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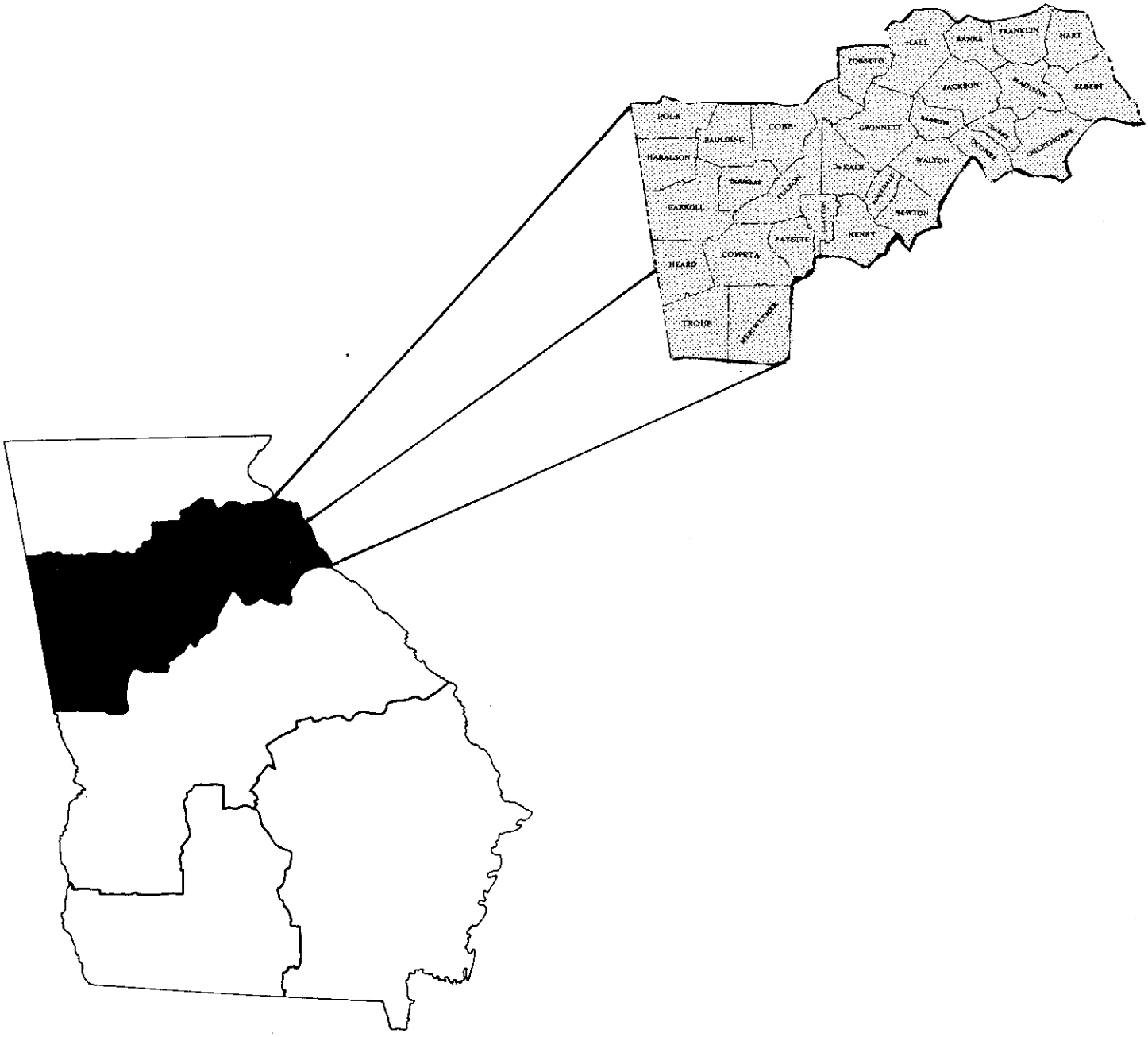


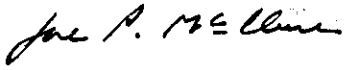
Foreword

This report highlights the principal findings of the fifth forest survey of North Central Georgia. Fieldwork began in May 1982 and was completed in September 1982. Four previous surveys, completed in 1936, 1953, 1961, and 1972, provide statistics for measuring changes and trends over the past 47 years. The primary emphasis in this report is on the changes and trends since 1972. Previously reported figures have been adjusted to provide the best estimate of change.

Periodic surveys of the forest resource 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 Forest Service, USDA. In Florida, Georgia, North Carolina, South Carolina, and Virginia, these surveys are administered by the Forest Inventory and Analysis (Forest Survey) Research Work Unit at the Southeastern Forest Experiment Station, with headquarters in Asheville, North Carolina. The primary objective of the survey 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 deals only with the extent and condition of forest lands, associated timber volumes, and rates of growth and removals.

The 32-county area covered by this report is one of five survey units in Georgia. Similar reports, USDA Forest Service Resource Bulletins SE-61, SE-63, and SE-65 have been issued for Southwest, Southeast, and Central Georgia, respectively. A comparable report for North Georgia will be issued upon final processing of collected data. When completed, this survey will provide updated statistics on the forest resource for all of Georgia.

The Southeastern Station gratefully acknowledges the cooperation and assistance provided by the Georgia Forestry Commission, Hiwassee Land Company, and the Tennessee Valley Authority in collecting field data. Appreciation is also expressed for the excellent cooperation of other public agencies, forest industry, and other private landowners in providing information and access to the sample locations.



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Project Leader

April 1983
Southeastern Forest Experiment Station
Asheville, North Carolina

FOREST STATISTICS

FOR

NORTH CENTRAL GEORGIA,

1983

by

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Forest Inventory and Analysis
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Since 1972 in North Central Georgia

• area of commercial forest land has decreased by 184,000 acres, or about 5 percent. Almost 296,000 acres of commercial forest were diverted to other land uses, while more than 111,500 acres of new commercial forest were added. Approximately 48 percent of the acreage removed from commercial forest was diverted to an urban land use, 37 percent to agricultural land, and about 13 percent to water. Two percent, or about 6,700 acres of the diverted area, was reclassified as productive reserved forest. Commercial forests now cover 3.8 million acres, 62 percent of the land area in these 32 counties.

• area of commercial forest land held by nonindustrial private forest (NIPF) landowners has declined by 289,000 acres, or 8 percent, and now totals 3.2 million acres. The three ownership categories making up the NIPF group, farmer, miscellaneous private individual, and miscellaneous private corporate, account for 85 percent of the commercial forest acreage. Commercial forest area owned by farmers declined by 537,000 acres, a loss of 43 percent. In contrast, miscellaneous private corporate landowners increased their holdings by 171,000 acres, or by 71 percent, while the acreage owned by miscellaneous private individuals increased by 4 percent, a gain of 78,000 acres. Forest industry has increased its holdings by 76,000 acres to 482,000 acres, an increase of 19 percent. Forest industry controls an additional 44,000 acres of commercial forest under long-term lease from the NIPF sector.

• almost 806,000 acres, or 79,000 acres annually, were harvested and retained in commercial forest. This figure represents 21 percent of the total commercial forest area and is an increase of 85 percent in the annual harvest of forest land since the period between 1961 and 1972. Three-fourths of this harvesting occurred on NIPF lands. An additional 380,000 acres, or 10 percent of the total commercial forest area, experienced some form of intermediate cutting. Again, the majority of this cut, 86 percent, occurred on NIPF land. Insects, disease, and other natural destructive agents significantly damaged the timber on an additional 804,000 acres of commercial forest land.

• about 149,000 acres, or 14,600 acres annually, have been artificially regenerated and are adequately stocked with suitable trees. The rate of artificial regeneration has increased by 50 percent since the period between 1961 and 1972; however, all of this increase has occurred on lands owned or leased by forest industry. Artificial regeneration has decreased by 72 percent on NIPF lands. When all ownerships are included, stands originating wholly or in part from artificial regeneration make up only 8 percent of the commercial forest land.

• average basal area of all live trees 5.0 inches d.b.h. and larger has increased from 63 to 70 square feet per acre of commercial forest land. There are also 552 sapling-size trees per acre, 93 fewer per acre than in 1972. Stands classified as fully stocked have increased by 14 percent to 1.5 million acres, but stands classified as medium stocked dropped from 2.2 million to 1.8 million acres. The acreage of commercial forest considered to be poorly stocked has increased from 490,000 to 509,000 acres.

• volume of softwood growing stock has increased by less than 2 percent and now totals 2.5 billion cubic feet. This increase is small in comparision to that between 1961 and 1972 when the volume of softwood growing stock rose by over 76 percent. All of this increase occurred in sawtimber-size trees, where growing-stock volume increased by 246 million cubic feet, or 16 percent. Poletimber volume, however, declined by 209 million cubic feet, a loss of 22 percent. The volume of loblolly pine, which accounts for 73 percent of the softwood inventory, increased by 167 million cubic feet, or 10 percent. The volume of shortleaf

pine dropped 166 million cubic feet or 23 percent, while the volume of Virginia pine increased 43 million cubic feet, or by more than 92 percent. The current inventory of softwood growing stock includes 8.2 billion board feet of sawtimber.

• volume of hardwood growing stock has increased from about 2.0 billion cubic feet to almost 2.5 billion cubic feet. This increase in volume occurred across the range of diameters, except the 6-inch class in which volume declined by less than 1 percent. Oaks accounted for 52 percent of the increase, and sweetgum, yellow-poplar, hickory, and the soft maples accounted for another 44 percent. Only ash showed a decrease in volume. The current inventory of hardwood growing stock includes 6.7 billion board feet of sawtimber.

• number of pines in the 2-, 4-, 6- and 8-inch diameter classes has declined significantly. The number of pines has dropped 43 percent in the 2-inch class, 47 percent in the 4-inch class, 34 percent in the 6-inch class and 13 percent in the 8-inch class. The acreage of commercial forest land classified as pine sapling-seedling and poletimber stands also declined substantially. The acreage of pine poletimber stands has decreased 425,000 acres, or by 43 percent. The acreage of pine sapling-seedling stands has decreased almost 56,000 acres, or 12 percent. The acreage classified as pine sawtimber has increased 21 percent.

In 1982

• net annual growth of softwood growing stock averaged 45 cubic feet per acre of commercial forest land and totaled 172 million cubic feet. This is a 24 percent decrease from the 226 million cubic feet found in 1971. Part of this reduction in growth can be attributed to a rather large increase in softwood mortality and a decrease in ingrowth (volume added to growing stock as trees in the 2- and 4-inch diameter classes grow into the 6-inch and larger diameter classes). In 1971, ingrowth contributed 66 million cubic feet, or 27 percent of the gross growth. At present, ingrowth is contributing 25 million cubic feet, only 11 percent of the gross growth. An unexplained reduction in the average annual diameter growth of yellow pines has also contributed to the decrease in net annual growth. The reduction is evident in most diameter classes. Reductions range from a low of 6 percent in the 12-inch diameter class to a high of 32 percent in the 4-inch class. The net annual growth of hardwood growing stock has increased by 33 percent since 1971 and now totals 120 million cubic feet. Ingrowth, which is now equivalent to 15.7 million cubic feet, has decreased by 14 percent and now contributes only 11 percent to gross growth as compared to 18 percent in 1971. For all growing stock, net annual growth averaged 77 cubic feet per acre of commercial forest land, and included 1.2 billion board feet of sawtimber.

