United States
Department of
Agriculture

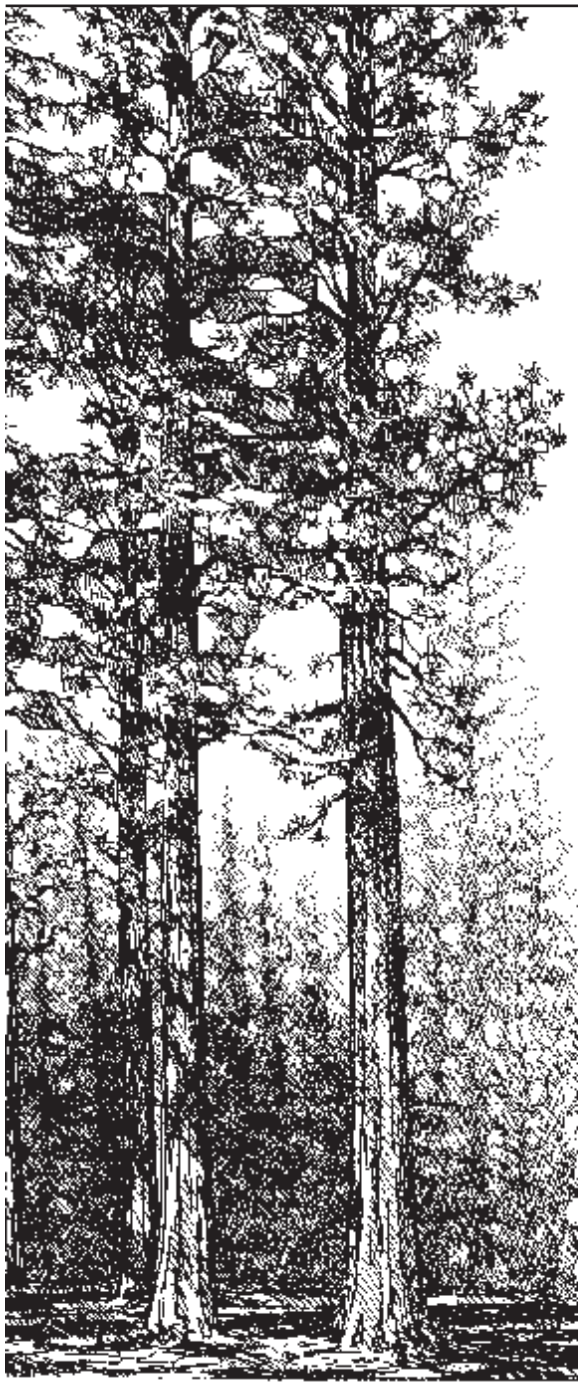
Forest Service

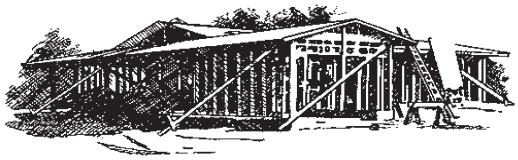
**Southern
Research Station**

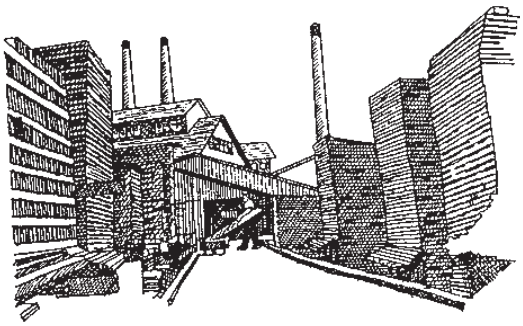
Resource Bulletin
SRS–104

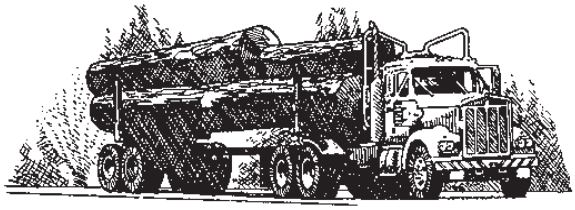
Georgia's Timber Industry—An Assessment of Timber Product Output and Use, 2003

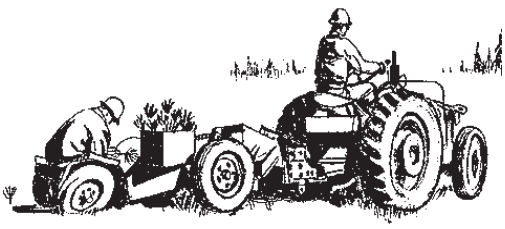
**Tony G. Johnson and
John L. Wells**











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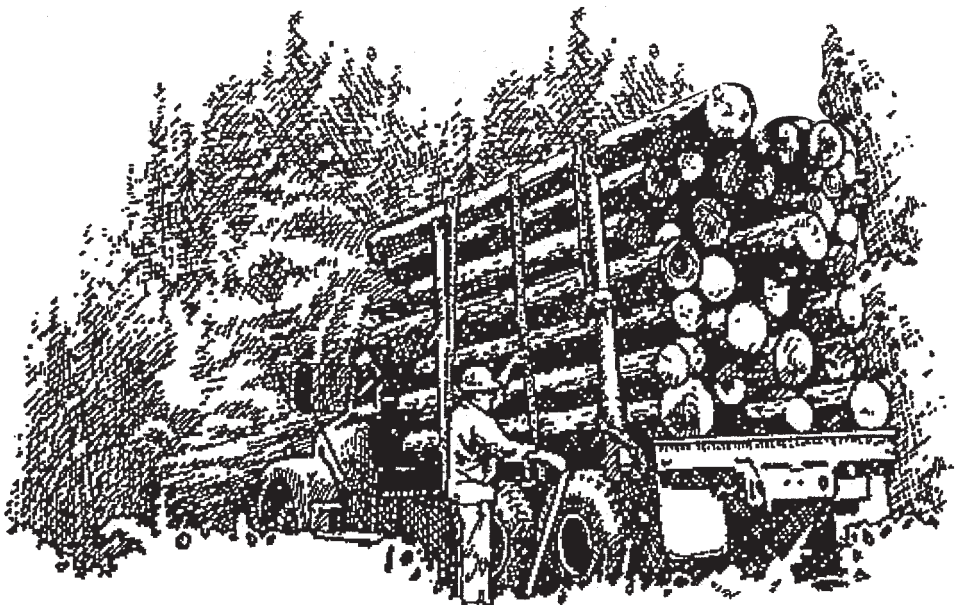

November 2005

Southern Research Station
P.O. Box 2680
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Foreword

This report contains the findings of a 2003 canvass of all primary wood-using plants in Georgia, and presents changes in product output and residue use since 2001. It complements the Forest Inventory and Analysis periodic inventory of volume and removals from the State's timberland. The canvass was conducted to determine the amount and source of wood receipts and annual timber product drain, by county, in 2003 and to determine interstate and cross-regional movement of industrial roundwood. Only primary wood-using mills were canvassed. Primary mills are those that process roundwood in log or bolt form or as chipped roundwood. Examples of industrial roundwood products are saw logs, pulpwood, veneer logs, poles, and logs used for composite board products. Mills producing products from residues generated at primary and secondary processors were not canvassed. Trees chipped in the woods were included in the estimate of timber drain only if they were delivered to a primary domestic manufacturer.

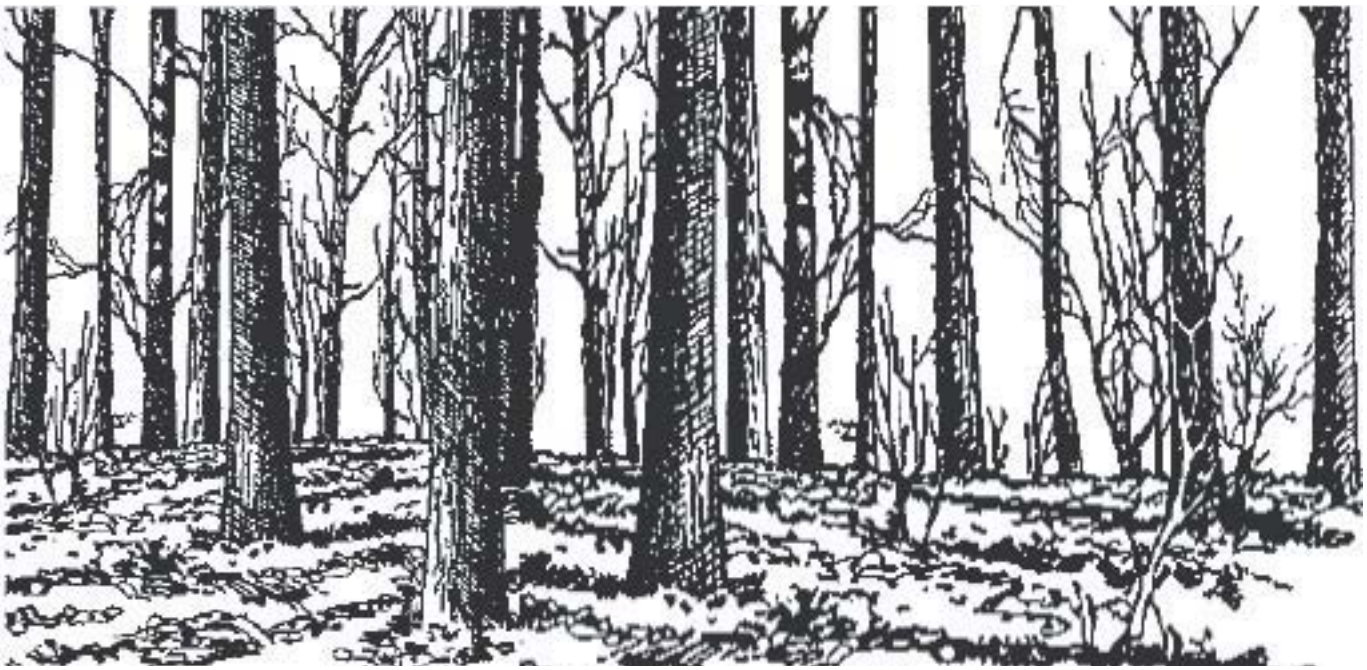
A 100-percent canvass of all wood processors in Georgia was conducted in 2004 to obtain information for 2003. In addition, roundwood from out-of-State mills known to be using logs or bolts harvested from Georgia timberland was incorporated into Georgia production estimates. Each mill was canvassed by mail or through personal contact at plant locations. Telephone contacts followed mailed questionnaire responses when additional information or clarification of a response was necessary. In the event of a nonresponse, data collected in previous surveys were updated using current data collected for mills of similar size, product type, and location. Surveys for all timber products other than pulpwood began in 1961, and are currently conducted every 2 years.

Pulpwood production data were taken from an annual canvass of all southern pulpmills. Medium density fiberboard, insulating board, and hardboard plants were included in this survey.

Acknowledgments

The authors thank Nathan McClure and Richard Harper for review and comments; Sonja Oswalt and Lyn Thornhill for the maps; Anne Jenkins, Janet Griffin, and Sharon Johnson for tables, graphs, and statistical checking; and Paul Smith, Diana Corbin, and Louise Wilde for editorial review, styling, and publication of this report.

The Southern Research Station gratefully acknowledges the cooperation and assistance provided by the Georgia Forestry Commission in collecting mill data. Appreciation is also extended to forest industry and mill managers for providing timber products information.



Timber Product Output Database Retrieval System

The Forest Inventory and Analysis (FIA) Research Work Unit of the U.S. Department of Agriculture Forest Service (USDA Forest Service) developed the Timber Product Output (TPO) Database Retrieval System to help customers answer questions about timber harvesting and use in the Southern region. This system acts as an interface to a standard set of consistently coded TPO data for each State and county in the region and nation. This regional and national set of TPO data consists of 11 variables that describe for each county the roundwood products harvested, logging residues left in the woods, timber otherwise removed, and wood and bark residues generated by the county's primary wood-using mills. The system is available through the FIA Web site: http://srsfia2.fs.fed.us/php/tpo2/tpo.php.

The database is well documented and easy to use. The retrieval system allows the user to select the TPO variables of interest and generate a standard set of timber products, removals, and mill residue tables for the specified resource area or areas. The system has been logically divided into two sections to assist the user in specific data requests. In section 1, the user is asked to define the resource area, and section 2 generates tables for the specified area. In each section, the user is asked to supply specific input that will serve to customize the database retrieval.

There are four options available for defining the geographic area of interest. Each option provides an increasing level of detail. The region, subregion, State, or county defines an area. The user selects the option that best suits the level of detail required. Users who select county as an option should be aware that some counties have been combined due to data sensitivity. These combined counties are identified with asterisks in the output tables.

The TPO contacts are listed to provide additional explanation or clarification.

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[a] All Tables in this report are available in Microsoft® Excel workbook files. Upon request, these files will be supplied in the format the customer requests.

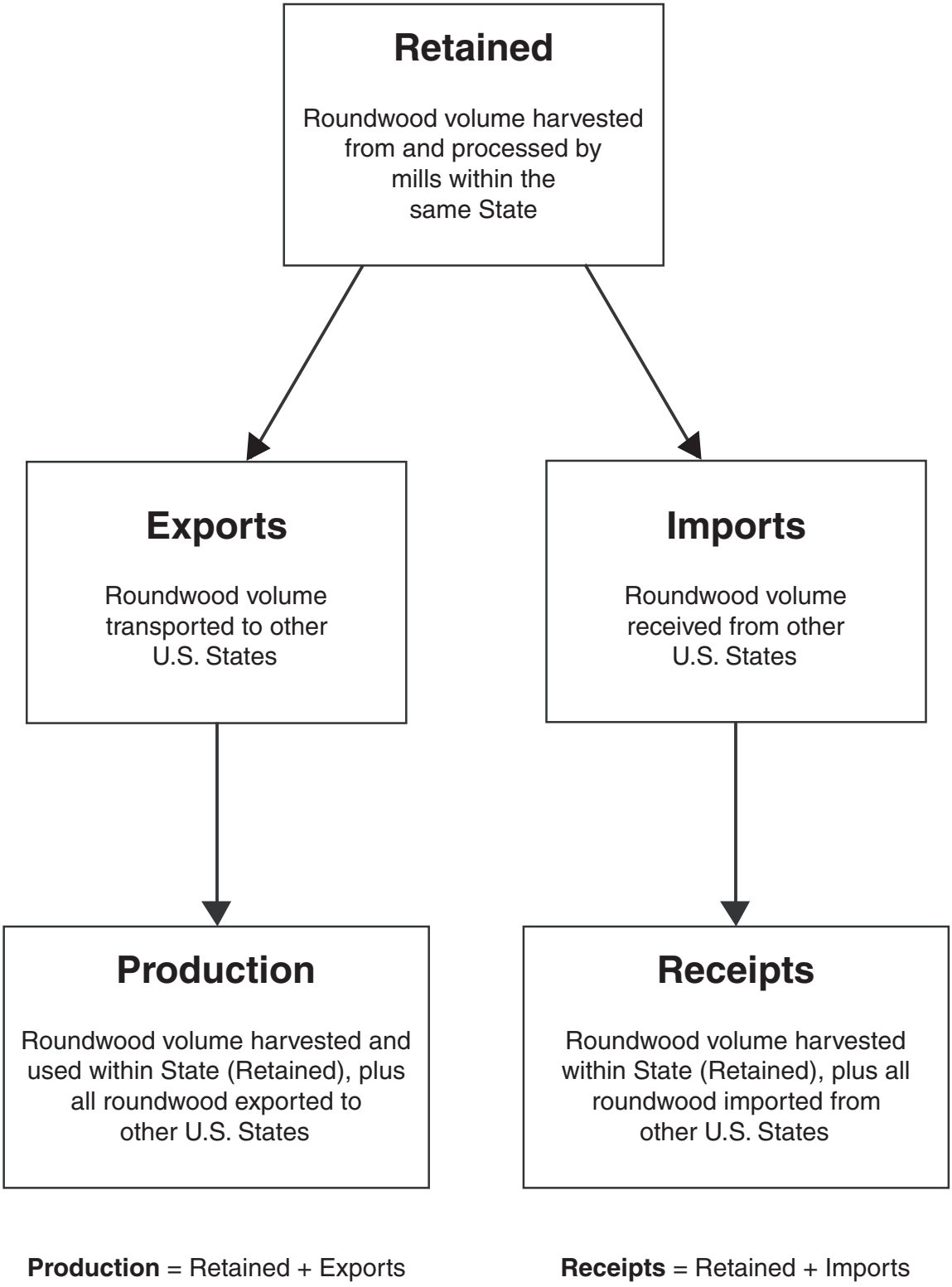

Figure 1—Movement of roundwood exports and imports within the United States.

