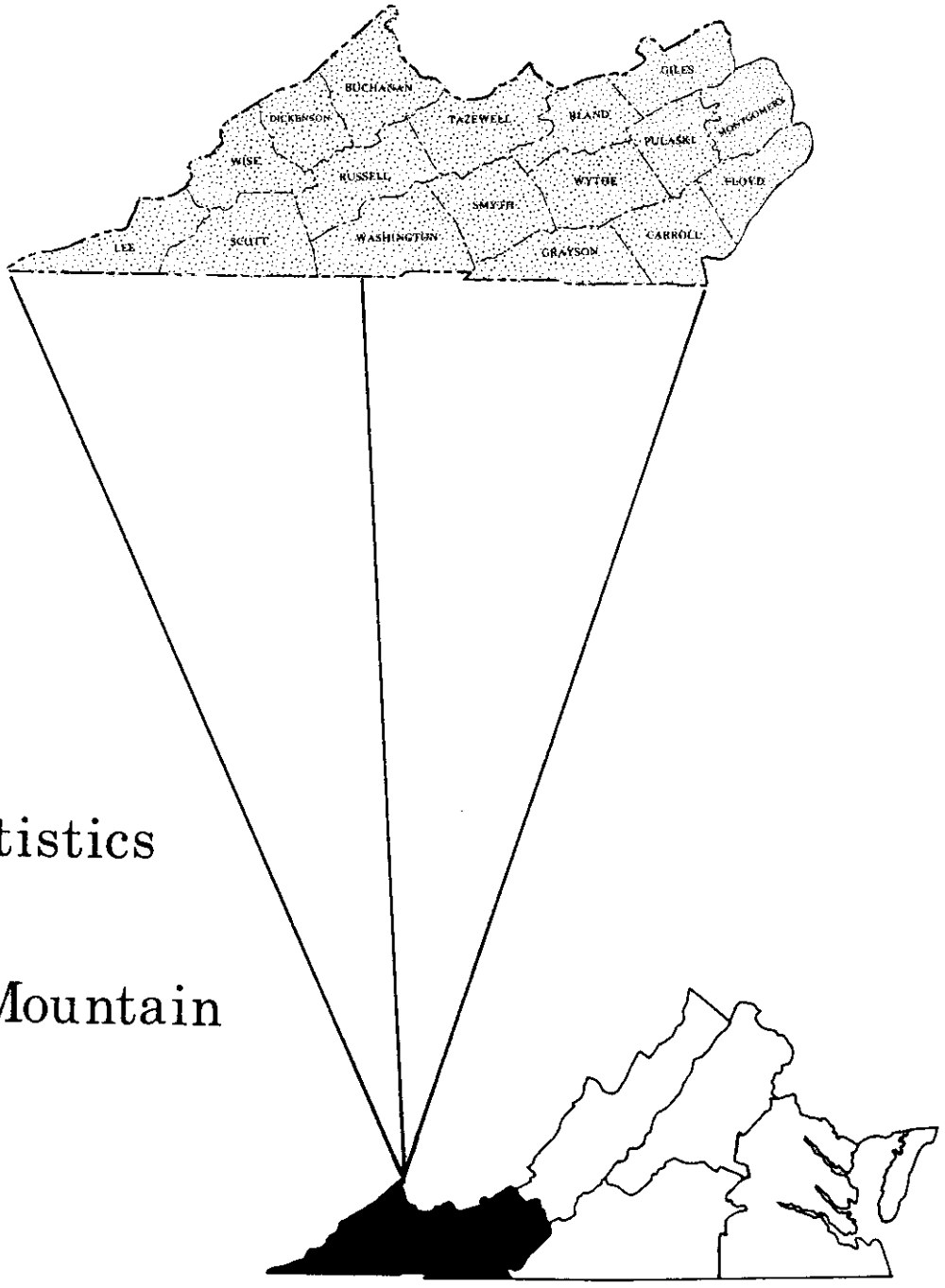
USDA Forest Service Resource Bulletin SE-42 October 1977



Forest Statistics for the Southern Mountain Region of Virginia 1977

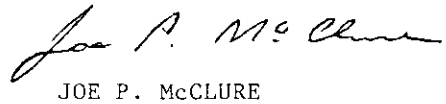
FOREWORD

This report highlights the principal findings of the fourth inventory of the timber resource in the Southern Mountain Region of Virginia. The inventory was started in December 1976 and completed in March 1977. Three previous inventories, completed in 1940, 1957, and 1966, provide statistics for measuring changes and trends over the past 37 years. In this report, the primary emphasis is on the changes and trends since 1966. Previously reported figures have been adjusted to provide the best estimate of real change.

Forest Survey, 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, USDA. In Florida, Georgia, North Carolina, South Carolina, and Virginia, Renewable Resources Evaluation 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 17-county area covered by this report is one of five survey units in Virginia. Similar reports, USDA Forest Service Resource Bulletins SE-34, 35, 39, and 41, have been issued for the Coastal Plain, Southern Piedmont, Northern Piedmont, and the Northern Mountain Region, along with an interim summary of some of the State totals. A final State report will present an in-depth analysis of the findings and should be available early in 1978.

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
Project Leader

Forest Statistics
for the
Southern Mountain Region of Virginia
1977

by
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HIGHLIGHTS

Since 1966 in the Southern Mountain Region of Virginia--

--area of commercial forest land has increased by 20,000 acres, or less than 1 percent. This increase is entirely attributable to the reclassification of nearly 17,000 acres of noncommercial forest land on the Jefferson National Forest to commercial forest land. Altogether, more than 96,000 acres were added to commercial forests, while only 76,000 acres of commercial forests were diverted to other land uses. Urban land uses accounted for 51 percent of the diversions; agricultural uses accounted for nearly 40 percent. Commercial forest land now occupies 3.0 million acres, or 63 percent of the total land in this 17-county area.

--area of commercial forest land owned by public agencies has increased by 92,000 acres, or by 25 percent. The previously mentioned land reclassification on the Jefferson National Forest accounted for 18 percent of this increase. This National Forest makes up almost nine-tenths of all publicly owned forest land. The smallest changes in ownership acreages occurred in the miscellaneous private and farmer categories: miscellaneous private holdings increased by 33,000 acres, while farmer-owned woodlands declined by only 16,000 acres. Commercial forest land owned by forest industry declined by 87,000 acres and now totals only 60,000 acres. This decline was caused by the shift of one large landowner out of the forest industry category.

--nearly 8 out of every 10 acres now classified as commercial forest showed no evidence of treatment or major disturbance. As in other mountainous regions, the rugged terrain and high percentage of hardwood forests contributed to this low level of forestry activity. Harvesting has taken place on 120,000 acres; over 259,000 acres experienced some form of intermediate cutting. Grazing and other disturbances occurred on 187,000 acres. An additional 96,000 acres have experienced significant natural disturbance by insects, disease, fire, weather, or other natural destructive agents.

--average basal area of all live trees 5.0 inches d.b.h. and larger has increased from 59 to 75 square feet per acre of commercial forest. There are also 533 saplings per acre, 100 fewer than in 1966. Despite the increase in basal-area stocking, 958,000 acres were classified either as nonstocked or poorly stocked with growing-stock trees. Trees which fail to qualify as growing stock because of roughness, rot, poor form, or species make up over 26 percent of the basal-area stocking.

