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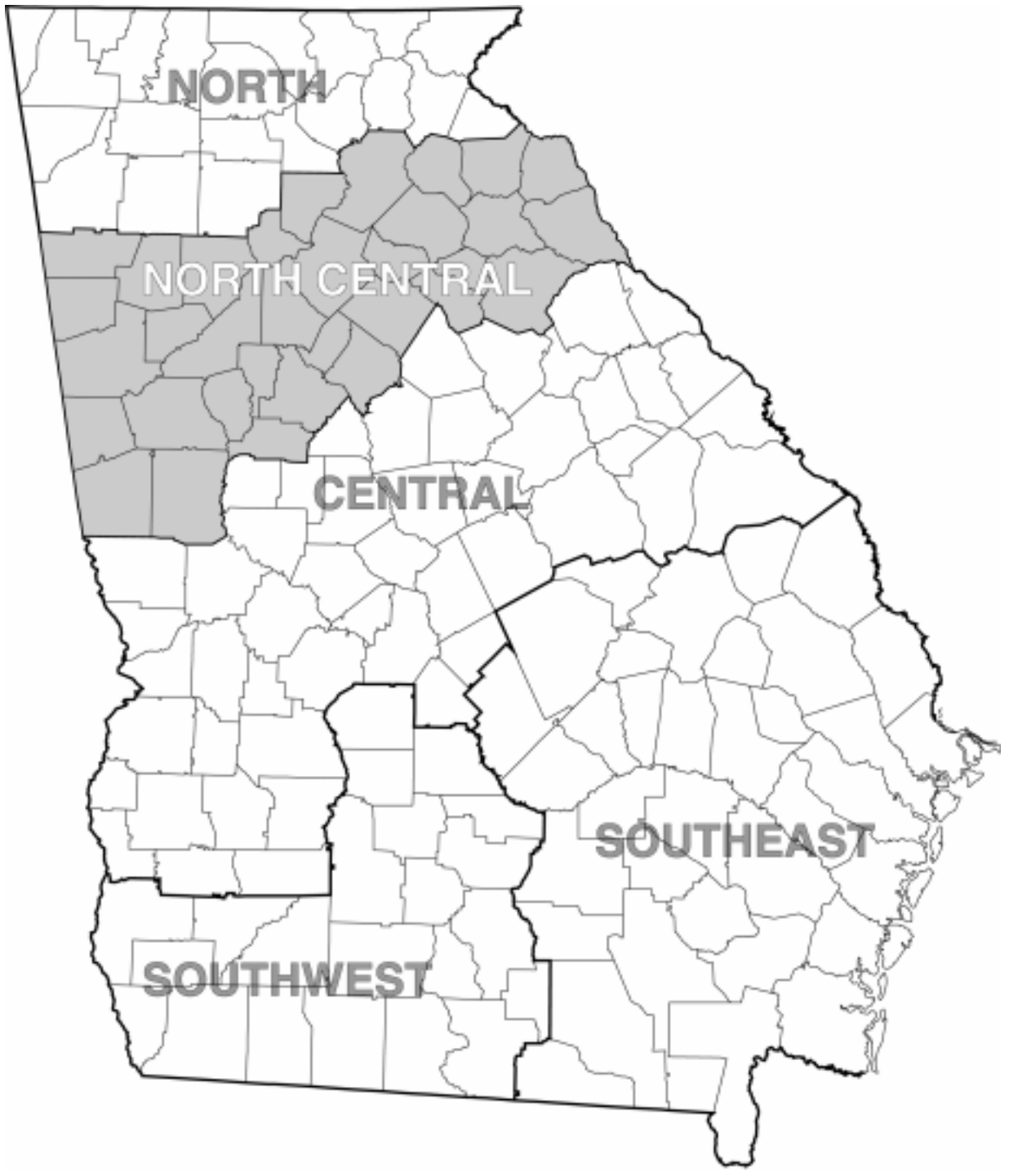
Forest Statistics for North Central Georgia, 1998

Michael T. Thompson



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Foreword

This report highlights the principal findings of the seventh forest survey of North Central Georgia. Field work began in June 1997 and was completed in November 1997. Six previous surveys, completed in 1936, 1953, 1961, 1972, 1983, and 1989 provide statistics for measuring changes and trends over the past 61 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:

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Acknowledgment

The Southern Research Station gratefully acknowledges the cooperation and assistance provided by the Georgia Forestry Commission in conducting the survey. The Forestry Commission and numerous firms and entities provided additional staff to assist in collecting field data. 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 3½-inch diskettes.

Figure 1—Forest survey regions in Georgia.

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Highlights

This report summarizes results from a 1998 inventory of the forest resources of North Central Georgia (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 32-county area has decreased by 5 percent since 1989 and now totals 3.5 million acres. Two hundred and seventy thousand acres were diverted from timberland to other uses, while 100,000 acres were added to the timberland base. Eighty percent of the diversions were due to forest clearing for urban and related land uses. Tree planting and natural seeding on agricultural lands accounted for almost all of the additions. Forests cover 56 percent of the land area in North Central Georgia. Timberland accounts for almost all forests; reserved forest land accounts for 14,800 acres.

Ownership—The decrease in timberland area occurred in the nonindustrial private forest (NIPF) and forest industry sectors. NIPF owners control 3.0 million acres, or 86 percent, of the total timberland in this area, a decrease of 1 percent. Timberland under forest industry control dropped 28 percent to 387,000 acres. Public agencies control 118,000 acres, or 3 percent of total timberland, an increase of 10 percent.

Forest type—Forest stands classed as a pine or oak-pine forest type occupy 1.8 million acres, or 51 percent of the timberland in the region. Collectively, pine and oak-pine stands have decreased 16 percent since 1989, and stands classified as hardwood forest type increased 12 percent to 1.7 million acres. Pine plantations increased 15 percent to 404,000 acres and account for 33 percent of all pine stands in the region. Oak-hickory remains the predominant forest type in the region with 1.4 million acres, and loblolly pine remains the predominant softwood forest type with 1.1 million acres.

Stand treatment—Harvesting and regeneration have been the predominant treatment and management activities in the timberland of North Central Georgia since 1989. Final harvests occurred on 56,000 acres annually; 63 percent of the harvesting activity was in pine stands, 14 percent in oak-pine stands, and 23 percent in hardwood stands. The area of new stands established exceeded the area harvested by 28 percent. Reforestation and afforestation combined averaged 71,000 acres annually. Sixty-seven percent (47,000 acres) of this total involved natural seeding of trees on forest land.

Softwood volume—Volume of softwood growing stock decreased 16 percent to 2.2 billion cubic feet between 1989 and 1998. Softwood volume decreased 14 percent to 1.9 billion cubic feet on NIPF land, and dropped 37 percent to 222 million cubic feet on forest industry land. Volume of softwood growing stock increased 18 percent to 108 million cubic feet on public land. At 1.8 billion cubic feet, loblolly pine remains the predominant softwood species. Volume of loblolly pine has decreased 8 percent since 1989. Volume of shortleaf pine dropped 43 percent to 301 million cubic feet, and volume of Virginia pine declined 17 percent to 90 million cubic feet. Seventeen percent of the softwood volume is in pine plantations, compared to 9 percent in 1989. Fifty-eight percent of softwood volume is in natural pine stands; 15 percent is in oak-pine stands; and the remaining 10 percent is in hardwood stands. The inventory of softwood sawtimber totals 8.4 billion board feet, down 14 percent since 1989.

Hardwood volume—Volume of hardwood growing stock increased 14 percent to 3.6 billion cubic feet. Hardwood volume increased 14 percent to 3.3 billion cubic feet on NIPF land and was up 70 percent to 181 million cubic feet on public land. Hardwood volume declined 23 percent to 156 million cubic feet on forest industry land. Oak species collectively account for 1.5 billion cubic feet, or 41 percent of hardwood volume; volume in oaks has increased 10 percent since 1989. Volume in yellow-poplar has increased 32 percent to 762 million cubic feet and volume in sweetgum was up 14 percent to 647 million cubic feet. Volume of hardwood sawtimber increased 28 percent to 12.4 billion board feet.

Growth—Net annual growth of softwood growing stock averaged 130 million cubic feet. Net annual growth of softwoods has increased 28 percent since the previous survey period. The increase in softwood growth resulted from improvements in survivor growth and higher levels of ingrowth. Softwood growth was up 30 percent on NIPF land, 30 percent on forest industry land, and declined 13 percent on public land.

Net annual growth of hardwood growing stock averaged 124 million cubic feet. Net annual growth of hardwoods increased 37 percent since the previous survey period. The increase in hardwood growth represents a turnaround from that recorded in the previous survey period where hardwood growth declined 19 percent.

Removals—Annual removals of softwood growing stock averaged 178 million cubic feet. Softwood removals have increased 17 percent since the previous survey period. Seventy-eight percent of softwood removals occurred on NIPF land and 20 percent occurred on forest industry land. Across all ownerships, softwood removals exceeded growth by 37 percent, compared to the growth-to-removal relationship recorded in 1989 when softwood removals exceeded growth by 51 percent.

Annual removals of hardwood growing stock averaged 71 million cubic feet. Hardwood removals have increased 33 percent since the previous survey period. Eighty-nine percent of hardwood removals occurred on NIPF land; this ownership category accounted for almost all of the increase in hardwood removals. Across all ownerships, hardwood growth exceeded removals by 73 percent. Hardwood growth exceeded removals by 67 percent in the previous survey period.

Mortality—Mortality of growing stock has increased to 78 million cubic feet since 1989, up 26 percent. Softwood mortality increased 15 percent to 46 million cubic feet; hardwood mortality increased 48 percent to 32 million cubic feet.

Inventory Methods

The Southern Research Station, Forest Inventory and Analysis (FIA) unit uses a two-phase sample of aerial-photo points and permanent ground plots. The area of forest land in each county was determined by photo interpretation of aerial-photo point clusters. Initial estimates of forest and nonforest land were based on the classification of 28,277 sample clusters systematically spaced on the latest aerial photographs available. A subsample of the photo clusters was ground checked so initial area estimates could be adjusted for change in land use since date of photography and for photo misclassification.

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 in diameter at breast height (d.b.h.) and larger. A 1/300-acre circular microplot, located at the center of the subplot, was used to sample trees 1.0 through 4.9 inches d.b.h. and seedlings (trees less than 1.0 inch d.b.h.). These fixed-radius sample plots were established without regard to land use or forest cover. Forest and nonforest condition classes were delineated and recorded. Condition classes were defined by six attributes: land use, forest type, stand origin, stand size, stand density, and major ownership category. All trees tallied were assigned to their respective condition class.

The cluster of four fixed plots sampled timberland at 919 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 817 permanent sample plots established in the previous inventory. The plot design for the previous inventory was based on a cluster of 10 points. Variable plots were systematically spaced within a single forest condition at three to five 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.

Item	Sample estimate and confidence interval	Sampling error
		Percent
Timberland *(1,000 acres)*	3,482.5 ± 21.9	0.63
All live *(M ft³)*		
Inventory	6,146.9 ± 306.1	4.98
Net annual growth	259.1 ± 9.8	3.77
Annual removals	257.7 ± 17.7	6.85
Annual mortality	88.2 ± 6.0	6.75
Growing stock *(M ft³)*		
Inventory	5,870.2 ± 304.1	5.18
Net annual growth	254.3 ± 9.6	3.77
Annual removals	249.9 ± 17.1	6.86
Annual mortality	77.7 ± 5.5	7.13
Sawtimber *(M fbm)*		
Inventory	20,876.3 ± 1,567.8	7.51
Net annual growth	1,078.0 ± 41.1	3.81
Annual removals	992.9 ± 74.2	7.47
Annual mortality	261.8 ± 23.7	9.06

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

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

where

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

SE_t = sampling error for survey unit or State total,

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

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

For example, the estimate of sampling error for growing-stock volume on forest industry (including leased) timberland is computed as:

$$SE_s = 5.18 \frac{\sqrt{5{,}870.2}}{\sqrt{377.9}} = 20.4.$$

Thus, the sampling error is 20.4 percent, and the resulting confidence interval (two times out of three) for growing-stock inventory on forest industry (including leased) timberland is 377.9 ± 77.1 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, North Central Georgia, 1998

Counties and survey unit	Timberland area	Live trees			Growing stock			Sawtimber		
		Volume	Growth	Removals	Volume	Growth	Removals	Volume	Growth	Removals
		Percent								
Banks	2.13	17.25	44.58	44.67	17.73	44.38	45.41	22.50	40.21	43.98
Barrow	5.48	20.26	16.16	27.47	21.12	16.59	27.47	22.54	17.67	31.88
Carroll	2.37	10.26	16.65	29.27	10.38	16.68	29.87	15.21	16.72	30.68
Clarke	4.22	9.24	24.58	100.09	9.54	24.83	100.09	12.55	29.29	17.16
Clayton	8.24	26.07	37.92	56.42	26.26	37.38	58.01	32.54	44.60	64.44
Cobb	12.66	16.84	19.98	32.34	16.93	19.74	32.37	18.37	19.26	35.25
Coweta	1.95	10.65	18.01	40.28	11.04	15.96	41.03	19.66	22.08	44.24
De Kalb	8.05	15.58	20.86	68.57	16.14	20.06	68.57	19.49	24.01	76.02
Douglas	3.36	11.72	24.35	63.29	12.26	20.82	63.29	17.63	23.05	67.43
Elbert	1.66	13.14	20.34	44.46	13.68	21.04	43.91	22.06	17.11	53.20
Fayette	4.02	21.36	20.19	46.77	20.90	18.80	46.77	28.73	29.53	47.69
Forsyth	7.34	21.76	18.05	39.11	22.22	19.02	39.11	29.99	24.49	37.44
Franklin	4.21	16.14	17.77	53.27	16.74	18.57	54.83	20.03	21.82	61.96
Fulton	6.69	13.43	13.21	27.61	13.71	13.51	27.25	16.64	14.95	27.56
Gwinnett	4.98	16.63	16.72	35.76	17.04	16.22	36.01	23.31	13.87	36.39
Hall	3.56	13.08	25.19	46.97	13.57	25.74	48.38	16.71	21.74	57.62
Haralson	2.01	17.07	17.29	27.04	17.33	17.10	27.08	23.95	20.39	31.00
Hart	6.85	17.16	20.16	100.29	17.03	19.28	100.29	22.72	25.31	—
Heard	1.65	13.42	15.10	35.24	13.43	15.02	34.75	18.72	18.40	37.02
Henry	4.32	12.53	13.43	27.00	12.68	13.75	26.89	17.44	17.50	30.83
Jackson	1.77	17.53	27.89	36.80	17.88	25.06	36.80	23.81	26.59	38.96
Madison	3.69	12.06	26.95	60.14	12.39	28.21	63.71	19.94	28.31	91.72
Meriwether	1.25	10.15	12.83	23.53	10.74	13.01	23.35	15.06	12.91	25.56
Newton	2.96	13.33	28.40	32.42	13.73	30.53	32.14	16.42	19.28	30.23
Oconee	7.39	16.38	88.78	47.17	17.19	109.76	47.17	20.01	53.67	47.06
Oglethorpe	1.79	16.50	15.62	21.43	16.65	16.01	21.30	25.80	14.66	23.76
Paulding	3.71	15.05	16.64	35.16	15.72	16.45	35.58	20.84	25.81	39.98
Polk	2.12	15.69	26.69	33.98	16.17	25.95	34.13	21.72	19.29	32.26
Rockdale	7.35	23.42	28.61	50.91	26.19	29.80	50.91	37.44	25.08	47.90
Spalding	3.14	17.65	13.69	34.60	18.87	16.18	35.11	24.60	19.65	36.44
Troup	1.65	46.92	18.32	25.38	47.45	18.74	25.49	59.18	16.09	30.74
Walton	3.96	13.01	30.19	47.04	13.15	28.52	46.94	16.08	30.01	47.62
Survey unit	**0.63**	**4.98**	**3.77**	**6.85**	**5.18**	**3.77**	**6.86**	**7.51**	**3.81**	**7.47**

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

Corporate. Owned by corporations, including incorporated farm ownerships.

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

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

Miscellaneous Federal land. Federal land other than national forests.

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

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

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

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

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

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

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

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

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

Rotten trees. Live trees of commercial species not containing at least one 12-foot saw log, or two noncontiguous saw logs, each 8 feet or longer, now or prospectively, primarily because of rot or missing sections, and with less than one-third of the gross board-foot tree volume in sound material.

Rough trees. Live trees of commercial species not containing at least one 12-foot saw log, or two noncontiguous saw logs, each 8 feet or longer, now or prospectively, primarily because of roughness, poor form, splits, and cracks, and with less than one-third of the gross board-foot tree volume in sound material; and live trees of noncommercial species.

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

Roundwood chipped. Any timber cut primarily for pulpwood, delivered to nonpulpmills, chipped, and then sold to 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 saw-log portion of sawtimber-size trees in board feet (International 1/4-inch rule).

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

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

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

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

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

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

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

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

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

Planted. Planted or artificially seeded.

Natural. No evidence of artificial regeneration.

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

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

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

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

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

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

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

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

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

Timber products. Roundwood products and byproducts.

