,855	43,260	20,286	1,040	5,749	3,737	8,391	2,392	--
TOTAL SOFTWOODS	10,142,651	2,493,690	2,534,303	2,031,651	1,465,868	807,933	360,039	404,761	44,406
HARDWOOD:									
SELECT WHITE OAKS	868,690	--	182,377	205,331	175,142	101,861	60,381	109,076	34,522
SELECT RED OAKS	303,186	--	61,737	72,415	57,928	47,985	20,068	34,195	8,860
CHESTNUT OAK	131,261	--	29,461	27,392	21,639	25,343	1,868	25,558	--
OTHER WHITE OAKS	173,536	--	65,234	41,511	19,996	14,323	12,315	13,249	6,908
OTHER RED OAKS	1,401,815	--	342,693	280,792	254,210	184,806	115,881	161,656	61,777
HICKORY	523,552	--	113,240	114,900	97,108	68,218	52,900	63,539	13,647
YELLOW BIRCH	--	--	--	--	--	--	--	--	--
HARD MAPLE	14,538	--	1,416	4,790	2,497	--	2,367	3,468	--
SOFT MAPLE	205,676	--	51,355	40,930	34,508	21,060	23,645	27,064	7,114
BEECH	90,433	--	21,794	10,514	6,269	8,148	4,921	36,912	1,875
SWEETGUM	1,028,198	--	236,734	191,323	187,946	184,284	95,907	114,993	17,011
TUPELO AND BLACKGUM	40,151	--	8,535	9,129	13,771	1,745	--	6,971	--
ASH	190,834	--	38,749	47,996	32,897	33,760	18,618	12,001	6,813
COTTONWOOD	164,193	--	6,904	3,065	4,825	18,487	12,291	41,147	77,474
BASSWOOD	2,825	--	2,825	--	--	--	--	--	--
YELLOW-POPLAR	1,230,937	--	186,842	221,505	236,141	184,558	184,019	192,943	24,929
BAY AND MAGNOLIA	--	--	--	--	--	--	--	--	--
BLACK CHERRY	--	--	--	--	--	--	--	--	--
BLACK WALNUT	19,591	--	2,499	1,725	1,991	7,516	--	5,860	--
SYCAMORE	169,150	--	23,063	34,115	12,997	19,231	23,845	49,620	6,279
BLACK LOCUST	2,541	--	1,039	--	--	1,502	--	--	--
ELM	114,544	--	44,212	17,806	20,468	13,148	6,211	2,579	10,120
OTHER EASTERN HARDWOODS	161,885	--	28,727	30,125	31,603	22,436	28,019	20,975	--
TOTAL HARDWOODS	6,837,536	--	1,449,436	1,355,364	1,211,934	958,411	663,256	921,806	277,329
ALL SPECIES	16,980,187	2,493,690	3,983,739	3,387,015	2,677,802	1,766,344	1,023,295	1,326,567	321,735

TABLE 17. --NET ANNUAL GROWTH AND REMOVALS OF GROWING STOCK ON COMMERCIAL FOREST LAND, BY SPECIES, 1976

SPECIES	NET ANNUAL GROWTH	ANNUAL TIMBER REMOVALS
	- - THOUSAND CUBIC FEET - -	
SOFTWOOD:		
YELLOW PINES	243,094	127,308
EASTERN WHITE PINE	1,069	406
SPRUCE AND FIR	--	--
CYPRESS	--	--
OTHER EASTERN SOFTWOODS	5,039	1,253
TOTAL SOFTWOODS	249,202	128,967
HARDWOOD:		
SELECT WHITE AND RED OAKS	22,840	10,664
OTHER WHITE AND RED OAKS	35,898	13,076
HICKORY	7,713	2,511
YELLOW BIRCH	--	--
HARD MAPLE	205	--
SWEETGUM	19,312	5,297
ASH, WALNUT, AND BLACK CHERRY	3,434	525
YELLOW-POPLAR	18,773	6,099
TUPELO AND BLACKGUM	812	395
BAY AND MAGNOLIA	50	167
OTHER EASTERN HARDWOODS	15,573	3,761
TOTAL HARDWOODS	124,610	42,495
ALL SPECIES	373,812	171,462