--volume of softwood growing stock has increased from 0.3 to nearly 0.5 billion cubic feet, or by 51 percent. White pine and Virginia pine, the leading softwood species, accounted for over 84 percent of the increase. Shortleaf pine recorded the only substantial decline in volume, dropping by more than 38 percent. The softwood-volume increase occurred across all diameter classes. The current inventory of softwood growing stock includes nearly 1.6 billion board feet of sawtimber, 73 percent more than in 1966.

--volume of hardwood growing stock has increased from 2.3 to 3.2 billion cubic feet, or by 36 percent. Yellow-poplar and the oaks accounted for 72 percent of the gain; yellow-poplar has surpassed chestnut oak as the most abundant hardwood species in the area. Substantial gains in hardwood growing-stock volume were recorded for all diameter classes. The current inventory of hardwood growing stock includes 8.1 billion board feet of sawtimber, up by 39 percent.

In 1976--

--net growth of growing stock averaged 44 cubic feet per acre of commercial forest and totaled 132 million cubic feet. Net growth of hardwoods accounted for 87 percent of the total net growth and exceeded removals by 213 percent. Net growth of softwoods exceeded removals by 293 percent. The net growth of all species included 452 million board feet of sawtimber.

--removals of growing stock totaled 41 million cubic feet. Both hardwood and softwood removals were down in comparison with the previous survey. Hardwoods accounted for 89 percent of the growing-stock removals. Over 28 percent of the growing-stock removals were not used for products. Removals of all species included 150 million board feet of sawtimber.

--mortality of growing stock totaled 17 million cubic feet and reduced gross growth by 12 percent. Over 83 percent of the mortality was hardwood. Insects were the leading identifiable cause of death for softwood species, while weather and suppression were the major causes of death for hardwood species. Total mortality included 37 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 14,909 sample clusters systematically spaced on the latest aerial photographs available. A subsample of 867 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 568 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 Southern Mountain Region 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 active cutting operations throughout the State 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 594 permanent sample plots which were established in the third survey.

6. Onwership 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	0.89
Per billion cubic feet of growing stock	4.82
Per billion cubic feet of net annual growth	1.19
Per billion cubic feet of annual removals	2.52

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]		
BLAND	1.45	8.76	10.94	54.53
BUCHANAN	2.08	7.21	14.72	35.13
CARROLL	1.98	11.38	13.07	37.43
DICKENSON	2.54	9.40	9.74	42.74
FLOYD	2.07	17.53	19.08	62.77
GILES	1.10	10.19	8.91	69.70
GRAYSON	1.73	11.73	11.89	83.94
LEE	2.28	12.10	15.54	30.20
MONTGOMERY	2.24	9.36	10.65	69.61
PULASKI	2.67	11.43	10.67	60.82
RUSSELL	3.16	12.04	13.84	53.52
SCOTT	1.73	7.52	11.56	53.38
SMYTH	1.37	8.93	9.47	63.33
TAZEWELL	2.32	8.44	9.75	77.94
WASHINGTON	2.60	10.64	13.59	57.69
WISE	2.06	9.72	15.67	35.12
WYTHE	2.16	9.25	14.98	73.22
UNIT TOTAL	0.51	2.53	3.26	12.44

[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 pole-timber 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 sawtim-ber.

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	60.3	61.0	68.2	60.0
8	68.7	68.1	76.0	68.4
10	73.7	73.1	81.4	73.4
12	76.9	76.7	85.2	76.4
14	79.1	79.4	88.2	78.4
16	80.4	81.6	90.4	79.8
18	81.5	83.3	92.3	80.8
20	82.2	84.8	93.8	81.5
22	82.8	86.0	95.1	82.1
24+	83.9	87.9	97.9	83.1
AVERAGE	74.4	71.7	84.5	74.0

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					
BLAND	236,160	174,198	173,604	394	200	61,962
BUCHANAN	325,120	271,215	271,192	--	23	53,905
CARROLL	318,720	186,936	185,854	--	1,082	131,784
DICKENSON	214,080	178,990	176,529	--	2,461	35,090
FLOYD	245,120	138,718	136,861	--	1,857	106,402
GILES	232,257	170,925	170,265	--	660	61,332
GRAYSON	291,200	160,484	155,892	--	4,592	130,716
LEE	280,320	167,562	159,989	315	7,258	112,758
MONTGOMERY	255,854	149,767	149,584	183	--	106,087
PULASKI	213,143	116,113	116,113	--	--	97,030
RUSSELL	309,120	159,563	159,563	--	--	149,557
SCOTT	344,960	230,907	230,360	122	425	114,053
SMYTH	278,400	176,947	173,650	90	3,207	101,453
TAZEWELL	334,080	204,713	204,713	--	--	129,367
WASHINGTON	371,310	190,137	189,973	--	164	181,173
WISE	265,600	210,634	210,513	121	--	54,966
WYTHE	294,400	148,697	148,437	--	260	145,703
TOTAL	4,809,844	3,036,506	3,013,092	1,225	22,189	1,773,338

[1] FROM U. S. BUREAU OF THE CENSUS, LAND AND WATER AREA OF THE UNITED STATES, 1970.
[2] INCLUDES 22,554 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							
		NATIONAL FOREST	MISCELLANEOUS FEDERAL	STATE	COUNTY AND MUNICIPAL	FOREST INDUSTRY	FARMER	MISCELLANEOUS PRIVATE	
								CORPORATE	INDIVIDUAL
	ACRES								
BLAND	173,604	71,067	--	--	500	10,417	74,442	--	17,178
BUCHANAN	271,192	--	--	--	--	22,310	44,800	89,599	114,483
CARROLL	185,854	2,426	--	766	--	4,222	122,680	5,576	50,184
DICKENSON	176,529	8,768	5,719	--	--	--	27,939	50,288	83,815
FLOYD	136,861	--	--	5	--	1,076	88,780	5,222	41,778
GILES	170,265	59,350	--	1,225	--	2,522	53,585	4,466	49,117
GRAYSON	155,892	15,581	--	--	--	1,819	110,792	11,080	16,620
LEE	159,989	11,370	--	--	--	279	37,085	10,596	100,659
MONTGOMERY	149,584	17,837	1,185	1,445	75	2,476	31,641	5,273	89,652
PULASKI	116,113	15,557	1,404	210	1,750	5,204	28,746	28,747	34,495
RUSSELL	159,563	--	--	5,147	249	130	64,596	39,752	49,689
SCOTT	230,360	25,268	--	--	200	381	119,297	5,681	79,533
SMYTH	173,650	65,928	--	8,837	75	--	57,206	--	41,604
TAZEWELL	204,713	5,742	--	4,171	--	2,250	71,520	60,515	60,515
WASHINGTON	189,973	18,284	47	7,663	--	--	54,661	--	109,318
WISE	210,513	37,576	4,200	--	3,593	--	27,524	88,075	49,545
WYTHE	148,437	53,637	--	--	1,891	7,389	53,450	5,345	26,725
TOTAL	3,013,092	408,391	12,555	29,469	8,333	60,475	1,068,744	410,215	1,014,910

