

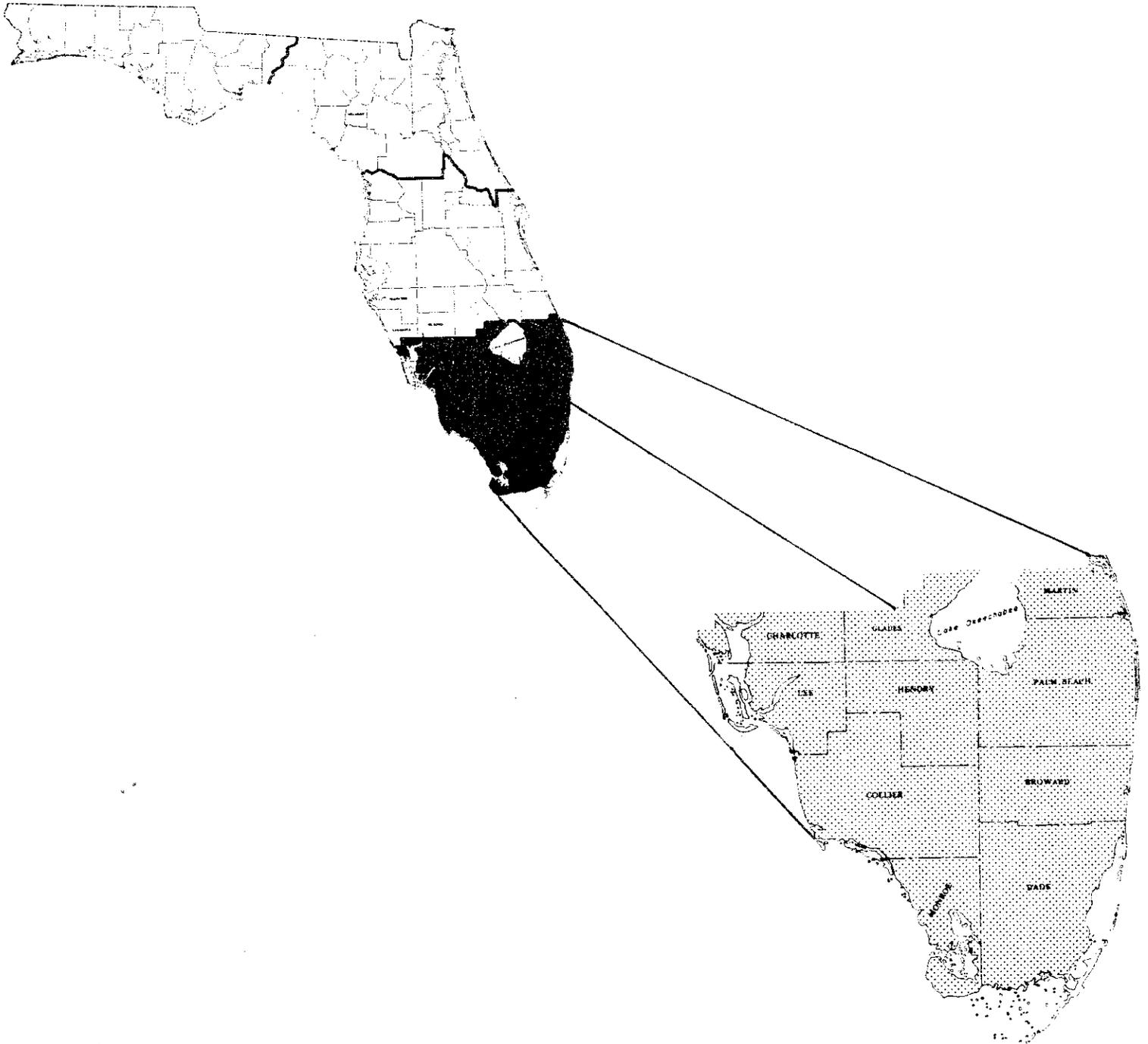
United States
Department of
Agriculture
Forest Service



Southeastern Forest
Experiment Station

Resource Bulletin
SE-59

FOREST STATISTICS FOR SOUTH FLORIDA, 1980



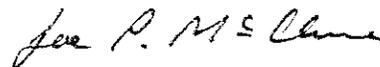
FOREWORD

This report highlights the principal findings of the fifth forest survey of South Florida. Fieldwork began in January 1980 and was completed in May 1980. Four previous surveys, completed in 1936, 1949, 1959, and 1970, provide statistics for measuring changes and trends over the past 44 years. The primary emphasis in this report is on the changes and trends since 1970. Previously reported figures have been adjusted to provide the best estimate of change.

Renewable Resources Evaluation (formerly Forest Survey) is authorized by the Forest and Rangeland Renewable Resources Research Act of 1978. The survey 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 in Asheville, North Carolina. The primary objective of the survey is to periodically inventory and evaluate forest and related resources. These inventories provide information on the extent and condition of forest lands, volume of timber, and rates of timber growth and removals. These data and evaluations help provide a basis for formulating forest policies and programs and for the orderly development and use of the resources.

The 10-county area covered by this report is one of four survey units in Florida. Similar reports, USDA Forest Service Resource Bulletins SE-52, SE-53, and SE-55, have been issued for Northwest, Northeast, and Central Florida. Another report containing many of the State totals is being released with this report. An in-depth, analytical State report on the timber resource should be available in late 1981.

The Southeastern Station gratefully acknowledges the cooperation and assistance provided by the Division of Forestry, Florida Department of Agriculture and Consumer Services, in collecting the field data. Appreciation is also expressed for the excellent cooperation of other public agencies and private landowners in providing information and access to the sample locations.



JOE P. McCLURE
Project Leader

July 1981

Southeastern Forest Experiment Station
Asheville, North Carolina

**FOREST STATISTICS
FOR
SOUTH FLORIDA,
1980**

by

Raymond M. Sheffield, Resource Analyst

and

William A. Bechtold, Resource Analyst

CONTENTS

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

HIGHLIGHTS

The physiographic and vegetative conditions in South Florida are not found in any other area in the Southeast. Dense human populations and other socioeconomic factors have led to an extensive interchange of acreage among the various land uses. All these factors greatly complicate the inventory process in South Florida. To sample at the accuracy levels used for most Survey Units in the Southeast would be prohibitively costly and time consuming. Thus, the statistics presented in this report represent our best estimate at a reasonable expenditure of time and dollars. A measure of the reliability of the data is found in the sampling error table on page 5.