• mortality of growing stock totaled 68 million cubic feet, and reduced gross growth by 19 percent. Softwood mortality has increased by 170 percent since 1971 and now makes up almost 73 percent of all mortality. Insects, primarily southern pine bark beetles, account for 52 percent of the current softwood mortality. Disease accounts for another 20 percent. Hardwood mortality has increased 84 percent since 1971. Mortality of all species included 186 million board feet of sawtimber.

• removals of softwood growing stock totaled 160 million cubic feet, an increase of 51 percent since 1971. Softwood removals exceeded net growth only on farmer-owned land. Over all ownerships, softwood net growth exceeded removals by 8 percent. Hardwood removals totaled 58 million cubic feet, an increase of 24 percent since 1971. Hardwood net growth exceeded removals by 109 percent. Total net growth exceeded total removals in all ownership categories except forest industry, where removals exceeded net growth by 18 percent. Removals of total growing stock included 809 million board feet of sawtimber.

How the Inventory is Made

The method of the inventory is a sampling procedure designed to provide reliable statistics primarily at the State and Survey Unit levels. Individual county statistics are presented so that any combination of counties may be added together until a total is large enough to meet the desired degree of reliability. Procedures were as follows:

1. Initial estimates of forest and nonforest areas were based on the classification of 20,746 sample clusters systematically spaced on the latest aerial photographs available. A subsample of 1,699 of the 16-point clusters was ground checked, and a linear regression was fitted to the data to develop the relationship between the photo and ground classification of the subsample. This procedure provides a means for adjusting the initial estimates of area for change in land use since date of photography and for photo misclassifications.

2. Estimates of timber volume and forest classifications were based on measurements recorded at 1,047 ground sample locations systematically distributed within the commercial forest land. The plot design at each location was based on a cluster of 10 points. In most cases, variable plots, using a basal-area factor of 37.5 square feet per acre, were systematically spaced within a single forest condition at 5 of the 10 cluster points. Trees less than 5 inches d.b.h. were tallied on a fixed-radius plot around each point center.

3. Equations prepared from detailed measurements collected on standing trees in this Unit, and similar measurements taken throughout the Southeast, were used to compute the volume of individual tally trees. A mirror caliper and sectional aluminum poles were used to obtain the additional measurements on these standing trees required to construct volume equations.

4. Felled trees were measured at 11 active cutting operations. These data will be pooled with similar measurements taken in the State to supplement the standing-tree volume data and to generate utilization factors for product and species groups that will be analyzed at the State level.

5. Estimates of growth, removals, and mortality were determined from the remeasurement of 909 permanent sample plots established in the fourth survey.

6. Ownership information was collected from correspondence, public records, and local contacts. In those counties where the sample missed a particular ownership class, temporary sample plots were added on these lands.

7. All field data were sent to Asheville for editing and were punched into cards and stored for machine computing, sorting, and tabulation. Final estimates were based on statistical summaries of the data.

Reliability of the Data

Statistical analysis of these data indicates the following sampling errors in terms of one standard error (two times out of three):

	Percent
Per million acres of commercial forest land . . .	0.98
Per billion cubic feet of growing stock	5.24
Per billion cubic feet of net annual growth	1.24
Per billion cubic feet of annual removals	2.96

Sampling errors for county and unit totals,[a] in terms of one standard error, North Central Georgia

County	Commercial forest area	Cubic-foot volume of growing stock		
		Inventory	Growth	Removals
	Sampling error[b]			
Banks	2.49	11.73	10.96	40.63
Barrow	6.82	18.25	20.65	59.35
Carroll	2.13	11.86	11.11	31.16
Clarke	4.91	22.96	14.78	41.54
Clayton	6.00	20.72	19.74	49.24
Cobb	4.30	9.72	10.05	27.87
Coweta	1.43	10.97	10.14	25.30
De Kalb	5.15	11.95	11.83	73.91
Douglas	3.75	12.46	13.52	46.61
Elbert	2.32	13.53	10.74	25.27
Fayette	3.07	17.93	19.67	44.93
Forsyth	3.78	14.48	15.96	69.39
Franklin	2.77	12.50	11.40	45.22
Fulton	2.89	6.94	6.69	51.35
Gwinnett	3.01	9.37	9.91	25.39
Hall	2.36	12.49	13.06	29.11
Haralson	1.98	12.11	12.48	36.58
Hart	2.60	14.56	9.14	47.80
Heard	1.56	15.14	16.81	22.84
Henry	2.79	11.81	12.32	34.22
Jackson	3.78	11.79	11.36	38.56
Madison	2.47	16.09	16.19	39.00
Meriwether	1.82	14.19	14.81	17.53
Newton	2.52	14.29	13.90	50.63
Oconee	3.21	11.46	10.87	64.54
Oglethorpe	1.46	10.73	9.57	17.85
Paulding	1.63	11.43	11.11	30.96
Polk	3.22	11.92	12.41	35.50
Rockdale	8.19	21.40	21.74	100.32
Spalding	3.64	16.16	16.15	34.89
Troup	1.65	10.29	8.52	21.33
Walton	2.84	11.60	10.42	56.13
Unit total	0.51	2.34	2.28	6.35

[a] Sampling error of breakdowns of county and unit totals may be computed with the following formula:

$$E = \frac{(SE)\sqrt{(\text{specified volume or area})}}{\sqrt{(\text{volume or area total in question})}}$$

Where: E = Sampling error of the volume or area total in question.

SE = Specified sampling error in table.

[b] By random-sampling formula (in percent).

Definitions of Terms

Acceptable trees.—Growing-stock trees of commercial species that meet specified standards of size and quality, but not qualifying as desirable trees.

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 as square feet of basal area per acre.

Commercial forest land.—Forest land producing or capable of producing crops of industrial wood and not withdrawn from timber utilization.

Commercial species.—Tree species presently or prospectively suitable for industrial wood products.

Cropland.—Land under cultivation within the past 24 months, including orchards and land in soil-improving crops, but excluding land cultivated in developing improved pasture. Also includes idle farmland.

Desirable trees.—Growing-stock trees of commercial species having no serious defects in quality limiting present or prospective use for timber products, of relatively high vigor, and containing no pathogens that may result in death or serious deterioration before rotation age.

Diameter class.—A classification of trees based on diameter outside bark, measured at breast height (4½ feet above the ground). D.b.h. is the common abbreviation for "diameter at breast height." Two-inch diameter classes are commonly used in Renewable Resources Evaluation, with the even inch the approximate midpoint for a class. For example, the 6-inch class includes trees 5.0 through 6.9 inches d.b.h., inclusive.

Farm.—Lands on which agriculture operations are being conducted and sale of agriculture products totaled $1,000 or more during the year.

Farm operator.—A person who operates a farm, either doing the work himself or directly supervising the work.

Farmer-owned lands.—Lands owned by farm operators.

Forest industry lands.—Lands owned by companies or individuals operating wood-using plants.

Forest land.—Land at least 16.7 percent stocked by forest trees of any size, or formerly having had such tree cover, and not currently developed for nonforest use.

Forest type.—A classification of forest land based upon the species forming a plurality of live-tree stocking.

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

Oak-pine.—Forests in which hardwoods (usually upland oaks) comprise a plurality of the stocking but in which pines comprise 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, comprise a plurality of the stocking, except where pines comprise 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, comprise a plurality of the stocking, except where pines comprise 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, comprise a plurality of the stocking. (Common associates include willow, sycamore, beech, and maple.)

Gross growth.—Annual increase in net volume of trees in the absence of cutting and mortality.

Growing-stock trees.—Live trees of commercial species qualifying as desirable or acceptable trees.

Growing-stock volume.—Net volume in cubic feet of growing-stock trees 5.0 inches d.b.h. and over from a 1-foot stump to a minimum 4.0-inch top diameter outside bark of the central stem, or to the point where the central stem breaks into limbs. (Net volume in primary forks is included.)

Hardwoods.—Dicotyledonous trees, usually broad-leaved and deciduous.

Soft hardwoods.—Soft-textured hardwoods such as boxelder, red and silver maple, buckeye, hackberry, loblolly-bay, silverbell (in mountains), butternut, sweetgum, yellow-poplar, cucumbertree, magnolia, sweetbay, water tupelo, blackgum, sycamore, cottonwood, black cherry, willow, basswood, and elm.

Hard hardwoods.—Hard-textured hardwoods such as Florida and sugar maple, birch, hickory, dogwood, persimmon (forest grown), beech, ash, honeylocust, holly, black walnut, mulberry, all commercial oaks, and black locust.

Idle farmland.—Includes former croplands, orchards, improved pastures and farm sites not tended within the past 2 years, and presently less than 16.7 percent stocked with trees.

Improved pasture.—Land currently improved for grazing by cultivation, seeding, irrigation, or clearing of trees or brush.

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 flood plains (omitting tidal flats below mean high tide); streams, sloughs, estuaries, and canals less than 1/8 of a statute mile in width; and lakes, reservoirs, and ponds less than 40 acres in area.

Logging residues.—The unused portions of trees cut or killed by logging.

Miscellaneous Federal lands.—Federal lands other than National Forests, lands administered by the Bureau of Land Management, and Indian lands.

Miscellaneous private lands - corporate.—Lands owned by private corporations other than forest industry.

Miscellaneous private lands - individual.—Privately owned lands other than forest-industry, farmer-owned, or corporate lands.

Mortality.—Number or sound-wood volume of live trees dying from natural causes during a specified period.

National Forest land.—Federal lands which have been legally designated as National Forests or purchase units, and other lands under the administration of the Forest Service, including experimental areas and Bankhead-Jones Title III lands.

Net annual growth.—The increase in volume for a specific year.

Net volume.—Gross volume less deductions for rot, sweep, or other defect affecting use for timber products.

Noncommercial forest land.—(a) Unproductive forest land incapable of yielding crops of industrial wood because of adverse site conditions, and (b) productive-reserved forest land.

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

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

Nonstocked land.—Commercial forest land less than 16.7 percent stocked with growing-stock trees.

Other Federal lands.—Federal lands other than National Forests, including lands administered by the Bureau of Land Management, Bureau of Indian Affairs, and other Federal agencies.

Other public lands.—Publicly owned lands other than National Forests.

Overstocked areas.—Areas where growth of trees is significantly reduced by excessive numbers of trees.

Poletimber trees.—Growing-stock trees of commercial species at least 5.0 inches in d.b.h. but smaller than sawtimber size.

Productive-reserved forest land.—Forest land sufficiently productive to qualify as commercial forest land, but withdrawn from timber utilization through statute or administrative designation.