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									
BLAND	173,604	5,727	--	--	4,738	15,703	147,436	--	--	--
BUCHANAN	271,192	--	--	--	--	9,955	241,326	--	--	19,911
CARROLL	185,854	33,457	--	--	16,729	32,103	103,565	--	--	--
DICKENSON	176,529	--	--	--	5,588	--	143,002	--	--	27,939
FLOYD	136,861	20,890	--	--	16,744	31,333	67,889	--	5	--
GILES	170,265	--	--	--	4,465	4,465	143,474	--	4,465	13,396
GRAYSON	155,892	23,978	--	--	--	8,137	115,986	--	--	7,791
LEE	159,989	--	--	--	5,297	16,172	133,222	--	--	5,298
MONTGOMERY	149,584	5,349	--	--	18,295	26,369	99,571	--	--	--
PULASKI	116,113	--	--	--	14,101	17,248	81,610	--	3,154	--
RUSSELL	159,563	--	--	--	14,906	--	139,688	--	--	4,969
SCOTT	230,360	--	--	--	11,362	--	218,998	--	--	--
SMYTH	173,650	--	--	--	5,532	14,819	142,605	--	--	10,694
TAZEWELL	204,713	--	--	--	5,501	--	193,711	--	5,501	--
WASHINGTON	189,973	--	--	--	6,073	18,219	165,681	--	--	--
WISE	210,513	--	--	--	--	5,505	188,493	--	--	16,515
WYTHE	148,437	--	--	--	5,345	12,600	125,147	--	--	5,345
TOTAL	3,013,092	89,401	--	--	134,676	212,628	2,451,404	--	13,125	111,858

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		
BLAND	173,604	75,723	88,405	9,476	--
BUCHANAN	271,192	144,293	92,056	29,866	4,977
CARROLL	185,854	86,071	54,408	39,033	6,342
DICKENSON	176,529	93,919	65,846	11,176	5,588
FLOYD	136,861	67,891	37,631	20,890	10,449
GILES	170,265	62,103	86,911	21,251	--
GRAYSON	155,892	67,950	57,648	16,619	13,675
LEE	159,989	53,259	68,871	37,859	--
MONTGOMERY	149,584	66,835	72,202	10,547	--
PULASKI	116,113	18,541	78,295	19,277	--
RUSSELL	159,563	54,659	55,216	39,751	9,937
SCOTT	230,360	122,039	82,856	25,465	--
SMYTH	173,650	100,119	62,836	10,695	--
TAZEWELL	204,713	92,436	101,275	5,501	5,501
WASHINGTON	189,973	66,808	104,924	18,241	--
WISE	210,513	106,601	68,773	26,041	9,098
WYTHE	148,437	76,929	71,508	--	--
TOTAL	3,013,092	1,356,176	1,249,661	341,688	65,567

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

COUNTY	ALL CLASSES	SITE CLASS				
		1	2	3	4	5
				ACRES		
BLAND	173,604	--	11,452	11,453	26,654	124,045
BUCHANAN	271,192	--	--	19,911	161,744	89,537
CARROLL	185,854	5,576	5,577	16,728	122,089	35,884
DICKENSON	176,529	5,588	--	11,307	106,165	53,469
FLOYD	136,861	--	15,667	5,222	100,306	15,666
GILES	170,265	--	4,465	--	88,027	77,773
GRAYSON	155,892	5,539	--	11,080	103,785	35,488
LEE	159,989	--	--	42,384	107,010	10,595
MONTGOMERY	149,584	--	75	--	128,381	21,128
PULASKI	116,113	--	--	5,756	71,228	39,129
RUSSELL	159,563	--	9,938	--	74,962	74,663
SCOTT	230,360	--	--	5,681	116,364	108,315
SMYTH	173,650	5,200	--	5,200	126,748	36,502
TAZEWELL	204,713	--	--	5,501	125,439	73,773
WASHINGTON	189,973	--	--	30,368	129,193	30,412
WISE	210,513	--	--	16,515	189,798	4,200
WYTHE	148,437	--	--	18,098	64,178	66,161
TOTAL	3,013,092	21,903	47,174	205,204	1,842,071	896,740

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		
BLAND	173,604	--	26,608	89,939	57,057	--
BUCHANAN	271,192	--	9,955	134,398	121,862	4,977
CARROLL	185,854	--	27,881	93,441	58,190	6,342
DICKENSON	176,529	--	5,587	99,373	65,981	5,588
FLOYD	136,861	--	10,445	53,300	62,667	10,449
GILES	170,265	--	39,983	99,743	30,539	--
GRAYSON	155,892	--	8,137	62,409	71,671	13,675
LEE	159,989	--	21,190	90,452	48,347	--
MONTGOMERY	149,584	--	30,903	95,110	23,571	--
PULASKI	116,113	--	17,457	74,364	24,292	--
RUSSELL	159,563	--	15,334	94,410	39,882	9,937
SCOTT	230,360	--	15,773	153,569	61,018	--
SMYTH	173,650	--	48,273	98,751	26,626	--
TAZEWELL	204,713	--	27,507	121,273	50,432	5,501
WASHINGTON	189,973	6,074	18,221	117,003	48,675	--
WISE	210,513	--	28,051	121,809	51,555	9,098
WYTHE	148,437	--	21,399	76,930	50,108	--
TOTAL	3,013,092	6,074	372,704	1,676,274	892,473	65,567

[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
	THOUSAND BOARD FEET					*THOUSAND CUBIC FEET*[1]				
BLAND	411,167	32,250	58,700	97,571	222,646	167,659	10,241	15,461	39,432	102,525
BUCHANAN	712,917	--	29,235	241,279	442,403	267,247	--	6,621	106,130	154,496
CARROLL	523,563	21,694	233,303	29,695	238,871	202,531	15,011	59,910	21,273	106,337
DICKENSON	589,773	20,168	25,458	211,034	333,113	199,619	9,591	5,337	72,142	112,549
FLOYD	417,358	18,158	183,351	60,990	154,859	132,788	11,224	44,619	23,499	53,446
GILES	663,321	33,760	50,846	150,005	428,710	250,282	11,606	9,853	62,983	165,840
GRAYSON	475,038	16,203	109,320	81,772	267,743	168,100	3,655	31,379	33,885	99,181
LEE	456,446	7,307	4,049	150,340	294,750	179,795	3,571	3,704	53,752	118,768
MONTGOMERY	519,356	66,005	107,721	52,279	293,351	211,243	28,371	34,451	21,761	126,660
PULASKI	232,030	56,791	17,999	41,948	115,292	120,106	21,041	3,591	15,157	80,317
RUSSELL	434,801	1,532	8,786	163,669	260,814	156,837	359	2,219	56,740	97,519
SCOTT	772,466	36,195	7,114	282,673	446,484	275,299	13,879	3,031	93,136	165,253
SMYTH	809,952	104,477	66,314	98,035	541,126	290,817	31,746	16,640	44,474	197,957
TAZEWELL	686,029	7,067	17,576	178,540	482,846	266,111	2,191	3,154	88,715	172,051
WASHINGTON	771,921	47,233	21,694	313,535	389,459	287,117	14,841	5,672	111,044	155,560
WISE	674,338	4,922	47,908	221,931	399,577	253,954	1,268	9,499	90,667	152,520
WYTHE	492,731	66,339	24,493	56,553	345,346	204,149	18,416	7,514	19,383	158,836
TOTAL	9,643,207	540,101	1,013,867	2,431,849	5,657,390	3,633,654	197,011	262,655	954,173	2,219,815

