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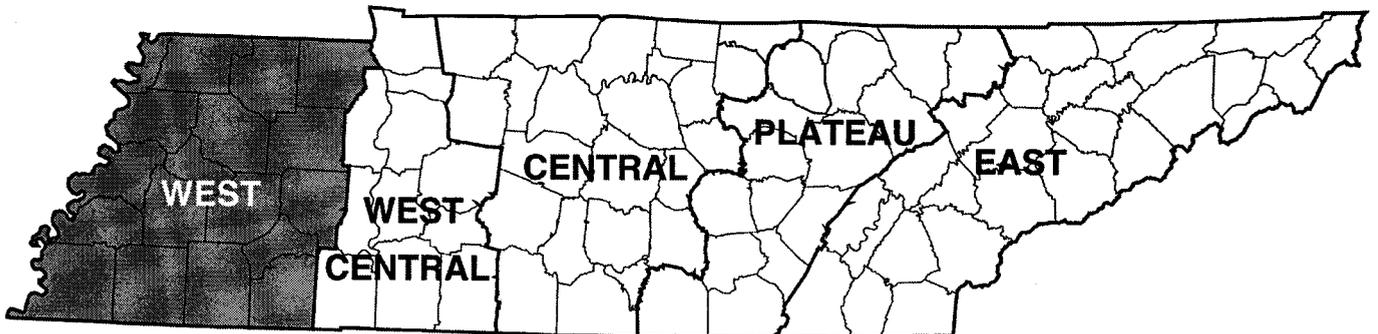


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Research Station

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SRS-41

# Forest Statistics for West Tennessee, 1997

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**The Author:**

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## **Foreword**

This report highlights the principal findings of the sixth forest survey of West Tennessee. Field work began in December 1996 and was completed in June 1997. Five previous surveys, completed in 1950, 1961, 1970, 1980, and 1989 provide statistics for measuring changes and trends over the past 47 years. This report primarily emphasizes the changes and trends since 1989.

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 Monitoring (FIM) Research Work Unit at the Southern Research Station, Asheville, NC. The FIM unit operates out of two locations, one in Starkville, MS, and the other in Asheville, NC, and is responsible for inventories of 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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## **Acknowledgment**

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<sup>a</sup> 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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# Forest Statistics for West Tennessee, 1997

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## Highlights

This report summarizes results from a 1997 inventory of the forest resources of West Tennessee (fig. 1). Current estimates of forest area, timberland area, related classifications such as ownership and forest type, and timber volumes are presented and compared with previous values. Average annual rates of net growth, removals, and mortality are summarized since the previous inventory in 1989. Resource data are presented in 51 tables and 9 graphs. A summary of major findings follows.

**Timberland area**—The area classified as timberland in the 18-county area has increased 11 percent since 1989, from 1.96 million acres to 2.18 million acres. Seventy-one thousand nine hundred acres were diverted from timberland to other uses, while 284,600 acres were added from previous nonforest use, resulting in a 212,600-acre net change. The majority of the diverted area was cleared for agriculture and urban-related land uses. Forests cover 36 percent of the land area in West Tennessee.

**Ownership**—Nonindustrial private forest (NIPF) ownership land increased 15 percent, and totaled 1.86 million acres. NIPF owners control 85 percent of the timberland in West Tennessee. The area of timberland declined by 24 percent on industry land, from 161,300 acres in 1989 to 122,100 acres in 1997. Public agencies control 192,800 acres, a 5-percent increase.

**Forest type**—Forest stands classified as hardwood forest type occupy 1.99 million acres, or 92 percent of timberland in the region. Hardwood stands have increased 12 percent since 1989. Stands classified as oak-pine forest type increased 16.5 percent to 172,300 acres, while stands classified as pine forest type decreased by 14 percent to 153,900 acres. Oak-hickory remains the predominant forest type in the region with 1.23 million acres.

**Stand treatment**—Harvesting and regeneration have been the predominant treatment and management activities in the timberland of West Tennessee since 1989. Final harvests occurred on 12,200 acres annually. Fifty-seven percent of final harvests was in hardwood stands, 39 percent occurred in pine stands, and 4 percent in oak-pine stands. A combination of reforestation and afforestation averaged 47,400 acres annually. Planting activities accounted for 14 percent of this total.

**Hardwood volume**—Volume of hardwood growing stock increased 21 percent to 2.9 billion cubic feet. On public lands, hardwood volume increased 53 percent to 374.8 million cubic feet. On NIPF lands it increased by 23 percent to 2.4 billion cubic feet. Hardwood volume declined 43 percent to 110.3 million cubic feet on forest industry land. Oak species collectively accounted for 1.0 billion cubic feet, or 36 percent of hardwood volume; volume in hickories increased 25 percent to 255.6 million cubic feet and soft maple volume was up 83 percent to 192.1 million cubic feet. Volume of hardwood sawtimber increased 21 percent to 10.1 billion board feet.

**Softwood volume**—Volume of softwood growing stock increased 39 percent to 487.9 million cubic feet between 1989 and 1997. Softwood volume increased 52 percent to 337.8 million cubic feet on NIPF land, 19 percent to 47.2 million cubic feet on forest industry land, and 15 percent to 102.9 million cubic feet on public land. At 210.5 million cubic feet, loblolly pine is now the predominant softwood species. Volume of loblolly pine has increased 76 percent since 1989. Volume of short-leaf pine dropped 5 percent to 121.2 million cubic feet. Other softwood volumes were classified under baldcypress and redcedar. The inventory of softwood sawtimber totals 2.1 billion board feet, a 62-percent increase from the previous survey period.

**Growth**—Net annual growth of hardwood growing stock averaged 95.4 million cubic feet. Net annual growth of hardwoods increased 3 percent since the previous survey period. Hardwood growth declined 31 percent on industry land, and increased 18.5 and 4 percent on public and NIPF lands, respectively.

Net annual growth of softwood growing stock averaged 20.6 million cubic feet. Net annual growth of softwoods has increased 82 percent since the previous survey period. Softwood growth increased 225 percent on public land, 72 percent on NIPF land, and 70 percent on forest industry land.

**Removals**—Annual removals of hardwood growing stock averaged 64.5 million cubic feet. Hardwood removals have increased 77 percent since the previous survey period. Eighty-five percent of hardwood removals occurred on NIPF land, 12 percent on forest industry land, and 3 percent on public land. Across all ownerships, hardwood growth exceeded removals by 48 percent (or by a margin of 1.5 to 1).

Annual removals of softwood growing stock averaged 19.6 million cubic feet. Softwood removals have increased 221 percent since the previous survey period. Sixty-seven percent of softwood removals occurred on NIPF land, 18 percent on forest industry land, and 14 percent on public land. Across all ownerships, softwood growth exceeded removals by 5 percent (or by a margin of 1.1 to 1).

**Mortality**—Mortality of growing stock has increased 16 percent to 31.1 million cubic feet since 1989. Hardwood mortality increased 9 percent to 26.1 million cubic feet; softwood mortality increased 72 percent to 5.0 million cubic feet.

## Inventory Methods

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

The plot design at each ground sample location was based on 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 circular microplot, located at the center of the subplot, was used to sample trees 1.0 through 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 forest cover. Forest and nonforest condition classes were delineated and recorded. Condition classes were defined by six attributes: land use, forest type, stand origin, stand size, stand density, and major ownership. All trees tallied were assigned to their respective condition class.

The cluster of four fixed plots sampled timberland at 460 ground sample locations in this survey unit. Estimates of timber volume and forest classification were derived from tree measurements and classifications made at these locations. Volumes for individual tally trees were computed using equations for each of the major species in the survey unit. The equations were developed from detailed measurements collected on standing trees in this survey unit and throughout the region.

Estimates of growth, removals, and mortality were determined from the remeasurement of 344 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 each plot center.

## Statistical Reliability

FIM 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>
<b>Timberland (1,000 acres)</b>	2,175.7 ±	11.5	0.53
<b>All live (M ft<sup>3</sup>)</b>			
Inventory	4,003.2 ±	156.1	3.90
Net annual growth	134.8 ±	7.4	5.47
Annual removals	90.3 ±	11.1	12.30
Annual mortality	43.8 ±	3.9	8.82
<b>Growing stock (M ft<sup>3</sup>)</b>			
Inventory	3,370.6 ±	146.3	4.34
Net annual growth	116.1 ±	6.4	5.52
Annual removals	84.0 ±	10.7	12.77
Annual mortality	31.1 ±	3.0	9.61
<b>Sawtimber (M fbm)</b>			
Inventory	12,120.5 ±	739.4	6.10
Net annual growth	562.6 ±	31.3	5.56
Annual removals	361.9 ±	49.1	13.56
Annual mortality	89.6 ±	11.3	12.63

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

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

where

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

$SE_t$  = sampling error for survey unit or State total,

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

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

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

$$SE_s = 4.34 \frac{\sqrt{3,370.6}}{\sqrt{2,397.6}} = 5.15.$$

Thus, the sampling error is 5.15 percent, and the resulting confidence interval (two times out of three) for hardwood growing-stock inventory on NIPF land is 2,397.6 ± 123.5 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<sup>a</sup> by counties and survey unit for timberland, live trees, growing stock, and sawtimber, West Tennessee, 1997**

Counties and survey unit	Timberland area	Live trees			Growing stock			Sawtimber		
		Volume	Growth	Removals	Volume	Growth	Removals	Volume	Growth	Removals
		<i>Percent</i>								
Carroll	1.9	12.1	16.0	49.2	12.3	16.5	52.0	19.4	17.4	52.2
Chester	3.1	17.7	19.6	53.9	19.6	20.0	53.6	23.5	16.3	61.0
Crockett	3.0	48.5	35.9	—	51.7	58.6	—	76.9	36.9	—
Dyer	1.8	26.9	30.8	100.0	28.4	37.4	100.0	33.6	30.3	100.0
Fayette	2.2	19.8	29.5	43.8	23.0	35.2	45.6	27.4	31.0	46.7
Gibson	2.7	25.7	44.9	100.0	28.8	57.0	100.0	39.5	52.5	100.0
Hardeman	2.2	9.6	24.9	29.8	11.4	22.7	32.1	16.0	18.7	33.0
Haywood	1.6	22.3	38.8	100.0	24.9	34.9	100.0	32.9	39.3	100.0
Henderson	2.1	12.7	16.6	37.7	14.3	17.7	41.9	22.0	18.1	40.1
Henry	1.2	11.9	13.4	32.7	13.1	13.5	33.5	20.0	16.1	35.1
Lake	3.3	104.8	100.1	—	104.9	100.1	—	106.6	100.1	—
Lauderdale	1.2	29.1	38.2	47.7	32.9	39.4	47.7	42.0	37.9	47.5
McNairy	2.6	11.1	14.4	27.6	11.7	15.0	28.2	14.7	18.0	34.9
Madison	2.6	12.0	13.5	37.6	13.2	14.1	37.2	17.3	15.6	38.8
Obion	1.6	11.7	22.2	100.0	13.4	21.6	100.0	17.3	19.7	100.0
Shelby	2.1	13.0	14.6	56.3	15.0	16.1	55.6	17.5	18.1	52.4
Tipton	1.7	20.5	25.7	100.0	26.4	29.2	100.0	34.5	24.2	100.0
Weakley	1.8	18.0	31.1	63.9	19.0	20.7	63.9	25.9	26.4	62.4
<b>Survey unit</b>	<b>0.5</b>	<b>3.9</b>	<b>5.5</b>	<b>12.3</b>	<b>4.3</b>	<b>5.5</b>	<b>12.8</b>	<b>6.1</b>	<b>5.6</b>	<b>13.6</b>

<sup>a</sup> By random-sampling formula.

## Definitions

**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 Monitoring, 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 Monitoring 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.

*Forest industry-leased land.* Land leased or under management contracts to forest industry from other owners for periods of one forest rotation or longer. Land under cutting contracts is not included.

*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.

**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 nonpulpmills, chipped, and then sold to pulp mills as residues, including chipped tops, jump sections, whole trees, and pulpwood sticks.

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

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

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

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

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

**Saw-log top.** The point on the bole of sawtimber trees above which a conventional saw log cannot be produced. The minimum saw-log top is 7.0 inches d.o.b. for softwoods and 9.0 inches d.o.b. for hardwoods.

**Sawtimber-size trees.** Softwoods 9.0 inches d.b.h. and larger and hardwoods 11.0 inches d.b.h. and larger.

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

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

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

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

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

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

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

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

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

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

*Planted.* Planted or artificially seeded.

*Natural.* No evidence of artificial regeneration.

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

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

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

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

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

**Stocking.** The degree of occupancy of land by trees, measured by basal area or the number of trees in a stand and spacing in the stand, compared with a minimum standard, depending on tree size, required to fully utilize the growth potential of the land.

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

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

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

**Timber products.** Roundwood products and byproducts.

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

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

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

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

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

## **Metric Equivalents**

---

1 acre = 4,046.86 square meters or 0.404686 hectare

1 cubic foot = 0.028317 cubic meter

1 inch = 2.54 centimeters or 0.0254 meter

Breast height = 1.4 meters aboveground level

1 square foot = 929.03 square centimeters or 0.0929 square meter

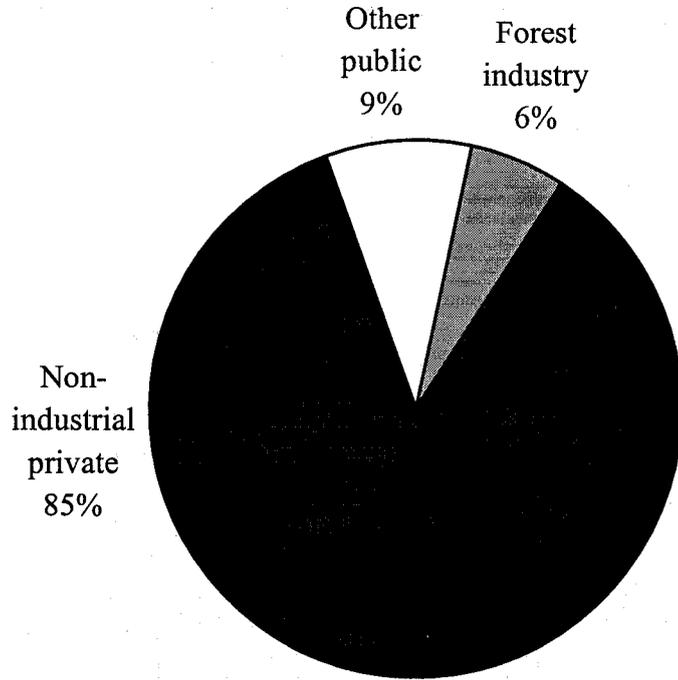
1 square foot per acre basal area = 0.229568 square meter per hectare

1 pound = 0.454 kilogram

1 ton = 0.907 metric ton

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**Graphs**



**2.2 Million acres**

Figure 2—Distribution of timberland by ownership class, West Tennessee, 1997.

