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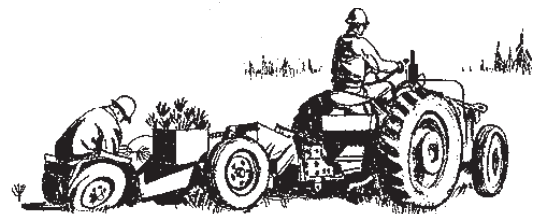
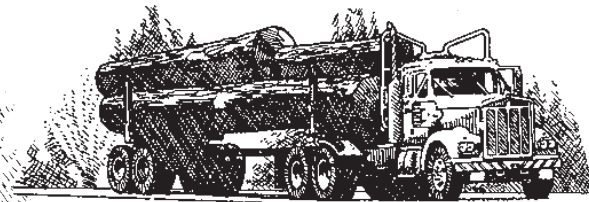
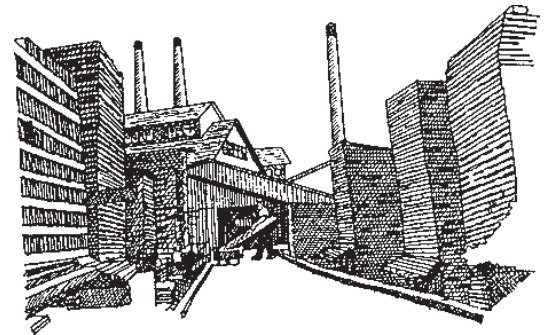
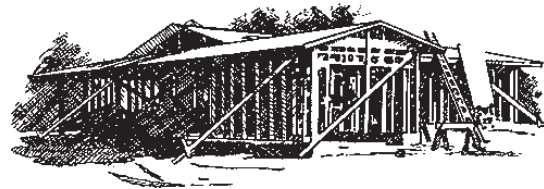


Southern
Research Station

Resource Bulletin
SRS-103

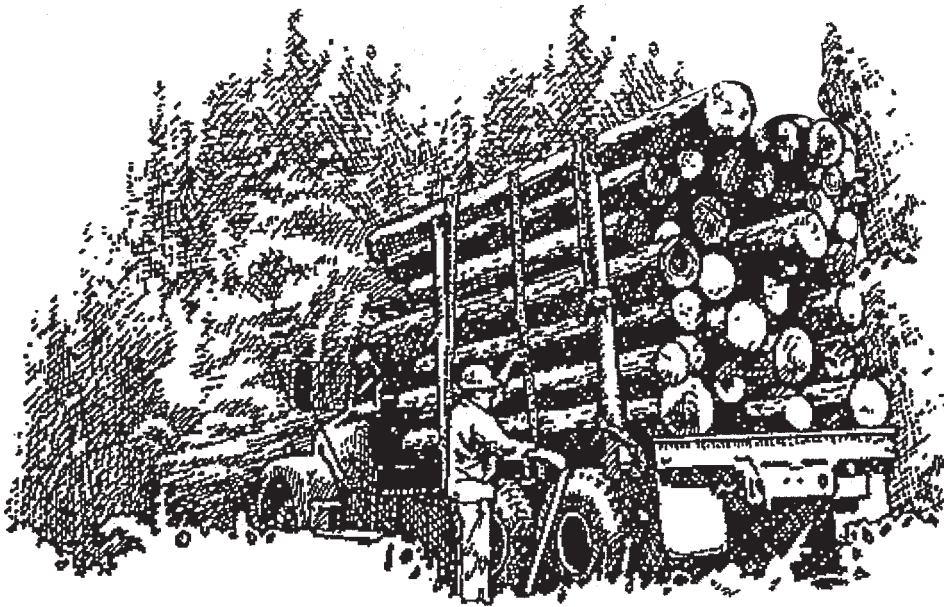
Louisiana's Timber Industry— An Assessment of Timber Product Output and Use, 2002

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April 2005

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Foreword

This report contains the findings of a 2002 sample survey of all primary wood-using plants in Louisiana, and presents changes in product output and residue use since 1999. It complements the Forest Inventory and Analysis (FIA) annual inventory of volume and removals from the State's timberland. The canvass was conducted to determine the amount and source of wood receipts and annual timber product drain, by parish, 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.

The canvass of wood processors in Louisiana was conducted in 2003 to obtain information for 2002. In addition, roundwood from out-of-State mills known to be using logs or bolts harvested from Louisiana timberland was incorporated into Louisiana production estimates. Each mill was canvassed by mail or through personal

contact at plant locations. Telephone contacts followed mailed questionnaire responses when additional information or clarification of a response was necessary. In the event of a nonresponse, data collected in previous surveys were updated using current data collected for mills of similar size, product type, and location. Surveys for all timber products other than pulpwood began in 1948, and are currently conducted every 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 Louis Heaton for review and comments; Anne Jenkins, Lyn Thornhill, Charlene Walker, Janet Griffin, and Sharon Johnson for tables, graphs, maps, and statistical checking; and Paul Smith, Diana Corbin, and Louise Wilde for editorial review, styling, and publication of this report.

