United States
Department of
Agriculture

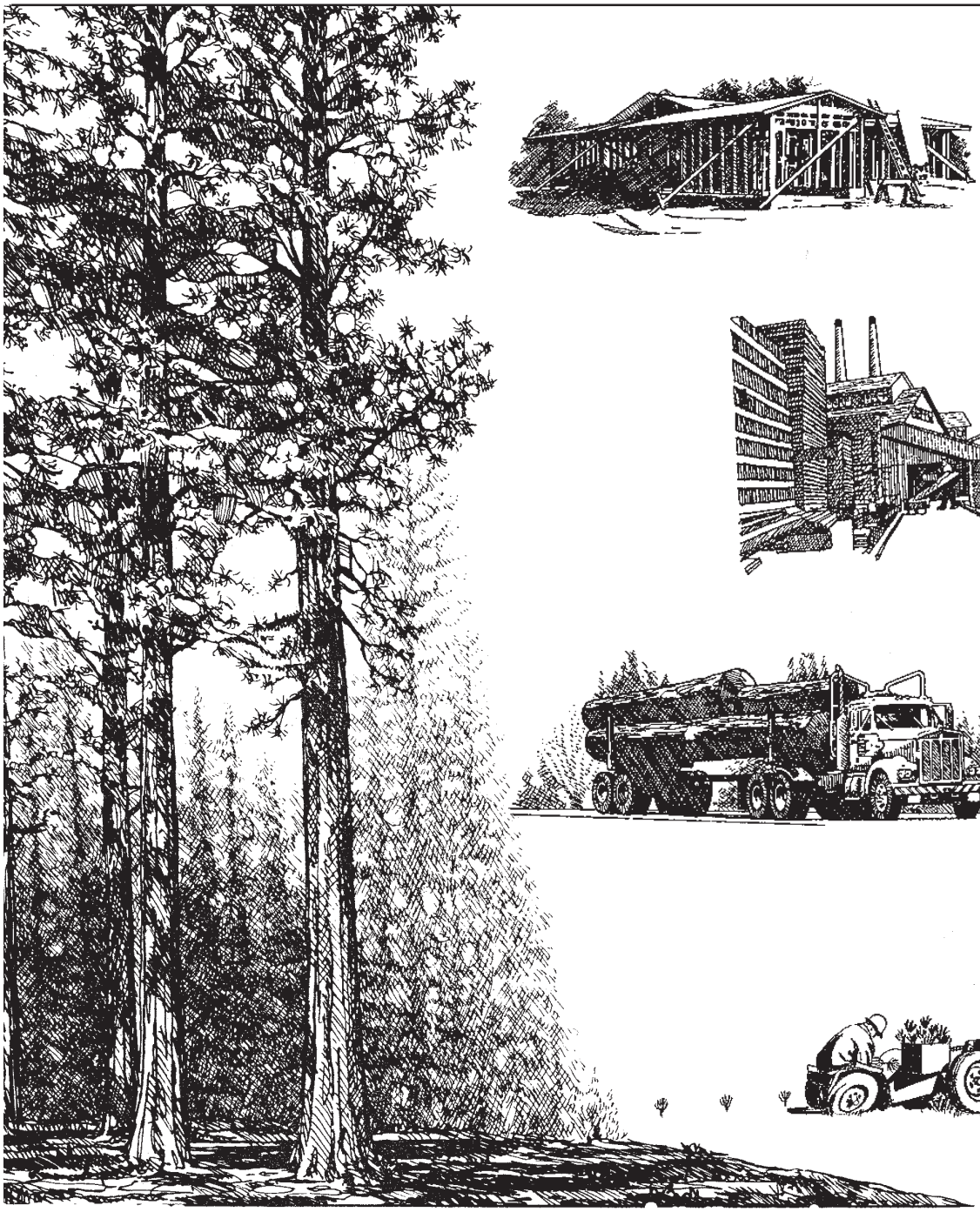
Forest Service

**Southern
Research Station**

Resource Bulletin
SRS–100

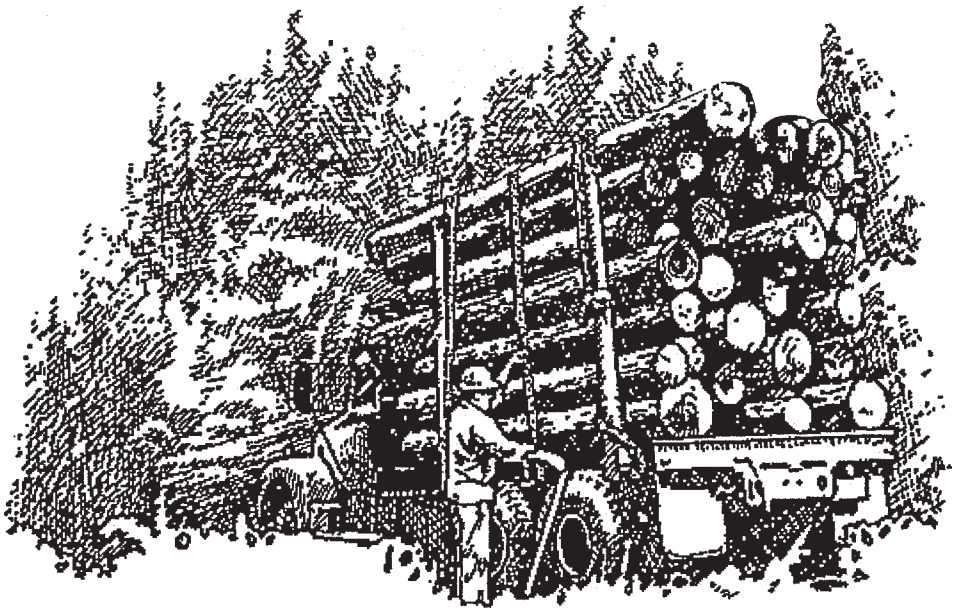
Oklahoma's Timber Industry—An Assessment of Timber Product Output and Use, 2002

Tony G. Johnson, Michael Howell, and James W. Bentley



The Authors:

Tony G. Johnson, Resource Analyst, **Michael Howell**, Resource Forester, and **James W. Bentley**, Resource Forester, USDA Forest Service, Southern Research Station, Knoxville, TN 37919.



March 2005

Southern Research Station
P.O. Box 2680
Asheville, NC 28802

Foreword

This bulletin contains the findings of a 2002 canvass of primary wood-using plants in Oklahoma, and presents changes in product output and residue use since 1999. It complements the Forest Inventory and Analysis periodic inventory of volume and removals from the State's timberland, primarily the 18 eastern counties of Oklahoma. The canvass was conducted to determine the amount and source of wood receipts and annual timber product drain, by county, in 2002 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 sampled canvass of all wood processors in Oklahoma was conducted in 2001 to obtain information for 2002. 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 southeastern pulpmills. Medium density fiberboard, insulating board, and hardboard plants were included in this survey.

Acknowledgments

The authors thank Kurt Atkinson for review and comments; Anne Jenkins, Charlene Walker, Lyn Thornhill, and Janet Griffin for tables, graphs, maps, and statistical checking; and Paul Smith, Diana Corbin, and Louise Wilde for editorial review, styling, and publication of this bulletin.

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.

Table of Contents

[a] All tables in this report are available in Microsoft® Excel workbook files. Upon request, these files will be supplied on 3½-inch diskettes.

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.

