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Forest Statistics for Southwest-South Alabama, 1999

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Foreword

This report highlights the principal findings of the seventh forest survey of Southwest-South Alabama. Field work began in June 1997 and was completed in January 1999. Six previous surveys, completed in 1936, 1953, 1963, 1972, 1982, and 1990, provide statistics for measuring changes and trends over the past 63 years. This report primarily emphasizes changes and trends since 1990.

Periodic surveys of forest resources are authorized by the Forest and Rangeland Renewable Resources Research Act of 1978. These surveys are a continuing, nationwide undertaking by the Regional Experiment Stations of the U.S. Department of Agriculture, Forest Service. In the Southern United States, these surveys are conducted by the Forest Inventory and Analysis (FIA) Research Work Unit at the Southern Research Station, Asheville, NC. The FIA unit operates out of two locations, one in Starkville, MS, and the other in Asheville, NC, and is responsible for inventories in 13 Southern States and the Commonwealth of Puerto Rico. The primary objective of these surveys is to periodically inventory and evaluate all forest and related resources. These multiresource data help provide a basis for formulating forest policies and programs and for the orderly development and use of the resources. This report discusses the extent and condition of forest land, associated timber volumes, and rates of timber growth, mortality, and removals.

Additional information about any aspect of this survey may be obtained from:

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Acknowledgement

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^a All tables in this report are available in Microsoft® Excel workbook files. Upon request, these files will be supplied on 3½-inch diskettes.

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Figure 1—Forest survey regions in Alabama.

Forest Statistics for Southwest-South Alabama, 1999

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Highlights

This report summarizes results from a 1999 inventory of the forest resources of Southwest-South Alabama (fig. 1). Current estimates of forest area, timberland area, related classifications such as ownership and forest type, and timber volumes are presented. While comparisons are made with values from the previous inventory, methods for determining several key attributes such as timber volume, stocking, forest type, stand-size class, and site class have changed. The inventory plot design has changed since the previous survey. Changes in methods and plot design were made to increase consistency among Forest Inventory and Analysis (FIA) Research Work Units. For comparisons in this report, growing stock and sawtimber volumes from the previous inventory have been recomputed using current methods. Resource data are presented in 49 tables and 9 graphs. A summary of major findings follows.

Timberland area—The area classified as timberland in this five-county area has increased 1 percent since 1990 to 2.78 million acres. Forty-eight thousand acres were diverted from timberland to other land uses, while 85,000 acres were added from previously nonforest land uses, resulting in a 37,000-acre net change. The majority of the diverted timberland was cleared for agriculture and urban-related land uses. Timberland covers 74 percent of the land area in Southwest-South Alabama.

Ownership—Nonindustrial private forest (NIPF) land ownership increased 21 percent to 2.13 million acres. Corporate ownership increased 127 percent since 1990 to 613,000 acres. Ownership by individuals increased 2 percent since 1990 to 1.52 million acres. NIPF land owners control 77 percent of the timberland in Southwest-South Alabama. Timberland under forest industry dropped 43 percent to 482,000 acres. Public agencies control 162,000 acres, or 6 percent of total timberland.

Forest type—Forest stands classified as hardwood forest types account for 33 percent of the timberland area. The area of hardwood stands has increased about 4

percent since 1990. Stands classified as softwood forest types occupy 1.32 million acres, or 47 percent of the timberland area. Stands classified as oak-pine forest type dropped to 506,000 acres, a decrease of 16 percent. Longleaf-slash pine remains the dominant forest type in the region with 781,000 acres.

Stand treatment—Harvesting and regeneration have been the predominant treatment and management activities in the timberland of the region since 1990. Final harvest occurred on 54,000 acres annually. Forty percent of these harvests were from natural pine stands, 22 percent were from pine plantations, 15 percent were from oak-pine stands, 14 percent were from lowland hardwood, and 9 percent were from upland hardwood stands. Reforestation and afforestation combined averaged 69,000 acres annually.

Softwood volume—Volume of softwood growing stock increased 5 percent to 1.9 billion cubic feet between 1990 and 1999. Softwood growing-stock volume increased 45 percent on public lands to 172 million cubic feet, and 42 percent on NIPF lands to 1,539 million cubic feet. Driven by the reduction in land holdings in the region, volume decreased on forest industry land by 65 percent to 219 million cubic feet. Slash pine is the predominate species at 681 million cubic feet. The volume of loblolly pine has increased 41 percent since 1990 to 537 million cubic feet. The inventory of softwood sawtimber totals nearly 7.0 billion board feet, an increase of 8 percent since 1990.

Hardwood volume—Volume of hardwood growing stock increased 5 percent to 1.2 billion cubic feet. Hardwood growing-stock volume increased 15 percent on public lands to 39 million cubic feet, and 29 percent on NIPF lands to 889 million cubic feet. Hardwood growing-stock volume decreased 39 percent to 236 million cubic feet on forest industry lands. Tupelo and blackgum are the predominate species with 318 million cubic feet. The inventory of hardwood sawtimber increased 16 percent to 3.3 billion board feet.

Growth—Net annual growth of softwood growing stock averaged 103.1 million cubic feet, an increase of 15 percent since the previous survey period. Softwood growth increased 76 percent and 47 percent on public and NIPF lands, respectively, and decreased 40 percent on forest industry land (see accompanying drop in forest industry acreage). Hardwood growth increased 19 percent on NIPF lands, and decreased 65 percent and 48 percent on public ownership and forest industry lands, respectively, since the previous survey period.

Removals—Annual removals of softwood growing stock averaged 99.3 million cubic feet, an increase of 29 percent since the previous survey period. Seventy-three percent of the softwood removals were from NIPF land, 24 percent from forest industry land, and 3 percent from public lands. Softwood growth exceeded softwood removals by 4 percent (or by a margin of 1.04 to 1).

Annual removals of hardwood growing stock averaged 33.2 million cubic feet, an increase of 39 percent since the previous survey period. Sixty-one percent of hardwood removals were from NIPF land, 38 percent from forest industry land, and less than 1 percent from public land. Hardwood growth exceeded removals by 36 percent (or by a margin of 1.36 to 1).

Mortality—The average annual mortality of growing stock has increased 64 percent to 29.0 million cubic feet since the previous survey period. Hardwood mortality has increased 36 percent to 12.3 million cubic feet; softwood mortality has increased 92 percent to 16.6 million cubic feet.

Inventory Methods

The Southern Research Station, FIA unit secured data on forest acreage and timber volume using a three-step process. A forest-nonforest classification using aerial photographs was accomplished using points representing approximately 230 acres. These photo classifications were adjusted based on ground observations at sample locations representing approximately 3,840 acres. Finally, field measurements were made at forest locations on the intersections of grid lines spaced 3 miles apart.

The plot installed at each ground sample location was a cluster of four points spaced 120 feet apart. Each point served as the center of a 1/24-acre circular subplot used to sample trees 5.0 inches diameter at breast height (d.b.h.) and larger. A 1/300-acre microplot, located at the subplot center, was used to sample trees 1.0 to 4.9 inches d.b.h. and seedlings (trees less than 1.0 inches d.b.h.). These fixed-radius sample plots were established without regard to land use or land cover. Forest and nonforest condition classes were delineated and recorded. Condition classes were defined by six attributes: land use, forest type, stand origin, stand size, forest density, and major ownership class. All trees tallied were assigned to their respective condition class.

The cluster of four fixed plots sampled timberland at 554 ground sample locations in this survey unit. Estimates of timber volume and forest classifications were derived from tree measurements and classifications made at these locations. Volumes for individual tally trees were computed using equations for each of the major species in the survey unit. The equations were developed from detailed measurements of standing trees throughout the region.

Estimates of growth, removals, and mortality were determined from the remeasurement of 517 permanent sample plots established in the previous inventory. The plot design for the previous inventory was based on a cluster of 10 points. At each point, trees 5.0 inches d.b.h. and larger were selected for measurement on a variable-radius plot defined by a 37.5-factor prism. Trees less than 5.0 inches d.b.h. were tallied on a fixed-radius plot around points 1 through 3.

Statistical Reliability

FIA inventories employ sampling methods designed to achieve reliable statistics at the survey unit and State levels. A measure of reliability of inventory statistics is provided by sampling errors. These sampling errors mean that the chances are two out of three that the true population value is within the limits indicated by a confidence interval. Sampling errors (in percent) and associated confidence intervals around the sample estimates for timberland area, inventory volumes, and components of change are presented in the following table.

Item	Sample estimate and confidence interval			Sampling error Percent
Timberland (1,000 acres)	2,778.0	±	24.7	0.89
All live ($M ft^3$)				
Inventory	3,447.3	±	143.1	4.15
Net annual growth	165.7	±	8.8	5.29
Annual removals	140.2	±	12.4	8.87
Annual mortality	34.0	±	3.2	9.39
Growing stock ($M ft^3$)				
Inventory	3,094.0	±	133.8	4.33
Net annual growth	148.2	±	8.0	5.42
Annual removals	132.5	±	11.4	8.63
Annual mortality	29.0	±	2.8	9.59
Sawtimber ($M fbm$)				
Inventory	10,247.6	±	575.5	5.62
Net annual growth	506.4	±	31.5	6.23
Annual removals	414.6	±	41.1	9.91
Annual mortality	97.2	±	11.4	11.77

Sampling error increases as the area or volume considered decreases in magnitude. Sampling errors and associated confidence intervals are often unacceptably high for small components of the total resource. Statistical confidence may be computed for any subdivision of survey unit or State totals using the following formula. Sampling errors obtained from this method are only approximations of reliability because this process assumes constant variance across all subdivisions of totals.

$$SE_s = SE_t \frac{\sqrt{X_t}}{\sqrt{X_s}},$$

where

SE_s = sampling error for subdivision of survey unit or State total,

SE_t = sampling error for survey unit or State total,

X_s = sum of values for the variable of interest (area or volume) for subdivision of survey unit or State,

X_t = total area or volume for survey unit or State.

For example, the estimate of sampling error for hardwood growing-stock volume on NIPF land is computed as:

$$SE_s = 4.33 \frac{\sqrt{3,094.0}}{\sqrt{888.7}} = 8.08 .$$

Thus, the sampling error is 8.08 percent, and the resulting confidence interval (two times out of three) for hardwood growing-stock inventory on NIPF land is 888.7 ± 71.8 million cubic feet.

County statistics are provided, but users are cautioned that the accuracy of individual county data is highly variable. Individual county statistics are provided so any combination of counties may be added together until the totals are large enough to meet the desired degree of reliability. Sampling errors for key resource items for individual counties are provided in the following table.

Sampling errors^a by counties and survey unit for timberland, live trees, growing stock, and sawtimber, Southwest-South Alabama, 1999

Counties and survey unit	Timberland area	Live trees			Growing stock			Sawtimber		
		Volume	Growth	Removals	Volume	Growth	Removals	Volume	Growth	Removals
Percent										
Baldwin	1.9	9.5	10.1	21.1	10.1	10.8	19.3	13.1	14.2	23.2
Covington	2.3	8.6	17.5	22.6	8.9	16.6	22.8	12.9	19.3	21.5
Escambia	1.9	10.2	11.4	14.2	10.3	11.4	14.3	11.5	12.5	17.1
Mobile	1.9	9.8	10.4	26.8	10.5	11.3	25.4	13.4	12.9	32.8
Washington	1.4	7.8	10.6	17.7	8.2	11.2	18.1	11.3	10.2	19.4
Survey unit	0.9	4.2	5.3	8.9	4.3	5.4	8.6	5.6	6.2	9.9

^a By random-sampling formula.

Definitions

Afforestation. Area of land previously classified as nonforest that is converted to forest by planting trees or by natural reversion to forest.

Average annual mortality. Average annual volume of trees 5.0 inches d.b.h. and larger that died from natural causes during the intersurvey period.

Average annual removals. Average annual volume of trees 5.0 inches d.b.h. and larger removed from the inventory by harvesting, cultural operations (such as timber-stand improvement), land clearing, or changes in land use during the intersurvey period.

Average net annual growth. Average annual net change in volume of trees 5.0 inches d.b.h. and larger in the absence of cutting (gross growth minus mortality) during the intersurvey period.

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 in square feet per acre.

Biomass. The aboveground fresh weight of solid wood and bark in live trees 1.0 inch d.b.h. and larger from the ground to the tip of the tree. All foliage is excluded. The weight of wood and bark in lateral limbs, secondary limbs, and twigs under 0.5 inch in diameter at the point of occurrence on sapling-size trees is included but is excluded on poletimber and sawtimber-size trees.

Bole. That portion of a tree between a 1-foot stump and a 4-inch top d.o.b. in trees 5.0 inches d.b.h. and larger.

Census water. Streams, sloughs, estuaries, canals, and other moving bodies of water 200 feet wide and greater, and lakes, reservoirs, ponds, and other permanent bodies of water 4.5 acres in area and greater.

Commercial species. Tree species currently or potentially suitable for industrial wood products.

D.b.h. Tree diameter in inches (outside bark) at breast height (4.5 feet aboveground).

Diameter class. A classification of trees based on tree d.b.h. Two-inch diameter classes are commonly used by Forest Inventory and Analysis, with the even inch as the approximate midpoint for a class. For example, the 6-inch class includes trees 5.0 through 6.9 inches d.b.h.

D.o.b. (diameter outside bark). Stem diameter including bark.

Forest land. Land at least 10 percent stocked by forest trees of any size, or formerly having had such tree cover, and not currently developed for nonforest use. The minimum area considered for classification is 1 acre. Forested strips must be at least 120 feet wide.

Forest management type. A classification of timberland based on forest type and stand origin.

Pine plantation. Stands that (a) have been artificially regenerated by planting or direct seeding, (b) are classed as a pine or other softwood forest type, and (c) have at least 10 percent stocking.

Natural pine. Stands that (a) have not been artificially regenerated, (b) are classed as a pine or other softwood forest type, and (c) have at least 10 percent stocking.

Oak-pine. Stands that have at least 10 percent stocking and classed as a forest type of oak-pine.

Upland hardwood. Stands that have at least 10 percent stocking and classed as an oak-hickory or maple-beech-birch forest type.

Lowland hardwood. Stands that have at least 10 percent stocking with a forest type of oak-gum-cypress, elm-ash-cottonwood, palm, or other tropical.

Nonstocked stands. Stands less than 10 percent stocked with live trees.

Forest type. A classification of forest land based on the species forming a plurality of live-tree stocking. Major eastern forest-type groups are:

White-red-jack pine. Forests in which eastern white pine, red pine, or jack pine, singly or in combination, constitute a plurality of the stocking. (Common associates include hemlock, birch, and maple).

Spruce-fir. Forests in which spruce or true firs, singly or in combination, constitute a plurality of the stocking. (Common associates include maple, birch, and hemlock).

Longleaf-slash pine. Forests in which longleaf or slash pine, singly or in combination, constitute 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, constitute a plurality of the stocking. (Common associates include oak, hickory, and gum).

Oak-pine. Forests in which hardwoods (usually upland oaks) constitute a plurality of the stocking but in which pines account for 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, constitute a plurality of the stocking, except where pines account for 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. Bottom-land forests in which tupelo, blackgum, sweetgum, oaks, or southern cypress, singly or in combination, constitute a plurality of the stocking, except where pines account for 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, constitute a plurality of the stocking. (Common associates include willow, sycamore, beech, and maple).

