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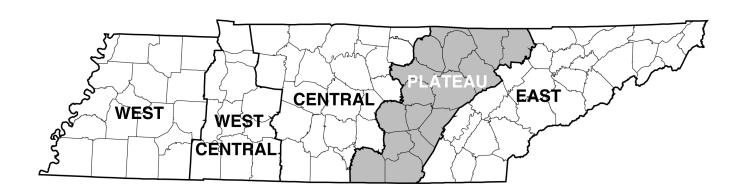
Forest Statistics for Tennessee's Plateau Counties, 1999

Forest Service



Southern Research Station Callie Jo Schweitzer

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Foreword

This report highlights the principal findings of the sixth forest survey of Tennessee's Plateau Counties. Field work began in March 1998 and was completed in November 1998. Five previous surveys, completed in 1950, 1961, 1971, 1980, and 1989, provide statistics for measuring changes and trends over the past 49 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 Analysis (FIA) Research Work Unit at the Southern Research Station, Asheville, NC. The FIA unit operates out of two locations, one in Starkville, MS, and the other in Asheville, NC, and is responsible for inventories 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:

Forest Inventory and Analysis Southern Research Station P.O. Box 2680 Asheville, NC 28802-2680 Telephone: 828-257-4350

Acknowledgment

The Southern Research Station gratefully acknowledges the cooperation and assistance provided by the Tennessee Department of Agriculture, Forestry Division. The research was made possible through collaboration within USDA Forest Service, FIA personnel (including those in Data Collection, Data Compilation, Analysis, and Publications Management). Appreciation is also expressed for the cooperation of other public agencies and private landowners in providing access to measurement plots.

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 $[^]a$ All tables in this report are available in Microsoft® Excel workbook files. Upon request, these files will be supplied on $3\frac{1}{2}$ -inch diskettes.

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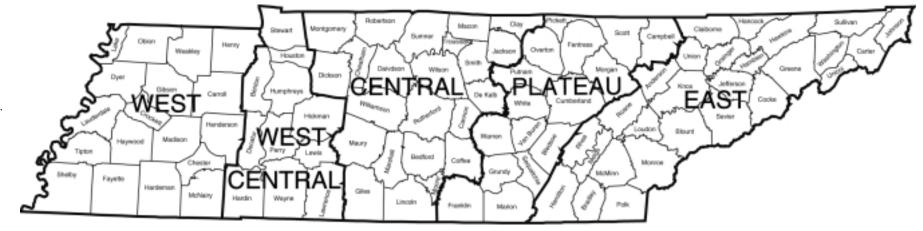


Figure 1—Forest survey regions in Tennessee .

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Highlights

This report summarizes results from a 1999 inventory of the forest resources of the Plateau region of 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 16-county area has decreased 2 percent since 1989, from 3.06 million acres to 2.99 million acres. The acreage diverted from timberland to other uses was 140,500 acres, while 70,100 acres were added from previous nonforest use, resulting in a 70,300-acre net loss. Most of the diverted area was either moved into noncommercial uses or cleared for agriculture. Although there has been a slight decline in acreage, forests still cover 71 percent of the land area in the Plateau region of Tennessee.

Ownership—Nonindustrial private forest (NIPF) land ownership decreased 10 percent and totaled 2.16 million acres. NIPF land owners control 72 percent of the timberland in the Plateau region of Tennessee. The area of timberland owned by forest industry increased 49 percent, from 333,400 acres in 1989 to 497,700 acres in 1999. Public agencies control 332,300 acres, a 2-percent increase since 1989.

Forest type—Forest stands classified as hardwood forest type occupy 2.65 million acres, or 88 percent of timberland in the region. Hardwood stands have decreased 2 percent, and softwood stands have decreased 2 percent since 1989. Stands classified as oak-pine forest type decreased 4 percent to 375,600 acres. Stands classified as oak-hickory have decreased 2 percent since 1989, and the oak-hickory forest type remained the predominant forest type in the region with 2.25 million acres.

Stand treatment—Partial harvesting has been the predominant treatment and management activity in the timberland of Tennessee's Plateau region since 1989. Partial harvests occurred on 35,600 acres annually. Eighty-nine percent of partial harvests was in hardwood stands, and 6 percent in oak-pine stands. A combination of reforestation and afforestation averaged 23,200 acres annually. Planting activities accounted for 20 percent of this total.

Hardwood volume—Volume of hardwood growing stock increased 34 percent to 4.25 billion cubic feet. Hardwood volume increased 48 percent to 530.1 million cubic feet on public lands, 23 percent to 3.2 billion cubic feet on NIPF land, and 140 percent to 531.5 million cubic feet on forest industry land. Oak species collectively accounted for 2.1 billion cubic feet, or 49 percent of hardwood volume; volume in yellow-poplar increased 15 percent to 559.6 million cubic feet, and hickory volume was up 21 percent to 456.4 million cubic feet. Volume of hardwood sawtimber increased 31 percent to 13.2 billion board feet.

Softwood volume—Volume of softwood growing stock increased 25 percent to 1.0 billion cubic feet between 1989 and 1999. Softwood volume increased 70 percent to 278.8 million cubic feet on forest industry land, 8 percent to 149.3 million cubic feet on public land, and 16 percent to 613.6 million cubic feet on NIPF land. Virginia pine accounted for 394.7 million cubic feet of the total softwood volume in the Plateau region of Tennessee. The majority of the remaining softwood volume was classified as loblolly pine at 252.3 million cubic feet, shortleaf pine at 197.6 million cubic feet, and eastern white pine at 107.6 million cubic feet. The inventory of softwood sawtimber totals 3.5 billion board feet, a 29-percent increase from the previous survey period.

Growth—Net annual growth of hardwood growing stock averaged 132.2 million cubic feet. Net annual growth of hardwoods increased 18 percent since the previous survey period. Hardwood growth increased 115 percent on forest industry land, 52 percent on public land, and 5 percent on NIPF lands.

Net annual growth of softwood growing stock averaged 48.4 million cubic feet. Net annual growth of softwoods has increased 56 percent since the previous survey period. Softwood growth increased 105 percent on forest industry land, 87 percent on public land, and 21 percent on NIPF land.

Removals—The Plateau counties of Tennessee gained 81,300 acres of reserved land, and a substantial portion of this gain came from the reclassification of timberland to reserved forest land. Trees removed from timberland as a result of this reclassification are considered removed from the inventory. Status change removals, as a percent of total removals, were 18 percent for growing stock and live trees, and 14 percent for sawtimber. Removals presented include status change removal values.

Annual removals of hardwood growing stock averaged 61.6 million cubic feet. Hardwood removals have increased 38 percent since the previous survey period. Eighty percent of hardwood removals occurred on NIPF lands, 14 percent on forest industry land, and 6 percent on public land. Across all ownerships, hardwood growth exceeded removals by 115 percent (or by a margin of 2.15 to 1).

Annual removals of softwood growing stock averaged 26.7 million cubic feet. Softwood removals have increased 193 percent since the previous survey period. Sixty-nine percent of softwood growing stock removals occurred on NIPF lands, 25 percent on forest industry land, and 6 percent on public land. Softwood growth exceeded removals by 81 percent (or by a margin of 1.81 to 1).

Mortality—Mortality of growing stock has increased 19 percent to 37.1 million cubic feet since 1989. Hardwood mortality increased 7 percent to 24.6 million cubic feet; mortality increased 76 percent on forest industry timberlands and 29 percent on public lands and declined 4 percent on NIPF lands. Softwood mortality increased 52 percent to 12.4 million cubic feet. Softwood mortality increased 232 percent on forest industry land, 66 percent on public land, and 27 percent on NIPF lands. Seventy-one percent of the total hardwood mortality and 61 percent of the total softwood mortality was accounted for on NIPF lands.

Inventory Methods

The Southern Research Station, Forest Inventory and Analysis (FIA) 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 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 508 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 536 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

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

	Sample	esti nd	mate	Sampling
Item	confiden		nterval	error
				Percent
Timberland (1,000 acres)	2,994.5	±	24.0	0.80
All live $(M ft^3)$				
Inventory	5,991.4	±	155.8	2.60
Net annual growth	197.0	±	7.7	3.92
Annual removals	93.8	±	10.2	10.85
Annual mortality	47.9	±	3.8	7.85
Growing stock $(M ft^3)$				
Inventory	5,288.8	±	149.7	2.83
Net annual growth	180.6	±	7.2	4.00
Annual removals	88.3	±	9.6	10.85
Annual mortality	37.1	±	3.3	9.02
Sawtimber (M fbm)				
Inventory	16,750.4	±	668.3	3.99
Net annual growth	742.9	±	32.0	4.31
Annual removals	313.4	±	35.0	11.16
Annual mortality	93.5	±	11.1	11.92

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_. = 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:

$$SE_s = 2.83 \frac{\sqrt{5,288.8}}{\sqrt{3,185.6}} = 3.65.$$

Thus, the sampling error is 3.65 percent, and the resulting confidence interval (two times out of three) for hardwood growing-stock inventory on NIPF land is $3,185.6 \pm 116.3$ million cubic feet.

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

Sampling errors^a by counties and survey unit for timberland, live trees, growing stock, and sawtimber, Plateau Counties, Tennessee, 1999

Counties and	Timberland		Live trees		Growing stock			Sawtimber		
survey unit	area	Volume	Growth	Removals	Volume	Growth	Removals	Volume	Growth	Removals
					Perce	nt				
Bledsoe	3.4	11.4	16.8	52.1	12.5	16.5	53.4	14.4	20.7	61.0
Campbell	2.7	7.9	15.2	43.6	8.2	16.9	44.7	10.5	14.0	49.1
Cumberland	2.4	7.0	9.3	41.7	7.5	9.7	41.5	12.4	10.4	46.6
Fentress	2.3	6.8	13.7	27.7	7.5	15.1	27.6	10.7	15.2	29.6
Franklin	3.1	11.7	12.1	42.6	12.3	13.1	42.8	16.9	17.3	44.2
Grundy	4.5	13.8	11.0	47.2	15.7	12.3	48.5	26.2	17.0	43.9
Marion	2.7	9.5	11.1	44.9	10.4	11.4	44.1	13.5	13.2	48.2
Morgan	2.0	8.4	11.2	55.0	9.4	11.6	55.0	13.5	12.9	67.3
Overton	2.3	9.8	14.9	35.1	10.7	13.7	34.6	15.2	13.9	34.2
Pickett	5.3	17.3	38.8	100.1	20.5	31.3	100.1	29.1	27.4	100.1
Putnam	3.6	11.0	16.9	52.5	12.2	17.1	52.5	17.4	16.9	51.9
Scott	2.4	9.2	15.1	21.4	9.7	14.6	21.4	12.6	15.7	21.3
Sequatchie	5.2	12.6	36.1	55.6	13.9	35.0	55.6	19.5	31.1	61.8
Van Buren	3.9	13.7	19.5	48.2	13.9	18.9	48.6	20.0	20.2	49.2
Warren	4.1	13.4	18.0	44.4	14.6	17.2	44.7	20.1	24.0	43.5
White	4.0	14.9	19.2	42.8	17.1	18.9	43.7	24.5	18.8	38.6
Survey unit	0.8	2.6	3.9	10.8	2.8	4.0	10.9	4.0	4.3	11.2

^a 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 Analysis, with the even inch as the approximate midpoint for a class. For example, the 6-inch class includes trees 5.0 through 6.9 inches d.b.h.

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

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

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

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

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

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

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

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

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

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

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

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

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

Loblolly-shortleaf pine. Forests in which loblolly pine, shortleaf pine, or other southern yellow pines, except longleaf or slash pine, singly or in combination, constitute a plurality of the stocking. (Common associates include oak, hickory, and gum).

Oak-pine. Forests in which hardwoods (usually upland oaks) constitute a plurality of the stocking but in which pines account for 25 to 50 percent of the stocking. (Common associates include gum, hickory, and yellow-poplar).

Oak-hickory. Forests in which upland oaks or hickory, singly or in combination, constitute a plurality of the stocking, except where pines account for 25 to 50 percent, in which case the stand would be classified oak-pine. (Common associates include yellow-poplar, elm, maple, and black walnut).

Oak-gum-cypress. Bottom-land forests in which tupelo, blackgum, sweetgum, oaks, or southern cypress, singly or in combination, constitute a plurality of the stocking, except where pines account for 25 to 50 percent, in which case the stand would be classified oak-pine. (Common associates include cottonwood, willow, ash, elm, hackberry, and maple).

Elm-ash-cottonwood. Forests in which elm, ash, or cottonwood, singly or in combination, constitute a plurality of the stocking. (Common associates include willow, sycamore, beech, and maple).

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

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

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

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

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

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

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

Hardwoods. Dicotyledonous trees, usually broadleaf and deciduous.

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

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

Industrial wood. All roundwood products except fuelwood.

Land area. The area of dry land and land temporarily or partly covered by water, such as marshes, swamps, and river floodplains (omitting tidal flats below mean high tide), streams, sloughs, estuaries, and canals less than 200 feet wide, and lakes, reservoirs, and ponds less than 4.5 acres in area.

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

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

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

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

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

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

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

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

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

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

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

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

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.

<u>Corporate</u>. Owned by corporations, including incorporated farm ownerships.

<u>Individual</u>. All lands owned by individuals, including farm operators.

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

<u>Miscellaneous Federal land</u>. 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 pulpmills 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 sawlog 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

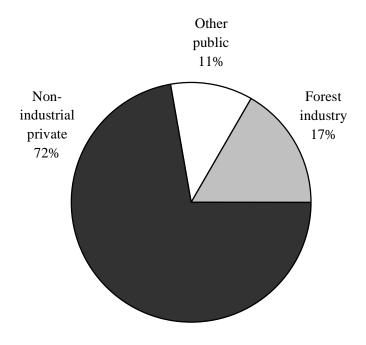
1 square foot = 929.03 square centimeters or 0.0929 square meter

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

1 pound = 0.454 kilogram

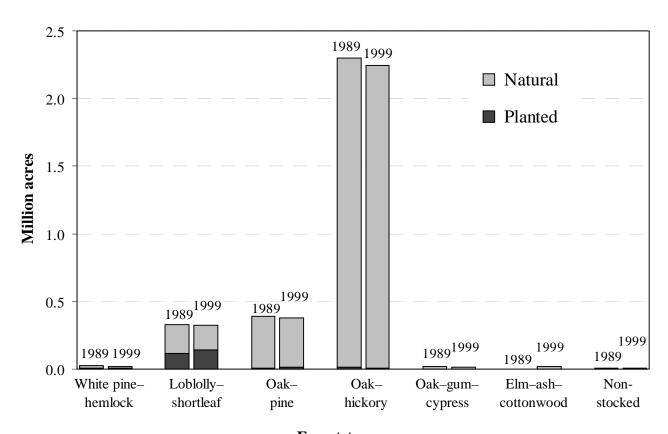
1 ton = 0.907 metric ton

Graphs



3.0 Million acres

Figure 2—Distribution of timberland by ownership class, Plateau Counties, Tennessee, 1999.