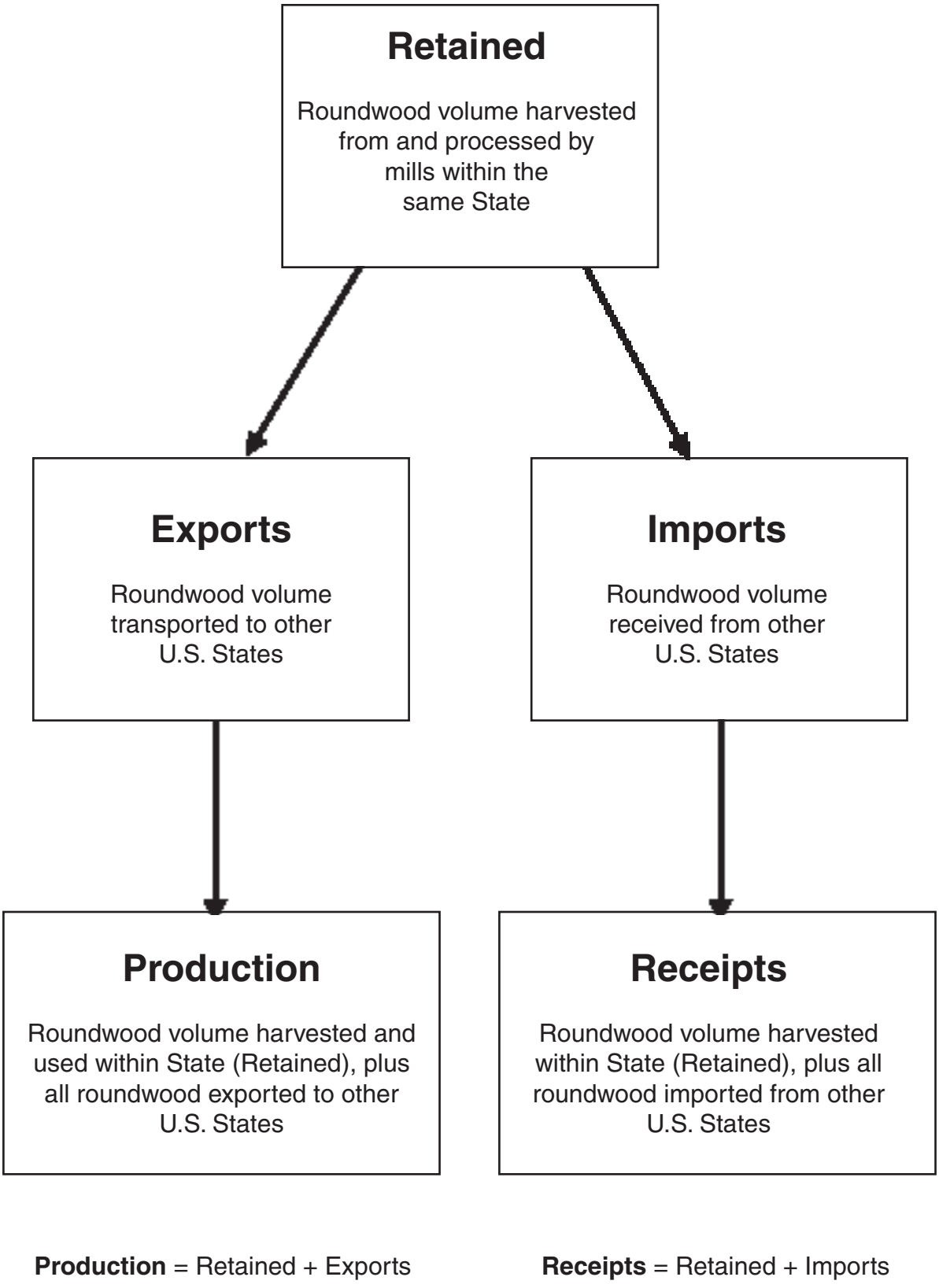


Figure 1—Movement of roundwood exports and imports within the United States.

Oklahoma's Timber Industry—An Assessment of Timber Product Output and Use, 2002

Tony G. Johnson, Michael Howell, and James W. Bentley

Output of Industrial Timber Products

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

All Products

- Between 1999 and 2002, the combined industrial timber product output (TPO) from roundwood and plant byproducts increased 3 percent, from 171 to 176 million cubic feet.
- TPO from roundwood was up 6 million cubic feet, or 5 percent, to 126 million cubic feet, while output of plant byproducts declined 0.6 million cubic feet to 50 million cubic feet.
- Output of softwood roundwood products increased 9 percent to 98 million cubic feet, while output of hardwood roundwood products declined 6 percent to 28 million cubic feet (fig. 2).
- Figures 3 and 4 display softwood and hardwood county-level intensity of roundwood production for all industrial products across Oklahoma. The data are depicted in cubic feet produced per acre of census land area. Counties with the highest production intensity are depicted in the darker shades. For softwoods the darkest shade represents more than 10 cubic feet of production per acre, while for hardwoods the darkest shade represents more than 8 cubic feet per acre.
- Pulpwood and saw logs were the principal roundwood products in 2002. Combined output of these two products totaled 113 million cubic feet and accounted for 90 percent of the State's total roundwood output (fig. 5).

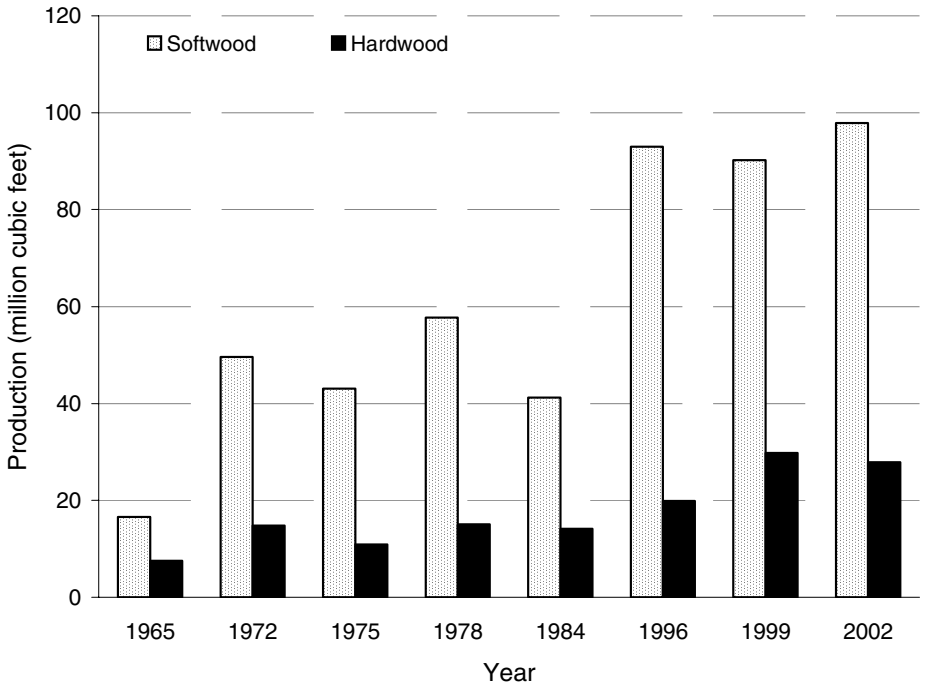


Figure 2—Roundwood production for all products by species group and year (see page 8 for references for individual years).

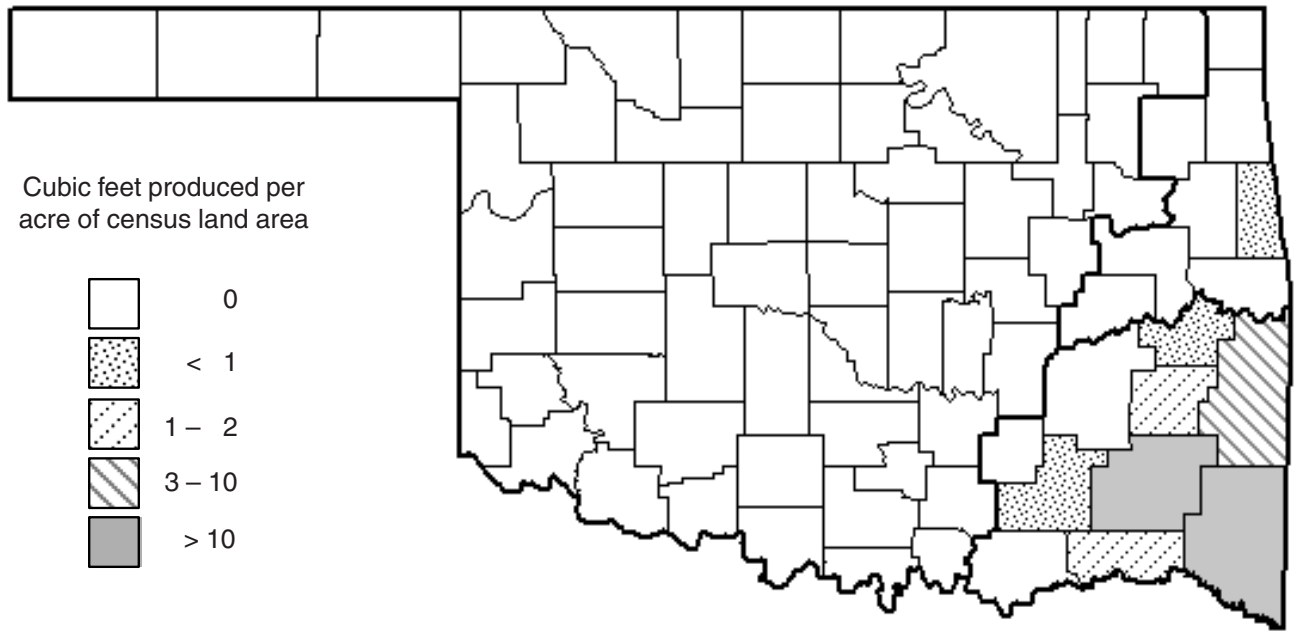


Figure 3—Intensity of roundwood softwood output for all industrial products in Oklahoma by county, 2002.

