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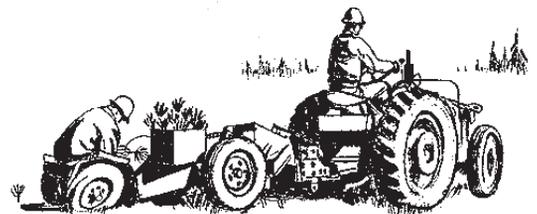
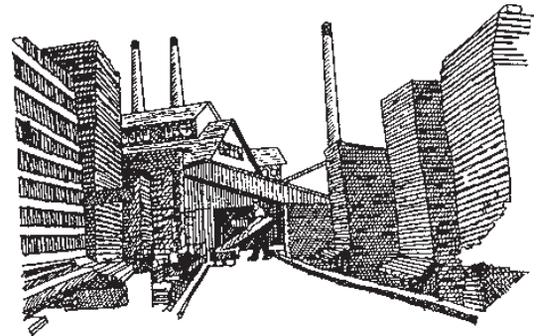
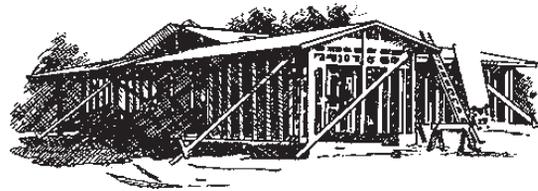


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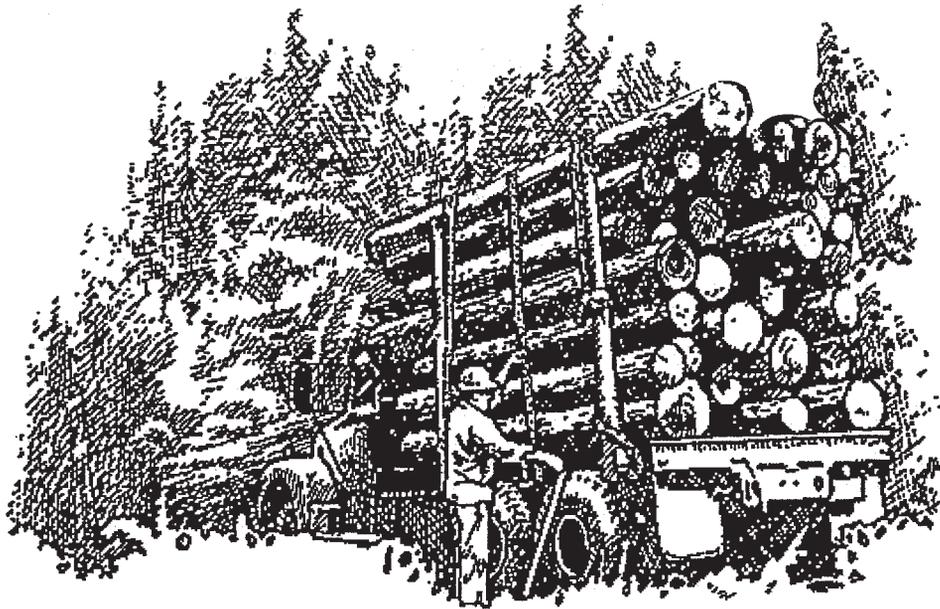
South Carolina's Timber Industry— An Assessment of Timber Product Output and Use, 2001

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Foreword

This report contains the findings of a 2001 canvass of all primary wood-using plants in South Carolina, and presents changes in product output and residue use since 1999. 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 2001 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 2002 to obtain information for 2001. 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 southern pulp mills. Medium density fiberboard, insulating board, and hardboard plants were included in this survey.

Acknowledgments

The authors thank Byron Rominger and Miles Knight for review and comments; Dumitru Salajanu for the maps; Anne Jenkins, Sharon Johnson, and Janet Griffin for tables, graphs, and statistical checking; and Paul Smith, Diana Corbin, and Louise Wilde for editorial review, styling, and publication of this report.

The Southern Research Station gratefully acknowledges the cooperation and assistance provided by the South Carolina Forestry Commission and the Cooperative Extension Service, Clemson University, in collecting mill data. Appreciation is also extended to forest industry and mill managers for providing timber products information.

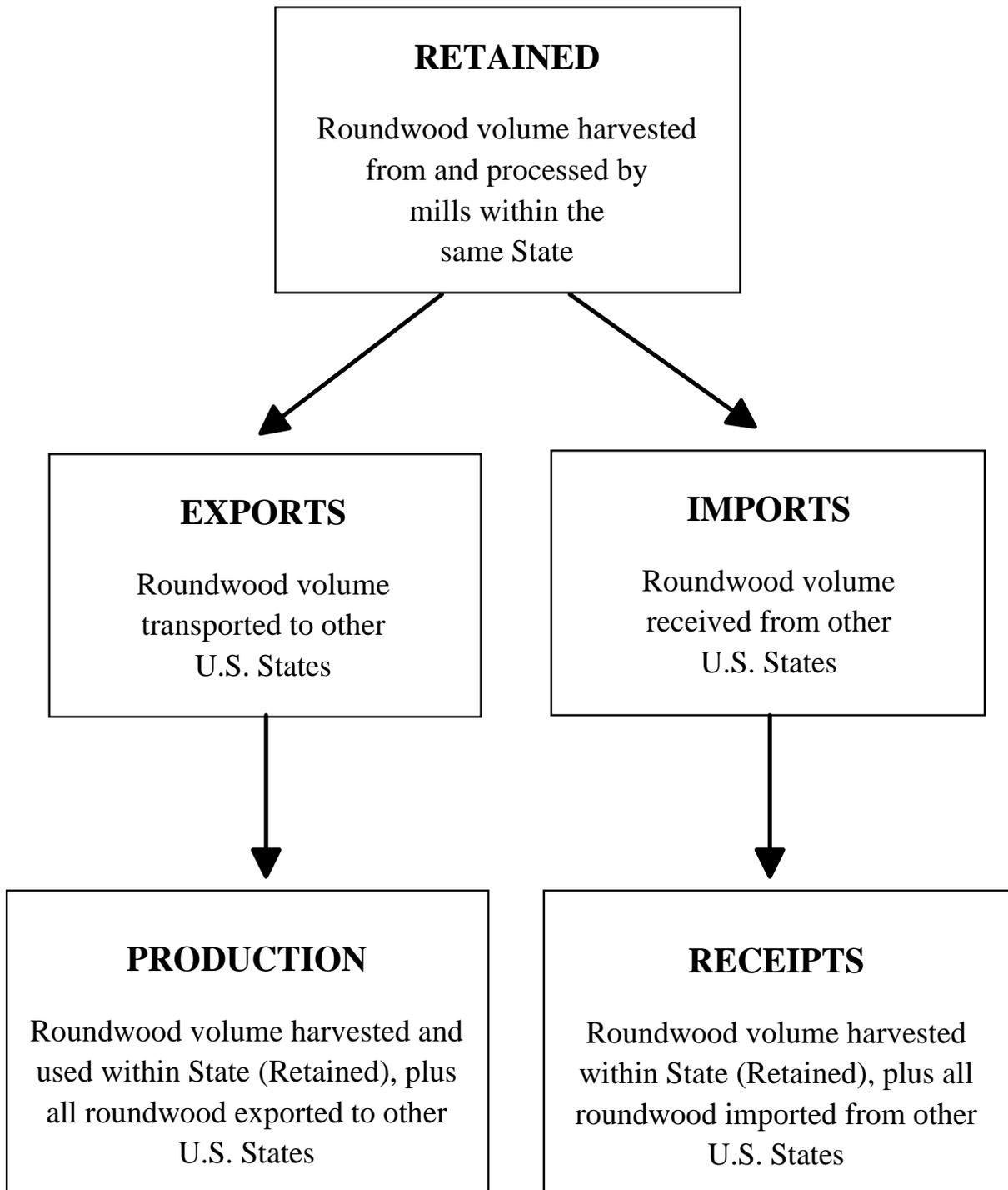


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^a All tables in this report are available in Microsoft® Excel workbook files. Upon request, these files will be supplied on 3½-inch diskettes.

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Production = Retained + Exports

Receipts = Retained + Imports

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

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Output of Industrial Timber Products

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

All Products

- Between 1999 and 2001, the combined industrial timber products output (TPO) from roundwood and plant byproducts declined 12 percent from 822 to 721 million cubic feet.
- Timber products output from roundwood fell 77 million cubic feet, or 12 percent, to 549 million cubic feet, while output of plant byproducts declined 12 percent to 172 million cubic feet.
- With the exception of composite panel products, product output was down across all products for both softwoods and hardwoods. Output of softwood roundwood products was down 8 percent to 441 million cubic feet, while hardwood roundwood products declined 25 percent to 108 million cubic feet—levels not seen since the early 1990s (fig. 2).
- Figures 3 and 4 display softwood and hardwood county-level intensity of roundwood production for all industrial products across South Carolina. The data are depicted in cubic feet produced per acre of census land area. Counties with the highest production intensity are depicted in the darker shades. For softwoods the darkest shade represents more than 40 cubic feet of production per acre, while for hardwoods the darkest shade represents more than 15 cubic feet per acre.

