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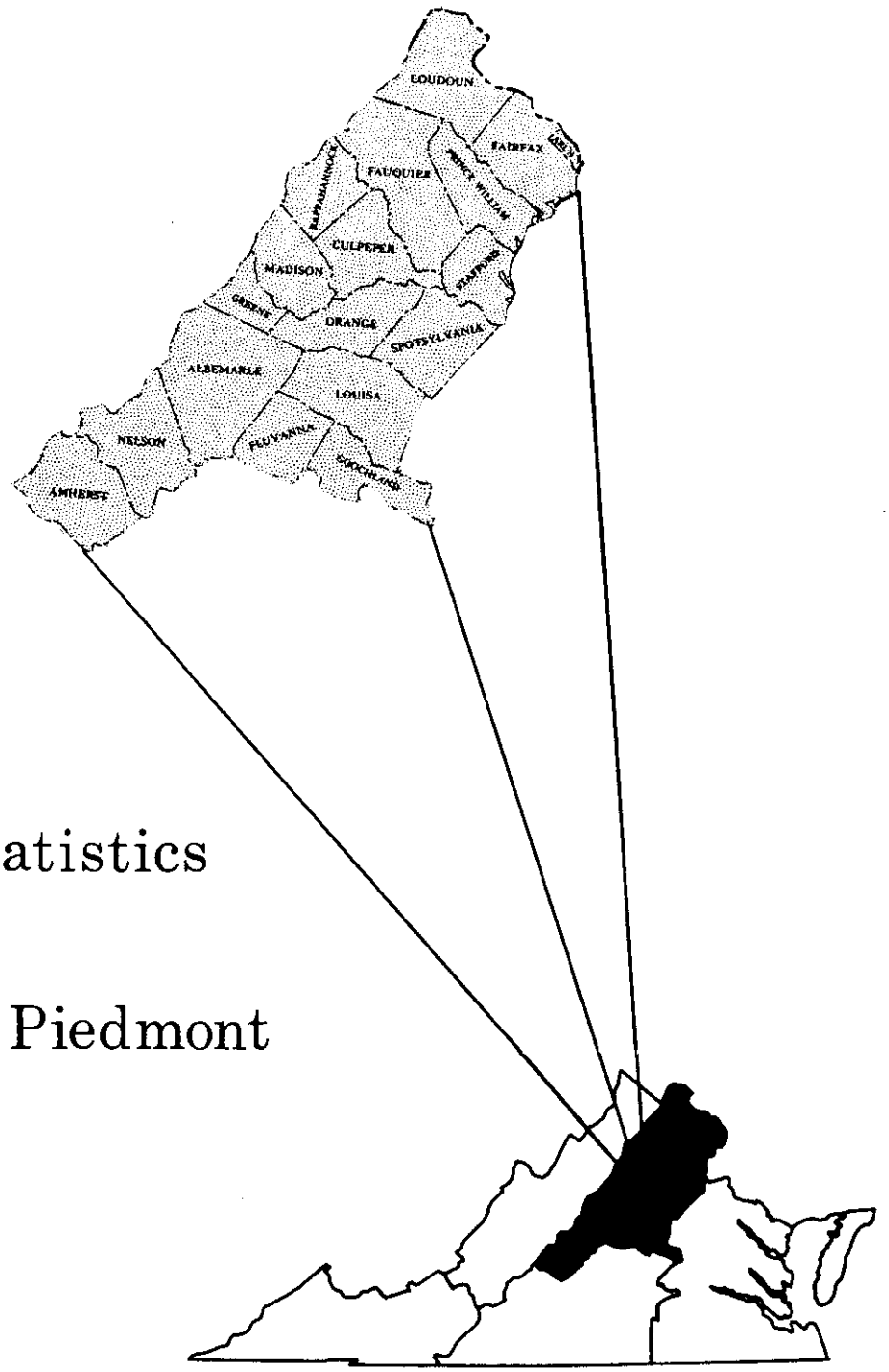

Forest Statistics for the Northern Piedmont of Virginia 1976

FOREWORD

This report highlights the principal findings of the fourth inventory of the timber resource in the Northern Piedmont of Virginia. The inventory was started in March 1976 and completed in August 1976. Three previous inventories, completed in 1940, 1957, and 1965, provide statistics for measuring changes and trends over the past 36 years. In this report, the primary emphasis is on the changes and trends since 1965. Previously reported figures have been adjusted to provide the best estimate of real change.

Forest Resources Research, 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, USDA. In Florida, Georgia, North Carolina, South Carolina, and Virginia, Forest Resources Research is administered through the Southeastern Forest Experiment Station, with headquarters at Asheville, North Carolina. The objective of the statewide timber inventories is to periodically measure and evaluate the timber resource. 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 resource.

The 18-county area covered by this report is one of five survey units in Virginia. Similar reports, USDA Forest Service Resource Bulletins SE-34 and 35, have been issued for the Coastal Plain and Southern Piedmont of Virginia. Comparable reports for the other two units will be issued as the Statewide inventory progresses. When completed, this inventory will provide updated statistics on the timber resource for all of Virginia.

The Southeastern Station gratefully acknowledges the cooperation and assistance provided by the Virginia 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

JOE P. McCLURE
Project Leader

Forest Statistics
for the
Northern Piedmont of Virginia
1976

by
Raymond M. Sheffield, Assistant Mensurationist

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HIGHLIGHTS

Since 1965 in the Northern Piedmont of Virginia--

--area of commercial forest land has increased by 93,000 acres, or nearly 4 percent. The increase occurred in almost all areas except five counties near Washington, D. C. The addition of nearly 172,000 acres to commercial forest has more than offset the diversion of almost 79,000 acres of forest land to other land uses. About 72 percent of the diversion was to urban development and agricultural uses; the remainder of the loss was attributed to land clearing for new lakes and to the reclassification of 11,000 acres as productive-reserved forest. Commercial forests now occupy 2.6 million acres, or 58 percent of the total land area in this 18-county area.

--area of commercial forest land held by miscellaneous private owners has increased by 242,000 acres, or 24 percent. Farmer-owned woodlands declined by 180,000 acres. Forest-industry holdings increased by 8 percent; however, forest industries still control only 8 percent of all commercial forest land. Public ownership of commercial forests increased by 18 percent, and now totals almost 162,000 acres. Private nonindustrial landowners control 86 percent of all commercial forest land.

--about 31 percent of the area remaining in commercial forests has been treated or significantly disturbed. Over 288,000 acres were harvested and nearly 293,000 acres have undergone intermediate cutting. More than 24 percent of the harvested stands were subsequently artificially regenerated. Nearly 58 percent of all artificial regeneration occurred on forest-industry lands; most of the remainder occurred on private nonindustrial lands. Grazing and other significant disturbances occurred on 112,000 acres. An additional 85,000 acres were disturbed by insects, disease, weather, and other damaging agents.

--area occupied by sawtimber stands has increased by 33 percent. Poletimber stands have decreased in area by 3 percent, while sapling-seedling stands have decreased by 19 percent. Forest land classified as nonstocked increased by 9,000 acres, or by 86 percent. The average age of adequately stocked stands is 26 years in the softwood forest types and 49 years in the hardwood types. Stands 40 years and older comprise 22 percent of the total acreage in softwood types and 69 percent of the total acreage in hardwood types.

--average basal area of all live trees 5.0 inches d.b.h. and larger has increased from 55 to 69 square feet per acre of commercial forest land. The number of saplings per acre increased from 535 to 579. Hardwoods accounted for all of this increase in saplings. Despite the increase in stocking, nearly 465,000 acres were classified as either nonstocked or poorly stocked with growing-stock trees.

--volume of softwood growing stock has increased from under 0.6 to over 0.7 billion cubic feet, or by 33 percent. Softwood growing-stock volume increased only 2 percent between 1957 and 1965. The recent increase in softwood volume occurred across all diameter classes and for all major species. Loblolly pine, white pine, and Virginia pine made the largest gains. Softwood sawtimber volume, which declined 3 percent between 1957 and 1965, has increased by 50 percent and now totals 1.6 billion board feet.

--volume of hardwood growing stock has increased from 2.0 to 2.6 billion cubic feet, or by 30 percent. Hardwood growing-stock volume increased 9 percent between 1957 and 1965. Again, the increase occurred across all diameter classes and for most major species. Yellow-poplar and the oaks accounted for 73 percent of the gain. The current inventory of hardwood growing stock includes 7.3 billion board feet of sawtimber, up by 36 percent.

