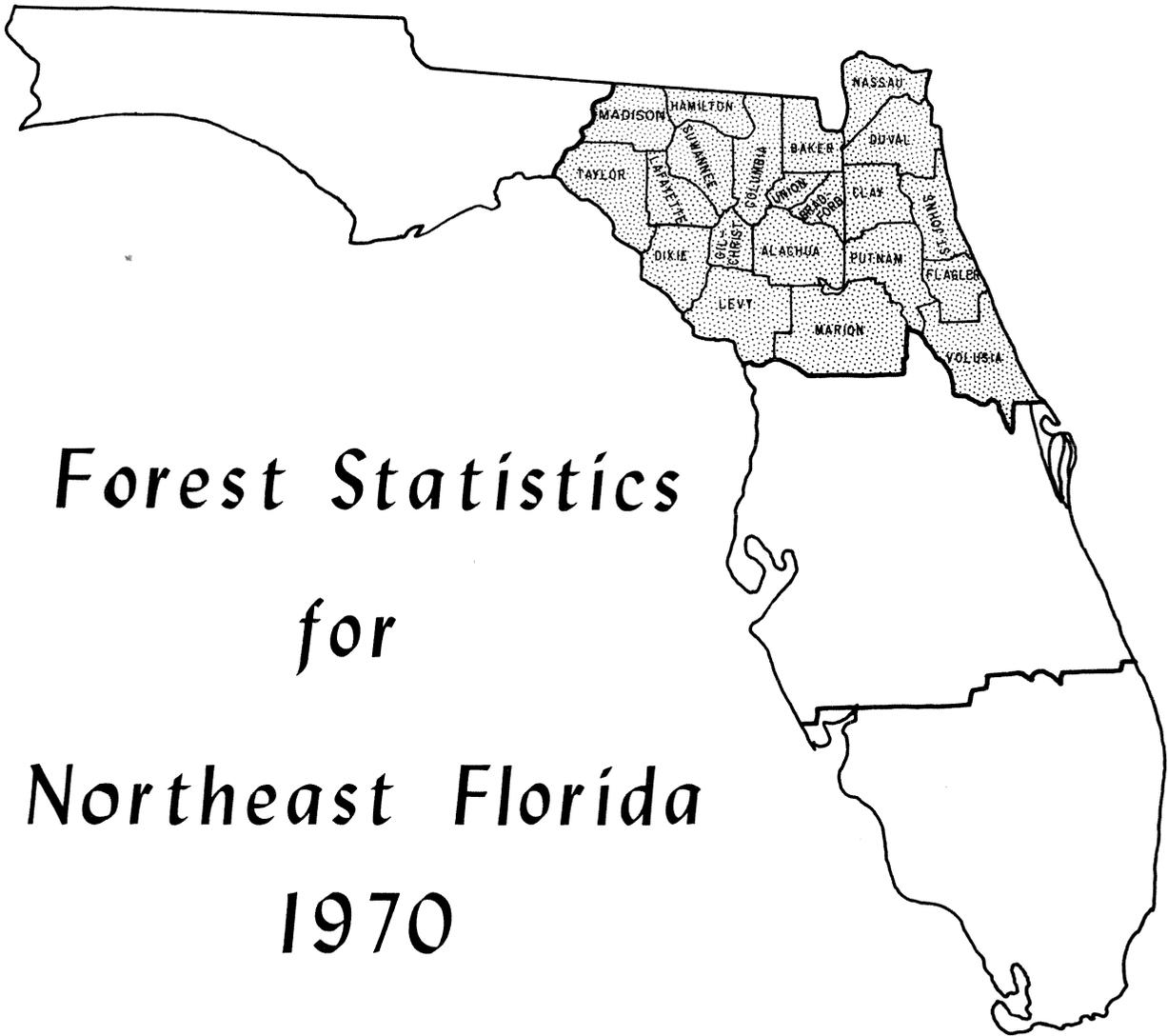


*Library*



**Forest Statistics**  
**for**  
**Northeast Florida**  
**1970**

Forest Service - U.S. Department of Agriculture  
Southeastern Forest Experiment Station  
Asheville, North Carolina

## FOREWORD

This report highlights the principal findings of the fourth Forest Survey of the timber resource in Northeast Florida. The survey was started in February 1969 and completed in November 1969. Findings of the three previous surveys, completed in 1934, 1949, and 1959, provide the basis for measuring changes that have occurred and trends that have developed over the past 36 years. However, in this report, the primary emphasis is on the changes and trends that have taken place since the last survey.

Forest Survey, authorized by the McSweeney-McNary Forest Research Act of May 22, 1928, is a continuing nationwide undertaking by the regional experiment stations of the Forest Service, USDA. In Florida, Georgia, North Carolina, South Carolina, and Virginia, Forest Survey is an activity of the Southeastern Forest Experiment Station, with headquarters at Asheville, North Carolina. The general objective is to inventory periodically the forest lands, their extent, condition, and volume of timber, and to ascertain rates of forest growth and depletion. It is necessary to keep this basic information up to date to provide a sound basis for the formulation of forest policies and programs.

The 21-county area covered by this report is one of four Survey units in Florida. A comparable report, "Forest Statistics for Northwest Florida 1969," USDA Forest Service Resource Bulletin SE-14, was issued, and similar reports for the other two units will be issued as the Statewide survey progresses. When completed, this survey will provide updated statistics on the timber resource for all of Florida.

The Southeastern Station gratefully acknowledges the cooperation and assistance provided by the Division of Forestry, Florida Department of Agriculture and Consumer Services, in the collection of the field data.

Joe P. McClure, Project Leader of the Forest Survey in the Southeast, organized and coordinated the various phases of the Survey. Noel D. Cost was in charge of the data collection. William H. B. Haines was in charge of the computations. Richard L. Welch was responsible for compiling the timber removal and mortality information. Herbert A. Knight was in charge of the analysis and reporting.

Office personnel assisting in this report were:

Robert A. Cathey	Agnes C. Nichols
Bertie W. Greene	Louise Shuford
Cecil C. Hutchins, Jr.	Sammy S. Wenningham
Joanne Hutchison	Dorothy S. White
Doniev W. Jackson	Camilla E. Young

The field party included:

Thomas R. Bellamy and John D. Nesbit, Field Supervisors  
Nolan L. Snyder, Field Assistant

Mervyn S. Allen	Robert S. Hensley
Robert E. Allen	Roy C. Henson
Jacky D. Balkcom	Harold D. Mathews
David S. Carr	James F. Palmer
Gerald C. Craver	John F. Parlier, Jr.
Edgar L. Davenport	Don F. Rogers
Jeffrey E. Dukes	Richard J. White, Jr.
Leonard G. Edwards	

  
DEAN N. QUINNEY, Assistant Director  
Division of Marketing, Utilization,  
and Resources Research

*Forest Statistics*  
*for*  
*Northeast Florida*  
**1970**

**by**  
**Joe P. McClure, Principal Resource Analyst**

CONTENTS

	<u>Page</u>
HIGHLIGHTS - - - - -	1
HOW THE FOREST SURVEY IS MADE - - - - -	3
RELIABILITY OF THE DATA - - - - -	4
DEFINITIONS OF TERMS - - - - -	6
COUNTY TABLES:	
1. Area, by land class - - - - -	13
2. Area of commercial forest land, by ownership class - - - - -	14
3. Area of commercial forest land, by forest-type group - - - - -	15
4. Area of commercial forest land, by stand-size class - - - - -	16
5. Area of commercial forest land, by site class - - - - -	17
6. Area of commercial forest land, by stocking classes of growing-stock trees - - - - -	18
7. Volume of sawtimber and growing stock on commercial forest land, by species group - - - - -	19
8. Net annual growth of sawtimber and growing stock on commercial forest land, by species group - - - - -	20
9. Annual removals of sawtimber and growing stock on commercial forest land, by species group - - - - -	21
UNIT TABLES:	
10. Area of commercial forest land, by forest type and ownership class - - - - -	22
11. Area of commercial forest land, by ownership and stocking classes of growing-stock trees - - - - -	22
12. Volume of timber on commercial forest land, by class and species group - - - - -	23
13. Number of growing-stock trees on commercial forest land, by species and diameter class - - - - -	24
14. Volume of all live trees on commercial forest land, by species and diameter class - - - - -	25
15. Volume of growing stock on commercial forest land, by species and diameter class - - - - -	26
16. Volume of sawtimber on commercial forest land, by species and diameter class - - - - -	27
17. Net annual growth and removals of growing stock on commercial forest land, by species - - - - -	28
18. Net annual growth and removals of sawtimber on commercial forest land, by species - - - - -	29
19. Mortality of growing stock and sawtimber on commercial forest land, by species - - - - -	30
20. Volume of all live trees and growing stock on commercial forest land, by ownership class and species group - - - - -	31
21. Volume of sawtimber on commercial forest land, by ownership class and species group - - - - -	31
22. Net annual growth and removals of growing stock on commercial forest land, by ownership class and species group - - - - -	32
23. Net annual growth and removals of sawtimber on commercial forest land, by ownership class and species group - - - - -	32
24. Average net volume per acre of sawtimber, growing stock, and other live timber on commercial forest land, by ownership class, major forest type, and species group - - - - -	33
25. Land area, by class, major forest type, and survey completion date - - - - -	34
26. Volume of sawtimber, growing stock, and all live timber on commercial forest land, by species group, diameter class, and survey completion date - - - - -	35

## HIGHLIGHTS

Since 1959 in Northeast Florida--

- area of commercial forest land declined by 190,000 acres, representing a net loss of less than 3 percent. This small net change, however, masks some major shifts which have taken place among the various land uses over the 11-year period. For example, about 510,000 acres of commercial forest land were diverted to pasture, urban developments, and cropland, while some 320,000 acres of land shifted back into commercial forest. Area of commercial forest land now totals almost 7.1 million acres, or 72 percent of total land area.
  