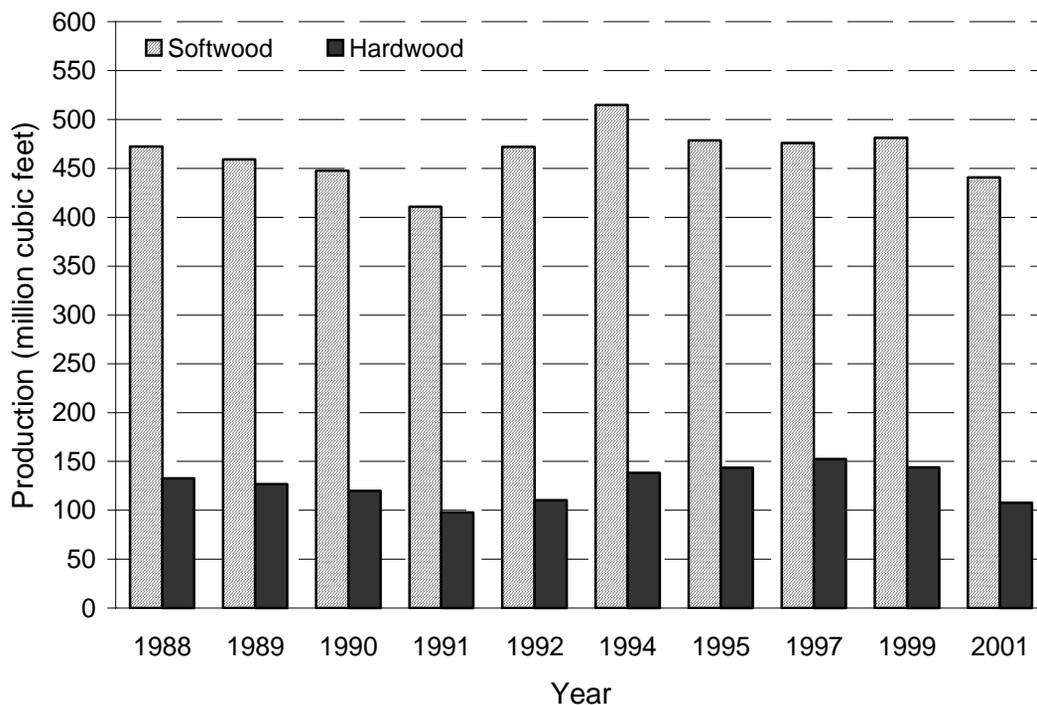


Figure 2—Roundwood production for all products by species group and year (see page 9 for references for individual years).

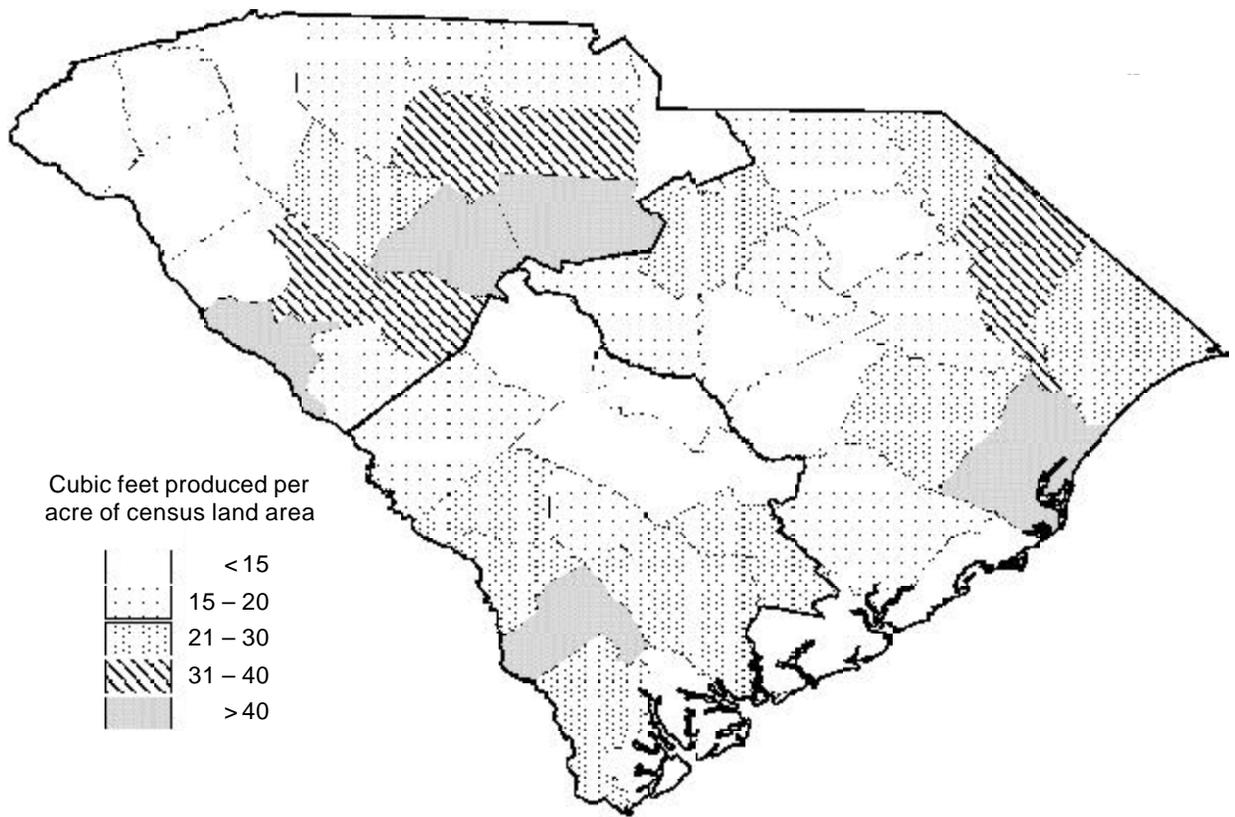


Figure 3—Intensity of roundwood softwood output for all industrial products in South Carolina by county, 2001.

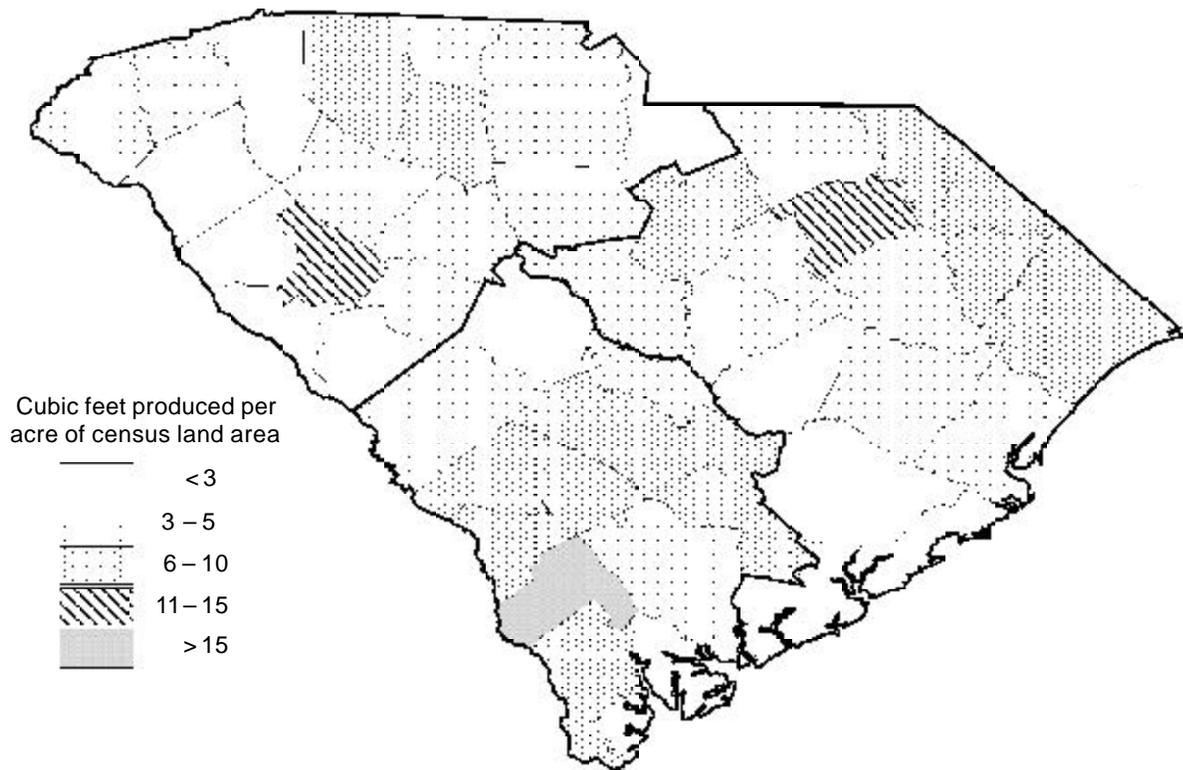


Figure 4—Intensity of roundwood hardwood output for all industrial products in South Carolina by county, 2001.

- Pulpwood and saw logs were the principal roundwood products in 2001. Combined output of these products totaled 486 million cubic feet and accounted for 88 percent of South Carolina’s total roundwood output (fig. 5).
- Total receipts at South Carolina mills, which included roundwood harvested and retained in the State and roundwood imported from other States, declined 11 percent to 525 million cubic feet. At the same time, the number of primary roundwood-using plants in South Carolina was down from 90 in 1999 to 76 in 2001. This was the largest drop in mills since the late 1980s.

Pulpwood

- Pulpwood production, including chipped roundwood, was down 54 million cubic feet to 270 million cubic feet and accounted for 49 percent of the State’s total roundwood TPO. Softwood output was down 12 percent to 194 million cubic feet (2.8 million cords), while hardwood output fell 27 percent to 76 million cubic feet (1.1 million cords) (fig. 6).