The latest survey classifies over 2.0 million acres, or 26 percent of the land area in South Florida, as forest. Nearly 949,000 acres are classified as unproductive forest, 834,000 acres as commercial forest, and 265,000 acres as productive-reserved forest land. The breakdown of forest land has changed significantly from that in 1970. While the trends indicated by the current survey findings are not unreasonable, it is only fair to state that part of the change may be attributed to different methods of obtaining land use breakdowns in the two surveys. In 1970, estimates of forest and nonforest were based entirely on ground classifications at each sample location. The usual method is to classify a large number of sample clusters on aerial photographs and use the ground samples to adjust the photo classifications. This preferred photo method could not be used in 1970 or in 1980 because complete and current photo coverage for the 10 counties in South Florida did not exist and interpreting vegetation and land use classes from much of the photography was difficult. Thus, in the latest survey a large number of direct aerial observations along flight lines at low altitude were used to classify land use. This procedure is described on page 3. Observation along the same flight lines can be repeated in future surveys for consistency.

Since 1970 in South Florida

- *area of commercial forest land has increased by 109,000 acres, or by 15 percent.* Commercial forests occupy 834,000 acres, or less than 11 percent of the land area in these 10 counties. Four counties at the south end of the peninsula and up the Atlantic Coast—Broward, Dade, Monroe, and Palm Beach—have no commercial forest. About 347,000 acres were added to the commercial forest-land base in South Florida, while 238,000 acres were diverted to other land uses. Most of the additions were due to the reclassification of 308,000 acres of unproductive forest and rangeland to commercial forest. In the absence of this reclassification, area of commercial forest land would have dropped substantially. Two-thirds of the diversions was to noncommercial forests and the remaining one-third to nonforest land uses. The establishment of the Big Cypress National Preserve accounted for most of the 214,000-acre increase in acreage of productive-reserved forest land.

- *area of commercial forest land owned by farmers has more than doubled, and now totals 228,000 acres.* The acreage held by miscellaneous private owners totals 595,000 acres, 3 percent more than in 1970. Private land-owners control 99 percent of the commercial forest acreage. Forest industry does not own any commercial forest land in South Florida.

- *3 of every 5 acres of commercial forest land have been treated or disturbed.* The major treatments were prescribed burning on 170,000 acres, grazing on 84,000 acres, and major drainage efforts on 65,000 acres. Forestry related activities such as harvesting, intermediate cutting, and artificial regeneration accounted for only 16 percent of the total acreage treated or disturbed. Natural disturbances, largely wildfire, caused significant damage on 66,000 acres.

- *area of commercial forest land occupied by hardwood forest types has increased by 153,000 acres, largely the result of the inclusion of the reclassified, unproductive sites.* Oak-gum-cypress is the predominant hardwood type, and includes 139,000 acres of palm and other tropical forest types. Pine forest types have declined by 48,000 acres, or by 14 percent. Land clearing accounted for three-fourths of the pine-type loss. Oak-pine types have increased by 13 percent, but make up only 4 percent of the commercial forest land.

- *average basal area of all live trees 5.0 inches d.b.h. and larger has increased from 36 to 50 square feet per acre of commercial forest land.* However, over 57 percent of the commercial forest is still poorly stocked or non-stocked with growing-stock trees.

- *volume of growing-stock timber has increased from over 0.5 to about 0.6 billion cubic feet, or by 10 percent.* Softwood species make up over 91 percent of this volume. Cypress and slash pine are the major softwood species. Cypress accounted for 93 percent of the total volume increase. Collectively, hardwood species declined in volume by less than 2 percent. The current inventory of growing stock includes 1.6 billion board feet of sawtimber, up by 20 percent since 1970.

In 1979

•*net annual growth of growing stock totaled 21 million cubic feet, while annual timber removals totaled 16 million cubic feet.* Softwoods accounted for 81 percent of the net growth but only 54 percent of the removals. For hardwoods, annual removals were about 90 percent greater than net growth. Only 14 percent of the removals were due to commercial logging operations. Land clearing and other land withdrawals accounted for the remaining timber removals.

•*mortality of growing stock totaled 10 million cubic feet, and reduced gross growth by 33 percent.* Softwood species comprised 94 percent of the mortality. Fire was the primary cause of death, accounting for 72 percent of the mortality.

HOW THE INVENTORY IS MADE

The method of the inventory is 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 a total is large enough to meet the desired degree of reliability. Procedures were as follows:

1. Estimates of forest and nonforest areas were determined from direct aerial observations along 27 east-west flight lines spaced at 5-mile intervals. The flight lines were selected systematically from a random start and flown perpendicularly to the direction of primary drainage. From an altitude of 500 feet above the ground, observers classified the land use at 24,471 sample points along the flight lines. An interval timer was used to locate the sample points. This direct aerial method was not used in the Keys because of their unique geographical layout. In the Keys, gross area estimates were made by planimeter of the U.S. Geological Survey boundaries as transferred from maps onto aerial photographs. The breakdown of gross acreage into detailed land use was based upon the ground classification of 45 sample locations.
2. Estimates of timber volume and forest classifications were based on measurements recorded at 189 ground sample locations systematically distributed on commercial forest land. The plot design at each location was based on a cluster of 10 points. In most cases, variable plots, using a basal-area factor of 37.5 square feet per acre, were systematically spaced within a single forest condition at 5 of the 10 cluster points. Trees less than 5 inches d.b.h. were tallied on a fixed-radius plot around each point center.
3. Equations prepared from detailed measurements collected on standing trees in this Unit, and similar measurements taken throughout the Southeast, were used to compute the volume of individual tally trees. A mirror caliper and sectional aluminum poles were used to obtain the additional measurements on these standing trees required to construct volume equations.
4. Felled trees were measured at two active cutting operations. These data will be pooled with similar measurements taken in the State to supplement the standing-tree volume data and to generate utilization factors for product and species groups that will be analyzed at the State level.
5. Estimates of growth, removals, and mortality were determined from the remeasurement of 156 permanent sample plots established in the fourth survey.
6. Ownership information was collected from correspondence, public records, and local contacts. In those counties where the sample missed a particular ownership class, temporary sample plots were added on these lands.
7. All field data were sent to Asheville for editing and were punched into cards and stored 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):

	<i>Percent</i>
Per million acres of commercial forest land	10.93
Per billion cubic feet of growing stock	8.78
Per billion cubic feet of net annual growth	1.46
Per billion cubic feet of annual removals	3.17

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 - - - - -		
BROWARD	0.00	.00	.00	.00
CHARLOTTE	13.62	28.68	30.04	71.41
COLLIER	9.12	16.72	15.95	42.12
DADE	0.00	.00	.00	.00
GLADES	7.30	31.67	20.40	69.67
HENDRY	17.84	27.70	23.10	45.39
LEE	18.99	35.93	22.98	50.27
MARTIN	22.59	47.69	52.95	101.96
MONROE	0.00	.00	.00	.00
PALM BEACH	0.00	.00	.00	.00
UNIT TOTAL	11.66	11.40	9.98	24.79

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 (4-1/2 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.--Lands on which agriculture operations are being conducted and sale of agriculture products totaled \$1,000 or more during the year.