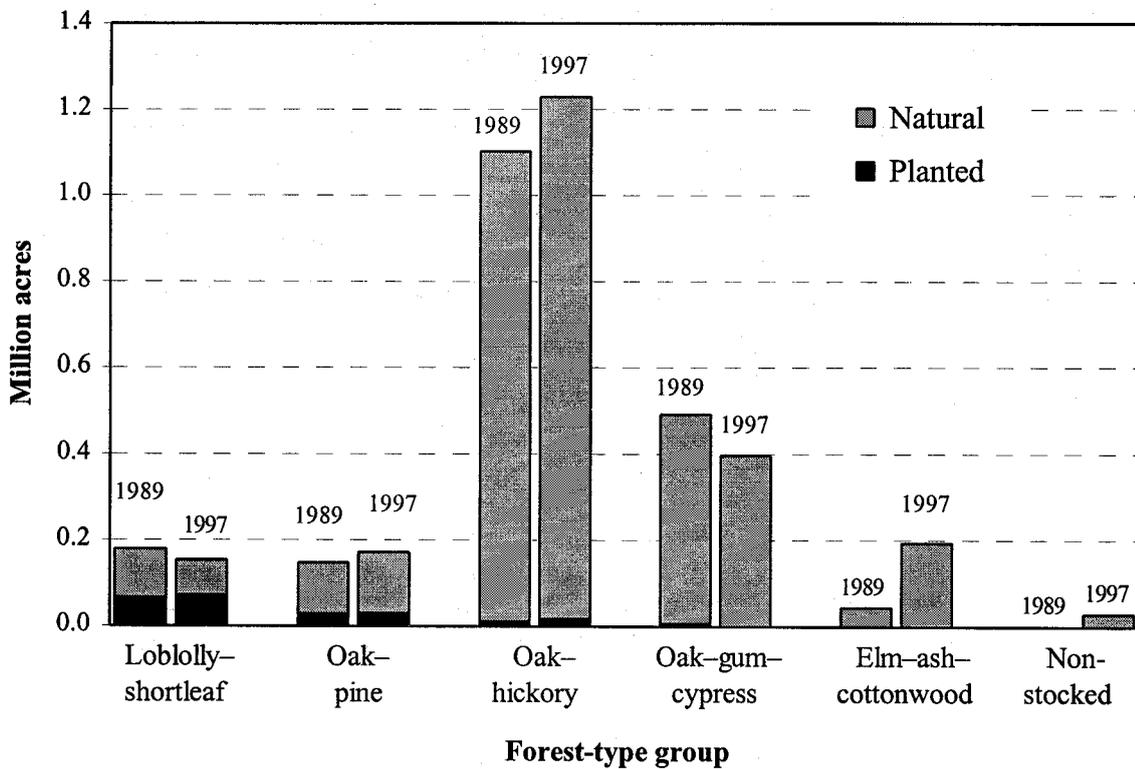


Figure 3—Area of timberland by forest-type group and stand origin, West Tennessee, 1989 and 1997.

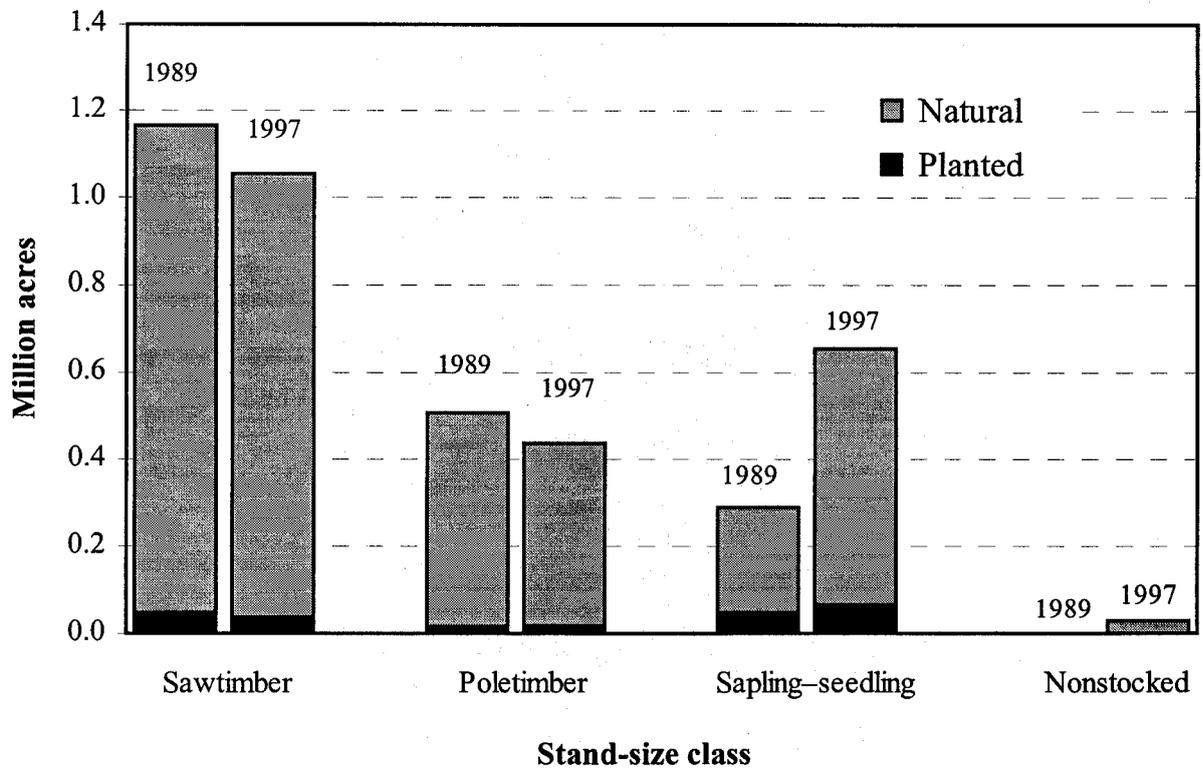


Figure 4—Area of timberland by stand-size class and stand origin, West Tennessee, 1989 and 1997.

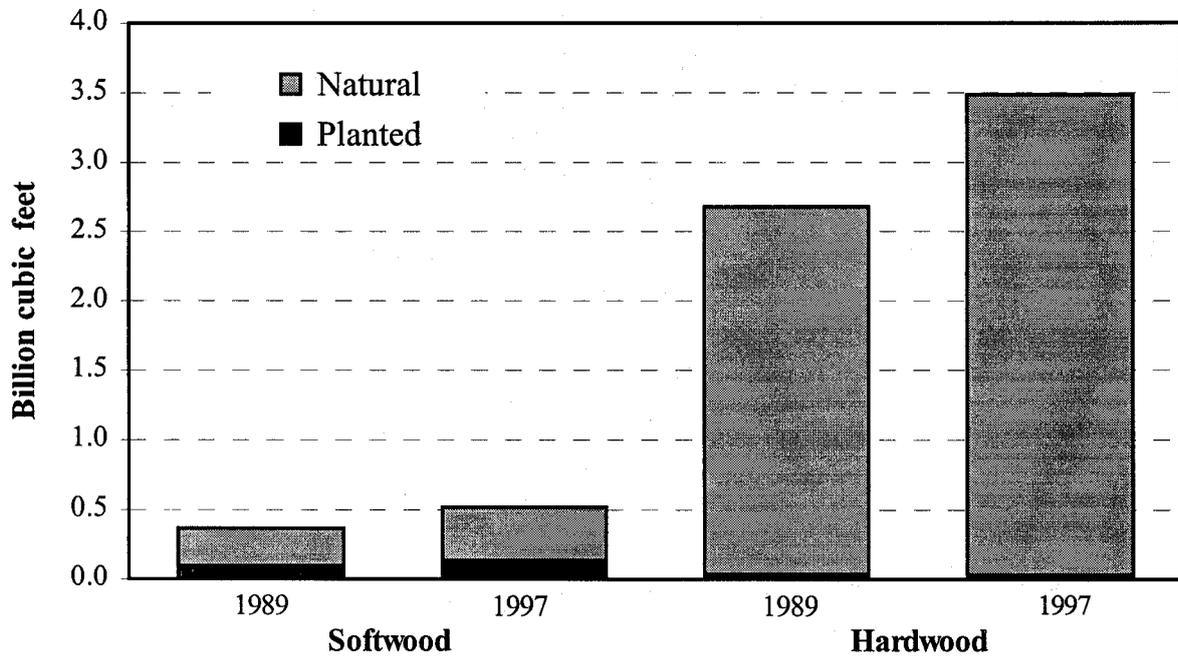
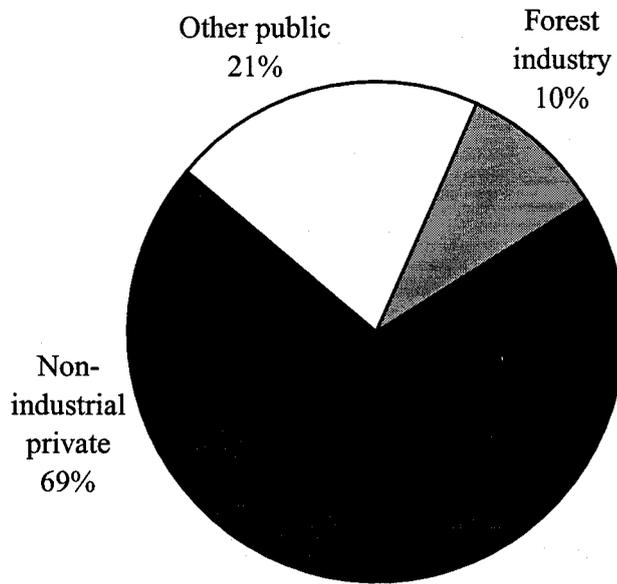
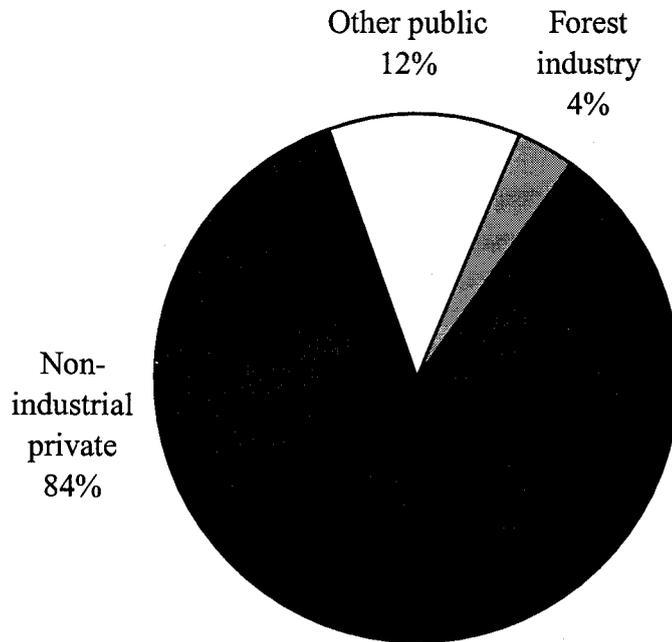


Figure 5—Volume of live trees on timberland by species group and stand origin, West Tennessee, 1989 and 1997.



**0.5 Billion cubic feet**

Figure 6—Distribution of softwood live tree volume by ownership class, West Tennessee, 1997.



**3.5 Billion cubic feet**

Figure 7—Distribution of hardwood live tree volume by ownership class, West Tennessee, 1997.

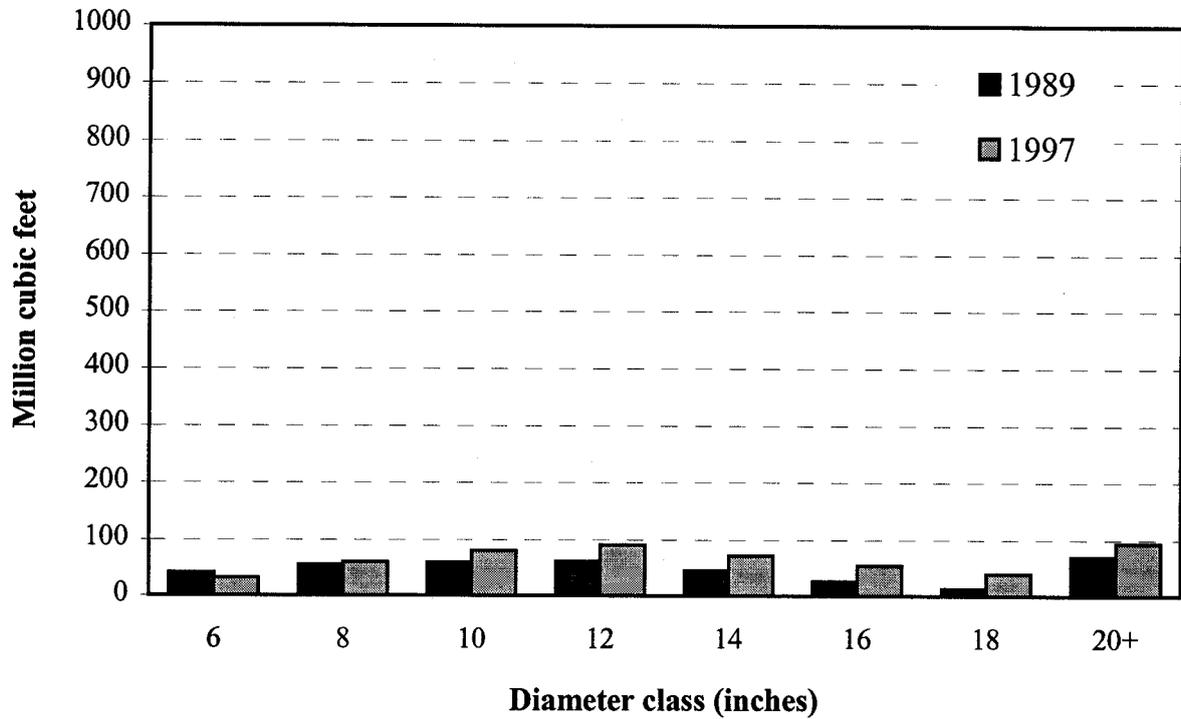


Figure 8—Volume of softwood live trees on timberland by diameter class, West Tennessee, 1989 and 1997.

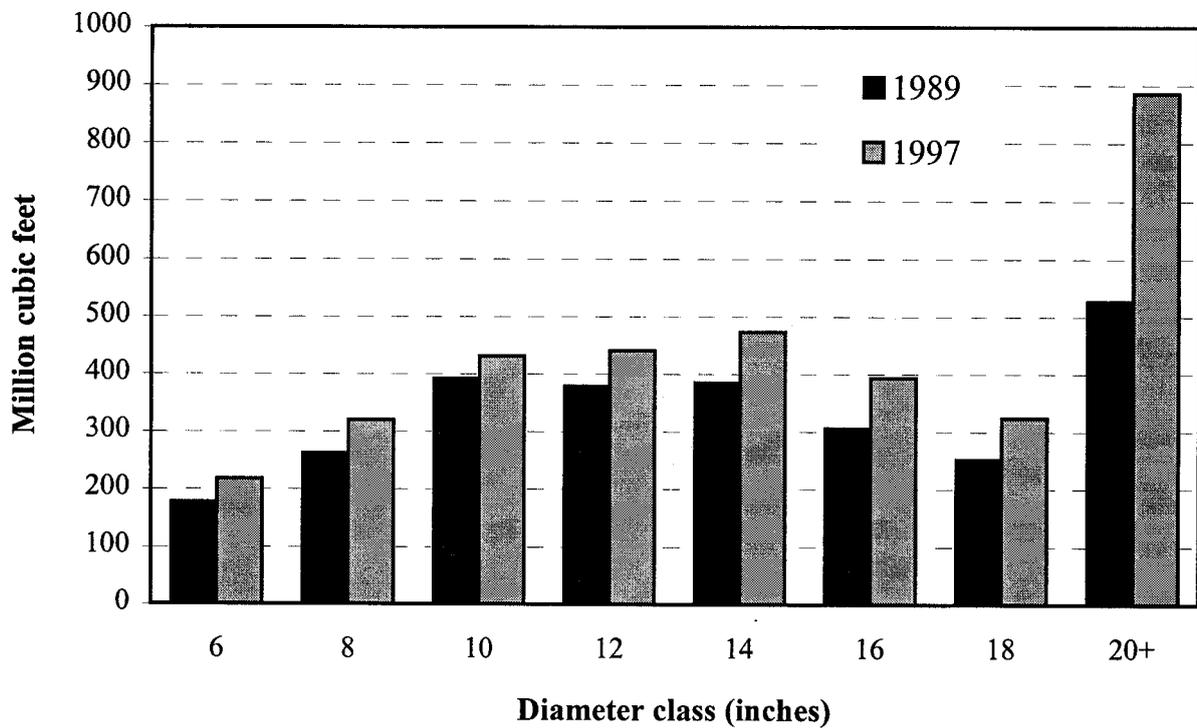


Figure 9—Volume of hardwood live trees on timberland by diameter class, West Tennessee, 1989 and 1997.

