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# Oklahoma's Timber Industry— An Assessment of Timber Product Output and Use, 2005

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and Michael Howell

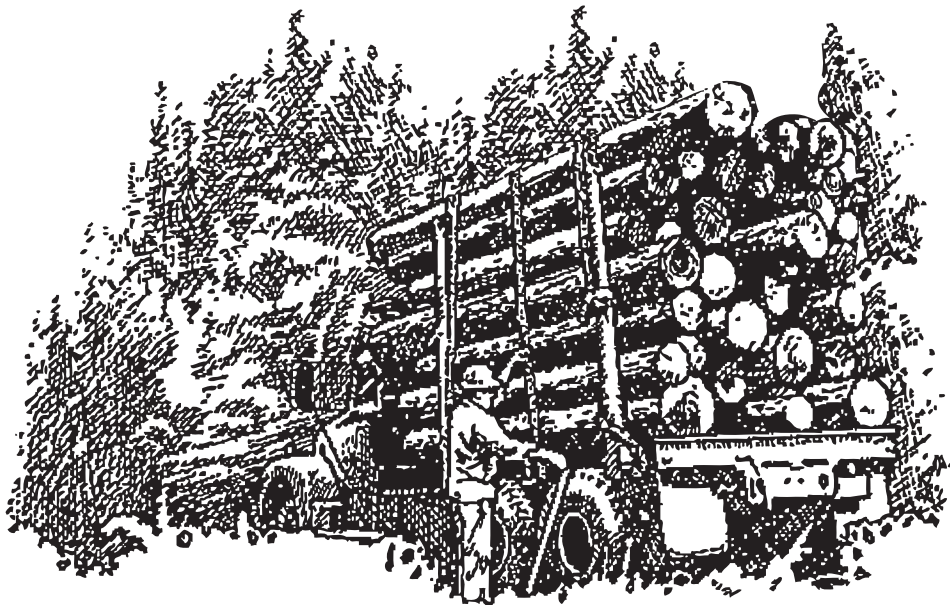


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## Foreword

This report contains the findings of a 2005 canvass of all primary wood-using plants in Oklahoma, and presents changes in product output and residue use since 2002. It complements the Forest Inventory and Analysis periodic 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 2005 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 Oklahoma was conducted in 2006 to obtain information for 2005. In addition, roundwood from out-of-State mills known to be using logs or bolts harvested from Oklahoma timberland was incorporated into Oklahoma 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 1955, and are currently conducted every 3 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.

## Acknowledgments

The authors thank Richard Harper and Kurt Atkinson for review and comments; Carolyn Steppleton for her tireless efforts in processing and accuracy of the data; Sonja Oswalt for the mill map; Helen Beresford for timber product output database maintenance and support; Anne Jenkins, Janet Griffin, Sharon Johnson, and Charlene Walker for tables, graphs, and statistical checking; and the Southern Research Station's Publications Group for editorial review, styling, and publication of this report.

The Southern Research Station gratefully acknowledges the cooperation and assistance provided by the Oklahoma Department of Agriculture, Food and Forestry—Forestry Division, in collecting mill data. Appreciation is also extended to forest industry and mill managers for providing timber products information.



## Timber Product Output Database Retrieval System

The Forest Inventory and Analysis (FIA) Research Work Unit of the USDA 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. This regional and national set of TPO data consists of 11 variables that describe for each county the roundwood products harvested, logging residues left in the woods, other timber removals (i.e. land clearing and reserved timber removals), and wood and bark residues generated by the county's primary wood-using mills. The system is available through the FIA Web site: <http://srsfia2.fs.fed.us/php/tpo2/tpo.php>.

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 has been logically divided into two sections to assist the user in making specific data requests. In section 1, the user will be asked to define the resource area, and section 2 generates tables for the specified area. In each section, the user is asked to supply specific options that will serve to customize the database retrieval.

There are four options available for defining the geographic area of interest. Each option provides an increasing level of detail. The region, subregion, State, or county defines an area. The user selects the option that best suits the level of detail required. Users who select county as an option should be aware that some counties have been combined due to data sensitivity. These combined counties are identified with asterisks in the output tables.

The TPO contacts are listed for each region to provide additional explanation or clarification.

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## Contents

	<i>Page</i>
Output of Industrial Timber Products .....	1
All Products.....	1
Saw Logs.....	2
Pulpwood.....	3
Veneer and Other Industrial Products .....	3
Plant Byproducts .....	4
County Data .....	4
Total Roundwood Output .....	5
Source .....	5
Ownership .....	6
Species .....	6
References .....	7
Glossary .....	8
Metric Equivalents .....	11
Conversion Factors .....	11
Species List .....	12
Appendix .....	13
Index of Tables .....	15
Tables A.1–A.17 <sup>a</sup> .....	17

<sup>a</sup> All tables in this report are available in Microsoft® Excel workbook files. Upon request, these files will be supplied in the format the customer requests. The use of trade or firm names in this publication is for reader information and does not imply endorsement by the U.S. Department of Agriculture of any product or service.

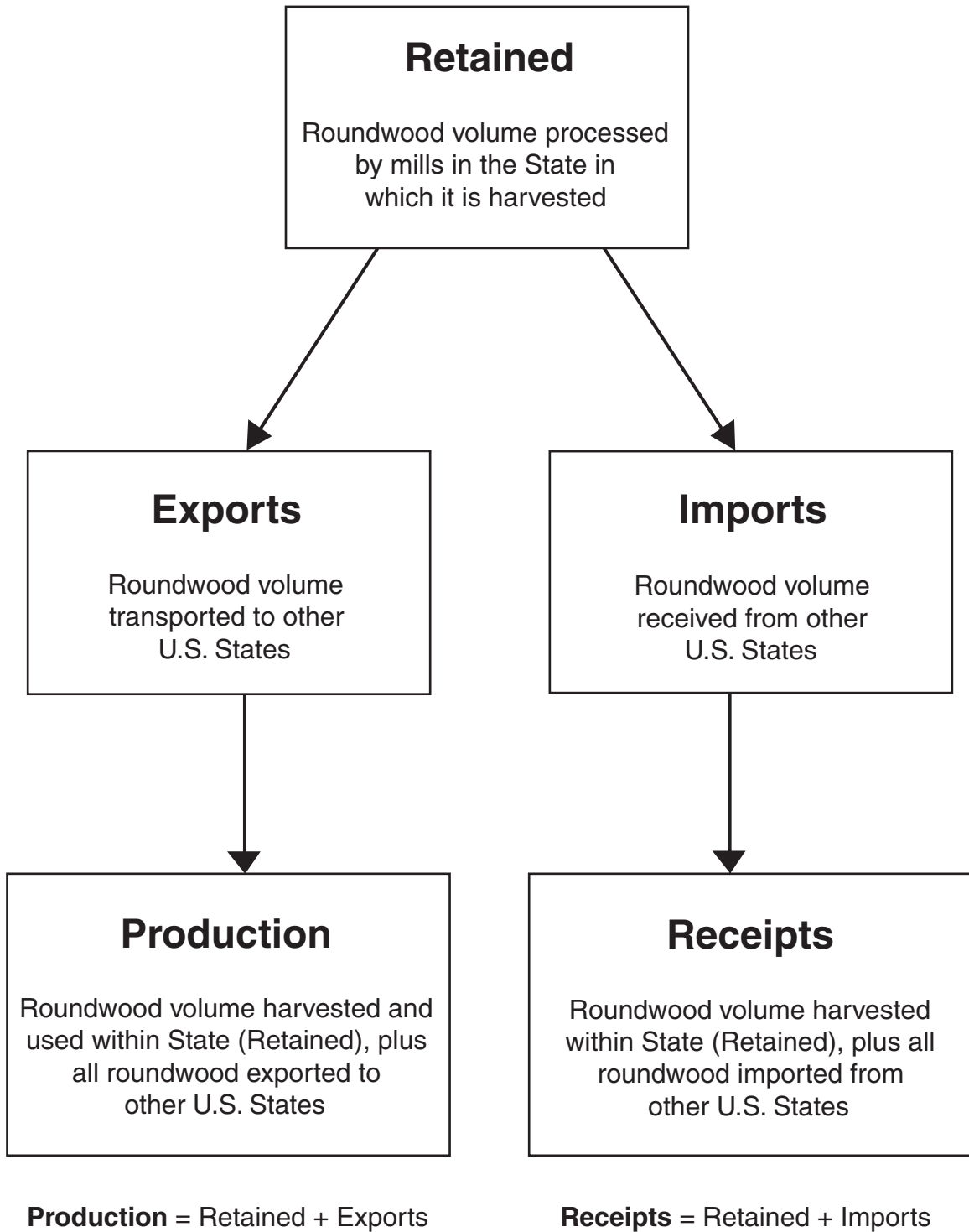


Figure 1—Movement of roundwood exports and imports within the United States.

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## Output of Industrial Timber Products

Note: Certain terms used in this report—retained, export, import, production, and receipts—have specialized meanings and relationships unique to the Forest Inventory and Analysis Units across the country that deal with timber product output (TPO) (fig. 1).