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, 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 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 STOCKING PERCENTAGES BASED ON TALLY AT ALL 10 POINTS OF A 10-POINT CLUSTER OF PLOTS. TREES LESS THAN 5 INCHES D.B.H. WERE TALLIED ON CIRCULAR, 1/300-ACRE PLOTS AT EACH POINT. TREES 5.0 INCHES D.B.H. AND LARGER WERE TALLIED ON VARIABLE PLOTS USING A BASAL AREA FACTOR OF 37.5 AT EACH SAMPLE POINT.

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	65.1	61.0	68.2	60.0
8	73.1	68.1	76.0	68.4
10	78.0	73.1	81.4	73.4
12	81.6	76.7	85.2	76.4
14	83.6	79.4	88.2	78.4
16	86.8	81.6	90.4	79.8
18	88.2	83.3	92.3	80.8
20	89.8	84.8	93.8	81.5
22	89.9	86.0	95.1	82.1
24+	91.3	87.0	97.8	82.9
AVERAGE	77.3	71.5	80.7	73.7

COUNTY TABLES

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

TABLE 1. --AREA, BY LAND CLASS AND COUNTY, 1980

COUNTY	ALL LAND ¹	FOREST LAND			NONFOREST LAND ²	
		TOTAL	COMMERCIAL FOREST	UNPRODUCTIVE FOREST		PRODUCTIVE-RESERVED
----- ACRES -----						
BROWARD	777,502	32,473	--	32,473	--	745,029
CHARLOTTE	458,729	111,561	65,648	45,913	--	347,168
COLLIER	1,297,035	743,661	415,191	158,558	169,912	553,374
DADE	1,250,756	209,959	--	186,872	23,087	1,040,797
GLADES	570,440	99,717	88,904	10,813	--	470,723
HENDRY	745,872	120,181	110,011	9,990	180	625,691
LEE	569,547	171,039	120,016	51,023	--	398,508
MARTIN	349,153	54,645	34,201	12,143	8,301	294,508
MONROE	645,715	372,589	--	309,204	63,385	273,126
PALM BEACH	1,254,622	131,765	--	131,765	--	1,122,857
TOTAL	7,919,371	2,047,590	833,971	948,754	264,865	5,871,781

¹ FROM U. S. BUREAU OF THE CENSUS AND U. S. GEOLOGICAL SURVEY.

² INCLUDES 244,492 ACRES OF WATER ACCORDING TO SURVEY STANDARDS OF AREA CLASSIFICATION, BUT DEFINED BY THE GEOLOGICAL SURVEY AND BUREAU OF THE CENSUS AS LAND.

TABLE 2. -- AREA OF COMMERCIAL FOREST LAND, BY OWNERSHIP CLASS AND COUNTY, 1980

COUNTY	ALL OWNERSHIPS	OWNERSHIP CLASS								
		NATIONAL FOREST	MISCELLANEOUS FEDERAL	STATE	COUNTY AND MUNICIPAL	FOREST INDUSTRY	FARMER	MISCELLANEOUS PRIVATE		
								CORPORATE	INDIVIDUAL	
----- ACRES -----										
BROWARD	--	--	--	140	887	--	--	38,014	--	26,607
CHARLOTTE	65,648	--	--	--	--	--	--	52,903	--	206,323
COLLIER	415,191	--	--	--	2,530	--	153,435	--	--	--
DADE	--	--	--	--	--	--	--	--	--	--
GLADES	88,904	--	205	--	15	--	2,957	79,814	--	5,913
HENDRY	110,011	--	6,100	--	46	--	31,160	67,512	--	5,193
LEE	120,016	--	--	--	--	--	38,405	38,407	--	43,204
MARTIN	34,201	--	--	45	247	--	2,422	14,533	--	16,954
MONROE	--	--	--	--	--	--	--	--	--	--
PALM BEACH	--	--	--	--	--	--	--	--	--	--
TOTAL	833,971	--	6,305	185	3,725	--	228,379	291,183	--	304,194

TABLE 3. -- AREA OF COMMERCIAL FOREST LAND, BY FOREST-TYPE GROUP AND COUNTY, 1980

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		
BROWARD	65,648	--	--	--	--	3,801	--	22,807	--	--	--	--
CHARLOTTE	415,191	--	--	39,040	--	15,872	5,291	309,384	5,291	--	--	--
DADE	--	--	79,353	--	--	--	--	--	--	--	--	--
GLADES	88,904	--	--	47,297	--	2,956	5,239	38,651	--	--	--	--
HENDRY	110,011	--	--	51,932	--	5,193	2,391	47,647	--	--	--	--
LEE	120,016	--	--	72,009	--	4,800	4,801	38,406	--	--	--	--
MARTIN	34,201	--	--	14,824	--	2,423	4,844	12,110	--	--	--	--
MONROE	--	--	--	--	--	--	--	--	--	--	--	--
PALM BEACH	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL	833,971	--	--	304,455	--	35,045	20,175	469,005	5,291	--	--	--

¹ INCLUDES 138,958 ACRES OF PALM AND OTHER TROPICAL FOREST TYPES.

