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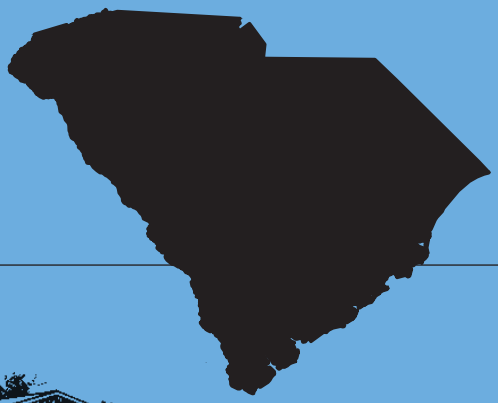
South Carolina's Timber Industry—An Assessment of Timber Product Output and Use, 2005

Tony G. Johnson
and Nathan Smith



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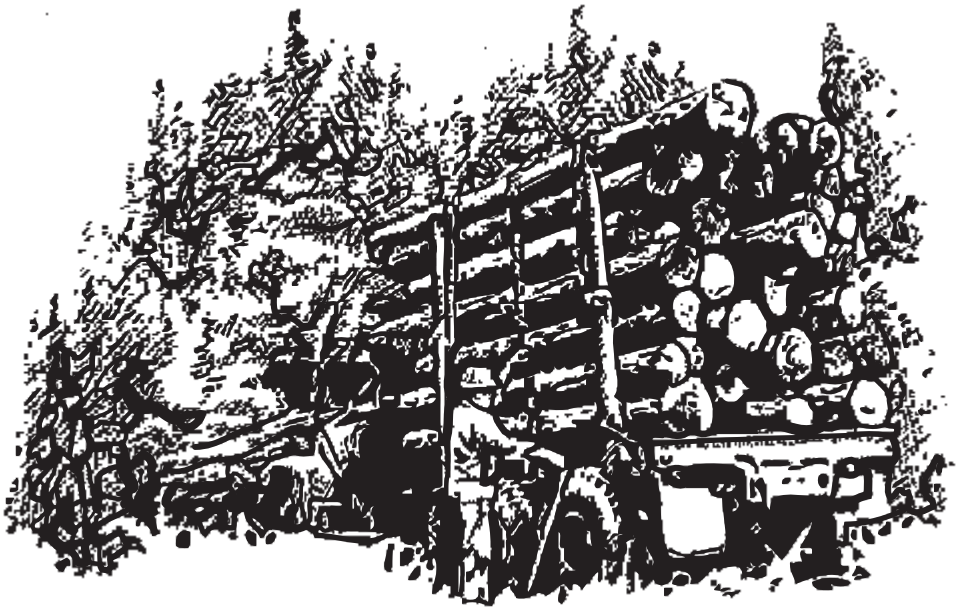

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Asheville, NC 28804

Foreword

This report contains the findings of a 2005 canvass of all primary wood-using plants in South Carolina, and presents changes in product output and residue use since 2003. 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 2005 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 South Carolina was conducted in 2006 to obtain information for 2005. In addition, roundwood from out-of-State mills known to be using logs or bolts harvested from South Carolina timberland was incorporated into South Carolina 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 1936, and are currently conducted every 2 years.

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

Acknowledgments

The authors thank Tim Adams, Jennie Morris, and Roger Conner for review and comments; Carolyn Steppleton for her tireless efforts in processing and ensuring the accuracy of Timber Product Output (TPO) data; Sonja Oswalt for the mill map; Helen Beresford for TPO database maintenance and support; Anne Jenkins, Janet Griffin, Sharon Johnson, and Charlene Walker for tables, graphs, and statistical checking; and the Southern Research Station (SRS) Technical Publications Team for editorial review, styling, and publication of this report.

The SRS gratefully acknowledges the cooperation and assistance provided by the South Carolina 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 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, other timber removals (i.e. land clearing and reserved timber removals), 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, State, or region. The system has been logically divided into two sections to assist the user in making specific data requests. In section 1, the user will be 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 options 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 for each region 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. The use of trade or firm names in this publication is for reader information and does not imply endorsement by the U.S. Department of Agriculture of any product or service.

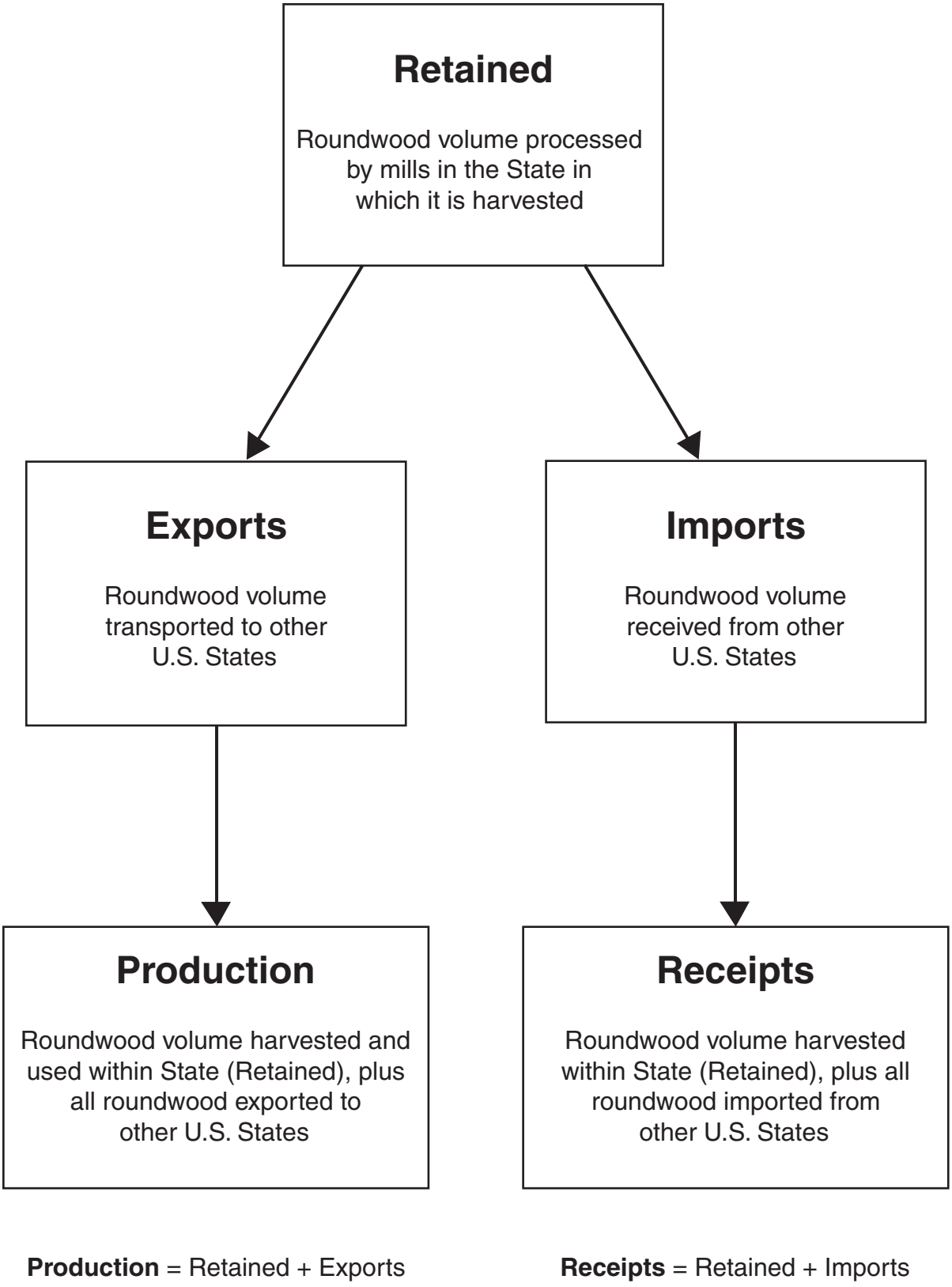

Figure 1—Movement of roundwood exports and imports within the United States.

