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# South Carolina's Timber Industry— An Assessment of Timber Product Output and Use, 2007

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and Tim O. Adams

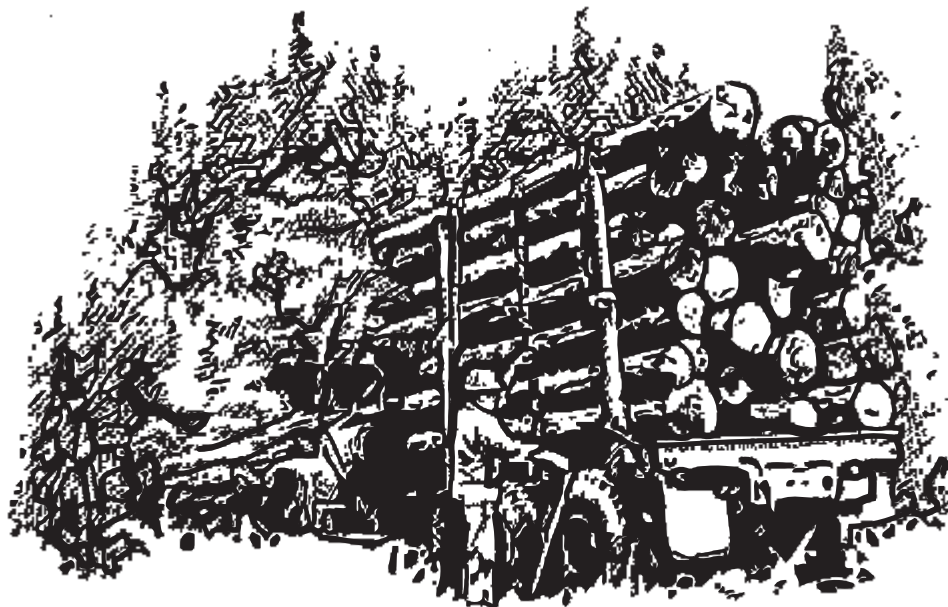


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## Foreword

This report contains the findings of a 2007 canvass of all primary wood-using plants in South Carolina, and presents changes in product output and residue use since 2005. It complements the Forest Inventory and Analysis (FIA) 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 2007 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 2008 to obtain information for 2007. 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 Byron Rominger and Dave Dodge for review and comments; Carolyn Steppleton and Michael Howell for their tireless efforts in processing and accuracy of the data; Helen Beresford for timber product output 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/>.

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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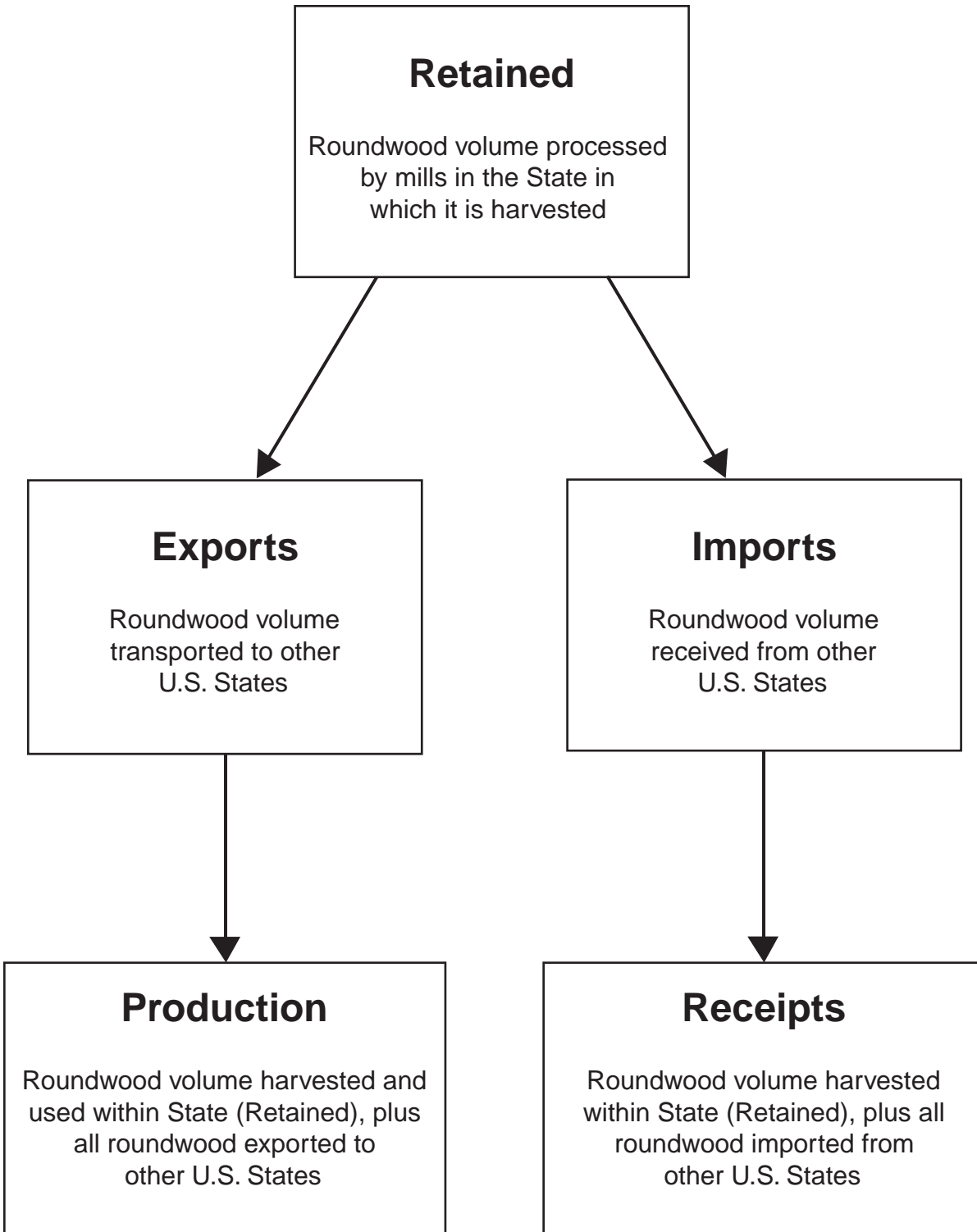
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<sup>a</sup> All tables in this report are available in Microsoft® Excel workbook files. Upon request, these files will be supplied in the format the customer requests. The use of trade or firm names in this publication is for reader information and does not imply endorsement by the U.S. Department of Agriculture of any product or service.



**Production** = Retained + Exports

**Receipts** = Retained + Imports

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, 2007

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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 and relationships unique to the Forest Inventory and Analysis Work Units across the country that deal with timber product output (TPO) (fig. 1).

### All Products

- Industrial TPO from roundwood was down 32 million cubic feet, or 5 percent, to 613 million cubic feet, while output of utilized plant byproducts declined 6 percent to 176 million cubic feet.
- With the exception of softwood composite panels and other industrial products, all product output categories were down substantially. Output of softwood roundwood products was down nearly 4 percent to 513 million cubic feet, while hardwood roundwood products declined 11 percent to 100 million cubic feet (fig. 2).