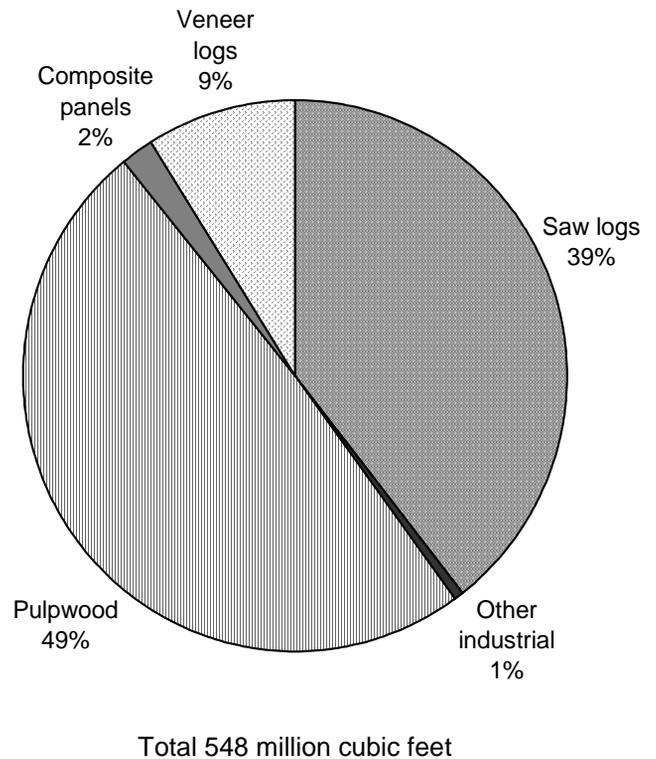


Figure 5—Roundwood production by type of product, 2001.

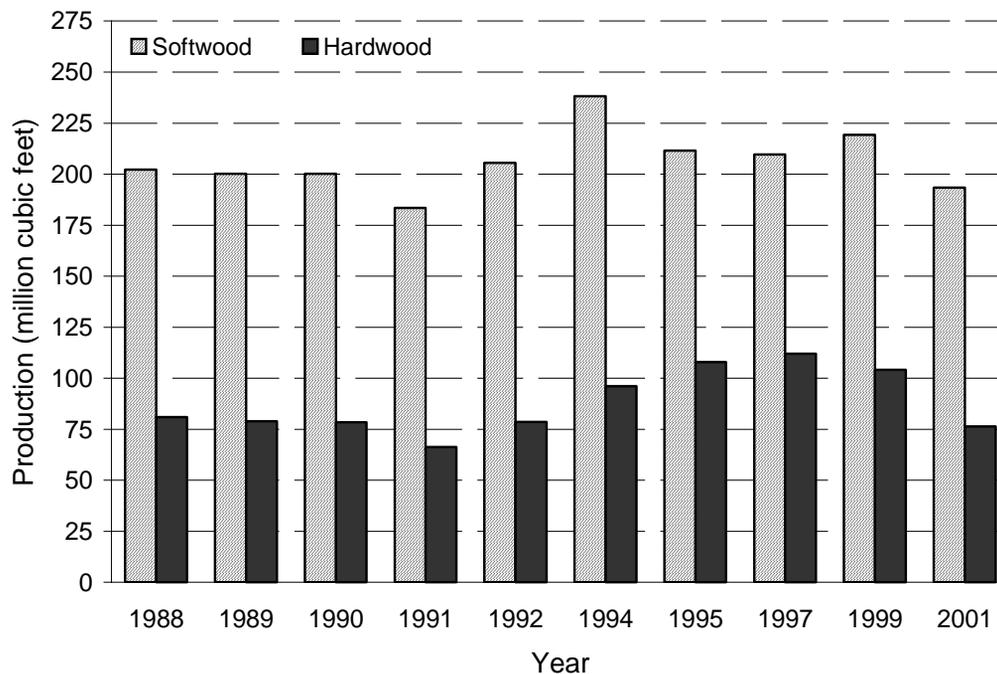


Figure 6—Roundwood pulpwood production by species group and year (see page 9 for references for individual years).

- Seven pulpmill facilities were operating and receiving roundwood in South Carolina in 2001. Total pulpwood receipts for these mills were down 36 million cubic feet to 265 million cubic feet, accounting for 50 percent of total receipts for all mills.
- Seventy-eight percent of roundwood cut for pulpwood was retained for processing at South Carolina pulpmills. Roundwood pulpwood accounted for 63 percent of total known exports and 77 percent of total imports. Roundwood pulpwood exports amounted to 61 million cubic feet, or 5 million cubic feet more than was imported.

Saw Logs

- Saw logs accounted for 39 percent of the State's total roundwood products. Output of softwood saw logs declined 9 percent to 192 million cubic feet (1.1 billion board feet, International 1/4-inch rule); hardwood saw log output fell 25 percent to 24 million cubic feet (144 million board feet, International 1/4-inch rule) (fig. 7).
- In 2001, South Carolina had 51 sawmills, a net loss of 12 mills since 1999. Total saw-log receipts were down 27 million cubic feet to 201 million cubic feet. Softwood saw-log receipts declined 10 percent to 183 million cubic feet,

while those of hardwoods dropped 26 percent to 18 million cubic feet. Of the 51 mills operating in 2001, 8 percent had receipts of less than 1 million board feet, while 39 percent had receipts greater than 10 million board feet. Those 20 mills accounted for 89 percent of saw-log receipts.

- South Carolina retained 87 percent of its saw-log production for domestic manufacture, with saw-log exports exceeding imports by 15 million cubic feet in 2001.

Veneer Logs

- Output of veneer logs in 2001 totaled 48 million cubic feet and accounted for 9 percent of South Carolina's total roundwood TPO volume. Softwood veneer production was down 13 percent to 41 million cubic feet (233 million board feet, International 1/4-inch rule); output of hardwood veneer logs declined 7 percent to 7 million cubic feet (43 million board feet, International 1/4-inch rule) (fig. 8).
- Nine veneer mills were operating in South Carolina, three fewer than in 1999. Receipts of veneer logs declined 16 percent to 45 million cubic feet. Softwood veneer receipts were down 7.5 million cubic feet to 38 million cubic feet.

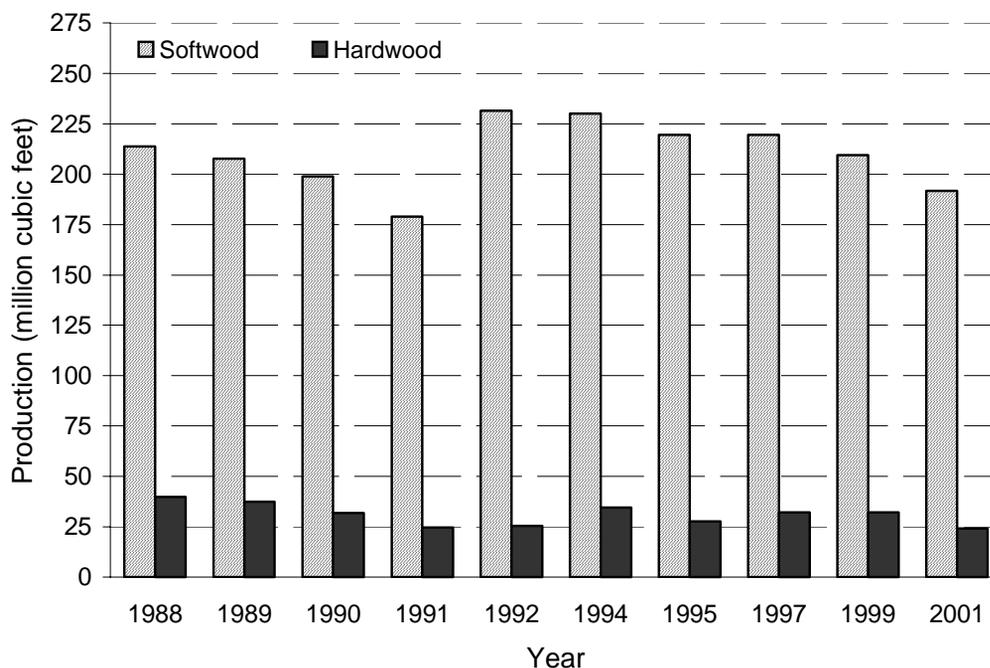


Figure 7—Roundwood saw-log production by species group and year (see page 9 for references for individual years).

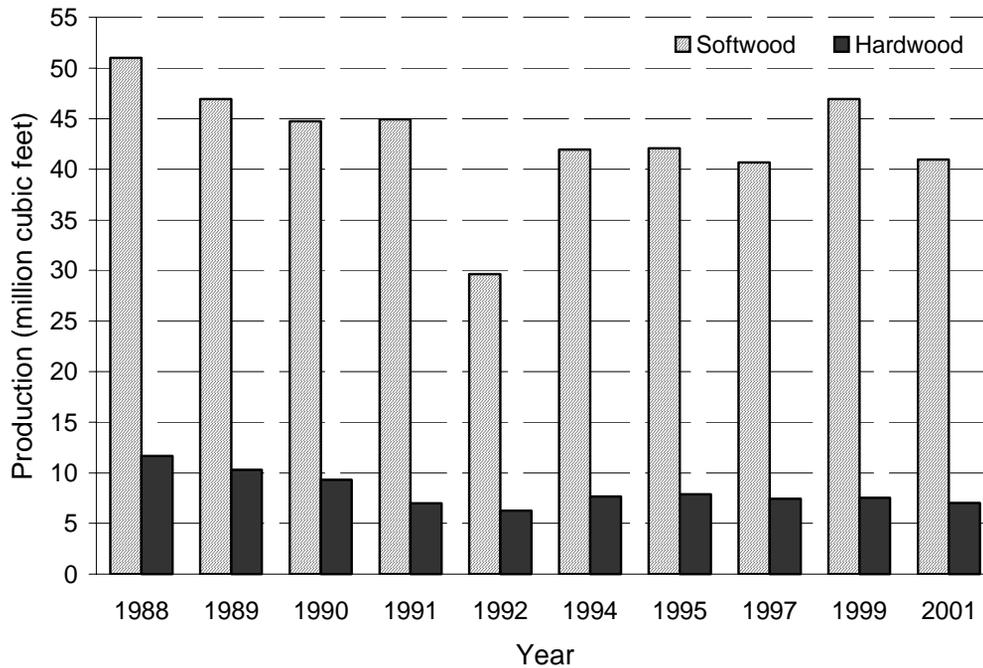


Figure 8—Roundwood veneer-log production by species group and year (see page 9 for references for individual years).