[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, 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*				
BLAND	21,165	1,407	3,399	6,230	10,129	6,091	191	670	1,616	3,614
BUCHANAN	30,353	--	1,193	16,518	12,642	13,155	--	188	8,241	4,726
CARROLL	32,584	2,398	13,006	4,554	12,626	7,415	483	2,795	854	3,283
DICKENSON	24,961	1,433	771	12,707	10,050	6,294	292	155	2,980	2,867
FLOYD	19,344	1,559	10,919	2,372	4,494	6,497	1,272	2,750	1,021	1,454
GILES	28,858	1,515	1,591	9,127	16,625	8,238	232	331	2,891	4,784
GRAYSON	22,280	148	6,436	4,890	10,806	5,759	43	1,482	1,301	2,933
LEE	20,520	338	148	7,139	12,895	6,751	98	143	3,166	3,344
MONTGOMERY	28,826	3,175	9,482	3,525	12,644	7,155	774	1,654	902	3,825
PULASKI	12,407	2,494	578	2,382	6,953	4,260	495	102	878	2,785
RUSSELL	18,764	34	409	8,674	9,647	5,562	6	87	2,845	2,624
SCOTT	32,560	1,951	418	13,994	16,197	10,466	331	77	4,491	5,567
SMYTH	34,983	2,580	5,172	8,009	19,222	8,360	767	608	1,653	5,332
TAZEWELL	30,003	84	370	13,403	16,146	8,829	40	63	3,875	4,851
WASHINGTON	38,078	1,290	1,109	19,419	16,260	10,526	302	158	5,353	4,713
WISE	31,560	131	1,725	13,794	15,910	9,582	25	239	4,300	5,018
WYTHE	24,409	1,767	1,211	1,881	19,550	7,222	319	532	493	5,878
TOTAL	451,655	22,304	57,937	148,618	222,796	132,162	5,670	12,034	46,860	67,598

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*				
BLAND	11,883	--	--	515	11,368	2,962	--	--	276	2,686
BUCHANAN	24,262	--	1,085	13,779	9,398	5,544	--	217	2,674	2,653
CARROLL	13,101	--	7,826	2,502	2,773	4,123	--	1,611	1,271	1,241
DICKENSON	10,223	--	--	2,676	7,547	3,324	--	--	725	2,599
FLOYD	10,449	--	5,392	--	5,057	2,257	--	1,173	--	1,084
GILES	4,395	--	--	2,484	1,911	884	--	--	455	429
GRAYSON	1,261	--	774	487	--	911	--	753	158	--
LEE	14,508	--	--	3,793	10,715	4,287	--	160	1,189	2,938
MONTGOMERY	1,593	--	--	1,593	--	596	--	--	286	310
PULASKI	885	885	--	--	--	496	167	--	--	329
RUSSELL	10,237	--	--	4,827	5,410	2,877	--	--	1,419	1,458
SCOTT	10,772	--	--	3,614	7,158	2,612	--	--	794	1,818
SMYTH	4,201	--	--	1,698	2,503	1,415	--	--	390	1,025
TAZEWELL	6,733	--	--	4,347	2,386	1,416	--	--	941	475
WASHINGTON	4,984	854	--	--	4,130	1,264	163	--	--	1,101
WISE	14,705	530	--	1,971	12,204	4,625	259	--	578	3,788
WYTHE	6,305	--	--	--	6,305	1,521	--	--	--	1,521
TOTAL	150,497	2,269	15,077	44,286	88,865	41,114	589	3,914	11,156	25,455

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	89,401	--	75	1,819	65,592	21,915
SPRUCE-FIR	--	--	--	--	--	--
LONGLEAF PINE	--	--	--	--	--	--
SLASH PINE	--	--	--	--	--	--
LOBLOLLY PINE	--	--	--	--	--	--
SHORTLEAF PINE	4,969	--	--	--	--	4,969
VIRGINIA PINE	91,799	--	38	3,678	43,786	44,297
SAND PINE	--	--	--	--	--	--
EASTERN REDCEDAR	20,735	--	--	--	9,937	10,798
POND PINE	--	--	--	--	--	--
SPRUCE PINE	--	--	--	--	--	--
PITCH PINE	9,203	4,738	--	--	--	4,465
TABLE-MOUNTAIN PINE	7,970	5,494	--	2,476	--	--
TOTAL	224,077	10,232	113	7,973	119,315	86,444
HARDWOOD TYPES:						
OAK-PINE	212,628	17,437	6,810	4,501	69,001	114,879
OAK-HICKORY	2,391,693	329,149	40,275	46,740	850,479	1,125,050
CHESTNUT OAK	59,711	38,288	--	1,261	10,192	9,970
SOUTHERN SCRUB OAK	--	--	--	--	--	--
OAK-GUM-CYPRESS	--	--	--	--	--	--
ELM-ASH-COTTONWOOD	13,125	--	3,159	--	--	9,966
MAPLE-BEECH-BIRCH	111,858	13,285	--	--	19,757	78,816
TOTAL	2,789,015	398,159	50,244	52,502	949,429	1,338,681
ALL TYPES	3,013,092	408,391	50,357	60,475	1,068,744	1,425,125

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	408,391	--	84,575	204,129	117,091	2,596
OTHER PUBLIC	50,357	--	5,881	23,868	16,244	4,364
FOREST INDUSTRY	60,475	--	10,417	20,091	29,967	--
FARMER	1,068,744	6,074	112,158	599,918	318,247	32,347
MISC. PRIVATE	1,425,125	--	159,673	828,268	410,924	26,260
ALL OWNERSHIPS	3,013,092	6,074	372,704	1,676,274	892,473	65,567

[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	1,873,372	105,554	178,345	457,285	1,132,188
UPPER-STEM PORTION	372,958	18,481	31,226	92,998	230,253
TOTAL	2,246,330	124,035	209,571	550,283	1,362,441
POLETIMBER TREES	1,387,324	72,976	53,084	403,890	857,374
ALL GROWING-STOCK TREES	3,633,654	197,011	262,655	954,173	2,219,815
ROUGH TREES:					
SAWTIMBER-SIZE TREES	350,737	7,520	2,104	59,952	281,161
POLETIMBER-SIZE TREES	454,649	15,053	2,474	95,569	341,553
TOTAL	805,386	22,573	4,578	155,521	622,714
ROTTEN TREES:					
SAWTIMBER-SIZE TREES	105,060	229	--	27,143	77,688
POLETIMBER-SIZE TREES	10,836	--	--	4,193	6,643
TOTAL	115,896	229	--	31,336	84,331
SALVABLE DEAD TREES:					
SAWTIMBER-SIZE TREES	3,477	991	--	600	1,886
POLETIMBER-SIZE TREES	4,044	1,166	381	711	1,786
TOTAL	7,521	2,157	381	1,311	3,672
TOTAL, ALL TIMBER	4,562,457	221,970	267,614	1,142,341	2,930,532

