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Forest Statistics for West-Central Alabama, 1999

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Foreword

This report highlights the principal findings of the seventh forest survey of West-Central Alabama. Field work began in April 1997 and was completed in May 2000. 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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^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.

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Highlights

This report summarizes results from a 1999 inventory of the forest resources of West-Central Alabama (fig. 1). These data are considered preliminary; a finalized State analytical report will be published after all survey units have been inventoried. Current estimates of forest area, timberland area, related classifications such as ownership and forest type, and timber volume are presented. While comparisons are made with values from the previous inventory, methods for determining several key attributes such as 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 Research Work Units (FIA). 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 nine-county area has increased 1 percent since 1990 to 3.4 million acres. Eighty-four thousand acres were diverted from timberland to other land uses, while 131,000 acres were added from previously nonforest land uses, resulting in a net addition of 47,000 acres. Four-fifths of the diverted timberland was cleared for urban and related land uses. Timberland covered 78 percent of the land area in West-Central Alabama.

Ownership—Nonindustrial private forest (NIPF) land ownership increased 6 percent to 2.52 million acres. Corporate ownership increased 46 percent to 307,000 acres. Ownership by individuals increased 2 percent to 2.22 million acres. NIPF land owners controlled 74 percent of the timberland in West-Central Alabama. Timberland owned by forest industry dropped 15 percent to 690,000 acres. Public agencies controlled 190,000 acres, or 6 percent of total timberland.

Forest type—Forest stands classified as hardwood forest types accounted for 44 percent of the timberland area. The

area of hardwood stands decreased 6 percent since 1990. The area of softwood stands increased 12 percent to 1.20 million acres, or 35 percent of the timberland area. The area of oak-pine stands increased 2 percent to 714,000 acres. Planted stands occupied 1.0 million acres—29 percent of all timberland.

Stand treatment—Harvesting and regeneration were the predominant treatment and management activities in the timberland of the region since 1990. Final harvest occurred on 76,500 acres annually. Thirty-five percent of these harvests were from oak-pine stands, 28 percent from upland hardwood stands, 22 percent from natural pine stands, 13 percent from pine plantations, and 2 percent from lowland hardwood stands. Reforestation and afforestation combined averaged 100,000 acres annually.

Softwood volume—Volume of softwood growing stock increased 6 percent to 1.8 billion cubic feet between 1990 and 1999. Softwood growing-stock volume increased 40 percent on public lands to 188 million cubic feet, and 1 percent on NIPF lands to 1.1 billion cubic feet. On forest industry lands, softwood growing-stock volume increased by 9 percent to 502 million cubic feet. Loblolly pine was the predominate species at 1.5 billion cubic feet, an increase of 20 percent since 1990. Planted stands accounted for 43 percent of the 1999 softwood inventory. The inventory of softwood sawtimber totaled about 5.9 billion board feet, a decrease of 3 percent from 1990.

Hardwood volume—Volume of hardwood growing stock increased 5 percent to 2.3 billion cubic feet. Hardwood growing-stock volume increased 56 percent on public lands to 180 million cubic feet, and 10 percent on NIPF lands to 1.9 billion cubic feet. Hardwood growing-stock volume decreased 35 percent to 256 million cubic feet on forest industry lands. Other red oaks are the predominate species group with 516 million cubic feet. The inventory of hardwood sawtimber increased 21 percent to 7.3 billion board feet.

Growth—Net annual growth of softwood growing stock averaged 147.6 million cubic feet, an increase of 53 percent since the previous survey period. Softwood growth increased 208 percent on public lands, 34 percent on NIPF lands, and 71 percent on forest industry land. Planted stands accounted for more than one-half the softwood growth. Net annual growth of hardwood growing stock averaged 88.4 million cubic feet, down by 6 percent since the previous inventory. Hardwood growth increased 139 percent on public lands, but decreased 8 percent and 32 percent on NIPF ownership and forest industry lands, respectively, since the previous survey period.

Removals—Annual removals of softwood growing stock averaged 152.8 million cubic feet, an increase of 13 percent since the previous survey period. Sixty-four percent of the softwood removals were from NIPF land, 31 percent from forest industry land, and 6 percent from public lands. Softwood removals exceeded softwood growth by 4 percent. Planted stands accounted for 31 percent of the softwood removals. Annual removals of hardwood growing stock averaged 82.0 million cubic feet, an increase of 3 percent since the previous survey period. Eighty-four percent of hardwood removals were from NIPF land, 13 percent from forest industry land, and 3 percent from public land. Hardwood growth exceeded removals by 8 percent.

Mortality—Average annual mortality of growing stock increased 3 percent to 46.6 million cubic feet since the previous survey period. Hardwood mortality was stable at 23.4 million cubic feet; softwood mortality increased 8 percent to 23.2 million cubic feet.

Inventory Methods

The Southern Research Station, FIA secured data on forest acreage and timber volume using a three-step process. A forest-nonforest classification using aerial photographs was completed using a count of points representing approximately 230 acres each. 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 approximately 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 inch 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 on each plot. Condition classes were defined by six attributes: land-use, forest type, stand origin, stand size, stand density, and major ownership. The process of delineating a fixed-radius plot into numerous sections based on forest and land-use conditions is called mapping. All trees tallied were assigned to their respective condition class. For conditions that were too small to have sufficient stocking, the field person assigned a forest type and stand size based on similar conditions outside the plot boundary. In all other cases, these classifications were derived using standard FIA algorithms.

The cluster of four fixed plots sampled timberland at 662 ground sample locations in this survey unit. Estimates of timber volume and forest classifications were derived from tree measurements and classifications made at those locations. Volumes for individual tally trees were computed using equations for each of the major species in the survey unit. Previous surveys used deterministic measurements taken along the bole of each tree to compute individual tree volumes. Estimates of 1990 tree volumes were recomputed using the new equations. All comparisons of standing volume use these recomputed values. These recomputed volumes do not match previously published numbers.

Estimates of growth, removals, and mortality were determined from the remeasurement of 591 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. Change estimates for the current survey were determined by remeasuring 5 of the 10 points from the previous survey. Any new trees that may have grown onto the plot during the intersurvey period were not sampled. The new growth algorithms do not account for ongrowth and nongrowth of new trees.

Moving from a variable-radius prism point sampling scheme composed of 10 points, in which all points were “rotated” into forest conditions if a point fell in a nonforest condition, to a fixed-plot design where all forest and nonforest conditions are mapped on the plot brought about changes in the way stocking and expansion factors are estimated. Estimates of stocking are used in the computation of forest

type and stand size. Expansion factors are used to bring plot and tree level estimates up to the population level. The exact impact these changes have on the survey is often debated and is currently being investigated. Therefore, since the sample design and methods of deriving stand parameters have changed since the 1990 Alabama survey, users should be aware of these changes and use caution when making rigorous comparisons between this and earlier surveys.

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
	<i>Percent</i>		
Timberland (1,000 acres)	3,404.3 ±	29.3	0.86
All live (M ft³)			
Inventory	4,593.6 ±	171.8	3.74
Net annual growth	251.7 ±	10.7	4.26
Annual removals	248.1 ±	17.5	7.07
Annual mortality	55.8 ±	4.4	7.82
Growing stock (M ft³)			
Inventory	4,170.7 ±	163.1	3.91
Net annual growth	236.0 ±	10.4	4.41
Annual removals	234.9 ±	16.8	7.16
Annual mortality	46.6 ±	4.0	8.50
Sawtimber (M fbm)			
Inventory	13,239.5 ±	740.1	5.59
Net annual growth	826.8 ±	40.4	4.89
Annual removals	760.2 ±	65.3	8.59
Annual mortality	146.6 ±	15.0	10.22

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:

$$SE_s = 3.91 \frac{\sqrt{4,170.7}}{\sqrt{1,909.9}} = 5.78 .$$

Thus, the sampling error is 5.78 percent, and the resulting confidence interval (two times out of three) for hardwood growing-stock inventory on NIPF land is $1,909.9 \pm 110.4$ 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, West-Central Alabama, 1999

Counties and survey unit	Timberland area	Live trees			Growing stock			Sawtimber		
		Volume	Growth	Removals	Volume	Growth	Removals	Volume	Growth	Removals
<i>Percent</i>										
Bibb	2.3	9.5	9.2	34.0	9.9	9.3	34.4	15.8	10.0	46.6
Fayette	2.1	12.5	13.9	23.8	13.0	14.7	23.7	18.7	17.4	26.4
Greene	2.9	12.5	19.2	28.8	13.5	19.5	29.3	17.0	16.8	34.5
Hale	2.9	12.6	14.6	23.9	13.3	14.0	24.7	16.0	14.0	28.0
Lamar	2.6	14.4	13.6	22.6	15.0	14.1	23.1	18.5	16.8	29.2
Marion	3.0	10.1	12.1	20.2	10.6	13.2	20.5	16.2	20.9	29.1
Perry	2.9	9.7	13.0	21.2	10.2	13.7	21.2	15.9	14.8	24.0
Pickens	2.2	11.8	11.2	15.4	11.9	11.3	15.8	16.3	12.6	18.2
Tuscaloosa	2.1	8.1	10.0	15.3	8.6	10.5	15.4	10.9	11.1	18.3
Survey unit	0.9	3.7	4.3	7.1	3.9	4.4	7.2	5.6	4.9	8.6

^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 merchant-able. 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, whitecedar, 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

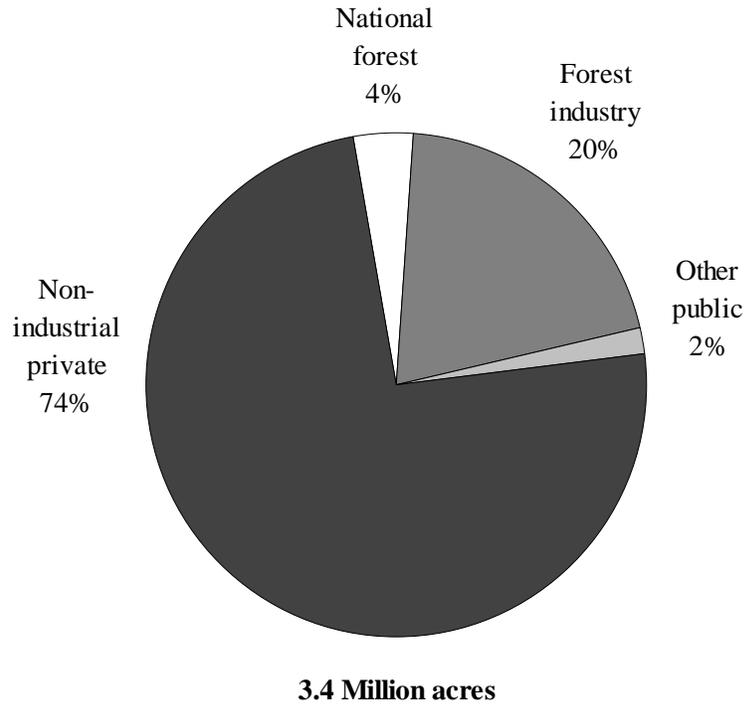


Figure 2—Distribution of timberland by ownership class, West-Central Alabama, 1999.

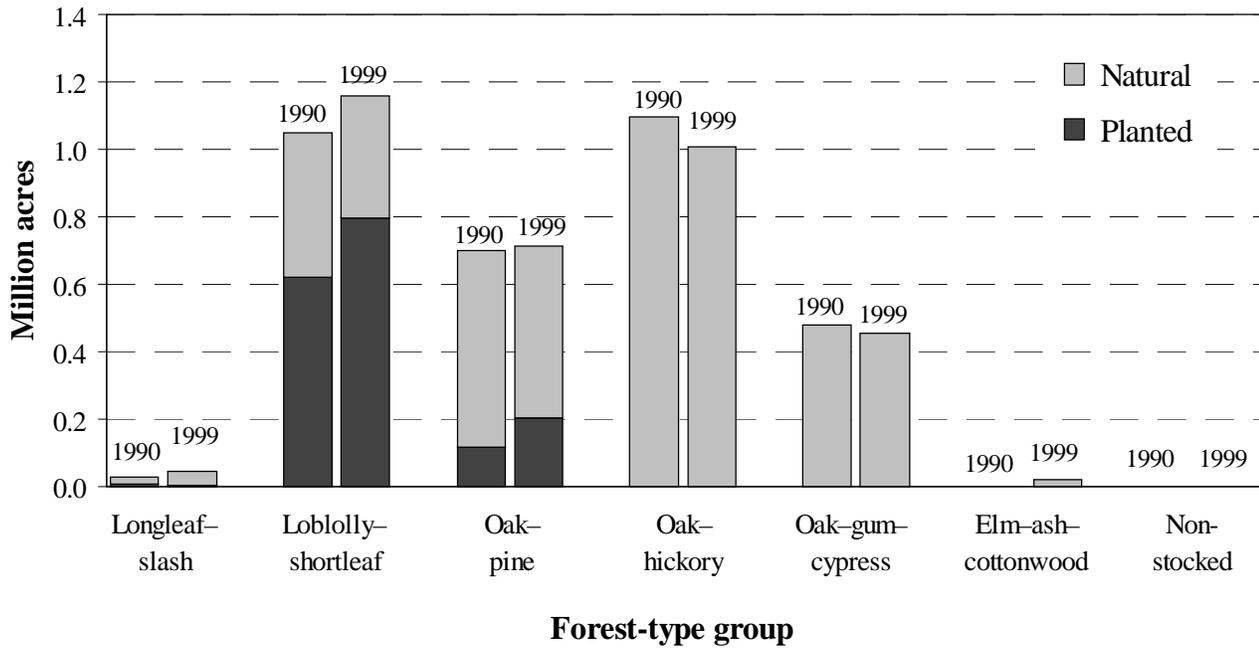


Figure 3—Area of timberland by forest-type group and stand origin, West-Central Alabama, 1990 and 1999.