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

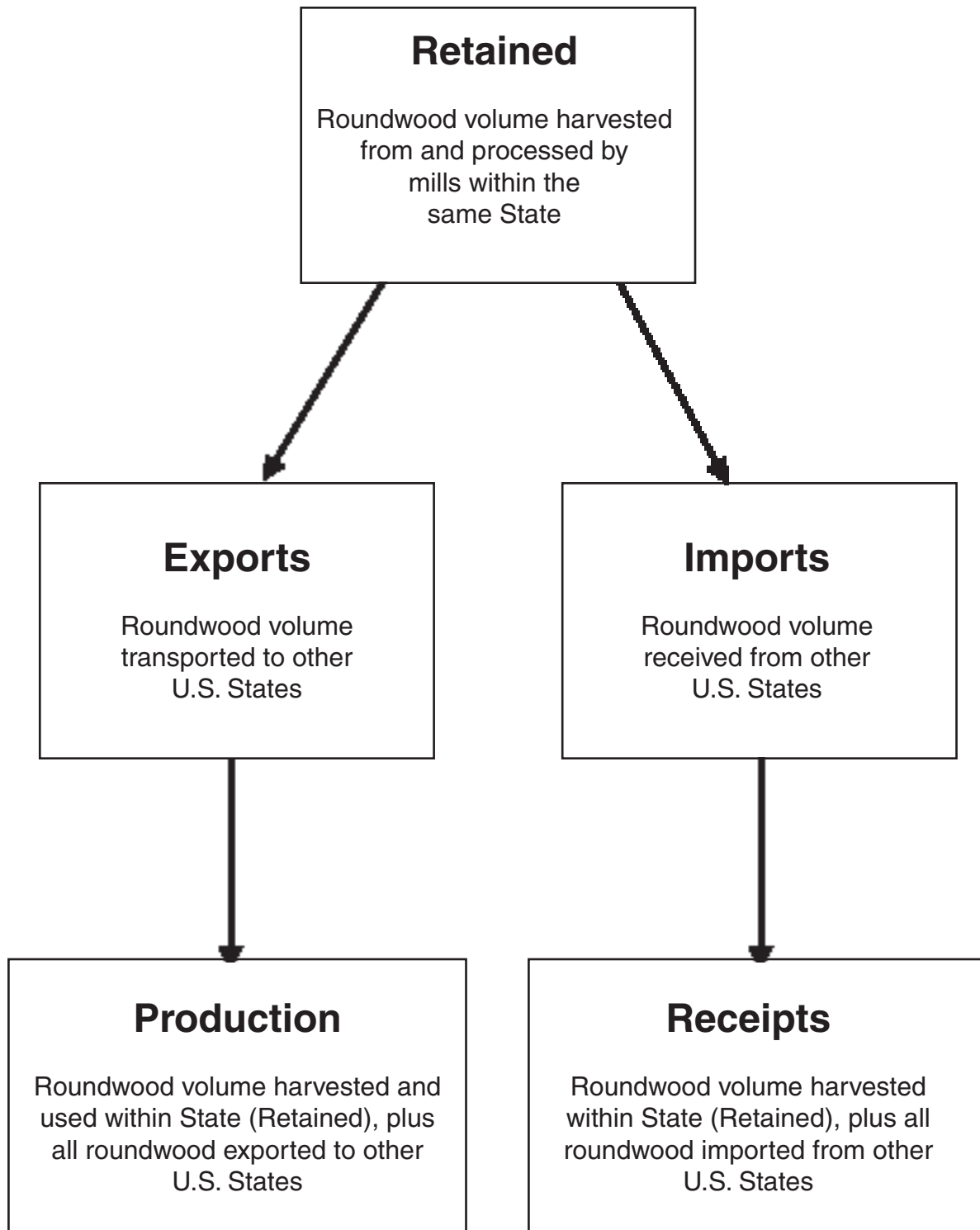


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^aAll tables in this report are available in Microsoft® Excel workbook files. Upon request, these files will be supplied on 3½-inch diskettes.

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Production = Retained + Exports

Receipts = Retained + Imports

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 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

- The combined industrial timber product output (TPO) from roundwood and plant byproducts decreased 9 percent, from 1.09 billion cubic feet in 1999 to 995 million cubic feet in 2002.
- TPO from roundwood was down 82 million cubic feet, or 10 percent, to 720 million cubic feet, while output of plant byproducts decreased 10 million cubic feet to 275 million cubic feet.

- Output of softwood roundwood products decreased 9 percent, totaling 590 million cubic feet, while output of hardwood roundwood products was down 15 percent to 131 million cubic feet (fig. 2).
- Figures 3 and 4 display softwood and hardwood parish-level intensity of roundwood production for all industrial products across Louisiana. The data are depicted in cubic feet produced per acre of census land area. Parishes with the highest production intensity are depicted in the darker shades. For softwoods the darkest shade represents more than 50 cubic feet of production per acre, while for hardwoods the darkest shade represents more than 15 cubic feet per acre.
- Saw logs and pulpwood were the principal roundwood products in 2002. Combined output of these two products totaled 539 million cubic feet and accounted for 75 percent of the State's total industrial roundwood output (fig. 5).

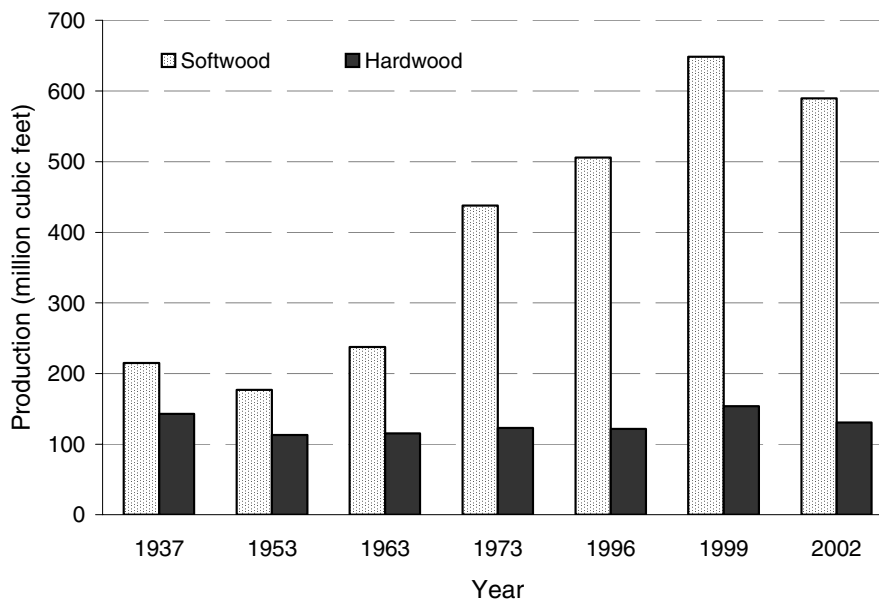


Figure 2—Roundwood production for all products by species group and year (see page 10 for references for individual years).