Rangeland.—Land on which the natural plant cover is composed principally of native grasses, forbs, or shrubs valuable for forage.

Rotten trees.—Live trees of commercial species that do not contain 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 tree volume in sound material.

Rough trees.—(a) Live trees of commercial species that do not contain 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 tree volume in sound material; and (b) all live trees of noncommercial species.

Salvable dead trees.—Standing or down dead trees that are considered merchantable by Renewable Resources Evaluation standards.

Saplings.—Live trees 1.0 to 5.0 inches in diameter at breast height.

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

Saw-log portion.—That part of the bole of sawtimber trees between the stump and the saw-log top.

Saw-log top.—The point on the bole of sawtimber trees above which a 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 trees.—Live trees of commercial species containing at least a 12-foot saw log, or two noncontiguous saw logs, each 8 feet or longer, and with at least one-third of the gross board-foot volume between the 1-foot stump and minimum saw-log top being sound. Softwoods must be at least 9.0 inches and hardwoods at least 11.0 inches in diameter at breast height.

Sawtimber volume.—Net volume of the saw-log portion of live sawtimber in board-foot International ¼-inch rule.

Seedlings.—Live trees less than 1.0 inch in diameter at breast height that are expected to survive and develop.

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

Class 1.—Sites capable of producing 165 or more cubic feet per acre annually.

Class 2.—Sites capable of producing 120 to 165 cubic feet per acre annually.

Class 3.—Sites capable of producing 85 to 120 cubic feet per acre annually.

Class 4.—Sites capable of producing 50 to 85 cubic feet per acre annually.

Class 5.—Sites incapable of producing 50 cubic feet per acre annually, but excluding unproductive sites.

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

Pines.—Yellow pine species which include loblolly, longleaf, slash, shortleaf, pitch, Virginia, Table Mountain, sand, and spruce pine.

Other softwoods.—White pine, hemlock, cypress, eastern redcedar, white-cedar, spruce, and fir.

Stand-size class.—A classification of forest land based on the size class of growing-stock trees on the area.

Sawtimber stands.—Stands at least 16.7 percent stocked with growing-stock trees, with half or more of total stocking in sawtimber or poletimber trees, and with sawtimber stocking at least equal to poletimber stocking.

Poletimber stands.—Stands at least 16.7 percent stocked with growing-stock trees of which half or more of this stocking is in poletimber and sawtimber trees, and with poletimber stocking exceeding that of sawtimber.

Sapling-seedling stands.—Stands at least 16.7 percent stocked with growing-stock trees of which more than half of the stocking is saplings and seedlings.

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

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 to a minimum standard, depending on tree size, to fully utilize the growth potential of the land. (See page 8 .)

Timber removals.—The net volume of growing-stock trees removed from the inventory by harvesting; cultural operations, such as stand improvement; land clearing, or changes in land use.

Unproductive forest land.—Forest land incapable of producing 20 cubic feet per acre of industrial wood under natural conditions, because of adverse site conditions.

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

Urban and other areas.—Areas within the legal boundaries of cities and towns; suburban areas developed for residential, industrial, or recreational purposes; school yards; cemeteries; roads; railroads; airports; beaches; powerlines and other rights-of-way; or other nonforest land not included in any other specified land use class.

Stocking Standard

D.b.h. class	Minimum number of trees per acre for full stocking	Minimum basal area per acre for full stocking	Percent stocking assigned each tally tree[a]
Seedlings	600	—	5.0
2	560	—	5.4
4	460	—	6.5
6	340	67	5.8
8	240	84	4.8
10	155	85	4.3
12	115	90	4.0
14	90	96	3.8
16	72	101	3.7
18	60	106	3.5
20	51	111	3.5

[a]Stocking percentages based on tally at all 10 points of a 10-point cluster of plots. Trees less than 5 inches d.b.h. were tallied on circular, 1/300-acre plots at each point. Trees 5.0 inches d.b.h. and larger were tallied on variable plots using a basal area factor of 37.5 at each sample point.

Overstocked—More than 130 percent
Fully stocked—100-130 percent
Medium stocked—60-99 percent
Poorly stocked—16.7-59 percent
Nonstocked—Less than 16.7 percent

Cubic feet of wood per average cord
(excluding bark)

D.b.h. class	All species	Pine	Other softwood	Hardwood
6	60.5	61.0	68.2	60.0
8	68.3	68.1	76.0	68.4
10	73.2	73.1	81.4	73.4
12	76.5	76.7	85.3	76.4
14	78.9	79.4	88.2	78.4
16	80.5	81.6	90.4	79.8
18	81.7	83.3	92.3	80.8
20	82.4	84.8	93.8	81.5
22	83.0	86.0	95.1	82.1
24+	83.4	87.3	96.2	83.0
Average	73.8	73.3	75.4	74.2

County Tables

The county tables are intended for use in compiling forest resource estimates for groups of counties. Because the sampling procedure used by the forest survey was intended primarily to furnish inventory data for the survey unit as a whole, individual county estimates have limited and variable accuracy. As county totals are broken down by various subdivisions, the possibility of errror increases and is greatest for the smallest items. The order of this increase can be computed with the formula on page 4.

Table 1.—Area, by county and land class, North Central Georgia, 1983

County	All land[a]	Forest land				Nonforest land[b]
		Total	Commercial forest	Unproductive forest	Productive-reserved	
	Acres					
Banks	147,776	103,526	103,526	—	—	44,250
Barrow	109,126	54,411	53,029	—	1,382	54,715
Carroll	315,603	189,722	189,601	—	121	125,881
Clarke	80,000	42,686	42,686	—	—	37,314
Clayton	94,810	46,309	46,309	—	—	48,501
Cobb	221,696	105,362	101,689	—	3,673	116,334
Coweta	283,072	199,020	199,020	—	—	84,052
De Kalb	171,802	67,639	65,834	—	1,805	104,163
Douglas	129,280	95,679	93,979	—	1,700	33,601
Elbert	228,800	156,636	155,962	—	674	72,164
Fayette	127,040	73,865	73,865	—	—	53,175
Forsyth	142,317	83,381	83,288	—	93	58,936
Franklin	170,323	92,139	91,424	—	715	78,184
Fulton	339,200	170,528	168,598	—	1,930	168,672
Gwinnett	278,778.	155,019	154,589	—	430	123,759
Hall	241,600	151,111	151,111	—	—	90,489
Haralson	182,099	137,513	137,513	—	—	44,586
Hart	147,712	63,148	63,010	—	138	84,564
Heard	187,277	150,603	150,603	—	—	36,674
Henry	211,526	121,180	121,180	—	—	90,346
Jackson	215,680	119,467	119,467	—	—	96,213
Madison	179,546	100,726	100,685	—	41	78,820
Meriwether	319,066	229,739	229,739	—	—	89,327
Newton	173,632	108,559	108,559	—	—	65,073
Oconee	118,982	69,097	69,097	—	—	49,885
Oglethorpe	278,336	220,825	220,615	—	210	57,511
Paulding	203,270	159,350	158,618	—	732	43,920
Polk	199,642	141,017	141,017	—	—	58,625
Rockdale	81,862	38,918	38,501	—	417	42,944
Spalding	128,314	68,409	68,409	—	—	59,905
Troup	266,170	192,707	192,707	—	—	73,463
Walton	211,200	120,973	120,798	—	175	90,227
Total	6,185,537	3,829,264	3,815,028	—	14,236	2,356,273

[a]From U.S. Bureau of the Census, 1970 and 1980.

[b]Includes 56,043 acres of water according to Forest Survey standards of area classification, but defined by the Bureau of Census as land.

Table 2.--Area of commercial forest land, by county and ownership class, North Central Georgia, 1983

County	All ownerships	Ownership class							
		National Forest	Miscellaneous Federal	State	County and municipal	Forest industry[a]	Farmer	Miscellaneous private	
								Corporate	Individual
	Acres								
Banks	103,526	656	--	413	--	10,153	60,198	4,013	28,093
Barrow	53,029	--	--	15	85	--	18,591	3,098	31,240
Carroll	189,601	--	--	140	780	27,633	47,675	6,810	106,563
Clarke	42,686	--	--	1,650	593	840	--	--	39,603
Clayton	46,309	--	428	35	3,594	--	3,018	21,126	18,108
Cobb	101,689	--	2,597	90	325	--	3,178	25,430	70,069
Coweta	199,020	--	--	--	2,915	25,255	31,382	17,433	122,035
De Kalb	65,834	--	58	222	1,068	--	2,804	28,037	33,645
Douglas	93,979	--	--	--	890	2,222	--	23,355	67,512
Elbert	155,962	--	13,405	--	267	41,467	25,891	11,489	63,443
Fayette	73,865	--	--	--	134	840	10,414	10,412	52,065
Forsyth	83,288	--	5,504	--	35	235	22,024	4,097	51,393
Franklin	91,424	--	964	--	25	5,484	42,420	7,181	35,350
Fulton	168,598	--	--	105	1,480	3,025	10,250	23,914	129,824
Gwinnett	154,589	--	841	100	718	--	17,338	31,207	104,385
Hall	151,111	--	7,915	203	3,018	7,504	30,772	13,188	88,511
Haralson	137,513	--	--	--	510	26,265	45,657	3,512	61,569
Hart	63,010	--	5,704	750	25	3,763	38,377	--	14,391
Heard	150,603	--	5,381	--	266	51,570	6,908	17,370	69,108
Henry	121,180	--	--	80	285	4,093	47,321	18,927	50,474
Jackson	119,467	--	--	447	202	3,298	28,880	7,220	79,420
Madison	100,685	--	--	--	75	16,094	19,265	10,447	54,804
Meriwether	229,739	--	--	2,905	2,039	56,549	48,133	12,336	107,777
Newton	108,559	--	--	245	721	8,581	14,668	18,338	66,006
Oconee	69,097	160	200	176	34	4,418	8,014	8,014	48,081
Oglethorpe	220,615	3,771	--	300	40	87,077	30,052	10,204	89,171
Paulding	158,618	--	--	--	10,055	31,930	10,824	3,608	102,201
Polk	141,017	--	--	--	425	31,425	28,912	10,842	69,413
Rockdale	38,501	--	--	392	32	1,048	3,703	11,109	22,217
Spalding	68,409	--	--	300	255	1,625	4,412	8,825	52,992
Troup	192,707	--	11,928	--	585	23,885	18,175	25,446	112,688
Walton	120,798	--	--	--	444	5,517	37,597	12,304	64,936
Total	3,815,028	4,587	54,925	8,568	31,920	481,796	716,853	409,292	2,107,087

[a]Not including 44,191 acres of farmer-owned and miscellaneous private lands leased to forest industry.