South Carolina's Timber Industry—An Assessment of Timber Product Output and Use, 2005

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Output of Industrial Timber Products

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

All Products

- Between 2003 and 2005, the combined industrial TPO from roundwood and plant byproducts increased 12 percent, from 740 to 831 million cubic feet.
- TPO from roundwood was up 73 million cubic feet, or 13 percent, to 645 million cubic feet, while output of plant byproducts increased 10 percent to 186 million cubic feet.
- With the exception of hardwood saw logs and softwood veneer products, all product output categories were up substantially. Output of softwood roundwood products was up nearly 14 percent to 533 million cubic feet, while hardwood roundwood products increased almost 10 percent to 112 million cubic feet (fig. 2).
- Pulpwood and saw logs were the principal roundwood products in 2005. Combined output of these products totaled 576 million cubic feet and accounted for 89 percent of South Carolina's total roundwood output (fig. 3).
- Total receipts at South Carolina mills, which included roundwood harvested and retained in the State and roundwood imported from other States, increased 8 percent to 582 million cubic feet. The number of primary roundwood-using plants in South Carolina remained stable in 2005 at 75 mills. Although three sawmills closed, the State gained three new other mills (fig. 4).
- Across all products, 79 percent of roundwood harvested was retained for processing at South Carolina mills. Exports of roundwood to other States amounted to 133 million cubic feet, while imports of roundwood amounted

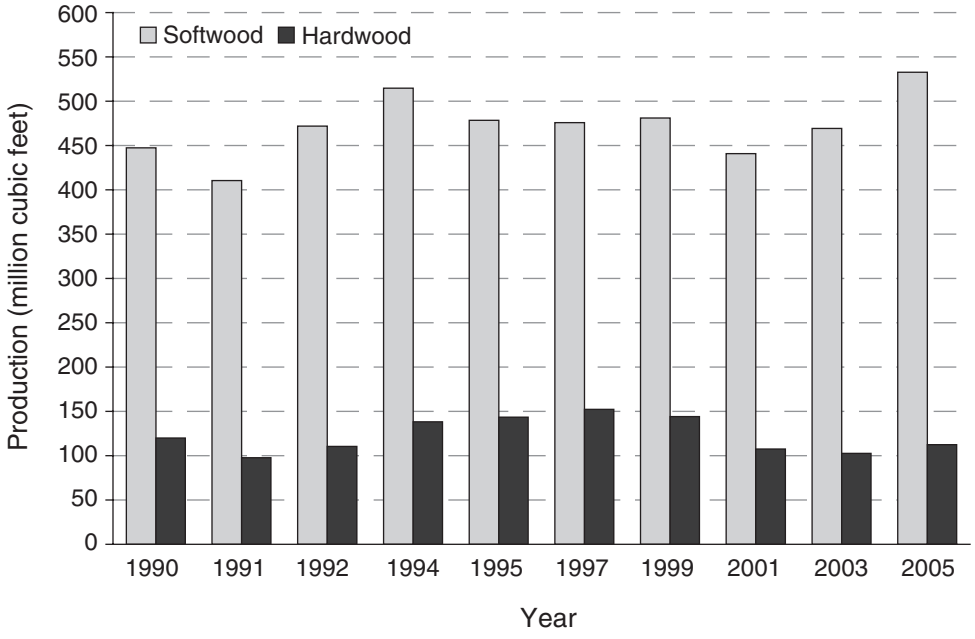

Figure 2—Roundwood production for all products by species group and year (see page 7 for references for individual years).

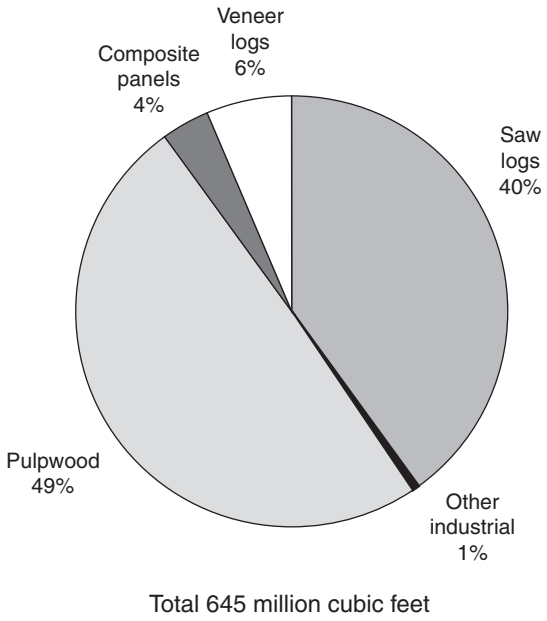

Figure 3—Roundwood production by type of product, 2005.

to 70 million cubic feet making the State a net exporter of roundwood. Tables A.8 to A.11 show exports to and imports from other States by individual product type.

Pulpwood

- Since 2003, pulpwood production, including chipped roundwood, was up 44 million cubic feet to 318 million cubic feet and accounted for 49 percent of the State's total roundwood TPO. Softwood output increased 15 percent to 237 million cubic feet (3.4 million cords), while hardwood output was up 19 percent to 81 million cubic feet (1.2 million cords) (fig. 5).

- Seven pulpmill facilities were operating and receiving roundwood in South Carolina in 2005, the same since 1999. Total pulpwood receipts for these mills were up 21 million cubic feet to 299 million cubic feet, accounting for 51 percent of total receipts for all mills.

- Seventy-five percent of roundwood cut for pulpwood was retained for processing at South Carolina pulpmills. Roundwood pulpwood accounted for 59 percent of total

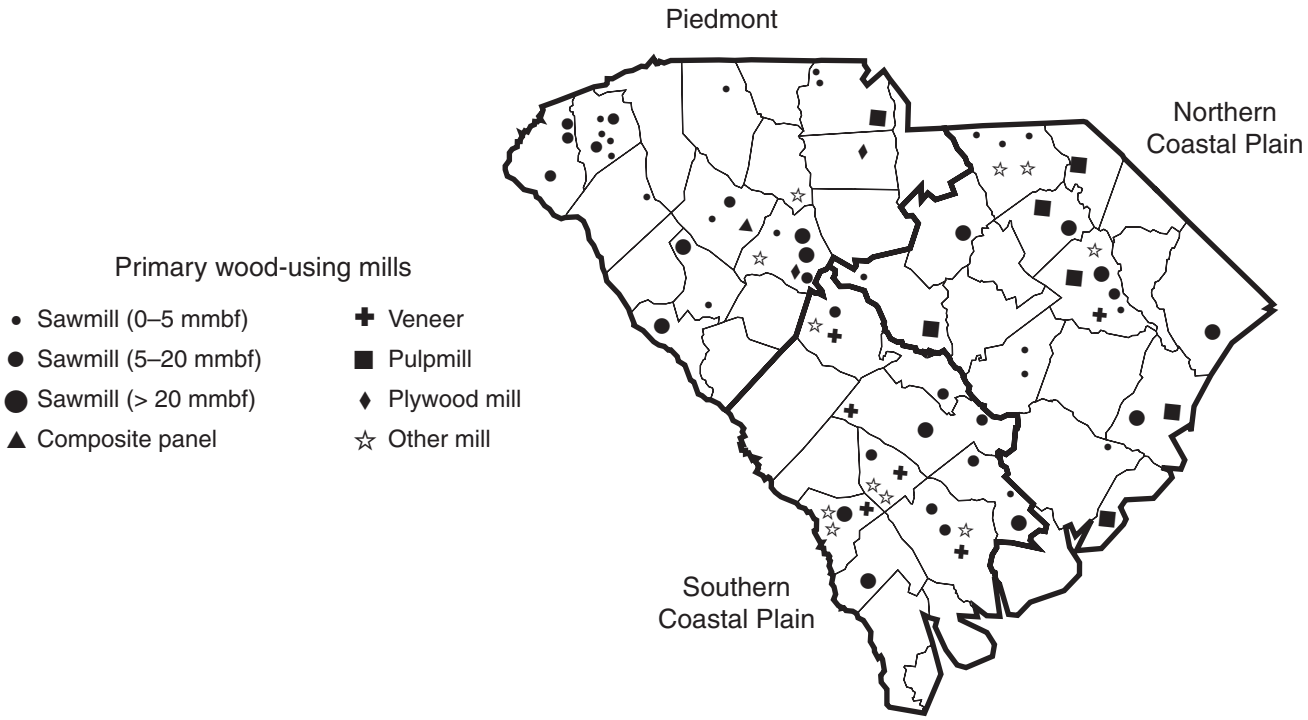

Figure 4—Primary wood-using mills by region, 2005.