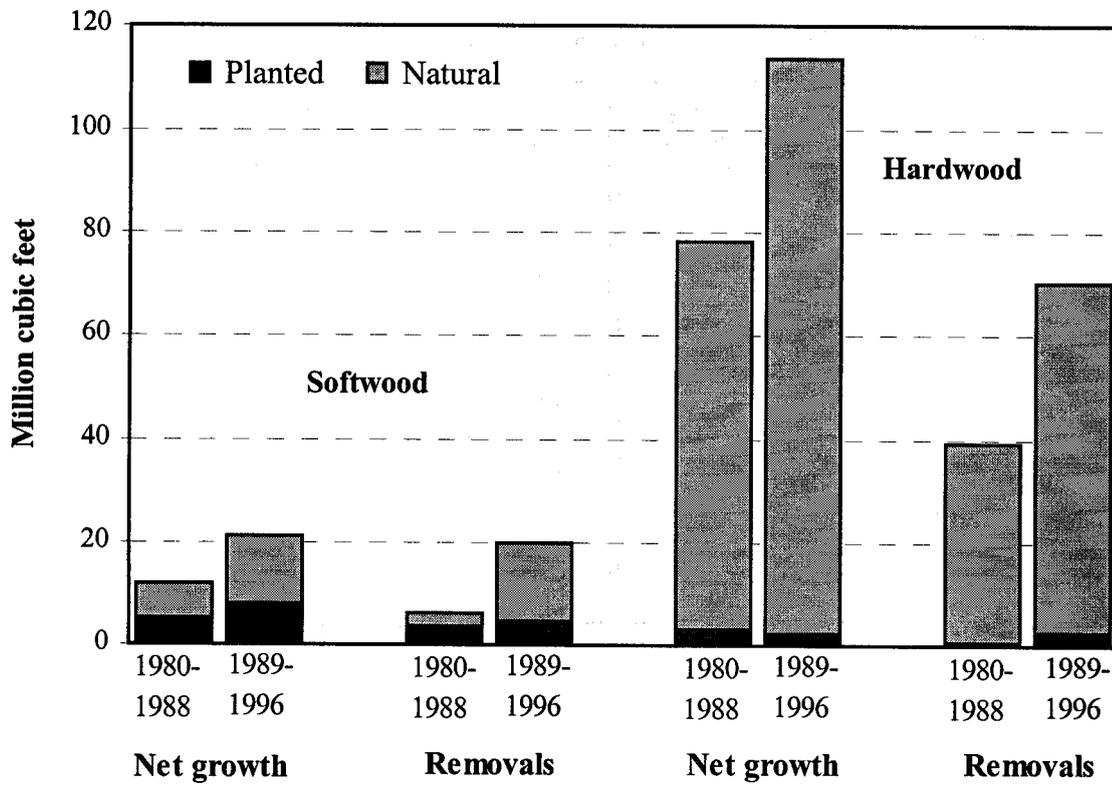


Figure 10—Average net annual growth and removals of live trees on timberland by species group and stand origin, West Tennessee, 1980-1988 and 1989-1996.

## Cross Reference of Eastern Core Tables

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6	7	19	35, 37
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8	10	21	38
9	11	22	40
10	17	23	41
11	18	24	43
12	20	25	23
13	21		

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**Table 1—Land area by county and land class, West Tennessee, 1997**

County	Total land area <sup>a</sup>	Forest land				Other land <sup>b</sup>
		Total forest	Timberland	Productive reserved	Other	
<i>Thousand acres</i>						
Carroll	383.4	201.5	201.5	—	—	181.9
Chester	184.7	102.2	102.2	—	—	82.4
Crockett	169.8	17.2	17.2	—	—	152.6
Dyer	326.8	44.5	44.5	—	—	282.3
Fayette	450.9	187.2	187.2	—	—	263.7
Gibson	385.7	74.5	74.5	—	—	311.2
Hardeman	427.3	275.9	275.9	—	—	151.4
Haywood	341.3	97.5	97.5	—	—	243.8
Henderson	332.8	175.0	175.0	—	—	157.8
Henry	359.5	155.3	155.3	—	—	204.2
Lake	104.6	25.2	25.2	0.0	—	79.4
Lauderdale	301.1	93.3	92.6	0.7	—	207.8
McNairy	358.5	215.0	215.0	—	—	143.4
Madison	356.6	140.7	140.7	—	—	215.8
Obion	348.8	87.0	87.0	—	—	261.8
Shelby	483.1	127.1	127.1	—	—	356.1
Tipton	294.0	70.6	70.6	—	—	223.4
Weakley	371.4	86.9	86.7	0.2	—	284.5
<b>Total</b>	<b>5,980.1</b>	<b>2,176.7</b>	<b>2,175.7</b>	<b>1.0</b>	<b>—</b>	<b>3,803.5</b>

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.

<sup>a</sup> From the U.S. Bureau of the Census, 1990.

<sup>b</sup> Includes 37.3 thousand acres of water according to Forest Inventory and Monitoring 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 Tennessee, 1997**

Forest-type group	All classes	Ownership class					Forest industry	Nonindustrial private
		National forest	Miscellaneous Federal	State	County and municipal	Forest industry		
<i>Thousand acres</i>								
White-red-jack pine	—	—	—	—	—	—	—	
Spruce-fir	—	—	—	—	—	—	—	
Longleaf-slash pine	—	—	—	—	—	—	—	
Loblolly-shortleaf pine	153.9	—	5.7	8.0	—	25.6	114.7	
Oak-pine	172.4	—	10.8	6.6	—	25.3	129.7	
Oak-hickory	1,229.4	—	6.6	53.2	5.9	33.6	1,130.2	
Oak-gum-cypress	397.1	—	36.3	17.1	11.7	21.3	310.7	
Elm-ash-cottonwood	194.2	—	14.7	12.9	1.6	16.4	148.6	
Maple-beech-birch	—	—	—	—	—	—	—	
Tropical hardwood	—	—	—	—	—	—	—	
Nonstocked	29.8	—	—	0.8	2.1	—	26.9	
<b>Total</b>	<b>2,176.7</b>	<b>—</b>	<b>74.1</b>	<b>98.5</b>	<b>21.2</b>	<b>122.2</b>	<b>1,860.7</b>	

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 Tennessee, 1997**

County	All classes	Ownership class						
		National forest	Miscellaneous Federal	State	County and municipal	Forest industry	Nonindustrial private	
						Corporate	Individual	
<i>Thousand acres</i>								
Carroll	201.5	—	—	12.9	—	17.8	6.6	164.2
Chester	102.2	—	—	10.2	—	20.3	5.3	66.5
Crockett	17.2	—	—	—	—	—	—	17.2
Dyer	44.5	—	1.3	6.7	9.5	6.7	6.7	13.5
Fayette	187.2	—	—	—	—	—	35.1	152.1
Gibson	74.5	—	8.2	7.1	—	—	—	59.2
Hardeman	275.9	—	—	6.2	—	12.5	22.9	234.3
Haywood	97.5	—	—	—	—	—	3.1	94.4
Henderson	175.0	—	14.9	16.2	—	—	—	144.0
Henry	155.3	—	10.5	—	—	5.4	11.3	128.2
Lake	25.2	—	—	10.3	—	—	—	14.9
Lauderdale	92.6	—	33.3	—	—	8.3	—	51.0
McNairy	215.0	—	—	5.4	—	38.1	5.4	166.0
Madison	140.7	—	—	5.0	—	—	12.5	123.2
Obion	87.0	—	5.9	—	—	—	7.6	73.4
Shelby	127.1	—	—	17.5	11.7	—	—	97.9
Tipton	70.6	—	—	—	—	—	—	70.6
Weakley	86.7	—	—	—	—	13.1	12.3	61.3
<b>Total</b>	<b>2,175.7</b>	<b>—</b>	<b>74.1</b>	<b>97.5</b>	<b>21.2</b>	<b>122.2</b>	<b>128.9</b>	<b>1,731.9</b>

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 Tennessee, 1997**

County	Forest-type group						
	All groups	Loblolly-shortleaf	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-cottonwood	Nonstocked
<i>Thousand acres</i>							
Carroll	201.5	16.6	15.4	137.1	16.3	14.5	1.5
Chester	102.2	10.1	24.0	52.1	5.1	10.6	0.5
Crockett	17.2	—	—	17.2	—	—	—
Dyer	44.5	—	—	11.7	8.4	18.0	6.3
Fayette	187.2	14.3	17.1	136.8	17.9	—	1.1
Gibson	74.5	5.7	—	45.3	4.7	17.3	1.5
Hardeman	275.9	29.7	13.9	195.4	36.5	—	0.3
Haywood	97.5	1.6	—	19.8	53.2	19.8	3.1
Henderson	175.0	21.0	25.8	111.9	16.3	—	—
Henry	155.3	3.9	2.8	96.0	34.1	17.2	1.4
Lake	25.2	—	—	—	13.4	11.8	—
Lauderdale	92.6	—	—	23.7	48.1	18.7	2.1
McNairy	215.0	30.9	44.8	121.4	15.5	—	2.4
Madison	140.7	8.9	19.1	74.6	28.8	7.6	1.8
Obion	87.0	—	—	43.0	29.7	14.3	—
Shelby	127.1	8.8	1.3	48.3	33.3	29.1	6.3
Tipton	70.6	—	—	55.9	6.6	8.1	—
Weakley	86.7	2.4	8.2	39.1	29.4	7.1	0.6
<b>Total</b>	<b>2,175.7</b>	<b>153.9</b>	<b>172.4</b>	<b>1,229.3</b>	<b>397.0</b>	<b>194.2</b>	<b>29.0</b>

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 Tennessee, 1997**

County	All classes	Stand-size class			
		Sawtimber	Poletimber	Sapling-seedling	Nonstocked
<i>Thousand acres</i>					
Carroll	201.5	87.5	59.0	53.5	1.5
Chester	102.2	38.2	30.7	32.9	0.5
Crockett	17.2	13.6	1.5	2.1	—
Dyer	44.5	14.2	5.8	18.1	6.3
Fayette	187.2	65.6	21.7	98.8	1.1
Gibson	74.5	28.2	21.0	23.8	1.5
Hardeman	275.9	130.3	60.4	84.8	0.3
Haywood	97.5	52.6	8.4	33.4	3.1
Henderson	175.0	72.7	45.1	57.2	—
Henry	155.3	79.8	37.7	36.5	1.4
Lake	25.2	13.4	—	11.8	—
Lauderdale	92.6	61.5	6.2	22.9	2.1
McNairy	215.0	74.6	52.6	85.4	2.4
Madison	140.7	87.3	24.8	26.8	1.8
Obion	87.0	67.9	9.3	9.8	—
Shelby	127.1	83.3	17.4	20.1	6.3
Tipton	70.6	31.0	16.3	23.3	—
Weakley	86.7	53.5	19.1	13.5	0.6
<b>Total</b>	<b>2,175.7</b>	<b>1,055.2</b>	<b>436.9</b>	<b>654.6</b>	<b>29.0</b>

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 Tennessee, 1997**

County	All classes	Site class (cubic feet/acre/year)				
		20-49	50-84	85-119	120-164	>165
<i>Thousand acres</i>						
Carroll	201.5	23.4	71.4	71.0	33.2	2.6
Chester	102.2	3.6	42.2	18.4	32.9	5.3
Crockett	17.2	—	—	15.1	2.1	—
Dyer	44.5	—	—	25.7	8.7	10.1
Fayette	187.2	9.0	65.1	64.9	31.6	16.6
Gibson	74.5	1.5	30.6	30.2	12.2	—
Hardeman	275.9	10.8	114.4	61.2	70.8	18.6
Haywood	97.5	5.7	9.1	42.3	9.8	30.6
Henderson	175.0	—	68.3	58.3	43.0	5.4
Henry	155.3	5.4	55.0	81.1	12.5	1.4
Lake	25.2	—	—	11.8	13.4	—
Lauderdale	92.6	—	16.7	25.1	25.9	25.0
McNairy	215.0	—	70.9	114.1	20.5	9.5
Madison	140.7	5.0	42.6	58.4	17.7	17.0
Obion	87.0	—	25.5	43.7	5.9	11.9
Shelby	127.1	5.0	20.4	33.1	51.0	17.5
Tipton	70.6	—	15.2	14.7	24.4	16.3
Weakley	86.7	—	16.0	50.2	8.9	11.5
<b>Total</b>	<b>2,175.7</b>	<b>69.5</b>	<b>663.2</b>	<b>819.4</b>	<b>424.5</b>	<b>199.2</b>

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

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

**Table 7—Area of timberland by county and stocking class of growing-stock trees, West Tennessee, 1997**

County	All classes	Stocking class (percent)				
		<16.7	16.7-59	60-99	100-130	>130
<i>Thousand acres</i>						
Carroll	201.5	7.1	26.9	94.0	58.5	15.0
Chester	102.2	2.2	6.8	32.5	42.0	18.8
Crockett	17.2	1.5	8.8	—	6.9	—
Dyer	44.5	6.3	5.0	11.7	21.4	—
Fayette	187.2	19.3	75.7	62.4	26.3	3.5
Gibson	74.5	4.3	5.6	22.8	27.7	14.1
Hardeman	275.9	2.5	54.5	124.5	70.0	24.3
Haywood	97.5	3.1	9.4	39.9	41.6	3.5
Henderson	175.0	1.4	19.9	58.9	79.7	15.3
Henry	155.3	5.6	19.8	93.9	35.2	0.9
Lake	25.2	—	—	9.4	10.3	5.5
Lauderdale	92.6	9.3	46.9	19.0	—	17.5
McNairy	215.0	5.3	14.4	108.2	60.4	26.8
Madison	140.7	5.5	12.5	77.7	40.0	5.1
Obion	87.0	0.9	—	42.0	18.6	25.4
Shelby	127.1	12.1	16.0	55.5	33.8	9.7
Tipton	70.6	—	10.2	38.0	22.4	—
Weakley	86.7	3.9	15.1	38.8	22.4	6.5
<b>Total</b>	<b>2,175.7</b>	<b>90.2</b>	<b>347.4</b>	<b>929.0</b>	<b>617.1</b>	<b>192.0</b>

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 8—Area of timberland by forest-type group, stand origin, and ownership class, West Tennessee, 1997**

Forest-type group and stand origin	All classes	Ownership class			
		National forest	Other public	Forest industry	Nonindustrial private
<i>Thousand acres</i>					
<b>Softwood types</b>					
Loblolly-shortleaf pine					
Planted	72.4	—	2.6	25.6	44.3
Natural	81.5	—	11.1	—	70.4
Total	153.9	—	13.7	25.6	114.7
Total softwoods	153.9	—	13.7	25.6	114.7
<b>Hardwood types</b>					
Oak-pine					
Planted	30.5	—	4.3	16.8	9.3
Natural	141.9	—	13.1	8.4	120.4
Total	172.4	—	17.4	25.3	129.7
Oak-hickory	1,229.3	—	65.5	33.6	1,130.2
Oak-gum-cypress	397.0	—	65.0	21.3	310.7
Elm-ash-cottonwood	194.2	—	29.2	16.4	148.6
Total hardwoods	1,992.9	—	177.1	96.6	1,719.1
<b>Nonstocked</b>	29.0	—	2.1	—	26.9
<b>All groups</b>	2,175.7	—	192.8	122.2	1,860.7