### All Products

- Between 2002 and 2005, the combined industrial TPO from roundwood and plant byproducts declined 2 percent, from 176 to 173 million cubic feet.
- TPO from roundwood was down 6.5 million cubic feet, or 5 percent, to 119 million cubic feet, while output of plant byproducts increased 3.6 million cubic feet to 54 million cubic feet.

- Output of softwood roundwood products declined 3 percent to 95 million cubic feet, while output of hardwood roundwood products declined 15 percent to 24 million cubic feet (fig. 2).
- Pulpwood and saw logs were the principal roundwood products in 2005. Combined output of these two products totaled 98 million cubic feet and accounted for 83 percent of the State's total roundwood output (fig. 3).
- Total receipts at Oklahoma mills, which included roundwood harvested and retained in the State and roundwood imported from other States, increased 20 percent, from 123 million cubic feet in 2002 to 149 million cubic feet. There were 107 primary roundwood-using plants operating in Oklahoma in 2005 (fig. 4).

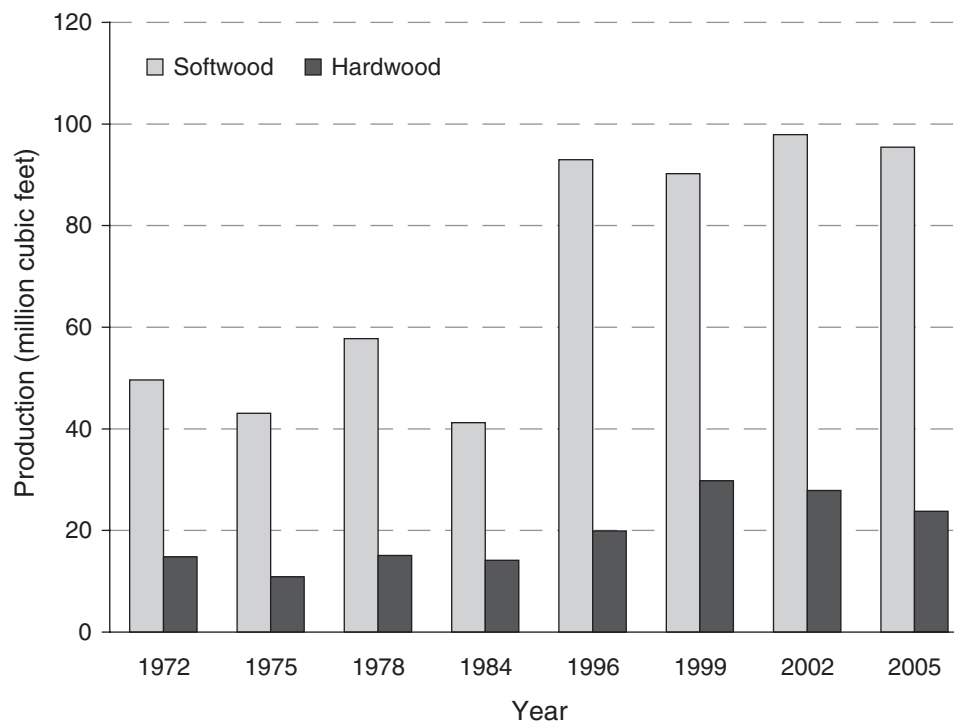


Figure 2—Roundwood production for all products by species group and year (see page 7 for references for individual years).

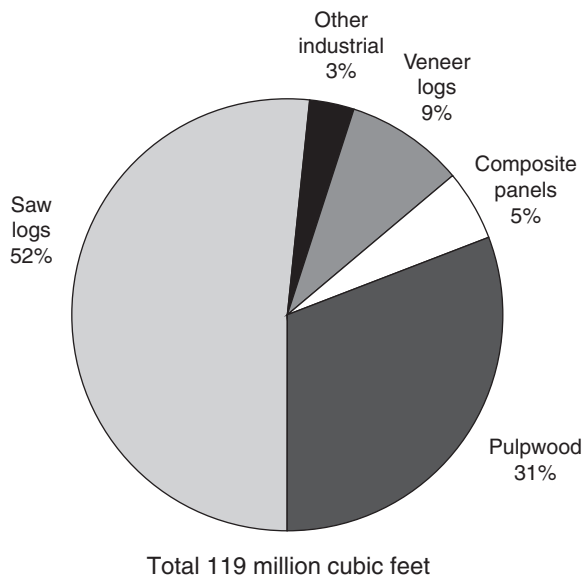


Figure 3—Roundwood production by type of product, 2005.

- Across all products, 81 percent of roundwood harvested was retained for processing at Oklahoma mills. Exports of roundwood to other States amounted to 23 million cubic feet, while imports of roundwood amounted to 52 million cubic feet making the State a net importer of roundwood. Tables A.8 to A.10 show exports to and imports from other States by individual product type.

### Saw Logs

- Saw logs accounted for 52 percent of the State’s total roundwood products. Output of softwood saw logs declined 5 percent to 55 million cubic feet (304 million board feet), while that of hardwood saw logs increased 2 percent to 6.8 million cubic feet (41 million board feet) (fig. 5).
- In 2005, Oklahoma had 95 sawmills. This number includes some portable and one-man sawmills and many small sawmills not canvassed for this report. Total softwood saw-log receipts were 56 million cubic feet, while those of hardwoods totaled 8.5 million cubic feet. Of the 19 reporting mills, 7 had receipts <1.0 million board feet, 8 had receipts between 1.0 and 9.99 million board feet, while 4 had receipts >10 million board feet. These four mills accounted for 90 percent of the reported volume.

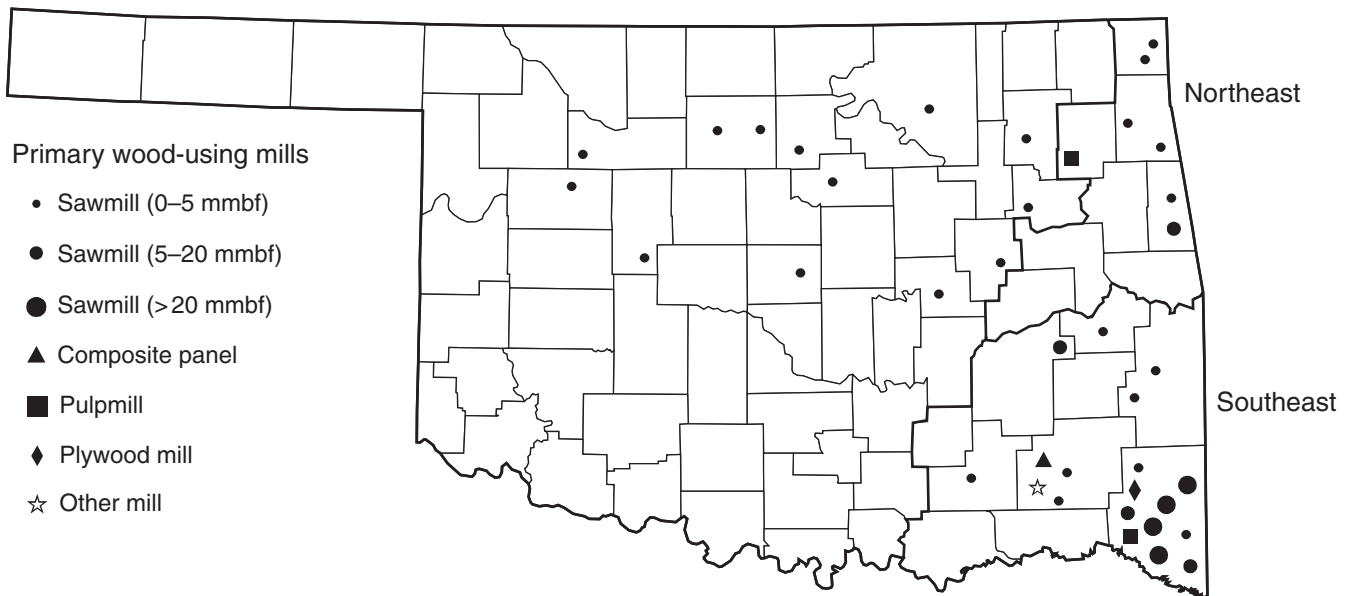


Figure 4—Primary wood-using mills by region, 2005.