TABLE 18. --NET ANNUAL GROWTH AND REMOVALS OF SAWTIMBER ON COMMERCIAL FOREST LAND, BY SPECIES, 1976

SPECIES	NET ANNUAL GROWTH	ANNUAL TIMBER REMOVALS
	- - - THOUSAND BOARD FEET - - -	
SOFTWOOD:		
YELLOW PINES	819,830	427,168
EASTERN WHITE PINE	5,245	2,120
SPRUCE AND FIR	--	--
CYPRESS	--	--
OTHER EASTERN SOFTWOODS	8,206	3,346
TOTAL SOFTWOODS	833,281	432,634
HARDWOOD:		
SELECT WHITE AND RED OAKS	80,898	35,873
OTHER WHITE AND RED OAKS	113,405	42,449
HICKORY	19,928	6,590
YELLOW BIRCH	--	--
HARD MAPLE	2,471	--
SWEETGUM	51,608	14,754
ASH, WALNUT, AND BLACK CHERRY	12,231	2,564
YELLOW-POPLAR	85,831	24,209
TUPELO AND BLACKGUM	1,922	1,218
BAY AND MAGNOLIA	--	649
OTHER EASTERN HARDWOODS	40,079	11,738
TOTAL HARDWOODS	408,373	140,044
ALL SPECIES	1,241,654	572,678

TABLE 19.--MORTALITY OF GROWING STOCK AND SAWTIMBER ON COMMERCIAL FOREST LAND, BY SPECIES, 1976

SPECIES	GROWING STOCK THOUSAND CUBIC FEET	SAWTIMBER THOUSAND BOARD FEET
SOFTWOOD:		
YELLOW PINES	29,204	71,715
EASTERN WHITE PINE	--	--
SPRUCE AND FIR	--	--
CYPRESS	--	--
OTHER EASTERN SOFTWOODS	1,055	3,422
TOTAL SOFTWOODS	30,259	75,137
HARDWOOD:		
SELECT WHITE AND RED OAKS	638	864
OTHER WHITE AND RED OAKS	4,195	6,855
HICKORY	312	1,196
YELLOW BIRCH	--	--
HARD MAPLE	--	--
SWEETGUM	2,156	6,518
ASH, WALNUT, AND BLACK CHERRY	581	--
YELLOW-POPLAR	560	1,684
TUPELO AND BLACKGUM	--	--
BAY AND MAGNOLIA	--	--
OTHER EASTERN HARDWOODS	4,029	10,657
TOTAL HARDWOODS	12,471	27,774
ALL SPECIES	42,730	102,911

TABLE 20. --VOLUME OF ALL LIVE TREES AND GROWING STOCK ON COMMERCIAL FOREST LAND, BY OWNERSHIP CLASS AND SPECIES GROUP, 1977

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
	THOUSAND CUBIC FEET									
NATIONAL FOREST	718,681	420,891	23,179	135,259	139,352	664,965	413,382	22,761	115,472	113,350
OTHER PUBLIC	202,377	99,552	1,914	37,439	63,472	185,034	96,978	1,914	29,962	56,180
FOREST INDUSTRY	608,615	365,853	4,714	125,190	112,858	555,004	357,450	4,444	103,366	89,744
FARMER	2,308,850	1,029,419	33,628	509,956	735,847	2,081,927	998,695	32,290	428,618	622,324
MISCELLANEOUS PRIVATE	2,780,383	1,462,503	21,981	474,955	820,944	2,516,729	1,421,612	19,687	395,313	680,117
ALL OWNERSHIPS	6,618,906	3,378,218	85,416	1,282,799	1,872,473	6,003,659	3,288,117	81,096	1,072,731	1,561,715

