Introduction

This science update contains the findings of a 2011 canvass of all primary wood-using plants in Alabama, 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 inter-state 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 Alabama 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 Alabama timberland was incorporated into Alabama 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 1961, 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 U.S. Department of Agriculture Forest Service developed the Timber Product Output (TPO) Database Retrieval System to help customers answer questions about timber harvesting and use in the Southern region. This system acts as an interface to a standard set of consistently coded TPO data for each State and county in the region and Nation. 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 Alabama Forestry Commission in collecting mill data. Appreciation is also extended to forest industry and mill managers for providing timber products information.
All Products

- Industrial timber product output from roundwood increased 157.0 million cubic feet, or 20 percent, to 960.3 million cubic feet.

- Output of industrial softwood roundwood products was up 23 percent, to 736.3 million cubic feet, while output of industrial hardwood roundwood products increased 9 percent to 224.0 million cubic feet (fig. 1).

- Across all products, 82 percent of roundwood harvested was retained for processing at Alabama mills. Exports of roundwood to other States amounted to 170.3 million cubic feet, while imports of roundwood amounted to 177.0 million cubic feet making the State a net importer of roundwood.

Pulpwood

- Total pulpwood production increased 16 percent to 599.5 million cubic feet but accounted for 63 percent of the State’s total industrial roundwood output (fig. 2).

- Pulpwood and saw logs were the principal roundwood products in 2011. Combined output of these two products totaled 868.4 million cubic feet and accounted for 91 percent of the State’s total industrial roundwood output (fig. 2).

- Total receipts at Alabama mills, which included roundwood harvested and retained in the State and roundwood imported from other States, was up 14 percent from 847.6 million cubic feet to 967.0 million cubic feet.

- At the same time, the number of primary roundwood-using plants in Alabama declined from 120 in 2009 to 115 in 2011 (fig. 3). The number of sawmills decreased by five, while the number of pulpmills, veneer, composite panel, and other miscellaneous mills remained stable.

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Pulpwood

- Total pulpwood production increased 16 percent to 599.5 million cubic feet but accounted for 63 percent of the State’s total roundwood TPO compared to 64 percent of total TPO in 2009. Softwood output was up to 437.8 million cubic feet; hardwood output increased as well to 161.8 million cubic feet (fig. 4). These were increases from 2009 numbers of 22 percent and 5 percent, respectively.

- Thirteen pulpmill facilities were operating and receiving roundwood in Alabama in 2011, the same as 2009. Total pulpwood receipts for these mills increased to 606.4 million cubic feet, accounting for 63 percent of total receipts for all mills.
• Seventy-nine percent of roundwood cut for pulpwood was retained for processing at Alabama pulpmills. Roundwood pulpwood accounted for 74 percent of total known exports and 75 percent of total imports.

**Saw Logs**

• Saw logs accounted for 28 percent of the State’s total roundwood products. Output of softwood saw logs increased 19 percent to 223.8 million cubic feet, while that of hardwood saw logs was up 12 percent to 45.0 million cubic feet (fig. 5).

• The number of veneer mills operating in Alabama remained stable at 12 for 2011. Receipts of veneer logs increased 50 percent to 33.1 million cubic feet. Softwood veneer log receipts increased 69 percent to 24.5 million cubic feet, while those of hardwoods were up 14 percent to 8.6 million cubic feet.

**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 49.5 million cubic feet. Softwood made-up 82 percent of the other industrial products volume.

• The number of plants producing other industrial products totaled 17 in 2011. Combined receipts of other industrial products from softwood and hardwood totaled 57.0 million cubic feet. Industrial fuel accounted for 30.6 million cubic feet, or 54 percent, of receipt volume for this category.

**Plant Byproducts**

• In 2011, processing of primary products in Alabama mills generated 276.5 million cubic feet of wood and bark residues. Coarse residues from all primary products amounted to 100.0 million cubic feet, while bark volume totaled 100.5 million cubic feet. Collectively, sawdust and shavings made-up 28 percent of total residues, or 76.0 million cubic feet (fig. 7).

• In 2011, Alabama had 73 sawmills, 5 fewer mills than in 2009. Total saw-log receipts were up 44.9 million cubic feet to 270.4 million cubic feet. Softwood saw-log receipts increased 21 percent to 227.3 million cubic feet, while those of hardwoods were up 14 percent to 43.1 million cubic feet.

• Alabama retained 88 percent of its saw-log production for within-State manufacture, with saw-log imports exceeding exports by 1.6 million cubic feet in 2011.

**Veneer Logs**

• Output of veneer logs in 2011 totaled 42.4 million cubic feet, a 46-percent increase since 2009, and accounted for 4 percent of the State’s total roundwood TPO volume. Output of softwood veneer logs increased 61 percent to 34.0 million cubic feet, while that of hardwood veneer logs was up 7 percent to 8.4 million cubic feet (fig. 6).
• The processing of saw logs generated 182.4 million cubic feet of mill residues, accounting for 66 percent of the total residues produced (fig. 8).

• Nearly 276.2 million cubic feet, or 100 percent, of the wood and bark residues were used for a product. While <1 percent of the residues were not used for a product, 56 percent of the residues were used for industrial fuel and 33 percent were used for fiber products (fig. 9). Eighty-eight percent, or 87.7 million cubic feet, of the coarse residues were used for fiber products. Ninety-four percent of the bark was used for industrial fuel, while 73 percent of the sawdust and shavings were used for industrial fuel.

How to Cite this Publication