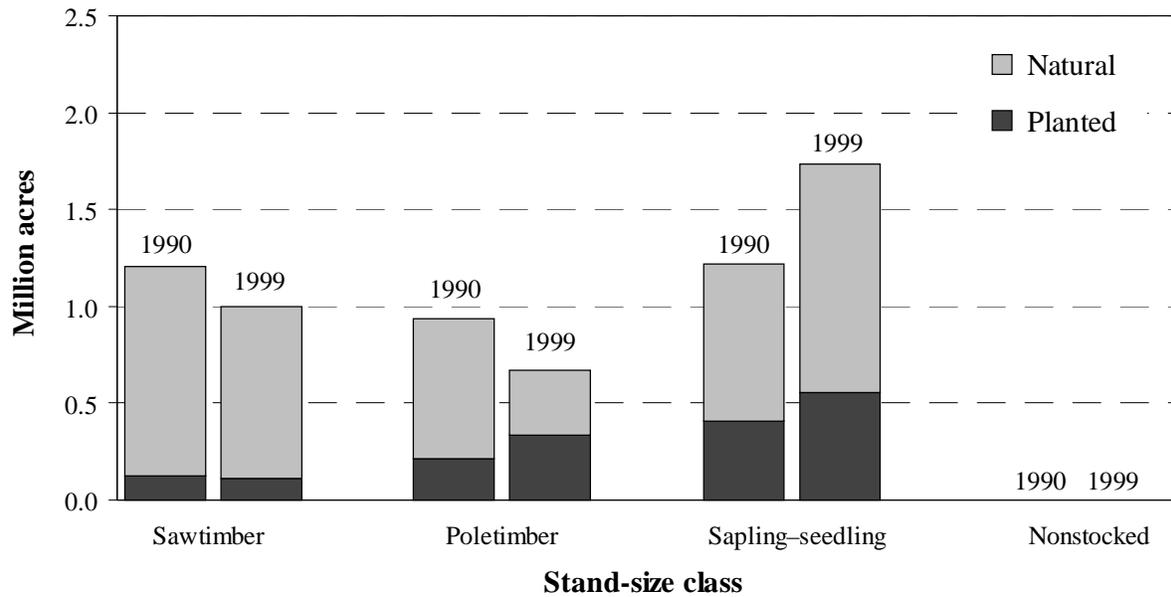


Figure 4—Area of timberland by stand-size class and stand origin, West-Central Alabama, 1990 and 1999.

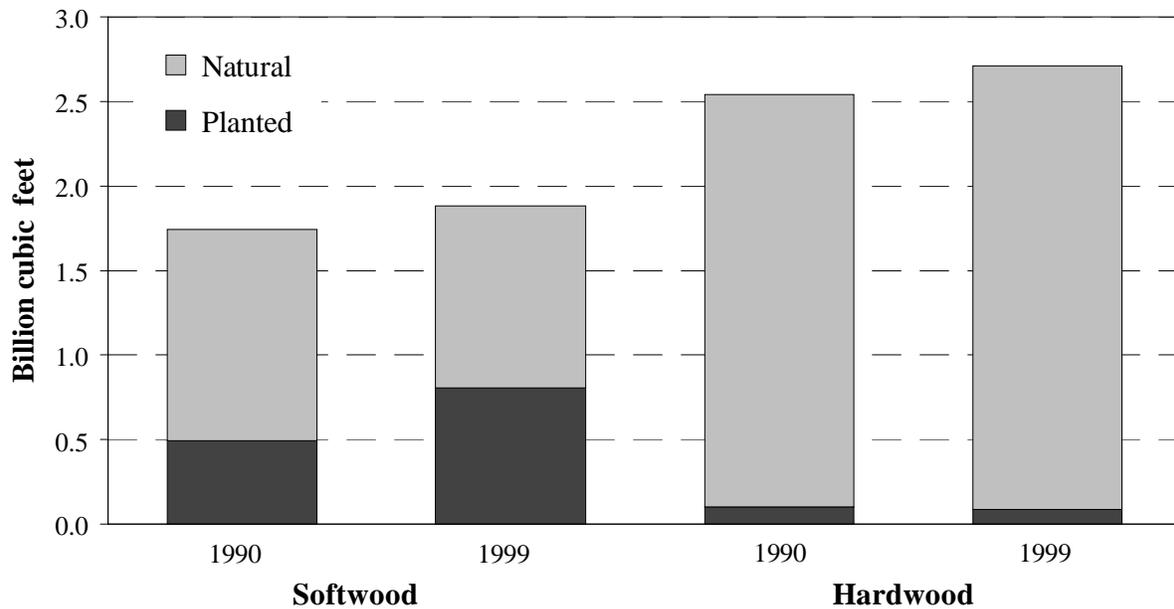


Figure 5—Volume of live trees on timberland by species group and stand origin, West-Central Alabama, 1990 and 1999.

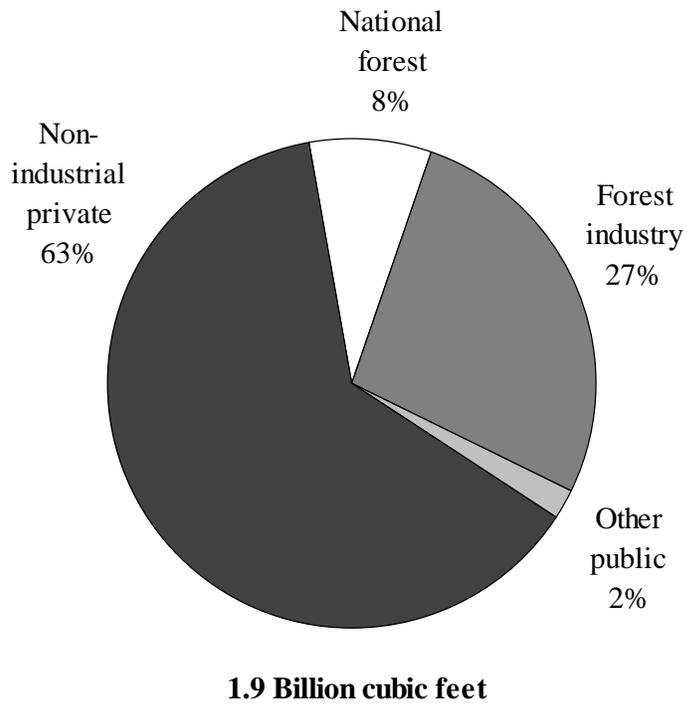


Figure 6—Distribution of softwood live tree volume by ownership class, West-Central Alabama, 1999.

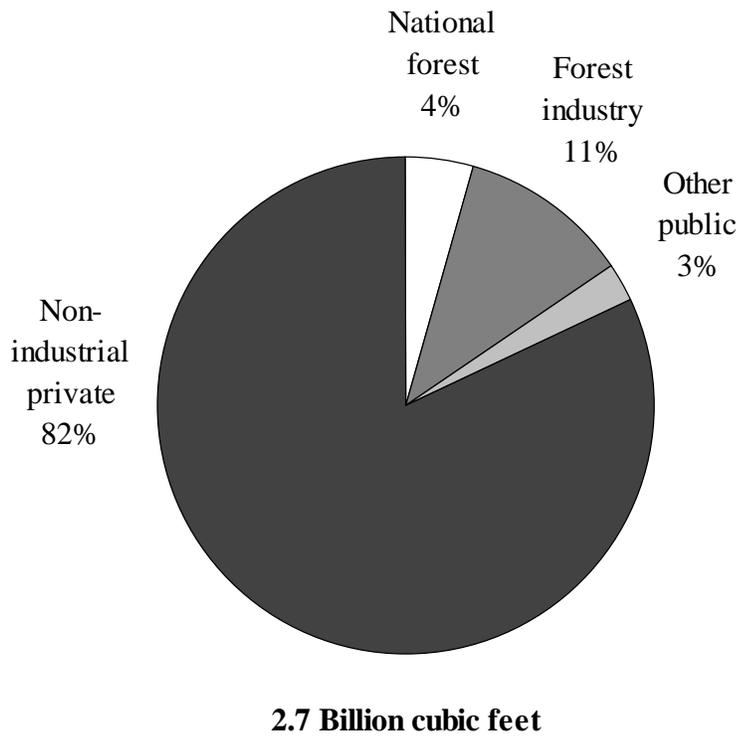


Figure 7—Distribution of hardwood live tree volume by ownership class, West-Central Alabama, 1999.

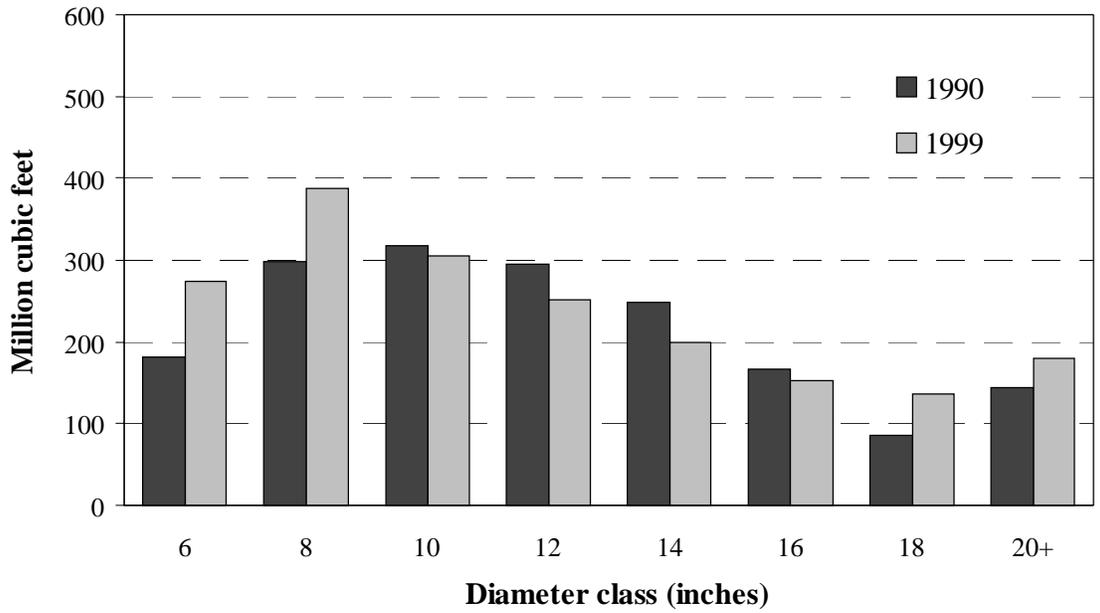


Figure 8—Volume of softwood live trees on timberland by diameter class, West-Central Alabama, 1990 and 1999.