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

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

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

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

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

Metric Equivalents

1 acre = 4,046.86 square meters or 0.404686 hectare
1 cubic foot = 0.028317 cubic meter
1 inch = 2.54 centimeters or 0.0254 meter
Breast height = 1.4 meters above ground 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

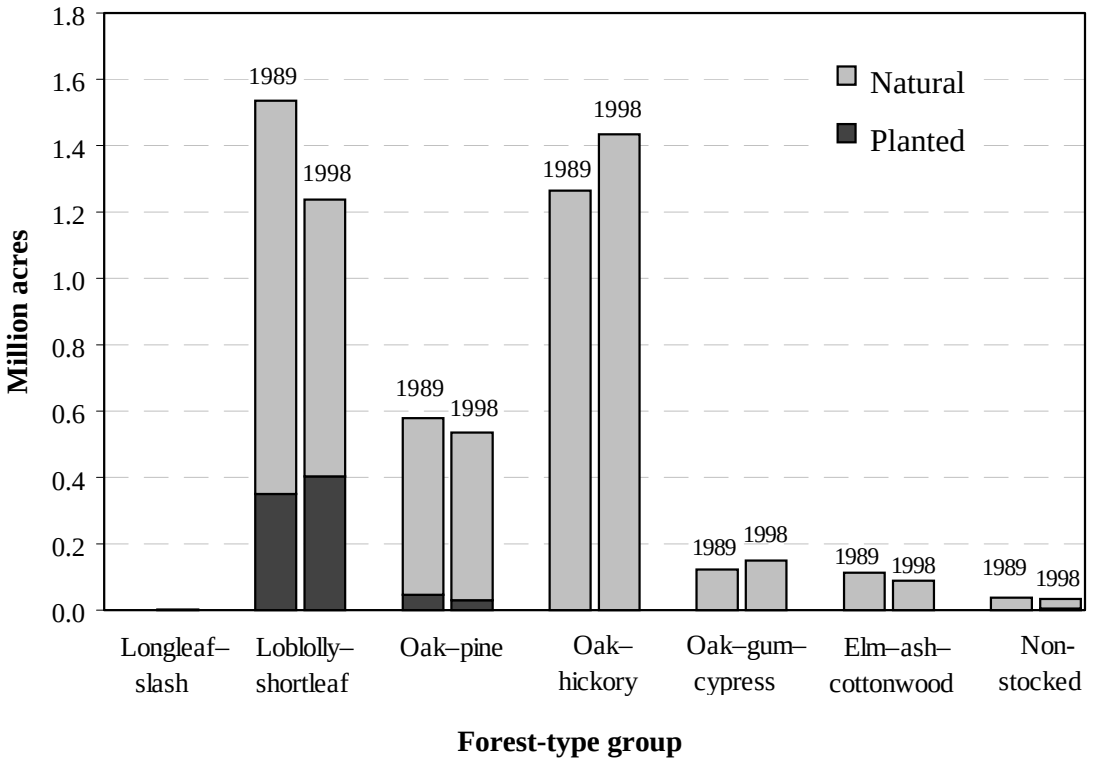

Figure 2—Area of timberland by forest-type group and stand origin, North Central Georgia, 1989 and 1998.

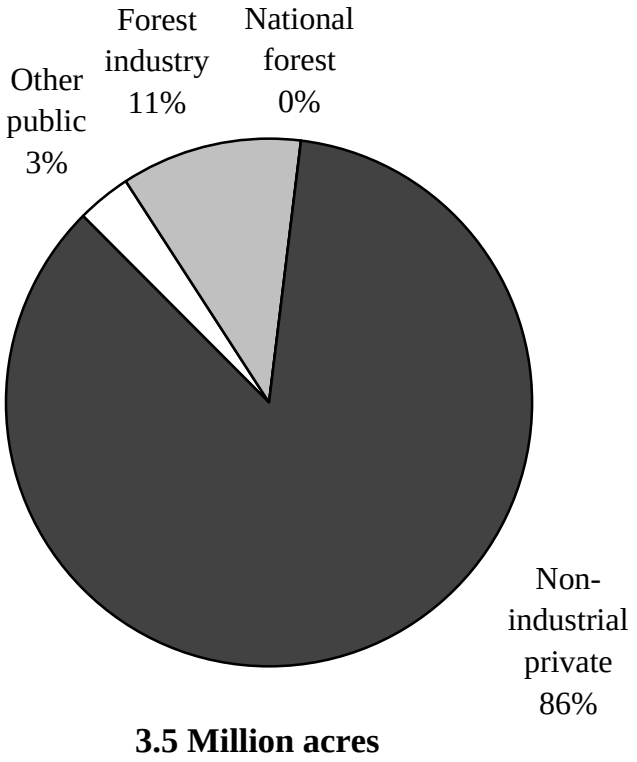

Figure 3—Distribution of timberland by ownership class, North Central Georgia, 1998.

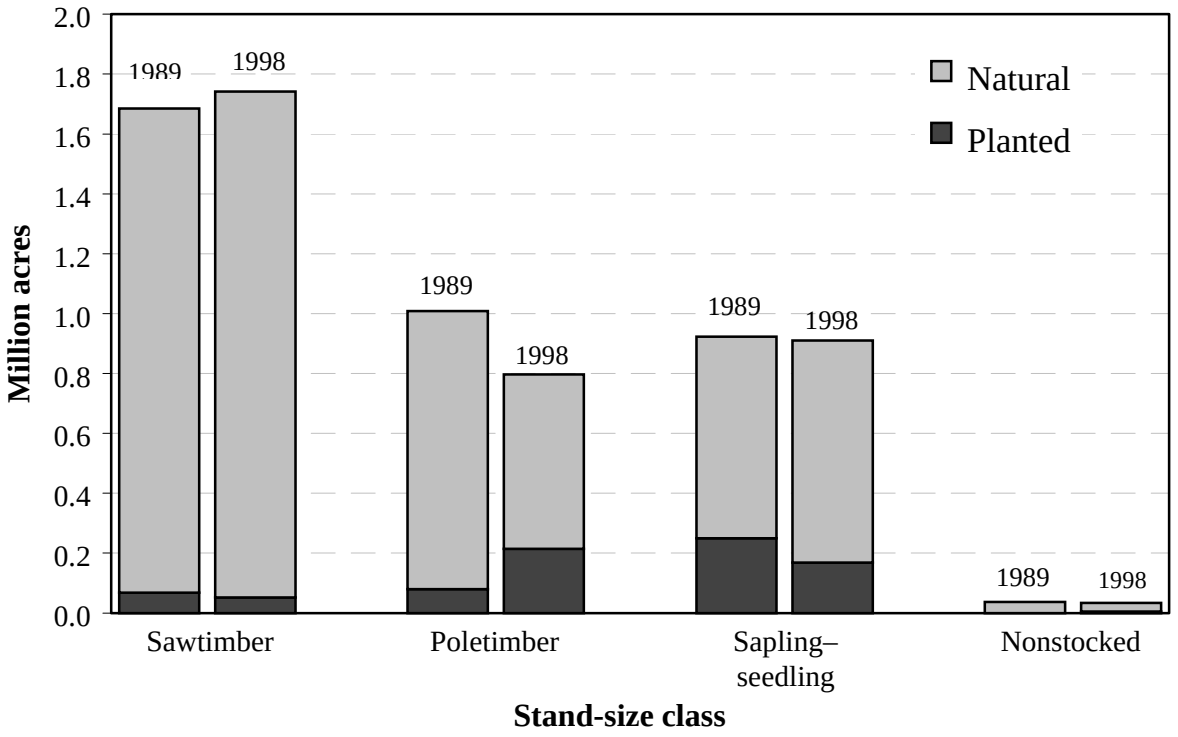

Figure 4—Area of timberland by stand-size class and stand origin, North Central Georgia, 1989 and 1998.

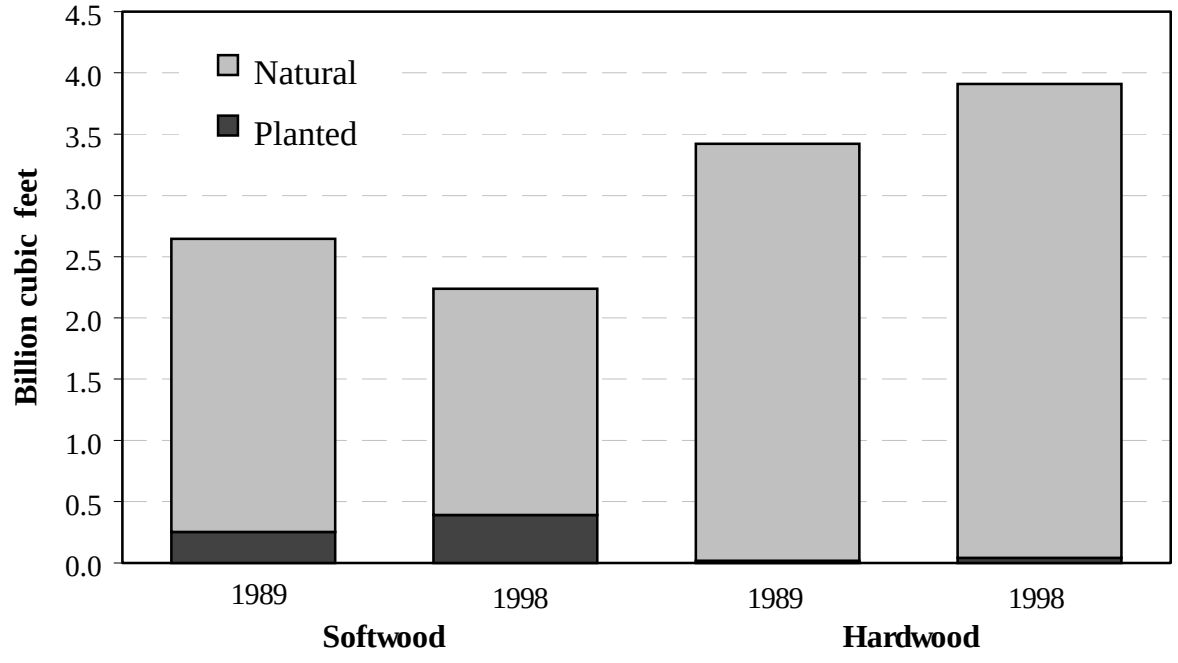

Figure 5—Volume of live trees on timberland by species group and stand origin, North Central Georgia, 1989 and 1998.

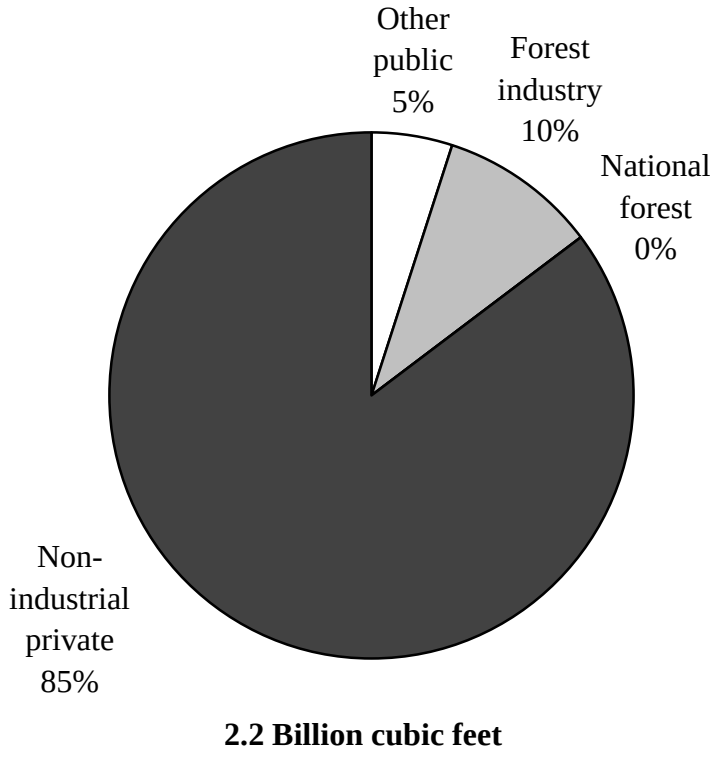

Figure 6—Distribution of softwood live tree volume by ownership class, North Central Georgia, 1998.

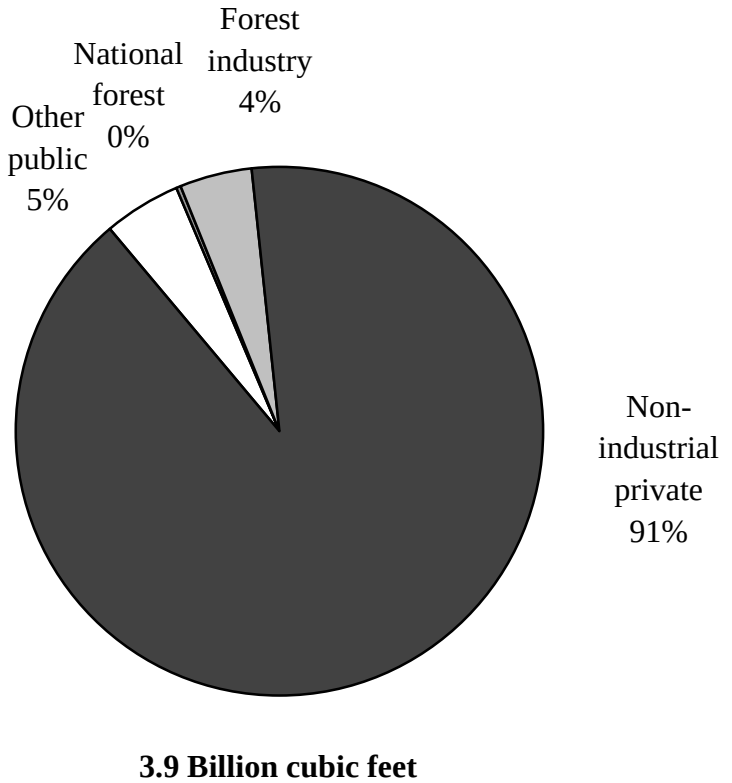

Figure 7—Distribution of hardwood live tree volume by ownership class, North Central Georgia, 1998.

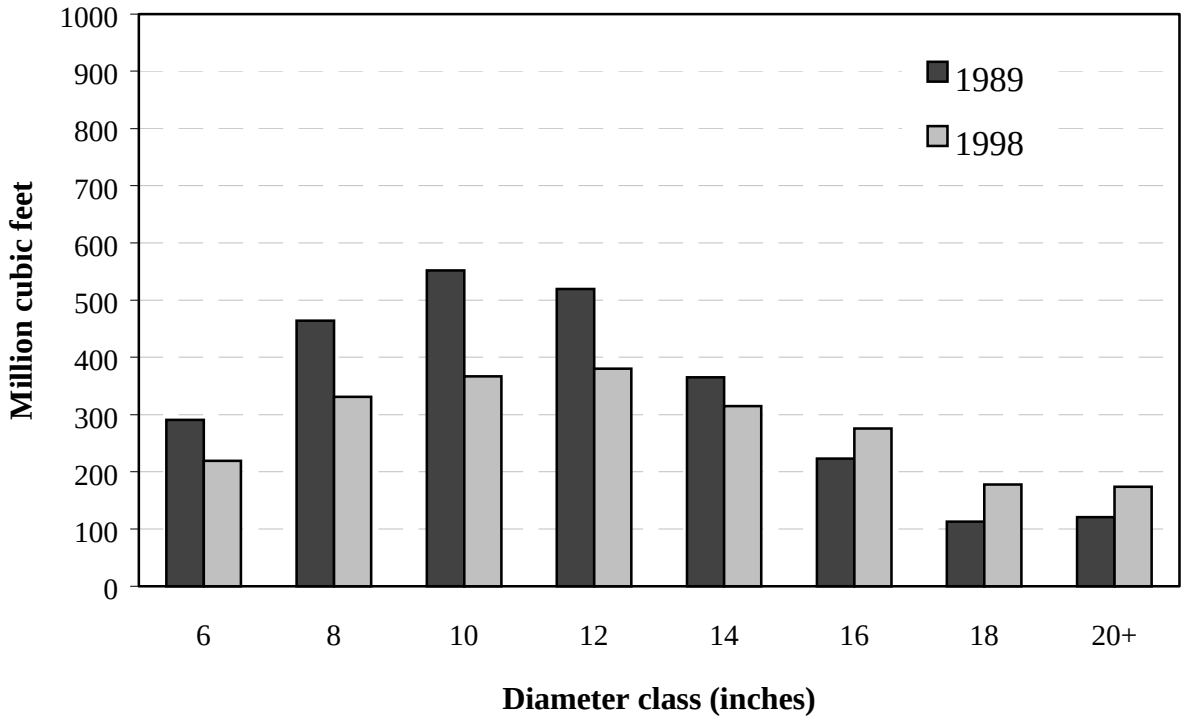

Figure 8—Volume of softwood live trees on timberland by diameter class, North Central Georgia, 1989 and 1998.

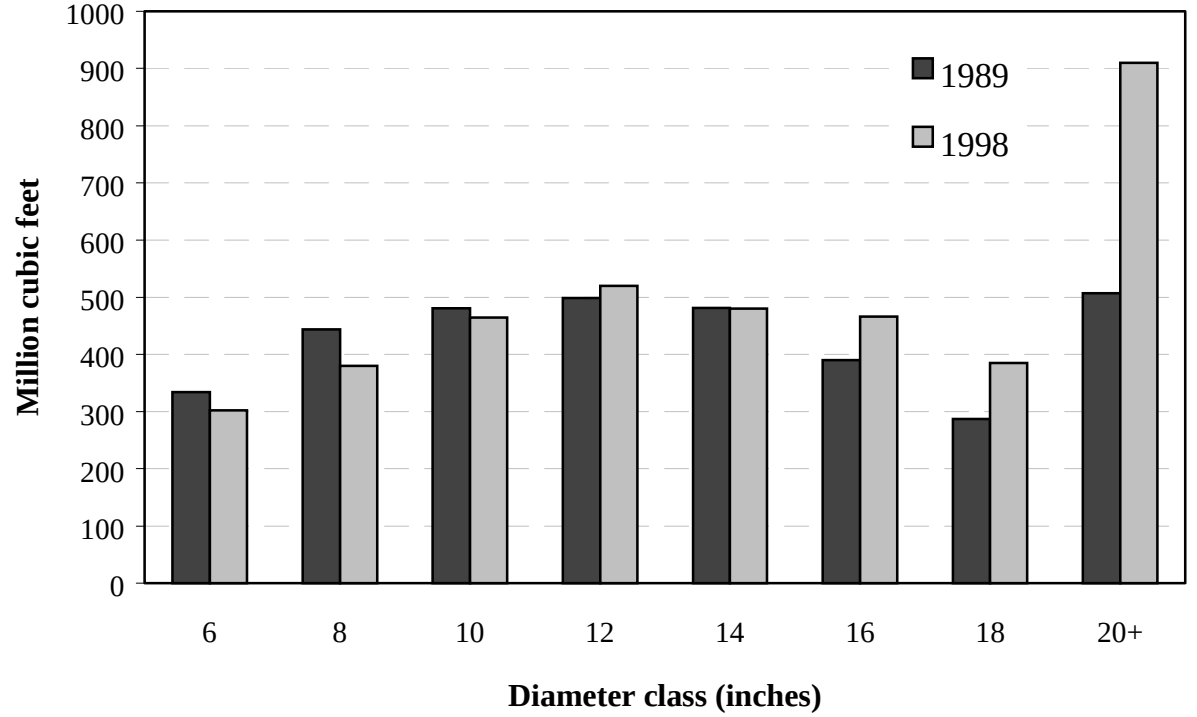

Figure 9—Volume of hardwood live trees on timberland by diameter class, North Central Georgia, 1989 and 1998.