- about 1.3 million acres have been artificially regenerated. Now, about one out of every four acres of commercial forest shows evidence of artificial reforestation, which makes this 21-county area a leader in the proportion of forest land in plantations. Most of the planting has been slash pine, and trends in forest type show the area in slash pine has been increasing rapidly--up to 40 percent since 1959--to 2.8 million acres. Area in the longleaf pine type, which declined from 2.3 to 1.2 million acres between 1949 and 1959, decreased further to a new low of less than 0.5 million acres.
  
- nonstocked forest land has been sharply reduced from 1.7 to 0.9 million acres, or over 45 percent. Average stand density of all live trees 5.0 inches d.b.h. and larger is now 44 square feet per acre, compared to 36 square feet in 1959 and 33 square feet in 1949. A 53-percent increase in the average number of 4-inch softwood trees per acre is a further indicator of the improvement in stand density. Two out of every five acres, however, are still either poorly stocked or nonstocked.
  
- area of commercial forest land owned by forest industry has increased from 2.5 to almost 3.3 million acres, or 29 percent. An additional 0.4 million acres of commercial forest land under long-term lease places about one-half of the total commercial forest area under forest industry management. Farm woodland and other privately owned forest land together declined from 4.0 to 3.2 million acres, or 20 percent. Most of the publicly owned forest land is still concentrated in the Ocala National Forest, the Osceola National Forest, and the State-owned Camp Blanding property located in Clay County.
  
- volume of softwood growing stock has increased by almost 750 million cubic feet, or 29 percent. This increase followed a period of relatively minor change between 1949 and 1959. Slash pine, the leading species in 1959, has accounted for almost 80 percent of the increase in softwood volume and is now the predominant species in the area. Cypress is the second major softwood species and its

volume is up by 4 percent. Longleaf pine, on the other hand, is down by 18 percent. Volume of softwood sawtimber has increased from 7.3 to over 9.1 billion board feet, or 25 percent.

--volume of hardwood growing stock has increased by over 110 million cubic feet, or 7 percent. Hardwood volume had increased by less than 4 percent between the 1949 and 1959 surveys. Tupelo, black-gum, sweetgum, and other soft-textured species have accounted for 80 percent of the recent increase in hardwood volume. Volume of oak is down by 4 percent and volume of ash is up by 12 percent. Volume of hardwood sawtimber has increased from 4.2 to 4.5 billion board feet, or 7 percent.

In 1969--

--net growth of growing stock exceeded removals by an estimated 90 million cubic feet, or 48 percent. About 65 percent of this growth over removals was pine, 14 percent other softwoods, and 21 percent hardwood. By ownership, 46 percent of the growth over removals was on the private, nonindustrial lands, 37 percent on forest industry lands, and the remaining 17 percent on public lands.

--net growth of sawtimber exceeded removals by an estimated 175 million board feet, or 28 percent. About 56 percent of this growth over removals was pine, 25 percent other softwoods, and 19 percent hardwood. By ownership, 41 percent of the growth over removals was on the private, nonindustrial lands, 28 percent on forest industry lands, and the remaining 31 percent on public lands.

--removals of growing stock totaled 188 million cubic feet, up by two-thirds from the estimate of removals in 1958. Pine species accounted for almost 82 percent of total removals from growing stock. Of the remaining 18 percent, 8 percent was hard-textured hardwoods, 7 percent was soft-textured hardwoods, and 3 percent was cypress. Pulpwood is the leading product removed in terms of volume, and yearly reports show that the annual pulpwood harvest in Northeast Florida has increased about 40 percent over this remeasurement period. Sawtimber removals were distributed by species in roughly the same proportion as growing stock.

--mortality of growing stock totaled over 28 million cubic feet, which was well below the estimate of mortality in 1958. It was still enough mortality to reduce gross growth by almost 10 percent. Over 60 percent of the mortality was hardwood, and climatic factors were the leading identifiable causes of death.

## 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 to permit adding any combination of counties 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. In 19 of the 21 counties, initial estimates of forest and nonforest areas were based on the classification of 31,777 sample clusters systematically spaced on the latest aerial photographs available. A subsample of 2,395 of these 16-point clusters were ground checked, and a linear regression was fitted to the data to develop the relationship between the photo and ground classification of the subsample. This procedure provided a means for adjusting the initial estimates of area for change in land use since date of photography and for photo misclassification.
2. In 2 of the 21 counties, aerial photography available was considered to be outdated. Estimates of forest and nonforest areas were determined by direct aerial observation of 8,797 sample points from fixed-wing aircraft along flight lines 2 miles apart. An interval timer was used to determine the sample points.
3. Estimates of timber volume and forest classifications were based on measurements recorded at 1,809 ground sample locations systematically distributed within the commercial forest land. A 10-point cluster of plots systematically spaced on an acre were measured at each of these sample locations using a basal area factor of 37.5 square feet per acre. Trees less than 5.0 inches d.b.h. were tallied on fixed-radius plots around the point centers.
4. Equations prepared from detailed measurements collected on the trees tallied at 1 out of every 20 sample locations were used to compute the volumes of individual tally trees. A mirror caliper and sectional aluminum poles were used to obtain the additional measurements on standing trees required to construct the volume equations. The same 5-percent subsample of plots used for the tree-volume study also served as a quality control of field measurements. Felled trees were measured at active cutting operations to provide utilization factors for product and species groups and to supplement the standing tree-volume study.
5. Estimates of growth, removals, and mortality were determined from the remeasurement of 1,563 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 in 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:

	<u>Percent</u>
Per million acres of commercial forest land - - - - -	1.45
Per billion cubic feet of growing stock - - - - -	5.95
Per billion cubic feet of net annual growth - - - - -	1.41
Per billion cubic feet of annual removals - - - - -	2.66

Sampling errors for county and unit totals,<sup>1/</sup> in terms of one standard error

County	Commercial forest area	Cubic-foot volume of growing stock		
		Inventory	Growth	Removals
- - - - - Sampling error <sup>2/</sup> - - - - -				
Alachua	3.79	11.90	12.45	26.01
Baker	0.77	9.99	9.58	22.22
Bradford	2.29	14.89	16.65	32.21
Clay	3.14	14.85	16.81	29.50
Columbia	1.73	9.68	10.10	27.36
Dixie	1.33	9.37	10.45	26.06
Duval	2.85	13.16	12.05	28.85
Flagler	2.78	13.48	12.05	25.38
Gilchrist	4.47	16.97	20.66	55.17
Hamilton	2.39	13.00	14.75	24.90
Lafayette	1.75	14.25	15.23	29.31
Levy	2.13	9.05	9.36	22.38
Madison	1.63	11.59	11.94	26.57
Marion	2.37	9.19	8.75	23.24
Nassau	1.75	10.07	11.03	28.04
Putnam	2.42	16.18	14.05	28.09
St. Johns	2.23	11.71	11.08	27.89
Suwannee	4.68	16.38	18.52	27.65
Taylor	1.42	10.29	11.38	17.72
Union	2.35	17.72	15.04	40.19
Volusia	2.43	11.01	10.13	36.22
Unit total	0.54	2.65	2.67	6.13

<sup>1/</sup> 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.

<sup>2/</sup> 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, comprises 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 mts.), 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 two 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 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 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 non-commercial species.

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

Saplings.--Live trees 1.0 inch 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 and with at least one-third of the gross board-foot volume between the 1-foot stump and minimum saw-log top 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-Mt., sand, and spruce pine.