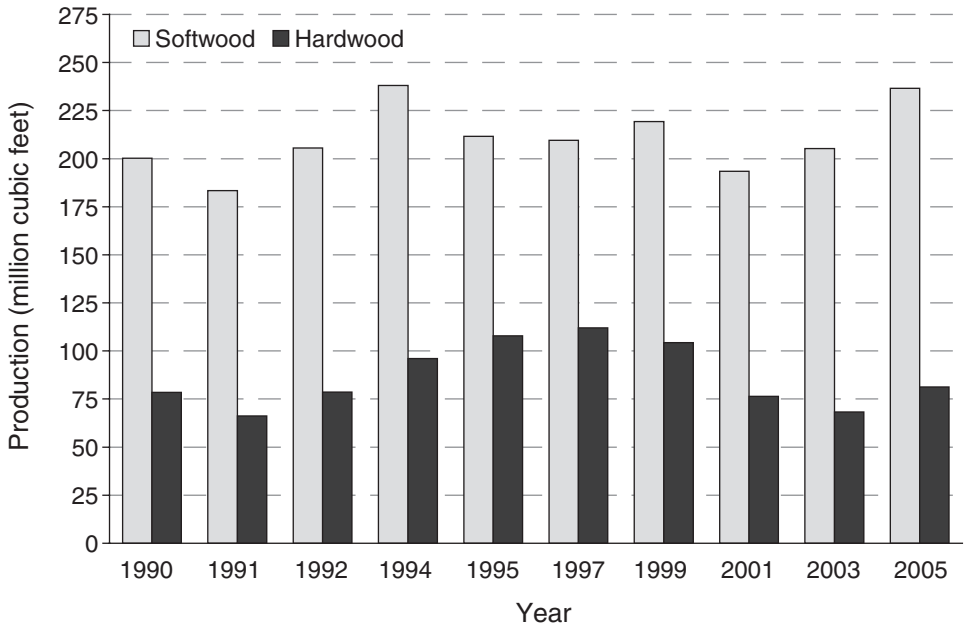

Figure 5—Roundwood pulpwood production by species group and year (see page 7 for references for individual years).

known exports and 85 percent of total imports. Roundwood pulpwood exports amounted to 78 million cubic feet, or 19 million cubic feet more than was imported.

Saw Logs

- Saw logs accounted for 40 percent of the State's total roundwood products. Output of softwood saw logs increased 13 percent to 234 million cubic feet (1.3 billion board feet, International ¼-inch rule); hardwood saw-log output declined 13 percent to 24 million cubic feet (142 million board feet, International ¼-inch rule) (fig. 6).

- In 2005, South Carolina had 48 sawmills, 3 fewer than in 2003. Total saw-log receipts were up 15 million cubic feet to 222 million cubic feet. Softwood saw-log receipts increased 11 percent to 204 million cubic feet, while hardwood receipts were down 19 percent to 18 million cubic feet. Of the 48 sawmills operating in 2005, 4 mills, or 8 percent, had receipts of < 1 million board feet, while 17, or 35 percent of the mills, had receipts > 10 million board feet. Those 17 mills accounted for 90 percent of saw-log receipts.

- South Carolina retained 84 percent of its saw-log production for within State manufacture, with saw-log exports exceeding imports by nearly 36 million cubic feet in 2005.

Veneer Logs

- Output of veneer logs in 2005 totaled 42 million cubic feet and accounted for 6 percent of South Carolina's total roundwood TPO volume. Softwood veneer production was down 1 percent to 34 million cubic feet (195 million board feet, International ¼-inch rule); output of hardwood veneer logs increased 5 percent to 7.3 million cubic feet (45 million board feet, International ¼-inch rule) (fig. 7).

- Eight veneer mills were operating in South Carolina, the same as in 2003. Receipts of veneer logs increased 2 percent to 37.4 million cubic feet. Softwood veneer receipts were down slightly, but remained at 30 million cubic feet, while hardwood veneer receipts increased 0.9 million cubic feet to 7 million cubic feet.

- South Carolina retained 82 percent of its veneer-log production for processing at veneer mills within the State. Exports amounted to 7.6 million cubic feet, while imports totaled 3.4 million cubic feet.

Composite Panels

- Roundwood harvested from South Carolina’s forests for composite panels increased 33 percent to 24 million cubic feet (347,000 cords). Softwood output accounted for nearly all of composite panel production in South Carolina.

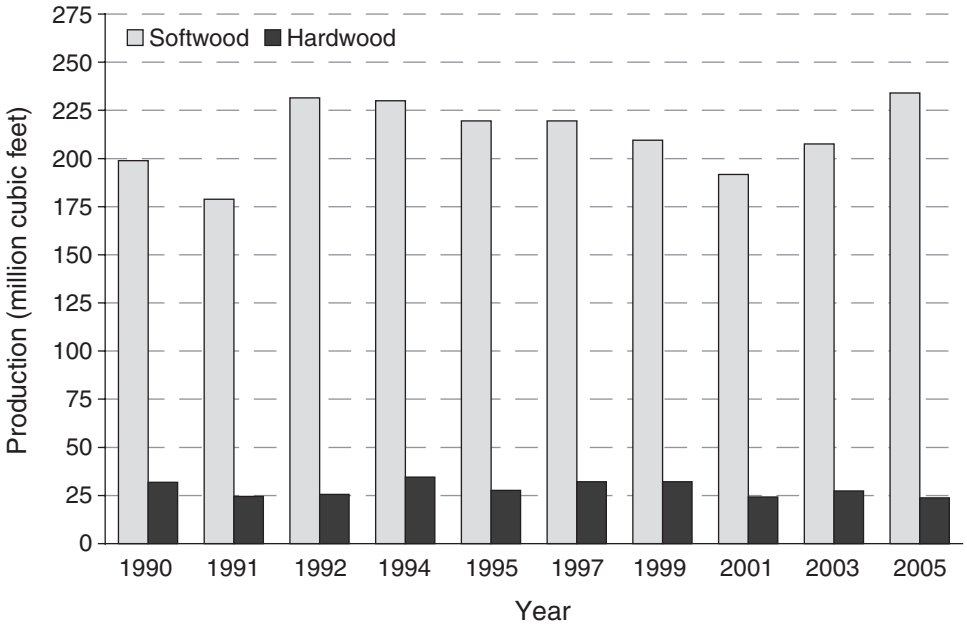

Figure 6—Roundwood saw-log production by species and year (see page 7 for references for individual years).