- South Carolina retained 91 percent of its veneer-log production for processing at domestic veneer mills. Exports amounted to 4 million cubic feet, while imports totaled 1.6 million cubic feet.

Composite Panels

- Roundwood harvested from South Carolina’s forests for composite panels increased more than sevenfold to 11 million cubic feet (161,000 cords). This large increase was due to the opening of South Carolina’s first oriented strand board mill in Laurens county. Softwood output accounted for 99 percent of composite panel production in 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 3.8 million cubic feet, a 5-percent decline since 1999. Softwood made up all of the other industrial products volume.
- The number of plants producing other industrial products totaled eight in 2001.

Plant Byproducts

- In 2001, processing of primary products in South Carolina mills generated 173 million cubic feet of wood and bark residues. Coarse residues from all primary products amounted to 65 million cubic feet, while bark volume totaled 53 million cubic feet. Sawdust and shavings made up 32 percent of total residues, or 55 million cubic feet (fig. 9).
- Almost all of the wood and bark residues were used for products. Forty-nine percent of the residue was used for industrial fuel (fig. 10). More than 53 million cubic feet, or 82 percent, of the coarse residues were used to manufacture fiber products. Most of the bark was used for industrial fuel or other miscellaneous products, while 56 percent of the sawdust and shavings were used for industrial fuel.
- The processing of saw logs generated 107 million cubic feet of mill residues, accounting for 62 percent of the total residues produced (fig. 11).

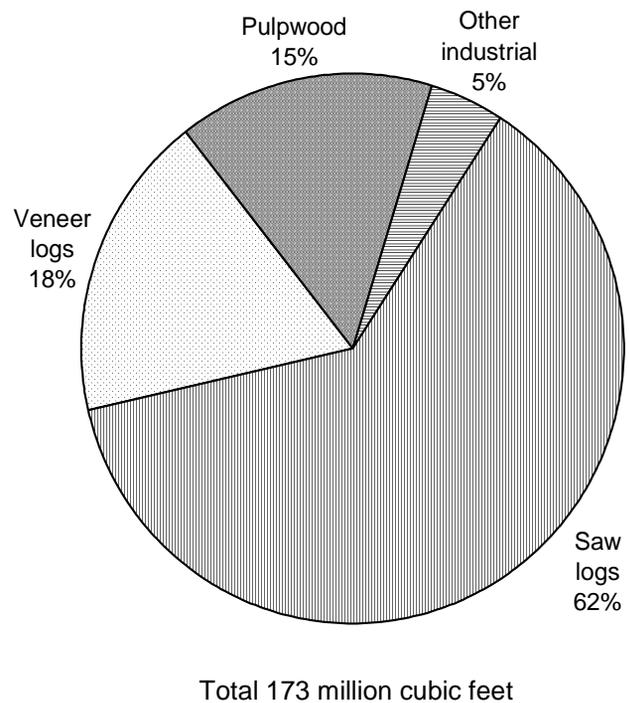
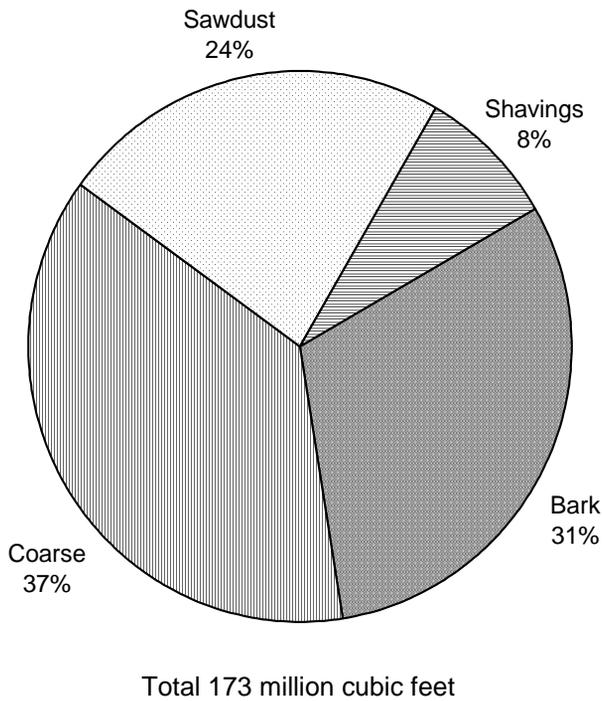


Figure 9—Primary mill residue by residue type, 2001.

Figure 11—Primary mill residue produced by roundwood type, 2001.

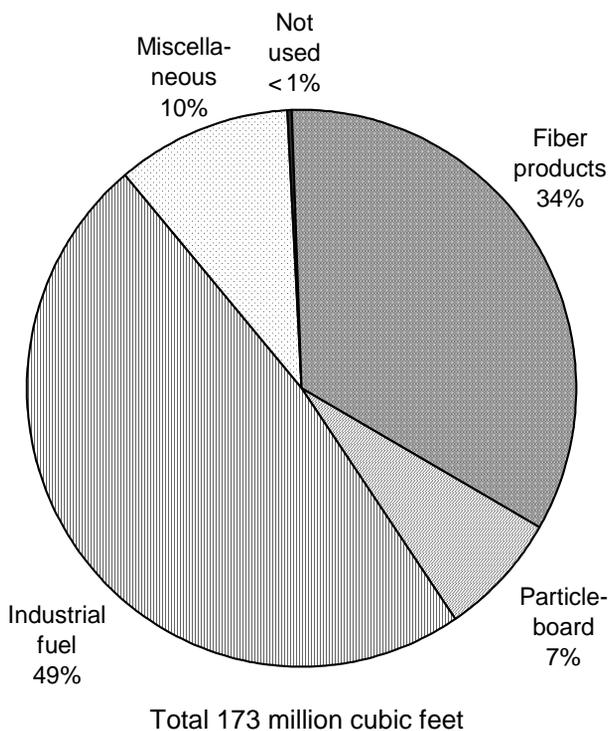


Figure 10—Disposal of residue by product, 2001.

Regional Trends

- Output of industrial roundwood products declined across all regions of South Carolina. The Piedmont region had the largest decline at 15 percent. The Southern Coastal Plain region was the only area that experienced an increase in hardwood output.

Southern Coastal Plain Region

- Roundwood output from the Southern Coastal Plain region totaled 139 million cubic feet, down 9 percent since 1999. Softwood output declined 13 percent to 105 million cubic feet, while hardwood output increased 6 percent to 34 million cubic feet.
- The Southern Coastal Plain region was the only region to experience an increase in both softwood and hardwood pulpwood production. Softwood production increased 8 percent to 49 million cubic feet, while hardwood output increased 15 percent to 26 million cubic feet. Pulpwood accounted for 54 percent of the region's TPO and 28 percent of the State's roundwood pulpwood output. Saw-log production of 55 million cubic feet accounted for 40 percent of the total roundwood output for the region.

- In the Southern Coastal Plain region, 25 primary wood-using plants were operating during 2001: 14 sawmills, 5 veneer or plywood mills, and 6 other miscellaneous mills. These mills processed 25 percent of the State's total roundwood output.

Northern Coastal Plain Region

- Roundwood output from the Northern Coastal Plain region totaled 204 million cubic feet, a 12-percent decline.
- Production of pulpwood was down 20 percent; it accounted for 51 percent of the region's total roundwood output and 39 percent of the State's total roundwood pulpwood output. Saw-log production of 85 million cubic feet accounted for 42 percent of the region's total roundwood output.
- The 22 mills operating in the Northern Coastal Plain region in 2001 included 13 sawmills, 2 veneer or plywood mills, 6 pulpmills, and 1 other miscellaneous mill. These mills processed 37 percent of the State's total roundwood output.

Piedmont Region

- Roundwood output from the Piedmont region of South Carolina totaled 205 million cubic feet, a decline of 15 percent since 1999. Roundwood production from this region accounted for 38 percent of the total roundwood TPO for the State.
- Pulpwood production was down 28 percent to 90 million cubic feet, accounting for 44 percent of the region's total TPO. Saw-log production of 75 million cubic feet accounted for another 36 percent of the region's total roundwood output.
- The 29 primary wood-using plants operating in the Piedmont region included 24 sawmills, 2 veneer or plywood mills, 1 composite panel mill, 1 pulpmill, and 1 other miscellaneous mill.