Forest-type group

Figure 3—Area of timberland by forest-type group and stand origin, Plateau Counties, Tennessee, 1989 and 1999.

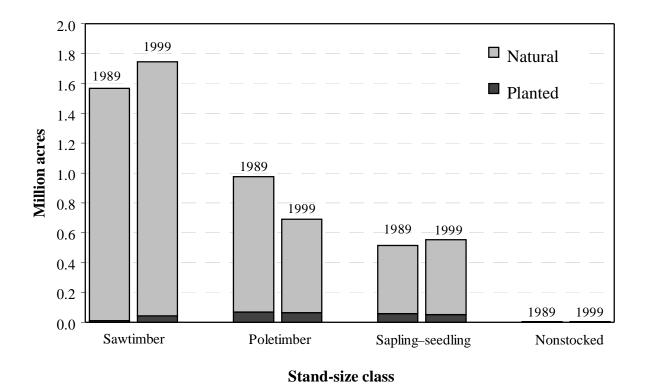


Figure 4—Area of timberland by stand-size class and stand origin, Plateau Counties, Tennessee, 1989 and 1998.

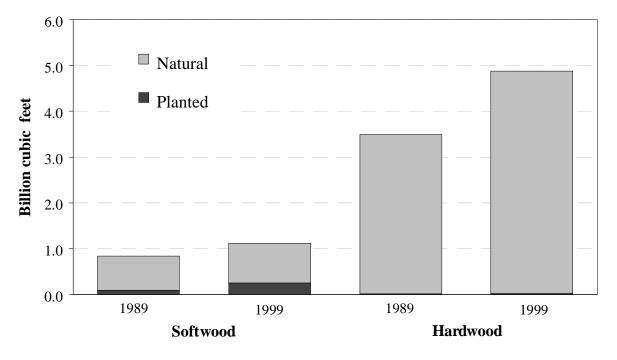


Figure 5—Volume of live trees on timberland by species group and stand origin, Plateau Counties, Tennessee, 1989 and 1998.

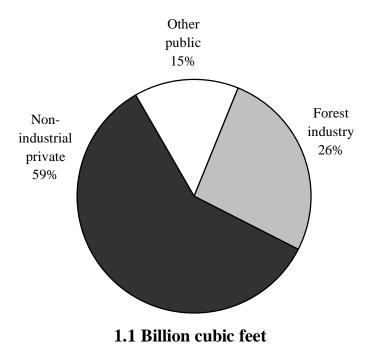


Figure 6—Distribution of softwood live tree volume by ownership class, Plateau Counties, Tennessee, 1999.

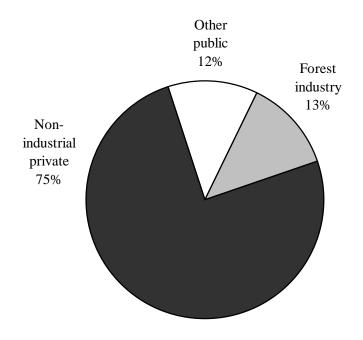
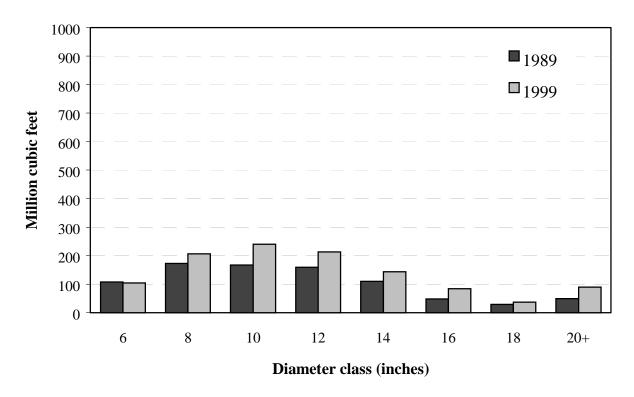


Figure 7—Distribution of hardwood live tree volume by ownership class, Plateau Counties, Tennessee, 1999.

4.9 Billion cubic feet



Figure~8 - Volume~of~softwood~live~trees~on~timberland~by~diameter~class,~Plateau~Counties,~Tennessee,~1989~and~1999.

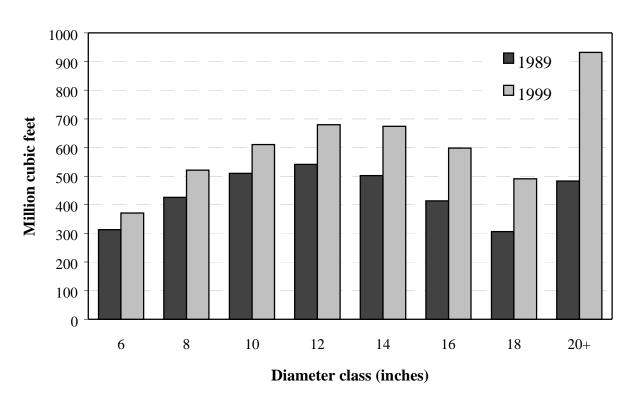


Figure 9—Volume of hardwood live trees on timberland by diameter class, Plateau Counties, Tennessee, 1989 and 1999.

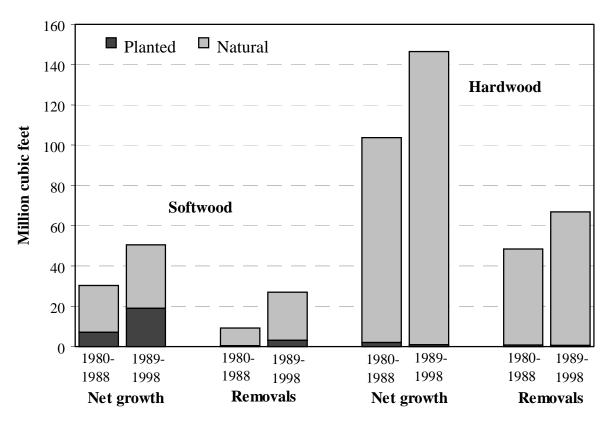


Figure 10—Average net annual growth and removals of live trees on timberland by species group and stand origin, Plateau Counties, Tennessee, 1980-1988 and 1989-1998.

Cross Reference of Eastern Core Tables

Core table	Corresponding table number in this report	Core table	Corresponding table number in this report
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Table 1—Land area by county and land class, Plateau Counties, Tennessee, 1999

			Forest land				
	Total land	Total		Productive		Other	
County	area	forest	Timberland	reserved	Other	land ^b	
			Thousa	nd acres			
Bledsoe	260.1	174.3	170.8	3.5	_	85.7	
Campbell	307.3	242.7	242.7	_	_	64.6	
Cumberland	436.2	321.8	320.1	1.7	_	114.4	
Fentress	319.1	237.5	208.5	29.0	_	81.7	
Franklin	354.0	196.6	196.3	0.4	_	157.4	
Grundy	230.8	169.6	153.8	15.8	_	61.2	
Marion	319.9	256.4	256.1	0.3	_	63.5	
Morgan	334.1	290.0	281.7	8.3	_	44.1	
Overton	277.4	169.5	169.5	_	_	107.9	
Pickett	104.3	73.2	68.2	5.1	_	31.0	
Putnam	256.6	159.3	159.0	0.3	_	97.3	
Scott	340.6	297.1	255.4	41.7	_	43.5	
Sequatchie	170.2	130.8	130.8	_	_	39.4	
Van Buren	175.0	144.4	138.8	5.6	_	30.6	
Warren	276.9	120.8	120.8	0.0	_	156.1	
White	241.1	122.1	122.1			119.0	
Total	4,403.5	3,106.2	2,994.5	111.8		1,297.3	

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

Table 2—Area of forest land by forest-type group and ownership class, Plateau Counties, Tennessee, 1999

		Ownership class								
Forest-type group	All classes	National forest	Miscellaneous Federal	State	County and municipal	Forest industry	Nonindustrial private			
			Th	ousand acre	'S					
White-red-jack pine	20.9	_	_	5.5	_	_	15.4			
Loblolly-shortleaf pine	327.7	_	11.0	15.4	2.6	136.9	161.8			
Oak-pine	400.9	_	37.7	48.5	_	36.8	277.9			
Oak-hickory	2,318.4	_	74.1	234.0	9.5	322.8	1,678.1			
Oak-gum-cypress	10.6	_	_	_	_	_	10.6			
Elm-ash-cottonwood	18.6	_	1.2	_	_	_	17.4			
Maple-beech-birch	4.6	_	4.6	_	_	_	_			
Nonstocked	4.4	_		_		1.2	3.1			
Total	3,106.2	_	128.7	303.4	12.0	497.7	2,164.4			

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

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

^b Includes 12.6 thousand acres of water according to Forest Inventory and Analysis standards of area classification, but defined by the Bureau of Census as land.

Table 3—Area of timberland by county and ownership class, Plateau Counties, Tennessee, 1999

		Ownership class						
	All	National	Miscellaneous		County and	Forest	Nonindust	rial private
County	classes	forest	Federal	State	municipal	industry	Corporate	Individual
				Thou	sand acres			
Bledsoe	170.8	_	_	17.8	_	39.6	28.6	84.8
Campbell	242.7	_	13.5	60.4	_	56.8	62.1	49.9
Cumberland	320.1	_	_	49.4	11.7	43.5	11.7	203.9
Fentress	208.5	_	_	11.2	_	39.2	49.1	109.0
Franklin	196.3	_	11.2	11.4	_	47.1	8.5	118.1
Grundy	153.8	_	_	16.6	0.4	33.4	5.5	97.9
Marion	256.1	_	_	23.5	_	25.5	36.1	171.1
Morgan	281.7	_	_	28.2	_	12.2	71.9	169.4
Overton	169.5	_	6.8	13.6	_	13.6	6.8	128.8
Pickett	68.2	_	7.8	13.1	_	_	_	47.3
Putnam	159.0	_	7.0	_	_	_	19.0	132.9
Scott	255.4	_	_	11.1	_	50.1	38.9	155.3
Sequatchie	130.8	_	_	_	_	37.9	32.5	60.3
Van Buren	138.8	_	_	12.1	_	70.5	5.6	50.7
Warren	120.8	_	_	_	_	_	6.2	114.6
White	122.1	_	5.7	_		28.3	17.0	71.1
Total	2,994.5		51.9	268.3	12.0	497.7	399.4	1,765.0

Table 4—Area of timberland by county and forest-type group, Plateau Counties, Tennessee, 1999

'			Forest-type group						
County	All groups	White-red- jack pine	Loblolly– shortleaf	Oak– pine	Oak– hickory	Oak-gum- cypress	Elm–ash– cottonwood	Nonstocked	
				Thousan	d acres			_	
Bledsoe	170.8	_	31.0	16.0	122.9	_	_	0.8	
Campbell	242.7	1.5	20.7	22.4	198.1	_	_	_	
Cumberland	320.1	5.8	47.6	72.6	193.6	_	_	0.5	
Fentress	208.5	_	28.0	48.0	132.5	_	_	_	
Franklin	196.3	_	1.3	17.9	174.0	3.2	_	_	
Grundy	153.8	_	2.3	15.2	133.9	_	1.1	1.2	
Marion	256.1	_	32.4	29.4	182.1	7.5	4.7	_	
Morgan	281.7	1.7	30.6	58.4	190.5	_	_	0.5	
Overton	169.5	_	8.5	_	161.0	_	_	_	
Pickett	68.2	_	5.0	8.5	54.7	_	_	_	
Putnam	159.0	_	11.1	12.7	135.2	_	_	_	
Scott	255.4	9.7	13.2	20.3	203.7	_	8.5	_	
Sequatchie	130.8	1.3	38.6	24.5	65.2	_	_	1.2	
Van Buren	138.8	0.9	36.6	14.9	86.5	_	_	_	
Warren	120.8	_	1.5	14.8	101.3	_	3.1	_	
White	122.1		11.0	_	111.0	_	_		
Total	2,994.5	20.9	319.4	375.6	2,246.1	10.6	17.4	4.4	

Table 5—Area of timberland by county and stand-size class, Plateau Counties, Tennessee, 1999

			Stand-si	ze class	
	All			Sapling-	
County	classes	Sawtimber	Poletimber	seedling	Nonstocked
			Thousand acres		
Bledsoe	170.8	100.0	34.5	35.4	0.8
Campbell	242.7	169.1	36.7	36.9	_
Cumberland	320.1	174.2	108.7	36.7	0.5
Fentress	208.5	135.6	39.2	33.7	_
Franklin	196.3	100.4	45.4	50.4	_
Grundy	153.8	49.3	59.4	43.8	1.2
Marion	256.1	158.4	50.6	47.0	_
Morgan	281.7	168.0	85.1	28.0	0.5
Overton	169.5	103.5	32.1	33.8	_
Pickett	68.2	55.2	5.2	7.8	_
Putnam	159.0	109.5	33.2	16.3	_
Scott	255.4	168.0	27.3	60.1	_
Sequatchie	130.8	64.9	31.5	33.2	1.2
Van Buren	138.8	51.2	46.7	40.9	_
Warren	120.8	57.8	42.2	20.8	_
White	122.1	79.9	12.8	29.5	
Total	2,994.5	1,745.0	690.6	554.5	4.4

Table 6—Area of timberland by county and site class, Plateau Counties, Tennessee, 1999