Table 3.--Area of commercial forest land, by county and forest-type group, North Central Georgia, 1983

County	All type groups	Forest-type group								
		White pine-hemlock	Spruce-fir	Longleaf-slash	Loblolly-shortleaf	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-cottonwood	Maple-beech birch
	Acres									
Banks	103,526	--	--	--	37,181	25,556	32,762	--	8,027	--
Barrow	53,029	--	--	--	25,144	12,393	12,394	--	3,098	--
Carroll	189,601	--	--	--	68,439	30,649	80,248	3,406	6,859	--
Clarke	42,686	--	--	--	22,842	8,801	6,643	4,400	--	--
Clayton	46,309	--	--	--	21,589	6,036	15,666	3,018	--	--
Cobb	101,689	--	--	--	72,991	12,714	12,805	--	3,179	--
Coweta	199,020	--	--	--	65,676	55,072	60,838	--	17,434	--
De Kalb	65,834	--	--	--	34,936	8,410	19,685	--	2,803	--
Douglas	93,979	--	--	--	24,140	15,566	50,047	890	3,336	--
Elbert	155,962	--	--	--	73,617	33,650	44,087	4,608	--	--
Fayette	73,865	--	--	--	27,006	10,413	26,032	--	10,414	--
Forsyth	83,288	--	--	--	35,531	7,377	40,380	--	--	--
Franklin	91,424	--	--	--	37,410	7,095	39,849	--	7,070	--
Fulton	168,598	--	--	--	89,177	13,770	55,402	3,416	6,833	--
Gwinnett	154,589	--	--	--	83,326	24,271	43,524	--	3,468	--
Hall	151,111	--	--	--	56,416	19,761	73,351	1,583	--	--
Haralson	137,513	--	--	--	49,941	24,584	52,452	--	10,536	--
Hart	63,010	--	--	--	21,977	--	41,033	--	--	--
Heard	150,603	--	--	--	83,101	11,598	52,450	3,454	--	--
Henry	121,180	--	--	--	58,087	25,237	34,702	--	3,154	--
Jackson	119,467	--	--	--	71,235	7,220	33,792	--	7,220	--
Madison	100,685	--	--	--	44,085	19,339	33,409	3,852	--	--
Meriwether	229,739	--	--	--	109,669	9,026	75,593	32,475	2,976	--
Newton	108,559	--	--	--	53,394	10,194	37,637	--	7,334	--
Oconee	69,097	--	--	--	28,852	20,211	12,020	4,007	4,007	--
Oglethorpe	220,615	--	--	--	110,239	11,812	64,721	8,586	25,257	--
Paulding	158,618	--	--	--	85,787	14,432	58,399	--	--	--
Polk	141,017	--	--	--	76,210	14,456	50,351	--	--	--
Rockdale	38,501	--	--	--	18,907	7,406	12,188	--	--	--
Spalding	68,409	--	--	--	37,482	13,276	8,826	8,825	--	--
Troup	192,707	--	--	--	109,262	16,926	58,161	--	8,358	--
Walton	120,798	--	--	--	59,276	17,089	27,344	17,089	--	--
Total	3,815,028	--	--	--	1,792,925	514,340	1,266,791	99,609	141,363	--

Table 4.—Area of commercial forest land, by county and stand-size class, North Central Georgia, 1983

County	All stands	Stand-size class			Nonstocked areas
		Sawtimber	Poletimber	Sapling–seedling	
	Acres				
Banks	103,526	45,214	37,182	21,130	—
Barrow	53,029	30,998	12,652	6,281	3,098
Carroll	189,601	51,315	79,295	55,586	3,405
Clarke	42,686	18,193	20,093	4,400	—
Clayton	46,309	22,165	12,072	12,072	—
Cobb	101,689	69,904	22,249	9,536	—
Coweta	199,020	72,862	48,244	70,940	6,974
De Kalb	65,834	40,599	22,431	—	2,804
Douglas	93,979	61,731	13,346	18,902	—
Elbert	155,962	32,730	58,404	64,828	—
Fayette	73,865	42,491	20,827	10,547	—
Forsyth	83,288	38,811	33,464	7,342	3,671
Franklin	91,424	36,450	37,299	17,675	—
Fulton	168,598	120,421	37,188	10,989	—
Gwinnett	154,589	92,885	38,985	22,719	—
Hall	151,111	53,103	56,120	28,700	13,188
Haralson	137,513	62,530	52,733	18,738	3,512
Hart	63,010	20,871	35,460	6,679	—
Heard	150,603	38,465	38,465	73,673	—
Henry	121,180	65,506	30,437	25,237	—
Jackson	119,467	64,015	33,792	21,660	—
Madison	100,685	33,407	37,088	30,190	—
Meriwether	229,739	58,387	75,041	87,383	8,928
Newton	108,559	58,587	21,442	28,530	—
Oconee	69,097	32,626	28,047	8,424	—
Oglethorpe	220,615	100,759	64,442	51,120	4,294
Paulding	158,618	42,062	74,534	37,460	4,562
Polk	141,017	50,777	61,573	28,667	—
Rockdale	38,501	25,920	7,830	4,751	—
Spalding	68,409	41,895	13,278	13,236	—
Troup	192,707	78,511	57,998	56,198	—
Walton	120,798	75,190	23,926	18,264	3,418
Total	3,815,028	1,679,380	1,205,937	871,857	57,854

Table 5.—Area of commercial forest land, by county and site class, North Central Georgia, 1983

County	All classes	Site class				
		1	2	3	4	5
	Acres					
Banks	103,526	—	4,013	24,735	74,778	—
Barrow	53,029	—	—	15,507	37,522	—
Carroll	189,601	—	7,000	52,006	119,330	11,265
Clarke	42,686	—	—	10,233	32,453	—
Clayton	46,309	—	6,036	15,553	18,684	6,036
Cobb	101,689	—	12,133	44,828	44,728	—
Coweta	199,020	—	6,973	102,321	86,239	3,487
De Kalb	65,834	—	—	20,752	45,082	—
Douglas	93,979	—	890	35,586	57,503	—
Elbert	155,962	—	—	33,785	122,177	—
Fayette	73,865	—	16,459	31,372	26,034	—
Forsyth	83,288	—	—	31,435	44,476	7,377
Franklin	91,424	—	—	15,215	76,209	—
Fulton	168,598	—	20,499	95,371	49,312	3,416
Gwinnett	154,589	—	6,934	70,527	77,128	—
Hall	151,111	4,396	8,792	61,951	74,389	1,583
Haralson	137,513	—	—	41,687	92,314	3,512
Hart	63,010	—	—	9,594	53,416	—
Heard	150,603	—	6,909	49,814	89,192	4,688
Henry	121,180	—	—	40,265	80,915	—
Jackson	119,467	—	447	49,330	69,690	—
Madison	100,685	—	3,853	41,188	55,644	—
Meriwether	229,739	—	21,996	103,413	92,297	12,033
Newton	108,559	—	—	46,780	61,779	—
Oconee	69,097	—	—	28,654	40,443	—
Oglethorpe	220,615	—	8,586	87,086	124,943	—
Paulding	158,618	—	—	14,433	123,285	20,900
Polk	141,017	—	3,614	25,176	90,666	21,561
Rockdale	38,501	—	3,703	15,892	18,906	—
Spalding	68,409	—	—	41,894	26,515	—
Troup	192,707	—	13,242	73,173	106,292	—
Walton	120,798	—	3,418	79,341	38,039	—
Total	3,815,028	4,396	155,497	1,408,897	2,150,380	95,858

Table 6.—Area of commercial forest land, by county and stocking classes of growing-stock trees, North Central Georgia, 1983

County	All classes	Stocking percentage[a]				
		> 130	100-130	60-99	16.7-59	< 16.7
	Acres					
Banks	103,526	—	33,167	53,242	17,117	—
Barrow	53,029	—	18,949	24,786	6,196	3,098
Carroll	189,601	3,405	45,431	123,691	13,669	3,405
Clarke	42,686	—	14,041	23,651	4,994	—
Clayton	46,309	6,499	12,072	27,738	—	—
Cobb	101,689	13,041	54,175	34,473	—	—
Coweta	199,020	—	110,648	67,452	13,946	6,974
De Kalb	65,834	8,412	26,360	25,454	2,804	2,804
Douglas	93,979	4,120	26,692	46,485	16,682	—
Elbert	155,962	—	48,731	85,390	21,841	—
Fayette	73,865	11,254	15,754	36,444	10,413	—
Forsyth	83,288	9,409	25,695	26,123	18,390	3,671
Franklin	91,424	111	12,554	64,619	14,140	—
Fulton	168,598	13,667	89,282	58,817	6,832	—
Gwinnett	154,589	14,588	38,143	81,053	20,805	—
Hall	151,111	8,792	45,258	60,311	23,562	13,188
Haralson	137,513	3,283	46,377	56,245	28,096	3,512
Hart	63,010	—	9,594	39,025	14,391	—
Heard	150,603	—	62,032	77,941	10,630	—
Henry	121,180	9,542	35,641	63,378	12,619	—
Jackson	119,467	3,610	50,742	38,745	26,370	—
Madison	100,685	3,293	30,576	49,454	17,362	—
Meriwether	229,739	16,951	93,850	81,515	28,495	8,928
Newton	108,559	3,667	32,198	54,359	18,335	—
Oconee	69,097	160	20,268	36,472	12,197	—
Oglethorpe	220,615	7,518	89,799	92,155	26,849	4,294
Paulding	158,618	7,216	54,547	72,346	19,947	4,562
Polk	141,017	—	36,826	86,122	18,069	—
Rockdale	38,501	3,703	11,501	23,297	—	—
Spalding	68,409	6,038	31,483	30,888	—	—
Troup	192,707	—	97,822	88,864	6,021	—
Walton	120,798	6,836	31,491	58,549	20,504	3,418
Total	3,815,028	165,115	1,351,699	1,789,084	451,276	57,854

[a]See stocking standards on page 8.