TABLE 4. --AREA OF COMMERCIAL FOREST LAND, BY STAND-SIZE CLASS AND COUNTY, 1980

COUNTY	ALL STANDS	STAND-SIZE CLASS			NONSTOCKED AREAS
		SAWTIMBER	POLETIMBER	SAPLING-SEEDLING	
-- ACRES --					
BROWARD	--	--	--	--	--
CHARLOTTE	65,648	20,033	19,006	7,603	19,006
COLLIER	415,191	124,217	142,841	52,903	95,230
DADE	--	--	--	--	--
GLADES	88,904	20,692	23,649	29,662	14,901
HENDRY	110,011	53,965	33,193	17,614	5,239
LEE	120,016	4,801	57,610	38,403	19,202
MARTIN	34,201	7,266	5,136	12,111	9,688
MONROE	--	--	--	--	--
PALM BEACH	--	--	--	--	--
TOTAL	833,971	230,974	281,435	158,296	163,266

TABLE 5. --AREA OF COMMERCIAL FOREST LAND, BY SITE CLASS AND COUNTY, 1980

COUNTY	ALL CLASSES	SITE CLASS				
		1	2	3	4	5
-- ACRES --						
BROWARD	--	--	--	--	--	--
CHARLOTTE	65,648	--	--	--	42,839	22,809
COLLIER	415,191	--	--	5,291	126,973	282,927
DADE	--	--	--	--	--	--
GLADES	88,904	--	--	--	56,180	32,724
HENDRY	110,011	--	--	--	72,750	37,261
LEE	120,016	--	--	--	14,402	105,614
MARTIN	34,201	--	--	--	12,110	22,091
MONROE	--	--	--	--	--	--
PALM BEACH	--	--	--	--	--	--
TOTAL	833,971	--	--	5,291	325,254	503,426

TABLE 6. --AREA OF COMMERCIAL FOREST LAND, BY STOCKING CLASSES OF GROWING-STOCK TREES, BY COUNTY, 1980

COUNTY	ALL CLASSES	STOCKING PERCENTAGE ¹				
		OVER 130	100-130	60-99	16.7-59	LESS THAN 16.7
----- ACRES -----						
BROWARD	--	--	--	--	--	--
CHARLOTTE	65,648	3,801	15,205	8,630	19,006	19,006
COLLIER	415,191	15,873	74,071	100,518	129,499	95,230
DADE	--	--	--	--	--	--
GLADES	88,904	2,956	5,912	23,648	41,487	14,901
HENDRY	110,011	10,386	15,580	25,967	52,839	5,239
LEE	120,016	--	19,203	24,004	57,607	19,202
MARTIN	34,201	--	9,935	2,468	12,110	9,688
MONROE	--	--	--	--	--	--
PALM BEACH	--	--	--	--	--	--
TOTAL	833,971	33,016	139,906	185,235	312,548	163,266

¹ SEE STOCKING STANDARDS ON PAGE 12.

TABLE 7. -- VOLUME OF SAWTIMBER AND GROWING STOCK ON COMMERCIAL FOREST LAND, BY SPECIES GROUP AND COUNTY, 1980

COUNTY	SAWTIMBER				GROWING STOCK				THOUSAND CUBIC FEET				
	ALL SPECIES	PINE	OTHER SOFTWOOD	HARDWOOD	ALL SPECIES	PINE	OTHER SOFTWOOD	HARDWOOD	ALL SPECIES	PINE	OTHER SOFTWOOD	SOFT HARDWOOD	HARD HARDWOOD
BROWARD	101,750	61,561	40,189	--	44,081	22,887	20,566	--	44,081	22,887	20,566	--	628
CHARLOTTE	793,189	157,103	567,483	--	306,776	54,146	225,139	--	306,776	54,146	225,139	17,816	9,675
DADE	173,319	65,960	92,480	4,821	53,799	19,580	27,199	10,058	53,799	19,580	27,199	4,825	2,195
GLADES	391,245	103,586	231,719	23,270	123,451	36,031	71,756	32,670	123,451	36,031	71,756	7,543	8,121
HENDRY	107,332	26,443	80,889	--	55,163	19,230	35,933	--	55,163	19,230	35,933	--	--
LEE	33,764	32,810	--	--	10,323	9,466	--	954	10,323	9,466	--	--	857
MARTIN	--	--	--	--	--	--	--	--	--	--	--	--	--
MONROE	--	--	--	--	--	--	--	--	--	--	--	--	--
PALM BEACH	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL	1,600,599	447,463	1,012,760	67,738	593,593	161,340	380,593	72,638	593,593	161,340	380,593	30,184	21,476

* 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, 1979

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									
BROWARD	5,277	3,829	1,448	6,027	2,984	2,041	1,470	516	1,507	55
CHARLOTTE	36,334	13,704	13,619	6,027	2,984	9,532	3,023	4,165	1,507	837
DADE	6,328	2,304	2,552	1,007	465	2,663	1,735	420	389	119
GLADES	18,541	8,131	4,888	3,413	2,109	4,372	2,182	1,184	513	493
HENDRY	6,142	3,407	2,735	---	388	2,184	1,552	1,532	---	60
LEE	3,515	3,128	---	---	---	469	409	---	---	---
MARTIN	---	---	---	---	---	---	---	---	---	---
MONROE	---	---	---	---	---	---	---	---	---	---
PALM BEACH	---	---	---	---	---	---	---	---	---	---
TOTAL	76,138	34,503	25,242	10,447	5,946	21,261	10,471	6,817	2,409	1,564

TABLE 9. --ANNUAL REMOVALS OF SAWTIMBER AND GROWING STOCK ON COMMERCIAL FOREST LAND, BY SPECIES GROUP AND COUNTY, 1979

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 --									
BROWARD	4,307					930	930			
CHARLOTTE	30,015	1,198	3,855	7,069	17,893	9,743	1,270	1,248	3,183	4,042
DADE	1,957					379	379			
GLADES	5,357	2,893	2,464			2,323	717	1,273	333	
HENDRY	2,307					2,501	2,501			
LEE	2,104					522	522			
MARTIN										
MONROE										
PALM BEACH										
TOTAL	46,047	14,766	6,319	7,069	17,893	16,398	6,319	2,521	3,516	4,042