Georgia's Timber Industry—An Assessment of Timber Product Output and Use, 2003

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Output of Industrial Timber Products

Note: Certain terms used in this report—retained, export, import, production, and receipts—have specialized meanings and relationships unique to the Forest Inventory and Analysis Units across the country that deal with timber product output (fig. 1).

All Products

- Between 2001 and 2003, the combined industrial timber product output (TPO) from roundwood and plant byproducts increased 1 percent, from 1.56 to 1.57 billion cubic feet.
- TPO from roundwood was up 30 million cubic feet, or 3 percent, to 1.15 billion cubic feet, while output of plant byproducts declined 23 million cubic feet, or 5 percent, to 417 million cubic feet.
- Output of softwood roundwood products increased 6 percent, totaling 962 million cubic feet, while output of hardwood roundwood products was down 12 percent to 191 million cubic feet (fig. 2).
- Figures 3 and 4 display softwood and hardwood county-level intensity of roundwood production for all industrial products across Georgia. The data are depicted in cubic feet produced per acre of census land area. Counties with the highest production intensity are depicted in the darker shades. For softwoods the darkest shade represents more than 40 cubic feet of production per acre, while for hardwoods the darkest shade represents more than 14 cubic feet per acre.
- Pulpwood and saw logs were the principal roundwood products in 2003. Combined output of these two products totaled 1.01 billion cubic feet and accounted for 88 percent of the State's total industrial roundwood output (fig. 5).

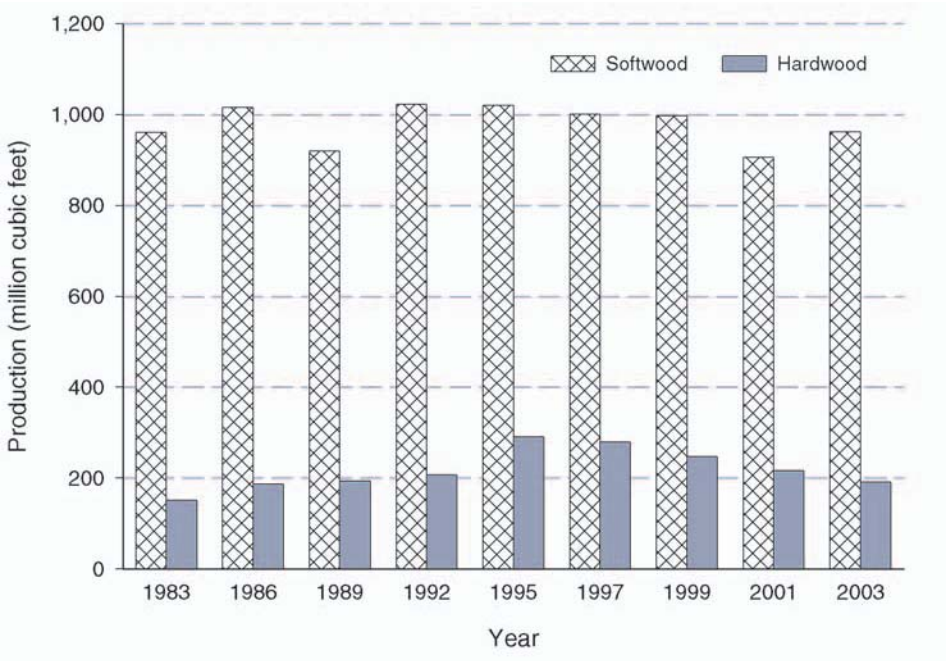

Figure 2—Roundwood production for all products by species group and year (see page 12 for references for individual years).

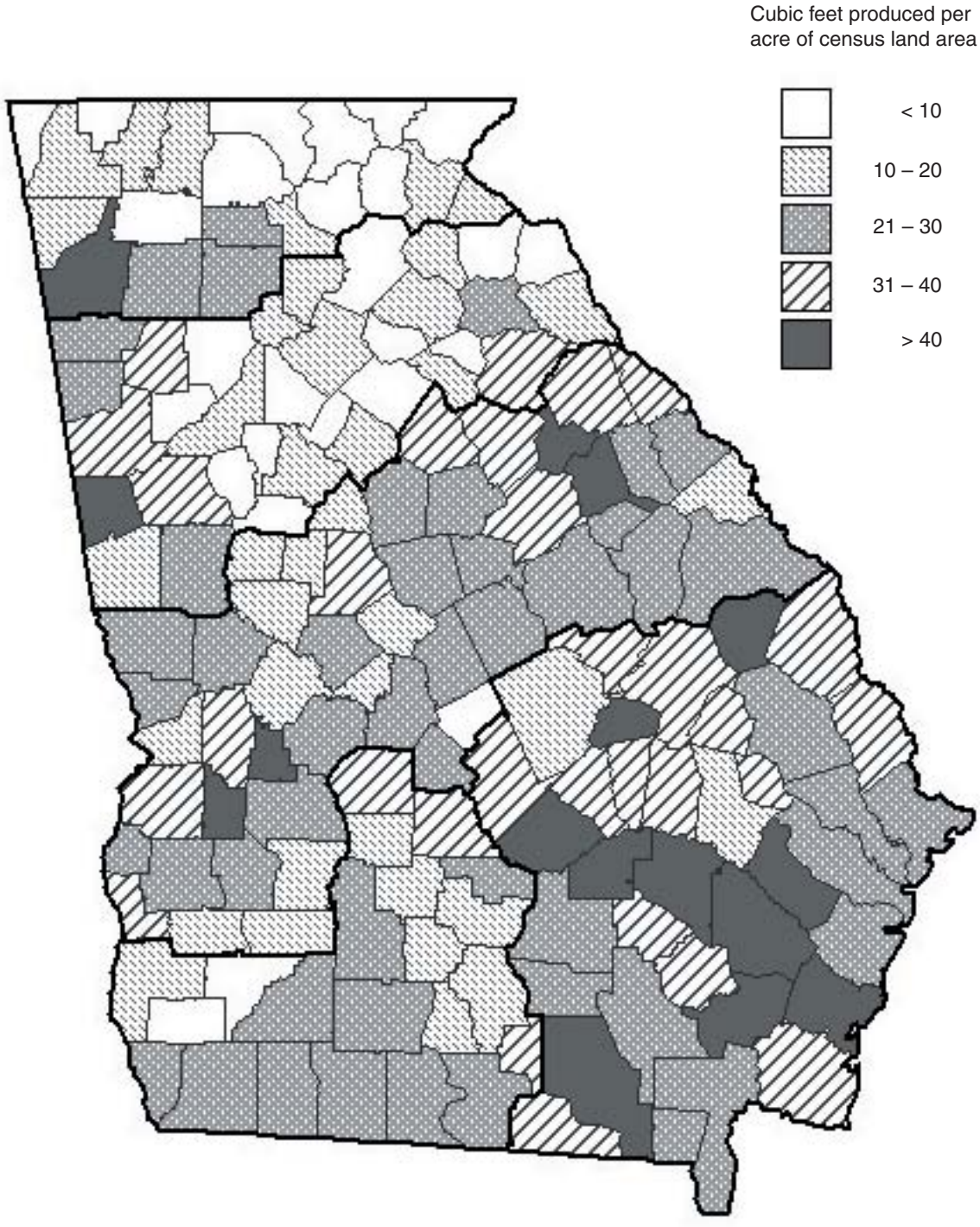

Figure 3—Intensity of roundwood softwood output for all industrial products in Georgia by county, 2003.

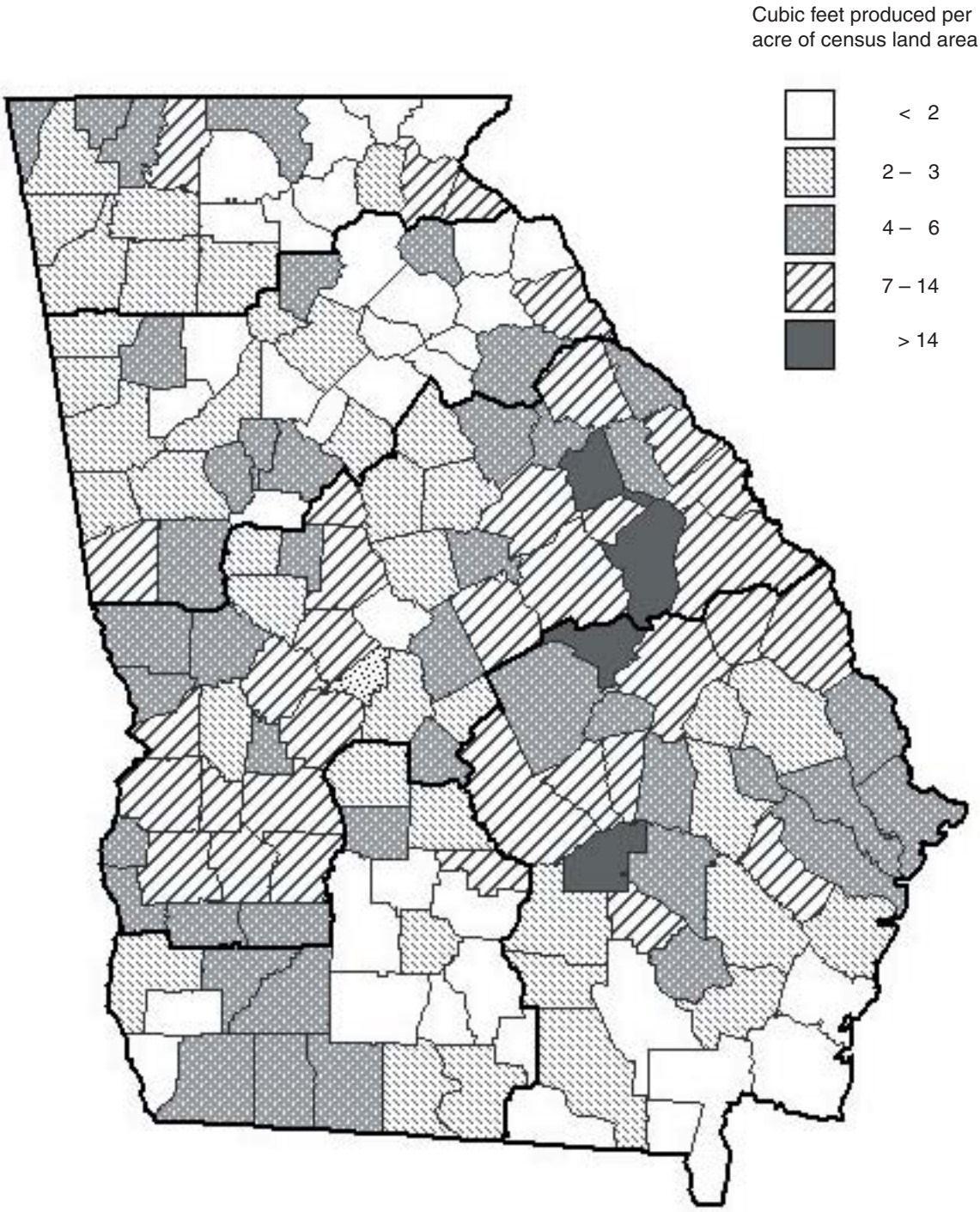

Figure 4—Intensity of roundwood hardwood output for all industrial products in Georgia by county, 2003.

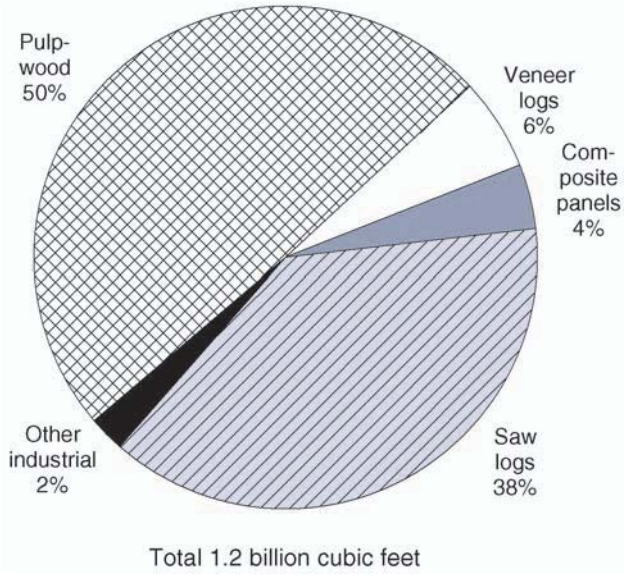

Figure 5—Roundwood production by type of product, 2003.

- Total receipts at Georgia mills, which included roundwood harvested and retained in the State and roundwood imported from other States, remained stable at 1.17 billion cubic feet. The number of primary roundwood-using plants in Georgia increased from 170 in 2001 to 187 in 2003.

Pulpwood

- Total pulpwood production, including chipped roundwood, increased 14 percent to 569 million cubic feet and accounted for 50 percent of the State's total roundwood TPO. Softwood output increased 25 percent to 458 million cubic feet (6.3 million cords); hardwood output declined 18 percent to 111 million cubic feet (1.5 million cords) (fig. 6).