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

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

**Table 9—Area of timberland by forest-type group, detailed forest type, and ownership class, West Tennessee, 1997**

Forest-type group and detailed forest type	All classes	Ownership class			
		National forest	Other public	Forest industry	Nonindustrial private
<i>Thousand acres</i>					
<b>Softwood types</b>					
Loblolly-shortleaf					
Loblolly pine	96.6	—	8.0	25.6	63.1
Shortleaf pine	37.2	—	—	—	37.2
Eastern redcedar	20.1	—	5.7	—	14.4
Total	153.9	—	13.7	25.6	114.7
Total softwoods	153.9	—	13.7	25.6	114.7
<b>Hardwood types</b>					
<b>Oak-pine</b>					
Eastern redcedar-hardwood	32.6	—	5.0	—	27.7
Shortleaf pine-oak	46.5	—	—	—	46.5
Loblolly pine-hardwood	85.4	—	12.4	25.3	47.7
Other oak-pine	7.8	—	—	—	7.8
Total	172.4	—	17.4	25.3	129.7
<b>Oak-hickory</b>					
Post oak-black oak	99.0	—	6.8	0.8	91.5
White oak-red oak-hickory	386.6	—	11.0	18.3	357.3
White oak	6.5	—	—	—	6.5
Yellow-poplar-white oak-n. red oak	54.1	—	3.9	7.6	42.6
Sweetgum-yellow-poplar	204.8	—	31.3	—	173.6
Mixed hardwood	478.3	—	12.5	6.9	458.8
Total	1,229.3	—	65.5	33.6	1,130.2
<b>Oak-gum-cypress</b>					
Swamp chestnut oak-cherrybark oak	30.1	—	—	—	30.1
Sweetgum-water oak-willow oak	195.2	—	5.4	14.3	175.5
Sugarberry-elm-green ash	95.9	—	29.2	5.4	61.2
Overcup oak-water hickory	8.3	—	8.3	—	—
Cypress-water tupelo	54.4	—	22.1	—	32.3
Sweetbay-blackgum-red maple	13.1	—	—	1.5	11.6
Total	397.0	—	65.0	21.3	310.7
<b>Elm-ash-cottonwood</b>					
River birch-sycamore	62.3	—	5.0	1.4	55.9
Cottonwood	14.2	—	1.6	6.7	5.8
Willow	82.3	—	16.7	8.3	57.3
Sycamore-pecan-elm	35.4	—	5.8	—	29.5
Total	194.2	—	29.2	16.4	148.6
Total hardwoods	1,992.9	—	177.1	96.6	1,719.1
<b>Nonstocked</b>	29.0	—	2.1	—	26.9
<b>All groups</b>	2,175.7	—	192.8	122.2	1,860.7

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

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

**Table 10—Area of timberland by ownership and stocking class of growing-stock trees, West Tennessee, 1997**

Ownership class	All classes	Stocking class (percent)				
		<16.7	16.7-59	60-99	100-13	>130
<i>Thousand acres</i>						
National forest	—	—	—	—	—	—
Other public	192.8	2.1	29.0	67.4	66.1	28.2
Forest industry	122.2	2.8	7.2	41.4	54.3	16.4
Nonindustrial private	1,860.7	85.3	311.2	820.1	496.7	147.4
<b>All ownerships</b>	<b>2,175.7</b>	<b>90.2</b>	<b>347.4</b>	<b>929.0</b>	<b>617.1</b>	<b>192.0</b>

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 Tennessee, 1997**

Forest-type group and stand origin	All classes	Stand-size class			
		Sawtimber	Poletimber	Sapling-seedling	Nonstocked
<i>Thousand acres</i>					
<b>Softwood types</b>					
Loblolly-shortleaf pine					
Planted	72.4	35.0	14.7	22.7	—
Natural	81.5	51.3	6.0	24.1	—
<b>Total</b>	<b>153.9</b>	<b>86.3</b>	<b>20.7</b>	<b>46.9</b>	<b>—</b>
<b>Total softwoods</b>	<b>153.9</b>	<b>86.3</b>	<b>20.7</b>	<b>46.9</b>	<b>—</b>
<b>Hardwood types</b>					
Oak-pine					
Planted	30.5	2.7	1.5	26.2	—
Natural	141.9	38.7	48.0	55.2	—
<b>Total</b>	<b>172.4</b>	<b>41.4</b>	<b>49.5</b>	<b>81.4</b>	<b>—</b>
Oak-hickory	1,229.3	576.1	281.7	371.5	—
Oak-gum-cypress	397.0	283.8	44.6	68.6	—
Elm-ash-cottonwood	194.2	67.6	40.4	86.1	—
<b>Total hardwoods</b>	<b>1,992.9</b>	<b>968.9</b>	<b>416.2</b>	<b>607.7</b>	<b>—</b>
<b>Nonstocked</b>	<b>29.0</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>29.0</b>
<b>All groups</b>	<b>2,175.7</b>	<b>1,055.2</b>	<b>436.9</b>	<b>654.6</b>	<b>29.0</b>

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 Tennessee, 1997**

Stand-age class	All types	Forest management type					
		Pine plantation	Natural pine	Oak-pine	Upland hardwood	Lowland hardwood	Nonstocked
<i>Years</i>		<i>Thousand acres</i>					
0-10	342.7	15.2	10.1	24.6	178.0	88.9	25.9
11-20	133.5	15.6	4.8	16.2	55.6	39.2	2.1
21-30	307.3	21.9	3.3	63.4	164.3	54.1	0.3
31-40	352.4	9.9	30.4	40.1	180.6	91.5	—
41-50	404.0	7.2	21.4	23.0	250.0	101.9	0.6
51-60	209.9	2.6	5.4	—	181.8	20.1	0.1
61-70	209.9	—	6.2	3.7	129.4	70.6	—
71-80	122.1	—	—	—	42.0	80.1	—
81+	93.8	—	—	1.4	47.6	44.8	—
All classes	2,175.7	72.4	81.5	172.4	1,229.3	591.2	29.0

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 13—Area of timberland by stand-age class and forest management type, public ownerships, West Tennessee, 1997**

Stand-age class	All types	Forest management type					
		Pine plantation	Natural pine	Oak-pine	Upland hardwood	Lowland hardwood	Nonstocked
<i>Years</i>		<i>Thousand acres</i>					
0-10	25.9	—	5.7	—	11.1	7.1	2.1
11-20	—	—	—	—	—	—	—
21-30	6.5	—	—	—	5.2	1.3	—
31-40	32.0	—	—	17.4	7.2	7.4	—
41-50	15.5	—	—	—	15.5	—	—
51-60	24.2	2.6	5.4	—	16.2	—	—
61-70	37.8	—	—	—	—	37.8	—
71-80	25.5	—	—	—	—	25.5	—
81+	25.3	—	—	—	10.2	15.1	—
All classes	192.8	2.6	11.1	17.4	65.5	94.2	2.1

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 14—Area of timberland by stand-age class and forest management type, forest industry ownerships, West Tennessee, 1997**

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	38.3	6.4	—	10.0	6.9	15.1	—
11-20	31.9	11.4	—	11.4	7.8	1.3	—
21-30	22.6	6.3	—	3.9	9.5	2.9	—
31-40	2.3	1.5	—	—	0.8	—	—
41-50	10.7	—	—	—	5.3	5.4	—
51-60	3.4	—	—	—	3.4	—	—
61-70	—	—	—	—	—	—	—
71-80	13.1	—	—	—	—	13.1	—
81+	—	—	—	—	—	—	—
All classes	122.2	25.6	—	25.3	33.6	37.7	—

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

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

**Table 15—Area of timberland by stand-age class and forest management type, nonindustrial private ownerships, West Tennessee, 1997**

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	278.6	8.8	4.4	14.6	160.0	66.8	23.9
11-20	101.7	4.2	4.8	4.8	47.8	37.9	2.1
21-30	278.2	15.6	3.3	59.5	149.6	49.9	0.3
31-40	318.2	8.4	30.4	22.7	172.6	84.0	—
41-50	377.8	7.2	21.4	23.0	229.2	96.4	0.6
51-60	182.3	—	—	—	162.2	20.1	0.1
61-70	172.1	—	6.2	3.7	129.4	32.8	—
71-80	83.5	—	—	—	42.0	41.5	—
81+	68.5	—	—	1.4	37.4	29.8	—
All classes	1,860.7	44.3	70.4	129.7	1,130.2	459.3	26.9

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

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

**Table 16—Area of nonindustrial private timberland by ownership, forested tract-size class, and forest management type, West Tennessee, 1997**

Ownership and forested tract-size class	All types	Forest management type					
		Pine plantation	Natural pine	Oak-pine	Upland hardwood	Lowland hardwood	Nonstocked
<i>Acres</i>		<i>Thousand acres</i>					
<b>Individual</b>							
≤ 10	96.3	—	7.9	11.3	63.0	12.7	1.4
11-50	265.0	—	10.9	6.2	192.3	47.5	8.1
51-100	378.6	21.8	1.2	46.1	203.6	96.4	9.4
101-200	475.2	10.8	18.7	25.1	329.5	87.0	4.1
201-500	305.7	3.2	20.9	36.3	164.8	78.2	2.4
≥ 501	211.1	2.9	10.2	—	114.8	83.1	0.1
<b>Total</b>	<b>1,731.9</b>	<b>38.7</b>	<b>69.8</b>	<b>125.0</b>	<b>1,068.1</b>	<b>404.8</b>	<b>25.5</b>
<b>Corporate</b>							
≤ 10	8.5	2.4	—	—	0.7	5.4	—
11-50	6.2	—	—	—	6.2	—	—
51-100	13.2	—	0.6	—	7.3	5.3	—
101-200	26.3	1.6	—	4.7	1.6	18.1	0.3
201-500	29.4	—	—	—	9.3	19.7	0.5
≥ 501	45.3	1.6	—	—	37.1	5.9	0.7
<b>Total</b>	<b>128.9</b>	<b>5.6</b>	<b>0.6</b>	<b>4.7</b>	<b>62.1</b>	<b>54.5</b>	<b>1.5</b>
<b>All nonindustrial private</b>							
≤ 10	104.8	2.4	7.9	11.3	63.7	18.1	1.4
11-50	271.1	—	10.9	6.2	198.5	47.5	8.1
51-100	391.8	21.8	1.8	46.1	210.9	101.7	9.4
101-200	501.5	12.3	18.7	29.8	331.1	105.1	4.4
201-500	335.1	3.2	20.9	36.3	174.0	97.9	2.8
≥ 501	256.5	4.5	10.2	—	151.9	89.0	0.8
<b>Total</b>	<b>1,860.7</b>	<b>44.3</b>	<b>70.4</b>	<b>129.7</b>	<b>1,130.2</b>	<b>459.3</b>	<b>26.9</b>

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 Tennessee, 1997**

Species	All classes	Diameter class (inches at breast height)											
		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>													
<b>Softwood</b>													
Shortleaf pine	12,646	2,390	1,299	1,832	2,269	2,054	1,525	936	206	98	37	—	—
Loblolly pine	60,643	24,302	15,768	7,587	4,839	3,556	2,104	1,206	835	328	39	79	—
Virginia pine	790	—	790	—	—	—	—	—	—	—	—	—	—
Baldcypress	3,402	415	—	339	267	336	471	218	291	269	178	513	105
Redcedars	54,514	28,767	16,399	4,757	2,699	1,135	532	96	65	32	—	32	—
<b>Total softwoods</b>	<b>131,995</b>	<b>55,874</b>	<b>34,256</b>	<b>14,515</b>	<b>10,074</b>	<b>7,081</b>	<b>4,632</b>	<b>2,456</b>	<b>1,397</b>	<b>727</b>	<b>254</b>	<b>624</b>	<b>105</b>
<b>Hardwood</b>													
Select white oaks	47,923	23,279	6,251	4,700	3,778	2,818	2,345	2,031	968	610	419	639	85
Select red oaks	14,874	3,533	1,688	1,837	2,017	1,139	1,607	831	747	569	209	564	133
Other white oaks	22,602	6,605	5,326	2,696	2,467	1,739	1,562	1,084	548	165	50	360	—
Other red oaks	57,700	18,687	11,704	6,002	4,989	4,991	3,594	2,993	1,769	1,134	593	1,024	220
Hickory	78,140	50,525	9,706	5,887	2,647	3,476	2,166	1,526	1,021	364	396	353	73
Hard maple	15,376	10,571	1,853	1,184	351	426	219	335	163	72	170	32	—
Soft maple	108,037	66,815	12,847	11,200	6,778	3,641	2,530	1,907	1,230	503	362	191	33
Beech	18,219	13,738	1,539	1,085	229	449	206	112	241	201	200	151	68
Sweetgum	157,125	96,650	27,112	11,479	7,650	5,440	3,479	2,140	1,247	956	307	665	—
Tupelo and blackgum	47,945	31,072	6,783	4,006	2,486	1,435	584	645	574	252	36	72	—
Ash	39,538	24,907	5,223	3,061	1,685	1,416	1,243	847	394	475	163	124	—
Cottonwood	1,067	—	—	108	195	289	118	201	—	—	—	120	36
Yellow-poplar	40,760	22,410	6,554	3,452	2,340	1,793	1,138	1,252	555	490	333	393	50
Bay and magnolia	1,422	408	816	99	99	—	—	—	—	—	—	—	—
Black cherry	28,104	16,801	5,327	2,547	1,669	1,159	170	220	102	77	—	32	—
Black walnut	872	—	—	216	85	305	148	49	69	—	—	—	—
Sycamore	11,528	7,128	890	775	732	290	218	321	219	178	228	442	107
Black locust	3,654	2,552	360	242	331	64	39	—	33	33	—	—	—
Elm	118,736	84,299	18,054	7,893	4,303	2,324	711	536	249	165	75	46	81
Other Eastern hardwoods	268,404	187,458	46,136	16,831	8,850	4,284	2,155	1,044	761	421	326	103	35
<b>Total hardwoods</b>	<b>1,082,026</b>	<b>667,438</b>	<b>168,169</b>	<b>85,300</b>	<b>53,681</b>	<b>37,478</b>	<b>24,232</b>	<b>18,074</b>	<b>10,890</b>	<b>6,665</b>	<b>3,867</b>	<b>5,311</b>	<b>921</b>
<b>All species</b>	<b>1,214,021</b>	<b>723,312</b>	<b>202,425</b>	<b>99,815</b>	<b>63,755</b>	<b>44,559</b>	<b>28,864</b>	<b>20,530</b>	<b>12,287</b>	<b>7,392</b>	<b>4,121</b>	<b>5,935</b>	<b>1,026</b>

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 Tennessee, 1997**

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>													
<b>Softwood</b>													
Shortleaf pine	10,505	1,614	371	1,734	2,031	2,022	1,493	936	206	98	—	—	—
Loblolly pine	50,125	18,336	13,198	6,646	4,214	3,205	2,104	1,206	802	296	39	79	—
Virginia pine	395	—	395	—	—	—	—	—	—	—	—	—	—
Baldcypress	2,726	—	—	265	149	336	402	218	291	269	178	513	105
Redcedars	33,136	17,629	8,963	3,280	2,102	832	234	64	—	32	—	—	—
<b>Total softwoods</b>	<b>96,887</b>	<b>37,579</b>	<b>22,927</b>	<b>11,925</b>	<b>8,496</b>	<b>6,395</b>	<b>4,233</b>	<b>2,424</b>	<b>1,299</b>	<b>695</b>	<b>217</b>	<b>592</b>	<b>105</b>
<b>Hardwood</b>													
Select white oaks	29,327	9,324	4,986	3,660	3,041	2,526	1,711	1,654	899	500	348	639	39
Select red oaks	9,596	1,028	878	1,227	1,500	1,031	1,347	672	617	569	209	518	—
Other white oaks	14,409	1,992	4,133	1,937	2,121	1,390	1,119	799	478	165	50	225	—
Other red oaks	36,598	6,530	7,410	4,798	4,379	4,347	2,885	2,463	1,521	897	523	768	77
Hickory	39,119	17,659	6,355	4,541	2,440	2,966	1,781	1,398	945	364	317	353	—
Hard maple	6,306	2,949	1,853	467	194	223	187	208	72	36	85	32	—
Soft maple	33,476	11,127	6,953	5,448	3,687	2,172	1,371	1,239	807	331	209	99	33
Beech	8,945	6,477	684	636	65	275	102	79	205	151	121	118	32
Sweetgum	98,594	51,226	19,181	8,998	6,627	4,630	2,929	1,986	1,247	917	261	592	—
Tupelo and blackgum	11,865	1,398	3,408	2,579	1,617	1,062	505	503	465	220	36	72	—
Ash	18,510	8,107	3,071	2,030	1,336	1,158	1,098	688	329	439	163	91	—
Cottonwood	915	—	—	108	160	207	118	201	—	—	—	85	36
Yellow-poplar	33,878	18,533	4,924	2,901	2,006	1,498	1,015	1,180	555	490	333	393	50
Bay and magnolia	573	408	—	99	66	—	—	—	—	—	—	—	—
Black cherry	8,752	4,344	1,242	1,150	742	783	138	174	70	77	—	32	—
Black walnut	614	—	—	109	85	233	102	49	36	—	—	—	—
Sycamore	7,523	3,676	890	610	633	258	101	283	186	141	228	410	107
Black locust	811	674	—	—	104	—	—	—	—	33	—	—	—
Elm	30,044	12,672	7,868	4,488	2,459	1,376	332	393	249	132	75	—	—
Other Eastern hardwoods	82,836	47,284	18,933	7,006	3,792	2,450	1,479	809	557	254	202	70	—
<b>Total hardwoods</b>	<b>472,691</b>	<b>205,408</b>	<b>92,769</b>	<b>52,792</b>	<b>37,054</b>	<b>28,585</b>	<b>18,320</b>	<b>14,778</b>	<b>9,238</b>	<b>5,716</b>	<b>3,160</b>	<b>4,497</b>	<b>374</b>
<b>All species</b>	<b>569,578</b>	<b>242,987</b>	<b>115,696</b>	<b>64,717</b>	<b>45,550</b>	<b>34,980</b>	<b>22,553</b>	<b>17,202</b>	<b>10,537</b>	<b>6,411</b>	<b>3,377</b>	<b>5,089</b>	<b>479</b>