TABLE 10. --AREA OF COMMERCIAL FOREST LAND, BY FOREST TYPE AND OWNERSHIP CLASS, 1980

FOREST TYPE	ALL OWNERSHIPS	OWNERSHIP CLASS				
		NATIONAL FOREST	OTHER PUBLIC	FOREST INDUSTRY	FARMER	MISC. PRIVATE
ACRES						
SOFTWOOD TYPES:						
WHITE PINE-HEMLOCK	--	--	--	--	--	--
SPRUCE-FIR	--	--	--	--	--	--
LONGLEAF PINE	5,912	--	--	--	--	5,912
SLASH PINE	298,543	--	1,319	--	49,773	247,451
LOBLOLLY PINE	--	--	--	--	--	--
SHORTLEAF PINE	--	--	--	--	--	--
VIRGINIA PINE	--	--	--	--	--	--
SAND PINE	--	--	--	--	--	--
EASTERN REDCEDAR	--	--	--	--	--	--
POND PINE	--	--	--	--	--	--
SPRUCE PINE	--	--	--	--	--	--
PITCH PINE	--	--	--	--	--	--
TABLE-MOUNTAIN PINE	--	--	--	--	--	--
TOTAL	304,455	--	1,319	--	49,773	253,363
HARDWOOD TYPES:						
OAK-PINE	35,045	--	--	--	15,382	19,663
OAK-HICKORY	5,239	--	46	--	5,193	--
CHESTNUT OAK	--	--	--	--	--	--
SOUTHERN SCRUB OAK	14,936	--	--	--	--	14,936
OAK-GUM-CYPRESS ¹	469,005	--	8,850	--	152,740	307,415
ELM-ASH-COTTONWOOD	5,291	--	--	--	5,291	--
MAPLE-BEECH-BIRCH	--	--	--	--	--	--
TOTAL	529,516	--	8,896	--	178,606	342,014
ALL TYPES	833,971	--	10,215	--	228,379	595,377

¹INCLUDES 138,958 ACRES OF PALM AND OTHER TROPICAL FOREST TYPES.

TABLE 11. --AREA OF COMMERCIAL FOREST LAND, BY OWNERSHIP AND STOCKING CLASSES OF GROWING-STOCK TREES, 1980

OWNERSHIP CLASSES	ALL CLASSES	STOCKING PERCENTAGE ¹				
		OVER 130	100-130	60-99	16.7-59	LESS THAN 16.7
ACRES						
NATIONAL FOREST	--	--	--	--	--	--
OTHER PUBLIC	10,215	--	247	1,072	8,732	164
FOREST INDUSTRY	--	--	--	--	--	--
FARMER	228,379	21,066	47,618	31,453	81,027	47,215
MISC. PRIVATE	595,377	11,950	92,041	152,710	222,789	115,887
ALL OWNERSHIPS	833,971	33,016	139,906	185,235	312,548	163,266

¹SEE STOCKING STANDARDS ON PAGE 12.

TABLE 12. -- VOLUME OF TIMBER ON COMMERCIAL FOREST LAND, BY CLASS AND SPECIES GROUP, 1980

CLASS OF TIMBER	ALL SPECIES	PINE	OTHER SOFTWOOD	SOFT HARDWOOD	HARD HARDWOOD
----- THOUSAND CUBIC FEET -----					
SAWTIMBER TREES:					
SAW-LOG PORTION	312,638	87,934	224,704	--	--
UPPER-STEM PORTION	64,137	8,697	22,224	17,932	15,284
TOTAL	376,775	96,631	246,928	17,932	15,284
POLETIMBER TREES	216,818	64,709	133,665	12,252	6,192
ALL GROWING-STOCK TREES	593,593	161,340	380,593	30,184	21,476
ROUGH TREES:					
SAWTIMBER-SIZE TREES	38,255	292	13,518	2,796	21,649
POLETIMBER-SIZE TREES	45,039	521	21,993	8,058	14,467
TOTAL	83,294	813	35,511	10,854	36,116
ROTTEN TREES:					
SAWTIMBER-SIZE TREES	3,780	--	2,161	743	876
POLETIMBER-SIZE TREES	1,424	--	1,191	--	233
TOTAL	5,204	--	3,352	743	1,109
SALVABLE DEAD TREES:					
SAWTIMBER-SIZE TREES	--	--	--	--	--
POLETIMBER-SIZE TREES	--	--	--	--	--
TOTAL	--	--	--	--	--
TOTAL, ALL TIMBER	682,091	162,153	419,456	41,781	58,701

TABLE 13. -- NUMBER OF GROWING-STOCK TREES ON COMMERCIAL FOREST LAND, BY SPECIES AND DIAMETER CLASS, 1980

SPECIES	ALL CLASSES	DIAMETER CLASS (INCHES AT BREAST HEIGHT)										29.0 AND LARGER									
		5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9											
-- THOUSAND TREES --																					
SOFTWOOD:																					
LONGLEAF PINE	122																				
SLASH PINE	27,657	13,174	7,589	3,850	1,666	913	265	154	28	18											
SHORTLEAF PINE																					
LOBLOLLY PINE																					
POND PINE																					
VIRGINIA PINE																					
PITCH PINE																					
TABLE-MOUNTAIN PINE																					
SPRUCE PINE																					
SAND PINE	80																				
EASTERN WHITE PINE																					
EASTERN HEMLOCK																					
SPRUCE AND FIR	5,508	1,517	1,265	870	1,136	304	162	198	37	19											
BALDCYPRESS	48,236	19,011	15,239	7,470	3,155	1,744	800	385	246	168											
CEDARS																					
TOTAL SOFTWOODS	81,603	33,782	24,215	12,190	5,957	2,961	1,227	737	311	205	18										
HARDWOOD:																					
SELECT WHITE OAKS																					
SELECT RED OAKS																					
CHESTNUT OAK																					
OTHER WHITE OAKS	366	135	345	152	22	37	55	11	35	9											
OTHER RED OAKS	1,921	584		297	412	112		22		59											
HICKORY																					
YELLOW BIRCH																					
HARD MAPLE																					
SOFT MAPLE	2,496	517	660	396	377	433	27	61	17	8											
BEECH																					
SWEETGUM																					
TUPELO AND BLACKGUM	100		65	35																	
ASH																					
COTTONWOOD																					
BASSWOOD																					
YELLOW-POPLAR																					
BAY AND MAGNOLIA	493	176	123	164	30																
BLACK CHERRY																					
BLACK WALNUT																					
SYCAMORE																					
BLACK LOCUST																					
ELM	53		53																		
OTHER EASTERN HARDWOODS	102		102																		
TOTAL HARDWOODS	5,531	1,412	1,348	1,044	841	582	82	94	52	76											
ALL SPECIES	87,134	35,194	25,563	13,234	6,798	3,543	1,309	831	363	281	18										

