



South Carolina's Timber Industry—Timber Product Output and Use, 2013

Introduction

This science update contains the findings of a 2013 canvass of all primary wood-using plants in South Carolina, and presents changes in product output and residue use since 2011. 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 2013 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 2014 to obtain information for 2013. 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 used to update the current survey. 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 Excel® core tables and figures that complement this science update are available on the TPO database. The system is available through the FIA Web site: <https://srsfia2.fs.fed.us/>.

The SRS 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.

Table 1—Output of industrial products by product and species

Product and species group	Year		Change	Change
	2011	2013		
---- thousand cubic feet ----				
percent				
Saw logs				
Softwood	156,787	188,715	31,928	20.4
Hardwood	15,405	20,572	5,167	33.5
Total	172,192	209,287	37,095	21.5
Veneer logs				
Softwood	26,394	30,598	4,204	15.9
Hardwood	3,809	2,818	-991	-26.0
Total	30,203	33,416	3,213	10.6
Pulpwood				
Softwood	306,233	279,860	-26,373	-8.6
Hardwood	78,276	63,397	-14,879	-19.0
Total	384,509	343,257	-41,252	-10.7
Composite panels				
Softwood	0	60,850	60,850	100.0
Hardwood	0	200	200	100.0
Total	0	61,050	61,050	100.0
Posts, poles & pilings				
Softwood	5,806	10,305	4,499	77.5
Hardwood	0	0	0	0.0
Total	5,806	10,305	4,499	77.5
Other industrial				
Softwood	55,976	17,439	-38,537	-68.8
Hardwood	1,304	3,565	2,261	173.4
Total	57,280	21,004	-36,276	-63.3
All industrial				
Softwood	551,196	587,767	36,571	6.6
Hardwood	98,794	90,552	-8,242	-8.3
Total	649,990	678,319	28,329	4.4

All Products

Industrial timber product output from roundwood increased 28.3 million cubic feet, or 4 percent, to 678.3 million cubic feet.

Output of industrial softwood roundwood products was up 7 percent, to 587.8 million cubic feet, while output of industrial hardwood roundwood products decreased 8 percent to 90.6 million cubic feet (fig. 1).

Pulpwood and saw logs were the principal roundwood products in 2013. Combined output of these two products totaled 552.5 million cubic feet and accounted for 81 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, were up 6 percent from 623.6 million cubic feet to 661.7 million cubic feet.

At the same time, the number of primary roundwood-using plants in South Carolina increased from 69 in 2011 to 85 in 2013 (fig. 3). The number of sawmills increased by 6, veneer decreased by 2, composite panel mills increased by 1, post, pole and piling mills increased by 1, miscellaneous mills increased by 4 and pulpmills remained stable at 7.

Across all products, 88 percent of roundwood harvested was retained for processing at South Carolina mills. Exports of roundwood to other States amounted to 79.6 million cubic feet, while imports of roundwood amounted to 63.0 million cubic feet making the State a net exporter of roundwood.

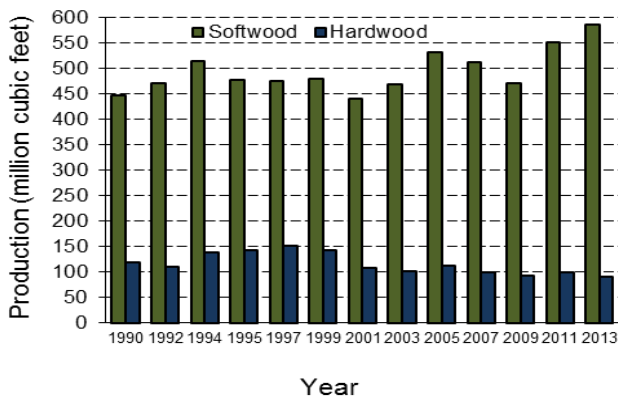


Figure 1—Roundwood production for all product by species group and year, South Carolina.