In 1975--

--net growth of growing stock totaled 141 million cubic feet and included 471 million board feet of sawtimber. Net growth averaged 55 cubic feet per acre of commercial forest; hardwoods accounted for nearly three-fourths of this growth. Ingrowth accounted for 29 percent of the net softwood growth, but only 12 percent of the hardwood. By ownership, 7 percent of the growth occurred on public lands; 8 percent on lands owned by forest industry; 37 percent on farmer-owned lands; and the remaining 48 percent on miscellaneous private lands. Net growth exceeded removals by 52 percent for softwoods and by 80 percent for hardwoods.

--removals of growing stock totaled 82 million cubic feet and included 247 million board feet of sawtimber. Almost 23 percent of the growing-stock removals were not used for products. Nearly one-fourth of this unused volume was left during logging and stand improvement operations. Growing-stock removals, by ownership class, differed from the distribution of net growth. Almost 12 percent of the removals came from publicly owned forests; another 12 percent from forest-industry lands; only 23 percent from farmer-owned lands; and 53 percent from miscellaneous private woodlands.

--mortality of growing stock totaled 20 million cubic feet and included 52 million board feet of sawtimber. Some 43 percent of the total mortality was softwood; more than half of the softwood mortality volume was the result of losses to pine bark beetles. Other identifiable causes of death included weather, suppression, disease, and fire. Altogether, mortality reduced gross growth of growing stock by 13 percent.

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 14,228 sample clusters systematically spaced on the latest aerial photographs available. A subsample of 1,188 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 667 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 Northern Piedmont of Virginia, 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 15 active cutting operations. These data will be pooled with similar measurements taken in the State to supplement the standing tree-volume study and 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 701 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):

	Percent
Per million acres of commercial forest land - - - - -	1.16
Per billion cubic feet of growing stock - - - - - - -	4.77
Per billion cubic feet of net annual growth - - - - -	1.01
Per billion cubic feet of annual removals - - - - - -	2.56

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
		SAMPLING ERROR[2]		
ALBEMARLE	2.04	7.94	8.59	25.14
AMHERST	1.83	7.96	8.38	35.88
ARLINGTON	0.00	0.00	0.00	0.00
CULPEPER	3.88	11.84	10.67	42.61
FAIRFAX	5.58	12.50	12.87	41.79
FAUQUIER	3.67	10.30	12.09	39.64
FLUVANNA	2.49	12.61	13.06	38.88
GOOCHLAND	3.01	9.90	10.15	37.87
GREENE	4.21	16.20	15.78	53.76
LOUDOUN	3.47	11.13	10.83	50.96
LOUISA	1.43	9.73	10.43	20.16
MADISON	3.11	11.92	12.19	85.17
NELSON	1.51	7.21	7.00	34.53
ORANGE	3.57	14.33	13.19	29.17
PRINCE WILLIAM	4.82	12.84	10.67	28.97
RAPPAHANNOCK	3.59	14.59	18.30	100.04
SPOTSYLVANIA	1.89	10.20	11.23	28.13
STAFFORD	3.05	10.51	8.86	39.84
UNIT TOTAL	0.72	2.62	2.69	8.93

[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	60.5	61.0	68.2	60.0
8	68.5	68.1	76.0	68.4
10	73.4	73.1	81.4	73.4
12	76.5	76.7	85.2	76.4
14	78.6	79.4	88.2	78.4
16	80.0	81.6	90.4	79.8
18	81.0	83.3	92.3	80.8
20	81.8	84.8	93.8	81.5
22	82.3	86.0	95.1	82.1
24+	83.3	87.0	97.1	83.1
AVERAGE	73.9	69.9	81.1	74.7

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, 1976*

COUNTY	ALL LAND[1]	FOREST LAND				NONFOREST LAND[2]
		TOTAL	COMMERCIAL FOREST	UNPRODUCTIVE FOREST	PRODUCTIVE-RESERVED	
	ACRES					
ALBEMARLE	480,640	320,656	291,386	--	29,270	159,984
AMHERST	300,763	234,862	232,994	--	1,868	65,901
ARLINGTON	16,640	--	--	--	--	16,640
CULPEPER	248,960	107,768	107,768	--	--	141,192
FAIRFAX	268,593	123,051	105,435	--	17,616	145,542
FAUQUIER	422,400	191,790	191,790	--	--	230,610
FLUVANNA	184,141	134,086	134,086	--	--	50,055
GOOCHLAND	188,800	136,607	136,607	--	--	52,193
GREENE	97,920	66,770	51,983	--	14,787	31,150
LOUDOUN	330,340	111,726	111,614	--	112	218,614
LOUISA	324,743	234,104	234,104	--	--	90,639
MADISON	209,280	129,859	97,685	--	32,174	79,421
NELSON	301,440	239,432	238,094	--	1,338	62,008
ORANGE	226,959	132,334	131,845	--	489	94,625
PRINCE WILLIAM	222,122	115,122	104,606	--	10,516	107,000
RAPPAHANNOCK	170,880	106,495	74,756	--	31,739	64,385
SPOTSYLVANIA	263,472	187,532	184,139	--	3,393	75,940
STAFFORD	173,829	125,121	123,166	--	1,955	48,708
TOTAL	4,431,922	2,697,315	2,552,058	--	145,257	1,734,607

[1] FROM U. S. BUREAU OF THE CENSUS, LAND AND WATER AREA OF THE UNITED STATES, 1970.
[2] INCLUDES 33,454 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, 1976*

COUNTY	ALL OWNERSHIPS	OWNERSHIP CLASS							
		NATIONAL FOREST	MISCELLANEOUS FEDERAL	STATE	COUNTY AND MUNICIPAL	FOREST INDUSTRY	FARMER	MISCELLANEOUS PRIVATE	
								CORPORATE	INDIVIDUAL
	ACRES								
ALBEMARLE	291,386	--	--	763	3,052	22,472	126,787	23,052	115,260
AMHERST	232,994	50,798	--	54	806	20,943	59,680	3,730	96,983
ARLINGTON	--	--	--	--	--	--	--	--	--
CULPEPER	107,768	--	--	--	--	7,539	61,430	6,467	32,332
FAIRFAX	105,435	--	8,975	2,764	748	--	3,873	30,983	58,092
FAUQUIER	191,790	--	3,277	4,078	749	3,706	88,075	26,806	65,099
FLUVANNA	134,086	--	--	770	85	19,432	54,425	14,844	44,530
GOOCHLAND	136,607	--	--	22	138	14,214	26,738	11,460	84,035
GREENE	51,983	--	--	1,000	--	1,332	23,171	3,310	23,170
LOUDOUN	111,614	--	3,849	4	1,054	--	57,456	8,209	41,042
LOUISA	234,104	--	--	33	649	23,063	91,460	32,011	86,888
MADISON	97,685	--	--	7,094	--	897	51,254	8,543	29,897
NELSON	238,094	12,208	--	796	--	37,337	87,886	23,969	75,898
ORANGE	131,845	--	--	--	332	10,677	56,864	--	63,972
PRINCE WILLIAM	104,606	--	25,008	471	1,162	--	30,510	16,949	30,506
RAPPAHANNOCK	74,756	--	--	--	--	--	47,572	--	27,184
SPOTSYLVANIA	184,139	--	--	50	1,968	34,646	38,809	15,524	93,142
STAFFORD	123,166	--	27,164	128	1,646	2,470	22,939	13,109	55,710
TOTAL	2,552,058	63,006	68,273	18,027	12,389	198,728	928,929	238,966	1,023,740