Other softwoods.--White pine, hemlock, cypress, eastern redcedar, whitecedar, 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 <sup>1/</sup>
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

<sup>1/</sup> 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	Soft hardwood	Hard hardwood
6	61.6	61.1	68.3	60.1	60.1
8	69.3	68.1	76.2	68.5	68.3
10	74.3	73.0	81.4	73.4	73.3
12	77.8	76.6	85.2	76.3	76.3
14	80.2	79.3	88.0	78.4	78.4
16	81.5	81.4	90.3	79.7	79.8
18	82.7	83.2	92.2	80.8	80.8
20	83.1	84.6	93.6	81.4	81.5
22	83.5	85.8	95.0	82.1	82.1
24+	85.0	87.4	99.5	83.0	83.6
Average	79.1	75.7	87.4	78.0	80.2

## 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 in Northeast Florida was intended primarily to furnish inventory data for the 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, 1970

County	All land <sup>1/</sup>	Forest land				Nonforest land <sup>2/</sup>
		Total	Commercial forest	Unproductive forest	Productive reserved	
----- <u>Thousand acres</u> -----						
Alachua	588.2	311.4	311.0	--	0.4	276.8
Baker	375.0	350.6	349.5	--	1.1	24.4
Bradford	188.5	148.1	148.1	--	--	40.4
Clay	392.7	327.5	326.2	--	1.3	65.2
Columbia	515.3	389.4	385.2	3.0	1.2	125.9
Dixie	456.7	393.6	393.6	--	(3/)	63.1
Duval	508.0	290.8	290.2	--	0.6	217.2
Flagler	316.1	265.6	263.6	1.8	0.2	50.5
Gilchrist	227.0	150.8	150.8	--	--	76.2
Hamilton	329.0	253.3	252.2	--	1.1	75.7
Lafayette	352.0	294.9	294.7	0.2	--	57.1
Levy	729.5	521.7	507.9	12.0	1.8	207.8
Madison	456.8	323.9	323.9	--	(3/)	132.9
Marion	1,038.3	637.6	636.1	--	1.5	400.7
Nassau	417.1	345.6	342.6	2.0	1.0	71.5
Putnam	473.9	369.4	368.7	--	0.7	104.5
St. Johns	400.9	298.1	293.4	3.1	1.6	102.8
Suwannee	439.1	204.8	204.2	--	0.6	234.3
Taylor	668.2	611.5	607.0	4.5	(3/)	56.7
Union	158.0	133.8	133.8	--	--	24.2
Volusia	723.2	491.3	478.2	12.4	0.7	231.9
<b>Total</b>	<b>9,753.5</b>	<b>7,113.7</b>	<b>7,060.9</b>	<b>39.0</b>	<b>13.8</b>	<b>2,639.8</b>

<sup>1/</sup> From U. S. Bureau of the Census, Land and Water Area of the United States, 1960.

<sup>2/</sup> Includes 118,900 acres of water according to Survey standards of area classification but defined by the Bureau of the Census as land.

<sup>3/</sup> Less than 50 acres.

Table 2.--Area of commercial forest land, by ownership and county, 1970

County	All ownerships	Ownership class									
		National Forest	Miscellaneous Federal	State	County and municipal	Forest industry <sup>2/</sup>	Farmer	Miscellaneous private Corporate	Individual		
----- Thousand acres -----											
Alachua	311.0	--	--	6.7	0.4	111.1	96.4	35.5	60.9		
Baker	349.5	74.6	--	0.1	--	165.7	10.9	40.0	58.2		
Bradford	148.1	--	--	8.4	1.1	73.4	21.7	10.9	32.6		
Clay	326.2	--	0.7	53.6	0.8	89.7	92.7	4.0	84.7		
Columbia	385.2	73.0	--	(1/)	0.3	121.6	97.6	43.9	48.8		
Dixie	393.6	--	--	0.4	0.3	385.0	1.3	1.3	5.3		
Duval	290.2	--	14.1	3.7	1.6	39.9	16.8	12.6	201.5		
Flagler	263.6	--	--	0.1	0.4	184.5	16.7	--	61.9		
Gilchrist	150.8	--	--	0.1	0.3	56.8	50.4	14.4	28.8		
Hamilton	252.2	--	--	(1/)	--	143.9	22.8	--	85.5		
Lafayette	294.7	--	--	--	0.4	222.4	27.8	14.0	30.1		
Levy	507.9	--	--	1.6	0.2	305.5	59.5	50.2	90.9		
Madison	323.9	--	--	(1/)	--	158.6	122.0	--	43.3		
Marion	636.1	248.6	1.9	12.5	0.8	59.1	113.1	130.5	69.6		
Nassau	342.6	--	--	2.9	0.6	193.5	7.3	10.9	127.4		
Putnam	368.7	22.8	0.3	4.8	0.2	103.5	94.8	29.2	113.1		
St. Johns	293.4	--	--	0.2	0.4	140.5	43.1	28.7	80.5		
Suwannee	204.2	--	--	--	0.1	29.6	90.7	7.0	76.8		
Taylor	607.0	--	--	0.1	0.3	502.9	8.7	25.9	69.1		
Union	133.8	--	--	5.1	--	76.5	48.2	--	4.0		
Volusia	478.2	--	8.8	2.8	0.8	100.0	68.0	123.0	174.8		
Total	7,060.9	419.0	25.8	103.1	9.0	3,263.7	1,110.5	582.0	1,547.8		

<sup>1/</sup> Less than 50 acres.

<sup>2/</sup> Not including 385,000 acres of farmer-owned and miscellaneous private lands leased to forest industry.

Table 3.--Area of commercial forest land, by forest-type group and county, 1970

County	All type groups	Forest-type groups										Elm-ash-cottonwood		
		Longleaf-slash pine	Loblolly-shortleaf pine	Oak-pine	Oak-hickory	Oak-gum-cypress								
		Thousand acres												
Alachua	311.0	141.7	20.3	32.4	74.4	42.2								
Baker	349.5	250.0	8.2	24.4	--	66.9								
Bradford	148.1	114.3	--	10.8	10.9	12.1								
Clay	326.2	149.3	29.5	18.7	64.4	64.3								
Columbia	385.2	194.7	9.8	26.5	56.1	98.1								
Dixie	393.6	166.2	4.2	34.4	55.0	133.1								0.7
Duval	290.2	144.9	23.1	25.2	50.4	46.6								
Flagler	263.6	176.3	--	25.5	8.1	53.7								
Gilchrist	150.8	88.7	--	3.6	51.3	7.2								
Hamilton	252.2	151.4	2.8	33.6	8.6	55.8								
Lafayette	294.7	144.1	7.2	30.9	26.3	86.2								
Levy	507.9	185.7	16.4	54.2	103.9	143.3								4.4
Madison	323.9	108.3	24.3	53.3	47.6	90.4								
Marion	636.1	127.1	240.6	72.7	144.0	47.4								4.3
Nassau	342.6	170.8	23.1	45.8	--	102.9								
Putnam	368.7	174.9	38.2	23.6	97.0	35.0								
St. Johns	293.4	173.6	14.4	28.4	8.6	68.4								
Suwannee	204.2	76.8	16.8	24.4	51.9	34.3								
Taylor	607.0	280.5	47.4	54.5	32.2	192.4								
Union	133.8	88.8	--	14.5	12.0	18.5								
Volusia	478.2	187.8	67.4	41.2	16.2	165.6								
Total	7,060.9	3,295.9	593.7	678.6	918.9	1,564.4								9.4

Table 4.--Area of commercial forest land, by stand-size class and county, 1970

County	All stands	Stand-size class			Nonstocked areas
		Sawtimber	Poletimber	Sapling and seedling	
----- Thousand acres -----					
Alachua	311.0	103.0	92.9	81.0	34.1
Baker	349.5	132.3	58.1	137.0	22.1
Bradford	148.1	20.8	66.8	55.1	5.4
Clay	326.2	70.2	72.1	83.7	100.2
Columbia	385.2	102.2	131.6	122.5	28.9
Dixie	393.6	127.5	126.1	100.0	40.0
Duval	290.2	73.9	81.2	93.1	42.0
Flagler	263.6	85.3	61.8	101.2	15.3
Gilchrist	150.8	36.4	36.6	52.3	25.5
Hamilton	252.2	69.5	68.3	99.6	14.8
Lafayette	294.7	81.8	54.5	105.8	52.6
Levy	507.9	201.9	141.8	89.5	74.7
Madison	323.9	93.7	103.0	94.7	32.5
Marion	636.1	184.1	171.1	161.3	119.6
Nassau	342.6	87.0	118.1	118.7	18.8
Putnam	368.7	68.8	82.3	123.2	94.4
St. Johns	293.4	62.7	98.4	129.4	2.9
Suwannee	204.2	51.7	51.8	56.0	44.7
Taylor	607.0	221.5	110.5	214.5	60.5
Union	133.8	34.5	44.4	50.9	4.0
Volusia	478.2	170.7	82.4	151.6	73.5
Total	7,060.9	2,079.5	1,853.8	2,221.1	906.5