- Pulpwood and saw logs were the principal roundwood products in 2007. Combined output of these products totaled 530 million cubic feet and accounted for nearly 87 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, declined 2 percent to 569 million cubic feet. The number of primary roundwood-using plants in South Carolina remained stable in 2007 at 75 mills. Although four sawmills closed, the State gained three new other mills and one composite panel mill (fig. 4).
- Across all products, 83 percent of roundwood harvested was retained for processing at South Carolina mills. Exports of roundwood to other States amounted to 102 million cubic feet, while imports of roundwood amounted to 59 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.

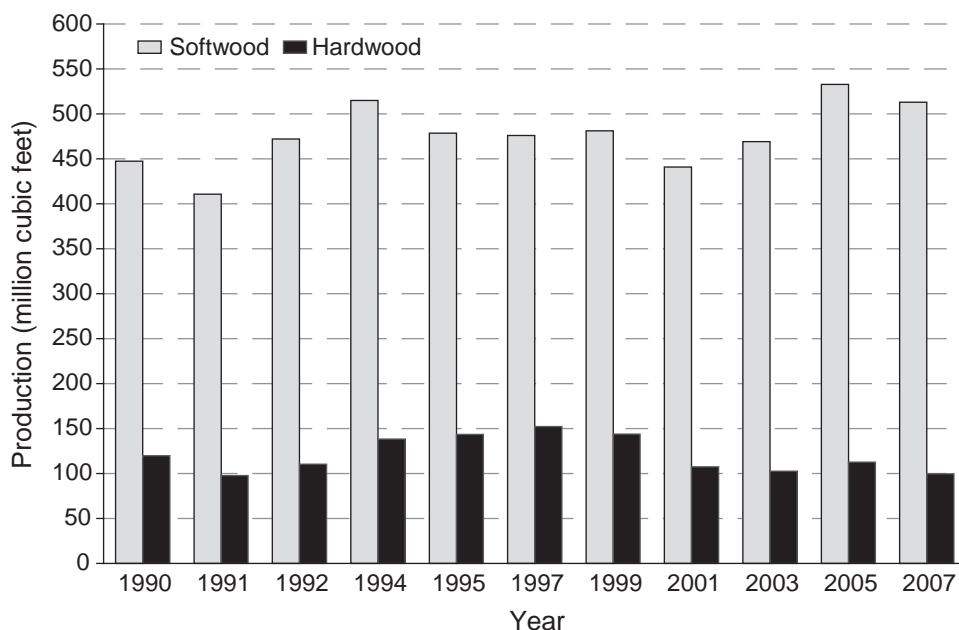


Figure 2—Roundwood production for all products by species group and year (see page 7 for references for individual years), South Carolina.

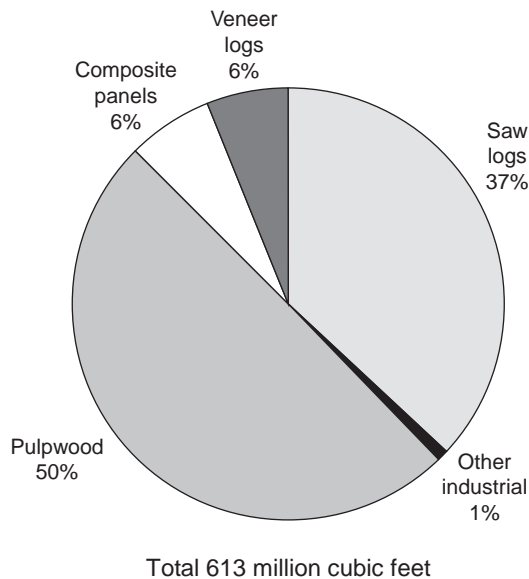


Figure 3—Roundwood production by type of product, South Carolina, 2007.

## Pulpwood

- Since 2005, pulpwood production, including chipped roundwood, was down 14 million cubic feet to 304 million cubic feet but still accounted for nearly 50 percent of the State's total roundwood TPO. Softwood output declined 2 percent to 231 million cubic feet (3.4 million cords), while hardwood output was down 10 percent to 73 million cubic feet (1.0 million cords) (fig. 5).
- Seven pulpmill facilities were operating and receiving roundwood in South Carolina in 2007, the same since 1999. Total pulpwood receipts for these mills were down 14 million cubic feet to 285 million cubic feet, accounting for 50 percent of total receipts for all mills.
- Eighty percent of roundwood cut for pulpwood was retained for processing at South Carolina pulpmills. Roundwood pulpwood accounted for 60 percent of total known exports and 72 percent of total imports. Roundwood pulpwood exports amounted to 61 million cubic feet, or 19 million cubic feet more than was imported.

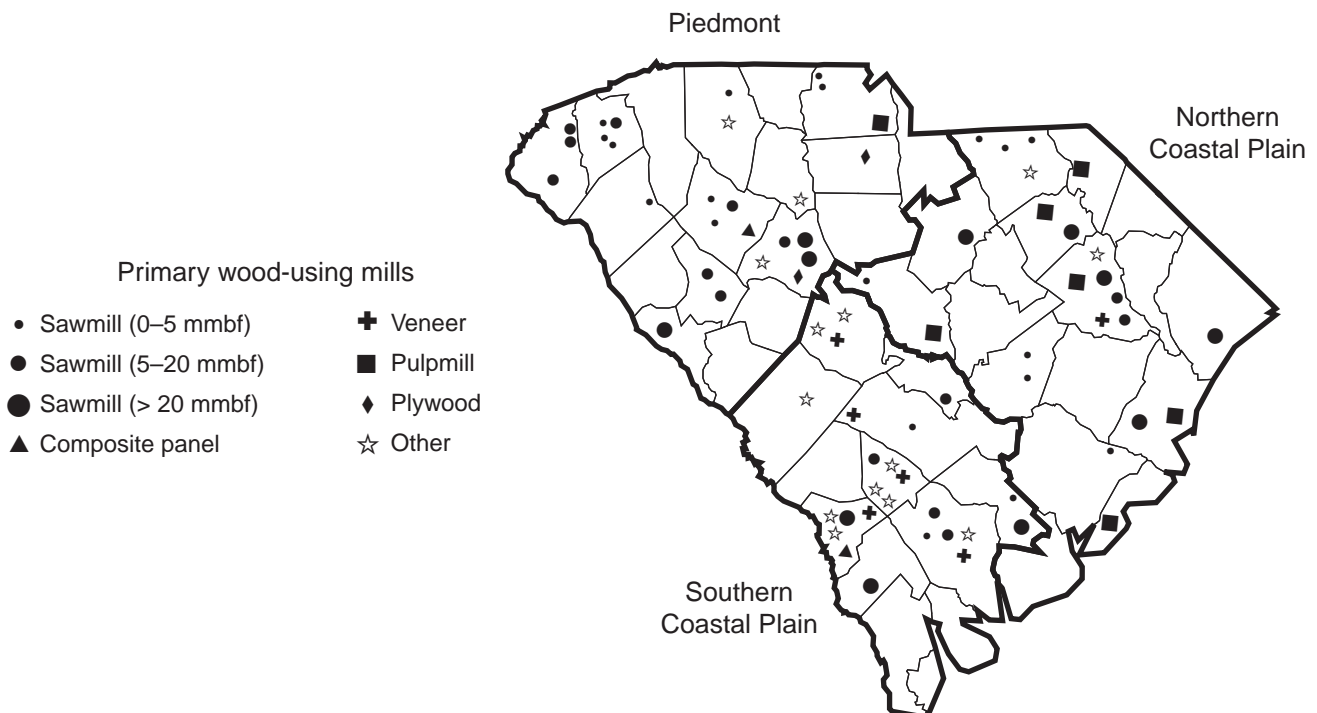


Figure 4—Primary wood-using mills by region, South Carolina, 2007.