Table 7.--Volume of sawtimber and growing stock on commercial forest land, by county and species group, North Central Georgia, 1983

County	Sawtimber					Growing stock				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	Thousand board feet					Thousand cubic feet[a]				
Banks	343,132	153,745	--	74,121	115,266	131,043	56,488	327	28,138	46,090
Barrow	234,683	117,826	--	40,060	76,797	76,540	37,280	--	15,441	23,819
Carroll	485,143	180,347	--	120,283	184,513	201,910	76,583	--	45,102	80,225
Clarke	188,346	79,688	--	71,699	36,959	55,590	23,779	--	19,952	11,859
Clayton	209,034	144,796	--	23,603	40,635	65,837	37,556	--	9,681	18,600
Cobb	734,727	581,659	--	76,463	76,605	205,090	156,015	--	24,630	24,445
Coweta	646,057	264,945	--	202,268	178,844	221,311	84,103	--	67,240	69,968
De Kalb	469,990	278,344	--	44,416	147,230	129,040	72,012	--	13,809	43,219
Douglas	389,872	136,897	--	88,438	164,537	136,270	45,271	--	30,818	60,181
Elbert	396,422	192,513	--	89,253	114,656	144,201	64,513	2,022	25,423	52,243
Fayette	372,912	124,363	--	134,396	114,153	115,048	33,299	--	49,443	32,306
Forsyth	323,848	191,053	--	43,141	89,654	119,963	67,572	--	17,163	35,228
Franklin	300,639	93,147	1,569	51,552	154,371	113,243	36,663	1,310	20,089	55,181
Fulton	1,273,516	664,756	--	249,634	359,126	368,364	186,186	--	77,697	104,481
Gwinnett	807,137	470,341	--	174,703	162,093	239,284	135,079	--	54,905	49,300
Hall	452,927	176,073	--	75,088	201,766	179,614	82,200	--	31,274	66,140
Haralson	534,202	293,294	--	101,260	139,648	176,287	82,120	--	39,680	54,487
Hart	147,462	13,880	--	16,454	117,128	71,088	10,570	--	12,913	47,605
Heard	331,444	208,334	--	88,194	34,916	117,689	72,229	--	27,605	17,855
Henry	484,273	325,556	--	59,648	99,069	169,281	103,030	--	27,999	38,252
Jackson	530,373	333,013	3,126	90,648	103,586	170,011	99,140	533	34,053	36,285
Madison	285,549	178,253	--	43,877	63,419	106,927	59,529	287	27,685	19,426
Meriwether	553,707	292,434	--	110,423	150,850	211,785	106,522	334	54,495	50,434
Newton	494,182	325,535	--	56,969	111,678	150,070	89,289	--	21,642	39,139
Oconee	326,671	196,340	--	70,164	60,167	118,165	55,430	--	29,047	33,688
Oglethorpe	895,062	449,938	10,198	261,126	173,800	300,614	143,174	2,469	96,277	58,694
Paulding	390,534	173,456	--	87,101	129,977	165,006	77,970	--	34,153	52,883
Polk	328,340	184,286	--	22,184	121,870	127,066	69,092	760	7,420	49,794
Rockdale	211,688	167,183	--	29,120	15,385	61,883	44,561	223	8,899	8,200
Spalding	446,727	341,094	--	90,159	15,474	128,530	85,451	--	34,864	8,215
Troup	641,978	397,716	--	148,169	96,093	222,898	123,627	291	52,638	46,342
Walton	642,906	417,100	--	117,479	108,327	184,845	101,053	--	47,574	36,218
Total	14,873,483	8,147,905	14,893	2,952,093	3,758,592	4,984,493	2,517,386	8,556	1,087,749	1,370,802

[a]Factors for converting to cords are shown on page 8.

Table 8.--Net annual growth of sawtimber and growing stock on commercial forest land, by county and species group, North Central Georgia, 1982

County	Sawtimber					Growing stock				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	Thousand board feet					Thousand cubic feet				
Banks	30,564	14,670	--	7,846	8,048	6,964	3,234	19	1,655	2,056
Barrow	18,755	9,458	--	3,601	5,696	4,072	2,341	--	818	913
Carroll	47,544	24,288	--	6,694	16,562	12,592	6,719	--	2,121	3,752
Clarke	9,998	4,721	--	3,304	1,973	2,993	1,499	--	926	568
Clayton	16,843	11,225	--	1,537	4,081	4,093	2,226	--	775	1,092
Cobb	62,534	54,909	--	4,820	2,805	12,446	9,946	--	1,596	904
Coweta	51,229	24,731	--	12,352	14,146	12,773	6,018	--	3,254	3,501
De Kalb	27,811	18,514	--	3,249	6,048	6,376	4,134	--	644	1,598
Douglas	29,935	14,928	--	4,542	10,465	7,425	3,125	--	1,609	2,691
Elbert	30,367	15,840	909	5,479	8,139	9,216	4,987	199	1,288	2,742
Fayette	19,921	8,031	--	7,116	4,774	6,515	2,957	--	2,114	1,444
Forsyth	25,556	17,593	--	3,555	4,408	7,322	4,376	--	1,204	1,742
Franklin	24,914	12,021	90	2,497	10,306	5,550	2,063	78	995	2,414
Fulton	94,855	63,617	--	16,315	14,923	20,124	11,776	--	4,479	3,869
Gwinnett	61,889	40,914	--	11,579	9,396	13,403	8,338	--	2,983	2,082
Hall	40,015	23,423	--	5,990	10,602	10,653	6,234	152	1,560	2,707
Haralson	35,981	22,955	--	6,303	6,723	10,320	5,224	--	2,392	2,704
Hart	11,229	1,957	--	1,583	7,689	3,853	1,040	72	586	2,155
Heard	31,514	23,206	--	5,714	2,594	7,529	5,359	--	1,347	823
Henry	44,868	35,420	--	3,655	5,793	10,807	7,338	--	1,473	1,996
Jackson	42,636	28,639	78	5,206	8,713	8,956	5,294	13	1,851	1,798
Madison	25,306	16,964	--	3,779	4,563	6,192	3,717	21	1,601	853
Meriwether	50,499	36,197	--	7,661	6,641	13,319	8,396	22	2,486	2,415
Newton	40,251	29,483	--	4,146	6,622	8,235	5,498	38	921	1,778
Oconee	27,811	12,912	--	3,863	11,036	6,437	2,784	--	1,594	2,059
Oglethorpe	79,701	48,784	401	17,577	12,939	16,978	9,983	100	4,187	2,708
Paulding	39,414	26,242	--	5,383	7,789	12,529	7,649	--	2,340	2,540
Polk	23,378	14,833	--	1,168	7,377	8,605	5,657	156	430	2,362
Rockdale	20,085	16,319	--	1,212	2,554	3,911	3,046	16	444	405
Spalding	37,634	30,529	--	5,023	2,082	8,062	5,657	--	1,884	521
Troup	51,890	35,876	--	8,543	7,471	14,551	9,078	19	2,757	2,697
Walton	44,083	30,283	--	6,343	7,457	9,802	5,573	--	2,413	1,816
Total	1,199,010	769,482	1,478	187,635	240,415	292,603	171,266	905	56,727	63,705

Table 9.--Annual removals of sawtimber and growing stock on commercial forest land, by county and species group, North Central Georgia, 1982

County	Sawtimber					Growing stock				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	Thousand board feet					Thousand cubic feet				
Banks	32,983	22,588	--	4,142	6,253	9,002	6,308	--	1,309	1,385
Barrow	11,388	10,169	--	1,219.	--	2,346	2,179	--	167	--
Carroll	21,295	13,218	--	3,376	4,701	7,784	4,924	--	942	1,918
Clarke	12,057	12,057	--	--	--	3,057	3,057	--	--	--
Clayton	7,025	7,025	--	--	--	1,255	1,133	--	--	122
Cobb	28,075	24,117	--	975	2,983	7,481	5,614	--	311	1,556
Coweta	41,683	31,787	--	7,478	2,418	12,472	8,985	--	2,746	741
De Kalb	8,400	8,149	--	--	251	1,523	1,397	--	--	126
Douglas	7,639	7,162	--	--	477	2,759	2,605	--	--	154
Elbert	28,214	19,208	--	4,138	4,868	8,931	6,007	64	1,298	1,562
Fayette	30,462	27,702	--	2,760	--	8,218	7,391	--	827	--
Forsyth	15,402	15,402	--	--	--	3,659	3,285	--	374	--
Franklin	22,683	16,309	--	--	6,374	5,651	3,671	--	--	1,980
Fulton	25,414	19,834	--	2,967	2,613	5,452	3,466	--	944	1,042
Gwinnett	38,871	22,979	--	7,764	8,128	8,752	5,270	--	1,758	1,724
Hall	25,728	15,904	--	894	8,930	7,779	5,005	--	266	2,508
Haralson	9,440	6,732	--	1,424	1,284	2,891	2,003	--	629	259
Hart	3,959	2,673	--	--	1,286	1,968	1,091	--	--	877
Heard	68,478	37,265	--	9,312	21,901	19,282	11,038	--	3,066	5,178
Henry	29,142	24,545	--	3,762	835	7,236	6,029	--	742	465
Jackson	6,964	6,015	--	949	--	1,584	1,330	--	254	--
Madison	37,763	13,075	--	23,967	721	9,372	4,679	--	4,379	314
Meriwether	106,010	90,340	--	11,450	4,220	26,853	22,032	81	3,630	1,110
Newton	5,972	5,972	--	--	--	2,495	2,020	--	102	373
Oconee	3,548	2,336	--	--	1,212	806	474	--	73	259
Oglethorpe	64,553	51,590	--	11,229	1,734	17,147	14,035	--	2,321	791
Paulding	26,104	22,214	--	812	3,078	6,926	5,680	--	187	1,059
Polk	18,091	12,503	--	1,041	4,547	5,291	3,765	--	193	1,333
Rockdale	4,851	4,851	--	--	--	826	826	--	--	--
Spalding	8,118	6,675	--	623	820	2,985	2,135	--	567	283
Troup	49,698	42,066	--	3,448	4,184	13,184	10,779	--	778	1,627
Walton	9,304	4,012	--	--	5,292	2,245	1,206	--	--	1,039
Total	809,314	606,474	--	103,730	99,110	217,212	159,419	145	27,863	29,785

Unit Tables

Table 10.—Area of commercial forest land, by forest type and ownership class, North Central Georgia, 1983

Forest type	All ownerships	Ownership class				
		National Forest	Other public	Forest industry	Farmer	Misc. private
	Acres					
Softwood types:						
White pine-hemlock	—	—	—	—	—	—
Spruce-fir	—	—	—	—	—	—
Longleaf pine	—	—	—	—	—	—
Slash pine	—	—	—	—	—	—
Loblolly pine	1,409,583	160	37,513	273,684	181,858	916,368
Shortleaf pine	311,127	—	12,765	26,843	64,365	207,154
Virginia pine	61,751	—	7,187	—	12,805	41,759
Sand pine	—	—	—	—	—	—
Eastern redcedar	10,464	—	—	—	6,850	3,614
Pond pine	—	—	—	—	—	—
Spruce pine	—	—	—	—	—	—
Pitch pine	—	—	—	—	—	—
Table Mountain pine	—	—	—	—	—	—
Total	1,792,925	160	57,465	300,527	265,878	1,168,895
Hardwood types:						
Oak-pine	514,340	—	6,837	50,467	96,670	360,366
Oak-hickory	1,251,926	656	26,252	91,963	287,519	845,536
Chestnut oak	3,671	—	—	—	—	3,671
Southern scrub oak	11,194	—	—	—	3,671	7,523
Oak-gum-cypress	99,609	—	2,473	13,537	31,936	51,663
Elm-ash-cottonwood	141,363	3,771	2,386	25,302	31,179	78,725
Maple-beech-birch	—	—	—	—	—	—
Total	2,022,103	4,427	37,948	181,269	450,975	1,347,484
All types	3,815,028	4,587	95,413	481,796	716,853	2,516,379

Table 11.—Area of commercial forest land, by ownership and stocking classes of growing-stock trees, North Central Georgia, 1983

Ownership class	All classes	Stocking percentage[a]				
		> 130	100-130	60-99	16.7-59	< 16.7
	Acres					
National Forest	4,587	160	—	4,427	—	—
Other public	95,413	7,165	30,297	45,715	12,236	—
Forest industry	481,796	21,355	232,419	168,862	45,670	13,490
Farmer	716,853	21,424	222,420	339,409	119,619	13,981
Miscellaneous private	2,516,379	115,011	866,563	1,230,671	273,751	30,383
All ownerships	3,815,028	165,115	1,351,699	1,789,084	451,276	57,854

[a]See stocking standards on page 8.