Table 5.--Area of commercial forest land, by site class and county, 1970

County	All classes	Site class				
		1	2	3	4	5
- - - - - <u>Thousand acres</u> - - - - -						
Alachua	311.0	--	15.2	98.0	180.9	16.9
Baker	349.5	--	--	86.5	249.5	13.5
Bradford	148.1	--	5.4	35.1	102.2	5.4
Clay	326.2	--	--	36.1	214.2	75.9
Columbia	385.2	--	4.9	128.5	214.9	36.9
Dixie	393.6	--	--	113.7	248.2	31.7
Duval	290.2	--	--	29.4	197.8	63.0
Flagler	263.6	--	5.8	40.8	208.9	8.1
Gilchrist	150.8	--	--	14.8	96.0	40.0
Hamilton	252.2	--	--	47.8	177.6	26.8
Lafayette	294.7	--	--	42.9	189.3	62.5
Levy	507.9	--	--	90.9	324.6	92.4
Madison	323.9	--	3.9	52.6	238.4	29.0
Marion	636.1	--	20.7	141.4	296.0	178.0
Nassau	342.6	--	--	68.5	255.6	18.5
Putnam	368.7	--	--	73.6	184.1	111.0
St. Johns	293.4	--	--	109.4	175.4	8.6
Suwannee	204.2	--	--	20.9	151.9	31.4
Taylor	607.0	--	4.5	177.2	341.0	84.3
Union	133.8	--	4.0	68.2	53.0	8.6
Volusia	478.2	--	3.3	47.6	345.9	81.4
<b>Total</b>	<b>7,060.9</b>	<b>--</b>	<b>67.7</b>	<b>1,523.9</b>	<b>4,445.4</b>	<b>1,023.9</b>

Table 6.--Area of commercial forest land, by stocking classes of growing-stock trees, by county, 1970

County	All classes	Stocking percentage <sup>1/</sup>				
		Over 130	100-130	60-99	16.7-59	Less than 16.7
----- Thousand acres -----						
Alachua	311.0	10.1	33.8	131.7	101.3	34.1
Baker	349.5	6.6	56.8	203.1	60.9	22.1
Bradford	148.1	3.4	34.2	78.8	26.3	5.4
Clay	326.2	--	32.0	103.5	90.5	100.2
Columbia	385.2	15.3	68.9	143.3	128.8	28.9
Dixie	393.6	16.6	62.7	191.7	82.6	40.0
Duval	290.2	5.3	53.9	104.3	84.7	42.0
Flagler	263.6	11.5	65.2	115.1	56.5	15.3
Gilchrist	150.8	3.8	22.0	47.9	51.6	25.5
Hamilton	252.2	--	42.1	117.9	77.4	14.8
Lafayette	294.7	7.2	53.0	79.1	102.8	52.6
Levy	507.9	18.3	37.8	216.3	160.8	74.7
Madison	323.9	--	57.2	122.7	111.5	32.5
Marion	636.1	3.3	113.1	179.2	220.9	119.6
Nassau	342.6	7.9	46.2	175.5	94.2	18.8
Putnam	368.7	4.7	25.5	149.2	94.9	94.4
St. Johns	293.4	5.7	78.9	146.2	59.7	2.9
Suwannee	204.2	3.5	31.4	68.6	56.0	44.7
Taylor	607.0	8.9	90.7	243.2	203.7	60.5
Union	133.8	--	35.8	74.4	19.6	4.0
Volusia	478.2	20.8	78.7	132.8	172.4	73.5
Total	7,060.9	152.9	1,119.9	2,824.5	2,057.1	906.5

<sup>1/</sup> See stocking standards on page 12.

Table 7.--Volume of sawtimber and growing stock on commercial forest land, by species group and county, 1970

County	Sawtimber					Growing stock				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	Million board feet					Million cubic feet <sup>1/</sup>				
Alachua	586.3	229.1	90.1	114.4	152.7	206.4	95.4	27.4	40.7	42.9
Baker	893.8	630.5	112.4	150.1	0.8	315.2	222.8	37.6	54.3	0.5
Bradford	227.8	201.8	8.9	2.0	15.1	109.9	91.1	9.9	3.1	5.8
Clay	340.9	154.0	59.2	66.1	61.6	146.9	79.7	18.9	27.9	20.4
Columbia	857.5	527.3	178.3	85.1	66.8	318.5	178.2	57.3	57.2	25.8
Dixie	998.8	313.5	191.4	204.2	289.7	346.5	107.6	64.2	83.7	91.0
Duval	552.1	248.9	20.5	171.2	111.5	217.2	111.3	9.8	59.3	36.8
Flagler	770.9	316.2	235.3	119.6	99.8	253.4	120.1	71.7	39.6	22.0
Gilchrist	120.3	41.2	23.2	11.5	44.4	58.5	33.9	8.6	2.9	13.1
Hamilton	381.9	202.6	85.6	59.9	33.8	157.0	77.5	32.1	35.5	11.9
Lafayette	426.3	211.8	103.9	65.0	45.6	157.9	76.3	38.0	29.0	14.6
Levy	1,099.9	481.8	159.9	192.7	265.5	385.6	151.0	60.3	87.3	87.0
Madison	578.2	247.1	114.1	156.5	60.5	229.0	96.2	39.2	68.7	24.9
Marion	1,221.1	801.2	61.9	175.0	183.0	421.5	290.0	16.8	52.9	61.8
Nassau	724.7	445.9	47.8	141.9	89.1	296.6	183.3	20.0	57.8	35.5
Putnam	520.1	288.1	36.2	119.3	76.5	186.2	112.1	8.7	40.3	25.1
St. Johns	639.6	293.8	95.6	109.6	140.6	251.9	111.5	34.2	57.6	48.6
Suwannee	282.2	112.4	12.2	68.4	89.2	94.4	46.7	2.9	21.2	23.6
Taylor	1,287.3	588.9	276.0	218.7	203.7	432.5	174.7	81.8	92.8	83.2
Union	225.9	141.0	27.3	44.7	12.9	113.1	63.1	13.9	30.1	6.0
Volusia	972.2	417.8	334.7	147.0	72.7	342.5	145.5	120.9	55.4	20.7
Total	13,707.8	6,894.9	2,274.5	2,422.9	2,115.5	5,040.7	2,568.0	774.2	997.3	701.2

<sup>1/</sup> 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, 1969

County	Sawtimber					Growing stock				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	Million board feet	Million cubic feet								
Alachua	30.0	21.2	2.3	2.6	3.9	12.8	9.9	0.6	1.2	1.1
Baker	59.6	52.4	3.1	4.1	--	15.4	13.6	0.9	0.9	--
Bradford	18.9	18.2	0.3	0.1	0.3	8.0	7.2	0.5	0.1	0.2
Clay	21.6	16.4	1.1	2.7	1.4	8.8	7.3	0.4	0.6	0.5
Columbia	48.6	38.7	4.6	3.3	2.0	17.1	12.2	1.2	2.4	1.3
Dixie	57.4	36.3	5.9	7.0	8.2	16.2	8.9	1.6	2.8	2.9
Duval	28.8	21.8	0.6	3.2	3.2	12.8	10.0	0.2	1.4	1.2
Flagler	42.5	32.9	6.0	2.5	1.1	14.1	11.1	1.9	0.8	0.3
Gilchrist	6.9	4.2	0.8	0.2	1.7	6.1	5.5	0.2	0.1	0.3
Hamilton	24.1	18.8	2.1	1.9	1.3	7.5	5.6	0.6	0.9	0.4
Lafayette	25.0	18.1	2.9	2.4	1.6	8.1	5.8	1.0	0.9	0.4
Levy	58.3	38.8	5.7	6.3	7.5	20.4	13.5	1.5	2.5	2.9
Madison	33.4	21.9	3.0	5.7	2.8	10.8	7.7	0.7	1.6	0.8
Marion	75.8	65.1	1.4	3.9	5.4	25.4	21.5	0.3	1.3	2.3
Nassau	50.7	43.2	1.5	3.1	2.9	17.4	14.6	0.4	1.4	1.0
Putnam	36.0	29.8	1.2	3.2	1.8	12.2	10.4	0.3	0.9	0.6
St. Johns	37.1	28.1	2.8	3.0	3.2	15.1	11.5	0.7	1.7	1.2
Suwannee	9.7	6.1	0.4	1.4	1.8	5.6	4.7	--	0.4	0.5
Taylor	67.1	42.9	7.1	8.6	8.5	21.1	13.6	2.0	2.6	2.9
Union	16.9	14.5	1.0	1.1	0.3	7.2	5.9	0.4	0.8	0.1
Volusia	49.1	36.2	8.5	2.9	1.5	15.6	11.4	2.6	1.2	0.4
Total	797.5	605.6	62.3	69.2	60.4	277.7	211.9	18.0	26.5	21.3

Table 9.--Annual removals of sawtimber and growing stock on commercial forest land,  
by species group and county, 1969