TABLE 3.--*AREA OF COMMERCIAL FOREST LAND, BY FOREST-TYPE GROUP AND COUNTY, 1976*

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									
ALBEMARLE	291,386	3,842	--	--	68,576	23,052	195,916	--	--	--
AMHERST	232,994	--	--	--	43,352	32,628	157,014	--	--	--
ARLINGTON	--	--	--	--	--	--	--	--	--	--
CULPEPER	107,768	--	--	--	22,632	16,166	62,504	--	6,466	--
FAIRFAX	105,435	--	--	--	15,492	3,879	82,198	--	3,872	--
FAUQUIER	191,790	--	--	--	38,168	15,317	134,476	--	3,829	--
FLUVANNA	134,086	--	--	--	45,740	24,737	58,661	--	4,948	--
GOOCHLAND	136,607	--	--	--	41,647	19,099	72,041	--	3,820	--
GREENE	51,983	--	--	--	14,573	3,310	34,100	--	--	--
LOUDOUN	111,614	--	--	--	12,313	5,162	90,035	--	4,104	--
LOUISA	234,104	--	--	--	60,553	16,282	152,696	--	4,573	--
MADISON	97,685	--	--	--	12,813	8,542	72,059	--	4,271	--
NELSON	238,094	--	--	--	32,494	23,186	174,425	--	7,989	--
ORANGE	131,845	--	--	--	25,210	24,888	78,193	--	3,554	--
PRINCE WILLIAM	104,606	--	--	--	24,364	3,390	73,463	--	3,389	--
RAPPAHANNOCK	74,756	3,398	--	--	3,398	3,398	64,562	--	--	--
SPOTSYLVANIA	184,139	--	--	--	60,463	35,829	80,085	3,881	3,881	--
STAFFORD	123,166	--	--	--	26,690	12,538	83,938	--	--	--
TOTAL	2,552,058	7,240	--	--	548,478	271,397	1,666,366	3,881	54,696	--

TABLE 4.--*AREA OF COMMERCIAL FOREST LAND, BY STAND-SIZE CLASS AND COUNTY, 1976*

COUNTY	ALL STANDS	STAND-SIZE CLASS			NONSTOCKED AREAS
		SAWTIMBER	POLETIMBER	SAPLING-SEEDLING	
			ACRES		
ALBEMARLE	291,386	134,062	81,064	68,576	7,684
AMHERST	232,994	76,985	116,201	39,754	54
ARLINGTON	--	--	--	--	--
CULPEPER	107,768	42,033	38,798	26,937	--
FAIRFAX	105,435	69,351	20,593	15,491	--
FAUQUIER	191,790	95,429	61,146	30,637	4,578
FLUVANNA	134,086	25,946	57,201	50,939	--
GOOCHLAND	136,607	30,027	64,937	41,643	--
GREENE	51,983	27,480	11,262	13,241	--
LOUDOUN	111,614	69,514	25,683	16,417	--
LOUISA	234,104	47,516	126,587	60,001	--
MADISON	97,685	54,076	26,524	17,085	--
NELSON	238,094	135,142	67,521	35,431	--
ORANGE	131,845	39,094	31,991	57,206	3,554
PRINCE WILLIAM	104,606	53,654	31,141	19,811	--
RAPPAHANNOCK	74,756	47,572	10,194	16,990	--
SPOTSYLVANIA	184,139	34,927	94,493	50,838	3,881
STAFFORD	123,166	56,421	46,115	20,630	--
TOTAL	2,552,058	1,039,229	911,451	581,627	19,751

TABLE 5.--*AREA OF COMMERCIAL FOREST LAND, BY SITE CLASS AND COUNTY, 1976*

COUNTY	ALL CLASSES	SITE CLASS				
		1	2	3	4	5
				ACRES		
ALBEMARLE	291,386	--	--	19,210	195,336	76,840
AMHERST	232,994	--	3,730	18,650	178,087	32,527
ARLINGTON	--	--	--	--	--	--
CULPEPER	107,768	--	--	16,167	88,368	3,233
FAIRFAX	105,435	--	--	15,492	78,325	11,618
FAUQUIER	191,790	--	--	18,843	161,459	11,488
FLUVANNA	134,086	--	--	25,344	84,004	24,738
GOOCHLAND	136,607	--	--	11,460	110,135	15,012
GREENE	51,983	--	4,310	6,620	31,123	9,930
LOUDOUN	111,614	--	--	8,208	102,348	1,058
LOUISA	234,104	--	2,562	27,438	178,676	25,428
MADISON	97,685	--	1,773	8,542	78,828	8,542
NELSON	238,094	--	--	34,398	174,077	29,619
ORANGE	131,845	--	--	--	110,521	21,324
PRINCE WILLIAM	104,606	--	--	--	91,048	13,558
RAPPAHANNOCK	74,756	--	--	3,398	54,368	16,990
SPOTSYLVANIA	184,139	--	--	31,498	132,337	20,304
STAFFORD	123,166	--	--	43,312	79,854	--
TOTAL	2,552,058	--	12,375	288,580	1,928,894	322,209

TABLE 6.--*AREA OF COMMERCIAL FOREST LAND, BY STOCKING CLASSES OF GROWING-STOCK TREES, BY COUNTY, 1976*

COUNTY	ALL CLASSES	STOCKING PERCENTAGE[1]				
		OVER 130	100-130	60-99	16.7-59	LESS THAN 16.7
				ACRES		
ALBEMARLE	291,386	7,684	76,454	141,553	58,011	7,684
AMHERST	232,994	--	32,292	149,267	51,381	54
ARLINGTON	--	--	--	--	--	--
CULPEPER	107,768	--	16,166	72,204	19,398	--
FAIRFAX	105,435	3,873	42,242	42,601	16,719	--
FAUQUIER	191,790	3,829	19,023	122,239	42,121	4,578
FLUVANNA	134,086	--	42,963	86,176	4,947	--
GOOCHLAND	136,607	--	41,646	79,949	15,012	--
GREENE	51,983	3,310	4,642	34,101	9,930	--
LOUDOUN	111,614	--	4,104	74,933	32,577	--
LOUISA	234,104	7,136	85,981	106,413	34,574	--
MADISON	97,685	4,271	22,254	49,805	21,355	--
NELSON	238,094	--	55,145	127,809	55,140	--
ORANGE	131,845	--	32,323	74,639	21,329	3,554
PRINCE WILLIAM	104,606	--	36,177	47,456	20,973	--
RAPPAHANNOCK	74,756	--	20,388	33,980	20,388	--
SPOTSYLVANIA	184,139	7,762	90,097	66,426	15,973	3,881
STAFFORD	123,166	10,068	35,477	72,569	5,052	--
TOTAL	2,552,058	47,933	657,374	1,382,120	444,880	19,751

[1] SEE STOCKING STANDARDS ON PAGE 12.

TABLE 7.--*VOLUME 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*[1]				
ALBEMARLE	1,093,304	153,694	22,508	277,744	639,358	384,821	68,114	6,689	81,674	228,344
AMHERST	664,420	66,250	57,542	201,538	339,090	263,371	44,130	15,284	69,527	134,430
ARLINGTON	--	--	--	--	--	--	--	--	--	--
CULPEPER	334,711	90,891	1,039	45,847	196,934	132,957	39,422	824	23,351	69,360
FAIRFAX	696,901	75,976	--	167,373	453,552	203,771	28,445	775	44,769	129,782
FAUQUIER	642,904	156,946	2,325	132,334	351,299	231,242	53,383	1,950	44,800	131,109
FLUVANNA	270,768	109,877	2,641	49,309	108,941	129,456	53,109	1,438	21,206	53,703
GOOCHLAND	328,943	47,390	--	141,078	140,475	153,387	39,442	1,119	47,218	65,608
GREENE	213,262	21,500	--	74,887	116,875	74,209	15,601	391	22,027	36,190
LOUDOUN	473,332	4,586	1,008	96,543	371,195	145,214	3,815	653	24,533	116,213
LOUISA	573,710	184,164	2,793	119,202	267,551	273,684	81,475	1,776	54,562	135,871
MADISON	414,146	62,892	14,536	103,024	233,694	137,812	25,505	3,159	30,357	78,791
NELSON	1,002,441	79,890	44,647	320,150	557,754	343,102	44,445	12,297	101,027	185,333
ORANGE	351,530	26,050	7,507	125,883	192,090	124,701	17,438	4,062	34,423	68,778
PRINCE WILLIAM	489,117	74,861	2,227	74,296	337,733	164,653	29,278	2,140	24,011	109,224
RAPPAHANNOCK	311,130	14,454	5,682	132,725	158,269	92,960	6,254	1,299	35,250	50,157
SPOTSYLVANIA	410,305	120,217	2,654	82,684	204,750	219,621	77,646	1,069	48,831	92,075
STAFFORD	572,043	94,493	2,056	136,685	338,809	209,619	46,916	786	53,767	108,150
TOTAL	8,842,967	1,384,131	169,165	2,281,302	5,008,369	3,284,580	674,418	55,711	761,333	1,793,118

