Introduction

This science update contains the findings of a 2011 canvass of all primary wood-using plants in Arkansas 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 Arkansas 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 Arkansas timberland was incorporated into Arkansas 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 1948, 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 Arkansas 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 52.0 million cubic feet, or 11 percent, to 541.5 million cubic feet.

- Output of industrial softwood roundwood products was up 13 percent to 409.2 million cubic feet, while output of industrial hardwood roundwood products increased 4 percent to 132.3 million cubic feet (fig. 1).

- Pulpwood and saw logs were the principal roundwood products in 2011. Combined output of these two products totaled 471.7 million cubic feet and accounted for 87 percent of the State’s total industrial roundwood output (fig. 2).

- Total receipts at Arkansas mills, which included roundwood harvested and retained in the State and roundwood imported from other States, was up 8 percent from 547.5 million cubic feet to 589.0 million cubic feet.

- The number of primary roundwood-using plants in Arkansas increased from 90 in 2009 to 95 in 2011 (fig. 3).

- Across all products, 89 percent of roundwood harvested was retained for processing at Arkansas mills. Exports of roundwood to other States amounted to 60.9 million cubic feet, while imports of roundwood amounted to 108.4 million cubic feet making the State a net importer of roundwood.

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

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

Saw Logs

- Saw logs accounted for 41 percent of the State’s total roundwood products. Output of softwood saw logs increased 6 percent to 179.4 million cubic feet, while that of hardwood saw logs dropped 8 percent to 42.0 million cubic feet (fig. 4).
• In 2011, Arkansas had 79 sawmills, 4 more mills than in 2009. Total saw-log receipts were up 3 percent to 237.3 million cubic feet. Softwood saw-log receipts increased 4 percent to 196.4 million cubic feet, while those of hardwoods dropped 5 percent to 40.9 million cubic feet.

• Arkansas retained 97 percent of its saw-log production for within-State manufacture, with saw-log imports exceeding exports by 15.9 million cubic feet in 2011.

Pulpwood

• Total pulpwood production increased 17 percent to 250.3 million cubic feet but accounted for 46 percent of the State’s total roundwood TPO compared to 44 percent of total TPO in 2009. Softwood output was up to 160.9 million cubic feet; hardwood output increased as well to 89.3 million cubic feet (fig. 5). These were increases from 2009 numbers of 21 percent and 10 percent, respectively.

Pulpwood

• Total pulpwood production increased 17 percent to 250.3 million cubic feet but accounted for 46 percent of the State’s total roundwood TPO compared to 44 percent of total TPO in 2009. Softwood output was up to 160.9 million cubic feet; hardwood output increased as well to 89.3 million cubic feet (fig. 5). These were increases from 2009 numbers of 21 percent and 10 percent, respectively.

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 22.1 million cubic feet. Softwood made up all of the other industrial products volume.

• The number of plants producing other industrial products totaled six in 2011. Receipts of other industrial products totaled 20.6 million cubic feet.

Plant Byproducts

• In 2011, processing of primary products in Arkansas mills generated 224.7 million cubic feet of wood and bark residues. Coarse residues from all primary products amounted to 96.4 million cubic feet, while bark volume totaled 56.0 million cubic feet. Collectively, sawdust and shavings made up 32 percent of total residues, or 72.3 million cubic feet (fig. 7).

Veneer Logs

• Output of veneer logs in 2011 totaled 47.6 million cubic feet, 8-percent increase since 2009, and accounted for 9 percent of the State’s total roundwood TPO volume (fig. 6).

• The number of veneer mills operating in Arkansas decreased one to four for 2011. Receipts of veneer logs increased 10 percent to 58.6 million cubic feet.
The processing of saw logs generated 160.3 million cubic feet of mill residues, accounting for 71 percent of the total residues produced (fig. 8).

Nearly 224.5 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, 53 percent of the residues were used for industrial fuel and 43 percent were used for fiber products (fig. 9). Ninety-three percent, or 89.7 million cubic feet, of the coarse residues were used for fiber products. Ninety-eight percent of the bark was used for industrial fuel, while 83 percent of the sawdust and shavings were used for industrial fuel.

### How to Cite this Publication