	All	Site class (cubic feet/acre/year)					
County	classes	20-49	50-84	85-119	120-164	>165	
			Thousand	d acres			
Bledsoe	170.8	7.4	91.8	44.6	12.2	14.8	
Campbell	242.7	13.3	86.8	72.4	48.8	21.4	
Cumberland	320.1	50.1	133.3	117.7	11.7	7.3	
Fentress	208.5	42.9	79.3	71.2	9.5	5.6	
Franklin	196.3	65.8	75.4	49.2	5.9	_	
Grundy	153.8	28.6	73.0	40.1	12.0	_	
Marion	256.1	76.4	97.9	30.0	33.1	18.7	
Morgan	281.7	50.4	81.4	103.4	46.6	_	
Overton	169.5	8.5	58.8	73.4	23.8	5.1	
Pickett	68.2	15.8	25.6	20.1	6.7	_	
Putnam	159.0	12.7	70.0	65.1	0.1	11.1	
Scott	255.4	16.7	151.9	70.8	8.3	7.6	
Sequatchie	130.8	4.9	66.0	40.8	17.7	1.4	
Van Buren	138.8	2.3	41.3	62.5	24.7	8.0	
Warren	120.8	13.2	60.7	23.6	23.4	_	
White	122.1		53.5	55.8	7.0	5.7	
Total	2,994.5	408.9	1,246.8	940.7	291.4	106.7	

Table 7—Area of timberland by county and stocking class of growing-stock trees, Plateau Counties, Tennessee, 1999

	All		Stoc	king class (per	rcent)	
County	classes	<16.7	16.7-59	60-99	100-130	>130
			Thousan	d acres		
Bledsoe	170.8	2.3	9.0	65.7	53.8	39.9
Campbell	242.7	4.3	37.6	133.6	64.3	3.0
Cumberland	320.1	1.0	47.0	165.9	84.8	21.5
Fentress	208.5	0.9	13.5	129.2	55.2	9.8
Franklin	196.3	2.1	54.7	90.4	43.2	5.9
Grundy	153.8	1.2	29.3	71.7	43.7	7.9
Marion	256.1	0.9	58.2	161.1	22.7	13.2
Morgan	281.7	4.3	62.1	111.8	72.6	30.9
Overton	169.5		32.3	94.9	40.6	1.7
Pickett	68.2	0.6	11.8	22.4	28.3	5.2
Putnam	159.0	2.3	20.9	116.3	15.7	3.9
Scott	255.4	_	25.9	148.1	61.6	19.8
Sequatchie	130.8	2.9	13.7	73.1	24.8	16.3
Van Buren	138.8		9.8	72.7	31.4	25.0
Warren	120.8	8.2	35.0	47.8	27.2	2.7
White	122.1		17.7	66.9	16.5	21.0
Total	2,994.5	30.9	478.3	1,571.4	686.3	227.6

Table 8—Area of timberland by forest-type group, stand origin, and ownership class, Plateau Counties, Tennessee, 1999

			Owne	ership class	
Forest-type group	All	National	Other	Forest	Nonindustrial
and stand origin	classes	forest	public	industry	private
			Thousand ac	res	
Softwood types					
White-red-jack pine					
Planted	4.2		_		4.2
Natural	16.8		5.5		11.2
Total	20.9	_	5.5	_	15.4
Loblolly-shortleaf pine					
Planted	141.5	_	7.4	110.4	23.7
Natural	178.0	_	13.3	26.6	138.1
Total	319.4	_	20.7	136.9	161.8
Total softwoods	340.4		26.2	136.9	177.2
Hardwood types					
Oak-pine					
Planted	10.6		_	5.6	5.0
Natural	365.0		60.9	31.2	272.9
Total	375.6	_	60.9	36.8	277.9
Oak-hickory	2,246.1	_	245.2	322.8	1,678.1
Oak-gum-cypress	10.6		_	_	10.6
Elm-ash-cottonwood	17.4				17.4
Total hardwoods	2,649.7	<u> </u>	306.1	359.6	1,984.1
Nonstocked	4.4	_		1.2	3.1
All groups	2,994.5		332.3	497.7	2,164.4

Table 9—Area of timberland by forest-type group, detailed forest type, and ownership class, Plateau Counties, Tennessee, 1999

			Ow	nership class	
Forest-type group	All	National	Other	Forest	Nonindustrial
and detailed forest type	classes	forest	public	industry	private
			Thousand a	cres	
Softwood types					
White-red-jack pine					
White pine	8.5	_	4.4	_	4.2
White pine–hemlock	1.7	_	_	_	1.7
Hemlock	10.6	_	1.2	_	9.5
Total	20.9		5.5		15.4
Loblolly-shortleaf	20.7		3.3		13.4
Loblolly pine	146.9		3.8	121.9	21.2
Shortleaf pine	39.2		3.5	121.9	35.7
Virginia pine	128.8	_	11.8	15.1	101.9
Eastern redcedar	4.5	_	1.5	_	3.0
Total	319.4		20.7	136.9	161.8
		_			
Total softwoods	340.4		26.2	136.9	177.2
Hardwood types					
Oak-pine					
White pine–n. red oak–white ash	32.8	_	5.6	4.4	22.8
Eastern redcedar-hardwood	44.0	_	6.3	5.6	32.1
Shortleaf pine-oak	89.3	_	20.6	1.5	67.1
Virginia pine–s. red oak	168.4	_	11.4	17.4	139.6
Loblolly pine–hardwood	26.3	_	6.1	7.5	12.6
Other oak-pine	14.8	_	10.8	0.3	3.7
Total	375.6	_	60.9	36.8	277.9
Oak-hickory					
Post oak-black oak	42.7	_	8.6	_	34.1
Chestnut oak	159.4	_	19.3	23.0	117.1
White oak-red oak-hickory	526.4	_	71.3	72.2	382.8
White oak	31.8	_	5.9	_	25.9
Yellow-poplar-white oak-n. red oak	286.3	_	29.4	36.8	220.0
Sweetgum-yellow-poplar	42.7	_	_	5.9	36.8
Mixed hardwood	1,156.8		110.7	184.8	861.3
Total	2,246.1	_	245.2	322.8	1,678.1
Oak-gum-cypress					
Sweetgum-water oak-willow oak	6.1	_	_	_	6.1
Sugarberry-elm-green ash	4.5				4.5
Total	10.6				10.6
Elm-ash-cottonwood	10.0				10.0
River birch–sycamore	14.3				14.3
Sycamore–pecan–elm	3.1	_	_		3.1
Total	17.4	_	_	_	17.4
Total hardwoods	2,649.7		306.1	359.6	1,984.1
Nonstocked	4.4			1.2	3.1
All groups	2,994.5		332.3	497.7	2,164.4
NT	1 1 .	1'			

Table 10—Area of timberland by ownership and stocking class of growing-stock trees, Plateau Counties, Tennessee, 1999

	All		Stock	king class (pe	rcent)					
Ownership class	classes	<16.7	60-99	100-130	>130					
		Thousand acres								
National forest		_	_	_	_	_				
Other public	332.3	2.4	50.5	151.5	103.9	24.0				
Forest industry	497.7	3.9	50.3	207.4	159.0	77.0				
Nonindustrial private	2,164.4	24.6	377.4	1,212.4	423.4	126.6				
All ownerships	2,994.5	30.9	478.3	1,571.4	686.3	227.6				

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, Plateau Counties, Tennessee, 1999

		Stand-size class								
Forest-type group	All			Sapling-						
and stand origin	classes	Sawtimber	Poletimber	seedling	Nonstocked					
			Thousand acres							
Softwood types										
White-red-jack pine										
Planted	4.2	4.2	_	_	_					
Natural	16.8	15.6	1.2							
Total	20.9	19.8	1.2	_	_					
Loblolly-shortleaf pine										
Planted	141.5	38.3	62.0	41.2	_					
Natural	178.0	99.3	32.1	46.6	_					
Total	319.4	137.6	94.1	87.8	_					
Total softwoods	340.4	157.3	95.3	87.8						
Hardwood types										
Oak-pine										
Planted	10.6	_	_	10.6	_					
Natural	365.0	211.3	99.9	53.8						
Total	375.6	211.3	99.9	64.4	_					
Oak-hickory	2,246.1	1,364.3	495.4	386.3	_					
Oak-gum-cypress	10.6	3.0	_	7.7	_					
Elm-ash-cottonwood	17.4	9.0	_	8.4	_					
Total hardwoods	2,649.7	1,587.7	595.3	466.7	<u> </u>					
Nonstocked	4.4	_	_		4.4					
All groups	2,994.5	1,745.0	690.6	554.5	4.4					

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

Table 12—Area of timberland by stand-age class and forest management type, all ownerships, Plateau Counties, Tennessee, 1999

				Forest ma	anagement type		
Stand-age class	All types	Pine plantation	Natural pine	Oak– pine	Upland hardwood	Lowland hardwood	Nonstocked
Years	<u> </u>	•	•	Thousand a	icres		
0-10	168.7	28.1	16.4	18.3	97.3	4.2	4.4
11-20	199.9	41.2	17.9	15.3	117.8	7.7	_
21-30	196.9	53.6	19.7	31.0	89.7	3.0	_
31-40	354.4	6.9	28.9	43.7	270.6	4.2	_
41-50	521.9	15.9	34.3	64.3	402.8	4.7	_
51-60	527.6		21.8	74.4	427.2	4.3	_
61-70	510.4		24.0	67.6	418.7	_	_
71-80	286.4	_	26.6	42.2	217.7	_	_
81+	228.4	_	5.2	18.8	204.4		_
All classes	2,994.5	145.6	194.7	375.6	2,246.1	28.1	4.4

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, Plateau Counties, Tennessee, 1999

				Forest m	anagement type	e	
Stand-age class	All types	Pine plantation	Natural pine	Oak– pine	Upland hardwood	Lowland hardwood	Nonstocked
Years				Thousand	acres		
0-10	10.2	1.3	_	_	8.9	_	_
11-20	25.2	3.5		_	21.6	_	_
21-30	11.6	2.6	1.5	6.1	1.4		_
31-40	30.9	_	5.9	5.6	19.4	_	_
41-50	18.0	_	5.9	5.5	6.6		_
51-60	52.7	_	_	20.0	32.7		_
61-70	81.2	_	_	11.7	69.5		_
71-80	59.4	_	0.3	11.9	47.2	_	_
81+	43.1		5.2		37.9		
All classes	332.3	7.4	18.8	60.9	245.2	_	_

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

Table 14—Area of timberland by stand-age class and forest management type, forest industry ownerships, Plateau Counties, Tennessee, 1999

				Forest	management typ	e	
Stand-age class	All types	Pine plantation	Natural pine	Oak- pine	Upland hardwood	Lowland hardwood	Nonstocked
Years				Thousan	d acres		
0-10	57.0	14.7	6.0	5.6	29.5	_	1.2
11-20	52.0	37.6	2.5	0.3	11.6	_	_
21-30	83.2	51.0	5.9	_	26.2	_	_
31-40	47.8	1.4	6.6	2.9	37.0	_	_
41-50	72.1	5.7	5.6	11.9	49.0	_	_
51-60	74.6	_	_	9.8	64.9	_	_
61-70	60.0	_	_	4.7	55.3	_	_
71-80	24.6	_	_	_	24.6	_	_
81+	26.3			1.5	24.8		
All classes	497.7	110.4	26.6	36.8	322.8	_	1.2

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, Plateau Counties, Tennessee, 1999

				Forest	management typ	be	
Stand-age class	All types	Pine plantation	Natural pine	Oak– pine	Upland hardwood	Lowland hardwood	Nonstocked
Years				Thousan	d acres		
0-10	101.5	12.2	10.4	12.7	58.8	4.2	3.1
11-20	122.7	_	15.4	15.0	84.6	7.7	_
21-30	102.2	_	12.3	24.9	62.0	3.0	_
31-40	275.6	5.6	16.4	35.2	214.2	4.2	_
41-50	431.8	10.2	22.8	46.9	347.2	4.7	_
51-60	400.3	_	21.8	44.5	329.6	4.3	_
61-70	369.2	_	24.0	51.2	294.0	_	_
71-80	202.3	_	26.3	30.2	145.8	_	_
81+	159.0			17.3	141.7		
All classes	2,164.4	27.9	149.3	277.9	1,678.1	28.1	3.1

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

Table 16—Area of nonindustrial private timberland by ownership, forested tract-size class, and forest management type, Plateau Counties, Tennessee, 1999

				Forest m	anagement type		
Ownership and forested	All	Pine	Natural	Oak-	Upland	Lowland	
tract-size class	types	plantation	pine	pine	hardwood	hardwood	Nonstocked
Acres				Thousand acr	res		
Individual							
≤ 10	139.7	5.3	24.0	17.7	91.1	1.1	0.5
11-50	293.9	1.5	5.3	41.4	244.9	_	0.8
51-100	275.4	3.4	7.9	36.5	216.2	11.0	0.5
101-200	314.9	_	13.9	36.9	259.9	3.0	1.2
201-500	367.7	4.2	24.5	78.4	260.7	_	
≥ 501	373.3	7.0	12.1	25.2	324.9	4.2	
Total	1,765.0	21.3	87.6	236.0	1,397.6	19.3	3.1
Corporate							
≤ 10	3.0	_	_		3.0		
11-50	3.0	_		3.0		_	
51-100	29.2	_	4.7	7.5	17.0	_	_
101-200	33.1	1.1	10.1	_	17.4	4.5	_
201-500	33.0	_	_	4.1	24.6	4.3	
≥ 501	298.2	5.4	46.9	27.3	218.6	_	
Total	399.4	6.6	61.7	41.9	280.5	8.8	
All nonindustrial private							
≤ 10	142.7	5.3	24.0	17.7	94.0	1.1	0.5
11-50	296.9	1.5	5.3	44.4	244.9		0.8
51-100	304.6	3.4	12.5	44.0	233.2	11.0	0.5
101-200	348.0	1.1	24.0	36.9	277.2	7.5	1.2
201-500	400.8	4.2	24.5	82.5	285.2	4.3	
≥ 501	671.5	12.4	59.0	52.4	543.5	4.2	
Total	2,164.4	27.9	149.3	277.9	1,678.1	28.1	3.1

Table 17—Number of live trees on timberland by species and diameter class, Plateau Counties, Tennessee, 1999