County	Sawtimber					Growing stock				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	Million board feet	Million cubic feet								
Alachua	25.3	22.8	--	0.5	2.0	7.5	6.6	--	0.4	0.5
Baker	33.2	33.2	--	--	--	10.6	10.6	--	--	--
Bradford	19.3	18.7	--	--	0.6	6.2	6.0	--	--	0.2
Clay	13.5	13.5	--	--	--	6.5	6.5	--	--	--
Columbia	30.0	27.9	--	0.7	1.4	10.0	9.3	--	0.2	0.5
Dixie	40.1	26.4	2.0	2.6	9.1	12.0	8.6	1.0	0.5	1.9
Duval	12.8	6.6	--	1.4	4.8	4.5	2.8	--	0.4	1.3
Flagler	44.6	32.7	7.7	0.8	3.4	12.1	9.3	1.7	0.3	0.8
Gilchrist	7.5	--	2.9	0.5	4.1	1.7	--	0.7	0.1	0.9
Hamilton	45.0	41.4	--	3.2	0.4	12.2	10.7	--	0.9	0.6
Lafayette	39.5	31.5	3.0	2.9	2.1	13.0	10.7	0.7	0.9	0.7
Levy	34.8	29.5	0.7	2.1	2.5	8.5	7.0	0.2	0.4	0.9
Madison	34.5	28.5	0.8	3.8	1.4	9.5	7.4	0.2	1.1	0.8
Marion	61.7	52.9	0.9	4.1	3.8	17.5	14.8	0.2	1.1	1.4
Nassau	19.5	14.3	--	3.3	1.9	8.4	6.3	--	1.3	0.8
Putnam	22.0	14.0	--	4.5	3.5	7.3	4.6	--	1.3	1.4
St. Johns	47.8	41.1	0.2	2.6	3.9	11.9	9.9	0.2	0.8	1.0
Suwannee	9.9	7.3	--	2.6	--	3.1	2.3	--	0.7	0.1
Taylor	58.5	46.7	0.6	7.5	3.7	17.4	14.0	0.2	2.1	1.1
Union	11.5	6.7	0.6	2.7	1.5	3.4	2.1	0.1	0.8	0.4
Volusia	11.9	11.5	--	--	0.4	4.7	4.5	0.1	--	0.1
Total	622.9	507.2	19.4	45.8	50.5	188.0	154.0	5.3	13.3	15.4

Table 10.--Area of commercial forest land, by forest type and ownership class, 1970

Forest type	All ownerships	Ownership class				
		National Forest	Other public	Forest industry	Farmer	Misc. private
- - - - - Thousand acres - - - - -						
Softwood types:						
Longleaf pine	455.5	58.7	25.1	143.4	71.8	156.5
Slash pine	2,840.4	89.9	35.9	1,607.2	351.4	756.0
Loblolly pine	145.1	--	--	54.4	30.1	60.6
Sand pine	275.2	192.2	19.4	11.0	10.8	41.8
Eastern redcedar	8.8	--	--	4.4	--	4.4
Pond pine	164.6	9.8	12.0	58.1	26.9	57.8
<b>Total</b>	<b>3,889.6</b>	<b>350.6</b>	<b>92.4</b>	<b>1,878.5</b>	<b>491.0</b>	<b>1,077.1</b>
Hardwood types:						
Oak-pine	678.6	32.6	7.1	300.7	170.5	167.7
Oak-hickory	478.9	--	7.5	141.6	169.2	160.6
Southern scrub oak	440.0	6.7	18.2	34.1	105.6	275.4
Oak-gum-cypress	1,564.4	29.1	12.7	904.4	174.2	444.0
Elm-ash-cottonwood	9.4	--	--	4.4	--	5.0
<b>Total</b>	<b>3,171.3</b>	<b>68.4</b>	<b>45.5</b>	<b>1,385.2</b>	<b>619.5</b>	<b>1,052.7</b>
<b>All types</b>	<b>7,060.9</b>	<b>419.0</b>	<b>137.9</b>	<b>3,263.7</b>	<b>1,110.5</b>	<b>2,129.8</b>

Table 11.--Area of commercial forest land, by ownership and stocking classes of growing-stock trees, 1970

Ownership classes	All classes	Stocking percentage <sup>1/</sup>				
		Over 130	100-130	60-99	16.7-59	Less than 16.7
- - - - - Thousand acres - - - - -						
National Forest	419.0	16.7	68.5	184.6	126.0	23.2
Other public	137.9	5.3	5.1	29.6	61.1	36.8
Forest industry	3,263.7	81.5	606.3	1,459.1	881.7	235.1
Farmer	1,110.5	24.2	152.6	433.2	330.9	169.6
Misc. private	2,129.8	25.2	287.4	718.0	657.4	441.8
<b>All ownerships</b>	<b>7,060.9</b>	<b>152.9</b>	<b>1,119.9</b>	<b>2,824.5</b>	<b>2,057.1</b>	<b>906.5</b>

<sup>1/</sup> See stocking standards on page 12.

Table 12.--Volume of timber on commercial forest land,  
by class and species group, 1970

Class of timber	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
- - - - - <u>Million cubic feet</u> - - - - -					
Sawtimber trees:					
Saw-log portion	2,786.6	1,394.5	462.9	487.4	441.8
Upper-stem portion	329.6	133.7	57.5	93.3	45.1
Total	3,116.2	1,528.2	520.4	580.7	486.9
Poletimber trees					
All growing-stock trees	1,924.5	1,039.8	253.8	416.6	214.3
	5,040.7	2,568.0	774.2	997.3	701.2
Rough trees:					
Sawtimber-size trees	221.9	5.9	7.9	55.4	152.7
Poletimber-size trees	336.7	14.4	13.9	103.8	204.6
Total	558.6	20.3	21.8	159.2	357.3
Rotten trees:					
Sawtimber-size trees	93.8	1.0	14.6	33.3	44.9
Poletimber-size trees	16.1	--	2.2	7.7	6.2
Total	109.9	1.0	16.8	41.0	51.1
Salvable dead trees:					
Sawtimber-size trees	6.7	4.6	1.0	--	1.1
Poletimber-size trees	0.7	--	0.7	--	--
Total	7.4	4.6	1.7	--	1.1
Total, all timber	5,716.6	2,593.9	814.5	1,197.5	1,110.7

Table 13.--Number of growing-stock trees on commercial forest land, by species and diameter class, 1970

Species	Diameter class (inches at breast height)													All classes	20.0 and larger
	Thousand trees														
	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					
<b>Softwood:</b>															
Longleaf pine	46,621	12,568	11,321	11,703	7,427	2,688	701	148	55	10					--
Slash pine	282,831	172,048	62,251	26,569	12,860	5,753	2,369	667	249	65					--
Loblolly pine	19,272	6,224	4,137	3,275	2,349	1,440	1,012	474	203	158					--
Pond pine	12,650	5,219	3,348	1,765	1,297	610	198	161	40	12					--
Spruce pine	176	76	--	--	17	31	22	19	--	11					--
Sand pine	24,177	16,518	5,098	1,788	465	218	51	33	--	6					--
Baldcypress	11,081	4,274	2,769	1,405	1,121	655	342	269	143	100					3
Pondcypress	81,241	34,847	20,236	12,854	7,529	3,749	1,352	391	124	149					10
Atlantic white cedar	99	--	--	29	43	27	--	--	--	--					--
Eastern redcedar	1,630	1,023	303	121	132	40	11	--	--	--					--
Total softwoods	479,778	252,797	109,463	59,509	33,240	15,211	6,058	2,162	814	511					13
<b>Hardwood:</b>															
Select white oaks <sup>1/</sup>	731	124	178	120	40	142	67	18	23	19					--
Select red oaks <sup>2/</sup>	471	193	179	36	35	15	--	9	--	4					--
Other white oaks	5,581	1,202	786	623	412	628	474	438	330	535					153
Other red oaks	34,481	13,704	8,320	4,809	2,783	1,905	1,185	653	441	587					94
Hickory	4,964	1,655	1,153	743	551	471	170	76	64	78					3
Florida maple	289	59	--	79	78	55	--	--	14	4					--
Soft maple	12,645	4,165	3,953	2,063	943	627	477	160	121	127					9
Beech	34	--	--	--	--	15	10	9	--	--					--
Sweetgum	22,282	10,462	5,216	3,266	1,628	899	431	171	131	75					3
Tupelo and blackgum	50,696	20,669	12,109	6,942	5,073	2,943	1,448	687	416	371					38
Ash	12,340	5,576	3,207	1,593	897	486	319	127	112	20					3
Loblolly-bay	7,420	3,852	1,865	999	277	110	172	82	33	24					6
Basswood	1,448	505	449	117	187	114	21	43	6	6					--
Yellow-poplar	252	84	38	58	22	29	12	9	--	--					--
Magnolia	1,625	214	467	334	253	143	135	28	26	25					--
Elm	3,384	1,417	648	570	425	150	87	60	14	10					3
Black cherry	129	--	54	31	--	13	22	9	--	--					--
Sweetbay	7,464	2,466	1,808	1,074	706	502	482	210	129	84					3
River birch	162	84	--	29	35	--	--	8	6	--					--
Hackberry	673	426	57	105	76	--	--	9	--	--					--
Other eastern hardwoods	1,282	697	260	200	56	59	--	7	--	--					--
Total hardwoods	168,353	67,554	40,747	23,791	14,477	9,306	5,512	2,813	1,866	1,972					315
All species	648,131	320,351	150,210	83,300	47,717	24,517	11,570	4,975	2,680	2,483					328

<sup>1/</sup> Includes white and swamp chestnut oaks.