Maple-beech-birch. Forests in which maple, beech, or yellow birch, singly or in combination, constitute a plurality of the stocking. (Common associates include hemlock, elm, basswood, and white pine).

Nonstocked stands. Stands less than 10 percent stocked with live trees.

Forested tract size. The area of forest within the contiguous tract containing each Forest Inventory and Analysis sample plot.

Fresh weight. Mass of tree component at time of cutting.

Gross growth. Annual increase in volume of trees 5.0 inches d.b.h. and larger in the absence of cutting and mortality. (Gross growth includes survivor growth, ingrowth, growth on ingrowth, growth on removals before removal, and growth on mortality before death).

Growing-stock trees. Living trees of commercial species classified as sawtimber, poletimber, saplings, and seedlings. Trees must contain at least one 12-foot or two 8-foot logs in the saw-log portion, currently or potentially (if too small to qualify), to be classed as growing stock. The log(s) must meet dimension and merchantability standards to qualify. Trees must also have, currently or potentially, one-third of the gross board-foot volume in sound wood.

Growing-stock volume. The cubic-foot volume of sound wood in growing-stock trees at least 5.0 inches d.b.h. from a 1-foot stump to a minimum 4.0-inch top d.o.b. of the central stem.

Hardwoods. Dicotyledonous trees, usually broadleaf and deciduous.

Soft hardwoods. Hardwood species with an average specific gravity of 0.50 or less, such as gums, yellow-poplar, cottonwoods, red maple, basswoods, and willows.

Hard hardwoods. Hardwood species with an average specific gravity greater than 0.50 such as oaks, hard maples, hickories, and beech.

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 floodplains (omitting tidal flats below mean high tide), streams, sloughs, estuaries, and canals less than 200 feet wide, and lakes, reservoirs, and ponds less than 4.5 acres in area.

Live trees. All living trees. All size classes, all tree classes, and both commercial and noncommercial species are included.

Log grade. A classification of logs based on external characteristics indicating quality or value.

Logging residues. The unused merchantable portion of growing-stock trees cut or destroyed during logging operations.

Net annual change. Increase or decrease in volume of live trees at least 5.0 inches d.b.h. Net annual change is equal to net annual growth minus average annual removals.

Noncommercial species. Tree species of typically small size, poor form, or inferior quality that normally do not develop into trees suitable for industrial wood products.

Nonforest land. Land that has never supported forests and land formerly forested where timber production is precluded by development for other uses.

Nonstocked stands. Stands less than 10 percent stocked with live trees.

Other forest land. Forest land other than timberland and productive reserved forest land. It includes available and reserved forest land which is incapable of producing annually 20 cubic feet per acre of industrial wood under natural conditions, because of adverse site conditions such as sterile soils, dry climate, poor drainage, high elevation, steepness, or rockiness.

Other removals. The growing-stock volume of trees removed from the inventory by cultural operations such as timber stand improvement, land clearing, and other changes in land use, resulting in the removal of the trees from timberland.

Ownership. The property owned by one ownership unit, including all parcels of land in the United States.

National forest land. Federal land that has been legally designated as national forests or purchase units, and other land under the administration of the Forest Service, including experimental areas and Bankhead-Jones Title III land.

Forest industry land. Land owned by companies or individuals operating primary wood-using plants.

Nonindustrial private forest (NIPF) land. Privately owned land excluding forest industry land or forest industry-leased land.

Corporate. Owned by corporations, including incorporated farm ownerships.

Individual. All lands owned by individuals, including farm operators.

Other public. An ownership class that includes all public lands except national forests.

Miscellaneous Federal land. Federal land other than national forests.

State, county, and municipal land. Land owned by States, counties, and local public agencies or municipalities or land leased to these governmental units for 50 years or more.

Plant residues. Wood material generated in the production of timber products at primary manufacturing plants.

Coarse residues. Material, such as slabs, edgings, trim, veneer cores and ends, suitable for chipping.

Fine residues. Material, such as sawdust, shavings, and veneer chippings, not suitable for chipping.

Plant byproducts. Residues (coarse or fine) used in the manufacture of industrial products or for consumer use or as fuel.

Unused plant residues. Residues (coarse or fine) not used for any product, including fuel.

Poletimber-size trees. Softwoods 5.0 to 8.9 inches d.b.h. and hardwoods 5.0 to 10.9 inches d.b.h.

Primary wood-using plants. Industries receiving roundwood or chips from roundwood for the manufacture of products, such as veneer, pulp, and lumber.

Productive-reserved forest land. Forest land sufficiently productive to qualify as timberland but withdrawn from timber utilization through statute or administrative regulation.

Reforestation. Area of land previously classified as forest that is regenerated by planting trees or natural regeneration.

Rotten trees. Live trees of commercial species not containing 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 board-foot tree volume in sound material.

Rough trees. Live trees of commercial species not containing 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 board-foot tree volume in sound material; and live trees of noncommercial species.

Roundwood (roundwood logs). Logs, bolts, or other round sections cut from trees for industrial or consumer uses.

Roundwood chipped. Any timber cut primarily for pulpwood, delivered to nonpulp mills, chipped, and then sold to pulp mills as residues, including chipped tops, jump sections, whole trees, and pulpwood sticks.

Roundwood products. Any primary product such as lumber, poles, pilings, pulp, or fuelwood, that is produced from roundwood.

Salvable dead trees. Standing or downed dead trees that were formerly growing stock and considered merchantable. Trees must be at least 5.0 inches d.b.h. to qualify.

Saplings. Live trees 1.0 to 5.0 inches d.b.h.

Saw log. A log meeting minimum standards of diameter, length, and defect, including logs at least 8 feet long, sound and straight, with a minimum diameter inside bark for softwoods of 6 inches (8 inches for hardwoods).

Saw-log portion. The part of the bole of sawtimber trees between a 1-foot stump and the saw-log top.

Saw-log top. The point on the bole of sawtimber trees above which a conventional 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-size trees. Softwoods 9.0 inches d.b.h. and larger and hardwoods 11.0 inches d.b.h. and larger.

Sawtimber volume. Growing-stock volume in the saw-log portion of sawtimber-size trees in board feet (International 1/4-inch rule).

Seedlings. Trees less than 1.0 inch d.b.h. and greater than 1 foot tall for hardwoods, greater than 6 inches tall for softwood, and greater than 0.5 inch in diameter at ground level for longleaf pine.

Select red oaks. A group of several red oak species composed of cherrybark, Shumard, and northern red oaks. Other red oak species are included in the "other red oaks" group.

Select white oaks. A group of several white oak species composed of white, swamp chestnut, swamp white, chinkapin, Durand, and bur oaks. Other white oak species are included in the "other white oaks" group.

Site class. A classification of forest land in terms of potential capacity to grow crops of industrial wood based on fully stocked natural stands.

Softwoods. Coniferous trees, usually evergreen, having leaves that are needles or scalelike.

Yellow pines. Loblolly, longleaf, slash, pond, shortleaf, pitch, Virginia, sand, spruce, and Table Mountain pines.

Other softwoods. Cypress, eastern redcedar, white-cedar, eastern white pine, eastern hemlock, spruce, and fir.

Stand age. The average age of dominant and codominant trees in the stand.

Stand origin. A classification of forest stands describing their means of origin.

Planted. Planted or artificially seeded.

Natural. No evidence of artificial regeneration.

Stand-size class. A classification of forest land based on the diameter class distribution of live trees in the stand.

Sawtimber stands. Stands at least 10 percent stocked with live trees, with half or more of total stocking in sawtimber and poletimber trees, and with sawtimber stocking at least equal to poletimber stocking.

Poletimber stands. Stands at least 10 percent stocked with live trees, of which half or more of total stocking is in poletimber and sawtimber trees, and with poletimber stocking exceeding that of sawtimber.

Sapling-seedling stands. Stands at least 10 percent stocked with live trees of which more than half of total stocking is saplings and seedlings.

Nonstocked stands. Stands less than 10 percent stocked with live trees.

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 with a minimum standard, depending on tree size, required to fully utilize the growth potential of the land.

Density of trees and basal area per acre required for full stocking

D.b.h. class	Trees per acre for full stocking	Basal area per acre
Seedlings	600	—
2	560	—
4	460	—
6	340	67
8	240	84
10	155	85
12	115	90
14	90	96
16	72	101
18	60	106
20	51	111

Timberland. Forest land capable of producing 20 cubic feet of industrial wood per acre per year and not withdrawn from timber utilization.

Timber products. Roundwood products and byproducts.

Tree. Woody plants having one erect perennial stem or trunk at least 3 inches d.b.h., a more or less definitely formed crown of foliage, and a height of at least 13 feet (at maturity).

Tree grade. A classification of the saw-log portion of sawtimber trees based on: (1) the grade of the butt log or (2) the ability to produce at least one 12-foot or two 8-foot logs in the upper section of the saw-log portion. Tree grade is an indicator of quality; grade 1 is the best quality.

Upper-stem portion. The part of the main stem or fork of sawtimber trees above the saw-log top to minimum top diameter 4.0 inches outside bark or to the point where the main stem or fork breaks into limbs.

Volume of live trees. The cubic-foot volume of sound wood in live trees at least 5.0 inches d.b.h. from a 1-foot stump to a minimum 4.0-inch top d.o.b. of the central stem.

Volume of saw-log portion of sawtimber trees. The cubic-foot volume of sound wood in the saw-log portion of sawtimber trees. Volume is the net result after deductions for rot, sweep, and other defects that affect use for lumber.

Metric Equivalents

1 acre = 4,046.86 square meters or 0.404686 hectare
 1 cubic foot = 0.028317 cubic meter
 1 inch = 2.54 centimeters or 0.0254 meter
 Breast height = 1.4 meters above the ground
 1 square foot = 929.03 square centimeters or 0.0929 square meter
 1 square foot per acre basal area = 0.229568 square meter per hectare
 1 pound = 0.454 kilogram
 1 ton = 0.907 metric ton

Graphs

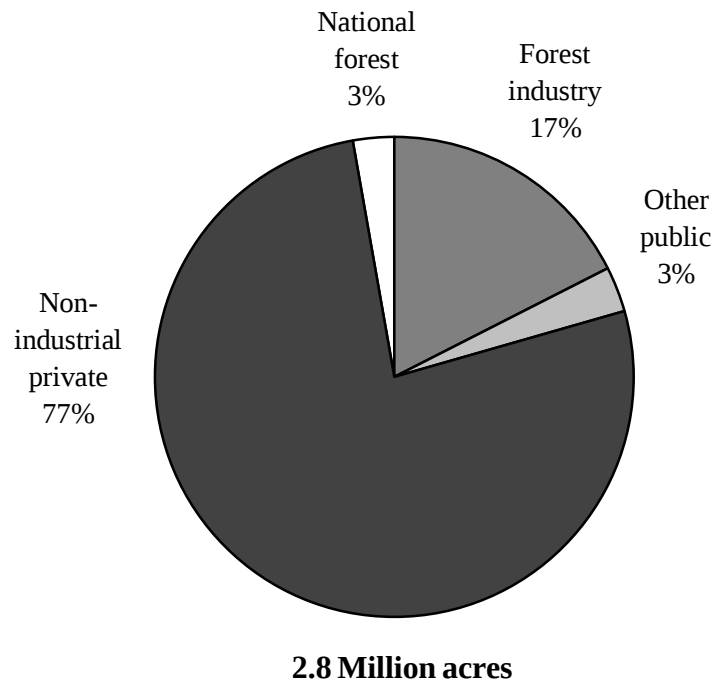


Figure 2—Distribution of timberland by ownership class, Southwest-South Alabama, 1999.

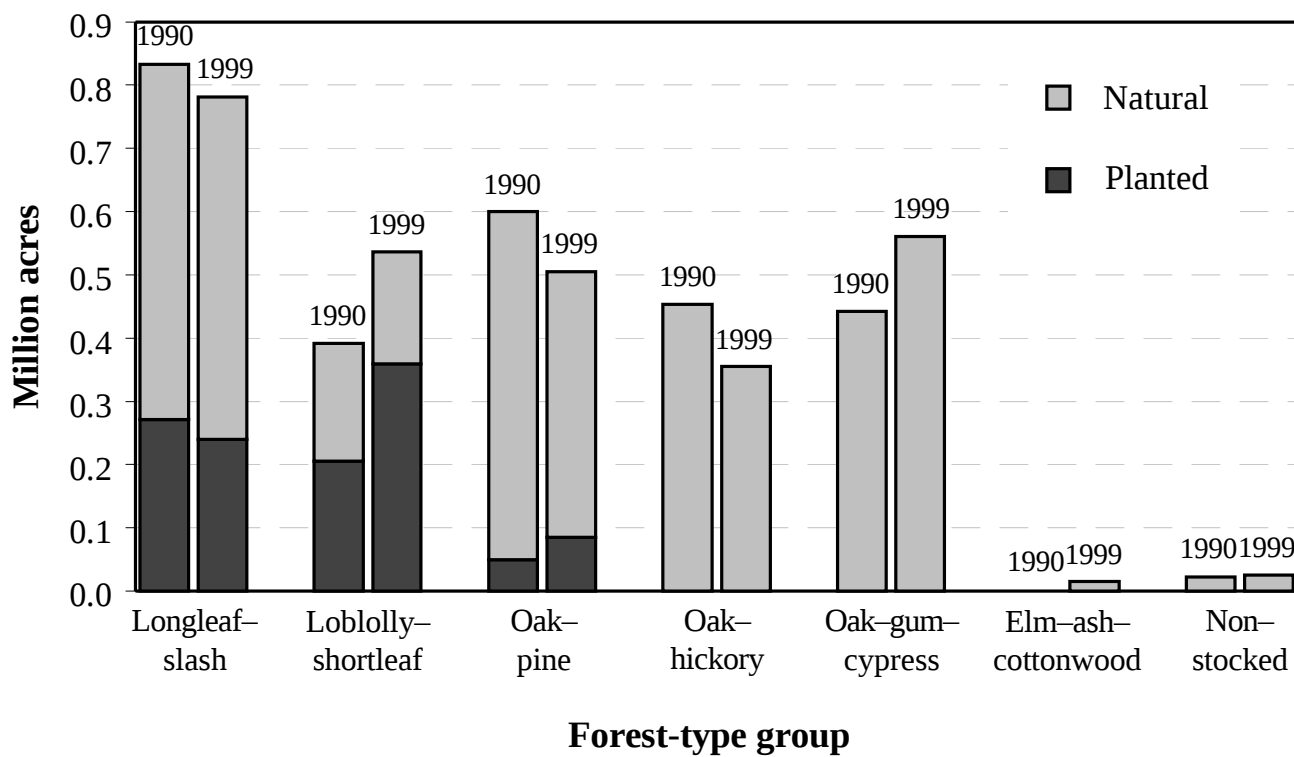


Figure 3—Area of timberland by forest-type group and stand origin, Southwest-South Alabama, 1990 and 1999.