						Diameter	class (inch	es at breast	height)				
	All	1.0-	3.0-	5.0-	7.0-	9.0-	11.0-	13.0-	15.0-	17.0-	19.0-	21.0-	29.0 and
Species	classes	2.9	4.9	6.9	8.9	10.9	12.9	14.9	16.9	18.9	20.9	28.9	larger
						Thou	usand trees						
Softwood													
Shortleaf pine	22,810	4,521	4,321	2,834	3,579	3,354	2,341	1,269	419	138	34	_	_
Loblolly pine	53,705	8,747	7,528	16,009	12,147	6,331	2,128	600	107	_	36	72	_
Virginia pine	98,377	43,563	17,723	11,870	9,771	7,136	4,832	1,978	1,107	364	33	_	_
Eastern white pine	30,208	19,948	5,156	1,559	921	661	492	590	317	103	180	246	35
Eastern hemlock	22,841	12,898	5,003	1,870	1,141	616	342	301	143	148	242	137	_
Redcedars	19,950	8,383	4,200	3,397	2,569	887	364	109	41				_
Total softwoods	247,891	98,060	43,931	37,539	30,128	18,985	10,499	4,847	2,134	753	525	455	35
Hardwood													
Select white oaks	137,939	44,525	35,920	19,548	13,137	8,812	6,251	4,328	2,443	1,586	753	599	37
Select red oaks	11,896	3,365	1,104	1,251	1,101	1,247	1,222	537	539	688	251	591	_
Other white oaks	80,716	25,112	18,269	8,649	7,672	6,594	5,132	3,567	2,322	1,681	683	934	101
Other red oaks	69,483	19,255	12,578	8,700	6,413	6,425	5,476	3,653	3,143	1,909	959	972	_
Hickory	103,735	51,570	17,725	9,196	8,405	6,448	4,222	2,924	1,669	841	454	246	35
Yellow birch	1,826	1,225	_	264	135	_		33	70	33	66	_	_
Hard maple	110,274	68,746	20,608	8,279	4,972	2,939	1,829	1,040	926	225	249	318	143
Soft maple	330,133	238,131	48,699	20,181	10,860	4,104	3,200	2,211	1,158	760	391	438	_
Beech	22,318	17,018	927	1,148	769	495	501	310	391	111	104	504	40
Sweetgum	28,812	15,395	7,021	2,697	1,333	1,106	753	289	143	34	41	_	_
Tupelo and blackgum	118,851	95,956	12,061	4,657	2,230	1,295	1,101	829	260	245	108	109	_
Ash	34,139	17,657	7,957	2,886	2,120	1,471	782	422	421	176	176	71	_
Basswood	10,783	7,099	476	1,019	592	370	542	110	144	219	70	142	_
Yellow-poplar	102,945	54,488	19,635	7,785	6,386	4,833	3,123	2,398	1,714	1,047	713	753	70
Bay and magnolia	1,535	938	420	70	73	_	34	_	_	_	_	_	_
Black cherry	26,392	15,163	5,867	2,566	1,163	637	321	256	205	70	33	111	_
Black walnut	2,688	888	_	515	220	329	207	393	34	34	34	34	_
Sycamore	4,871	2,778	872	284	294	139	144	179	37	108	36	_	_
Black locust	18,488	11,715	2,584	1,732	1,047	692	353	192	36	36	66	35	_
Elm	24,438	18,203	3,661	1,338	666	318	104	108	_	40	_	_	_
Other Eastern													
hardwoods	457,847	314,527	99,688	28,249	9,791	3,215	1,065	812	178	69	216	37	
Total hardwoods	1,700,109	1,023,754	316,072	131,014	79,379	51,469	36,362	24,591	15,833	9,912	5,403	5,894	426
All species	1,948,000	1,121,814	360,003	168,553	109,507	70,454	46,861	29,438	17,967	10,665	5,928	6,349	461

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

Table 18—Number of growing-stock trees on timberland by species and diameter class, Plateau Counties, Tennessee, 1999

						Diameter	class (inch	es at breast	height)				
	All	1.0-	3.0-	5.0-	7.0-	9.0-	11.0-	13.0-	15.0-	17.0-	19.0-	21.0-	29.0 and
Species	classes	2.9	4.9	6.9	8.9	10.9	12.9	14.9	16.9	18.9	20.9	28.9	larger
						The	ousand tree.	5					
Softwood													
Shortleaf pine	19,888	3,046	3,444	2,613	3,370	3,284	2,305	1,269	419	138	_	_	_
Loblolly pine	50,634	7,891	7,528	14,560	11,661	6,120	2,095	564	107	_	36	72	_
Virginia pine	76,290	30,944	13,329	9,278	8,672	6,406	4,630	1,806	966	259	_	_	_
Eastern white pine	20,836	12,150	3,864	1,419	851	661	457	553	317	103	180	246	35
Eastern hemlock	18,785	10,672	3,726	1,595	1,005	616	274	268	143	107	242	137	_
Redcedars	14,534	5,512	3,799	2,618	1,863	376	257	109					_
Total softwoods	200,967	70,215	35,690	32,083	27,422	17,463	10,018	4,569	1,952	607	458	455	35
Hardwood													
Select white oaks	99,229	20,483	27,569	16,818	11,799	8,112	5,707	4,018	2,168	1,340	718	460	37
Select red oaks	7,529	419	442	1,035	1,033	1,133	1,001	503	539	652	251	521	_
Other white oaks	48,088	6,556	10,502	6,623	6,410	5,592	4,499	3,173	1,931	1,537	545	619	101
Other red oaks	46,796	6,569	7,373	7,546	5,431	5,604	4,728	3,110	3,034	1,800	921	680	_
Hickory	60,719	15,674	13,794	8,141	7,627	5,935	3,836	2,854	1,563	735	312	213	35
Yellow birch	429	_	_	264	99	_	_		33	_	33	_	_
Hard maple	50,408	20,493	12,827	6,733	3,896	2,687	1,455	823	709	185	249	248	103
Soft maple	115,475	57,393	27,745	14,410	8,120	2,708	2,121	1,367	771	405	181	254	_
Beech	6,557	3,411	_	902	514	280	427	206	319	111	67	280	40
Sweetgum	19,670	7,891	6,117	2,288	1,194	1,106	679	214	106	34	41		_
Tupelo and blackgum	35,446	20,874	7,243	3,052	1,559	914	680	587	219	172	73	73	_
Ash	13,247	3,462	3,100	1,993	1,615	1,208	636	389	421	176	176	71	_
Basswood	4,001	1,335		841	487	256	470	110	107	219	34	142	_
Yellow-poplar	82,729	37,869	17,578	7,094	6,097	4,675	2,979	2,316	1,679	977	678	717	70
Bay and magnolia	1,535	938	420	70	73		34			_	_	_	_
Black cherry	9,737	3,598	2,261	1,654	806	562	285	256	170	34	33	78	_
Black walnut	1,400	_	_	365	111	329	173	286	34	34	34	34	_
Sycamore	1,847	_	872	108	260	139	144	179	37	72	36	_	_
Black locust	3,855	836	861	1,035	325	325	177	192	_	36	33	35	_
Elm	7,543	3,524	2,279	790	560	174	104	72	_	40	_	_	_
Other Eastern													
hardwoods	88,598	41,795	26,246	12,616	5,044	1,594	562	597	38	36	70		
Total hardwoods	704,838	253,120	167,229	94,378	63,060	43,333	30,697	21,252	13,878	8,595	4,485	4,425	386
All species	905,805	323,335	202,919	126,461	90,482	60,796	40,715	25,821	15,830	9,202	4,943	4,880	421

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

Table 19—Volume of live trees on timberland by species and diameter class, Plateau Counties, Tennessee, 1999

					Diame	ter class (i	nches at br	east height)		
	All	5.0-	7.0-	9.0-	11.0-	13.0-	15.0-	17.0-	19.0-	21.0-	29.0 and
Species	classes	6.9	8.9	10.9	12.9	14.9	16.9	18.9	20.9	28.9	larger
					N	Iillion cub	ic feet				
Softwood											
Shortleaf pine	202.3	8.5	28.5	46.9	50.9	40.9	17.3	7.5	1.8	_	_
Loblolly pine	261.4	40.0	75.5	74.5	39.8	16.6	4.7	_	2.8	7.4	_
Virginia pine	435.3	39.0	76.2	95.8	101.7	59.4	43.6	17.7	2.0	_	_
Eastern white pine	110.3	4.2	6.3	8.1	9.5	16.8	12.8	5.0	13.9	26.9	6.8
Eastern hemlock	67.9	4.3	6.0	6.3	5.7	6.7	4.9	6.5	16.0	11.6	_
Redcedars	37.9	7.9	13.2	8.2	5.0	2.6	1.0		_		_
Total softwoods	1,115.1	103.9	205.8	239.9	212.5	142.9	84.3	36.7	36.5	45.9	6.8
Hardwood											
Select white oaks	785.0	58.7	89.5	107.0	120.5	125.2	94.0	81.5	49.0	52.3	7.3
Select red oaks	195.9	4.0	7.3	16.3	22.2	14.3	20.5	35.1	17.0	59.0	_
Other white oaks	631.3	24.6	50.4	75.1	92.5	92.4	81.2	81.7	40.5	76.8	16.2
Other red oaks	693.2	25.6	41.1	74.9	100.0	96.3	119.6	90.7	59.3	85.7	_
Hickory	492.1	24.5	54.9	78.2	81.7	87.0	67.4	43.6	28.8	21.5	4.4
Yellow birch	10.5	1.3	0.9	_	_	0.6	2.2	1.8	3.8	_	_
Hard maple	278.4	27.4	34.3	38.0	36.1	29.5	35.8	12.1	16.4	25.3	23.7
Soft maple	406.1	62.7	71.9	42.1	53.6	53.3	37.7	32.8	21.3	30.6	_
Beech	107.5	3.3	5.2	5.3	9.5	8.8	14.2	5.2	6.5	41.6	7.9
Sweetgum	63.9	5.7	9.3	15.6	14.9	8.7	4.4	2.0	3.2	_	_
Tupelo and blackgum	101.6	12.4	14.1	12.5	17.7	17.2	9.4	6.8	4.8	6.6	_
Ash	114.8	8.2	14.2	18.2	15.4	12.3	17.0	9.1	11.5	8.9	_
Basswood	62.2	4.0	4.4	5.2	10.9	3.8	4.9	13.2	3.7	12.2	_
Yellow-poplar	575.6	26.3	50.0	70.0	68.8	77.8	75.1	59.5	53.5	79.1	15.8
Bay and magnolia	1.5	0.3	0.6	_	0.6	_	_	_	_	_	_
Black cherry	61.6	6.9	7.5	7.8	6.3	7.9	7.3	3.8	2.8	11.3	_
Black walnut	26.7	1.5	0.9	3.5	4.0	9.5	1.0	1.8	2.3	2.2	_
Sycamore	19.9	1.0	2.5	1.7	2.8	4.0	1.6	4.6	1.6	_	_
Black locust	31.9	3.7	5.4	6.1	4.7	4.1	1.1	1.2	2.5	3.1	_
Elm	16.4	3.8	3.9	3.3	2.2	1.8	_	1.5	_	_	_
Other Eastern											
hardwoods	200.2	65.5	52.7	29.4	14.7	19.6	4.0	2.6	10.7	1.0	
Total hardwoods	4,876.3	371.2	520.9	610.3	679.2	674.2	598.1	490.6	339.2	517.3	75.3
All species Numbers in rows and column	5,991.4	475.1	726.7	850.3	891.7	817.1	682.4	527.3	375.7	563.2	82.1

Table 20—Volume of growing-stock trees on timberland by species and diameter class, Plateau Counties, Tennessee, 1999

	_				Diameter of	class (inche	es at breast	t height)			
	All	5.0-	7.0-	9.0-	11.0-	13.0-	15.0-	17.0-	19.0-	21.0-	29.0 and
Species	classes	6.9	8.9	10.9	12.9	14.9	16.9	18.9	20.9	28.9	larger
					Millio	on cubic fe	et				
Softwood											
Shortleaf pine	197.6	8.1	27.0	46.3	50.5	40.9	17.3	7.5	_	_	_
Loblolly pine	252.3	37.1	72.8	72.4	39.1	16.0	4.7	_	2.8	7.4	_
Virginia pine	394.7	32.3	69.9	86.9	98.4	54.6	39.5	13.1	_	_	_
Eastern white pine	107.6	3.9	5.9	8.1	8.6	15.6	12.8	5.0	13.9	26.9	6.8
Eastern hemlock	63.5	3.4	5.2	6.3	4.8	6.0	4.9	5.2	16.0	11.6	_
Redcedars	26.0	5.9	10.3	3.6	3.5	2.6					
Total softwoods	1,041.6	90.8	191.0	223.6	204.9	135.8	79.2	30.8	32.8	45.9	6.8
Hardwood											
Select white oaks	726.4	51.9	81.7	99.9	112.2	118.8	86.8	73.4	48.0	46.4	7.3
Select red oaks	180.9	3.4	6.9	15.4	19.4	13.6	20.5	34.0	17.0	50.7	_
Other white oaks	555.0	19.8	43.0	65.6	83.6	84.6	72.2	77.7	33.9	58.4	16.2
Other red oaks	622.5	22.7	36.1	66.6	87.5	83.3	116.0	88.5	57.5	64.4	_
Hickory	456.4	22.4	51.0	72.3	75.0	85.1	64.0	39.4	22.9	20.0	4.4
Yellow birch	5.1	1.3	0.6	_	_	_	1.1	_	2.1	_	_
Hard maple	237.8	22.8	27.7	35.4	29.7	24.2	29.6	10.3	16.4	21.0	20.8
Soft maple	286.8	46.5	56.4	31.0	38.9	36.7	26.4	20.2	11.2	19.5	_
Beech	80.0	2.7	3.6	3.4	8.1	6.3	12.2	5.2	4.3	26.2	7.9
Sweetgum	58.5	5.0	8.6	15.6	13.4	6.8	3.9	2.0	3.2	_	_
Tupelo and blackgum	76.7	8.6	10.3	9.3	12.0	13.8	8.0	5.5	4.0	5.2	_
Ash	104.7	6.2	11.6	16.0	13.2	11.2	17.0	9.1	11.5	8.9	_
Basswood	57.6	3.4	3.8	3.7	9.9	3.8	4.8	13.2	2.8	12.2	_
Yellow-poplar	559.6	24.2	47.9	68.1	66.7	76.0	74.3	57.2	52.1	77.4	15.8
Bay and magnolia	1.5	0.3	0.6	_	0.6	_	_	_	_	_	_
Black cherry	48.4	4.9	5.5	7.1	5.7	7.9	6.0	2.5	2.8	5.9	_
Black walnut	24.1	1.1	0.4	3.5	3.6	8.0	1.0	1.8	2.3	2.2	_
Sycamore	17.6	0.4	2.1	1.7	2.8	4.0	1.6	3.2	1.6	_	_
Black locust	20.5	2.5	2.1	3.4	2.8	4.1	_	1.2	1.3	3.1	_
Elm	13.4	2.5	3.4	2.2	2.2	1.7	_	1.5	_	_	_
Other Eastern											
hardwoods	113.7	33.3	30.3	17.5	8.9	15.3	1.5	2.1	4.9		
Total hardwoods	4,247.2	285.8	433.8	537.9	596.4	605.2	546.7	448.0	299.7	421.3	72.4
All species	5,288.8	376.6	624.9	761.5	801.4	741.0	625.9	478.8	332.5	467.2	79.2