[1] 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, 1975*

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*				
ALBEMARLE	57,344	8,671	1,520	17,828	29,325	16,057	3,024	499	3,823	8,711
AMHERST	41,413	5,434	3,946	15,517	16,516	11,964	2,216	887	3,429	5,432
ARLINGTON	--	--	--	--	--	--	--	--	--	--
CULPEPER	18,241	4,812	78	5,123	8,228	5,489	1,630	19	1,230	2,610
FAIRFAX	26,338	4,554	--	6,928	14,856	7,621	1,370	21	1,909	4,321
FAUQUIER	32,100	5,821	36	9,148	17,095	9,125	2,119	153	1,870	4,983
FLUVANNA	14,375	5,596	164	2,747	5,868	7,019	3,361	99	1,280	2,279
GOOCHLAND	21,921	4,005	73	6,540	11,303	7,785	2,849	30	1,862	3,044
GREENE	10,827	2,446	250	3,898	4,233	3,388	772	9	1,207	1,400
LOUDOUN	18,907	461	29	3,980	14,437	5,287	205	43	971	4,068
LOUISA	42,376	11,701	81	10,512	20,082	12,804	4,108	285	2,684	5,727
MADISON	21,121	2,649	836	6,632	11,004	5,361	1,032	200	1,433	2,696
NELSON	53,502	5,161	1,952	23,291	23,098	13,346	2,152	441	4,825	5,928
ORANGE	15,393	1,248	188	5,461	8,496	5,088	744	252	1,577	2,515
PRINCE WILLIAM	21,898	4,013	143	3,118	14,624	5,978	1,224	53	962	3,739
RAPPAHANNOCK	17,516	706	278	9,914	6,618	4,435	238	68	2,183	1,946
SPOTSYLVANIA	29,973	10,839	300	7,299	11,535	12,165	5,669	85	2,102	4,309
STAFFORD	27,961	5,465	57	7,376	15,063	8,307	1,945	14	2,876	3,472
TOTAL	471,206	83,582	9,931	145,312	232,381	141,219	34,658	3,158	36,223	67,180

TABLE 9. --*ANNUAL REMOVALS OF SAWTIMBER AND GROWING STOCK ON COMMERCIAL FOREST LAND, BY SPECIES GROUP AND COUNTY, 1975*

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*				
ALBEMARLE	29,438	3,322	--	10,912	15,204	7,234	886	--	2,556	3,792
AMHERST	6,694	636	922	1,346	3,790	2,946	661	145	485	1,655
ARLINGTON	--	--	--	--	--	--	--	--	--	--
CULPEPER	10,300	910	--	2,829	6,561	2,662	157	--	610	1,895
FAIRFAX	21,814	4,736	--	5,654	11,424	4,993	1,139	--	1,116	2,738
FAUQUIER	8,777	1,230	--	4,037	3,510	3,745	1,369	--	1,030	1,346
FLUVANNA	11,832	7,174	--	2,199	2,459	5,771	2,771	149	423	2,428
GOOCHLAND	11,686	2,075	--	3,869	5,742	4,465	1,035	--	912	2,518
GREENE	1,586	--	--	--	1,586	515	--	--	175	340
LOUDOUN	14,791	2,696	--	2,134	9,961	3,341	539	--	401	2,401
LOUISA	28,492	9,739	522	6,105	12,126	11,549	3,601	356	2,355	5,237
MADISON	3,478	--	--	1,196	2,282	881	--	--	203	678
NELSON	14,159	--	2,002	6,467	5,690	4,149	596	315	1,420	1,818
ORANGE	20,943	5,064	--	2,898	12,981	7,329	2,721	--	552	4,056
PRINCE WILLIAM	16,636	--	--	3,032	13,604	5,443	593	--	651	4,199
RAPPAHANNOCK	464	--	--	464	--	119	--	--	119	--
SPOTSYLVANIA	23,543	11,091	--	3,590	8,862	11,102	6,513	108	1,039	3,442
STAFFORD	22,241	4,576	--	9,626	8,039	6,005	1,236	--	2,348	2,421
TOTAL	246,874	53,249	3,446	66,358	123,821	82,249	23,817	1,073	16,395	40,964

TABLE 10.--*AREA OF COMMERCIAL FOREST LAND, BY FOREST TYPE AND OWNERSHIP CLASS, 1976*

FOREST TYPE	ALL OWNERSHIPS	OWNERSHIP CLASS				
		NATIONAL FOREST	OTHER PUBLIC	FOREST INDUSTRY	FARMER	MISC. PRIVATE
	ACRES					
SOFTWOOD TYPES:						
WHITE PINE-HEMLOCK	7,240	--	--	--	3,398	3,842
SPRUCE-FIR	--	--	--	--	--	--
LONGLEAF PINE	--	--	--	--	--	--
SLASH PINE	--	--	--	--	--	--
LOBLOLLY PINE	84,198	--	332	34,927	19,753	29,186
SHORTLEAF PINE	45,845	--	--	3,554	21,919	20,372
VIRGINIA PINE	392,055	--	22,355	51,852	150,531	167,317
SAND PINE	--	--	--	--	--	--
EASTERN REDCEDAR	26,380	--	403	--	15,073	10,904
POND PINE	--	--	--	--	--	--
SPRUCE PINE	--	--	--	--	--	--
PITCH PINE	--	--	--	--	--	--
TABLE-MOUNTAIN PINE	--	--	--	--	--	--
TOTAL	555,718	--	23,090	90,333	210,674	231,621
HARDWOOD TYPES:						
OAK-PINE	271,397	7,256	7,849	35,007	114,816	106,469
OAK-HICKORY	1,576,028	44,864	65,977	69,654	559,162	836,371
CHESTNUT OAK	90,338	10,886	1,773	3,734	16,778	57,167
SOUTHERN SCRUB OAK	--	--	--	--	--	--
OAK-GUM-CYPRESS	3,881	--	--	--	--	3,881
ELM-ASH-COTTONWOOD	54,696	--	--	--	27,499	27,197
MAPLE-BEECH-BIRCH	--	--	--	--	--	--
TOTAL	1,996,340	63,006	75,599	108,395	718,255	1,031,085
ALL TYPES	2,552,058	63,006	98,689	198,728	928,929	1,262,706

TABLE 11.--*AREA OF COMMERCIAL FOREST LAND, BY OWNERSHIP AND STOCKING CLASSES OF GROWING-STOCK TREES, 1976*

OWNERSHIP CLASSES	ALL CLASSES	STOCKING PERCENTAGE[1]				
		OVER 130	100-130	60-99	16.7-59	LESS THAN 16.7
	ACRES					
NATIONAL FOREST	63,006	--	7,256	52,121	3,629	--
OTHER PUBLIC	98,689	6,791	32,443	36,259	22,393	803
FOREST INDUSTRY	198,728	2,563	98,362	69,605	28,198	--
FARMER	928,929	11,160	238,016	523,154	152,757	3,842
MISC. PRIVATE	1,262,706	27,419	281,297	700,981	237,903	15,106
ALL OWNERSHIPS	2,552,058	47,933	657,374	1,382,120	444,880	19,751

[1] SEE STOCKING STANDARDS ON PAGE 12.

TABLE 12.--*VOLUME OF TIMBER ON COMMERCIAL FOREST LAND, BY CLASS AND SPECIES GROUP, 1976*

CLASS OF TIMBER	ALL SPECIES	PINE	OTHER SOFTWOOD	SOFT HARDWOOD	HARD HARDWOOD
	THOUSAND CUBIC FEET				
SAWTIMBER TREES:					
SAW-LOG PORTION	1,728,346	287,606	28,697	415,215	996,828
UPPER-STEM PORTION	349,461	54,782	5,466	85,044	204,169
TOTAL	2,077,807	342,388	34,163	500,259	1,200,997
POLETIMBER TREES	1,206,773	332,030	21,548	261,074	592,121
ALL GROWING-STOCK TREES	3,284,580	674,418	55,711	761,333	1,793,118
ROUGH TREES:					
SAWTIMBER-SIZE TREES	155,705	6,001	1,106	38,660	109,938
POLETIMBER-SIZE TREES	225,810	17,777	1,426	64,834	141,773
TOTAL	381,515	23,778	2,532	103,494	251,711
ROTTEN TREES:					
SAWTIMBER-SIZE TREES	43,251	231	316	13,989	28,715
POLETIMBER-SIZE TREES	7,206	--	--	2,735	4,471
TOTAL	50,457	231	316	16,724	33,186
SALVABLE DEAD TREES:					
SAWTIMBER-SIZE TREES	3,259	1,195	31	289	1,744
POLETIMBER-SIZE TREES	2,732	1,194	37	597	904
TOTAL	5,991	2,389	68	886	2,648
TOTAL, ALL TIMBER	3,722,543	700,816	58,627	882,437	2,080,663