TABLE 21. --VOLUME OF SAWTIMBER ON COMMERCIAL FOREST LAND, BY OWNERSHIP CLASS AND SPECIES GROUP, 1977

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
	THOUSAND BOARD FEET									
NATIONAL FOREST	1,173,239	958,274	22,158	94,913	97,894	1,432,561	849,421	90,801	293,016	199,323
OTHER PUBLIC	331,656	245,661	--	32,353	53,642	276,003	132,082	5,792	38,938	99,191
FOREST INDUSTRY	915,332	731,352	--	83,761	100,219	589,821	257,928	2,363	218,310	111,220
FARMER	3,315,354	2,120,047	44,008	457,967	693,332	2,232,809	669,170	30,230	739,735	793,674
MISCELLANEOUS PRIVATE	4,128,863	2,906,971	31,173	419,088	771,631	2,584,549	1,035,092	10,128	614,706	924,623
ALL OWNERSHIPS	9,864,444	6,962,305	97,339	1,088,082	1,716,718	7,115,743	2,943,693	139,314	1,904,705	2,128,031

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, 1976

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
NATIONAL FOREST	32,157	21,058	1,053	5,077	4,969	21,229	19,814	--	231	1,184
OTHER PUBLIC	9,697	5,207	105	1,881	2,504	8,598	4,391	349	1,133	2,725
FOREST INDUSTRY	42,088	32,559	311	4,354	4,884	24,173	21,684	59	1,388	1,042
FARMER	125,834	74,431	2,498	20,584	28,321	44,174	30,737	468	5,101	7,868
MISCELLANEOUS PRIVATE	164,036	109,839	2,141	19,608	32,448	73,288	50,682	783	5,845	15,978
ALL OWNERSHIPS	373,812	243,094	6,108	51,504	73,106	171,462	127,308	1,659	13,698	28,797

THOUSAND CUBIC FEET

TABLE 23.--NET ANNUAL GROWTH AND REMOVALS OF SAWTIMBER ON COMMERCIAL FOREST LAND, BY OWNERSHIP CLASS AND SPECIES GROUP, 1976

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
NATIONAL FOREST	133,483	97,534	25	6,109	15,428	77,098	74,238	1,657	2,545	8,255
OTHER PUBLIC	38,338	23,036	25	6,109	9,168	33,224	20,767	--	2,545	8,255
FOREST INDUSTRY	121,536	92,214	304	15,383	13,635	78,928	72,943	--	2,243	3,742
FARMER	414,170	249,175	5,698	66,379	98,918	155,409	107,388	501	18,348	29,172
MISCELLANEOUS PRIVATE	534,127	363,871	2,778	65,736	101,742	228,019	151,832	3,308	23,043	49,836
ALL OWNERSHIPS	1,241,654	819,830	13,451	169,035	239,338	572,678	427,168	5,466	46,179	93,865

THOUSAND BOARD FEET

TABLE 24. --AVERAGE NET VOLUME PER ACRE OF SAWTIMBER, GROWING STOCK, AND OTHER LIVE TIMBER ON COMMERCIAL FOREST LAND, BY OWNERSHIP CLASS, MAJOR FOREST TYPE, AND SPECIES GROUP, 1977