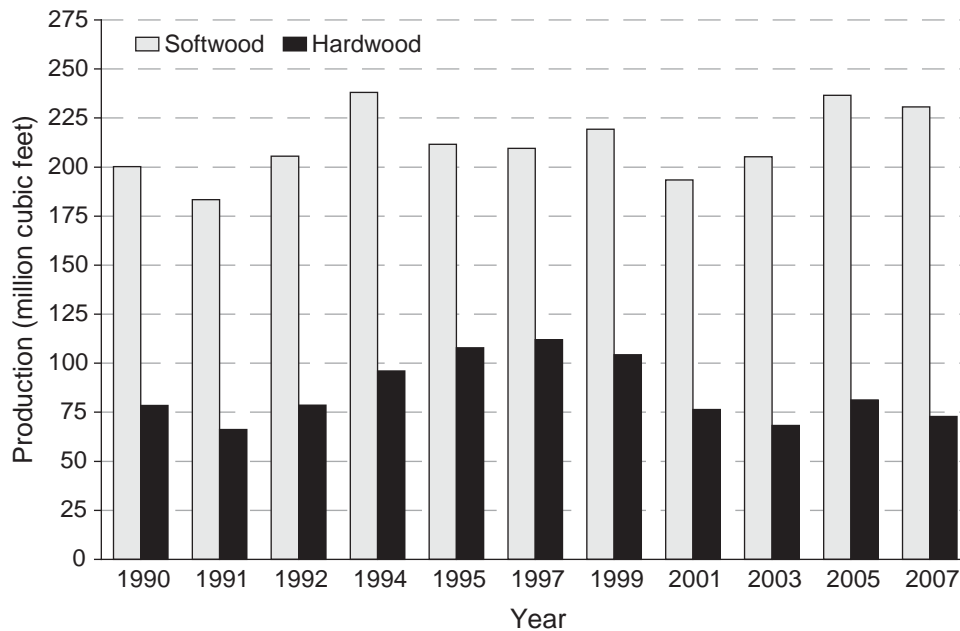


Figure 5—Roundwood pulpwood production by species group and year (see page 7 for references for individual years), South Carolina.

## Saw Logs

- Saw logs accounted for 37 percent of the State's total roundwood products. Output of softwood saw logs declined 13 percent to 204 million cubic feet (1.1 billion board feet, International ¼-inch rule); hardwood saw-log output declined 7 percent to 22 million cubic feet (132 million board feet, International ¼-inch rule) (fig. 6).
- In 2007, South Carolina had 44 sawmills, 4 fewer than in 2005. Total saw-log receipts were down 22 million cubic feet to 200 million cubic feet. Softwood saw-log receipts declined 9 percent to 185 million cubic feet, while hardwood receipts were down 17 percent to 15 million cubic feet. Of the 44 sawmills operating in 2007, 7 mills, or 16 percent, had receipts of <1 million board feet, while 14, or 32 percent of the mills, had receipts >10 million board feet. Those 14 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 more than 26 million cubic feet in 2007.

## Veneer Logs

- Output of veneer logs in 2007 totaled 38 million cubic feet and accounted for 6 percent of South Carolina's total roundwood TPO volume. Softwood veneer production was down 4 percent to 33 million cubic feet (188 million board feet, International ¼-inch rule); output of hardwood veneer logs dropped 36 percent to 4.7 million cubic feet (29 million board feet, International ¼-inch rule) (fig. 7).
- Eight veneer mills were operating in South Carolina, the same as in 2005. Receipts of veneer logs were down 3 percent to 36.3 million cubic feet. Softwood veneer receipts increased 4 percent to 31.4 million cubic feet, while hardwood veneer receipts fell 2.3 million cubic feet to 5 million cubic feet.
- South Carolina retained 87 percent of its veneer-log production for processing at veneer mills within the State. Exports amounted to 4.7 million cubic feet, while imports totaled 3.2 million cubic feet.

## Composite Panels

- Roundwood harvested from South Carolina's forests for composite panels increased 66 percent to 39 million cubic feet (573,000 cords). Softwood output accounted for nearly all of composite panel production in South Carolina.

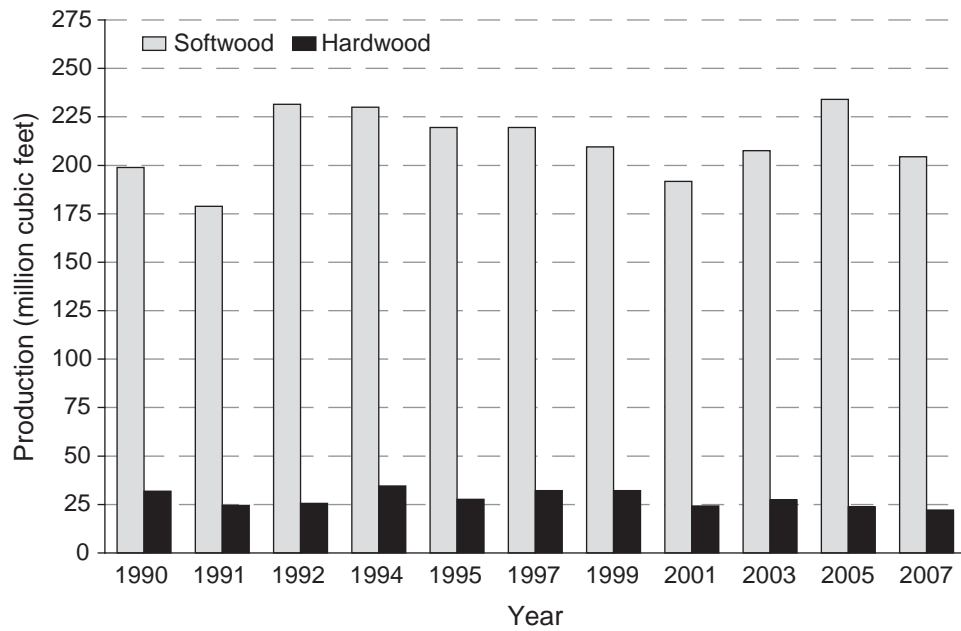


Figure 6—Roundwood saw-log production by species and year (see page 7 for references for individual years), South Carolina.

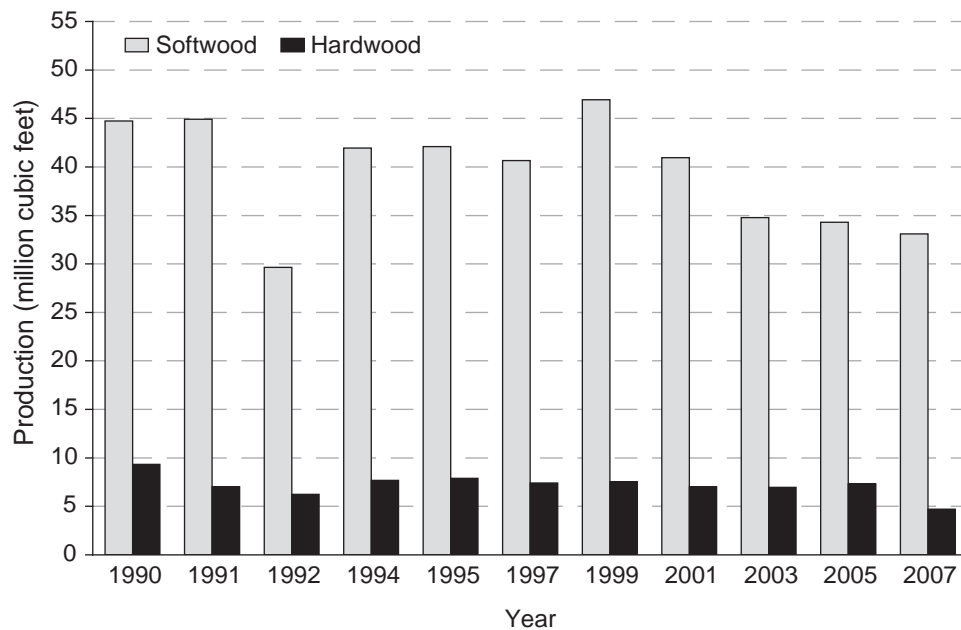


Figure 7—Roundwood veneer-log production by species and year (see page 7 for references for individual years), South Carolina.

