



# South Carolina's Timber Industry— Timber Product Output and Use, 2011

FOREST INVENTORY & ANALYSIS FACTSHEET

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## Introduction

This science update contains the findings of a 2011 canvass of all primary wood-using plants in South Carolina, and presents changes in product output and residue use since 2009. It complements the Forest Inventory and Analysis (FIA) annual 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 2011 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 2012 to obtain information for 2011. 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 pulpmills. Medium density fiberboard, insulating board, and hardboard plants were included in this survey.

The FIA Research Work Unit of the Forest Service, U.S. Department of Agriculture 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. 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 is available through the FIA Web site: <http://srsfia2.fs.fed.us/>. The Excel® core tables and figures that complement this science update are available on the TPO database.

The Southern Research Station gratefully acknowledges the tremendous 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.



Georgia-Pacific, Clarendon OSB mill, Alcolu, SC. (photo by Michelle Johnson, South Carolina Forestry Commission)





## All Products

- Industrial timber product output from roundwood increased 81.9 million cubic feet, or 15 percent, to 646.1 million cubic feet.
- Output of industrial softwood roundwood products was up 16 percent, to 549.5 million cubic feet, while output of industrial hardwood roundwood products increased 5 percent to 96.6 million cubic feet (fig. 1).

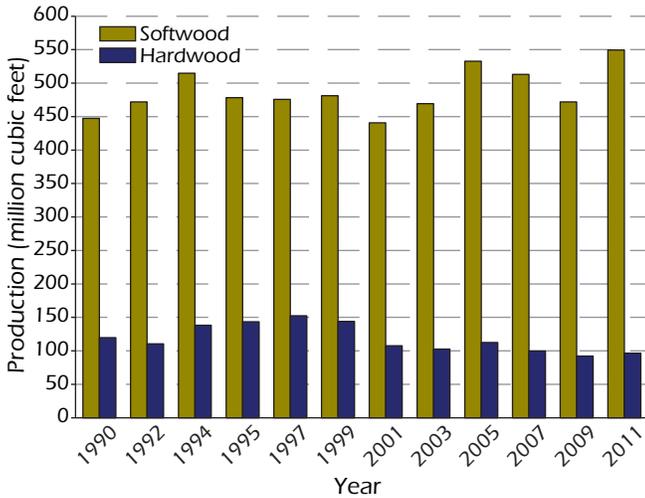


Figure 1—Roundwood production for all products by species group and year, South Carolina.

- Pulpwood and saw logs were the principal roundwood products in 2011. Combined output of these two products totaled 553.7 million cubic feet and accounted for 85 percent of the State’s total industrial roundwood output (fig. 2).
- Total receipts at South Carolina mills, which included roundwood harvested and retained in the State and roundwood imported from other States, was up 14 percent from 547.3 million cubic feet to 621.8 million cubic feet.

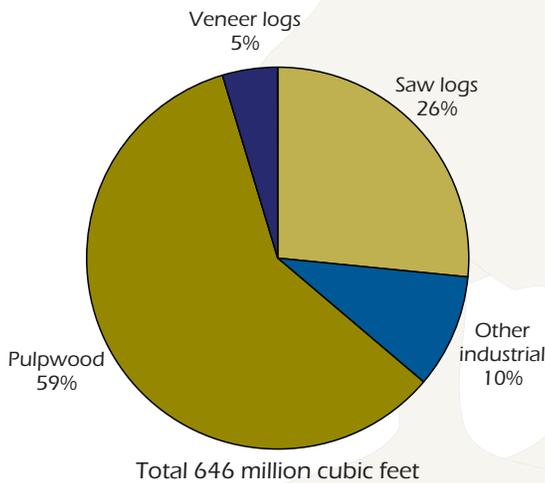


Figure 2—Roundwood production by type of product, South Carolina, 2011.