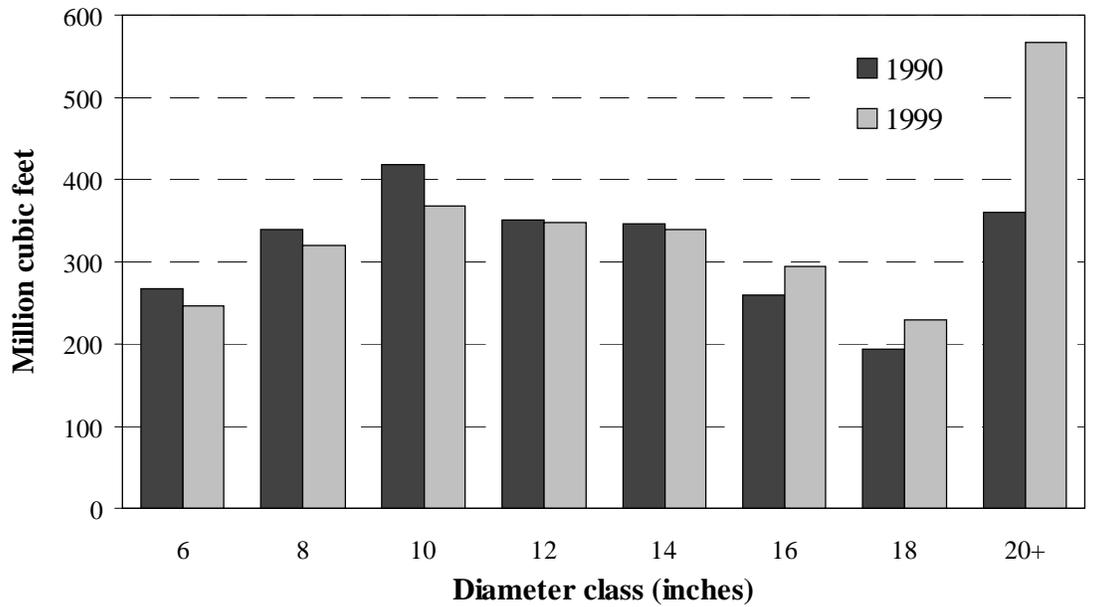


Figure 9—Volume of hardwood live trees on timberland by diameter class, West-Central Alabama, 1990 and 1999.

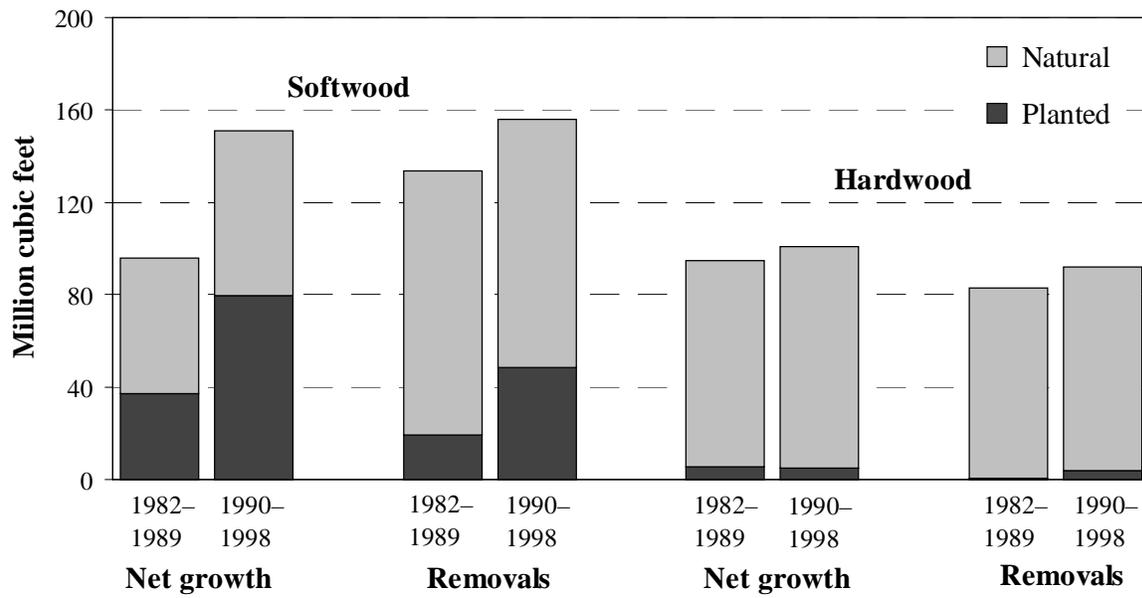


Figure 10—Average net annual growth and removals of live trees on timberland by species group and stand origin, West-Central Alabama, 1982–1989 and 1990–1998.

Cross Reference of Eastern Core Tables

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4	5	17	28
5	6	18	32, 34
6	7	19	35, 37
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8	10	21	38
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10	17	23	41
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13	21		

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Table 1—Land area by county and land class, West-Central Alabama, 1999

County	Total land area ^a	Forest land				Other land ^b
		Total forest	Timberland	Productive reserved	Other	
<i>Thousand acres</i>						
Bibb	398.3	345.5	345.5	—	—	52.8
Fayette	401.8	333.6	333.6	—	—	68.2
Greene	413.4	284.3	284.3	—	—	129.1
Hale	412.0	263.1	263.1	—	—	148.9
Lamar	387.1	314.6	314.6	—	—	72.5
Marion	474.5	365.9	365.9	—	—	108.7
Perry	460.5	357.0	357.0	—	—	103.5
Pickens	564.1	480.7	480.7	—	—	83.5
Tuscaloosa	848.2	659.6	659.6	—	—	188.6
Total	4,360.0	3,404.3	3,404.3	—	—	955.8

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.

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

^b Includes 14.3 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, West-Central Alabama, 1999

Forest-type group	All classes	Ownership class					Forest industry	Nonindustrial private
		National forest	Miscellaneous Federal	State	County and municipal	Other		
<i>Thousand acres</i>								
Longleaf–slash pine	45.8	30.7	—	—	—	1.4	13.7	
Loblolly–shortleaf pine	1,159.2	33.2	2.8	14.5	1.2	362.4	745.1	
Oak–pine	714.1	27.6	—	—	—	155.6	530.8	
Oak–hickory	1,007.7	32.4	5.7	14.7	—	112.1	842.9	
Oak–gum–cypress	454.3	7.1	6.2	9.9	4.4	58.2	368.5	
Elm–ash–cottonwood	22.9	—	—	—	—	—	22.9	
Nonstocked	0.4	—	—	—	—	—	0.4	
Total	3,404.3	130.9	14.8	39.1	5.5	689.6	2,524.3	

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, West-Central Alabama, 1999

County	All classes	Ownership class						
		National forest	Miscellaneous Federal	State	County and municipal	Forest industry	Nonindustrial private Corporate Individual	
<i>Thousand acres</i>								
Bibb	345.5	59.8	—	—	—	84.5	18.1	183.1
Fayette	333.6	—	—	17.9	—	67.6	21.6	226.5
Greene	284.3	—	14.3	—	4.4	37.2	53.6	174.8
Hale	263.1	28.1	—	—	—	47.0	16.8	171.2
Lamar	314.6	—	—	5.2	—	48.4	28.8	232.3
Marion	365.9	—	—	—	1.2	85.7	12.9	266.1
Perry	357.0	32.4	—	—	—	60.5	18.5	245.6
Pickens	480.7	—	0.5	—	—	129.9	22.5	327.9
Tuscaloosa	659.6	10.5	—	16.1	—	128.8	114.1	390.0
Total	3,404.3	130.9	14.8	39.1	5.5	689.6	306.9	2,217.4

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 4—Area of timberland by county and forest-type group, West-Central Alabama, 1999

County	All groups	Forest-type group						
		Longleaf–slash	Loblolly–shortleaf	Oak–pine	Oak–hickory	Oak–gum–cypress	Elm–ash–cottonwood	Nonstocked
<i>Thousand acres</i>								
Bibb	345.5	27.1	129.9	101.4	72.8	14.3	—	—
Fayette	333.6	—	124.4	52.0	115.0	26.6	15.5	—
Greene	284.3	—	69.4	47.3	72.3	95.3	—	—
Hale	263.1	5.4	88.9	32.6	82.1	54.1	—	—
Lamar	314.6	—	67.8	86.4	100.6	57.7	2.1	—
Marion	365.9	—	170.1	38.2	149.1	5.9	2.6	—
Perry	357.0	9.5	136.7	79.2	88.3	42.9	—	0.4
Pickens	480.7	—	150.9	118.1	139.2	72.6	—	—
Tuscaloosa	659.6	3.8	221.1	159.0	188.3	84.8	2.6	—
Total	3,404.3	45.8	1,159.2	714.1	1,007.7	454.3	22.9	0.4

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 5—Area of timberland by county and stand-size class, West-Central Alabama, 1999

County	All classes	Stand-size class			
		Sawtimber	Poletimber	Sapling-seedling	Nonstocked
<i>Thousand acres</i>					
Bibb	345.5	132.4	98.1	115.0	—
Fayette	333.6	77.1	71.5	185.1	—
Greene	284.3	115.5	48.2	120.6	—
Hale	263.1	107.9	34.1	121.1	—
Lamar	314.6	65.0	58.3	191.3	—
Marion	365.9	79.0	85.8	201.0	—
Perry	357.0	87.0	105.3	164.4	0.4
Pickens	480.7	129.6	71.4	279.7	—
Tuscaloosa	659.6	207.4	95.1	357.2	—
Total	3,404.3	1,000.8	667.8	1,735.3	0.4

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 6—Area of timberland by county and site class, West-Central Alabama, 1999

County	All classes	Site class (cubic feet/acre/year)				
		20-49	50-84	85-119	120-164	>165
<i>Thousand acres</i>						
Bibb	345.5	21.0	121.4	144.6	45.7	12.9
Fayette	333.6	49.1	126.1	103.7	38.6	16.1
Greene	284.3	10.0	93.0	103.6	63.5	14.2
Hale	263.1	46.6	91.8	81.5	36.4	6.8
Lamar	314.6	16.5	154.4	107.6	24.4	11.8
Marion	365.9	30.5	138.1	132.9	58.7	5.7
Perry	357.0	4.7	78.5	188.6	73.3	11.8
Pickens	480.7	31.1	149.8	199.2	75.6	24.9
Tuscaloosa	659.6	67.3	279.9	170.9	93.9	47.6
Total	3,404.3	276.7	1,233.0	1,232.6	510.1	151.9

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

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

County	All classes	Stocking class (percent)				
		<16.7	16.7-59	60-99	100-130	>130
<i>Thousand acres</i>						
Bibb	345.5	7.8	36.7	97.7	96.6	106.7
Fayette	333.6	3.2	30.8	116.7	96.9	86.0
Greene	284.3	1.6	38.5	84.8	99.1	60.4
Hale	263.1	17.0	32.2	64.6	83.7	65.6
Lamar	314.6	0.4	35.6	103.5	88.3	86.9
Marion	365.9	5.0	40.8	109.1	128.7	82.3
Perry	357.0	15.8	58.8	99.7	104.6	78.0
Pickens	480.7	11.5	44.0	162.1	175.3	87.7
Tuscaloosa	659.6	10.1	55.0	216.3	247.2	130.9
Total	3,404.3	72.4	372.4	1,054.6	1,120.4	784.4

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, West-Central Alabama, 1999

Forest-type group and stand origin	All classes	Ownership class			
		National forest	Other public	Forest industry	Nonindustrial private
<i>Thousand acres</i>					
Softwood types					
Longleaf–slash pine					
Planted	4.2	2.9	—	1.4	—
Natural	41.6	27.8	—	—	13.7
Total	45.8	30.7	—	1.4	13.7
Loblolly–shortleaf pine					
Planted	795.0	7.6	0.6	309.5	477.3
Natural	364.1	25.6	17.9	52.8	267.7
Total	1,159.2	33.2	18.5	362.4	745.1
Total softwoods	1,204.9	63.9	18.5	363.7	758.8
Hardwood types					
Oak–pine					
Planted	203.8	—	—	89.7	114.1
Natural	510.3	27.6	—	66.0	416.8
Total	714.1	27.6	—	155.6	530.8
Oak–hickory	1,007.7	32.4	20.4	112.1	842.9
Oak–gum–cypress	454.3	7.1	20.5	58.2	368.5
Elm–ash–cottonwood	22.9	—	—	—	22.9
Total hardwoods	2,198.9	67.0	40.9	325.9	1,765.2
Nonstocked	0.4	—	—	—	0.4
All groups	3,404.3	130.9	59.4	689.6	2,524.3

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, West-Central Alabama, 1999