Table 12.—Volume of timber on commercial forest land, by class and species group, North Central Georgia, 1983

Class of timber	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	Thousand cubic feet				
Sawtimber trees:					
Saw-log portion	2,918,533	1,620,329	2,744	558,933	736,527
Upper-stem portion	393,983	152,460	258	104,095	137,170
Total	3,312,516	1,772,789	3,002	663,028	873,697
Poletimber trees	1,671,977	744,597	5,554	424,721	497,105
All growing-stock trees	4,984,493	2,517,386	8,556	1,087,749	1,370,802
Rough trees:					
Sawtimber size	58,358	5,634	387	22,719	29,618
Poletimber size	116,659	5,768	366	39,406	71,119
Total	175,017	11,402	753	62,125	100,737
Rotten trees:					
Sawtimber size	22,735	—	—	11,512	11,223
Poletimber size	6,317	—	—	4,355	1,962
Total	29,052	—	—	15,867	13,185
Salvable dead trees:					
Sawtimber size	21,031	14,661	—	2,404	3,966
Poletimber size	16,362	13,186	—	1,423	1,753
Total	37,393	27,847	—	3,827	5,719
Total, all timber	5,225,955	2,556,635	9,309	1,169,568	1,490,443

Table 13.--Number of growing-stock trees on commercial forest land, by species and diameter class, North Central Georgia, 1983

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
	Thousand trees										
Softwood:											
Longleaf pine	1,070	--	180	268	245	259	61	49	--	8	--
Slash pine	602	124	249	143	40	24	22	--	--	--	--
Shortleaf pine	83,277	38,457	23,587	11,771	6,131	2,264	667	311	38	51	--
Loblolly pine	212,303	82,221	53,994	37,071	20,060	11,347	4,434	1,962	795	419	--
Pond pine	--	--	--	--	--	--	--	--	--	--	--
Virginia pine	12,674	4,838	4,255	2,200	996	245	106	34	--	--	--
Pitch pine	--	--	--	--	--	--	--	--	--	--	--
Table Mountain pine	--	--	--	--	--	--	--	--	--	--	--
Spruce pine	--	--	--	--	--	--	--	--	--	--	--
Sand pine	--	--	--	--	--	--	--	--	--	--	--
Eastern white pine	--	--	--	--	--	--	--	--	--	--	--
Eastern hemlock	--	--	--	--	--	--	--	--	--	--	--
Spruce and fir	--	--	--	--	--	--	--	--	--	--	--
Bald cypress	--	--	--	--	--	--	--	--	--	--	--
Pond cypress	--	--	--	--	--	--	--	--	--	--	--
Cedars	2,873	2,259	392	160	--	28	19	15	--	--	--
Total softwoods	312,799	127,899	82,657	51,613	27,472	14,167	5,309	2,371	833	478	--
Hardwood:											
Select white oaks	25,588	9,677	5,053	3,367	2,882	2,127	1,089	737	266	365	25
Select red oaks	7,714	2,352	1,445	1,434	951	756	346	193	105	123	9
Chestnut oak	3,003	679	625	816	333	306	109	42	42	51	--
Other white oaks	11,705	4,729	3,207	1,976	734	490	244	145	68	99	13
Other red oaks	50,564	18,869	11,594	8,225	5,476	2,733	1,474	1,127	482	528	56
Hickory	22,910	10,420	5,291	3,225	1,543	1,302	724	205	109	91	--
Yellow birch	--	--	--	--	--	--	--	--	--	--	--
Hard maple	602	201	304	97	--	--	--	--	--	--	--
Soft maple	11,481	3,265	4,252	1,569	867	499	601	189	137	97	5
Beech	470	--	197	--	65	45	22	42	27	67	5
Sweetgum	58,658	27,835	14,461	7,229	4,674	2,403	1,191	502	211	149	3
Tupelo and blackgum	5,793	2,593	1,005	968	638	338	119	120	12	--	--
Ash	5,395	1,813	1,502	739	403	422	311	8	63	47	8
Cottonwood	57	--	--	--	--	--	--	32	13	12	--
Basswood	83	--	--	48	--	31	--	--	--	--	4
Yellow-poplar	28,387	8,807	5,734	3,986	3,715	2,863	1,570	897	464	337	14
Bay and magnolia	640	274	265	--	101	--	--	--	--	--	--
Black cherry	4,236	3,328	421	368	95	24	--	--	--	--	--
Black walnut	656	456	--	128	35	--	--	15	14	8	--
Sycamore	778	131	435	--	--	55	78	43	26	10	--
Black locust	30	--	--	--	--	30	--	--	--	--	--
Elm	4,446	2,206	1,011	642	95	286	168	30	--	8	--
Other eastern hardwoods	7,044	3,781	1,941	482	509	132	63	46	61	29	--
Total hardwoods	250,240	101,416	58,743	35,299	23,116	14,842	8,109	4,452	2,100	2,021	142
All species	563,039	229,315	141,400	86,912	50,588	29,009	13,418	6,823	2,933	2,499	142

Table 14.--Volume of all live trees on commercial forest land, by species and diameter class, North Central Georgia, 1983

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
	Thousand cubic feet										
Softwood:											
Longleaf pine	16,970	--	935	2,263	3,605	5,967	1,835	1,716	--	649	--
Slash pine	5,750	416	1,433	1,761	796	700	644	--	--	--	--
Shortleaf pine	560,306	87,365	133,187	121,710	110,413	60,974	23,782	15,901	2,302	4,672	--
Loblolly pine	1,856,028	186,188	300,407	380,194	352,256	296,819	161,858	94,057	47,401	36,848	--
Pond pine	--	--	--	--	--	--	--	--	--	--	--
Virginia pine	89,734	13,935	26,499	22,503	15,575	5,707	3,626	1,889	--	--	--
Pitch pine	--	--	--	--	--	--	--	--	--	--	--
Table Mountain pine	--	--	--	--	--	--	--	--	--	--	--
Spruce pine	--	--	--	--	--	--	--	--	--	--	--
Sand pine	--	--	--	--	--	--	--	--	--	--	--
Eastern white pine	--	--	--	--	--	--	--	--	--	--	--
Eastern hemlock	--	--	--	--	--	--	--	--	--	--	--
Spruce and fir	--	--	--	--	--	--	--	--	--	--	--
Bald cypress	--	--	--	--	--	--	--	--	--	--	--
Pond cypress	--	--	--	--	--	--	--	--	--	--	--
Cedars	9,309	4,352	1,568	1,261	--	694	514	920	--	--	--
Total softwoods	2,538,097	292,256	464,029	529,692	482,645	370,861	192,259	114,483	49,703	42,169	--
Hardwood:											
Select white oaks	327,788	25,283	29,545	37,222	48,680	54,362	39,162	34,591	15,537	36,943	6,463
Select red oaks	112,068	8,000	10,024	17,508	15,910	19,729	12,457	9,342	6,082	11,249	1,767
Chestnut oak	35,502	2,221	3,627	7,142	5,669	6,044	3,230	1,628	2,086	3,855	--
Other white oaks	101,085	12,442	17,089	19,017	12,559	11,281	7,223	6,144	3,254	10,120	1,956
Other red oaks	525,206	47,300	64,509	85,170	87,636	62,959	46,905	47,479	26,075	46,381	10,792
Hickory	192,162	23,323	27,083	32,609	25,834	32,475	24,785	10,690	6,291	9,072	--
Yellow birch	--	--	--	--	--	--	--	--	--	--	--
Hard maple	4,667	715	2,046	1,282	--	--	--	624	--	--	--
Soft maple	141,901	13,428	28,637	20,488	19,538	14,114	18,251	9,308	8,871	7,798	1,468
Beech	19,169	399	1,697	464	1,060	951	711	1,644	2,804	7,310	2,129
Sweetgum	469,562	59,156	79,066	80,525	84,523	65,344	46,159	25,804	13,378	14,765	842
Tupelo and blackgum	55,167	8,642	5,970	12,197	10,757	7,985	3,744	5,102	428	342	--
Ash	66,073	6,284	8,886	6,942	6,632	11,379	10,798	3,931	4,524	5,291	1,406
Cottonwood	4,087	--	--	--	528	--	--	1,737	859	963	--
Basswood	1,748	--	--	627	--	560	--	--	--	--	561
Yellow-poplar	404,003	27,247	36,185	42,953	66,881	72,990	54,066	41,545	26,957	31,197	3,982
Bay and magnolia	4,493	915	1,764	--	1,814	--	--	--	--	--	--
Black cherry	23,351	11,728	4,695	4,869	1,520	539	--	--	--	--	--
Black walnut	5,901	983	--	949	836	675	--	866	626	966	--
Sycamore	11,925	590	3,367	--	--	1,433	2,736	1,811	1,449	539	--
Black locust	583	--	--	--	--	583	--	--	--	--	--
Elm	36,801	5,076	6,147	7,866	1,659	7,940	5,973	1,295	--	845	--
Other eastern hardwoods	107,223	37,513	23,983	15,273	10,105	5,842	4,186	2,370	4,046	3,288	617
Total hardwoods	2,650,465	291,245	354,320	393,103	402,141	377,185	280,386	205,911	123,267	190,924	31,983
All species	5,188,562	583,501	818,349	922,795	884,786	748,046	472,645	320,394	172,970	233,093	31,983

Table 15.--Volume of growing stock on commercial forest land, by species and diameter class, North Central Georgia, 1983