- Twelve pulpmill facilities were operating and receiving roundwood in Georgia in 2003, one less than in 2001. Total pulpwood receipts for these mills increased 20 million cubic feet to 562 million cubic feet, accounting for 48 percent of total receipts for all mills.

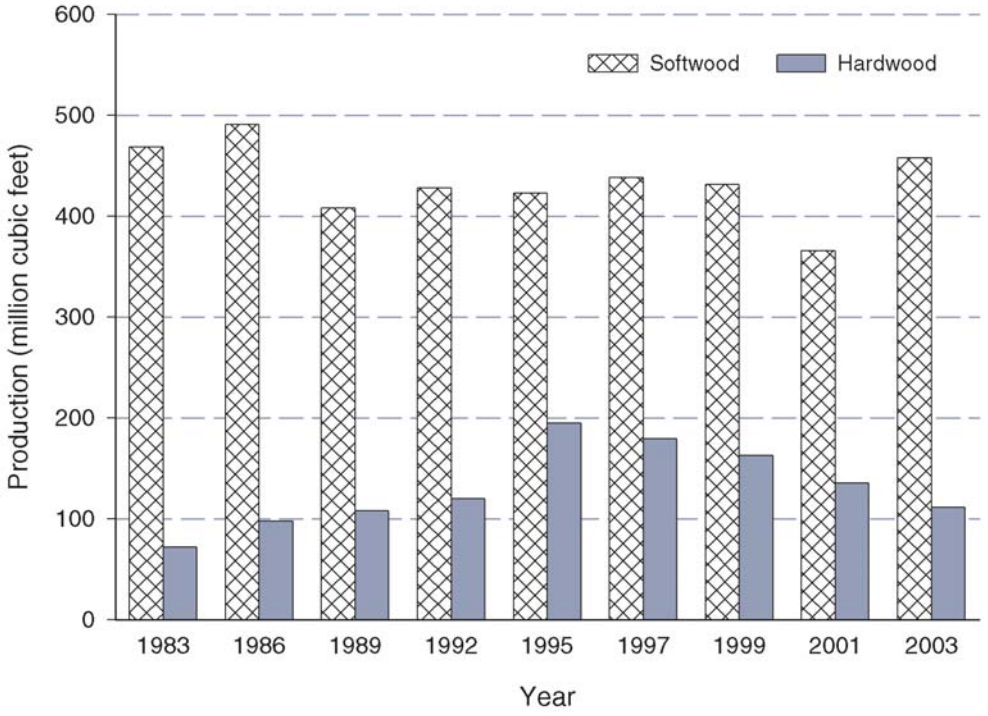

Figure 6—Roundwood pulpwood production by species group and year (see page 12 for references for individual years).

- Seventy-eight percent of roundwood cut for pulpwood was retained for processing at Georgia pulpmills. Roundwood pulpwood accounted for 71 percent of total known exports and 61 percent of total imports. Roundwood pulpwood exports exceeded imports by 6 million cubic feet, making the State a net exporter of pulpwood.

Saw Logs

- Saw logs accounted for 38 percent of the State's total roundwood products. Output of softwood saw logs declined 11 percent to 376 million cubic feet (2.1 billion board feet, International ¼-inch rule), while that of hardwood saw logs increased 7 percent to 65 million cubic feet (390 million board feet, International ¼-inch rule) (fig. 7).

- In 2003, Georgia had 122 sawmills, 4 mills more than in 2001. The total number of sawmills does not include the several single operator sawmills in the State. Total saw-log receipts were down 36 million cubic feet to 451 million cubic feet. Softwood saw-log receipts declined 10 percent to 384 million cubic feet, while those of hardwoods increased 15 percent to 67 million cubic feet. Of the operating mills in 2003, 28 percent had receipts of < 1 million board feet, while 36 percent had receipts > 10 million board feet. Those 44 mills, however, accounted for 93 percent of total saw-log receipts.

- Georgia retained 91 percent of its saw-log production for domestic manufacture, with saw-log imports exceeding exports by 10 million cubic feet in 2003.

Veneer Logs

- Output of veneer logs in 2003 totaled 68 million cubic feet and accounted for 6 percent of the State's total roundwood TPO volume. Softwood veneer production declined 2 percent to 57 million cubic feet (333 million board feet, International ¼-inch rule); output of hardwood veneer logs declined 21 percent to 11 million cubic feet (71 million board feet, International ¼-inch rule) (fig. 8).

- The number of veneer mills operating in Georgia declined from 10 to 8 since 2001. Receipts of veneer logs declined 1 percent to 73 million cubic feet.

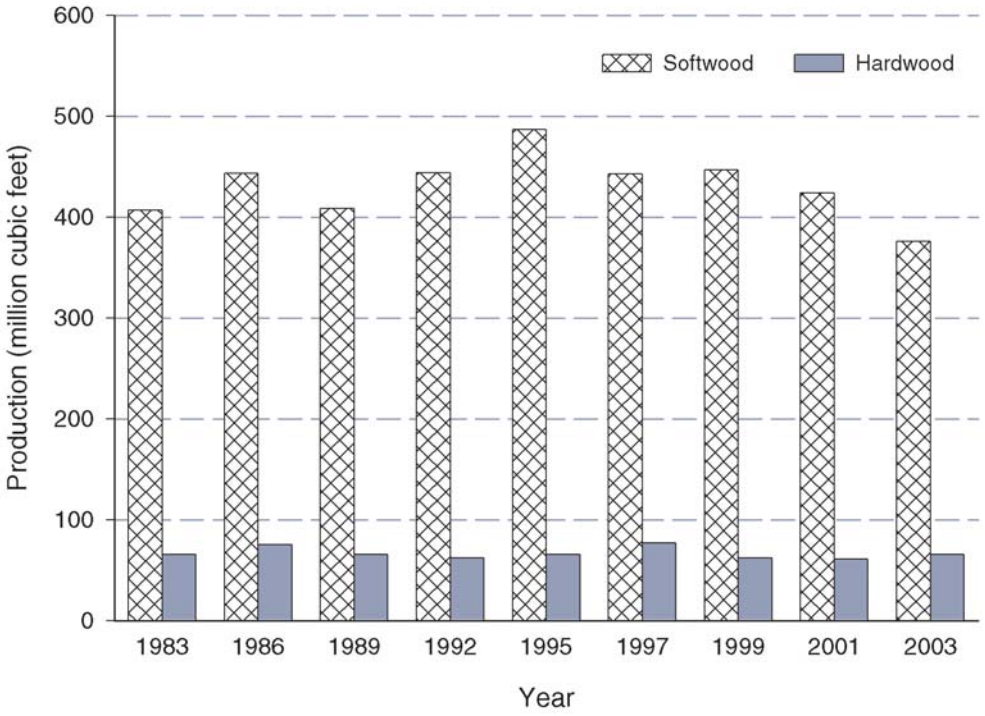

Figure 7—Roundwood saw-log production by species group and year (see page 12 for references for individual years).

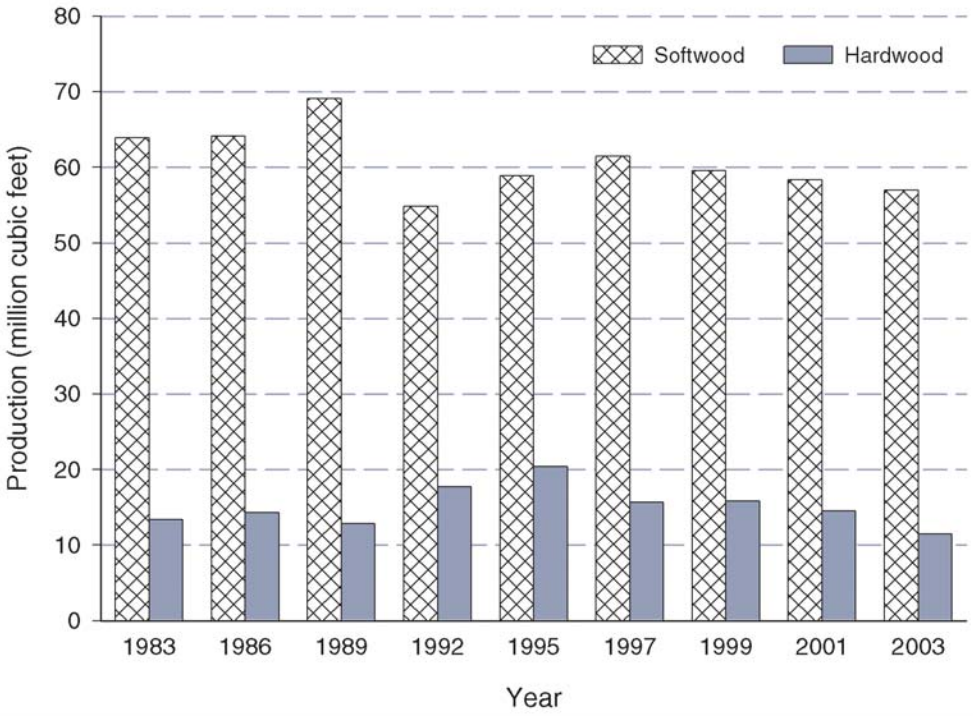

Figure 8—Roundwood veneer-log production by species group and year (see page 12 for references for individual years).

Softwood veneer receipts were up 1 million cubic feet, to 54 million cubic feet.

- Georgia retained 87 percent of its veneer-log production for processing at domestic veneer mills. Imports amounted to 13 million cubic feet, and exports totaled 9 million cubic feet, making the State a net importer of roundwood veneer logs.

Composite Panels

- Roundwood harvested from Georgia's forests for composite panels increased 2 percent and totaled 48 million cubic feet. Softwood output was up 9 percent to 45 million cubic feet (625 thousand cords); hardwood production declined 52 percent to 2 million cubic feet (32 thousand cords) (fig. 9).

- Four composite panel, or oriented strand board, mills were operating in Georgia in 2003. Total receipts for these mills increased 6 percent to 58 million cubic feet, and accounted for 5 percent of the State's total receipts.

- Ninety-seven percent of the roundwood production harvested for composite panels was retained for processing at Georgia's mills. Imports amounted to 12 million cubic feet, and exports totaled 2 million cubic feet, making the State a net importer of roundwood used for composite panels.

Other Industrial Products

- Roundwood harvested for other industrial uses such as poles, posts, mulch, firewood, logs for log homes, and all other industrial products totaled 27 million cubic feet, a 58-percent increase from 2001. Softwood made up 99 percent of the other industrial products volume.

- The number of plants producing other industrial products was up from 25 to 41 since 2001. Combined receipts of other industrial products from softwood and hardwood jumped 57 percent to 27 million cubic feet.

- Georgia was a net importer of roundwood used for other industrial products, but only by a small margin; all of the 1.5 million cubic feet imported and 1.2 million cubic feet exported were softwood.

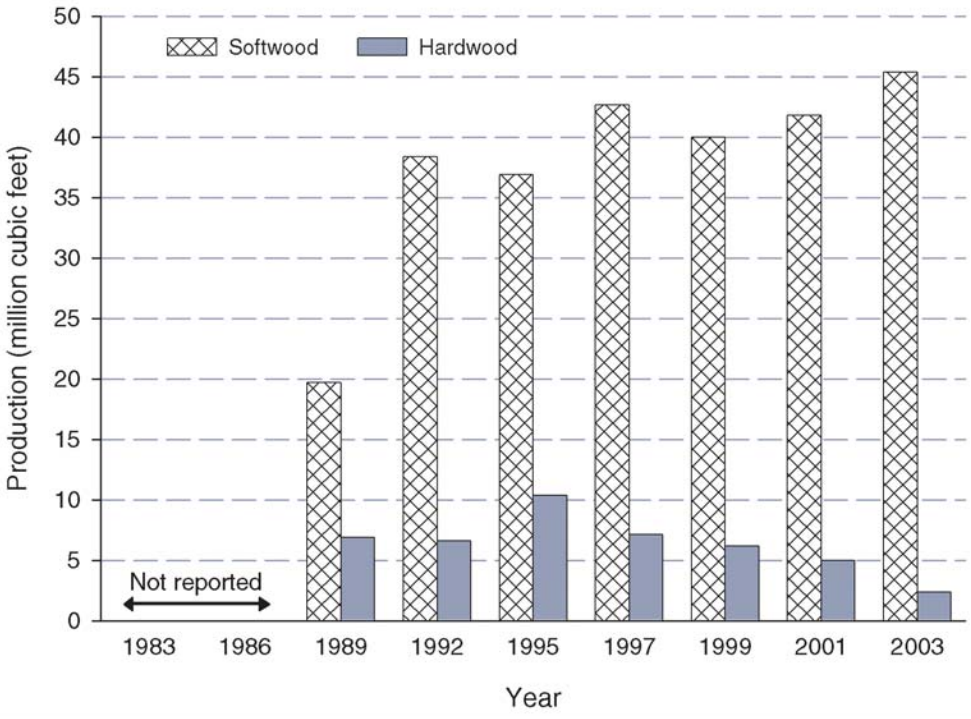

Figure 9—Roundwood production for composite panels by species group and year (see page 12 for references for individual years).

Plant Byproducts

- In 2003, processing of primary products in Georgia mills generated 419 million cubic feet of wood and bark residues. Coarse residues from all primary products amounted to 157 million cubic feet, while bark volume totaled 136 million cubic feet. Collectively, sawdust and shavings made up 30 percent of total residues, or 126 million cubic feet (fig. 10).

- Nearly 417 million cubic feet, or 99 percent, of the wood and bark residues were used for a product. While 1 percent of the residues were not used for a product, 41 percent of the residues were used for industrial fuel and 33 percent were used for fiber products (fig. 11). More than 134 million cubic feet, or 86 percent, of the coarse residues were used for fiber products. Most of the bark was used for industrial fuel or other miscellaneous products, while 50 percent of the sawdust and shavings were used for industrial fuel.

- The processing of saw logs generated 273 million cubic feet of mill residues, accounting for 65 percent of the total residues produced (fig. 12).

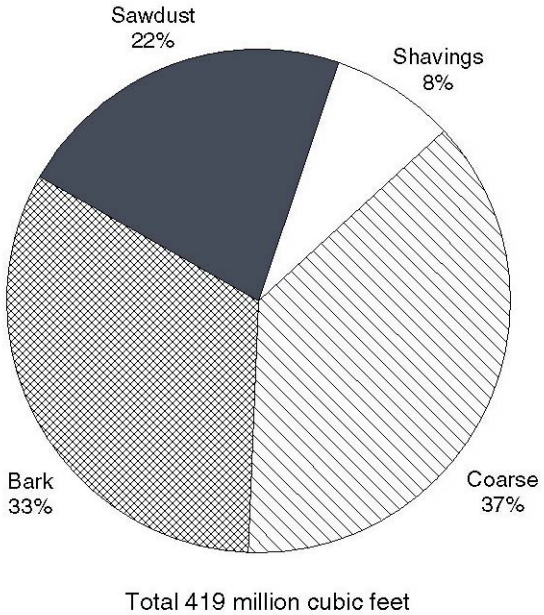

Figure 10—Primary mill residue by residue type, 2003.