Table 21—Volume in the saw-log portion of sawtimber trees on timberland by species and diameter class, Plateau Counties, Tennessee, 1999

				Diame	eter class (in	nches at bre	ast height)		
	All	9.0-	11.0-	13.0-	15.0-	17.0-	19.0-	21.0-	29.0 and
Species	classes	10.9	12.9	14.9	16.9	18.9	20.9	28.9	larger
				N.	Iillion cubic	: feet			
Softwood									
Shortleaf pine	146.6	37.4	46.0	39.0	16.8	7.4	_		_
Loblolly pine	121.2	56.4	35.0	15.1	4.6	_	2.8	7.4	_
Virginia pine	259.5	70.2	88.3	51.0	37.6	12.6	_		_
Eastern white pine	91.8	6.4	7.7	14.5	12.2	4.8	13.5	26.2	6.6
Eastern hemlock	50.6	4.9	4.2	5.5	4.6	4.9	15.3	11.2	_
Redcedars	8.5	2.9	3.2	2.5	_		_		_
Total softwoods	678.3	178.1	184.3	127.5	75.7	29.8	31.6	44.7	6.6
Hardwood									
Select white oaks	416.5	_	80.8	97.6	76.0	66.7	44.4	43.9	7.1
Select red oaks	131.5	_	13.6	10.9	17.2	29.4	15.0	45.5	
Other white oaks	363.9	_	60.7	69.4	62.8	69.9	31.0	54.6	15.4
Other red oaks	426.1	_	62.0	68.2	101.7	80.2	53.1	60.8	_
Hickory	259.2	_	54.0	69.9	55.7	35.5	21.1	18.7	4.2
Yellow birch	2.9		_	_	1.0	_	1.9	_	_
Hard maple	131.2	_	21.0	19.9	25.8	9.3	15.2	19.9	20.1
Soft maple	123.9	_	26.6	29.2	22.4	17.7	10.1	17.9	_
Beech	60.9	_	5.8	5.1	10.4	4.6	3.9	23.9	7.3
Sweetgum	23.3	_	9.4	5.6	3.4	1.9	3.0	_	_
Tupelo and blackgum	39.4	_	8.3	11.0	6.9	4.9	3.6	4.8	_
Ash	60.8	_	9.3	9.3	14.8	8.2	10.6	8.5	_
Basswood	40.2	_	7.0	3.2	4.2	11.9	2.6	11.4	_
Yellow-poplar	368.1	_	46.4	62.8	65.9	52.8	49.4	75.2	15.6
Bay and magnolia	0.4	_	0.4	_	_	_	_	_	_
Black cherry	26.4	_	4.2	6.6	5.3	2.2	2.6	5.4	_
Black walnut	15.6	_	2.6	6.5	0.8	1.6	2.1	2.0	_
Sycamore	10.6	_	1.9	3.1	1.4	2.8	1.5	_	_
Black locust	10.1	_	1.9	3.3	_	1.0	1.1	2.7	_
Elm	4.2	_	1.6	1.3	_	1.3	_	_	_
Other Eastern									
hardwoods	24.7		5.8	11.5	0.9	1.9	4.7		
Total hardwoods	2,539.9		423.4	494.5	476.5	403.8	276.8	395.2	69.8
All species	3,218.2	178.1	607.7	622.0	552.2	433.5	308.4	439.9	76.4

Table 22—Volume of sawtimber on timberland by species and diameter class, Plateau Counties, Tennessee, 1999

				Diame	ter class (inc	hes at breast	height)		
	All	9.0-	11.0-	13.0-	15.0-	17.0-	19.0-	21.0-	29.0 and
Species	classes	10.9	12.9	14.9	16.9	18.9	20.9	28.9	larger
				Mi	llion board f	^F eet			
Softwood									
Shortleaf pine	755.8	173.9	231.1	210.7	96.2	43.9	_	_	_
Loblolly pine	613.4	261.9	175.0	82.3	26.3	_	18.1	49.9	_
Virginia pine	1,263.6	316.5	420.6	257.2	199.5	69.8	_	_	_
Eastern white pine	543.2	28.7	38.4	76.8	69.6	28.3	83.2	172.7	45.3
Eastern hemlock	283.7	21.6	19.9	28.3	25.2	28.5	90.9	69.3	_
Redcedars	45.1	14.4	16.6	14.1	_	_	_		
Total softwoods	3,504.9	817.0	901.6	669.5	416.8	170.5	192.2	291.9	45.3
Hardwood									
Select white oaks	2,124.8	_	385.1	473.2	383.7	350.2	240.7	249.2	42.7
Select red oaks	690.5	_	63.6	52.3	85.8	152.5	80.8	255.4	
Other white oaks	1,829.3	_	281.7	327.4	306.7	355.6	163.6	303.2	91.1
Other red oaks	2,229.3	_	300.6	334.8	522.7	425.8	292.9	352.5	_
Hickory	1,336.8	_	257.9	344.8	287.4	190.9	117.8	110.3	27.7
Yellow birch	14.8	_	_	_	4.9	_	9.9	_	_
Hard maple	673.5	_	110.3	98.7	127.7	46.8	77.3	102.9	109.7
Soft maple	623.1	_	127.1	140.6	111.3	90.2	53.8	100.1	_
Beech	281.5	_	29.5	23.8	47.6	20.9	17.5	108.7	33.5
Sweetgum	123.6	_	47.7	29.0	18.3	10.9	17.8	_	_
Tupelo and blackgum	195.4	_	38.4	51.8	33.9	25.1	19.1	27.1	_
Ash	309.7	_	43.6	44.2	73.5	42.0	56.8	49.6	_
Basswood	206.7	_	33.2	15.3	20.8	60.7	14.1	62.6	_
Yellow-poplar	2,134.3	_	239.6	332.4	364.8	306.5	299.5	482.8	108.6
Bay and magnolia	2.1	_	2.1	_	_	_	_	_	_
Black cherry	142.2	_	20.2	33.5	28.1	12.3	15.2	32.9	_
Black walnut	71.5	_	12.4	29.4	3.7	7.2	9.5	9.3	_
Sycamore	54.1	_	9.5	15.1	7.0	14.7	7.8	_	_
Black locust	47.0	_	9.8	15.3	_	4.7	5.0	12.3	_
Elm	20.8	_	7.7	6.5	_	6.7	_	_	_
Other Eastern									
hardwoods	134.5		30.3	62.4	6.7	9.6	25.5		
Total hardwoods	13,245.5	_	2,050.3	2,430.4	2,434.7	2,133.3	1,524.5	2,258.9	413.3
All species	16,750.4	817.0	2,951.9	3,099.9	2,851.4	2,303.9	1,716.7	2,550.8	458.7

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

Table 23—Volume of sawtimber on timberland by species, size class, and tree grade, Plateau Counties, Tennessee, 1999

			All size o	classes			Trees ≥15.0 inches d.b.h.					
	All		Т	ree grade			All			Tree grade	,	
Species	grades	1	2	3	4	5	grades	1	2	3	4	5
						Million	ı board feet					
Softwood												
Shortleaf pine	755.8	245.9	218.6	285.5	_	5.8	140.1	40.1	60.5	33.7	_	5.8
Loblolly pine	613.4	2.7	44.8	562.8	_	3.1	94.2	_	9.1	85.1	_	_
Virginia pine	1,263.6	3.8	72.6	1,150.4	_	36.8	269.3	_	27.6	223.0	_	18.6
Eastern white pine	543.2	136.7	112.9	240.7	47.4	5.6	399.2	128.1	73.7	154.2	43.3	_
Eastern hemlock	283.7	20.5	111.3	95.0	42.7	14.3	213.9	20.5	87.7	50.3	41.2	14.3
Redcedars	45.1	_	1.0	41.9	_	2.2	_	_	_	_	_	_
Total softwoods	3,504.9	409.6	561.1	2,376.3	90.1	67.8	1,116.7	188.7	258.6	546.3	84.5	38.7
Hardwood												
Select white oaks	2,124.8	371.1	635.3	820.9	237.3	60.2	1,266.5	371.1	463.6	284.9	102.1	44.8
Select red oaks	690.5	192.7	114.5	197.8	144.0	41.5	574.5	192.7	98.0	143.2	102.9	37.7
Other white oaks	1,829.3	323.2	623.2	661.2	139.2	82.4	1,220.1	323.2	498.2	295.1	48.7	54.9
Other red oaks	2,229.3	228.5	447.5	717.1	719.9	116.3	1,593.9	228.5	351.0	440.0	470.4	104.0
Hickory	1,336.8	171.2	365.7	552.6	109.0	138.3	734.2	171.2	227.5	187.8	38.3	109.3
Yellow birch	14.8		4.9	9.9		_	14.8		4.9	9.9	_	
Hard maple	673.5	60.4	126.5	209.1	145.1	132.5	464.4	60.4	97.4	103.8	89.9	112.9
Soft maple	623.1	5.4	121.0	230.3	185.2	81.1	355.4	5.4	81.6	92.8	114.0	61.6
Beech	281.5	_	61.0	128.0	63.6	28.9	228.2	_	56.8	117.5	28.9	25.0
Sweetgum	123.6	_	64.8	51.2	5.1	2.5	46.9	_	40.0	6.9		_
Tupelo and blackgum	195.4	12.4	90.5	51.1	16.3	25.2	105.3	12.4	56.6	8.8	11.0	16.5
Ash	309.7	112.8	79.7	58.5	6.1	52.7	221.9	112.8	47.6	16.2	4.3	41.1
Basswood	206.7	45.6	44.0	61.1	42.8	13.2	158.3	45.6	39.3	25.3	41.4	6.7
Yellow-poplar	2,134.3	585.7	537.6	642.1	278.2	90.9	1,562.3	585.7	406.6	351.6	154.6	63.9
Bay and magnolia	2.1	_	_	2.1		_	_	_	_		_	_
Black cherry	142.2	21.6	25.4	43.4	5.3	46.5	88.5	21.6	4.9	17.9	_	44.0
Black walnut	71.5	7.2	27.9	29.5	3.8	3.0	29.7	7.2	9.5	13.0	_	_
Sycamore	54.1	16.3	_	24.5	13.4	_	29.5	16.3	_	13.2	_	_
Black locust	47.0	17.3	6.8	15.0	3.3	4.7	21.9	17.3	_	_	_	4.7
Elm	20.8	_	6.5	14.4	_	_	6.7	_	_	6.7	_	_
Other Eastern												
hardwoods	134.5	25.9	32.5	67.0	7.0	2.2	41.8	25.9		15.9		
Total hardwoods	13,245.5	2,197.2	3,415.3	4,586.6	2,124.3	922.1	8,764.8	2,197.2	2,483.5	2,150.4	1,206.5	727.2
All species	16,750.4	2,606.9	3,976.4	6,962.9	2,214.3	989.9	9,881.5	2,385.9	2,742.0	2,696.7	1,291.0	765.9

Table 24—Volume of growing stock on timberland by county and species group, Plateau Counties, Tennessee, 1999

			Softwoods			Hardwoods	
County	All species	All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
				Million cubic fe	et		
Bledsoe	308.1	114.1	112.0	2.1	194.0	38.9	155.1
Campbell	480.2	72.2	54.9	17.3	408.0	129.7	278.3
Cumberland	587.8	190.8	147.8	43.0	397.0	73.6	323.4
Fentress	393.7	120.1	97.9	22.2	273.5	67.2	206.4
Franklin	264.8	5.5	0.1	5.3	259.3	24.9	234.4
Grundy	214.7	18.9	18.6	0.3	195.8	37.5	158.3
Marion	409.4	65.3	60.3	5.0	344.1	90.2	253.9
Morgan	544.5	131.2	89.9	41.3	413.3	139.2	274.1
Overton	310.1	12.4	11.5	0.9	297.7	112.8	184.9
Pickett	141.0	5.6	3.9	1.8	135.4	40.7	94.7
Putnam	300.5	41.5	35.6	5.9	259.0	107.2	151.8
Scott	506.9	81.4	46.4	35.0	425.5	118.8	306.7
Sequatchie	193.3	80.2	72.5	7.7	113.1	32.4	80.7
Van Buren	211.5	81.8	77.6	4.2	129.7	24.9	104.8
Warren	200.6	4.8	0.6	4.2	195.8	51.8	143.9
White	221.8	15.7	14.9	0.8	206.0	65.1	141.0
Total	5,288.8	1,041.6	844.6	197.0	4,247.2	1,154.9	3,092.3

Table 25—Volume of live trees on timberland by county and species group, Plateau Counties, Tennessee, 1999