TABLE 15. -- VOLUME OF GROWING STOCK ON COMMERCIAL FOREST LAND, BY SPECIES AND DIAMETER CLASS, 1980

SPECIES	ALL CLASSES	DIAMETER CLASS (INCHES AT BREAST HEIGHT)										29.0 AND LARGER									
		5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9											
THOUSAND CUBIC FEET																					
SOFTWOOD:																					
LONGLEAF PINE	485																				
SLASH PINE	160,635	27,638	36,366	35,691	23,935	20,486	8,569	5,705	1,307	938											
SHORTLEAF PINE																					
LOBLOLLY PINE																					
POND PINE																					
VIRGINIA PINE																					
PITCH PINE																					
TABLE-MOUNTAIN PINE																					
SPRUCE PINE																					
SAND PINE	220																				
EASTERN WHITE PINE																					
EASTERN HEMLOCK																					
SPRUCE AND FIR	61,318	5,159	5,968	8,806	17,749	7,202	4,767	7,565	1,727	1,375											
BALDCYPRESS	319,275	46,397	75,141	63,556	43,118	33,626	20,537	12,710	10,663	10,966	2,561										
PONDYCYPRESS																					
CEDARS																					
TOTAL SOFTWOODS	541,933	79,414	118,960	108,053	84,802	61,314	33,873	25,980	13,697	13,279	2,561										
HARDWOOD:																					
SELECT WHITE OAKS																					
SELECT RED OAKS																					
CHESTNUT OAK																					
OTHER WHITE OAKS	3,018	187	1,412	914	256	759	1,498	463		439											
OTHER RED OAKS	18,458	1,278	1,412	2,401	4,269	1,585		596	1,298	4,121											
HICKORY																					
YELLOW BIRCH																					
HARD MAPLE																					
SOFT MAPLE	25,460	1,012	3,349	3,582	4,239	8,527	804	2,343	892	712											
BEECH																					
SWEETGUM																					
TUPELO AND BLACKGUM	655		294	361																	
ASH																					
COTTONWOOD																					
BASSWOOD																					
YELLOW-POPLAR																					
BAY AND MAGNOLIA	3,187	584	686	1,502	415																
BLACK CHERRY																					
BLACK WALNUT																					
SYCAMORE																					
BLACK-LOCUST																					
ELM	271		271																		
OTHER EASTERN HARDWOODS	611		611																		
TOTAL HARDWOODS	51,660	3,061	6,623	8,760	9,179	10,871	2,302	3,402	2,190	5,272											
ALL SPECIES	593,593	82,475	125,583	116,813	93,981	72,185	36,175	29,382	15,887	18,551	2,561										

TABLE 16. -- VOLUME OF SAWTIMBER ON COMMERCIAL FOREST LAND, BY SPECIES AND DIAMETER CLASS, 1980

SPECIES	ALL CLASSES	DIAMETER CLASS (INCHES AT BREAST HEIGHT)										29.0 AND LARGER
		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	447,463	133,701	109,079	107,224	48,736	34,389	8,166	6,168				
LOBLOLLY PINE												
POND PINE												
VIRGINIA PINE												
PITCH PINE												
TABLE-MOUNTAIN PINE												
SPRUCE PINE												
SAND PINE												
EASTERN WHITE PINE												
EASTERN HEMLOCK												
SPRUCE AND FIR												
BALDOCYPRESS	200,824	24,405	65,801	31,714	22,550	38,917	9,378	8,059				
PONDYCYPRESS	811,936	190,777	166,745	149,158	99,554	65,934	58,680	64,522				16,566
CEDARS												
TOTAL SOFTWOODS	1,460,223	348,883	341,625	288,096	170,840	139,240	76,224	78,749	16,566			
HARDWOOD:												
SELECT WHITE OAKS												
SELECT RED OAKS												
CHESTNUT OAK												
OTHER WHITE OAKS	8,968		954	3,178		2,406		2,430				
OTHER RED OAKS	63,670		15,997	6,893	7,116	3,059	6,997	23,608				
HICKORY												
YELLOW BIRCH												
HARD MAPLE												
SOFT MAPLE												
BEECH	66,459		12,809	31,854	3,405	10,558	4,291	3,542				
SWEETGUM												
TUPELO AND BLACKGUM												
ASH												
COTTONWOOD												
BASSWOOD												
YELLOW-POPLAR												
BAY AND MAGNOLIA	1,279		1,279									
BLACK CHERRY												
BLACK WALNUT												
SYCAMORE												
BLACK LOCUST												
ELM												
OTHER EASTERN HARDWOODS												
TOTAL HARDWOODS	140,376	--	31,039	41,925	10,521	16,023	11,288	29,580				
ALL SPECIES	1,600,599	348,883	372,664	330,021	181,361	155,263	87,512	108,329	16,566			

TABLE 17. --NET ANNUAL GROWTH AND REMOVALS OF GROWING STOCK ON COMMERCIAL FOREST LAND, BY SPECIES, 1979

SPECIES	NET ANNUAL GROWTH	ANNUAL TIMBER REMOVALS
- - THOUSAND CUBIC FEET - -		
SOFTWOOD:		
YELLOW PINES	10,471	6,319
EASTERN WHITE PINE	--	--
SPRUCE AND FIR	--	--
CYPRESS	6,817	2,521
OTHER EASTERN SOFTWOODS	--	--
TOTAL SOFTWOODS	17,288	8,840
HARDWOOD:		
SELECT WHITE AND RED OAKS	--	--
OTHER WHITE AND RED OAKS	1,437	3,578
HICKORY	--	--
YELLOW BIRCH	--	--
HARD MAPLE	--	--
SWEETGUM	--	--
ASH, WALNUT, AND BLACK CHERRY	127	464
YELLOW-POPLAR	--	--
TUPELO AND BLACKGUM	35	--
BAY AND MAGNOLIA	290	--
OTHER EASTERN HARDWOODS	2,084	3,516
TOTAL HARDWOODS	3,973	7,558
ALL SPECIES	21,261	16,398

TABLE 18. --NET ANNUAL GROWTH AND REMOVALS OF SAWTIMBER ON COMMERCIAL FOREST LAND, BY SPECIES, 1979

SPECIES	NET ANNUAL GROWTH	ANNUAL TIMBER REMOVALS
- - - THOUSAND BOARD FEET - - -		
SOFTWOOD:		
YELLOW PINES	34,503	14,766
EASTERN WHITE PINE	--	--
SPRUCE AND FIR	--	--
CYPRESS	25,242	6,319
OTHER EASTERN SOFTWOODS	--	--
TOTAL SOFTWOODS	59,745	21,085
HARDWOOD:		
SELECT WHITE AND RED OAKS	--	--
OTHER WHITE AND RED OAKS	5,946	17,893
HICKORY	--	--
YELLOW BIRCH	--	--
HARD MAPLE	--	--
SWEETGUM	--	--
ASH, WALNUT, AND BLACK CHERRY	--	--
YELLOW-POPLAR	--	--
TUPELO AND BLACKGUM	191	--
BAY AND MAGNOLIA	597	--
OTHER EASTERN HARDWOODS	9,659	7,069
TOTAL HARDWOODS	16,393	24,962
ALL SPECIES	76,138	46,047