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
	Thousand cubic feet										
Softwood:											
Longleaf pine	16,970	--	935	2,263	3,605	5,967	1,835	1,716	--	649	--
Slash pine	5,750	416	1,433	1,761	796	700	644	--	--	--	--
Shortleaf pine	557,992	85,894	133,187	121,710	110,413	60,974	22,939	15,901	2,302	4,672	--
Loblolly pine	1,847,353	184,755	297,956	378,144	350,912	296,498	161,858	93,450	47,401	36,379	--
Pond pine	--	--	--	--	--	--	--	--	--	--	--
Virginia pine	89,321	13,935	26,086	22,503	15,575	5,707	3,626	1,889	--	--	--
Pitch pine	--	--	--	--	--	--	--	--	--	--	--
Table Mountain pine	--	--	--	--	--	--	--	--	--	--	--
Spruce pine	--	--	--	--	--	--	--	--	--	--	--
Sand pine	--	--	--	--	--	--	--	--	--	--	--
Eastern white pine	--	--	--	--	--	--	--	--	--	--	--
Eastern hemlock	--	--	--	--	--	--	--	--	--	--	--
Spruce and fir	--	--	--	--	--	--	--	--	--	--	--
Bald cypress	--	--	--	--	--	--	--	--	--	--	--
Pond cypress	--	--	--	--	--	--	--	--	--	--	--
Cedars	8,556	3,986	1,568	1,261	--	694	514	533	--	--	--
Total softwoods	2,525,942	288,986	461,165	527,642	481,301	370,540	191,416	113,489	49,703	41,700	--
Hardwood:											
Select white oaks	320,747	24,461	29,545	36,849	48,680	53,909	38,759	34,591	14,953	34,480	4,520
Select red oaks	109,085	8,000	9,483	15,913	15,910	18,882	12,457	9,342	6,082	11,249	1,767
Chestnut oak	33,476	2,221	3,246	6,577	4,944	6,044	2,875	1,628	2,086	3,855	--
Other white oaks	93,515	11,612	16,421	18,410	10,388	10,803	6,468	5,972	3,254	8,231	1,956
Other red oaks	508,772	44,102	62,431	83,833	85,284	62,296	46,010	45,861	25,340	44,199	9,416
Hickory	186,824	22,449	26,037	32,162	24,312	32,231	24,785	9,874	6,291	8,683	--
Yellow birch	--	--	--	--	--	--	--	--	--	--	--
Hard maple	3,794	715	2,046	1,033	--	--	--	--	--	--	--
Soft maple	113,068	9,642	23,726	14,472	13,426	11,491	17,604	7,894	7,530	6,545	738
Beech	14,453	--	1,697	--	1,060	951	711	1,644	1,384	6,453	553
Sweetgum	452,757	56,660	75,780	76,964	82,479	63,698	44,544	25,429	12,688	13,673	842
Tupelo and blackgum	46,023	6,147	5,240	9,744	9,417	7,096	3,246	4,705	428	--	--
Ash	61,638	5,233	7,795	6,942	6,632	11,379	10,145	3,931	3,862	4,313	1,406
Cottonwood	3,559	--	--	--	--	--	--	1,73.	859	963	--
Basswood	1,748	--	--	627	--	560	--	--	--	--	561
Yellow-poplar	396,922	26,043	34,442	42,953	66,881	72,215	54,066	41,545	26,392	29,612	2,773
Bay and magnolia	3,730	828	1,425	--	1,477	--	--	--	--	--	--
Black cherry	16,576	8,149	2,388	3,980	1,520	539	--	--	--	--	--
Black walnut	5,226	983	--	949	836	--	--	866	626	966	--
Sycamore	11,925	590	3,367	--	--	1,433	2,736	1,811	1,449	539	--
Black locust	583	--	--	--	--	583	--	--	--	--	--
Elm	30,887	4,606	4,077	6,697	1,659	6,538	5,170	1,295	--	845	--
Other eastern hardwoods	43,243	7,751	10,098	4,285	8,099	2,874	2,182	1,837	3,408	2,709	--
Total hardwoods	2,458,551	240,192	319,244	362,390	383,004	363,522	271,758	199,962	116,632	177,315	24,532
All species	4,984,493	529,178	780,409	890,032	864,305	734,062	463,174	313,451	166,335	219,015	24,532

Table 16.--Volume of sawtimber on commercial forest land, by species and diameter class, North Central Georgia, 1983

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
	Thousand board feet								
Softwood:									
Longleaf pine	83,494	8,860	17,579	31,917	10,406	10,393	--	4,339	--
Slash pine	17,970	6,997	3,629	3,780	3,564	--	--	--	--
Shortleaf pine	1,509,590	443,904	493,536	308,719	126,327	92,808	14,231	30,065	--
Loblolly pine	6,341,990	1,324,526	1,547,120	1,491,521	893,431	552,612	294,382	238,398	--
Pond pine	--	--	--	--	--	--	--	--	--
Virginia pine	194,861	77,959	62,905	26,306	17,843	9,848	--	--	--
Pitch pine	--	--	--	--	--	--	--	--	--
Table Mountain pine	--	--	--	--	--	--	--	--	--
Spruce pine	--	--	--	--	--	--	--	--	--
Sand pine	--	--	--	--	--	--	--	--	--
Eastern white pine	--	--	--	--	--	--	--	--	--
Eastern hemlock	--	--	--	--	--	--	--	--	--
Spruce and fir	--	--	--	--	--	--	--	--	--
Bald cypress	--	--	--	--	--	--	--	--	--
Pond cypress	--	--	--	--	--	--	--	--	--
Cedars	14,893	5,185	--	3,634	2,948	3,126	--	--	--
Total softwoods	8,162,798	1,867,431	2,124,769	1,865,877	1,054,519	668,787	308,613	272,802	--
Hardwood:									
Select white oaks	978,791	--	158,109	207,200	167,445	160,743	73,742	185,147	26,405
Select red oaks	309,546	--	50,866	70,144	50,504	43,861	28,079	56,641	9,451
Chestnut oak	86,008	--	15,466	21,993	11,850	7,352	9,815	19,532	--
Other white oaks	219,681	--	37,358	45,634	29,687	30,104	17,393	47,304	12,201
Other red oaks	1,402,315	--	290,659	250,877	206,667	219,791	129,450	246,637	58,234
Hickory	451,691	--	80,907	129,515	111,871	48,319	32,578	48,501	--
Yellow birch	--	--	--	--	--	--	--	--	--
Hard maple	--	--	--	--	--	--	--	--	--
Soft maple	265,647	--	42,281	43,195	71,981	35,188	35,755	33,101	4,146
Beech	51,603	--	3,939	3,659	2,794	6,571	5,571	26,718	2,351
Sweetgum	1,071,653	--	291,972	272,313	215,017	133,844	70,552	82,060	5,895
Tupelo and blackgum	93,914	--	29,505	27,220	13,190	21,915	2,084	--	--
Ash	176,586	--	21,294	44,058	43,319	18,172	18,794	22,826	8,123
Cottonwood	17,627	--	--	--	--	8,257	4,365	5,005	--
Basswood	5,295	--	--	2,154	--	--	--	--	3,141
Yellow-poplar	1,374,823	--	235,921	310,395	262,241	218,229	147,883	180,441	19,713
Bay and magnolia	4,865	--	4,865	--	--	--	--	--	--
Black cherry	7,675	--	5,513	2,162	--	--	--	--	--
Black walnut	11,683	--	2,893	--	--	3,077	2,233	3,480	--
Sycamore	35,796	--	--	5,356	11,757	8,582	7,260	2,841	--
Black locust	2,095	--	--	2,095	--	--	--	--	--
Elm	62,986	--	5,761	25,220	21,732	5,812	--	4,461	--
Other eastern hardwoods	80,405	--	24,652	10,706	8,921	7,873	15,264	12,989	--
Total hardwoods	6,710,685	--	1,301,961	1,473,896	1,228,976	977,690	600,818	977,684	149,660
All species	14,873,483	1,867,431	3,426,730	3,339,773	2,283,495	1,646,477	909,431	1,250,486	149,660

Table 17.—Net annual growth and removals of growing stock on commercial forest land, by species, North Central Georgia, 1982

Species	Net annual growth	Annual timber removals
	Thousand cubic feet	
Softwood:		
Yellow pines	171,266	159,419
Eastern white pine	—	—
Spruce and fir	—	—
Cypress	—	—
Other eastern softwoods	905	145
Total softwoods	172,171	159,564
Hardwood:		
Select white and red oaks	19,529	7,812
Other white and red oaks	31,410	16,008
Hickory	6,718	3,932
Yellow birch	—	—
Hard maple	333	—
Sweetgum	21,625	9,379
Ash, walnut, and black cherry	4,440	975
Yellow-poplar	25,236	14,387
Tupelo and blackgum	1,256	1,213
Bay and magnolia	196	—
Other eastern hardwoods	9,689	3,942
Total hardwoods	120,432	57,648
All species	292,603	217,212

Table 18.—Net annual growth and removals of sawtimber on commercial forest land, by species, North Central Georgia, 1982

Species	Net annual growth	Annual timber removals
	Thousand board feet	
Softwood:		
Yellow pines	769,482	606,474
Eastern white pine	—	—
Spruce and fir	—	—
Cypress	—	—
Other eastern softwoods	1,478	—
Total softwoods	770,960	606,474
Hardwood:		
Select white and red oaks	84,889	28,477
Other white and red oaks	118,155	50,539
Hickory	20,260	12,491
Yellow birch	—	—
Hard maple	200	—
Sweetgum	59,881	23,646
Ash, walnut, and black cherry	13,772	3,380
Yellow-poplar	99,459	66,628
Tupelo and blackgum	5,349	5,059
Bay and magnolia	244	—
Other eastern hardwoods	25,841	12,620
Total hardwoods	428,050	202,840
All species	1,199,010	809,314

Table 19.—Mortality of growing stock and sawtimber on commercial forest land, by species, North Central Georgia, 1982

Species	Growing stock	Sawtimber
	Thousand cubic feet	Thousand board feet
Softwood:		
Yellow pines	49,727	129,570
Eastern white pine	—	—
Spruce and fir	—	—
Cypress	—	—
Other eastern softwoods	—	—
Total softwoods	49,727	129,570
Hardwood:		
Select white and red oaks	2,414	6,181
Other white and red oaks	5,995	21,027
Hickory	488	1,245
Yellow birch	—	—
Hard maple	—	—
Sweetgum	2,585	7,839
Ash, walnut, and black cherry	519	1,745
Yellow-poplar	2,546	6,728
Tupelo and blackgum	532	1,872
Bay and magnolia	182	706
Other eastern hardwoods	3,133	8,974
Total hardwoods	18,394	56,317
All species	68,121	185,887

Table 20.—Volume of all live trees and growing stock on commercial forest land, by ownership class and species group, North Central Georgia, 1983

Ownership class	All live trees					Growing stock				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	Thousand cubic feet									
National Forest	11,349	—	—	5,358	5,991	11,349	—	—	5,358	5,991
Other public	154,136	77,223	—	32,481	44,432	144,684	77,058	—	28,939	38,687
Forest industry	447,046	274,520	1,223	94,309	76,994	430,562	273,543	1,007	85,944	70,068
Farmer	1,005,157	395,848	2,736	278,291	328,282	957,842	395,438	2,586	260,598	299,220
Miscellaneous private	3,570,874	1,781,197	5,350	755,302	1,029,025	3,440,056	1,771,347	4,963	706,910	956,836
All ownerships	5,188,562	2,528,788	9,309	1,165,741	1,484,724	4,984,493	2,517,386	8,556	1,087,749	1,370,802

Table 21.—Volume of sawtimber on commercial forest land, by ownership class and species group, North Central Georgia, 1983

Ownership class	Small sawtimber[a]					Large sawtimber[b]				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	Thousand board feet									
National Forest	20,190	—	—	6,364	13,826	11,974	—	—	8,705	3,269
Other public	261,810	177,997	—	39,133	44,680	174,818	87,764	—	43,065	43,989
Forest industry	788,652	628,561	1,299	104,840	53,952	330,031	90,472	—	126,650	112,909
Farmer	1,563,027	941,196	—	288,789	333,042	1,208,848	329,854	—	376,140	502,854
Miscellaneous private	6,000,255	4,101,504	7,520	876,519	1,014,712	4,513,878	1,790,557	6,074	1,081,888	1,635,359
All ownerships	8,633,934	5,849,258	8,819	1,315,645	1,460,212	6,239,549	2,298,647	6,074	1,636,448	2,298,380

[a]Volume of sawtimber trees less than 15.0 inches at d.b.h.

