

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

FOREST INVENTORY & ANALYSIS FACTSHEET

*James W. Bentley, Jason A. Cooper, and Michael Howell*

## Introduction

This science update contains the findings of a 2011 canvass of all primary wood-using plants in Virginia, 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 Virginia 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 Virginia timberland was incorporated into Virginia 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 1965, 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 Virginia Department of Forestry in collecting mill data. Appreciation is also extended to forest industry and mill managers for providing timber products information.



Woodyard for chipmill in Virginia. (photo by Charlie Becker, Virginia Department of Forestry)





## All Products

- Industrial timber product output from roundwood increased 39.5 million cubic feet, or 10 percent, to 441.9 million cubic feet.
- Output of industrial softwood roundwood products was up 10 percent, to 247.7 million cubic feet, while output of industrial hardwood roundwood products increased 9 percent to 194.3 million cubic feet (fig. 1).
- Pulpwood and saw logs were the principal roundwood products in 2011. Combined output of these two products totaled 375.9 million cubic feet and accounted for 85 percent of the State's total industrial roundwood output (fig. 2).
- Total receipts at Virginia mills, which included roundwood harvested and retained in the State and

roundwood imported from other States, was up 3 percent from 397.9 million cubic feet to 411.0 million cubic feet.

- At the same time, the number of primary roundwood-using plants in Virginia declined from 151 in 2009 to 123 in 2011 (fig. 3).

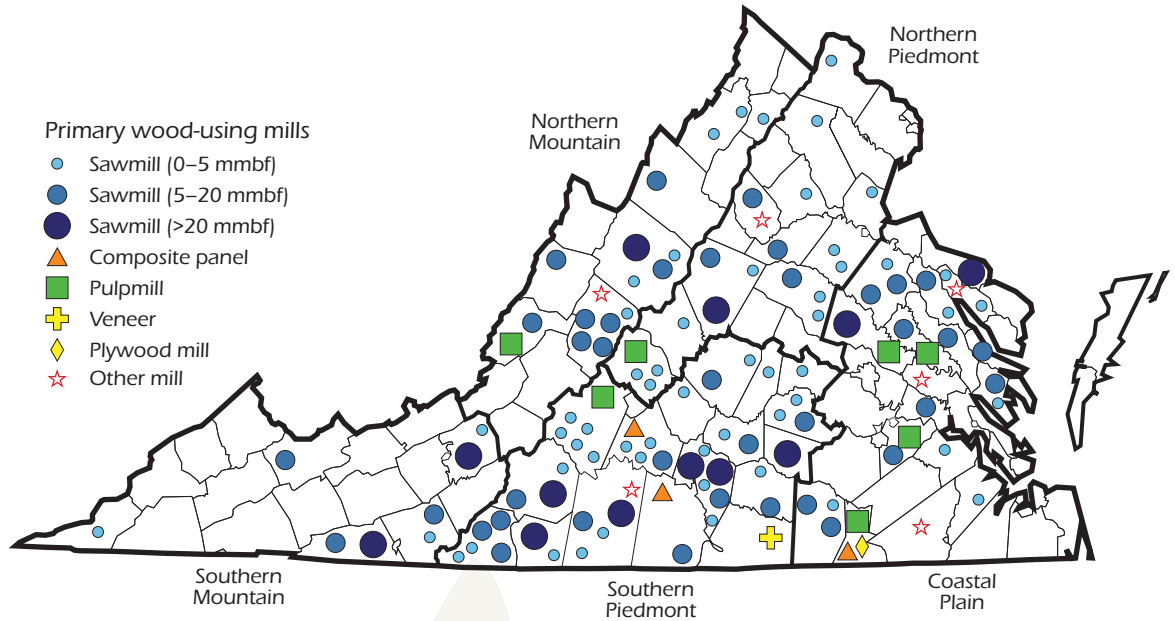


Figure 3—Primary wood-using mills by region, Virginia, 2011.