## 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 5.6 million cubic feet, a 33-percent increase since 2005. Softwood made up all of the other industrial products volume.
- The number of plants producing other industrial products totaled 14 in 2007.

## Plant Byproducts

- In 2007, processing of primary products in South Carolina mills generated 176 million cubic feet of wood and bark residues. Coarse residues from all primary products accounted for 33 percent, or 59 million cubic feet, and bark volume accounted for 36 percent, or 63 million cubic feet. Sawdust and shavings made up 31 percent of total residues, or 54 million cubic feet (fig. 8).
- The processing of saw logs generated 110 million cubic feet of mill residues, accounting for 63 percent of the total residues produced (fig. 9).

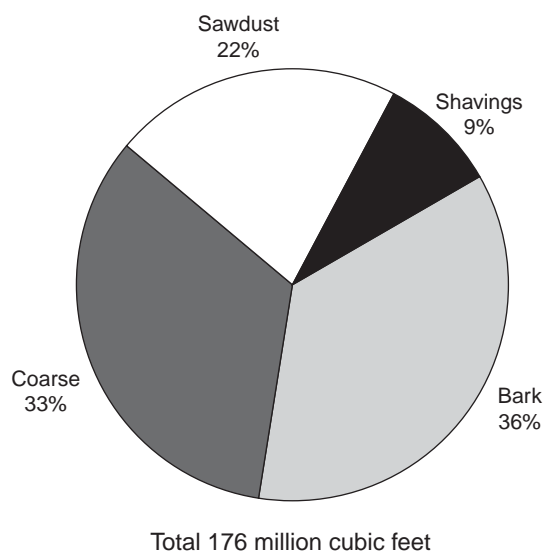


Figure 8—Primary mill residue by residue type, South Carolina, 2007.

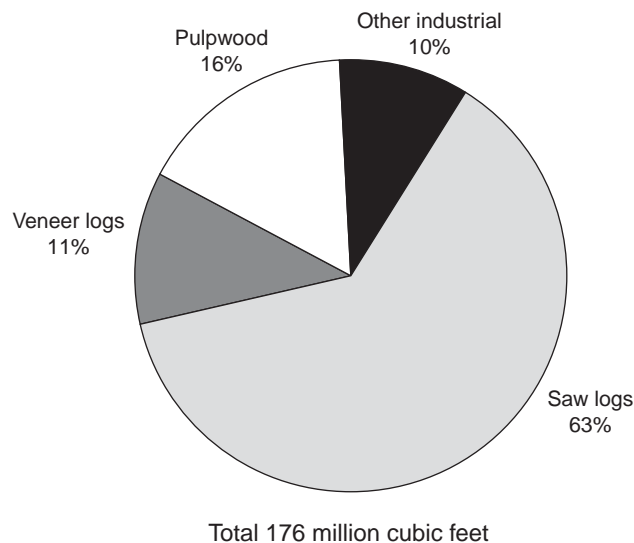


Figure 9—Primary mill residue produced by roundwood type, South Carolina, 2007.

- Almost all of the wood and bark residues were used for products. Fifty-four percent of the residue was used for industrial fuel (fig. 10). More than 51 million cubic feet, or 87 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 69 percent of the sawdust and shavings were used for industrial fuel.

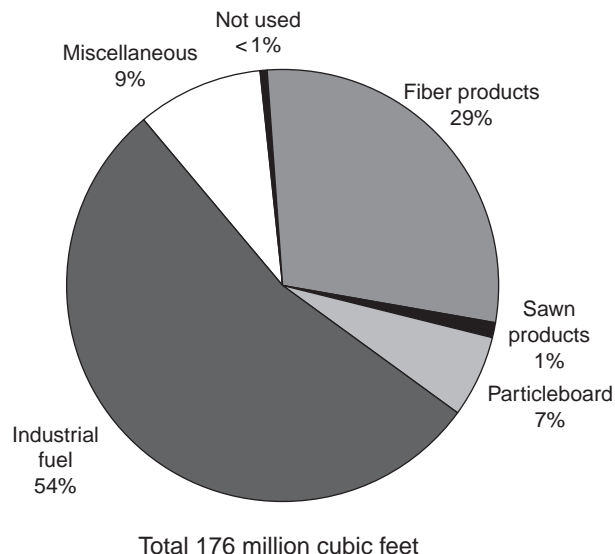


Figure 10—Disposal of residue by product, South Carolina, 2007.

## 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. Eight counties (Colleton, Fairfield, Georgetown, Hampton, Horry, Newberry, Orangeburg, and Williamsburg) had combined softwood and hardwood product output of >20 million cubic feet each. These eight counties total product output amounted to >212 million cubic feet and accounted for 35 percent of the State's total product output.

## 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 613 million cubic feet of roundwood output for industrial roundwood products, an estimated 25 million cubic feet were harvested for within State domestic fuelwood, bringing South Carolina's total roundwood output to 638 million cubic feet.
- Ninety-four percent of total roundwood output was considered growing-stock volume (sawtimber and poletimber) from timberland sources (fig. 11). Other

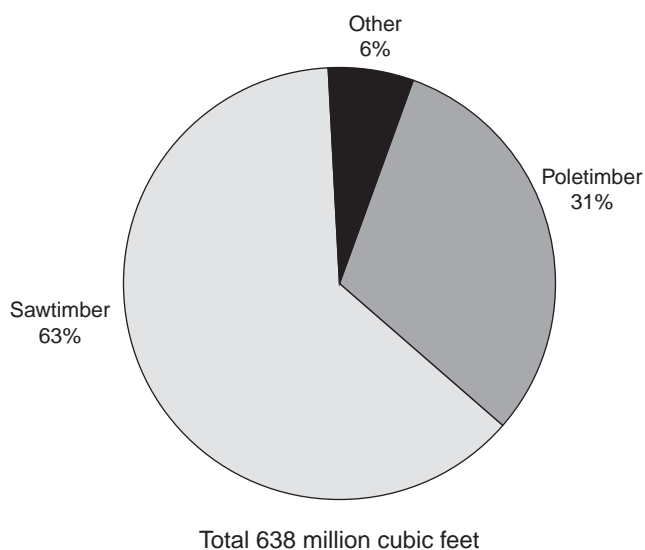


Figure 11—Roundwood output by source, South Carolina, 2007.

sources (such as saplings; stumps, tops, and limbs of trees on timberland; and trees on nonforest land) contributed an estimated 40 million cubic feet, or 6 percent of total roundwood output.