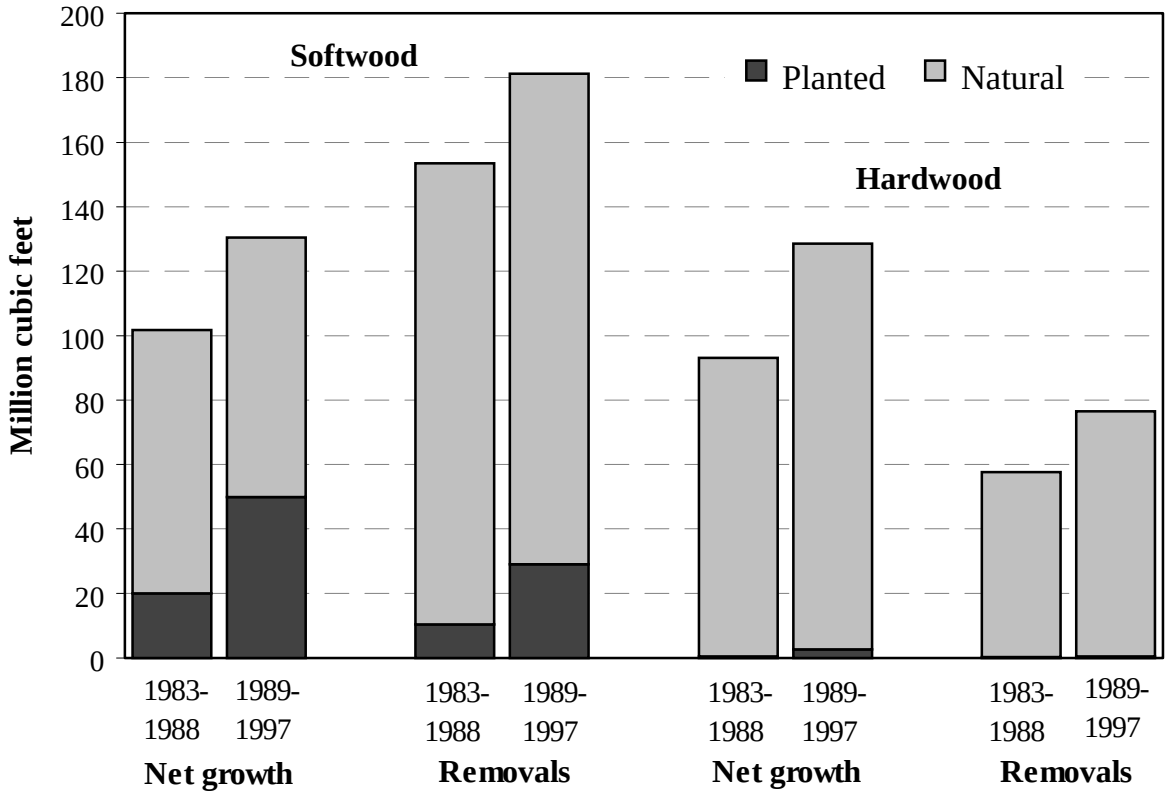

Figure 10—Average net annual growth and removals of live trees on timberland by species group and stand origin, North Central Georgia, 1983-1988 and 1989-1997.

Cross Reference of Eastern Core Tables

Core table	Corresponding table number in this report	Core table	Corresponding table number in this report
1	1	14	22
2	3	15	24, 26
3	4	16	27
4	5	17	28
5	6	18	32, 34
6	7	19	35, 37
7	8	20	38
8	10	21	38
9	11	22	40
10	17	23	41
11	18	24	43
12	20	25	23
13	21		

Index of Tables

23. Volume of sawtimber on timberland by species, size class, and tree grade

24. Volume of growing stock on timberland by county and species group

25. Volume of live trees on timberland by county and species group

26. Volume of sawtimber on timberland by county and species group

27. Volume of timber on timberland by class of timber and species group

28. Volume of live and growing-stock trees on timberland by ownership class and species group

29. Volume of sawtimber on timberland by ownership class, species group, and size class

30. Volume of growing stock on timberland by forest-type group, stand origin, and species group

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

32. Average net annual growth of growing stock on timberland by county and species group

33. Average net annual growth of live trees on timberland by county and species group

34. Average net annual growth of sawtimber on timberland by county and species group

35. Average annual removals of growing stock on timberland by county and species group

36. Average annual removals of live trees on timberland by county and species group

37. Average annual removals of sawtimber on timberland by county and species group

38. Average net annual growth and average annual removals of live trees, growing stock, and sawtimber on timberland by species

39. Average annual removals of growing stock on timberland by species and diameter class

40. Average annual mortality of live trees, growing stock, and sawtimber on timberland by species

41. Average net annual growth and average annual removals of growing stock on timberland by ownership class and species group

42. Average net annual growth and average annual removals of live trees on timberland by ownership class and species group

43. Average net annual growth and average annual removals of sawtimber on timberland by ownership class and species group

44. Average net annual growth of growing stock on timberland by forest-type group, stand origin, and species group

45. Average annual removals of growing stock on timberland by forest-type group, stand origin, and species group

46. Fresh weight of live trees on timberland by ownership class, species group, and tree component

47. Area of timberland treated or disturbed annually and retained in timberland by treatment or disturbance and ownership class

48. Area of timberland treated or disturbed annually and retained in timberland by treatment or disturbance and forest management type

49. Area of timberland regenerated annually by type of regeneration and forest management type

50. Land area by land-use class, major forest type, and survey completion date

51. Volume of sawtimber, growing stock, and live trees on timberland by species group, survey completion date, and diameter class

Table 1—Land area by county and land class, North Central Georgia, 1998

County	Total land area[a]	Forest land				Other land[b]
		Total forest	Timberland	Productive reserved	Other	
		Thousand acres				
Banks	149.6	103.0	103.0	—	—	46.5
Barrow	103.8	46.4	45.3	1.1	—	57.4
Carroll	319.5	185.9	185.8	0.1	—	133.7
Clarke	77.3	34.9	34.9	—	—	42.4
Clayton	91.3	28.1	28.1	—	—	63.2
Cobb	217.7	50.0	46.0	4.1	—	167.7
Coweta	283.6	195.4	195.4	—	—	88.1
De Kalb	171.7	39.1	37.3	1.8	—	132.6
Douglas	127.6	80.6	79.3	1.4	—	46.9
Elbert	236.0	166.0	165.3	0.7	—	70.1
Fayette	126.3	59.6	59.6	—	—	66.8
Forsyth	144.5	68.2	68.1	0.1	—	76.4
Franklin	168.5	91.2	90.6	0.5	—	77.4
Fulton	338.4	125.7	123.8	1.9	—	212.7
Gwinnett	277.0	104.8	104.4	0.4	—	172.2
Hall	251.9	133.9	133.9	—	—	118.0
Haralson	180.6	128.3	128.3	—	—	52.3
Hart	148.6	65.9	65.8	0.1	—	82.7
Heard	189.5	151.6	151.6	—	—	37.9
Henry	206.5	109.8	109.7	0.0	—	96.8
Jackson	219.1	126.8	126.8	—	—	92.4
Madison	182.0	112.4	111.8	0.6	—	69.7
Meriwether	322.1	230.8	230.7	0.1	—	91.4
Newton	176.9	98.7	98.7	—	—	78.3
Oconee	118.9	62.0	62.0	—	—	56.9
Oglethorpe	282.3	225.8	225.7	0.1	—	56.6
Paulding	200.7	136.2	135.4	0.7	—	64.5
Polk	199.1	132.1	132.1	—	—	67.0
Rockdale	83.6	39.9	39.0	0.9	—	43.8
Spalding	126.7	66.9	66.9	—	—	59.8
Troup	264.9	182.7	182.7	—	—	82.2
Walton	210.7	114.8	114.7	0.1	—	95.9
Total	6,197.4	3,497.4	3,482.5	14.8	—	2,700.0

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

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

[a] From the U.S. Bureau of the Census, 1990.

[b] Includes 11.3 thousand acres of water according to Forest Inventory and Analysis standards of area classification, but defined by the Bureau of Census as land.

Table 2—Area of forest land by forest-type group and ownership class, North Central Georgia, 1998

Forest-type group	All classes	Ownership class					
		National forest	Miscellaneous Federal	State	County and municipal	Forest industry[a]	Nonindustrial private
				Thousand acres			
Longleaf–slash pine	2.2	—	—	2.2	—	—	—
Loblolly–shortleaf pine	1,244.4	—	26.2	14.9	8.2	237.0	958.1
Oak–pine	535.3	—	9.8	2.3	7.2	43.4	472.6
Oak–hickory	1,442.3	1.2	23.5	6.1	15.5	72.0	1,324.0
Oak–gum–cypress	149.9	—	—	—	3.9	13.6	132.4
Elm–ash–cottonwood	89.4	3.3	5.6	—	3.0	13.3	64.2
Nonstocked	33.8	—	—	—	—	8.1	25.8
Total	3,497.4	4.5	65.1	25.5	37.9	387.4	2,977.0

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

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

[a] Includes 33.8 thousand acres of nonindustrial private land under long-term lease.

Table 3—Area of timberland by county and ownership class, North Central Georgia, 1998

County	All classes	Ownership class						
		National forest	Miscellaneous Federal	State	County and municipal	Forest industry[a]	Nonindustrial private	
							Corporate	Individual
	Thousand acres							
Banks	103.0	1.0	—	3.0	0.7	8.3	14.9	75.0
Barrow	45.3	—	—	0.0	0.5	—	7.2	37.5
Carroll	185.8	—	—	0.1	2.0	30.0	17.8	135.9
Clarke	34.9	—	—	1.6	0.6	—	7.7	24.9
Clayton	28.1	—	0.6	—	0.9	—	14.6	12.0
Cobb	46.0	—	2.5	0.1	0.7	—	2.1	40.6
Coweta	195.4	—	0.0	—	2.6	16.0	14.2	162.6
De Kalb	37.3	—	0.0	—	0.5	—	18.4	18.4
Douglas	79.3	—	—	0.1	0.9	1.3	24.1	53.0
Elbert	165.3	—	12.0	0.1	0.6	31.2	22.1	99.3
Fayette	59.6	—	—	—	0.2	—	4.9	54.5
Forsyth	68.1	—	5.6	0.0	0.3	0.0	14.9	47.2
Franklin	90.6	—	1.0	—	0.1	4.1	8.8	76.7
Fulton	123.8	—	—	0.3	1.5	—	27.6	94.4
Gwinnett	104.4	—	5.6	—	2.0	0.1	10.8	86.0
Hall	133.9	—	7.9	—	2.8	3.7	24.9	94.7
Haralson	128.3	—	—	—	0.5	32.4	24.9	70.5
Hart	65.8	—	6.1	1.0	0.3	2.7	6.9	48.9
Heard	151.6	—	5.4	—	0.3	56.0	15.4	74.5
Henry	109.7	—	—	—	1.5	—	9.1	99.1
Jackson	126.8	—	—	0.6	0.3	2.0	33.3	90.5
Madison	111.8	—	—	0.3	0.2	11.0	11.5	88.8
Meriwether	230.7	—	—	5.6	1.8	55.8	29.5	138.0
Newton	98.7	—	—	0.3	3.6	3.8	9.4	81.5
Oconee	62.0	0.2	0.0	0.1	0.1	4.4	7.1	50.2
Oglethorpe	225.7	3.3	—	0.5	0.1	50.7	73.5	97.5
Paulding	135.4	—	0.0	3.1	10.3	29.0	18.6	74.4
Polk	132.1	—	—	—	0.3	22.1	23.2	86.6
Rockdale	39.0	—	—	—	0.2	—	8.2	30.6
Spalding	66.9	—	—	0.3	0.6	0.4	14.8	51.0
Troup	182.7	—	11.9	0.0	0.4	22.5	10.7	137.2
Walton	114.7	—	—	0.1	0.6	—	12.2	101.8
Total	3,482.5	4.5	58.6	17.2	37.9	387.4	543.3	2,433.7

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

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

[a] Includes 33.8 thousand acres of nonindustrial private land under long-term lease.

Table 4—Area of timberland by county and forest-type group, North Central Georgia, 1998

County	All groups	Forest-type group						
		Longleaf–slash	Loblolly–shortleaf	Oak–pine	Oak–hickory	Oak–gum–cypress	Elm–ash–cottonwood	Nonstocked
		Thousand acres						
Banks	103.0	—	15.9	25.2	54.4	—	5.0	2.5
Barrow	45.3	—	9.9	6.6	27.5	1.3	—	—
Carroll	185.8	—	60.6	22.5	85.3	14.0	—	3.3
Clarke	34.9	—	10.4	10.5	14.0	—	—	—
Clayton	28.1	—	8.9	4.6	4.5	4.6	1.8	3.7
Cobb	46.0	—	21.0	12.4	12.6	—	—	—
Coweta	195.4	—	79.9	41.8	53.2	11.2	9.3	—
De Kalb	37.3	—	20.8	0.5	13.8	2.2	—	—
Douglas	79.3	—	13.7	8.1	53.9	3.6	—	—
Elbert	165.3	—	52.5	33.1	72.0	4.7	3.0	—
Fayette	59.6	—	19.2	19.0	14.9	6.5	—	—
Forsyth	68.1	—	18.5	2.8	46.8	—	—	—
Franklin	90.6	—	22.3	14.9	43.5	—	9.9	—
Fulton	123.8	—	51.9	9.8	52.7	7.9	0.7	0.8
Gwinnett	104.4	—	26.5	23.3	51.4	—	3.3	—
Hall	133.9	—	42.3	28.1	58.6	1.4	—	3.5
Haralson	128.3	—	56.5	19.1	45.2	3.7	3.7	—
Hart	65.8	—	18.9	1.9	43.6	—	1.4	—
Heard	151.6	—	84.6	19.8	36.3	8.9	0.3	1.6
Henry	109.7	—	46.1	19.2	38.7	5.8	—	—
Jackson	126.8	—	30.1	24.3	64.6	—	6.5	1.3
Madison	111.8	—	44.3	9.9	57.6	—	—	—
Meriwether	230.7	2.2	100.7	24.2	78.8	18.8	4.3	1.6
Newton	98.7	—	44.9	16.6	27.2	10.0	—	—
Oconee	62.0	—	9.4	16.5	32.0	4.1	—	—
Oglethorpe	225.7	—	96.4	16.9	71.4	11.1	28.2	1.7
Paulding	135.4	—	51.0	11.6	64.8	5.2	—	2.8
Polk	132.1	—	58.8	19.3	48.3	—	1.1	4.6
Rockdale	39.0	—	12.8	—	26.2	—	—	—
Spalding	66.9	—	17.8	21.5	18.6	6.8	—	2.3
Troup	182.7	0.0	67.3	24.2	77.5	2.7	10.9	—
Walton	114.7	—	23.7	27.3	44.4	15.3	—	4.1
Total	3,482.5	2.2	1,237.5	535.3	1,434.4	149.9	89.4	33.8

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

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

Table 5—Area of timberland by county and stand-size class, North Central Georgia, 1998

County	All classes	Stand-size class			
		Sawtimber	Poletimber	Sapling-seedling	Nonstocked
		Thousand acres			
Banks	103.0	57.0	11.1	32.5	2.5
Barrow	45.3	29.3	5.3	10.7	—
Carroll	185.8	86.6	39.8	56.1	3.3
Clarke	34.9	28.3	5.8	0.8	—
Clayton	28.1	10.6	7.4	6.4	3.7
Cobb	46.0	37.6	1.0	7.3	—
Coweta	195.4	99.4	56.0	40.0	—
De Kalb	37.3	32.4	4.2	0.7	—
Douglas	79.3	62.8	7.3	9.2	—
Elbert	165.3	60.0	63.8	41.5	—
Fayette	59.6	32.7	8.0	19.0	—
Forsyth	68.1	40.1	15.1	12.9	—
Franklin	90.6	48.3	16.0	26.3	—
Fulton	123.8	102.8	11.2	8.9	0.8
Gwinnett	104.4	62.5	23.4	18.5	—
Hall	133.9	77.5	19.3	33.6	3.5
Haralson	128.3	37.0	44.3	47.0	—
Hart	65.8	42.4	13.5	9.9	—
Heard	151.6	42.4	53.5	54.2	1.6
Henry	109.7	55.3	27.0	27.5	—
Jackson	126.8	45.4	21.1	59.0	1.3
Madison	111.8	38.8	53.2	19.7	—
Meriwether	230.7	69.1	66.1	93.9	1.6
Newton	98.7	71.9	9.1	17.7	—
Oconee	62.0	44.1	7.3	10.6	—
Oglethorpe	225.7	90.5	68.1	65.4	1.7
Paulding	135.4	53.4	27.5	51.6	2.8
Polk	132.1	46.5	35.7	45.3	4.6
Rockdale	39.0	27.6	4.3	7.1	—
Spalding	66.9	31.0	9.8	23.9	2.3
Troup	182.7	93.1	48.1	41.5	—
Walton	114.7	85.1	14.0	11.6	4.1
Total	3,482.5	1,741.2	797.3	910.2	33.8

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

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

Table 6—Area of timberland by county and site class, North Central Georgia, 1998

County	All classes	Site class (cubic feet/acre/year)				
		20-49	50-84	85-119	120-164	>165
		Thousand acres				
Banks	103.0	—	81.2	21.9	—	—
Barrow	45.3	—	41.5	3.8	—	—
Carroll	185.8	3.1	125.7	50.0	6.9	—
Clarke	34.9	—	25.6	5.5	3.9	—
Clayton	28.1	1.8	14.3	12.0	—	—
Cobb	46.0	—	21.3	22.6	2.1	—
Coweta	195.4	14.6	105.4	74.5	0.8	—
De Kalb	37.3	—	20.6	16.7	—	—
Douglas	79.3	1.3	47.6	26.9	3.6	—
Elbert	165.3	9.0	126.7	29.6	—	—
Fayette	59.6	—	38.3	21.2	—	—
Forsyth	68.1	9.9	25.8	20.4	10.6	1.2
Franklin	90.6	3.3	55.0	31.5	—	0.8
Fulton	123.8	—	67.7	48.8	4.1	3.1
Gwinnett	104.4	—	61.3	39.8	3.3	—
Hall	133.9	5.0	89.3	31.6	3.1	5.0
Haralson	128.3	—	71.0	51.5	3.7	2.1
Hart	65.8	5.6	49.1	11.1	—	—
Heard	151.6	7.4	99.2	42.7	2.3	—
Henry	109.7	3.9	73.7	29.2	2.9	—
Jackson	126.8	9.9	59.4	57.5	—	—
Madison	111.8	5.2	64.3	36.6	—	5.7
Meriwether	230.7	9.8	141.6	74.2	5.1	—
Newton	98.7	1.2	63.8	25.5	8.3	—
Oconee	62.0	—	33.9	28.1	—	—
Oglethorpe	225.7	14.0	133.8	77.8	—	—
Paulding	135.4	22.5	87.4	25.6	0.0	—
Polk	132.1	17.4	104.0	10.7	—	—
Rockdale	39.0	8.2	16.1	14.6	—	—
Spalding	66.9	3.1	38.9	22.7	2.3	—
Troup	182.7	3.4	128.0	51.3	—	—
Walton	114.7	—	43.2	63.5	8.0	—
Total	3,482.5	159.6	2,154.5	1,079.4	71.1	17.9