TABLE 19. --MORTALITY OF GROWING STOCK AND SAWTIMBER ON COMMERCIAL FOREST LAND, BY SPECIES, 1979

SPECIES	GROWING STOCK	SAWTIMBER
	THOUSAND CUBIC FEET	THOUSAND BOARD FEET
SOFTWOOD:		
YELLOW PINES	6,290	19,622
EASTERN WHITE PINE	--	--
SPRUCE AND FIR	--	--
CYPRESS	3,453	4,114
OTHER EASTERN SOFTWOODS	--	--
TOTAL SOFTWOODS	9,743	23,736
HARDWOOD:		
SELECT WHITE AND RED OAKS	--	--
OTHER WHITE AND RED OAKS	--	--
HICKORY	--	--
YELLOW BIRCH	--	--
HARD MAPLE	--	--
SWEETGUM	--	--
ASH, WALNUT, AND BLACK CHERRY	--	--
YELLOW-POPLAR	--	--
TUPELO AND BLACKGUM	129	505
BAY AND MAGNOLIA	--	--
OTHER EASTERN HARDWOODS	539	1,503
TOTAL HARDWOODS	668	2,008
ALL SPECIES	10,411	25,744

TABLE 20. -- VOLUME OF ALL LIVE TREES AND GROWING STOCK ON COMMERCIAL FOREST LAND, BY OWNERSHIP CLASS AND SPECIES GROUP, 1980

OWNERSHIP CLASS	ALL LIVE TREES			GROWING STOCK			THOUSAND CUBIC FEET			
	ALL SPECIES	PINE	OTHER SOFTWOOD	SOFT HARDWOOD	HARD HARDWOOD	ALL SPECIES	PINE	OTHER SOFTWOOD	SOFT HARDWOOD	HARD HARDWOOD
NATIONAL FOREST	19,907	2,076	7,659	6,043	4,129	11,483	2,076	5,441	2,851	1,115
OTHER PUBLIC FOREST INDUSTRY	247,192	39,375	175,839	16,441	15,537	222,191	39,375	163,254	12,245	7,316
FARMER	414,992	120,702	235,958	19,297	39,035	355,919	119,889	211,898	15,087	13,045
MISCELLANEOUS PRIVATE										
ALL OWNERSHIPS	682,091	162,153	419,456	41,781	58,701	593,593	161,340	380,593	30,184	21,476

TABLE 21. -- VOLUME OF SAWTIMBER ON COMMERCIAL FOREST LAND, BY OWNERSHIP CLASS AND SPECIES GROUP, 1980

OWNERSHIP CLASS	SMALL SAWTIMBER ¹			LARGE SAWTIMBER ²			THOUSAND BOARD FEET			
	ALL SPECIES	PINE	OTHER SOFTWOOD	SOFT HARDWOOD	HARD HARDWOOD	ALL SPECIES	PINE	OTHER SOFTWOOD	SOFT HARDWOOD	HARD HARDWOOD
NATIONAL FOREST	14,987	--	4,761	5,982	4,244	25,616	9,376	12,993	3,247	--
OTHER PUBLIC FOREST INDUSTRY	426,658	114,425	282,021	19,442	10,770	183,173	12,377	144,667	6,876	19,253
FARMER	609,923	235,579	341,818	20,518	12,008	340,242	75,706	226,500	11,673	26,363
MISCELLANEOUS PRIVATE										
ALL OWNERSHIPS	1,051,568	350,004	628,600	45,942	27,022	549,031	97,459	384,160	21,796	45,616

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 24. --AVERAGE NET VOLUME PER ACRE OF SAWTIMBER, GROWING STOCK, AND OTHER LIVE TIMBER ON COMMERCIAL FOREST LAND, BY SPECIES GROUP, AND OWNERSHIP CLASS, MAJOR FOREST TYPE, AND SPECIES GROUP, 1980

FOREST TYPE, AND SPECIES GROUP, AND CLASS OF MATERIAL	ALL OWNERSHIPS			OWNERSHIP CLASS					MISC. PRIVATE BOARD FEET	MISC. PRIVATE CUBIC FEET
	BOARD FEET	CUBIC FEET	FEET	NATIONAL FOREST BOARD FEET	OTHER PUBLIC BOARD FEET	FOREST INDUSTRY BOARD FEET	FARMER BOARD FEET	BOARD FEET		
PINE TYPES:										
GROWING STOCK:										
SOFTWOOD	1,119	460	--	--	--	--	2,000	725	946	408
HARDWOOD	--	--	--	--	--	--	--	--	--	--
TOTAL	1,119	460	--	--	--	2,000	725	946	408	--
OTHER TIMBER:										
SOFTWOOD	--	9	--	--	--	--	--	9	--	9
HARDWOOD	--	7	--	--	--	--	--	14	--	6
TOTAL	--	16	--	--	--	--	--	23	--	15
OAK-PINE TYPES:										
GROWING STOCK:										
SOFTWOOD	1,136	331	--	--	--	1,130	306	1,141	350	--
HARDWOOD	--	--	--	--	--	--	--	--	--	--
TOTAL	1,136	331	--	--	--	1,130	306	1,141	350	--
OTHER TIMBER:										
SOFTWOOD	--	18	--	--	--	--	--	--	--	32
HARDWOOD	--	--	--	--	--	--	--	--	--	--
TOTAL	--	18	--	--	--	--	--	--	--	32
UPLAND HARDWOOD TYPES:										
GROWING STOCK:										
SOFTWOOD	85	15	--	--	--	--	--	--	112	20
HARDWOOD	1,407	343	--	--	--	5,804	1,413	--	--	--
TOTAL	1,492	358	--	--	--	5,804	1,413	112	20	--
OTHER TIMBER:										
SOFTWOOD	--	75	--	--	--	--	--	310	--	--
HARDWOOD	--	--	--	--	--	--	--	--	--	--
TOTAL	--	75	--	--	--	--	--	310	--	--
BOTTOMLAND HARDWOOD TYPES:										
GROWING STOCK:										
SOFTWOOD	2,254	816	--	1,207	334	--	2,813	1,043	2,044	735
HARDWOOD	234	93	--	599	176	--	183	82	232	93
TOTAL	2,488	909	--	1,806	510	--	2,996	1,125	2,276	828
OTHER TIMBER:										
SOFTWOOD	--	75	--	--	99	--	--	78	--	72
HARDWOOD	--	94	--	--	276	--	--	66	--	95
TOTAL	--	169	--	--	375	--	--	144	--	167
ALL TYPES:										
GROWING STOCK:										
SOFTWOOD	1,751	650	--	1,207	334	--	2,462	901	1,499	565
HARDWOOD	168	62	--	599	176	--	251	87	120	48
TOTAL	1,919	712	--	1,806	510	--	2,713	988	1,619	613
OTHER TIMBER:										
SOFTWOOD	--	48	--	--	99	--	--	56	--	42
HARDWOOD	--	58	--	--	276	--	--	55	--	51
TOTAL	--	106	--	--	375	--	--	111	--	93
ALL TIMBER	1,919	818	--	1,806	885	--	2,713	1,099	1,619	706