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 Tennessee, 1997**

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>											
<b>Softwood</b>											
Shortleaf pine	124.8	5.8	15.7	25.0	33.3	29.2	8.6	5.8	1.5	—	—
Loblolly pine	221.3	13.6	28.5	41.3	41.7	34.6	34.5	17.5	4.0	5.7	—
Baldcypress	123.5	0.9	1.6	3.7	8.0	5.4	9.2	13.9	9.3	53.8	17.6
Redcedars	49.5	10.4	14.1	10.3	7.7	2.2	1.5	1.3	—	1.9	—
<b>Total softwoods</b>	<b>519.2</b>	<b>30.7</b>	<b>59.9</b>	<b>80.3</b>	<b>90.7</b>	<b>71.4</b>	<b>53.9</b>	<b>38.6</b>	<b>14.7</b>	<b>61.5</b>	<b>17.6</b>
<b>Hardwood</b>											
Select white oaks	340.1	13.4	23.1	34.4	44.4	54.9	36.4	29.7	27.3	59.6	16.8
Select red oaks	238.9	5.6	13.9	14.5	32.7	21.6	29.8	29.0	14.4	59.1	18.2
Other white oaks	146.0	6.7	13.9	18.0	23.7	25.3	17.5	7.9	3.1	29.9	—
Other red oaks	522.7	15.1	29.8	59.0	64.7	74.9	60.7	48.7	37.4	95.7	36.8
Hickory	287.8	14.2	15.6	40.4	38.7	43.7	41.0	18.9	26.9	39.0	9.4
Hard maple	42.1	3.5	2.0	4.3	3.9	8.4	5.1	3.4	8.3	3.0	—
Soft maple	287.5	30.7	39.6	39.6	41.5	43.0	36.0	18.9	18.0	15.7	4.6
Beech	61.2	2.9	1.3	5.0	3.7	3.2	8.6	7.0	10.4	11.5	7.6
Sweetgum	490.8	28.0	50.3	68.2	71.3	68.0	55.4	56.2	22.7	70.7	—
Tupelo and blackgum	99.7	10.5	14.7	16.0	9.3	15.5	17.5	11.0	1.7	3.6	—
Ash	145.6	9.7	11.0	17.8	26.1	24.1	14.0	23.5	10.8	8.5	—
Cottonwood	34.0	0.4	1.6	4.2	2.1	5.6	—	—	—	14.0	6.2
Yellow-poplar	236.3	9.2	15.4	21.2	22.5	34.9	23.4	29.7	23.9	45.9	10.4
Bay and magnolia	0.5	0.2	0.4	—	—	—	—	—	—	—	—
Black cherry	50.2	5.9	9.7	14.7	3.7	5.1	4.1	4.3	—	2.9	—
Black walnut	9.4	0.5	0.6	3.3	1.9	1.0	2.1	—	—	—	—
Sycamore	112.0	2.8	5.3	3.6	3.6	8.4	7.8	8.5	14.0	41.8	16.1
Black locust	5.6	0.6	1.5	0.6	0.6	—	1.0	1.4	—	—	—
Elm	117.6	19.5	23.5	22.8	10.9	12.4	8.9	7.2	3.8	1.1	7.6
Other Eastern hardwoods	255.9	38.1	46.0	43.5	35.5	23.4	24.3	18.1	17.2	6.3	3.5
<b>Total hardwoods</b>	<b>3,484.0</b>	<b>217.4</b>	<b>319.3</b>	<b>431.1</b>	<b>440.7</b>	<b>473.2</b>	<b>393.5</b>	<b>323.3</b>	<b>240.0</b>	<b>508.3</b>	<b>137.1</b>
<b>All species</b>	<b>4,003.2</b>	<b>248.1</b>	<b>379.1</b>	<b>511.4</b>	<b>531.4</b>	<b>544.7</b>	<b>447.4</b>	<b>361.9</b>	<b>254.7</b>	<b>569.8</b>	<b>154.8</b>

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 Tennessee, 1997**

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>											
<b>Softwood</b>											
Shortleaf pine	121.2	5.6	14.4	24.7	32.9	29.2	8.6	5.8	—	—	—
Loblolly pine	210.4	11.6	24.9	38.5	41.7	34.6	33.7	15.7	4.0	5.7	—
Baldcypress	122.4	0.8	0.8	3.7	7.7	5.4	9.2	13.9	9.3	53.8	17.6
Redcedars	33.8	7.4	11.6	7.9	4.1	1.5	—	1.3	—	—	—
<b>Total softwoods</b>	<b>487.9</b>	<b>25.4</b>	<b>51.8</b>	<b>74.8</b>	<b>86.4</b>	<b>70.7</b>	<b>51.5</b>	<b>36.8</b>	<b>13.2</b>	<b>59.5</b>	<b>17.6</b>
<b>Hardwood</b>											
Select white oaks	292.8	10.9	19.1	31.9	33.9	46.6	34.3	24.7	24.5	59.6	7.3
Select red oaks	199.6	4.2	11.1	13.5	28.6	18.1	25.8	29.0	14.4	55.0	—
Other white oaks	115.1	5.2	12.1	14.8	17.8	19.3	15.4	7.9	3.1	19.5	—
Other red oaks	437.9	13.0	27.3	53.3	53.4	62.9	52.9	40.4	34.8	79.7	20.1
Hickory	255.6	11.9	15.0	35.8	33.5	40.9	38.3	18.9	22.4	39.0	—
Hard maple	26.9	1.5	1.2	2.5	3.4	5.9	2.3	1.9	5.2	3.0	—
Soft maple	192.1	17.2	24.0	26.5	24.3	31.2	27.3	15.1	12.8	8.8	4.6
Beech	47.1	1.9	0.5	3.1	1.8	2.3	7.8	6.3	7.0	10.3	6.1
Sweetgum	451.4	23.6	44.5	60.1	63.1	63.6	55.4	54.8	19.5	66.8	—
Tupelo and blackgum	84.3	7.5	11.0	12.3	8.3	13.5	16.0	10.5	1.7	3.6	—
Ash	129.1	7.3	9.3	15.1	23.8	20.4	12.5	23.4	10.8	6.5	—
Cottonwood	29.2	0.4	1.3	3.2	2.1	5.6	—	—	—	10.5	6.2
Yellow-poplar	228.7	7.9	14.0	18.7	21.2	33.6	23.4	29.7	23.9	45.9	10.4
Bay and magnolia	0.5	0.2	0.4	—	—	—	—	—	—	—	—
Black cherry	35.7	2.8	4.4	11.0	2.9	4.4	3.1	4.3	—	2.9	—
Black walnut	7.1	0.3	0.6	2.6	1.4	1.0	1.2	—	—	—	—
Sycamore	103.8	2.3	4.8	3.2	1.7	7.6	6.8	7.0	14.0	40.3	16.1
Black locust	2.0	—	0.6	—	—	—	—	1.4	—	—	—
Elm	75.8	12.7	14.7	14.8	5.4	9.5	8.9	5.9	3.8	—	—
Other Eastern hardwoods	168.0	19.9	24.3	28.7	28.1	19.4	18.7	11.5	12.4	5.0	—
<b>Total hardwoods</b>	<b>2,882.8</b>	<b>150.6</b>	<b>240.1</b>	<b>351.2</b>	<b>354.8</b>	<b>405.8</b>	<b>350.1</b>	<b>292.6</b>	<b>210.5</b>	<b>456.4</b>	<b>70.8</b>
<b>All species</b>	<b>3,370.6</b>	<b>176.0</b>	<b>291.9</b>	<b>426.0</b>	<b>441.2</b>	<b>476.4</b>	<b>401.6</b>	<b>329.3</b>	<b>223.7</b>	<b>515.9</b>	<b>88.5</b>

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 Tennessee, 1997**

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>									
<b>Softwood</b>									
Shortleaf pine	91.8	20.0	29.9	27.8	8.4	5.7	—	—	—
Loblolly pine	158.5	30.6	37.6	32.7	32.7	15.5	3.9	5.6	—
Baldcypress	113.3	2.7	6.6	4.8	8.5	13.1	8.8	51.7	17.0
Redcedars	12.8	6.4	3.7	1.4	—	1.3	—	—	—
<b>Total softwoods</b>	<b>376.4</b>	<b>59.6</b>	<b>77.8</b>	<b>66.7</b>	<b>49.6</b>	<b>35.6</b>	<b>12.7</b>	<b>57.3</b>	<b>17.0</b>
<b>Hardwood</b>									
Select white oaks	201.7	—	24.2	38.4	30.0	22.4	22.7	56.8	7.1
Select red oaks	149.1	—	20.0	14.4	22.3	26.4	13.5	52.4	—
Other white oaks	71.1	—	13.0	16.1	13.5	7.2	2.9	18.5	—
Other red oaks	298.4	—	37.6	51.0	46.1	36.8	32.1	75.1	19.6
Hickory	165.7	—	24.2	33.7	33.4	17.0	20.6	36.8	—
Hard maple	18.6	—	2.4	4.9	1.9	1.8	4.8	2.9	—
Soft maple	103.0	—	16.5	25.2	23.6	13.4	11.8	8.2	4.3
Beech	36.6	—	1.3	1.8	6.7	5.5	6.3	9.3	5.7
Sweetgum	280.7	—	44.6	52.7	49.2	50.6	18.5	64.9	—
Tupelo and blackgum	44.3	—	5.6	10.8	13.7	9.4	1.5	3.3	—
Ash	81.8	—	16.9	16.7	10.9	21.1	10.0	6.1	—
Cottonwood	22.2	—	1.5	4.5	—	—	—	10.1	6.0
Yellow-poplar	168.4	—	14.8	27.6	20.8	27.5	22.6	44.8	10.3
Black cherry	15.1	—	2.2	3.7	2.7	3.8	—	2.7	—
Black walnut	2.8	—	1.0	0.9	1.0	—	—	—	—
Sycamore	84.5	—	1.0	5.9	5.7	6.1	12.7	37.6	15.4
Black locust	1.2	—	—	—	—	1.2	—	—	—
Elm	27.5	—	3.8	7.6	7.5	5.2	3.4	—	—
Other Eastern hardwoods	75.5	—	19.3	15.0	15.5	10.0	11.1	4.6	—
<b>Total hardwoods</b>	<b>1,848.1</b>	<b>—</b>	<b>250.0</b>	<b>331.1</b>	<b>304.6</b>	<b>265.6</b>	<b>194.6</b>	<b>433.9</b>	<b>68.3</b>
<b>All species</b>	<b>2,224.5</b>	<b>59.6</b>	<b>327.8</b>	<b>397.8</b>	<b>354.2</b>	<b>301.2</b>	<b>207.3</b>	<b>491.3</b>	<b>85.3</b>

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 Tennessee, 1997**

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>									
<b>Softwood</b>									
Shortleaf pine	474.6	92.7	149.9	149.9	47.7	34.5	—	—	—
Loblolly pine	859.5	142.7	189.7	178.3	191.0	94.8	25.2	37.9	—
Baldcypress	656.4	11.4	30.0	23.6	43.7	72.2	50.4	316.2	108.8
Redcedars	67.5	32.2	19.9	7.7	—	7.8	—	—	—
<b>Total softwoods</b>	<b>2,058.0</b>	<b>278.9</b>	<b>389.4</b>	<b>359.5</b>	<b>282.4</b>	<b>209.2</b>	<b>75.6</b>	<b>354.1</b>	<b>108.8</b>
<b>Hardwood</b>									
Select white oaks	1,071.5	—	116.0	187.8	151.7	118.8	123.7	330.1	43.3
Select red oaks	848.4	—	98.4	72.0	117.9	150.4	80.8	328.9	—
Other white oaks	383.2	—	64.5	81.6	70.8	39.3	15.9	111.2	—
Other red oaks	1,638.1	—	187.5	253.7	235.9	195.7	182.6	453.6	129.0
Hickory	882.4	—	115.4	166.8	172.6	92.0	115.4	220.2	—
Hard maple	95.0	—	12.4	24.3	9.6	8.9	24.0	15.9	—
Soft maple	532.4	—	80.5	122.9	121.0	71.2	65.1	46.1	25.5
Beech	167.5	—	6.6	8.6	30.4	24.9	28.4	42.6	26.1
Sweetgum	1,568.8	—	227.1	273.9	266.8	286.6	109.4	405.1	—
Tupelo and blackgum	215.7	—	24.9	49.8	66.3	47.9	8.1	18.6	—
Ash	408.9	—	78.9	79.6	53.9	109.4	53.7	33.3	—
Cottonwood	131.3	—	7.6	23.0	—	—	—	62.4	38.3
Yellow-poplar	997.4	—	76.6	145.9	115.6	159.9	136.6	290.1	72.7
Black cherry	81.3	—	10.2	18.3	14.7	21.6	—	16.4	—
Black walnut	13.0	—	4.7	3.8	4.5	—	—	—	—
Sycamore	482.0	—	5.1	29.2	28.7	32.5	70.2	220.4	95.8
Black locust	5.5	—	—	—	—	5.5	—	—	—
Elm	138.5	—	18.4	37.0	37.7	27.1	18.3	—	—
Other Eastern hardwoods	401.8	—	98.4	78.0	84.3	53.8	62.0	25.4	—
<b>Total hardwoods</b>	<b>10,062.5</b>	<b>—</b>	<b>1,233.0</b>	<b>1,656.3</b>	<b>1,582.4</b>	<b>1,445.5</b>	<b>1,094.3</b>	<b>2,620.2</b>	<b>430.8</b>
<b>All species</b>	<b>12,120.5</b>	<b>278.9</b>	<b>1,622.5</b>	<b>2,015.8</b>	<b>1,864.9</b>	<b>1,654.7</b>	<b>1,169.9</b>	<b>2,974.3</b>	<b>539.6</b>