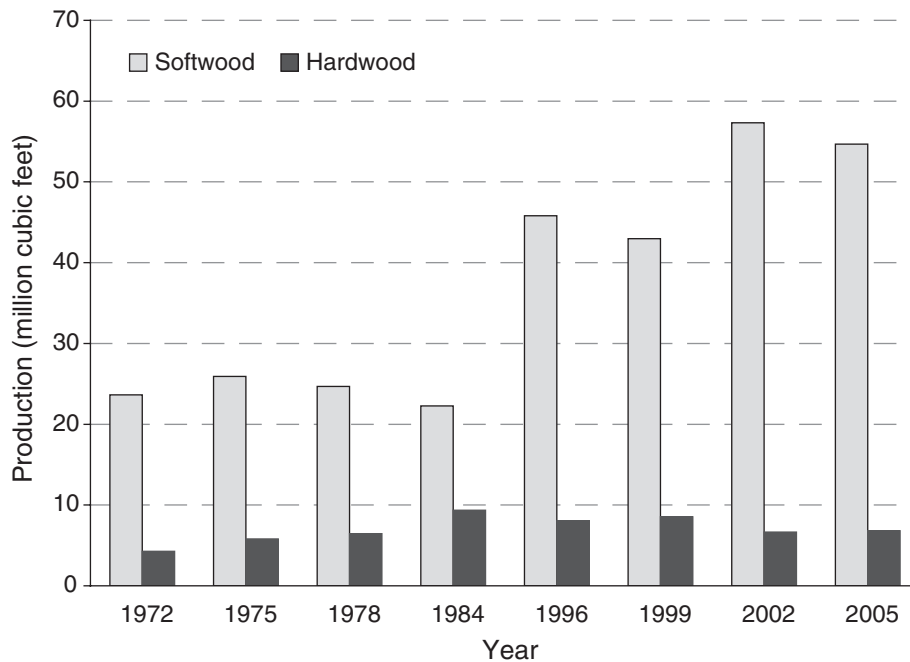


Figure 5—Roundwood saw-log production by species group and year (see page 7 for references for individual years).

- Oklahoma retained 84 percent of its saw-log production for domestic manufacture, with saw-log imports exceeding exports by more than 2.8 million cubic feet in 2005.

### Pulpwood

- Total pulpwood production, including chipped roundwood, declined 25 percent to 37 million cubic feet (492,000 cords) and accounted for 31 percent of the State's total roundwood TPO. Softwood output was down 29 percent to 20 million cubic feet (270,000 cords), while hardwood output declined 20 percent to 17 million cubic feet (222,000 cords) (fig. 6).
- Two pulpmill facilities were operating and receiving roundwood in Oklahoma in 2005. Total pulpwood receipts for these mills increased 30 percent to 58 million cubic feet, and accounted for 39 percent of total receipts for all mills.
- Seventy percent of roundwood cut for pulpwood was retained for processing at Oklahoma pulpmills. Roundwood pulpwood accounted for 48 percent of total known

exports and 62 percent of total imports. Roundwood pulpwood imports amounted to 33 million cubic feet, while exports totaled 11 million cubic feet, making the State a net importer of pulpwood.

### Veneer and Other Industrial Products

- In 2005, output of veneer and other industrial products totaled 21 million cubic feet and accounted for 17 percent of the State's total roundwood TPO volume. Softwood production increased 64 percent and accounted for nearly all of the production volume.
- One veneer mill and two other industrial mills were contacted for this report. Receipts at these mills totaled 26 million cubic feet. Softwood accounted for all the receipt volume at these mills.
- Oklahoma retained 91 percent of its veneer and other industrial production for processing at domestic veneer and other industrial mills. Imports amounted to 7 million cubic feet, while exports were 2 million cubic feet, making the State a net importer of roundwood for veneer and other industrial uses.

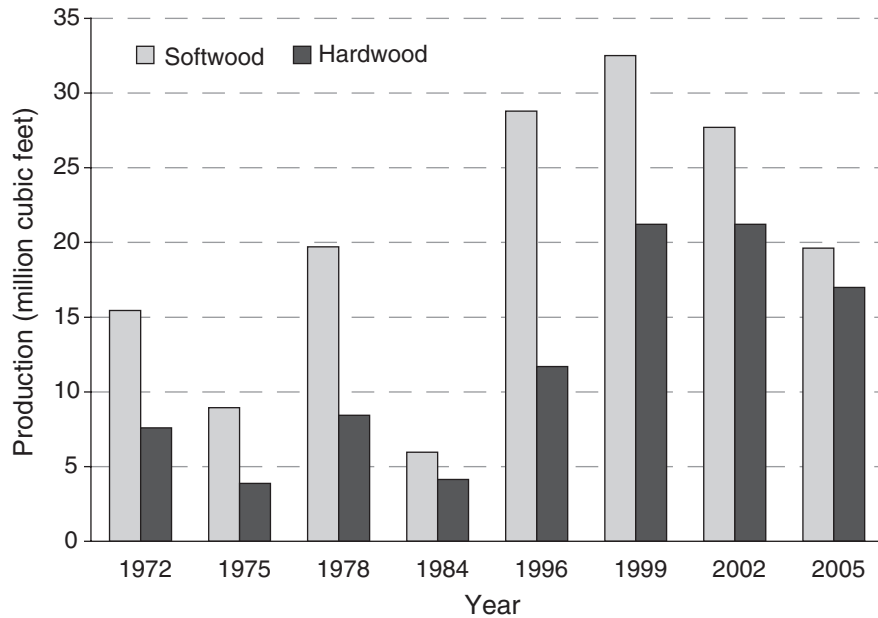


Figure 6—Roundwood pulpwood production by species group and year (see page 7 for references for individual years).

## Plant Byproducts

- In 2005, processing of primary products in Oklahoma mills generated 54 million cubic feet of wood and bark residues. Coarse residues from all primary products amounted to 22 million cubic feet, while bark volume totaled 14 million cubic feet. Collectively, sawdust and shavings made up 33 percent of total residues, or 18 million cubic feet (fig. 7).
- The processing of saw logs generated 41 million cubic feet of mill residues, accounting for 76 percent of the total residues produced (fig. 8).
- Fifty-eight percent of the wood and bark residues were used for industrial fuel (fig. 9). Thirty percent were used for fiber products, with the remainder used for miscellaneous and sawn products. Ninety-four and ninety-eight percent, respectively, of the bark and sawdust was used for industrial fuel, while 91 percent of the shavings were used for industrial fuel.

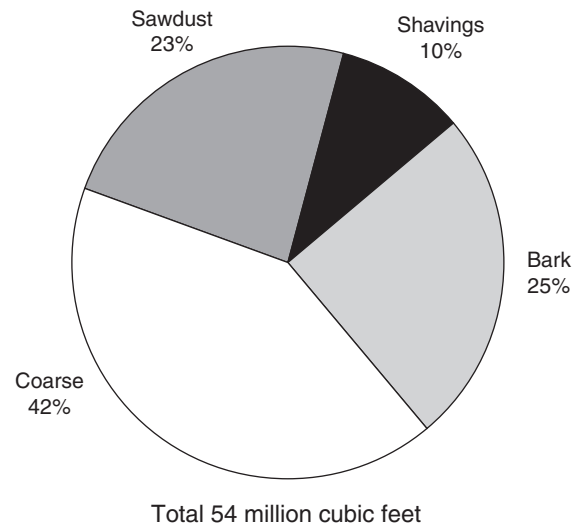
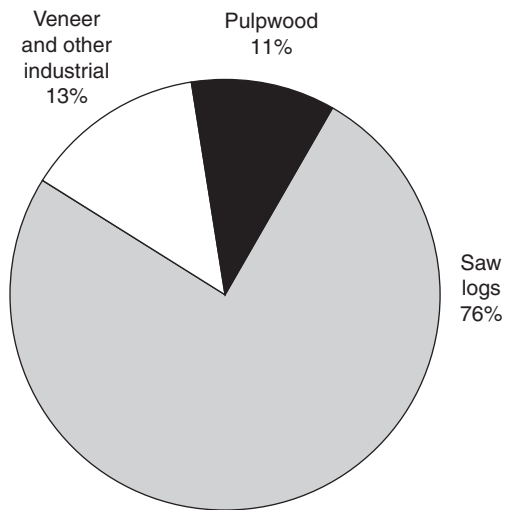


Figure 7—Primary mill residue by residue type, 2005.

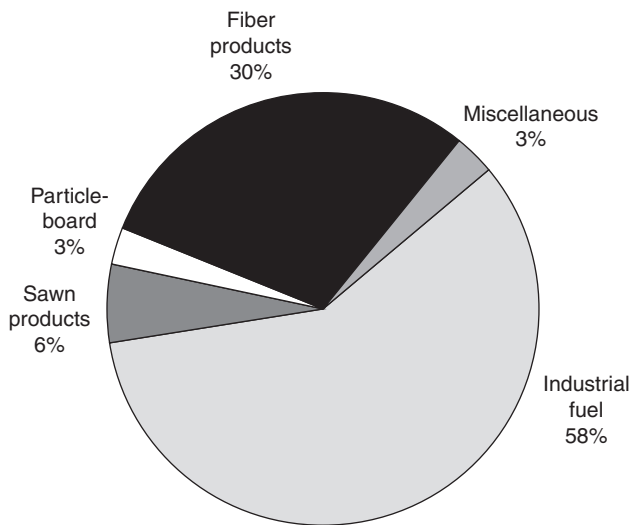
## County Data

- Table A.13 shows softwood and hardwood product output by county and individual product type. Only 16 of Oklahoma's 67 counties had reported softwood and



Total 54 million cubic feet

Figure 8—Primary mill residue produced by roundwood type, 2005.



Total 54 million cubic feet

Figure 9—Disposal of residue by product, 2005.