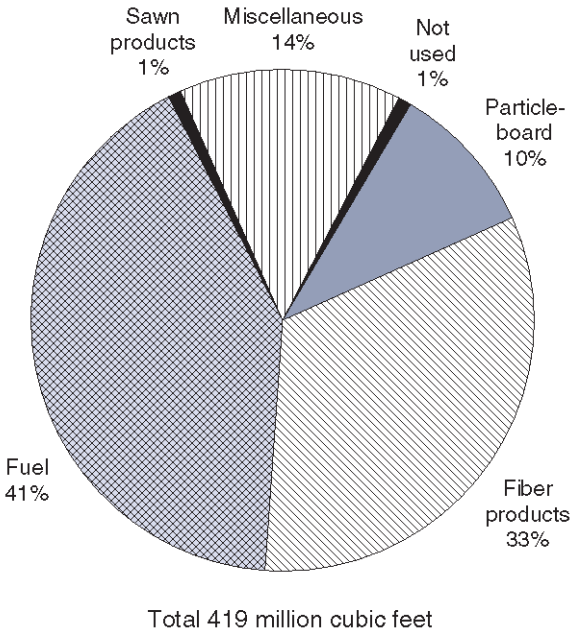

Figure 11—Disposal of residue by product, 2003.

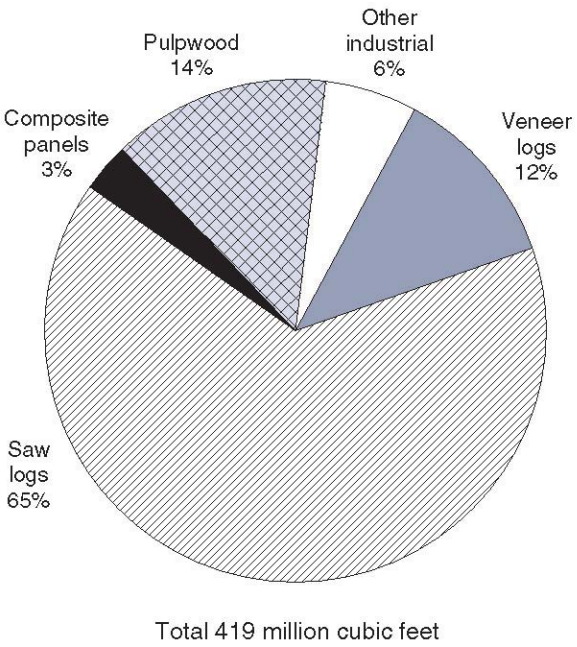

Figure 12—Primary mill residue produced by roundwood type, 2003.

Regional Trends

- Output of industrial roundwood products was up in all regions, with the exception of the Southwest region. This region had an 11-percent drop in product output. The Northern and Central regions were the only two regions that had an increase in hardwood output.

Southeast Region

- Roundwood output from the Southeast Georgia region totaled 427 million cubic feet, up 4 percent since 2001.

- Pulpwood accounted for 53 percent of the region's TPO and 40 percent of the State's roundwood pulpwood output. The 166 million cubic feet of saw logs accounted for 39 percent of the total roundwood output for the region and 38 percent of the State's total saw-log output, the highest of any region.

- In the Southeast region, 57 primary wood-using plants were operating during 2003: 31 sawmills, 2 veneer or plywood mills, 5 pulpmills, and 19 other miscellaneous mills (fig. 13). These mills processed 37 percent of the State's total roundwood output.

Southwest Region

- Roundwood output dropped 19 million cubic feet to 144 million cubic feet in the Southwest Georgia region, this was an 11-percent decline since 2001.

- Saw-log production of 55 million cubic feet accounted for 38 percent of the region's total roundwood output. Production of pulpwood increased 2 percent to 67 million cubic feet and accounted for 46 percent of the region's total roundwood output. Hardwood pulpwood production fell 52 percent in this region to 12 million cubic feet.

- The 29 mills operating in the Southwest Georgia region in 2003 included 16 sawmills, 2 veneer or plywood mills, 2 pulpmills, 2 composite panel mills, and 7 other miscellaneous mills. These mills accounted for 12 percent of the total roundwood output for the State.

Central Region

- Roundwood output from the Central Georgia region totaled 364 million cubic feet, up 7 percent. Roundwood production from this region accounted for 32 percent of the total roundwood TPO for the State.

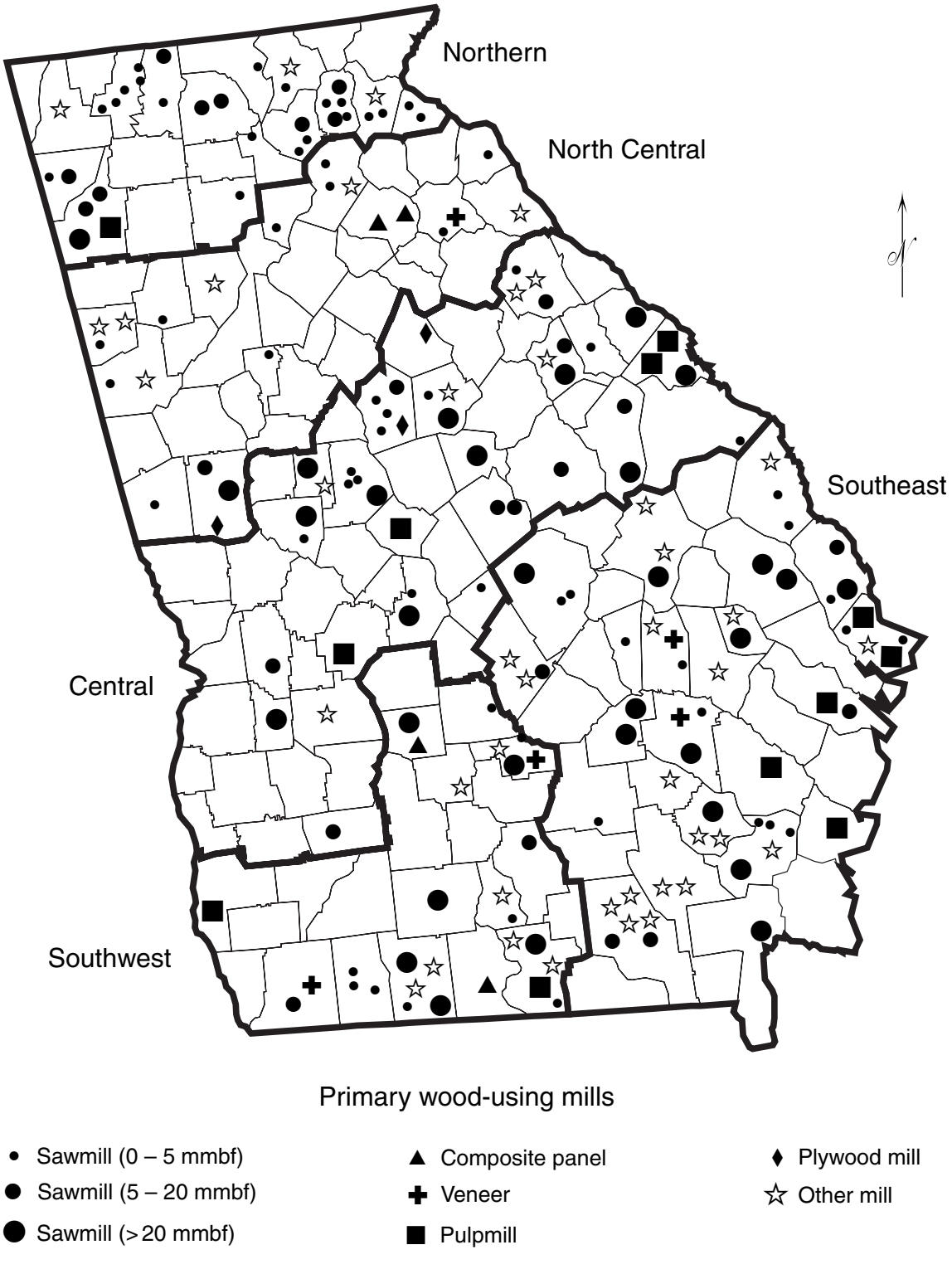

Figure 13—Primary wood-using mills by region, 2003.

- Pulpwood production increased more than 35 million cubic feet, or by 24 percent, to 184 million cubic feet. Softwood pulpwood production was up 37 percent and accounted for all of the increase. Pulpwood accounted for 51 percent of the region's total TPO. Saw-log production was down 9 million cubic feet to 141 million cubic feet and accounted for another 39 percent of the region's total roundwood output.

- The 45 primary wood-using plants operating in Central Georgia included 4 pulpmills, 33 sawmills, 2 veneer or plywood mills, and 6 other miscellaneous mills.

North Central Region

- Roundwood output from the North Central Georgia region totaled 140 million cubic feet, a 3-percent increase since 2001. This region accounted for 12 percent of the State's total TPO.

- Saw-log production was down 12 percent to 48 million cubic feet, accounting for 34 percent of the region's total roundwood output. Production of pulpwood rose 33 percent to 50 million cubic feet and accounted for 36 percent of the region's total roundwood output. With 21 and 20 million cubic feet, respectively, this region accounted for 31 percent of the State's veneer output and 43 percent of the composite panel production.

- In the North Central region, 22 primary wood-using plants were operating during 2003: 12 sawmills, 2 veneer or plywood mills, 2 composite panel mills, and 6 other miscellaneous mills.

Northern Region

- Roundwood output from the Northern Georgia region totaled 78 million cubic feet, an 11-percent increase since 2001.

- Saw-log production was down 2 percent to 31 million cubic feet and accounted for 40 percent of the region's total roundwood output. Pulpwood production was up 35 percent and accounted for 55 percent of the region's total TPO.

- In the Northern region, 34 primary wood-using plants were operating during 2003: 30 sawmills, 1 pulpmill, and 3 other miscellaneous mills. These mills processed 7 percent of the State's total roundwood output.

Total Roundwood Output

Using the most recent inventory data for Georgia, product output by source, ownership, and detailed species group was estimated.

Source

- In addition to the 1.15 billion cubic feet of roundwood output for industrial roundwood, an estimated 50 million cubic feet were harvested for domestic fuelwood, bringing Georgia's total roundwood output to 1.20 billion cubic feet.

- Ninety-five percent of total roundwood output was considered growing-stock volume (sawtimber and poletimber) from timberland sources. Other sources (such as saplings; stumps, tops, and limbs of trees on timberland; and trees on nonforest land) contributed an estimated 56 million cubic feet, or 5 percent of total roundwood output (fig. 14).

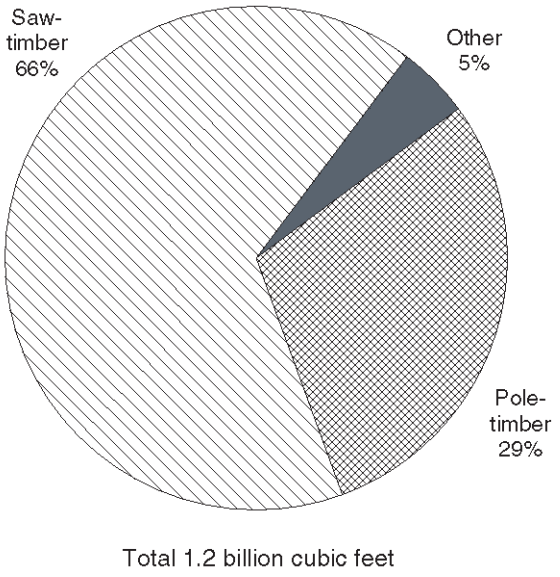

Figure 14—Roundwood output by source, 2003.

Ownership

- An estimated 835 million cubic feet, or 69 percent, of the total roundwood output came from nonindustrial private forest lands. Forest industry lands contributed 335 million cubic feet, or 28 percent of the output. Public lands made up the remaining 3 percent, or 34 million cubic feet (fig. 15).

Species

- The loblolly and shortleaf pine group provided the most volume of any softwood species group, accounting for 56 percent of the total softwood output (fig. 16). The longleaf-slash pine type accounted for 39 percent of the softwood output. In hardwoods, the red oak and white oak groups combined accounted for 101 million cubic feet, or 43 percent of total hardwood output (fig. 17).

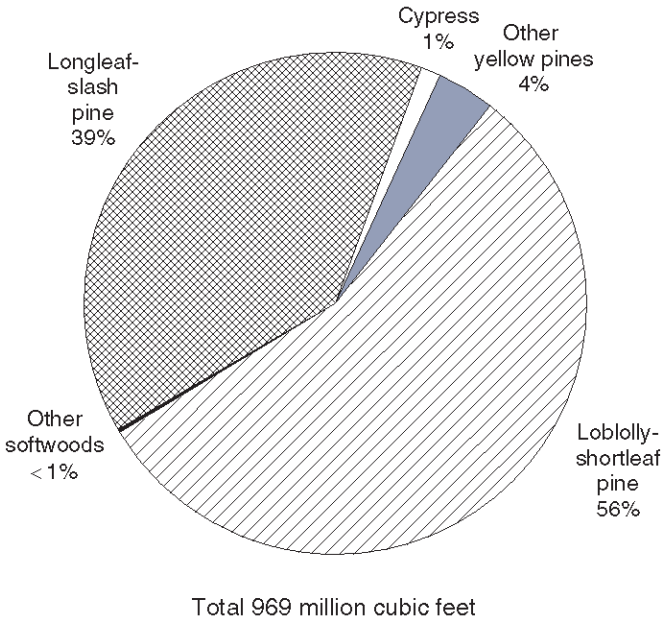

Figure 16—Roundwood output by softwood species group, 2003.

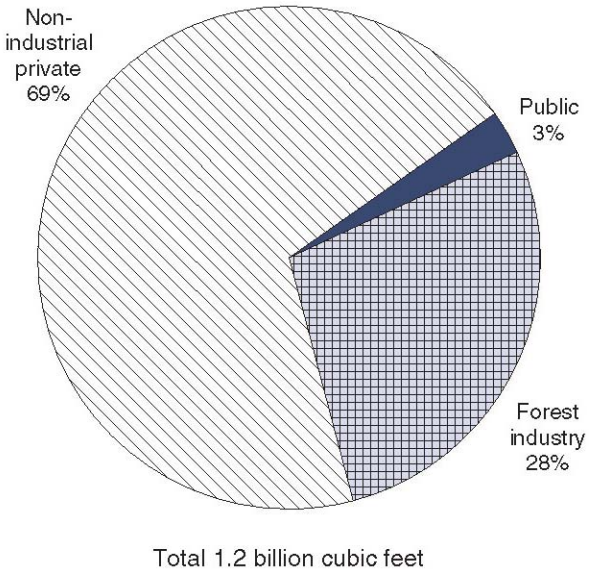

Figure 15—Roundwood output by ownership, 2003.