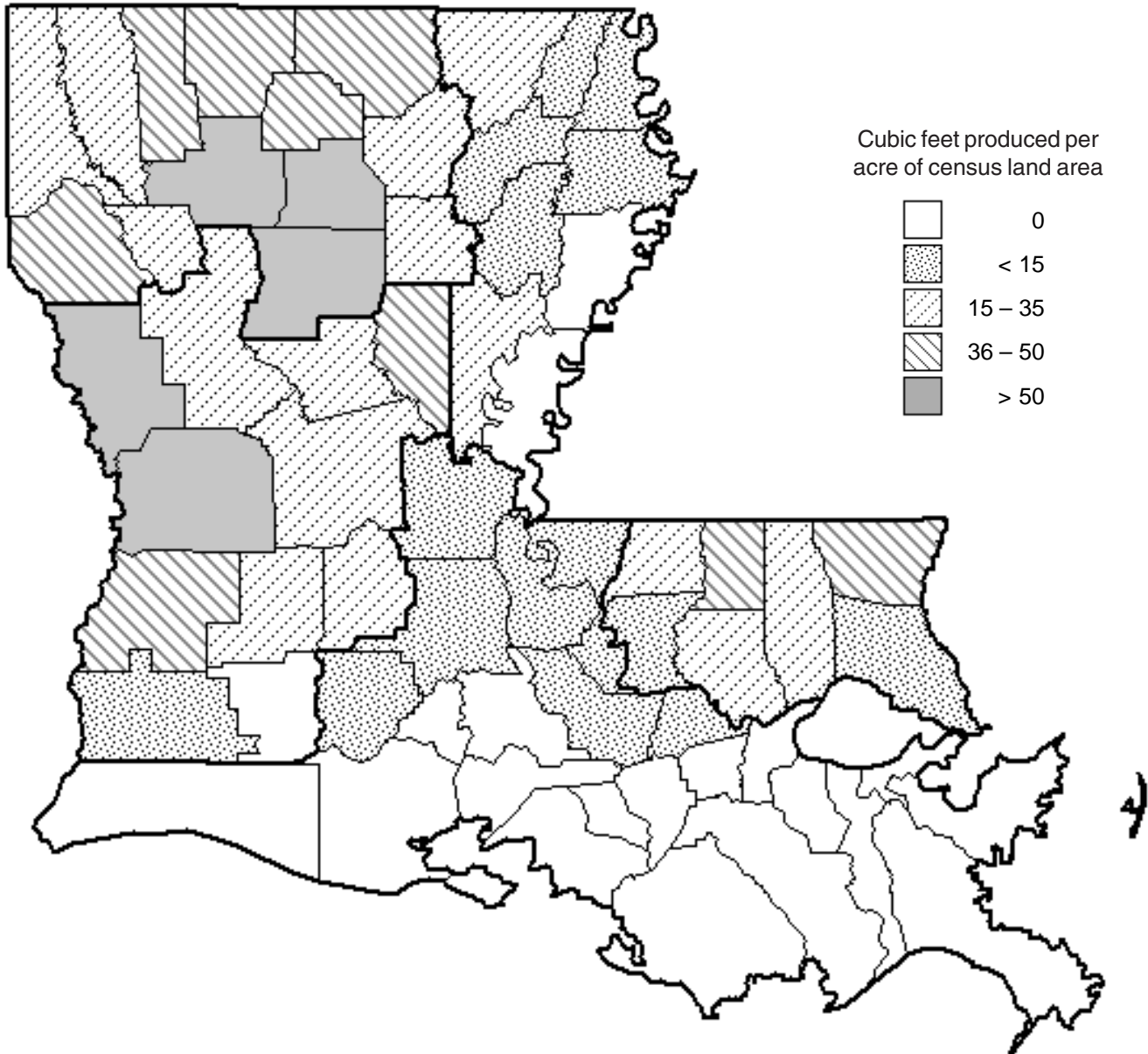


Figure 3—Intensity of roundwood softwood output for all industrial products in Louisiana by parish, 2002.

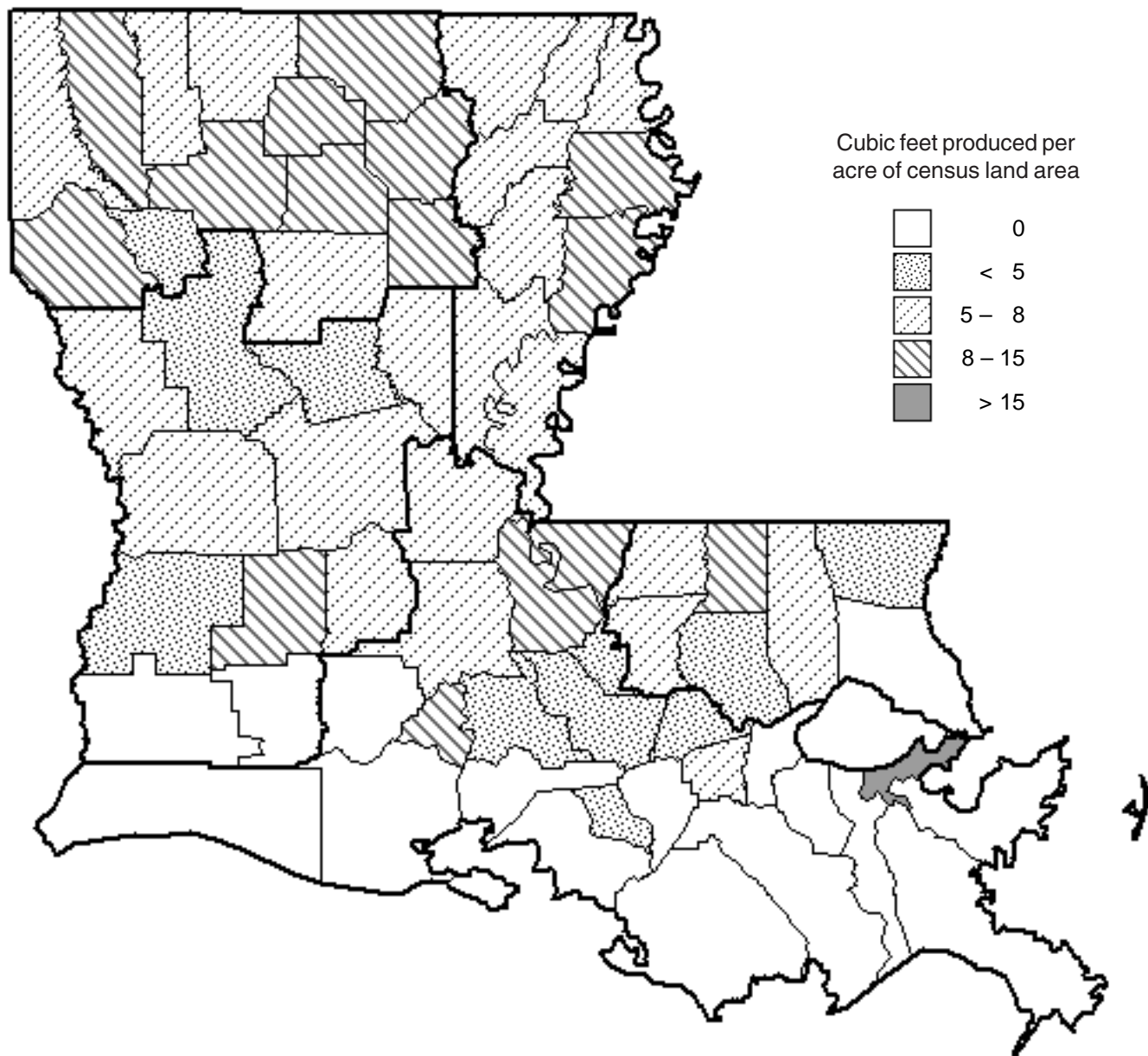


Figure 4—Intensity of roundwood hardwood output for all industrial products in Louisiana by parish, 2002.

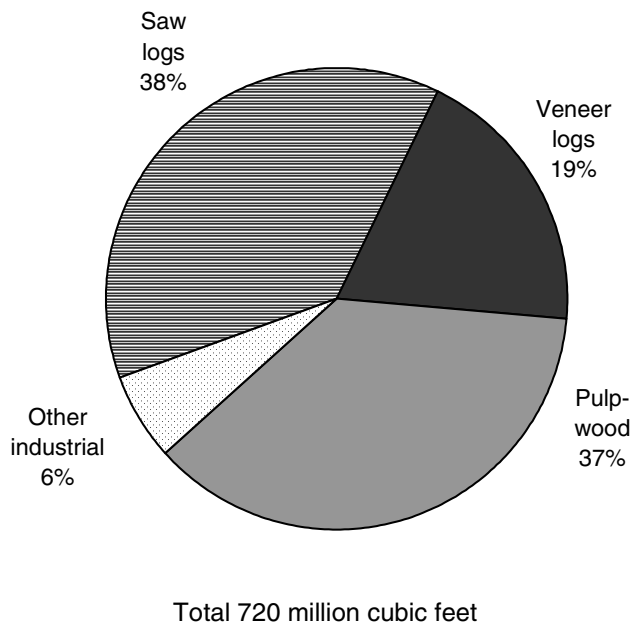


Figure 5—Roundwood production by type of product, 2002.