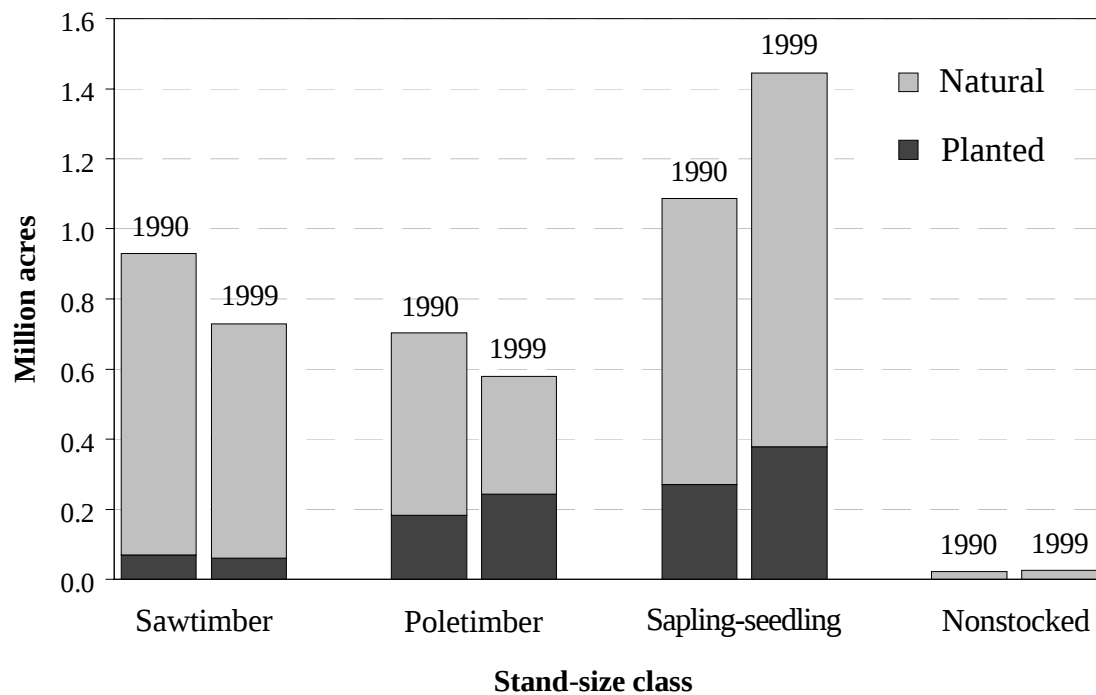


Figure 4—Area of timberland by stand-size class and stand origin, Southwest-South Alabama, 1990 and 1999.

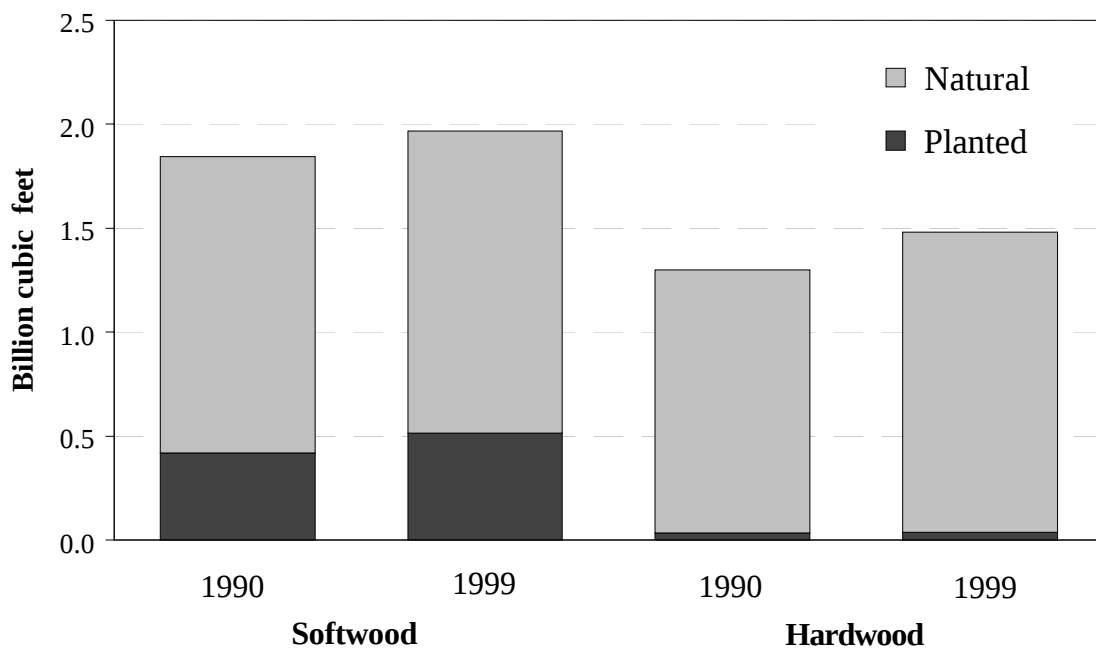
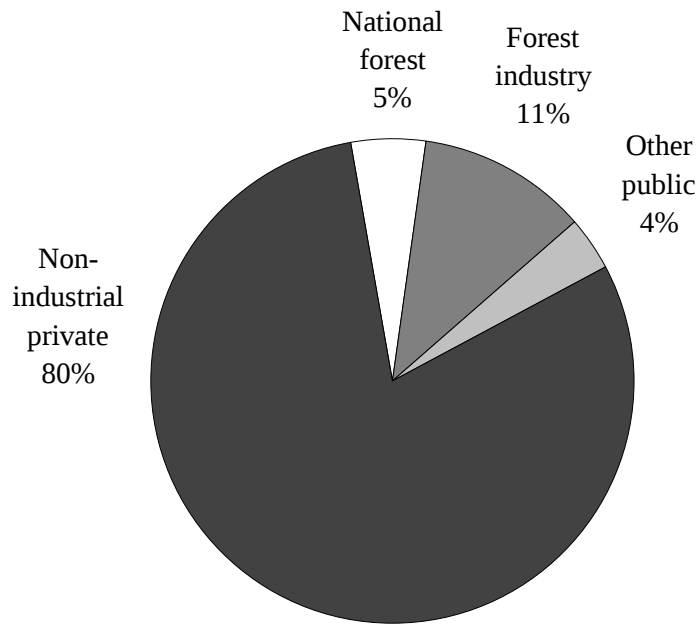
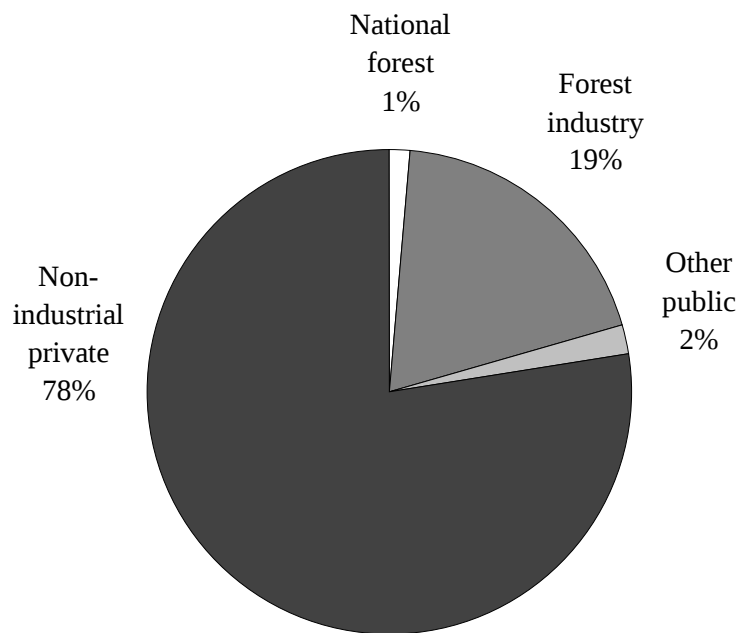


Figure 5—Volume of live trees on timberland by species group and stand origin, Southwest-South Alabama, 1990 and 1999.



2.0 Billion cubic feet

Figure 6—Distribution of softwood live tree volume by ownership class, Southwest-South Alabama, 1999.



1.5 Billion cubic feet

Figure 7—Distribution of hardwood live tree volume by ownership class, Southwest-South Alabama, 1999.

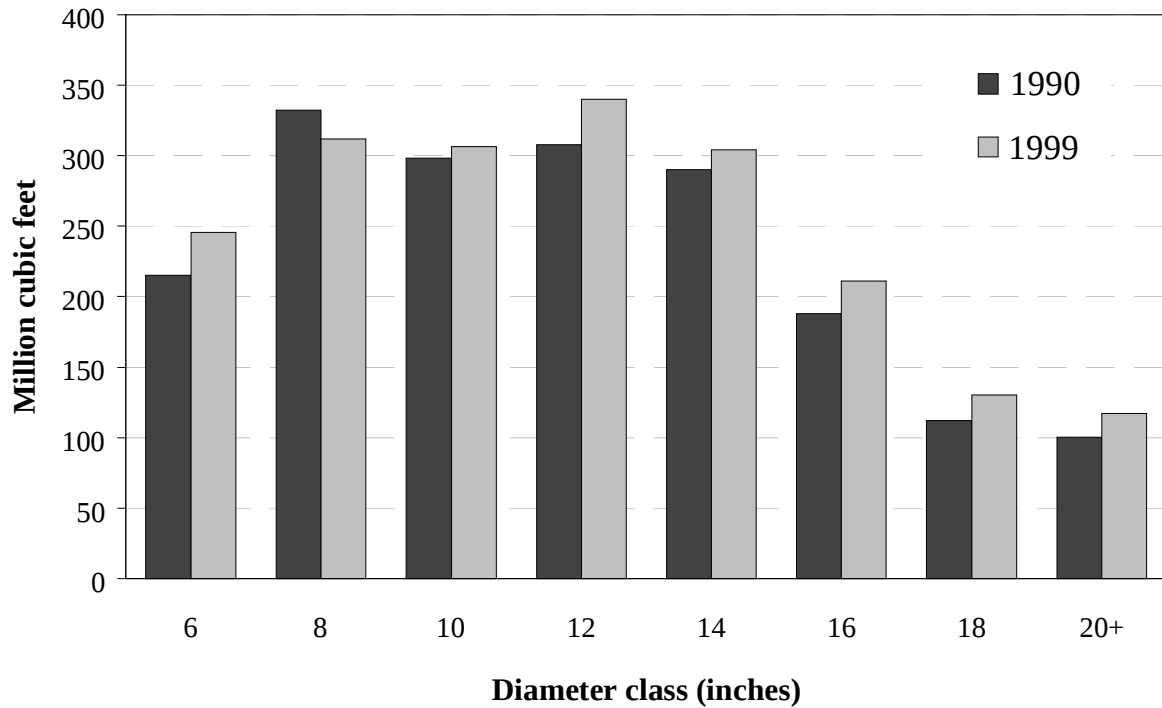


Figure 8—Volume of softwood live trees on timberland by diameter class, Southwest-South Alabama, 1990 and 1999.

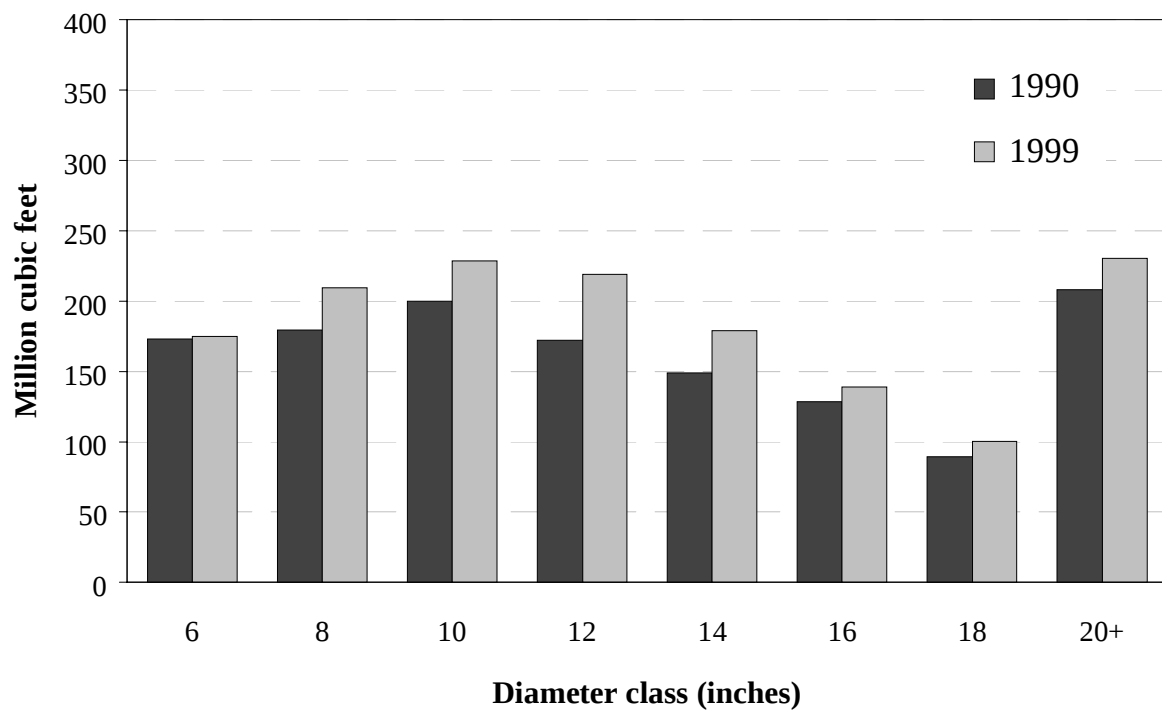


Figure 9—Volume of hardwood live trees on timberland by diameter class, Southwest-South Alabama, 1990 and 1999.

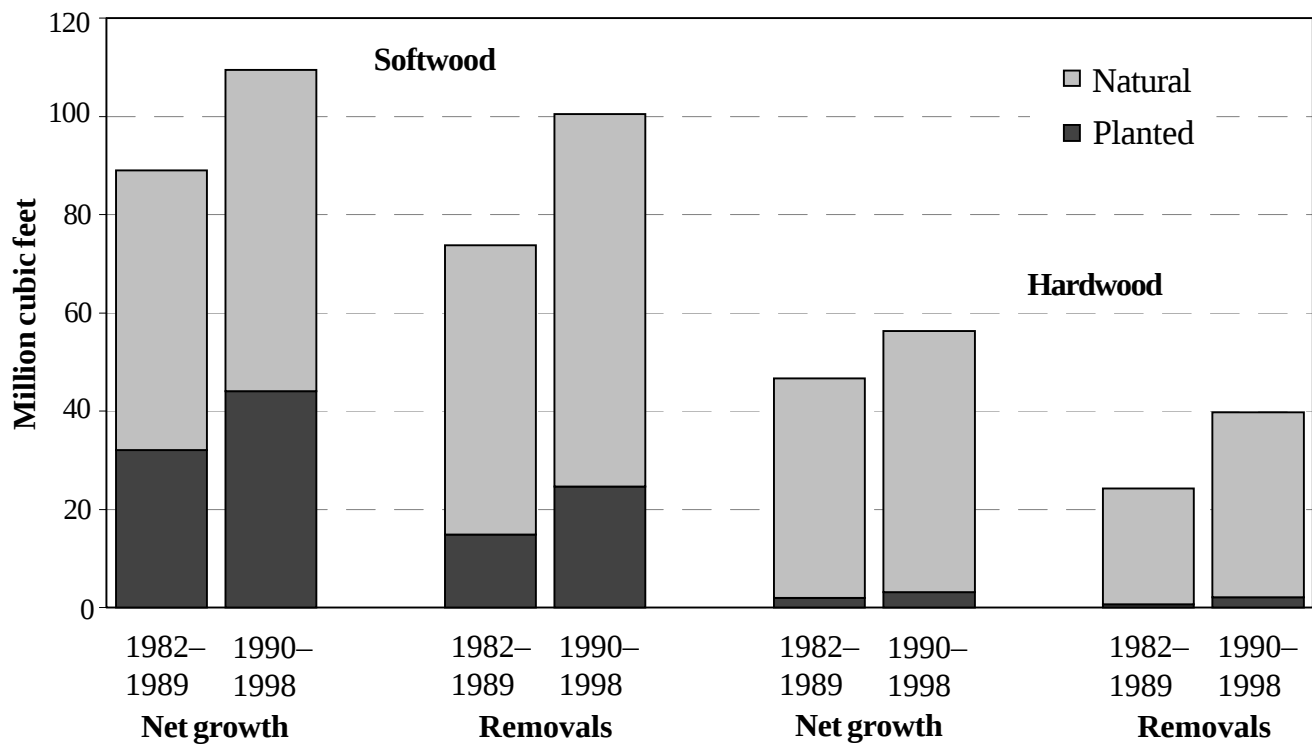


Figure 10—Average net annual growth and removals of live trees on timberland by species group and stand origin, Southwest-South Alabama, 1982–1989 and 1990–1998.