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 Tennessee, 1997**

Species	All size classes					Trees ≥15.0 inches d.b.h.						
	All grades	Tree grade				All grades	Tree grade					
		1	2	3	4		5	1	2	3	4	5
<i>Million board feet</i>												
<b>Softwood</b>												
Shortleaf pine	474.6	40.9	105.4	312.1	—	16.2	82.2	19.5	21.1	30.4	—	11.2
Loblolly pine	859.5	101.2	109.8	628.7	—	19.7	348.8	51.0	40.7	241.5	—	15.7
Baldcypress	656.4	281.7	165.5	144.2	—	65.0	591.4	272.7	143.9	121.3	—	53.5
Redcedars	67.5	54.4	1.2	11.9	—	—	7.8	7.8	—	—	—	—
<b>Total softwoods</b>	<b>2,058.0</b>	<b>478.2</b>	<b>382.0</b>	<b>1,096.9</b>	<b>—</b>	<b>100.9</b>	<b>1,030.2</b>	<b>350.9</b>	<b>205.8</b>	<b>393.2</b>	<b>—</b>	<b>80.3</b>
<b>Hardwood</b>												
Select white oaks	1,071.5	330.0	320.8	288.8	27.2	104.7	767.6	330.0	237.2	83.8	18.9	97.7
Select red oaks	848.4	296.0	242.7	172.8	59.0	77.9	678.0	296.0	202.9	68.0	42.8	68.3
Other white oaks	383.2	68.6	129.2	133.3	43.5	8.7	237.2	68.6	93.1	49.5	20.1	5.9
Other red oaks	1,638.1	367.3	437.8	545.3	146.8	140.8	1,196.9	367.3	332.1	304.3	77.1	116.1
Hickory	882.4	106.1	294.8	330.2	61.7	89.6	600.2	106.1	227.4	167.2	29.8	69.7
Hard maple	95.0	—	4.4	36.1	40.6	14.0	58.3	—	—	14.5	29.9	14.0
Soft maple	532.4	46.5	78.1	223.3	87.0	97.5	329.0	46.5	56.7	84.6	56.1	85.1
Beech	167.5	—	32.5	87.4	47.6	—	152.3	—	32.5	83.7	36.2	—
Sweetgum	1,568.8	458.4	412.0	530.6	18.7	149.1	1,067.8	458.4	251.4	215.5	—	142.5
Tupelo and blackgum	215.7	56.9	74.8	83.9	—	—	140.9	56.9	49.3	34.7	—	—
Ash	408.9	124.5	104.8	142.9	9.0	27.7	250.3	124.5	52.7	44.8	9.0	19.3
Cottonwood	131.3	42.6	24.7	61.7	2.2	—	100.7	42.6	19.7	38.3	—	—
Yellow-poplar	997.4	367.2	159.7	356.4	74.4	39.6	774.9	367.2	97.6	215.2	63.9	31.0
Black cherry	81.3	28.4	16.7	36.2	—	—	52.7	28.4	8.6	15.7	—	—
Black walnut	13.0	4.5	—	8.5	—	—	4.5	4.5	—	—	—	—
Sycamore	482.0	299.7	85.3	66.9	16.2	13.9	447.7	299.7	71.3	54.0	8.9	13.9
Black locust	5.5	—	—	—	5.5	—	5.5	—	—	—	5.5	—
Elm	138.5	—	45.0	48.5	19.3	25.6	83.1	—	31.1	18.7	14.9	18.3
Other Eastern hardwoods	401.8	46.4	26.9	266.8	25.0	36.6	225.4	46.4	17.4	140.3	—	21.4
<b>Total hardwoods</b>	<b>10,062.5</b>	<b>2,643.2</b>	<b>2,490.2</b>	<b>3,419.6</b>	<b>683.8</b>	<b>825.8</b>	<b>7,173.2</b>	<b>2,643.2</b>	<b>1,780.8</b>	<b>1,633.0</b>	<b>413.1</b>	<b>703.1</b>
<b>All species</b>	<b>12,120.5</b>	<b>3,121.4</b>	<b>2,872.2</b>	<b>4,516.5</b>	<b>683.8</b>	<b>926.7</b>	<b>8,203.4</b>	<b>2,994.1</b>	<b>1,986.6</b>	<b>2,026.2</b>	<b>413.1</b>	<b>783.4</b>

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 Tennessee, 1997**

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Million cubic feet</i>							
Carroll	339.6	43.6	41.0	2.6	296.0	102.0	194.0
Chester	165.3	44.4	43.1	1.3	121.0	51.1	69.8
Crockett	21.4	—	—	—	21.4	2.2	19.1
Dyer	52.0	—	—	—	52.0	40.4	11.6
Fayette	145.8	37.1	33.4	3.7	108.7	34.5	74.2
Gibson	106.9	0.7	—	0.7	106.1	35.9	70.2
Hardeman	355.2	85.0	60.7	24.3	270.2	84.2	186.0
Haywood	168.3	4.2	2.9	1.3	164.1	53.7	110.4
Henderson	255.4	51.4	45.7	5.7	204.0	97.0	107.0
Henry	244.1	9.0	7.8	1.2	235.1	132.8	102.3
Lake	70.6	33.9	—	33.9	36.7	25.8	10.9
Lauderdale	178.0	3.1	—	3.1	174.9	88.3	86.6
McNairy	257.6	81.3	79.1	2.1	176.3	58.9	117.4
Madison	240.1	21.1	5.0	16.1	219.0	100.9	118.1
Obion	260.2	45.0	—	45.0	215.2	83.2	132.0
Shelby	234.3	11.8	0.8	11.1	222.5	143.1	79.4
Tipton	102.4	—	—	—	102.4	66.9	35.5
Weakley	173.6	16.2	12.2	4.0	157.4	86.1	71.3
<b>Total</b>	<b>3,370.6</b>	<b>487.9</b>	<b>331.7</b>	<b>156.2</b>	<b>2,882.8</b>	<b>1,287.0</b>	<b>1,595.8</b>

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 25—Volume of live trees on timberland by county and species group, West Tennessee, 1997**

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Million cubic feet</i>							
Carroll	391.9	45.6	42.7	3.0	346.3	120.5	225.8
Chester	185.4	46.0	44.5	1.5	139.4	59.6	79.8
Crockett	31.8	—	—	—	31.8	2.6	29.3
Dyer	59.8	—	—	—	59.8	45.8	14.0
Fayette	221.9	41.2	35.3	5.9	180.6	58.9	121.7
Gibson	125.3	1.4	—	1.4	123.9	48.8	75.2
Hardeman	431.4	89.4	62.6	26.8	342.0	105.2	236.8
Haywood	197.5	4.4	2.9	1.5	193.2	70.4	122.8
Henderson	301.3	61.3	50.0	11.3	240.0	109.8	130.2
Henry	295.0	10.0	8.4	1.6	285.0	149.8	135.3
Lake	74.6	33.9	—	33.9	40.7	27.8	12.9
Lauderdale	204.0	3.4	—	3.4	200.5	103.6	97.0
McNairy	300.2	85.2	81.6	3.6	214.9	78.8	136.1
Madison	292.7	23.1	5.1	18.0	269.6	124.1	145.5
Obion	291.9	45.2	—	45.2	246.7	94.2	152.5
Shelby	273.2	12.7	0.8	11.9	260.5	167.6	92.9
Tipton	133.1	—	—	—	133.1	80.7	52.3
Weakley	192.3	16.3	12.2	4.1	176.0	94.0	82.0
<b>Total</b>	<b>4,003.2</b>	<b>519.2</b>	<b>346.1</b>	<b>173.1</b>	<b>3,484.0</b>	<b>1,542.1</b>	<b>1,941.9</b>

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 26—Volume of sawtimber on timberland by county and species group, West Tennessee, 1997**

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Million board feet</i>							
Carroll	1,167.3	179.7	178.0	1.8	987.5	314.0	673.5
Chester	483.8	131.9	131.9	—	351.9	115.6	236.4
Crockett	86.1	—	—	—	86.1	7.2	78.9
Dyer	190.2	—	—	—	190.2	141.0	49.1
Fayette	462.2	166.9	155.3	11.6	295.3	79.1	216.2
Gibson	286.8	2.0	—	2.0	284.8	55.6	229.2
Hardeman	1,214.3	350.1	249.0	101.1	864.2	243.4	620.7
Haywood	734.8	15.5	12.4	3.1	719.2	169.9	549.4
Henderson	843.0	213.5	201.7	11.8	629.5	328.7	300.9
Henry	809.7	28.9	28.9	—	780.9	459.4	321.5
Lake	348.6	188.4	—	188.4	160.2	120.1	40.1
Lauderdale	810.5	15.2	—	15.2	795.4	425.4	370.0
McNairy	736.9	324.3	321.7	2.6	412.6	104.2	308.4
Madison	850.1	77.6	10.0	67.6	772.5	360.7	411.8
Obion	1,124.5	236.8	—	236.8	887.7	293.5	594.2
Shelby	968.8	59.0	—	59.0	909.8	616.1	293.8
Tipton	333.3	—	—	—	333.3	227.8	105.5
Weakley	669.6	68.2	45.4	22.9	601.4	336.3	265.1
<b>Total</b>	<b>12,120.5</b>	<b>2,058.0</b>	<b>1,334.1</b>	<b>723.9</b>	<b>10,062.5</b>	<b>4,398.0</b>	<b>5,664.5</b>

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 Tennessee, 1997**

Class of timber	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Million cubic feet</i>							
<b>Sawtimber trees</b>							
Saw-log portion	2,224.5	376.4	250.3	126.1	1,848.1	791.4	1,056.7
Upper-stem portion <sup>a</sup>	327.1	34.3	24.8	9.5	292.8	124.2	168.6
<b>Total</b>	<b>2,551.6</b>	<b>410.7</b>	<b>275.1</b>	<b>135.6</b>	<b>2,140.9</b>	<b>915.6</b>	<b>1,225.3</b>
<b>Poletimber trees</b>							
All growing-stock trees	819.1	77.2	56.6	20.6	741.9	371.4	370.4
<b>Total</b>	<b>3,370.6</b>	<b>487.9</b>	<b>331.7</b>	<b>156.2</b>	<b>2,882.8</b>	<b>1,287.0</b>	<b>1,595.8</b>
<b>Rough trees</b>							
Sawtimber size	354.7	17.4	7.4	10.0	337.2	107.5	229.8
Poletimber size	233.4	13.3	7.0	6.3	220.0	124.0	96.0
<b>Total</b>	<b>588.0</b>	<b>30.8</b>	<b>14.4</b>	<b>16.3</b>	<b>557.2</b>	<b>231.5</b>	<b>325.8</b>
<b>Rotten trees</b>							
Sawtimber size	38.7	0.6	—	0.6	38.1	20.4	17.8
Poletimber size	5.9	—	—	—	5.9	3.2	2.6
<b>Total</b>	<b>44.6</b>	<b>0.6</b>	<b>—</b>	<b>0.6</b>	<b>44.0</b>	<b>23.6</b>	<b>20.4</b>
<b>Salvable dead trees</b>							
Sawtimber size	5.7	0.6	—	0.6	5.1	5.1	—
Poletimber size	9.7	1.2	1.2	—	8.4	5.2	3.3
<b>Total</b>	<b>15.4</b>	<b>1.9</b>	<b>1.2</b>	<b>0.6</b>	<b>13.5</b>	<b>10.3</b>	<b>3.3</b>
<b>All classes</b>	<b>4,018.6</b>	<b>521.0</b>	<b>347.3</b>	<b>173.7</b>	<b>3,497.6</b>	<b>1,552.4</b>	<b>1,945.2</b>

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.

<sup>a</sup> 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 Tennessee, 1997**

Ownership class	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Live trees (million cubic feet)</i>							
National forest	—	—	—	—	—	—	—
Other public	527.2	106.8	46.5	60.3	420.35	245.2	175.2
Forest industry	173.4	49.4	45.0	4.5	124.00	53.9	70.1
Nonindustrial private	3,302.6	362.9	254.6	108.3	2,939.70	1,243.0	1,696.7
All classes	4,003.2	519.2	346.1	173.1	3,484.05	1,542.1	1,941.9
<i>Growing-stock trees (million cubic feet)</i>							
National forest	—	—	—	—	—	—	—
Other public	477.7	102.9	43.9	59.0	374.8	220.8	154.0
Forest industry	157.5	47.2	43.0	4.2	110.3	46.7	63.6
Nonindustrial private	2,735.4	337.8	244.8	93.0	2,397.6	1,019.5	1,378.1
All classes	3,370.6	487.9	331.7	156.2	2,882.8	1,287.0	1,595.8

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 29—Volume of sawtimber on timberland by ownership class, species group, and size class, West Tennessee, 1997**

Ownership class	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>All size classes (million board feet)</i>							
National forest	—	—	—	—	—	—	—
Other public	2,044.4	533.9	214.3	319.6	1,510.5	905.6	604.9
Forest industry	492.3	128.8	106.0	22.9	363.5	134.4	229.1
Nonindustrial private	9,583.8	1,395.2	1,013.8	381.4	8,188.6	3,358.0	4,830.5
All classes	12,120.5	2,058.0	1,334.1	723.9	10,062.5	4,398.0	5,664.5
<i>Trees ≥ 15.0 inches d.b.h. (million board feet)</i>							
National forest	—	—	—	—	—	—	—
Other public	1,603.3	441.7	140.5	301.2	1,161.6	706.0	455.6
Forest industry	249.7	22.9	—	22.9	226.8	59.5	167.3
Nonindustrial private	6,350.4	565.6	290.5	275.1	5,784.8	2,377.6	3,407.1
All classes	8,203.4	1,030.2	431.0	599.2	7,173.2	3,143.2	4,030.0

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 Tennessee, 1997**

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>							
<b>Softwood types</b>							
Loblolly-shortleaf pine							
Planted	127.4	117.9	117.6	0.3	9.5	6.5	3.0
Natural	140.1	116.1	108.6	7.5	24.0	13.8	10.2
Total	267.5	234.0	226.2	7.8	33.4	20.3	13.1
Total softwoods	267.5	234.0	226.2	7.8	33.4	20.3	13.1
<b>Hardwood types</b>							
Oak-pine							
Planted	19.3	12.0	12.0	—	7.3	1.0	6.3
Natural	147.1	74.5	65.4	9.1	72.6	31.1	41.5
Total	166.4	86.5	77.4	9.1	79.9	32.2	47.7
Oak-hickory	1,740.9	46.7	28.0	18.7	1,694.3	585.2	1,109.1
Oak-gum-cypress	899.6	120.4	0.1	120.3	779.2	413.6	365.6
Elm-ash-cottonwood	296.2	0.2	—	0.2	296.0	235.8	60.2
Total hardwoods	3,103.1	253.8	105.5	148.3	2,849.3	1,266.7	1,582.7
<b>Nonstocked</b>	—	—	—	—	—	—	—
<b>All groups</b>	3,370.6	487.9	331.7	156.2	2,882.8	1,287.0	1,595.8

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 31—Average basal area of live trees per acre on timberland by ownership class, species group, and d.b.h., West Tennessee, 1997**

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>					
<b>National forest</b>					
Softwood	—	—	—	—	—
Hardwood	—	—	—	—	—
Total	—	—	—	—	—
<b>Other public</b>					
Softwood	21.0	1.2	4.6	3.6	11.5
Hardwood	93.4	13.0	26.1	21.4	33.0
Total	114.4	14.2	30.7	24.9	44.6
<b>Forest industry</b>					
Softwood	30.1	5.0	20.2	4.4	0.5
Hardwood	58.5	15.8	19.7	12.3	10.8
Total	88.6	20.8	39.8	16.7	11.3
<b>Nonindustrial private</b>					
Softwood	13.3	2.2	5.4	3.2	2.4
Hardwood	84.1	11.7	27.8	18.1	26.5
Total	97.4	14.0	33.2	21.4	28.9
<b>All classes</b>					
Softwood	14.8	2.3	6.1	3.3	3.0
Hardwood	83.4	12.1	27.2	18.0	26.1
Total	98.1	14.4	33.4	21.4	29.0

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 32—Average net annual growth of growing stock on timberland by county and species group, West Tennessee, 1989–1996**