- Total receipts at Louisiana mills, which included roundwood harvested and retained in the State and roundwood imported from other States, decreased 11 percent to 793 million cubic feet. The number of primary roundwood-using plants in Louisiana increased from 57 in 1999 to 60 in 2002.

Saw Logs

- Saw logs accounted for 38 percent of the State's total roundwood products. Output of softwood saw logs increased < 1 percent to 230 million cubic feet (1.2 billion board feet, International ¼-inch rule), while that of hardwood saw logs increased 9 percent to 43 million cubic feet (254 million board feet, International ¼-inch rule) (fig. 6).
- In 2002, Louisiana had 35 sawmills, a net gain of 3 mills since 1999. The total number of sawmills does not include the several one-person sawmills in the State. Total saw-log receipts were up 11 million cubic feet to 243 million cubic feet. Softwood saw-log receipts increased 3 percent to 211 million cubic feet, while those of hardwood increased 20 percent to 33 million cubic feet. Of the operating mills in 2002, 11 percent had receipts of between 1.0 and 4.99 million board feet, 17 percent had receipts of between 5.0 and 9.99 million board feet, while 72 percent had receipts > 10 million board feet. Those 25 mills, however, accounted for 96 percent of total saw-log receipts.
- Louisiana retained 73 percent of its saw-log production for domestic manufacture, with saw-log exports exceeding imports by 30 million cubic feet in 2002.

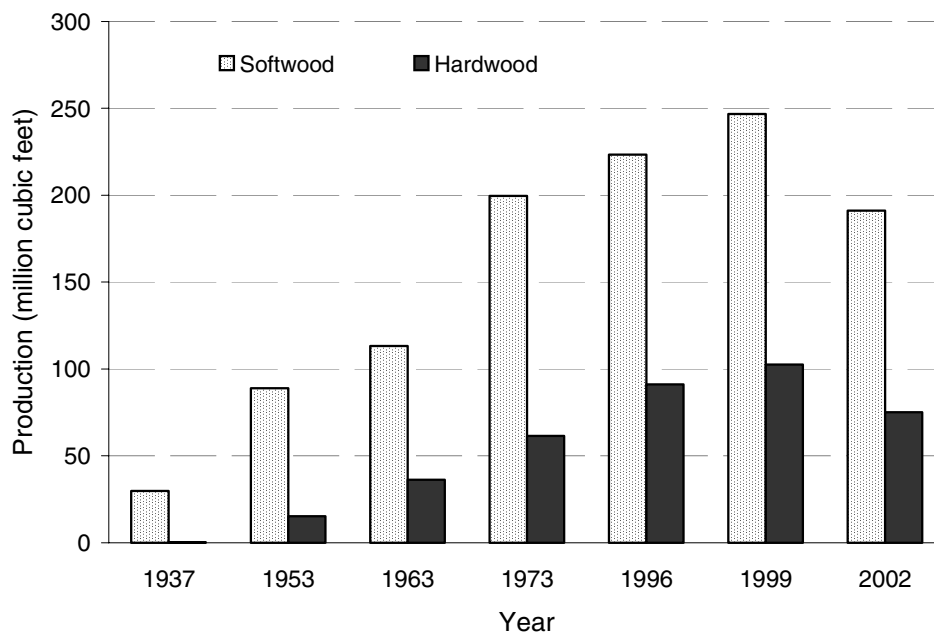


Figure 6—Roundwood pulpwood production by species group and year (see page 10 for references for individual years).

Pulpwood

- Total pulpwood production, including chipped roundwood, decreased 24 percent to 266 million cubic feet (3.7 million cords) and accounted for 37 percent of the State's total roundwood TPO. Softwood output decreased 23 percent to 191 million cubic feet; hardwood output decreased 27 percent to 75 million cubic feet (fig. 7).
- Eleven pulpmill facilities were operating and receiving roundwood in Louisiana in 2002, the same as in 1999. Total pulpwood receipts for these mills decreased 103 million cubic feet to 379 million cubic feet, accounting for 48 percent of total receipts for all mills.
- Eighty-six percent of roundwood cut for pulpwood was retained for processing at Louisiana pulpmills. Roundwood pulpwood accounted for 27 percent of total known exports and 71 percent of total imports. Roundwood pulpwood imports amounted to 150 million cubic feet, while exports amounted to 37 million cubic feet, making the State a net importer of pulpwood.

Veneer Logs

- Output of veneer logs in 2002 totaled 137 million cubic feet and accounted for 19 percent of the State's total roundwood TPO volume. Softwood veneer production decreased 7 percent to 137 million cubic feet (796 million board feet, International 1/4-inch rule); output of hardwood veneer logs decreased 8 percent to 641

thousand cubic feet (4 million board feet, International 1/4-inch rule) (fig. 8).

- Ten veneer mills were operating and receiving roundwood in Louisiana, the same as in 1999. Receipts of veneer logs decreased 4 percent to 133 million cubic feet. Softwood veneer receipts were down 5 million cubic feet, while hardwood veneer receipts were down 88 thousand cubic feet.
- Louisiana retained 85 percent of its veneer-log production for processing at domestic veneer mills. Exports amounted to 20 million cubic feet, and imports totaled 15 million cubic feet, making the State a net exporter of roundwood veneer logs.

Other Industrial Products

- Roundwood harvested for other industrial uses such as poles, posts, mulch, firewood, logs for log homes, composite panels, and all other industrial products totaled 44 million cubic feet, an 8-million-cubic-foot increase from 1999. Softwood output for other industrial products was up 7 million cubic feet to 31 million cubic feet and accounted for 72 percent of the other industrial product volume. At the same time, hardwood output increased 619 thousand cubic feet to 12 million cubic feet (fig. 9).
- In 2002, Louisiana had 4 plants producing other industrial products, the same as in 1999. Combined

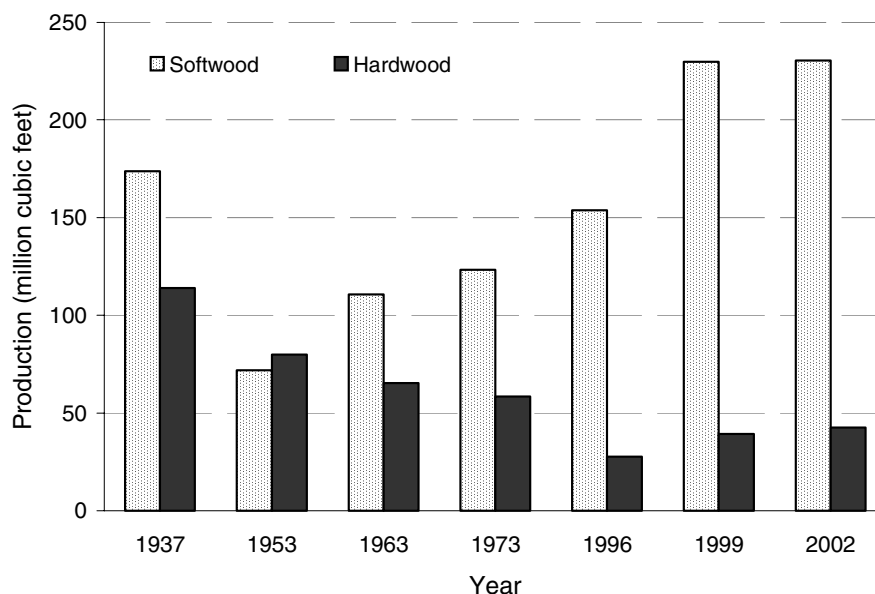


Figure 7—Roundwood saw-log production by species group and year (see page 10 for references for individual years).