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 549 million cubic feet of roundwood output for industrial roundwood products, an estimated 34 million cubic feet were harvested for domestic fuelwood, bringing South Carolina's total roundwood output to 583 million cubic feet.
- Ninety-two percent of total roundwood output was considered growing-stock volume (sawtimber and pole-timber) from timberland sources. Other sources (such as saplings; stumps, tops, and limbs of trees on timberland; and trees on nonforest land) contributed an estimated 46 million cubic feet, or 8 percent of total roundwood output (fig. 12).

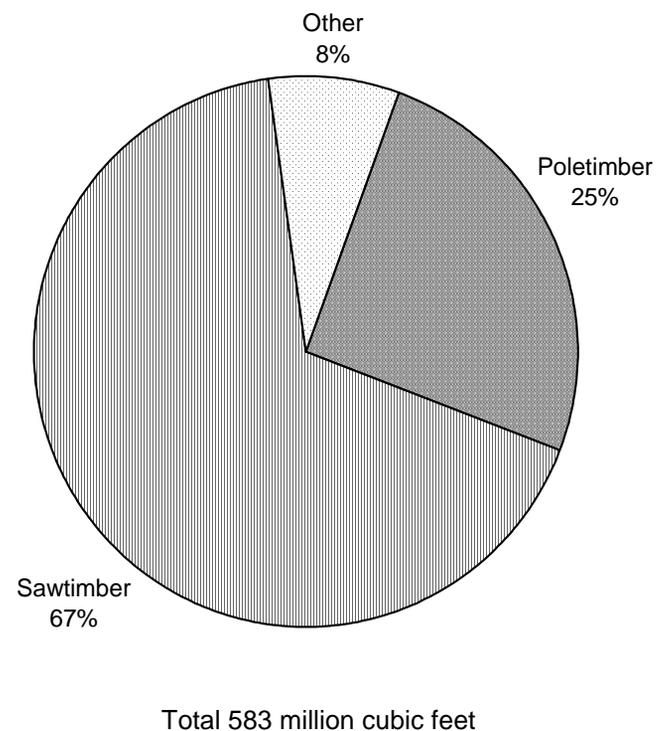


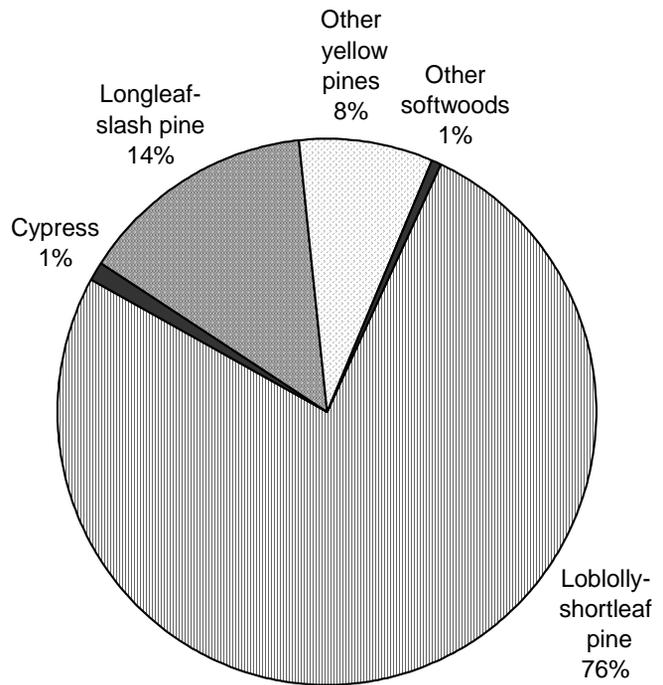
Figure 12—Roundwood output by source, 2001.

Ownership

- An estimated 379 million cubic feet, or 65 percent, of the total roundwood output came from nonindustrial private forest lands.
- Forest industry lands contributed 180 million cubic feet, or 31 percent of the output. Public lands made up the remaining 4 percent, or 23 million cubic feet (fig. 13).

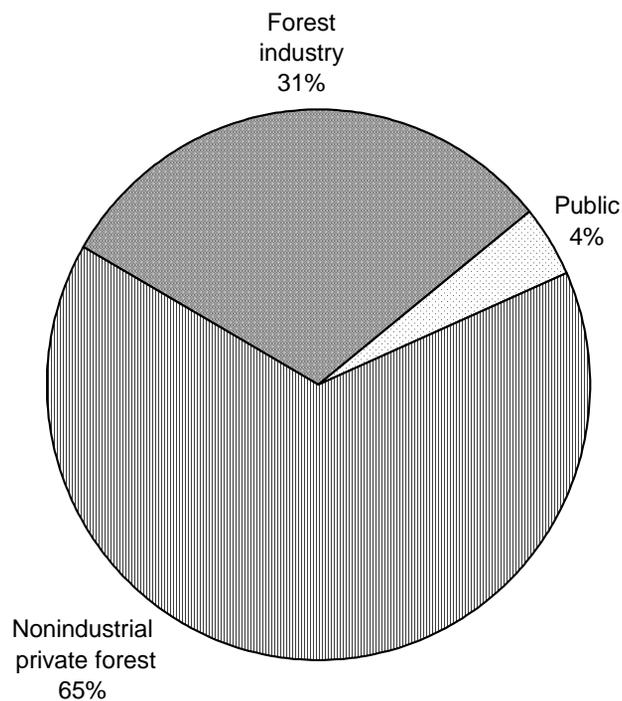
Species

- The loblolly and shortleaf pine group provided more volume than any other softwood species group, accounting for 76 percent of the total softwood output (fig. 14). The longleaf and slash pine type accounted for another 14 percent of the softwood output.
- The red oak and white oak groups combined accounted for 55 million cubic feet, or 40 percent of total hardwood output (fig. 15). Sweetgum accounted for another 30 million cubic feet, or 22 percent, of total hardwood output.



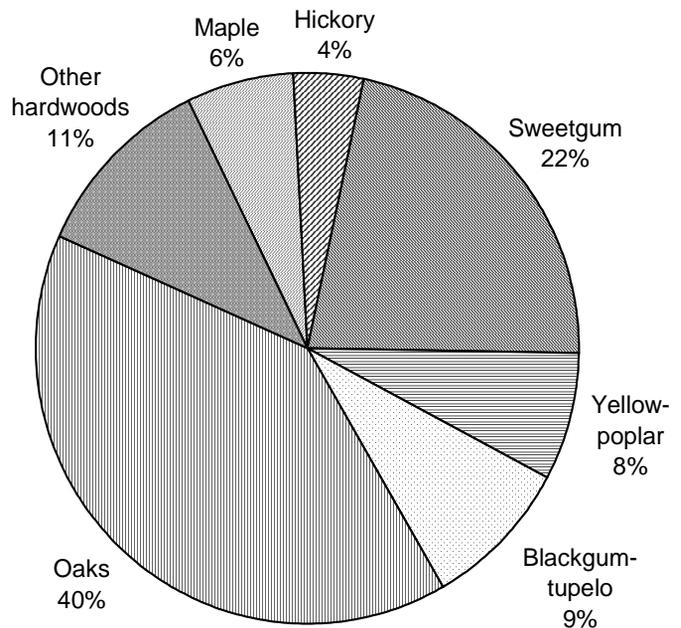
Total 445 million cubic feet

Figure 14—Roundwood output by softwood species group, 2001.



Total 583 million cubic feet

Figure 13—Roundwood output by ownership, 2001.



Total 138 million cubic feet

Figure 15—Roundwood output by hardwood species group, 2001.

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Definition of Terms

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, 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 greater than 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.

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.

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

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

Production. The total volume of known roundwood harvested from land within a State, regardless of where it is

consumed. Production is the sum of timber harvested and used within a State, and all roundwood exported to other States.

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

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

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

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

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

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

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

Roundwood products. Any primary product, such as lumber, veneer, composite panels, poles, pilings, pulp, or fuelwood that is produced from roundwood.

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

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 1/4-inch rule).

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

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

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

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

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

Standard unit. A unit measure applied to roundwood timber products. Board feet (International 1/4-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 products. Roundwood products and byproducts.

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

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 sawtimber 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^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.

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Table 1—Output of industrial products by product and species group, South Carolina, 1999 and 2001

Product and species group	Year		Change	Percent change
	1999	2001		
<i>thousand cubic feet</i>				
Saw logs				
Softwood	209,572	191,723	-17,849	-8.5
Hardwood	32,113	24,153	-7,960	-24.8
Total	241,685	215,876	-25,809	-10.7
Veneer logs				
Softwood	46,938	40,967	-5,971	-12.7
Hardwood	7,536	7,025	-511	-6.8
Total	54,474	47,992	-6,482	-11.9
Pulpwood^a				
Softwood	219,352	193,408	-25,944	-11.8
Hardwood	104,264	76,380	-27,884	-26.7
Total	323,616	269,788	-53,828	-16.6
Composite panels				
Softwood	1,374	10,982	9,608	699.3
Hardwood	74	65	-9	-12.2
Total	1,448	11,047	9,599	662.9
Other industrial				
Softwood	3,972	3,769	-203	-5.1
Hardwood	0	0	0	--
Total	3,972	3,769	-203	-5.1
All industrial				
Softwood	481,208	440,849	-40,359	-8.4
Hardwood	143,987	107,623	-36,364	-25.3
Total	625,195	548,472	-76,723	-12.3
Byproduct output				
Softwood	162,523	150,009	-12,514	-7.7
Hardwood	33,893	22,413	-11,480	-33.9
Total	196,416	172,422	-23,994	-12.2
Total output				
Softwood	643,731	590,858	-52,873	-8.2
Hardwood	177,880	130,036	-47,844	-26.9
Total	821,611	720,894	-100,717	-12.3

-- = negligible.