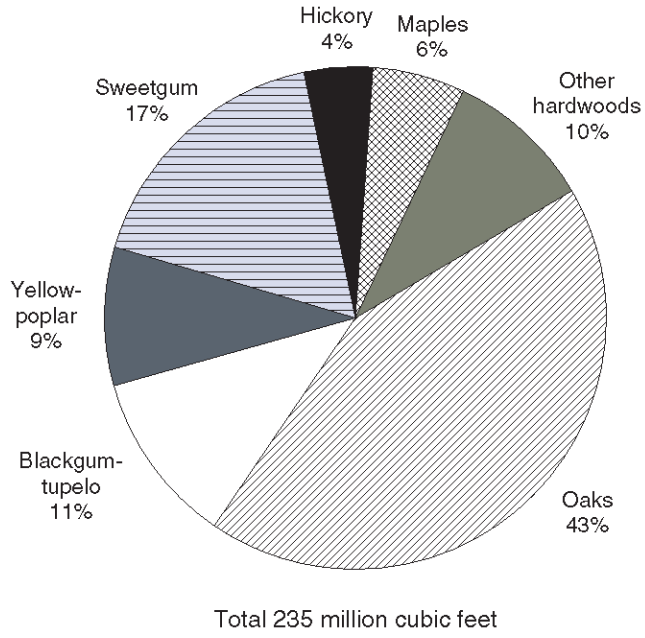

Figure 17—Roundwood output by hardwood species group, 2003.

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Glossary

Board foot. A unit of measure applied to lumber that is 1-foot long, 1-foot wide, and 1-inch thick (or its equivalent) and also associated with roundwood as to its potential yield of such products.

Byproducts. Primary wood products, e.g., pulp chips, animal bedding, and fuelwood, recycled from mill residues**.**

Composite panels. Roundwood products manufactured into chips, wafers, strands, flakes, shavings, or sawdust and then reconstituted into a variety of panel and engineered lumber products.

Consumption. The quantity of a commodity, such as pulpwood, utilized by a particular mill or group of mills.

Drain. The volume of roundwood removed from any geographic area where timber is grown.

Exports. The volume of domestic roundwood utilized by mills outside the State where timber was cut.

Fiber products. Byproducts used in the manufacture of pulp, paper, paperboard, and composite products, such as chipboard.

Fuelwood production. The volume of roundwood harvested to produce some form of energy, e.g., heat and steam, in residential, industrial or institutional settings.

Growing-stock removals. The growing-stock volume removed from poletimber and sawtimber trees in the timberland inventory. (Note: Includes volume removed for roundwood products, logging residues, and other removals.)

Growing-stock trees. Living trees of commercial species classified as sawtimber, poletimber, saplings, and seedlings. Growing-stock 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). The log(s) must meet dimension and merchantability standards and 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 >0.50, such as oaks, hard maples, hickories, and beech.

Imports. The volume of domestic roundwood delivered to a mill or group of mills in a specific State but harvested outside that State.

Industrial fuelwood. A roundwood product, with or without bark, used to generate energy at a manufacturing facility such as a wood-using mill.

Industrial roundwood products. Any primary use of the main stem of a tree, such as saw logs, pulpwood, veneer logs, intended to be processed into primary wood products such as lumber, wood pulp, sheathing, at primary wood-using mills.

International ¼-inch rule. A log rule or formula for estimating the board-foot volume of logs, allowing ½-inch of taper for each 4-foot length. The rule appears in a number of forms that allow for kerf. In the form used by FIA, a ¼-inch of kerf is assumed. This rule is used as the USDA Forest Service standard log rule in the Eastern United States.

Log. A primary forest product harvested in long, primarily 8-, 12-, and 16-foot lengths.

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

Merchantable portion. That portion of live trees 5.0 inches d.b.h. and larger between a 1-foot stump and a minimum 4.0-inch top d.o.b. on the central stem. That portion of primary forks from the point of occurrence to a minimum 4.0-inch top d.o.b. is included.

Merchantable volume. Solid-wood volume in the merchantable portion of live trees.

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.

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

Nongrowing-stock sources. The net volume removed from the nongrowing-stock portions of poletimber and sawtimber trees (stumps, tops, limbs, cull sections of central stem) and from any portion of a rough, rotten, sapling, dead, or nonforest tree.

Other forestland. Forestland other than timberland and productive reserved forestland. It includes available and reserved forestland that 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 products. A miscellaneous category of roundwood products, e.g., cooperage, excelsior, shingles, and mill residue byproducts (charcoal, bedding, mulch, etc.).

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.

Other sources. (See: Nongrowing-stock sources.)

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

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

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

Nonindustrial private forest (NIPF) land. Privately owned land excluding forest industry land.

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, which is suitable for chipping.

Fine residues. Material, such as sawdust, shavings, and veneer residue, which is not suitable for chipping.

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

Unused plant residues. Residues (coarse or fine) that are 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.

Posts, poles, and pilings. Roundwood products milled (cut or peeled) into standard sizes (lengths and circumferences) to be put in the ground to provide vertical and lateral support in buildings, foundations, utility lines, and fences. May also include nonindustrial (unmilled) products.

Primary wood-using plants. Industries that convert roundwood products (saw logs, veneer logs, pulpwood, etc.) into primary wood products, such as lumber, veneer or sheathing, wood pulp.

Production. The total volume of known roundwood harvested from land within a State, regardless of where it is consumed. Production is the sum of timber harvested and used within a State, and all roundwood exported to other States.

Pulpwood. A roundwood product that will be reduced to individual wood fibers by chemical or mechanical means. The fibers are used to make a broad generic group of pulp products that includes paper products, as well as fiberboard, insulating board, and paperboard.

Receipts. The quantity or volume of industrial roundwood received at a mill or by a group of mills in a State, regardless of the geographic source. Volume of roundwood receipts is equal to the volume of roundwood retained in a State plus roundwood imported from other States.

Retained. Roundwood volume harvested from and processed by mills within the same State.

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 manufacture or consumer uses.

Roundwood chipped. Any timber cut primarily for industrial manufacture, delivered to nonpulpmills, chipped, and then sold to pulpmills for use as fiber. Includes tops, jump sections, whole trees, and pulpwood sticks.

Roundwood product drain. That portion of total drain used for a product.

Roundwood products. Any primary product, such as lumber, veneer, composite panels, 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 roundwood product, usually 8 feet in length or longer, processed into a variety of sawn products such as lumber, cants, pallets, railroad ties, and timbers.

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 for FIA standards.

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-sized trees in board feet (International ¼-inch rule).

Seedlings. Trees < 1.0 inch d.b.h. and > 1 foot tall for hardwoods, > 6 inches tall for softwoods, and > 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.

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

Standard cord. A unit of measure applied to roundwood, usually bolts or split wood. It is a stack of wood 4 feet high, 4 feet wide, and 8 feet long encompassing 128 cubic feet of wood, bark, and air space. This usually translates to approximately 75.0 to 81.0 cubic feet of solid wood for pulpwood, because pulpwood is more uniform.

Standard unit. A unit measure applied to roundwood timber products. Board feet (International ¼-inch rule) is the standard unit used for saw logs and veneer; cords are used for pulpwood, composite panel, and fuelwood; hundred pieces for poles; thousand pieces for posts; and thousand cubic feet for all other miscellaneous forest products.

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

Timber product output. The total volume of roundwood products from all sources plus the volume of byproducts recovered from mill residues (equals roundwood product drain).

Timber products. Roundwood products and byproducts.

Timber removals. The total volume of trees removed from the timberland inventory by harvesting, cultural operations such as stand improvement, land clearing, or changes in land use. (Note: Includes roundwood products, logging residues, and other removals.)

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).

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

Utilization studies. Studies conducted on active logging operations to develop factors for merchantable portions of trees left in the woods (logging residues), logging damage, and utilization of the unmerchantable portion of growing-stock trees and nongrowing-stock trees.

Veneer log. A roundwood product either rotary cut, sliced, stamped, or sawn into a variety of veneer products such as plywood, finished panels, veneer sheets, or sheathing.

Weight. A unit of measure for mill residues, expressed as oven-dry tons (2,000 oven-dry pounds).

Metric Equivalents

1 acre = 4,046.86 m^2 or 0.404686 ha

1 cubic foot = 0.028317 m^3

1 inch = 2.54 cm or 0.0254 m

Breast height = 1.4 m above the ground

1 square foot = 929.03 cm^2 or 0.0929 m^2

1 square foot per basal area = 0.229568 m^2/ha

1 pound = 0.454 kg

1 ton = 0.907 MT

Conversion Factors[a]

Saw logs	
Softwood	0.18349 cubic foot = 1 board foot 5.45 board feet = 1 cubic foot
Hardwood	0.16807 cubic foot = 1 board foot 5.95 board feet = 1 cubic foot
Veneer logs	
Softwood	0.17094 cubic foot = 1 board foot 5.85 board feet = 1 cubic foot
Hardwood	0.16260 cubic foot = 1 board foot 6.15 board feet = 1 cubic foot
Pulpwood[b]	
Softwood	72.6 cubic feet per cord
Hardwood	75.0 cubic feet per cord

[a] Conversion factors vary with stem size (d.b.h.) and species. The factors shown are for trees of average diameters removed in Georgia during the most recent survey period.

[b] Cubic feet of solid wood per cord.

Species List[a]

Common name	Scientific name[b]
Softwoods	
Atlantic white-cedar	*Chamaecyparis thyoides* (L.) B.S.P.
Southern redcedar	*Juniperus silicicola* (Small) Bailey
Eastern redcedar	*J. virginiana* L.
Shortleaf pine	*Pinus echinata* Mill.
Slash pine	*P. elliottii* Engelm.
Spruce pine	*P. glabra* Walt.
Longleaf pine	*P. palustris* Mill.
Loblolly pine	*P. taeda* L.
Virginia pine	*P. virginiana* Mill.
Baldcypress	*Taxodium distichum* (L.) Rich.
Hardwoods	
Florida maple	*Acer barbatum* Michx.
Boxelder	*A. negundo* L.
Red maple	*A. rubrum* L.
Silver maple	*A. saccharinum* L.
Sugar maple	*A. saccharum* Marsh.
Buckeye	*Aesculus* spp. L.
Ailanthus	*Ailanthus altissima* (Mill.) Swingle
Tung-oil tree	*Aleurites fordii* Hemsl.
Serviceberry	*Amelanchier* spp. Medic.
River birch	*Betula nigra* L.
American hornbeam	*Carpinus caroliniana* Walt.
Hickory	*Carya* spp. Nutt.
Water hickory	*C. aquatica* (Michx. f.) Nutt.
Bitternut hickory	*C. cordiformis* (Wangenh.) K. Koch
Pignut hickory	*C. glabra* (Mill.) Sweet
Pecan	*C. illinoensis* (Wangenh.) K. Koch
Shellbark hickory	*C. laciniosa* (Michx. f.) Loud.
Nutmeg hickory	*C. myristiciformis* (Michx. f.) Nutt.
Shagbark hickory	*C. ovata* (Mill.) K. Koch
Black hickory	*C. texana* Buckl.
Mockernut hickory	*C. tomentosa* (Poir.) Nutt.
Allegheny chinkapin	*Castanea pumila* Mill.
Chinkapin	*Castanopsis* (D. Don) Spach
Catalpa	*Catalpa* spp. Scop.
Sugarberry	*Celtis laevigata* Willd.
Hackberry	*C. occidentalis* L.
Eastern redbud	*Cercis canadensis* L.
Flowering dogwood	*Cornus florida* L.
Hawthorn	*Crataegus* spp. L.
Common persimmon	*Diospyros virginian*a L.
American beech	*Fagus grandifolia* Ehrh.
White ash	*Fraxinus americana* L.
Pumpkin ash	*F. profunda* (Bush) Bush
Blue ash	*F. quadrangulata* Michx.
Waterlocust	*Gleditsia aquatica* Marsh.
Honeylocust	*G. triacanthos* L.
Loblolly-bay	*Gordonia lasianthus* (L.) Ellis
American holly	*Ilex opaca* Ait.
Black walnut	*Juglans nigra* L.
Hardwoods (continued)	
Sweetgum	*Liquidambar styraciflua* L.
Yellow-poplar	*Liriodendron tulipifera* L.
Osage-orange	*Maclura pomifera* (Raf.) Schneid.
Cucumbertree	*Magnolia acuminata* L.
Southern magnolia	*M. grandiflora* L.
Bigleaf magnolia	*M. macrophylla* Michx.
Sweetbay	*M. virginiana* L.
Apple	*Malus* spp. Mill.
Chinaberry	*Melia azedarach* L.
White mulberry	*Morus alba* L.
Red mulberry	*M. rubra* L.
Water tupelo	*Nyssa aquatica* L.
Blackgum	*N. sylvatica* Marsh.
Swamp tupelo	*N. sylvatica* var. *biflora* (Walt.) Sarg.
Eastern hophornbeam	*Ostrya virginiana* (Mill.) K. Koch
Sourwood	*Oxydendrum arboreum* (L.) DC.
Redbay	*Persea borbonia* (L.) Spreng.
American sycamore	*Platanus occidentalis* L.
Cottonwood	*Populus* spp. L.
Black cherry	*Prunus serotina* Ehrh.
White oak	*Quercus alba* L.
Scarlet oak	*Q. coccinea* Muenchh.
Southern red oak	*Q. falcata* Michx.
Cherrybark oak	*Q. falcata* var. *pagodifolia* Ell.
Bluejack oak	*Q. incana* Bartr.
Turkey oak	*Q. laevis* Walt.
Laurel oak	*Q. laurifolia* Michx.
Overcup oak	*Q. lyrata* Walt.
Swamp chestnut oak	*Q. michauxii* Nutt.
Chinkapin oak	*Q. muehlenbergii* Engelm.
Water oak	*Q. nigra* L.
Nuttall oak	*Q. nuttallii* Palmer
Oglethorpe oak	*Q. oglethorpensis* Duncan
Pin oak	*Q. palustris* Muenchh.
Willow oak	*Q. phellos* L.
Chestnut oak	*Q. prinus* L.
Northern red oak	*Q. rubra* L.
Shumard oak	*Q. shumardii* Buckl.
Post oak	*Q. stellata* Wangenh.
Black oak	*Q. velutina* Lam.
Live oak	*Q. virginiana* Mill.
Black locust	*Robinia pseudoacacia* L.
Willow	*Salix* spp. L.
Sassafras	*Sassafras albidum* (Nutt.) Nees
American basswood	*Tilia americana* L.
White basswood	*T. heterophylla* Vent.
Winged elm	*Ulmus alata* Michx.
American elm	*U. americana* L.
Slippery elm	*U. rubra* Muhl.
September elm	*U. serotina* Sarg.

[a] Scientific and common names of tree species > 1.0 inch in d.b.h. occurring in the FIA sample.
[b] Nomenclature (Little 1979).