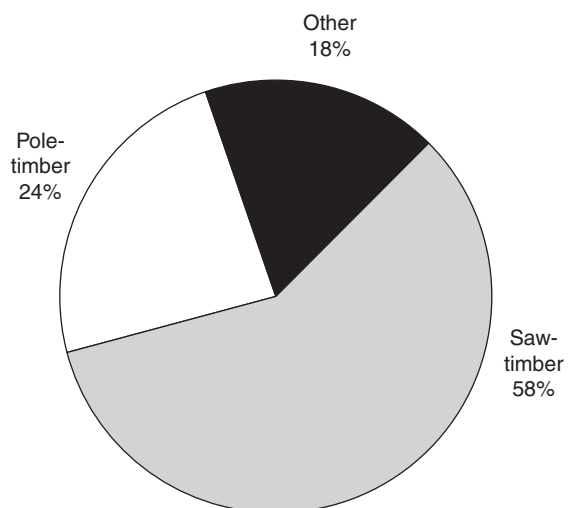
hardwood product output. Three counties (Le Flore, McCurtain, and Pushmataha) had combined softwood and hardwood product output of >6 million cubic feet each. These three counties total product output amounted to >110 million cubic feet and accounted for 92 percent of the State’s total product output.

## Total Roundwood Output

Using the latest inventory data for Oklahoma, product output for source, ownership, and detailed species group was estimated.

### Source

- In addition to the 119 million cubic feet of roundwood output for industrial roundwood products, an estimated 12 million cubic feet was harvested for domestic fuelwood, bringing Oklahoma’s total roundwood output to 132 million cubic feet.
- Eighty-two percent of total roundwood output was considered growing-stock volume (sawtimber and poletimber) from timberland sources. Other sources (such as saplings; stumps, tops, and limbs of trees on timberland; and trees on nonforest land) contributed an estimated 24 million cubic feet, or 18 percent of total roundwood output (fig. 10).



Total 132 million cubic feet

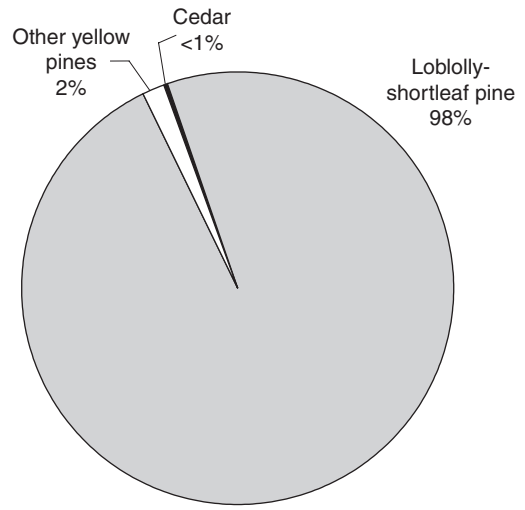
Figure 10—Roundwood output by source, 2005.

### Ownership

- An estimated 73 million cubic feet, or 55 percent, of the total roundwood output came from forest industry lands.
- Nonindustrial private forest lands contributed 56 million cubic feet, or 43 percent, of the output. Public lands made up the remaining 2 percent, or 2.7 million cubic feet (fig. 11).

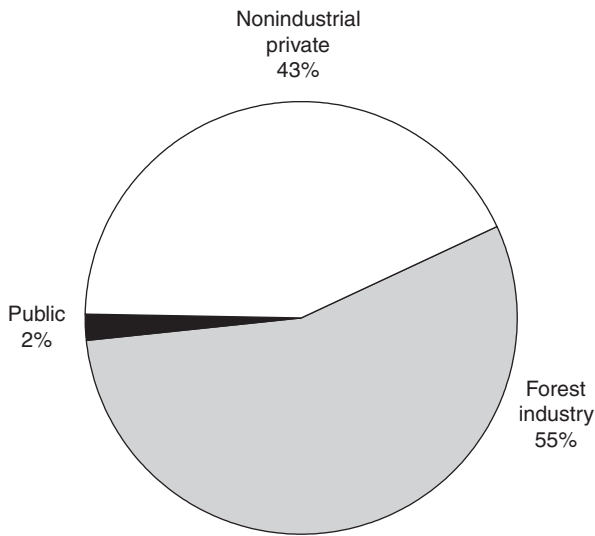
### Species

- The loblolly and shortleaf pine group provided more volume than any other softwood species group, accounting for 98 percent of total softwood output (fig. 12). The cedar and other yellow pine type accounted for 1.7 million cubic feet of the softwood output.
- The red oak and white oak groups combined accounted for 24 million cubic feet, or 68 percent of total hardwood output (fig. 13).



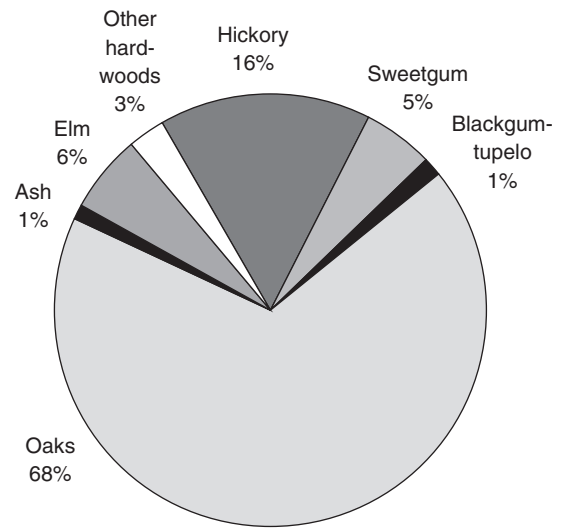
Total 96 million cubic feet

Figure 12—Roundwood output by softwood species group, 2005.



Total 132 million cubic feet

Figure 11—Roundwood output by ownership, 2005.



Total 36 million cubic feet

Figure 13—Roundwood output by hardwood species group, 2005.

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## Glossary

**Board foot.** A unit of measure applied to lumber that is 1-foot long, 1-foot wide, and 1-inch thick (or its equivalent) and also associated with roundwood as to its potential yield of such products.

**Byproducts.** Primary wood products, e.g., pulp chips, animal bedding, and fuelwood, recycled from mill residues.

**Composite panels.** Roundwood products manufactured into chips, wafers, strands, flakes, shavings, or sawdust and then reconstituted into a variety of panel and engineered lumber products.

**Consumption.** The quantity of a commodity, such as pulpwood, utilized by a particular mill or group of mills.

**Drain.** The volume of roundwood removed from any geographic area where timber is grown.

**Exports.** The volume of domestic roundwood utilized by mills outside the State where timber was cut.

**Fiber products.** Byproducts used in the manufacture of pulp, paper, paperboard, and composite products, such as chipboard.

**Fuelwood production.** The volume of roundwood harvested to produce some form of energy, e.g., heat and steam, in residential, industrial or institutional settings.

**Growing-stock removals.** The growing-stock volume removed from poletimber and sawtimber trees in the timberland inventory. (Note: Includes volume removed for roundwood products, logging residues, and other removals.)

**Growing-stock trees.** Living trees of commercial species classified as sawtimber, poletimber, saplings, and seedlings. Growing-stock trees must contain at least one 12-foot or two 8-foot logs in the saw-log portion, currently or potentially (if too small to qualify). The log(s) must meet dimension and merchantability standards and have, currently or potentially, one-third of the gross board-foot volume in sound wood.

**Growing-stock volume.** The cubic-foot volume of sound wood in growing-stock trees at least 5.0 inches d.b.h. from a 1-foot stump to a minimum 4.0-inch top d.o.b. of the central stem.

**Hardwoods.** Dicotyledonous trees, usually broadleaf and deciduous.

*Soft hardwoods.* Hardwood species with an average specific gravity of 0.50 or less, such as gums, yellow-poplar, cottonwoods, red maple, basswoods, and willows.

*Hard hardwoods.* Hardwood species with an average specific gravity >0.50, such as oaks, hard maples, hickories, and beech.

**Imports.** The volume of domestic roundwood delivered to a mill or group of mills in a specific State but harvested outside that State.

**Industrial fuelwood.** A roundwood product, with or without bark, used to generate energy at a manufacturing facility such as a wood-using mill.

**Industrial roundwood products.** Any primary use of the main stem of a tree, such as saw logs, pulpwood, veneer logs, intended to be processed into primary wood products such as lumber, wood pulp, sheathing, at primary wood-using mills.

**International ¼-inch rule.** A log rule or formula for estimating the board-foot volume of logs, allowing ½-inch of taper for each 4-foot length. The rule appears in a number of forms that allow for kerf. In the form used by FIA, a ¼-inch of kerf is assumed. This rule is used as the USDA Forest Service standard log rule in the Eastern United States.

**Log.** A primary forest product harvested in long, primarily 8-, 12-, and 16-foot lengths.

**Logging residues.** The unused merchantable portion of growing-stock trees cut or destroyed during logging operations.

**Merchantable portion.** That portion of live trees 5.0 inches d.b.h. and larger between a 1-foot stump and a minimum 4.0-inch top d.o.b. on the central stem. That portion of primary forks from the point of occurrence to a minimum 4.0-inch top d.o.b. is included.

**Merchantable volume.** Solid-wood volume in the merchantable portion of live trees.

**Noncommercial species.** Tree species of typically small size, poor form, or inferior quality that normally do not develop into trees suitable for industrial wood products.

**Nonforest land.** Land that has never supported forests and land formerly forested where timber production is precluded by development for other uses.