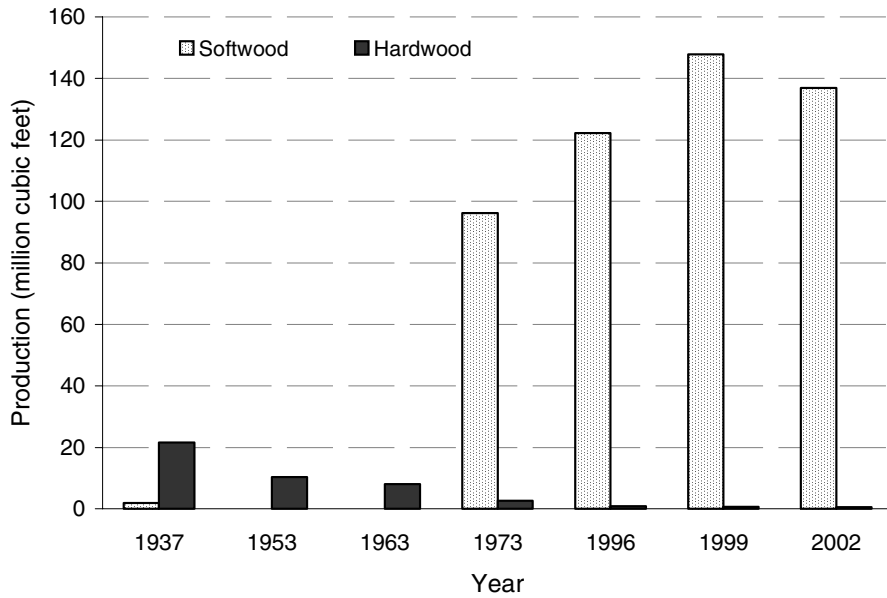


Figure 8—Roundwood veneer-log production by species group and year (see page 10 for references for individual years).

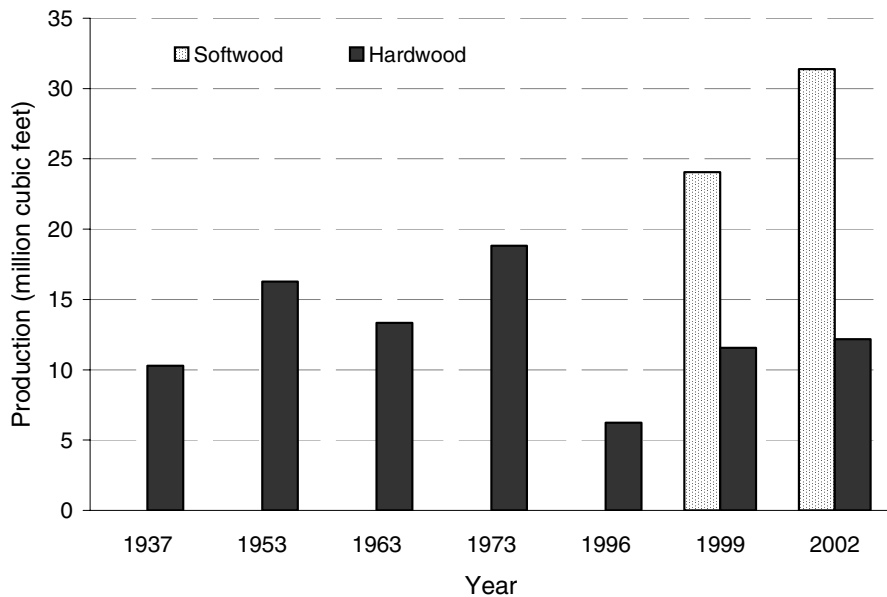


Figure 9—Roundwood production for other industrial products by species group and year (see page 10 for references for individual years).

receipts of other industrial products from softwood and hardwood remained the same at 38 million cubic feet.

- Louisiana was a net exporter of roundwood used for other industrial products; exports amounted to 9 million cubic feet and imports totaled 3 million cubic feet.

Plant Byproducts

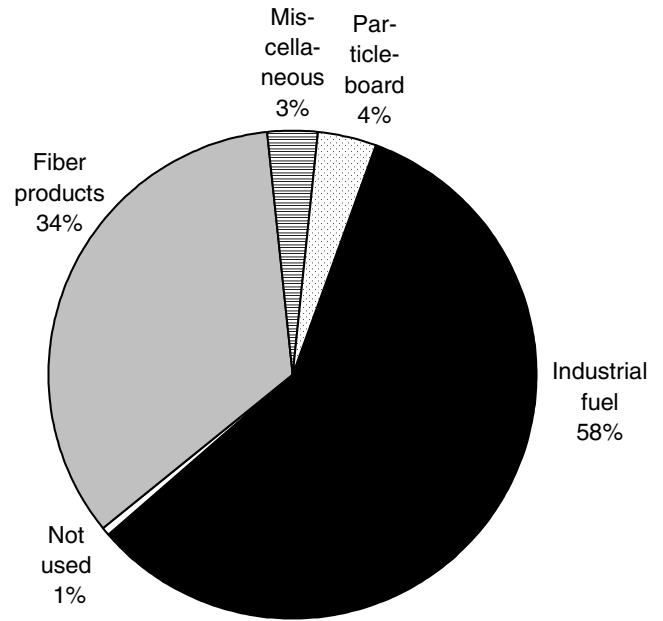
- In 2002, processing of primary products in Louisiana mills generated 276 million cubic feet of wood and bark residues. Coarse residues from all primary products amounted to 108 million cubic feet, while bark volume

totaled 83 million cubic feet. Collectively, sawdust and shavings made up 31 percent of total residues, or 85 million cubic feet (fig. 10).

- More than 275 million cubic feet, or 99 percent, of the wood and bark residues were used for a product. While < 1 percent of the residues were not used for a product, 58 percent of the residues were used for industrial fuel and 34 percent were used for fiber products (fig. 11). Ninety-four million cubic feet, or 87 percent, of the coarse residues were used for fiber products. Most of the bark was used for industrial fuel or other miscellaneous products, while 91 percent of the sawdust and shavings were used for industrial fuel.
- The processing of saw logs generated 140 million cubic feet of mill residues, accounting for 51 percent of the total residues produced (fig. 12).