TABLE 13.--*NUMBER OF GROWING-STOCK TREES ON COMMERCIAL FOREST LAND, BY SPECIES AND DIAMETER CLASS, 1976*

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 TREES										
SOFTWOOD:											
LONGLEAF PINE	--	--	--	--	--	--	--	--	--	--	--
SLASH PINE	--	--	--	--	--	--	--	--	--	--	--
SHORTLEAF PINE	14,914	5,042	5,251	2,797	1,322	408	64	10	20	--	--
LOBLOLLY PINE	8,117	5,073	2,141	474	171	115	44	64	30	5	--
POND PINE	12	--	--	--	--	--	12	--	--	--	--
VIRGINIA PINE	71,835	33,932	22,240	10,020	4,223	1,120	238	55	7	--	--
PITCH PINE	572	131	192	112	35	66	21	15	--	--	--
TABLE-MOUNTAIN PINE	16	--	--	--	16	--	--	--	--	--	--
SPRUCE PINE	--	--	--	--	--	--	--	--	--	--	--
SAND PINE	--	--	--	--	--	--	--	--	--	--	--
EASTERN WHITE PINE	2,019	735	344	335	148	214	122	46	26	49	--
EASTERN HEMLOCK	965	255	498	--	34	58	31	49	26	14	--
SPRUCE AND FIR	--	--	--	--	--	--	--	--	--	--	--
BALDCYPRESS	--	--	--	--	--	--	--	--	--	--	--
PONDCYPRESS	--	--	--	--	--	--	--	--	--	--	--
CEDARS	5,239	3,764	1,022	373	45	27	--	8	--	--	--
TOTAL SOFTWOODS	103,689	48,932	31,688	14,111	5,994	2,008	532	247	109	68	--
HARDWOOD:											
SELECT WHITE OAKS	39,898	14,701	8,847	5,587	3,996	2,731	2,012	1,011	571	421	21
SELECT RED OAKS	10,141	2,848	1,794	1,502	1,449	1,115	540	344	231	280	38
CHESTNUT OAK	20,750	5,106	4,778	3,959	2,561	1,633	1,199	813	386	290	25
OTHER WHITE OAKS	2,066	693	633	268	195	177	40	--	19	31	10
OTHER RED OAKS	31,362	10,064	8,057	4,687	3,427	2,498	1,236	647	357	369	20
HICKORY	20,857	8,159	4,469	3,609	2,021	1,312	807	243	95	139	3
YELLOW BIRCH	--	--	--	--	--	--	--	--	--	--	--
HARD MAPLE	46	--	--	21	18	--	--	7	--	--	--
SOFT MAPLE	14,462	6,560	3,213	2,443	1,083	484	362	131	59	123	4
BEECH	3,851	1,841	695	551	285	216	89	65	56	51	2
SWEETGUM	7,490	3,951	1,633	1,112	473	237	45	26	7	4	2
TUPELO AND BLACKGUM	4,647	2,259	808	708	417	177	186	40	20	32	--
ASH	4,102	1,498	1,043	683	433	230	137	42	13	23	--
COTTONWOOD	43	--	43	--	--	--	--	--	--	--	--
BASSWOOD	538	80	80	81	171	79	17	17	6	7	--
YELLOW-POPLAR	30,209	8,990	5,835	4,922	3,880	2,792	1,901	935	450	459	45
BAY AND MAGNOLIA	611	264	76	156	54	49	--	--	12	--	--
BLACK CHERRY	848	367	352	25	15	28	37	9	--	15	--
BLACK WALNUT	2,012	798	573	243	148	159	42	36	13	--	--
SYCAMORE	1,049	137	79	223	273	157	62	27	28	50	13
BLACK LOCUST	3,357	696	1,180	685	458	235	53	36	14	--	--
ELM	1,545	741	301	209	157	67	31	8	--	31	--
OTHER EASTERN HARDWOODS	5,442	2,864	1,154	432	461	250	128	71	29	53	--
TOTAL HARDWOODS	205,326	72,617	45,643	32,106	21,975	14,626	8,924	4,508	2,366	2,378	183
ALL SPECIES	309,015	121,549	77,331	46,217	27,969	16,634	9,456	4,755	2,475	2,446	183

TABLE 14.--*VOLUME OF ALL LIVE TREES ON COMMERCIAL FOREST LAND, BY SPECIES AND DIAMETER CLASS, 1976*

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	--	--	--	--	--	--	--	--	--	--	--
SLASH PINE	--	--	--	--	--	--	--	--	--	--	--
SHORTLEAF PINE	125,156	14,557	34,880	34,665	25,140	11,171	2,686	518	1,539	--	--
LOBLOLLY PINE	45,200	12,677	12,911	5,199	3,263	3,401	1,817	3,479	2,022	431	--
POND PINE	303	--	--	--	--	--	303	--	--	--	--
VIRGINIA PINE	518,952	112,672	158,705	127,974	78,369	29,764	8,470	2,467	531	--	--
PITCH PINE	8,098	1,349	1,743	920	650	1,630	850	646	--	310	--
TABLE-MOUNTAIN PINE	718	147	166	80	325	--	--	--	--	--	--
SPRUCE PINE	--	--	--	--	--	--	--	--	--	--	--
SAND PINE	--	--	--	--	--	--	--	--	--	--	--
EASTERN WHITE PINE	26,373	2,036	1,981	3,825	2,614	4,979	3,565	1,928	1,686	3,435	324
EASTERN HEMLOCK	11,130	452	2,905	--	573	1,216	902	2,045	1,363	1,674	--
SPRUCE AND FIR	--	--	--	--	--	--	--	--	--	--	--
BALDCYPRESS	--	--	--	--	--	--	--	--	--	--	--
PONDCYPRESS	--	--	--	--	--	--	--	--	--	--	--
CEDARS	21,056	9,459	6,141	3,562	862	581	--	451	--	--	--
TOTAL SOFTWOODS	756,986	153,349	219,432	176,225	111,796	52,742	18,593	11,534	7,141	5,850	324
HARDWOOD:											
SELECT WHITE OAKS	535,846	47,392	58,379	66,483	75,714	78,576	75,691	52,296	36,944	39,264	5,107
SELECT RED OAKS	203,816	12,228	13,267	20,456	29,494	30,537	22,178	19,279	15,109	31,830	9,438
CHESTNUT OAK	366,283	20,257	37,366	56,167	51,468	47,304	49,140	40,688	25,625	30,909	7,159
OTHER WHITE OAKS	23,246	1,719	3,596	3,498	3,870	4,743	1,638	--	919	2,159	1,104
OTHER RED OAKS	395,585	30,889	50,903	52,059	62,749	63,039	43,815	30,255	22,355	34,274	5,247
HICKORY	240,951	26,060	30,739	41,954	39,033	36,721	31,595	13,544	6,497	14,188	620
YELLOW BIRCH	--	--	--	--	--	--	--	--	--	--	--
HARD MAPLE	1,181	--	--	374	258	220	--	329	--	--	--
SOFT MAPLE	187,247	32,271	32,222	37,285	25,328	17,747	15,013	8,129	4,344	12,775	2,133
BEECH	49,714	6,003	5,177	9,134	6,028	6,293	4,671	3,970	3,494	4,513	491
SWEETGUM	54,403	9,392	10,972	12,564	9,436	6,628	1,803	1,380	442	792	996
TUPELO AND BLACKGUM	54,505	7,638	7,468	10,667	8,813	5,545	7,003	2,412	1,766	2,647	548
ASH	60,469	8,213	10,764	10,729	10,831	7,966	5,110	4,032	1,255	1,569	--
COTTONWOOD	378	--	378	--	--	--	--	--	--	--	--
BASSWOOD	10,635	159	911	980	3,248	2,320	644	1,020	448	905	--
YELLOW-POPLAR	494,684	30,588	41,966	60,940	75,408	79,069	72,721	48,745	30,560	42,871	11,816
BAY AND MAGNOLIA	7,616	869	885	1,790	999	1,621	331	231	890	--	--
BLACK CHERRY	14,438	2,580	3,908	1,443	1,507	1,250	1,428	1,016	--	1,306	--
BLACK WALNUT	27,649	2,991	4,164	3,619	5,004	5,456	1,722	2,229	1,790	674	--
SYCAMORE	29,122	1,261	627	4,094	6,507	4,705	2,552	1,199	1,478	4,150	2,549
BLACK LOCUST	62,526	7,700	14,488	12,184	10,623	8,652	4,059	2,290	1,323	1,037	170
ELM	24,047	3,595	4,622	4,982	3,379	2,212	1,698	553	--	3,006	--
OTHER EASTERN HARDWOODS	115,225	26,918	26,058	19,023	14,642	10,302	6,338	5,173	2,959	4,818	--
TOTAL HARDWOODS	2,959,566	278,723	357,860	430,425	444,338	420,846	349,150	238,770	158,392	233,687	47,375
ALL SPECIES	3,716,552	432,072	577,292	606,650	556,134	473,588	367,743	250,304	165,533	239,537	47,699