**Nongrowing-stock sources.** The net volume removed from the nongrowing-stock portions of poletimber and sawtimber trees (stumps, tops, limbs, cull sections of central stem) and from any portion of a rough, rotten, sapling, dead, or nonforest tree.

**Other forest land.** Forest land other than timberland and productive reserved forest land. It includes available and reserved forest land that is incapable of producing annually 20 cubic feet per acre of industrial wood under natural conditions because of adverse site conditions such as sterile soils, dry climate, poor drainage, high elevation, steepness, or rockiness.

**Other products.** A miscellaneous category of roundwood products, e.g., cooperage, excelsior, shingles, and mill residue byproducts (charcoal, bedding, mulch, etc.).

**Other removals.** The growing-stock volume of trees removed from the inventory by cultural operations such as timber stand improvement, land clearing, and other changes in land use, resulting in the removal of the trees from timberland.

**Other sources.** (See: Nongrowing-stock sources.)

**Ownership.** The property owned by one ownership unit, including all parcels of land in the United States.

*National forest land.* Federal land that has been legally designated as national forests or purchase units, and other land under the administration of the Forest Service, including experimental areas and Bankhead-Jones Title III land.

*Forest industry land.* Land owned by companies or individuals operating primary wood-using plants.

*Nonindustrial private forest (NIPF) land.* Privately owned land excluding forest industry land.

Corporate. Owned by corporations, including incorporated farm ownerships.

Individual. All lands owned by individuals, including farm operators.

*Other public.* An ownership class that includes all public lands except national forests.

Miscellaneous Federal land. Federal land other than national forests.

State, county, and municipal land. Land owned by States, counties, and local public agencies or municipalities, or land leased to these governmental units for 50 years or more.

**Plant residues.** Wood material generated in the production of timber products at primary manufacturing plants.

*Coarse residues.* Material, such as slabs, edgings, trim, veneer cores and ends, which is suitable for chipping.

*Fine residues.* Material, such as sawdust, shavings, and veneer residue, which is not suitable for chipping.

*Plant byproducts.* Residues (coarse or fine) used in the further manufacture of industrial products for consumer use, or as fuel.

*Unused plant residues.* Residues (coarse or fine) that are not used for any product, including fuel.

**Poletimber-size trees.** Softwoods 5.0 to 8.9 inches d.b.h. and hardwoods 5.0 to 10.9 inches d.b.h.

**Posts, poles, and pilings.** Roundwood products milled (cut or peeled) into standard sizes (lengths and circumferences) to be put in the ground to provide vertical and lateral support in buildings, foundations, utility lines, and fences. May also include nonindustrial (unmilled) products.

**Primary wood-using plants.** Industries that convert roundwood products (saw logs, veneer logs, pulpwood, etc.) into primary wood products, such as lumber, veneer or sheathing, wood pulp.

**Production.** The total volume of known roundwood harvested from land within a State, regardless of where it is

consumed. Production is the sum of timber harvested and used within a State, and all roundwood exported to other States.

**Pulpwood.** A roundwood product that will be reduced to individual wood fibers by chemical or mechanical means. The fibers are used to make a broad generic group of pulp products that includes paper products, as well as fiberboard, insulating board, and paperboard.

**Receipts.** The quantity or volume of industrial roundwood received at a mill or by a group of mills in a State, regardless of the geographic source. Volume of roundwood receipts is equal to the volume of roundwood retained in a State plus roundwood imported from other States.

**Retained.** Roundwood volume harvested from and processed by mills within the same State.

**Rotten trees.** Live trees of commercial species not containing at least one 12-foot saw log, or two noncontiguous saw logs, each 8 feet or longer, now or prospectively, primarily because of rot or missing sections, and with less than one-third of the gross board-foot tree volume in sound material.

**Rough trees.** Live trees of commercial species not containing at least one 12-foot saw log, or two noncontiguous saw logs, each 8 feet or longer, now or prospectively, primarily because of roughness, poor form, splits, and cracks, and with less than one-third of the gross board-foot tree volume in sound material; and live trees of noncommercial species.

**Roundwood (roundwood logs).** Logs, bolts, or other round sections cut from trees for industrial manufacture or consumer uses.

**Roundwood chipped.** Any timber cut primarily for industrial manufacture, delivered to nonpulpmills, chipped, and then sold to pulpmills for use as fiber. Includes tops, jump sections, whole trees, and pulpwood sticks.

**Roundwood product drain.** That portion of total drain used for a product.

**Roundwood products.** Any primary product, such as lumber, veneer, composite panels, poles, pilings, pulp, or fuelwood that is produced from roundwood.

**Salvable dead trees.** Standing or downed dead trees that were formerly growing stock and considered merchantable. Trees must be at least 5.0 inches d.b.h. to qualify.

**Saplings.** Live trees 1.0 to 5.0 inches d.b.h.

**Saw log.** A roundwood product, usually 8 feet in length or longer, processed into a variety of sawn products such as lumber, cants, pallets, railroad ties, and timbers.

**Saw-log portion.** The part of the bole of sawtimber trees between a 1-foot stump and the saw-log top.

**Saw-log top.** The point on the bole of sawtimber trees above which a conventional saw log cannot be produced. The minimum saw-log top is 7.0 inches d.o.b. for softwoods and 9.0 inches d.o.b. for hardwoods for FIA standards.

**Sawtimber-size trees.** Softwoods 9.0 inches d.b.h. and larger and hardwoods 11.0 inches d.b.h. and larger.

**Sawtimber volume.** Growing-stock volume in the saw-log portion of sawtimber-sized trees in board feet (International ¼-inch rule).

**Seedlings.** Trees <1.0 inch d.b.h. and >1 foot tall for hardwoods, >6 inches tall for softwoods, and >0.5 inch in diameter at ground level for longleaf pine.

**Select red oaks.** A group of several red oak species composed of cherrybark, Shumard, and northern red oaks. Other red oak species are included in the “other red oaks” group.

**Select white oaks.** A group of several white oak species composed of white, swamp chestnut, swamp white, chinkapin, Durand, and bur oaks. Other white oak species are included in the “other white oaks” group.

**Softwoods.** Coniferous trees, usually evergreen, having leaves that are needles or scale like.

**Standard cord.** A unit of measure applied to roundwood, usually bolts or split wood. It is a stack of wood 4 feet high, 4 feet wide, and 8 feet long encompassing 128 cubic feet of wood, bark, and air space. This usually translates to approximately 75.0 to 81.0 cubic feet of solid wood for pulpwood, because pulpwood is more uniform.



**Standard unit.** A unit measure applied to roundwood timber products. Board feet (International ¼-inch rule) is the standard unit used for saw logs and veneer; cords are used for pulpwood, composite panel, and fuelwood; hundred pieces for poles; thousand pieces for posts; and thousand cubic feet for all other miscellaneous forest products.

**Timberland.** Forest land capable of producing 20 cubic feet of industrial wood per acre per year and not withdrawn from timber utilization.

**Timber product output.** The total volume of roundwood products from all sources plus the volume of byproducts recovered from mill residues (equals roundwood product drain).

**Timber products.** Roundwood products and byproducts.

**Timber removals.** The total volume of trees removed from the timberland inventory by harvesting, cultural operations such as stand improvement, land clearing, or changes in land use. (Note: Includes roundwood products, logging residues, and other removals.)

**Tree.** Woody plants having one erect perennial stem or trunk at least 3 inches d.b.h., a more or less definitely formed crown of foliage, and a height of at least 13 feet (at maturity).

**Upper-stem portion.** The part of the main stem of saw-timber trees above the saw-log top and the minimum top diameter of 4.0 inches outside bark, or to the point where the main stem breaks into limbs.

**Utilization studies.** Studies conducted on active logging operations to develop factors for merchantable portions of trees left in the woods (logging residues), logging damage, and utilization of the unmerchantable portion of growing-stock trees and nongrowing-stock trees.

**Veneer log.** A roundwood product either rotary cut, sliced, stamped, or sawn into a variety of veneer products such as plywood, finished panels, veneer sheets, or sheathing.

**Weight.** A unit of measure for mill residues, expressed as oven-dry tons (2,000 oven-dry pounds).

## Metric Equivalents

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1 acre = 4046.86 m<sup>2</sup> or 0.404686 ha  
 1 cubic foot = 0.028317 m<sup>3</sup>  
 1 inch = 2.54 cm or 0.0254 m  
 Breast height = 1.4 m above the ground  
 1 square foot = 929.03 cm<sup>2</sup> or 0.0929 m<sup>2</sup>  
 1 square foot basal area per acre = 0.229568 m<sup>2</sup>/ha  
 1 pound = 0.454 kg  
 1 ton = 0.907 MT

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## Conversion Factors<sup>a</sup>

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Saw logs	
Softwood	0.18018 cubic foot = 1 board foot 5.55 board feet = 1 cubic foot
Hardwood	0.16556 cubic foot = 1 board foot 6.04 board feet = 1 cubic foot
Veneer logs	
Softwood	0.17391 cubic foot = 1 board foot 5.75 board feet = 1 cubic foot
Hardwood	0.15873 cubic foot = 1 board foot 6.30 board feet = 1 cubic foot
Pulpwood <sup>b</sup>	
Softwood	72.5 cubic feet per cord
Hardwood	76.6 cubic feet per cord

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<sup>a</sup> Conversion factors vary with stem size (d.b.h.) and species.