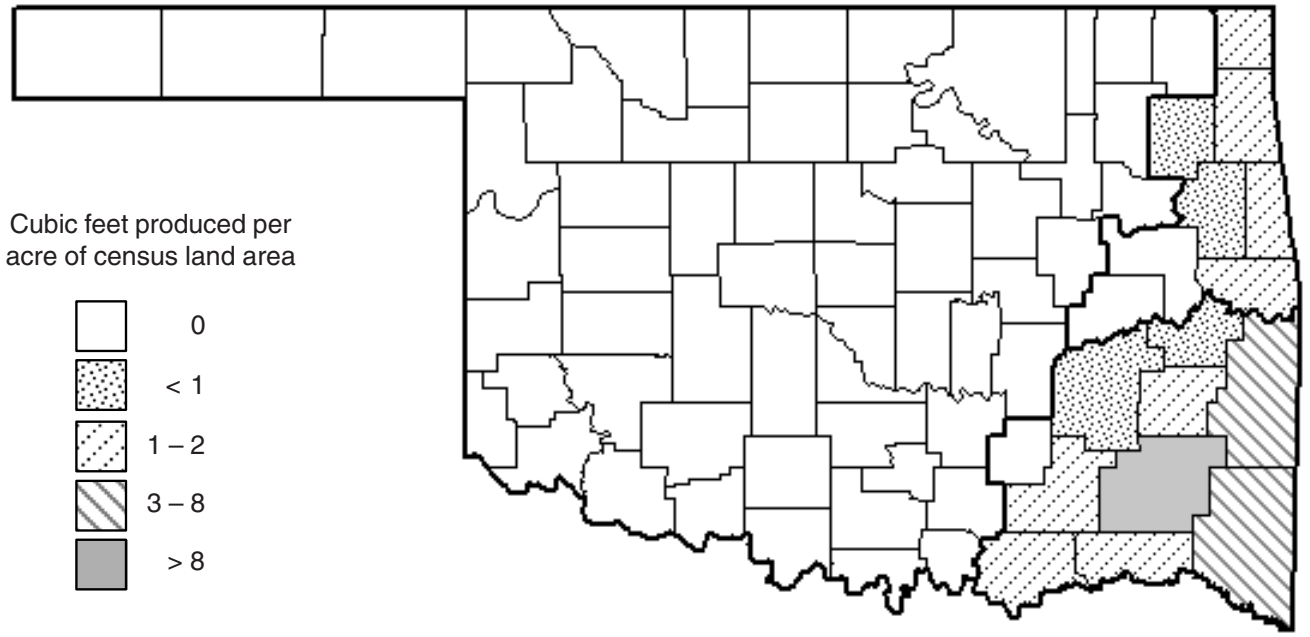


Figure 4—Intensity of roundwood hardwood output for all industrial products in Oklahoma by county, 2002.

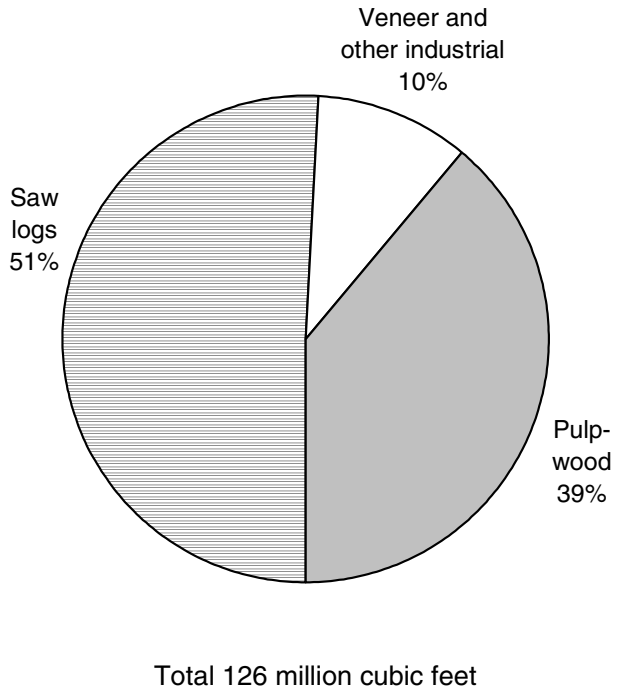


Figure 5—Roundwood production by type of product, 2002.

- Total receipts at Oklahoma mills, which included roundwood harvested and retained in the State and roundwood imported from other States, declined 19 percent, from 151 million cubic feet in 1999 to 123 million cubic feet in 2002. There were 109 primary roundwood-using plants operating in Oklahoma in 2002.

Saw Logs

- Saw logs accounted for 51 percent of the State's total roundwood products. Output of softwood saw logs increased 33 percent to 57 million cubic feet (318 million board feet), while that of hardwood saw logs declined 22 percent to 7 million cubic feet (40 million board feet) (fig. 6).

- In 2002, Oklahoma had 97 sawmills. This number includes some portable and one-man sawmills and many small sawmills not canvassed for this bulletin. Total softwood saw-log receipts were 56 million cubic feet, while those of hardwoods totaled 9 million cubic feet. Of the 17 reporting mills, 5 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.

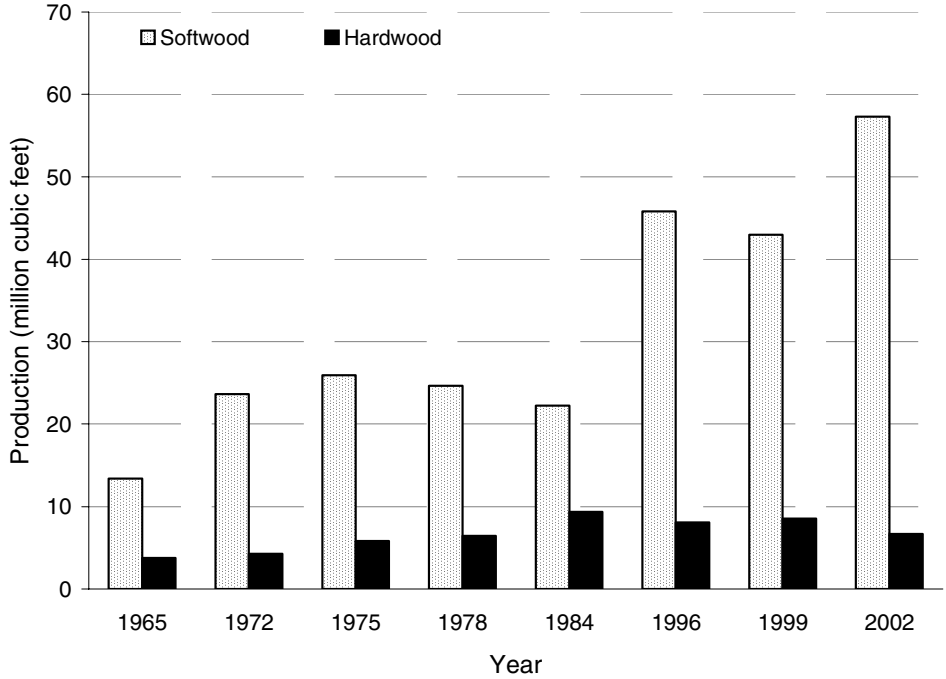


Figure 6—Roundwood saw-log production by species group and year (see page 8 for references for individual years).

- Oklahoma retained 80 percent of its saw-log production for domestic manufacture, with saw-log imports exceeding exports by 800 thousand cubic feet in 2002.

Pulpwood

- Total pulpwood production, including chipped roundwood, declined 9 percent to 49 million cubic feet (659 thousand cords) and accounted for 39 percent of the State's total roundwood TPO. Softwood output was down 15 percent to 28 million cubic feet, while hardwood remained relatively stable at 21 million cubic feet (fig. 7).

- Two pulpmill facilities were operating and receiving roundwood in Oklahoma in 2002. Total pulpwood receipts for these mills declined 35 percent to 45 million cubic feet, and accounted for 36 percent of total receipts for all mills.

- Sixty-three percent of roundwood cut for pulpwood was retained for processing at Oklahoma pulpmills. Roundwood pulpwood accounted for 56 percent of total known exports and 46 percent of total imports. Roundwood pulpwood imports amounted to 14 million cubic feet, while exports totaled 18 million cubic feet.

Veneer and Other Industrial Products

- In 2002, output of veneer and other industrial products totaled 13 million cubic feet and accounted for 10 percent of the State's total roundwood TPO volume. Softwood production declined 13 percent and accounted for all the production volume (fig. 8).

- Two veneer and other industrial mills were contacted for this bulletin. Receipts at these mills totaled 14 million cubic feet. Softwood accounted for all the receipt volume at these mills.

- Oklahoma retained 86 percent of its veneer and other industrial production for processing at domestic veneer and other industrial mills. Imports amounted to 3 million cubic feet, while exports were 2 million cubic feet, making the State a net importer of roundwood for veneer and other industrial uses.