FOREST TYPE, SPECIES GROUP, AND CLASS OF MATERIAL	ALL OWNERSHIPS		OWNERSHIP CLASS									
			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	3,594	1,220	7,566	1,734	5,798	1,471	2,534	940	3,072	1,133	3,329	1,257
HARDWOOD	245	136	282	145	301	239	215	112	321	150	187	124
TOTAL	3,839	1,356	7,848	1,879	6,099	1,710	2,749	1,052	3,393	1,283	3,516	1,381
OTHER TIMBER:												
SOFTWOOD	--	35	--	35	--	41	--	24	--	37	--	38
HARDWOOD	--	42	--	64	--	70	--	40	--	48	--	31
TOTAL	--	77	--	99	--	111	--	64	--	85	--	69
OAK-PINE TYPES:												
GROWING STOCK:												
SOFTWOOD	1,796	554	3,464	759	218	44	788	306	1,675	571	1,825	551
HARDWOOD	1,301	562	1,175	552	--	--	551	334	1,437	615	1,334	558
TOTAL	3,097	1,116	4,639	1,311	218	44	1,339	640	3,112	1,186	3,159	1,109
OTHER TIMBER:												
SOFTWOOD	--	13	--	10	--	--	--	6	--	15	--	14
HARDWOOD	--	132	--	133	--	--	--	21	--	146	--	139
TOTAL	--	145	--	143	--	--	--	27	--	161	--	153
UPLAND HARDWOOD TYPES:												
GROWING STOCK:												
SOFTWOOD	484	142	1,614	340	369	123	482	134	389	124	438	138
HARDWOOD	3,179	1,182	4,455	1,522	3,748	1,300	2,179	808	3,396	1,278	2,943	1,105
TOTAL	3,663	1,324	6,069	1,862	4,117	1,423	2,661	942	3,785	1,402	3,381	1,243
OTHER TIMBER:												
SOFTWOOD	--	4	--	--	--	--	--	--	--	4	--	6
HARDWOOD	--	200	--	253	--	190	--	187	--	197	--	198
TOTAL	--	204	--	253	--	190	--	187	--	201	--	204
BOTTOMLAND HARDWOOD TYPES:												
GROWING STOCK:												
SOFTWOOD	319	69	--	--	--	--	461	101	141	39	429	88
HARDWOOD	6,246	1,847	12,783	3,009	--	--	6,916	1,990	4,178	1,528	5,018	1,596
TOTAL	6,565	1,916	12,783	3,009	--	--	7,377	2,091	4,319	1,567	5,447	1,684
OTHER TIMBER:												
SOFTWOOD	--	--	--	--	--	--	--	--	--	--	--	--
HARDWOOD	--	368	--	336	--	--	--	385	--	274	--	414
TOTAL	--	368	--	336	--	--	--	385	--	274	--	414
ALL TYPES:												
GROWING STOCK:												
SOFTWOOD	2,240	744	5,348	1,215	3,155	814	1,866	681	1,806	650	2,063	747
HARDWOOD	1,510	582	1,908	637	1,844	709	966	363	1,694	663	1,414	557
TOTAL	3,750	1,326	7,256	1,852	4,999	1,523	2,832	1,044	3,500	1,313	3,477	1,304
OTHER TIMBER:												
SOFTWOOD	--	21	--	22	--	21	--	16	--	20	--	22
HARDWOOD	--	115	--	128	--	122	--	85	--	123	--	114
TOTAL	--	136	--	150	--	143	--	101	--	143	--	136
ALL TIMBER	3,750	1,462	7,256	2,002	4,999	1,666	2,832	1,145	3,500	1,456	3,477	1,440

ROUGH AND ROTTEN TREES.

TABLE 25.--LAND AREA, BY CLASS, MAJOR FOREST TYPE, AND SURVEY COMPLETION DATE, 1958, 1967, AND 1977

LAND USE CLASS	SURVEY COMPLETION DATE			CHANGE 1967-1977
	1958	1967	1977	
----- ACRES -----				
FOREST LAND:				
COMMERCIAL FOREST LAND:				
PINE AND OAK-PINE TYPES	2,617,500	3,053,500	2,929,453	-124,047
HARDWOOD TYPES	1,528,300	1,425,611	1,598,583	+172,972
TOTAL	4,145,800	4,479,111	4,528,036	+ 48,925
NONCOMMERCIAL FOREST LAND:				
PRODUCTIVE-RESERVED	53,900	46,600	38,746	- 7,854
UNPRODUCTIVE	4,300	--	--	--
TOTAL	58,200	46,600	38,746	- 7,854
NONFOREST LAND:				
CROPLAND	1,808,900	1,021,527	741,685	-279,842
PASTURE AND RANGE	407,300	661,429	728,065	+ 66,636
OTHER	274,200	472,113	607,247	+135,134
TOTAL	2,490,400	2,155,069	2,076,997	- 78,072
ALL LAND ¹	6,694,400	6,680,780	6,643,779	- 37,001

¹ EXCLUDES ALL WATER AREAS.