### Ownership

- An estimated 455 million cubic feet, or 71 percent, of the total roundwood output came from nonindustrial private forest lands.
- Forest industry lands contributed 135 million cubic feet, or 21 percent of the output. Public lands made up the remaining 8 percent, or more than 48 million cubic feet (fig. 12).

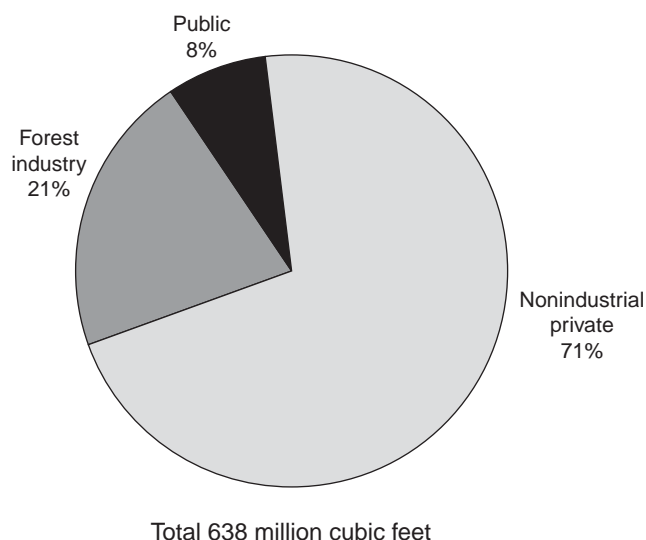


Figure 12—Roundwood output by ownership, South Carolina, 2007.

### 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.
- The red oak and white oak groups combined accounted for 43 million cubic feet, or 35 percent of total hardwood output (fig. 14). Sweetgum accounted for another 29 million cubic feet, or 24 percent, of total hardwood output.

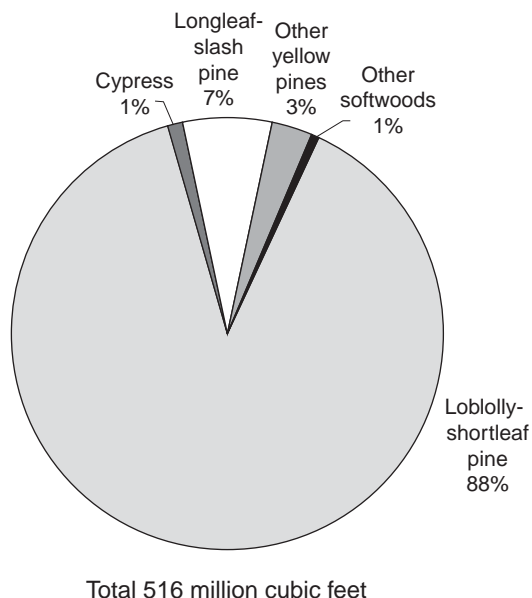


Figure 13—Roundwood output by softwood species group, South Carolina, 2007.

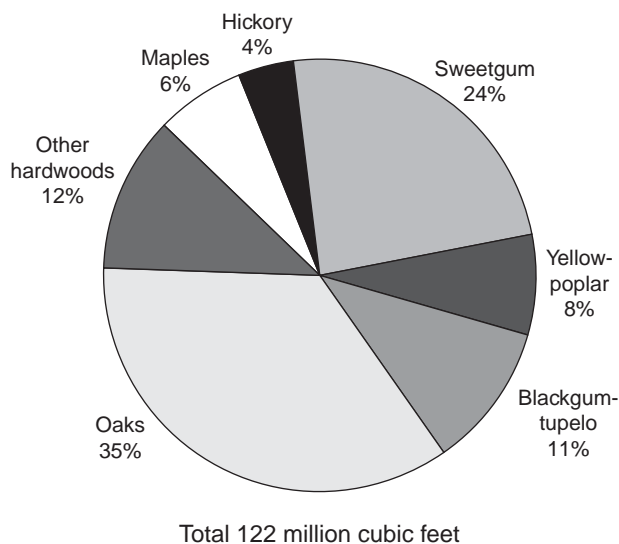


Figure 14—Roundwood output by hardwood species group, South Carolina, 2007.

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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.

**Domestic fuelwood.** The volume of roundwood harvested to produce heat for residential settings.

**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.

**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 U.S. 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 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 nonpulp mills, 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).

## Conversion Factors<sup>a</sup>

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 <sup>b</sup>	
Softwood	68.6 cubic feet per cord
Hardwood	70.5 cubic feet per cord

<sup>a</sup> 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.

<sup>b</sup> Cubic feet of solid wood per cord.

## Species List<sup>a</sup>

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

<sup>a</sup> Common and scientific names of tree species  $\geq 1.0$  inch d.b.h. occurring in the FIA sample.

<sup>b</sup> Little (1979).

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**Table A.1—Output of industrial products by product and species group, South Carolina, 2005 and 2007**

Product and species group	Year		Change	Change
	2005	2007		
	- - - - thousand cubic feet - - - -			percent
Saw logs				
Softwood	233,982	204,382	-29,600	-12.7
Hardwood	23,846	22,108	-1,738	-7.3
Total	257,828	226,490	-31,338	-12.2
Veneer logs				
Softwood	34,299	33,091	-1,208	-3.5
Hardwood	7,324	4,705	-2,619	-35.8
Total	41,623	37,796	-3,827	-9.2
Pulpwood <sup>a</sup>				
Softwood	236,513	230,722	-5,791	-2.4
Hardwood	81,223	72,777	-8,446	-10.4
Total	317,736	303,499	-14,237	-4.5
Composite panels				
Softwood	23,674	39,286	15,612	65.9
Hardwood	108	97	-11	-10.2
Total	23,782	39,383	15,601	65.6
Other industrial				
Softwood	4,255	5,637	1,382	32.5
Hardwood	0	0	0	—
Total	4,255	5,637	1,382	32.5
All industrial				
Softwood	532,723	513,118	-19,605	-3.7
Hardwood	112,501	99,687	-12,814	-11.4
Total	645,224	612,805	-32,419	-5.0

— = negligible.

<sup>a</sup> Includes roundwood delivered to nonpulp mills, then chipped and sold to pulpmills (7,104,000 cubic feet in 2005 and 3,516,000 cubic feet in 2007).

**Table A.2—Roundwood receipts by product and species group, South Carolina, 2005 and 2007**

Product and species group	Year		Change	Change
	2005	2007		
	- - - thousand cubic feet - - -			percent
Saw logs				
Softwood	204,408	185,175	-19,233	-9.4
Hardwood	17,883	14,828	-3,055	-17.1
Total	222,291	200,003	-22,288	-10.0
Veneer logs				
Softwood	30,188	31,362	1,174	3.9
Hardwood	7,220	4,940	-2,280	-31.6
Total	37,408	36,302	-1,106	-3.0
Pulpwood <sup>a</sup>				
Softwood	207,432	207,342	-90	0.0
Hardwood	91,539	77,208	-14,331	-15.7
Total	298,971	284,550	-14,421	-4.8
Other industrial				
Softwood	23,661	48,030	24,369	103.0
Hardwood	0	0	0	—
Total	23,661	48,030	24,369	103.0
Total output				
Softwood	465,689	471,909	6,220	1.3
Hardwood	116,642	96,976	-19,666	-16.9
Total	582,331	568,885	-13,446	-2.3

— = negligible; 0.0 = a value of <0.0 but >0.05 for the cell.