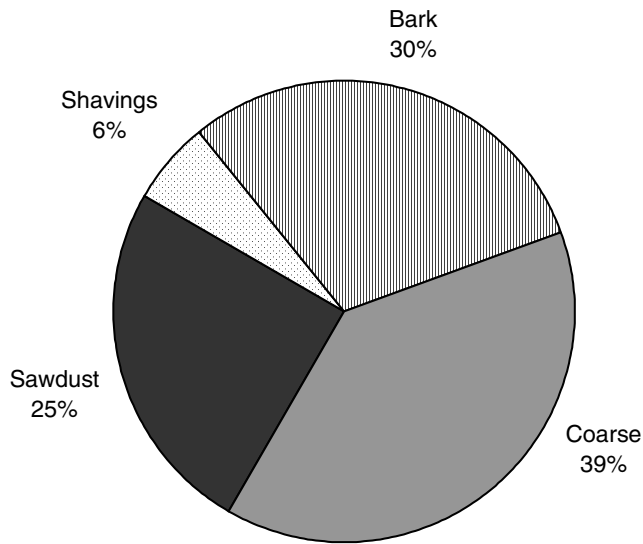
Regional Trends

- Output of industrial roundwood products decreased in all regions with the exception of the Southwest and North Delta regions. The Southeast and Northwest regions had the largest decline at 20 and 18 percent, respectively.



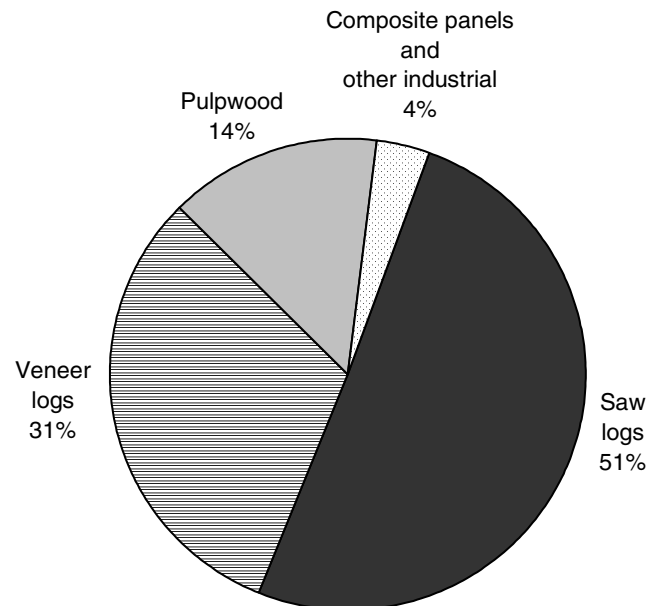
Total 276 million cubic feet

Figure 11—Disposal of residue by product, 2002.



Total 276 million cubic feet

Figure 10—Primary mill residue by residue type, 2002.



Total 276 million cubic feet

Figure 12—Primary mill residue produced by roundwood type, 2002.

North Delta Region

- In 2002, roundwood output from the North Delta region totaled 48 million cubic feet, up 6 percent since 1999.
- Saw-log production increased < 1 percent to 22 million cubic feet, accounting for 47 percent of the region's TPO. Pulpwood production of 20 million cubic feet accounted for another 41 percent of the region's total roundwood output.
- In the North Delta region, two primary wood-using plants were operating during 2002: one sawmill and one pulpmill. These mills processed 7 percent of the State's total roundwood output.

South Delta Region

- Thirty-one million cubic feet of roundwood were produced in the South Delta region in 2002, a 3 percent decline since 1999.
- Saw-log production of 16 million cubic feet accounted for 53 percent of the region's total roundwood output. Pulpwood production of 5.7 million cubic feet accounted for another 19 percent of the region's total roundwood output.
- The six mills operating in the South Delta region in 2002 included three sawmills, two pulpmills, and one other miscellaneous mill. These mills accounted for 4 percent of the total roundwood output for the State.

Southwest Region

- In 2002, roundwood output from the Southwest region totaled 251 million cubic feet, up 1 percent since 1999. Roundwood production from this region accounted for 35 percent of the total roundwood TPO for the State.
- Saw-log production increased by 17 percent to 56 million cubic feet accounting for 22 percent of the region's total roundwood output. Pulpwood production decreased by 10 percent to 120 million cubic feet, accounting for another 48 percent of the region's total TPO.
- The 17 primary wood-using plants operating in southwest Louisiana included 3 pulpmills, 7 sawmills, 6 veneer or plywood mills, and 1 other miscellaneous mill.

Southeast Region

- In 2002, roundwood output from the Southeast region totaled 80 million cubic feet, a 20 percent decrease since 1999. This region accounted for 11 percent of the State's total TPO.
- Saw-log production decreased 2 percent to 45 million cubic feet, accounting for 56 percent of the region's total roundwood output. Production of pulpwood dropped 34 percent and accounted for 35 percent of the region's total roundwood output.
- In the Southeast region, 10 primary wood-using plants were operating during 2002: 7 sawmills, 2 pulpmills, and 1 veneer or plywood mill.

Northwest Region

- In 2002, roundwood output from the Northwest region totaled 311 million cubic feet, a decrease of 18 percent since 1999.
- The 134 million cubic feet of saw logs accounted for 43 percent of the total roundwood output for the region and 49 percent of the State's total saw log output. Pulpwood production decreased 38 percent to 93 million cubic feet, accounting for 30 percent of the region's TPO and 35 percent of the State's total roundwood pulpwood output. With 62 million cubic feet this region accounted for 45 percent of the State's veneer output.
- In the Northwest region, 25 primary wood-using plants were operating during 2002: 17 sawmills, 3 veneer or plywood mills, 3 pulpmills, and 2 other miscellaneous mills. These mills processed 43 percent of the State's total roundwood output.

Total Roundwood Output

Using the most recent inventory data for Louisiana, product output by source, ownership, and detailed species group was estimated.

Source

- In addition to the 720 million cubic feet of roundwood output for industrial roundwood, an estimated 21 million cubic feet was harvested for domestic fuelwood, bringing Louisiana's total roundwood output to 741 million cubic feet.

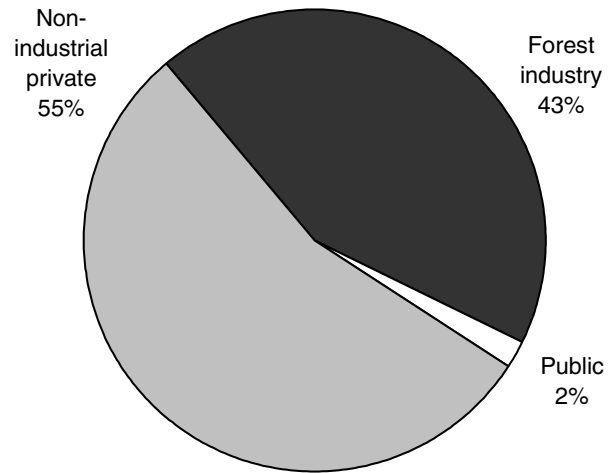
- Ninety percent of total roundwood output was considered growing-stock volume (sawtimber and poletimber) from timberland sources. Other sources (such as saplings; stumps, tops, and limbs of trees on timberland; and trees on nonforestland) contributed an estimated 72 million cubic feet, or 10 percent of total roundwood output (fig. 13).