- At the same time, the number of primary roundwood-using plants in South Carolina declined from 77 in 2009 to 70 in 2011 (fig. 3).
- Across all products, 87 percent of roundwood harvested was retained for processing at South Carolina mills. Exports of roundwood to other States amounted to 82.2 million cubic feet, while imports of roundwood amounted to 57.9 million cubic feet, making the State a net exporter of roundwood.

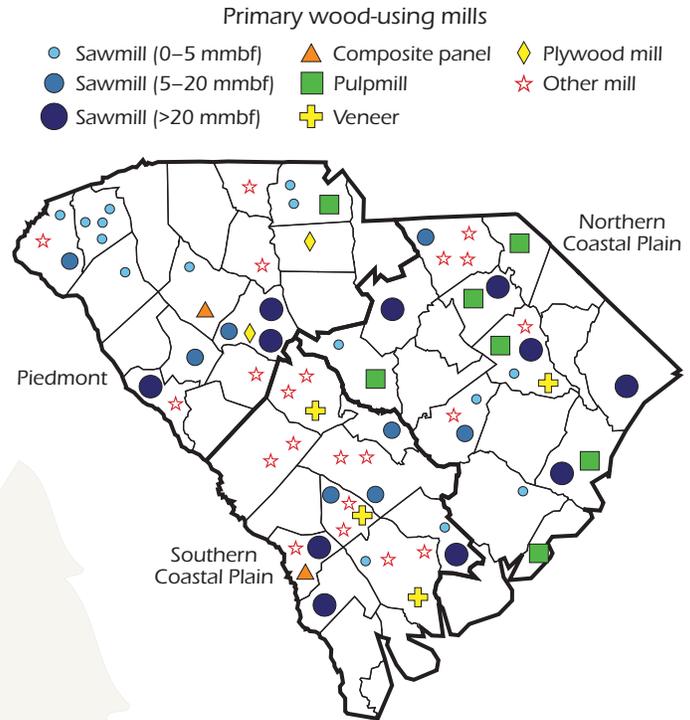


Figure 3—Primary wood-using mills by region, South Carolina, 2011.

## Pulpwood

- Total pulpwood production increased 13 percent to 382.0 million cubic feet but accounted for 59 percent of the State’s total roundwood TPO compared to 60 percent of total TPO in 2009. Softwood output was up to 305.1 million cubic feet; hardwood output increased as well to 76.9 million cubic feet (fig. 4). These were increases from 2009 numbers of 15 percent and 5 percent, respectively.

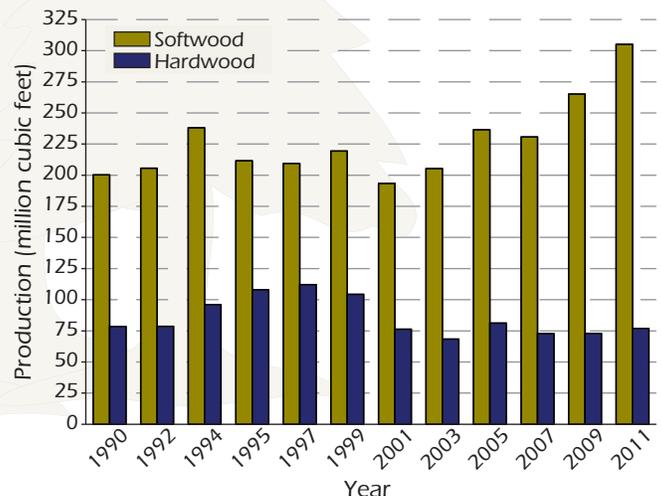


Figure 4—Roundwood pulpwood production by species group and year, South Carolina.



- Seven pulpmill facilities were operating and receiving roundwood in South Carolina in 2011, the same since 1999. Total pulpwood receipts for these mills increased to 360.2 million cubic feet, accounting for 58 percent of total receipts for all mills.
- Eighty-four percent of roundwood cut for pulpwood was retained for processing at South Carolina pulp mills. Roundwood pulpwood accounted for 76 percent of total known exports and 71 percent of total imports.