1. ROUGH AND ROTTEN TREES.

TABLE 25. --LAND AREA, BY CLASS, MAJOR FOREST TYPE, AND SURVEY COMPLETION DATE, 1959, 1970, AND 1980

LAND USE CLASS	SURVEY COMPLETION DATE			CHANGE 1970-1980
	1959	1970	1980	
- - - - - ACRES - - - - -				
FOREST LAND:				
COMMERCIAL FOREST LAND:				
PINE AND OAK-PINE TYPES	705,200	383,528	339,500	- 44,028
HARDWOOD TYPES	228,300	341,073	494,471	+153,398
TOTAL	933,500	724,601	833,971	+109,370
NONCOMMERCIAL FOREST LAND:				
PRODUCTIVE-RESERVED	54,400	50,600	264,865	+214,265
UNPRODUCTIVE	1,594,500	1,441,615	948,754	-492,861
TOTAL	1,648,900	1,492,215	1,213,619	-278,596
NONFOREST LAND:				
CROPLAND	427,300	849,364	926,660	+ 77,296
PASTURE AND RANGE	1,395,100	1,589,513	1,910,185	+320,672
OTHER	3,180,700	3,019,186	2,790,444	-228,742
TOTAL	5,003,100	5,458,063	5,627,289	+169,226
ALL LAND ¹	7,585,500	7,674,879	7,674,879	--

¹ EXCLUDES ALL WATER AREAS.

TABLE 26. -- VOLUME OF SAWTIMBER, GROWING STOCK, AND ALL LIVE TIMBER ON COMMERCIAL FOREST LAND, BY SPECIES GROUP, DIAMETER CLASS, AND SURVEY COMPLETION DATE

SPECIES GROUP	YEAR	ALL CLASSES	DIAMETER CLASS (INCHES AT BREAST HEIGHT)										21.0 AND LARGER
			5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9			
SAWTIMBER (IN THOUSAND BOARD FEET)													
SOFTWOOD	1959	1,176,954	--	--	275,476	239,532	258,957	103,891	80,486	95,095	123,517		
	1970	1,191,014	--	--	309,348	213,558	276,085	156,672	105,431	57,592	72,228		
	1980	1,460,223	--	--	348,883	341,625	288,096	170,840	139,240	76,224	95,315		
HARDWOOD	1959	140,098	--	--	--	27,157	45,462	10,776	20,286	11,504	24,913		
	1970	134,352	--	--	--	31,436	41,069	11,800	13,979	9,988	26,080		
	1980	140,376	--	--	--	31,039	41,925	10,521	16,023	11,288	29,580		
GROWING STOCK (IN THOUSAND CUBIC FEET)													
SOFTWOOD	1959	485,535	117,871	94,562	85,313	59,452	55,109	20,597	15,016	17,088	20,528		
	1970	487,753	89,512	117,670	95,803	53,030	58,754	31,061	19,670	10,349	12,004		
	1980	541,933	79,414	118,960	108,053	84,802	61,314	33,873	25,980	13,697	15,840		
HARDWOOD	1959	58,148	6,807	7,272	10,915	8,030	11,787	4,307	2,358	2,232	4,440		
	1970	52,505	4,086	6,859	9,481	9,295	10,648	2,968	1,938	4,648			
	1980	51,660	3,061	6,623	8,760	9,179	10,871	2,582	2,302	1,938	5,272		
ALL LIVE TIMBER (IN THOUSAND CUBIC FEET)													
SOFTWOOD	1959	525,749	136,664	103,340	92,688	61,742	56,087	21,523	15,016	17,088	21,601		
	1970	526,303	103,784	128,487	104,085	55,078	59,793	32,462	19,670	10,349	12,595		
	1980	581,609	92,139	129,940	117,297	88,105	62,412	35,397	25,980	13,697	16,642		
HARDWOOD	1959	120,206	27,325	15,562	18,312	14,463	18,490	6,009	7,719	4,505	7,821		
	1970	104,382	16,401	14,676	15,910	16,745	16,708	5,339	3,837	3,837	8,176		
	1980	100,482	12,317	14,177	14,708	16,538	17,048	5,898	6,102	4,380	9,314		

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., and William A. Bechtold
1981. Forest statistics for South Florida, 1980. USDA For. Serv., Resour. Bull. SE-59,
33 p. Southeast. For. Exp. Stn., Asheville, N.C.

Since the fourth inventory of the forest resources of South Florida in 1970, the area of commercial forest land has increased by 109,000 acres and now totals 834,000 acres. Nonindustrial private landowners control 99 percent of the commercial forest land. The volume of growing stock on these lands has increased by 10 percent. Cypress accounts for 93 percent of the total volume gain. Net annual growth of growing stock totals 21 million cubic feet compared to 16 million cubic feet for annual timber removals.

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

Sheffield, Raymond M., and William A. Bechtold
1981. Forest statistics for South Florida, 1980. USDA For. Serv., Resour. Bull. SE-59,
33 p. Southeast. For. Exp. Stn., Asheville, N.C.

Since the fourth inventory of the forest resources of South Florida in 1970, the area of commercial forest land has increased by 109,000 acres and now totals 834,000 acres. Nonindustrial private landowners control 99 percent of the commercial forest land. The volume of growing stock on these lands has increased by 10 percent. Cypress accounts for 93 percent of the total volume gain. Net annual growth of growing stock totals 21 million cubic feet compared to 16 million cubic feet for annual timber removals.

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



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

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