Ownership

- An estimated 406 million cubic feet, or 55 percent, of the total roundwood output came from nonindustrial private forestlands. Forest industry lands contributed 321 million cubic feet, or 43 percent of the output. Public lands made up the remaining 2 percent, or 15 million cubic feet (fig. 14).

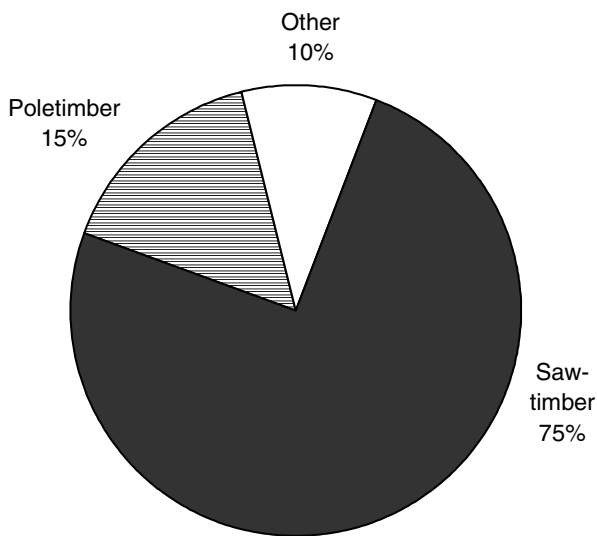
Species

- The loblolly and shortleaf pine group provided the most volume of any softwood species group, accounting for 83 percent of the total softwood output (fig. 15). The longleaf-slash pine type accounted for 13 percent of the softwood output. In hardwoods, the red oak and white oak groups combined accounted for 61 million cubic feet, or 41 percent of total hardwood output (fig. 16).



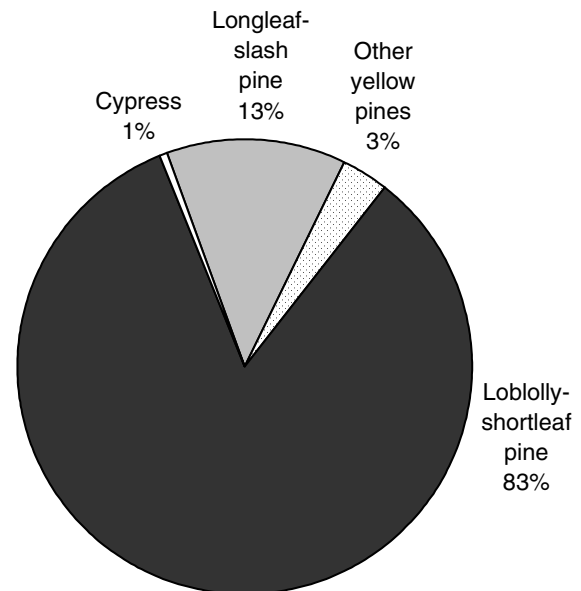
Total 741 million cubic feet

Figure 14—Roundwood output by ownership, 2002.



Total 741 million cubic feet

Figure 13—Roundwood output by source, 2002.



Total 591 million cubic feet

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

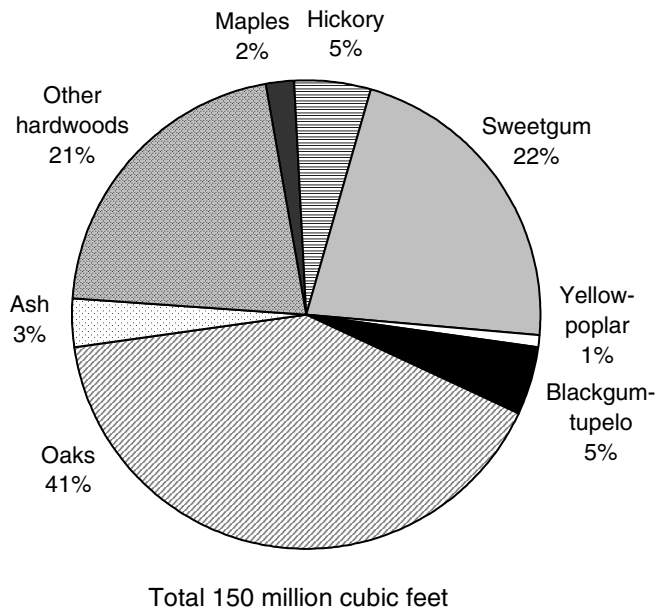


Figure 16—Roundwood output by hardwood species group, 2002.

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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, 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 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 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	0.18349 cubic foot = 1 board foot 5.45 board feet = 1 cubic foot
Hardwood	0.16807 cubic foot = 1 board foot 5.95 board feet = 1 cubic foot
Veneer logs	
Softwood	0.17094 cubic foot = 1 board foot 5.85 board feet = 1 cubic foot
Hardwood	0.16260 cubic foot = 1 board foot 6.15 board feet = 1 cubic foot
Pulpwood ^b	
Softwood	72.6 cubic feet per cord
Hardwood	75.0 cubic feet per cord

^a Conversion factors vary with stem size (d.b.h.) and species. The factors shown are for trees of average diameters removed in Louisiana during the most recent survey period.

^b Cubic feet of solid wood per cord.