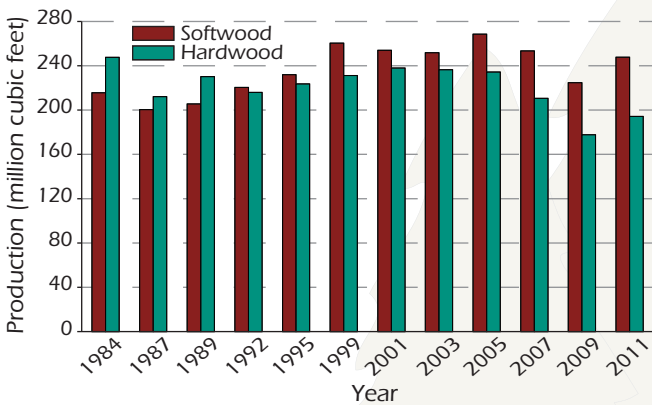


Figure 1—Roundwood production for all products by species group and year, Virginia.

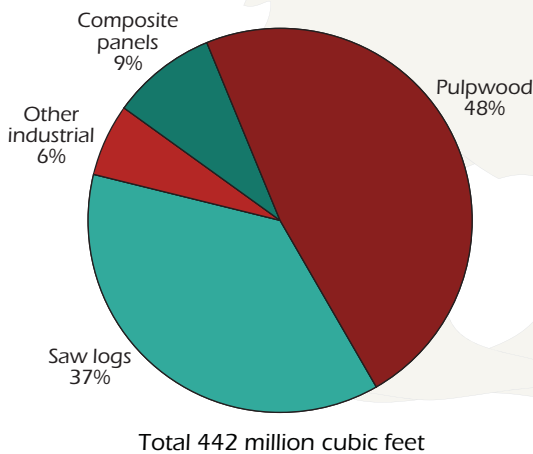


Figure 2—Roundwood production by type of product, Virginia, 2011.

- Across all products, 80 percent of roundwood harvested was retained for processing at Virginia mills. Exports of roundwood to other States amounted to 88.0 million cubic feet, while imports of roundwood amounted to 57.1 million cubic feet, making the State a net exporter of roundwood.

## Pulpwood

- Total pulpwood production increased 34 percent to 211.6 million cubic feet and accounted for 48 percent of the State's total roundwood TPO compared to 39 percent of total TPO in 2009. Softwood output was up to 122.1 million cubic feet; hardwood output increased as well to 89.5 million cubic feet (fig. 4). These were increases from 2009 numbers of 42 percent and 24 percent, respectively.
- Seven pulpmill facilities were operating and receiving roundwood in Virginia in 2011, one less than in 2009. Total pulpwood receipts for these mills increased to 186.0 million cubic feet, accounting for 45 percent of total receipts for all mills.
- Seventy-six percent of roundwood cut for pulpwood was retained for processing at Virginia pulpmills. Roundwood pulpwood accounted for 58 percent of total known exports and 45 percent of total imports.

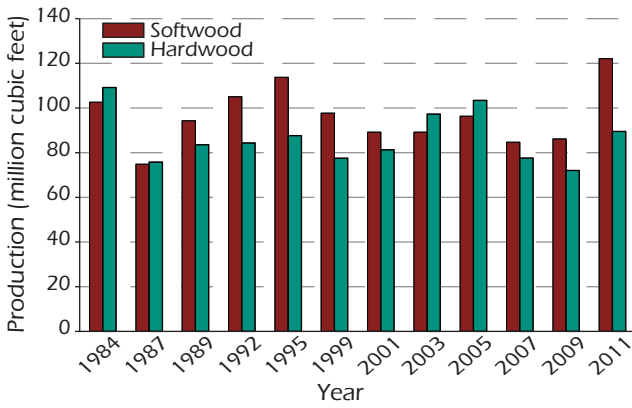


Figure 4—Roundwood pulpwood production by species group and year, Virginia.

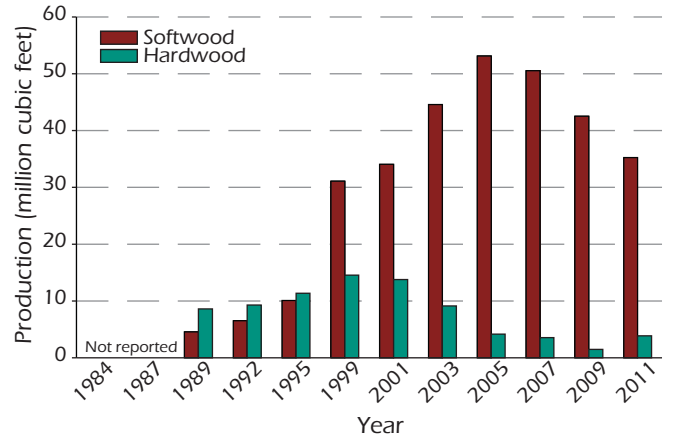


Figure 6—Roundwood production for composite panels by species group and year, Virginia.