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

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

Table 7—Area of timberland by county and stocking class of growing-stock trees, North Central Georgia, 1998

County	All classes	Stocking class (percent)				
		<16.7	16.7-59	60-99	100-130	>130
			Thousand acres			
Banks	103.0	2.5	41.3	47.0	12.2	—
Barrow	45.3	0.8	22.7	20.4	1.3	—
Carroll	185.8	8.3	62.6	106.3	7.4	1.1
Clarke	34.9	—	18.9	9.3	6.8	—
Clayton	28.1	5.5	2.8	12.6	7.2	—
Cobb	46.0	—	8.4	28.1	7.4	2.1
Coweta	195.4	1.2	51.2	131.8	11.2	—
De Kalb	37.3	2.2	2.2	29.2	3.7	—
Douglas	79.3	0.9	29.7	40.4	8.3	—
Elbert	165.3	—	52.0	106.5	5.6	1.2
Fayette	59.6	—	32.7	17.5	9.4	—
Forsyth	68.1	—	21.4	37.1	5.0	4.7
Franklin	90.6	0.1	15.1	65.1	8.8	1.5
Fulton	123.8	0.8	23.0	86.7	12.3	0.9
Gwinnett	104.4	—	35.2	66.7	2.5	—
Hall	133.9	7.8	44.4	75.2	6.5	—
Haralson	128.3	1.7	47.1	64.7	14.8	—
Hart	65.8	0.3	24.6	38.6	2.3	—
Heard	151.6	1.6	32.7	91.8	25.6	—
Henry	109.7	1.0	30.1	72.7	5.9	—
Jackson	126.8	3.9	68.0	43.0	11.9	—
Madison	111.8	2.9	36.2	62.3	10.4	—
Meriwether	230.7	6.5	63.0	146.7	14.4	—
Newton	98.7	1.2	42.4	55.0	—	—
Oconee	62.0	6.3	42.0	12.5	1.3	—
Oglethorpe	225.7	2.2	104.6	110.1	8.8	—
Paulding	135.4	2.8	62.4	66.3	3.9	—
Polk	132.1	4.9	61.6	58.7	6.8	—
Rockdale	39.0	—	18.0	21.0	—	—
Spalding	66.9	4.9	15.6	37.8	8.4	0.3
Troup	182.7	1.9	52.6	117.7	10.5	—
Walton	114.7	4.1	43.9	49.8	15.5	1.5
Total	3,482.5	76.2	1,208.7	1,928.7	255.8	13.2

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

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

Table 8—Area of timberland by forest-type group, stand origin, and ownership class, North Central Georgia, 1998

Forest-type group and stand origin	All classes	Ownership class				
		National forest	Other public	Forest industry	Forest industry-leased	Nonindustrial private
			Thousand acres			
Softwood types						
Longleaf–slash pine						
Planted	—	—	—	—	—	—
Natural	2.2	—	2.2	—	—	—
Total	2.2	—	2.2	—	—	—
Loblolly–shortleaf pine						
Planted	404.0	—	0.7	189.4	3.1	210.8
Natural	833.6	—	41.7	41.1	3.5	747.3
Total	1,237.5	—	42.4	230.5	6.5	958.1
Total softwoods	1,239.7	—	44.6	230.5	6.5	958.1
Hardwood types						
Oak–pine						
Planted	29.9	—	—	14.4	0.1	15.4
Natural	505.4	—	19.4	22.8	6.1	457.2
Total	535.3	—	19.4	37.2	6.2	472.6
Oak–hickory	1,434.4	1.2	37.2	60.3	11.6	1,324.0
Oak–gum–cypress	149.9	—	3.9	7.0	6.6	132.4
Elm–ash–cottonwood	89.4	3.3	8.6	13.3	—	64.2
Total hardwoods	2,208.9	4.5	69.1	117.8	24.4	1,993.1
Nonstocked	33.8	—	—	5.2	2.9	25.8
All groups	3,482.5	4.5	113.7	353.5	33.8	2,977.0

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

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

Table 9—Area of timberland by forest-type group, detailed forest type, and ownership class, North Central Georgia, 1998

Forest-type group and detailed forest type	All classes	Ownership class				
		National forest	Other public	Forest industry	Forest industry-leased	Nonindustrial private
			Thousand acres			
Softwood types						
Longleaf–slash						
Longleaf pine	2.2	—	2.2	—	—	—
Total	2.2	—	2.2	—	—	—
Loblolly–shortleaf						
Loblolly pine	1,113.5	—	29.9	219.2	6.5	857.9
Shortleaf pine	92.6	—	7.9	6.0	—	78.7
Virginia pine	29.6	—	4.6	3.5	—	21.5
Eastern redcedar	1.7	—	—	1.7	—	—
Total	1,237.5	—	42.4	230.5	6.5	958.1
Total softwoods	1,239.7	—	44.6	230.5	6.5	958.1
Hardwood types						
Oak–pine						
Eastern redcedar–hardwood	10.3	—	1.0	—	—	9.3
Longleaf pine–scrub oak	6.0	—	1.5	—	—	4.4
Shortleaf pine–oak	103.4	—	3.3	5.2	—	94.9
Virginia pine–s. red oak	8.3	—	—	—	—	8.3
Loblolly pine–hardwood	407.3	—	13.5	32.1	6.2	355.5
Total	535.3	—	19.4	37.2	6.2	472.6
Oak–hickory						
Post oak–black oak	59.5	—	—	—	—	59.5
Chestnut oak	62.3	—	1.8	—	11.6	48.8
White oak–red oak–hickory	517.0	—	25.9	4.5	—	486.6
White oak	20.6	—	—	—	—	20.6
Yellow-poplar–white oak–n. red oak	131.0	—	1.3	11.0	—	118.7
Southern scrub oak	9.9	—	—	—	—	9.9
Sweetgum–yellow-poplar	432.8	1.2	2.9	42.7	—	386.1
Mixed hardwood	201.3	—	5.3	2.2	—	193.8
Total	1,434.4	1.2	37.2	60.3	11.6	1,324.0
Oak–gum–cypress						
Sweetgum–water oak–willow oak	92.9	—	3.9	6.0	—	82.9
Sugarberry–elm–green ash	12.0	—	—	—	—	12.0
Sweetbay–blackgum–red maple	45.0	—	—	1.0	6.6	37.5
Total	149.9	—	3.9	7.0	6.6	132.4
Elm–ash–cottonwood						
River birch–sycamore	43.0	3.3	3.0	3.7	—	33.0
Willow	26.1	—	3.0	5.3	—	17.8
Sycamore–pecan–elm	20.2	—	2.6	4.3	—	13.3
Total	89.4	3.3	8.6	13.3	—	64.2
Total hardwoods	2,208.9	4.5	69.1	117.8	24.4	1,993.1
Nonstocked	33.8	—	—	5.2	2.9	25.8
All groups	3,482.5	4.5	113.7	353.5	33.8	2,977.0

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

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

Table 10—Area of timberland by ownership and stocking class of growing-stock trees, North Central Georgia, 1998

Ownership class	All classes	Stocking class (percent)				
		<16.7	16.7-59	60-99	100-130	>130
	Thousand acres					
National forest	4.5	—	—	3.3	1.2	—
Other public	113.7	2.5	39.4	69.8	1.8	0.3
Forest industry	353.5	9.6	92.4	221.7	29.8	—
Forest industry-leased	33.8	2.9	17.8	10.3	2.8	—
Nonindustrial private	2,977.0	61.2	1,059.1	1,623.6	220.2	13.0
All ownerships	3,482.5	76.2	1,208.7	1,928.7	255.8	13.2

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

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

Table 11—Area of timberland by forest-type group, stand origin, and stand-size class, North Central Georgia, 1998

Forest-type group and stand origin	All classes	Stand-size class			
		Sawtimber	Poletimber	Sapling-seedling	Nonstocked
	Thousand acres				
Softwood types					
Longleaf–slash pine					
Planted	—	—	—	—	—
Natural	2.2	2.2	0.0	—	—
Total	2.2	2.2	0.0	—	—
Loblolly–shortleaf pine					
Planted	404.0	45.5	213.5	145.0	—
Natural	833.6	468.3	150.4	214.9	—
Total	1,237.5	513.8	363.9	359.9	—
Total softwoods	1,239.7	516.0	363.9	359.9	—
Hardwood types					
Oak–pine					
Planted	29.9	6.6	—	23.3	—
Natural	505.4	216.6	135.7	153.2	—
Total	535.3	223.2	135.7	176.5	—
Oak–hickory	1,434.4	819.4	270.7	344.3	—
Oak–gum–cypress	149.9	117.6	16.2	16.1	—
Elm–ash–cottonwood	89.4	65.1	10.9	13.4	—
Total hardwoods	2,208.9	1,225.2	433.4	550.3	—
Nonstocked	33.8	—	—	—	33.8
All groups	3,482.5	1,741.2	797.3	910.2	33.8

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

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

Table 12—Area of timberland by stand-age class and forest management type, all ownerships, North Central Georgia, 1998

Stand-age class	All types	Forest management type					
		Pine plantation	Natural pine	Oak–pine	Upland hardwood	Lowland hardwood	Nonstocked
Years				*Thousand acres*			
0-10	711.1	128.9	146.9	126.3	266.0	27.9	15.1
11-20	512.9	169.2	108.8	98.9	119.7	7.5	8.8
21-30	387.3	76.3	110.6	58.6	116.9	22.4	2.5
31-40	405.0	24.4	174.2	38.5	145.5	21.1	1.3
41-50	476.6	3.9	145.4	97.6	202.2	24.2	3.3
51-60	534.1	0.1	121.1	66.9	277.5	65.7	2.8
61-70	239.2	1.1	20.7	25.8	146.9	44.7	—
71-80	140.4	—	7.2	12.6	104.0	16.6	—
81+	76.0	—	0.9	10.2	55.7	9.2	—
All classes	3,482.5	404.0	835.8	535.3	1,434.4	239.3	33.8

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

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

Table 13—Area of timberland by stand-age class and forest management type, public ownerships, North Central Georgia, 1998

Stand-age class	All types	Forest management type					
		Pine plantation	Natural pine	Oak–pine	Upland hardwood	Lowland hardwood	Nonstocked
Years				*Thousand acres*			
0-10	12.6	—	6.3	0.9	1.2	4.2	—
11-20	14.5	0.5	6.7	5.7	1.6	—	—
21-30	4.0	—	2.5	0.7	0.9	—	—
31-40	28.1	—	13.8	2.3	12.0	—	—
41-50	21.0	—	6.9	2.7	8.8	2.6	—
51-60	25.0	0.1	7.7	3.6	10.8	2.7	—
61-70	4.3	—	0.1	0.9	—	3.3	—
71-80	4.9	—	—	2.6	—	2.3	—
81+	3.8	—	—	—	3.2	0.7	—
All classes	118.2	0.7	43.9	19.4	38.4	15.8	—

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

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

Table 14—Area of timberland by stand-age class and forest management type, forest industry ownerships, North Central Georgia, 1998

Stand-age class	All types[a]	Forest management type: Pine plantation	Natural pine	Oak–pine	Upland hardwood	Lowland hardwood	Nonstocked
Years				*Thousand acres*			
0-10	128.5	74.4	2.1	20.8	19.9	9.6	1.7
11-20	82.8	63.9	4.5	7.4	3.6	—	3.5
21-30	85.7	50.4	9.6	10.4	14.4	1.0	—
31-40	30.0	3.7	19.8	0.7	4.1	1.7	—
41-50	26.7	0.1	4.0	3.2	19.4	—	—
51-60	23.2	—	—	1.0	8.5	10.9	2.8
61-70	10.4	—	4.6	—	2.1	3.7	—
71-80	—	—	—	—	—	—	—
81+	—	—	—	—	—	—	—
All classes	387.4	192.5	44.6	43.4	72.0	26.8	8.1

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

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

[a] Includes 33.8 thousand acres of nonindustrial private land under long-term lease.

Table 15—Area of timberland by stand-age class and forest management type, nonindustrial private ownerships, North Central Georgia, 1998

Stand-age class	All types[a]	Forest management type: Pine plantation	Natural pine	Oak–pine	Upland hardwood	Lowland hardwood	Nonstocked
Years				*Thousand acres*			
0-10	570.0	54.5	138.5	104.6	244.9	14.1	13.3
11-20	415.5	104.8	97.6	85.8	114.5	7.5	5.3
21-30	297.6	25.9	98.5	47.6	101.7	21.4	2.5
31-40	346.9	20.7	140.6	35.5	129.3	19.4	1.3
41-50	428.9	3.8	134.5	91.7	174.0	21.6	3.3
51-60	485.9	—	113.4	62.3	258.3	52.0	—
61-70	224.4	1.1	16.0	24.9	144.8	37.6	—
71-80	135.5	—	7.2	10.0	104.0	14.3	—
81+	72.2	—	0.9	10.2	52.5	8.5	—
All classes	2,977.0	210.8	747.3	472.6	1,324.0	196.6	25.8

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

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

[a] Excludes 33.8 thousand acres of nonindustrial private land under long-term lease to forest industry.

Table 16—Area of nonindustrial private timberland by ownership, forested tract-size class, and forest management type, North Central Georgia, 1998

Ownership and forested tract-size class	All types	Forest management type					
		Pine plantation	Natural pine	Oak–pine	Upland hardwood	Lowland hardwood	Nonstocked
Acres		*Thousand acres*					
Individual							
≤ 10	438.9	7.8	129.9	79.0	214.7	6.5	1.1
11-50	640.5	19.4	186.6	105.7	289.2	33.7	5.8
51-100	483.7	17.3	122.0	78.5	223.9	31.2	10.7
101-200	498.3	29.2	96.2	66.1	262.7	41.0	3.1
201-500	280.3	28.8	69.1	52.1	99.6	30.6	—
≥ 501	91.9	13.2	21.2	11.3	34.4	11.9	—
Total	2,433.7	115.6	625.0	392.8	1,124.5	154.8	20.8
Corporate							
≤ 10	42.6	1.0	20.0	9.6	10.2	1.8	—
11-50	69.7	4.4	19.2	6.9	33.3	2.2	3.7
51-100	52.1	7.5	13.1	6.7	21.8	3.0	—
101-200	116.2	23.6	11.7	9.9	67.0	3.9	—
201-500	95.9	25.1	10.9	21.4	28.4	10.2	—
≥ 501	166.9	33.6	47.4	25.3	38.8	20.6	1.3
Total	543.3	95.2	122.2	79.7	199.5	41.7	5.0
All nonindustrial private							
≤ 10	481.5	8.7	149.8	88.6	224.9	8.3	1.1
11-50	710.2	23.8	205.8	112.6	322.5	35.9	9.5
51-100	535.8	24.9	135.1	85.2	245.7	34.2	10.7
101-200	614.5	52.8	107.9	76.0	329.7	44.9	3.1
201-500	376.3	53.9	80.0	73.5	128.0	40.9	—
≥ 501	258.8	46.8	68.6	36.5	73.1	32.5	1.3
Total	2,977.0	210.8	747.3	472.6	1,324.0	196.6	25.8

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

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

Table 17—Number of live trees on timberland by species and diameter class, North Central Georgia, 1998

Species	All classes	Diameter class (inches at breast height) 1.0-2.9	3.0-4.9	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 and larger
						Thousand trees							
Softwood													
Longleaf pine	1,918	651	373	163	147	184	51	56	267	26	—	—	—
Slash pine	107	—	—	—	—	26	26	—	25	30	—	—	—
Shortleaf pine	79,809	24,640	22,588	12,968	9,777	5,111	2,931	896	680	134	56	28	—
Loblolly pine	563,600	260,075	124,375	79,133	43,661	23,385	14,178	8,615	5,385	2,837	1,072	857	27
Virginia pine	22,121	11,427	3,757	1,968	1,475	1,432	1,351	501	133	77	—	—	—
Redcedars	23,973	17,944	3,952	1,048	529	245	160	64	—	31	—	—	—
Total softwoods	691,528	314,737	155,045	95,280	55,589	30,383	18,697	10,132	6,490	3,135	1,128	885	27
Hardwood													
Select white oaks	85,117	45,152	13,681	7,594	5,625	4,425	2,881	1,928	1,607	1,049	525	588	62
Select red oaks	18,988	11,276	2,076	1,335	1,490	496	647	541	628	180	141	178	—
Other white oaks	33,711	15,783	4,920	4,167	2,713	2,362	1,632	805	513	496	69	223	28
Other red oaks	273,591	190,125	35,574	15,798	9,690	7,116	5,068	3,771	2,571	1,677	851	1,178	172
Hickory	86,195	54,068	12,665	7,881	4,433	3,155	1,817	973	513	310	158	222	—
Yellow birch	22	—	—	22	—	—	—	—	—	—	—	—	—
Hard maple	7,257	5,906	638	287	177	29	108	112	—	—	—	—	—
Soft maple	156,288	116,158	21,525	7,625	3,542	2,503	2,069	996	704	511	222	406	27
Beech	7,474	5,485	722	451	137	134	254	56	86	42	30	49	28
Sweetgum	413,030	275,638	71,541	29,287	15,883	9,487	5,106	2,977	1,452	912	284	432	31
Tupelo and blackgum	72,825	52,906	11,619	3,645	1,757	1,167	746	589	268	86	42	—	—
Ash	12,145	7,534	436	1,469	515	472	632	315	305	85	78	265	39
Cottonwood	115	—	—	29	29	—	—	29	—	—	—	28	—
Basswood	1,182	764	—	175	142	45	28	28	—	—	—	—	—
Yellow-poplar	135,150	82,229	18,034	10,582	6,228	4,341	3,934	2,972	2,459	1,663	1,128	1,505	75
Bay and magnolia	2,601	1,147	709	356	183	102	52	52	—	—	—	—	—
Black cherry	87,167	64,462	15,509	4,359	1,743	756	278	—	31	29	—	—	—
Black walnut	2,092	1,661	—	139	27	54	75	25	52	—	31	28	—
Sycamore	1,783	337	396	178	262	135	136	135	117	—	87	—	—
Black locust	56	—	—	56	—	—	—	—	—	—	—	—	—
Elm	51,677	37,688	7,299	3,392	1,629	747	556	163	103	74	26	—	—
Other Eastern hardwoods	394,978	293,270	71,737	19,388	6,554	2,127	1,005	475	174	87	22	139	—
Total hardwoods	1,843,444	1,261,589	289,081	118,215	62,759	39,653	27,024	16,942	11,583	7,201	3,694	5,241	462
All species	2,534,972	1,576,326	444,126	213,495	118,348	70,036	45,721	27,074	18,073	10,336	4,822	6,126	489