Forest-type group and detailed forest type	All classes	Ownership class			
		National forest	Other public	Forest industry	Nonindustrial private
<i>Thousand acres</i>					
Softwood types					
Longleaf-slash					
Longleaf pine	45.8	30.7	—	1.4	13.7
Total	45.8	30.7	—	1.4	13.7
Loblolly-shortleaf					
Loblolly pine	1,050.0	33.2	9.8	351.3	655.7
Shortleaf pine	16.3	—	—	—	16.3
Virginia pine	83.8	—	8.7	11.1	64.0
Eastern redcedar	9.0	—	—	—	9.0
Total	1,159.2	33.2	18.5	362.4	745.1
Total softwoods	1,204.9	63.9	18.5	363.7	758.8
Hardwood types					
Oak-pine					
Eastern redcedar-hardwood	16.0	—	—	—	16.0
Longleaf pine-scrub oak	12.3	6.7	—	—	5.5
Shortleaf pine-oak	85.3	2.8	—	23.8	58.8
Virginia pine-s. red oak	53.9	—	—	1.5	52.5
Loblolly pine-hardwood	542.7	18.1	—	128.9	395.7
Other oak-pine	3.9	—	—	1.4	2.4
Total	714.1	27.6	—	155.6	530.8
Oak-hickory					
Post oak-black oak	10.0	—	—	5.5	4.4
Chestnut oak	16.5	—	—	—	16.5
White oak-red oak-hickory	110.7	4.0	—	7.4	99.4
White oak	4.3	—	—	—	4.3
Yellow-poplar-white oak-n. red oak	21.7	3.4	6.0	1.6	10.8
Sweetgum-yellow-poplar	166.6	2.3	—	21.9	142.4
Mixed hardwood	677.9	22.7	14.4	75.7	565.1
Total	1,007.7	32.4	20.4	112.1	842.9
Oak-gum-cypress					
Swamp chestnut oak-cherrybark oak	21.4	—	—	—	21.4
Sweetgum-water oak-willow oak	230.9	1.9	8.2	36.5	184.3
Sugarberry-elm-green ash	65.7	—	7.3	5.9	52.5
Overcup oak-water hickory	4.5	—	—	—	4.5
Cypress-water tupelo	51.5	2.7	—	2.4	46.4
Sweetbay-blackgum-red maple	80.2	2.5	5.0	13.4	59.3
Total	454.3	7.1	20.5	58.2	368.5
Elm-ash-cottonwood					
River birch-sycamore	15.6	—	—	—	15.6
Willow	7.2	—	—	—	7.2
Total	22.9	—	—	—	22.9
Total hardwoods	2,198.9	67.0	40.9	325.9	1,765.2
Nonstocked	0.4	—	—	—	0.4
All groups	3,404.3	130.9	59.4	689.6	2,524.3

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, West-Central Alabama, 1999

Ownership class	All classes	Stocking class (percent)				
		<16.7	16.7-59	60-99	100-130	>130
<i>Thousand acres</i>						
National forest	130.9	0.1	6.9	50.1	45.9	27.8
Other public	59.4	—	4.9	30.9	7.8	15.9
Forest industry	689.6	6.1	74.0	142.2	273.2	194.1
Nonindustrial private	2,524.3	66.2	286.6	831.4	793.5	546.6
All ownerships	3,404.3	72.4	372.4	1,054.6	1,120.4	784.4

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 11—Area of timberland by forest-type group, stand origin, and stand-size class, West-Central Alabama, 1999

Forest-type group and stand origin	All classes	Stand-size class			
		Sawtimber	Poletimber	Sapling-seedling	Nonstocked
<i>Thousand acres</i>					
Softwood types					
Longleaf–slash pine					
Planted	4.2	—	—	4.2	—
Natural	41.6	19.8	7.7	14.1	—
Total	45.8	19.8	7.7	18.3	—
Loblolly–shortleaf pine					
Planted	795.0	109.9	324.2	360.9	—
Natural	364.1	154.1	54.4	155.7	—
Total	1,159.2	264.0	378.6	516.6	—
Total softwoods	1,204.9	283.8	386.3	534.9	—
Hardwood types					
Oak–pine					
Planted	203.8	4.5	10.6	188.7	—
Natural	510.3	155.9	67.5	286.9	—
Total	714.1	160.4	78.1	475.6	—
Oak–hickory	1,007.7	299.0	121.4	587.4	—
Oak–gum–cypress	454.3	249.8	82.0	122.5	—
Elm–ash–cottonwood	22.9	7.8	—	15.0	—
Total hardwoods	2,198.9	717.0	281.5	1,200.4	—
Nonstocked	0.4	—	—	—	0.4
All groups	3,404.3	1,000.8	667.8	1,735.3	0.4

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 12—Area of timberland by stand-age class and forest management type, all ownerships, West-Central 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	1,071.3	341.4	77.1	261.7	343.7	47.1	0.4
11-20	514.9	309.8	31.2	62.8	67.9	43.1	—
21-30	382.3	108.3	68.4	97.6	66.6	41.4	—
31-40	276.3	29.9	42.5	57.8	90.3	55.9	—
41-50	500.0	9.9	70.8	133.5	149.2	136.5	—
51-60	279.0	—	42.8	50.0	122.6	63.6	—
61-70	211.5	—	47.2	20.9	88.8	54.6	—
71-80	102.8	—	14.5	25.6	41.5	21.1	—
81+	66.2	—	11.1	4.2	37.1	13.8	—
All classes	3,404.3	799.3	405.7	714.1	1,007.7	477.1	0.4

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 13—Area of timberland by stand-age class and forest management type, public ownerships, West-Central 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	19.7	—	2.8	—	11.2	5.7	—
11-20	13.3	3.5	9.8	—	—	—	—
21-30	14.8	6.9	6.8	—	—	1.1	—
31-40	2.0	—	—	2.0	—	—	—
41-50	44.4	0.6	10.9	6.5	11.2	15.2	—
51-60	28.7	—	16.9	6.8	4.4	0.6	—
61-70	41.3	—	15.5	8.2	12.6	5.0	—
71-80	19.3	—	3.1	4.1	12.1	—	—
81+	6.9	—	5.6	—	1.3	—	—
All classes	190.3	11.0	71.4	27.6	52.7	27.6	—

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 14—Area of timberland by stand-age class and forest management type, forest industry ownerships, West-Central 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	241.4	108.9	11.6	62.5	50.8	7.6	—
11-20	161.1	132.1	—	23.9	1.7	3.4	—
21-30	95.2	48.0	7.6	31.9	7.7	—	—
31-40	53.4	17.0	13.3	8.8	8.5	5.9	—
41-50	62.5	5.1	17.4	15.1	10.7	14.1	—
51-60	51.5	—	—	13.3	19.4	18.9	—
61-70	10.4	—	2.9	—	7.4	—	—
71-80	—	—	—	—	—	—	—
81+	14.2	—	—	—	5.9	8.3	—
All classes	689.6	310.9	52.8	155.6	112.1	58.2	—

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 15—Area of timberland by stand-age class and forest management type, nonindustrial private ownerships, West-Central 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	810.2	232.5	62.7	199.1	281.6	33.8	0.4
11-20	340.5	174.2	21.5	38.8	66.2	39.8	—
21-30	272.3	53.5	54.0	65.7	58.9	40.3	—
31-40	220.9	12.9	29.3	46.9	81.8	50.0	—
41-50	393.2	4.2	42.4	111.9	127.3	107.3	—
51-60	198.8	—	25.9	30.0	98.8	44.1	—
61-70	159.8	—	28.7	12.7	68.8	49.6	—
71-80	83.5	—	11.4	21.5	29.5	21.1	—
81+	45.2	—	5.5	4.2	29.9	5.5	—
All classes	2,524.3	477.3	281.5	530.8	842.9	391.4	0.4

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

Ownership and forested tract-size class	All types	Forest management type					Nonstocked
		Pine plantation	Natural pine	Oak–pine	Upland hardwood	Lowland hardwood	
<i>Acres</i>		<i>Thousand acres</i>					
Individual							
≤ 10	59.4	6.2	12.3	5.1	27.0	8.8	—
11-50	621.4	104.9	67.3	125.7	222.8	100.3	0.4
51-100	466.2	89.0	66.2	79.6	206.5	24.9	—
101-200	507.6	78.0	64.8	106.9	159.6	98.3	—
201-500	473.9	108.3	49.6	109.8	123.5	82.7	—
≥ 501	88.8	17.9	4.5	7.3	24.5	34.7	—
Total	2,217.4	404.2	264.7	434.5	763.9	349.8	0.4
Corporate							
≤ 10	0.9	—	—	—	0.9	—	—
11-50	27.2	—	—	22.6	4.5	—	—
51-100	27.7	5.9	—	8.3	7.6	5.9	—
101-200	101.5	30.0	14.5	18.0	33.0	5.9	—
201-500	87.0	26.8	2.3	18.7	16.7	22.6	—
≥ 501	62.8	10.5	—	28.8	16.4	7.2	—
Total	306.9	73.2	16.8	96.3	79.1	41.6	—
All nonindustrial private							
≤ 10	60.3	6.2	12.3	5.1	27.9	8.8	—
11-50	648.6	104.9	67.3	148.4	227.3	100.3	0.4
51-100	493.9	94.8	66.2	87.9	214.1	30.9	—
101-200	609.0	108.0	79.3	124.9	192.6	104.2	—
201-500	560.9	135.1	51.9	128.5	140.1	105.3	—
≥ 501	151.6	28.3	4.5	36.0	40.8	41.9	—
Total	2,524.3	477.3	281.5	530.8	842.9	391.4	0.4

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 17—Number of live trees on timberland by species and diameter class, West-Central Alabama, 1999

Species	Diameter class (inches at breast height)												
	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
<i>Thousand trees</i>													
Softwood													
Longleaf pine	12,100	5,003	2,853	1,116	800	625	455	599	444	160	45	—	—
Shortleaf pine	33,434	12,568	7,942	5,014	3,183	2,095	1,044	940	281	294	32	41	—
Loblolly pine	521,301	206,307	110,633	102,406	60,647	21,456	9,874	4,302	2,533	1,690	542	897	14
Virginia pine	95,484	70,223	13,403	5,802	2,482	1,921	1,084	401	168	—	—	—	—
Baldcypress	2,062	512	512	109	107	143	217	106	145	36	34	141	—
Redcedars	19,946	12,693	4,053	1,416	812	587	173	102	36	37	37	—	—
Total softwoods	684,327	307,306	139,396	115,863	68,031	26,827	12,847	6,450	3,607	2,217	690	1,079	14
Hardwood													
Select white oaks	68,668	38,818	12,512	6,695	4,045	2,615	1,495	911	801	410	190	141	35
Select red oaks	8,035	3,904	453	857	737	299	363	136	394	159	305	325	103
Other white oaks	41,492	23,855	5,616	3,879	2,609	2,024	1,346	1,053	582	254	120	154	—
Hickory	117,802	88,149	13,427	6,831	2,754	2,569	1,563	1,067	723	301	225	193	—
Hard maple	6,374	5,433	630	278	33	—	—	—	—	—	—	—	—
Soft maple	213,100	169,485	26,439	8,598	4,322	1,882	1,203	591	296	215	33	36	—
Beech	19,320	12,545	4,540	857	377	431	156	88	33	104	119	70	—
Sweetgum	346,666	243,462	59,932	20,961	10,999	4,946	2,179	2,051	879	614	293	317	33
Tupelo and blackgum	116,123	81,368	13,728	6,359	4,783	3,147	3,268	1,576	1,141	476	104	139	34
Ash	19,500	12,569	3,596	1,255	778	563	283	215	139	34	—	68	—
Cottonwood	34	—	—	—	—	—	—	—	34	—	—	—	—
Basswood	2,480	2,123	—	283	—	37	37	—	—	—	—	—	—
Yellow-poplar	79,787	56,299	11,257	4,417	2,568	1,852	1,026	648	712	599	99	297	13
Bay and magnolia	20,027	12,676	1,300	2,763	1,488	982	536	185	61	36	—	—	—
Black cherry	47,855	33,950	10,997	2,049	546	280	33	—	—	—	—	—	—
Black walnut	462	427	—	—	35	—	—	—	—	—	—	—	—
Sycamore	2,725	446	1,818	149	69	—	118	36	55	—	—	34	—
Elm	39,759	32,650	4,218	1,301	624	390	216	221	104	—	35	—	—
Other Eastern hardwoods	413,191	323,850	57,901	17,579	7,361	3,313	1,435	835	210	350	179	142	36
Total hardwoods	1,827,802	1,337,168	260,514	96,655	52,663	31,035	18,849	12,308	7,923	4,555	2,492	3,042	598
All species	2,512,129	1,644,474	399,910	212,518	120,694	57,862	31,696	18,758	11,530	6,772	3,182	4,121	612

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, West-Central Alabama, 1999