Plant Byproducts

- In 2002, processing of primary products in Oklahoma mills generated 50 million cubic feet of wood and bark residues. Coarse residues from all primary products amounted to 22 million cubic feet, while bark volume

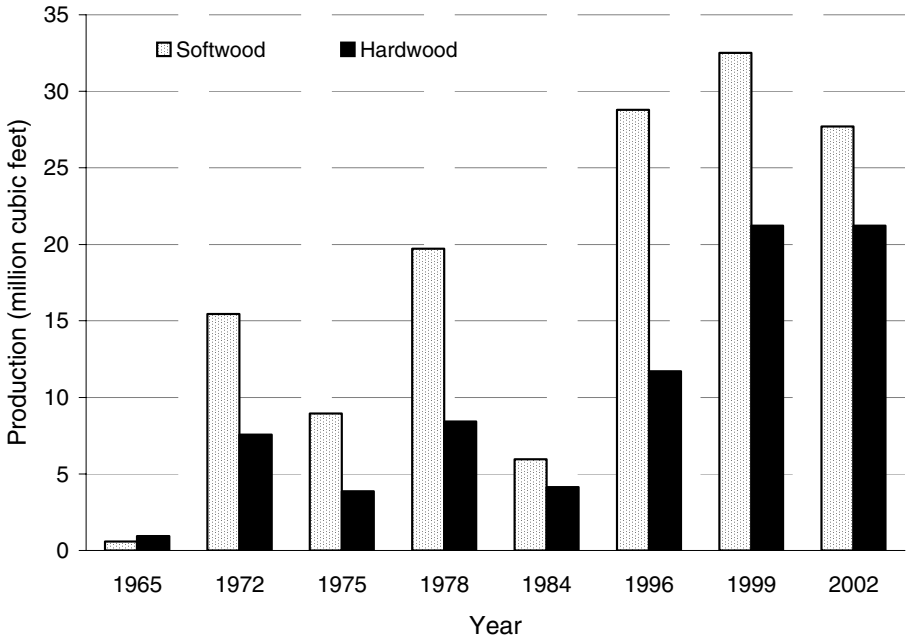


Figure 7—Roundwood pulpwood production by species group and year (see page 8 for references for individual years).

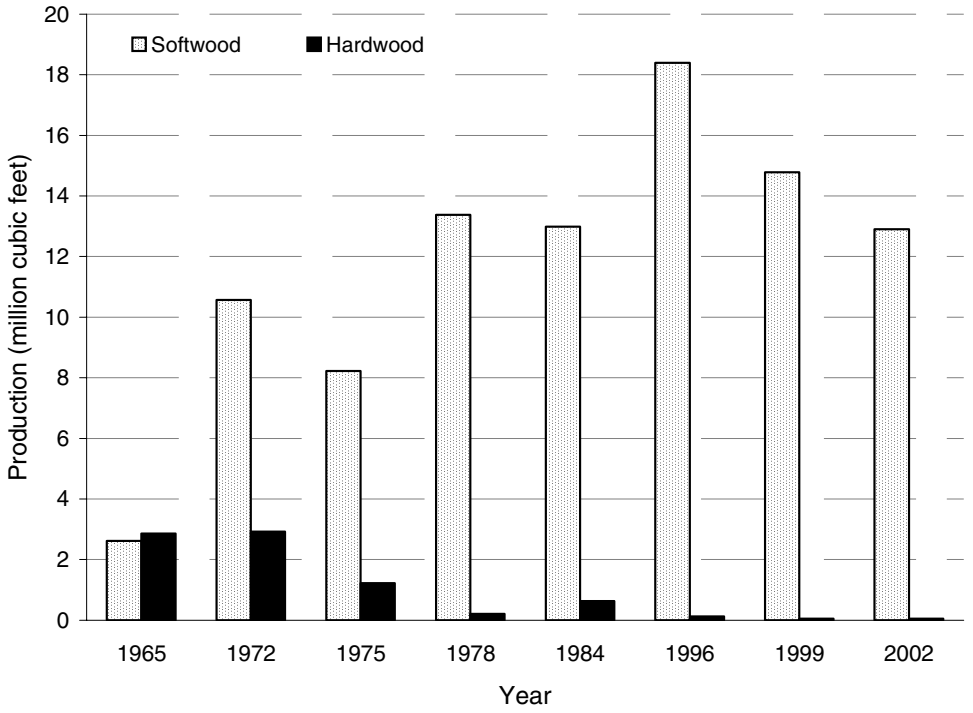


Figure 8—Roundwood veneer-log production by species group and year (see page 8 for references for individual years).

totaled 10 million cubic feet. Collectively, sawdust and shavings made up 36 percent of total residues, or 18 million cubic feet (fig. 9).

- Fifty-seven percent of the wood and bark residues were used for industrial fuel (fig. 10). Thirty-four percent were used for fiber products, with the remainder used for miscellaneous and sawn products. Ninety-five and ninety-eight percent, respectively, of the bark and sawdust was used for industrial fuel, while 92 percent of the shavings were used for industrial fuel.

- The processing of saw logs generated 41 million cubic feet of mill residues, accounting for 81 percent of the total residues produced (fig. 11).

Regional Trends

- Hardwood output of industrial roundwood products declined in the two regions of Oklahoma; however, softwood output increased in both of these regions. The

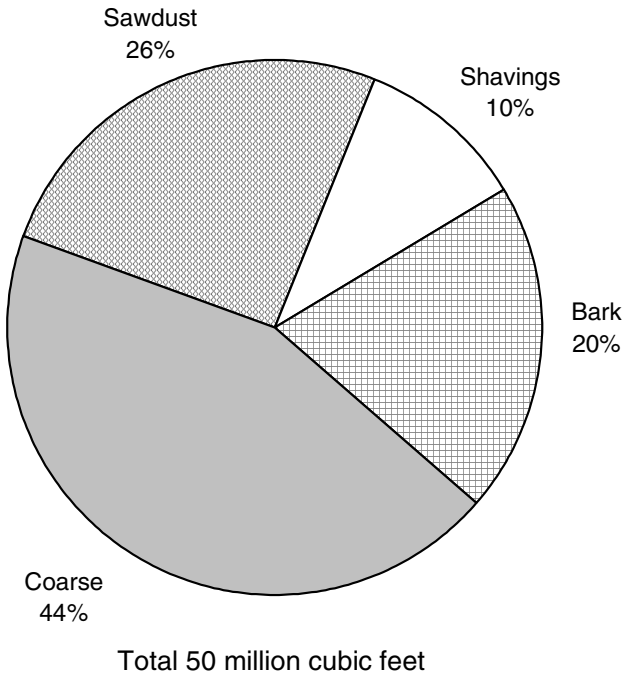


Figure 9—Primary mill residue by residue type, 2002.

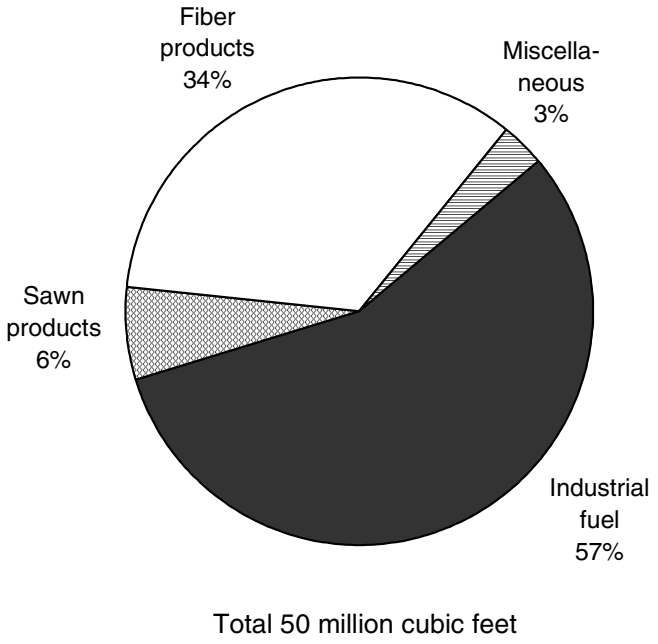


Figure 10—Disposal of residue by product, 2002.

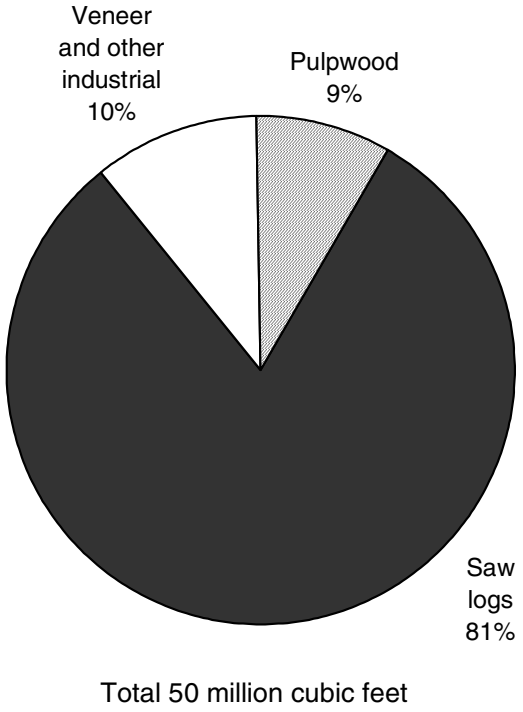


Figure 11—Primary mill residue produced by roundwood type, 2002.