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

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

Table 18—Number of growing-stock trees on timberland by species and diameter class, North Central Georgia, 1998

Species	All classes	Diameter class (inches at breast height) 1.0-2.9	3.0-4.9	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 and larger
						Thousand trees							
Softwood													
Longleaf pine	1,918	651	373	163	147	184	51	56	267	26	—	—	—
Slash pine	107	—	—	—	—	26	26	—	25	30	—	—	—
Shortleaf pine	76,368	21,722	22,187	12,920	9,728	5,086	2,931	896	680	134	56	28	—
Loblolly pine	545,895	245,317	123,190	78,249	43,326	23,110	13,957	8,590	5,363	2,837	1,072	857	27
Virginia pine	20,508	10,782	2,806	1,968	1,475	1,415	1,351	501	133	77	—	—	—
Redcedars	17,948	12,325	3,632	1,018	504	245	160	64	—	—	—	—	—
Total softwoods	662,744	290,797	152,188	94,318	55,180	30,066	18,476	10,107	6,468	3,104	1,128	885	27
Hardwood													
Select white oaks	68,425	30,679	12,135	7,328	5,523	4,310	2,819	1,903	1,607	1,049	525	513	34
Select red oaks	13,961	6,337	2,076	1,277	1,490	466	647	541	628	180	141	178	—
Other white oaks	27,592	10,920	4,164	3,989	2,636	2,297	1,574	778	491	448	69	198	28
Other red oaks	213,746	136,655	31,664	14,607	9,208	6,913	4,857	3,723	2,424	1,650	799	1,100	146
Hickory	62,300	33,408	10,452	7,294	4,372	2,994	1,743	946	454	310	132	195	—
Yellow birch	22	—	—	22	—	—	—	—	—	—	—	—	—
Hard maple	2,614	1,435	638	200	150	29	79	83	—	—	—	—	—
Soft maple	75,567	48,055	14,050	5,243	2,652	1,802	1,482	732	620	433	196	302	—
Beech	5,837	4,102	722	373	137	78	162	28	86	42	30	49	28
Sweetgum	332,479	206,810	63,626	26,758	15,136	9,245	5,030	2,848	1,452	858	284	432	—
Tupelo and blackgum	38,204	22,142	8,814	2,981	1,637	1,063	669	531	239	86	42	—	—
Ash	7,170	3,597	—	1,157	498	405	499	315	276	85	51	248	39
Cottonwood	115	—	—	29	29	—	—	29	—	—	—	28	—
Basswood	251	—	—	147	31	17	28	28	—	—	—	—	—
Yellow-poplar	122,871	71,311	17,343	10,268	6,149	4,235	3,909	2,923	2,432	1,620	1,101	1,505	75
Bay and magnolia	1,224	746	—	219	131	102	—	26	—	—	—	—	—
Black cherry	43,055	27,732	11,166	2,271	1,130	567	189	—	—	—	—	—	—
Black walnut	733	346	—	139	—	54	58	25	52	—	31	28	—
Sycamore	1,694	337	396	116	235	135	136	135	117	—	87	—	—
Elm	26,371	14,640	5,810	3,022	1,421	667	467	163	81	74	26	—	—
Other Eastern hardwoods	26,311	19,522	3,395	1,354	875	335	380	137	92	60	22	139	—
Total hardwoods	1,070,542	638,774	186,451	88,794	53,440	35,714	24,728	15,894	11,051	6,895	3,536	4,915	350
All species	1,733,286	929,571	338,639	183,112	108,620	65,780	43,204	26,001	17,519	9,999	4,664	5,800	377

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

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

Table 19—Volume of live trees on timberland by species and diameter class, North Central Georgia, 1998

Species	All classes	Diameter class (inches at breast height) 5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 and larger
					Million cubic feet						
Softwood											
Longleaf pine	17.3	0.4	1.1	2.3	1.2	1.6	9.4	1.3	—	—	—
Slash pine	3.5	—	—	0.3	0.4	—	1.0	1.8	—	—	—
Shortleaf pine	301.2	35.7	64.4	66.7	60.7	29.8	28.7	8.3	4.3	2.6	—
Loblolly pine	1,814.9	175.0	252.2	274.9	286.2	267.8	231.1	160.8	76.5	86.1	4.3
Virginia pine	89.7	5.7	11.0	20.1	28.9	14.3	5.5	4.3	—	—	—
Redcedars	12.2	2.2	2.7	2.3	2.3	1.6	—	1.0	—	—	—
Total softwoods	2,238.7	218.9	331.4	366.5	379.8	315.1	275.7	177.4	80.8	88.7	4.3
Hardwood											
Select white oaks	480.9	22.3	36.8	55.2	58.7	58.5	69.5	60.5	40.2	65.0	14.3
Select red oaks	119.3	4.2	11.1	6.3	14.2	17.2	26.8	10.2	9.5	19.8	—
Other white oaks	176.0	11.3	16.8	26.6	29.1	17.9	18.1	25.8	4.5	20.6	5.3
Other red oaks	788.7	44.8	61.6	82.4	93.9	102.8	96.8	87.2	57.6	127.1	34.7
Hickory	215.6	17.9	25.9	36.8	35.6	26.5	20.6	18.0	12.0	22.5	—
Yellow birch	0.1	0.1	—	—	—	—	—	—	—	—	—
Hard maple	6.2	0.7	0.7	0.3	1.8	2.8	—	—	—	—	—
Soft maple	217.1	21.2	20.4	27.4	34.0	23.4	24.8	20.8	12.8	31.1	1.4
Beech	28.0	1.3	0.7	1.5	4.8	1.4	2.5	2.3	2.2	7.0	4.4
Sweetgum	670.9	71.3	97.1	115.9	105.3	92.4	62.3	51.8	21.0	46.5	7.3
Tupelo and blackgum	78.4	8.4	9.6	13.3	12.7	16.9	10.2	4.3	3.0	—	—
Ash	95.2	4.0	3.5	6.0	13.5	9.5	12.5	4.9	5.0	27.1	9.1
Cottonwood	3.5	0.1	0.1	—	—	0.5	—	—	—	2.8	—
Basswood	3.2	0.6	0.8	0.5	0.4	0.9	—	—	—	—	—
Yellow-poplar	767.3	33.0	43.0	54.2	80.8	90.1	106.5	91.6	83.8	168.9	15.4
Bay and magnolia	4.8	0.9	1.2	0.9	0.5	1.3	—	—	—	—	—
Black cherry	35.7	11.5	9.4	7.7	4.8	—	1.1	1.2	—	—	—
Black walnut	10.2	0.4	0.2	0.6	1.2	0.6	2.0	—	2.4	2.9	—
Sycamore	19.8	0.7	1.6	1.5	2.8	3.7	3.9	—	5.6	—	—
Black locust	0.1	0.1	—	—	—	—	—	—	—	—	—
Elm	48.3	7.3	8.8	8.8	9.8	4.4	3.8	3.5	1.8	—	—
Other Eastern hardwoods	138.5	39.9	30.9	19.0	15.7	9.7	4.9	3.1	1.4	14.0	—
Total hardwoods	3,908.2	301.9	380.2	464.7	519.7	480.7	466.2	385.1	262.8	555.2	91.8
All species	6,146.9	520.8	711.6	831.2	899.5	795.8	742.0	562.5	343.6	643.8	96.1

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

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

Table 20—Volume of growing-stock trees on timberland by species and diameter class, North Central Georgia, 1998

Species	All classes	Diameter class (inches at breast height) 5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 and larger
					Million cubic feet						
Softwood											
Longleaf pine	17.3	0.4	1.1	2.3	1.2	1.6	9.4	1.3	—	—	—
Slash pine	3.5	—	—	0.3	0.4	—	1.0	1.8	—	—	—
Shortleaf pine	300.6	35.6	64.3	66.4	60.7	29.8	28.7	8.3	4.3	2.6	—
Loblolly pine	1,802.5	173.2	250.0	272.0	282.0	267.0	230.5	160.8	76.5	86.1	4.3
Virginia pine	89.6	5.7	11.0	19.9	28.9	14.3	5.5	4.3	—	—	—
Redcedars	11.0	2.1	2.6	2.3	2.3	1.6	—	—	—	—	—
Total softwoods	2,224.4	216.9	329.0	363.2	375.6	314.4	275.1	176.4	80.8	88.7	4.3
Hardwood											
Select white oaks	464.5	21.7	36.4	54.3	57.5	58.1	69.5	60.5	40.2	56.6	9.8
Select red oaks	119.1	4.1	11.1	6.2	14.2	17.2	26.8	10.2	9.5	19.8	—
Other white oaks	169.8	11.0	16.5	26.1	28.3	17.6	17.6	23.9	4.5	19.1	5.3
Other red oaks	761.1	41.7	59.4	80.6	90.7	102.2	92.1	87.0	54.7	119.4	33.4
Hickory	206.1	16.6	25.7	35.2	34.3	25.8	19.0	18.0	10.3	21.3	—
Yellow birch	0.1	0.1	—	—	—	—	—	—	—	—	—
Hard maple	4.9	0.4	0.6	0.3	1.3	2.2	—	—	—	—	—
Soft maple	175.2	15.4	15.5	20.6	26.1	19.0	22.4	19.6	11.4	25.1	—
Beech	25.3	1.1	0.7	0.8	3.4	1.0	2.5	2.3	2.2	7.0	4.4
Sweetgum	647.4	66.4	93.6	113.5	103.9	89.7	62.3	50.6	21.0	46.5	—
Tupelo and blackgum	72.7	7.0	9.2	12.5	11.5	15.7	9.6	4.3	3.0	—	—
Ash	89.3	3.3	3.4	5.6	11.3	9.5	11.6	4.9	3.5	27.0	9.1
Cottonwood	3.5	0.1	0.1	—	—	0.5	—	—	—	2.8	—
Basswood	2.3	0.5	0.2	0.3	0.4	0.9	—	—	—	—	—
Yellow-poplar	761.7	32.1	42.6	53.4	80.4	90.0	105.5	90.3	83.1	168.9	15.4
Bay and magnolia	3.0	0.6	0.8	0.9	—	0.7	—	—	—	—	—
Black cherry	22.5	6.5	6.5	6.1	3.5	—	—	—	—	—	—
Black walnut	9.8	0.4	—	0.6	0.9	0.6	2.0	—	2.4	2.9	—
Sycamore	19.5	0.5	1.5	1.5	2.8	3.7	3.9	—	5.6	—	—
Elm	43.9	6.7	7.9	8.0	8.4	4.4	3.2	3.5	1.8	—	—
Other Eastern hardwoods	44.0	3.9	5.3	3.8	7.1	3.4	2.8	2.4	1.4	14.0	—
Total hardwoods	3,645.7	240.0	337.1	430.1	485.9	462.2	450.8	377.4	254.5	530.5	77.3
All species	5,870.2	456.9	666.1	793.3	861.5	776.5	725.9	553.8	335.4	619.1	81.6

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

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

Table 21—Volume in the saw-log portion of sawtimber trees on timberland by species and diameter class, North Central Georgia, 1998

Species	All classes	Diameter class (inches at breast height) 9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 and larger
				Million cubic feet					
Softwood									
Longleaf pine	14.9	1.9	1.1	1.5	9.1	1.2	—	—	—
Slash pine	3.3	0.2	0.4	—	0.9	1.8	—	—	—
Shortleaf pine	179.9	53.6	54.9	28.4	28.0	8.2	4.2	2.6	—
Loblolly pine	1,264.8	210.5	253.7	253.1	223.9	158.2	75.8	85.2	4.3
Virginia pine	64.8	16.2	25.9	13.3	5.2	4.1	—	—	—
Redcedars	5.5	1.9	2.1	1.5	—	—	—	—	—
Total softwoods	1,533.1	284.3	338.2	297.9	267.2	173.5	80.0	87.8	4.3
Hardwood									
Select white oaks	305.6	—	41.2	48.0	61.0	54.9	37.3	53.8	9.5
Select red oaks	82.2	—	10.2	13.8	22.6	8.9	8.3	18.5	—
Other white oaks	99.1	—	20.6	14.4	15.4	21.6	4.1	17.9	5.0
Other red oaks	503.6	—	64.4	83.9	80.6	78.9	50.7	112.8	32.2
Hickory	108.0	—	24.7	21.1	16.6	16.2	9.5	20.0	—
Hard maple	2.7	—	0.9	1.8	—	—	—	—	—
Soft maple	102.6	—	17.8	15.1	19.1	17.3	10.3	23.1	—
Beech	19.8	—	2.5	0.8	2.1	2.0	2.0	6.4	4.0
Sweetgum	314.4	—	72.8	74.3	55.5	46.7	19.9	45.1	—
Tupelo and blackgum	35.3	—	7.8	12.7	8.3	3.8	2.7	—	—
Ash	68.4	—	8.2	7.7	10.1	4.5	3.3	25.8	8.8
Cottonwood	3.1	—	—	0.4	—	—	—	2.7	—
Basswood	1.1	—	0.3	0.8	—	—	—	—	—
Yellow-poplar	565.5	—	55.8	74.0	94.0	83.4	78.8	164.2	15.2
Bay and magnolia	0.6	—	—	0.6	—	—	—	—	—
Black cherry	2.5	—	2.5	—	—	—	—	—	—
Black walnut	7.6	—	0.7	0.5	1.7	—	2.1	2.7	—
Sycamore	13.0	—	1.8	2.9	3.2	—	5.1	—	—
Elm	16.8	—	5.8	3.5	2.8	3.0	1.6	—	—
Other Eastern hardwoods	26.8	—	5.0	2.8	2.4	2.1	1.3	13.2	—
Total hardwoods	2,278.8	—	343.0	379.1	395.3	343.5	237.0	506.1	74.8
All species	3,812.0	284.3	681.2	677.0	662.5	517.0	317.1	593.9	79.1

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

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

Table 22—Volume of sawtimber on timberland by species and diameter class, North Central Georgia, 1998

Species	All classes	Diameter class (inches at breast height) 9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 and larger
				Million board feet					
Softwood									
Longleaf pine	85.2	9.1	6.0	8.5	53.9	7.8	—	—	—
Slash pine	19.1	0.9	1.8	—	5.5	11.0	—	—	—
Shortleaf pine	929.4	249.0	273.1	154.0	160.5	49.5	26.8	16.6	—
Loblolly pine	7,047.0	979.3	1,286.6	1,392.3	1,313.7	974.2	488.5	581.2	31.3
Virginia pine	313.7	73.2	123.3	66.7	27.6	22.9	—	—	—
Redcedars	29.5	9.6	11.1	8.8	—	—	—	—	—
Total softwoods	8,424.0	1,321.0	1,701.9	1,630.2	1,561.1	1,065.3	515.3	597.8	31.3
Hardwood									
Select white oaks	1,595.3	—	196.3	232.7	307.7	287.9	202.9	308.4	59.4
Select red oaks	430.3	—	47.9	66.1	113.4	46.1	44.3	112.5	—
Other white oaks	516.9	—	99.7	71.1	79.0	114.0	22.5	101.4	29.4
Other red oaks	2,765.3	—	326.8	423.2	421.4	425.2	285.2	670.2	213.3
Hickory	566.8	—	117.9	103.5	85.5	87.5	53.5	118.8	—
Hard maple	13.4	—	4.5	8.9	—	—	—	—	—
Soft maple	528.3	—	85.3	73.1	95.4	90.0	55.5	129.0	—
Beech	91.7	—	12.3	3.7	9.8	9.1	9.0	29.2	18.5
Sweetgum	1,718.7	—	371.0	385.9	301.2	264.1	116.9	279.6	—
Tupelo and blackgum	174.3	—	36.6	61.1	41.5	20.1	15.0	—	—
Ash	370.2	—	38.1	36.4	50.7	23.4	17.6	148.8	55.1
Cottonwood	18.4	—	—	2.0	—	—	—	16.4	—
Basswood	5.2	—	1.4	3.8	—	—	—	—	—
Yellow-poplar	3,323.8	—	288.1	391.0	522.8	484.1	477.3	1,055.8	104.9
Bay and magnolia	2.9	—	—	2.9	—	—	—	—	—
Black cherry	12.0	—	12.0	—	—	—	—	—	—
Black walnut	35.4	—	3.1	2.2	7.7	—	9.8	12.6	—
Sycamore	67.5	—	9.1	14.4	16.3	—	27.8	—	—
Elm	84.2	—	28.5	17.3	13.9	15.8	8.7	—	—
Other Eastern hardwoods	131.8	—	24.8	13.6	11.5	9.9	6.3	65.5	—
Total hardwoods	12,452.3	—	1,703.6	1,912.8	2,077.7	1,877.2	1,352.2	3,048.3	480.6
All species	20,876.3	1,321.0	3,405.4	3,543.1	3,638.8	2,942.5	1,867.5	3,646.0	511.9

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

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

Table 23—Volume of sawtimber on timberland by species, size class, and tree grade, North Central Georgia, 1998