Species	Diameter class (inches at breast height)												
	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
<i>Thousand trees</i>													
Softwood													
Longleaf pine	10,670	3,816	2,660	1,116	786	589	455	599	444	160	45	—	—
Shortleaf pine	29,686	9,502	7,526	4,866	3,098	2,062	1,044	940	281	294	32	41	—
Loblolly pine	468,756	169,439	101,921	98,415	59,031	20,789	9,572	4,232	2,352	1,621	507	863	14
Virginia pine	82,123	59,059	12,516	5,160	2,117	1,753	982	368	168	—	—	—	—
Baldcypress	1,371	—	512	72	70	106	183	72	145	36	34	141	—
Redcedars	8,254	4,217	1,755	1,128	569	410	106	33	36	—	—	—	—
Total softwoods	600,860	246,033	126,890	110,757	65,671	25,709	12,342	6,244	3,426	2,111	618	1,045	14
Hardwood													
Select white oaks	38,057	14,092	8,353	5,764	3,669	2,477	1,393	878	801	369	120	141	—
Select red oaks	4,142	905	—	664	632	265	322	136	359	159	305	325	70
Other white oaks	24,554	10,530	4,135	3,129	2,149	1,683	991	948	582	204	120	83	—
Other red oaks	113,735	65,234	18,356	8,554	7,015	4,653	3,202	2,444	1,620	933	602	1,019	103
Hickory	57,735	34,742	8,578	5,819	2,549	2,395	1,352	928	688	301	225	158	—
Hard maple	505	416	—	89	—	—	—	—	—	—	—	—	—
Soft maple	54,019	34,294	10,764	4,326	2,074	1,232	609	247	261	179	33	—	—
Beech	4,398	2,023	864	493	200	431	119	47	—	69	119	33	—
Sweetgum	193,633	115,569	41,056	17,138	9,583	4,577	1,923	1,855	812	513	257	317	33
Tupelo and blackgum	54,695	28,289	8,051	5,430	4,062	2,729	2,978	1,438	1,036	476	104	68	34
Ash	7,835	3,955	1,002	1,080	710	454	215	215	102	34	—	68	—
Cottonwood	34	—	—	—	—	—	—	—	34	—	—	—	—
Basswood	249	—	—	175	—	37	37	—	—	—	—	—	—
Yellow-poplar	59,341	38,842	9,096	4,080	2,462	1,664	976	648	671	528	99	262	13
Bay and magnolia	13,428	8,827	416	1,769	967	824	416	112	61	36	—	—	—
Black cherry	17,087	8,520	6,903	1,060	362	209	33	—	—	—	—	—	—
Black walnut	35	—	—	—	35	—	—	—	—	—	—	—	—
Sycamore	1,351	—	926	149	69	—	82	36	55	—	—	34	—
Elm	6,820	4,155	879	579	449	287	145	187	104	—	35	—	—
Other Eastern hardwoods	90,970	58,374	18,342	6,631	3,386	1,914	938	581	210	314	138	106	36
Total hardwoods	742,623	428,767	137,721	66,929	40,373	25,831	15,731	10,700	7,396	4,115	2,157	2,614	289
All species	1,343,483	674,800	264,611	177,686	106,044	51,540	28,073	16,944	10,822	6,226	2,775	3,659	303

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, West-Central 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
<i>Million cubic feet</i>											
Softwood											
Longleaf pine	75.7	2.7	5.6	8.4	9.3	18.7	18.4	9.2	3.3	—	—
Shortleaf pine	156.6	15.2	22.5	27.9	23.2	29.2	13.1	19.8	2.3	3.5	—
Loblolly pine	1,499.1	236.1	338.0	236.1	189.0	134.4	107.9	104.2	41.5	109.6	2.3
Virginia pine	100.5	16.2	17.2	25.7	22.2	11.9	7.2	—	—	—	—
Baldcypress	31.7	0.3	0.8	1.9	4.6	2.9	5.1	1.7	2.0	12.5	—
Redcedars	21.0	2.9	4.1	4.7	2.4	2.0	0.9	1.7	2.3	—	—
Total softwoods	1,884.7	273.5	388.1	304.7	250.6	199.2	152.6	136.6	51.4	125.6	2.3
Hardwood											
Select white oaks	213.8	17.8	25.9	33.0	29.2	26.2	30.5	20.3	12.3	17.4	1.3
Select red oaks	125.8	2.6	4.8	4.3	7.4	4.3	14.1	8.7	22.2	36.6	20.7
Other white oaks	148.0	10.0	15.0	23.2	22.6	26.7	20.3	10.6	8.3	11.3	—
Other red oaks	612.9	31.4	52.0	65.2	66.9	73.5	64.3	51.0	50.2	99.9	58.5
Hickory	198.3	15.8	16.5	30.6	28.3	28.6	28.3	15.3	15.9	19.1	—
Hard maple	0.9	0.7	0.2	—	—	—	—	—	—	—	—
Soft maple	121.3	24.0	23.2	20.0	18.5	13.3	8.4	9.2	2.0	2.7	—
Beech	31.2	2.1	2.2	5.4	3.2	2.0	0.6	3.9	8.0	3.7	—
Sweetgum	435.4	50.0	71.0	64.7	44.0	63.8	37.4	36.4	21.3	35.6	11.3
Tupelo and blackgum	296.1	19.5	31.9	40.4	64.1	43.7	40.8	23.8	5.9	7.7	18.5
Ash	41.9	4.0	5.3	7.3	4.9	6.4	6.2	1.7	—	6.0	—
Cottonwood	1.5	—	—	—	—	—	1.5	—	—	—	—
Basswood	1.5	0.7	—	0.3	0.5	—	—	—	—	—	—
Yellow-poplar	193.3	12.6	17.5	23.1	21.1	21.2	28.2	30.6	7.1	29.7	2.3
Bay and magnolia	47.9	8.5	9.5	11.3	9.7	5.0	2.5	1.5	—	—	—
Black cherry	11.8	5.2	3.5	2.6	0.5	—	—	—	—	—	—
Black walnut	0.2	—	0.2	—	—	—	—	—	—	—	—
Sycamore	9.2	0.6	0.5	—	2.2	1.0	1.6	—	—	3.4	—
Black locust	3.6	0.1	0.4	0.8	—	1.3	—	1.0	—	—	—
Elm	26.5	3.3	3.9	3.9	3.9	5.9	3.4	—	2.3	—	—
Other Eastern hardwoods	187.7	37.3	36.5	31.8	20.8	16.2	6.4	14.0	9.2	9.9	5.5
Total hardwoods	2,708.9	246.1	319.9	367.9	347.9	338.9	294.5	228.1	164.8	283.0	118.0
All species	4,593.6	519.6	708.0	672.6	598.6	538.1	447.1	364.7	216.1	408.7	120.3

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 20—Volume of growing-stock trees on timberland by species and diameter class, West-Central 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	75.1	2.7	5.5	7.9	9.3	18.7	18.4	9.2	3.3	—	—
Shortleaf pine	155.4	14.9	22.0	27.4	23.2	29.2	13.1	19.8	2.3	3.5	—
Loblolly pine	1,459.9	228.9	330.6	230.6	184.3	133.3	101.8	101.0	39.7	107.3	2.3
Virginia pine	92.4	14.7	14.9	23.8	20.5	11.3	7.2	—	—	—	—
Baldcypress	30.3	0.3	0.7	1.6	4.2	2.3	5.1	1.7	2.0	12.5	—
Redcedars	12.1	2.4	3.0	3.5	1.6	0.6	0.9	—	—	—	—
Total softwoods	1,825.2	263.9	376.8	294.7	243.1	195.5	146.5	131.7	47.4	123.3	2.3
Hardwood											
Select white oaks	198.9	15.9	23.9	31.4	27.8	25.7	30.5	18.2	8.1	17.4	—
Select red oaks	116.7	2.2	4.1	3.8	6.9	4.3	13.4	8.7	22.2	36.6	14.4
Other white oaks	128.4	8.2	12.8	20.0	17.8	24.7	20.3	9.4	8.3	6.8	—
Other red oaks	515.7	24.6	45.3	55.4	61.3	69.4	60.6	49.5	41.4	90.1	18.0
Hickory	184.5	14.0	15.6	29.0	25.3	26.0	27.0	15.3	15.9	16.3	—
Hard maple	0.3	0.3	—	—	—	—	—	—	—	—	—
Soft maple	73.2	13.2	12.0	14.2	9.9	6.3	7.3	8.3	2.0	—	—
Beech	25.7	1.4	1.4	5.4	2.4	1.3	—	3.3	8.0	2.5	—
Sweetgum	401.3	43.0	64.5	60.8	40.1	59.3	35.9	31.4	19.5	35.6	11.3
Tupelo and blackgum	272.9	17.1	28.3	35.9	59.7	40.9	38.2	23.8	5.9	4.5	18.5
Ash	38.0	3.6	5.1	6.2	3.8	6.4	5.0	1.7	—	6.0	—
Cottonwood	1.5	—	—	—	—	—	1.5	—	—	—	—
Basswood	1.3	0.4	—	0.3	0.5	—	—	—	—	—	—
Yellow-poplar	184.3	11.8	16.8	21.3	20.5	21.2	26.6	28.0	7.1	28.8	2.3
Bay and magnolia	37.9	5.9	6.7	9.6	8.4	3.4	2.5	1.5	—	—	—
Black cherry	7.7	2.9	2.5	1.7	0.5	—	—	—	—	—	—
Black walnut	0.2	—	0.2	—	—	—	—	—	—	—	—
Sycamore	8.7	0.6	0.5	—	1.7	1.0	1.6	—	—	3.4	—
Elm	21.7	1.7	2.9	3.1	2.8	5.5	3.4	—	2.3	—	—
Other Eastern hardwoods	127.1	16.9	19.8	20.1	15.5	13.2	6.4	13.4	7.3	8.9	5.5
Total hardwoods	2,345.5	183.5	262.5	318.4	304.8	308.6	280.1	212.6	148.1	257.0	69.9
All species	4,170.7	447.4	639.3	613.1	547.9	504.1	426.7	344.3	195.4	380.4	72.2

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 21—Volume in the saw-log portion of sawtimber trees on timberland by species and diameter class, West-Central 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
<i>Million cubic feet</i>									
Softwood									
Longleaf pine	63.0	6.6	8.5	17.8	17.9	9.0	3.3	—	—
Shortleaf pine	109.0	22.0	21.1	27.8	12.8	19.5	2.3	3.5	—
Loblolly pine	815.5	178.1	165.2	126.2	98.8	99.4	39.3	106.3	2.3
Virginia pine	54.9	19.1	18.4	10.5	6.9	—	—	—	—
Baldcypress	27.0	1.1	3.6	2.1	4.7	1.6	1.9	12.0	—
Redcedars	5.7	2.8	1.4	0.6	0.8	—	—	—	—
Total softwoods	1,075.0	229.7	218.2	185.0	141.8	129.6	46.8	121.7	2.3
Hardwood									
Select white oaks	108.5	—	20.1	21.1	26.6	16.6	7.5	16.6	—
Select red oaks	97.5	—	4.9	3.5	11.5	7.7	20.4	35.2	14.2
Other white oaks	73.6	—	13.0	20.3	17.7	8.5	7.7	6.4	—
Other red oaks	337.8	—	44.2	57.3	52.6	44.7	38.0	84.0	17.2
Hickory	106.8	—	18.2	21.4	23.6	13.8	14.7	15.3	—
Soft maple	26.8	—	6.6	5.0	6.1	7.3	1.8	—	—
Beech	15.2	—	1.8	1.1	—	2.9	7.1	2.3	—
Sweetgum	202.1	—	27.8	49.0	32.0	29.1	18.5	34.7	11.1
Tupelo and blackgum	156.2	—	41.6	32.9	32.8	21.2	5.4	4.2	17.9
Ash	19.5	—	2.6	5.2	4.4	1.6	—	5.6	—
Cottonwood	1.3	—	—	—	1.3	—	—	—	—
Basswood	0.4	—	0.4	—	—	—	—	—	—
Yellow-poplar	118.1	—	14.3	17.5	23.5	25.8	6.8	28.0	2.2
Bay and magnolia	12.3	—	6.0	2.8	2.2	1.3	—	—	—
Black cherry	0.4	—	0.4	—	—	—	—	—	—
Sycamore	6.4	—	1.1	0.8	1.4	—	—	3.2	—
Elm	11.3	—	2.0	4.5	2.8	—	2.0	—	—
Other Eastern hardwoods	55.9	—	10.1	9.9	5.0	11.3	6.3	7.9	5.3
Total hardwoods	1,350.0	—	214.9	252.2	243.6	191.8	136.1	243.3	68.1
All species	2,425.1	229.7	433.1	437.3	385.4	321.3	182.9	365.0	70.3

