

Kentucky'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 Kentucky, 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 Kentucky 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 Kentucky timberland was incorporated into Kentucky 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 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 Kentucky Division of Forestry 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 group, Kentucky, 2011 and 2013.

Product and species group	Year		Change	Change
	2011	2013		
--- thousand cubic feet --- percent				
Saw logs				
Softwood	2,436	11,611	9,175	376.6
Hardwood	103,158	116,050	12,892	12.5
Total	105,594	127,661	22,067	20.9
Other industrial				
Softwood	4,094	3,480	-614	-15.0
Hardwood	34,083	21,205	-12,878	-37.8
Total	38,177	24,685	-13,492	-35.3
All industrial				
Softwood	6,530	15,091	8,561	131.1
Hardwood	137,241	137,255	14	0.0
Total	143,771	152,346	8,575	6.0

All Products

Industrial timber product output from roundwood increased 8.5 million cubic feet, or 6 percent, to 152.4 million cubic feet.

Output of industrial hardwood roundwood products had no significant change at 137.3 million cubic feet, while output of industrial softwood roundwood products increased 130 percent to 15.1 million cubic feet (fig. 1).

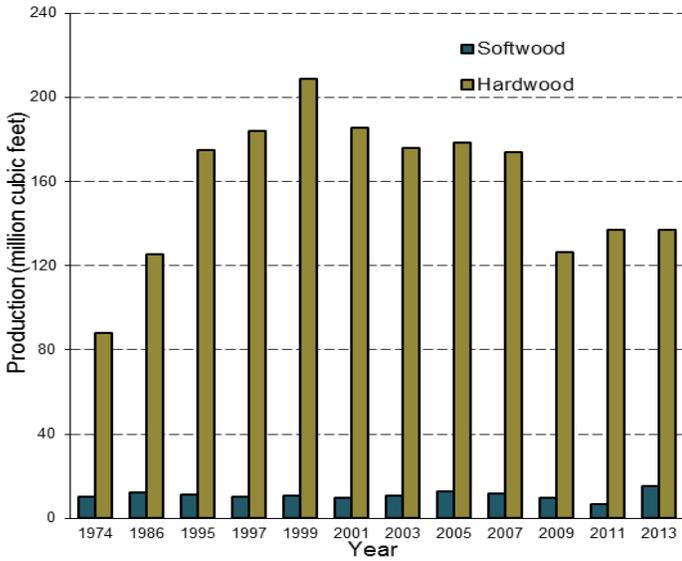


Figure 1 — Roundwood production for all products by species group and year, Kentucky, 2013.

Saw logs and the other industrial were the only roundwood products in 2013. Combined output of these two products totaled 152.3 million cubic feet and accounted for 100 percent of the State's total industrial roundwood output (fig. 2).

Total receipts at Kentucky mills, which included roundwood harvested and retained in the State and roundwood imported from other States, was up 10 percent from 174.8 million cubic feet to 191.8 million cubic feet.

In 2013, the number of primary roundwood-using plants in Kentucky was 219, down from 225 in 2011 (fig. 3). The number of sawmills decreased by 4, while the number of pulpmills, veneer, and composite panel remained stable and other miscellaneous mills decreased by 1.

Across all products, 93 percent of roundwood harvested was retained for processing at Kentucky mills. Exports of roundwood to other States amounted to 9.3 million cubic feet, while imports of roundwood amounted to 48.8 million cubic feet making the State a net importer of roundwood.

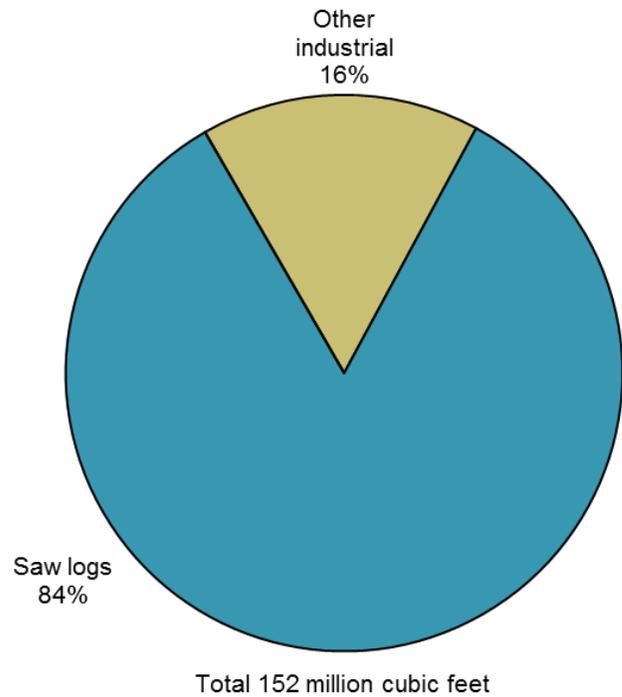


Figure 2 — Roundwood production by type of product, Kentucky, 2013.