Species	All size classes					Trees ≥15.0 inches d.b.h.				
	All grades	Tree grade 1	2	3	4	All grades	Tree grade 1	2	3	4
	Million board feet									
Softwood										
Longleaf pine	85.2	23.9	26.8	34.6	—	61.7	22.0	22.3	17.4	—
Slash pine	19.1	—	11.0	8.2	—	16.5	—	11.0	5.5	—
Shortleaf pine	929.4	199.2	274.5	455.7	—	253.4	52.0	78.5	123.0	—
Loblolly pine	7,047.0	1,857.9	1,759.5	3,429.7	—	3,388.8	1,219.5	731.5	1,437.8	—
Virginia pine	313.7	6.8	6.1	300.9	—	50.5	6.8	—	43.7	—
Redcedars	29.5	—	—	19.9	9.6	—	—	—	—	—
Total softwoods	8,424.0	2,087.7	2,077.8	4,248.9	9.6	3,770.8	1,300.2	843.3	1,627.4	—
Hardwood										
Select white oaks	1,595.3	372.6	483.2	636.8	102.7	1,166.3	372.6	389.5	332.5	71.7
Select red oaks	430.3	109.7	173.3	128.3	19.0	316.3	109.7	148.6	50.9	7.0
Other white oaks	516.9	60.1	114.4	280.2	62.2	346.2	60.1	107.8	146.4	31.8
Other red oaks	2,765.3	329.5	918.9	1,135.1	381.8	2,015.3	329.5	839.4	620.7	225.7
Hickory	566.8	91.2	131.1	289.7	54.8	345.3	91.2	116.3	107.7	30.1
Hard maple	13.4	—	—	9.1	4.3	—	—	—	—	—
Soft maple	528.3	23.8	95.0	289.9	119.6	369.9	23.8	95.0	173.5	77.5
Beech	91.7	—	13.8	68.3	9.6	75.6	—	13.8	56.0	5.8
Sweetgum	1,718.7	238.9	523.0	906.7	50.1	961.8	238.9	368.9	336.7	17.3
Tupelo and blackgum	174.3	9.0	43.7	97.6	24.0	76.6	9.0	27.2	30.4	10.1
Ash	370.2	100.8	128.1	131.4	9.9	295.7	100.8	117.3	73.1	4.6
Cottonwood	18.4	—	16.4	2.0	—	16.4	—	16.4	—	—
Basswood	5.2	—	3.8	1.4	—	—	—	—	—	—
Yellow-poplar	3,323.8	774.6	1,426.4	949.5	173.3	2,644.7	774.6	1,212.8	548.2	109.0
Bay and magnolia	2.9	—	—	2.9	—	—	—	—	—	—
Black cherry	12.0	—	—	8.2	3.8	—	—	—	—	—
Black walnut	35.4	12.6	14.5	7.0	1.3	30.0	12.6	14.5	3.0	—
Sycamore	67.5	—	31.7	32.0	3.8	44.0	—	28.6	13.3	2.2
Elm	84.2	—	18.9	53.4	11.9	38.4	—	18.9	19.5	—
Other Eastern hardwoods	131.8	31.6	23.3	71.3	5.6	93.4	31.6	23.3	38.5	—
Total hardwoods	12,452.3	2,154.4	4,159.5	5,100.9	1,037.7	8,835.9	2,154.4	3,538.3	2,550.5	592.8
All species	20,876.3	4,242.1	6,237.3	9,349.7	1,047.2	12,606.8	3,454.5	4,381.5	4,177.9	592.8

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

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

Table 24—Volume of growing stock on timberland by county and species group, North Central Georgia, 1998

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
	Million cubic feet						
Banks	149.1	35.9	35.9	—	113.2	42.7	70.5
Barrow	73.5	29.0	28.9	0.1	44.5	24.9	19.6
Carroll	291.4	105.4	105.4	—	186.0	79.7	106.3
Clarke	76.5	31.2	30.8	0.3	45.3	25.3	20.0
Clayton	36.9	10.0	10.0	—	26.9	11.9	15.0
Cobb	130.5	70.8	70.8	—	59.7	37.3	22.4
Coweta	330.3	150.4	150.4	—	179.9	105.1	74.8
De Kalb	117.8	61.3	61.3	0.0	56.5	16.7	39.8
Douglas	182.9	52.2	52.2	—	130.6	56.3	74.4
Elbert	234.9	88.0	85.5	2.5	146.9	48.2	98.7
Fayette	99.3	45.4	45.4	—	53.9	34.5	19.4
Forsyth	163.2	51.0	51.0	—	112.2	57.5	54.6
Franklin	145.7	48.1	46.4	1.8	97.6	23.7	73.9
Fulton	372.3	147.2	147.2	0.0	225.0	117.9	107.1
Gwinnett	227.6	84.4	84.4	—	143.2	101.5	41.7
Hall	240.7	85.1	84.9	0.1	155.6	45.9	109.7
Haralson	193.1	81.5	81.5	—	111.6	50.8	60.8
Hart	124.7	20.8	19.1	1.6	104.0	42.6	61.4
Heard	169.0	88.6	88.0	0.6	80.5	43.5	37.0
Henry	198.8	89.5	89.5	—	109.3	59.9	49.4
Jackson	161.8	38.4	37.6	0.8	123.5	75.8	47.7
Madison	178.7	78.7	78.3	0.5	99.9	63.9	36.0
Meriwether	234.2	116.4	116.1	0.2	117.8	58.3	59.5
Newton	240.5	96.0	95.0	1.0	144.5	44.0	100.5
Oconee	103.0	25.9	25.3	0.6	77.2	30.4	46.7
Oglethorpe	309.9	88.4	87.9	0.5	221.5	126.6	95.0
Paulding	203.0	60.4	60.4	—	142.6	64.4	78.3
Polk	131.3	54.3	54.2	0.1	77.0	11.2	65.8
Rockdale	69.3	32.6	32.5	0.1	36.7	20.8	15.9
Spalding	95.9	35.7	35.6	0.0	60.3	35.5	24.8
Troup	334.1	136.3	136.3	—	197.7	107.2	90.6
Walton	250.4	85.6	85.5	0.1	164.7	93.6	71.1
Total	5,870.2	2,224.4	2,213.4	11.0	3,645.7	1,757.4	1,888.3

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

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

Table 25—Volume of live trees on timberland by county and species group, North Central Georgia, 1998

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
	Million cubic feet						
Banks	157.7	35.9	35.9	—	121.8	45.2	76.6
Barrow	82.0	29.7	29.6	0.1	52.3	30.5	21.9
Carroll	308.9	106.5	106.5	—	202.4	84.3	118.1
Clarke	79.7	31.2	30.8	0.3	48.5	27.0	21.5
Clayton	37.4	10.0	10.0	—	27.4	12.1	15.3
Cobb	134.9	70.9	70.9	—	64.0	40.3	23.7
Coweta	341.3	151.2	151.2	—	190.2	107.1	83.0
De Kalb	122.1	61.9	61.8	0.0	60.2	18.5	41.7
Douglas	195.7	52.2	52.2	—	143.4	59.2	84.2
Elbert	245.1	89.6	87.1	2.6	155.4	50.7	104.8
Fayette	102.4	47.3	47.3	—	55.1	35.1	20.1
Forsyth	173.7	51.0	51.0	—	122.7	61.3	61.4
Franklin	156.6	48.1	46.4	1.8	108.5	26.1	82.4
Fulton	380.8	148.7	148.7	0.0	232.1	119.3	112.8
Gwinnett	235.4	84.5	84.5	—	150.9	104.5	46.4
Hall	250.9	85.1	84.9	0.1	165.8	48.6	117.2
Haralson	200.2	81.6	81.6	—	118.6	52.3	66.3
Hart	133.2	20.8	19.1	1.6	112.4	46.3	66.1
Heard	173.2	89.3	88.8	0.6	83.9	43.6	40.3
Henry	202.0	89.5	89.5	—	112.5	60.3	52.2
Jackson	182.3	39.6	37.8	1.8	142.6	88.6	54.0
Madison	183.2	78.7	78.3	0.5	104.4	66.0	38.5
Meriwether	252.4	117.1	116.9	0.2	135.3	64.9	70.4
Newton	250.5	96.2	95.1	1.0	154.3	50.5	103.7
Oconee	108.7	25.9	25.3	0.6	82.8	32.8	49.9
Oglethorpe	320.4	88.4	87.9	0.5	232.0	131.0	101.1
Paulding	217.7	61.6	61.6	—	156.1	68.0	88.1
Polk	140.4	54.6	54.5	0.1	85.7	11.4	74.3
Rockdale	76.1	33.0	32.9	0.1	43.1	26.5	16.6
Spalding	103.0	36.5	36.4	0.0	66.5	37.3	29.2
Troup	341.8	136.5	136.5	—	205.3	108.9	96.4
Walton	257.4	85.7	85.6	0.1	171.7	97.5	74.2
Total	6,146.9	2,238.7	2,226.5	12.2	3,908.2	1,855.9	2,052.3

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

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

Table 26—Volume of sawtimber on timberland by county and species group, North Central Georgia, 1998

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
				Million board feet			
Banks	511.5	119.8	119.8	—	391.8	154.3	237.4
Barrow	284.5	125.5	125.5	—	159.0	90.8	68.2
Carroll	999.7	401.9	401.9	—	597.8	238.4	359.4
Clarke	294.2	126.7	125.1	1.6	167.5	89.6	77.8
Clayton	117.8	49.5	49.5	—	68.2	26.5	41.7
Cobb	519.3	307.5	307.5	—	211.8	130.6	81.2
Coweta	1,051.8	499.0	499.0	—	552.8	331.2	221.6
De Kalb	539.9	297.9	297.9	—	242.0	58.5	183.6
Douglas	698.8	242.5	242.5	—	456.3	186.5	269.8
Elbert	757.8	270.7	267.7	3.0	487.1	120.4	366.7
Fayette	347.2	192.9	192.9	—	154.4	106.5	47.9
Forsyth	654.7	230.2	230.2	—	424.5	242.2	182.3
Franklin	532.5	202.7	195.1	7.7	329.8	49.1	280.6
Fulton	1,613.2	682.5	682.5	—	930.7	472.7	458.0
Gwinnett	901.9	376.8	376.8	—	525.1	416.9	108.3
Hall	876.1	303.0	303.0	—	573.1	156.4	416.6
Haralson	668.4	303.0	303.0	—	365.4	202.1	163.3
Hart	391.9	62.3	56.0	6.4	329.6	138.8	190.8
Heard	440.5	229.0	227.9	1.1	211.4	121.1	90.3
Henry	714.5	366.5	366.5	—	348.0	200.7	147.2
Jackson	601.5	133.3	131.0	2.2	468.3	290.4	177.9
Madison	541.7	258.8	257.6	1.2	282.9	205.5	77.4
Meriwether	608.5	274.5	274.5	—	334.0	154.6	179.4
Newton	1,005.3	411.1	407.6	3.5	594.3	145.0	449.2
Oconee	353.0	106.4	103.6	2.8	246.6	92.7	153.9
Oglethorpe	1,077.9	215.5	215.5	—	862.4	481.6	380.8
Paulding	673.9	210.5	210.5	—	463.3	202.0	261.3
Polk	379.5	191.1	191.1	—	188.4	19.4	169.0
Rockdale	248.7	152.3	152.3	—	96.4	48.6	47.8
Spalding	343.6	172.1	172.1	—	171.6	95.1	76.4
Troup	1,106.4	492.0	492.0	—	614.4	341.5	272.9
Walton	1,019.9	416.2	416.2	—	603.7	336.5	267.2
Total	20,876.3	8,424.0	8,394.5	29.5	12,452.3	5,946.3	6,506.1

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

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

Table 27—Volume of timber on timberland by class of timber and species group, North Central Georgia, 1998

Class of timber	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
				Million cubic feet			
Sawtimber trees							
Saw-log portion	3,812.0	1,533.1	1,527.6	5.5	2,278.8	1,057.1	1,221.7
Upper-stem portion[a]	505.1	145.4	144.6	0.8	359.7	167.0	192.6
Total	4,317.1	1,678.5	1,672.2	6.3	2,638.5	1,224.2	1,414.4
Poletimber trees	1,553.1	545.9	541.2	4.7	1,007.2	533.2	474.0
All growing-stock trees	5,870.2	2,224.4	2,213.4	11.0	3,645.7	1,757.4	1,888.3
Rough trees							
Sawtimber size	108.5	9.9	8.8	1.0	98.6	36.1	62.5
Poletimber size	140.7	4.5	4.3	0.2	136.2	45.1	91.1
Total	249.1	14.3	13.1	1.2	234.8	81.2	153.6
Rotten trees							
Sawtimber size	24.2	—	—	—	24.2	15.3	9.0
Poletimber size	3.4	—	—	—	3.4	2.0	1.4
Total	27.6	—	—	—	27.6	17.3	10.3
Salvable dead trees							
Sawtimber size	5.2	1.4	1.4	—	3.9	—	3.9
Poletimber size	—	—	—	—	—	—	—
Total	5.2	1.4	1.4	—	3.9	—	3.9
All classes	6,152.2	2,240.1	2,227.9	12.2	3,912.0	1,855.9	2,056.1

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

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

[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, North Central Georgia, 1998

Ownership class	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
				Live trees *(million cubic feet)*			
National forest	12.6	—	—	—	12.6	4.8	7.8
Other public	294.4	108.9	108.6	0.3	185.5	61.3	124.2
Forest industry	362.3	207.5	207.4	0.2	154.7	90.0	64.7
Forest industry-leased	29.4	16.0	16.0	—	13.4	8.4	5.1
Nonindustrial private	5,448.3	1,906.4	1,894.6	11.8	3,541.9	1,691.5	1,850.4
All classes	6,146.9	2,238.7	2,226.5	12.2	3,908.2	1,855.9	2,052.3
				Growing-stock trees *(million cubic feet)*			
National forest	11.7	—	—	—	11.7	4.3	7.5
Other public	276.9	107.7	107.5	0.3	169.2	55.1	114.1
Forest industry	352.1	206.0	205.8	0.2	146.1	87.5	58.6
Forest industry-leased	25.8	15.7	15.7	—	10.1	5.9	4.2
Nonindustrial private	5,203.6	1,894.9	1,884.4	10.6	3,308.6	1,604.7	1,703.9
All classes	5,870.2	2,224.4	2,213.4	11.0	3,645.7	1,757.4	1,888.3

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

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

Table 29—Volume of sawtimber on timberland by ownership class, species group, and size class, North Central Georgia, 1998

Ownership class	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
				All size classes *(million board feet)*			
National forest	49.6	—	—	—	49.6	17.2	32.4
Other public	1,083.7	439.9	439.9	—	643.8	172.7	471.1
Forest industry	937.1	522.8	522.8	—	414.3	237.6	176.7
Forest industry-leased	59.5	32.4	32.4	—	27.1	18.7	8.4
Nonindustrial private	18,746.4	7,428.8	7,399.4	29.5	11,317.5	5,500.1	5,817.4
All classes	20,876.3	8,424.0	8,394.5	29.5	12,452.3	5,946.3	6,506.1
				Trees ≥ 15.0 inches d.b.h. *(million board feet)*			
National forest	31.0	—	—	—	31.0	7.7	23.3
Other public	692.5	215.5	215.5	—	477.0	100.9	376.1
Forest industry	419.5	151.6	151.6	—	267.8	153.1	114.7
Forest industry-leased	15.8	6.2	6.2	—	9.6	9.6	—
Nonindustrial private	11,448.1	3,397.5	3,397.5	—	8,050.6	3,880.5	4,170.0
All classes	12,606.8	3,770.8	3,770.8	—	8,835.9	4,151.9	4,684.1

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

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

Table 30—Volume of growing stock on timberland by forest-type group, stand origin, and species group, North Central Georgia, 1998

Forest-type group and stand origin	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
				Million cubic feet			
Softwood types							
Longleaf–slash pine							
Planted	—	—	—	—	—	—	—
Natural	5.5	4.2	4.2	—	1.3	0.2	1.2
Total	5.5	4.2	4.2	—	1.3	0.2	1.2
Loblolly–shortleaf pine							
Planted	409.9	379.7	379.7	0.0	30.2	22.9	7.3
Natural	1,574.2	1,272.7	1,268.0	4.7	301.5	222.8	78.7
Total	1,984.0	1,652.4	1,647.7	4.7	331.6	245.7	86.0
Total softwoods	1,989.5	1,656.6	1,651.9	4.7	333.0	245.8	87.1
Hardwood types							
Oak–pine							
Planted	11.5	7.3	7.3	—	4.3	0.9	3.4
Natural	750.2	331.7	329.3	2.4	418.5	206.5	212.0
Total	761.7	339.0	336.6	2.4	422.8	207.3	215.4
Oak–hickory	2,539.5	204.9	201.0	3.9	2,334.5	965.8	1,368.8
Oak–gum–cypress	381.0	20.8	20.8	—	360.2	238.9	121.4
Elm–ash–cottonwood	197.3	2.6	2.6	—	194.7	99.3	95.4
Total hardwoods	3,879.5	567.3	561.0	6.3	3,312.2	1,511.2	1,801.0
Nonstocked	1.1	0.6	0.6	—	0.6	0.3	0.2
All groups	5,870.2	2,224.4	2,213.4	11.0	3,645.7	1,757.4	1,888.3

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

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

Table 31—Average basal area of live trees per acre on timberland by ownership class, species group, and d.b.h., North Central Georgia, 1998

Ownership class and species group	All tree sizes	D.b.h. (inches)			
		1.0-4.9	5.0-10.9	11.0-14.9	≥15.0
	Square feet/acre				
National forest					
Softwood	—	—	—	—	—
Hardwood	106.0	14.1	15.5	35.3	41.0
Total	106.0	14.1	15.5	35.3	41.0
Other public					
Softwood	39.7	6.3	14.0	9.7	9.7
Hardwood	67.8	15.9	19.4	15.7	16.8
Total	107.5	22.3	33.4	25.3	26.5
Forest industry					
Softwood	40.5	5.4	25.7	6.3	3.1
Hardwood	34.3	10.4	12.4	6.2	5.4
Total	74.9	15.8	38.2	12.5	8.5
Forest industry-leased					
Softwood	31.8	4.6	23.9	2.3	0.9
Hardwood	32.4	5.9	10.6	12.1	3.8
Total	64.2	10.5	34.6	14.4	4.7
Nonindustrial private					
Softwood	32.7	4.6	13.4	7.6	7.2
Hardwood	60.8	11.7	18.6	10.9	19.6
Total	93.6	16.3	32.0	18.5	26.7
All classes					
Softwood	33.6	4.7	14.5	7.5	6.9
Hardwood	58.8	11.8	18.1	10.8	18.2
Total	92.4	16.5	32.6	18.3	25.1

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

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

Table 32—Average net annual growth of growing stock on timberland by county and species group, North Central Georgia, 1989-1997