<sup>2/</sup> Includes cherrybark and Shumard oaks.

Table 14.--Volume of all live trees on commercial forest land, by species and diameter class, 1970

Species	Diameter class (inches at breast height)										Million cubic feet
	All classes	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-29.0 and larger	
Softwood:											
Longleaf pine	511.9	36.7	80.5	150.1	142.7	69.3	22.5	6.5	2.9	0.7	--
Slash pine	1,588.2	390.1	378.7	313.6	235.2	147.1	75.3	29.8	13.1	5.3	--
Loblolly pine	245.3	14.8	27.2	38.5	44.9	37.0	35.3	22.3	12.2	13.1	--
Pond pine	99.1	11.2	17.0	19.0	20.4	15.1	6.6	6.6	2.5	0.7	--
Spruce pine	4.3	0.2	--	--	0.4	0.9	0.9	1.0	--	0.9	--
Sand pine	140.5	59.0	38.8	24.5	8.9	5.6	1.5	1.8	--	0.4	4.6
Baldcypress	147.0	15.5	21.6	18.5	24.2	18.8	12.2	13.4	8.8	9.4	4.6
Pondcypress	655.2	101.3	127.4	139.7	124.6	88.2	38.5	16.1	6.3	11.0	2.1
Atlantic white cedar	1.9	0.1	--	0.3	0.6	0.9	--	--	--	--	--
Eastern redcedar	8.7	2.4	1.6	1.3	1.8	1.0	0.4	--	0.2	--	--
Total softwoods	3,402.1	631.3	692.8	705.5	603.7	383.9	193.2	97.5	46.0	41.5	6.7
Hardwood:											
Select white oaks <sup>1/</sup>	13.1	0.6	0.9	1.1	0.8	3.8	2.1	0.8	1.2	1.8	--
Select red oaks <sup>2/</sup>	3.8	0.7	1.3	0.4	0.5	0.3	--	0.2	--	0.4	--
Other white oaks	266.6	12.0	14.3	20.8	23.1	26.2	25.4	26.4	21.4	59.8	37.2
Other red oaks	459.4	45.8	56.7	61.4	51.8	54.2	43.0	33.9	28.3	64.1	20.2
Hickory	61.3	4.7	6.9	7.4	9.3	12.7	6.4	4.0	3.1	6.3	0.5
Florida maple	6.0	0.2	0.3	1.1	1.6	1.6	--	--	0.8	0.4	--
Soft maple	171.0	19.0	30.3	30.2	24.4	21.2	18.5	9.0	6.2	11.0	1.2
Beech	1.4	--	--	0.2	--	0.4	0.5	0.3	--	--	--
Sweetgum	191.2	26.4	31.1	38.3	30.1	27.6	15.2	7.6	7.8	6.0	1.1
Tupelo and blackgum	573.0	69.6	79.6	86.4	102.6	86.0	52.1	31.2	24.6	34.7	6.2
Ash	145.1	23.4	28.6	23.2	19.8	18.4	14.2	7.9	6.6	2.6	0.4
Loblolly-bay	54.0	11.4	11.1	10.3	5.0	3.9	4.7	3.4	1.5	1.8	0.9
Basswood	18.9	1.6	3.6	1.9	3.8	3.6	1.0	2.5	0.4	0.5	--
Yellow-poplar	3.4	0.4	0.4	0.5	0.4	0.7	0.4	0.5	--	0.1	--
Magnolia	26.3	1.0	3.0	3.5	5.0	4.7	3.8	1.5	1.6	2.2	--
Elm	38.1	4.7	6.0	7.7	7.2	4.2	2.6	2.9	1.2	1.1	0.5
Black cherry	2.8	0.2	0.3	0.8	--	0.5	0.6	0.4	--	--	--
Sweetbay	108.5	10.8	14.1	15.5	13.5	15.5	15.3	9.9	6.3	6.9	0.7
River birch	2.1	0.4	--	0.1	0.8	0.2	--	0.3	0.3	--	--
Hackberry	5.7	1.7	0.9	1.6	1.1	--	--	0.4	--	--	--
Other eastern hardwoods	155.4	44.8	40.2	31.8	16.1	14.7	5.3	1.4	0.8	0.3	--
Total hardwoods	2,307.1	279.4	329.6	344.2	316.9	300.4	211.1	144.5	112.1	200.0	68.9
All species	5,709.2	910.7	1,022.4	1,049.7	920.6	684.3	404.3	242.0	158.1	241.5	75.6

<sup>1/</sup> Includes white and swamp chestnut oaks.

<sup>2/</sup> Includes cherrybark and Shumard oaks.

Table 15.--Volume of growing stock on commercial forest land, by species and diameter class, 1970

Species	All classes	Diameter class (inches at breast height)											Million cubic feet
		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		
Softwood:													
Longleaf pine	510.4	36.0	80.3	149.8	142.7	69.3	22.5	6.5	2.6	0.7	--	--	--
Slash pine	1,579.5	386.2	376.4	312.9	233.9	146.8	75.3	29.8	13.1	5.1	--	--	--
Loblolly pine	242.2	13.8	26.2	37.9	44.7	37.0	35.3	22.0	12.2	13.1	--	--	--
Pond pine	96.2	10.3	16.3	18.3	20.3	14.6	6.6	6.6	2.5	0.7	--	--	--
Spruce pine	4.3	0.2	--	--	0.4	0.9	0.9	1.0	--	0.9	--	--	--
Sand pine	135.4	55.9	38.2	23.1	8.9	5.6	1.5	1.8	--	0.4	--	--	--
Baldcypress	138.8	14.8	20.7	17.9	23.7	18.3	12.2	13.0	8.1	8.7	1.4	--	--
Pondcypress	625.7	93.4	121.2	135.1	122.6	84.8	37.4	14.8	5.4	9.8	1.2	--	--
Atlantic white cedar	1.8	--	--	0.3	0.6	0.9	--	--	--	--	--	--	--
Eastern redcedar	7.9	2.1	1.6	1.1	1.8	0.9	0.4	--	--	--	--	--	--
Total softwoods	3,342.2	612.7	680.9	696.4	599.6	379.1	192.1	95.5	43.9	39.4	2.6	--	--
Hardwood:													
Select white oaks <sup>1/</sup>	12.5	0.4	0.9	1.1	0.6	3.6	2.1	0.8	1.2	1.8	--	--	--
Select red oaks <sup>2/</sup>	3.8	0.7	1.3	0.4	0.5	0.3	--	0.2	--	0.4	--	--	--
Other white oaks	136.3	2.5	3.6	5.6	5.6	13.2	12.2	15.2	14.4	37.3	26.7	--	--
Other red oaks	373.1	33.4	45.0	49.7	44.7	46.8	37.2	27.8	22.4	49.6	16.5	--	--
Hickory	56.2	4.0	5.5	7.4	8.8	12.0	5.5	3.7	3.1	5.7	0.5	--	--
Florida maple	5.0	0.2	--	0.8	1.2	1.6	--	--	0.8	0.4	--	--	--
Soft maple	127.2	12.0	23.6	22.7	15.4	16.1	15.0	6.9	5.5	8.8	1.2	--	--
Beech	1.2	--	--	--	--	0.4	0.5	0.3	--	--	--	--	--
Sweetgum	172.5	21.9	28.1	34.5	27.7	25.1	14.6	7.3	7.2	5.7	0.4	--	--
Tupelo and blackgum	487.5	52.7	65.5	73.1	86.8	77.8	46.7	28.9	22.2	28.9	4.9	--	--
Ash	106.1	13.4	18.7	16.3	17.4	14.9	10.9	6.3	6.4	1.6	0.2	--	--
Loblolly-bay	42.7	8.1	8.0	8.2	4.1	2.4	4.3	3.4	1.5	1.8	0.9	--	--
Basswood	15.4	1.3	3.0	1.3	3.3	2.9	0.7	2.0	0.4	0.5	--	--	--
Yellow-poplar	2.9	0.2	0.4	0.4	0.7	0.7	0.4	0.5	--	--	--	--	--
Magnolia	22.2	0.5	2.4	3.1	3.9	3.7	3.8	1.1	1.5	2.2	--	--	--
Elm	31.3	3.2	4.1	5.7	7.0	3.6	2.6	2.9	0.9	0.8	0.5	--	--
Black cherry	1.7	--	0.2	0.2	--	0.3	0.6	0.4	--	--	--	--	--
Sweetbay	88.0	6.1	10.8	11.4	11.2	13.4	14.5	8.4	5.8	6.0	0.4	--	--
River birch	1.4	0.2	--	0.1	0.5	--	--	0.3	0.3	--	--	--	--
Hackberry	4.1	1.1	0.2	1.3	1.1	--	--	0.4	--	--	--	--	--
Other eastern hardwoods	7.4	1.7	0.9	1.9	0.8	1.5	--	0.3	--	0.3	--	--	--
Total hardwoods	1,698.5	163.6	222.0	245.3	241.0	240.3	171.6	117.1	93.6	151.8	52.2	--	--
All species	5,040.7	776.3	902.9	941.7	840.6	619.4	363.7	212.6	137.5	191.2	54.8	--	--

<sup>1/</sup> Includes white and swamp chestnut oaks.