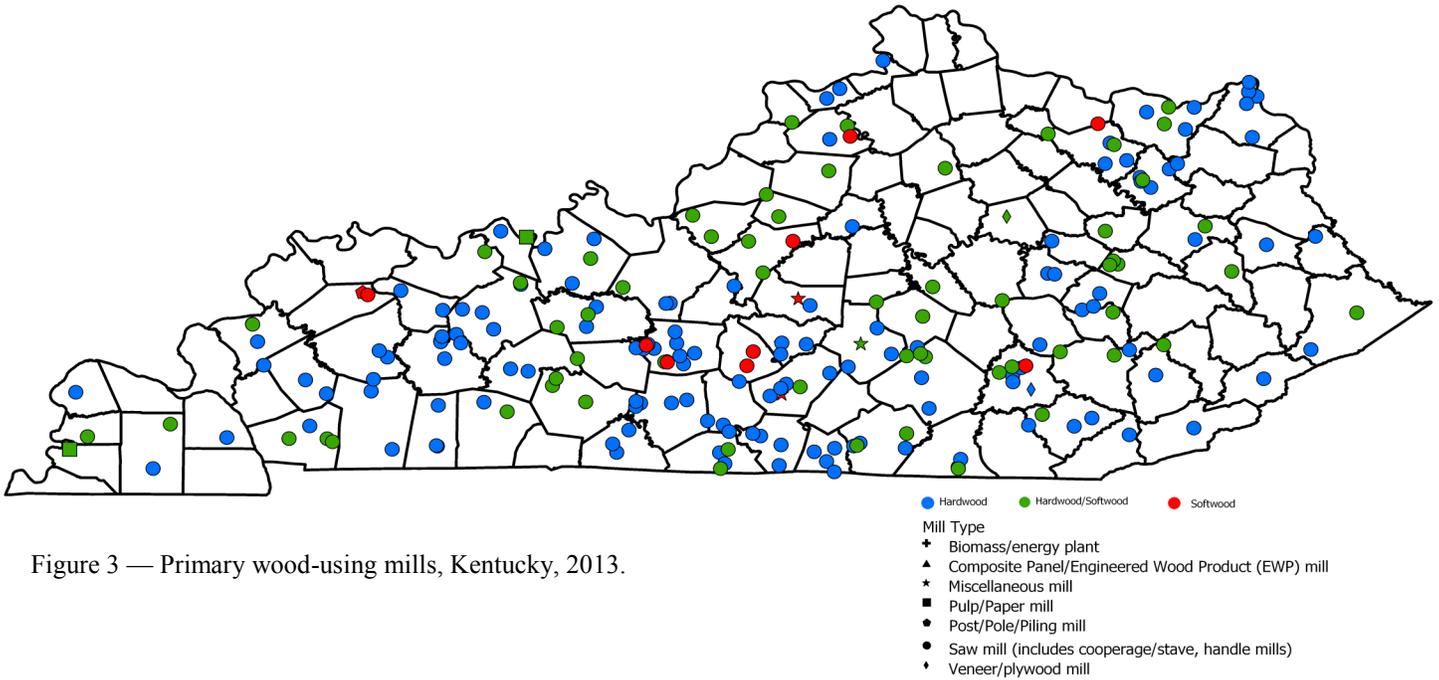


Figure 3 — Primary wood-using mills, Kentucky, 2013.

Saw Logs

Saw logs accounted for 84 percent of the State's total roundwood products. Output of hardwood saw logs increased 13 percent to 116.1 million cubic feet, while that of softwood saw logs increased 377 percent to 11.6 million cubic feet (fig. 4).

In 2013, Kentucky had 208 sawmills, 4 fewer mills than in 2011. Total saw-log receipts were up 26.3 million cubic feet to 137 million cubic feet. Hardwood saw-log receipts increased 15 percent to 124.4 million cubic feet, while those of softwoods declined 21 percent to 2.4 million cubic feet.

Kentucky retained 98 percent of its saw-log production for within State manufacture, with saw-log imports exceeding exports by 9.3 million cubic feet in 2013.

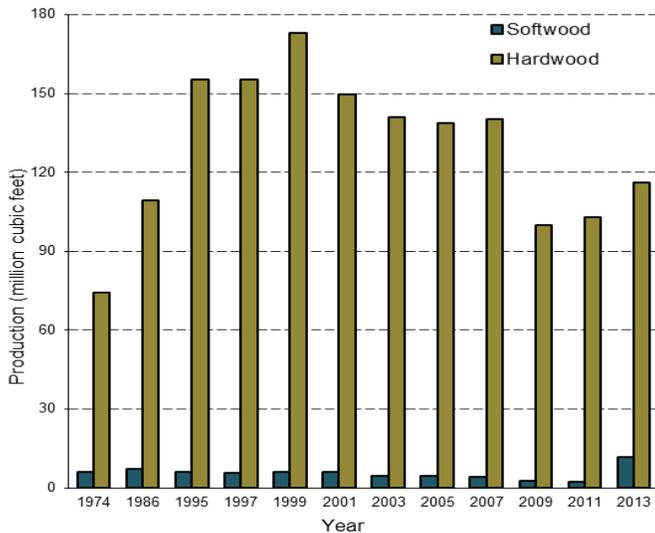


Figure 4 — Roundwood saw-log production by species group and year, Kentucky, 2013.