TABLE 15.--*VOLUME OF GROWING STOCK ON COMMERCIAL FOREST LAND, BY SPECIES AND DIAMETER CLASS, 1976*

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	--	--	--	--	--	--	--	--	--	--	--
SLASH PINE	--	--	--	--	--	--	--	--	--	--	--
SHORTLEAF PINE	124,589	14,392	34,688	34,455	25,140	11,171	2,686	518	1,539	--	--
LOBLOLLY PINE	44,554	12,271	12,911	4,959	3,263	3,401	1,817	3,479	2,022	431	--
POND PINE	303	--	--	--	--	--	303	--	--	--	--
VIRGINIA PINE	498,414	104,642	151,589	123,397	77,829	29,489	8,470	2,467	531	--	--
PITCH PINE	6,233	323	1,214	920	650	1,630	850	646	--	--	--
TABLE-MOUNTAIN PINE	325	--	--	--	325	--	--	--	--	--	--
SPRUCE PINE	--	--	--	--	--	--	--	--	--	--	--
SAND PINE	--	--	--	--	--	--	--	--	--	--	--
EASTERN WHITE PINE	25,395	1,924	1,981	3,825	2,277	4,979	3,565	1,928	1,481	3,435	--
EASTERN HEMLOCK	11,130	452	2,905	--	573	1,216	902	2,045	1,363	1,674	--
SPRUCE AND FIR	--	--	--	--	--	--	--	--	--	--	--
BALDCYPRESS	--	--	--	--	--	--	--	--	--	--	--
PONDCYPRESS	--	--	--	--	--	--	--	--	--	--	--
CEDARS	19,186	8,592	5,694	3,393	673	581	--	253	--	--	--
TOTAL SOFTWOODS	730,129	142,596	210,982	170,949	110,730	52,467	18,593	11,336	6,936	5,540	--
HARDWOOD:											
SELECT WHITE OAKS	512,472	42,735	55,610	64,217	74,428	75,056	74,029	49,749	35,965	36,654	4,029
SELECT RED OAKS	179,471	10,006	12,206	17,715	26,741	28,761	19,657	16,639	13,544	27,971	6,231
CHESTNUT OAK	297,773	14,567	28,868	43,097	43,618	40,825	40,983	35,481	21,916	23,641	4,777
OTHER WHITE OAKS	20,174	1,540	3,160	2,523	3,432	3,983	1,354	--	919	2,159	1,104
OTHER RED OAKS	379,597	28,640	47,968	49,764	59,998	62,610	43,815	30,043	21,594	31,741	3,424
HICKORY	225,434	21,787	27,483	40,378	36,701	35,568	30,913	12,253	6,260	13,471	620
YELLOW BIRCH	--	--	--	--	--	--	--	--	--	--	--
HARD MAPLE	836	--	--	249	258	--	--	329	--	--	--
SOFT MAPLE	132,460	22,043	20,064	27,898	19,467	11,895	11,824	5,415	3,356	9,438	1,060
BEECH	41,178	5,194	4,257	6,796	4,992	5,075	3,625	3,069	3,494	4,185	491
SWEETGUM	49,153	7,866	9,325	11,791	8,854	6,628	1,803	1,380	442	479	585
TUPELO AND BLACKGUM	39,732	5,570	4,584	6,567	7,201	4,359	6,377	1,829	1,004	2,241	--
ASH	42,516	5,001	7,237	7,887	8,037	5,681	4,504	1,918	682	1,569	--
COTTONWOOD	378	--	378	--	--	--	--	--	--	--	--
BASSWOOD	9,629	159	452	980	3,248	2,320	644	719	448	659	--
YELLOW-POPLAR	473,578	27,871	38,561	59,863	73,317	77,491	71,392	46,334	28,572	40,908	9,269
BAY AND MAGNOLIA	6,064	756	465	1,540	999	1,414	--	--	890	--	--
BLACK CHERRY	7,060	1,141	2,198	273	389	629	1,088	412	--	930	--
BLACK WALNUT	18,445	2,378	3,574	2,142	2,460	3,878	1,188	1,967	858	--	--
SYCAMORE	25,242	592	627	2,916	5,116	4,418	2,197	1,199	1,478	4,150	2,549
BLACK LOCUST	30,399	2,015	6,450	6,756	6,522	5,145	1,544	1,346	621	--	--
ELM	15,283	1,849	1,853	2,574	2,812	1,933	1,143	333	--	2,786	--
OTHER EASTERN HARDWOODS	47,577	7,481	8,026	4,732	7,889	6,279	4,586	3,380	1,523	3,681	--
TOTAL HARDWOODS	2,554,451	209,191	283,346	360,658	396,479	383,948	322,666	213,795	143,566	206,663	34,139
ALL SPECIES	3,284,580	351,787	494,328	531,607	507,209	436,415	341,259	225,131	150,502	212,203	34,139

TABLE 16. --*VOLUME OF SAWTIMBER ON COMMERCIAL FOREST LAND, BY SPECIES AND DIAMETER CLASS, 1976*

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	--	--	--	--	--	--	--	--	--
SLASH PINE	--	--	--	--	--	--	--	--	--
SHORTLEAF PINE	323,797	126,856	112,736	56,603	15,114	3,010	9,478	--	--
LOBLOLLY PINE	95,032	16,834	14,838	17,209	10,147	20,585	12,556	2,863	--
POND PINE	1,618	--	--	--	1,618	--	--	--	--
VIRGINIA PINE	940,233	428,820	319,731	134,558	41,554	12,717	2,853	--	--
PITCH PINE	21,913	2,798	2,706	7,932	4,642	3,835	--	--	--
TABLE-MOUNTAIN PINE	1,538	--	1,538	--	--	--	--	--	--
SPRUCE PINE	--	--	--	--	--	--	--	--	--
SAND PINE	--	--	--	--	--	--	--	--	--
EASTERN WHITE PINE	105,898	13,824	9,817	23,923	18,519	10,600	8,572	20,643	--
EASTERN HEMLOCK	41,842	--	2,439	5,513	4,618	11,102	7,795	10,375	--
SPRUCE AND FIR	--	--	--	--	--	--	--	--	--
BALDCYPRESS	--	--	--	--	--	--	--	--	--
PONDCYPRESS	--	--	--	--	--	--	--	--	--
CEDARS	21,425	13,533	3,355	3,039	--	1,498	--	--	--
TOTAL SOFTWOODS	1,553,296	602,665	467,160	248,777	96,212	63,347	41,254	33,881	--
HARDWOOD:									
SELECT WHITE OAKS	1,477,664	--	244,151	290,575	317,234	231,706	177,380	192,592	24,026
SELECT RED OAKS	578,375	--	85,417	106,767	79,571	72,496	61,826	138,778	33,520
CHESTNUT OAK	870,722	--	137,615	152,308	169,957	158,388	103,812	121,274	27,368
OTHER WHITE OAKS	59,629	--	12,824	16,667	6,318	--	4,883	12,204	6,733
OTHER RED OAKS	1,066,661	--	195,045	242,978	189,541	140,805	107,150	170,600	20,542
HICKORY	577,935	--	124,375	143,114	138,817	59,923	32,257	75,633	3,816
YELLOW BIRCH	--	--	--	--	--	--	--	--	--
HARD MAPLE	2,445	--	927	--	--	1,518	--	--	--
SOFT MAPLE	249,802	--	61,788	44,510	49,214	24,090	15,963	47,879	6,358
BEECH	97,454	--	18,291	19,277	14,226	12,231	14,129	17,203	2,097
SWEETGUM	85,205	--	31,378	28,393	8,689	7,223	2,410	3,062	4,050
TUPELO AND BLACKGUM	89,278	--	22,429	16,166	26,379	8,275	4,718	11,311	--
ASH	88,278	--	26,779	21,989	19,285	8,867	3,354	8,004	--
COTTONWOOD	--	--	--	--	--	--	--	--	--
BASSWOOD	31,916	--	11,083	9,144	2,820	3,206	2,176	3,487	--
YELLOW-POPLAR	1,653,656	--	258,920	332,412	344,910	244,369	160,796	249,361	63,488
BAY AND MAGNOLIA	15,872	--	3,363	6,713	--	--	5,796	--	--
BLACK CHERRY	15,174	--	1,443	2,487	4,694	1,889	--	4,661	--
BLACK WALNUT	36,254	--	8,483	13,543	4,185	6,983	3,060	--	--
SYCAMORE	93,282	--	15,610	16,917	9,481	5,598	7,312	22,779	15,585
BLACK LOCUST	54,713	--	22,870	18,657	5,722	5,084	2,380	--	--
ELM	37,857	--	9,829	7,581	4,796	1,526	--	14,125	--
OTHER EASTERN HARDWOODS	107,499	--	27,233	23,869	18,635	14,002	6,811	16,949	--
TOTAL HARDWOODS	7,289,671	--	1,319,253	1,514,067	1,414,474	1,008,179	716,213	1,109,902	207,583
ALL SPECIES	8,842,967	602,665	1,786,413	1,762,844	1,510,686	1,071,526	757,467	1,143,783	207,583