			Softwoods			Hardwoods	
County	All species	All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
				Million cubic fee	et		
Bledsoe	348.4	124.5	121.9	2.6	224.0	45.5	178.5
Campbell	531.4	73.2	56.0	17.3	458.2	149.7	308.5
Cumberland	661.6	196.4	151.3	45.1	465.2	101.1	364.0
Fentress	441.3	129.7	106.0	23.7	311.6	82.8	228.8
Franklin	302.2	8.0	0.3	7.6	294.3	33.1	261.2
Grundy	245.4	19.5	19.1	0.4	225.9	42.9	183.0
Marion	464.0	68.3	62.6	5.7	395.7	104.7	291.0
Morgan	607.6	137.6	94.7	42.9	470.0	160.3	309.7
Overton	363.3	16.7	12.2	4.5	346.6	130.6	216.1
Pickett	163.4	6.5	4.4	2.0	156.9	41.9	115.1
Putnam	356.2	46.3	37.7	8.6	309.9	120.1	189.8
Scott	555.8	88.5	53.2	35.3	467.2	133.0	334.2
Sequatchie	228.8	90.7	81.5	9.2	138.1	43.0	95.2
Van Buren	232.1	86.2	82.0	4.2	145.9	25.5	120.4
Warren	235.2	5.9	0.6	5.3	229.3	63.5	165.9
White	254.7	17.2	15.6	1.7	237.5	74.4	163.1
Total	5,991.4	1,115.1	899.0	216.1	4,876.3	1,352.0	3,524.3

Table 26—Volume of sawtimber on timberland by county and species group, Plateau Counties, Tennessee, 1999

			Softwoods			Hardwoods	
County	All species	All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
			Λ	Million board fee	rt		
Bledsoe	916.9	366.8	362.4	4.4	550.1	97.7	452.5
Campbell	1,688.4	272.3	195.1	77.2	1,416.1	429.4	986.6
Cumberland	1,776.7	686.5	457.3	229.1	1,090.3	145.7	944.6
Fentress	1,212.7	397.0	304.4	92.6	815.8	178.9	636.8
Franklin	843.4	11.6	_	11.6	831.7	58.9	772.8
Grundy	597.4	65.7	65.7	_	531.7	111.8	419.9
Marion	1,323.2	221.7	199.3	22.4	1,101.5	274.2	827.3
Morgan	1,785.3	475.5	279.3	196.1	1,309.8	473.5	836.3
Overton	977.6	56.7	55.5	1.2	920.9	351.7	569.3
Pickett	444.7	7.5	4.4	3.1	437.2	137.9	299.4
Putnam	1,056.4	149.5	136.2	13.3	906.9	410.2	496.7
Scott	1,667.1	314.9	154.6	160.4	1,352.1	326.1	1,026.0
Sequatchie	555.7	235.4	203.5	31.9	320.3	103.2	217.1
Van Buren	527.7	185.0	163.5	21.5	342.7	72.3	270.5
Warren	595.6	9.4	2.2	7.2	586.2	157.9	428.3
White	781.5	49.5	49.5		732.1	264.9	467.2
Total	16,750.4	3,504.9	2,632.8	872.1	13,245.5	3,594.2	9,651.3

Table 27—Volume of timber on timberland by class of timber and species group, Plateau Counties, Tennessee, 1999

			Softwoods			Hardwoods	
	All	All	Yellow	Other	All	Soft	Hard
Class of timber	species	softwood	pine	softwood	hardwood	hardwood	hardwood
				Million cubic fe	eet		
Sawtimber trees							
Saw-log portion	3,218.2	678.3	527.4	151.0	2,539.9	654.4	1,885.5
Upper-stem portion ^a	531.3	81.5	70.1	11.4	449.9	113.8	336.1
Total	3,749.5	759.8	597.5	162.3	2,989.7	768.2	2,221.6
Poletimber trees	1,539.3	281.8	247.1	34.7	1,257.5	386.7	870.8
All growing-stock trees	5,288.8	1,041.6	844.6	197.0	4,247.2	1,154.9	3,092.3
Rough trees							
Sawtimber size	396.1	45.4	33.6	11.9	350.7	110.8	239.9
Poletimber size	269.4	27.8	20.6	7.2	241.5	72.0	169.5
Total	665.5	73.3	54.2	19.1	592.2	182.8	409.4
Rotten trees							
Sawtimber size	33.7	0.2	0.2	_	33.4	13.2	20.3
Poletimber size	3.5	_	_	_	3.5	1.2	2.3
Total	37.1	0.2	0.2		36.9	14.3	22.6
Salvable dead trees							
Sawtimber size	59.4	25.2	20.4	4.8	34.2	5.1	29.1
Poletimber size	18.8	5.9	5.9	_	12.9		12.9
Total	78.1	31.0	26.2	4.8	47.1	5.1	42.0
All classes	6,069.6	1,146.2	925.2	220.9	4,923.4	1,357.1	3,566.3

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell. a Includes cull sections in the saw-log portion.

Table 28—Volume of live and growing-stock trees on timberland by ownership class and species group, Plateau Counties, Tennessee, 1999

			Softwoods			Hardwoods	
Ownership class	All species	All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
			Live t	rees (million ca	ubic feet)		
National forest		_	_			_	_
Other public	759.8	161.9	107.7	54.2	597.9	136.5	461.4
Forest industry	902.6	292.8	277.5	15.3	609.8	163.3	446.5
Nonindustrial private	4,329.0	660.4	513.8	146.6	3,668.6	1,052.2	2,616.4
All classes	5,991.4	1,115.1	899.0	216.1	4,876.3	1,352.0	3,524.3
			Growing-st	tock trees (mill	lion cubic feet)		
National forest	_	_	_	_	_	_	_
Other public	679.4	149.3	100.3	49.0	530.1	114.1	416.0
Forest industry	810.3	278.8	264.3	14.5	531.5	141.6	389.9
Nonindustrial private	3,799.2	613.6	480.1	133.5	3,185.6	899.2	2,286.4
All classes	5,288.8	1,041.6	844.6	197.0	4,247.2	1,154.9	3,092.3

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, Plateau Counties, Tennessee, 1999

			Softwoods			Hardwoods	
Ownership class	All species	All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
				classes (million	board feet)		
National forest	_	_	_	_	_	_	_
Other public	2,391.6	614.2	383.9	230.4	1,777.4	357.4	1,420.0
Forest industry	2,220.8	649.2	594.2	55.0	1,571.6	383.0	1,188.5
Nonindustrial private	12,138.0	2,241.4	1,654.7	586.7	9,896.5	2,853.7	7,042.8
All classes	16,750.4	3,504.9	2,632.8	872.1	13,245.5	3,594.2	9,651.3
		Т	rees ≥ 15.0 i	nches d.b.h. (n	nillion board fee	et)	
National forest	_	_	_	_	_	_	_
Other public	1,585.6	269.8	90.0	179.9	1,315.8	235.1	1,080.7
Forest industry	1,056.3	72.6	34.2	38.4	983.7	213.8	769.9
Nonindustrial private	7,239.6	774.3	379.5	394.9	6,465.3	1,939.1	4,526.2
All classes	9,881.5	1,116.7	503.6	613.2	8,764.8	2,388.0	6,376.8

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

Table 30—Volume of growing stock on timberland by forest-type group, stand origin, and species group, Plateau Counties, Tennessee, 1999

			Softwoods			Hardwoods	
Forest-type group	All	All	Yellow	Other	All	Soft	Hard
and stand origin	species	softwood	pine	softwood	hardwood	hardwood	hardwood
				Million cubic j	feet		
Softwood types							
White-red-jack pine							
Planted	13.4	13.3	0.5	12.7	0.1	0.1	_
Natural	58.4	40.2		40.2	18.1	4.1	14.0
Total	71.7	53.5	0.5	52.9	18.2	4.2	14.0
Loblolly-shortleaf pine							
Planted	239.3	228.7	228.3	0.4	10.6	7.0	3.7
Natural	354.9	286.4	276.7	9.6	68.5	25.8	42.7
Total	594.2	515.1	505.1	10.0	79.1	32.8	46.3
Total softwoods	665.9	568.6	505.6	62.9	97.4	37.0	60.3
Hardwood types							
Oak-pine							
Planted	_		_	_	_		_
Natural	563.7	282.5	225.3	57.2	281.2	53.7	227.5
Total	563.7	282.5	225.3	57.2	281.2	53.7	227.5
Oak-hickory	4,032.3	190.3	113.4	76.9	3,842.0	1,046.2	2,795.8
Oak-gum-cypress	9.1		_	_	9.1	8.4	0.7
Elm-ash-cottonwood	17.6				17.6	9.6	8.0
Total hardwoods	4,622.7	472.8	338.8	134.1	4,149.8	1,117.8	3,032.0
Nonstocked	0.2	0.2	0.2		_		
All groups	5,288.8	1,041.6	844.6	197.0	4,247.2	1,154.9	3,092.3

Table 31—Average basal area of live trees per acre on timberland by ownership class, species group, and d.b.h., Plateau Counties, Tennessee, 1999

Ownership class	All tree		D.b.h. (inches)	
and species group	sizes	1.0-4.9	5.0-10.9	11.0-14.9	≥15.0
		S	quare feet/acre		
National forest					
Softwood	_	_	_	_	_
Hardwood					
Total	_	_	_	_	_
Other public					
Softwood	24.4	2.3	9.9	7.1	5.1
Hardwood	85.1	14.8	26.4	15.2	28.7
Total	109.4	17.0	36.3	22.3	33.7
Forest industry					
Softwood	32.5	2.9	24.3	4.5	0.7
Hardwood	64.9	15.8	20.5	12.1	16.5
Total	97.4	18.6	44.9	16.6	17.3
Nonindustrial private					
Softwood	17.0	2.1	7.9	4.3	2.6
Hardwood	83.0	13.6	27.7	17.9	23.8
Total	99.9	15.7	35.6	22.2	26.4
All classes					
Softwood	20.4	2.2	10.9	4.7	2.6
Hardwood	80.1	14.1	26.3	16.6	23.1
Total	100.6	16.3	37.3	21.3	25.7

Table 32—Average net annual growth of growing stock on timberland by county and species group, Plateau Counties, Tennessee, 1989-1998

			Softwoods	3		Hardwoods	
County	All species	All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
				Million cubic j	feet		
Bledsoe	15.6	7.9	7.8	0.1	7.6	2.1	5.5
Campbell	10.9	0.9	0.9	-0.0	10.0	4.3	5.8
Cumberland	19.6	7.3	5.6	1.7	12.2	3.1	9.1
Fentress	12.2	4.9	3.7	1.2	7.3	2.4	4.9
Franklin	9.3	0.3	_	0.3	9.1	1.1	7.9
Grundy	9.2	1.1	1.0	0.0	8.1	2.4	5.7
Marion	16.7	3.7	3.5	0.2	13.0	3.4	9.6
Morgan	17.8	5.3	3.5	1.8	12.5	4.9	7.6
Overton	11.2	2.4	1.7	0.7	8.9	3.7	5.2
Pickett	3.9	0.3	0.1	0.2	3.6	0.6	2.9
Putnam	6.6	-0.2	-0.3	0.1	6.8	3.0	3.8
Scott	17.3	3.5	1.0	2.5	13.8	4.8	8.9
Sequatchie	6.8	3.1	3.1	0.1	3.6	1.8	1.8
Van Buren	9.1	4.6	4.4	0.2	4.5	1.2	3.3
Warren	5.4	_	_	_	5.4	1.1	4.3
White	9.2	3.3	3.3		5.9	2.3	3.6
Total	180.6	48.4	39.3	9.1	132.2	42.1	90.1

Table 33—Average net annual growth of live trees on timberland by county and species group, Plateau Counties, Tennessee, 1989-1998

			Softwood	S		Hardwoods	
County	All species	All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
				Million cubic	feet		
Bledsoe	16.4	8.1	8.0	0.1	8.3	2.4	5.9
Campbell	11.9	1.0	1.0	0.0	10.9	4.7	6.2
Cumberland	21.6	7.5	5.8	1.7	14.1	3.8	10.4
Fentress	13.5	5.0	3.9	1.2	8.4	2.7	5.8
Franklin	10.9	0.4	_	0.4	10.5	1.1	9.3
Grundy	10.6	1.2	1.0	0.2	9.4	2.6	6.8
Marion	18.8	3.7	3.5	0.2	15.1	4.2	10.9
Morgan	20.4	6.2	4.1	2.1	14.2	5.5	8.8
Overton	12.9	2.4	1.7	0.7	10.5	4.5	6.0
Pickett	3.6	0.3	0.1	0.2	3.4	0.4	3.0
Putnam	7.9	-0.1	-0.3	0.2	8.0	3.8	4.2
Scott	17.3	3.7	1.2	2.5	13.5	5.2	8.3
Sequatchie	7.1	3.1	3.1	0.0	4.1	2.1	2.0
Van Buren	9.1	4.6	4.4	0.2	4.5	1.2	3.3
Warren	5.6	0.0	_	0.0	5.6	1.2	4.4
White	9.4	3.4	3.4	0.0	6.0	2.5	3.5
Total	197.0	50.5	40.8	9.7	146.5	47.6	98.8

Table 34—Average net annual growth of sawtimber on timberland by county and species group, Plateau Counties, Tennessee, 1989-1998

			Softwoods			Hardwoods	
County	All species	All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
				Million board	feet		
Bledsoe	56.0	32.4	31.9	0.5	23.6	8.9	14.7
Campbell	57.5	9.7	9.8	-0.1	47.9	20.5	27.4
Cumberland	79.7	29.7	20.7	9.1	50.0	7.9	42.1
Fentress	55.1	24.3	17.9	6.4	30.8	9.8	20.9
Franklin	36.6	0.5	_	0.5	36.1	3.6	32.4
Grundy	33.3	4.7	4.7	_	28.6	8.9	19.7
Marion	60.8	11.5	10.3	1.2	49.4	11.6	37.8
Morgan	68.9	25.1	15.2	9.9	43.8	17.6	26.3
Overton	49.9	9.4	8.8	0.6	40.5	16.4	24.1
Pickett	15.1	1.2	_	1.2	13.9	4.3	9.6
Putnam	27.9	0.6	-0.1	0.7	27.3	10.2	17.1
Scott	83.5	25.4	8.6	16.8	58.1	15.4	42.6
Sequatchie	32.6	14.5	14.1	0.4	18.1	9.8	8.3
Van Buren	30.5	12.7	11.3	1.4	17.7	6.0	11.8
Warren	17.8	_	_	_	17.8	5.1	12.8
White	37.7	12.5	12.5		25.2	5.4	19.8
Total	742.9	214.2	165.5	48.6	528.8	161.5	367.3

Table 35—Average annual removals of growing stock on timberland by county and species group, Plateau Counties, Tennessee, 1989-1998

			Softwoods			Hardwoo	ds
County	All species	All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
			N.	Iillion cubic fee	t		
Bledsoe	3.2	1.6	1.6	_	1.6	_	1.6
Campbell	2.9	0.2	0.2	_	2.7	1.0	1.7
Cumberland	3.6	1.5	1.0	0.5	2.1	0.9	1.2
Fentress	9.6	4.0	3.5	0.5	5.6	0.6	5.0
Franklin	6.2	_	_	_	6.2	0.7	5.5
Grundy	5.5	2.1	2.1	_	3.4	0.2	3.2
Marion	6.7	2.3	2.2	0.1	4.4	0.4	4.0
Morgan	2.1	1.1	0.4	0.6	1.0	0.2	0.8
Overton	10.7	2.9	2.9	_	7.8	6.2	1.6
Pickett	2.9	1.1	_	1.1	1.9	0.4	1.5
Putnam	1.0	_	_	_	1.0	0.2	0.8
Scott	18.8	4.3	4.2	0.1	14.5	4.1	10.4
Sequatchie	0.9	0.5	0.5	_	0.3	0.1	0.2
Van Buren	4.3	1.0	1.0	_	3.2	1.2	2.1
Warren	4.3	_	_	_	4.3	0.7	3.6
White	5.8	4.1	4.1		1.7	0.6	1.1
Total	88.3 ^a	26.7	23.8	2.9	61.6	17.5	44.1

^a Approximately 18 percent of growing-stock removals was due to reclassification of forest land from timberland to reserved status.