Northeast region had a substantial decline, 18 percent, with all of the decline occurring in hardwood output.

Southeast Region

- Roundwood output from the Southeast region totaled 123 million cubic feet, a gain of 6 percent since 1999. Softwood output increased 9 percent to 98 million cubic feet, while hardwood output declined 2 percent to 25 million cubic feet.

- Saw-log production of 62 million cubic feet accounted for 50 percent of the total roundwood output for the region. Pulpwood accounted for 40 percent of the region's TPO and nearly all of the State's roundwood pulpwood output.

Northeast Region

- Roundwood output from the Northeast region totaled 2.5 million cubic feet, a decline of 18 percent.

- Production of saw logs was up 8 percent and accounted for nearly all of the region's total roundwood output and 4 percent of the State's total roundwood saw-log output.

Total Roundwood Output

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

Source

- In addition to the 126 million cubic feet of roundwood output for industrial roundwood products, an estimated 9 million cubic feet was harvested for domestic fuelwood, bringing Oklahoma's total roundwood output to 135 million cubic feet.

- Eighty-one 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 nonforestland) contributed an estimated 25 million cubic feet, or 19 percent of total roundwood output (fig. 12).

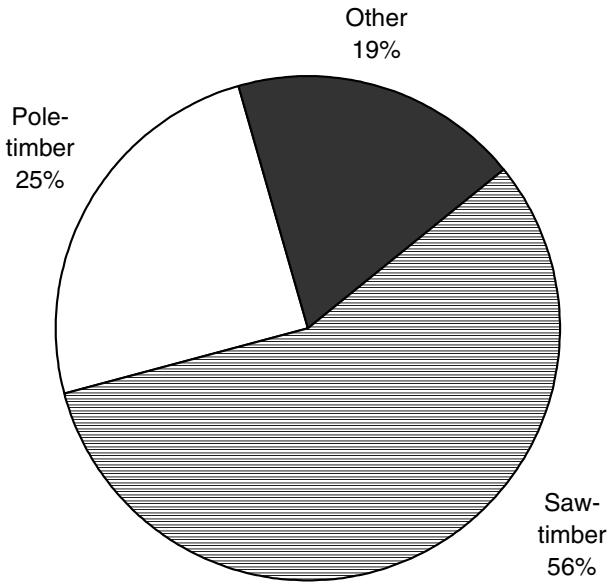


Figure 12—Roundwood output by source, 2002.

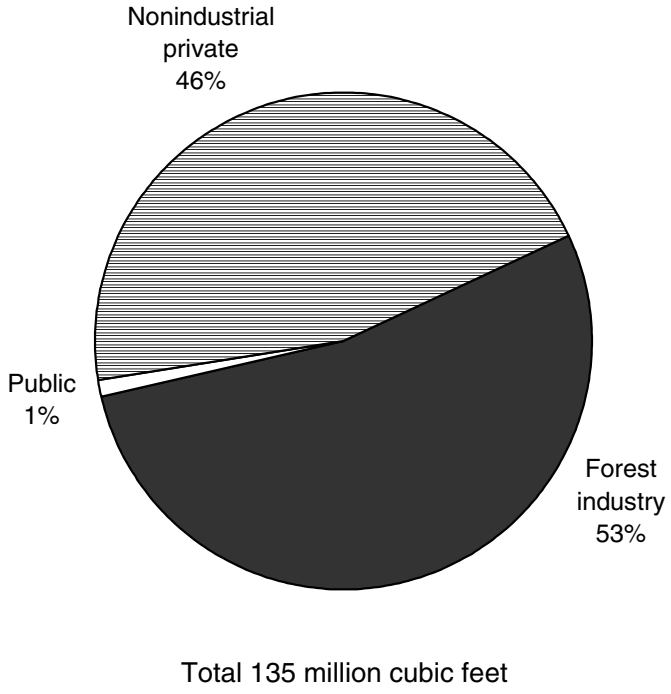


Figure 13—Roundwood output by ownership, 2002.

Ownership

- An estimated 72 million cubic feet, or 53 percent, of the total roundwood output came from forest industry lands.
- Nonindustrial private forestlands contributed 62 million cubic feet, or 46 percent, of the output. Public lands made up the remaining 1 percent, or 1.3 million cubic feet (fig. 13).

Species

- The loblolly and shortleaf pine group provided more volume than any other softwood species group, accounting for nearly all of the total softwood output (fig. 14). The cedar and other yellow pine types accounted for 350 thousand cubic feet of the softwood output.
- The red oak and white oak groups combined accounted for 25 million cubic feet, or 69 percent of total hardwood output (fig. 15).

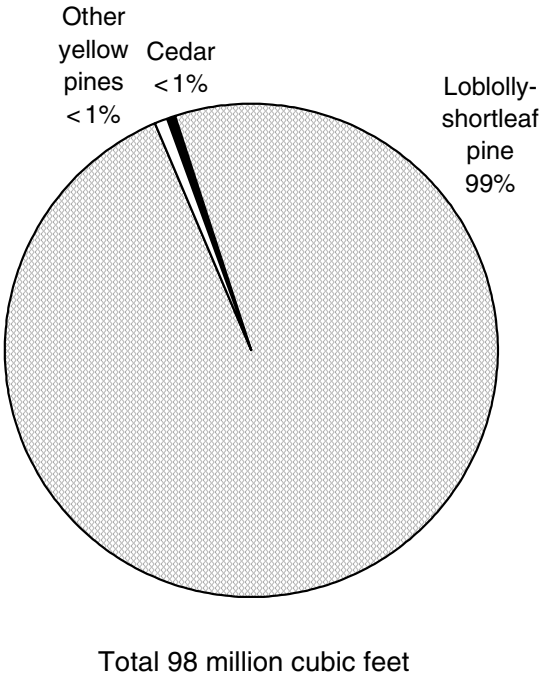


Figure 14—Roundwood output by softwood species group, 2002.

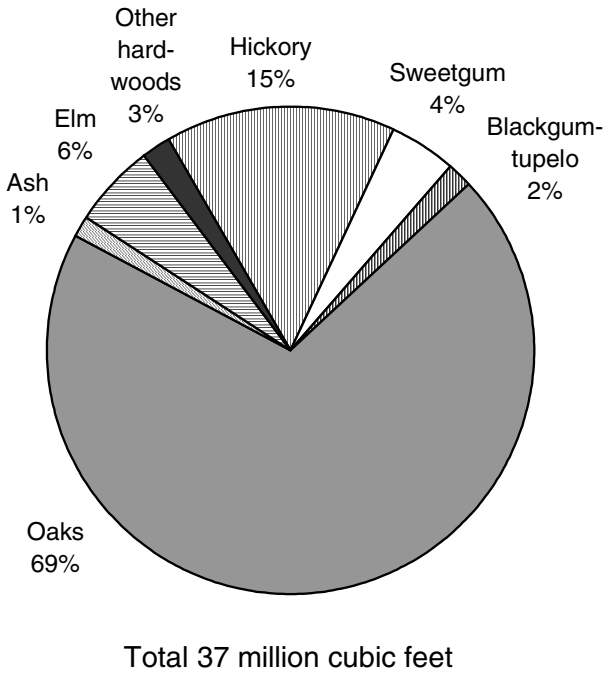


Figure 15—Roundwood output by hardwood species group, 2002.

Literature Cited

Bertelson, D.F. 1973. Oklahoma forest industries, 1972. Resour. Bull. SO–45. New Orleans: U.S. Department of Agriculture Forest Service, Southern Forest Experiment Station. 16 p. [1972].

Bertelson, D.F. 1977. Oklahoma forest industries, 1975. Resour. Bull. SO–64. New Orleans: U.S. Department of Agriculture Forest Service, Southern Forest Experiment Station. 14 p. [1975].

Howell, M.; Johnson, T.G. 1998. Oklahoma's timber industry—an assessment of timber product output and use, 1996. Resour. Bull. SRS–30. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 16 p. [1996].

Howell, M.; Johnson, T.G. 2002. Oklahoma's timber industry—an assessment of timber product output and use, 1999. Resour. Bull. SRS–82. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 28 p. [1999].

Little, E.L., Jr. 1979. Checklist of United States trees (native and naturalized). Agric. Handb. 541. Washington, DC: U.S. Department of Agriculture. 375 p.

May, D.M. 1986. Oklahoma forest industries, 1984. Resour. Bull. SO–109. New Orleans: U.S. Department of Agriculture Forest Service, Southern Forest Experiment Station. 11 p. [1984].