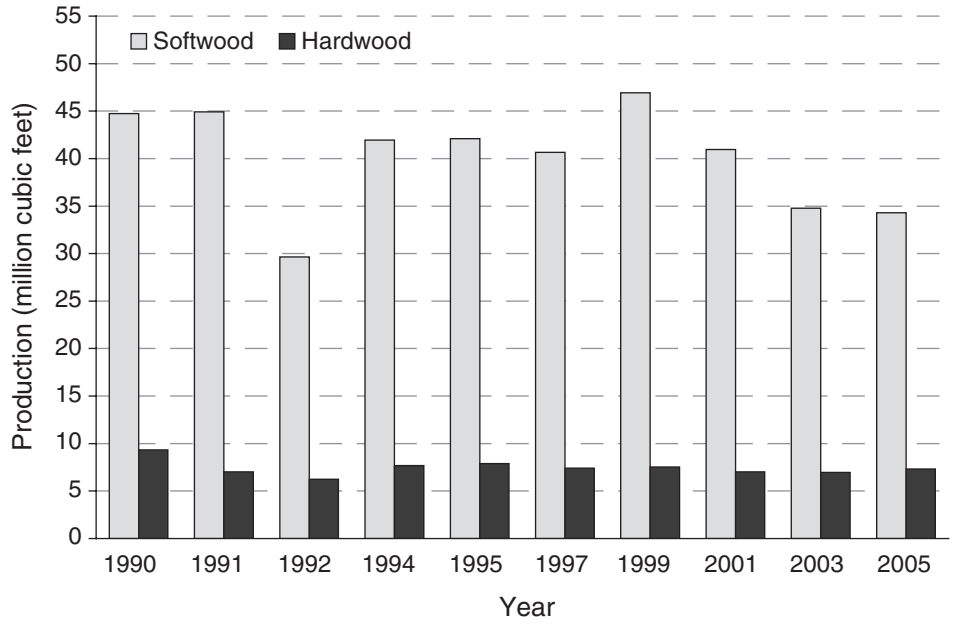

Figure 7—Roundwood veneer-log production by species and year (see page 7 for references for individual years).

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 4.3 million cubic feet, a 13-percent increase since 2003. Softwood made up all of the other industrial products volume.

- The number of plants producing other industrial products totaled 11 in 2005.

Plant Byproducts

- In 2005, processing of primary products in South Carolina mills generated 186 million cubic feet of wood and bark residues. Coarse residues from all primary products accounted for 36 percent, or 67 million cubic feet, and bark volume accounted for 33 percent, or 61 million cubic feet. Sawdust and shavings made up 31 percent of total residues, or 58 million cubic feet (fig. 8).

- The processing of saw logs generated 123 million cubic feet of mill residues, accounting for 66 percent of the total residues produced (fig. 9).

- Almost all of the wood and bark residues were used for products. Fifty-three percent of the residue was used for industrial fuel (fig. 10). More than 54 million cubic feet, or 81 percent, of the coarse residues were used to manufacture fiber products. Most of the bark was used for industrial fuel or other miscellaneous products, and 71 percent of the sawdust and shavings were used for industrial fuel.

County Data

- Table A.14 shows softwood and hardwood product output by county and individual product type. All 46 counties in South Carolina had softwood and hardwood output. Nine counties (Beaufort, Colleton, Dorchester, Fairfield, Georgetown, Hampton, Horry, Newberry, and Orangeburg) had combined softwood and hardwood product output of more than 20 million cubic feet each. These nine counties total product output amounted to nearly 264 million cubic feet and accounted for 41 percent of the State's total product output.

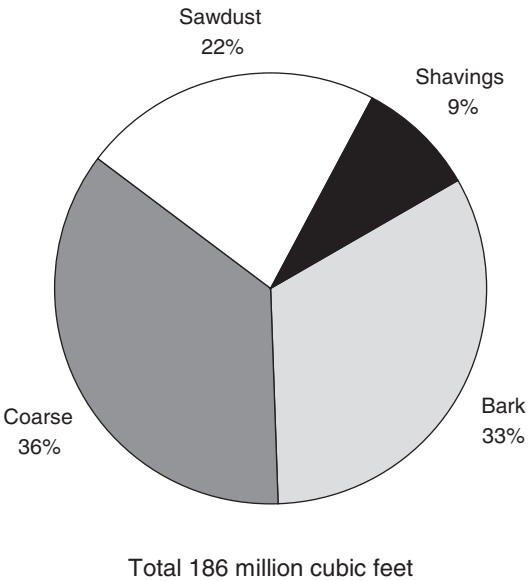

Figure 8—Primary mill residue by residue type, 2005.

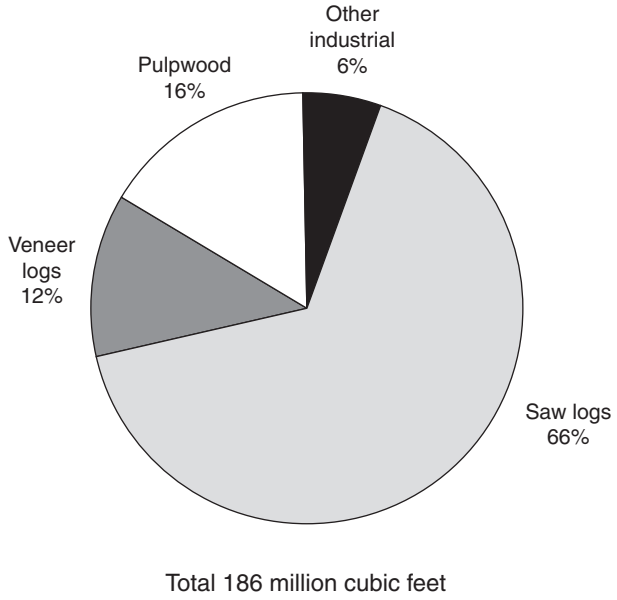

Figure 9—Primary mill residue produced by roundwood type, 2005.

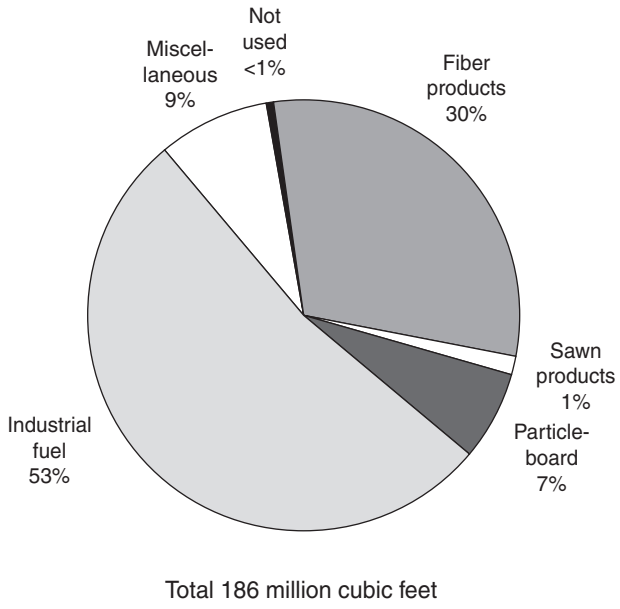

Figure 10—Disposal of residue by product, 2005.

Total Roundwood Output

Using the latest inventory data for South Carolina, product output was estimated by source, ownership, and detailed species group.

Source

- In addition to the 645 million cubic feet of roundwood output for industrial roundwood products, an estimated 27 million cubic feet were harvested for within State fuelwood, bringing South Carolina's total roundwood output to 672 million cubic feet.

- Ninety-four percent of total roundwood output was considered growing-stock volume (sawtimber and poletimber) from timberland sources (fig. 11). Other sources (such as saplings; stumps, tops, and limbs of trees on timberland; and trees on nonforest land) contributed an estimated 42 million cubic feet, or 6 percent of total roundwood output.

Ownership

- An estimated 486 million cubic feet, or 73 percent, of the total roundwood output came from nonindustrial private forest lands.

- Forest industry lands contributed 143 million cubic feet, or 21 percent of the output. Public lands made up the remaining 6 percent, or nearly 43 million cubic feet (fig. 12).