Cross Reference of Eastern Core Tables

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Table 1—Land area by county and land class, Southwest-South Alabama, 1999

County	Total land area ^a	Forest land				Other land ^b
		Total	Productive			
		forest	Timberland	reserved	Other	
Thousand acres						
Baldwin	1,021.8	674.2	671.4	—	2.8	347.6
Covington	662.2	505.8	505.8	—	—	156.4
Escambia	606.4	458.8	458.8	—	—	147.5
Mobile	789.4	531.8	531.8	—	—	257.6
Washington	691.7	610.2	610.2	—	—	81.5
Total	3,771.4	2,780.8	2,778.0	—	2.8	990.6

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

^a From the U.S. Bureau of the Census, 1990.

^b Includes 21.0 thousand acres of water according to Forest Inventory and Analysis standards of area classification, but defined by the Bureau of Census as land.

Table 2—Area of forest land by forest-type group and ownership class, Southwest-South Alabama, 1999

Forest-type group	All classes	Ownership class					
		National forest	Miscellaneous Federal	State	County and municipal	Forest industry	Nonindustrial private
Thousand acres							
Longleaf–slash pine	781.4	58.3	—	17.2	16.6	96.5	592.9
Loblolly–shortleaf pine	538.8	—	4.1	1.7	2.6	146.8	383.7
Oak–pine	505.6	10.5	—	10.7	11.9	46.6	425.9
Oak–hickory	354.7	6.6	—	4.4	—	57.4	286.3
Oak–gum–cypress	560.8	4.4	5.2	11.0	—	118.0	422.3
Elm–ash–cottonwood	14.3	—	—	—	—	11.7	2.6
Nonstocked	25.3	—	—	—	—	5.6	19.7
Total	2,780.8	79.8	9.2	44.9	31.1	482.5	2,133.3

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 3—Area of timberland by county and ownership class, Southwest-South Alabama, 1999

County	All classes	Ownership class						
		National forest	Miscellaneous Federal	State	County and municipal	Forest industry	Nonindustrial private	
							Corporate	Individual
Thousand acres								
Baldwin	671.4	—	6.5	14.0	3.9	253.2	82.4	311.5
Covington	505.8	52.1	—	—	—	30.2	106.0	317.6
Escambia	458.8	27.7	—	7.9	5.6	134.0	131.3	152.3
Mobile	531.8	—	—	22.7	21.6	47.5	145.4	294.6
Washington	610.2	—	—	0.3	—	17.7	148.4	443.9
Total	2,778.0	79.8	6.5	44.9	31.1	482.5	613.4	1,519.9

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 4—Area of timberland by county and forest-type group, Southwest-South Alabama, 1999

County	Forest-type group							
	All groups	Longleaf-slash	Loblolly-shortleaf	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-cottonwood	Nonstocked
	Thousand acres							
Baldwin	671.4	172.0	112.2	111.6	79.5	175.5	14.3	6.4
Covington	505.8	133.0	150.1	78.5	71.0	71.3	—	2.0
Escambia	458.8	213.6	109.2	36.3	47.4	46.8	—	5.6
Mobile	531.8	180.5	58.8	110.9	71.0	99.5	—	11.0
Washington	610.2	82.3	105.8	168.3	85.8	167.7	—	0.3
Total	2,778.0	781.4	536.1	505.6	354.7	560.8	14.3	25.3

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 5—Area of timberland by county and stand-size class, Southwest-South Alabama, 1999

County	All classes	Stand-size class			
		Sawtimber	Poletimber	Sapling- seedling	Nonstocked
Thousand acres					
Baldwin	671.4	163.0	140.5	361.4	6.4
Covington	505.8	126.5	139.1	238.2	2.0
Escambia	458.8	130.9	59.9	262.5	5.6
Mobile	531.8	148.0	90.5	282.2	11.0
Washington	610.2	160.3	149.3	300.3	0.3
Total	2,778.0	728.8	579.3	1,444.7	25.3

Numbers in rows and columns may not sum to totals due to rounding.

Table 6—Area of timberland by county and site class, Southwest-South Alabama, 1999

	All	Site class (cubic feet/acre/year)				
County	classes	20-49	50-84	85-119	120-164	>165
Thousand acres						
Baldwin	671.4	96.5	365.8	171.8	31.8	5.5
Covington	505.8	9.4	207.8	246.8	29.8	12.1
Escambia	458.8	11.8	178.9	198.8	63.7	5.6
Mobile	531.8	85.4	299.5	109.9	32.9	4.0
Washington	610.2	30.3	240.1	233.3	106.5	—
Total	2,778.0	233.4	1,292.2	960.6	264.7	27.1

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 7—Area of timberland by county and stocking class of growing-stock trees, Southwest-South Alabama, 1999

	All	Stocking class (percent)				
County	classes	<16.7	16.7-59	60-99	100-130	>130
		Thousand acres				
Baldwin	671.4	21.5	102.8	185.6	188.3	173.3
Covington	505.8	5.1	71.7	175.1	155.8	98.2
Escambia	458.8	15.2	45.6	90.3	170.9	136.8
Mobile	531.8	35.3	107.0	194.7	115.4	79.3
Washington	610.2	3.1	80.1	201.3	173.3	152.4
Total	2,778.0	80.2	407.2	847.0	803.7	640.0

Numbers in rows and columns may not sum to totals due to rounding.

Table 8—Area of timberland by forest-type group, stand origin, and ownership class, Southwest-South Alabama, 1999

Forest-type group and stand origin	All classes	Ownership class			
		National forest	Other public	Forest industry	Nonindustrial private
Thousand acres					
Softwood types					
Longleaf-slash pine					
Planted	239.6	7.2	11.0	78.6	142.8
Natural	541.8	51.0	22.7	17.8	450.2
Total	781.4	58.3	33.7	96.5	592.9
Loblolly-shortleaf pine					
Planted	358.9	—	1.7	138.5	218.7
Natural	177.2	—	3.9	8.3	165.0
Total	536.1	—	5.6	146.8	383.7
Total softwoods	1,317.5	58.3	39.3	243.2	976.6
Hardwood types					
Oak-pine					
Planted	85.1	1.9	5.5	19.1	58.6
Natural	420.5	8.6	17.1	27.5	367.3
Total	505.6	10.5	22.6	46.6	425.9
Oak-hickory	354.7	6.6	4.4	57.4	286.3
Oak-gum-cypress	560.8	4.4	16.1	118.0	422.3
Elm-ash-cottonwood	14.3	—	—	11.7	2.6
Total hardwoods	1,435.3	21.5	43.1	233.6	1,137.1
Nonstocked	25.3	—	—	5.6	19.7
All groups	2,778.0	79.8	82.4	482.5	2,133.3

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 9—Area of timberland by forest-type group, detailed forest type, and ownership class, Southwest-South Alabama, 1999

Forest-type group and detailed forest type	All classes	Ownership class			
		National forest	Other public	Forest industry	Nonindustrial private
Thousand acres					
Softwood types					
Longleaf-slash					
Longleaf pine	375.5	39.8	30.6	8.1	297.0
Slash pine	405.9	18.4	3.1	88.4	296.0
Total	781.4	58.3	33.7	96.5	592.9
Loblolly-shortleaf					
Loblolly pine	521.1	—	5.6	146.8	368.7
Shortleaf pine	11.0	—	—	—	11.0
Virginia pine	4.0	—	—	—	4.0
Total	536.1	—	5.6	146.8	383.7
Total softwoods	1,317.5	58.3	39.3	243.2	976.6
Hardwood types					
Oak-pine					
Longleaf pine-scrub oak	133.9	6.3	10.6	5.5	111.5
Shortleaf pine-oak	4.4	—	—	—	4.4
Loblolly pine-hardwood	185.3	—	1.3	24.8	159.2
Slash pine-hardwood	167.4	2.9	5.5	16.3	142.7
Other oak-pine	14.6	1.4	5.2	—	8.1
Total	505.6	10.5	22.6	46.6	425.9
Oak-hickory					
Post oak-black oak	5.9	—	—	—	5.9
White oak-red oak-hickory	1.3	—	—	—	1.3
Southern scrub oak	35.4	2.2	—	11.2	22.0
Sweetgum-yellow-poplar	34.2	—	0.8	6.6	26.9
Mixed hardwood	277.9	4.4	3.6	39.6	230.2
Total	354.7	6.6	4.4	57.4	286.3
Oak-gum-cypress					
Sweetgum-water oak-willow oak	85.5	1.3	5.2	11.7	67.4
Sugarberry-elm-green ash	41.7	—	5.2	16.3	20.2
Overcup oak-water hickory	16.7	—	0.3	5.6	10.8
Atlantic white-cedar	3.9	—	—	3.9	—
Cypress-water tupelo	52.7	1.9	—	13.6	37.2
Sweetbay-blackgum-red maple	360.3	1.3	5.5	66.9	286.7
Total	560.8	4.4	16.1	118.0	422.3
Elm-ash-cottonwood					
Willow	14.3	—	—	11.7	2.6
Total	14.3	—	—	11.7	2.6
Total hardwoods	1,435.3	21.5	43.1	233.6	1,137.1
Nonstocked	25.3	—	—	5.6	19.7
All groups	2,778.0	79.8	82.4	482.5	2,133.3

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 10—Area of timberland by ownership and stocking class of growing-stock trees, Southwest-South Alabama, 1999

Ownership class	All	Stocking class (percent)				
	classes	<16.7	16.7-59	60-99	100-130	>130
Thousand acres						
National forest	79.8	2.1	9.9	27.4	17.6	22.9
Other public	82.4	1.6	10.4	37.6	27.3	5.6
Forest industry	482.5	18.7	73.6	122.9	144.9	122.4
Nonindustrial private	2,133.3	57.9	313.4	659.1	613.9	489.1
All ownerships	2,778.0	80.2	407.2	847.0	803.7	640.0

Numbers in rows and columns may not sum to totals due to rounding.

Table 11—Area of timberland by forest-type group, stand origin, and stand-size class, Southwest-South Alabama, 1999

Forest-type group and stand origin	All classes	Stand-size class			
		Sawtimber	Poletimber	Sapling- seedling	Nonstocked
Thousand acres					
Softwood types					
Longleaf-slash pine					
Planted	239.6	29.3	115.5	94.8	—
Natural	541.8	203.6	88.6	249.6	—
Total	781.4	232.9	204.1	344.4	—
Loblolly-shortleaf pine					
Planted	358.9	32.6	125.9	200.4	—
Natural	177.2	59.3	9.3	108.6	—
Total	536.1	91.9	135.1	309.0	—
Total softwoods	1,317.5	324.8	339.2	653.4	—
Hardwood types					
Oak-pine					
Planted	85.1	—	1.5	83.6	—
Natural	420.5	132.2	62.2	226.1	—
Total	505.6	132.2	63.7	309.7	—
Oak-hickory	354.7	36.8	58.0	259.8	—
Oak-gum-cypress	560.8	235.1	117.1	208.7	—
Elm-ash-cottonwood	14.3	—	1.3	13.0	—
Total hardwoods	1,435.3	404.0	240.1	791.2	—
Nonstocked	25.3	—	—	—	25.3
All groups	2,778.0	728.8	579.3	1,444.7	25.3

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 12—Area of timberland by stand-age class and forest management type, all ownerships, Southwest-South Alabama, 1999

Stand-age class	All types	Forest management type					Nonstocked
		Pine plantation	Natural pine	Oak–pine	Upland hardwood	Lowland hardwood	
<i>Years</i>							
		<i>Thousand acres</i>					
0-10	683.2	220.8	109.2	115.5	127.5	90.4	19.9
11-20	342.2	188.9	52.4	16.7	33.6	50.0	0.6
21-30	340.1	121.2	53.6	62.9	47.9	51.9	2.6
31-40	358.8	46.0	108.9	96.1	44.9	62.5	0.5
41-50	393.7	7.5	146.1	104.2	55.0	80.9	—
51-60	306.2	5.5	134.4	52.1	17.6	96.3	0.3
61-70	220.7	8.6	95.6	33.3	27.0	54.8	1.4
71-80	84.9	—	10.3	17.9	1.3	55.4	—
81+	48.2	—	8.4	7.0	—	32.9	—
All classes	2,778.0	598.5	718.9	505.6	354.7	575.1	25.3

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 13—Area of timberland by stand-age class and forest management type, public ownerships, Southwest-South Alabama, 1999

Stand-age class	All types	Forest management type					Nonstocked
		Pine plantation	Natural pine	Oak–pine	Upland hardwood	Lowland hardwood	
<i>Years</i>							
		<i>Thousand acres</i>					
0-10	15.8	4.0	2.6	9.3	—	—	—
11-20	7.6	2.5	3.8	—	—	1.3	—
21-30	7.7	—	2.2	—	—	5.5	—
31-40	27.9	8.0	2.5	7.1	3.3	7.1	—
41-50	18.9	—	8.6	5.2	—	5.2	—
51-60	34.3	5.5	21.4	6.2	—	1.3	—
61-70	41.5	—	31.1	2.6	7.7	—	—
71-80	5.2	—	2.4	2.5	—	0.3	—
81+	3.4	—	3.1	0.2	—	—	—
All classes	162.3	19.9	77.7	33.1	11.0	20.5	—

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 14—Area of timberland by stand-age class and forest management type, forest industry ownerships, Southwest-South Alabama, 1999

Stand-age class	All types	Forest management type					
		Pine plantation	Natural pine	Oak–pine	Upland hardwood	Lowland hardwood	Nonstocked
<i>Years</i>				<i>Thousand acres</i>			
0-10	212.0	116.4	5.8	22.7	32.2	29.2	5.6
11-20	78.6	50.1	—	7.7	—	20.8	—
21-30	65.3	50.6	1.3	6.4	6.6	0.3	—
31-40	23.6	—	9.9	—	10.3	3.4	—
41-50	35.2	—	3.9	9.8	4.4	17.1	—
51-60	20.8	—	—	—	—	20.8	—
61-70	16.2	—	5.2	—	3.9	7.1	—
71-80	25.3	—	—	—	—	25.3	—
81+	5.6	—	—	—	—	5.6	—
All classes	482.5	217.1	26.1	46.6	57.4	129.6	5.6