Appendix

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Table A.1—Output of industrial products by product and species group, Georgia, 2001 and 2003

Product and species group	Year 2001	Year 2003	Change	Change
	thousand cubic feet			*percent*
Saw logs				
Softwood	424,068	375,705	-48,363	-11.4
Hardwood	61,063	65,442	4,379	7.2
Total	485,131	441,147	-43,984	-9.1
Veneer logs				
Softwood	58,370	56,986	-1,384	-2.4
Hardwood	14,541	11,488	-3,053	-21.0
Total	72,911	68,474	-4,437	-6.1
Pulpwood[a]				
Softwood	365,687	457,619	91,932	25.1
Hardwood	135,292	111,277	-24,015	-17.8
Total	500,979	568,896	67,917	13.6
Composite panels				
Softwood	41,813	45,373	3,560	8.5
Hardwood	4,960	2,365	-2,595	-52.3
Total	46,773	47,738	965	2.1
Other industrial				
Softwood	16,154	26,264	10,110	62.6
Hardwood	713	335	-378	-53.0
Total	16,867	26,599	9,732	57.7
All industrial				
Softwood	906,092	961,947	55,855	6.2
Hardwood	216,569	190,907	-25,662	-11.8
Total	1,122,661	1,152,854	30,193	2.7
Byproduct output				
Softwood	368,371	348,174	-20,197	-5.5
Hardwood	71,115	68,460	-2,655	-3.7
Total	439,486	416,634	-22,852	-5.2
Total output				
Softwood	1,274,463	1,310,121	35,658	2.8
Hardwood	287,684	259,367	-28,317	-9.8
Total	1,562,147	1,569,488	7,341	0.5

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (11,692,000 cubic feet in 2001 and 10,473,000 cubic feet in 2003).

Table A.2—Roundwood receipts by product and species group, Georgia, 2001 and 2003

Product and species group	Year 2001	2003	Change	Change
	thousand cubic feet			*percent*
Saw logs				
Softwood	428,938	384,600	-44,338	-10.3
Hardwood	58,269	66,804	8,535	14.6
Total	487,207	451,404	-35,803	-7.3
Veneer logs				
Softwood	52,697	53,943	1,246	2.4
Hardwood	21,203	18,921	-2,282	-10.8
Total	73,900	72,864	-1,036	-1.4
Pulpwood[a]				
Softwood	400,206	462,362	62,156	15.5
Hardwood	141,820	100,065	-41,755	-29.4
Total	542,026	562,427	20,401	3.8
Composite panels				
Softwood	42,069	49,080	7,011	16.7
Hardwood	12,381	8,776	-3,605	-29.1
Total	54,450	57,856	3,406	6.3
Other industrial				
Softwood	16,311	26,533	10,222	62.7
Hardwood	761	335	-426	-56.0
Total	17,072	26,868	9,796	57.4
Total output				
Softwood	940,221	976,518	36,297	3.9
Hardwood	234,434	194,901	-39,533	-16.9
Total	1,174,655	1,171,419	-3,236	-0.3

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (13,506,000 cubic feet in 2001 and 12,467,000 cubic feet in 2003).

Table A.3—Number of primary wood-using plants by industry, Georgia, 1983 to 2003

Industry	Year								
	1983	1986	1989	1992	1995	1997	1999	2001	2003
	number								
Sawmills	222	239	172	178	144	129	129	118	122
Veneer mills	19	18	16	14	12	11	12	10	8
Pulpmills	15	15	14	13	14	13	12	13	12
Composite panel mills	0	0	3	4	5	5	4	4	4
Other mills	28	29	26	41	32	28	31	25	41
All plants	284	301	231	250	207	186	188	170	187

Table A.4—Roundwood receipts by sawmill size, Georgia, 2001 and 2003

Sawmill size class[a]	2001			2003		
	Mills	Volume		Mills	Volume	
mmbf	*number*	*mbf*	*percent*	*number*	*mbf*	*percent*
< 1.0	26	6,395	0	34	11,208	0
1.0 – 4.99	35	92,716	4	31	78,172	3
5.0 – 9.99	13	91,552	3	13	93,793	4
10.0 – 49.99	24	588,684	22	21	454,629	18
> 50	20	1,911,387	71	23	1,862,143	75
Total	118	2,690,734	100	122	2,499,945	100

[a] Based on volume received as opposed to actual capacity.

Table A.5—Roundwood receipts by species and type of mill, Georgia, 2003

Species	All mills	Type of mill					
			Veneer mills				
		Sawmills	Pine plywood	Other veneer	OSB and panels	Pulpmills[a]	Other mills
		thousand cubic feet					
Softwood							
Yellow pine	497,791	374,953	40,422	13,521	48,905	NA	19,990
Eastern white pine	1,885	1,885	0	0	0	NA	0
Cedar	183	5	0	0	175	NA	3
Cypress	14,231	7,691	0	0	0	NA	6,540
Other softwood	66	66	0	0	0	NA	0
Unclassified	462,362	0	0	0	0	462,362	0
Total softwoods	976,518	384,600	40,422	13,521	49,080	462,362	26,533
Hardwood							
Blackgum and tupelo	10,234	3,913	1,032	1,242	4,047	NA	0
Soft maple	2,049	1,843	0	206	0	NA	0
Sweetgum	10,145	4,126	558	1,265	4,196	NA	0
Yellow-poplar	23,477	9,472	12,382	1,372	251	NA	0
Other soft hardwood	2,948	2,460	0	206	282	NA	0
Hickory	1,224	1,113	0	0	0	NA	111
Red oak	26,487	26,047	0	329	0	NA	111
White oak	8,503	8,401	0	0	0	NA	102
Other hard hardwood	9,769	9,429	0	329	0	NA	11
Unclassified	100,065	0	0	0	0	100,065	0
Total hardwoods	194,901	66,804	13,972	4,949	8,776	100,065	335
All species	1,171,419	451,404	54,394	18,470	57,856	562,427	26,868

NA = not applicable; OSB = oriented strand board.

[a] Collected only by softwood and hardwood and includes roundwood chipped.

Table A.6—Industrial roundwood movement by year and species group, Georgia, 2001 and 2003

Year	Production	Exported to other States	Retained	Imported from other States	Receipts
			thousand cubic feet		
			Softwood		
2001	906,092	112,364	793,728	146,493	940,221
2003	961,947	138,829	823,118	153,400	976,518
			Hardwood		
2001	216,569	30,321	186,248	48,186	234,434
2003	190,907	33,064	157,843	37,058	194,901
			All species		
2001	1,122,661	142,685	979,976	194,679	1,174,655
2003	1,152,854	171,893	980,961	190,458	1,171,419

Table A.7—Industrial roundwood movement by product and species group, Georgia, 2003

Product and species group	Production	Exported to other States	Retained	Imported from other States	Receipts
			thousand cubic feet		
Saw logs					
Softwood	375,705	33,403	342,302	42,298	384,600
Hardwood	65,442	4,401	61,041	5,763	66,804
Total	441,147	37,804	403,343	48,061	451,404
Veneer logs					
Softwood	56,986	7,355	49,631	4,312	53,943
Hardwood	11,488	1,228	10,260	8,661	18,921
Total	68,474	8,583	59,891	12,973	72,864
Pulpwood[a]					
Softwood	457,619	95,317	362,302	100,060	462,362
Hardwood	111,277	27,388	83,889	16,176	100,065
Total	568,896	122,705	446,191	116,236	562,427
Composite panels					
Softwood	45,373	1,506	43,867	5,213	49,080
Hardwood	2,365	47	2,318	6,458	8,776
Total	47,738	1,553	46,185	11,671	57,856
Other industrial					
Softwood	26,264	1,248	25,016	1,517	26,533
Hardwood	335	0	335	0	335
Total	26,599	1,248	25,351	1,517	26,868
All products					
Softwood	961,947	138,829	823,118	153,400	976,518
Hardwood	190,907	33,064	157,843	37,058	194,901
Total	1,152,854	171,893	980,961	190,458	1,171,419

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills.

Table A.8—Saw-log volume by destination, source, and species group, Georgia, 2003

Destination and source	All species	Species group	
		Softwood	Hardwood
	thousand cubic feet		
Georgia (retained)	403,343	342,302	61,041
Exports to			
Alabama	27,689	26,599	1,090
Florida	3,471	3,365	106
North Carolina	1,455	120	1,335
South Carolina	5,105	3,235	1,870
Tennessee	84	84	0
Total	37,804	33,403	4,401
Imports from			
Alabama	7,478	6,480	998
Florida	14,931	14,342	589
North Carolina	541	450	91
South Carolina	22,520	19,038	3,482
Tennessee	2,591	1,988	603
Total	48,061	42,298	5,763

Table A.9—Veneer volume by destination, source, and species group, Georgia, 2003

Destination and source	All species	Species group	
		Softwood	Hardwood
	thousand cubic feet		
Georgia (retained)	59,891	49,631	10,260
Exports to			
Alabama	1,331	1,155	176
Florida	6,200	6,200	0
North Carolina	120	0	120
South Carolina	932	0	932
Total	8,583	7,355	1,228
Imports from			
Alabama	5,673	2,307	3,366
Florida	505	0	505
Kentucky	2,112	90	2,022
North Carolina	386	338	48
Ohio	48	0	48
South Carolina	1,912	1,487	425
Tennessee	434	0	434
Virginia	1,903	90	1,813
Total	12,973	4,312	8,661

Table A.10—Pulpwood volume by destination, source, and species group, Georgia, 2003[a]

Destination and source	All species	Species group	
		Softwood	Hardwood
	thousand cubic feet		
Georgia (retained)	446,191	362,302	83,889
Exports to			
Alabama	49,201	38,421	10,780
Florida	45,046	36,412	8,634
Kentucky	1,123	0	1,123
Louisiana	32	0	32
North Carolina	847	206	641
South Carolina	2,512	530	1,982
Tennessee	23,653	19,457	4,196
Texas	291	291	0
Total	122,705	95,317	27,388
Imports from			
Alabama	32,786	29,970	2,816
Florida	53,417	50,741	2,676
North Carolina	169	23	146
South Carolina	29,831	19,293	10,538
Tennessee	33	33	0
Total	116,236	100,060	16,176

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills.

Table A.11—Composite panel volume by destination, source, and species group, Georgia, 2003

Destination and source	All species	Species group	
		Softwood	Hardwood
	thousand cubic feet		
Georgia (retained)	46,185	43,867	2,318
Exports to			
Tennessee	1,553	1,506	47
Total	1,553	1,506	47
Imports from			
Alabama	84	84	0
Florida	7,759	1,359	6,400
South Carolina	3,828	3,770	58
Total	11,671	5,213	6,458

Table A.12—Other industrial volume by destination, source, and species group, Georgia, 2003[a]

Destination and source	All species	Species group	
		Softwood	Hardwood
	thousand cubic feet		
Georgia (retained)	25,351	25,016	335
Exports to			
Florida	1,125	1,125	0
South Carolina	60	60	0
Virginia	63	63	0
Total	1,248	1,248	0
Imports from			
Florida	1,483	1,483	0
South Carolina	34	34	0
Total	1,517	1,517	0

[a] Includes poles, posts, mulch, firewood, log homes, charcoal, and all other industrial mills.

Table A.13—Primary mill residue volume by roundwood type, species group, and residue type, Georgia, 2003

Roundwood type and species group	All types	Residue type			
		Bark	Coarse	Sawdust	Shavings
		thousand cubic feet			
Saw logs					
Softwood	232,310	34,076	108,409	56,708	33,117
Hardwood	40,349	7,635	18,152	14,022	540
Total	272,659	41,711	126,561	70,730	33,657
Veneer logs					
Softwood	35,695	5,119	16,625	13,951	0
Hardwood	13,717	2,231	5,718	5,768	0
Total	49,412	7,350	22,343	19,719	0
Pulpwood					
Softwood	46,831	46,831	0	0	0
Hardwood	12,174	12,174	0	0	0
Total	59,005	59,005	0	0	0
Composite panels					
Softwood	10,966	10,966	0	0	0
Hardwood	2,250	2,250	0	0	0
Total	13,216	13,216	0	0	0
Other industrial[a]					
Softwood	24,859	15,289	8,045	1,525	0
Hardwood	189	42	106	41	0
Total	25,048	15,331	8,151	1,566	0
Total					
Softwood	350,661	112,281	133,079	72,184	33,117
Hardwood	68,679	24,332	23,976	19,831	540
Total	419,340	136,613	157,055	92,015	33,657

[a] Includes poles, pilings, posts, and all other industrial products.

Table A.14—Disposal of residue at primary wood-using plants by product, species group, and type of residue, Georgia, 2001 and 2003

Product and species group	Residue type									
	All types		Bark		Coarse		Sawdust		Shavings	
	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003
	thousand cubic feet									
Fiber products										
Softwood	131,770	119,048	0	0	127,028	116,301	1,563	1,862	3,179	885
Hardwood	16,033	18,158	0	0	16,033	18,010	0	148	0	0
Total	147,803	137,206	0	0	143,061	134,311	1,563	2,010	3,179	885
Particleboard										
Softwood	59,330	41,011	0	0	10,652	2,336	24,896	21,023	23,782	17,652
Hardwood	954	0	0	0	561	0	393	0	0	0
Total	60,284	41,011	0	0	11,213	2,336	25,289	21,023	23,782	17,652
Sawn products										
Softwood	3,533	3,876	0	0	3,533	3,876	0	0	0	0
Hardwood	1,596	1,459	0	0	1,596	1,459	0	0	0	0
Total	5,129	5,335	0	0	5,129	5,335	0	0	0	0
Fuel										
Softwood	124,645	130,048	73,098	82,048	5,218	3,000	40,652	37,210	5,677	7,790
Hardwood	46,077	43,150	24,812	21,390	3,771	4,282	17,425	17,333	69	145
Total	170,722	173,198	97,910	103,438	8,989	7,282	58,077	54,543	5,746	7,935
Miscellaneous										
Softwood	49,093	54,191	30,988	28,532	6,110	6,855	7,258	12,014	4,737	6,790
Hardwood	6,455	5,693	4,720	2,934	910	203	793	2,161	32	395
Total	55,548	59,884	35,708	31,466	7,020	7,058	8,051	14,175	4,769	7,185
Not used										
Softwood	6,108	2,487	2,054	1,701	902	711	2,524	75	628	0
Hardwood	518	219	438	8	22	22	58	189	0	0
Total	6,626	2,706	2,492	1,709	924	733	2,582	264	628	0
All products										
Softwood	374,479	350,661	106,140	112,281	153,443	133,079	76,893	72,184	38,003	33,117
Hardwood	71,633	68,679	29,970	24,332	22,893	23,976	18,669	19,831	101	540
Total	446,112	419,340	136,110	136,613	176,336	157,055	95,562	92,015	38,104	33,657

Table A.15—Roundwood timber product output by product and species group, Southeast region of Georgia, 2001 and 2003

Product and species group	Year 2001	2003	Change	Change
	- - - - - - *thousand cubic feet* - - - - -			*percent*
Saw logs				
Softwood	160,733	150,029	-10,704	-6.7
Hardwood	14,119	16,085	1,966	13.9
Total	174,852	166,114	-8,738	-5.0
Veneer logs				
Softwood	3,175	7,602	4,427	139.4
Hardwood	2,227	2,084	-143	-6.4
Total	5,402	9,686	4,284	79.3
Pulpwood[a]				
Softwood	171,232	186,441	15,209	8.9
Hardwood	46,342	39,024	-7,318	-15.8
Total	217,574	225,465	7,891	3.6
Composite panels				
Softwood	2,006	5,690	3,684	183.6
Hardwood	1,322	830	-492	-37.2
Total	3,328	6,520	3,192	95.9
Other industrial				
Softwood	10,800	19,028	8,228	76.2
Hardwood	0	0	0	—
Total	10,800	19,028	8,228	76.2
All industrial				
Softwood	347,946	368,790	20,844	6.0
Hardwood	64,010	58,023	-5,987	-9.4
Total	411,956	426,813	14,857	3.6

— = negligible.