^a Includes roundwood delivered to nonpulp mills, then chipped and sold to pulp mills (11,055,000 cubic feet in 1999 and 9,216,000 cubic feet in 2001).

**Table 2—Roundwood receipts by product and species group,
South Carolina, 1999 and 2001**

Product and species group	Year		Change	Percent change
	1999	2001		
<i>thousand cubic feet</i>				
Saw logs				
Softwood	203,575	182,912	-20,663	-10.2
Hardwood	24,975	18,393	-6,582	-26.4
Total	228,550	201,305	-27,245	-11.9
Veneer logs				
Softwood	45,723	38,243	-7,480	-16.4
Hardwood	7,777	6,983	-794	-10.2
Total	53,500	45,226	-8,274	-15.5
Pulpwood^a				
Softwood	225,326	191,316	-34,010	-15.1
Hardwood	75,518	73,613	-1,905	-2.5
Total	300,844	264,929	-35,915	-11.9
Other industrial				
Softwood	3,956	13,524	9,568	241.9
Hardwood	0	0	0	--
Total	3,956	13,524	9,568	241.9
Total output				
Softwood	478,580	425,995	-52,585	-11.0
Hardwood	108,270	98,989	-9,281	-8.6
Total	586,850	524,984	-61,866	-10.5

-- = negligible.

^a Includes roundwood delivered to nonpulp mills, then chipped and sold to pulpmills (12,266,000 cubic feet in 1999 and 9,818,000 cubic feet in 2001).

Table 3—Number of primary wood-using plants by industry, South Carolina, 1983-2001

Industry	Year									
	1983	1985	1987	1989	1992	1994	1995	1997	1999	2001
Sawmills	113	118	99	87	79	76	70	66	63	51
Veneer mills	21	21	20	17	14	14	14	12	12	9
Pulpmills	8	8	8	8	9	8	8	8	7	7
Composite panel mills	0	0	0	0	0	0	0	0	0	1
Other mills	6	8	6	5	9	7	7	6	8	8
All plants	148	155	133	117	111	105	99	92	90	76

Table 4—Roundwood receipts by sawmill size, South Carolina, 1999 and 2001

Sawmill size class ^a	1999			2001		
	Number of mills	Thousand board feet	Percent of volume	Number of mills	Thousand board feet	Percent of volume
<i>million board feet</i>						
< 1.0	5	1,681	0	4	1,611	0
1.0–4.99	20	61,527	5	16	44,327	4
5.0–9.99	13	89,449	7	11	80,077	7
10.0–49.99	16	379,287	30	11	249,329	22
> 50	9	747,711	58	9	750,314	67
Total	63	1,279,655	100	51	1,125,658	100

^a Based on volume received as opposed to actual capacity.

Table 5—Roundwood receipts by species and type of mill, South Carolina, 2001

Species	Type of mill					
	All mills	Sawmills	Veneer mills		Pulpmills ^a	Other mills
			Pine plywood	Other veneer		
<i>thousand cubic feet</i>						
Softwood						
Yellow pine	233,483	181,757	29,765	8,437	NA	13,524
Eastern white pine	328	328	0	0	NA	0
Cedar	1	1	0	0	NA	0
Cypress	867	826	0	41	NA	0
Other softwood	0	0	0	0	NA	0
Unclassified	191,316	0	0	0	191,316	0
Total softwoods	425,995	182,912	29,765	8,478	191,316	13,524
Hardwood						
Blackgum and tupelo	1,457	404	0	1,053	NA	0
Soft maple	531	522	0	9	NA	0
Sweetgum	4,611	1,525	1,809	1,277	NA	0
Yellow-poplar	5,200	3,345	1,266	589	NA	0
Other soft hardwood	3,733	3,733	0	0	NA	0
Hickory	620	357	0	263	NA	0
Red oak	5,035	4,617	0	418	NA	0
White oak	2,896	2,734	0	162	NA	0
Other hard hardwood	1,293	1,156	0	137	NA	0
Unclassified	73,613	0	0	0	73,613	0
Total hardwoods	98,989	18,393	3,075	3,908	73,613	0
All species	524,984	201,305	32,840	12,386	264,929	13,524

NA = not applicable.

^a Only collected by softwood and hardwood and includes roundwood chipped.

Table 6—Industrial roundwood movement by year and species group, South Carolina, 1999 and 2001

Year	Production	Exported to other States	Retained	Imported from other States	Receipts
<i>thousand cubic feet</i>					
Softwood					
1999	481,208	63,450	417,758	60,822	478,580
2001	440,849	67,610	373,239	52,756	425,995
Hardwood					
1999	143,987	46,778	97,209	11,061	108,270
2001	107,623	28,755	78,868	20,121	98,989
All species					
1999	625,195	110,228	514,967	71,883	586,850
2001	548,472	96,365	452,107	72,877	524,984

Table 7—Industrial roundwood movement by product and species group, South Carolina, 2001

Product and species group	Production	Exported to other States	Retained	Imported from other States	Receipts
<i>thousand cubic feet</i>					
Saw logs					
Softwood	191,723	21,204	170,519	12,393	182,912
Hardwood	24,153	6,907	17,246	1,147	18,393
Total	215,876	28,111	187,765	13,540	201,305
Veneer logs					
Softwood	40,967	3,631	37,336	907	38,243
Hardwood	7,025	706	6,319	664	6,983
Total	47,992	4,337	43,655	1,571	45,226
Pulpwood^a					
Softwood	193,408	39,591	153,817	37,499	191,316
Hardwood	76,380	21,077	55,303	18,310	73,613
Total	269,788	60,668	209,120	55,809	264,929
Other industrial					
Softwood	14,751	3,184	11,567	1,957	13,524
Hardwood	65	65	0	0	0
Total	14,816	3,249	11,567	1,957	13,524
All products					
Softwood	440,849	67,610	373,239	52,756	425,995
Hardwood	107,623	28,755	78,868	20,121	98,989
Total	548,472	96,365	452,107	72,877	524,984

^a Includes roundwood chipped.

Table 8—Saw-log volume by destination, source, and species group, South Carolina, 2001

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
South Carolina (retained)	187,765	170,519	17,246
Exports to:			
Georgia	15,650	14,981	669
North Carolina	12,460	6,223	6,237
Tennessee	1	0	1
Total	28,111	21,204	6,907
Imports from:			
Georgia	2,578	2,030	548
North Carolina	10,962	10,363	599
Total	13,540	12,393	1,147

Table 9—Veneer volume by destination, source, and species group, South Carolina, 2001

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
South Carolina (retained)	43,655	37,336	6,319
Exports to:			
Georgia	417	406	11
North Carolina	3,920	3,225	695
Total	4,337	3,631	706
Imports from:			
Georgia	378	0	378
North Carolina	1,193	907	286
Total	1,571	907	664

Table 10—Pulpwood volume by destination, source, and species group, South Carolina, 2001^a

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
South Carolina (retained)	209,120	153,817	55,303
Exports to:			
Florida	1	1	0
Georgia	40,632	23,311	17,321
North Carolina	20,030	16,275	3,755
Tennessee	4	4	0
Virginia	1	0	1
Total	60,668	39,591	21,077
Imports from:			
Arkansas	188	4	184
Georgia	110	103	7
Louisiana	14	8	6
North Carolina	55,176	37,176	18,000
Virginia	321	208	113
Total	55,809	37,499	18,310

^a Includes roundwood chipped that was delivered to nonpulpmills, then chipped and sold to pulpmills.

Table 11—Other industrial volume by destination, source, and species group, South Carolina, 2001^a

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
South Carolina (retained)	11,567	11,567	0
Exports to:			
Georgia	3,249	3,184	65
Total	3,249	3,184	65
Imports from:			
Georgia	1,521	1,521	0
North Carolina	436	436	0
Total	1,957	1,957	0

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

Table 12—Primary mill residue volume by roundwood type, species group, and residue type, South Carolina, 2001

Roundwood type and species group	All types	Residue type			
		Bark	Coarse	Sawdust	Shavings
<i>thousand cubic feet</i>					
Saw logs					
Softwood	98,104	15,578	42,447	25,928	14,151
Hardwood	9,329	1,944	3,762	3,573	50
Total	107,433	17,522	46,209	29,501	14,201
Veneer logs					
Softwood	26,416	3,332	14,005	9,079	0
Hardwood	4,680	772	1,912	1,996	0
Total	31,096	4,104	15,917	11,075	0
Pulpwood					
Softwood	17,758	17,758	0	0	0
Hardwood	8,526	8,526	0	0	0
Total	26,284	26,284	0	0	0
Other industrial^a					
Softwood	7,781	5,411	2,370	0	0
Hardwood	0	0	0	0	0
Total	7,781	5,411	2,370	0	0
Total					
Softwood	150,059	42,079	58,822	35,007	14,151
Hardwood	22,535	11,242	5,674	5,569	50
Total	172,594	53,321	64,496	40,576	14,201

^a Includes poles, pilings, posts, and other industrial products.