### Saw Logs

- Saw logs accounted for 37 percent of the State’s total roundwood products. Output of softwood saw logs decreased 8 percent to 76.4 million cubic feet, while that of hardwood saw logs dropped 4 percent to 87.9 million cubic feet (fig. 5).
- In 2011, Virginia had 105 sawmills, 24 fewer mills than in 2009. Total saw-log receipts declined 7.6 million cubic feet to 146.0 million cubic feet. Softwood saw-log receipts decreased 9 percent to 68.2 million cubic feet, while those of hardwoods dropped 2 percent to 77.8 million cubic feet.
- Virginia retained 82 percent of its saw-log production for within-State manufacture, with saw-log exports exceeding imports by 18.3 million cubic feet in 2011.

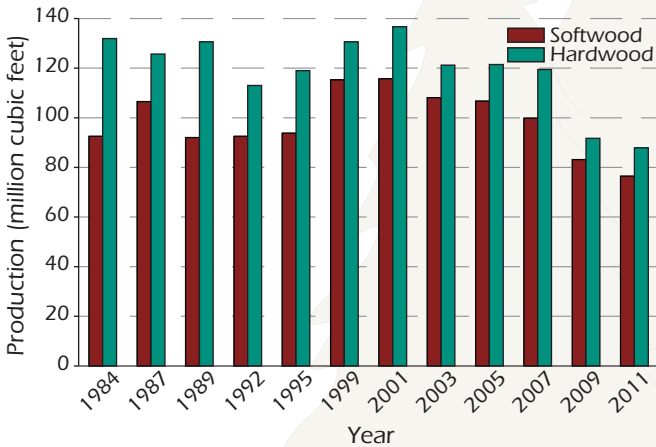


Figure 5—Roundwood saw-log production by species group and year, Virginia.

### Other Industrial Products

- Roundwood harvested for other industrial uses such as poles, posts, mulch, veneer logs, industrial fuel, logs for log homes, and all other industrial products totaled 26.9 million cubic feet. Softwood made up 52 percent of the other industrial products volume.
- The number of plants producing other industrial products totaled eight in 2011. Combined receipts of other industrial products from softwood and hardwood increased 8 percent to 37.1 million cubic feet. Industrial fuel accounted for 16.7 million cubic feet, or 45 percent, of receipt volume for this category.

### Plant Byproducts

- In 2011, processing of primary products in Virginia mills generated 126.8 million cubic feet of wood and bark residues. Coarse residues from all primary products amounted to 51.6 million cubic feet, while bark volume totaled 38.7 million cubic feet. Collectively, sawdust and shavings made up 28 percent of total residues, or 36.4 million cubic feet (fig. 7).

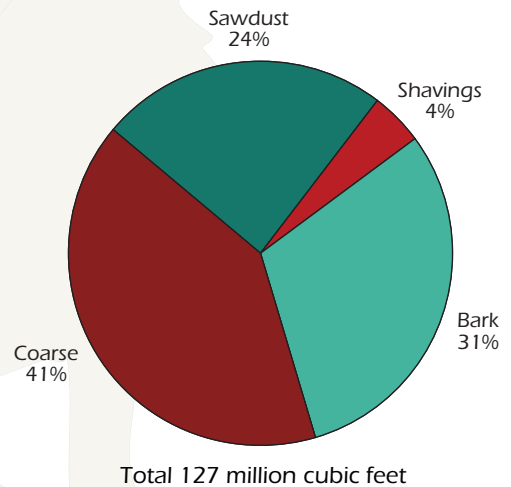


Figure 7—Primary mill residue by residue type, Virginia, 2011.