<sup>b</sup> Cubic feet of solid wood per cord.

## Species List<sup>a</sup>

Common name	Scientific name <sup>b</sup>	Common name	Scientific name <sup>b</sup>
Softwoods		Hardwoods (continued)	
Eastern redcedar	<i>Juniperus virginiana</i> L.	Chinaberry	<i>Melia azedarach</i> L.
Shortleaf pine	<i>Pinus echinata</i> Mill.	White mulberry	<i>Morus alba</i> L.
Loblolly pine	<i>P. taeda</i> L.	Red mulberry	<i>M. rubra</i> L.
Baldcypress	<i>Taxodium distichum</i> (L.) Rich.	Water tupelo	<i>Nyssa aquatica</i> L.
Hardwoods		Blackgum	<i>N. sylvatica</i> Marsh.
Florida maple	<i>Acer barbatum</i> Michx.	Swamp tupelo	<i>N. sylvatica</i> var. <i>biflora</i> (Walt.) Sarg.
Boxelder	<i>A. negundo</i> L.	Eastern hophornbeam	<i>Ostrya virginiana</i> (Mill.) K. Koch
Red maple	<i>A. rubrum</i> L.	Sourwood	<i>Oxydendrum arboreum</i> (L.) DC.
Silver maple	<i>A. saccharinum</i> L.	Royal paulownia	<i>Paulownia tomentosa</i> (Thunb.) Sieb. & Zucc. ex Steud.
Sugar maple	<i>A. saccharum</i> Marsh.	Water-elm	<i>Planera aquatica</i> J. F. Gmel.
Ailanthus	<i>Ailanthus altissima</i> (Mill.) Swingle	American sycamore	<i>Platanus occidentalis</i> L.
Tung-oil-tree	<i>Aleurites fordii</i> Hemsl.	Eastern cottonwood	<i>Populus deltoides</i> Bartr. ex Marsh.
Serviceberry	<i>Amelanchier</i> spp. Medic.	Plums, cherries (other than black cherry)	<i>Prunus</i> spp. L.
River birch	<i>Betula nigra</i> L.	Black cherry	<i>P. serotina</i> Ehrh.
Chittamwood	<i>Bumelia lanuginosa</i> (Michx.) Pers.	White oak	<i>Quercus alba</i> L.
Water hickory	<i>Carya aquatica</i> (Michx. f.) Nutt.	Scarlet oak	<i>Q. coccinea</i> Muenchh.
Bitternut hickory	<i>C. cordiformis</i> (Wangenh.) K. Koch	Durand oak	<i>Q. durandii</i> Buckl.
Pignut hickory	<i>C. glabra</i> (Mill.) Sweet	Southern red oak	<i>Q. falcata</i> Michx.
Pecan	<i>C. illinoensis</i> (Wangenh.) K. Koch	Cherrybark oak	<i>Q. falcata</i> var. <i>pagodifolia</i> Ell.
Shellbark hickory	<i>C. laciniosa</i> (Michx. f.) Loud.	Laurel oak	<i>Q. laurifolia</i> Michx.
Nutmeg hickory	<i>C. myristiciformis</i> (Michx. f.) Nutt.	Overcup oak	<i>Q. lyrata</i> Walt.
Shagbark hickory	<i>C. ovata</i> (Mill.) K. Koch	Bur oak	<i>Q. macrocarpa</i> Michx.
Mockernut hickory	<i>C. tomentosa</i> (Poir.) Nutt.	Blackjack oak	<i>Q. marilandica</i> Muenchh.
Allegheny chinkapin	<i>Castanea pumila</i> Mill.	Swamp chestnut oak	<i>Q. michauxii</i> Nutt.
Chinkapin	<i>Castanopsis</i> (D. Don) Spach	Chinkapin oak	<i>Q. muehlenbergii</i> Engelm.
Sugarberry	<i>Celtis laevigata</i> Willd.	Water oak	<i>Q. nigra</i> L.
Hackberry	<i>C. occidentalis</i> L.	Nuttall oak	<i>Q. nuttallii</i> Palmer
Eastern redbud	<i>Cercis canadensis</i> L.	Pin oak	<i>Q. palustris</i> Muenchh.
Flowering dogwood	<i>Cornus florida</i> L.	Willow oak	<i>Q. phellos</i> L.
American smoketree	<i>Cotinus obovatus</i> Raf.	Northern red oak	<i>Q. rubra</i> L.
Hawthorn	<i>Crataegus</i> spp. L.	Shumard oak	<i>Q. shumardii</i> Buckl.
Common persimmon	<i>Diospyros virginiana</i> L.	Post oak	<i>Q. stellata</i> Wangenh.
American beech	<i>Fagus grandifolia</i> Ehrh.	Delta post oak	<i>Q. stellata</i> var. <i>paludosa</i> Sarg.
White ash	<i>Fraxinus americana</i> L.	Black oak	<i>Q. velutina</i> Lam.
Green ash	<i>F. pennsylvanica</i> Marsh.	Black locust	<i>Robinia pseudoacacia</i> L.
Pumpkin ash	<i>F. profunda</i> (Bush) Bush	Willow	<i>Salix</i> spp. L.
Blue ash	<i>F. quadrangulata</i> Michx.	Sassafras	<i>Sassafras albidum</i> (Nutt.) Nees
Waterlocust	<i>Gleditsia aquatica</i> Marsh.	American basswood	<i>Tilia americana</i> L.
Honeylocust	<i>G. triacanthos</i> L.	White basswood	<i>T. heterophylla</i> Vent.
Kentucky coffeetree	<i>Gymnocladus dioicus</i> (L.) K. Koch	Winged elm	<i>Ulmus alata</i> Michx.
American holly	<i>Ilex opaca</i> Ait.	American elm	<i>U. americana</i> L.
Butternut	<i>Juglans cinerea</i> L.	Cedar elm	<i>U. crassifolia</i> Nutt.
Black walnut	<i>J. nigra</i> L.	Slippery elm	<i>U. rubra</i> Muhl.
Sweetgum	<i>Liquidambar styraciflua</i> L.	September elm	<i>U. serotina</i> Sarg.
Yellow-poplar	<i>Liriodendron tulipifera</i> L.	Rock elm	<i>U. thomasi</i> Sarg.
Osage-orange	<i>Maclura pomifera</i> (Raf.) Schneid.		
Apple	<i>Malus</i> spp. Mill.		

<sup>a</sup> Common and scientific names of tree species > 1.0 inch d.b.h. occurring in the Forest Inventory and Analysis sample.

<sup>b</sup> Little (1979).

## **Appendix**



## Index of Tables

Table A.1—Output of industrial products by product and species group, Oklahoma, 2002 and 2005

Table A.2—Roundwood receipts by product and species group, Oklahoma, 2002 and 2005

Table A.3—Number of primary wood-using plants by industry, Oklahoma, 1972 to 2005

Table A.4—Roundwood receipts by sawmill size, Oklahoma, 2002 and 2005

Table A.5—Roundwood receipts by species and type of mill, Oklahoma, 2005

Table A.6—Industrial roundwood movement by year and species group, Oklahoma, 2002 and 2005

Table A.7—Industrial roundwood movement by product and species group, Oklahoma, 2005

Table A.8—Saw-log volume by destination, source, and species group, Oklahoma, 2005

Table A.9—Veneer and other industrial volume by destination, source, and species group, Oklahoma, 2005

Table A.10—Pulpwood volume by destination, source, and species group, Oklahoma, 2005

Table A.11—Primary mill residue volume by roundwood type, species group, and residue type, Oklahoma, 2005

Table A.12—Disposal of residue at primary wood-using plants by product, species group, and type of residue, Oklahoma, 2002 and 2005

Table A.13—Roundwood timber product output by county, product, and species group, Oklahoma, 2005

Table A.14—Total roundwood output by product, species group, and source of material, Oklahoma, 2005

Table A.15—Total roundwood output by species group, survey region, and ownership class, Oklahoma, 2005

Table A.16—Total roundwood output by species group, detailed species group, and product, Oklahoma, 2005

Table A.17—Total roundwood output by species group, detailed species group, and ownership class, Oklahoma, 2005



**Table A.1—Output of industrial products by product and species group, Oklahoma, 2002 and 2005**

Product and species group	Year		Change	Change
	2002	2005		
	----- thousand cubic feet -----			percent
Saw logs				
Softwood	57,304	54,691	-2,613	-4.6
Hardwood	6,653	6,803	150	2.3
Total	63,957	61,494	-2,463	-3.9
Veneer logs and other industrial <sup>a</sup>				
Softwood	12,906	21,119	8,213	63.6
Hardwood	0	13	13	—
Total	12,906	21,132	8,226	63.7
Pulpwood <sup>b</sup>				
Softwood	27,706	19,626	-8,080	-29.2
Hardwood	21,212	16,983	-4,229	-19.9
Total	48,918	36,609	-12,309	-25.2
All industrial				
Softwood	97,916	95,436	-2,480	-2.5
Hardwood	27,865	23,799	-4,066	-14.6
Total	125,781	119,235	-6,546	-5.2
Byproduct output				
Softwood	43,690	46,885	3,195	7.3
Hardwood	6,387	6,838	451	7.1
Total	50,077	53,723	3,646	7.3
Total output				
Softwood	141,606	142,321	715	0.5
Hardwood	34,252	30,637	-3,615	-10.6
Total	175,858	172,958	-2,900	-1.6

— = negligible.