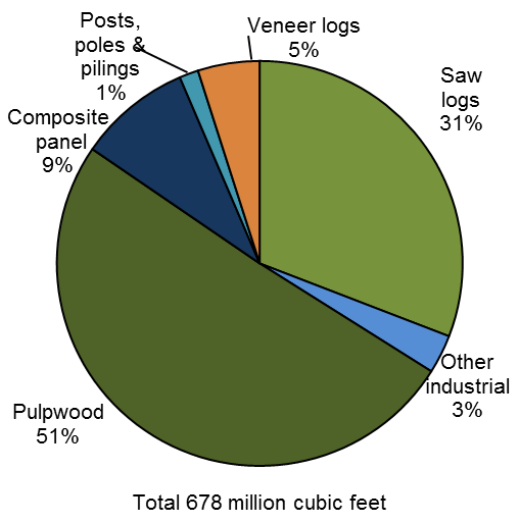


Figure 2—Roundwood production by type of product, South Carolina, 2013.

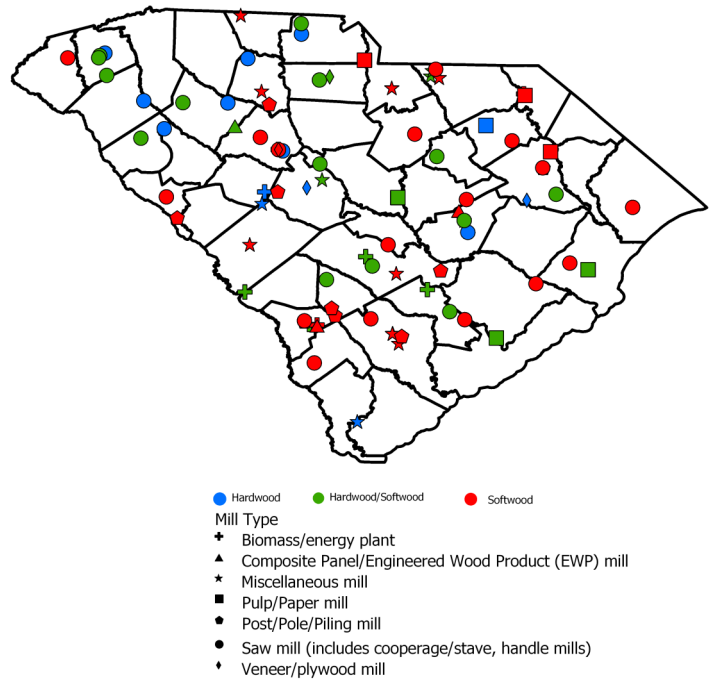


Figure 3— Primary wood-using mills, South Carolina, 2013.

Pulpwood

Total pulpwood production decreased 11 percent to 343.3 million cubic feet but accounted for 51 percent of the State’s total roundwood TPO compared to 59 percent of total TPO in 2011. Softwood output was down to 279.9 million cubic feet; hardwood output decreased as well to 63.4 million cubic feet (fig. 4). These were decreases from 2011 numbers of 9 percent and 19 percent, respectively.

Seven pulpmill facilities were operating and receiving roundwood in South Carolina in 2013, the same since 1999. Total pulpwood receipts for these mills decreased to 327.5 million cubic feet, accounting for 49 percent of total receipts for all mills.

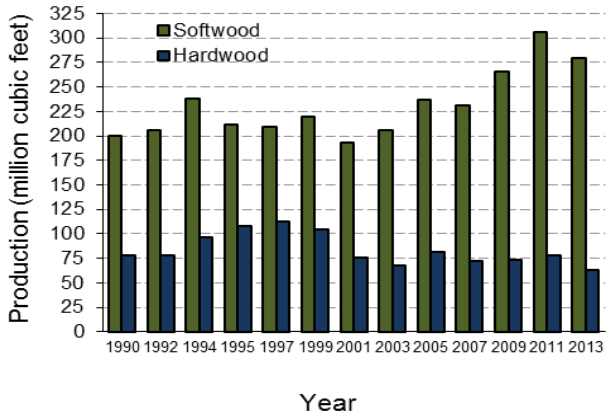


Figure 4—Roundwood pulpwood production by species group and year, South Carolina.