### Saw Logs

- Saw logs accounted for 26 percent of the State’s total roundwood products. Output of softwood saw logs was up 17 percent to 157.3 million cubic feet, while hardwood saw logs increased <1 percent to 14.4 million cubic feet (fig. 5).

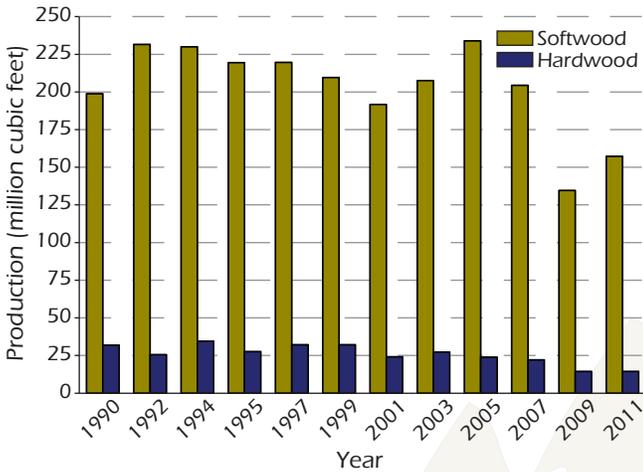


Figure 5—Roundwood saw-log production by species group and year, South Carolina.

- In 2011, South Carolina had 34 sawmills, 5 fewer mills than in 2009. Total saw-log receipts were up 20.3 million cubic feet to 159.8 million cubic feet. Softwood saw-log receipts increased 16 percent to 151.3 million cubic feet, while those of hardwoods dropped 10 percent to 8.5 million cubic feet.
- South Carolina retained 89 percent of its saw-log production for within-State manufacture, with saw-log exports exceeding imports by 11.9 million cubic feet in 2011.

### Veneer Logs

- Output of veneer logs in 2011 totaled 30.2 million cubic feet, a 9-percent increase since 2009, and accounted for 5 percent of the State’s total roundwood TPO volume (fig. 6).
- The number of veneer mills operating in South Carolina remained stable at six for 2011. Receipts of veneer logs dropped 1 percent to 31.6 million cubic feet.

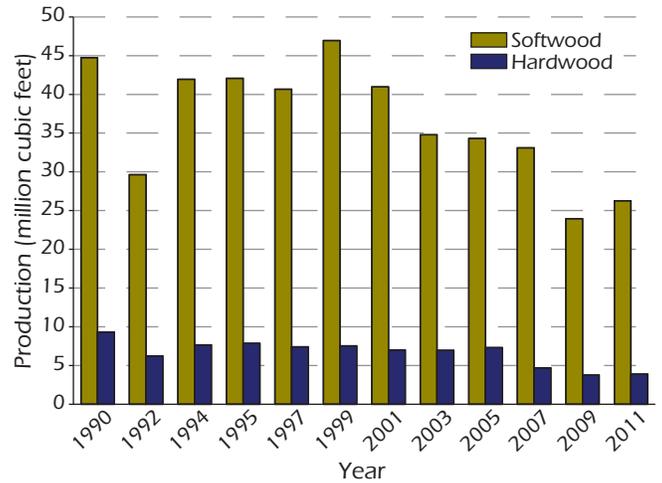


Figure 6—Roundwood veneer-log production by species group and year, South Carolina.

### Other Industrial Products

- Roundwood harvested for other industrial uses such as poles, posts, mulch, residential firewood, industrial fuel, logs for log homes, composite panels, and all other industrial products totaled 62.3 million cubic feet. Softwood made up 98 percent of the other industrial products volume.
- The number of plants producing other industrial products totaled 23 in 2011. Total receipts of other industrial products increased 29 percent to 70.3 million cubic feet. Industrial fuel accounted for 9.4 million cubic feet, or 13 percent, of receipt volume for this category.