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
	Million cubic feet						
Banks	4.7	-0.0	-0.1	0.0	4.7	2.0	2.7
Barrow	2.8	1.2	1.2	—	1.7	0.7	1.0
Carroll	11.8	7.2	7.2	—	4.7	1.9	2.8
Clarke	3.3	1.0	1.0	—	2.3	1.7	0.6
Clayton	2.0	1.0	1.0	—	1.0	0.2	0.9
Cobb	6.6	4.2	4.2	—	2.5	1.7	0.8
Coweta	15.2	10.2	10.2	—	5.1	1.9	3.2
De Kalb	4.8	1.7	1.7	—	3.2	1.4	1.7
Douglas	5.4	1.4	1.4	—	4.0	2.2	1.8
Elbert	6.6	3.8	3.7	0.1	2.8	0.8	2.0
Fayette	4.5	2.5	2.5	—	2.0	0.8	1.2
Forsyth	5.3	1.0	1.0	—	4.3	1.7	2.6
Franklin	6.6	2.2	2.2	0.0	4.4	1.7	2.7
Fulton	11.3	4.6	4.6	—	6.7	4.2	2.5
Gwinnett	13.0	5.1	5.1	—	8.0	5.5	2.5
Hall	6.6	0.7	0.7	0.0	5.9	2.1	3.8
Haralson	11.3	7.2	7.2	—	4.1	2.5	1.6
Hart	3.5	1.1	1.0	0.1	2.4	0.5	1.9
Heard	10.3	6.1	6.1	—	4.2	2.1	2.1
Henry	7.9	5.6	5.6	—	2.4	1.5	0.9
Jackson	5.7	0.8	0.7	0.0	5.0	3.0	2.0
Madison	6.9	1.9	1.8	0.1	5.0	2.9	2.1
Meriwether	23.3	17.9	17.8	0.1	5.4	2.7	2.7
Newton	9.8	7.3	7.2	0.1	2.4	0.3	2.2
Oconee	1.4	-1.3	-1.3	—	2.8	1.2	1.5
Oglethorpe	14.4	9.7	9.7	0.0	4.7	3.0	1.7
Paulding	11.1	5.6	5.6	—	5.5	3.1	2.5
Polk	10.0	7.3	7.3	—	2.7	0.3	2.3
Rockdale	2.2	1.1	1.1	—	1.0	0.4	0.7
Spalding	6.0	3.7	3.7	—	2.2	1.3	0.9
Troup	14.4	8.6	8.5	0.0	5.9	2.5	3.3
Walton	5.4	0.3	0.3	—	5.1	2.7	2.4
Total	254.3	130.4	129.7	0.7	124.0	60.4	63.6

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

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

Table 33—Average net annual growth of live trees on timberland by county and species group, North Central Georgia, 1989-1997

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
				Million cubic feet			
Banks	4.5	-0.0	-0.1	0.0	4.5	2.2	2.4
Barrow	3.0	1.2	1.2	—	1.8	0.7	1.1
Carroll	12.0	7.2	7.2	—	4.8	1.9	2.9
Clarke	3.4	1.0	1.0	—	2.4	1.8	0.6
Clayton	2.1	1.0	1.0	—	1.1	0.2	0.9
Cobb	6.8	4.2	4.2	—	2.7	1.8	0.8
Coweta	14.5	9.8	9.8	—	4.7	1.3	3.4
De Kalb	4.9	1.7	1.7	—	3.3	1.4	1.8
Douglas	5.1	1.4	1.4	—	3.7	1.9	1.9
Elbert	6.8	3.9	3.7	0.2	3.0	0.8	2.2
Fayette	4.3	2.3	2.3	—	2.0	0.7	1.3
Forsyth	5.5	1.0	1.0	—	4.5	1.7	2.9
Franklin	7.1	2.3	2.3	0.0	4.8	1.8	3.0
Fulton	11.5	4.7	4.7	—	6.9	4.1	2.7
Gwinnett	13.1	4.9	4.9	—	8.2	5.5	2.8
Hall	6.8	0.7	0.7	0.0	6.1	2.2	3.9
Haralson	11.5	7.2	7.2	—	4.3	2.5	1.8
Hart	3.7	1.1	1.0	0.1	2.6	0.7	1.9
Heard	10.7	6.1	6.1	—	4.7	2.2	2.5
Henry	8.1	5.6	5.6	—	2.5	1.5	1.0
Jackson	5.6	0.5	0.7	-0.3	5.1	3.1	2.1
Madison	7.1	2.0	1.8	0.2	5.1	2.9	2.3
Meriwether	23.9	18.0	18.0	0.1	5.9	3.1	2.8
Newton	10.3	7.3	7.2	0.1	2.9	0.7	2.2
Oconee	1.8	-1.3	-1.3	—	3.1	1.5	1.6
Oglethorpe	14.9	9.9	9.9	0.0	5.0	3.3	1.7
Paulding	11.2	5.7	5.7	—	5.5	3.0	2.5
Polk	10.0	7.4	7.4	—	2.5	0.3	2.2
Rockdale	2.2	1.2	1.2	—	1.1	0.4	0.7
Spalding	6.5	3.9	3.9	—	2.6	1.5	1.1
Troup	14.8	8.6	8.6	0.0	6.2	2.8	3.4
Walton	5.2	0.3	0.3	—	4.8	2.5	2.3
Total	259.1	130.5	130.1	0.4	128.6	61.9	66.7

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

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

Table 34—Average net annual growth of sawtimber on timberland by county and species group, North Central Georgia, 1989-1997

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
	Million board feet						
Banks	19.1	1.6	1.6	—	17.5	7.2	10.4
Barrow	15.4	5.3	5.3	—	10.1	4.7	5.4
Carroll	51.9	28.4	28.4	—	23.5	13.5	10.0
Clarke	15.6	5.3	5.3	—	10.3	5.8	4.4
Clayton	10.3	7.3	7.3	—	3.1	-0.4	3.5
Cobb	36.9	28.6	28.6	—	8.3	6.1	2.2
Coweta	56.3	39.8	39.8	—	16.4	5.2	11.3
De Kalb	27.6	13.2	13.2	—	14.5	4.7	9.8
Douglas	28.6	9.0	9.0	—	19.6	10.4	9.2
Elbert	30.6	14.1	13.6	0.6	16.5	5.3	11.2
Fayette	19.3	8.8	8.8	—	10.4	4.2	6.3
Forsyth	24.2	8.2	8.2	—	16.0	7.8	8.2
Franklin	30.6	10.6	10.6	—	20.0	6.7	13.3
Fulton	57.9	27.7	27.7	—	30.2	20.1	10.2
Gwinnett	62.0	27.5	27.5	—	34.4	23.8	10.7
Hall	37.7	6.7	6.7	—	31.0	9.7	21.3
Haralson	37.7	18.6	18.6	—	19.1	11.3	7.8
Hart	19.6	4.4	4.4	—	15.2	3.3	11.9
Heard	33.1	20.1	20.1	—	13.0	8.1	4.9
Henry	33.9	25.3	25.3	—	8.6	5.8	2.9
Jackson	24.5	6.1	5.6	0.6	18.4	8.6	9.8
Madison	25.7	8.3	7.6	0.7	17.4	11.3	6.1
Meriwether	73.2	49.8	49.3	0.5	23.4	10.9	12.4
Newton	42.9	30.4	30.4	—	12.5	1.0	11.5
Oconee	12.5	-3.1	-3.1	—	15.7	8.2	7.5
Oglethorpe	62.6	37.8	37.8	0.0	24.8	16.5	8.3
Paulding	40.6	15.7	15.7	—	24.9	13.4	11.5
Polk	22.3	15.1	15.1	—	7.2	0.0	7.2
Rockdale	11.8	10.8	10.8	—	1.0	0.8	0.2
Spalding	32.6	22.8	22.8	—	9.8	5.5	4.4
Troup	51.7	30.5	30.5	—	21.2	10.2	11.0
Walton	29.3	7.4	7.4	—	21.9	11.3	10.6
Total	1,078.0	541.9	539.5	2.4	536.1	260.8	275.3

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

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

Table 35—Average annual removals of growing stock on timberland by county and species group, North Central Georgia, 1989-1997

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
				Million cubic feet			
Banks	5.5	1.9	1.8	0.1	3.5	2.8	0.7
Barrow	4.1	2.3	2.3	—	1.8	0.7	1.2
Carroll	11.0	6.2	6.2	—	4.8	0.9	3.9
Clarke	0.9	0.9	0.9	—	—	—	—
Clayton	3.6	2.7	2.7	—	0.9	0.5	0.4
Cobb	11.7	8.6	8.6	—	3.0	1.9	1.1
Coweta	5.3	4.7	4.7	—	0.7	0.7	—
De Kalb	1.2	1.2	1.2	—	—	—	—
Douglas	3.6	3.4	3.4	—	0.2	0.1	0.1
Elbert	6.7	2.8	2.7	0.2	3.9	2.6	1.2
Fayette	3.9	3.1	3.1	—	0.7	0.6	0.2
Forsyth	6.1	2.5	2.5	—	3.6	1.4	2.2
Franklin	4.5	3.0	3.0	—	1.5	—	1.5
Fulton	14.9	11.3	11.3	—	3.6	1.0	2.6
Gwinnett	13.3	7.9	7.9	—	5.4	2.6	2.8
Hall	1.3	0.7	0.7	—	0.6	0.4	0.2
Haralson	18.7	9.7	9.7	—	9.0	4.3	4.7
Hart	0.2	—	—	—	0.2	—	0.2
Heard	10.2	6.8	6.8	—	3.4	2.4	1.1
Henry	8.0	5.2	5.2	—	2.9	1.4	1.5
Jackson	8.0	7.4	7.4	—	0.7	—	0.7
Madison	1.9	1.5	1.5	—	0.4	0.2	0.2
Meriwether	21.1	16.7	16.7	—	4.5	2.3	2.1
Newton	7.7	5.8	5.8	—	1.9	0.5	1.4
Oconee	4.4	2.7	2.7	—	1.7	0.4	1.3
Oglethorpe	23.0	19.8	19.4	0.4	3.2	1.7	1.5
Paulding	8.9	7.8	7.8	—	1.1	0.1	1.1
Polk	13.7	11.4	11.4	—	2.3	0.1	2.2
Rockdale	4.2	3.0	3.0	—	1.1	0.7	0.4
Spalding	11.4	10.1	10.1	—	1.3	1.1	0.2
Troup	8.3	5.9	5.9	0.1	2.4	1.4	1.0
Walton	2.7	1.4	1.4	—	1.2	1.2	0.1
Total	249.9	178.5	177.7	0.7	71.5	33.9	37.6

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

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

Table 36—Average annual removals of live trees on timberland by county and species group, North Central Georgia, 1989-1997

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
				Million cubic feet			
Banks	5.8	1.9	1.8	0.1	3.9	3.0	0.9
Barrow	4.1	2.3	2.3	—	1.8	0.7	1.2
Carroll	11.3	6.2	6.2	—	5.1	1.2	4.0
Clarke	1.0	1.0	1.0	—	—	—	—
Clayton	3.9	2.7	2.7	—	1.1	0.7	0.5
Cobb	11.8	8.6	8.6	—	3.2	2.1	1.1
Coweta	5.5	4.7	4.7	—	0.9	0.9	—
De Kalb	1.2	1.2	1.2	—	—	—	—
Douglas	3.6	3.4	3.4	—	0.2	0.1	0.1
Elbert	7.0	2.9	2.7	0.2	4.0	2.8	1.3
Fayette	3.9	3.1	3.1	—	0.7	0.6	0.2
Forsyth	6.1	2.5	2.5	—	3.6	1.4	2.2
Franklin	4.7	3.1	3.1	—	1.6	—	1.6
Fulton	15.7	11.6	11.6	—	4.1	1.3	2.8
Gwinnett	13.5	7.9	7.9	—	5.6	2.7	2.9
Hall	1.3	0.7	0.7	—	0.7	0.4	0.3
Haralson	19.1	9.7	9.7	—	9.3	4.4	5.0
Hart	0.3	—	—	—	0.3	0.1	0.2
Heard	10.7	6.8	6.8	—	3.9	2.7	1.2
Henry	8.3	5.2	5.2	—	3.2	1.4	1.8
Jackson	8.0	7.4	7.4	—	0.7	—	0.7
Madison	2.1	1.7	1.5	0.2	0.4	0.2	0.2
Meriwether	21.7	16.9	16.9	—	4.8	2.6	2.2
Newton	8.1	5.8	5.8	—	2.3	0.8	1.5
Oconee	4.4	2.7	2.7	—	1.7	0.4	1.3
Oglethorpe	24.0	20.6	20.2	0.4	3.4	1.9	1.5
Paulding	9.1	7.9	7.9	—	1.2	0.1	1.1
Polk	14.0	11.5	11.5	—	2.5	0.1	2.4
Rockdale	4.2	3.0	3.0	—	1.1	0.7	0.4
Spalding	12.1	10.8	10.8	—	1.4	1.2	0.2
Troup	8.5	5.9	5.9	0.1	2.5	1.5	1.0
Walton	2.7	1.4	1.4	—	1.3	1.2	0.1
Total	257.7	181.2	180.2	1.0	76.5	37.0	39.5

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

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

Table 37—Average annual removals of sawtimber on timberland by county and species group, North Central Georgia, 1989-1997

County	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
	Million board feet						
Banks	14.7	6.8	6.8	—	8.0	7.8	0.2
Barrow	16.2	9.4	9.4	—	6.8	1.7	5.2
Carroll	37.7	20.8	20.8	—	17.0	2.4	14.6
Clarke	2.4	2.4	2.4	—	—	—	—
Clayton	15.6	13.5	13.5	—	2.0	0.5	1.5
Cobb	51.4	41.0	41.0	—	10.4	8.0	2.4
Coweta	15.3	13.9	13.9	—	1.4	1.4	—
De Kalb	4.3	4.3	4.3	—	—	—	—
Douglas	15.0	14.3	14.3	—	0.8	0.8	—
Elbert	23.4	7.4	7.4	—	16.0	11.5	4.5
Fayette	12.6	11.7	11.7	—	1.0	—	1.0
Forsyth	18.1	8.8	8.8	—	9.4	3.9	5.4
Franklin	19.6	14.0	14.0	—	5.6	—	5.6
Fulton	65.6	52.4	52.4	—	13.2	4.6	8.6
Gwinnett	52.1	30.1	30.1	—	22.0	9.7	12.4
Hall	4.2	3.1	3.1	—	1.1	1.1	—
Haralson	61.2	33.9	33.9	—	27.3	12.8	14.5
Hart	—	—	—	—	—	—	—
Heard	35.3	26.3	26.3	—	9.0	7.7	1.2
Henry	32.5	24.9	24.9	—	7.6	3.4	4.2
Jackson	37.9	35.5	35.5	—	2.4	—	2.4
Madison	5.9	5.9	5.9	—	—	—	—
Meriwether	75.8	63.1	63.1	—	12.6	7.5	5.1
Newton	30.7	24.7	24.7	—	6.1	1.9	4.2
Oconee	16.6	11.1	11.1	—	5.5	1.8	3.7
Oglethorpe	91.5	82.3	80.6	1.7	9.2	2.8	6.4
Paulding	25.0	20.7	20.7	—	4.3	—	4.3
Polk	31.9	29.0	29.0	—	2.9	—	2.9
Rockdale	15.8	13.1	13.1	—	2.7	2.7	—
Spalding	52.4	51.3	51.3	—	1.2	0.5	0.7
Troup	31.8	24.3	24.3	—	7.4	5.8	1.6
Walton	10.3	7.1	7.1	—	3.2	3.2	—
Total	922.9	707.0	705.3	1.7	215.9	103.3	112.5

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

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

Table 38—Average net annual growth and average annual removals of live trees, growing stock, and sawtimber on timberland by species, North Central Georgia, 1989-1997

Species	Live trees		Growing stock		Sawtimber	
	Net annual growth	Annual removals	Net annual growth	Annual removals	Net annual growth	Annual removals
	Million cubic feet				*Million board feet*	
Softwood						
Longleaf pine	0.5	1.4	0.5	1.4	2.9	7.3
Slash pine	0.7	0.5	0.7	0.5	4.9	1.5
Shortleaf pine	-1.6	24.5	-1.6	24.4	15.1	84.6
Loblolly pine	128.0	151.0	127.7	148.6	502.9	600.8
Virginia pine	2.4	2.9	2.4	2.9	13.7	11.1
Redcedars	0.4	1.0	0.7	0.7	2.4	1.7
Total softwoods	130.5	181.2	130.4	178.5	541.9	707.0
Hardwood						
Select white oaks	19.0	8.8	18.9	8.7	78.0	21.3
Select red oaks	4.0	3.3	4.1	3.3	22.7	12.5
Other white oaks	6.6	3.1	6.6	3.0	25.9	4.9
Other red oaks	25.3	17.3	25.4	17.1	111.5	58.1
Hickory	7.0	3.8	6.9	3.8	25.5	11.8
Hard maple	0.3	—	0.3	—	1.2	—
Soft maple	6.6	2.7	5.7	2.2	20.5	7.1
Beech	0.8	0.1	0.7	0.1	2.5	0.5
Sweetgum	21.3	15.4	21.2	14.3	71.3	31.7
Tupelo and blackgum	1.3	1.0	1.1	0.8	5.9	2.5
Ash	0.5	1.0	0.3	0.9	6.1	2.6
Cottonwood	-0.2	—	-0.2	—	-1.2	—
Basswood	0.5	—	0.5	—	—	—
Yellow-poplar	30.2	16.0	29.9	15.2	156.0	59.9
Bay and magnolia	0.1	0.1	0.1	—	0.6	—
Black cherry	0.6	0.8	0.5	0.6	0.3	1.0
Black walnut	-0.0	—	-0.0	—	0.3	—
Sycamore	0.5	0.2	0.5	0.2	3.2	0.7
Elm	2.1	0.8	1.9	0.6	4.3	0.3
Other Eastern hardwoods	2.3	2.1	-0.5	0.7	1.4	0.8
Total hardwoods	128.6	76.5	124.0	71.5	536.1	215.9
All species	259.1	257.7	254.3	249.9	1,078.0	922.9

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

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

Table 39—Average annual removals of growing stock on timberland by species and diameter class, North Central Georgia, 1989-1997