<sup>a</sup> Includes poles, posts, composite panels, mulch, firewood, log homes, charcoal, and all other industrial products.

<sup>b</sup> Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (3,707,000 cubic feet in 2002 and 3,707,000 cubic feet in 2005).

**Table A.2—Roundwood receipts by product and species group, Oklahoma, 2002 and 2005**

Product and species group	Year		Change	Change percent
	2002	2005		
	<i>----- thousand cubic feet -----</i>			
Saw logs				
Softwood	56,222	55,839	-383	-0.7
Hardwood	8,535	8,481	-54	-0.6
Total	64,757	64,320	-437	-0.7
Veneer logs and other industrial <sup>a</sup>				
Softwood	13,901	26,211	12,310	88.6
Hardwood	0	0	0	—
Total	13,901	26,211	12,310	88.6
Pulpwood <sup>b</sup>				
Softwood	34,808	45,067	10,259	29.5
Hardwood	9,918	13,064	3,146	31.7
Total	44,726	58,131	13,405	30.0
Total output				
Softwood	104,931	127,117	22,186	21.1
Hardwood	18,453	21,545	3,092	16.8
Total	123,384	148,662	25,278	20.5

— = negligible.

<sup>a</sup> Includes poles, posts, composite panels, mulch, firewood, log homes, charcoal, and all other industrial products.

<sup>b</sup> Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (4,528,000 cubic feet in 2002 and 4,528,000 cubic feet in 2005).

**Table A.3—Number of primary wood-using plants by industry, Oklahoma, 1972 to 2005**

Industry	Year							
	1972	1975	1978	1984	1996	1999	2002	2005
	<i>number</i>							
Sawmills	103	83	66	84	68	62	97	95
Veneer or plywood mills	1	1	1	1	1	1	1	1
Pulpmills	3	3	3	3	2	2	2	2
Composite panel mills	0	0	0	0	0	0	1	1
Other mills	11	14	11	12	2	2	8	8
All plants	118	101	81	100	73	67	109	107



**Table A.4—Roundwood receipts by sawmill size, Oklahoma, 2002 and 2005**

Sawmill size class <sup>a</sup>	2002			2005		
	Mills <sup>b</sup>	Volume		Mills <sup>b</sup>	Volume	
	<i>mmbf</i>	<i>number</i>	<i>mbf</i> <i>percent</i>	<i>number</i>	<i>mbf</i> <i>percent</i>	
< 1.0	5	440	0	7	612	0
1.0–9.99	8	35,658	10	8	35,209	10
>10.0	4	327,669	90	4	325,614	90
Total	17	363,767	100	19	361,435	100

<sup>a</sup> Based on volume received as opposed to actual capacity.

<sup>b</sup> Mills under 1.0 million board feet were not included in this report.

**Table A.5—Roundwood receipts by species and type of mill, Oklahoma, 2005**

Species	All mills	Type of mill		
		Sawmills	Veneer and other industrial	Pulpmills <sup>a</sup>
<i>thousand cubic feet</i>				
Softwood				
Yellow pine	82,038	55,827	26,211	NA
Eastern white pine	0	0	0	NA
Cedar	12	12	0	NA
Cypress	0	0	0	NA
Other softwood	0	0	0	NA
Unclassified	45,067	0	0	45,067
Total softwoods	127,117	55,839	26,211	45,067
Hardwood				
Blackgum and tupelo	2	2	0	NA
Soft maple	201	201	0	NA
Sweetgum	414	414	0	NA
Yellow-poplar	0	0	0	NA
Other soft hardwood	1,181	1,181	0	NA
Hickory	750	750	0	NA
Red oak	2,538	2,538	0	NA
White oak	1,753	1,753	0	NA
Other hard hardwood	1,642	1,642	0	NA
Unclassified	13,064	0	0	13,064
Total hardwoods	21,545	8,481	0	13,064
All species	148,662	64,320	26,211	58,131

NA = not applicable.

<sup>a</sup> Only collected by softwood and hardwood and includes roundwood chipped.

**Table A.6—Industrial roundwood movement by year and species group, Oklahoma, 2002 and 2005**

Year	Production	Exported to other States	Retained	Imported from other States	Receipts
<i>thousand cubic feet</i>					
<b>Softwood</b>					
2002	97,916	17,408	80,508	24,423	104,931
2005	95,436	12,049	83,387	43,730	127,117
<b>Hardwood</b>					
2002	27,865	14,798	13,067	5,386	18,453
2005	23,799	10,751	13,048	8,497	21,545
<b>All species</b>					
2002	125,781	32,206	93,575	29,809	123,384
2005	119,235	22,800	96,435	52,227	148,662

**Table A.7—Industrial roundwood movement by product and species group, Oklahoma, 2005**

Product and species group	Production	Exported to other States	Retained	Imported from other States	Receipts
<i>thousand cubic feet</i>					
Saw logs					
Softwood	54,691	8,570	46,121	9,718	55,839
Hardwood	6,803	1,437	5,366	3,115	8,481
Total	61,494	10,007	51,487	12,833	64,320
Veneer logs and other industrial					
Softwood	21,119	1,794	19,325	6,886	26,211
Hardwood	13	13	0	0	0
Total	21,132	1,807	19,325	6,886	26,211
Pulpwood <sup>a</sup>					
Softwood	19,626	1,685	17,941	27,126	45,067
Hardwood	16,983	9,301	7,682	5,382	13,064
Total	36,609	10,986	25,623	32,508	58,131
All products					
Softwood	95,436	12,049	83,387	43,730	127,117
Hardwood	23,799	10,751	13,048	8,497	21,545
Total	119,235	22,800	96,435	52,227	148,662

<sup>a</sup> Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills.

**Table A.8—Saw-log volume by destination, source, and species group, Oklahoma, 2005**

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
Oklahoma (retained)	51,487	46,121	5,366
Exports to			
Arkansas	9,855	8,570	1,285
Missouri	152	0	152
Total	10,007	8,570	1,437
Imports from			
Arkansas	3,463	1,878	1,585
Missouri	81	0	81
Texas	9,289	7,840	1,449
Total	12,833	9,718	3,115

**Table A.10—Pulpwood<sup>a</sup> volume by destination, source, and species group, Oklahoma, 2005**

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
Oklahoma (retained)	25,623	17,941	7,682
Exports to			
Arkansas	9,268	1,685	7,583
Texas	1,718	0	1,718
Total	10,986	1,685	9,301
Imports from			
Arkansas	22,275	19,285	2,990
Illinois	216	216	0
Louisiana	340	340	0
Texas	9,677	7,285	2,392
Total	32,508	27,126	5,382

<sup>a</sup> Includes roundwood chipped.

**Table A.9—Veneer and other industrial<sup>a</sup> volume by destination, source, and species group, Oklahoma, 2005**

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
Oklahoma (retained)	19,325	19,325	0
Exports to			
Arkansas	1,794	1,794	0
Missouri	13	0	13
Total	1,807	1,794	13
Imports from			
Arkansas	2,621	2,621	0
Louisiana	632	632	0
Texas	3,633	3,633	0
Total	6,886	6,886	0

<sup>a</sup> Includes poles, posts, composite panels, mulch, firewood, log homes, charcoal, and all other industrial products.

**Table A.11—Primary mill residue volume by roundwood type, species group, and residue type, Oklahoma, 2005**

Roundwood type and species group	All types	Residue type			
		Bark	Coarse	Sawdust	Shavings
<i>thousand cubic feet</i>					
Saw logs					
Softwood	35,332	3,749	16,492	9,905	5,186
Hardwood	5,322	879	2,736	1,707	0
Total	40,654	4,628	19,228	11,612	5,186
Veneer logs and other industrial <sup>a</sup>					
Softwood	7,296	3,061	3,146	1,089	0
Hardwood	0	0	0	0	0
Total	7,296	3,061	3,146	1,089	0
Pulpwood					
Softwood	4,263	4,263	0	0	0
Hardwood	1,559	1,559	0	0	0
Total	5,822	5,822	0	0	0
Total					
Softwood	46,891	11,073	19,638	10,994	5,186
Hardwood	6,881	2,438	2,736	1,707	0
Total	53,772	13,511	22,374	12,701	5,186

<sup>a</sup> Includes poles, pilings, posts, composite panels, and other industrial products.