### Plant Byproducts

- In 2011, processing of primary products in South Carolina mills generated 152.0 million cubic feet of wood and bark residues. Coarse residues from all primary products amounted to 51.2 million cubic feet, while bark volume totaled 54.6 million cubic feet. Collectively, sawdust and shavings made up 30 percent of total residues, or 46.2 million cubic feet (fig. 7).

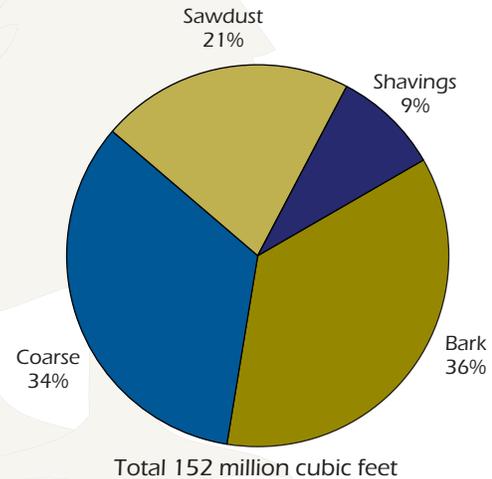


Figure 7—Primary mill residue by residue type, South Carolina, 2011.



- The processing of saw logs generated 95.3 million cubic feet of mill residues, accounting for 63 percent of the total residues produced (fig. 8).

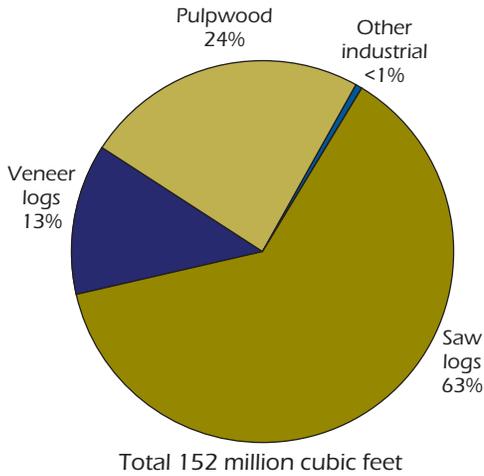


Figure 8—Primary mill residue produced by roundwood type, South Carolina, 2011.

- Nearly 100 percent, or 151.7 million cubic feet, of the wood and bark residues were used for a product. While <1 percent of the residues were not used for a product, 52 percent of the residues were used for industrial fuel and 30 percent were used for fiber products (fig. 9). Nearly 43.1 million cubic feet, or 84 percent, of the coarse residues were used for fiber products. Eighty-five percent of the bark was used for industrial fuel, while 65 percent of the sawdust and shavings were used for industrial fuel.

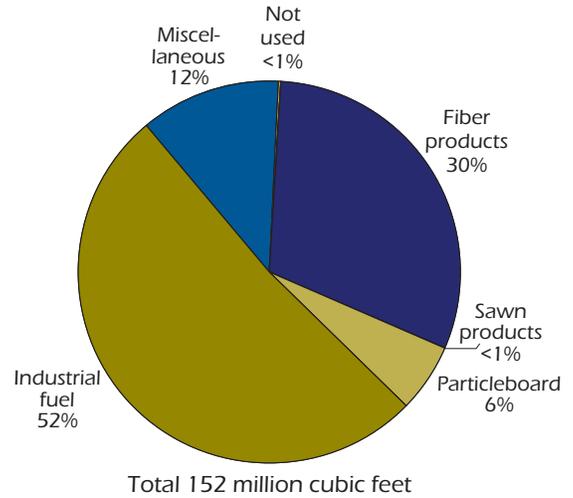


Figure 9—Disposal of residue by product, South Carolina, 2011.



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Load of pulp logs headed to pulpmill. (photo by James Bentley)

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