TABLE 26. --VOLUME 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	DIAMETER CLASS (INCHES AT BREAST HEIGHT)								
			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
<i>SAWTIMBER (IN THOUSAND BOARD FEET)</i>											
SOFTWOOD	1958	4,946,872	--	--	1,378,867	1,225,538	842,503	613,816	331,116	256,926	298,106
	1967	6,374,145	--	--	1,630,671	1,595,673	1,292,910	803,280	454,984	283,752	312,875
	1977	10,142,651	--	--	2,493,690	2,534,303	2,031,651	1,465,868	807,933	360,039	449,167
HARDWOOD	1958	4,067,352	--	--	--	907,679	834,936	661,762	599,829	385,102	678,044
	1967	4,747,010	--	--	--	998,421	972,387	779,884	701,517	460,902	813,899
	1977	6,837,536	--	--	--	1,449,436	1,355,364	1,211,934	958,411	663,256	1,199,135
<i>GROWING STOCK (IN THOUSAND CUBIC FEET)</i>											
SOFTWOOD	1958	1,902,399	383,579	429,703	387,976	278,152	167,729	111,360	56,601	41,500	45,799
	1967	2,319,264	423,999	499,472	458,827	362,159	257,398	145,733	77,775	45,833	48,068
	1977	3,369,213	454,958	701,790	701,657	575,161	404,453	265,925	138,103	58,157	69,009
HARDWOOD	1958	1,618,573	199,234	235,456	246,726	266,416	208,006	146,993	122,439	73,845	119,458
	1967	1,928,434	239,186	304,397	296,910	293,050	242,249	177,673	143,196	88,380	143,393
	1977	2,634,446	296,868	368,694	402,489	425,482	337,650	269,206	195,617	127,190	211,250
<i>ALL LIVE TIMBER (IN THOUSAND CUBIC FEET)</i>											
SOFTWOOD	1958	1,962,909	405,506	448,177	399,620	282,689	169,224	111,834	56,601	41,795	47,463
	1967	2,389,688	448,235	520,945	472,597	368,085	259,700	146,370	77,775	46,191	49,790
	1977	3,463,634	481,039	731,639	723,219	584,430	408,030	267,062	138,103	58,564	71,548
HARDWOOD	1958	1,945,325	293,697	299,904	297,482	305,615	228,744	161,870	133,001	81,599	143,413
	1967	2,321,919	352,593	387,714	357,993	336,178	266,393	195,675	155,574	97,683	172,116
	1977	3,155,272	437,585	469,874	485,172	488,248	371,266	296,504	212,499	140,691	253,533

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.

Snyder, Nolan L.

1978. Forest statistics for the Piedmont of South Carolina, 1977. U.S. Dep. Agric. For. Serv., Resour. Bull. SE-45, 33 p. Southeast. For. Exp. Stn., Asheville, N. C.

In 1976, net annual growth of growing stock averaged almost 83 cubic feet per acre of commercial forest land—a record high for an entire Survey Unit in the Southeast. The area of commercial forest land in this 18-county area has changed little since 1967, and now totals 4.5 million acres. The inventory of softwood and hardwood growing stock increased by 45 and 37 percent, respectively. Annual timber removals were less than one-half the net growth. About 48 percent of the land now classified as commercial forest has been treated or significantly disturbed since 1967.

Keywords: Forest trends, commercial forest land, forest ownership, timber volume, timber growth, timber removals.

Snyder, Nolan L.

1978. Forest statistics for the Piedmont of South Carolina, 1977. U.S. Dep. Agric. For. Serv., Resour. Bull. SE-45, 33 p. Southeast. For. Exp. Stn., Asheville, N. C.

In 1976, net annual growth of growing stock averaged almost 83 cubic feet per acre of commercial forest land—a record high for an entire Survey Unit in the Southeast. The area of commercial forest land in this 18-county area has changed little since 1967, and now totals 4.5 million acres. The inventory of softwood and hardwood growing stock increased by 45 and 37 percent, respectively. Annual timber removals were less than one-half the net growth. About 48 percent of the land now classified as commercial forest has been treated or significantly disturbed since 1967.

Keywords: Forest trends, commercial forest land, forest ownership, timber volume, timber growth, timber removals.



The Forest Service, U. S. Department of Agriculture, is dedicated to the principle of multiple use management of the Nation's forest resources for sustained yields of wood, water, forage, wildlife, and recreation. Through forestry research, cooperation with the States and private forest owners, and management of the National Forests and National Grasslands, it strives—as directed by Congress—to provide increasingly greater service to a growing Nation.

USDA policy does not permit discrimination because of race, color, national origin, sex or religion. Any person who believes he or she has been discriminated against in any USDA-related activity should write immediately to the Secretary of Agriculture, Washington, D.C. 20250.