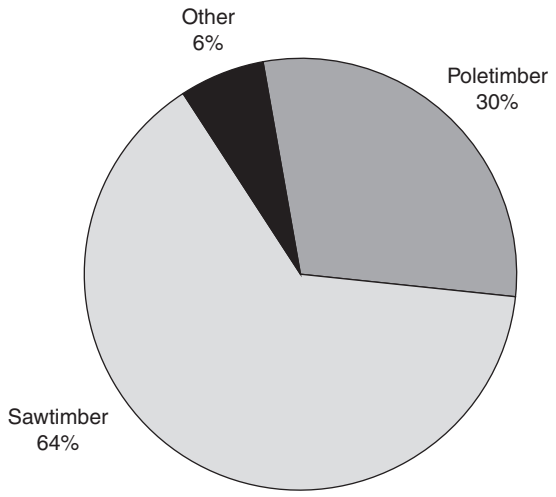

Figure 11—Roundwood output by source, 2005.

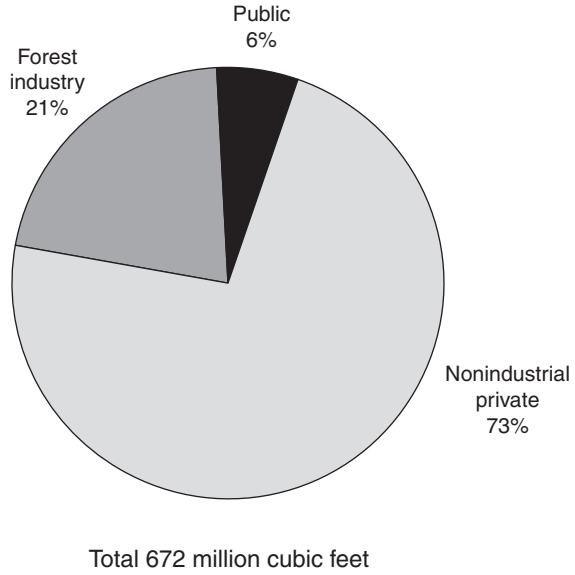

Figure 12—Roundwood output by ownership, 2005.

Species

- The loblolly and shortleaf pine group provided more volume than any other softwood species group, accounting for 88 percent of the total softwood output (fig. 13). The longleaf and slash pine type accounted for another 7 percent of the softwood output.

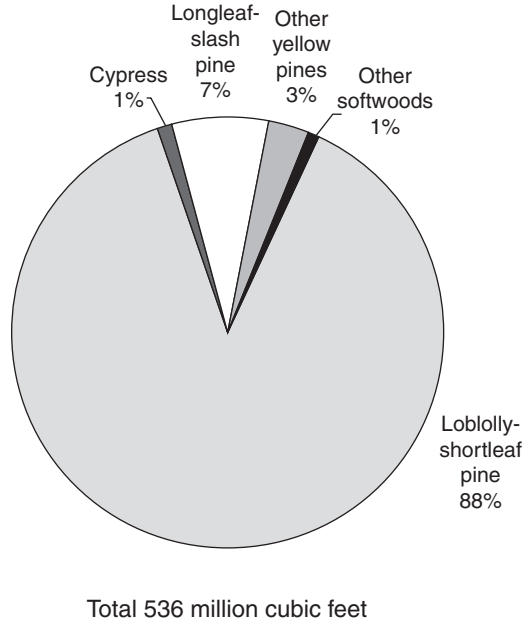

Figure 13—Roundwood output by softwood species group, 2005.

- The red oak and white oak groups combined accounted for 51 million cubic feet, or 37 percent of total hardwood output (fig. 14). Sweetgum accounted for another 34 million cubic feet, or 25 percent, of total hardwood output.

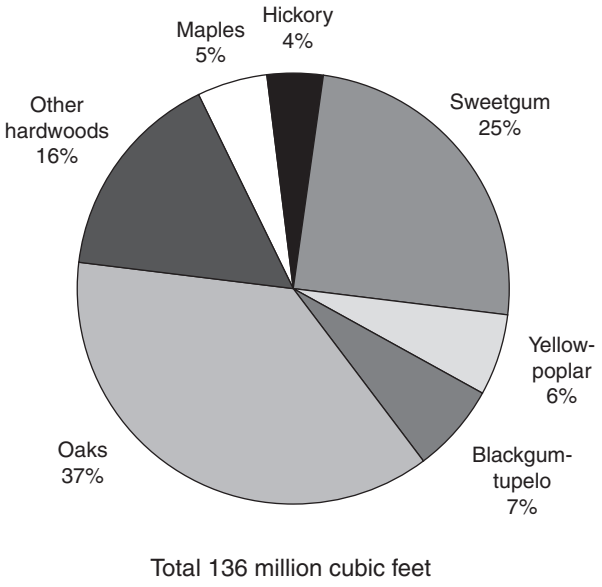

Figure 14—Roundwood output by hardwood species group, 2005.

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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.

Nonforest land. 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 forest land. Forest land other than timberland and productive reserved forest land. It includes available and reserved forest land 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 round-wood 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 scale like.

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. Forest land 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	0.18018 cubic foot = 1 board foot
	5.55 board feet = 1 cubic foot
Hardwood	0.16750 cubic foot = 1 board foot
	5.97 board feet = 1 cubic foot
Veneer logs	
Softwood	0.17601 cubic foot = 1 board foot
	5.68 board feet = 1 cubic foot
Hardwood	0.16340 cubic foot = 1 board foot
	6.12 board feet = 1 cubic foot
Pulpwood[b]	
Softwood	68.6 cubic feet per cord
Hardwood	70.5 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 South Carolina 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.
Pitch pine	*P. rigida* Mill.
Pond pine	*P. serotina* Michx.
Eastern white pine	*P. strobus* L.
Loblolly pine	*P. taeda* L.
Virginia pine	*P. virginiana* Mill.
Baldcypress	*Taxodium distichum* (L.) Rich.
Pondcypress	*T. distichum* var. *nutan* (Ait.) Sweet
Eastern hemlock	*Tsuga canadensis* (L.) Carr.
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.
Ohio buckeye	*A. glabra* Willd.
Ailanthus	*Ailanthus altissima* (Mill.) Swingle
Tung-oil tree	*Aleurites fordii* Hemsl.
Serviceberry	*Amelanchier* spp. Med.
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. myristicaeformis* (Michx. f.) Nutt.
Shagbark hickory	*C. ovata* (Mill.) K. Koch
Black hickory	*C. texana* Buckl.
Mockernut hickory	*C. tomentosa* 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 virginiana* 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.
Kentucky coffeetree	*Gymnocladus dioicus* (L.) K. Koch
Hardwoods (continued)	
American holly	*Ilex opaca* Ait.
Black walnut	*Juglans nigra* L.
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.
Durand oak	*Q. durandii* Buckl.
Southern red oak	*Q. falcata* Michx.
Cherrybark oak	*Q. falcata* var. *pagodaefolia* 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
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.
Cedar elm	*U. crassifolia* Nutt.
Slippery elm	*U. rubra* Muhl.
September elm	*U. serotina* Sarg.
Rock elm	*U. thomasii* Sarg.

[a] Common and scientific names of tree species > 1.0 inch d.b.h. occurring in the FIA sample.

[b] Little (1979).

Appendix

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Table A.1—Output of industrial products by product and species group, South Carolina, 2003 and 2005

Product and species group	Year			
	2003	2005	Change	Change
	- - - thousand cubic feet - - -			*percent*
Saw logs				
Softwood	207,536	233,982	26,446	12.7
Hardwood	27,381	23,846	-3,535	-12.9
Total	234,917	257,828	22,911	9.8
Veneer logs				
Softwood	34,781	34,299	-482	-1.4
Hardwood	6,958	7,324	366	5.3
Total	41,739	41,623	-116	-0.3
Pulpwood[a]				
Softwood	205,321	236,513	31,192	15.2
Hardwood	68,303	81,223	12,920	18.9
Total	273,624	317,736	44,112	16.1
Composite panels				
Softwood	17,870	23,674	5,804	32.5
Hardwood	56	108	52	92.9
Total	17,926	23,782	5,856	32.7
Other industrial				
Softwood	3,753	4,255	502	13.4
Hardwood	0	0	0	—
Total	3,753	4,255	502	13.4
All industrial				
Softwood	469,261	532,723	63,462	13.5
Hardwood	102,698	112,501	9,803	9.5
Total	571,959	645,224	73,265	12.8
Byproduct output				
Softwood	142,208	160,354	18,146	12.8
Hardwood	26,109	25,145	-964	-3.7
Total	168,317	185,499	17,182	10.2
Total output				
Softwood	611,469	693,077	81,608	13.3
Hardwood	128,807	137,646	8,839	6.9
Total	740,276	830,723	90,447	12.2

— = negligible.