Rudis, V.A.; Jones, G.J. 1981. Oklahoma forest industries, 1978. Resour. Bull. SO–78. New Orleans: U.S. Department of Agriculture Forest Service, Southern Forest Experiment Station. 10 p. [1978].

Sternitzke, H.S.; VanSickle, C.C. 1968. East Oklahoma forests. Resour. Bull. SO–14. New Orleans: U.S. Department of Agriculture Forest Service, Southern Forest Experiment Station. 32 p. [1965].

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, and veneer logs, intended to be processed into primary wood products such as lumber, wood pulp, and 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.

Nonforestland. 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 forestland. Forestland other than timberland and productive reserved forestland. It includes available and reserved forestland 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 forestland. 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, and 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 broad-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 softwood, 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 scalelike.

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. Forestland 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 sawtimber 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

1 acre = 4,046.86 m^2 or 0.404686 ha
1 cubic foot = 0.028317 m^3
1 inch = 2.54 cm or 0.0254 m
Breast height = 1.4 m above the ground
1 square foot = 929.03 cm^2 or 0.0929 m^2
1 square foot per basal area = 0.229568 m^2/ha
1 pound = 0.454 kg
1 ton = 0.907 mt

Conversion Factors[a]

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[b]	
Softwood	72.5 cubic feet per cord
Hardwood	76.6 cubic feet per cord

[a] Conversion factors vary with stem size (d.b.h.) and species.

[b] Cubic feet of solid wood per cord.

Species List[a]

Common name	Scientific name[b]	Common name	Scientific name[b]
Softwoods		Hardwoods (continued)	
Eastern redcedar	*J. virginiana* L.	American holly	*Ilex opaca* Ait.
Shortleaf pine	*Pinus echinata* Mill.	Black walnut	*Juglans nigra* L.
Loblolly pine	*P. taeda* L.	Sweetgum	*Liquidambar styraciflua* L.
Virginia pine	*P. virginiana* Mill.	Osage-orange	*Maclura pomifera* (Raf.) Schneid.
Baldcypress	*Taxodium distichum* (L.) Rich.	Cucumbertree	*Magnolia acuminata* L.
		Apple	*Malus* spp.
Hardwoods		Chinaberry	*Melia azedarach* L.
Florida maple	*Acer barbatum* Michx.	White mulberry	*Morus alba* L.
Boxelder	*A. negundo* L.	Red mulberry	*M. rubra* L.
Red maple	*A. rubrum* L.	Blackgum	*N. sylvatica* Marsh.
Silver maple	*A. saccharinum* L.	Eastern hophornbeam	*Ostrya virginiana* (Mill.) K. Koch
Buckeye	*Aesculus* spp.	American sycamore	*Platanus occidentalis* L.
Ohio buckeye	*A. glabra* Willd.	Cottonwood	*Populus* spp.
Ailanthus	*Ailanthus altissima* (Mill.) Swingle	Black cherry	*Prunus serotina* Ehrh.
Tung-oil tree	*Aleurites fordii* Hemsl.	White oak	*Quercus alba* L.
Serviceberry	*Amelanchier* spp.	Durand oak	*Q. durandii* Buckl.
River birch	*Betula nigra* L.	Southern red oak	*Q. falcata* Michx.
American hornbeam	*Carpinus caroliniana* Walt.	Cherrybark oak	*Q. falcata* var. *pagodifolia* Ell.
Hickory	*Carya* spp.	Bluejack oak	*Q. incana* Bartr.
Water hickory	*C. aquatica* (Michx. f.) Nutt.	Overcup oak	*Q. lyrata* Walt.
Bitternut hickory	*C. cordiformis* (Wangenh.) K. Koch	Bur oak	*Q. macrocarpa* Michx.
Pignut hickory	*C. glabra* (Mill.) Sweet	Swamp chestnut oak	*Q. michauxii* Nutt.
Pecan	*C. illinoensis* (Wangenh.) K. Koch	Chinkapin oak	*Q. muehlenbergii* Engelm.
Shellbark hickory	*C. laciniosa* (Michx. f.) Loud.	Water oak	*Q. nigra* L.
Nutmeg hickory	*C. myristiciformis* (Mich. f.) Nutt.	Nuttall oak	*Q. nuttallii* Palmer
Shagbark hickory	*C. ovata* (Mill.) K. Koch	Pin oak	*Q. palustris* Muenchh.
Black hickory	*C. texana* Buckl.	Willow oak	*Q. phellos* L.
Mockernut hickory	*C. tomentosa* (Poir.) Nutt.	Northern red oak	*Q. rubra* L.
Allegheny chinkapin	*Castanea pumila* Mill.	Shumard oak	*Q. shumardii* Buckl.
Catalpa	*Catalpa* spp.	Post oak	*Q. stellata* Wangenh.
Sugarberry	*Celtis laevigata* Willd.	Black oak	*Q. velutina* Lam.
Hackberry	*C. occidentalis* L.	Black locust	*Robinia pseudoacacia* L.
Eastern redbud	*Cercis canadensis* L.	Willow	*Salix* spp.
Flowering dogwood	*Cornus florida* L.	Sassafras	*Sassafras albidum* (Nutt.) Nees
Hawthorn	*Crataegus* spp.	American basswood	*Tilia americana* L.
Common persimmon	*Diospyros virginiana* L.	Winged elm	*Ulmus alata* Michx.
American beech	*Fagus grandifolia* Ehrh.	American elm	*U. americana* L.
White ash	*Fraxinus americana* L.	Cedar elm	*U. crassifolia* Nutt.
Waterlocust	*Gleditsia aquatica* Marsh.	Slippery elm	*U. rubra* Muhl.
Honeylocust	*G. triacanthos* L.	September elm	*U. serotina* Sarg.

[a] Scientific and common names of tree species > 1.0 inch in d.b.h. occurring in the FIA sample.

[b] Nomenclature (Little 1979).

Appendix

Index of Tables

Table A.1—Output of industrial products by product and species group, Oklahoma, 1999 and 2002

Product and species group	Year 1999	2002	Change	Change
	thousand cubic feet			*percent*
Saw logs				
Softwood	42,963	57,304	14,341	33.4
Hardwood	8,543	6,653	-1,890	-22.1
Total	51,506	63,957	12,451	24.2
Veneer logs and other industrial[a]				
Softwood	14,777	12,906	-1,871	-12.7
Hardwood	0	0	0	—
Total	14,777	12,906	-1,871	-12.7
Pulpwood[b]				
Softwood	32,508	27,706	-4,802	-14.8
Hardwood	21,226	21,212	-14	-0.1
Total	53,734	48,918	-4,816	-9.0
All industrial				
Softwood	90,248	97,916	7,668	8.5
Hardwood	29,769	27,865	-1,904	-6.4
Total	120,017	125,781	5,764	4.8
Byproduct output				
Softwood	43,073	43,690	617	1.4
Hardwood	7,594	6,387	-1,207	-15.9
Total	50,667	50,077	-590	-1.2
Total output				
Softwood	133,321	141,606	8,285	6.2
Hardwood	37,363	34,252	-3,111	-8.3
Total	170,684	175,858	5,174	3.0

— = negligible.

[a] Includes poles, posts, mulch, firewood, log homes, charcoal, and all other industrial products.

[b] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (4,553,000 cubic feet in 1999 and 3,707,000 cubic feet in 2002).

Table A.2—Roundwood receipts by product and species group, Oklahoma, 1999 and 2002

Product and species group	Year		Change	Change
	1999	2002		
	- - - - thousand cubic feet - - - -			*percent*
Saw logs				
Softwood	53,868	56,222	2,354	4.4
Hardwood	10,659	8,535	-2,124	-19.9
Total	64,527	64,757	230	0.4
Veneer logs and other industrial[a]				
Softwood	18,084	13,901	-4,183	-23.1
Hardwood	0	0	0	—
Total	18,084	13,901	-4,183	-23.1
Pulpwood[b]				
Softwood	56,529	34,808	-21,721	-38.4
Hardwood	12,246	9,918	-2,328	-19.0
Total	68,775	44,726	-24,049	-35.0
Total output				
Softwood	128,481	104,931	-23,550	-18.3
Hardwood	22,905	18,453	-4,452	-19.4
Total	151,386	123,384	-28,002	-18.5

— = negligible.

[a] Includes poles, posts, mulch, firewood, log homes, charcoal, and all other industrial products.

[b] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (9,563,000 cubic feet in 1999 and 4,528,000 cubic feet in 2002).