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)									
		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	1,428	342	558	313	136	58	13	--	--	8	--
LOBLOLLY PINE	72	--	50	--	--	22	--	--	--	--	--
POND PINE	--	--	--	--	--	--	--	--	--	--	--
VIRGINIA PINE	13,385	5,255	4,788	2,200	909	188	45	--	--	--	--
PITCH PINE	6,061	1,702	1,147	1,402	979	463	224	111	18	15	--
TABLE-MOUNTAIN PINE	3,185	1,097	1,022	449	288	215	73	33	8	--	--
SPRUCE PINE	--	--	--	--	--	--	--	--	--	--	--
SAND PINE	--	--	--	--	--	--	--	--	--	--	--
EASTERN WHITE PINE	15,017	4,391	3,418	2,587	1,976	1,441	644	298	161	95	6
EASTERN HEMLOCK	4,877	1,678	1,078	719	538	327	166	151	67	112	41
SPRUCE AND FIR	253	--	116	30	76	19	12	--	--	--	--
BALDCYPRESS	--	--	--	--	--	--	--	--	--	--	--
PONDCYPRESS	--	--	--	--	--	--	--	--	--	--	--
CEDARS	3,587	2,735	504	259	89	--	--	--	--	--	--
TOTAL SOFTWOODS	47,865	17,200	12,681	7,959	4,991	2,733	1,177	593	254	230	47
HARDWOOD:											
SELECT WHITE OAKS	23,625	8,830	5,090	4,139	2,429	1,294	869	469	225	258	22
SELECT RED OAKS	19,010	5,423	4,503	2,812	2,025	1,593	1,003	624	446	501	80
CHESTNUT OAK	45,479	16,493	12,229	7,028	4,097	2,235	1,459	774	461	645	58
OTHER WHITE OAKS	146	--	71	--	31	19	13	12	--	--	--
OTHER RED OAKS	42,806	15,772	10,165	7,007	3,855	2,984	1,558	858	402	177	28
HICKORY	29,118	11,065	7,940	4,664	2,390	1,460	831	469	166	133	--
YELLOW BIRCH	261	90	50	--	--	42	28	34	--	17	--
HARD MAPLE	7,677	3,155	2,042	1,102	451	382	283	123	75	59	5
SOFT MAPLE	23,339	11,412	5,453	3,592	1,469	636	319	225	137	96	--
BEECH	5,417	1,529	1,179	745	671	353	322	234	170	210	4
SWEETGUM	186	--	53	85	31	17	--	--	--	--	--
TUPELO AND BLACKGUM	3,836	2,162	515	456	109	233	188	90	28	55	--
ASH	3,240	1,625	502	373	227	202	157	89	19	42	4
COTTONWOOD	--	--	--	--	--	--	--	--	--	--	--
BASSWOOD	4,140	845	959	771	649	324	267	154	63	101	7
YELLOW-POPLAR	43,923	14,322	10,268	7,810	5,256	3,055	1,654	925	325	300	8
BAY AND MAGNOLIA	6,493	2,775	2,257	911	243	136	45	13	70	39	4
BLACK CHERRY	1,185	392	285	283	119	68	15	13	9	7	--
BLACK WALNUT	1,465	254	399	263	207	155	88	61	19	6	13
SYCAMORE	289	100	--	--	83	17	--	24	19	30	16
BLACK LOCUST	8,391	2,533	2,669	1,672	776	378	231	65	19	48	--
ELM	1,161	528	436	72	80	--	17	--	28	--	--
OTHER EASTERN HARDWOODS	11,979	5,719	3,263	1,558	727	334	102	117	58	81	20
TOTAL HARDWOODS	283,166	105,024	70,328	45,343	25,919	15,917	9,449	5,373	2,739	2,805	269
ALL SPECIES	331,031	122,224	83,009	53,302	30,910	18,650	10,626	5,966	2,993	3,035	316

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	--	--	--	--	--	--	--	--	--	--	--
SLASH PINE	--	--	--	--	--	--	--	--	--	--	--
SHORTLEAF PINE	12,746	1,166	3,378	3,238	1,996	1,686	612	--	--	670	--
LOBLOLLY PINE	594	--	283	--	--	311	--	--	--	--	--
POND PINE	--	--	--	--	--	--	--	--	--	--	--
VIRGINIA PINE	104,872	21,565	37,354	25,338	14,194	4,673	1,748	--	--	--	--
PITCH PINE	67,512	5,171	7,321	14,254	14,513	11,083	7,834	5,386	901	1,049	--
TABLE-MOUNTAIN PINE	34,089	4,096	7,695	6,200	5,621	5,911	2,504	1,554	508	--	--
SPRUCE PINE	--	--	--	--	--	--	--	--	--	--	--
SAND PINE	--	--	--	--	--	--	--	--	--	--	--
EASTERN WHITE PINE	185,235	13,027	24,045	29,224	32,496	33,807	21,319	13,248	9,070	7,845	1,154
EASTERN HEMLOCK	66,875	3,765	5,894	6,824	7,318	7,885	5,996	6,645	3,535	10,872	8,141
SPRUCE AND FIR	3,252	--	474	470	1,381	500	427	--	--	--	--
BALDCYPRESS	--	--	--	--	--	--	--	--	--	--	--
PONDCYPRESS	--	--	--	--	--	--	--	--	--	--	--
CEDARS	11,871	5,911	2,442	2,294	1,224	--	--	--	--	--	--
TOTAL SOFTWOODS	487,046	54,701	88,886	87,842	78,743	65,856	40,440	26,833	14,014	20,436	9,295
HARDWOOD:											
SELECT WHITE OAKS	308,611	30,124	36,132	51,755	43,998	38,310	34,034	22,385	18,086	28,377	5,410
SELECT RED OAKS	363,260	23,043	36,426	39,836	42,928	50,490	39,655	34,088	28,660	50,927	17,207
CHESTNUT OAK	672,043	64,680	92,601	100,608	93,815	70,020	68,579	45,470	35,665	78,809	21,796
OTHER WHITE OAKS	2,291	--	292	--	748	418	374	459	--	--	--
OTHER RED OAKS	522,147	58,741	72,379	87,879	74,519	82,646	55,028	42,321	25,650	17,655	5,329
HICKORY	330,476	35,689	54,754	60,774	48,639	42,803	32,239	26,289	10,925	17,987	377
YELLOW BIRCH	11,399	973	1,355	723	394	1,547	1,331	2,592	--	2,484	--
HARD MAPLE	109,811	14,394	16,891	16,413	11,596	12,659	11,850	7,968	5,350	8,238	4,452
SOFT MAPLE	280,317	52,016	51,384	57,223	36,693	22,861	18,058	14,571	11,207	13,171	3,133
BEECH	163,530	10,755	12,621	13,557	19,822	15,793	19,301	16,104	15,859	34,656	5,062
SWEETGUM	2,059	--	388	880	399	392	--	--	--	--	--
TUPELO AND BLACKGUM	65,014	8,397	7,892	9,293	5,532	8,208	9,728	5,797	3,116	7,051	--
ASH	52,861	7,544	8,419	6,375	7,075	5,748	6,306	4,212	1,114	5,344	724
COTTONWOOD	--	--	--	--	--	--	--	--	--	--	--
BASSWOOD	89,289	5,544	11,637	10,337	13,984	12,050	10,221	8,900	5,259	10,119	1,238
YELLOW-POPLAR	561,769	47,535	75,415	93,288	103,811	84,039	61,088	45,469	19,978	28,325	2,821
BAY AND MAGNOLIA	62,202	9,201	15,038	13,077	6,547	5,192	2,169	1,252	3,895	5,321	510
BLACK CHERRY	20,587	1,963	4,361	5,097	2,589	3,113	975	1,026	623	840	--
BLACK WALNUT	32,167	1,986	5,972	4,935	3,466	4,675	3,839	3,663	1,254	524	1,853
SYCAMORE	10,862	595	--	--	1,689	477	--	1,209	1,030	3,254	2,608
BLACK LOCUST	164,514	22,263	36,771	38,731	23,423	15,417	13,399	5,145	4,605	4,760	--
ELM	10,951	2,056	2,600	1,488	1,840	--	1,090	--	1,624	253	--
OTHER EASTERN HARDWOODS	231,730	63,191	54,107	38,828	27,104	15,014	8,891	6,859	4,438	9,650	3,648
TOTAL HARDWOODS	4,067,890	460,690	597,435	651,097	570,611	491,872	398,155	295,779	198,338	327,745	76,168
ALL SPECIES	4,554,936	515,391	686,321	738,939	649,354	557,728	438,595	322,612	212,352	348,181	85,463