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (2,257,000 cubic feet in 2003 and 7,104,000 cubic feet in 2005).

Table A.2—Roundwood receipts by product and species group, South Carolina, 2003 and 2005

Product and species group	Year 2003	2005	Change	Change
	- - - thousand cubic feet - - -			*percent*
Saw logs				
Softwood	185,013	204,408	19,395	10.5
Hardwood	22,041	17,883	-4,158	-18.9
Total	207,054	222,291	15,237	7.4
Veneer logs				
Softwood	30,274	30,188	-86	-0.3
Hardwood	6,335	7,220	885	14.0
Total	36,609	37,408	799	2.2
Pulpwood[a]				
Softwood	199,354	207,432	8,078	4.1
Hardwood	78,400	91,539	13,139	16.8
Total	277,754	298,971	21,217	7.6
Other industrial				
Softwood	18,138	23,661	5,523	30.4
Hardwood	0	0	0	—
Total	18,138	23,661	5,523	30.4
Total output				
Softwood	432,779	465,689	32,910	7.6
Hardwood	106,776	116,642	9,866	9.2
Total	539,555	582,331	42,776	7.9

— = negligible.

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (2,444,000 cubic feet in 2003 and 7,253,000 cubic feet in 2005).

Table A.3—Number of primary wood-using plants by industry, South Carolina, 1987 to 2005

Industry	Year 1987	1989	1992	1994	1995	1997	1999	2001	2003	2005
					number					
Sawmills	99	87	79	76	70	66	63	51	51	48
Veneer mills	20	17	14	14	14	12	12	9	8	8
Pulpmills	8	8	9	8	8	8	7	7	7	7
Composite panel mills	0	0	0	0	0	0	0	1	1	1
Other mills	6	5	9	7	7	6	8	8	8	11
All plants	133	117	111	105	105	99	90	76	75	75

Table A.4—Roundwood receipts by sawmill size, South Carolina, 2003 and 2005

Sawmill size class[a]	2003			2005		
	Mills	Volume		Mills	Volume	
mmbf	*number*	*mbf*	*percent*	*number*	*mbf*	*percent*
<1.0	4	1,525	0	4	1,697	0
1.0–4.99	15	41,469	3	17	52,876	4
5.0–9.99	12	89,995	8	10	75,058	6
10.0–49.99	11	263,010	23	6	85,041	7
>50	9	763,242	66	11	1,027,643	83
Total	51	1,159,241	100	48	1,242,315	100

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

Table A.5—Roundwood receipts by species and type of mill, South Carolina, 2005

Species	All mills	Type of mill				
			Veneer mills			
		Sawmills	Pine plywood	Other veneer	Pulpmills[a]	Other mills
	thousand cubic feet					
Softwood						
Yellow pine	56,485	202,917	30,188	0	NA	23,380
Eastern white pine	344	344	0	0	NA	0
Cedar	197	197	0	0	NA	0
Cypress	1,175	950	0	0	NA	225
Other softwood	56	0	0	0	NA	56
Unclassified	207,432	0	0	0	207,432	0
Total softwoods	465,689	204,408	30,188	0	207,432	23,661
Hardwood						
Blackgum and tupelo	1,569	660	0	909	NA	0
Soft maple	664	476	0	188	NA	0
Sweetgum	4,316	2,253	885	1,178	NA	0
Yellow-poplar	5,473	3,838	885	750	NA	0
Other soft hardwood	258	146	0	112	NA	0
Hickory	1,329	571	0	758	NA	0
Red oak	7,033	5,680	0	1,353	NA	0
White oak	3,757	3,640	0	117	NA	0
Other hard hardwood	704	619	0	85	NA	0
Unclassified	91,539	0	0	0	91,539	0
Total hardwoods	116,642	17,883	1,770	5,450	91,539	0
All species	582,331	222,291	31,958	5,450	298,971	23,661

NA = not applicable.

[a] Only collected by softwood and hardwood and includes roundwood chipped.

Table A.6—Industrial roundwood movement by year and species group, South Carolina, 2003 and 2005

Year	Production	Exported to other States	Retained	Imported from other States	Receipts
		thousand cubic feet			
		Softwood			
2003	469,261	78,976	390,285	42,494	432,779
2005	532,723	107,979	424,744	40,945	465,689
		Hardwood			
2003	102,698	24,280	78,418	28,358	106,776
2005	112,501	24,635	87,866	28,776	116,642
		All species			
2003	571,959	103,256	468,703	70,852	539,555
2005	645,224	132,614	512,610	69,721	582,331

Table A.7—Industrial roundwood movement by product and species group, South Carolina, 2005

Product and species group	Production	Exported to other States	Retained	Imported from other States	Receipts
		thousand cubic feet			
Saw logs					
Softwood	233,982	34,913	199,069	5,339	204,408
Hardwood	23,846	6,682	17,164	719	17,883
Total	257,828	41,595	216,233	6,058	222,291
Veneer logs					
Softwood	34,299	6,821	27,478	2,710	30,188
Hardwood	7,324	780	6,544	676	7,220
Total	41,623	7,601	34,022	3,386	37,408
Pulpwood[a]					
Softwood	236,513	60,979	175,534	31,898	207,432
Hardwood	81,223	17,065	64,158	27,381	91,539
Total	317,736	78,044	239,692	59,279	298,971
Other industrial					
Softwood	27,929	5,266	22,663	998	23,661
Hardwood	108	108	0	0	0
Total	28,037	5,374	22,663	998	23,661
All products					
Softwood	532,723	107,979	424,744	40,945	465,689
Hardwood	112,501	24,635	87,866	28,776	116,642
Total	645,224	132,614	512,610	69,721	582,331

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

Table A.8—Saw-log volume by destination, source, and species group, South Carolina, 2005

Destination and source	All species	Species group	
		Softwood	Hardwood
	thousand cubic feet		
South Carolina (retained)	216,233	199,069	17,164
Exports to			
Georgia	22,108	19,010	3,098
North Carolina	19,487	15,903	3,584
Total	41,595	34,913	6,682
Imports from			
Georgia	2,077	1,790	287
North Carolina	3,981	3,549	432
Total	6,058	5,339	719

Table A.9—Veneer volume by destination, source, and species group, South Carolina, 2005

Destination and source	All species	Species group	
		Softwood	Hardwood
	thousand cubic feet		
South Carolina (retained)	34,022	27,478	6,544
Exports to			
Florida	203	203	0
Georgia	2,691	2,172	519
North Carolina	4,676	4,419	257
Virginia	31	27	4
Total	7,601	6,821	780
Imports from			
Georgia	615	130	485
North Carolina	2,771	2,580	191
Total	3,386	2,710	676

Table A.10—Pulpwood volume by destination, source, and species group, South Carolina, 2005[a]

Destination and source	All species	Species group	
		Softwood	Hardwood
	thousand cubic feet		
South Carolina (retained)	239,692	175,534	64,158
Exports to			
Alabama	113	113	0
Georgia	54,631	41,368	13,263
North Carolina	22,103	18,334	3,769
Ohio	528	528	0
Tennessee	565	532	33
Virginia	104	104	0
Total	78,044	60,979	17,065
Imports from			
Georgia	8,907	2,852	6,055
Kentucky	514	0	514
Mississippi	30	0	30
North Carolina	48,394	29,046	19,348
Tennessee	777	0	777
Virginia	657	0	657
Total	59,279	31,898	27,381