Table A.3—Number of primary wood-using plants by industry, Oklahoma, 1965 to 2002

Industry	Year							
	1965	1972	1975	1978	1984	1996	1999	2002
	number							
Sawmills	110	103	83	66	84	68	62	97
Veneer or plywood mills	0	1	1	1	1	1	1	1
Pulpmills	2	3	3	3	3	2	2	2
Composite panel mills	0	0	0	0	0	0	0	1
Other mills	19	11	14	11	12	2	2	8
All plants	131	118	101	81	100	73	67	109

Table A.4—Roundwood receipts by sawmill size, Oklahoma, 1999 and 2002

Sawmill size class[a]	1999			2002		
	Mills[b]	Volume		Mills[b]	Volume	
mmbf	*number*	*mbf*	*percent*	*number*	*mbf*	*percent*
< 1.0	0	0	0	5	440	0
1.0 – 9.99	8	30,275	8	8	35,658	10
> 10.0	5	333,208	92	4	327,669	90
Total	13	363,483	100	17	363,327	100

[a] Based on volume received as opposed to actual capacity.

[b] 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, 2002

Species	All mills	Type of mill		
		Sawmills	Veneer and other industrial	Pulpmills[a]
		thousand cubic feet		
Softwood				
Yellow pine	70,114	56,213	13,901	NA
Eastern white pine	1	1	0	NA
Cedar	8	8	0	NA
Cypress	0	0	0	NA
Other softwood	0	0	0	NA
Unclassified	34,808	0	0	34,808
Total softwoods	104,931	56,222	13,901	34,808
Hardwood				
Blackgum and tupelo	2	2	0	NA
Soft maple	201	201	0	NA
Sweetgum	234	234	0	NA
Yellow-poplar	0	0	0	NA
Other soft hardwood	1,180	1,180	0	NA
Hickory	752	752	0	NA
Red oak	2,572	2,572	0	NA
White oak	1,763	1,763	0	NA
Other hard hardwood	1,831	1,831	0	NA
Unclassified	9,918	0	0	9,918
Total hardwoods	18,453	8,535	0	9,918
All species	123,384	64,757	13,901	44,726

NA = not applicable.

[a] Only collected by softwood and hardwood and includes roundwood chipped.

Table A.6—Industrial roundwood movement by year and species group, Oklahoma, 1999 and 2002

Year	Production	Exported to other States	Retained	Imported from other States	Receipts
			thousand cubic feet		
			Softwood		
1999	90,248	22,916	67,332	61,149	128,481
2002	97,916	17,408	80,508	24,423	104,931
			Hardwood		
1999	29,769	13,486	16,283	6,622	22,905
2002	27,865	14,798	13,067	5,386	18,453
			All species		
1999	120,017	36,402	83,615	67,771	151,386
2002	125,781	32,206	93,575	29,809	123,384

Table A.7—Industrial roundwood movement by product and species group, Oklahoma, 2002

Product and species group	Production	Exported to other States	Retained	Imported from other States	Receipts
			thousand cubic feet		
Saw logs					
Softwood	57,304	11,108	46,196	10,026	56,222
Hardwood	6,653	1,389	5,264	3,271	8,535
Total	63,957	12,497	51,460	13,297	64,757
Veneer logs and other industrial					
Softwood	12,906	1,795	11,111	2,790	13,901
Hardwood	0	0	0	0	0
Total	12,906	1,795	11,111	2,790	13,901
Pulpwood[a]					
Softwood	27,706	4,505	23,201	11,607	34,808
Hardwood	21,212	13,409	7,803	2,115	9,918
Total	48,918	17,914	31,004	13,722	44,726
All products					
Softwood	97,916	17,408	80,508	24,423	104,931
Hardwood	27,865	14,798	13,067	5,386	18,453
Total	125,781	32,206	93,575	29,809	123,384

[a] Includes roundwood chipped.

Table A.8—Saw-log volume by destination, source, and species group, Oklahoma, 2002

Destination and source	All species	Species group	
		Softwood	Hardwood
	thousand cubic feet		
Oklahoma (retained)	51,460	46,196	5,264
Exports to			
Arkansas	9,975	8,920	1,055
Missouri	334	0	334
Texas	2,188	2,188	0
Total	12,497	11,108	1,389
Imports from			
Arkansas	3,249	1,643	1,606
Louisiana	275	275	0
Missouri	94	0	94
Texas	9,679	8,108	1,571
Total	13,297	10,026	3,271

Table A.9—Veneer log and other industrial volume by destination, source, and species group, Oklahoma, 2002[a]

Destination and source	All species	Species group	
		Softwood	Hardwood
	thousand cubic feet		
Oklahoma (retained)	11,111	11,111	0
Exports to			
Arkansas	1,795	1,795	0
Total	1,795	1,795	0
Imports from			
Arkansas	1,161	1,161	0
Texas	1,629	1,629	0
Total	2,790	2,790	0

[a] Includes poles, posts, mulch, firewood, log homes, charcoal, and all other industrial products.

Table A.10—Pulpwood volume by destination, source, and species group, Oklahoma, 2002[a]

Destination and source	All species	Species group	
		Softwood	Hardwood
	thousand cubic feet		
Oklahoma (retained)	31,004	23,201	7,803
Exports to			
Arkansas	17,464	4,341	13,123
Louisiana	18	0	18
Texas	432	164	268
Total	17,914	4,505	13,409
Imports from			
Arkansas	10,249	10,249	0
Louisiana	80	80	0
Texas	3,393	1,278	2,115
Total	13,722	11,607	2,115

[a] Includes roundwood chipped.

Table A.11—Primary mill residue volume by roundwood type, species group, and residue type, Oklahoma, 2002

Roundwood type and species group	All types	Residue type			
		Bark	Coarse	Sawdust	Shavings
		thousand cubic feet			
Saw logs					
Softwood	35,192	3,773	16,283	9,970	5,166
Hardwood	5,319	884	2,717	1,718	0
Total	40,511	4,657	19,000	11,688	5,166
Veneer logs and other industrial[a]					
Softwood	5,218	983	3,146	1,089	0
Hardwood	0	0	0	0	0
Total	5,218	983	3,146	1,089	0
Pulpwood					
Softwood	3,280	3,280	0	0	0
Hardwood	1,068	1,068	0	0	0
Total	4,348	4,348	0	0	0
Total					
Softwood	43,690	8,036	19,429	11,059	5,166
Hardwood	6,387	1,952	2,717	1,718	0
Total	50,077	9,988	22,146	12,777	5,166

[a] Includes poles, pilings, posts, and other industrial products.

Table A.12—Disposal of residue at primary wood-using plants by product, species group, and type of residue, Oklahoma, 1999 and 2002

Product and species group	All types		Bark		Coarse		Sawdust		Shavings	
	1999	2002	1999	2002	1999	2002	1999	2002	1999	2002
	thousand cubic feet									
Fiber products										
Softwood	11,533	16,261	0	0	11,533	16,261	0	0	0	0
Hardwood	1,956	871	0	0	1,956	871	0	0	0	0
Total	13,489	17,132	0	0	13,489	17,132	0	0	0	0
Particleboard										
Softwood	1,319	0	0	0	0	0	0	0	1,319	0
Hardwood	0	0	0	0	0	0	0	0	0	0
Total	1,319	0	0	0	0	0	0	0	1,319	0
Charcoal/ chemical wood										
Softwood	35	2	0	0	35	2	0	0	0	0
Hardwood	0	0	0	0	0	0	0	0	0	0
Total	35	2	0	0	35	2	0	0	0	0
Sawn products										
Softwood	4,536	3,146	0	0	4,536	3,146	0	0	0	0
Hardwood	0	4	0	1	0	3	0	0	0	0
Total	4,536	3,150	0	1	4,536	3,149	0	0	0	0
Fuel										
Softwood	20,087	23,485	8,951	7,666	14	17	11,122	11,057	0	4,745
Hardwood	4,382	4,794	1,827	1,837	900	1,463	1,655	1,494	0	0
Total	24,469	28,279	10,778	9,503	914	1,480	12,777	12,551	0	4,745
Miscellaneous										
Softwood	5,563	794	1,775	370	0	2	0	1	3,788	421
Hardwood	1,256	690	253	110	512	365	491	215	0	0
Total	6,819	1,484	2,028	480	512	367	491	216	3,788	421
Not used										
Softwood	0	2	0	0	0	1	0	1	0	0
Hardwood	0	28	0	4	0	15	0	9	0	0
Total	0	30	0	4	0	16	0	10	0	0
All products										
Softwood	43,073	43,690	10,726	8,036	16,118	19,429	11,122	11,059	5,107	5,166
Hardwood	7,594	6,387	2,080	1,952	3,368	2,717	2,146	1,718	0	0
Total	50,667	50,077	12,806	9,988	19,486	22,146	13,268	12,777	5,107	5,166

Table A.13—Roundwood timber product output by product and species group, Southeast Region of Oklahoma, 1999 and 2002

Product and species group	Year 1999	2002	Change	Change
	- - - - *thousand cubic feet* - - - -			*percent*
Saw logs				
Softwood	42,963	57,295	14,332	33.4
Hardwood	5,538	4,208	-1,330	-24.0
Total	48,501	61,503	13,002	26.8
Veneer logs and other industrial				
Softwood	14,777	12,906	-1,871	-12.7
Hardwood	0	0	0	—
Total	14,777	12,906	-1,871	-12.7
Pulpwood[a]				
Softwood	32,508	27,706	-4,802	-14.8
Hardwood	20,493	21,211	718	3.5
Total	53,001	48,917	-4,084	-7.7
All industrial				
Softwood	90,248	97,907	7,659	8.5
Hardwood	26,031	25,419	-612	-2.4
Total	116,279	123,326	7,047	6.1

— = negligible.