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Million cubic feet</i>							
Carroll	10.0	2.1	1.8	0.3	8.0	3.0	5.0
Chester	5.6	2.1	2.2	-0.1	3.5	1.6	1.9
Crockett	0.7	—	—	—	0.7	0.1	0.6
Dyer	1.9	—	—	—	1.9	1.3	0.6
Fayette	8.4	1.6	1.4	0.2	6.9	1.8	5.0
Gibson	1.9	—	—	—	1.9	0.2	1.6
Hardeman	9.6	3.6	2.8	0.7	6.1	1.9	4.2
Haywood	4.8	—	—	—	4.8	2.5	2.2
Henderson	7.9	1.7	1.6	0.1	6.2	2.4	3.8
Henry	10.0	0.3	0.2	0.0	9.7	5.7	4.0
Lake	1.3	0.9	—	0.9	0.4	0.5	-0.1
Lauderdale	4.7	0.8	—	0.8	3.8	1.6	2.3
McNairy	11.5	5.1	5.0	0.1	6.4	1.4	4.9
Madison	8.4	0.9	0.5	0.4	7.6	3.2	4.4
Obion	9.0	0.1	—	0.1	8.9	5.5	3.4
Shelby	8.3	0.1	0.0	0.0	8.2	6.0	2.2
Tipton	5.1	—	—	—	5.1	1.7	3.4
Weakley	7.0	1.5	1.2	0.3	5.5	2.7	2.8
<b>Total</b>	<b>116.1</b>	<b>20.6</b>	<b>16.7</b>	<b>3.9</b>	<b>95.4</b>	<b>43.2</b>	<b>52.2</b>

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 Tennessee, 1989–1996**

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Million cubic feet</i>							
Carroll	11.6	2.1	1.8	0.3	9.5	3.3	6.2
Chester	6.0	2.2	2.3	-0.1	3.8	1.7	2.1
Crockett	0.8	—	—	—	0.8	0.1	0.7
Dyer	3.3	—	—	—	3.3	2.2	1.1
Fayette	10.3	1.8	1.7	0.2	8.4	2.0	6.5
Gibson	2.5	—	—	—	2.5	0.8	1.7
Hardeman	9.7	3.8	2.9	0.8	5.9	1.2	4.7
Haywood	5.2	—	—	—	5.2	2.9	2.3
Henderson	9.3	1.8	1.6	0.2	7.6	3.5	4.1
Henry	11.5	0.3	0.2	0.0	11.3	6.1	5.1
Lake	1.2	0.9	—	0.9	0.3	0.5	-0.1
Lauderdale	5.1	0.9	—	0.9	4.2	1.4	2.8
McNairy	13.1	5.1	5.0	0.1	8.1	2.4	5.7
Madison	10.7	0.9	0.5	0.4	9.8	4.5	5.4
Obion	10.2	0.1	—	0.1	10.1	6.3	3.8
Shelby	10.3	0.0	0.0	-0.0	10.3	8.0	2.3
Tipton	7.1	—	—	—	7.1	2.9	4.2
Weakley	6.7	1.4	1.1	0.3	5.3	3.1	2.2
<b>Total</b>	<b>134.8</b>	<b>21.3</b>	<b>17.1</b>	<b>4.2</b>	<b>113.6</b>	<b>52.9</b>	<b>60.7</b>

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 Tennessee, 1989–1996**

County	Softwoods			Hardwoods			
	All species	All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Million board feet</i>							
Carroll	48.0	10.5	10.5	—	37.5	14.6	22.9
Chester	23.6	9.2	9.2	—	14.4	5.6	8.8
Crockett	3.7	—	—	—	3.7	0.8	2.9
Dyer	11.2	—	—	—	11.2	7.8	3.4
Fayette	38.5	5.9	5.7	0.2	32.5	7.2	25.4
Gibson	12.4	—	—	—	12.4	0.9	11.4
Hardeman	49.2	16.7	13.4	3.2	32.5	9.2	23.3
Haywood	24.0	—	—	—	24.0	8.2	15.8
Henderson	39.8	10.8	10.7	0.1	29.0	13.4	15.6
Henry	46.1	1.4	1.4	—	44.8	24.0	20.7
Lake	7.7	6.2	—	6.2	1.5	1.5	0.0
Lauderdale	28.4	5.0	—	5.0	23.4	10.2	13.2
McNairy	48.8	21.3	21.5	-0.2	27.5	7.5	20.0
Madison	41.2	3.7	1.6	2.0	37.5	15.2	22.3
Obion	36.3	0.6	—	0.6	35.6	18.5	17.1
Shelby	48.3	0.3	—	0.3	48.1	35.1	13.0
Tipton	19.1	—	—	—	19.1	9.2	10.0
Weakley	36.3	10.1	8.7	1.4	26.2	12.7	13.5
<b>Total</b>	<b>562.6</b>	<b>101.7</b>	<b>82.9</b>	<b>18.8</b>	<b>460.9</b>	<b>201.8</b>	<b>259.1</b>

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 Tennessee, 1989–1996**

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Million cubic feet</i>							
Carroll	5.2	0.6	0.6	—	4.6	1.2	3.4
Chester	3.7	2.1	2.1	—	1.6	0.1	1.5
Crockett	—	—	—	—	—	—	—
Dyer	2.1	—	—	—	2.1	1.9	0.2
Fayette	9.2	—	—	—	9.2	1.3	7.9
Gibson	1.2	—	—	—	1.2	—	1.2
Hardeman	9.0	2.9	2.9	—	6.1	1.5	4.6
Haywood	1.5	—	—	—	1.5	0.2	1.3
Henderson	7.9	2.7	2.7	—	5.2	0.7	4.5
Henry	6.2	—	—	—	6.2	1.9	4.3
Lake	—	—	—	—	—	—	—
Lauderdale	7.5	1.9	—	1.9	5.6	2.2	3.4
McNairy	8.3	4.1	4.0	0.1	4.2	1.3	3.0
Madison	6.7	—	—	—	6.7	2.3	4.4
Obion	2.0	—	—	—	2.0	1.1	0.9
Shelby	2.6	—	—	—	2.6	2.3	0.4
Tipton	2.7	—	—	—	2.7	1.9	0.8
Weakley	8.3	5.3	—	5.3	2.9	0.6	2.3
<b>Total</b>	<b>84.0</b>	<b>19.6</b>	<b>12.3</b>	<b>7.3</b>	<b>64.5</b>	<b>20.4</b>	<b>44.0</b>

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 Tennessee, 1989–1996**

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Million cubic feet</i>							
Carroll	5.7	0.6	0.6	—	5.1	1.2	4.0
Chester	3.9	2.3	2.3	—	1.6	0.1	1.5
Crockett	—	—	—	—	—	—	—
Dyer	2.3	—	—	—	2.3	2.1	0.2
Fayette	10.4	—	—	—	10.4	1.8	8.6
Gibson	1.6	—	—	—	1.6	—	1.6
Hardeman	10.0	3.1	3.1	—	6.9	1.5	5.4
Haywood	1.5	—	—	—	1.5	0.2	1.3
Henderson	9.4	2.7	2.7	—	6.7	1.1	5.6
Henry	6.5	—	—	—	6.5	1.9	4.6
Lake	—	—	—	—	—	—	—
Lauderdale	7.5	1.9	—	1.9	5.6	2.2	3.4
McNairy	8.8	4.1	4.0	0.1	4.7	1.3	3.4
Madison	6.9	—	—	—	6.9	2.3	4.6
Obion	2.0	—	—	—	2.0	1.1	0.9
Shelby	3.0	—	—	—	3.0	2.5	0.4
Tipton	2.7	—	—	—	2.7	1.9	0.8
Weakley	8.3	5.3	—	5.3	2.9	0.6	2.3
<b>Total</b>	<b>90.3</b>	<b>19.9</b>	<b>12.7</b>	<b>7.3</b>	<b>70.3</b>	<b>21.9</b>	<b>48.5</b>

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 Tennessee, 1989–1996**

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Million board feet</i>							
Carroll	13.5	3.2	3.2	—	10.3	1.8	8.5
Chester	11.8	8.7	8.7	—	3.1	—	3.1
Crockett	—	—	—	—	—	—	—
Dyer	12.5	—	—	—	12.5	12.5	—
Fayette	37.6	—	—	—	37.6	2.3	35.3
Gibson	5.4	—	—	—	5.4	—	5.4
Hardeman	39.3	12.4	12.4	—	26.9	7.1	19.9
Haywood	8.9	—	—	—	8.9	1.2	7.6
Henderson	30.6	9.1	9.1	—	21.6	3.1	18.5
Henry	29.5	—	—	—	29.5	8.6	21.0
Lake	—	—	—	—	—	—	—
Lauderdale	42.7	11.1	—	11.1	31.6	12.4	19.1
McNairy	23.7	9.6	9.6	—	14.1	5.2	8.9
Madison	32.5	—	—	—	32.5	12.0	20.5
Obion	11.1	—	—	—	11.1	6.6	4.5
Shelby	10.0	—	—	—	10.0	7.8	2.2
Tipton	16.0	—	—	—	16.0	11.5	4.5
Weakley	36.9	22.3	—	22.3	14.6	3.3	11.3
<b>Total</b>	<b>361.9</b>	<b>76.3</b>	<b>42.9</b>	<b>33.4</b>	<b>285.6</b>	<b>95.2</b>	<b>190.4</b>

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 Tennessee, 1989–1996**

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>	
<b>Softwood</b>						
Shortleaf pine	5.4	4.5	5.3	4.5	29.7	23.4
Loblolly pine	11.7	8.1	11.4	7.8	53.1	19.5
Baldcypress	2.6	7.1	2.5	7.1	15.9	33.4
Redcedars	1.6	0.2	1.4	0.2	2.9	—
Total softwoods	21.3	19.9	20.6	19.6	101.7	76.3
<b>Hardwood</b>						
Select white oaks	11.1	8.3	9.6	7.5	47.4	32.8
Select red oaks	9.1	8.5	8.1	8.2	54.0	44.5
Other white oaks	3.7	3.4	3.2	3.0	13.2	12.2
Other red oaks	17.1	19.7	15.9	18.2	79.2	75.9
Hickory	7.8	4.0	6.6	3.6	33.0	11.7
Hard maple	3.0	0.4	2.2	0.4	6.0	2.0
Soft maple	9.4	2.1	6.1	1.8	25.7	7.6
Beech	1.9	1.1	1.3	1.0	3.4	3.3
Sweetgum	17.1	6.7	15.7	6.2	75.3	25.7
Tupelo and blackgum	3.0	0.4	2.9	0.3	7.4	0.9
Ash	3.9	1.6	3.0	1.5	17.1	5.9
Cottonwood	1.5	3.3	1.1	3.3	5.5	21.0
Yellow-poplar	12.0	5.6	10.8	5.4	58.5	27.3
Bay and magnolia	0.2	—	0.2	—	0.5	—
Black cherry	0.4	0.4	0.4	0.4	0.9	1.1
Black walnut	0.2	—	0.1	—	0.7	—
Sycamore	3.3	1.3	2.8	1.3	14.1	7.2
Black locust	0.2	0.4	0.1	0.4	0.5	1.5
Elm	2.3	1.5	0.8	1.3	3.1	2.0
Other Eastern hardwoods	6.6	1.8	4.4	0.7	15.4	2.8
Total hardwoods	113.6	70.3	95.4	64.5	460.9	285.6
<b>All species</b>	<b>134.8</b>	<b>90.3</b>	<b>116.1</b>	<b>84.0</b>	<b>562.6</b>	<b>361.9</b>

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 Tennessee, 1989–1996**

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>											
<b>Softwood</b>											
Shortleaf pine	4.5	—	0.1	—	0.6	1.3	1.9	0.7	—	—	—
Loblolly pine	7.8	0.7	2.5	2.7	0.7	0.9	—	—	0.2	—	—
Baldcypress	7.1	—	—	—	2.3	3.0	—	0.2	—	0.9	0.7
Redcedars	0.2	0.1	0.1	—	—	—	—	—	—	—	—
<b>Total softwoods</b>	<b>19.6</b>	<b>0.8</b>	<b>2.8</b>	<b>2.7</b>	<b>3.5</b>	<b>5.2</b>	<b>1.9</b>	<b>0.9</b>	<b>0.2</b>	<b>0.9</b>	<b>0.7</b>
<b>Hardwood</b>											
Select white oaks	7.5	0.1	—	0.3	0.6	2.1	0.9	1.7	0.2	1.5	0.1
Select red oaks	8.2	—	—	—	0.4	0.9	1.3	0.2	1.1	3.3	1.0
Other white oaks	3.0	0.1	0.3	0.1	0.3	0.1	0.4	0.5	0.5	0.6	—
Other red oaks	18.2	0.4	0.6	1.8	1.3	2.2	2.5	1.9	3.2	2.8	1.5
Hickory	3.6	0.1	0.1	0.7	0.8	0.3	0.6	0.5	—	0.4	—
Hard maple	0.4	—	—	—	—	—	—	—	—	0.4	—
Soft maple	1.8	—	—	0.1	0.4	—	0.4	0.4	—	0.4	—
Beech	1.0	—	0.1	—	0.1	—	0.3	—	0.3	0.1	—
Sweetgum	6.2	0.1	0.4	0.6	0.8	0.5	0.8	1.0	1.1	0.9	—
Tupelo and blackgum	0.3	—	—	0.1	0.1	—	0.1	—	—	—	—
Ash	1.5	—	0.1	0.2	—	—	0.5	—	0.2	0.5	—
Cottonwood	3.3	—	—	—	—	—	—	—	—	0.5	2.8
Yellow-poplar	5.4	—	—	0.3	0.3	0.9	1.1	0.7	0.7	1.5	—
Black cherry	0.4	—	0.1	0.1	—	—	—	—	—	0.2	—
Sycamore	1.3	—	—	—	—	—	—	—	0.3	—	1.0
Black locust	0.4	—	—	—	—	0.1	—	0.1	0.2	—	—
Elm	1.3	0.3	0.5	0.1	—	—	0.2	—	—	0.2	—
Other Eastern hardwoods	0.7	0.1	0.1	—	—	0.1	—	—	—	0.2	0.2
<b>Total hardwoods</b>	<b>64.5</b>	<b>1.1</b>	<b>2.5</b>	<b>4.4</b>	<b>5.2</b>	<b>7.3</b>	<b>9.1</b>	<b>7.0</b>	<b>7.8</b>	<b>13.6</b>	<b>6.6</b>
<b>All species</b>	<b>84.0</b>	<b>1.9</b>	<b>5.2</b>	<b>7.1</b>	<b>8.7</b>	<b>12.5</b>	<b>10.9</b>	<b>7.9</b>	<b>7.9</b>	<b>14.5</b>	<b>7.3</b>

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 Tennessee, 1989–1996**

Species	Live trees	Growing stock	Sawtimber
	<i>Million cubic feet</i>		<i>Million board feet</i>
<b>Softwood</b>			
Shortleaf pine	1.6	1.3	1.8
Loblolly pine	3.3	2.6	3.5
Baldcypress	0.2	—	—
Redcedars	1.3	1.1	0.6
Total softwoods	6.3	5.0	5.8
<b>Hardwood</b>			
Select white oaks	2.9	2.3	7.1
Select red oaks	2.4	2.1	6.6
Other white oaks	1.0	0.4	1.5
Other red oaks	5.9	4.3	17.0
Hickory	1.6	1.4	4.3
Hard maple	0.3	0.1	—
Soft maple	4.4	2.2	5.0
Beech	0.5	0.3	1.4
Sweetgum	2.8	1.7	7.0
Tupelo and blackgum	1.1	0.5	1.6
Ash	1.9	1.7	5.9
Cottonwood	0.3	0.3	1.1
Yellow-poplar	2.1	1.9	6.0
Black cherry	1.4	0.7	1.1
Black walnut	0.1	0.1	—
Sycamore	1.2	0.9	2.7
Black locust	0.0	—	—
Elm	3.3	2.3	6.4
Other Eastern hardwoods	4.3	2.7	8.9
Total hardwoods	37.5	26.1	83.7
<b>All species</b>	<b>43.8</b>	<b>31.1</b>	<b>89.6</b>