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

Table A.11—Other industrial volume by destination, source, and species group, South Carolina, 2005[a]

Destination and source	All species	Species group	
		Softwood	Hardwood
	thousand cubic feet		
South Carolina (retained)	22,663	22,663	0
Exports to			
Georgia	4,995	4,995	0
Tennessee	379	271	108
Total	5,374	5,266	108
Imports from			
Georgia	746	746	0
North Carolina	252	252	0
Total	998	998	0

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

Table A.12—Primary mill residue volume by roundwood type, species group, and residue type, South Carolina, 2005

Roundwood type and species group	All types	Residue type			
		Bark	Coarse	Sawdust	Shavings
		thousand cubic feet			
Saw logs					
Softwood	112,467	17,413	49,451	28,977	16,626
Hardwood	10,128	1,922	4,620	3,530	56
Total	122,595	19,335	54,071	32,507	16,682
Veneer logs					
Softwood	18,243	2,631	8,441	7,171	0
Hardwood	4,592	800	1,725	2,067	0
Total	22,835	3,431	10,166	9,238	0
Pulpwood					
Softwood	19,547	19,547	0	0	0
Hardwood	10,657	10,657	0	0	0
Total	30,204	30,204	0	0	0
Other industrial[a]					
Softwood	10,770	8,032	2,722	16	0
Hardwood	0	0	0	0	0
Total	10,770	8,032	2,722	16	0
Total					
Softwood	161,027	47,623	60,614	36,164	16,626
Hardwood	25,377	13,379	6,345	5,597	56
Total	186,404	61,002	66,959	41,761	16,682

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

Table A.13—Disposal of residue at primary wood-using plants by product, species group, and type of residue, South Carolina, 2003 and 2005

Product and species group	All types		Bark		Coarse		Sawdust		Shavings	
	2003	2005	2003	2005	2003	2005	2003	2005	2003	2005
	thousand cubic feet									
Fiber products										
Softwood	52,333	52,613	0	0	43,942	50,316	4,614	0	3,777	2,297
Hardwood	6,103	3,827	0	0	6,103	3,827	0	0	0	0
Total	58,436	56,440	0	0	50,045	54,143	4,614	0	3,777	2,297
Particleboard										
Softwood	9,487	12,504	0	0	948	4,769	5,858	2,151	2,681	5,584
Hardwood	452	0	0	0	0	0	452	0	0	0
Total	9,939	12,504	0	0	948	4,769	6,310	2,151	2,681	5,584
Sawn products										
Softwood	363	2,341	0	0	363	2,341	0	0	0	0
Hardwood	18	0	0	0	18	0	0	0	0	0
Total	381	2,341	0	0	381	2,341	0	0	0	0
Fuel										
Softwood	70,413	79,111	38,687	40,353	6,851	2,282	20,537	32,708	4,338	3,768
Hardwood	16,774	19,325	10,541	11,810	1,192	2,341	4,998	5,118	43	56
Total	87,187	98,436	49,228	52,163	8,043	4,623	25,535	37,826	4,381	3,824
Miscellaneous										
Softwood	9,612	13,785	5,306	6,891	415	775	1,397	1,142	2,494	4,977
Hardwood	2,762	1,993	1,641	1,534	413	78	697	381	11	0
Total	12,374	15,778	6,947	8,425	828	853	2,094	1,523	2,505	4,977
Not used										
Softwood	18	673	11	379	1	131	6	163	0	0
Hardwood	45	232	7	35	22	99	16	98	0	0
Total	63	905	18	414	23	230	22	261	0	0
All products										
Softwood	142,226	161,027	44,004	47,623	52,520	60,614	32,412	36,164	13,290	16,626
Hardwood	26,154	25,377	12,189	13,379	7,748	6,345	6,163	5,597	54	56
Total	168,380	186,404	56,193	61,002	60,268	66,959	38,575	41,761	13,344	16,682

Table A.14—Roundwood timber product output by county, product, and species group, South Carolina, 2005

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											
Abbeville	8,805	5,148	5,099	889	129	0	752	4,259	2,806	0	19	0
Aiken	15,719	2,653	8,721	871	1,642	165	3,438	1,617	1,708	0	210	0
Allendale	12,044	4,906	5,962	155	0	521	5,934	4,230	0	0	148	0
Anderson	2,766	1,957	1,298	1,149	554	0	45	808	869	0	0	0
Bamberg	3,865	1,176	2,726	155	0	312	999	709	0	0	140	0
Barnwell	4,771	1,191	2,671	840	0	272	2,052	79	0	0	48	0
Beaufort	20,058	5,625	1,736	120	0	82	18,322	5,423	0	0	0	0
Berkeley	9,363	213	5,691	67	723	0	2,890	146	0	0	59	0
Calhoun	7,182	1,928	2,051	35	129	194	4,957	1,699	0	0	45	0
Charleston	6,388	383	3,712	155	0	0	2,617	228	0	0	59	0
Cherokee	4,572	2,038	659	638	347	424	3,295	868	271	108	0	0
Chester	10,986	2,288	721	883	2,841	354	6,916	1,051	189	0	319	0
Chesterfield	13,730	1,434	7,305	482	172	0	6,253	952	0	0	0	0
Clarendon	6,473	825	3,299	75	0	66	3,174	684	0	0	0	0
Colleton	25,558	2,427	19,487	547	0	937	5,810	943	0	0	261	0
Darlington	7,354	1,503	4,950	40	0	31	2,404	1,432	0	0	0	0
Dillon	5,528	743	3,351	274	865	0	1,261	469	0	0	51	0
Dorchester	15,553	8,077	8,651	246	0	379	6,820	7,452	0	0	82	0
Edgefield	10,064	1,881	6,451	207	1,039	0	732	1,674	1,673	0	169	0
Fairfield	20,993	1,889	4,489	0	3,016	354	12,913	1,535	189	0	386	0
Florence	13,562	4,548	10,391	669	0	38	2,854	3,841	0	0	317	0
Georgetown	21,701	4,375	12,075	92	0	0	9,473	4,283	0	0	153	0
Greenville	2,403	1,653	890	1,523	133	61	621	69	759	0	0	0
Greenwood	15,398	1,439	4,748	546	909	48	5,727	845	3,945	0	69	0
Hampton	48,423	2,546	13,010	532	0	969	35,259	1,045	0	0	154	0
Horry	19,240	1,186	11,887	0	2,596	83	4,604	1,103	0	0	153	0
Jasper	12,988	3,521	9,234	548	0	323	3,645	2,650	0	0	109	0
Kershaw	14,295	1,855	4,518	808	923	42	8,813	1,005	0	0	41	0
Lancaster	10,358	1,078	3,133	539	688	0	6,520	539	0	0	17	0
Laurens	9,577	1,450	1,767	999	2,156	0	3,651	451	1,898	0	105	0
Lee	3,378	238	1,391	32	0	0	1,987	206	0	0	0	0
Lexington	4,547	397	2,718	153	519	28	996	216	189	0	125	0
Marion	7,200	4,413	5,198	853	865	43	1,025	3,517	0	0	112	0
Marlboro	8,020	2,880	3,712	616	1,032	0	3,276	2,264	0	0	0	0
McCormick	10,740	208	6,320	208	1,827	0	288	0	2,236	0	69	0
Newberry	35,839	9,372	8,191	719	2,897	0	20,953	8,653	3,607	0	191	0
Oconee	5,664	1,462	2,143	1,273	1,029	51	1,813	138	679	0	0	0
Orangeburg	15,271	5,381	7,505	1,006	389	705	7,273	3,670	0	0	104	0
Pickens	2,811	1,750	2,642	1,742	136	4	33	4	0	0	0	0
Richland	5,965	986	2,729	240	733	64	2,484	682	0	0	19	0
Saluda	8,304	1,296	4,405	365	129	0	1,362	931	2,278	0	130	0
Spartanburg	7,534	5,131	1,172	842	1,534	33	4,565	4,256	189	0	74	0
Sumter	4,451	641	2,928	202	0	0	1,523	439	0	0	0	0
Union	9,739	4,092	971	380	3,013	362	5,428	3,350	189	0	138	0
Williamsburg	18,478	967	10,364	444	0	25	7,951	498	0	0	163	0
York	5,065	1,351	910	687	1,334	354	2,805	310	0	0	16	0
All counties	532,723	112,501	233,982	23,846	34,299	7,324	236,513	81,223	23,674	108	4,255	0

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (7,104,000 cubic feet in 2005).