TABLE 17.--*NET ANNUAL GROWTH AND REMOVALS OF GROWING STOCK ON COMMERCIAL FOREST LAND, BY SPECIES, 1975*

SPECIES	NET ANNUAL GROWTH	ANNUAL TIMBER REMOVALS
	- - THOUSAND CUBIC FEET - -	
SOFTWOOD:		
YELLOW PINES	34,658	23,817
EASTERN WHITE PINE	1,576	145
SPRUCE AND FIR	--	--
CYPRESS	--	--
OTHER EASTERN SOFTWOODS	1,582	928
TOTAL SOFTWOODS	37,816	24,890
HARDWOOD:		
SELECT WHITE AND RED OAKS	25,282	21,719
OTHER WHITE AND RED OAKS	26,500	14,566
HICKORY	7,556	2,631
YELLOW BIRCH	--	--
HARD MAPLE	39	--
SWEETGUM	2,004	1,676
ASH,WALNUT, AND BLACK CHERRY	3,610	340
YELLOW-POPLAR	25,557	10,967
TUPELO AND BLACKGUM	1,012	751
BAY AND MAGNOLIA	202	--
OTHER EASTERN HARDWOODS	11,641	4,709
TOTAL HARDWOODS	103,403	57,359
ALL SPECIES	141,219	82,249

TABLE 18.--*NET ANNUAL GROWTH AND REMOVALS OF SAWTIMBER ON COMMERCIAL FOREST LAND, BY SPECIES, 1975*

SPECIES	NET ANNUAL GROWTH	ANNUAL TIMBER REMOVALS
	- - - THOUSAND BOARD FEET - - -	
SOFTWOOD:		
YELLOW PINES	83,582	53,249
EASTERN WHITE PINE	6,990	922
SPRUCE AND FIR	--	--
CYPRESS	--	--
OTHER EASTERN SOFTWOODS	2,941	2,524
TOTAL SOFTWOODS	93,513	56,695
HARDWOOD:		
SELECT WHITE AND RED OAKS	91,824	61,927
OTHER WHITE AND RED OAKS	92,902	48,721
HICKORY	26,638	8,062
YELLOW BIRCH	--	--
HARD MAPLE	428	--
SWEETGUM	3,849	4,736
ASH,WALNUT, AND BLACK CHERRY	7,550	--
YELLOW-POPLAR	113,687	49,716
TUPELO AND BLACKGUM	2,019	1,903
BAY AND MAGNOLIA	847	--
OTHER EASTERN HARDWOODS	37,949	15,114
TOTAL HARDWOODS	377,693	190,179
ALL SPECIES	471,206	246,874

TABLE 19.--*MORTALITY OF GROWING STOCK AND SAWTIMBER ON COMMERCIAL FOREST LAND, BY SPECIES, 1975*

SPECIES	GROWING STOCK	SAWTIMBER
	THOUSAND CUBIC FEET	*THOUSAND BOARD FEET*
SOFTWOOD:		
YELLOW PINES	8,594	19,785
EASTERN WHITE PINE	110	702
SPRUCE AND FIR	--	--
CYPRESS	--	--
OTHER EASTERN SOFTWOODS	134	--
TOTAL SOFTWOODS	8,838	20,487
HARDWOOD:		
SELECT WHITE AND RED OAKS	2,524	7,964
OTHER WHITE AND RED OAKS	3,359	12,587
HICKORY	897	3,595
YELLOW BIRCH	--	--
HARD MAPLE	--	--
SWEETGUM	611	--
ASH,WALNUT, AND BLACK CHERRY	517	497
YELLOW-POPLAR	898	1,034
TUPELO AND BLACKGUM	115	494
BAY AND MAGNOLIA	--	--
OTHER EASTERN HARDWOODS	2,665	4,844
TOTAL HARDWOODS	11,586	31,015
ALL SPECIES	20,424	51,502

TABLE 20.--*VOLUME OF ALL LIVE TREES AND GROWING STOCK ON COMMERCIAL FOREST LAND, BY OWNERSHIP CLASS AND SPECIES GROUP, 1976*

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	119,931	4,013	5,192	30,948	79,778	95,822	3,767	4,854	28,991	58,210
OTHER PUBLIC	186,280	41,931	791	41,067	102,491	160,378	39,645	791	34,753	85,189
FOREST INDUSTRY	231,709	81,374	4,319	49,801	96,215	207,970	80,890	4,149	40,829	82,102
FARMER	1,374,787	257,333	30,525	294,436	792,493	1,217,710	244,653	29,283	248,244	695,530
MISCELLANEOUS PRIVATE	1,803,845	313,776	17,732	465,299	1,007,038	1,602,700	305,463	16,634	408,516	872,087
ALL OWNERSHIPS	3,716,552	698,427	58,559	881,551	2,078,015	3,284,580	674,418	55,711	761,333	1,793,118

TABLE 21.--*VOLUME OF SAWTIMBER ON COMMERCIAL FOREST LAND, BY OWNERSHIP CLASS AND SPECIES GROUP, 1976*

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	97,008	7,838	6,285	38,754	44,131	186,480	3,613	11,808	54,162	116,897
OTHER PUBLIC	196,429	65,790	2,056	44,476	84,107	283,495	17,833	--	77,923	187,739
FOREST INDUSTRY	277,214	150,122	2,610	57,254	67,228	228,525	6,680	8,935	61,144	151,766
FARMER	1,499,283	423,377	39,298	248,143	788,465	1,875,401	66,747	46,376	487,437	1,274,841
MISCELLANEOUS PRIVATE	2,081,988	596,032	25,194	493,944	966,818	2,117,144	46,099	26,603	718,065	1,326,377
ALL OWNERSHIPS	4,151,922	1,243,159	75,443	882,571	1,950,749	4,691,045	140,972	93,722	1,398,731	3,057,620

[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, 1975*

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
	THOUSAND CUBIC FEET									
NATIONAL FOREST	3,842	91	260	1,478	2,013	1,389	--	145	485	759
OTHER PUBLIC	5,773	1,458	15	1,491	2,809	8,077	1,388	--	1,070	5,619
FOREST INDUSTRY	11,153	5,660	369	1,868	3,256	10,141	5,594	79	1,164	3,304
FARMER	52,392	13,377	1,519	11,839	25,657	18,996	3,706	496	3,822	10,972
MISCELLANEOUS PRIVATE	68,059	14,072	995	19,547	33,445	43,646	13,129	353	9,854	20,310
ALL OWNERSHIPS	141,219	34,658	3,158	36,223	67,180	82,249	23,817	1,073	16,395	40,964

TABLE 23.--*NET ANNUAL GROWTH AND REMOVALS OF SAWTIMBER ON COMMERCIAL FOREST LAND, BY OWNERSHIP CLASS AND SPECIES GROUP, 1975*