Table 36—Average annual removals of live trees on timberland by county and species group, Plateau Counties, Tennessee, 1989-1998

			Softwoods			Hardwoods			
County	All species	All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood		
				Million cubic f	feet				
Bledsoe	3.4	1.6	1.6	_	1.8	_	1.8		
Campbell	3.2	0.2	0.2	_	3.0	1.0	2.0		
Cumberland	3.8	1.5	1.0	0.5	2.3	1.0	1.3		
Fentress	9.7	4.0	3.5	0.5	5.7	0.7	5.0		
Franklin	7.2	_	_	_	7.2	0.9	6.3		
Grundy	5.8	2.1	2.1	_	3.7	0.2	3.6		
Marion	7.5	2.3	2.2	0.1	5.2	0.5	4.7		
Morgan	2.1	1.1	0.4	0.6	1.0	0.2	0.8		
Overton	11.2	3.1	3.1	_	8.1	6.2	1.9		
Pickett	2.9	1.1	_	1.1	1.9	0.4	1.5		
Putnam	1.0	_	_	_	1.0	0.2	0.8		
Scott	19.9	4.3	4.2	0.1	15.6	4.3	11.2		
Sequatchie	0.9	0.5	0.5	_	0.3	0.1	0.2		
Van Buren	4.5	1.0	1.0	_	3.5	1.2	2.3		
Warren	4.8	_	_	_	4.8	0.9	3.9		
White	6.0	4.1	4.1	_	1.8	0.6	1.2		
Total	93.8	27.0	24.0	3.0	66.8	18.4	48.4		

^a Approximately 18 percent of live-tree removals was due to reclassification of forest land from timberland to reserved status.

Table 37—Average annual removals of sawtimber on timberland by county and species group, Plateau Counties, Tennessee, 1989-1998

			Softwoods			Hardwoods	
County	All species	All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
				Million board	feet		
Bledsoe	10.4	6.5	6.5	_	3.8	_	3.8
Campbell	10.0	0.7	0.7	_	9.2	3.9	5.4
Cumberland	11.6	5.6	2.7	3.0	5.9	3.8	2.2
Fentress	32.1	16.4	13.6	2.7	15.8	0.7	15.1
Franklin	27.2		_	_	27.2	3.5	23.7
Grundy	15.4	4.8	4.8	_	10.7	0.7	9.9
Marion	17.3	7.7	6.9	0.7	9.6		9.6
Morgan	7.9	5.6	2.2	3.4	2.3	0.5	1.9
Overton	51.5	14.1	14.1	_	37.4	30.3	7.2
Pickett	7.8	4.7		4.7	3.1	0.9	2.2
Putnam	4.2		_	_	4.2	0.9	3.4
Scott	67.2	17.2	17.2	_	50.1	11.5	38.6
Sequatchie	2.5	2.0	2.0	_	0.5		0.5
Van Buren	14.6	2.0	2.0	_	12.6	5.5	7.1
Warren	19.6	_	_	_	19.6	4.2	15.4
White	14.2	8.7	8.7	_	5.5	1.6	3.9
Total	313.4	95.7	81.2	14.5	217.7	67.8	149.9

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

^a Approximately 14 percent of sawtimber removals was due to reclassification of forest land from timberland to reserved status.

Table 38—Average net annual growth and average annual removals of live trees, growing stock, and sawtimber on timberland by species, Plateau Counties, Tennessee, 1989-1998

	Live	e trees	Growi	ng stock	Saw	timber
	Net		Net		Net	
	annual	Annual	annual	Annual	annual	Annual
Species	growth	removals	growth	removals	growth	removals
		Million o	ubic feet		Million	board feet
Softwood			v			J
Shortleaf pine	4.3	5.2	4.2	5.2	28.0	24.7
Loblolly pine	21.6	4.4	21.4	4.4	66.0	9.0
Virginia pine	14.9	14.4	13.8	14.2	71.4	47.5
Pitch pine	0.0	17.7	0.0	14.2	0.2	47.5
Eastern white pine	5.7	1.5	5.7	1.5	34.7	7.7
Eastern hemlock	2.9	1.5	2.6	1.5	11.3	6.8
Redcedars	1.1	1.5	0.8	1.5	2.7	0.0
	•					
Total softwoods	50.5	27.0	48.4	26.7	214.2	95.7
Hardwood						
Select white oaks	25.8	12.1	24.1	11.7	96.0	41.7
Select red oaks	7.0	5.3	6.4	4.8	28.2	20.6
Other white oaks	19.8	8.1	17.9	7.5	75.0	25.0
Other red oaks	20.5	9.1	19.7	8.8	88.8	29.1
Hickory	8.1	4.8	8.3	4.5	34.2	15.4
Yellow birch	0.2		0.1			_
Hard maple	7.5	2.4	6.6	2.3	25.2	7.8
Soft maple	17.6	3.2	13.5	2.7	37.1	6.0
Beech	0.1	2.6	0.6	2.2	4.1	6.9
Sweetgum	2.1	0.2	2.1	0.2	5.2	_
Tupelo and blackgum	2.2	0.6	1.7	0.4	2.4	0.6
Ash	2.2	0.9	2.1	0.8	8.1	2.3
Basswood	1.2	0.7	1.2	0.7	5.3	2.5
Yellow-poplar	19.8	13.0	19.5	12.8	99.3	57.8
Bay and magnolia	0.0	0.1				
Black cherry	3.5	_	3.2		9.2	_
Black walnut	0.4	0.1	0.4	0.1	1.8	0.5
Sycamore	0.2	_	0.1		0.5	_
Black locust	0.9	0.5	0.3	0.1	1.5	0.5
Elm	0.7	0.2	0.5	0.2	0.7	_
Other Eastern						
hardwoods	6.8	2.8	4.0	1.7	6.2	1.0
Total hardwoods	146.5	66.8	132.2	61.6	528.8	217.7
All species	197.0	93.8	180.6	88.3	742.9	313.4

^a Approximately 18 percent of live-tree removals, 18 percent of growing-stock removals, and 14 percent of sawtimber removals were due to reclassification of forest land from timberland to reserved status.

 $Table\ 39 — Average\ annual\ removals\ of\ growing\ stock\ on\ timberland\ by\ species\ and\ diameter\ class,\ Plateau\ Counties,\ Tennessee,\ 1989-1998$

					Diame	ter class (ir	nches at bro	east height	()		
	All	5.0-	7.0-	9.0-	11.0-	13.0-	15.0-	17.0-	19.0-	21.0-	29.0 and
Species	classes	6.9	8.9	10.9	12.9	14.9	16.9	18.9	20.9	28.9	larger
					Mi	llion cubic	feet				
Softwood											
Shortleaf pine	5.2	_	_	0.9	1.9	1.8	0.3	0.2	_	_	_
Loblolly pine	4.4	0.8	1.4	1.1	1.1	_	_	_	_	_	_
Virginia pine	14.2	0.6	2.6	3.0	3.9	2.2	1.1	0.2	0.4	0.1	_
Eastern white pine	1.5	0.1	_	_	0.2	0.4	_	0.3	0.3	0.2	_
Eastern hemlock	1.5	0.1	0.1	_		_	0.3	0.4	_	0.5	_
Total softwoods	26.7	1.5	4.2	5.0	7.1	4.4	1.8	1.1	0.7	0.8	
Hardwood											
Select white oaks	11.7	1.2	0.5	0.7	1.0	1.4	2.7	2.2	1.4	0.6	_
Select red oaks	4.8	_	0.2	_	0.1	0.3	1.6	1.1	0.7	0.8	_
Other white oaks	7.5	0.2	0.8	0.7	0.5	1.6	0.9	1.3	1.0	0.5	_
Other red oaks	8.8	0.8	1.1	0.6	0.4	1.3	1.2	1.2	1.4	0.7	_
Hickory	4.5	_	0.3	0.9	0.4	0.6	0.6	0.6	0.4	0.2	0.5
Hard maple	2.3	0.1	0.4	_	0.3	0.5	0.4	0.4	0.1	0.1	_
Soft maple	2.7	0.6	0.3	0.4	0.1	0.5	0.1	_	0.3	0.3	_
Beech	2.2	0.1	0.1	0.2	0.1	0.4	0.1	0.4	_	0.7	_
Sweetgum	0.2	0.1	0.1	_	_	_	_	_	_	_	_
Tupelo and blackgum	0.4	0.1	_	0.2	_	_	0.1	_	_	_	_
Ash	0.8	_	0.1	0.1	0.1	0.1	_	0.2	_	0.1	_
Basswood	0.7	_	_	0.1	0.3	_	0.1	_	0.2	_	_
Yellow-poplar	12.8	_	0.7	0.6	1.2	3.1	1.7	2.5	1.3	1.7	_
Black walnut	0.1	_	_	_	_	_	_	_	_	_	0.1
Black locust	0.1	_	_	_	_	0.1	_	_	_	_	_
Elm	0.2	0.1	_	0.1	_	_	_	_	_	_	_
Other Eastern											
hardwoods	1.7	0.8	0.3	0.5						0.2	_
Total hardwoods	61.6	4.1	4.9	5.3	4.6	9.9	9.7	9.9	6.8	5.9	0.6
All species	88.3	5.6	9.1	10.3	11.8	14.3	11.4	11.0	7.5	6.6	0.6

^a Approximately 18 percent of growing-stock removals was due to reclassification of forest land from timberland to reserved status.

Table 40—Average annual mortality of live trees, growing stock, and sawtimber on timberland by species, Plateau Counties, Tennessee, 1989-1998

Species	Live trees	Growing stock	Sawtimber
	Million	ı cubic feet	Million board feet
Softwood			
Shortleaf pine	2.1	2.1	3.9
Loblolly pine	2.0	1.9	1.7
Virginia pine	8.2	7.8	21.1
Eastern white pine	0.2	0.2	0.6
Eastern hemlock	0.4	0.4	1.7
Redcedars	0.4	0.1	0.4
Total softwoods	13.2	12.4	29.4
Hardwood			
Select white oaks	3.3	2.4	5.7
Select red oaks	1.3	1.2	5.3
Other white oaks	2.6	1.9	5.3
Other red oaks	6.0	4.3	10.3
Hickory	4.2	3.5	10.2
Hard maple	1.2	1.0	2.6
Soft maple	2.2	1.6	1.5
Beech	2.3	1.3	5.2
Sweetgum	0.4	0.4	1.4
Tupelo and blackgum	1.0	0.5	1.5
Ash	1.5	1.2	3.4
Basswood	0.3	0.1	0.6
Yellow-poplar	2.4	2.2	4.3
Black cherry	0.4	0.3	0.8
Black locust	1.7	1.2	2.9
Elm	0.4	0.2	0.7
Other Eastern			
hardwoods	3.4	1.2	2.4
Total hardwoods	34.7	24.6	64.1
All species	47.9	37.1	93.5

Table 41—Average net annual growth and average annual removals of growing stock on timberland by ownership class and species group, Plateau Counties, Tennessee, 1989-1998

			Softwoods			Hardwoods	;
Ownership class	All species	All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
			Average net	annual growth	n (million cubic	feet)	
National forest	_	_	_	_	_	_	_
Other public	18.5	4.7	2.4	2.2	13.8	3.3	10.6
Forest industry	41.9	22.4	21.9	0.5	19.5	6.7	12.8
Nonindustrial private	120.2	21.4	15.0	6.4	98.8	32.1	66.7
All classes	180.6	48.4	39.3	9.1	132.2	42.1	90.1
			Average ar	nual removals	(million cubic f	eet)	
National forest	_	_		_	_	_	_
Other public	5.4	1.6	0.4	1.2	3.8	0.9	2.9
Forest industry	15.0	6.7	6.0	0.6	8.4	3.5	4.8
Nonindustrial private	67.8	18.5	17.3	1.1	49.4	13.0	36.4
All classes	88.3	26.7	23.8	2.9	61.6	17.5	44.1

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, Plateau Counties, Tennessee, 1989-1998

			Softwood	s		Hardwoods	
Ownership class	All species	All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
		I	Average net	annual growth	(million cubic f	eet)	
National forest	_	_	_	_	_	_	_
Other public	19.6	4.8	2.5	2.3	14.9	3.3	11.6
Forest industry	44.6	22.7	22.1	0.6	22.0	7.7	14.3
Nonindustrial private	132.7	23.1	16.2	6.9	109.6	36.7	73.0
All classes	197.0	50.5	40.8	9.7	146.5	47.6	98.8
			Average an	nual removals	million cubic fe	et)	
National forest	_	_	_	_	_	_	_
Other public	5.6	1.6	0.4	1.2	4.0	1.0	3.1
Forest industry	16.4	6.7	6.0	0.6	9.7	3.7	6.0
Nonindustrial private	71.8	18.7	17.5	1.2	53.1	13.7	39.4
All classes	93.8	27.0	24.0	3.0	66.8	18.4	48.4

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

^a Approximately 18 percent of growing-stock removals was due to reclassification of forest land from timberland to reserved status.