Eighty-four percent of roundwood cut for pulpwood was retained for processing at South Carolina pulp mills. Roundwood pulpwood accounted for 69 percent of total known exports and 62 percent of total imports.

Saw Logs

Saw logs accounted for 31 percent of the State’s total roundwood products. Output of softwood saw logs was up 20 percent to 188.7

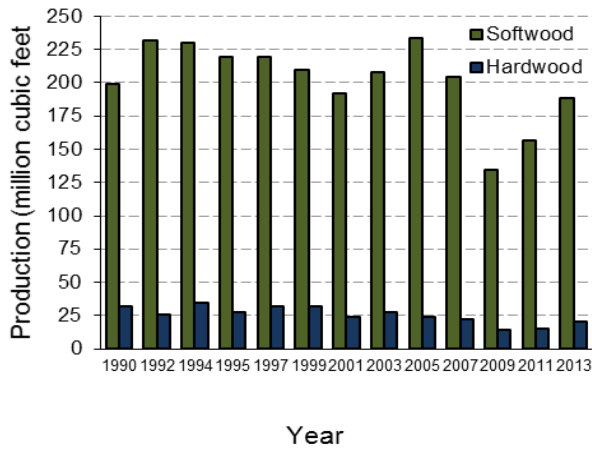


Figure 5—Roundwood saw-log production by species group and year, South Carolina.

million cubic feet, while that of hardwood saw logs increased 34 percent to 20.6 million cubic feet (fig. 5).

In 2013, South Carolina had 39 sawmills, 6 more mills than in 2011. Total saw-log receipts were up 39.6 million cubic feet to 199.7 million cubic feet. Softwood saw-log receipts increased 25 percent to 189.0 million cubic feet, while those of hardwoods were up 15 percent to 10.7 million cubic feet.

South Carolina retained 89 percent of its saw-log production for within State manufacture, with saw-log exports exceeding imports by 9.6 million cubic feet in 2013.

Veneer Logs

Output of veneer logs in 2013 totaled 33.4 million cubic feet, an 11 percent increase since 2011, and accounted for 5 percent of the State’s total roundwood TPO volume (fig. 6).

The number of veneer mills operating in South Carolina decreased to 4 for 2013. Receipts of veneer logs increased 6 percent to 33.7 million cubic feet.

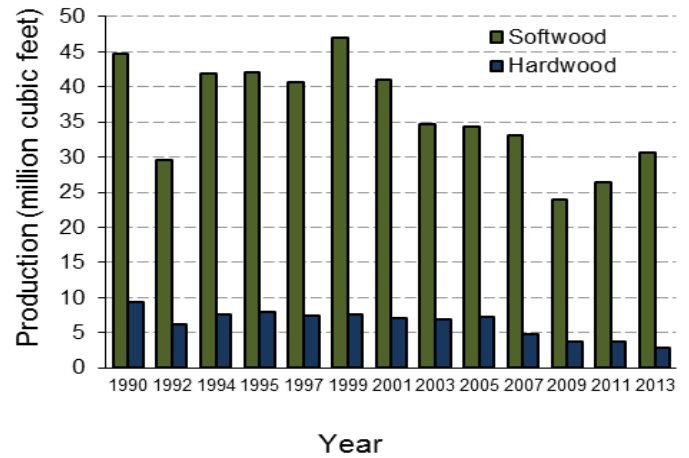


Figure 6—Roundwood veneer-log production by species group and year, South Carolina.

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 92.4 million cubic feet. Softwood made up 96 percent of the other industrial products volume.

The number of plants producing other industrial products totaled 32 in 2013. Combined receipts of other industrial products from softwood and hardwood increased 41 percent to 100.8 million cubic feet. Industrial fuel accounted for 21.2 million cubic feet, or 21 percent, of receipt volume for this category.

Plant Byproducts

In 2013, processing of primary products in South Carolina mills generated 173.7 million cubic feet of wood and bark residues. Coarse residues from all primary products amounted to 61.9 million cubic feet, while bark volume totaled 60.7 million cubic feet. Collectively, sawdust and shavings made up 29 percent of total residues, or 51.1 million cubic feet (fig. 7).