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 15—Area of timberland by stand-age class and forest management type, nonindustrial private ownerships, Southwest-South Alabama, 1999

Stand-age class	All types	Forest management type					Nonstocked
		Pine plantation	Natural pine	Oak–pine	Upland hardwood	Lowland hardwood	
<i>Years</i>		<i>Thousand acres</i>					
0-10	455.4	100.4	100.8	83.5	95.3	61.2	14.3
11-20	256.1	136.3	48.6	9.0	33.6	28.0	0.6
21-30	267.1	70.5	50.1	56.5	41.3	46.0	2.6
31-40	307.4	38.0	96.5	89.0	31.3	52.1	0.5
41-50	339.6	7.5	133.6	89.3	50.6	58.6	—
51-60	251.1	—	113.1	45.9	17.6	74.3	0.3
61-70	163.0	8.6	59.3	30.6	15.4	47.7	1.4
71-80	54.4	—	8.0	15.4	1.3	29.8	—
81+	39.3	—	5.3	6.7	—	27.3	—
All classes	2,133.3	361.4	615.2	425.9	286.3	424.9	19.7

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 16—Area of nonindustrial private timberland by ownership, forested tract-size class, and forest management type, Southwest-South Alabama, 1999

Ownership and forested tract-size class	All types	Forest management type					
		Pine plantation	Natural pine	Oak–pine	Upland hardwood	Lowland hardwood	Nonstocked
<i>Acres</i>							
Individual							
≤ 10	75.5	1.3	2.6	37.7	21.3	10.1	2.6
11-50	379.5	51.5	81.8	98.6	49.2	95.0	3.3
51-100	239.8	49.9	58.2	38.3	55.9	35.5	2.0
101-200	318.3	59.7	94.7	30.6	54.2	79.0	—
201-500	257.1	37.8	71.8	59.2	25.6	59.4	3.4
≥ 501	249.7	23.7	87.4	63.5	27.1	42.2	5.8
Total	1,519.9	223.9	396.5	328.0	233.3	321.2	17.0
Corporate							
≤ 10	14.5	4.7	4.1	—	—	5.5	0.3
11-50	44.8	—	25.1	5.3	10.2	4.0	0.3
51-100	42.7	10.9	7.6	11.5	1.4	11.4	—
101-200	75.9	2.0	39.0	14.3	15.1	5.6	—
201-500	156.7	50.7	37.7	30.6	4.2	33.6	—
≥ 501	278.7	69.3	105.2	36.3	22.2	43.8	2.0
Total	613.4	137.5	218.6	97.9	53.0	103.7	2.6
All nonindustrial private							
≤ 10	90.1	6.0	6.7	37.7	21.3	15.6	2.9
11-50	424.3	51.5	106.8	103.9	59.4	99.0	3.6
51-100	282.5	60.8	65.8	49.8	57.2	46.8	2.0
101-200	394.2	61.6	133.7	44.9	69.3	84.6	—
201-500	413.7	88.4	109.5	89.7	29.7	93.0	3.4
≥ 501	528.5	93.0	192.6	99.8	49.2	85.9	7.8
Total	2,133.3	361.4	615.2	425.9	286.3	424.9	19.7

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 17—Number of live trees on timberland by species and diameter class, Southwest-South Alabama, 1999

		Diameter class (inches at breast height)											
	All	1.0-	3.0-	5.0-	7.0-	9.0-	11.0-	13.0-	15.0-	17.0-	19.0-	21.0-	29.0 and
Species	classes	2.9	4.9	6.9	8.9	10.9	12.9	14.9	16.9	18.9	20.9	28.9	larger
Thousand trees													
Softwood													
Longleaf pine	115,851	46,783	31,737	10,789	8,158	5,924	5,514	3,926	1,649	1,083	270	18	—
Slash pine	147,282	33,631	38,413	36,317	19,356	9,216	4,900	2,637	1,700	710	302	100	—
Shortleaf pine	5,585	422	1,403	2,106	597	209	482	229	102	35	—	—	—
Loblolly pine	238,447	88,736	66,957	47,600	19,263	7,284	4,513	2,226	1,157	374	203	134	—
Virginia pine	1,023	—	—	759	231	33	—	—	—	—	—	—	—
Spruce pine	3,199	2,150	419	212	105	105	35	35	69	—	69	—	—
Sand pine	279	—	—	186	62	31	—	—	—	—	—	—	—
Baldcypress	7,788	3,164	1,656	770	483	459	340	359	164	33	66	228	66
Pondcypress	4,794	3,729	411	167	97	132	31	128	—	68	—	31	—
Atlantic white-cedar	1,441	778	—	190	126	93	190	64	—	—	—	—	—
Redcedars	3,811	2,766	640	273	—	62	35	35	—	—	—	—	—
Total softwoods	529,500	182,159	141,636	99,369	48,478	23,548	16,040	9,639	4,841	2,303	910	511	66
Hardwood													
Select white oaks	7,451	5,347	411	831	275	244	139	106	36	—	31	31	—
Select red oaks	606	—	441	—	—	66	35	33	—	—	31	—	—
Other white oaks	33,082	22,645	5,045	1,946	1,272	981	533	363	197	34	31	35	—
Other red oaks	290,844	212,098	42,830	15,045	9,093	4,944	2,904	1,853	862	568	342	239	66
Hickory	15,332	9,524	2,984	1,115	598	590	290	103	35	93	—	—	—
Hard maple	1,363	852	441	35	—	35	—	—	—	—	—	—	—
Soft maple	101,137	68,644	21,820	6,081	2,580	1,152	407	260	35	96	31	31	—
Beech	260	—	—	71	—	33	72	—	34	35	—	15	—
Sweetgum	94,043	66,823	15,867	5,675	2,512	1,186	1,017	487	202	206	34	34	—
Tupelo and blackgum	128,175	68,520	26,678	12,904	7,317	4,489	3,148	1,981	1,562	584	634	358	—
Ash	14,220	8,881	3,208	682	444	472	252	62	62	64	31	62	—
Cottonwood	128	—	—	62	31	—	—	—	—	—	—	35	—
Yellow-poplar	18,881	7,922	4,586	2,049	1,522	956	647	300	176	197	236	222	68
Bay and magnolia	170,465	112,010	30,928	11,205	6,854	3,956	2,739	1,324	858	281	172	138	—
Black cherry	21,437	17,716	2,468	603	437	198	15	—	—	—	—	—	—
Black walnut	70	—	—	35	—	—	35	—	—	—	—	—	—
Sycamore	911	778	—	31	—	—	—	—	—	35	—	33	34
Elm	4,825	3,021	761	342	341	201	62	66	31	—	—	—	—
Other Eastern													
hardwoods	219,777	168,738	32,360	11,477	3,901	2,114	593	360	69	134	—	31	—
Total hardwoods	1,123,007	773,519	190,828	70,189	37,177	21,617	12,888	7,298	4,159	2,327	1,573	1,264	168
All species	1,652,507	955,678	332,464	169,558	85,655	45,165	28,928	16,937	9,000	4,630	2,483	1,775	234

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell.

Table 18—Number of growing-stock trees on timberland by species and diameter class, Southwest-South Alabama, 1999

		Diameter class (inches at breast height)											
Species	All classes	1.0- 2.9	3.0- 4.9	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 and larger
Thousand trees													
Softwood													
Longleaf pine	107,367	40,668	29,674	10,550	8,091	5,924	5,514	3,926	1,649	1,083	270	18	—
Slash pine	134,946	28,318	33,201	34,789	19,139	9,185	4,865	2,637	1,700	710	302	100	—
Shortleaf pine	5,405	422	1,403	1,998	561	209	446	229	102	35	—	—	—
Loblolly pine	206,302	68,317	60,030	44,700	18,256	6,800	4,307	2,090	1,126	374	168	134	—
Virginia pine	924	—	—	693	231	—	—	—	—	—	—	—	—
Spruce pine	1,816	838	419	176	70	105	35	35	69	—	69	—	—
Sand pine	248	—	—	155	62	31	—	—	—	—	—	—	—
Baldcypress	5,856	1,586	1,656	639	421	397	340	359	164	33	33	197	31
Pondcypress	3,972	2,907	411	167	97	132	31	128	—	68	—	31	—
Atlantic white-cedar	1,019	389	—	157	126	93	190	64	—	—	—	—	—
Redcedars	2,855	1,908	640	206	—	31	35	35	—	—	—	—	—
Total softwoods	470,710	145,353	127,434	94,230	47,054	22,907	15,763	9,503	4,810	2,303	842	480	31
Hardwood													
Select white oaks	3,519	2,237	—	627	242	174	71	70	36	—	31	31	—
Select red oaks	132	—	—	—	—	66	35	—	—	—	31	—	—
Other white oaks	7,046	3,244	996	1,108	743	389	203	232	31	34	31	35	—
Other red oaks	141,680	90,969	25,106	10,627	6,242	3,663	2,117	1,267	698	447	307	171	66
Hickory	8,871	4,666	2,151	664	408	523	259	103	35	62	—	—	—
Hard maple	35	—	—	35	—	—	—	—	—	—	—	—	—
Soft maple	22,121	8,612	8,908	2,173	1,415	483	238	165	—	96	—	31	—
Beech	190	—	—	36	—	33	72	—	34	—	—	15	—
Sweetgum	67,264	47,078	11,277	4,371	1,997	895	917	355	134	206	34	—	—
Tupelo and blackgum	59,916	22,406	13,047	8,625	5,226	3,478	2,819	1,692	1,268	522	539	294	—
Ash	3,767	1,556	830	186	190	472	252	62	62	64	31	62	—
Cottonwood	128	—	—	62	31	—	—	—	—	—	—	35	—
Yellow-poplar	16,850	7,091	4,139	1,851	1,262	727	647	267	176	197	236	222	35
Bay and magnolia	69,603	37,485	14,022	6,530	4,683	2,729	2,038	1,027	694	184	139	72	—
Black cherry	6,128	4,203	1,290	339	234	62	—	—	—	—	—	—	—
Black walnut	35	—	—	—	—	—	35	—	—	—	—	—	—
Sycamore	911	778	—	31	—	—	—	—	—	35	—	33	34
Elm	773	—	—	242	237	170	62	31	31	—	—	—	—
Other Eastern hardwoods	50,980	36,530	8,542	3,218	1,289	842	230	198	69	31	—	31	—
Total hardwoods	459,949	266,855	90,308	40,725	24,199	14,706	9,995	5,469	3,268	1,878	1,379	1,032	135
All species	930,659	412,208	217,742	134,955	71,253	37,613	25,758	14,972	8,078	4,181	2,221	1,512	166

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell.

Table 19—Volume of live trees on timberland by species and diameter class, Southwest-South Alabama, 1999

Species	Diameter class (inches at breast height)										
	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	21.0-28.9	29.0 and larger
<i>Million cubic feet</i>											
Softwood											
Longleaf pine	576.2	32.6	62.0	81.0	120.2	126.4	73.2	60.5	18.5	1.9	—
Slash pine	687.3	95.9	131.6	125.4	103.8	84.7	72.7	41.3	22.0	9.9	—
Shortleaf pine	39.6	5.5	3.8	3.3	11.8	8.3	4.8	2.1	—	—	—
Loblolly pine	559.5	103.5	107.7	86.7	92.5	67.9	50.4	21.4	13.2	16.3	—
Virginia pine	3.5	2.2	1.1	0.2	—	—	—	—	—	—	—
Spruce pine	12.3	0.7	0.7	1.1	0.6	1.0	3.1	—	5.1	—	—
Sand pine	1.1	0.5	0.3	0.2	—	—	—	—	—	—	—
Baldcypress	63.9	2.7	3.1	5.5	6.5	10.0	6.9	1.5	3.2	18.2	6.3
Pondcypress	11.6	0.5	0.6	1.2	0.5	3.1	—	3.1	—	2.5	—
Atlantic white-cedar	8.1	0.7	1.1	1.1	3.5	1.8	—	—	—	—	—
Redcedars	2.9	0.7	—	0.7	0.6	0.9	—	—	—	—	—
Total softwoods	1,966.1	245.5	311.8	306.5	340.1	304.0	211.1	130.0	61.9	48.8	6.3
Hardwood											
Select white oaks	18.5	2.1	1.6	2.8	2.4	3.2	1.3	—	1.6	3.5	—
Select red oaks	4.8	—	—	0.9	0.8	0.6	—	—	2.3	—	—
Other white oaks	44.2	4.4	5.9	8.8	6.5	7.6	4.5	1.9	1.4	3.0	—
Other red oaks	344.0	40.6	52.0	53.1	47.8	43.3	28.5	23.9	20.3	19.6	15.0
Hickory	25.5	2.8	3.3	6.4	4.9	2.8	1.4	4.0	—	—	—
Hard maple	0.5	0.1	—	0.4	—	—	—	—	—	—	—
Soft maple	64.0	16.5	14.1	11.4	6.2	5.7	1.0	4.4	1.4	3.4	—
Beech	5.9	0.2	—	0.4	1.8	—	0.9	1.4	—	1.3	—
Sweetgum	100.0	13.0	15.3	14.0	19.4	15.2	7.7	11.1	2.8	1.5	—
Tupelo and blackgum	372.8	32.1	41.5	48.8	56.0	49.5	54.3	25.4	33.7	31.5	—
Ash	32.2	1.7	2.3	5.8	5.2	1.5	2.8	3.3	2.5	7.2	—
Cottonwood	3.8	0.2	0.1	—	—	—	—	—	—	3.5	—
Yellow-poplar	112.0	5.9	10.7	11.3	12.9	7.6	6.8	9.7	17.6	19.5	10.0
Bay and magnolia	247.0	30.0	41.0	43.2	45.3	33.3	26.7	10.5	10.2	6.8	—
Black cherry	5.9	1.3	2.4	1.9	0.3	—	—	—	—	—	—
Black walnut	0.7	0.1	—	—	0.6	—	—	—	—	—	—
Sycamore	10.4	0.1	—	—	—	—	—	1.7	—	2.7	5.8
Elm	8.9	0.9	1.9	2.4	1.5	1.4	0.9	—	—	—	—
Other Eastern hardwoods	80.1	23.2	17.4	17.1	7.3	7.6	2.3	3.1	—	2.1	—
Total hardwoods	1,481.2	175.1	209.5	228.8	218.8	179.3	139.0	100.4	94.0	105.6	30.8
All species	3,447.3	420.6	521.3	535.2	558.9	483.3	350.1	230.4	155.9	154.3	37.2

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 20—Volume of growing-stock trees on timberland by species and diameter class, Southwest-South Alabama, 1999