**Table A.12—Disposal of residue at primary wood-using plants by product, species group, and type of residue, Oklahoma, 2002 and 2005**

Product and species group	All types		Bark		Coarse		Sawdust		Shavings	
	2002	2005	2002	2005	2002	2005	2002	2005	2002	2005
<i>thousand cubic feet</i>										
<b>Fiber products</b>										
Softwood	16,261	14,953	0	0	16,261	14,953	0	0	0	0
Hardwood	871	1,097	0	0	871	1,097	0	0	0	0
Total	17,132	16,050	0	0	17,132	16,050	0	0	0	0
<b>Particleboard</b>										
Softwood	0	1,515	0	0	0	1,515	0	0	0	0
Hardwood	0	0	0	0	0	0	0	0	0	0
Total	0	1,515	0	0	0	1,515	0	0	0	0
<b>Charcoal/chemical wood</b>										
Softwood	2	2	0	0	2	2	0	0	0	0
Hardwood	0	0	0	0	0	0	0	0	0	0
Total	2	2	0	0	2	2	0	0	0	0
<b>Sawn products</b>										
Softwood	3,146	3,146	0	0	3,146	3,146	0	0	0	0
Hardwood	4	3	1	0	3	3	0	0	0	0
Total	3,150	3,149	1	0	3,149	3,149	0	0	0	0
<b>Fuel</b>										
Softwood	23,485	26,178	7,666	10,425	17	17	11,057	10,991	4,745	4,745
Hardwood	4,794	5,286	1,837	2,329	1,463	1,463	1,494	1,494	0	0
Total	28,279	31,464	9,503	12,754	1,480	1,480	12,551	12,485	4,745	4,745
<b>Miscellaneous</b>										
Softwood	794	1,091	370	647	2	2	1	1	421	441
Hardwood	690	452	110	102	365	150	215	200	0	0
Total	1,484	1,543	480	749	367	152	216	201	421	441
<b>Not used</b>										
Softwood	2	6	0	1	1	3	1	2	0	0
Hardwood	28	43	4	7	15	23	9	13	0	0
Total	30	49	4	8	16	26	10	15	0	0
<b>All products</b>										
Softwood	43,690	46,891	8,036	11,073	19,429	19,638	11,059	10,994	5,166	5,186
Hardwood	6,387	6,881	1,952	2,438	2,717	2,736	1,718	1,707	0	0
Total	50,077	53,772	9,988	13,511	22,146	22,374	12,777	12,701	5,166	5,186

**Table A.13—Roundwood timber product output by county, product, and species group, Oklahoma, 2005**

County	All products		Saw logs		Veener logs and other industrial <sup>a</sup>		Pulpwood <sup>b</sup>	
	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood
<i>thousand cubic feet</i>								
Adair	7	1,065	7	665	0	0	0	400
Atoka	1,054	896	392	579	599	0	63	317
Bryan	505	0	0	0	505	0	0	0
Cherokee	0	316	0	316	0	0	0	0
Choctaw	801	135	256	43	252	0	293	92
Coal	505	0	0	0	505	0	0	0
Delaware	0	518	0	518	0	0	0	0
Haskell	553	261	0	261	505	0	48	0
Latimer	954	95	334	0	599	0	21	95
Le Flore	4,966	1,734	3,484	437	1,148	0	334	1,297
Mayes	0	55	0	55	0	0	0	0
McCurtain	58,036	9,039	37,231	2,290	8,950	0	11,855	6,749
Ottawa	0	351	0	338	0	13	0	0
Pittsburg	505	0	0	0	505	0	0	0
Pushmataha	27,550	8,942	12,987	909	7,551	0	7,012	8,033
Sequoyah	0	392	0	392	0	0	0	0
All counties	95,436	23,799	54,691	6,803	21,119	13	19,626	16,983

<sup>a</sup> Includes poles, posts, composite panels, mulch, firewood, log homes, charcoal, and all other industrial products.

<sup>b</sup> Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (3,707,000 cubic feet in 2005).

**Table A.14—Total roundwood output by product, species group, and source of material, Oklahoma, 2005**

Product and species group	All sources	Total	Growing-stock trees		Other sources
			Sawtimber	Poletimber	
<i>thousand cubic feet</i>					
Saw logs					
Softwood	54,691	46,487	43,697	2,789	8,204
Hardwood	6,803	6,644	6,245	399	159
Total	61,494	53,130	49,942	3,188	8,364
Veneer logs and other industrial <sup>a</sup>					
Softwood	21,119	18,380	13,348	5,033	2,739
Hardwood	13	13	13	0	0
Total	21,132	18,393	13,360	5,033	2,739
Pulpwood					
Softwood	19,626	12,757	3,255	9,501	6,869
Hardwood	16,983	14,941	4,610	10,330	2,042
Total	36,609	27,697	7,866	19,831	8,912
Total industrial products					
Softwood	95,436	77,624	60,300	17,323	17,812
Hardwood	23,799	21,597	10,868	10,729	2,202
Total	119,235	99,220	71,168	28,052	20,015
Fuelwood					
Softwood	210	97	80	17	113
Hardwood	12,122	8,728	5,511	3,218	3,394
Total	12,332	8,825	5,591	3,235	3,507
All products					
Softwood	95,646	77,721	60,380	17,341	17,925
Hardwood	35,921	30,325	16,379	13,946	5,596
Total	131,567	108,046	76,759	31,287	23,521

Numbers in rows and columns may not add due to rounding.

<sup>a</sup> Includes poles, posts, composite panels, mulch, firewood, log homes, charcoal, and all other industrial products.

**Table A.15—Total roundwood output by species group, survey region, and ownership class, Oklahoma, 2005**

Species group and survey region	Total	Ownership class		
		Public	Forest industry	Nonindustrial private
<i>thousand cubic feet</i>				
Softwoods				
Southeast	95,639	1,755	61,540	32,344
Northeast	7	0	0	7
Total softwoods	<u>95,646</u>	<u>1,755</u>	<u>61,540</u>	<u>32,351</u>
Hardwoods				
Southeast	31,850	620	11,098	20,133
Northeast	4,071	326	0	3,745
Total hardwoods	<u>35,921</u>	<u>946</u>	<u>11,098</u>	<u>23,878</u>
All species	<u>131,567</u>	<u>2,701</u>	<u>72,638</u>	<u>56,228</u>

Numbers in rows and columns may not add due to rounding.



**Table A.16—Total roundwood output by species group, detailed species group, and product, Oklahoma, 2005**

Species group and detailed species group	Total	Product			
		Saw logs	Veneer logs and other industrial <sup>a</sup>	Pulp-wood	Fuel-wood
<i>thousand cubic feet</i>					
Softwood					
Cedar	137	45	64	27	0
Loblolly-shortleaf pine	93,943	54,646	19,540	19,551	207
Other yellow pines	1,566	0	1,515	48	3
Total softwoods	95,646	54,691	21,119	19,626	210
Hardwood					
Soft maple	89	15	0	44	30
Hard maple	23	9	0	6	8
Hickory	5,699	888	0	2,888	1,923
Ash	363	135	0	106	123
Sweetgum	1,864	197	0	1,038	629
Blackgum-tupelo	523	106	0	240	177
Black cherry	111	19	0	55	37
Select white oaks	2,846	645	0	1,241	960
Other white oaks	10,155	1,505	1	5,223	3,427
Select red oaks	1,438	280	0	673	485
Other red oaks	9,942	2,404	12	4,170	3,355
Elm	2,133	324	0	1,089	720
Other eastern hardwoods	0	0	0	0	0
	734	276	0	210	248
Total hardwoods	35,921	6,803	13	16,983	12,122
All species	131,567	61,494	21,132	36,609	12,332

Numbers in rows and columns may not add due to rounding.

<sup>a</sup> Includes poles, posts, composite panels, mulch, firewood, log homes, charcoal, and all other industrial products.

**Table A.17—Total roundwood output by species group, detailed species group, and ownership class, Oklahoma, 2005**

Species group and detailed species group	Total	Ownership class		
		Public	Forest industry	Nonindustrial private
<i>thousand cubic feet</i>				
Softwood				
Cedar	137	11	0	126
Loblolly-shortleaf pine	93,943	1,744	61,540	30,659
Other yellow pines	1,566	0	0	1,566
Total softwoods	95,646	1,755	61,540	32,351
Hardwood				
Soft maple	89	0	15	73
Hard maple	23	0	0	23
Hickory	5,699	93	2,356	3,250
Ash	363	5	25	334
Sweetgum	1,864	0	870	995
Blackgum-tupelo	523	23	63	437
Black cherry	111	26	0	85
Select white oaks	2,846	182	313	2,351
Other white oaks	10,155	294	4,257	5,604
Select red oaks	1,438	132	132	1,174
Other red oaks	9,942	132	2,215	7,595
Elm	2,133	22	801	1,311
Other eastern hardwoods	734	36	52	646
Total hardwoods	35,921	946	11,098	23,878
All species	131,567	2,701	72,638	56,228

Numbers in rows and columns may not add due to rounding.

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Oklahoma's timber industry—an assessment of timber product output and use, 2005. Resour. Bull. SRS-136. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 28 p.

In 2005, roundwood output from Oklahoma's forests totaled 119 million cubic feet. Mill byproducts generated from primary manufacturers totaled 54 million cubic feet. Almost all plant residue was used primarily for fuel and fiber products. Saw logs were the leading roundwood product at 61 million cubic feet; pulpwood ranked second at 37 million cubic feet. There were 107 primary processing plants operating in Oklahoma in 2005. Receipts totaled 149 million cubic feet.

**Keywords:** FIA, pulpwood, residues, roundwood, saw logs, veneer logs, wood movement.



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