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
	THOUSAND BOARD FEET									
NATIONAL FOREST	15,273	253	1,505	5,299	8,216	2,806	--	922	1,346	538
OTHER PUBLIC	22,572	5,504	57	6,691	10,320	32,969	6,584	--	6,183	20,202
FOREST INDUSTRY	24,596	8,252	377	6,031	9,936	20,418	7,586	--	5,031	7,801
FARMER	178,308	30,828	5,153	48,566	93,761	70,316	9,832	2,524	19,730	38,230
MISCELLANEOUS PRIVATE	230,457	38,745	2,839	78,725	110,148	120,365	29,247	--	34,068	57,050
ALL OWNERSHIPS	471,206	83,582	9,931	145,312	232,381	246,874	53,249	3,446	66,358	123,821

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, 1976*

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	1,896	951	--	--	2,482	1,401	1,525	813	1,652	884	2,199	1,020
HARDWOOD	472	198	--	--	467	236	82	53	480	211	614	237
TOTAL	2,368	1,149	--	--	2,949	1,637	1,607	866	2,132	1,095	2,813	1,257
OTHER TIMBER:												
SOFTWOOD	--	31	--	--	--	26	--	5	--	54	--	21
HARDWOOD	--	30	--	--	--	27	--	19	--	44	--	23
TOTAL	--	61	--	--	--	53	--	24	--	98	--	44
OAK-PINE TYPES:												
GROWING STOCK:												
SOFTWOOD	824	371	1,686	512	802	393	373	205	1,167	458	541	319
HARDWOOD	1,271	591	466	431	3,027	1,233	258	193	1,915	787	824	470
TOTAL	2,095	962	2,152	943	3,829	1,626	631	398	3,082	1,245	1,365	789
OTHER TIMBER:												
SOFTWOOD	--	15	--	--	--	202	--	6	--	8	--	12
HARDWOOD	--	112	--	266	--	46	--	45	--	162	--	74
TOTAL	--	127	--	266	--	248	--	51	--	170	--	86
UPLAND HARDWOOD TYPES:												
GROWING STOCK:												
SOFTWOOD	175	65	294	84	333	88	265	82	176	67	145	59
HARDWOOD	3,889	1,331	4,135	1,389	4,866	1,420	3,936	1,368	4,228	1,383	3,571	1,283
TOTAL	4,064	1,396	4,429	1,473	5,199	1,508	4,201	1,450	4,404	1,450	3,716	1,342
OTHER TIMBER:												
SOFTWOOD	--	4	--	10	--	2	--	--	--	3	--	4
HARDWOOD	--	200	--	357	--	306	--	243	--	181	--	190
TOTAL	--	204	--	367	--	308	--	243	--	184	--	194
BOTTOMLAND HARDWOOD TYPES:												
GROWING STOCK:												
SOFTWOOD	14	16	--	--	--	--	--	--	31	25	--	8
HARDWOOD	2,759	920	--	--	--	--	--	--	2,785	871	2,736	963
TOTAL	2,773	936	--	--	--	--	--	--	2,816	896	2,736	971
OTHER TIMBER:												
SOFTWOOD	--	--	--	--	--	--	--	--	--	--	--	--
HARDWOOD	--	379	--	--	--	--	--	--	--	475	--	296
TOTAL	--	379	--	--	--	--	--	--	--	475	--	296
ALL TYPES:												
GROWING STOCK:												
SOFTWOOD	609	286	437	128	825	389	826	418	628	299	551	256
HARDWOOD	2,856	1,001	3,757	1,290	3,795	1,155	1,656	604	3,053	1,029	2,782	1,016
TOTAL	3,465	1,287	4,194	1,418	4,620	1,544	2,482	1,022	3,681	1,328	3,333	1,272
OTHER TIMBER:												
SOFTWOOD	--	11	--	9	--	22	--	3	--	15	--	8
HARDWOOD	--	159	--	348	--	227	--	113	--	156	--	152
TOTAL	--	170	--	357	--	249	--	116	--	171	--	160
ALL TIMBER	3,465	1,457	4,194	1,775	4,620	1,793	2,482	1,138	3,681	1,499	3,333	1,432

[1] ROUGH AND ROTTEN TREES.

TABLE 25.--*LAND AREA, BY CLASS, MAJOR FOREST TYPE, AND SURVEY COMPLETION DATE, 1957, 1965, AND 1976*

LAND USE CLASS	SURVEY COMPLETION DATE			CHANGE
	1957	1965	1976	1965-1976
		ACRES		
FOREST LAND:				
COMMERCIAL FOREST LAND:				
PINE AND OAK-PINE TYPES	859,200	869,615	827,115	- 42,500
HARDWOOD TYPES	1,633,300	1,589,223	1,724,943	+135,720
TOTAL	2,492,500	2,458,838	2,552,058	+ 93,220
NONCOMMERCIAL FOREST LAND:				
PRODUCTIVE-RESERVED	110,300	133,927	145,257	+ 11,330
UNPRODUCTIVE	24,200	11,070	--	- 11,070
TOTAL	134,500	144,997	145,257	+ 260
NONFOREST LAND:				
CROPLAND	786,400	632,516	506,627	-125,889
PASTURE AND RANGE	781,000	861,362	794,071	- 67,291
OTHER	230,800	331,623	400,455	+ 68,832
TOTAL	1,798,200	1,825,501	1,701,153	-124,348
ALL LAND[1]	4,425,200	4,429,336	4,398,468	- 30,868

[1] EXCLUDES ALL WATER AREAS.

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	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
SAWTIMBER (IN THOUSAND BOARD FEET)											
SOFTWOOD	1957	1,066,060	--	--	426,324	361,492	184,872	53,716	17,183	14,002	8,471
	1965	1,038,099	--	--	426,751	310,451	154,513	70,898	40,519	17,029	17,938
	1976	1,553,296	--	--	602,665	467,160	248,777	96,212	63,347	41,254	33,881
HARDWOOD	1957	4,679,528	--	--	--	963,426	1,079,337	768,533	588,500	435,026	844,706
	1965	5,377,847	--	--	--	998,839	1,242,771	926,738	616,461	471,051	1,121,987
	1976	7,289,671	--	--	--	1,319,253	1,514,067	1,414,474	1,008,179	716,213	1,317,485
GROWING STOCK (IN THOUSAND CUBIC FEET)											
SOFTWOOD	1957	540,033	138,347	138,881	120,943	85,682	38,986	10,380	3,075	2,354	1,385
	1965	551,001	130,522	166,500	121,064	73,584	32,584	13,700	7,251	2,863	2,933
	1976	730,129	142,596	210,982	170,949	110,730	52,467	18,593	11,336	6,936	5,540
HARDWOOD	1957	1,809,292	189,343	241,724	273,226	289,578	273,735	175,304	124,788	87,197	154,397
	1965	1,970,284	184,916	240,824	287,533	300,222	315,184	211,391	130,717	94,418	205,079
	1976	2,554,451	209,191	283,346	360,658	396,479	383,948	322,666	213,795	143,566	240,802
ALL LIVE TIMBER (IN THOUSAND CUBIC FEET)											
SOFTWOOD	1957	561,529	149,212	144,428	124,695	86,535	39,180	10,380	3,133	2,422	1,544
	1965	573,034	140,773	173,149	124,815	74,318	32,754	13,700	7,356	2,919	3,250
	1976	756,986	153,349	219,432	176,225	111,796	52,742	18,593	11,534	7,141	6,174
HARDWOOD	1957	2,113,692	252,343	305,241	326,027	324,632	300,000	189,714	139,379	96,205	180,151
	1965	2,293,885	246,444	304,106	343,094	336,551	345,435	228,737	145,967	104,169	239,382
	1976	2,959,566	278,723	357,860	430,425	444,338	420,846	349,150	238,770	158,392	281,062

[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.

Sheffield, Raymond M.
1976. Forest statistics for the Northern Piedmont of Virginia, 1976. USDA For. Serv. Resour. Bull. SE-39, 33 p. Southeast. For. Exp. Stn., Asheville, N. C.

Since 1965, the area of commercial forest land increased nearly 4 percent in this 18-county area. Commercial forests now occupy 2.6 million acres, or 58 percent of the total land area. Private nonindustrial landowners hold 86 percent of these forests. The inventory of softwood and hardwood growing stock increased by 33 and 30 percent, respectively. All major softwood and hardwood species increased in volume. Net annual growth of growing stock averaged 55 cubic feet per acre of commercial forest land, 72 percent more than the volume of annual timber removals.

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

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Southeastern Forest Experiment Station
Asheville, North Carolina

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