<sup>a</sup> Includes roundwood delivered to nonpulp mills, then chipped and sold to pulp mills (7,253,000 cubic feet in 2005 and 3,597,000 cubic feet in 2007).

**Table A.3—Number of primary wood-using plants by type of mill, South Carolina, 1989 to 2007**

Type of mill	Year									
	1989	1992	1994	1995	1997	1999	2001	2003	2005	2007
	number									
Sawmills	87	79	76	70	66	63	51	51	48	44
Veneer mills	17	14	14	14	12	12	9	8	8	8
Pulpmills	8	9	8	8	8	7	7	7	7	7
Composite panel mills	0	0	0	0	0	0	1	1	1	2
Other mills	5	9	7	7	6	8	8	8	1	1
All plants	117	111	105	105	99	90	76	75	75	75

**Table A.4—Roundwood receipts by sawmill size, South Carolina, 2005 and 2007**

Sawmill size class <sup>a</sup> <i>mmbf</i>	2005			2007		
	Mills <i>number</i>	Volume		Mills <i>number</i>	Volume	
		<i>mbf</i>	<i>percent</i>		<i>mbf</i>	<i>percent</i>
<1.0	4	1,697	0	7	3,549	0
1.0–4.99	17	52,876	4	12	35,282	3
5.0–9.99	10	75,058	6	11	77,274	7
10.0–49.99	6	85,041	7	5	140,079	13
>50	11	1,027,643	83	9	861,080	77
Total	48	1,242,315	100	44	1,117,264	100

<sup>a</sup> Based on volume received as opposed to actual capacity.

**Table A.5—Roundwood receipts by species and type of mill, South Carolina, 2007**

Species	All mills	Sawmills	Type of mill		Pulpmills <sup>a</sup>	Other mills
			Veneer mills			
			Pine plywood	Other veneer		
<i>thousand cubic feet</i>						
Softwood						
Yellow pine	261,549	182,228	31,362	0	NA	47,959
Eastern white pine	338	328	0	0	NA	10
Cedar	160	158	0	0	NA	2
Cypress	2,520	2,461	0	0	NA	59
Other softwood	0	0	0	0	NA	0
Unclassified	207,342	0	0	0	207,342	0
Total softwoods	471,909	185,175	31,362	0	207,342	48,030
Hardwood						
Blackgum and tupelo	1,178	675	0	503	NA	0
Soft maple	504	384	0	120	NA	0
Sweetgum	3,408	1,896	885	627	NA	0
Yellow-poplar	4,726	3,437	885	404	NA	0
Other soft hardwood	178	151	0	27	NA	0
Hickory	861	272	0	589	NA	0
Red oak	5,262	4,475	0	787	NA	0
White oak	2,872	2,804	0	68	NA	0
Other hard hardwood	779	734	0	45	NA	0
Unclassified	77,208	0	0	0	77,208	0
Total hardwoods	96,976	14,828	1,770	3,170	77,208	0
All species	568,885	200,003	33,132	3,170	284,550	48,030

NA = not applicable.

<sup>a</sup> Only collected by softwood and hardwood and includes roundwood chipped.

**Table A.6—Industrial roundwood movement by year and species group, South Carolina, 2005 and 2007**

Year	Production	Exported to other States	Retained	Imported from other States	Receipts
<i>thousand cubic feet</i>					
<b>Softwood</b>					
2005	532,723	107,979	424,744	40,945	465,689
2007	513,118	81,627	431,491	40,418	471,909
<b>Hardwood</b>					
2005	112,501	24,635	87,866	28,776	116,642
2007	99,687	20,860	78,827	18,149	96,976
<b>All species</b>					
2005	645,224	132,614	512,610	69,721	582,331
2007	612,805	102,487	510,318	58,567	568,885

**Table A.7—Industrial roundwood movement by product and species group, South Carolina, 2007**

Product and species group	Production	Exported to other States	Retained	Imported from other States	Receipts
<i>thousand cubic feet</i>					
Saw logs					
Softwood	204,382	27,241	177,141	8,034	185,175
Hardwood	22,108	8,003	14,105	723	14,828
Total	226,490	35,244	191,246	8,757	200,003
Veneer logs					
Softwood	33,091	4,309	28,782	2,580	31,362
Hardwood	4,705	433	4,272	668	4,940
Total	37,796	4,742	33,054	3,248	36,302
Pulpwood <sup>a</sup>					
Softwood	230,722	48,754	181,968	25,374	207,342
Hardwood	72,777	12,327	60,450	16,758	77,208
Total	303,499	61,081	242,418	42,132	284,550
Other industrial					
Softwood	44,923	1,323	43,600	4,430	48,030
Hardwood	97	97	0	0	0
Total	45,020	1,420	43,600	4,430	48,030
All products					
Softwood	513,118	81,627	431,491	40,418	471,909
Hardwood	99,687	20,860	78,827	18,149	96,976
Total	612,805	102,487	510,318	58,567	568,885

<sup>a</sup> Includes roundwood delivered to nonpulp mills, then chipped and sold to pulpmills.



**Table A.8—Saw-log volume by destination, source, and species group, South Carolina, 2007**

Destination and source	All species	Species group	
		Softwood	Hardwood
thousand cubic feet			
South Carolina (retained)	191,246	177,141	14,105
Exports to			
Georgia	14,423	11,679	2,744
Kentucky	8	8	0
North Carolina	20,813	15,554	5,259
Total	35,244	27,241	8,003
Imports from			
Georgia	6,301	5,900	401
North Carolina	2,456	2,134	322
Total	8,757	8,034	723

**Table A.10—Pulpwood volume by destination, source, and species group, South Carolina, 2007<sup>a</sup>**

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
South Carolina (retained)	242,418	181,968	60,450
Exports to			
Georgia	35,788	27,386	8,402
North Carolina	24,412	20,488	3,924
Oklahoma	405	405	0
Tennessee	476	475	1
Total	61,081	48,754	12,327
Imports from			
Georgia	2,909	2,296	613
North Carolina	38,904	23,059	15,845
Tennessee	280	0	280
Virginia	39	19	20
Total	42,132	25,374	16,758

<sup>a</sup> Includes roundwood delivered to nonpulp mills, then chipped and sold to pulp mills.

**Table A.9—Veneer volume by destination, source, and species group, South Carolina, 2007**

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
South Carolina (retained)	33,054	28,782	4,272
Exports to			
Georgia	1,204	1,090	114
North Carolina	3,507	3,192	315
Virginia	31	27	4
Total	4,742	4,309	433
Imports from			
Alabama	2	0	2
Georgia	387	0	387
North Carolina	2,859	2,580	279
Total	3,248	2,580	668

**Table A.11—Other industrial volume by destination, source, and species group, South Carolina, 2007<sup>a</sup>**

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
South Carolina (retained)	43,600	43,600	0
Exports to			
Georgia	1,079	1,079	0
Tennessee	341	244	97
Total	1,420	1,323	97
Imports from			
Georgia	4,361	4,361	0
North Carolina	69	69	0
Total	4,430	4,430	0