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, West-Central 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
<i>Million board feet</i>									
Softwood									
Longleaf pine	360.7	32.2	44.4	100.3	106.4	56.4	20.9	—	—
Shortleaf pine	585.5	102.0	105.9	149.9	73.3	117.9	14.3	22.2	—
Loblolly pine	4,534.8	824.6	829.5	691.1	576.1	610.5	253.1	733.1	16.7
Virginia pine	263.3	86.3	87.3	53.1	36.5	—	—	—	—
Baldcypress	147.3	4.8	16.4	10.1	24.2	8.8	11.0	72.0	—
Redcedars	29.8	13.8	7.6	3.4	5.0	—	—	—	—
Total softwoods	5,921.3	1,063.8	1,091.1	1,008.0	821.5	793.6	299.3	827.3	16.7
Hardwood									
Select white oaks	558.0	—	96.0	102.6	134.4	87.4	40.4	97.1	—
Select red oaks	583.1	—	23.5	17.6	60.2	42.1	117.2	224.2	98.3
Other white oaks	370.8	—	61.7	97.9	88.7	44.5	42.2	35.7	—
Other red oaks	1,883.3	—	227.2	295.5	280.9	245.8	220.1	505.2	108.6
Hickory	560.2	—	86.7	105.4	121.8	74.4	82.3	89.7	—
Soft maple	133.2	—	31.8	23.8	30.7	37.6	9.3	—	—
Beech	69.8	—	8.9	5.0	—	13.1	32.4	10.5	—
Sweetgum	1,140.3	—	141.5	254.0	173.4	164.5	108.6	218.3	80.0
Tupelo and blackgum	765.7	—	172.0	147.7	157.8	108.8	30.0	23.7	125.6
Ash	98.4	—	12.1	24.9	22.2	8.2	—	31.1	—
Cottonwood	7.0	—	—	—	7.0	—	—	—	—
Basswood	1.8	—	1.8	—	—	—	—	—	—
Yellow-poplar	680.9	—	73.6	92.6	130.2	148.9	41.1	179.3	15.3
Bay and magnolia	58.4	—	28.4	13.1	10.4	6.5	—	—	—
Black cherry	1.8	—	1.8	—	—	—	—	—	—
Sycamore	34.6	—	5.3	3.8	6.9	—	—	18.6	—
Elm	56.5	—	9.6	21.8	14.1	—	11.0	—	—
Other Eastern hardwoods	314.4	—	54.1	53.3	28.9	66.1	37.0	47.7	27.5
Total hardwoods	7,318.1	—	1,036.0	1,259.0	1,267.6	1,047.7	771.5	1,481.1	455.3
All species	13,239.5	1,063.8	2,127.1	2,267.0	2,089.1	1,841.3	1,070.8	2,308.3	472.0

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.

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

Species	All size classes						Trees \geq 15.0 inches d.b.h.					
	All grades	Tree grade					All grades	Tree grade				
		1	2	3	4	5		1	2	3	4	5
<i>Million board feet</i>												
Softwood												
Longleaf pine	360.7	102.5	111.6	146.6	—	—	183.7	61.7	44.7	77.3	—	—
Shortleaf pine	585.5	237.6	207.7	140.2	—	—	227.7	93.2	99.7	34.8	—	—
Loblolly pine	4,534.8	1,249.5	1,099.2	2,152.3	—	33.7	2,189.5	829.4	662.8	672.9	—	24.4
Virginia pine	263.3	6.3	63.8	191.6	—	1.6	36.5	—	20.0	16.5	—	—
Baldcypress	147.3	23.4	26.4	97.5	—	—	116.0	23.4	21.2	71.4	—	—
Redcedars	29.8	—	2.7	27.1	—	—	5.0	—	—	5.0	—	—
Total softwoods	5,921.3	1,619.3	1,511.3	2,755.3	—	35.4	2,758.4	1,007.8	848.5	877.8	—	24.4
Hardwood												
Select white oaks	558.0	93.8	214.5	166.5	70.1	13.1	359.4	93.8	185.8	54.9	20.3	4.5
Select red oaks	583.1	273.4	200.2	81.1	28.4	—	542.0	273.4	190.6	59.6	18.4	—
Other white oaks	370.8	35.1	104.7	168.7	44.5	17.7	211.2	35.1	66.3	77.7	22.2	9.8
Other red oaks	1,883.3	198.9	479.0	641.6	416.3	147.5	1,360.5	198.9	403.7	433.5	217.6	106.8
Hickory	560.2	84.6	204.6	200.3	64.0	6.8	368.1	84.6	166.8	88.3	28.4	—
Soft maple	133.2	25.2	13.4	40.3	40.0	14.2	77.6	25.2	6.2	15.7	22.0	8.6
Beech	69.8	—	33.2	10.6	23.4	2.6	55.9	—	33.2	6.2	16.5	—
Sweetgum	1,140.3	201.9	336.1	324.9	181.3	96.1	744.8	201.9	218.5	134.5	108.2	81.7
Tupelo and blackgum	765.7	137.2	297.9	286.7	10.4	33.5	445.9	137.2	216.7	61.8	2.8	27.4
Ash	98.4	22.8	39.0	30.6	6.1	—	61.5	22.8	21.4	17.3	—	—
Cottonwood	7.0	7.0	—	—	—	—	7.0	7.0	—	—	—	—
Basswood	1.8	—	—	—	—	1.8	—	—	—	—	—	—
Yellow-poplar	680.9	53.2	98.8	243.1	208.3	77.5	514.7	53.2	81.2	147.3	167.6	65.5
Bay and magnolia	58.4	—	11.6	33.5	6.7	6.5	16.9	—	—	3.6	6.7	6.5
Black cherry	1.8	—	—	—	1.8	—	—	—	—	—	—	—
Sycamore	34.6	18.6	3.8	7.4	4.8	—	25.5	18.6	—	2.1	4.8	—
Elm	56.5	—	19.6	22.2	14.7	—	25.1	—	10.4	—	14.7	—
Other Eastern hardwoods	314.4	24.5	39.4	127.0	106.8	16.7	207.1	24.5	35.3	73.2	67.3	6.9
Total hardwoods	7,318.1	1,176.2	2,095.8	2,384.4	1,227.9	433.9	5,023.2	1,176.2	1,636.1	1,175.6	717.6	317.7
All species	13,239.5	2,795.5	3,607.1	5,139.7	1,227.9	469.3	7,781.6	2,183.9	2,484.6	2,053.4	717.6	342.1

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 24—Volume of growing stock on timberland by county and species group, West-Central Alabama, 1999

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Million cubic feet</i>							
Bibb	554.6	302.6	300.3	2.3	251.9	99.8	152.1
Fayette	355.9	141.8	141.7	0.1	214.1	137.8	76.2
Greene	465.7	139.6	129.9	9.7	326.1	167.3	158.9
Hale	318.0	123.9	120.9	3.0	194.2	77.1	117.1
Lamar	356.1	124.7	107.4	17.3	231.4	146.8	84.6
Marion	339.3	171.1	170.8	0.3	168.2	35.4	132.8
Perry	382.1	210.3	208.9	1.4	171.8	99.1	72.7
Pickens	596.7	290.3	284.5	5.8	306.4	132.5	174.0
Tuscaloosa	802.2	320.9	318.2	2.6	481.3	232.3	249.0
Total	4,170.7	1,825.2	1,782.8	42.5	2,345.5	1,128.2	1,217.4

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, West-Central Alabama, 1999

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Million cubic feet</i>							
Bibb	587.4	307.8	305.4	2.4	279.6	108.4	171.3
Fayette	383.1	143.5	143.1	0.4	239.6	150.5	89.1
Greene	527.3	151.7	140.3	11.4	375.6	191.0	184.6
Hale	348.8	126.3	123.3	3.0	222.6	90.9	131.7
Lamar	396.0	128.9	110.9	18.0	267.1	173.5	93.6
Marion	382.5	179.4	179.1	0.3	203.1	49.5	153.6
Perry	437.0	220.9	214.7	6.2	216.1	113.0	103.1
Pickens	649.0	295.3	288.3	7.0	353.7	146.9	206.8
Tuscaloosa	882.4	331.0	326.9	4.1	551.5	255.8	295.6
Total	4,593.6	1,884.7	1,832.0	52.7	2,708.9	1,279.5	1,429.5

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, West-Central Alabama, 1999

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Million board feet</i>							
Bibb	1,830.1	1,021.8	1,013.1	8.6	808.3	294.0	514.3
Fayette	980.8	405.4	405.4	—	575.4	377.4	198.1
Greene	1,821.6	548.9	504.8	44.1	1,272.8	606.3	666.5
Hale	987.6	411.1	399.2	12.0	576.4	184.7	391.7
Lamar	975.8	372.4	295.9	76.4	603.4	367.8	235.6
Marion	676.5	268.4	267.3	1.0	408.2	70.5	337.7
Perry	1,059.0	523.5	520.6	3.0	535.4	269.0	266.4
Pickens	2,242.9	1,210.0	1,184.1	25.9	1,032.9	367.8	665.1
Tuscaloosa	2,665.2	1,160.0	1,153.8	6.1	1,505.2	722.3	782.9
Total	13,239.5	5,921.3	5,744.2	177.1	7,318.1	3,259.8	4,058.3

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 27—Volume of timber on timberland by class of timber and species group, West-Central Alabama, 1999

Class of timber	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Million cubic feet</i>							
Sawtimber trees							
Saw-log portion	2,425.1	1,075.0	1,042.4	32.7	1,350.0	604.8	745.2
Upper-stem portion ^a	340.6	109.4	106.1	3.4	231.1	112.2	118.9
Total	2,765.6	1,184.5	1,148.5	36.0	1,581.1	717.0	864.1
Poletimber trees							
All growing-stock trees	4,170.7	1,825.2	1,782.8	42.5	2,345.5	1,128.2	1,217.4
Rough trees							
Sawtimber size	222.9	38.6	30.0	8.6	184.3	65.2	119.1
Poletimber size	188.5	20.9	19.2	1.7	167.6	81.8	85.8
Total	411.4	59.5	49.2	10.3	351.9	146.9	205.0
Rotten trees							
Sawtimber size	9.7	—	—	—	9.7	3.2	6.5
Poletimber size	1.8	—	—	—	1.8	1.2	0.6
Total	11.5	—	—	—	11.5	4.4	7.1
Salvable dead trees							
Sawtimber size	26.3	11.3	11.3	0.0	15.0	2.1	12.9
Poletimber size	5.9	3.1	2.1	1.0	2.9	0.9	2.0
Total	32.3	14.4	13.4	1.0	17.9	2.9	14.9
All classes	4,625.9	1,899.1	1,845.4	53.7	2,726.8	1,282.4	1,444.4

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.

^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, West-Central 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	276.6	152.9	152.7	0.3	123.7	63.4	60.3
Other public	110.6	36.8	36.0	0.9	73.7	26.0	47.7
Forest industry	802.2	508.0	502.8	5.2	294.1	155.6	138.5
Nonindustrial private	3,404.3	1,186.9	1,140.6	46.3	2,217.4	1,034.4	1,183.0
All classes	4,593.6	1,884.7	1,832.0	52.7	2,708.9	1,279.5	1,429.5
Growing-stock trees (million cubic feet)							
National forest	266.2	152.4	152.2	0.3	113.7	59.6	54.1
Other public	101.6	35.8	35.7	0.1	65.8	24.4	41.4
Forest industry	758.0	501.9	497.4	4.6	256.1	138.9	117.2
Nonindustrial private	3,045.0	1,135.0	1,097.5	37.5	1,909.9	905.2	1,004.7
All classes	4,170.7	1,825.2	1,782.8	42.5	2,345.5	1,128.2	1,217.4

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

Table 29—Volume of sawtimber on timberland by ownership class, species group, and size class, West-Central 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	1,057.8	716.6	715.9	0.6	341.3	171.7	169.5
Other public	364.2	153.5	153.5	—	210.7	77.5	133.2
Forest industry	1,941.0	1,150.3	1,125.8	24.5	790.7	451.5	339.1
Nonindustrial private	9,876.5	3,900.9	3,748.9	152.0	5,975.5	2,559.1	3,416.4
All classes	13,239.5	5,921.3	5,744.2	177.1	7,318.1	3,259.8	4,058.3
Trees \geq 15.0 inches d.b.h. (million board feet)							
National forest	594.7	387.1	387.1	—	207.6	93.4	114.2
Other public	223.8	96.8	96.8	—	127.0	47.9	79.1
Forest industry	799.6	259.9	236.4	23.4	539.7	343.0	196.7
Nonindustrial private	6,163.5	2,014.6	1,917.1	97.5	4,148.9	1,637.8	2,511.1
All classes	7,781.6	2,758.4	2,637.5	121.0	5,023.2	2,122.1	2,901.0

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.