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (4,577,000 cubic feet in 2001 and 4,117,000 cubic feet in 2003).

Table A.16—Roundwood timber product output by county, product, and species group, Southeast region of Georgia, 2003

County	All products		Saw logs		Veneer logs		Pulpwood[a]		Composite panels		Other industrial	
	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood
	thousand cubic feet											
Appling	14,394	1,602	7,258	437	203	65	6,204	1,100	0	0	729	0
Atkinson	6,514	458	2,424	424	203	21	3,294	13	0	0	593	0
Bacon	7,181	1,295	3,250	407	135	16	3,064	872	0	0	732	0
Brantley	16,880	707	7,736	244	135	112	8,193	351	0	0	816	0
Bryan	7,316	1,242	3,593	256	0	0	3,527	986	0	0	196	0
Bulloch	11,036	1,662	6,651	418	138	234	3,863	1,010	0	0	384	0
Camden	15,253	303	8,168	245	233	0	6,729	58	0	0	123	0
Candler	5,015	557	1,431	0	0	40	3,519	517	0	0	65	0
Charlton	14,242	8	6,142	1	275	4	7,262	3	0	0	563	0
Chatham	7,748	1,596	1,709	44	0	0	6,009	1,552	0	0	30	0
Clinch	24,802	1,363	8,163	245	207	0	14,054	703	88	415	2,290	0
Coffee	8,064	1,120	1,437	517	338	30	5,676	573	0	0	613	0
Dodge	9,949	3,211	1,075	407	338	174	4,105	2,630	1,260	0	3,171	0
Echols	10,537	416	4,072	1	0	0	5,992	0	88	415	385	0
Effingham	11,268	1,876	5,998	303	0	339	5,184	1,234	0	0	86	0
Emanuel	14,189	3,210	6,204	1,663	138	11	7,578	1,536	0	0	269	0
Evans	3,779	801	1,032	0	0	0	2,553	801	0	0	194	0
Glynn	12,270	138	3,829	0	648	102	7,428	36	0	0	365	0
Jeff Davis	10,358	9,170	3,144	274	677	55	4,855	8,841	1,418	0	264	0
Jenkins	9,804	1,845	5,123	411	0	0	4,641	1,434	0	0	40	0
Johnson	6,953	2,998	4,255	2,221	0	0	2,429	777	0	0	269	0
Laurens	10,024	2,844	4,038	1,721	754	46	3,665	1,077	1,418	0	149	0
Liberty	9,803	1,929	2,619	416	0	6	6,715	1,507	0	0	469	0
Long	12,329	2,575	5,225	800	0	73	6,681	1,702	0	0	423	0
McIntosh	5,966	1,079	1,523	0	0	66	3,992	1,013	0	0	451	0
Montgomery	5,288	1,499	2,168	585	677	55	2,105	859	0	0	338	0
Pierce	6,885	968	3,117	407	135	16	2,634	545	0	0	999	0
Screven	15,806	3,093	8,597	108	0	413	7,032	2,572	0	0	177	0
Tattnall	4,939	1,188	1,791	407	0	6	3,001	775	0	0	147	0
Telfair	11,661	1,999	3,774	1,124	677	55	5,305	820	1,418	0	487	0
Toombs	9,561	1,409	4,385	830	338	30	4,685	549	0	0	153	0
Treutlen	6,442	672	3,570	90	0	0	2,644	582	0	0	228	0
Ware	16,368	276	5,912	245	338	30	8,627	1	0	0	1,491	0
Wayne	18,947	1,097	8,818	0	0	6	9,064	1,091	0	0	1,065	0
Wheeler	7,219	1,817	1,798	834	1,015	79	4,132	904	0	0	274	0
All counties	368,790	58,023	150,029	16,085	7,602	2,084	186,441	39,024	5,690	830	19,028	0

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (4,117,000 cubic feet in 2003).

Table A.17—Roundwood timber product output by product and species group, Southwest region of Georgia, 2001 and 2003

Product and species group	Year		Change	Change
	2001	2003		
	- - - - - thousand cubic feet - - - - -			*percent*
Saw logs				
Softwood	69,646	52,337	-17,309	-24.9
Hardwood	4,963	2,742	-2,221	-44.8
Total	74,609	55,079	-19,530	-26.2
Veneer logs				
Softwood	8,096	6,042	-2,054	-25.4
Hardwood	3,219	819	-2,400	-74.6
Total	11,315	6,861	-4,454	-39.4
Pulpwood[a]				
Softwood	40,595	54,610	14,015	34.5
Hardwood	24,916	11,999	-12,917	-51.8
Total	65,511	66,609	1,098	1.7
Composite panels				
Softwood	6,140	9,521	3,381	55.1
Hardwood	2,532	1,079	-1,453	-57.4
Total	8,672	10,600	1,928	22.2
Other industrial				
Softwood	2,832	5,274	2,442	86.2
Hardwood	0	16	16	—
Total	2,832	5,290	2,458	86.8
All industrial				
Softwood	127,309	127,784	475	0.4
Hardwood	35,630	16,655	-18,975	-53.3
Total	162,939	144,439	-18,500	-11.4

— = negligible.

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (998,000 cubic feet in 2001 and 1,197,000 cubic feet in 2003).

Table A.18—Roundwood timber product output by county, product, and species group, Southwest region of Georgia, 2003

County	All products		Saw logs		Veneer logs		Pulpwood[a]		Composite panels		Other industrial	
	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood
	thousand cubic feet											
Baker	2,016	888	159	0	0	0	1,823	888	0	0	34	0
Ben Hill	4,079	1,186	1,786	71	338	24	560	1,091	1,260	0	135	0
Berrien	5,979	532	4,617	342	338	24	519	0	35	166	470	0
Brooks	6,822	709	3,365	127	0	230	3,284	352	0	0	173	0
Colquitt	10,180	270	6,393	0	0	0	2,669	270	945	0	173	0
Cook	1,815	84	822	0	0	0	435	1	17	83	541	0
Crisp	2,766	1,115	1,473	51	0	0	1,184	1,056	0	0	109	8
Decatur	11,580	2,280	3,481	107	1,664	0	6,277	2,173	0	0	158	0
Dooly	8,399	663	1,296	298	0	0	6,503	357	472	0	128	8
Early	6,323	1,226	1,106	173	0	0	5,217	1,053	0	0	0	0
Grady	6,638	1,383	2,228	5	1,419	0	2,866	1,378	0	0	125	0
Irwin	4,381	302	2,088	29	338	24	1,637	0	53	249	265	0
Lanier	3,962	2	2,277	0	0	0	1,186	2	0	0	499	0
Lowndes	7,821	693	4,496	98	0	0	2,553	180	88	415	684	0
Miller	1,078	240	139	0	0	0	893	240	0	0	46	0
Mitchell	7,936	1,716	598	0	0	0	5,174	1,550	2,083	166	81	0
Seminole	3,219	213	1,246	0	0	81	1,905	132	0	0	68	0
Thomas	10,404	1,429	4,499	133	1,811	230	3,805	1,066	0	0	289	0
Tift	2,083	578	1,121	354	67	202	439	22	0	0	456	0
Turner	3,615	71	1,707	71	0	0	561	0	1,260	0	87	0
Wilcox	8,565	756	3,512	606	67	4	3,102	146	1,733	0	151	0
Worth	8,123	319	3,928	277	0	0	2,018	42	1,575	0	602	0
All counties	127,784	16,655	52,337	2,742	6,042	819	54,610	11,999	9,521	1,079	5,274	16

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (1,197,000 cubic feet in 2003).

Table A.19—Roundwood timber product output by product and species group, Central region of Georgia, 2001 and 2003

Product and species group	Year		Change	Change
	2001	2003		
	- - - - - *thousand cubic feet* - - - - -			*percent*
Saw logs				
Softwood	125,531	112,216	-13,315	-10.6
Hardwood	24,244	29,024	4,780	19.7
Total	149,775	141,240	-8,535	-5.7
Veneer logs				
Softwood	22,597	24,906	2,309	10.2
Hardwood	4,340	3,932	-408	-9.4
Total	26,937	28,838	1,901	7.1
Pulpwood[a]				
Softwood	98,872	135,290	36,418	36.8
Hardwood	49,726	48,682	-1,044	-2.1
Total	148,598	183,972	35,374	23.8
Composite panels				
Softwood	14,247	8,260	-5,987	-42.0
Hardwood	686	140	-546	-79.6
Total	14,933	8,400	-6,533	-43.7
Other industrial				
Softwood	863	973	110	12.7
Hardwood	82	106	24	29.3
Total	945	1,079	134	14.2
All industrial				
Softwood	262,110	281,645	19,535	7.5
Hardwood	79,078	81,884	2,806	3.5
Total	341,188	363,529	22,341	6.5

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (2,033,000 cubic feet in 2001 and 2,626,000 cubic feet in 2003).

Table A.20—Roundwood timber product output by county, product, and species group, Central region of Georgia, 2003

County	All products		Saw logs		Veneer logs		Pulpwood[a]		Composite panels		Other industrial	
	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood
	thousand cubic feet											
Baldwin	4,353	1,074	1,239	528	1,636	152	1,477	394	0	0	1	0
Bibb	1,840	236	689	8	138	5	1,013	223	0	0	0	0
Bleckley	1,488	397	792	386	0	5	672	6	0	0	24	0
Burke	12,393	5,368	4,954	979	0	11	7,358	4,378	0	0	81	0
Butts	2,259	906	1,942	901	277	0	40	0	0	0	0	5
Calhoun	3,129	1,091	749	585	0	0	2,380	506	0	0	0	0
Chattahoochee	3,199	1,164	837	352	0	0	2,362	812	0	0	0	0
Clay	4,206	602	1,056	0	0	14	3,150	588	0	0	0	0
Columbia	4,268	1,363	2,713	0	0	0	1,553	1,363	0	0	2	0
Crawford	4,848	2,019	1,237	6	0	5	3,611	2,005	0	0	0	3
Dougherty	2,453	1,334	536	585	0	0	1,917	749	0	0	0	0
Glascock	2,507	1,020	1,280	375	277	0	948	645	0	0	2	0
Greene	8,664	994	3,811	312	2,911	65	381	587	1,422	30	139	0
Hancock	11,448	3,844	6,631	1,803	1,525	54	2,437	1,969	853	18	2	0
Harris	8,722	1,386	3,839	81	361	151	4,522	1,154	0	0	0	0
Houston	5,662	635	1,198	448	138	5	4,326	182	0	0	0	0
Jasper	5,260	935	2,930	544	554	158	1,754	233	0	0	22	0
Jefferson	10,235	5,531	6,875	3,048	0	5	3,305	2,478	0	0	55	0
Jones	5,487	995	4,221	901	970	76	296	18	0	0	0	0
Lamar	1,634	571	1,111	360	0	0	523	198	0	0	0	13
Lee	4,280	1,694	1,372	0	0	0	2,908	1,686	0	0	0	8
Lincoln	4,626	603	2,868	164	967	0	731	439	0	0	60	0
Macon	6,531	2,123	1,034	0	0	0	5,497	2,115	0	0	0	8
Marion	7,941	868	2,994	353	0	0	4,947	507	0	0	0	8
McDuffie	5,104	828	3,811	309	821	54	438	465	0	0	34	0
Monroe	8,815	2,105	3,527	906	905	264	4,383	927	0	0	0	8
Morgan	7,289	667	1,701	557	2,772	65	1,821	24	995	21	0	0
Muscogee	4,146	763	1,481	235	180	327	2,485	201	0	0	0	0
Peach	1,181	0	1,083	0	0	0	98	0	0	0	0	0
Pike	1,811	554	832	376	180	151	799	19	0	0	0	8
Pulaski	3,877	916	931	524	0	0	2,342	392	472	0	132	0
Putnam	6,386	764	3,177	528	1,820	59	1,347	177	0	0	42	0
Quitman	2,956	453	461	52	0	14	2,495	387	0	0	0	0
Randolph	7,760	2,464	829	680	0	456	6,931	1,328	0	0	0	0
Richmond	2,429	1,968	657	52	138	0	1,634	1,916	0	0	0	0
Schley	4,958	721	847	235	0	0	4,111	478	0	0	0	8
Stewart	11,442	3,500	3,377	408	0	21	8,065	3,071	0	0	0	0
Sumter	6,728	3,404	1,454	627	0	395	4,648	2,374	472	0	154	8
Talbot	6,337	1,463	2,054	235	180	378	4,103	850	0	0	0	0
Taliaferro	5,491	871	1,871	529	2,115	0	302	320	1,167	22	36	0
Taylor	4,872	3,166	1,170	473	0	433	3,702	2,252	0	0	0	8
Terrell	5,445	1,762	1,322	218	0	395	4,123	1,141	0	0	0	8
Twiggs	4,967	1,434	1,252	1,199	415	5	3,276	230	0	0	24	0
Upson	4,316	457	1,279	35	180	151	2,857	266	0	0	0	5
Warren	8,986	2,761	5,241	1,243	1,173	27	1,851	1,476	711	15	10	0
Washington	13,361	5,888	6,767	2,653	554	5	6,004	3,230	0	0	36	0
Webster	6,918	1,314	2,090	668	0	15	4,828	623	0	0	0	8
Wilkes	12,144	3,913	5,786	1,865	3,165	0	932	2,014	2,168	34	93	0
Wilkinson	6,493	2,995	2,308	1,698	554	11	3,607	1,286	0	0	24	0
All counties	281,645	81,884	112,216	29,024	24,906	3,932	135,290	48,682	8,260	140	973	106

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (2,626,000 cubic feet in 2003).