### Composite Panels

- Roundwood harvested from Virginia’s forests for composite panels fell 11 percent and totaled 39.1 million cubic feet. Softwood output was down 17 percent to 35.2 million cubic feet; hardwood production more than doubled to 3.9 million cubic feet (fig. 6).
- Three composite panel, or oriented strand board, mills were operating in Virginia in 2011, the same since 2001. Total receipts for these mills decreased 19 percent to 42.0 million cubic feet, and accounted for 10 percent of the State’s total receipts.



- The processing of saw logs generated 92.5 million cubic feet of mill residues, accounting for 73 percent of the total residues produced (fig. 8).

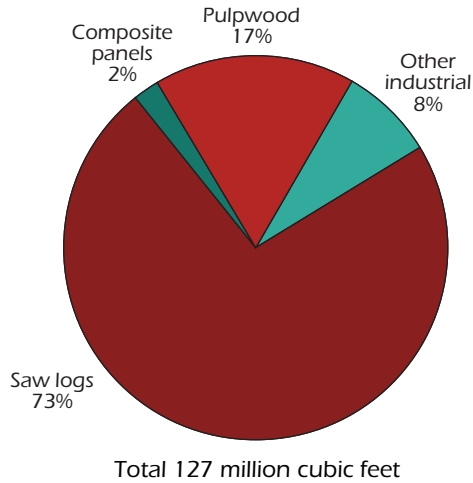


Figure 8—Primary mill residue produced by roundwood type, Virginia, 2011.

- Nearly 100 percent, or 126.5 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, 43 percent of the residues were used for industrial fuel and 32 percent were used for fiber products (fig. 9). Seventy-eight percent, or 40.1 million cubic feet, of the coarse residues were used for fiber products. Seventy-two percent of the bark and shavings were used for industrial fuel.

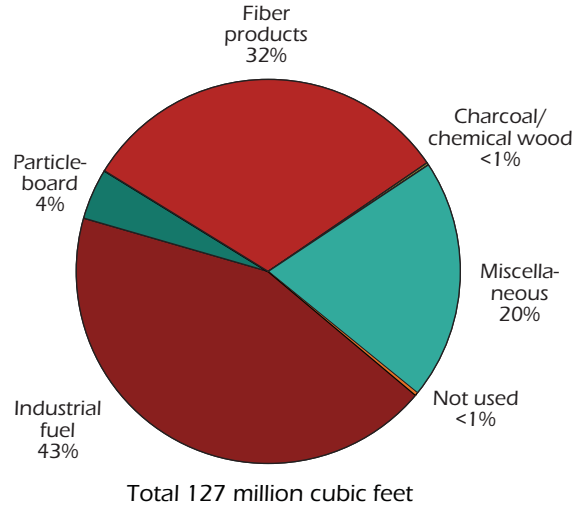


Figure 9—Disposal of residue by product, Virginia, 2011.



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

### Contact Information

**James W. Bentley, Forester**  
 Forest Inventory and Analysis  
 Southern Research Station,  
 USDA Forest Service  
 4700 Old Kingston Pike  
 Knoxville, TN 37919  
 Phone: 865-862-2056 / Fax: 865-862-2048  
 Email: [jamesbentley@fs.fed.us](mailto:jamesbentley@fs.fed.us)  
 Southern FIA: <http://srsfia2.fs.fed.us>  
 National FIA: <http://fia.fs.fed.us>

**Jason A. Cooper, Forester**  
 Forest Inventory and Analysis  
 Southern Research Station  
 USDA Forest Service  
 4700 Old Kingston Pike  
 Knoxville, TN 37919  
 Phone: 865-862-2009 / Fax: 865-862-2048  
 Email: [jasoncooper@fs.fed.us](mailto:jasoncooper@fs.fed.us)  
 Southern FIA: <http://srsfia2.fs.fed.us>  
 National FIA: <http://fia.fs.fed.us>

**Michael Howell, Forester**  
 Forest Inventory and Analysis  
 Southern Research Station  
 USDA Forest Service  
 4700 Old Kingston Pike  
 Knoxville, TN 37919  
 Phone: 865-862-2054 / Fax: 865-862-2048  
 Email: [mhowell@fs.fed.us](mailto:mhowell@fs.fed.us)  
 Southern FIA: <http://srsfia2.fs.fed.us>  
 National FIA: <http://fia.fs.fed.us>



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