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

Forest-type group and stand origin	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Million cubic feet</i>							
Softwood types							
Longleaf–slash pine							
Planted	1.1	1.1	1.1	—	—	—	—
Natural	65.4	58.1	57.8	0.3	7.3	1.4	5.9
Total	66.5	59.3	59.0	0.3	7.3	1.4	5.9
Loblolly–shortleaf pine							
Planted	737.2	689.8	689.0	0.8	47.3	25.9	21.4
Natural	581.4	454.0	451.8	2.2	127.4	52.7	74.7
Total	1,318.6	1,143.9	1,140.8	3.1	174.7	78.6	96.1
Total softwoods	1,385.1	1,203.1	1,199.7	3.4	182.0	80.0	102.0
Hardwood types							
Oak–pine							
Planted	109.4	93.0	93.0	—	16.4	12.0	4.4
Natural	646.7	345.0	341.9	3.1	301.7	127.3	174.4
Total	756.1	438.0	434.8	3.1	318.1	139.3	178.8
Oak–hickory	1,042.6	120.9	115.4	5.5	921.7	314.7	607.0
Oak–gum–cypress	953.7	63.3	32.7	30.5	890.4	560.8	329.6
Elm–ash–cottonwood	33.3	—	—	—	33.3	33.3	—
Total hardwoods	2,785.7	622.1	583.0	39.1	2,163.6	1,048.2	1,115.4
Nonstocked	—	—	—	—	—	—	—
All groups	4,170.7	1,825.2	1,782.8	42.5	2,345.5	1,128.2	1,217.4

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 31—Average basal area of live trees per acre on timberland by ownership class, species group, and d.b.h., West-Central 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
<i>Square feet/acre</i>					
National forest					
Softwood	48.8	5.3	16.3	12.2	15.0
Hardwood	51.2	10.6	20.3	10.2	10.1
Total	100.1	15.9	36.6	22.4	25.1
Other public					
Softwood	41.3	7.6	12.4	4.0	17.3
Hardwood	61.2	7.2	23.0	12.7	18.4
Total	102.5	14.7	35.4	16.7	35.7
Forest industry					
Softwood	43.2	5.5	29.5	6.1	2.2
Hardwood	34.0	13.8	9.3	4.3	6.6
Total	77.3	19.4	38.8	10.4	8.7
Nonindustrial private					
Softwood	27.9	4.8	13.5	4.1	5.5
Hardwood	52.1	13.4	17.5	8.7	12.6
Total	80.1	18.3	31.0	12.8	18.1
All classes					
Softwood	32.7	5.0	16.5	5.2	6.0
Hardwood	49.0	13.1	16.4	8.1	11.4
Total	81.8	18.2	32.9	13.3	17.4

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, West-Central Alabama, 1990–1998

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Million cubic feet</i>							
Bibb	24.7	17.3	17.3	0.0	7.4	2.6	4.8
Fayette	26.9	16.3	16.3	—	10.5	6.3	4.3
Greene	20.2	11.3	11.0	0.3	8.9	4.3	4.6
Hale	15.1	8.3	8.3	0.0	6.8	2.9	3.9
Lamar	22.2	11.0	10.8	0.3	11.1	5.5	5.6
Marion	29.8	20.3	20.2	0.1	9.5	2.8	6.7
Perry	27.1	19.4	19.4	-0.1	7.7	3.6	4.2
Pickens	37.1	23.6	23.5	0.1	13.5	6.9	6.7
Tuscaloosa	33.1	20.1	20.1	0.0	12.9	5.8	7.1
Total	236.0	147.6	146.8	0.7	88.4	40.6	47.8

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

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Million cubic feet</i>							
Bibb	25.7	17.3	17.3	0.0	8.4	3.4	5.0
Fayette	28.6	16.8	16.8	—	11.8	7.2	4.6
Greene	21.8	12.0	11.7	0.3	9.8	4.6	5.2
Hale	16.3	8.8	8.8	0.0	7.5	3.1	4.4
Lamar	23.3	11.2	11.0	0.2	12.1	5.9	6.1
Marion	32.2	20.6	20.5	0.1	11.6	4.1	7.5
Perry	29.7	19.9	19.9	0.0	9.8	4.4	5.4
Pickens	38.6	23.7	23.6	0.1	15.0	7.8	7.2
Tuscaloosa	35.5	20.7	20.7	0.0	14.9	6.5	8.4
Total	251.7	151.0	150.3	0.8	100.7	46.9	53.8

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

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Million board feet</i>							
Bibb	85.5	57.7	57.6	0.1	27.8	9.5	18.2
Fayette	79.6	47.3	47.3	—	32.3	19.4	12.8
Greene	75.4	36.5	34.3	2.2	39.0	16.6	22.4
Hale	62.5	32.7	32.2	0.5	29.8	10.5	19.3
Lamar	79.3	33.4	31.7	1.7	45.9	21.6	24.2
Marion	59.2	37.1	36.6	0.5	22.0	7.5	14.5
Perry	76.0	48.4	48.3	0.1	27.6	10.4	17.3
Pickens	168.4	115.5	115.4	0.1	52.9	25.2	27.7
Tuscaloosa	140.9	86.4	86.4	—	54.5	22.4	32.1
Total	826.8	495.1	489.9	5.2	331.6	143.1	188.5

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

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Million cubic feet</i>							
Bibb	8.2	6.9	6.9	—	1.3	0.1	1.2
Fayette	23.7	13.9	13.9	—	9.7	3.2	6.5
Greene	16.8	10.1	10.1	—	6.7	3.0	3.7
Hale	15.7	9.7	9.7	—	5.9	1.7	4.2
Lamar	25.2	12.3	12.3	—	12.9	4.2	8.7
Marion	23.8	12.0	12.0	—	11.8	3.5	8.3
Perry	24.4	17.5	17.5	—	6.9	4.1	2.8
Pickens	50.7	36.0	35.9	0.1	14.7	7.2	7.5
Tuscaloosa	46.3	34.3	34.2	0.1	12.0	4.6	7.5
Total	234.9	152.8	152.6	0.2	82.0	31.6	50.4

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

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Million cubic feet</i>							
Bibb	8.6	6.9	6.9	—	1.6	0.2	1.4
Fayette	25.0	14.3	14.3	—	10.7	3.8	6.9
Greene	18.5	10.7	10.7	—	7.8	3.2	4.6
Hale	17.6	10.3	10.3	—	7.3	2.0	5.3
Lamar	27.3	12.6	12.6	—	14.7	4.8	9.9
Marion	24.8	12.1	12.1	—	12.7	3.7	9.1
Perry	25.6	18.0	18.0	—	7.5	4.5	3.0
Pickens	53.4	36.8	36.6	0.1	16.6	7.8	8.8
Tuscaloosa	47.4	34.4	34.3	0.1	13.1	4.9	8.2
Total	248.1	156.1	155.8	0.2	92.0	34.9	57.1

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

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Million board feet</i>							
Bibb	25.2	23.7	23.7	—	1.5	—	1.5
Fayette	64.9	39.0	39.0	—	26.0	9.7	16.3
Greene	54.4	38.7	38.7	—	15.7	7.0	8.8
Hale	57.3	37.1	37.1	—	20.2	4.4	15.7
Lamar	76.4	48.4	48.4	—	27.9	4.2	23.7
Marion	62.4	39.7	39.7	—	22.7	7.4	15.3
Perry	73.5	55.7	55.7	—	17.8	8.6	9.2
Pickens	182.8	147.8	147.8	—	35.0	17.8	17.2
Tuscaloosa	163.4	127.4	127.4	—	36.0	15.6	20.4
Total	760.2	557.5	557.5	—	202.8	74.6	128.1

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 38—Average net annual growth and average annual removals of live trees, growing stock, and sawtimber on timberland by species, West-Central 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	4.9	2.9	4.9	2.9	28.4	12.9
Slash pine	0.3	1.0	0.3	1.0	1.1	2.2
Shortleaf pine	5.9	20.0	6.3	19.7	37.1	68.5
Loblolly pine	132.5	120.1	129.6	117.1	406.3	451.4
Virginia pine	6.5	11.6	5.7	11.6	17.0	21.5
Spruce pine	0.0	0.2	0.0	0.2	0.1	1.0
Eastern hemlock	0.1	—	0.1	—	0.5	—
Baldcypress	0.3	—	0.4	—	2.5	—
Redcedars	0.4	0.2	0.3	0.2	2.2	—
Total softwoods	151.0	156.1	147.6	152.8	495.1	557.5
Hardwood						
Select white oaks	9.3	8.6	8.6	8.5	27.8	17.3
Select red oaks	3.3	3.6	3.4	3.6	19.8	13.9
Other white oaks	6.9	7.0	6.2	6.3	21.2	14.2
Other red oaks	25.3	26.1	23.4	24.8	101.5	67.6
Hickory	4.8	7.0	4.3	6.4	15.5	14.1
Hard maple	0.0	0.1	0.0	0.1	—	—
Soft maple	4.8	2.7	3.0	2.2	6.5	4.2
Beech	0.7	0.8	0.6	0.4	1.6	1.1
Sweetgum	20.3	17.0	18.2	15.8	52.0	29.1
Tupelo and blackgum	6.7	3.1	5.9	2.4	22.1	2.8
Ash	1.1	0.3	1.2	0.3	4.3	1.5
Yellow-poplar	9.8	8.1	9.5	7.9	50.4	30.1
Bay and magnolia	0.7	0.8	0.4	0.5	1.1	1.0
Black cherry	0.8	0.2	0.5	0.2	1.3	—
Sycamore	0.5	0.3	0.5	0.3	0.8	1.0
Black locust	0.3	—	—	—	—	—
Elm	0.7	0.8	-0.1	0.4	-1.4	1.0
Other Eastern hardwoods	4.4	5.4	2.7	2.0	7.1	3.9
Total hardwoods	100.7	92.0	88.4	82.0	331.6	202.8
All species	251.7	248.1	236.0	234.9	826.8	760.2

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

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
<i>Million cubic feet</i>											
Softwood											
Longleaf pine	2.9	0.1	0.1	1.1	0.4	0.7	0.2	0.2	0.2	—	—
Slash pine	1.0	—	0.5	0.3	—	0.2	—	—	—	—	—
Shortleaf pine	19.7	1.7	3.4	4.7	4.3	1.9	2.8	0.3	0.3	0.2	—
Loblolly pine	117.1	12.3	14.5	22.3	19.2	17.7	13.2	7.5	3.8	6.1	0.4
Virginia pine	11.6	1.9	4.6	2.2	1.0	0.9	0.7	0.2	—	—	—
Spruce pine	0.2	—	—	—	—	—	0.2	—	—	—	—
Redcedars	0.2	—	0.2	—	—	—	—	—	—	—	—
Total softwoods	152.8	16.1	23.5	30.6	24.9	21.4	17.1	8.2	4.3	6.3	0.4
Hardwood											
Select white oaks	8.5	1.0	1.4	1.9	1.2	1.4	0.6	0.3	0.1	0.5	—
Select red oaks	3.6	0.3	0.1	0.2	0.5	0.6	0.8	0.5	0.3	0.4	—
Other white oaks	6.3	0.8	0.8	1.3	1.1	0.8	0.2	0.7	0.3	0.3	—
Other red oaks	24.8	1.6	3.8	4.2	4.3	4.3	2.1	1.5	1.0	1.6	0.4
Hickory	6.4	0.1	1.1	1.9	0.9	1.2	1.0	0.2	—	0.2	—
Hard maple	0.1	—	0.1	—	—	—	—	—	—	—	—
Soft maple	2.2	0.2	0.4	0.5	—	0.3	0.4	0.3	—	—	—
Beech	0.4	0.2	—	—	—	—	—	—	0.1	0.1	—
Sweetgum	15.8	3.5	2.4	3.0	2.9	2.2	0.8	0.4	0.4	0.2	—
Tupelo and blackgum	2.4	0.1	0.7	0.8	0.2	0.4	0.1	—	—	—	—
Ash	0.3	—	—	—	—	—	—	0.2	0.2	—	—
Yellow-poplar	7.9	0.6	0.8	0.4	0.8	1.7	0.9	0.9	0.5	1.1	—
Bay and magnolia	0.5	—	0.1	0.1	—	—	0.1	0.1	—	—	—
Black cherry	0.2	0.1	0.2	—	—	—	—	—	—	—	—
Sycamore	0.3	—	—	—	—	0.1	0.1	—	—	—	—
Elm	0.4	0.1	—	—	—	0.1	—	0.1	—	—	—
Other Eastern hardwoods	2.0	0.7	0.3	0.1	0.3	—	—	0.4	—	0.2	—
Total hardwoods	82.0	9.3	12.2	14.5	12.2	13.2	7.2	5.6	3.0	4.5	0.4
All species	234.9	25.4	35.7	45.1	37.2	34.6	24.3	13.8	7.3	10.8	0.8