Table A.21—Roundwood timber product output by product and species group, North Central region of Georgia, 2001 and 2003

Product and species group	Year		Change	Change
	2001	2003		
	- - - - - *thousand cubic feet* - - - - -			*percent*
Saw logs				
Softwood	41,563	37,227	-4,336	-10.4
Hardwood	12,689	10,599	-2,090	-16.5
Total	54,252	47,826	-6,426	-11.8
Veneer logs				
Softwood	23,346	17,355	-5,991	-25.7
Hardwood	3,920	3,846	-74	-1.9
Total	27,266	21,201	-6,065	-22.2
Pulpwood[a]				
Softwood	30,604	44,502	13,898	45.4
Hardwood	6,984	5,649	-1,335	-19.1
Total	37,588	50,151	12,563	33.4
Composite panels				
Softwood	15,426	20,053	4,627	30.0
Hardwood	322	266	-56	-17.4
Total	15,748	20,319	4,571	29.0
Other industrial				
Softwood	869	263	-606	-69.7
Hardwood	503	156	-347	-69.0
Total	1,372	419	-953	-69.5
All industrial				
Softwood	111,808	119,400	7,592	6.8
Hardwood	24,418	20,516	-3,902	-16.0
Total	136,226	139,916	3,690	2.7

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (2,722,000 cubic feet in 2001 and 1,411,000 cubic feet in 2003).

Table A.22—Roundwood timber product output by county, product, and species group, North Central region of Georgia, 2003

County	All products		Saw logs		Veneer logs		Pulpwood[a]		Composite panels		Other industrial	
	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood
	thousand cubic feet											
Banks	2,924	837	220	612	202	82	29	111	2,458	32	15	0
Barrow	478	157	0	14	135	65	0	75	343	3	0	0
Carroll	11,310	1,165	1,437	239	1,011	454	8,862	465	0	0	0	7
Clarke	307	20	1	19	135	0	0	0	171	1	0	0
Clayton	668	569	621	564	0	0	47	5	0	0	0	0
Cobb	388	147	69	60	180	5	139	66	0	0	0	16
Coweta	10,123	1,054	2,960	550	361	151	6,802	340	0	0	0	13
De Kalb	389	259	196	54	180	205	13	0	0	0	0	0
Douglas	813	221	505	155	180	0	128	46	0	0	0	20
Elbert	3,473	2,122	509	1,887	270	0	625	204	2,026	31	43	0
Fayette	1,346	731	1,074	713	180	0	92	2	0	0	0	16
Forsyth	1,850	585	334	144	0	145	829	287	687	7	0	2
Franklin	1,532	104	156	40	338	54	8	0	1,030	10	0	0
Fulton	6,443	841	4,603	616	541	157	1,128	51	171	1	0	16
Gwinnett	3,574	972	544	608	819	307	813	33	1,398	22	0	2
Hall	2,643	226	512	198	0	0	386	3	1,741	25	4	0
Haralson	4,923	436	1,799	266	180	75	2,944	90	0	0	0	5
Hart	453	139	0	138	270	0	0	0	171	1	12	0
Heard	10,433	417	3,008	161	361	175	7,064	68	0	0	0	13
Henry	4,333	1,090	3,287	797	319	59	727	231	0	0	0	3
Jackson	3,358	175	1	21	1,256	124	45	0	2,056	30	0	0
Madison	4,488	110	78	23	1,743	54	0	0	2,630	33	37	0
Meriwether	7,263	1,354	2,963	547	541	554	3,759	249	0	0	0	4
Newton	2,718	452	1,600	379	554	59	564	14	0	0	0	0
Oconee	2,450	161	423	98	270	0	212	47	1,545	16	0	0
Oglethorpe	9,672	1,578	1,954	1,074	3,668	65	272	385	3,626	54	152	0
Paulding	6,583	1,380	1,462	192	921	554	4,200	613	0	0	0	21
Polk	6,125	453	2,746	64	289	0	3,090	389	0	0	0	0
Rockdale	568	23	416	18	138	5	14	0	0	0	0	0
Spalding	1,022	111	769	0	138	54	115	52	0	0	0	5
Troup	4,610	2,462	2,514	248	632	378	1,464	1,823	0	0	0	13
Walton	2,140	165	466	100	1,543	65	131	0	0	0	0	0
All counties	119,400	20,516	37,227	10,599	17,355	3,846	44,502	5,649	20,053	266	263	156

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (1,411,000 cubic feet in 2003).

Table A.23—Roundwood timber product output by product and species group, Northern region of Georgia, 2001 and 2003

Product and species group	Year 2001	2003	Change	Change
	- - - - thousand cubic feet - - - -			*percent*
Saw logs				
Softwood	26,595	23,896	-2,699	-10.1
Hardwood	5,048	6,992	1,944	38.5
Total	31,643	30,888	-755	-2.4
Veneer logs				
Softwood	1,156	1,081	-75	-6.5
Hardwood	835	807	-28	-3.4
Total	1,991	1,888	-103	-5.2
Pulpwood[a]				
Softwood	24,384	36,776	12,392	50.8
Hardwood	7,324	5,923	-1,401	-19.1
Total	31,708	42,699	10,991	34.7
Composite panels				
Softwood	3,994	1,849	-2,145	-53.7
Hardwood	98	50	-48	-49.0
Total	4,092	1,899	-2,193	-53.6
Other industrial				
Softwood	790	726	-64	-8.1
Hardwood	128	57	-71	-55.5
Total	918	783	-135	-14.7
All industrial				
Softwood	56,919	64,328	7,409	13.0
Hardwood	13,433	13,829	396	2.9
Total	70,352	78,157	7,805	11.1

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (1,362,000 cubic feet in 2001 and 1,122,000 cubic feet in 2003).

Table A.24—Roundwood timber product output by county, product, and species group, Northern region of Georgia, 2003

County	All products		Saw logs		Veneer logs		Pulpwood[a]		Composite panels		Other industrial	
	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood
	thousand cubic feet											
Bartow	6,628	974	3,013	121	0	0	3,615	853	0	0	0	0
Catoosa	262	565	146	465	0	0	116	100	0	0	0	0
Chattooga	4,034	438	1,316	181	0	0	2,718	257	0	0	0	0
Cherokee	8,129	584	1,809	111	522	48	5,798	425	0	0	0	0
Dade	782	450	0	10	0	0	180	421	602	19	0	0
Dawson	1,919	240	715	180	0	0	1,204	60	0	0	0	0
Fannin	1,154	1,084	632	588	0	296	522	166	0	0	0	34
Floyd	14,406	1,164	5,436	267	289	0	8,681	897	0	0	0	0
Gilmer	1,785	426	778	350	0	0	1,007	76	0	0	0	0
Gordon	2,287	644	398	242	0	0	1,889	402	0	0	0	0
Habersham	3,244	1,346	1,714	1,051	135	295	1,380	0	0	0	15	0
Lumpkin	1,275	344	687	343	0	0	588	1	0	0	0	0
Murray	3,490	1,601	1,113	299	0	0	2,377	1,302	0	0	0	0
Pickens	4,216	224	979	97	0	0	3,237	127	0	0	0	0
Rabun	514	190	451	190	0	0	0	0	0	0	63	0
Stephens	1,348	844	833	793	135	48	0	0	343	3	37	0
Towns	102	47	25	47	0	0	77	0	0	0	0	0
Union	465	330	246	167	0	120	219	20	0	0	0	23
Walker	3,632	578	1,324	220	0	0	800	330	904	28	604	0
White	1,628	478	1,368	445	0	0	253	33	0	0	7	0
Whitfield	3,028	1,278	913	825	0	0	2,115	453	0	0	0	0
All counties	64,328	13,829	23,896	6,992	1,081	807	36,776	5,923	1,849	50	726	57

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (1,122,000 cubic feet in 2003).

Table A.25—Total roundwood output by product, species group, and source of material, Georgia, 2003

Product and species group	All sources	Growing-stock trees			Other sources
		Total	Sawtimber	Poletimber	
	thousand cubic feet				
Saw logs					
Softwood	375,705	367,025	352,352	14,674	8,680
Hardwood	65,442	62,611	58,971	3,640	2,831
Total	441,147	429,636	411,322	18,314	11,511
Veneer logs and bolts					
Softwood	56,986	55,670	55,114	556	1,316
Hardwood	11,488	11,398	11,284	114	90
Total	68,474	67,068	66,397	670	1,406
Pulpwood					
Softwood	457,619	446,052	206,976	239,076	11,567
Hardwood	111,277	102,402	46,364	56,038	8,875
Total	568,896	548,454	253,340	295,114	20,442
Composite panels					
Softwood	45,373	43,604	17,878	25,725	1,769
Hardwood	2,365	2,165	823	1,342	200
Total	47,738	45,769	18,701	27,068	1,969
Poles and posts					
Softwood	12,520	12,231	11,542	689	289
Hardwood	0	0	0	0	0
Total	12,520	12,231	11,542	689	289
Other miscellaneous					
Softwood	13,744	13,427	7,839	5,587	317
Hardwood	335	285	166	119	50
Total	14,079	13,711	8,005	5,706	368
Total industrial products					
Softwood	961,947	938,009	651,701	286,307	23,938
Hardwood	190,907	178,861	117,607	61,253	12,046
Total	1,152,854	1,116,869	769,308	347,561	35,985
Fuelwood					
Softwood	6,667	4,625	3,188	1,437	2,042
Hardwood	43,734	25,813	19,808	6,005	17,921
Total	50,401	30,438	22,996	7,442	19,963
All products					
Softwood	968,614	942,634	654,889	287,745	25,980
Hardwood	234,641	204,673	137,415	67,258	29,968
Total	1,203,255	1,147,307	792,305	355,003	55,948

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

Table A.26—Total roundwood output by species group, survey region, and ownership class, Georgia, 2003

Species group and survey region	Total	Ownership class		
		Public	Forest industry	Nonindustrial private
		thousand cubic feet		
Softwoods				
Southeast	371,350	6,037	162,058	203,255
Southwest	128,666	1,922	25,554	101,190
Central	283,598	9,291	76,321	197,986
North Central	120,227	3,527	26,171	90,530
North	64,773	4,828	7,279	52,666
Total softwoods	968,614	25,605	297,383	645,626
Hardwoods				
Southeast	71,315	4,030	11,586	55,699
Southwest	20,468	14	2,332	18,122
Central	100,644	1,200	17,244	82,201
North Central	25,217	724	3,386	21,107
North	16,997	2,221	2,575	12,201
Total hardwoods	234,641	8,189	37,123	189,330
All species	1,203,255	33,793	334,506	834,956

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

Table A.27—Total roundwood output by species group, detailed species group, and product, Georgia, 2003

Species group and detailed species group	Total	Product						
		Saw logs	Veneer logs	Pulpwood	Composite panel	Poles and posts	Other miscellaneous	Fuel-wood
		thousand cubic feet						
Softwood								
Cedar	1,227	165	289	109	643	2	10	8
Longleaf-slash pine	377,555	149,123	9,589	185,951	12,111	8,829	9,353	2,599
White pine	654	297	0	353	0	0	0	4
Loblolly-shortleaf pine	540,652	206,782	46,090	248,404	28,863	3,214	3,577	3,722
Other yellow pines	36,075	14,196	964	16,280	3,572	317	499	248
Cypress	12,271	5,045	54	6,441	185	158	304	85
Hemlock	180	97	0	81	0	0	0	1
Total softwoods	968,614	375,705	56,986	457,619	45,373	12,520	13,744	6,667
Hardwood								
Soft maple	13,970	3,780	561	6,902	112	0	10	2,604
Hard maple	18	12	0	2	0	0	0	3
Other birch	673	178	131	208	22	0	9	125
Hickory	10,359	3,246	497	4,651	18	0	17	1,930
Beech	443	150	32	178	0	0	0	83
Ash	2,667	1,129	98	931	10	0	2	497
Sweetgum	40,255	12,797	1,802	17,935	160	0	59	7,502
Yellow-poplar	20,892	6,641	1,454	8,624	228	0	52	3,894
Blackgum-tupelo	26,183	4,987	1,072	14,528	705	0	11	4,880
Sycamore	361	146	21	125	2	0	1	67
Cottonwood	101	23	15	44	0	0	0	19
Black cherry	2,109	540	104	953	117	0	2	393
Select white oaks	13,028	4,327	1,042	5,175	27	0	27	2,429
Other white oaks	8,910	2,903	443	3,823	60	0	21	1,661
Select red oaks	3,734	1,387	179	1,423	38	0	10	696
Other red oaks	75,030	18,828	3,047	38,526	545	0	99	13,984
Basswood	117	0	0	95	0	0	0	22
Elm	3,391	1,273	171	1,295	18	0	2	632
Other Eastern hardwoods	12,401	3,096	821	5,858	303	0	12	2,311
Total hardwoods	234,641	65,442	11,488	111,277	2,365	0	335	43,734
All species	1,203,255	441,147	68,474	568,896	47,738	12,520	14,079	50,401

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

Table A.28—Total roundwood output by species group, detailed species group, and ownership class, Georgia, 2003

Species group and detailed species group	Total	Ownership class		
		Public	Forest industry	Nonindustrial private
		thousand cubic feet		
Softwood				
Cedar	1,227	14	575	638
Longleaf-slash pine	377,555	6,803	142,471	228,281
White pine	654	2	329	323
Loblolly-shortleaf pine	540,652	17,621	143,801	379,230
Other yellow pines	36,075	1,004	6,480	28,591
Cypress	12,271	155	3,728	8,388
Hemlock	180	5	0	175
Total softwoods	968,614	25,605	297,383	645,626
Hardwood				
Soft maple	13,970	704	2,185	11,081
Hard maple	18	0	1	17
Other birch	673	18	34	621
Hickory	10,359	620	2,143	7,595
Beech	443	0	84	358
Ash	2,667	133	483	2,052
Sweetgum	40,255	1,081	6,323	32,851
Yellow-poplar	20,892	735	2,737	17,420
Blackgum-tupelo	26,183	801	4,998	20,384
Sycamore	361	70	25	266
Cottonwood	101	0	22	80
Black cherry	2,109	83	187	1,838
Select white oaks	13,028	284	1,728	11,015
Other white oaks	8,910	1,066	1,697	6,148
Select red oaks	3,734	34	760	2,940
Other red oaks	75,030	2,030	11,152	61,848
Basswood	117	0	0	117
Elm	3,391	65	565	2,762
Other Eastern hardwoods	12,401	464	1,999	9,938
Total hardwoods	234,641	8,189	37,123	189,330
All species	1,203,255	33,793	334,506	834,956

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

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Johnson, T.G.; Wells, J.L. 2005. Georgia's timber industry—an assessment of timber product output and use, 2003. Resour. Bull. SRS–104. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 46 p.

In 2003, industrial roundwood output from Georgia's forests totaled 1.15 billion cubic feet, 3 percent more than in 2001. Mill byproducts generated from primary manufacturers declined 5 percent to 417 million cubic feet. Almost all plant residues were used primarily for fuel and fiber products. Pulpwood was the leading roundwood product at 569 million cubic feet; saw logs ranked second at 441 million cubic feet; veneer logs were third at 68 million cubic feet. The number of primary processing plants increased from 170 in 2001 to 187 in 2003. Total receipts remained stable at 1.17 billion cubic feet.

Keywords: FIA, pulpwood, residues, roundwood, saw logs, veneer logs, wood movement.

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Department of Agriculture

Forest Service

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