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (4,553,000 cubic feet in 1999 and 3,707,000 cubic feet in 2002).

Table A.14—Roundwood timber product output by county, product, and species group, Southeast Region of Oklahoma, 2002

County	All products		Saw logs		Veneer logs and other industrial		Pulpwood[a]	
	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood
	thousand cubic feet							
Atoka	510	1,015	392	579	94	0	24	436
Bryan	0	593	0	0	0	0	0	593
Choctaw	1,091	944	275	43	443	0	373	901
Haskell	207	261	0	261	0	0	207	0
Latimer	1,155	791	334	0	537	0	284	791
Le Flore	7,461	5,806	3,484	437	1,086	0	2,891	5,369
McCurtain	63,573	6,864	39,804	2,098	6,895	0	16,874	4,766
Pittsburg	0	157	0	0	0	0	0	157
Pushmataha	23,910	8,988	13,006	790	3,851	0	7,053	8,198
All counties	97,907	25,419	57,295	4,208	12,906	0	27,706	21,211

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (3,707,000 cubic feet in 2002).

Table A.15—Roundwood timber product output by product and species group, Northeast Region of Oklahoma, 1999 and 2002

Product and species group	Year		Change	Change
	1999	2002		
	- - - thousand cubic feet - - -			*percent*
Saw logs				
Softwood	0	9	9	—
Hardwood	2,268	2,445	177	7.8
Total	2,268	2,454	186	8.2
Veneer logs and other industrial				
Softwood	0	0	0	—
Hardwood	0	0	0	—
Total	0	0	0	—
Pulpwood[a]				
Softwood	0	0	0	—
Hardwood	733	1	-732	-99.9
Total	733	1	-732	-99.9
All industrial				
Softwood	0	9	9	—
Hardwood	3,001	2,446	-555	-18.5
Total	3,001	2,455	-546	-18.2

— = negligible.

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (0 cubic feet in 1999 and 0 cubic feet in 2002).

Table A.16—Roundwood timber product output by county, product, and species group, Northeast Region of Oklahoma, 2002

County	All products		Saw logs		Veneer logs and other industrial		Pulpwood[a]	
	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood
	thousand cubic feet							
Adair	9	621	9	620	0	0	0	1
Cherokee	0	323	0	323	0	0	0	0
Delaware	0	635	0	635	0	0	0	0
Mayes	0	62	0	62	0	0	0	0
Ottawa	0	405	0	405	0	0	0	0
Sequoyah	0	400	0	400	0	0	0	0
All counties	9	2,446	9	2,445	0	0	0	1

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (0 cubic feet in 2002).

Table A.17—Total roundwood output by product, species group, and source of material, Oklahoma, 2002

Product and species group	All sources	Growing-stock trees		Other sources
		Total	Sawtimber	Poletimber	
	thousand cubic feet				
Saw logs					
Softwood	57,304	48,708	45,785	2,922	8,596
Hardwood	6,653	6,497	6,107	390	156
Total	63,957	55,205	51,892	3,312	8,752
Veneer logs and other industrial[a]					
Softwood	12,906	11,268	10,025	1,243	1,638
Hardwood	0	0	0	0	0
Total	12,906	11,268	10,025	1,243	1,638
Pulpwood					
Softwood	27,706	18,009	4,596	13,413	9,697
Hardwood	21,212	18,661	5,759	12,902	2,551
Total	48,918	36,670	10,354	26,316	12,248
Total industrial products					
Softwood	97,916	77,984	60,406	17,579	19,932
Hardwood	27,865	25,158	11,866	13,292	2,707
Total	125,781	103,142	72,272	30,871	22,639
Fuelwood					
Softwood	159	74	61	13	85
Hardwood	9,144	6,584	4,157	2,427	2,560
Total	9,303	6,658	4,218	2,440	2,645
All products					
Softwood	98,075	78,058	60,466	17,592	20,017
Hardwood	37,009	31,742	16,023	15,719	5,267
Total	135,084	109,800	76,489	33,311	25,284

Numbers in rows and columns may not sum to totals due to rounding.

[a] Includes poles, posts, mulch, firewood, log homes, charcoal, and all other industrial products.

Table A.18—Total roundwood output by species group, survey region, and ownership class, Oklahoma, 2002

Species group and survey region	Total	Ownership class		
		Public	Forest industry	Nonindustrial private
		thousand cubic feet		
Softwoods				
Southeast	98,066	593	62,869	34,604
Northeast	9	0	0	9
Total softwoods	98,075	593	62,869	34,613
Hardwoods				
Southeast	33,761	360	9,304	24,096
Northeast	3,248	319	0	2,929
Total hardwoods	37,009	679	9,304	27,025
All species	135,084	1,272	72,173	61,638

Numbers in rows and columns may not sum to totals due to rounding.

Table A.19—Total roundwood output by species group, detailed species group, and product, Oklahoma, 2002

Species group and detailed species group	Total	Product			
		Saw log	Veneer logs and other industrial	Pulpwood	Fuel-wood
		thousand cubic feet			
Softwood					
Cedar	143	47	45	51	0
Loblolly-shortleaf pine	97,725	57,257	12,861	27,448	159
Other yellow pines	207	0	0	207	0
Total softwoods	98,075	57,304	12,906	27,706	159
Hardwood					
Soft maple	59	14	0	31	15
Hard maple	12	9	0	0	3
Hickory	5,578	876	0	3,324	1,378
Ash	438	133	0	197	108
Sweetgum	1,613	177	0	1,037	398
Blackgum-tupelo	603	101	0	353	149
Sycamore	99	0	0	75	25
Black cherry	326	19	0	227	81
Select white oaks	3,172	628	0	1,761	784
Other white oaks	11,446	1,441	0	7,177	2,828
Select red oaks	2,237	266	0	1,418	553
Other red oaks	8,638	2,390	0	4,113	2,134
Elm	2,028	303	0	1,224	501
Other Eastern hardwoods	759	298	0	274	188
Total hardwoods	37,009	6,653	0	21,212	9,144
All species	135,084	63,957	12,906	48,918	9,303

Numbers in rows and columns may not sum to totals due to rounding.

Table A.20—Total roundwood output by species group, detailed species group, and ownership class, Oklahoma, 2002

Species group and detailed species group	Total	Ownership class		
		Public	Forest industry	Nonindustrial private
		thousand cubic feet		
Softwood				
Cedar	143	8	0	135
Loblolly-shortleaf pine	97,725	585	62,869	34,271
Other yellow pines	207	0	0	207
Total softwoods	98,075	593	62,869	34,613
Hardwood				
Soft maple	59	0	10	49
Hard maple	12	0	0	12
Hickory	5,578	84	2,019	3,475
Ash	438	4	16	417
Sweetgum	1,613	0	743	869
Blackgum-tupelo	603	14	42	546
Sycamore	99	0	0	99
Black cherry	326	15	0	311
Select white oaks	3,172	126	209	2,837
Other white oaks	11,446	201	3,692	7,554
Select red oaks	2,237	80	88	2,069
Other red oaks	8,638	104	1,770	6,763
Elm	2,028	13	679	1,336
Other Eastern hardwoods	759	38	35	687
Total hardwoods	37,009	679	9,304	27,025
All species	135,084	1,272	72,173	61,638

Numbers in rows and columns may not sum to totals due to rounding.

The Forest Service, U.S. Department of Agriculture, is dedicated to the principle of multiple use management of the Nation's forest resources for sustained yields of wood, water, forage, wildlife, and recreation. Through forestry research, cooperation with the States and private forest owners, and management of the National Forests and National Grasslands, it strives—as directed by Congress—to provide increasingly greater service to a growing Nation.

Johnson, T.G.; Howell, M.; Bentley, J.W. 2005. Oklahoma's timber industry—an assessment of timber product output and use, 2002. Resour. Bull. SRS–100. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 34 p.

In 2002, roundwood output from Oklahoma's forests totaled 126 million cubic feet. Mill byproducts generated from primary manufacturers totaled 50 million cubic feet. Almost all plant residue was used primarily for fuel and fiber products. Saw logs were the leading roundwood product at 64 million cubic feet; pulpwood ranked second at 49 million cubic feet. There were 109 primary processing plants operating in Oklahoma in 2002. Receipts totaled 123 million cubic feet.

Keywords: Pulpwood, residues, roundwood, saw logs, veneer logs, wood movement.

United States
Department of Agriculture

Forest Service

Southern
Research Station
P.O. Box 2680
200 Weaver Blvd.
Asheville, NC 28802