<sup>2/</sup> Includes cherrybark and shumard oaks.

Table 16.--Volume of sawtimber on commercial forest land, by species and diameter class, 1970

Species	Diameter class (inches at breast height)							Total softwoods	Total hardwoods	All species
	All classes	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9			
----- Million board feet -----										
<b>Softwood:</b>										
Longleaf pine	1,832.2	608.5	673.0	363.1	135.1	38.4	11.4	25.7	11.4	25.7
Slash pine	3,603.1	1,136.9	1,034.4	742.9	427.4	176.1	59.7	25.7	59.7	25.7
Loblolly pine	968.8	136.2	194.6	183.8	201.3	126.4	57.7	68.8	57.7	68.8
Pond pine	303.0	58.6	82.4	70.0	40.4	36.4	11.9	3.3	11.9	3.3
Spruce pine	21.2	--	1.7	5.0	5.2	4.6	--	4.7	--	4.7
Sand pine	166.6	85.8	35.5	24.9	7.4	10.7	--	2.3	--	2.3
Baldcypress	496.2	59.9	107.0	90.2	70.9	79.1	37.8	44.6	37.8	44.6
Pondcypress	1,755.0	472.7	517.5	409.2	200.3	82.2	24.5	43.5	24.5	43.5
Atlantic white cedar	6.7	0.9	1.9	3.9	--	--	--	--	--	--
Eastern redcedar	16.6	3.7	7.3	3.8	1.8	--	--	--	--	--
<b>Total softwoods</b>	<b>9,169.4</b>	<b>2,563.2</b>	<b>2,655.3</b>	<b>1,896.8</b>	<b>1,089.8</b>	<b>553.9</b>	<b>203.0</b>	<b>195.6</b>	<b>203.0</b>	<b>195.6</b>
<b>Hardwood:</b>										
Select white oaks <sup>1/</sup>	44.6	--	1.3	14.3	10.4	3.5	5.6	9.5	5.6	9.5
Select red oaks <sup>2/</sup>	6.4	--	1.8	1.3	--	1.5	--	1.8	--	1.8
Other white oaks	542.7	--	15.8	45.7	44.2	67.6	64.5	176.5	64.5	176.5
Other red oaks	1,066.0	--	162.4	178.7	154.9	135.5	101.4	250.9	101.4	250.9
Hickory	175.3	--	34.2	47.6	25.1	19.4	13.9	31.3	13.9	31.3
Florida maple	17.6	--	5.2	7.6	--	--	3.4	1.4	3.4	1.4
Soft maple	312.1	--	54.6	67.9	69.1	36.2	26.0	50.5	26.0	50.5
Beech	4.9	--	--	1.4	1.4	2.1	--	--	--	--
Sweetgum	386.9	--	95.5	109.0	70.1	40.6	34.9	34.1	34.9	34.1
Tupelo and blackgum	1,220.3	--	270.0	307.6	194.6	152.7	109.6	158.3	109.6	158.3
Ash	242.2	--	58.5	60.3	50.5	29.8	33.0	9.1	33.0	9.1
Loblolly-bay	84.3	--	12.5	8.0	20.6	18.1	8.9	10.4	8.9	10.4
Basswood	42.6	--	12.1	12.0	3.7	9.8	2.5	2.5	2.5	2.5
Yellow-poplar	9.9	--	1.8	3.4	2.0	2.7	--	--	--	--
Magnolia	69.6	--	13.9	14.9	17.8	6.5	7.1	9.4	7.1	9.4
Elm	69.4	--	22.8	13.2	10.9	11.6	4.3	4.2	4.3	4.2
Black cherry	4.8	--	--	0.7	1.3	2.8	--	--	--	--
Sweetbay	216.0	--	30.4	45.1	52.1	37.5	22.8	26.9	22.8	26.9
River birch	4.9	--	2.2	--	--	1.3	1.4	--	1.4	--
Hackberry	6.2	--	4.3	--	--	1.9	--	--	--	--
Other eastern hardwoods	11.7	--	2.7	6.8	--	1.1	--	1.1	--	1.1
<b>Total hardwoods</b>	<b>4,538.4</b>	--	<b>802.0</b>	<b>945.5</b>	<b>728.7</b>	<b>582.2</b>	<b>439.3</b>	<b>777.9</b>	<b>439.3</b>	<b>777.9</b>
<b>All species</b>	<b>13,707.8</b>	<b>2,563.2</b>	<b>3,457.3</b>	<b>2,842.3</b>	<b>1,818.5</b>	<b>1,136.1</b>	<b>642.3</b>	<b>973.5</b>	<b>642.3</b>	<b>973.5</b>

<sup>1/</sup> Includes white and swamp chestnut oaks.

<sup>2/</sup> Includes cherrybark and shumard oaks.

Table 17.--Net annual growth and removals of growing stock on commercial forest land, by species, 1969

Species	: Net annual growth :	: Annual timber removals
	- - - - <u>Million cubic feet</u> - - - -	
Softwood:		
Yellow pines	211.9	154.0
Cypress	17.5	5.3
Other eastern softwoods	0.5	--
Total softwoods	229.9	159.3
Hardwood:		
Select white and red oaks	0.5	0.6
Other white and red oaks	16.3	10.8
Hickory	1.6	2.5
Hard maple	0.1	0.4
Sweetgum	5.7	4.0
Ash, walnut, and black cherry	2.7	0.9
Yellow-poplar	0.1	0.3
Other hardwoods	20.8	9.2
Total hardwoods	47.8	28.7
All species	277.7	188.0

Table 18.--Net annual growth and removals of sawtimber on commercial forest land, by species, 1969

Species	: Net annual growth :	: Annual timber removals
	- - - - <u>Million board feet</u> - - - -	
Softwood:		
Yellow pines	605.6	507.2
Cypress	60.9	19.4
Other eastern softwoods	1.4	--
Total softwoods	667.9	526.6
Hardwood:		
Select white and red oaks	1.0	3.2
Other white and red oaks	46.8	35.1
Hickory	5.7	9.3
Hard maple	0.4	1.5
Sweetgum	15.0	14.2
Ash, walnut, and black cherry	6.0	1.4
Yellow-poplar	0.3	1.6
Other hardwoods	54.4	30.0
Total hardwoods	129.6	96.3
All species	797.5	622.9

Table 19.--Mortality of growing stock and sawtimber on commercial forest land, by species, 1969

Species	: Growing stock :	: Sawtimber
	<u>Million cubic feet</u>	<u>Million board feet</u>
Softwood:		
Yellow pines	8.7	22.5
Cypress	1.9	6.0
Other eastern softwoods	0.2	0.9
Total softwoods	10.8	29.4
Hardwood:		
Select white and red oaks	0.2	1.1
Other white and red oaks	7.8	26.9
Hickory	--	--
Hard maple	--	--
Sweetgum	1.8	5.5
Ash, walnut, and black cherry	0.3	0.5
Yellow-poplar	--	--
Other hardwoods	7.3	19.6
Total hardwoods	17.4	53.6
All species	28.2	83.0

Table 20.--Volume of all live trees and growing stock on commercial forest land, by ownership class and species group, 1970

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
					Million cubic feet					
National Forest	466.7	350.5	36.6	61.9	17.7	445.2	346.7	35.6	54.5	8.4
Other public	50.5	31.7	3.0	11.6	4.2	44.7	30.7	2.8	10.6	0.6
Forest industry	2,463.5	1,033.0	461.1	553.8	415.6	2,230.4	1,028.3	444.5	461.5	296.1
Farmer	898.5	393.1	90.7	174.0	240.7	758.2	388.9	87.4	138.6	143.3
Miscellaneous private	1,830.0	781.0	221.4	396.2	431.4	1,562.2	773.4	203.9	332.1	252.8
All ownerships	5,709.2	2,589.3	812.8	1,197.5	1,109.6	5,040.7	2,568.0	774.2	997.3	701.2

Table 21.--Volume of sawtimber on commercial forest land, by ownership class and species group, 1970

Ownership class	Small sawtimber <sup>1/</sup>					Large sawtimber <sup>2/</sup>				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
						Million board feet				
National Forest	965.1	830.2	71.2	58.3	5.4	245.6	87.0	55.8	88.7	14.1
Other public	99.5	76.9	6.0	16.6	--	38.7	19.4	2.1	14.3	2.9
Forest industry	4,054.9	2,210.2	1,028.2	533.3	283.2	1,924.0	513.3	293.2	522.7	594.8
Farmer	1,216.5	743.3	192.8	156.7	123.7	831.8	289.3	59.4	174.6	308.5
Miscellaneous private	2,526.8	1,576.7	379.8	335.5	234.8	1,804.9	548.6	186.0	522.2	548.1
All ownerships	8,862.8	5,437.3	1,678.0	1,100.4	647.1	4,845.0	1,457.6	596.5	1,322.5	1,468.4

<sup>1/</sup> Volume of sawtimber trees less than 15.0 inches at d.b.h.