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

Species	Live trees	Growing stock	Sawtimber
	<i>Million cubic feet</i>		<i>Million board feet</i>
Softwood			
Longleaf pine	0.3	0.3	1.4
Shortleaf pine	5.2	4.5	14.7
Loblolly pine	17.0	16.2	47.4
Virginia pine	2.0	2.0	6.4
Baldcypress	0.1	—	—
Redcedars	0.2	0.2	—
Total softwoods	24.8	23.2	69.9
Hardwood			
Select white oaks	1.0	0.8	3.1
Select red oaks	1.1	1.0	4.3
Other white oaks	1.4	1.0	3.3
Other red oaks	8.1	6.2	21.3
Hickory	2.2	1.8	5.6
Soft maple	1.7	0.9	3.4
Beech	0.3	—	—
Sweetgum	4.1	3.5	12.2
Tupelo and blackgum	2.3	1.9	4.6
Ash	0.8	0.5	1.6
Yellow-poplar	1.0	1.0	3.2
Bay and magnolia	0.8	0.5	1.5
Black cherry	0.1	0.1	—
Elm	1.3	1.2	4.8
Other Eastern			
hardwoods	4.8	3.0	7.9
Total hardwoods	31.0	23.4	76.6
All species	55.8	46.6	146.6

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 41—Average net annual growth and average annual removals of growing stock on timberland by ownership class and species group, West-Central 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	16.6	10.3	10.3	0.0	6.3	3.0	3.3
Other public	4.2	1.9	1.9	—	2.4	0.7	1.7
Forest industry	64.9	53.3	53.2	0.1	11.6	6.7	4.8
Nonindustrial private	150.3	82.1	81.5	0.6	68.1	30.1	38.0
All classes	236.0	147.6	146.8	0.7	88.4	40.6	47.8
Average annual removals (million cubic feet)							
National forest	6.2	6.2	6.2	—	—	—	—
Other public	4.3	2.2	2.2	—	2.1	0.4	1.7
Forest industry	58.1	47.3	47.2	0.1	10.8	3.9	6.8
Nonindustrial private	166.3	97.1	97.0	0.1	69.1	27.3	41.9
All classes	234.9	152.8	152.6	0.2	82.0	31.6	50.4

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 42—Average net annual growth and average annual removals of live trees on timberland by ownership class and species group, West-Central 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	16.6	10.2	10.2	0.0	6.4	3.0	3.3
Other public	4.5	2.1	2.1	0.0	2.4	0.7	1.6
Forest industry	66.9	54.1	54.0	0.1	12.8	7.2	5.5
Nonindustrial private	163.8	84.6	84.0	0.6	79.2	36.0	43.3
All classes	251.7	151.0	150.3	0.8	100.7	46.9	53.8
Average annual removals (million cubic feet)							
National forest	6.3	6.2	6.2	—	0.1	0.1	0.0
Other public	4.4	2.2	2.2	—	2.2	0.4	1.8
Forest industry	60.5	48.4	48.3	0.1	12.1	4.3	7.8
Nonindustrial private	176.9	99.3	99.1	0.1	77.6	30.2	47.4
All classes	248.1	156.1	155.8	0.2	92.0	34.9	57.1

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 43—Average net annual growth and average annual removals of sawtimber on timberland by ownership class and species group, West-Central 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	77.8	54.4	53.9	0.5	23.4	13.0	10.4
Other public	20.8	11.5	11.5	—	9.3	3.8	5.4
Forest industry	191.5	147.1	146.4	0.7	44.4	25.8	18.5
Nonindustrial private	536.6	282.0	278.1	4.0	254.6	100.4	154.2
All classes	826.8	495.1	489.9	5.2	331.6	143.1	188.5
Average annual removals (million board feet)							
National forest	27.8	27.8	27.8	—	—	—	—
Other public	19.7	12.9	12.9	—	6.7	1.2	5.6
Forest industry	179.5	154.8	154.8	—	24.6	9.2	15.5
Nonindustrial private	533.3	361.9	361.9	—	171.4	64.3	107.1
All classes	760.2	557.5	557.5	—	202.8	74.6	128.1

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 44—Average net annual growth of growing stock on timberland by forest-type group, stand origin, and species group, West-Central 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
<i>Million cubic feet</i>							
Softwood types							
Longleaf–slash pine							
Planted	0.3	0.3	0.3	—	—	—	—
Natural	6.1	5.0	5.0	—	1.1	0.3	0.8
Total	6.4	5.3	5.3	—	1.1	0.3	0.8
Loblolly–shortleaf pine							
Planted	74.0	71.6	71.6	—	2.4	1.3	1.1
Natural	47.2	35.9	35.8	0.1	11.3	5.5	5.7
Total	121.1	107.5	107.4	0.1	13.7	6.9	6.8
Total softwoods	127.5	112.8	112.7	0.1	14.8	7.2	7.6
Hardwood types							
Oak–pine							
Planted	7.1	5.5	5.5	—	1.6	0.8	0.8
Natural	33.3	18.4	18.5	-0.1	14.9	5.4	9.5
Total	40.5	24.0	24.0	-0.1	16.5	6.3	10.2
Oak–hickory	41.9	9.6	9.2	0.3	32.4	12.4	19.9
Oak–gum–cypress	25.8	1.3	0.9	0.4	24.5	14.3	10.2
Elm–ash–cottonwood	0.3	—	—	—	0.3	0.4	-0.1
Total hardwoods	108.5	34.8	34.1	0.7	73.6	33.4	40.3
Nonstocked	—	—	—	—	—	—	—
All groups	236.0	147.6	146.8	0.7	88.4	40.6	47.8

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.

^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, West-Central 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
<i>Million cubic feet</i>							
Softwood types							
Longleaf–slash pine							
Planted	—	—	—	—	—	—	—
Natural	2.3	2.3	2.3	—	—	—	—
Total	2.3	2.3	2.3	—	—	—	—
Loblolly–shortleaf pine							
Planted	47.1	44.4	44.4	—	2.7	1.8	0.9
Natural	67.7	56.5	56.4	0.1	11.2	5.6	5.6
Total	114.8	100.9	100.7	0.1	13.9	7.4	6.5
Total softwoods	117.1	103.2	103.0	0.1	13.9	7.4	6.5
Hardwood types							
Oak–pine							
Planted	3.3	2.4	2.4	—	0.9	0.4	0.5
Natural	55.5	32.9	32.9	—	22.6	8.3	14.3
Total	58.8	35.3	35.3	—	23.5	8.6	14.8
Oak–hickory	47.5	12.1	12.1	—	35.4	11.0	24.4
Oak–gum–cypress	10.4	2.3	2.2	0.1	8.1	3.5	4.7
Elm–ash–cottonwood	1.1	—	—	—	1.1	1.1	—
Total hardwoods	117.8	49.7	49.6	0.1	68.1	24.2	43.9
Nonstocked	—	—	—	—	—	—	—
All groups	234.9	152.8	152.6	0.2	82.0	31.6	50.4

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.

^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, West-Central Alabama, 1999

Ownership class and species group	Component							
	All components	All live saplings	Growing-stock trees			Cull trees		
			Total	Boles	Stumps, tops, and limbs	Total	Boles	Stumps, tops, and limbs
<i>Thousand tons</i>								
National forest								
Softwood	6,972.0	323.5	6,627.2	5,769.1	858.2	21.3	17.4	3.9
Hardwood	6,877.2	846.6	5,527.6	4,475.1	1,052.5	503.1	376.1	127.0
Total	13,849.2	1,170.1	12,154.8	10,244.1	1,910.7	524.4	393.5	130.9
Other public								
Softwood	1,686.0	118.2	1,520.6	1,316.0	204.6	47.3	37.8	9.5
Hardwood	4,024.1	285.6	3,324.4	2,688.3	636.1	414.2	322.5	91.7
Total	5,710.1	403.7	4,845.0	4,004.3	840.7	461.5	360.3	101.2
Forest industry								
Softwood	24,357.5	1,556.3	22,521.0	18,517.2	4,003.8	280.3	224.4	55.9
Hardwood	19,049.1	4,590.8	12,531.0	10,215.3	2,315.8	1,927.3	1,458.8	468.5
Total	43,406.6	6,147.1	35,052.0	28,732.5	6,319.6	2,207.6	1,683.2	524.4
Nonindustrial private								
Softwood	56,776.2	4,733.0	49,701.7	41,789.6	7,912.1	2,341.5	1,946.0	395.6
Hardwood	128,174.6	17,538.6	94,873.5	76,683.4	18,190.1	15,762.6	12,181.8	3,580.8
Total	184,950.8	22,271.5	144,575.2	118,473.0	26,102.2	18,104.1	14,127.8	3,976.3
All ownerships								
Softwood	89,791.6	6,730.8	80,370.5	67,391.9	12,978.7	2,690.3	2,225.5	464.9
Hardwood	158,125.0	23,261.5	116,256.4	94,062.0	22,194.4	18,607.1	14,339.2	4,268.0
Total	247,916.6	29,992.3	196,626.9	161,453.9	35,173.1	21,297.4	16,564.6	4,732.8

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, West-Central Alabama, 1990 to 1999

Treatment or disturbance	All classes	Ownership class		
		Public	Forest industry	Nonindustrial private
<i>Thousand acres</i>				
Final harvest	76.5	1.5	15.7	59.2
Partial harvest ^a	38.3	1.5	6.3	30.5
Seed tree/shelterwood	3.3	—	0.6	2.7
Commercial thinning	16.1	1.3	7.2	7.6
Other stand improvement	8.0	0.4	5.7	1.9
Site preparation	36.2	—	9.5	26.7
Artificial regeneration ^b	41.6	—	10.9	30.7
Natural regeneration ^b	58.5	1.1	7.7	49.7
Other treatment	11.9	0.7	2.1	9.1
Natural disturbance				
Disease	8.6	0.4	2.0	6.2
Insects	1.8	0.1	—	1.7
Fire	—	—	—	—
Weather	5.2	0.2	1.0	4.0
Animals	8.8	1.0	0.9	6.8
Other disturbances				
Grazing	—	—	—	—
Other man-caused disturbance	2.8	—	0.6	2.3

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, West-Central Alabama, 1990 to 1999

Treatment or disturbance	All types	Forest management type ^a					Nonstocked
		Pine plantation	Natural pine	Oak–pine	Upland hardwood	Lowland hardwood	
<i>Thousand acres</i>							
Final harvest	76.5	9.9	16.8	26.5	21.6	1.6	—
Partial harvest ^b	38.3	3.3	10.2	7.2	11.4	6.2	—
Seed tree/shelterwood	3.3	0.6	1.5	0.6	0.5	—	—
Commercial thinning	16.1	10.8	3.6	1.1	0.2	0.5	—
Other stand improvement	8.0	5.9	1.1	1.0	—	—	—
Site preparation	36.2	5.6	10.0	13.3	7.3	0.0	—
Other treatment	11.9	1.5	1.6	2.6	4.7	1.6	—
Natural disturbance							
Disease	8.6	2.9	2.0	3.0	0.6	0.1	—
Insects	1.8	0.2	0.8	0.8	—	—	—
Fire	—	—	—	—	—	—	—
Weather	5.2	0.6	0.5	1.0	0.2	2.9	—
Animals	8.8	—	—	0.6	1.9	6.2	—
Other disturbance							
Grazing	—	—	—	—	—	—	—
Other man-caused disturbance	2.8	0.6	—	2.0	0.2	—	—

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, West-Central Alabama, 1990 to 1999

Type of regeneration	All types	Forest management type ^a					
		Pine plantation	Natural pine	Oak–pine	Upland hardwood	Lowland hardwood	Nonstocked
<i>Thousand acres</i>							
Artificial regeneration following harvest	29.8	20.4	—	7.9	1.5	—	—
Natural regeneration following harvest	34.3	—	3.3	8.4	21.4	1.3	—
Other artificial regeneration on forest land	6.2	5.6	—	0.6	—	—	—
Other natural regeneration on forest land	13.8	0.6	1.6	3.6	6.0	2.0	—
Artificial regeneration on former nonforest land	5.9	4.9	—	1.0	—	—	—
Natural reversion of former nonforest land	10.2	—	3.6	3.6	1.2	1.8	—
Total	100.4	31.5	8.6	25.2	30.1	5.0	—

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 nine-county area of Alabama. Major findings are highlighted in text and graphics; detailed data are presented in 49 tables.

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

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