Table 13—Disposal of residue at primary wood-using plants by product, species group, and type of residue, South Carolina, 1999 and 2001

Product and species group	All types		Bark		Coarse		Sawdust		Shavings	
	1999	2001	1999	2001	1999	2001	1999	2001	1999	2001
<i>thousand cubic feet</i>										
Fiber products										
Softwood	60,121	54,406	0	0	54,451	48,779	2,813	3,462	2,857	2,165
Hardwood	7,226	4,330	0	0	6,770	4,330	456	0	0	0
Total	67,347	58,736	0	0	61,221	53,109	3,269	3,462	2,857	2,165
Particleboard										
Softwood	12,831	12,604	163	30	319	419	6,603	5,961	5,746	6,194
Hardwood	480	7	8	7	0	0	456	0	16	0
Total	13,311	12,611	171	37	319	419	7,059	5,961	5,762	6,194
Charcoal/ chemical wood										
Softwood	1,238	0	449	0	24	0	765	0	0	0
Hardwood	952	0	0	0	574	0	378	0	0	0
Total	2,190	0	449	0	598	0	1,143	0	0	0
Sawn products										
Softwood	3,133	2,125	0	0	3,133	2,125	0	0	0	0
Hardwood	13	18	0	0	13	18	0	0	0	0
Total	3,146	2,143	0	0	3,146	2,143	0	0	0	0
Fuel										
Softwood	72,350	67,295	38,344	34,710	2,797	6,951	27,078	23,588	4,131	2,046
Hardwood	23,357	16,218	16,803	9,892	946	1,063	5,577	5,229	31	34
Total	95,707	83,513	55,147	44,602	3,743	8,014	32,655	28,817	4,162	2,080
Miscellaneous										
Softwood	12,850	13,579	6,233	7,318	287	540	2,429	1,975	3,901	3,746
Hardwood	1,865	1,840	1,282	1,330	357	178	225	316	1	16
Total	14,715	15,419	7,515	8,648	644	718	2,654	2,291	3,902	3,762
Not used										
Softwood	632	50	357	21	253	8	22	21	0	0
Hardwood	93	122	33	13	5	85	55	24	0	0
Total	725	172	390	34	258	93	77	45	0	0
All products										
Softwood	163,155	150,059	45,546	42,079	61,264	58,822	39,710	35,007	16,635	14,151
Hardwood	33,986	22,535	18,126	11,242	8,665	5,674	7,147	5,569	48	50
Total	197,141	172,594	63,672	53,321	69,929	64,496	46,857	40,576	16,683	14,201

Table 14—Roundwood timber products output by product and species group, Southern Coastal Plain Region of South Carolina, 1999 and 2001

Product and species group	Year		Change	Percent change
	1999	2001		
<i>thousand cubic feet</i>				
Saw logs				
Softwood	67,010	50,610	-16,400	-24.5
Hardwood	5,996	4,482	-1,514	-25.3
Total	73,006	55,092	-17,914	-24.5
Veneer logs				
Softwood	5,625	3,516	-2,109	-37.5
Hardwood	3,287	3,230	-57	-1.7
Total	8,912	6,746	-2,166	-24.3
Pulpwood^a				
Softwood	45,080	48,611	3,531	7.8
Hardwood	22,994	26,452	3,458	15.0
Total	68,074	75,063	6,989	10.3
Composite panels				
Softwood	0	283	283	--
Hardwood	0	0	0	--
Total	0	283	283	--
Other industrial				
Softwood	1,984	1,544	-440	-22.2
Hardwood	0	0	0	--
Total	1,984	1,544	-440	-22.2
All industrial				
Softwood	119,699	104,564	-15,135	-12.6
Hardwood	32,277	34,164	1,887	5.8
Total	151,976	138,728	-13,248	-8.7

-- = negligible.

^a Includes roundwood delivered to nonpulp mills, then chipped and sold to pulpmills (5,264,000 cubic feet in 1999 and 1,582,000 cubic feet in 2001).

Table 15—Roundwood timber products output by county, product, and species group, Southern Coastal Plain Region of South Carolina, 2001

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
	<i>thousand cubic feet</i>											
Aiken	11,469	3,929	5,134	230	250	127	5,682	3,572	189	0	214	0
Allendale	6,141	1,649	3,922	116	83	325	2,007	1,208	0	0	129	0
Bamberg	4,918	1,582	2,738	231	83	347	1,902	1,004	0	0	195	0
Barnwell	8,170	2,170	5,328	227	166	285	2,477	1,658	0	0	199	0
Beaufort	3,358	392	2,295	0	0	146	1,058	246	0	0	5	0
Calhoun	2,860	857	894	303	83	153	1,876	401	0	0	7	0
Colleton	16,680	4,032	9,350	1,049	250	510	6,748	2,473	0	0	332	0
Dorchester	8,850	2,361	4,258	159	250	178	4,315	2,024	0	0	27	0
Hampton	15,220	6,443	6,615	262	0	521	8,481	5,660	0	0	124	0
Jasper	10,513	2,939	4,497	239	0	73	5,907	2,627	0	0	109	0
Lexington	6,375	835	2,441	118	1,518	143	2,194	574	94	0	128	0
Orangeburg	10,010	6,975	3,138	1,548	833	422	5,964	5,005	0	0	75	0
All counties	104,564	34,164	50,610	4,482	3,516	3,230	48,611	26,452	283	0	1,544	0

^a Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (1,582,000 cubic feet in 2001).

Table 16—Roundwood timber products output by product and species group, Northern Coastal Plain Region of South Carolina, 1999 and 2001

Product and species group	Year		Change	Percent change
	1999	2001		
<i>thousand cubic feet</i>				
Saw logs				
Softwood	77,082	77,371	289	0.4
Hardwood	11,006	8,027	-2,979	-27.1
Total	88,088	85,398	-2,690	-3.1
Veneer logs				
Softwood	12,166	12,182	16	0.1
Hardwood	709	837	128	18.1
Total	12,875	13,019	144	1.1
Pulpwood^a				
Softwood	98,039	73,083	-24,956	-25.5
Hardwood	32,913	31,867	-1,046	-3.2
Total	130,952	104,950	-26,002	-19.9
Composite panels				
Softwood	0	94	94	--
Hardwood	0	0	0	--
Total	0	94	94	--
Other industrial				
Softwood	795	1,006	211	26.5
Hardwood	0	0	0	--
Total	795	1,006	211	26.5
All industrial				
Softwood	188,082	163,736	-24,346	-12.9
Hardwood	44,628	40,731	-3,897	-8.7
Total	232,710	204,467	-28,243	-12.1

-- = negligible.

^a Includes roundwood delivered to nonpulp mills, then chipped and sold to pulpmills (4,422,000 cubic feet in 1999 and 2,293,000 cubic feet in 2001).

Table 17—Roundwood timber products output by county, product, and species group, Northern Coastal Plain Region of South Carolina, 2001

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
	<i>thousand cubic feet</i>											
Berkeley	12,936	1,543	4,617	132	2,333	0	5,986	1,411	0	0	0	0
Charleston	7,253	725	3,109	0	166	0	3,945	725	0	0	33	0
Chesterfield	9,584	2,741	2,623	985	486	92	6,475	1,664	0	0	0	0
Clarendon	3,541	1,041	1,888	235	83	0	1,570	806	0	0	0	0
Darlington	4,334	5,161	2,015	2,770	169	48	2,150	2,343	0	0	0	0
Dillon	9,326	2,570	6,180	304	1,161	68	1,954	2,198	0	0	31	0
Florence	8,935	2,802	5,732	530	808	29	2,125	2,243	0	0	270	0
Georgetown	27,992	1,848	14,090	0	101	7	13,640	1,841	0	0	161	0
Horry	16,418	4,589	8,453	72	1,259	75	6,598	4,442	0	0	108	0
Kershaw	10,964	3,200	3,487	624	648	123	6,766	2,453	0	0	63	0
Lee	4,787	922	1,904	0	0	0	2,876	922	0	0	7	0
Marion	10,707	3,333	7,891	694	26	5	2,660	2,634	0	0	130	0
Marlboro	8,484	2,906	3,177	309	1,389	291	3,918	2,306	0	0	0	0
Richland	8,987	2,506	3,914	339	1,444	87	3,506	2,080	94	0	29	0
Sumter	3,868	2,476	1,429	540	83	5	2,343	1,931	0	0	13	0
Williamsburg	15,620	2,368	6,862	493	2,026	7	6,571	1,868	0	0	161	0
All counties	163,736	40,731	77,371	8,027	12,182	837	73,083	31,867	94	0	1,006	0

^a Includes roundwood delivered to nonpulp mills, then chipped and sold to pulpmills (2,293,000 cubic feet in 2001).

Table 18—Roundwood timber products output by product and species group, Piedmont Region of South Carolina, 1999 and 2001

Product and species group	Year		Change	Percent change
	1999	2001		
<i>thousand cubic feet</i>				
Saw logs				
Softwood	65,480	63,742	-1,738	-2.7
Hardwood	15,111	11,644	-3,467	-22.9
Total	80,591	75,386	-5,205	-6.5
Veneer logs				
Softwood	29,147	25,269	-3,878	-13.3
Hardwood	3,540	2,958	-582	-16.4
Total	32,687	28,227	-4,460	-13.6
Pulpwood^a				
Softwood	76,233	71,714	-4,519	-5.9
Hardwood	48,357	18,061	-30,296	-62.7
Total	124,590	89,775	-34,815	-27.9
Composite panels				
Softwood	1,374	10,605	9,231	671.8
Hardwood	74	65	-9	-12.2
Total	1,448	10,670	9,222	636.9
Other industrial				
Softwood	1,193	1,219	26	2.2
Hardwood	0	0	0	--
Total	1,193	1,219	26	2.2
All industrial				
Softwood	173,427	172,549	-878	-0.5
Hardwood	67,082	32,728	-34,354	-51.2
Total	240,509	205,277	-35,232	-14.6

-- = negligible.