<sup>2/</sup> 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, 1969

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
	Million cubic feet									
National Forest	24.5	22.5	0.6	1.1	0.3	6.9	6.9	--	--	--
Other public	2.2	1.8	0.1	0.3	--	4.2	2.3	--	0.5	1.4
Forest industry	123.1	90.5	10.5	12.8	9.3	90.0	76.5	2.4	5.9	5.2
Farmer	44.7	33.8	2.0	4.1	4.8	31.7	22.9	1.8	2.2	4.8
Miscellaneous private	83.2	63.3	4.8	8.2	6.9	55.2	45.4	1.1	4.7	4.0
All ownerships	277.7	211.9	18.0	26.5	21.3	188.0	154.0	5.3	13.3	15.4

Table 23.--Net annual growth and removals of sawtimber on commercial forest land, by ownership class and species group, 1969

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
	Million board feet									
National Forest	74.9	68.0	2.5	3.7	0.7	14.7	14.7	--	--	--
Other public	7.7	7.1	0.2	0.4	--	14.5	9.4	--	1.3	3.8
Forest industry	345.5	247.5	37.8	34.7	25.5	296.9	249.3	7.0	22.5	18.1
Farmer	118.8	90.0	6.9	9.6	12.3	107.8	78.1	8.3	8.6	12.8
Miscellaneous private	250.6	193.0	14.9	20.8	21.9	189.0	155.7	4.1	13.4	15.8
All ownerships	797.5	605.6	62.3	69.2	60.4	622.9	507.2	19.4	45.8	50.5

Table 24.--Average net volume per acre of sawtimber, growing stock, and other live timber<sup>1/</sup> on commercial forest land, by ownership class, major forest type, and species group, 1970

Forest type, species group, and class of material	Ownership class											
	All ownerships		National Forest		Other public		Forest industry		Farmer		Misc. private	
	Board feet	Cubic feet	Board feet	Cubic feet	Board feet	Cubic feet	Board feet	Cubic feet	Board feet	Cubic feet	Board feet	Cubic feet
Pine types:												
Growing stock:												
Softwood	1,406	569	2,123	805	1,169	392	1,300	535	1,306	575	1,364	541
Hardwood	33	17	12	10	--	--	18	13	33	19	62	26
Total	1,439	586	2,135	815	1,169	392	1,318	548	1,339	594	1,426	567
Other timber:												
Softwood	--	6	--	9	--	16	--	3	--	6	--	7
Hardwood	--	12	--	9	--	7	--	9	--	15	--	17
Total	--	18	--	18	--	23	--	12	--	21	--	24
Oak-pine type:												
Growing stock:												
Softwood	1,826	558	2,126	642	340	80	2,084	663	1,604	451	1,650	509
Hardwood	405	184	197	214	--	--	203	106	828	318	337	162
Total	2,231	742	2,323	856	340	80	2,287	769	2,432	769	1,987	671
Other timber:												
Softwood	--	9	--	10	--	--	--	11	--	6	--	6
Hardwood	--	85	--	108	--	--	--	54	--	118	--	95
Total	--	94	--	118	--	--	--	65	--	124	--	101
Upland hardwood types:												
Growing stock:												
Softwood	232	57	--	--	268	58	292	68	223	61	219	53
Hardwood	1,106	365	--	--	113	25	2,104	671	974	335	930	306
Total	1,338	422	--	--	381	83	2,396	739	1,197	396	1,149	359
Other timber:												
Softwood	--	1	--	--	--	--	--	--	--	1	--	1
Hardwood	--	207	--	--	--	58	--	230	--	222	--	203
Total	--	208	--	--	--	58	--	230	--	223	--	204
Bottomland hardwood types:												
Growing stock:												
Softwood	1,425	442	2,050	566	652	170	1,554	475	1,355	429	1,221	393
Hardwood	1,993	749	4,325	1,423	2,791	956	1,892	749	1,649	616	2,107	749
Total	3,418	1,191	6,375	1,989	3,443	1,126	3,446	1,224	3,004	1,045	3,328	1,142
Other timber:												
Softwood	--	21	--	18	--	--	--	16	--	16	--	30
Hardwood	--	199	--	247	--	227	--	183	--	212	--	218
Total	--	220	--	265	--	227	--	199	--	228	--	248
All types:												
Growing stock:												
Softwood	1,297	472	2,085	763	888	285	1,388	505	1,101	408	1,134	412
Hardwood	641	240	332	126	289	96	663	260	654	241	691	246
Total	1,938	712	2,417	889	1,177	381	2,051	765	1,755	649	1,825	658
Other timber:												
Softwood	--	9	--	10	--	10	--	7	--	6	--	11
Hardwood	--	86	--	33	--	39	--	73	--	114	--	102
Total	--	95	--	43	--	49	--	80	--	120	--	113
All timber	1,938	807	2,417	932	1,177	430	2,051	845	1,755	769	1,825	771

<sup>1/</sup> Rough and rotten trees.

Table 25.--Land area, by class, major forest type,  
and survey completion date, 1949, 1959, and 1970

Land use class	Survey completion date			Change 1959-1970
	1949 <sup>2/</sup>	1959 <sup>2/</sup>	1970	
- - - - - <u>Thousand acres</u> - - - - -				
Forest land:				
Commercial forest land:				
Pine and oak-pine types	4,894.0	4,336.1	4,568.2	+232.1
Hardwood types	2,707.7	2,914.9	2,492.7	-422.2
Total	7,601.7	7,251.0	7,060.9	-190.1
Noncommercial forest land:				
Productive-reserved	6.1	12.3	13.8	+ 1.5
Unproductive	85.9	62.4	39.0	- 23.4
Total	92.0	74.7	52.8	- 21.9
Nonforest land:				
Cropland	1,108.2	1,079.3	813.7	-265.6
Pasture and range	295.6	468.2	794.8	+326.6
Other	546.7	790.8	912.4	+121.6
Total	1,950.5	2,338.3	2,520.9	+182.6
All land <sup>1/</sup>	9,644.2	9,664.0	9,634.6	- 29.4

<sup>1/</sup> Excludes all water areas.

<sup>2/</sup> These figures differ slightly from reported figures because of revisions in the estimates of land area.

Table 26.--Volume<sup>1/</sup> 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 million board feet)												
Softwood	1949	7,840.2	--	--	2,609.5	2,474.6	1,584.6	634.3	287.5	87.1	162.6	
	1959	7,336.8	--	--	2,276.9	2,398.8	1,407.2	696.0	313.1	130.0	114.8	
	1970	9,169.4	--	--	2,563.2	2,655.3	1,896.8	1,089.8	553.9	203.0	207.4	
Hardwood	1949	4,241.6	--	--	--	760.5	911.1	625.9	552.4	360.2	1,031.5	
	1959	4,232.4	--	--	--	779.7	914.6	666.0	562.8	421.1	888.2	
	1970	4,538.4	--	--	--	802.0	945.5	728.7	582.2	439.3	1,040.7	
GROWING STOCK (in million cubic feet)												
Softwood	1949	2,629.6	302.4	529.7	708.9	558.7	316.7	111.8	49.6	18.8	33.0	
	1959	2,593.8	387.1	537.2	618.6	541.6	281.3	122.6	54.0	28.1	23.3	
	1970	3,342.2	612.7	680.9	696.4	599.6	379.1	192.1	95.5	43.9	42.0	
Hardwood	1949	1,527.1	139.4	174.5	215.6	228.6	231.5	147.5	111.1	76.7	202.2	
	1959	1,585.4	153.1	191.0	240.6	234.4	232.4	156.9	113.2	89.7	174.1	
	1970	1,698.5	163.6	222.0	245.3	241.0	240.3	171.6	117.1	93.6	204.0	
ALL LIVE TIMBER (in million cubic feet)												
Softwood	1949	2,673.2	311.8	538.7	718.7	562.6	320.8	112.5	50.6	19.7	37.8	
	1959	2,637.6	399.2	546.3	627.1	545.4	284.9	123.4	55.1	29.4	26.8	
	1970	3,402.1	631.3	692.8	705.5	603.7	383.9	193.2	97.5	46.0	48.2	
Hardwood	1949	2,066.7	238.5	259.2	302.3	300.6	289.4	181.3	137.1	91.9	266.4	
	1959	2,151.3	261.9	283.7	337.4	308.2	290.6	193.0	139.7	107.4	229.4	
	1970	2,307.1	279.4	329.6	344.2	316.9	300.4	211.1	144.5	112.1	268.9	

<sup>1/</sup> 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.