Other Industrial Products

Roundwood harvested for other industrial uses such as pulpwood, poles, posts, mulch, residential firewood, industrial fuel, logs for log homes, veneer, and all other industrial products totaled 24.7 million cubic feet. Hardwood made up 86 percent of the other industrial products volume.

The number of plants producing other industrial products totaled 11 in 2011. Combined receipts of other industrial and miscellaneous products from softwood and hardwood totaled 54.8 million cubic feet.

Plant Byproducts

In 2013, processing of primary products in Kentucky mills generated 84.1 million cubic feet of wood and bark residues. Coarse residues from all primary products amounted to 43.9 million cubic feet, while bark volume totaled 14.3 million cubic feet. Collectively, sawdust and shavings made up 31 percent of total residues, or 25.5 million cubic feet (fig. 5).

The processing of saw logs generated 80.2 million cubic feet of mill residues, accounting for 95 percent of the total residues produced (fig. 6).

Ninety-nine percent, or 78.3 million cubic feet, of the wood and bark residues were used for a product. While 2 percent of the residues were not used for a product, 22 percent of the residues were used for industrial fuel, 20 percent were used for charcoal/chemical wood, and 31 percent were used for fiber products (fig. 7). Forty-four percent, or 16.1 million cubic feet, of the coarse residues were used for fiber products. Forty-six percent of the bark was used for industrial fuel, while 48 percent of the sawdust and shavings were used for industrial fuel.

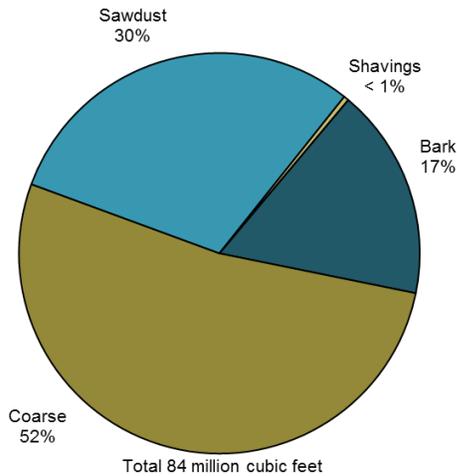


Figure 5 — Primary mill residue by residue type, Kentucky, 2013.

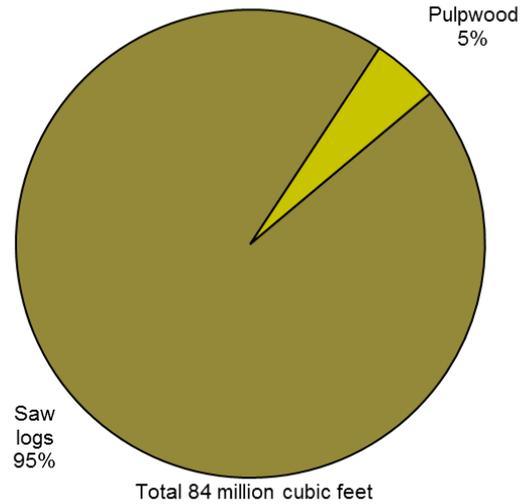


Figure 6 — Primary mill residue produced by roundwood type, Kentucky, 2013.

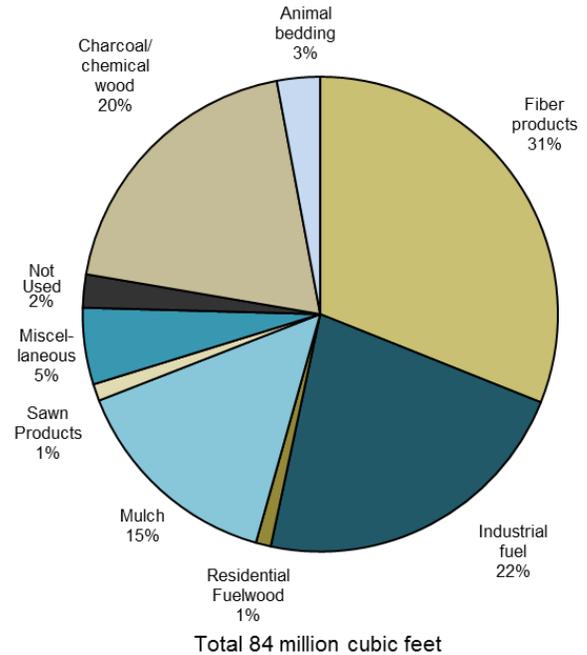


Figure 7 — Disposal of residue by product, Kentucky, 2013.

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