Species	All classes	Diameter class (inches at breast height)									
		5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 and larger
Million cubic feet											
Softwood											
Longleaf pine	575.2	32.1	61.4	81.0	120.2	126.4	73.2	60.5	18.5	1.9	—
Slash pine	681.5	92.2	130.3	125.0	103.4	84.7	72.7	41.3	22.0	9.9	—
Shortleaf pine	38.7	5.3	3.6	3.3	11.2	8.3	4.8	2.1	—	—	—
Loblolly pine	537.3	98.1	103.1	82.4	89.4	65.0	49.5	21.4	12.1	16.3	—
Virginia pine	3.1	2.0	1.1	—	—	—	—	—	—	—	—
Spruce pine	12.0	0.6	0.5	1.1	0.6	1.0	3.1	—	5.1	—	—
Sand pine	1.0	0.5	0.3	0.2	—	—	—	—	—	—	—
Baldcypress	59.4	2.4	2.8	4.8	6.5	10.0	6.9	1.5	2.3	16.6	5.5
Pondcypress	11.6	0.5	0.6	1.2	0.5	3.1	—	3.1	—	2.5	—
Atlantic white-cedar	8.0	0.5	1.1	1.1	3.5	1.8	—	—	—	—	—
Redcedars	2.5	0.5	—	0.5	0.6	0.9	—	—	—	—	—
Total softwoods	1,930.3	234.7	304.8	300.7	336.0	301.2	210.2	130.0	60.0	47.2	5.5
Hardwood											
Select white oaks	15.4	1.7	1.5	2.2	1.4	2.2	1.3	—	1.6	3.5	—
Select red oaks	4.1	—	—	0.9	0.8	—	—	—	2.3	—	—
Other white oaks	25.9	2.4	3.8	3.9	3.1	5.3	1.0	1.9	1.4	3.0	—
Other red oaks	270.7	30.4	38.5	41.4	36.6	30.5	24.3	19.4	19.3	15.3	15.0
Hickory	21.6	1.8	2.3	5.9	4.4	2.8	1.4	3.0	—	—	—
Hard maple	0.1	0.1	—	—	—	—	—	—	—	—	—
Soft maple	35.7	6.6	8.4	5.1	3.9	4.0	—	4.4	—	3.4	—
Beech	4.5	0.2	—	0.4	1.8	—	0.9	—	—	1.3	—
Sweetgum	83.1	10.7	12.7	11.1	17.7	11.5	5.6	11.1	2.8	—	—
Tupelo and blackgum	318.3	23.0	31.8	40.5	51.6	44.8	45.4	23.5	30.6	27.0	—
Ash	30.1	0.8	1.1	5.8	5.2	1.5	2.8	3.3	2.5	7.2	—
Cottonwood	3.8	0.2	0.1	—	—	—	—	—	—	3.5	—
Yellow-poplar	104.0	5.6	9.6	9.2	12.9	7.2	6.8	9.7	17.6	19.5	6.0
Bay and magnolia	189.2	18.7	30.1	31.5	37.5	27.4	23.1	8.4	8.6	4.1	—
Black cherry	2.8	0.8	1.4	0.6	—	—	—	—	—	—	—
Black walnut	0.6	—	—	—	0.6	—	—	—	—	—	—
Sycamore	10.4	0.1	—	—	—	—	—	1.7	—	2.7	5.8
Elm	7.0	0.6	1.5	1.9	1.5	0.6	0.9	—	—	—	—
Other Eastern hardwoods	36.4	7.4	6.7	8.4	3.0	5.2	2.3	1.2	—	2.1	—
Total hardwoods	1,163.7	111.1	149.3	168.9	181.9	143.0	115.8	87.5	86.8	92.7	26.8
All species	3,094.0	345.7	454.1	469.6	517.8	444.2	326.0	217.6	146.8	139.9	32.4

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 21—Volume in the saw-log portion of sawtimber trees on timberland by species and diameter class, Southwest-South Alabama, 1999

		Diameter class (inches at breast height)							
	All	9.0-	11.0-	13.0-	15.0-	17.0-	19.0-	21.0-	29.0 and
Species	classes	10.9	12.9	14.9	16.9	18.9	20.9	28.9	larger
Million cubic feet									
Softwood									
Longleaf pine	447.4	66.8	109.9	120.3	71.0	59.3	18.2	1.9	—
Slash pine	418.6	100.9	93.8	80.7	70.8	40.8	21.8	9.8	—
Shortleaf pine	27.5	2.6	10.2	7.9	4.7	2.1	—	—	—
Loblolly pine	303.0	64.1	80.1	61.5	48.1	21.1	12.0	16.1	—
Spruce pine	10.4	0.8	0.6	1.0	3.0	—	5.1	—	—
Sand pine	0.2	0.2	—	—	—	—	—	—	—
Baldcypress	49.0	3.4	5.5	9.0	6.4	1.4	2.2	15.9	5.4
Pondcypress	9.8	1.0	0.5	2.8	—	3.0	—	2.5	—
Atlantic white-cedar	5.7	0.9	3.1	1.7	—	—	—	—	—
Redcedars	1.8	0.4	0.5	0.8	—	—	—	—	—
Total softwoods	1,273.4	241.0	304.2	285.7	203.9	127.7	59.3	46.2	5.4
Hardwood									
Select white oaks	8.9	—	1.0	1.8	1.1	—	1.5	3.4	—
Select red oaks	2.8	—	0.6	—	—	—	2.2	—	—
Other white oaks	13.2	—	2.2	4.3	0.8	1.7	1.3	2.8	—
Other red oaks	136.4	—	26.8	25.1	21.1	17.4	17.6	14.1	14.4
Hickory	9.4	—	3.2	2.3	1.2	2.7	—	—	—
Soft maple	12.8	—	2.7	3.2	—	3.8	—	3.1	—
Beech	3.3	—	1.3	—	0.7	—	—	1.2	—
Sweetgum	39.7	—	12.3	9.6	5.0	10.2	2.6	—	—
Tupelo and blackgum	186.4	—	36.1	36.4	39.4	21.1	28.0	25.4	—
Ash	19.6	—	3.6	1.2	2.5	3.0	2.4	6.9	—
Cottonwood	3.4	—	—	—	—	—	—	3.4	—
Yellow-poplar	71.4	—	9.0	5.7	6.1	9.0	16.7	19.0	5.9
Bay and magnolia	88.5	—	25.9	22.7	20.3	7.7	8.1	3.9	—
Black walnut	0.4	—	0.4	—	—	—	—	—	—
Sycamore	9.5	—	—	—	—	1.5	—	2.5	5.6
Elm	2.4	—	1.1	0.5	0.7	—	—	—	—
Other Eastern hardwoods	10.5	—	1.9	4.0	1.8	1.0	—	1.8	—
Total hardwoods	618.7	—	128.2	117.0	100.8	79.0	80.3	87.5	25.9
All species	1,892.1	241.0	432.4	402.6	304.8	206.7	139.6	133.6	31.3

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 22—Volume of sawtimber on timberland by species and diameter class, Southwest-South Alabama, 1999

Species	All classes	Diameter class (inches at breast height)							
		9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 and larger
Million board feet									
Softwood									
Longleaf pine	2,503.4	328.0	577.7	678.0	422.2	368.1	116.8	12.6	—
Slash pine	2,265.5	469.2	475.5	445.4	416.0	252.6	141.2	65.6	—
Shortleaf pine	145.2	11.9	51.3	42.4	27.1	12.4	—	—	—
Loblolly pine	1,634.3	296.9	402.3	336.7	281.2	130.5	77.0	109.7	—
Spruce pine	60.5	4.2	2.9	5.1	17.2	—	31.1	—	—
Sand pine	0.8	0.8	—	—	—	—	—	—	—
Baldcypress	265.1	14.3	24.6	43.4	33.3	7.4	12.6	95.2	34.4
Pondcypress	51.1	4.2	2.1	13.7	—	16.4	—	14.7	—
Atlantic white-cedar	29.2	4.1	15.8	9.4	—	—	—	—	—
Redcedars	9.7	2.2	2.8	4.6	—	—	—	—	—
Total softwoods	6,964.8	1,135.7	1,555.0	1,578.7	1,197.1	787.5	378.6	297.8	34.4
Hardwood									
Select white oaks	50.0	—	5.0	9.5	5.8	—	8.5	21.2	—
Select red oaks	16.4	—	3.0	—	—	—	13.4	—	—
Other white oaks	69.0	—	11.0	21.7	4.3	9.0	7.2	15.9	—
Other red oaks	772.0	—	140.6	132.8	113.0	97.5	103.2	86.5	98.4
Hickory	47.3	—	15.1	11.6	6.2	14.5	—	—	—
Soft maple	65.8	—	12.9	15.2	—	19.8	—	18.0	—
Beech	15.4	—	6.5	—	3.4	—	—	5.5	—
Sweetgum	212.6	—	62.7	50.0	27.1	57.5	15.3	—	—
Tupelo and blackgum	930.3	—	159.4	166.3	192.2	110.3	152.0	150.0	—
Ash	104.0	—	17.0	5.5	12.5	15.3	12.9	40.7	—
Cottonwood	21.6	—	—	—	—	—	—	21.6	—
Yellow-poplar	425.7	—	46.4	30.1	33.6	52.0	101.5	121.3	40.7
Bay and magnolia	422.5	—	124.7	105.7	95.7	37.0	40.0	19.5	—
Black walnut	1.9	—	1.9	—	—	—	—	—	—
Sycamore	56.1	—	—	—	—	8.0	—	13.9	34.2
Elm	11.6	—	5.4	2.5	3.7	—	—	—	—
Other Eastern hardwoods	60.7	—	10.1	22.4	10.5	5.8	—	11.9	—
Total hardwoods	3,282.8	—	621.8	573.2	508.0	426.7	453.9	525.8	173.4
All species	10,247.6	1,135.7	2,176.8	2,152.0	1,705.0	1,214.2	832.5	823.6	207.8

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 23—Volume of sawtimber on timberland by species, size class, and tree grade, Southwest-South Alabama, 1999

Species	All size classes						Trees ≥15.0 inches d.b.h.					
	All grades	Tree grade					All grades	Tree grade				
		1	2	3	4	5		1	2	3	4	5
Million board feet												
Softwood												
Longleaf pine	2,503.4	604.1	747.9	1,145.1	—	6.3	919.7	237.5	357.8	324.5	—	—
Slash pine	2,265.5	1,151.4	448.0	637.8	—	28.3	875.4	578.0	139.6	157.8	—	—
Shortleaf pine	145.2	66.8	37.3	41.0	—	—	39.6	21.7	—	17.9	—	—
Loblolly pine	1,634.3	279.1	250.9	1,053.5	—	50.8	598.4	126.2	107.1	326.7	—	38.4
Spruce pine	60.5	18.3	—	42.1	—	—	48.3	15.5	—	32.8	—	—
Sand pine	0.8	—	—	0.8	—	—	—	—	—	—	—	—
Baldcypress	265.1	172.0	54.3	38.8	—	—	182.9	150.5	27.2	5.3	—	—
Pondcypress	51.1	37.2	9.3	4.6	—	—	31.1	31.1	—	—	—	—
Atlantic white-cedar	29.2	6.0	—	23.2	—	—	—	—	—	—	—	—
Redcedars	9.7	—	—	9.7	—	—	—	—	—	—	—	—
Total softwoods	6,964.8	2,335.1	1,547.7	2,996.7	—	85.3	2,695.4	1,160.4	631.7	864.9	—	38.4
Hardwood												
Select white oaks	50.0	—	5.7	39.2	5.0	—	35.4	—	—	35.4	—	—
Select red oaks	16.4	—	13.4	—	3.0	—	13.4	—	13.4	—	—	—
Other white oaks	69.0	9.0	3.0	29.3	27.6	—	36.3	9.0	—	20.1	7.2	—
Other red oaks	772.0	130.8	71.0	285.2	253.1	31.9	498.6	130.8	54.0	185.0	111.9	16.8
Hickory	47.3	6.2	—	29.0	12.1	—	20.6	6.2	—	7.2	7.2	—
Soft maple	65.8	—	—	42.1	5.7	18.0	37.8	—	—	19.8	—	18.0
Beech	15.4	—	5.5	—	3.4	6.5	8.9	—	5.5	—	3.4	—
Sweetgum	212.6	33.2	52.2	94.5	9.7	23.0	100.0	33.2	15.6	28.2	—	23.0
Tupelo and blackgum	930.3	149.5	309.4	339.0	29.5	102.9	604.5	149.5	233.4	119.9	8.9	92.8
Ash	104.0	27.2	19.9	49.8	7.0	—	81.4	27.2	19.9	27.3	7.0	—
Cottonwood	21.6	—	—	—	—	21.6	21.6	—	—	—	—	21.6
Yellow-poplar	425.7	163.5	80.3	61.4	69.3	51.2	349.2	163.5	74.4	19.9	48.2	43.2
Bay and magnolia	422.5	43.3	66.4	219.5	45.9	47.5	192.1	43.3	34.7	72.9	26.1	15.1
Black walnut	1.9	—	—	1.9	—	—	—	—	—	—	—	—
Sycamore	56.1	48.1	—	8.0	—	—	56.1	48.1	—	8.0	—	—
Elm	11.6	—	—	6.4	5.1	—	3.7	—	—	3.7	—	—
Other Eastern hardwoods	60.7	—	25.4	23.6	9.7	2.0	28.1	—	17.0	5.8	5.4	—
Total hardwoods	3,282.8	610.8	652.1	1,229.1	486.2	304.6	2,087.7	610.8	468.0	553.2	225.2	230.5
All species	10,247.6	2,945.9	2,199.9	4,225.8	486.2	389.9	4,783.1	1,771.2	1,099.7	1,418.1	225.2	268.9

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 24—Volume of growing stock on timberland by county and species group, Southwest-South Alabama, 1999

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
Million cubic feet							
Baldwin	715.6	409.6	377.5	32.1	306.0	194.5	111.5
Covington	505.8	326.5	325.0	1.5	179.3	106.5	72.8
Escambia	559.1	361.2	354.8	6.4	197.8	137.6	60.3
Mobile	536.9	381.5	355.7	25.8	155.4	118.5	36.9
Washington	776.6	451.4	435.9	15.6	325.1	214.1	111.0
Total	3,094.0	1,930.3	1,848.8	81.5	1,163.7	771.1	392.6

Numbers in rows and columns may not sum to totals due to rounding.

Table 25—Volume of live trees on timberland by county and species group, Southwest-South Alabama, 1999

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
Million cubic feet							
Baldwin	825.7	415.9	380.9	35.0	409.7	259.2	150.5
Covington	543.3	335.2	333.5	1.6	208.1	115.6	92.5
Escambia	582.0	362.2	355.6	6.5	219.8	148.0	71.8
Mobile	625.8	389.9	362.9	27.0	235.9	161.5	74.5
Washington	870.5	462.9	446.5	16.4	407.6	264.6	143.0
Total	3,447.3	1,966.1	1,879.6	86.6	1,481.2	948.9	532.3

Numbers in rows and columns may not sum to totals due to rounding.

Table 26—Volume of sawtimber on timberland by county and species group, Southwest-South Alabama, 1999

County	All species	Softwoods			Hardwoods		
		All	Yellow	Other	All	Soft	Hard
		softwood	pine	softwood	hardwood	hardwood	hardwood
Million board feet							
Baldwin	2,465.4	1,495.2	1,345.3	149.9	970.2	606.5	363.7
Covington	1,505.7	1,044.0	1,040.0	4.0	461.7	286.4	175.2
Escambia	2,021.8	1,427.7	1,403.4	24.3	594.1	428.2	165.9
Mobile	1,679.3	1,310.0	1,194.9	115.1	369.3	321.8	47.5
Washington	2,575.4	1,687.8	1,626.0	61.7	887.6	556.9	330.7
Total	10,247.6	6,964.8	6,609.7	355.1	3,282.8	2,199.8	1,083.0

Numbers in rows and columns may not sum to totals due to rounding.