Table A.15—Total roundwood output by product, species group, and source of material, South Carolina, 2005

Product and species group	All sources	Growing-stock trees			Other sources
		Total	Sawtimber	Poletimber	
	thousand cubic feet				
Saw logs					
Softwood	233,982	226,312	211,764	14,548	7,670
Hardwood	23,846	23,383	21,980	1,403	463
Total	257,828	249,695	233,744	15,951	8,133
Veneer logs and bolts					
Softwood	34,299	33,503	32,977	526	796
Hardwood	7,324	7,241	7,241	0	83
Total	41,623	40,744	40,218	526	879
Pulpwood					
Softwood	236,513	216,612	98,086	118,526	19,901
Hardwood	81,223	74,289	27,735	46,555	6,934
Total	317,736	290,901	125,821	165,081	26,835
Composite panels					
Softwood	23,674	22,011	10,150	11,861	1,663
Hardwood	108	100	43	57	8
Total	23,782	22,111	10,193	11,918	1,671
Poles and posts					
Softwood	4,183	3,831	3,727	104	352
Hardwood	0	0	0	0	0
Total	4,183	3,831	3,727	104	352
Other miscellaneous					
Softwood	72	60	48	12	12
Hardwood	0	0	0	0	0
Total	72	60	48	12	12
Total industrial products					
Softwood	532,723	502,329	356,751	145,578	30,394
Hardwood	112,501	105,014	56,999	48,015	7,487
Total	645,224	607,342	413,750	193,593	37,882
Fuelwood					
Softwood	3,334	1,265	691	575	2,069
Hardwood	23,530	21,391	17,077	4,314	2,139
Total	26,864	22,657	17,768	4,889	4,207
All products					
Softwood	536,057	503,594	357,442	146,152	32,463
Hardwood	136,031	126,405	74,076	52,329	9,626
Total	672,088	629,999	431,518	198,481	42,089

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

Table A.16—Total roundwood output by species group, survey region, and ownership class, South Carolina, 2005

Species group and survey region	Total	Ownership class		
		Public	Forest industry	Nonindustrial private
		thousand cubic feet		
Softwoods				
Southern Coastal Plain	187,142	18,935	67,536	100,670
Northern Coastal Plain	166,161	8,905	54,836	102,420
Piedmont	182,754	9,671	9,385	163,698
Total softwoods	536,057	37,511	131,757	366,789
Hardwoods				
Southern Coastal Plain	48,159	1,646	3,317	43,196
Northern Coastal Plain	32,876	2,860	7,669	22,347
Piedmont	54,996	455	490	54,051
Total hardwoods	136,031	4,961	11,476	119,594
All species	672,088	42,471	143,233	486,383

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

Table A.17—Total roundwood output by species group, detailed species group, and product, South Carolina, 2005

Species group and detailed species group	Total	Product						
		Saw logs	Veneer logs	Pulpwood	Composite panels	Poles and posts	Other miscellaneous	Fuel-wood
		thousand cubic feet						
Softwood								
Cedar	572	114	99	334	15	6	1	4
Longleaf-slash pine	38,649	19,200	1,354	16,868	777	210	0	241
Eastern white pine	3,866	1,464	695	1,224	458	0	0	24
Loblolly-shortleaf pine	470,903	203,177	30,267	208,867	21,737	3,859	67	2,929
Other yellow pines	16,608	6,651	1,293	7,813	686	57	5	104
Cypress	5,459	3,376	590	1,408	0	52	0	34
Total softwoods	536,057	233,982	34,299	236,513	23,674	4,183	72	3,334
Hardwood								
Soft maple	7,003	1,541	329	3,921	0	0	0	1,211
Other birch	0	0	0	0	0	0	0	0
Hickory	5,909	960	338	3,587	2	0	0	1,022
Beech	93	10	3	64	0	0	0	16
Ash	2,918	326	267	1,819	0	0	0	505
Black walnut	837	75	2	615	0	0	0	145
Sweetgum	33,685	4,754	1,826	21,253	25	0	0	5,826
Yellow-poplar	8,081	2,942	229	3,502	10	0	0	1,398
Blackgum-tupelo	9,126	1,765	688	5,094	0	0	0	1,579
Sycamore	968	167	305	329	0	0	0	168
Cottonwood	4	0	0	3	0	0	0	1
Black cherry	2,465	344	157	1,532	5	0	0	426
Select white oaks	3,729	1,102	221	1,760	0	0	0	645
Other white oaks	5,325	1,079	313	2,986	26	0	0	921
Select red oaks	3,462	350	108	2,406	0	0	0	599
Other red oaks	38,292	6,341	2,118	23,170	40	0	0	6,623
Elm	5,616	1,029	183	3,432	0	0	0	971
Other eastern hardwoods	8,519	1,059	238	5,748	0	0	0	1,474
Total hardwoods	136,031	23,846	7,324	81,223	108	0	0	23,530
All species	672,088	257,828	41,623	317,736	23,782	4,183	72	26,864

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

Table A.18—Total roundwood output by species group, detailed species group, and ownership class, South Carolina, 2005

Species group and detailed species group	Total	Ownership class		
		Public	Forest industry	Nonindustrial private
	thousand cubic feet			
Softwood				
Cedar	572	4	18	550
Longleaf-slash pine	38,649	8,168	4,144	26,338
Eastern white pine	3,866	2,597	0	1,269
Loblolly-shortleaf pine	470,903	26,055	122,848	322,000
Other yellow pines	16,608	687	3,265	12,656
Cypress	5,459	0	1,484	3,976
Total softwoods	536,057	37,511	131,757	366,789
Hardwood				
Soft maple	7,003	589	1,167	5,247
Other birch	0	0	0	0
Hickory	5,909	231	578	5,100
Beech	93	0	3	91
Ash	2,918	280	284	2,354
Black walnut	837	0	0	837
Sweetgum	33,685	1,019	2,426	30,240
Yellow-poplar	8,081	94	63	7,924
Blackgum-tupelo	9,126	48	1,584	7,494
Sycamore	968	505	463	0
Cottonwood	4	0	0	4
Black cherry	2,465	84	118	2,263
Select white oaks	3,729	112	92	3,525
Other white oaks	5,325	73	218	5,035
Select red oaks	3,462	1	99	3,362
Other red oaks	38,292	1,511	3,494	33,287
Elm	5,616	223	408	4,985
Other eastern hardwoods	8,519	192	479	7,847
Total hardwoods	136,031	4,961	11,476	119,594
All species	672,088	42,471	143,233	486,383

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

Johnson, Tony G.; Smith, Nathan. 2007. South Carolina's timber industry—an assessment of timber product output and use, 2005. Resour. Bull. SRS–121. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 28 p.

In 2005, industrial roundwood output from South Carolina's forests totaled 645 million cubic feet, 13 percent more than in 2003. Mill byproducts generated from primary manufacturers increased 10 percent to 186 million cubic feet. Almost all plant residues were used primarily for fuel and fiber products. Pulpwood was the leading roundwood product at 318 million cubic feet; saw logs ranked second at 258 million cubic feet; veneer logs were third at 42 million cubic feet. The number of primary processing plants remained at 75 in 2005. Total receipts increased 8 percent to 582 million cubic feet.

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

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