Introduction

This science update contains the findings of a 2013 canvass of all primary wood-using plants in Georgia, 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 Georgia 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 Georgia timberland was incorporated into Georgia 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 Forest Inventory and Analysis (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: https://srsfia2.fs.fed.us/. The Excel® core tables and figures that complement this science update are available on the TPO database.

The SRS gratefully acknowledges the tremendous cooperation and assistance provided by the Georgia Forestry Commission in collecting mill data. Appreciation is also extended to forest industry and mill managers for providing timber products information.

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<th>Table 1—Output of industrial products by product and species group, Georgia, 2011 and 2013</th>
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<td><strong>Product and species group</strong></td>
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All Products

Industrial timber product output from roundwood decreased 6.7 million cubic feet, or <1 percent, to 1.21 billion cubic feet.

Output of industrial softwood roundwood products increased 1 percent, at 1.04 billion cubic feet, while output of industrial hardwood roundwood products decreased 9.7 percent to 163.3 million cubic feet (fig. 1).

Pulpwood and saw logs were the principal roundwood products in 2013. Combined output of these two products totaled 971.9 million cubic feet and accounted for 81 percent of the State's total industrial roundwood output (fig. 2).

Total receipts at Georgia mills, which included roundwood harvested and retained in the State and roundwood imported from other States, experienced no change at 1.22 billion cubic feet. At the same time, the number of primary roundwood-using plants in Georgia increased from 151 in 2011 to 164 in 2013 (fig. 3). The number of sawmills increased by 4, pulpmills, veneer, and composite panel mills remain stable, and other miscellaneous mills increased by 9.

Across all products, 87 percent of roundwood harvested was retained for processing at Georgia mills. Exports of roundwood to other States amounted to 161.8 million cubic feet, while imports of roundwood amounted to 173.1 million cubic feet making the State a net importer of roundwood.

Pulpwood

Total pulpwood production declined 13 percent to 607.9 million cubic feet, but accounted for 50 percent of the State's total roundwood TPO compared to 58 percent of total TPO in 2011. Softwood output was down to 508.1 million cubic feet; hardwood output decreased as well to 99.8 million cubic feet (fig. 4). These were decreases from 2011 numbers of 13.4 percent and 13 percent, respectively.

Twelve pulpmill facilities were operating and receiving roundwood in Georgia in 2012, the same since 2003. Total pulpwood receipts for these mills decreased to 607.6 million cubic feet, accounting for 50 percent of total receipts for all mills.
Eighty-one percent of roundwood cut for pulpwood was retained for processing at Georgia pulpmills. Roundwood pulpwood accounted for 71 percent of total known exports and 66 percent of total imports.

**Saw Logs**

Saw logs accounted for 30 percent of the State's total roundwood products. Output of softwood saw logs increased 12 percent to 310 million cubic feet, while that of hardwood saw logs decreased 4 percent to 54 million cubic feet (fig. 5).

In 2013, Georgia had 94 sawmills, 4 more mills than in 2011. Total saw-log receipts were up 26 million cubic feet to 372.6 million cubic feet. Softwood saw-log receipts increased 10 percent to 314.8 million cubic feet, while those of hardwoods decreased 5 percent to 57.9 million cubic feet.

Georgia retained 93 percent of its saw-log production for within State manufacture, with saw-log imports exceeding exports by 8.7 million cubic feet in 2013.

**Veneer Logs**

Output of veneer logs in 2013 totaled 43.3 million cubic feet, 11 percent increase since 2011, and accounted for 3.6 percent of the State's total roundwood TPO volume (fig. 6).

The number of veneer mills operating in Georgia decreased by one at 5 for 2013. Receipts of veneer logs increased 3 percent to 41.8 million cubic feet.

**Composite Panels**

Roundwood harvested from Georgia’s forests for composite panels increased 44 percent and totaled 74.2 million cubic feet. Softwood output was up 47 percent to 74.2 million cubic feet. (fig. 7).

Four composite panel, or oriented strand board, mills were operating in Georgia in 2013, up from 3 in 2011. Total receipts for these mills increased 55 percent to 80.2 million cubic feet, and accounted for 7 percent of the state’s total receipts.
Other Industrial Products

Roundwood harvested for other industrial uses such as poles, posts, mulch, residential firewood, industrial fuel, logs for log homes, and all other industrial products totaled 117.8 million cubic feet. Softwood made up 94 percent of the other industrial products volume.

The number of plants producing other industrial products totaled 49 in 2013. Combined receipts of other industrial products from softwood and hardwood increased 34 percent to 116.3 million cubic feet. Industrial fuel accounted for 79.8 million cubic feet, or 69 percent, of receipt volume for this category.

Plant Byproducts

In 2013, processing of primary products in Georgia mills generated 356.0 million cubic feet of wood and bark residues. Coarse residues from all primary products amounted to 137 million cubic feet, while bark volume totaled 115.6 million cubic feet. Collectively, sawdust and shavings made up 30 percent of total residues, or 76.9 million cubic feet (fig. 8).

The processing of saw logs generated 251 million cubic feet of mill residues, accounting for 71 percent of the total residues produced (fig. 9).

Nearly 356.0 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, 41 percent of the residues were used for industrial fuel and 41 percent were used for fiber products (fig. 10). More than 120.6 million cubic feet, or 93 percent, of the coarse residues were used for fiber products. Eighty percent of the bark was used for industrial fuel, while 56 percent of the sawdust and shavings were used for industrial fuel.

Figure 8—Primary mill residue by type, Georgia, 2013.

Figure 9—Primary mill residue produced by mill roundwood type, Georgia, 2013.

Figure 10—Disposal of residue by product, Georgia, 2013.