^a Includes roundwood delivered to nonpulp mills, then chipped and sold to pulp mills (1,369,000 cubic feet in 1999 and 5,341,000 cubic feet in 2001).

Table 19—Roundwood timber products output by county, product, and species group, Piedmont Region of South Carolina, 2001

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
	<i>thousand cubic feet</i>											
Abbeville	2,684	823	371	382	0	0	585	417	1,721	24	7	0
Anderson	2,588	1,364	817	1,263	0	0	51	74	1,702	27	18	0
Cherokee	4,623	1,116	161	438	486	201	3,882	477	94	0	0	0
Chester	13,293	2,144	2,298	361	3,564	676	7,128	1,107	189	0	114	0
Edgefield	6,270	955	4,206	327	813	0	999	628	189	0	63	0
Fairfield	20,464	2,156	6,404	81	4,596	614	8,890	1,461	283	0	291	0
Greenville	2,994	909	1,908	816	271	0	336	93	472	0	7	0
Greenwood	9,939	4,070	3,947	882	949	35	3,973	3,153	1,039	0	31	0
Lancaster	3,795	1,006	1,403	498	486	92	1,901	416	0	0	5	0
Laurens	10,364	2,142	3,086	1,009	1,679	61	4,330	1,072	1,228	0	41	0
McCormick	17,034	409	11,758	180	949	0	4,037	229	283	0	7	0
Newberry	27,722	2,090	7,133	534	3,281	111	15,743	1,445	1,323	0	242	0
Oconee	4,242	1,342	2,802	1,167	406	11	274	150	760	14	0	0
Pickens	4,241	1,722	3,847	1,422	0	0	300	300	94	0	0	0
Saluda	11,835	1,254	7,040	282	2,440	19	1,599	953	567	0	189	0
Spartanburg	9,499	4,339	3,100	715	568	153	5,380	3,471	378	0	73	0
Union	12,345	3,016	2,952	299	2,027	373	6,989	2,344	283	0	94	0
York	8,617	1,871	509	988	2,754	612	5,317	271	0	0	37	0
All counties	172,549	32,728	63,742	11,644	25,269	2,958	71,714	18,061	10,605	65	1,219	0

^a Includes roundwood delivered to nonpulp mills, then chipped and sold to pulp mills (5,341,000 cubic feet in 2001).

Table 20—Total roundwood output by product, species group, and source of material, South Carolina, 2001

Product and species group	All sources	Total	Growing-stock trees		Other sources
			Sawtimber	Poletimber	
<i>thousand cubic feet</i>					
Saw logs					
Softwood	191,723	181,536	179,033	2,503	10,187
Hardwood	24,153	22,714	22,282	433	1,439
Total	215,876	204,250	201,314	2,936	11,626
Veneer logs and bolts					
Softwood	40,967	39,508	38,888	621	1,459
Hardwood	7,025	6,945	6,945	0	80
Total	47,992	46,453	45,833	621	1,539
Pulpwood					
Softwood	193,408	177,104	81,667	95,437	16,304
Hardwood	76,380	69,941	32,812	37,130	6,439
Total	269,788	247,046	114,479	132,567	22,742
Composite panels					
Softwood	10,982	10,058	4,554	5,503	924
Hardwood	65	59	23	37	6
Total	11,047	10,117	4,577	5,540	930
Poles and posts					
Softwood	3,731	3,057	2,974	83	674
Hardwood	0	0	0	0	0
Total	3,731	3,057	2,974	83	674
Other miscellaneous					
Softwood	38	31	25	6	7
Hardwood	0	0	0	0	0
Total	38	31	25	6	7
Total industrial products					
Softwood	440,849	411,294	307,140	104,154	29,555
Hardwood	107,623	99,660	62,061	37,599	7,963
Total	548,472	510,954	369,202	141,752	37,518
Fuelwood					
Softwood	3,861	1,466	801	665	2,395
Hardwood	30,349	24,613	19,650	4,964	5,736
Total	34,210	26,079	20,451	5,629	8,131
All products					
Softwood	444,710	412,760	307,941	104,818	31,950
Hardwood	137,972	124,274	81,711	42,563	13,698
Total	582,682	537,033	389,652	147,381	45,649

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

Table 21—Total roundwood output by species group, survey region, and ownership class, South Carolina, 2001

Species group and survey region	Total	Ownership class		
		Public	Forest industry	Nonindustrial private
<i>thousand cubic feet</i>				
Softwoods				
Southern Coastal Plain	105,480	5,070	25,541	74,869
Northern Coastal Plain	165,171	8,486	59,595	97,090
Piedmont	174,059	8,447	56,668	108,944
Total softwoods	<u>444,710</u>	<u>22,003</u>	<u>141,804</u>	<u>280,903</u>
Hardwoods				
Southern Coastal Plain	43,799	70	12,209	31,520
Northern Coastal Plain	52,216	400	13,869	37,947
Piedmont	41,957	885	12,147	28,925
Total hardwoods	<u>137,972</u>	<u>1,355</u>	<u>38,225</u>	<u>98,392</u>
All species	<u>582,682</u>	<u>23,358</u>	<u>180,029</u>	<u>379,295</u>

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

Table 22—Total roundwood output by species group, detailed species group, and product, South Carolina, 2001

Species group and detailed species group	Total	Product						Fuel-wood
		Saw log	Veneer	Pulpwood	Composite panel	Poles and posts	Other miscellaneous	
<i>thousand cubic feet</i>								
Softwood								
Cedar	2,652	572	528	1,279	232	19	0	23
Longleaf-slash pine	63,451	28,335	3,508	30,315	142	591	9	551
White pine	292	142	22	92	32	1	0	3
Loblolly-shortleaf pine	338,717	144,772	33,984	144,392	9,764	2,834	29	2,941
Other yellow pines	35,074	15,565	2,604	15,567	808	225	0	304
Cypress	4,524	2,336	321	1,764	4	61	0	39
Total softwoods	444,710	191,723	40,967	193,408	10,982	3,731	38	3,861
Hardwood								
Soft maple	9,003	1,306	332	5,383	1	0	0	1,980
Other birch	474	133	50	187	0	0	0	104
Hickory	5,708	1,306	222	2,921	3	0	0	1,255
Beech	464	115	14	233	0	0	0	102
Ash	3,818	661	210	2,104	3	0	0	840
Black walnut	30	1	7	16	0	0	0	7
Sweetgum	30,122	4,530	1,741	17,211	14	0	0	6,626
Yellow-poplar	10,445	2,571	581	4,992	3	0	0	2,298
Blackgum-tupelo	12,183	1,369	529	7,605	1	0	0	2,680
Sycamore	1,365	177	211	677	0	0	0	300
Cottonwood	422	78	46	205	0	0	0	93
Black cherry	426	76	21	236	0	0	0	94
Select white oaks	11,086	2,639	463	5,536	11	0	0	2,438
Other white oaks	4,375	949	257	2,203	4	0	0	962
Select red oaks	3,861	730	166	2,115	1	0	0	849
Other red oaks	35,845	5,796	1,833	20,311	21	0	0	7,885
Elm	2,708	541	139	1,431	2	0	0	596
Other Eastern hardwoods	5,636	1,176	203	3,016	2	0	0	1,240
Total hardwoods	137,972	24,153	7,025	76,380	65	0	0	30,349
All species	582,682	215,876	47,992	269,788	11,047	3,731	38	34,210

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

Table 23—Total roundwood output by species group, detailed species group, and ownership class, South Carolina, 2001

Species group and detailed species group	Total	Ownership class		
		Public	Forest industry	Nonindustrial private
<i>thousand cubic feet</i>				
Softwood				
Cedar	2,652	106	1,068	1,478
Longleaf-slash pine	63,451	5,510	18,376	39,565
White pine	292	17	0	276
Loblolly-shortleaf pine	338,717	15,468	114,115	209,134
Other yellow pines	35,074	815	7,211	27,048
Cypress	4,524	88	1,035	3,402
Total softwoods	444,710	22,003	141,804	280,903
Hardwood				
Soft maple	9,003	62	2,770	6,171
Other birch	474	14	235	226
Hickory	5,708	78	1,840	3,790
Beech	464	12	35	418
Ash	3,818	35	946	2,838
Black walnut	30	0	11	19
Sweetgum	30,122	236	7,696	22,190
Yellow-poplar	10,445	109	2,724	7,613
Blackgum-tupelo	12,183	54	3,178	8,950
Sycamore	1,365	49	593	723
Cottonwood	422	3	122	297
Black cherry	426	4	65	357
Select white oaks	11,086	174	2,897	8,015
Other white oaks	4,375	44	1,316	3,014
Select red oaks	3,861	63	1,513	2,286
Other red oaks	35,845	320	10,101	25,424
Elm	2,708	35	738	1,935
Other Eastern hardwoods	5,636	63	1,445	4,128
Total hardwoods	137,972	1,355	38,225	98,392
All species	582,682	23,358	180,029	379,295

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



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In 2001, roundwood output from South Carolina's forests totaled 548 million cubic feet, 12 percent less than in 1999. Mill byproducts generated from primary manufacturers declined 12 percent to 172 million cubic feet. Almost all plant residues were used primarily for fuel and fiber products. Pulpwood was the leading roundwood product at 270 million cubic feet; saw logs ranked second at 216 million cubic feet; veneer logs were third at 48 million cubic feet. The number of primary processing plants declined from 90 in 1999 to 76 in 2001. Total receipts declined 11 percent to 525 million cubic feet.

Keywords: Pulpwood, residues, roundwood, saw logs, veneer logs, wood movement.

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