[b]Volume of sawtimber trees 15.0 inches and larger at d.b.h.

Table 22.—Net annual growth and removals of growing stock on commercial forest land, by ownership class and species group, North Central Georgia, 1982

Ownership class	Net annual growth					Annual timber removals				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	Thousand cubic feet									
National Forest	426	—	—	178	248	—	—	—	—	—
Other public	9,215	5,119	152	1,861	2,083	6,180	3,562	—	1,092	1,526
Forest industry	30,146	21,952	107	4,054	4,033	35,636	20,653	—	8,153	6,830
Farmer	53,429	25,807	194	13,107	14,321	49,022	35,159	145	6,784	6,934
Miscellaneous private	199,387	118,388	452	37,527	43,020	126,374	100,045	—	11,834	14,495
All ownerships	292,603	171,266	905	56,727	63,705	217,212	159,419	145	27,863	29,785

Table 23.—Net annual growth and removals of sawtimber on commercial forest land, by ownership class and species group, North Central Georgia, 1982

Ownership class	Net annual growth					Annual timber removals				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	Thousand board feet									
National Forest	2,354	—	—	1,614	740	—	—	—	—	—
Other public	32,727	23,175	—	4,315	5,237	19,165	11,831	—	3,208	4,126
Forest industry	111,908	85,995	69	13,682	12,162	126,457	70,014	—	30,011	26,432
Farmer	223,767	127,493	909	40,453	54,912	181,554	133,632	—	25,788	22,134
Miscellaneous private	828,254	532,819	500	127,571	167,364	482,138	390,997	—	44,723	46,418
All ownerships	1,199,010	769,482	1,478	187,635	240,415	809,314	606,474	—	103,730	99,110

Table 24.--Average net volume per acre of sawtimber, growing stock, and other live timber[a] on commercial forest land, by major forest type, species group, and ownership class, North Central Georgia, 1983

Forest type, species group, and class of material	All ownerships		Ownership class									
			National Forest		Other public		Forest industry		Farmer		Misc. private	
	Board feet	Cubic feet	Board feet	Cubic feet	Board feet	Cubic feet	Board feet	Cubic feet	Board feet	Cubic feet	Board feet	Cubic feet
Pine types:												
Growing stock:												
Softwood	3,692	1,180	--	--	3,538	1,062	2,356	900	3,514	1,144	4,073	1,264
Hardwood	391	181	--	--	356	204	119	72	493	230	438	196
Total	4,083	1,361	--	--	3,894	1,266	2,475	972	4,007	1,374	4,511	1,460
Other timber:												
Softwood	--	6	--	--	--	3	--	4	--	1	--	8
Hardwood	--	18	--	--	--	22	--	4	--	28	--	19
Total	--	24	--	--	--	25	--	8	--	29	--	27
Oak-pine type:												
Growing stock:												
Softwood	1,672	485	--	--	4,028	1,011	480	196	2,087	608	1,624	469
Hardwood	1,394	574	--	--	4,051	1,125	458	207	1,501	708	1,390	563
Total	3,066	1,059	--	--	8,079	2,136	938	403	3,588	1,316	3,014	1,032
Other timber:												
Softwood	--	--	--	--	--	--	--	--	--	--	--	1
Hardwood	--	50	--	--	--	96	--	28	--	41	--	53
Total	--	50	--	--	--	96	--	28	--	41	--	54
Upland hardwood types:												
Growing stock:												
Softwood	501	124	--	--	403	107	161	49	358	101	591	141
Hardwood	3,112	1,121	--	--	2,089	869	1,324	652	3,105	1,119	3,352	1,183
Total	3,613	1,245	--	--	2,492	976	1,485	701	3,463	1,220	3,943	1,324
Other timber:												
Softwood	--	--	--	--	--	--	--	--	--	--	--	--
Hardwood	--	72	--	--	--	107	--	54	--	88	--	67
Total	--	72	--	--	--	107	--	54	--	88	--	67
Lowland hardwood types:												
Growing stock:												
Softwood	333	57	--	--	--	--	--	--	431	71	431	74
Hardwood	5,438	1,686	8,458	2,984	2,723	1,085	5,492	1,634	4,890	1,592	5,859	1,767
Total	5,771	1,743	8,458	2,984	2,723	1,085	5,492	1,634	5,321	1,663	6,290	1,841
Other timber:												
Softwood	--	--	--	--	--	--	--	--	--	--	--	--
Hardwood	--	174	--	--	--	276	--	197	--	147	--	177
Total	--	174	--	--	--	276	--	197	--	147	--	177
All types:												
Growing stock:												
Softwood	2,140	662	--	--	2,280	661	1,548	590	1,765	553	2,353	708
Hardwood	1,759	644	8,458	2,984	1,466	580	856	335	2,084	777	1,837	663
Total	3,899	1,306	8,458	2,984	3,746	1,241	2,404	925	3,849	1,330	4,190	1,371
Other timber:												
Softwood	--	3	--	--	--	1	--	3	--	1	--	4
Hardwood	--	50	--	--	--	80	--	33	--	65	--	48
Total	--	53	--	--	--	81	--	36	--	66	--	52
All timber	3,899	1,360	8,458	2,984	3,746	1,323	2,404	961	3,849	1,396	4,190	1,423

[a]Rough and rotten trees.

Table 25.—Land area, by class, major forest type, and survey completion date, North Central Georgia, 1961,1972, and 1983

Land use class	Survey completion date			Change 1972-1983
	1961	1972	1983	
	Acres			
Forest land:				
Commercial forest land:				
Pine and oak-pine types	2,794,100	2,768,946	2,307,265	-461,681
Hardwood types	1,290,500	1,230,295	1,507,763	+277,468
Total	4,084,600	3,999,241	3,815,028	-184,213
Noncommercial forest land:				
Productive-reserved	5,600	7,502	14,236	+6,734
Unproductive	—	—	—	—
Total	5,600	7,502	14,236	+6,734
Nonforest land:				
Cropland	1,051,200	657,669	669,387	+11,718
Pasture and range	633,800	795,578	601,060	-194,518
Other	419,000	713,895	1,029,783	+315,888
Total	2,104,000	2,167,142	2,300,230	+133,088
All land[a]	6,194,200	6,173,885	6,129,494	-44,391

[a]Excludes all water areas.

Table 26.—Volume[a] of sawtimber, growing stock, and all live timber on commercial forest land, 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 (in thousand board feet)								
Softwood										
1961	3,486,942	—	—	1,141,699	1,072,315	645,927	321,026	119,327	111,886	74,762
1972	6,983,031	—	—	1,682,200	1,855,104	1,505,940	973,407	507,211	249,714	209,455
1983	8,162,798	—	—	1,867,431	2,124,769	1,865,877	1,054,519	668,787	308,613	272,802
Hardwood										
1961	3,646,087	—	—	—	844,597	713,346	582,791	502,477	355,033	647,843
1972	4,963,227	—	—	—	1,090,100	1,060,535	909,650	617,774	414,254	870,914
1983	6,710,685	—	—	—	1,301,961	1,473,896	1,228,976	977,690	600,818	1,127,344
		GROWING STOCK (in thousand cubic feet)								
Softwood										
1961	1,407,911	273,498	332,696	322,605	242,880	128,262	58,273	20,249	18,020	11,428
1972	2,488,367	429,450	529,369	475,332	420,182	299,035	176,694	86,070	40,218	32,017
1983	2,525,942	288,986	461,165	527,642	481,301	370,540	191,416	113,489	49,703	41,700
Hardwood										
1961	1,451,563	157,245	197,326	255,969	248,484	175,961	128,879	102,777	68,925	115,997
1972	2,018,591	241,136	297,906	333,354	320,712	261,602	201,161	126,360	80,422	155,938
1983	2,458,551	240,192	319,244	362,390	383,004	363,522	271,758	199,962	116,632	201,847
		ALL LIVE TIMBER (in thousand cubic feet)								
Softwood										
1961	1,415,617	276,829	334,551	323,871	243,478	128,324	58,518	20,438	18,020	11,588
1972	2,501,512	434,678	532,314	477,205	421,229	299,188	177,468	86,800	40,218	32,412
1983	2,538,097	292,256	464,029	529,692	482,645	370,861	192,259	114,483	49,703	42,169
Hardwood										
1961	1,570,477	190,821	219,038	277,496	260,845	182,564	132,972	105,815	72,846	128,080
1972	2,187,648	292,625	330,682	361,384	336,668	271,423	207,564	130,086	85,023	172,193
1983	2,650,465	291,245	354,320	393,103	402,141	377,185	280,386	205,911	123,267	222,907

[a]To provide a basis for valid comparisons, adjustments have been made to allow for differences in volume tables and sawtimber specifications used in previous surveys.

Tansey, John B.
Forest statistics for North Central Georgia, 1983. Resour. Bull. SE-67. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station; 1983. 30 p.

Since the fourth inventory of the forest resources of North Central Georgia in 1972, the area of commercial forest land has decreased by 5 percent, or 184,000 acres. Commercial forests now cover 3.8 million acres, 62 percent of the land in these 32 counties. Volume of softwood growing stock has increased 2 percent while volume of hardwood growing stock has increased 22 percent. Net annual growth of softwood growing stock totaled 172 million cubic feet compared to annual softwood removals of 160 million cubic feet. Hardwood net growth totaled 120 million cubic feet compared to annual hardwood removals of 58 million cubic feet.

KEYWORDS: Commercial forest land, timber volume, timber growth, timber removals.

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Since the fourth inventory of the forest resources of North Central Georgia in 1972, the area of commercial forest land has decreased by 5 percent, or 184,000 acres. Commercial forests now cover 3.8 million acres, 62 percent of the land in these 32 counties. Volume of softwood growing stock has increased 2 percent while volume of hardwood growing stock has increased 22 percent. Net annual growth of softwood growing stock totaled 172 million cubic feet compared to annual softwood removals of 160 million cubic feet. Hardwood net growth totaled 120 million cubic feet compared to annual hardwood removals of 58 million cubic feet.

KEYWORDS: Commercial forest land, timber volume, timber growth, timber removals.

The Forest Service, U.S. Department of Agriculture, is dedicated to the principle of multiple use management of the Nation's forest resources for sustained yields of wood, water, forage, wildlife, and recreation. Through forestry research, cooperation with the States and private forest owners, and management of the National Forests and National Grasslands, it strives—as directed by Congress—to provide increasingly greater service to a growing Nation.

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