The processing of saw logs generated 118.5 million cubic feet of mill residues, accounting for 68 percent of the total residues produced (fig. 8).

Nearly 100 percent, or 173.5 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, 49 percent of the residues were used for industrial fuel, and 42 percent were used for fiber products (fig. 9). Eighty-five percent of residue used for industrial fuel was used onsite, and 15 percent was used at other plants. Nearly 57.0 million cubic feet, or 92 percent, of the coarse residues were used for fiber products. Eighty-two percent of the bark was used for industrial fuel, while 65 percent of the sawdust and shavings were used for industrial fuel.

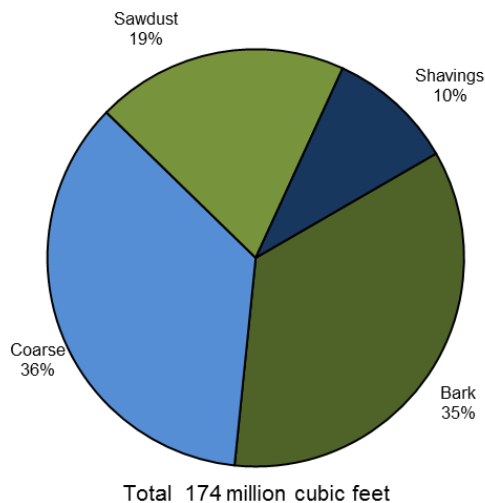


Figure 7—Primary mill residue by residue type, South Carolina, 2013.

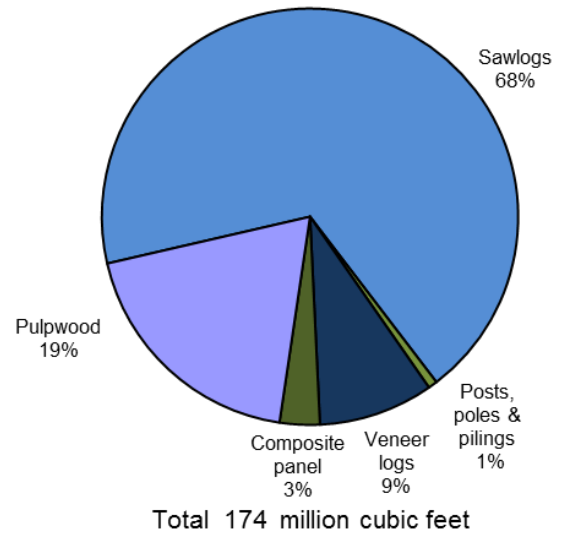


Figure 8—Primary mill residue produced by roundwood type, South Carolina, 2013.

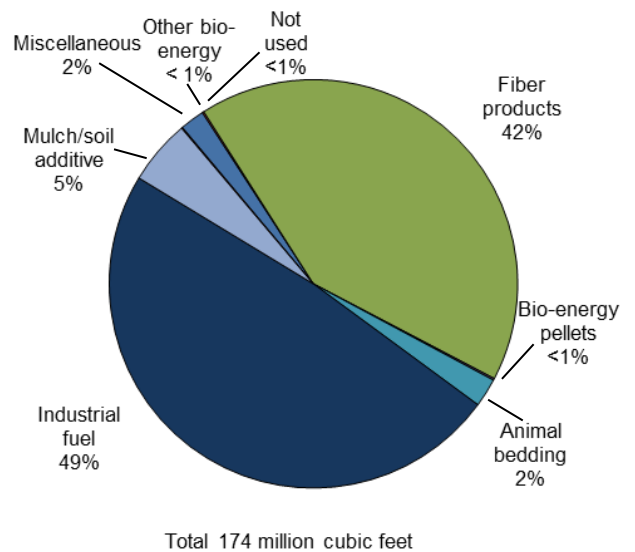


Figure 9—Disposal of residue by product, South Carolina, 2013.

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