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	--	--	--	--	--	--	--	--	--	--	--
SLASH PINE	--	--	--	--	--	--	--	--	--	--	--
SHORTLEAF PINE	12,340	1,018	3,120	3,238	1,996	1,686	612	--	--	670	--
LOBLOLLY PINE	594	--	283	--	--	311	--	--	--	--	--
POND PINE	--	--	--	--	--	--	--	--	--	--	--
VIRGINIA PINE	89,193	14,704	32,390	22,779	13,794	4,286	1,240	--	--	--	--
PITCH PINE	64,446	4,278	6,565	13,701	13,878	10,854	7,834	5,386	901	1,049	--
TABLE-MOUNTAIN PINE	30,438	3,700	6,918	5,069	4,979	5,557	2,153	1,554	508	--	--
SPRUCE PINE	--	--	--	--	--	--	--	--	--	--	--
SAND PINE	--	--	--	--	--	--	--	--	--	--	--
EASTERN WHITE PINE	182,349	12,375	23,530	28,593	32,496	33,458	20,580	13,248	9,070	7,845	1,154
EASTERN HEMLOCK	65,774	3,570	5,373	6,824	7,318	7,885	5,611	6,645	3,535	10,872	8,141
SPRUCE AND FIR	3,252	--	474	470	1,381	500	427	--	--	--	--
BALDCYPRESS	--	--	--	--	--	--	--	--	--	--	--
PONDCYPRESS	--	--	--	--	--	--	--	--	--	--	--
CEDARS	11,280	5,535	2,227	2,294	1,224	--	--	--	--	--	--
TOTAL SOFTWOODS	459,666	45,180	80,880	82,968	77,066	64,537	38,457	26,833	14,014	20,436	9,295
HARDWOOD:											
SELECT WHITE OAKS	265,330	25,060	31,300	46,054	41,078	33,263	30,196	20,845	13,117	20,818	3,599
SELECT RED OAKS	312,290	17,100	29,780	32,834	36,693	42,910	35,128	30,312	26,110	46,069	15,354
CHESTNUT OAK	498,454	46,848	73,733	76,722	71,771	55,514	50,399	34,042	25,005	54,529	9,891
OTHER WHITE OAKS	1,876	--	292	--	428	418	279	459	--	--	--
OTHER RED OAKS	459,521	47,794	62,836	77,680	65,533	72,106	51,878	39,641	23,371	14,479	4,203
HICKORY	288,210	29,429	46,795	51,472	42,926	36,829	30,805	23,802	10,436	13,716	--
YELLOW BIRCH	5,573	422	423	--	--	870	928	1,399	--	1,531	--
HARD MAPLE	84,149	10,402	13,532	12,569	8,546	9,874	10,426	6,318	5,350	5,663	1,469
SOFT MAPLE	190,501	36,777	35,254	40,100	26,080	16,744	11,142	9,941	7,763	6,700	--
BEECH	98,428	4,256	7,826	8,897	12,989	10,155	11,543	11,218	10,884	20,003	657
SWEETGUM	2,059	--	388	880	399	392	--	--	--	--	--
TUPELO AND BLACKGUM	35,617	5,120	2,602	4,038	1,628	5,103	6,687	3,764	1,700	4,975	--
ASH	35,555	4,440	3,120	3,888	3,930	5,234	5,067	4,212	1,114	3,826	724
COTTONWOOD	--	--	--	--	--	--	--	--	--	--	--
BASSWOOD	74,402	3,148	7,176	9,226	12,825	9,911	10,221	8,210	4,058	8,389	1,238
YELLOW-POPLAR	538,734	43,007	69,124	90,918	99,335	83,230	60,770	45,469	19,098	26,325	1,458
BAY AND MAGNOLIA	50,485	7,315	14,035	10,528	4,657	3,824	1,470	555	3,895	3,696	510
BLACK CHERRY	12,447	1,241	1,898	2,787	2,009	2,078	526	658	623	627	--
BLACK WALNUT	22,634	949	2,512	2,726	3,067	4,042	2,993	2,714	1,254	524	1,853
SYCAMORE	10,170	394	--	--	1,689	477	--	1,209	1,030	2,763	2,608
BLACK LOCUST	77,348	7,355	15,782	16,918	13,779	8,869	7,228	2,721	1,194	3,502	--
ELM	8,751	1,626	2,600	785	1,451	--	665	--	1,624	--	--
OTHER EASTERN HARDWOODS	101,454	18,998	21,985	17,568	12,809	8,202	3,441	4,986	3,144	6,673	3,648
TOTAL HARDWOODS	3,173,988	311,681	442,993	506,590	463,622	412,045	331,792	252,475	160,770	244,808	47,212
ALL SPECIES	3,633,654	356,861	523,873	589,558	540,688	476,582	370,249	279,308	174,784	265,244	56,507

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	--	--	--	--	--	--	--	--	--
SLASH PINE	--	--	--	--	--	--	--	--	--
SHORTLEAF PINE	36,755	11,527	8,837	8,660	3,503	--	--	4,228	--
LOBLOLLY PINE	1,512	--	--	1,512	--	--	--	--	--
POND PINE	--	--	--	--	--	--	--	--	--
VIRGINIA PINE	160,850	79,209	56,060	19,557	6,024	--	--	--	--
PITCH PINE	243,345	44,537	58,081	53,458	42,944	31,896	5,643	6,786	--
TABLE-MOUNTAIN PINE	97,639	20,532	23,507	29,277	12,020	9,143	3,160	--	--
SPRUCE PINE	--	--	--	--	--	--	--	--	--
SAND PINE	--	--	--	--	--	--	--	--	--
EASTERN WHITE PINE	691,620	102,604	139,267	161,940	107,260	73,020	52,412	47,553	7,564
EASTERN HEMLOCK	294,645	23,472	30,066	36,944	28,483	36,070	19,990	66,244	53,376
SPRUCE AND FIR	12,432	1,808	5,839	2,424	2,361	--	--	--	--
BALDCYPRESS	--	--	--	--	--	--	--	--	--
PONDCYPRESS	--	--	--	--	--	--	--	--	--
CEDARS	15,170	9,497	5,673	--	--	--	--	--	--
TOTAL SOFTWOODS	1,553,968	293,186	327,330	313,772	202,595	150,129	81,205	124,811	60,940
HARDWOOD:									
SELECT WHITE OAKS	682,835	--	133,825	127,861	129,812	96,394	64,073	109,932	20,938
SELECT RED OAKS	981,099	--	117,816	158,801	142,851	131,987	119,653	226,829	83,162
CHESTNUT OAK	1,247,842	--	227,598	206,037	208,927	151,848	118,051	279,933	55,448
OTHER WHITE OAKS	6,737	--	1,388	1,714	1,347	2,288	--	--	--
OTHER RED OAKS	1,120,956	--	213,566	278,769	224,245	186,501	115,295	77,700	24,880
HICKORY	689,973	--	143,447	157,993	139,461	116,584	54,114	78,374	--
YELLOW BIRCH	19,621	--	--	3,335	3,768	5,795	--	6,723	--
HARD MAPLE	206,121	--	31,276	39,785	44,898	28,773	25,205	28,310	7,874
SOFT MAPLE	305,768	--	82,279	62,294	46,284	44,592	36,728	33,591	--
BEECH	306,136	--	47,804	38,795	44,971	44,687	44,015	83,069	2,795
SWEETGUM	3,024	--	1,248	1,776	--	--	--	--	--
TUPELO AND BLACKGUM	101,816	--	4,847	18,642	27,575	16,989	8,076	25,687	--
ASH	103,850	--	12,269	20,259	21,888	19,731	5,497	20,025	4,181
COTTONWOOD	--	--	--	--	--	--	--	--	--
BASSWOOD	233,656	--	44,365	38,828	43,566	37,656	19,450	42,908	6,883
YELLOW-POPLAR	1,518,560	--	351,289	356,230	293,023	239,832	107,492	160,810	9,884
BAY AND MAGNOLIA	99,210	--	15,584	17,388	7,730	3,150	24,793	26,500	4,065
BLACK CHERRY	26,878	--	6,808	8,482	2,281	3,016	3,081	3,210	--
BLACK WALNUT	57,903	--	10,582	14,102	10,539	9,616	4,470	1,888	6,706
SYCAMORE	49,529	--	5,178	1,941	--	5,692	5,118	15,428	16,172
BLACK LOCUST	136,544	--	48,762	32,279	26,926	10,333	4,592	13,652	--
ELM	15,476	--	4,968	--	2,756	--	7,752	--	--
OTHER EASTERN HARDWOODS	175,705	--	42,059	30,726	14,139	21,468	14,084	32,789	20,440
TOTAL HARDWOODS	8,089,239	--	1,546,958	1,616,037	1,436,987	1,176,932	781,539	1,267,358	263,428
ALL SPECIES	9,643,207	293,186	1,874,288	1,929,809	1,639,582	1,327,061	862,744	1,392,169	324,368