<sup>a</sup> 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, 2007**

Roundwood type and species group	All types	Residue type			
		Bark	Coarse	Sawdust	Shavings
		thousand cubic feet			
Saw logs					
Softwood	102,129	15,774	44,336	26,252	15,767
Hardwood	7,994	1,594	3,441	2,927	32
Total	110,123	17,368	47,777	29,179	15,799
Veneer logs					
Softwood	16,808	2,733	6,626	7,449	0
Hardwood	3,370	548	1,408	1,414	0
Total	20,178	3,281	8,034	8,863	0
Pulpwood					
Softwood	19,900	19,900	0	0	0
Hardwood	8,980	8,980	0	0	0
Total	28,880	28,880	0	0	0
Other industrial <sup>a</sup>					
Softwood	16,696	13,563	3,060	73	0
Hardwood	0	0	0	0	0
Total	16,696	13,563	3,060	73	0
Total					
Softwood	155,533	51,970	54,022	33,774	15,767
Hardwood	20,344	11,122	4,849	4,341	32
Total	175,877	63,092	58,871	38,115	15,799

<sup>a</sup> 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, 2005 and 2007**

Product and species group	All types		Bark		Coarse		Sawdust		Shavings	
	2005	2007	2005	2007	2005	2007	2005	2007	2005	2007
<i>thousand cubic feet</i>										
Fiber products										
Softwood	52,613	46,817	0	0	50,316	46,817	0	0	2,297	0
Hardwood	3,827	4,226	0	0	3,827	4,226	0	0	0	0
Total	56,440	51,043	0	0	54,143	51,043	0	0	2,297	0
Particleboard										
Softwood	12,504	11,112	0	0	4,769	1,307	2,151	424	5,584	9,381
Hardwood	0	0	0	0	0	0	0	0	0	0
Total	12,504	11,112	0	0	4,769	1,307	2,151	424	5,584	9,381
Sawn products										
Softwood	2,341	1,680	0	0	2,341	1,680	0	0	0	0
Hardwood	0	0	0	0	0	0	0	0	0	0
Total	2,341	1,680	0	0	2,341	1,680	0	0	0	0
Industrial fuel										
Softwood	79,111	81,479	40,353	45,390	2,282	2,111	32,708	31,422	3,768	2,556
Hardwood	19,325	13,768	11,810	9,924	2,341	446	5,118	3,366	56	32
Total	98,436	95,247	52,163	55,314	4,623	2,557	37,826	34,788	3,824	2,588
Miscellaneous										
Softwood	13,785	14,414	6,891	6,575	775	2,091	1,142	1,918	4,977	3,830
Hardwood	1,993	2,095	1,534	1,185	78	176	381	734	0	0
Total	15,778	16,509	8,425	7,760	853	2,267	1,523	2,652	4,977	3,830
Not used										
Softwood	673	31	379	5	131	16	163	10	0	0
Hardwood	232	255	35	13	99	1	98	241	0	0
Total	905	286	414	18	230	17	261	251	0	0
All products										
Softwood	161,027	155,533	47,623	51,970	60,614	54,022	36,164	33,774	16,626	15,767
Hardwood	25,377	20,344	13,379	11,122	6,345	4,849	5,597	4,341	56	32
Total	186,404	175,877	61,002	63,092	66,959	58,871	41,761	38,115	16,682	15,799

**Table A.14—Roundwood timber product output by county, product, and species group, South Carolina, 2007**

County	All products		Saw logs		Veneer logs		Pulpwood <sup>a</sup>		Composite panel		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
<i>thousand cubic feet</i>												
Abbeville	5,689	1,533	2,880	412	848	0	516	1,121	1,345	0	100	0
Aiken	14,335	2,866	5,695	1,029	566	41	4,692	1,796	3,148	0	234	0
Allendale	13,135	1,482	6,795	154	0	224	2,678	1,104	3,414	0	248	0
Anderson	2,795	2,865	1,541	1,733	698	0	134	1,132	413	0	9	0
Bamberg	7,560	1,634	2,270	154	0	161	2,985	1,319	2,134	0	171	0
Barnwell	9,211	790	3,283	154	0	124	2,388	512	3,414	0	126	0
Beaufort	4,179	776	2,238	118	0	116	1,929	542	0	0	12	0
Berkeley	17,749	1,474	5,322	35	438	0	11,982	1,439	0	0	7	0
Calhoun	4,349	720	1,945	35	708	85	1,682	600	0	0	14	0
Charleston	10,884	1,871	4,423	154	0	77	6,432	1,640	0	0	29	0
Cherokee	3,315	2,436	1,086	1,010	344	432	1,621	897	244	97	20	0
Chester	12,129	2,752	165	509	2,581	354	9,078	1,889	0	0	305	0
Chesterfield	11,855	2,706	5,530	544	172	0	6,144	2,162	0	0	9	0
Clarendon	7,839	907	5,014	92	0	21	2,825	794	0	0	0	0
Colleton	28,623	4,316	11,731	252	0	690	13,098	3,374	3,201	0	593	0
Darlington	4,032	1,402	2,626	200	0	0	1,397	1,202	0	0	9	0
Dillon	4,655	1,767	1,887	274	563	35	2,154	1,458	0	0	51	0
Dorchester	11,795	2,537	4,798	332	0	160	6,404	2,045	426	0	167	0
Edgefield	15,096	1,017	7,515	92	1,416	0	4,623	925	1,447	0	95	0
Fairfield	31,370	1,895	6,141	2	3,086	354	21,584	1,539	206	0	353	0
Florence	12,522	3,975	4,100	880	0	35	8,187	3,060	0	0	235	0
Georgetown	27,925	3,175	14,543	220	0	0	13,159	2,955	0	0	223	0
Greenville	3,005	2,583	1,025	1,579	425	0	1,329	1,004	206	0	20	0
Greenwood	11,688	1,100	4,658	713	1,274	36	1,415	351	4,231	0	110	0
Hampton	25,473	1,631	13,431	154	0	126	9,833	1,351	1,920	0	289	0
Horry	17,082	3,549	8,968	299	1,566	64	6,315	3,186	0	0	233	0
Jasper	14,869	2,785	9,636	154	0	253	4,460	2,378	640	0	133	0
Kershaw	14,685	1,719	5,119	98	769	0	8,778	1,621	0	0	19	0
Lancaster	11,889	1,880	2,907	578	688	0	8,285	1,302	0	0	9	0
Laurens	7,612	1,857	2,364	1,206	1,801	0	872	651	2,481	0	94	0
Lee	4,353	1,141	1,867	49	0	19	2,477	1,073	0	0	9	0
Lexington	4,952	736	1,871	94	566	16	2,236	626	206	0	73	0
Marion	6,954	3,289	3,520	596	563	35	2,636	2,658	0	0	235	0
Marlboro	10,620	2,094	5,300	578	1,032	55	4,279	1,461	0	0	9	0
McCormick	8,121	1,042	4,180	719	1,512	0	781	323	1,542	0	106	0
Newberry	25,211	766	8,434	424	5,079	92	7,229	250	4,136	0	333	0
Oconee	4,105	2,457	1,807	918	88	12	2,045	1,527	165	0	0	0
Orangeburg	16,342	3,830	5,013	388	0	210	10,386	3,232	853	0	90	0
Pickens	1,595	2,059	827	1,283	7	4	534	772	206	0	21	0
Richland	9,486	2,536	3,646	203	769	0	5,004	2,333	0	0	67	0
Saluda	11,791	401	3,708	143	425	0	4,322	258	3,102	0	234	0
Spartanburg	5,198	3,774	2,513	2,148	1,150	86	1,384	1,540	0	0	151	0
Sumter	7,276	3,349	2,280	89	0	0	4,996	3,260	0	0	0	0
Union	7,934	3,539	439	461	2,753	362	4,396	2,716	206	0	140	0
Williamsburg	16,342	4,035	8,822	368	0	0	7,339	3,667	0	0	181	0
York	5,493	2,639	519	481	1,204	426	3,699	1,732	0	0	71	0
All counties	513,118	99,687	204,382	22,108	33,091	4,705	230,722	72,777	39,286	97	5,637	0

<sup>a</sup> Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (3,516,000 cubic feet in 2007).