^a Approximately 18 percent of live-tree removals was due to reclassification of forest land from timberland to reserved status.

Table 43—Average net annual growth and average annual removals of sawtimber on timberland by ownership class and species group, Plateau Counties, Tennessee, 1989-1998

			Softwoods			Hardwoods	
Ownership class	All species	All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
		Av	verage net a	nnual growth	ı (million board	d feet)	
National forest	_	_	_	_	_	_	_
Other public	80.3	23.4	13.5	9.9	56.9	12.9	44.0
Forest industry	146.4	71.1	68.2	2.9	75.3	25.2	50.1
Nonindustrial private	516.2	119.6	83.8	35.8	396.6	123.4	273.2
All classes	742.9	214.2	165.5	48.6	528.8	161.5	367.3
		A	verage ann	ual removals	(million board	feet)	
National forest	_	_	_	_	_	_	_
Other public	11.1	6.5	1.3	5.2	4.6	2.4	2.2
Forest industry	54.3	18.3	14.6	3.7	35.9	15.9	20.0
Nonindustrial private	248.1	70.9	65.3	5.6	177.2	49.5	127.7
All classes	313.4°	95.7	81.2	14.5	217.7	67.8	149.9

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

^a Approximately 14 percent of sawtimber removals was due to reclassification of forest land from timberland to reserved status.

Table 44—Average net annual growth of growing stock on timberland by forest-type group, stand origin, and species group, Plateau Counties, Tennessee, 1989-1998

			Softwoods			Hardwoods	
Forest-type group	All	All	Yellow	Other	All	Soft	Hard
and stand origin ^a	species	softwood	pine	softwood	hardwood	hardwood	hardwood
				Million cubic j	feet		
Softwood types							
White-red-jack pine							
Planted	1.3	1.3	-0.3	1.6	_	_	_
Natural	2.4	1.5	0.0	1.5	0.9	0.3	0.7
Total	3.7	2.8	-0.3	3.1	0.9	0.3	0.7
Loblolly-shortleaf pine							
Planted	18.2	16.7	16.7	_	1.5	1.0	0.5
Natural	13.2	9.8	9.3	0.6	3.4	1.6	1.9
Total	31.5	26.5	26.0	0.6	4.9	2.6	2.4
Total softwoods	35.2	29.3	25.7	3.6	5.9	2.8	3.0
Hardwood types							
Oak-pine							
Planted	_		_	_	_	_	_
Natural	19.6	7.9	6.6	1.3	11.8	3.6	8.1
Total	19.6	7.9	6.6	1.3	11.8	3.6	8.1
Oak-hickory	125.0	11.2	7.1	4.2	113.8	35.2	78.5
Oak-gum-cypress	0.4	_	_	_	0.4	0.3	0.2
Elm-ash-cottonwood	0.4			_	0.4	0.1	0.2
Total hardwoods	145.4	19.1	13.6	5.5	126.3	39.3	87.1
Nonstocked		_			_	_	_
All groups	180.6	48.4	39.3	9.1	132.2	42.1	90.1

^a Classifications at the beginning of the remeasurement period.

Table 45—Average annual removals of growing stock on timberland by forest-type group, stand origin, and species group, Plateau Counties, Tennessee, 1989-1998

			Softwoods			Hardwoods	
Forest-type group	All	All	Yellow	Other	All	Soft	Hard
and stand origin ^a	species	softwood	pine	softwood	hardwood	hardwood	hardwood
				Million cubic fe	eet		
Softwood types							
White-red-jack pine							
Planted	_	_	_		_	_	_
Natural	1.7	0.7	0.2	0.5	1.0	0.1	0.9
Total	1.7	0.7	0.2	0.5	1.0	0.1	0.9
Loblolly-shortleaf pine							
Planted	4.4	3.6	3.6	_	0.8	0.1	0.7
Natural	3.2	1.0	0.7	0.2	2.2	1.0	1.3
Total	7.6	4.5	4.3	0.2	3.0	1.0	2.0
Total softwoods	9.3	5.2	4.5	0.8	4.1	1.2	2.9
Hardwood types							
Oak-pine							
Planted	_	_	_		_	_	
Natural	17.6	9.5	9.5	0.1	8.0	2.1	5.9
Total	17.6	9.5	9.5	0.1	8.0	2.1	5.9
Oak-hickory	61.4	12.0	9.8	2.1	49.5	14.2	35.3
Total hardwoods	79.0	21.5	19.3	2.2	57.5	16.3	41.2
Nonstocked		<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>
All groups	88.3	26.7	23.8	2.9	61.6	17.5	44.1

A dash (—) indicates no sample for the cell; 0.0 indicates a value of >0.0 but <0.05 for the cell. ^a Classifications at the beginning of the remeasurement period.

^b Approximately 18 percent of growing-stock removals was due to reclassification of forest land from timberland to reserved status.

Table 46—Fresh weight of live trees on timberland by ownership class, species group, and tree component, Plateau Counties, Tennessee, 1999

					Component			
		'	Gro	wing-stock tre	es		Cull trees	
Ownership class and species group	All components	All live saplings	Total	Boles	Stumps, tops, and limbs	Total	Boles	Stumps, tops, and limbs
and the same	r	T S		Thousand				
National forest								
Softwood	_	_	_	_	_	_	_	_
Hardwood			_	_	_	_	_	_
Total								
Other public								
Softwood	7,239.8	350.8	6,313.6	5,373.2	940.4	575.4	475.6	99.8
Hardwood	34,223.9	3,073.2	27,680.8	22,427.0	5,253.9	3,469.9	2,677.2	792.7
Total	41,463.6	3,424.0	33,994.4	27,800.1	6,194.3	4,045.3	3,152.8	892.5
Forest industry								
Softwood	13,416.4	421.3	12,344.9	10,252.8	2,092.2	650.2	525.2	125.1
Hardwood	35,996.6	4,749.0	26,975.8	21,877.1	5,098.7	4,271.8	3,241.2	1,030.7
Total	49,412.9	5,170.3	39,320.7	32,129.9	7,190.8	4,922.0	3,766.3	1,155.7
Nonindustrial private								
Softwood	30,277.8	1,836.5	26,276.9	22,400.2	3,876.7	2,164.5	1,778.0	386.5
Hardwood	206,417.3	18,909.9	162,023.4	131,617.9	30,405.5	25,484.0	19,803.7	5,680.4
Total	236,695.1	20,746.4	188,300.3	154,018.1	34,282.2	27,648.5	21,581.6	6,066.9
All ownerships								
Softwood	50,933.9	2,608.5	44,935.3	38,026.1	6,909.2	3,390.1	2,778.7	611.4
Hardwood	276,637.7	26,732.1	216,680.0	175,922.0	40,758.0	33,225.7	25,722.0	7,503.7
Total	327,571.6	29,340.6	261,615.3	213,948.1	47,667.2	36,615.7	28,500.7	8,115.1

Table 47—Area of timberland treated or disturbed annually and retained in timberland by treatment or disturbance and ownership class, Plateau Counties, Tennessee, 1989 to 1999

			Ownership class	S
Treatment or	All		Forest	Nonindustrial
disturbance	classes	Public	industry	private
		Thous	sand acres	
Final harvest	11.1	0.3	3.9	6.9
Partial harvest ^a	35.6	0.0	5.0	30.6
Seed tree/shelterwood	0.6	_	_	0.6
Commercial thinning	0.4	_	_	0.4
Other stand improvement	1.1	0.6	0.0	0.4
Site preparation	7.3	_	3.1	4.2
Artificial regeneration ^b	3.9	_	2.1	1.7
Natural regeneration ^b	19.3	0.4	1.3	17.6
Other treatment	15.9	_	1.3	14.6
Natural disturbance				
Disease	13.6	0.8	4.5	8.2
Insects	_	_	_	_
Fire	_	_	_	_
Weather	21.3	2.2	3.0	16.1
Animals	0.5	_	_	0.5
Other disturbances				
Grazing	4.6	_	_	4.6
Other human-caused disturbance	4.8		0.6	4.2

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

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

^a Includes high-grading and some selective cutting.

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

Table 48—Area of timberland treated or disturbed annually and retained in timberland by treatment or disturbance and forest management type, Plateau Counties, Tennessee, 1989 to 1999

				Forest ma	nagement type ^a		
Treatment or	All	Pine	Natural	Oak-	Upland	Lowland	
disturbance	types	plantation	pine	pine	hardwood	hardwood	Nonstocked
			T	Thousand act	res		
Final harvest	11.1	1.1	0.1	3.2	6.8	_	_
Partial harvest ^b	35.6	_	1.9	2.0	31.6	_	_
Seed tree/shelterwood	0.6	_	_	_	0.6	_	_
Commercial thinning	0.4	_	_	_	0.4	_	_
Other stand improvement	1.1	_	_	0.4	0.6	_	_
Site preparation	7.3	1.1	0.7	2.0	2.9	_	0.6
Other treatment	15.9	0.2	1.6	3.3	10.9	_	_
Natural disturbance							
Disease	13.6	1.2	0.8	2.4	8.6	_	0.6
Insects	_	_	_	_		_	_
Fire	_	_	_	_	_	_	_
Weather	21.3	1.5	4.9	3.8	10.5	0.6	_
Animals	0.5	_	_	_	0.5	_	_
Other disturbance							
Grazing	4.6	0.2	_	0.5	4.0	_	_
Other human-caused disturbance	4.8	_	0.2	1.2	3.3	0.2	

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

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

^a Classification before treatment or disturbance.

^b Includes high-grading and some selective cutting.

Table 49—Area of timberland regenerated annually by type of regeneration and forest management type, Plateau Counties, Tennessee, 1989 to 1999

				Forest ma	nagement type ^a		
Type of regeneration	All types	Pine plantation	Natural pine	Oak– pine	Upland hardwood	Lowland hardwood	Nonstocked
				Thousand	acres		
Artificial regeneration following harvest	2.9	2.5	0.4	_	_	_	_
Natural regeneration following harvest	4.2	_	_	0.6	3.7	_	_
Other artificial regeneration on forest land	0.2	0.2	_	_	_	_	_
Other natural regeneration on forest land	7.7	_	_	_	7.7	_	_
Artificial regeneration on former nonforest land	1.6	0.5	_	1.1	_	_	_
Natural reversion of former nonforest land	6.5	_	0.9	1.3	3.2	1.1	_
Total	23.2	3.2	1.3	3.0	14.5	1.1	_

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

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

	Sı	Change		
Land-use class	1980	1989	1999	1989-1999
	d acres			
Forest land				
Timberland				
Pine types	251.3	349.0	340.4	-8.6
Oak-pine types	398.2	391.5	375.6	-15.9
Hardwood types	2,323.1	2,324.4	2,278.5	-45.9
Total	2,972.6	3,064.9	2,994.5	-70.4
Productive reserved	39.0	30.5	111.8	81.3
Other			_	
Total forest land	3,011.6	3,095.4	3,106.3	10.9
Other land ^a	1,437.1	1,299.6	1,297.3	-2.3
All land b	4,448.7	4,394.9	4,403.5	8.6

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

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

classification, but defined by the Bureau of Census as land.

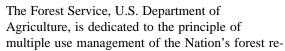
^a Includes 12.6 thousand acres of water according to Forest Inventory and Analysis standards of area

^b 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, Plateau Counties, Tennessee

		Diameter class (inches at breast height)								
Species group	All	5.0-	7.0-	9.0-	11.0-	13.0-	15.0-	17.0-	19.0-	21.0 and
and year	classes	6.9	8.9	10.9	12.9	14.9	16.9	18.9	20.9	larger
				Sawt	imber (mill	lion board f	^f eet)			
Softwood										
1980	2,005.0	_	_	613.2	581.4	341.4	204.9	102.6	64.8	96.7
1989	2,724.5		_	700.6	770.7	572.3	257.9	152.4	103.3	166.4
1999	3,504.9	_	_	817.0	901.6	669.5	416.8	170.5	192.2	337.2
Hardwood										
1980	7,191.2	_	_	_	1,669.3	1,783.2	1,587.9	966.8	551.7	632.3
1989	10,150.2	_	_		2,101.2	2,266.1	2,011.7	1,520.7	1,018.5	1,231.9
1999	13,245.5	_	_	_	2,050.3	2,430.4	2,434.7	2,133.3	1,524.5	2,672.3
				Growi	ng stock (m	illion cubic	: feet)			
Softwood				920			, J = = 0			
1980	610.5	86.3	123.0	137.7	115.6	64.6	36.6	18.4	11.1	17.2
1989	830.9	106.1	170.0	164.7	157.4	108.3	47.5	28.1	19.1	29.6
1999	1,041.6	90.8	191.0	223.6	204.9	135.8	79.2	30.8	32.8	52.7
Hardwood										
1980	2,386.1	245.4	321.9	391.7	386.8	360.6	299.0	174.9	98.0	107.7
1989	3,160.1	253.2	390.1	473.3	496.9	467.2	388.4	281.0	186.5	223.4
1999	4,247.2	285.8	433.8	537.9	596.4	605.2	546.7	448.0	299.7	493.7
				Live	trees (mill	ion cubic fe	eet)	•		
Softwood					,	J	,			
1980	633.2	89.3	127.4	142.8	120.4	66.7	37.5	19.0	11.4	18.8
1989	841.3	107.1	172.2	167.2	158.9	109.4	48.1	29.3	19.1	30.0
1999	1,115.1	103.9	205.8	239.9	212.5	142.9	84.3	36.7	36.5	52.7
Hardwood										
1980	2,925.3	296.0	364.9	449.2	464.0	423.2	359.8	255.9	134.1	208.2
1989	3,494.3	313.5	425.3	510.0	541.2	501.4	413.9	305.9	206.1	277.0
1999	4,876.3	371.2	520.9	610.3	679.2	674.2	598.1	490.6	339.2	592.6

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



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This report summarizes a 1999 inventory of the forest resources of a 16-county area of Tennessee. Major findings are highlighted in text and graphs; detailed data are presented in 51 tables.

 $\textbf{Keywords:} \ Forest \ ownership, \ timber \ land, \ timber \ growth, \ timber \ removals, \ timber \ volume.$

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