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	5,670	589
EASTERN WHITE PINE	9,528	3,012
SPRUCE AND FIR	136	--
CYPRESS	--	--
OTHER EASTERN SOFTWOODS	2,370	902
TOTAL SOFTWOODS	17,704	4,503
HARDWOOD:		
SELECT WHITE AND RED OAKS	18,459	5,846
OTHER WHITE AND RED OAKS	26,243	9,926
HICKORY	8,668	4,962
YELLOW BIRCH	72	--
HARD MAPLE	2,633	1,239
SWEETGUM	81	--
ASH,WALNUT, AND BLACK CHERRY	3,135	845
YELLOW-POPLAR	32,993	7,283
TUPELO AND BLACKGUM	900	777
BAY AND MAGNOLIA	1,618	683
OTHER EASTERN HARDWOODS	19,656	5,050
TOTAL HARDWOODS	114,458	36,611
ALL SPECIES	132,162	41,114

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	22,304	2,269
EASTERN WHITE PINE	45,627	11,294
SPRUCE AND FIR	918	--
CYPRESS	--	--
OTHER EASTERN SOFTWOODS	11,392	3,783
TOTAL SOFTWOODS	80,241	17,346
HARDWOOD:		
SELECT WHITE AND RED OAKS	68,545	22,846
OTHER WHITE AND RED OAKS	97,885	36,228
HICKORY	26,174	19,970
YELLOW BIRCH	214	--
HARD MAPLE	6,649	2,893
SWEETGUM	267	--
ASH,WALNUT, AND BLACK CHERRY	7,101	915
YELLOW-POPLAR	111,935	28,705
TUPELO AND BLACKGUM	2,915	2,314
BAY AND MAGNOLIA	3,288	3,389
OTHER EASTERN HARDWOODS	46,441	15,891
TOTAL HARDWOODS	371,414	133,151
ALL SPECIES	451,655	150,497

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

SPECIES	GROWING STOCK	SAWTIMBER
	THOUSAND CUBIC FEET	*THOUSAND BOARD FEET*
SOFTWOOD:		
YELLOW PINES	2,517	4,652
EASTERN WHITE PINE	444	--
SPRUCE AND FIR	--	--
CYPRESS	--	--
OTHER EASTERN SOFTWOODS	--	--
TOTAL SOFTWOODS	2,961	4,652
HARDWOOD:		
SELECT WHITE AND RED OAKS	1,889	5,210
OTHER WHITE AND RED OAKS	4,955	12,742
HICKORY	1,052	3,595
YELLOW BIRCH	--	--
HARD MAPLE	253	--
SWEETGUM	--	--
ASH, WALNUT, AND BLACK CHERRY	633	2,397
YELLOW-POPLAR	1,654	1,684
TUPELO AND BLACKGUM	--	--
BAY AND MAGNOLIA	242	1,744
OTHER EASTERN HARDWOODS	3,850	4,889
TOTAL HARDWOODS	14,528	32,261
ALL SPECIES	17,489	36,913

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	651,274	42,242	14,882	118,989	475,161	522,859	39,845	14,882	98,329	369,803
OTHER PUBLIC	112,975	13,029	15,735	30,641	53,570	87,891	11,588	15,735	22,566	38,002
FOREST INDUSTRY	63,993	13,496	8,381	7,938	34,178	49,104	9,409	7,804	6,645	25,246
FARMER	1,652,415	53,366	162,766	416,986	1,019,297	1,290,718	47,113	159,939	338,747	744,919
MISCELLANEOUS PRIVATE	2,074,279	97,680	65,469	566,476	1,344,654	1,683,082	89,056	64,295	487,886	1,041,845
ALL OWNERSHIPS	4,554,936	219,813	267,233	1,141,030	2,926,860	3,633,654	197,011	262,655	954,173	2,219,815

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	554,649	102,145	26,215	108,480	317,809	742,540	51,640	28,821	134,540	527,539
OTHER PUBLIC	102,478	26,475	38,633	13,104	24,266	132,299	5,194	23,617	45,998	57,490
FOREST INDUSTRY	47,463	9,595	20,336	6,993	10,539	54,242	--	12,993	2,039	39,210
FARMER	1,574,337	82,602	338,097	386,277	767,361	1,995,740	14,909	260,980	554,995	1,164,856
MISCELLANEOUS PRIVATE	1,818,356	193,937	96,253	531,976	996,190	2,621,103	53,604	167,922	647,447	1,752,130
ALL OWNERSHIPS	4,097,283	414,754	519,534	1,046,830	2,116,165	5,545,924	125,347	494,333	1,385,019	3,541,225

[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
	THOUSAND CUBIC FEET									
NATIONAL FOREST	16,963	639	726	3,520	12,078	5,257	426	--	262	4,569
OTHER PUBLIC	3,478	383	680	1,206	1,209	945	--	--	206	739
FOREST INDUSTRY	2,178	711	312	396	759	333	--	--	--	333
FARMER	46,610	1,434	7,877	14,793	22,506	17,365	--	3,261	4,540	9,564
MISCELLANEOUS PRIVATE	62,933	2,503	2,439	26,945	31,046	17,214	163	653	6,148	10,250
ALL OWNERSHIPS	132,162	5,670	12,034	46,860	67,598	41,114	589	3,914	11,156	25,455

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
	THOUSAND BOARD FEET									
NATIONAL FOREST	57,522	3,011	2,585	16,397	35,529	16,023	1,415	--	--	14,608
OTHER PUBLIC	10,915	1,222	4,680	2,423	2,590	3,693	--	--	782	2,911
FOREST INDUSTRY	4,977	1,242	1,447	797	1,491	1,232	--	--	--	1,232
FARMER	176,867	6,579	37,695	54,649	77,944	68,899	--	11,773	21,227	35,899
MISCELLANEOUS PRIVATE	201,374	10,250	11,530	74,352	105,242	60,650	854	3,304	22,277	34,215
ALL OWNERSHIPS	451,655	22,304	57,937	148,618	222,796	150,497	2,269	15,077	44,286	88,865