Table 27—Volume of timber on timberland by class of timber and species group, Southwest-South Alabama, 1999

		Softwoods			Hardwoods		
Class of timber	All species	All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
Million cubic feet							
Sawtimber trees							
Saw-log portion	1,892.1	1,273.4	1,207.1	66.3	618.7	423.3	195.3
Upper-stem portion ^a	233.2	117.4	110.6	6.8	115.8	81.0	34.8
Total	2,125.3	1,390.8	1,317.7	73.1	734.5	504.4	230.1
Poletimber trees							
All growing-stock trees	968.7	539.5	531.1	8.3	429.2	266.8	162.5
	3,094.0	1,930.3	1,848.8	81.5	1,163.7	771.1	392.6
Rough trees							
Sawtimber size	146.4	17.2	13.9	3.3	129.3	72.0	57.2
Poletimber size	199.7	17.8	16.9	1.0	181.9	101.2	80.7
Total	346.1	35.0	30.7	4.3	311.1	173.2	137.9
Rotten trees							
Sawtimber size	4.9	0.8	—	0.8	4.1	3.5	0.6
Poletimber size	2.2	—	—	—	2.2	1.0	1.2
Total	7.2	0.8	—	0.8	6.4	4.5	1.8
Salvable dead trees							
Sawtimber size	29.6	18.6	16.2	2.4	11.0	4.1	6.9
Poletimber size	3.8	3.1	3.1	—	0.7	—	0.7
Total	33.3	21.7	19.3	2.4	11.7	4.1	7.6
All classes	3,480.7	1,987.8	1,898.8	89.0	1,492.9	953.0	539.9

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

^a Includes cull sections in the saw-log portion.

Table 28—Volume of live and growing-stock trees on timberland by ownership class and species group, Southwest-South Alabama, 1999

Ownership class	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
Live trees (million cubic feet)							
National forest	122.5	100.1	98.9	1.2	22.4	11.1	11.3
Other public	100.4	72.3	72.3	—	28.1	13.3	14.8
Forest industry	503.8	222.8	193.8	29.1	280.9	196.8	84.1
Nonindustrial private	2,720.7	1,570.9	1,514.6	56.3	1,149.8	727.7	422.2
All classes	3,447.3	1,966.1	1,879.6	86.6	1,481.2	948.9	532.3
Growing-stock trees (million cubic feet)							
National forest	118.4	99.9	98.7	1.2	18.5	10.1	8.4
Other public	92.7	72.2	72.2	—	20.5	9.2	11.3
Forest industry	455.6	219.5	191.7	27.8	236.1	166.4	69.6
Nonindustrial private	2,427.3	1,538.7	1,486.2	52.5	888.7	585.4	303.3
All classes	3,094.0	1,930.3	1,848.8	81.5	1,163.7	771.1	392.6

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 29—Volume of sawtimber on timberland by ownership class, species group, and size class, Southwest-South Alabama, 1999

Ownership class	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
All size classes (million board feet)							
National forest	506.2	461.0	457.0	4.0	45.3	28.0	17.3
Other public	326.0	273.9	273.9	—	52.1	25.0	27.1
Forest industry	1,405.4	616.0	495.4	120.6	789.4	538.9	250.5
Nonindustrial private	8,009.9	5,613.9	5,383.4	230.6	2,396.0	1,607.9	788.1
All classes	10,247.6	6,964.8	6,609.7	355.1	3,282.8	2,199.8	1,083.0
Trees ≥ 15.0 inches d.b.h. (million board feet)							
National forest	248.5	219.4	219.4	—	29.1	19.5	9.6
Other public	120.6	96.1	96.1	—	24.5	12.4	12.1
Forest industry	766.8	236.5	159.2	77.3	530.2	350.9	179.3
Nonindustrial private	3,647.3	2,143.4	2,006.7	136.7	1,503.9	1,010.3	493.6
All classes	4,783.1	2,695.4	2,481.3	214.1	2,087.7	1,393.2	694.6

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 30—Volume of growing stock on timberland by forest-type group, stand origin, and species group, Southwest-South Alabama, 1999

Forest-type group and stand origin	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
Million cubic feet							
Softwood types							
Longleaf-slash pine							
Planted	239.0	228.3	228.3	—	10.6	2.5	8.1
Natural	715.7	653.4	652.1	1.3	62.3	19.5	42.8
Total	954.7	881.7	880.4	1.3	72.9	22.1	50.9
Loblolly-shortleaf pine							
Planted	269.9	258.2	258.1	0.1	11.7	6.5	5.2
Natural	214.1	186.4	186.3	0.1	27.7	9.6	18.1
Total	484.0	444.6	444.5	0.1	39.4	16.1	23.3
Total softwoods	1,438.7	1,326.3	1,324.9	1.4	112.4	38.2	74.2
Hardwood types							
Oak-pine							
Planted	15.7	10.7	10.7	—	5.0	2.0	3.0
Natural	495.4	366.4	366.1	0.3	129.1	57.4	71.7
Total	511.1	377.1	376.8	0.3	134.1	59.4	74.7
Oak-hickory	200.8	50.4	47.6	2.7	150.4	70.8	79.6
Oak-gum-cypress	942.2	175.7	99.5	76.2	766.5	602.3	164.2
Elm-ash-cottonwood	1.2	0.8	—	0.8	0.4	0.4	—
Total hardwoods	1,655.3	604.0	523.9	80.1	1,051.3	732.9	318.4
Nonstocked	—	—	—	—	—	—	—
All groups	3,094.0	1,930.3	1,848.8	81.5	1,163.7	771.1	392.6

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 31—Average basal area of live trees per acre on timberland by ownership class, species group, and d.b.h., Southwest-South Alabama, 1999

Ownership class and species group	All tree sizes	D.b.h. (inches)			
		1.0-4.9	5.0-10.9	11.0-14.9	≥15.0
Square feet/acre					
National forest					
Softwood	48.2	5.2	12.3	13.3	17.4
Hardwood	29.7	9.1	11.2	3.8	5.5
Total	77.9	14.3	23.6	17.1	22.9
Other public					
Softwood	40.5	6.6	15.7	10.7	7.6
Hardwood	35.4	7.6	12.7	3.7	11.5
Total	75.9	14.2	28.3	14.4	19.1
Forest industry					
Softwood	32.7	8.2	19.0	3.2	2.2
Hardwood	36.7	8.9	11.9	7.4	8.5
Total	69.4	17.1	31.0	10.6	10.7
Nonindustrial private					
Softwood	36.7	5.3	16.7	9.4	5.3
Hardwood	38.7	11.0	15.0	6.4	6.2
Total	75.3	16.3	31.7	15.8	11.5
All classes					
Softwood	36.8	5.8	16.8	8.7	5.6
Hardwood	37.8	10.5	14.2	6.4	6.7
Total	74.6	16.2	31.0	15.0	12.3

Numbers in rows and columns may not sum to totals due to rounding.

Table 32—Average net annual growth of growing stock on timberland by county and species group, Southwest-South Alabama, 1990–1998

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
Million cubic feet							
Baldwin	37.5	25.6	24.2	1.4	11.9	7.2	4.7
Covington	19.7	15.1	15.1	0.0	4.5	3.0	1.5
Escambia	27.7	21.5	20.8	0.7	6.2	4.3	1.9
Mobile	24.3	17.9	17.3	0.6	6.4	4.2	2.2
Washington	39.1	23.0	22.1	0.9	16.1	10.4	5.7
Total	148.2	103.1	99.5	3.6	45.1	29.1	16.0

Numbers in rows and columns may not sum to totals due to rounding.

Table 33—Average net annual growth of live trees on timberland by county and species group, Southwest-South Alabama, 1990–1998

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
Million cubic feet							
Baldwin	41.6	26.3	25.1	1.2	15.3	8.7	6.5
Covington	24.0	18.7	18.5	0.2	5.3	3.3	2.1
Escambia	28.7	21.5	20.9	0.7	7.1	4.9	2.2
Mobile	28.1	18.7	18.1	0.6	9.4	5.6	3.8
Washington	43.4	24.2	23.2	1.0	19.2	12.8	6.4
Total	165.7	109.4	105.7	3.7	56.3	35.3	21.0

Numbers in rows and columns may not sum to totals due to rounding.

Table 34—Average net annual growth of sawtimber on timberland by county and species group, Southwest-South Alabama, 1990–1998

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
Million board feet							
Baldwin	124.5	80.7	73.5	7.2	43.8	25.2	18.6
Covington	55.3	44.9	44.9	0.1	10.4	6.0	4.4
Escambia	116.3	96.0	94.5	1.5	20.3	13.8	6.4
Mobile	74.7	55.7	52.6	3.2	18.9	15.5	3.5
Washington	135.6	88.8	86.2	2.5	46.8	28.5	18.3
Total	506.4	366.1	351.7	14.4	140.2	89.0	51.2

Numbers in rows and columns may not sum to totals due to rounding.

Table 35—Average annual removals of growing stock on timberland by county and species group, Southwest-South Alabama, 1990–1998

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
Million cubic feet							
Baldwin	27.6	18.6	18.2	0.4	8.9	6.5	2.4
Covington	21.1	16.2	16.2	—	4.9	2.1	2.8
Escambia	36.3	33.3	33.3	—	2.9	1.1	1.8
Mobile	16.3	10.5	10.4	0.1	5.8	4.5	1.3
Washington	31.3	20.7	20.7	—	10.7	6.2	4.5
Total	132.5	99.3	98.8	0.5	33.2	20.4	12.7

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 36—Average annual removals of live trees on timberland by county and species group, Southwest-South Alabama, 1990–1998

County	All species	Softwoods			Hardwoods		
		All	Yellow	Other	All	Soft	Hard
		softwood	pine	softwood	hardwood	hardwood	hardwood
Million cubic feet							
Baldwin	30.9	18.8	18.4	0.4	12.1	8.8	3.3
Covington	21.5	16.2	16.2	—	5.3	2.2	3.1
Escambia	37.2	33.9	33.9	—	3.3	1.2	2.1
Mobile	17.4	10.5	10.4	0.1	6.9	5.3	1.7
Washington	33.2	21.0	21.0	—	12.2	6.9	5.2
Total	140.2	100.4	99.9	0.5	39.7	24.3	15.4

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 37—Average annual removals of sawtimber on timberland by county and species group, Southwest-South Alabama, 1990–1998

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
Million board feet							
Baldwin	81.8	56.5	56.5	—	25.3	15.2	10.1
Covington	48.3	35.3	35.3	—	13.0	5.6	7.4
Escambia	137.4	130.4	130.4	—	7.0	2.5	4.6
Mobile	45.7	31.2	30.7	0.5	14.5	13.3	1.2
Washington	101.3	70.8	70.8	—	30.5	15.8	14.7
Total	414.6	324.3	323.8	0.5	90.3	52.4	37.9

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 38—Average net annual growth and average annual removals of live trees, growing stock, and sawtimber on timberland by species, Southwest-South Alabama, 1990–1998

Species	Live trees		Growing stock		Sawtimber	
	Net annual growth	Annual removals	Net annual growth	Annual removals	Net annual growth	Annual removals
			<i>Million cubic feet</i>		<i>Million board feet</i>	
Softwood						
Longleaf pine	21.4	31.3	21.4	31.3	104.4	136.9
Slash pine	36.4	35.5	35.8	35.1	108.6	93.0
Shortleaf pine	2.2	2.1	2.0	2.1	8.9	8.0
Loblolly pine	44.8	30.2	39.4	29.5	124.4	81.7
Virginia pine	0.3	—	0.3	—	—	—
Spruce pine	0.7	0.7	0.6	0.7	5.0	3.7
Sand pine	0.0	0.1	0.0	0.1	0.4	0.4
Baldcypress	2.8	0.5	2.9	0.5	10.6	0.5
Pondcypress	0.3	—	0.3	—	1.6	—
Atlantic white-cedar	0.3	—	0.3	—	2.2	—
Redcedars	0.3	—	—	—	—	—
Total softwoods	109.4	100.4	103.1	99.3	366.1	324.3
Hardwood						
Select white oaks	0.5	1.6	0.5	1.6	2.6	4.7
Select red oaks	-0.2	0.2	-0.3	0.2	-1.3	1.1
Other white oaks	2.7	1.2	1.7	0.9	6.4	1.0
Other red oaks	13.9	9.3	11.8	8.5	34.0	28.4
Hickory	0.8	0.9	0.7	0.9	1.9	2.7
Hard maple	0.1	—	0.1	—	—	—
Soft maple	3.0	1.3	2.0	0.9	4.5	0.9
Beech	-0.1	—	0.0	—	0.6	—
Sweetgum	6.6	3.3	5.7	3.1	13.9	8.7
Tupelo and blackgum	10.2	11.2	9.0	8.9	36.8	24.9
Ash	1.6	0.4	1.0	0.1	6.5	—
Cottonwood	-0.1	—	-0.1	—	-0.7	—
Basswood	0.0	—	—	—	—	—
Yellow-poplar	5.0	1.6	4.8	1.5	12.1	6.1
Bay and magnolia	9.1	4.9	6.5	4.1	19.3	6.8
Black cherry	0.3	—	0.0	—	—	—
Sycamore	0.3	0.2	0.3	0.2	1.7	0.5
Elm	0.3	0.4	0.3	0.3	0.6	1.1
Other Eastern hardwoods	2.3	3.3	1.0	2.0	1.3	3.4
Total hardwoods	56.3	39.7	45.1	33.2	140.2	90.3
All species	165.7	140.2	148.2	132.5	506.4	414.6

Numbers in columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 39—Average annual removals of growing stock on timberland by species and diameter class, Southwest-South Alabama, 1990–1998