Species	All classes	Diameter class (inches at breast height) 5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 and larger
					Million cubic feet						
Softwood											
Longleaf pine	1.4	0.1	0.1	0.2	0.2	0.5	0.3	—	—	—	—
Slash pine	0.5	—	0.2	0.1	0.2	—	—	—	—	—	—
Shortleaf pine	24.4	2.2	4.7	6.8	5.4	3.0	1.3	0.7	0.2	—	—
Loblolly pine	148.6	10.8	23.2	31.3	33.0	22.6	14.7	6.5	4.2	2.3	—
Virginia pine	2.9	0.2	0.3	0.5	0.9	0.3	0.2	0.4	—	—	—
Redcedars	0.7	0.1	0.3	—	0.1	—	0.1	0.1	—	—	—
Total softwoods	178.5	13.5	28.8	38.9	39.9	26.4	16.6	7.7	4.4	2.3	—
Hardwood											
Select white oaks	8.7	1.6	0.7	1.7	0.7	1.1	1.1	1.1	0.2	0.5	—
Select red oaks	3.3	—	0.2	0.2	0.7	0.9	0.4	0.6	—	0.4	—
Other white oaks	3.0	0.2	0.9	0.7	0.4	0.2	—	0.2	—	0.3	—
Other red oaks	17.1	0.9	1.8	2.1	2.6	2.2	2.3	1.9	2.2	1.0	0.2
Hickory	3.8	0.3	0.4	0.6	0.4	0.7	0.6	0.3	—	0.6	—
Soft maple	2.2	0.1	0.2	0.4	0.3	0.3	0.4	0.3	0.2	0.2	—
Beech	0.1	—	—	—	—	—	—	—	0.1	—	—
Sweetgum	14.3	2.0	2.5	3.2	1.9	1.4	1.3	1.0	0.9	0.2	—
Tupelo and blackgum	0.8	0.1	0.1	—	0.2	0.5	—	—	—	—	—
Ash	0.9	0.1	0.1	0.1	—	0.1	0.3	0.2	—	—	—
Yellow-poplar	15.2	1.3	1.5	1.0	1.9	2.5	1.4	1.8	1.6	2.2	—
Black cherry	0.6	0.2	0.2	—	—	0.2	—	—	—	—	—
Sycamore	0.2	—	—	—	—	—	—	0.2	—	—	—
Elm	0.6	0.1	0.4	—	0.1	—	—	—	—	—	—
Other Eastern hardwoods	0.7	0.1	0.1	0.3	—	0.1	0.1	—	—	—	—
Total hardwoods	71.5	7.0	8.9	10.1	9.2	10.3	7.8	7.5	5.2	5.3	0.2
All species	249.9	20.5	37.7	49.0	49.0	36.7	24.4	15.2	9.6	7.6	0.2

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

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

Table 40—Average annual mortality of live trees, growing stock, and sawtimber on timberland by species, North Central Georgia, 1989-1997

Species	Live trees	Growing stock	Sawtimber
	Million cubic feet		*Million board feet*
Softwood			
Slash pine	0.1	0.1	—
Shortleaf pine	18.3	18.1	58.6
Loblolly pine	26.6	24.8	94.2
Virginia pine	3.2	3.2	10.2
Redcedars	0.4	—	—
Total softwoods	48.6	46.2	163.1
Hardwood			
Select white oaks	2.1	1.9	8.5
Select red oaks	2.6	2.3	6.4
Other white oaks	1.3	1.1	4.1
Other red oaks	10.0	8.9	30.3
Hickory	1.5	1.5	3.9
Soft maple	4.1	2.4	9.9
Sweetgum	4.9	4.0	10.2
Tupelo and blackgum	0.7	0.6	1.6
Ash	2.1	2.0	3.8
Cottonwood	0.4	0.4	2.2
Yellow-poplar	2.9	2.7	8.1
Bay and magnolia	0.1	0.1	0.3
Black cherry	1.2	0.8	0.9
Black walnut	0.1	0.1	—
Elm	1.3	1.1	3.9
Other Eastern hardwoods	4.3	1.7	4.6
Total hardwoods	39.6	31.5	98.7
All species	88.2	77.7	261.8

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

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

Table 41—Average net annual growth and average annual removals of growing stock on timberland by ownership class and species group, North Central Georgia, 1989-1997

Ownership class	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
		Average net annual growth *(million cubic feet)*					
National forest	0.3	—	—	—	0.3	0.4	-0.1
Other public	6.3	2.7	2.6	0.0	3.6	1.5	2.2
Forest industry	32.0	26.5	26.5	0.0	5.5	2.9	2.6
Forest industry-leased	1.9	1.3	1.3	—	0.6	0.2	0.4
Nonindustrial private	213.8	99.9	99.2	0.6	114.0	55.5	58.5
All classes	254.3	130.4	129.7	0.7	124.0	60.4	63.6
		Average annual removals *(million cubic feet)*					
National forest	—	—	—	—	—	—	—
Other public	5.8	3.5	3.5	—	2.3	0.9	1.4
Forest industry	40.4	34.8	34.7	0.1	5.6	3.7	2.0
Forest industry-leased	0.2	0.2	0.2	—	—	—	—
Nonindustrial private	203.5	140.0	139.3	0.6	63.6	29.3	34.2
All classes	249.9	178.5	177.7	0.7	71.5	33.9	37.6

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

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

Table 42—Average net annual growth and average annual removals of live trees on timberland by ownership class and species group, North Central Georgia, 1989-1997

Ownership class	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
		Average net annual growth *(million cubic feet)*					
National forest	0.3	—	—	—	0.3	0.4	-0.1
Other public	6.7	2.7	2.7	0.0	3.9	1.6	2.4
Forest industry	32.6	26.9	26.8	0.1	5.7	3.0	2.7
Forest industry-leased	2.0	1.3	1.3	—	0.7	0.3	0.4
Nonindustrial private	217.5	99.6	99.3	0.3	118.0	56.7	61.3
All classes	259.1	130.5	130.1	0.4	128.6	61.9	66.7
		Average annual removals *(million cubic feet)*					
National forest	—	—	—	—	—	—	—
Other public	6.0	3.5	3.5	—	2.6	1.2	1.4
Forest industry	41.9	35.7	35.4	0.2	6.2	4.1	2.1
Forest industry-leased	0.2	0.2	0.2	—	—	—	—
Nonindustrial private	209.6	141.9	141.1	0.7	67.7	31.8	36.0
All classes	257.7	181.2	180.2	1.0	76.5	37.0	39.5

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

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

Table 43—Average net annual growth and average annual removals of sawtimber on timberland by ownership class and species group, North Central Georgia, 1989-1997

Ownership class	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
		Average net annual growth *(million board feet)*					
National forest	3.0	—	—	—	3.0	2.0	1.0
Other public	28.7	9.7	9.7	—	19.0	7.9	11.1
Forest industry	97.8	73.8	73.8	—	24.0	13.1	10.8
Forest industry-leased	4.2	3.4	3.4	—	0.8	0.5	0.3
Nonindustrial private	944.4	455.1	452.7	2.4	489.3	237.2	252.1
All classes	1,078.0	541.9	539.5	2.4	536.1	260.8	275.3
		Average annual removals *(million board feet)*					
National forest	—	—	—	—	—	—	—
Other public	21.2	14.0	14.0	—	7.2	3.0	4.2
Forest industry	138.2	120.6	120.6	—	17.6	12.5	5.1
Forest industry-leased	0.4	0.4	0.4	—	—	—	—
Nonindustrial private	763.2	572.1	570.3	1.7	191.1	87.9	103.2
All classes	922.9	707.0	705.3	1.7	215.9	103.3	112.5

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

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

Table 44—Average net annual growth of growing stock on timberland by forest-type group, stand origin, and species group, North Central Georgia, 1989-1997

Forest-type group and stand origin[a]	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
	Million cubic feet						
Softwood types							
Loblolly–shortleaf pine							
Planted	50.6	48.4	48.4	—	2.2	1.7	0.5
Natural	90.0	69.6	69.5	0.1	20.4	12.4	8.0
Total	140.5	118.0	117.9	0.1	22.6	14.1	8.4
Total softwoods	140.5	118.0	117.9	0.1	22.6	14.1	8.4
Hardwood types							
Oak–pine							
Planted	1.6	1.3	1.3	—	0.3	—	0.3
Natural	27.6	7.7	7.4	0.3	19.9	9.4	10.5
Total	29.2	9.0	8.7	0.3	20.2	9.4	10.8
Oak–hickory	73.7	3.6	3.3	0.3	70.1	28.4	41.7
Oak–gum–cypress	7.7	-0.2	-0.2	—	7.9	5.7	2.1
Elm–ash–cottonwood	3.3	0.1	0.1	—	3.2	2.8	0.5
Total hardwoods	113.8	12.4	11.8	0.6	101.4	46.3	55.1
Nonstocked	—	—	—	—	—	—	—
All groups	254.3	130.4	129.7	0.7	124.0	60.4	63.6

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

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

[a] 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, North Central Georgia, 1989-1997

Forest-type group and stand origin[a]	All species	Softwoods			Hardwoods		
		All softwood	Yellow pine	Other softwood	All hardwood	Soft hardwood	Hard hardwood
	Million cubic feet						
Softwood types							
Loblolly–shortleaf pine							
Planted	29.0	28.8	28.8	—	0.2	0.2	0.1
Natural	129.9	120.4	120.4	—	9.6	6.5	3.1
Total	158.9	149.2	149.2	—	9.8	6.6	3.2
Total softwoods	158.9	149.2	149.2	—	9.8	6.6	3.2
Hardwood types							
Oak–pine							
Planted	—	—	—	—	—	—	—
Natural	32.2	19.0	18.9	0.1	13.2	5.9	7.2
Total	32.2	19.0	18.9	0.1	13.2	5.9	7.2
Oak–hickory	50.1	10.1	9.5	0.6	39.9	14.9	25.1
Oak–gum–cypress	6.2	0.2	0.2	—	6.0	4.6	1.4
Elm–ash–cottonwood	2.6	—	—	—	2.6	1.9	0.7
Total hardwoods	91.0	29.3	28.6	0.7	61.7	27.3	34.4
Nonstocked	—	—	—	—	—	—	—
All groups	249.9	178.5	177.7	0.7	71.5	33.9	37.6

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

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

[a] Classifications at the beginning of the remeasurement period.

Table 46—Fresh weight of live trees on timberland by ownership class, species group, and tree component, North Central Georgia, 1998

Ownership class and species group	All components	Component						
		All live saplings	Growing-stock trees			Cull trees		
			Total	Boles	Stumps, tops, and limbs	Total	Boles	Stumps, tops, and limbs
	Thousand tons							
National forest								
Softwood	—	—	—	—	—	—	—	—
Hardwood	633.0	40.5	552.0	464.5	87.6	40.6	32.0	8.6
Total	633.0	40.5	552.0	464.5	87.6	40.6	32.0	8.6
Other public								
Softwood	5,104.7	438.4	4,618.8	3,955.5	663.3	47.6	40.2	7.4
Hardwood	10,083.3	1,318.8	7,932.3	6,509.0	1,423.3	832.2	645.4	186.9
Total	15,188.0	1,757.2	12,551.1	10,464.5	2,086.6	879.8	685.6	194.2
Forest industry								
Softwood	10,259.1	782.9	9,407.0	7,656.5	1,750.5	69.3	57.8	11.5
Hardwood	8,958.3	1,843.6	6,692.0	5,472.2	1,219.8	422.7	309.7	113.0
Total	19,217.4	2,626.5	16,099.0	13,128.7	2,970.3	492.0	367.5	124.5
Forest industry-leased								
Softwood	766.2	44.5	711.2	585.3	125.9	10.6	9.2	1.4
Hardwood	740.3	120.7	466.6	379.2	87.4	153.1	116.8	36.3
Total	1,506.5	165.2	1,177.7	964.5	213.2	163.6	125.9	37.7
Nonindustrial private								
Softwood	87,742.1	5,686.3	81,555.8	69,467.3	12,088.5	500.1	414.7	85.5
Hardwood	190,391.3	21,058.7	157,836.7	129,587.3	28,249.4	11,495.9	8,786.2	2,709.7
Total	278,133.4	26,745.0	239,392.5	199,054.6	40,337.9	11,996.0	9,200.8	2,795.2
All ownerships								
Softwood	103,872.1	6,952.1	96,292.6	81,664.5	14,628.2	627.5	521.8	105.7
Hardwood	210,806.1	24,382.2	173,479.6	142,412.2	31,067.4	12,944.4	9,889.9	3,054.5
Total	314,678.2	31,334.2	269,772.2	224,076.6	45,695.6	13,571.8	10,411.7	3,160.2

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

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

Table 47—Area of timberland treated or disturbed annually and retained in timberland by treatment or disturbance and ownership class, North Central Georgia, 1989-1998

Treatment or disturbance	All classes	Ownership class			
		Public	Forest industry	Forest industry-leased	Nonindustrial private
		Thousand acres			
Final harvest	55.9	0.7	11.8	0.0	43.3
Partial harvest[a]	21.9	0.5	0.6	1.0	19.7
Commercial thinning	9.7	—	0.9	—	8.8
Other stand improvement	3.2	0.6	0.4	—	2.2
Site preparation	16.0	—	10.9	0.0	5.1
Artificial regeneration[b]	15.7	—	10.1	0.0	5.5
Natural regeneration[b]	55.7	1.1	3.2	0.0	51.3
Other treatment	31.5	0.9	2.2	0.3	28.0
Natural disturbance:					
Disease	9.1	0.2	0.4	—	8.5
Insects	24.7	1.7	1.4	—	21.7
Wildfire	0.8	—	—	—	0.8
Weather	16.8	0.5	1.3	0.1	14.8
Animals	6.6	0.7	0.8	—	5.2

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

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

[a] 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, North Central Georgia, 1989-1998

Treatment or disturbance	All types	Forest management type[a]					
		Pine plantation	Natural pine	Oak–pine	Upland hardwood	Lowland hardwood	Nonstocked
		Thousand acres					
Final harvest	55.9	6.6	28.8	7.7	10.0	2.8	—
Partial harvest[b]	21.9	0.5	8.2	4.2	8.9	0.1	—
Commercial thinning	9.7	2.5	6.7	—	0.4	—	—
Other stand improvement	3.2	—	1.0	1.8	0.4	—	—
Site preparation	16.0	4.6	4.6	0.3	6.5	—	—
Other treatment	31.5	1.1	8.9	7.1	13.8	0.5	—
Natural disturbance:							
Disease	9.1	2.5	5.1	1.2	0.2	—	—
Insects	24.7	1.3	13.7	5.5	3.8	0.5	—
Wildfire	0.8	—	0.5	—	0.3	—	—
Weather	16.8	0.9	3.5	2.7	7.4	2.3	—
Animals	6.6	—	—	0.6	0.2	5.8	—

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

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

[a] Classification before treatment or disturbance.

[b] Includes high-grading and some selective cutting.

Table 49—Area of timberland regenerated annually by type of regeneration and forest management type, North Central Georgia, 1989-1998

Type of regeneration	All types	Forest management type[a]					
		Pine plantation	Natural pine	Oak–pine	Upland hardwood	Lowland hardwood	Nonstocked
		Thousand acres					
Artificial regeneration following harvest	11.7	9.0	—	1.9	0.6	—	0.2
Natural regeneration following harvest	38.0	—	9.2	8.2	19.3	1.1	0.1
Other artificial regeneration on forest land	3.0	3.0	—	—	—	—	—
Other natural regeneration on forest land	9.4	—	2.6	1.8	4.2	0.7	—
Artificial regeneration on former nonforest land	0.9	0.9	—	0.1	—	—	—
Natural reversion of former nonforest land	8.2	—	4.7	1.5	1.6	0.1	0.4
Total	71.4	12.9	16.5	13.5	25.7	2.0	0.7

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

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

[a] Classification after regeneration.

Table 50—Land area by land-use class, major forest type, and survey completion date, North Central Georgia

Land-use class	Survey completion date			Change
	1983	1989	1998	1989-1998
		Thousand acres		
Forest land				
Timberland				
Pine types	1,792.9	1,541.9	1,251.0	-290.9
Oak–pine types	514.3	579.2	547.3	-31.9
Hardwood types	1,507.8	1,531.7	1,684.2	152.5
Total	3,815.0	3,652.8	3,482.5	-170.3
Productive reserved	14.2	8.7	14.8	6.1
Other	—	—	—	—
Total forest land	3,829.3	3,661.5	3,497.4	-164.2
Other land	2,356.3	2,528.1	2,700.0	171.9
All land[a]	6,185.5	6,189.6	6,197.4	7.7

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.

[a] 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, North Central Georgia

Species group and year	All classes	Diameter class (inches at breast height) 5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0 and larger
					Sawtimber *(million board feet)*					
Softwood										
1983	10,441.1	—	—	2,388.6	2,717.8	2,386.6	1,348.8	855.4	394.7	348.9
1989	9,826.7	—	—	2,196.8	2,572.6	2,074.4	1,386.5	736.8	429.1	430.6
1998	8,424.0	—	—	1,321.0	1,701.9	1,630.2	1,561.1	1,065.3	515.3	629.1
Hardwood										
1983	8,428.6	—	—	—	1,635.3	1,851.2	1,543.6	1,228.0	754.6	1,415.9
1989	9,732.6	—	—	—	1,729.4	2,014.9	1,811.1	1,449.9	994.8	1,732.5
1998	12,452.3	—	—	—	1,703.6	1,912.8	2,077.7	1,877.2	1,352.2	3,528.9
					Growing stock *(million cubic feet)*					
Softwood										
1983	2,987.5	341.8	545.4	624.1	569.3	438.3	226.4	134.2	58.8	49.3
1989	2,633.4	286.9	460.3	550.3	517.4	364.7	222.9	111.0	61.6	58.3
1998	2,224.4	216.9	329.0	363.2	375.6	314.4	275.1	176.4	80.8	93.0
Hardwood										
1983	2,944.5	287.7	382.3	434.0	458.7	435.4	325.5	239.5	139.7	241.7
1989	3,200.9	271.3	403.6	454.3	473.7	467.0	377.6	278.7	181.3	293.5
1998	3,645.7	240.0	337.1	430.1	485.9	462.2	450.8	377.4	254.5	607.8
					Live trees *(million cubic feet)*					
Softwood										
1983	3,001.9	345.7	548.8	626.5	570.8	438.6	227.4	135.4	58.8	49.9
1989	2,646.7	290.7	464.0	552.0	519.6	364.7	222.9	112.4	62.0	58.3
1998	2,238.7	218.9	331.4	366.5	379.8	315.1	275.7	177.4	80.8	93.0
Hardwood										
1983	3,174.3	348.8	424.4	470.8	481.6	451.7	335.8	246.6	147.6	267.0
1989	3,423.4	334.1	444.1	480.7	498.8	481.4	390.2	286.9	189.4	317.9
1998	3,908.2	301.9	380.2	464.7	519.7	480.7	466.2	385.1	262.8	647.0

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

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

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This report summarizes a 1998 inventory of the forest resources of a 32-county area of Georgia. Major findings are highlighted in text and graphs; detailed data are presented in 51 tables.

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

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