**Table A.15—Total roundwood output by product, species group, and source of material, South Carolina, 2007**

Product and species group	All sources	Total	Growing-stock trees		Other sources
			Sawtimber	Poletimber	
thousand cubic feet					
Saw logs					
Softwood	204,382	197,682	184,975	12,708	6,700
Hardwood	22,108	21,679	20,378	1,301	429
Total	226,490	219,361	205,353	14,008	7,129
Veneer logs and bolts					
Softwood	33,091	32,323	31,816	507	768
Hardwood	4,705	4,652	4,652	0	53
Total	37,796	36,975	36,467	507	821
Pulpwood					
Softwood	230,722	211,940	95,970	115,970	18,782
Hardwood	72,777	66,658	24,887	41,772	6,119
Total	303,499	278,599	120,857	157,742	24,900
Composite panels					
Softwood	39,286	36,526	16,843	19,683	2,760
Hardwood	97	90	39	51	7
Total	39,383	36,616	16,881	19,734	2,767
Poles and posts					
Softwood	5,020	4,598	4,472	125	422
Hardwood	0	0	0	0	0
Total	5,020	4,598	4,472	125	422
Other miscellaneous					
Softwood	617	514	411	103	103
Hardwood	0	0	0	0	0
Total	617	514	411	103	103
Total industrial products					
Softwood	513,118	483,583	334,487	149,096	29,535
Hardwood	99,687	93,079	49,955	43,124	6,608
Total	612,805	576,662	384,442	192,220	36,143
Domestic fuelwood					
Softwood	2,745	1,042	569	473	1,703
Hardwood	22,177	20,161	16,095	4,066	2,016
Total	24,922	21,203	16,664	4,539	3,719
All products					
Softwood	515,863	484,625	335,056	149,569	31,238
Hardwood	121,864	113,240	66,050	47,190	8,624
Total	637,727	597,865	401,106	196,759	39,862

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, 2007**

Species group and survey region	Total	Ownership class		
		Public	Forest industry	Nonindustrial private
<i>thousand cubic feet</i>				
Softwoods				
Southern Coastal Plain	155,650	13,242	51,265	91,143
Northern Coastal Plain	185,245	13,825	66,856	104,564
Piedmont	174,968	15,961	6,085	152,922
Total softwoods	515,863	43,028	124,206	348,629
Hardwoods				
Southern Coastal Plain	29,466	1,084	2,353	26,029
Northern Coastal Plain	47,662	3,501	8,069	36,092
Piedmont	44,736	758	203	43,776
Total hardwoods	121,864	5,342	10,625	105,897
All species	637,727	48,371	134,831	454,525

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, 2007**

Species group and detailed species group	Total	Product						
		Saw logs	Veneer logs	Pulpwood	Composite panels	Poles and posts	Other miscellaneous	Domestic fuelwood
thousand cubic feet								
Softwood								
Cedar	607	95	97	388	16	7	1	3
Longleaf-slash pine	34,627	14,936	737	16,518	1,966	244	42	185
Eastern white pine	2,796	1,225	59	1,384	113	0	0	15
Loblolly-shortleaf pine	456,425	178,680	30,769	202,819	36,582	4,628	518	2,428
Other yellow pines	15,102	6,737	1,075	6,681	396	84	48	80
Cypress	6,305	2,709	354	2,931	213	57	8	33
Total softwoods	515,863	204,382	33,091	230,722	39,286	5,020	617	2,745
Hardwood								
Soft maple	8,025	1,344	259	4,961	0	0	0	1,460
Hickory	5,033	775	228	3,112	2	0	0	916
Beech	64	16	1	34	0	0	0	12
Ash	2,037	189	123	1,354	0	0	0	371
Black walnut	465	33	2	345	0	0	0	85
Sweetgum	29,098	4,319	1,119	18,343	22	0	0	5,295
Yellow-poplar	9,208	3,338	226	3,960	9	0	0	1,676
Blackgum-tupelo	13,140	1,480	383	8,886	0	0	0	2,391
Sycamore	627	48	40	425	0	0	0	114
Cottonwood	21	1	0	16	0	0	0	4
Black cherry	1,752	446	98	883	5	0	0	319
Select white oaks	4,456	1,138	165	2,341	0	0	0	811
Other white oaks	4,936	1,001	279	2,734	24	0	0	898
Select red oaks	1,472	238	123	843	0	0	0	268
Other red oaks	32,156	5,586	1,385	19,298	36	0	0	5,852
Elm	3,647	1,005	72	1,906	0	0	0	664
Other eastern hardwoods	5,728	1,149	200	3,337	0	0	0	1,043
Total hardwoods	121,864	22,108	4,705	72,777	97	0	0	22,177
All species	637,727	226,490	37,796	303,499	39,383	5,020	617	24,922

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, 2007**

Species group and detailed species group	Total	Ownership class		
		Public	Forest industry	Nonindustrial private
<i>thousand cubic feet</i>				
Softwood				
Cedar	607	14	18	575
Longleaf-slash pine	34,627	10,996	4,419	19,211
Eastern white pine	2,796	1,880		916
Loblolly-shortleaf pine	456,425	29,639	114,373	312,414
Other yellow pines	15,102	499	3,656	10,948
Cypress	6,305	0	1,740	4,565
Total softwoods	515,863	43,028	124,206	348,629
Hardwood				
Soft maple	8,025	530	1,019	6,476
Hickory	5,033	232	371	4,431
Beech	64	0	4	60
Ash	2,037	189	296	1,552
Black walnut	465	0	0	465
Sweetgum	29,098	1,315	2,270	25,514
Yellow-poplar	9,208	158	61	8,989
Blackgum-tupelo	13,140	148	2,109	10,884
Sycamore	627	327	300	0
Cottonwood	21	0	0	21
Black cherry	1,752	65	101	1,586
Select white oaks	4,456	194	157	4,104
Other white oaks	4,936	111	304	4,522
Select red oaks	1,472	4	199	1,270
Other red oaks	32,156	1,575	2,833	27,748
Elm	3,647	148	216	3,283
Other eastern hardwoods	5,728	347	388	4,993
Total hardwoods	121,864	5,342	10,625	105,897
All species	637,727	48,371	134,831	454,525

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



**Johnson, Tony G.; Adams, Tim O.** 2009. South Carolina's timber industry—an assessment of timber product output and use, 2007. Resour. Bull. SRS-150. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 28 p.

In 2007, industrial roundwood output from South Carolina's forests totaled 613 million cubic feet, 5 percent less than in 2005. Mill byproducts generated from primary manufacturers decreased 6 percent to 176 million cubic feet. Almost all plant residues were used primarily for fuel and fiber products. Pulpwood was the leading roundwood product at 304 million cubic feet; saw logs ranked second at 226 million cubic feet; composite panels were third at 39 million cubic feet. The number of primary processing plants remained at 75 in 2007. Total receipts declined 2 percent to 569 million cubic feet.

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



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