Southwest South Alabama, 1996-1998											
Species	All classes	Diameter class (inches at breast height)									
		5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 and larger
Million cubic feet											
Softwood											
Longleaf pine	31.3	1.4	3.8	5.4	4.4	7.4	3.5	4.0	0.7	0.8	—
Slash pine	35.1	6.4	10.2	4.9	2.3	4.1	3.7	2.0	0.7	0.8	—
Shortleaf pine	2.1	0.1	0.3	0.3	0.4	0.2	0.3	—	0.3	—	—
Loblolly pine	29.5	3.9	8.4	6.9	1.6	2.4	2.9	1.1	1.8	0.4	—
Spruce pine	0.7	—	—	0.1	0.1	0.2	—	—	—	—	0.2
Sand pine	0.1	—	—	0.1	—	—	—	—	—	—	—
Baldcypress	0.5	0.2	0.2	—	0.1	—	—	—	—	—	—
Total softwoods	99.3	12.1	23.0	17.7	8.9	14.2	10.4	7.1	3.6	2.0	0.2
Hardwood											
Select white oaks	1.6	0.1	0.1	0.3	0.2	0.2	0.4	0.3	—	—	—
Select red oaks	0.2	—	—	—	—	—	—	—	0.2	—	—
Other white oaks	0.9	0.2	0.3	0.2	0.2	0.1	—	—	—	—	—
Other red oaks	8.5	1.0	0.9	0.8	0.9	1.0	0.7	0.6	0.3	1.5	0.7
Hickory	0.9	0.1	—	0.1	0.1	0.2	0.2	0.1	—	—	—
Soft maple	0.9	0.4	0.3	—	0.1	0.2	—	—	—	—	—
Sweetgum	3.1	0.4	0.7	0.2	0.1	0.5	0.6	0.2	0.2	0.2	—
Tupelo and blackgum	8.9	0.5	0.8	1.8	1.4	0.8	1.1	1.6	0.4	0.6	—
Ash	0.1	—	0.1	—	—	—	—	—	—	—	—
Yellow-poplar	1.5	0.1	—	0.3	—	0.1	0.5	0.3	—	0.2	—
Bay and magnolia	4.1	0.6	1.0	0.8	0.3	0.5	0.4	0.4	0.1	—	—
Sycamore	0.2	—	0.1	—	—	0.1	—	—	—	—	—
Elm	0.3	—	—	—	—	0.1	—	—	0.1	—	—
Other Eastern hardwoods	2.0	0.4	0.3	0.4	0.3	0.6	—	—	—	—	—
Total hardwoods	33.2	3.6	4.7	4.9	3.7	4.4	3.9	3.4	1.4	2.5	0.7
All species	132.5	15.8	27.7	22.6	12.6	18.6	14.3	10.5	5.0	4.5	0.9

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 40—Average annual mortality of live trees, growing stock, and sawtimber on timberland by species, Southwest-South Alabama, 1990–1998

Species	Live trees	Growing stock	Sawtimber
	<i>Million cubic feet</i>		<i>Million board feet</i>
Softwood			
Longleaf pine	4.7	4.4	20.2
Slash pine	7.7	7.3	22.6
Loblolly pine	4.5	4.4	10.0
Spruce pine	0.3	0.3	1.3
Baldcypress	0.3	0.1	0.7
Atlantic white-cedar	0.1	0.1	0.6
Total softwoods	17.5	16.6	55.4
Hardwood			
Select white oaks	0.1	0.1	—
Select red oaks	0.6	0.6	3.8
Other white oaks	0.1	0.1	—
Other red oaks	6.9	5.3	18.9
Hickory	0.7	0.4	1.9
Soft maple	0.3	0.2	0.6
Beech	0.3	—	—
Sweetgum	0.7	0.6	2.0
Tupelo and blackgum	1.6	1.3	1.6
Ash	0.4	0.2	1.2
Cottonwood	0.2	0.2	1.3
Yellow-poplar	0.6	0.5	1.5
Bay and magnolia	2.1	1.6	4.0
Elm	0.3	0.3	1.2
Other Eastern hardwoods	1.5	0.8	3.8
Total hardwoods	16.5	12.3	41.8
All species	34.0	29.0	97.2

Numbers in columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 41—Average net annual growth and average annual removals of growing stock on timberland by ownership class and species group, Southwest-South Alabama, 1990–1998

Ownership class	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
Average net annual growth (million cubic feet)							
National forest	3.1	3.0	3.0	0.0	0.1	0.4	-0.3
Other public	2.4	2.0	2.0	—	0.4	-0.0	0.4
Forest industry	27.9	20.4	18.6	1.8	7.5	4.6	3.0
Nonindustrial private	114.9	77.7	76.0	1.7	37.2	24.2	13.0
All classes	148.2	103.1	99.5	3.6	45.1	29.1	16.0
Average annual removals (million cubic feet)							
National forest	2.2	2.2	2.2	—	—	—	—
Other public	0.9	0.6	0.6	—	0.3	0.2	0.1
Forest industry	36.6	24.0	23.5	0.5	12.6	9.7	2.9
Nonindustrial private	92.9	72.6	72.6	—	20.3	10.6	9.7
All classes	132.5	99.3	98.8	0.5	33.2	20.4	12.7

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 42—Average net annual growth and average annual removals of live trees on timberland by ownership class and species group, Southwest-South Alabama, 1990–1998

Ownership class	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
Average net annual growth (million cubic feet)							
National forest	2.9	2.9	2.9	0.0	0.0	0.2	-0.1
Other public	2.7	2.1	2.1	—	0.6	0.1	0.5
Forest industry	29.5	20.4	18.7	1.7	9.2	5.7	3.4
Nonindustrial private	130.6	84.1	82.1	2.0	46.5	29.3	17.2
All classes	165.7	109.4	105.7	3.7	56.3	35.3	21.0
Average annual removals (million cubic feet)							
National forest	2.2	2.2	2.2	—	—	—	—
Other public	1.3	0.7	0.7	—	0.6	0.2	0.4
Forest industry	40.1	24.2	23.7	0.5	15.9	12.2	3.7
Nonindustrial private	96.6	73.3	73.3	—	23.3	11.9	11.4
All classes	140.2	100.4	99.9	0.5	39.7	24.3	15.4

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 43—Average net annual growth and average annual removals of sawtimber on timberland by ownership class and species group, Southwest-South Alabama, 1990–1998

Ownership class	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
Average net annual growth (million board feet)							
National forest	16.3	15.9	15.8	0.1	0.5	1.7	-1.3
Other public	9.4	9.5	9.5	—	-0.1	-0.4	0.3
Forest industry	79.5	47.8	40.6	7.2	31.7	19.0	12.6
Nonindustrial private	401.2	293.0	285.9	7.1	108.2	68.6	39.6
All classes	506.4	366.1	351.7	14.4	140.2	89.0	51.2
Average annual removals (million board feet)							
National forest	9.9	9.9	9.9	—	—	—	—
Other public	3.9	2.4	2.4	—	1.5	0.8	0.7
Forest industry	83.2	45.0	44.4	0.5	38.2	27.6	10.6
Nonindustrial private	317.5	267.0	267.0	—	50.5	24.0	26.5
All classes	414.6	324.3	323.8	0.5	90.3	52.4	37.9

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

Table 44—Average net annual growth of growing stock on timberland by forest-type group, stand origin, and species group, Southwest-South Alabama, 1990–1998

Forest-type group and stand origin ^a	Softwoods				Hardwoods		
	All species	All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Million cubic feet</i>							
Softwood types							
Longleaf–slash pine							
Planted	22.9	21.4	21.4	—	1.5	1.3	0.1
Natural	30.5	25.8	25.8	0.0	4.7	1.8	2.9
Total	53.4	47.2	47.2	0.0	6.2	3.2	3.0
Loblolly–shortleaf pine							
Planted	21.6	21.3	21.3	—	0.3	0.3	0.0
Natural	16.2	13.6	13.6	—	2.6	1.8	0.8
Total	37.8	34.9	34.9	—	2.8	2.0	0.8
Total softwoods	91.2	82.2	82.2	0.0	9.0	5.2	3.8
Hardwood types							
Oak–pine							
Planted	0.6	0.2	0.2	—	0.3	0.1	0.2
Natural	17.2	11.4	11.3	0.1	5.8	2.2	3.6
Total	17.7	11.6	11.6	0.1	6.1	2.3	3.8
Oak–hickory	11.3	3.1	2.4	0.7	8.2	4.5	3.7
Oak–gum–cypress	28.0	6.2	3.4	2.8	21.8	17.1	4.7
Total hardwoods	57.0	20.9	17.3	3.5	36.2	23.9	12.2
Nonstocked	—	—	—	—	—	—	—
All groups	148.2	103.1	99.5	3.6	45.1	29.1	16.0

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

^a Classifications at the beginning of the remeasurement period.

Table 45—Average annual removals of growing stock on timberland by forest-type group, stand origin, and species group, Southwest-South Alabama, 1990–1998

Forest-type group and stand origin ^a	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
Million cubic feet							
Softwood types							
Longleaf–slash pine							
Planted	10.8	10.8	10.8	—	—	—	—
Natural	45.1	41.2	41.2	—	3.9	2.1	1.8
Total	55.9	52.0	52.0	—	3.9	2.1	1.8
Loblolly–shortleaf pine							
Planted	12.5	12.1	12.1	—	0.4	0.3	0.1
Natural	13.4	11.6	11.6	—	1.8	0.3	1.5
Total	25.8	23.7	23.7	—	2.2	0.6	1.6
Total softwoods	81.7	75.7	75.7	—	6.1	2.6	3.4
Hardwood types							
Oak–pine							
Planted	3.1	1.5	1.5	—	1.6	0.9	0.7
Natural	17.7	12.1	12.1	—	5.6	2.2	3.4
Total	20.8	13.6	13.6	—	7.2	3.1	4.1
Oak–hickory	6.3	1.8	1.8	—	4.5	1.9	2.6
Oak–gum–cypress	23.7	8.3	7.7	0.5	15.5	12.8	2.6
Total hardwoods	50.8	23.7	23.1	0.5	27.1	17.8	9.3
Nonstocked	—	—	—	—	—	—	—
All groups	132.5	99.3	98.8	0.5	33.2	20.4	12.7

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

^a Classifications at the beginning of the remeasurement period.

Table 46—Fresh weight of live trees on timberland by ownership class, species group, and tree component, Southwest-South Alabama, 1999

Ownership class and species group	All components	All live saplings	Component					
			Growing-stock trees			Cull trees		
			Total	Boles	Stumps, tops, and limbs	Total	Boles	Stumps, tops, and limbs
Thousand tons								
National forest								
Softwood	4,776.8	300.5	4,467.1	3,890.6	576.5	9.2	7.1	2.1
Hardwood	1,505.7	412.4	887.4	696.8	190.6	205.9	153.4	52.6
Total	6,282.5	712.9	5,354.5	4,587.4	767.1	215.1	160.5	54.6
Other public								
Softwood	3,447.6	189.3	3,254.9	2,792.4	462.6	3.4	2.3	1.2
Hardwood	1,724.5	337.6	1,003.7	798.0	205.7	383.3	288.6	94.7
Total	5,172.1	526.8	4,258.6	3,590.4	668.3	386.7	290.8	95.9
Forest industry								
Softwood	11,699.9	1,537.6	10,017.9	8,228.7	1,789.2	144.5	114.7	29.8
Hardwood	14,862.4	2,170.2	10,552.7	8,651.4	1,901.3	2,139.5	1,636.7	502.8
Total	26,562.2	3,707.8	20,570.6	16,880.1	3,690.5	2,283.9	1,751.4	532.6
Nonindustrial private								
Softwood	76,318.8	5,892.8	68,756.8	58,320.5	10,436.3	1,669.3	1,215.2	454.2
Hardwood	66,826.6	12,629.3	41,422.3	33,169.1	8,253.2	12,775.0	9,803.3	2,971.8
Total	143,145.4	18,522.1	110,179.0	91,489.6	18,689.5	14,444.3	11,018.4	3,425.9
All ownerships								
Softwood	96,243.0	7,920.1	86,496.6	73,232.1	13,264.5	1,826.3	1,339.2	487.2
Hardwood	84,919.1	15,549.5	53,866.1	43,315.3	10,550.8	15,503.6	11,881.9	3,621.8
Total	181,162.1	23,469.5	140,362.7	116,547.4	23,815.3	17,329.9	13,221.0	4,108.9

Numbers in rows and columns may not sum to totals due to rounding.

Table 47—Area of timberland treated or disturbed annually and retained in timberland by treatment or disturbance and ownership class, Southwest-South Alabama, 1990 to 1999

Treatment or disturbance	All classes	Ownership class		
		Public	Forest industry	Nonindustrial private
Thousand acres				
Final harvest	53.6	1.1	19.4	33.1
Partial harvest ^a	17.3	0.6	1.8	14.9
Seed tree/shelterwood	3.6	—	—	3.6
Commercial thinning	31.8	0.7	3.3	27.7
Other stand improvement	4.6	—	0.2	4.4
Site preparation	31.5	0.8	15.6	15.1
Artificial regeneration ^b	29.6	1.0	13.0	15.6
Natural regeneration ^b	40.0	0.5	4.9	34.6
Other treatment	19.9	4.3	1.2	14.4
Natural disturbance				
Disease	25.0	1.5	5.4	18.1
Insects	—	—	—	—
Fire	—	—	—	—
Weather	21.5	3.0	3.7	14.8
Animals	0.9	—	—	0.9
Other disturbances				
Grazing	0.7	—	—	0.7
Other human-caused disturbance	6.5	0.4	0.6	5.4

Since some acres experience more than one treatment or disturbance, there are no column totals. Numbers in rows may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

^a Includes high-grading and some selective cutting.

^b Includes establishment of trees for timber production on forest and nonforest land.

Table 48—Area of timberland treated or disturbed annually and retained in timberland by treatment or disturbance and forest management type, Southwest-South Alabama, 1990 to 1999

Treatment or disturbance	All types	Forest management type ^a					
		Pine plantation	Natural pine	Oak–pine	Upland hardwood	Lowland hardwood	Nonstocked
Thousand acres							
Final harvest	53.6	12.0	21.5	7.8	4.9	7.4	—
Partial harvest ^b	17.3	—	8.8	4.1	0.5	3.5	0.4
Seed tree/shelterwood	3.6	0.2	2.8	0.7	—	—	—
Commercial thinning	31.8	10.9	18.1	2.7	—	—	—
Other stand improvement	4.6	1.9	0.7	1.9	—	—	—
Site preparation	31.5	11.4	13.0	3.3	1.9	2.0	—
Other treatment	19.9	2.7	12.3	2.6	1.5	0.8	—
Natural disturbance							
Disease	25.0	14.8	6.2	1.4	0.2	2.5	—
Insects	—	—	—	—	—	—	—
Fire	—	—	—	—	—	—	—
Weather	21.5	2.2	9.7	1.8	1.2	6.6	—
Animals	0.9	—	—	—	—	0.9	—
Other disturbance							
Grazing	0.7	—	0.7	—	—	—	—
Other human-caused disturbance	6.5	0.1	2.1	2.3	0.7	1.2	—

Since some acres experience more than one treatment or disturbance, there are no column totals. Numbers in rows may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

^a Classification before treatment or disturbance.

^b Includes high-grading and some selective cutting.

Table 49—Area of timberland regenerated annually by type of regeneration and forest management type, Southwest-South Alabama, 1990 to 1999

Type of regeneration	All types	Forest management type ^a					
		Pine plantation	Natural pine	Oak–pine	Upland hardwood	Lowland hardwood	Nonstocked
Thousand acres							
Artificial regeneration following harvest	21.0	15.6	—	5.1	—	0.3	—
Natural regeneration following harvest	21.8	—	5.8	3.8	6.5	5.7	0.0
Other artificial regeneration on forest land	3.1	2.0	—	1.1	—	—	—
Other natural regeneration on forest land	13.1	—	5.4	3.9	2.8	1.0	—
Artificial regeneration on former nonforest land	5.1	4.6	—	0.5	—	—	0.0
Natural reversion of former nonforest land	4.7	—	3.0	0.4	1.2	0.2	—
Total	68.8	22.2	14.2	14.8	10.4	7.1	0.0

Numbers in rows and columns may not sum to totals due to rounding.

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell.

^a Classification after regeneration.



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This report summarizes a 1999 inventory of the forest resources of a five-county area of Alabama. Major findings are highlighted in text and graphs; detailed data are presented in 49 tables.

Keywords: Forest ownership, timberland, timber growth, timber removals, timber volume.

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