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, 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	2,826	933	2,352	1,079	8,789	2,359	1,731	809	3,426	1,065	1,546	584
HARDWOOD	431	220	--	182	152	212	--	106	594	277	369	166
TOTAL	3,257	1,153	2,352	1,261	8,941	2,571	1,731	915	4,020	1,342	1,915	750
OTHER TIMBER:												
SOFTWOOD	--	64	--	58	--	93	--	309	--	52	--	33
HARDWOOD	--	126	--	62	--	186	--	45	--	210	--	25
TOTAL	--	190	--	120	--	279	--	354	--	262	--	58
OAK-PINE TYPES:												
GROWING STOCK:												
SOFTWOOD	1,696	521	1,922	532	313	288	--	--	2,059	634	1,556	469
HARDWOOD	1,332	583	922	527	--	174	--	--	1,826	740	1,229	534
TOTAL	3,028	1,104	2,844	1,059	313	462	--	--	3,885	1,374	2,785	1,003
OTHER TIMBER:												
SOFTWOOD	--	32	--	54	--	51	--	--	--	14	--	38
HARDWOOD	--	223	--	367	--	180	--	--	--	203	--	212
TOTAL	--	255	--	421	--	231	--	--	--	217	--	250
UPLAND HARDWOOD TYPES:												
GROWING STOCK:												
SOFTWOOD	208	51	370	83	75	21	406	121	183	46	173	43
HARDWOOD	2,993	1,168	2,752	1,172	2,576	1,128	1,423	733	3,108	1,161	3,057	1,189
TOTAL	3,201	1,219	3,122	1,255	2,651	1,149	1,829	854	3,291	1,207	3,230	1,232
OTHER TIMBER:												
SOFTWOOD	--	2	--	2	--	--	--	--	--	2	--	2
HARDWOOD	--	317	--	303	--	326	--	231	--	365	--	291
TOTAL	--	319	--	305	--	326	--	231	--	367	--	293
BOTTOMLAND HARDWOOD TYPES:												
GROWING STOCK:												
SOFTWOOD	--	--	--	--	--	--	--	--	--	--	--	--
HARDWOOD	4,472	1,183	--	--	5,401	1,502	--	--	--	--	4,015	1,027
TOTAL	4,472	1,183	--	--	5,401	1,502	--	--	--	--	4,015	1,027
OTHER TIMBER:												
SOFTWOOD	--	--	--	--	--	--	--	--	--	--	--	--
HARDWOOD	--	477	--	--	--	1,148	--	--	--	--	--	147
TOTAL	--	477	--	--	--	1,148	--	--	--	--	--	147
ALL TYPES:												
GROWING STOCK:												
SOFTWOOD	516	153	497	130	1,366	397	761	305	666	198	360	108
HARDWOOD	2,685	1,053	2,591	1,115	2,048	881	1,042	565	2,745	1,035	2,764	1,076
TOTAL	3,201	1,206	3,088	1,245	3,414	1,278	1,803	870	3,411	1,233	3,124	1,184
OTHER TIMBER:												
SOFTWOOD	--	9	--	6	--	21	--	83	--	9	--	7
HARDWOOD	--	297	--	300	--	344	--	181	--	337	--	268
TOTAL	--	306	--	306	--	365	--	264	--	346	--	275
ALL TIMBER	3,201	1,512	3,088	1,551	3,414	1,643	1,803	1,134	3,411	1,579	3,124	1,459

[1] ROUGH AND ROTTEN TREES.

TABLE 25.--*LAND AREA, BY CLASS, MAJOR FOREST TYPE, AND SURVEY COMPLETION DATE, 1957, 1966, AND 1977*

LAND USE CLASS	SURVEY COMPLETION DATE			CHANGE 1966-1977
	1957	1966	1977	
		ACRES		
FOREST LAND:				
COMMERCIAL FOREST LAND:				
PINE AND OAK-PINE TYPES	362,600	463,871	436,705	- 27,166
HARDWOOD TYPES	2,382,400	2,529,175	2,576,387	+ 47,212
TOTAL	2,745,000	2,993,046	3,013,092	+ 20,046
NONCOMMERCIAL FOREST LAND:				
PRODUCTIVE-RESERVED	14,200	18,500	22,189	+ 3,689
UNPRODUCTIVE	70,700	16,608	1,225	- 15,383
TOTAL	84,900	35,108	23,414	- 11,694
NONFOREST LAND:				
CROPLAND	654,000	438,178	269,287	-168,891
PASTURE AND RANGE	1,231,000	1,054,209	1,176,479	+122,270
OTHER	79,000	268,925	305,018	+ 36,093
TOTAL	1,964,000	1,761,312	1,750,784	- 10,528
ALL LAND[1]	4,793,900	4,789,466	4,787,290	- 2,176

[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	796,339	--	--	158,677	175,214	118,808	83,129	43,037	64,579	152,895
	1966	898,344	--	--	212,072	186,622	151,067	123,055	72,914	54,033	98,581
	1977	1,553,968	--	--	293,186	327,330	313,772	202,595	150,129	81,205	185,751
HARDWOOD	1957	5,089,056	--	--	--	860,979	945,445	787,679	790,615	525,596	1,178,742
	1966	5,833,470	--	--	--	1,135,711	1,121,719	979,581	786,890	581,526	1,228,043
	1977	8,089,239	--	--	--	1,546,958	1,616,037	1,436,987	1,176,932	781,539	1,530,786
GROWING STOCK (IN THOUSAND CUBIC FEET)											
SOFTWOOD	1957	254,564	31,357	53,528	44,900	41,256	24,436	15,780	7,692	11,144	24,471
	1966	305,119	43,311	65,293	60,009	43,942	31,071	23,359	13,032	9,324	15,778
	1977	459,666	45,180	80,880	82,968	77,066	64,537	38,457	26,833	14,014	29,731
HARDWOOD	1957	1,940,688	212,373	249,562	295,234	258,010	241,062	181,870	169,587	108,125	224,865
	1966	2,331,913	295,438	330,517	330,744	340,339	286,007	226,179	168,788	119,631	234,270
	1977	3,173,988	311,681	442,993	506,590	463,622	412,045	331,792	252,475	160,770	292,020
ALL LIVE TIMBER (IN THOUSAND CUBIC FEET)											
SOFTWOOD	1957	271,253	37,906	58,793	47,550	42,153	24,940	16,604	7,692	11,144	24,471
	1966	326,923	52,354	71,717	63,561	44,893	31,714	24,550	13,032	9,324	15,778
	1977	487,046	54,701	88,886	87,842	78,743	65,856	40,440	26,833	14,014	29,731
HARDWOOD	1957	2,495,828	313,067	336,648	379,575	317,456	287,699	218,302	198,671	133,400	311,010
	1966	3,007,497	435,517	445,851	425,230	418,740	341,339	271,473	197,757	147,601	323,989
	1977	4,067,890	460,690	597,435	651,097	570,611	491,872	398,155	295,779	198,338	403,913

[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.
1977. Forest statistics for the Southern Mountain Region of Virginia, 1977. USDA For. Serv. Resour. Bull. SE-42, 33 p. Southeast. For. Exp. Stn., Asheville, N. C.

The area of commercial forest land in this 17-county area has changed little since 1966. Softwood volume increased by 51 percent, hardwood by 36 percent. Hardwoods make up 87 percent of the growing-stock inventory. Annual timber removals were less than one-third the net annual growth. Mortality of growing stock reduced gross growth by 12 percent.

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

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