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 Tennessee, 1989–1996**

Ownership class	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Average net annual growth (million cubic feet)</i>							
National forest	—	—	—	—	—	—	—
Other public	9.0	2.6	0.9	1.7	6.4	4.4	2.0
Forest industry	8.4	4.6	4.6	0.0	3.7	1.8	1.9
Nonindustrial private	98.6	13.4	11.2	2.2	85.3	36.9	48.3
All classes	116.1	20.6	16.7	3.9	95.4	43.2	52.2
<i>Average annual removals (million cubic feet)</i>							
National forest	—	—	—	—	—	—	—
Other public	4.8	2.8	1.2	1.6	2.0	1.8	0.3
Forest industry	11.2	3.6	3.2	0.3	7.7	2.6	5.0
Nonindustrial private	68.0	13.2	7.9	5.3	54.8	16.0	38.8
All classes	84.0	19.6	12.3	7.3	64.5	20.4	44.0

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 42—Average net annual growth and average annual removals of live trees on timberland by ownership class and species group, West Tennessee, 1989–1996**

Ownership class	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Average net annual growth (million cubic feet)</i>							
National forest	—	—	—	—	—	—	—
Other public	11.6	2.7	0.9	1.8	9.0	6.0	3.0
Forest industry	9.2	4.8	4.7	0.1	4.4	2.5	2.0
Nonindustrial private	114.0	13.9	11.5	2.3	100.1	44.5	55.7
All classes	134.8	21.3	17.1	4.2	113.6	52.9	60.7
<i>Average annual removals (million cubic feet)</i>							
National forest	—	—	—	—	—	—	—
Other public	4.8	2.8	1.2	1.6	2.0	1.8	0.3
Forest industry	11.6	3.7	3.4	0.3	7.9	2.9	5.0
Nonindustrial private	73.9	13.4	8.1	5.3	60.4	17.3	43.2
All classes	90.3	19.9	12.7	7.3	70.3	21.9	48.5

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 43—Average net annual growth and average annual removals of sawtimber on timberland by ownership class and species group, West Tennessee, 1989–1996**

Ownership class	Softwoods				Hardwoods		
	All species	All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<b>Average net annual growth (million board feet)</b>							
National forest	—	—	—	—	—	—	—
Other public	58.4	18.0	6.9	11.1	40.4	26.8	13.6
Forest industry	29.2	13.2	13.3	-0.1	16.1	7.4	8.6
Nonindustrial private	475.0	70.5	62.6	7.9	404.5	167.6	236.9
All classes	562.6	101.7	82.9	18.8	460.9	201.8	259.1
<b>Average annual removals (million board feet)</b>							
National forest	—	—	—	—	—	—	—
Other public	28.0	16.2	6.3	9.8	11.9	10.5	1.3
Forest industry	47.9	5.1	3.8	1.3	42.9	15.7	27.2
Nonindustrial private	285.9	55.0	32.8	22.3	230.9	69.0	161.9
All classes	361.9	76.3	42.9	33.4	285.6	95.2	190.4

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 44—Average net annual growth of growing stock on timberland by forest-type group, stand origin, and species group, West Tennessee, 1989–1996**

Forest-type group and stand origin <sup>a</sup>	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Million cubic feet</i>							
<b>Softwood types</b>							
Loblolly–shortleaf pine							
Planted	10.6	9.0	9.1	-0.0	1.5	1.2	0.3
Natural	8.8	5.6	5.2	0.4	3.2	1.7	1.5
Total	19.4	14.7	14.3	0.4	4.7	2.9	1.8
Total softwoods	19.4	14.7	14.3	0.4	4.7	2.9	1.8
<b>Hardwood types</b>							
Oak–pine							
Planted	—	—	—	—	—	—	—
Natural	4.5	2.5	1.8	0.6	2.1	0.9	1.1
Total	4.5	2.5	1.8	0.6	2.1	0.9	1.1
Oak–hickory	56.9	1.1	0.6	0.4	55.8	20.2	35.6
Oak–gum–cypress	30.9	2.2	—	2.2	28.8	15.0	13.8
Elm–ash–cottonwood	4.4	0.3	—	0.3	4.1	4.1	-0.0
Total hardwoods	96.7	6.0	2.5	3.5	90.7	40.3	50.5
<b>Nonstocked</b>	—	—	—	—	—	—	—
<b>All groups</b>	116.1	20.6	16.7	3.9	95.4	43.2	52.2

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.

<sup>a</sup> 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 Tennessee, 1989–1996**

Forest-type group and stand origin <sup>a</sup>	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
<i>Million cubic feet</i>							
<b>Softwood types</b>							
Loblolly–shortleaf pine							
Planted	6.2	6.2	6.1	0.1	—	—	—
Natural	8.2	4.3	4.3	—	3.9	0.9	3.0
Total	14.4	10.5	10.4	0.1	3.9	0.9	3.0
Total softwoods	14.4	10.5	10.4	0.1	3.9	0.9	3.0
<b>Hardwood types</b>							
Oak–pine							
Planted	—	—	—	—	—	—	—
Natural	2.0	1.3	1.3	—	0.7	0.1	0.6
Total	2.0	1.3	1.3	—	0.7	0.1	0.6
Oak–hickory	39.4	0.7	0.6	0.1	38.7	9.7	29.1
Oak–gum–cypress	16.7	1.4	—	1.4	15.3	4.3	11.0
Elm–ash–cottonwood	11.5	5.7	—	5.7	5.8	5.4	0.4
Total hardwoods	69.7	9.1	1.9	7.2	60.5	19.5	41.0
<b>Nonstocked</b>	—	—	—	—	—	—	—
<b>All groups</b>	84.0	19.6	12.3	7.3	64.5	20.4	44.0

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.

<sup>a</sup> 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 Tennessee, 1997**

Ownership class and species group	All components	All live saplings	Component					
			Growing-stock trees			Cull trees		
			Total	Boles	Stumps, tops, and limbs	Total	Boles	Stumps, tops, and limbs
<i>Thousand tons</i>								
<b>National forest</b>								
Softwood	—	—	—	—	—	—	—	—
Hardwood	—	—	—	—	—	—	—	—
<b>Total</b>	—	—	—	—	—	—	—	—
<b>Other public</b>								
Softwood	5,117.7	112.5	4,829.6	4,060.7	768.9	175.6	143.1	32.5
Hardwood	21,194.7	1,157.0	17,689.9	14,832.9	2,857.0	2,347.9	1,801.9	546.0
<b>Total</b>	<b>26,312.4</b>	<b>1,269.5</b>	<b>22,519.4</b>	<b>18,893.5</b>	<b>3,625.9</b>	<b>2,523.5</b>	<b>1,945.0</b>	<b>578.5</b>
<b>Forest industry</b>								
Softwood	2,365.2	125.7	2,135.1	1,768.3	366.8	104.5	85.6	19.0
Hardwood	6,987.5	859.8	5,417.9	4,447.2	970.7	709.8	536.8	173.0
<b>Total</b>	<b>9,352.7</b>	<b>985.5</b>	<b>7,553.0</b>	<b>6,215.5</b>	<b>1,337.5</b>	<b>814.3</b>	<b>622.4</b>	<b>191.9</b>
<b>Nonindustrial private</b>								
Softwood	17,143.6	1,250.0	14,723.3	12,479.0	2,244.3	1,170.3	927.6	242.7
Hardwood	159,751.1	11,313.1	120,180.1	98,393.5	21,786.6	28,258.0	22,187.6	6,070.4
<b>Total</b>	<b>176,894.7</b>	<b>12,563.1</b>	<b>134,903.3</b>	<b>110,872.4</b>	<b>24,030.9</b>	<b>29,428.3</b>	<b>23,115.2</b>	<b>6,313.1</b>
<b>All ownerships</b>								
Softwood	24,626.4	1,488.2	21,687.9	18,307.9	3,380.0	1,450.4	1,156.3	294.2
Hardwood	187,933.3	13,329.9	143,287.8	117,673.5	25,614.3	31,315.6	24,526.3	6,789.4
<b>Total</b>	<b>212,559.7</b>	<b>14,818.0</b>	<b>164,975.7</b>	<b>135,981.4</b>	<b>28,994.3</b>	<b>32,766.0</b>	<b>25,682.5</b>	<b>7,083.5</b>

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 47—Area of timberland treated or disturbed annually and retained in timberland by treatment or disturbance and ownership class, West Tennessee, 1989 to 1997**

Treatment or disturbance	All classes	Ownership class		
		Public	Forest industry	Nonindustrial private
<i>Thousand acres</i>				
Final harvest	12.2	0.5	2.8	8.9
Partial harvest <sup>a</sup>	33.3	3.0	2.5	27.9
Seed tree/shelterwood	—	—	—	—
Commercial thinning	2.2	—	—	2.2
Other stand improvement	1.2	—	1.0	0.2
Site preparation	3.0	—	1.7	1.3
Artificial regeneration <sup>b</sup>	6.5	—	2.8	3.7
Natural regeneration <sup>b</sup>	41.0	3.3	1.5	36.2
Other treatment	6.2	—	—	6.2
Natural disturbance				
Disease	8.4	—	0.9	7.4
Insects	0.2	—	—	0.2
Fire	—	—	—	—
Weather	8.4	1.2	1.5	5.6
Animals	2.3	0.6	0.2	1.5
Other disturbances				
Grazing	7.5	—	—	7.5
Other man-caused disturbance	3.2	—	—	3.2

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.

<sup>a</sup> Includes high-grading and some selective cutting.

<sup>b</sup> 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 Tennessee, 1989 to 1997**

Treatment or disturbance	All types	Forest management type <sup>a</sup>					Nonstocked
		Pine plantation	Natural pine	Oak-pine	Upland hardwood	Lowland hardwood	
<i>Thousand acres</i>							
Final harvest	12.2	1.9	2.9	0.5	6.2	0.8	—
Partial harvest <sup>b</sup>	33.3	—	1.1	1.2	19.6	11.4	—
Seed tree/shelterwood	—	—	—	—	—	—	—
Commercial thinning	2.2	1.4	—	—	0.7	—	—
Other stand improvement	1.2	0.2	0.0	—	—	1.0	—
Site preparation	3.0	1.3	1.2	—	0.6	—	—
Other treatment	6.2	—	0.5	1.0	3.3	1.5	—
Natural disturbance							
Disease	8.4	1.3	0.9	0.2	6.0	—	—
Insects	0.2	0.2	—	—	—	—	—
Fire	—	—	—	—	—	—	—
Weather	8.4	1.4	0.7	1.0	1.8	3.5	—
Animals	2.3	—	—	—	0.8	1.5	—
Other disturbance							
Grazing	7.5	—	0.0	0.2	7.2	0.2	—
Other man-caused disturbance	3.2	—	0.0	—	1.5	1.7	—

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.

<sup>a</sup> Classification before treatment or disturbance.

<sup>b</sup> Includes high-grading and some selective cutting.

**Table 49—Area of timberland regenerated annually by type of regeneration and forest management type, West Tennessee, 1989 to 1997**

Type of regeneration	All types	Forest management type <sup>a</sup>					Nonstocked
		Pine plantation	Natural pine	Oak-pine	Upland hardwood	Lowland hardwood	
<i>Thousand acres</i>							
Artificial regeneration following harvest	2.8	—	—	1.2	1.7	—	—
Natural regeneration following harvest	5.5	—	—	0.5	5.0	—	—
Other artificial regeneration on forest land	0.9	0.6	—	0.3	—	—	—
Other natural regeneration on forest land	4.9	—	—	0.2	1.3	3.4	0.1
Artificial regeneration on former nonforest land	2.7	2.2	—	0.5	—	—	0.0
Natural reversion of former nonforest land	30.6	—	0.9	0.8	16.6	9.8	2.4
<b>Total</b>	<b>47.4</b>	<b>2.8</b>	<b>0.9</b>	<b>3.6</b>	<b>24.4</b>	<b>13.3</b>	<b>2.5</b>

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.

<sup>a</sup> Classification after regeneration.

**Table 50—Land area by land-use class, major forest type, and survey completion date, West Tennessee**

Land-use class	Survey completion date			Change 1989-1997
	1980	1989	1997	
<i>Thousand acres</i>				
<b>Forest land</b>				
Timberland				
Pine types	159.7	179.7	156.3	-23.4
Oak-pine types	132.0	147.8	172.4	24.6
Hardwood types	1,837.3	1,635.6	1,847.0	211.5
<b>Total</b>	<b>2,129.0</b>	<b>1,963.1</b>	<b>2,175.7</b>	<b>212.7</b>
Productive reserved	28.1	1.4	1.0	-0.5
Other	—	—	—	—
<b>Total forest land</b>	<b>2,157.1</b>	<b>1,964.5</b>	<b>2,176.7</b>	<b>212.2</b>
<b>Other land<sup>a</sup></b>	<b>3,923.5</b>	<b>4,042.6</b>	<b>3,803.5</b>	<b>-239.1</b>
<b>All land<sup>b</sup></b>	<b>6,080.6</b>	<b>6,007.0</b>	<b>5,980.1</b>	<b>-26.9</b>

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.

<sup>a</sup> Includes 37.3 thousand acres of water according to Forest Inventory and Monitoring standards of area classification, but defined by the Bureau of Census as land.

<sup>b</sup> From the U.S. Bureau of the Census, 1990.

**Table 51—Volume of sawtimber, growing stock, and live trees on timberland by species group, survey completion date, and diameter class, West Tennessee**

Species group and year	All classes	Diameter class (inches at breast height)								
		5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0 and larger
<b>Sawtimber (million board feet)</b>										
<b>Softwood</b>										
1980	1,110.5	—	—	206.4	292.6	129.8	112.3	85.3	82.7	201.5
1989	1,270.0	—	—	224.8	285.2	218.7	119.6	61.9	45.8	314.1
1997	2,058.0	—	—	278.9	389.4	359.5	282.4	209.2	75.6	463.0
<b>Hardwood</b>										
1980	6,859.3	—	—	—	1,169.2	1,429.6	1,225.8	927.2	632.5	1,475.0
1989	8,333.9	—	—	—	1,417.9	1,681.1	1,457.1	1,227.3	882.5	1,668.0
1997	10,062.5	—	—	—	1,233.0	1,656.3	1,582.4	1,445.5	1,094.3	3,051.0
<b>Growing stock (million cubic feet)</b>										
<b>Softwood</b>										
1980	286.2	36.8	42.0	49.9	55.4	23.8	19.3	14.0	12.9	32.0
1989	351.8	35.5	52.2	56.9	60.2	43.9	23.1	12.1	8.7	59.3
1997	487.9	25.4	51.8	74.8	86.4	70.7	51.5	36.8	13.2	77.2
<b>Hardwood</b>										
1980	1,976.5	140.1	232.3	288.7	282.0	284.4	226.8	165.8	108.8	247.6
1989	2,388.8	131.3	218.9	352.6	350.7	355.9	283.1	232.2	161.0	303.0
1997	2,882.8	150.6	240.1	351.2	354.8	405.8	350.1	292.6	210.5	527.3
<b>Live trees (million cubic feet)</b>										
<b>Softwood</b>										
1980	306.8	38.8	44.4	51.0	58.4	25.9	20.5	14.6	14.1	39.1
1989	367.9	40.6	55.1	59.5	60.9	44.4	25.3	12.6	8.8	60.7
1997	519.2	30.7	59.9	80.3	90.7	71.4	53.9	38.6	14.7	79.1
<b>Hardwood</b>										
1980	2,487.2	185.1	275.0	340.6	346.9	341.2	281.7	199.1	142.7	374.9
1989	2,678.8	177.2	261.5	392.6	379.1	384.9	305.2	251.7	172.3	354.3
1997	3,484.0	217.4	319.3	431.1	440.7	473.2	393.5	323.3	240.0	645.5

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.



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This report summarizes a 1997 inventory of the forest resources of an 18-county area of Tennessee. Major findings are highlighted in text and graphs; detailed data are presented in 51 tables.

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

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