Species List^a

Common name	Scientific name ^b	Common name	Scientific name ^b
Softwoods		Hardwoods (continued)	
Southern redcedar	<i>Juniperus silicicola</i> (Small) Bailey	Black walnut	<i>Juglans nigra</i> L.
Eastern redcedar	<i>J. virginiana</i> L.	Sweetgum	<i>Liquidambar styraciflua</i> L.
Shortleaf pine	<i>Pinus echinata</i> Mill.	Yellow-poplar	<i>Liriodendron tulipifera</i> L.
Slash pine	<i>P. elliotii</i> Engelm.	Cucumbertree	<i>Magnolia acuminata</i> L.
Spruce pine	<i>P. glabra</i> Walt.	Southern magnolia	<i>M. grandiflora</i> L.
Longleaf pine	<i>P. palustris</i> Mill.	Bigleaf magnolia	<i>M. macrophylla</i> Michx.
Loblolly pine	<i>P. taeda</i> L.	Sweetbay	<i>M. virginiana</i> L.
Baldcypress	<i>Taxodium distichum</i> (L.) Rich.	Apple	<i>Malus</i> spp.
Pondcypress	<i>T. nutans</i>	Chinaberry	<i>Melia azedarach</i> L.
Hardwoods		White mulberry	<i>Morus alba</i> L.
Florida maple	<i>Acer barbatum</i> Michx.	Red mulberry	<i>M. rubra</i> L.
Boxelder	<i>A. negundo</i> L.	Water tupelo	<i>Nyssa aquatica</i> L.
Red maple	<i>A. rubrum</i> L.	Blackgum	<i>N. sylvatica</i> Marsh.
Silver maple	<i>A. saccharinum</i> L.	Swamp tupelo	<i>N. sylvatica</i> var. <i>biflora</i> (Walt.) Sarg.
Ailanthus	<i>Ailanthus altissima</i> (Mill.) Swingle	Eastern hophornbeam	<i>Ostrya virginiana</i> (Mill.) K. Koch
Tung-oil tree	<i>Aleurites fordii</i> Hemsl.	Sourwood	<i>Oxydendrum arboreum</i> (L.) DC.
Serviceberry	<i>Amelanchier</i> spp.	Redbay	<i>Persea borbonia</i> (L.) Spreng.
River birch	<i>Betula nigra</i> L.	American sycamore	<i>Platanus occidentalis</i> L.
American hornbeam	<i>Carpinus caroliniana</i> Walt.	Cottonwood	<i>Populus</i> spp.
Hickory	<i>Carya</i> spp.	Black cherry	<i>Prunus serotina</i> Ehrh.
Water hickory	<i>C. aquatica</i> (Michx. f.) Nutt.	White oak	<i>Quercus alba</i> L.
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. glabra</i> var. <i>pagodifolia</i> Ell.
Nutmeg hickory	<i>C. myristiciformis</i> (Michx. f.) Nutt.	Bluejack oak	<i>Q. incana</i> Bartr.
Shagbark hickory	<i>C. ovata</i> (Mill.) K. Koch	Turkey oak	<i>Q. laevis</i> Walt.
Black hickory	<i>C. texana</i> Buckl.	Laurel oak	<i>Q. laurifolia</i> Michx.
Mockernut hickory	<i>C. tomentosa</i> (Poir.) Nutt.	Overcup oak	<i>Q. lyrata</i> Walt.
Allegheny chinkapin	<i>Castanea pumila</i> Mill.	Bur oak	<i>Q. macrocarpa</i> Michx.
Chinkapin	<i>Castanopsis</i> (D. Don) Spach	Swamp chestnut oak	<i>Q. michauxii</i> Nutt.
Catalpa	<i>Catalpa</i> spp.	Chinkapin oak	<i>Q. muehlenbergii</i> Engelm.
Sugarberry	<i>Celtis laevigata</i> Willd.	Water oak	<i>Q. nigra</i> L.
Eastern redbud	<i>Cercis canadensis</i> L.	Nuttall oak	<i>Q. nuttallii</i> Palmer
Flowering dogwood	<i>Cornus florida</i> L.	Willow oak	<i>Q. phellos</i> L.
Hawthorn	<i>Crataegus</i> spp.	Northern red oak	<i>Q. rubra</i> L.
Common persimmon	<i>Diospyros virginiana</i> L.	Shumard oak	<i>Q. shumardii</i> Buckl.
American beech	<i>Fagus grandifolia</i> Ehrh.	Post oak	<i>Q. stellata</i> Wangenh.
White ash	<i>Fraxinus americana</i> L.	Black oak	<i>Q. velutina</i> Lam.
Green ash	<i>F. pennsylvanica</i> Marsh.	Live oak	<i>Q. virginiana</i> Mill.
Pumpkin ash	<i>F. profunda</i> (Bush) Bush	Willow	<i>Salix</i> spp.
Blue ash	<i>F. quadrangulata</i> Michx.	Sassafras	<i>Sassafras albidum</i> (Nutt.) Nees
Waterlocust	<i>Gleditsia aquatica</i> Marsh.	Winged elm	<i>Ulmus alata</i> Michx.
Honeylocust	<i>G. triacanthos</i> L.	American elm	<i>U. americana</i> L.
Kentucky coffeetree	<i>Gymnocladus dioicus</i> (L.) K. Koch	Cedar elm	<i>U. crassifolia</i> Nutt.
American holly	<i>Ilex opaca</i> Ait.	Slippery elm	<i>U. rubra</i> Muhl.

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

^b Nomenclature (Little 1979).

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

Product and species group	Year		Change	Change
	1999	2002		
	----- thousand cubic feet -----			percent
Saw logs				
Softwood	229,859	230,394	535	0.2
Hardwood	39,201	42,609	3,408	8.7
Total	269,060	273,003	3,943	1.5
Veneer logs				
Softwood	147,777	136,832	-10,945	-7.4
Hardwood	695	641	-54	-7.8
Total	148,472	137,473	-10,999	-7.4
Pulpwood ^a				
Softwood	246,672	191,096	-55,576	-22.5
Hardwood	102,436	75,219	-27,217	-26.6
Total	349,108	266,315	-82,793	-23.7
Other industrial				
Softwood	24,037	31,369	7,332	30.5
Hardwood	11,557	12,176	619	5.4
Total	35,594	43,545	7,951	22.3
All industrial				
Softwood	648,345	589,691	-58,654	-9.0
Hardwood	153,889	130,645	-23,244	-15.1
Total	802,234	720,336	-81,898	-10.2
Byproduct output				
Softwood	247,175	238,447	-8,728	-3.5
Hardwood	37,899	36,235	-1,664	-4.4
Total	285,074	274,682	-10,392	-3.6
Total output				
Softwood	895,520	828,138	-67,382	-7.5
Hardwood	191,788	166,880	-24,908	-13.0
Total	1,087,308	995,018	-92,290	-8.5

^a Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (3,743,000 cubic feet in 1999 and 4,303,000 cubic feet in 2002).

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

Product and species group	Year		Change	Change
	1999	2002		
	----- thousand cubic feet -----			percent
Saw logs				
Softwood	204,514	210,536	6,022	2.9
Hardwood	27,326	32,654	5,328	19.5
Total	231,840	243,190	11,350	4.9
Veneer logs				
Softwood	137,772	132,960	-4,812	-3.5
Hardwood	88	0	-88	-100.0
Total	137,860	132,960	-4,900	-3.6
Pulpwood ^a				
Softwood	342,477	277,581	-64,896	-18.9
Hardwood	139,891	101,612	-38,279	-27.4
Total	482,368	379,193	-103,175	-21.4
Other industrial				
Softwood	24,598	24,601	3	0.0
Hardwood	12,948	12,948	0	—
Total	37,546	37,549	3	0.0
Total output				
Softwood	709,361	645,678	-63,683	-9.0
Hardwood	180,253	147,214	-33,039	-18.3
Total	889,614	792,892	-96,722	-10.9

— = negligible; 0.0 = a value of >0.0 but <0.5 for the cell.

^a Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (5,029,000 cubic feet in 1999 and 5,389,000 cubic feet in 2002).

Table A.3—Number of primary wood-using plants by industry, Louisiana, 1937 to 2002

Industry	Year						
	1937	1953	1962	1963	1996	1999	2002
	<i>number</i>						
Sawmills	557	458	160	164	70	32	35
Veneer or plywood mills	15	15	11	11	6	10	10
Pulpmills	6	8	10	10	11	11	11
Composite panel and other mills	65	49	36	38	5	4	4
All plants	643	530	217	223	92	57	60

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

Sawmill size class ^a	1999			2002		
	Mills ^b	Volume		Mills	Volume	
<i>mmbf</i>	<i>number</i>	<i>mbf</i>	<i>percent</i>	<i>number</i>	<i>mbf</i>	<i>percent</i>
1.0 – 4.99	4	12,613	1	4	12,613	1
5.0 – 9.99	5	35,967	3	6	42,875	3
10.0 – 49.99	13	355,087	28	16	426,099	33
>50	10	849,712	68	9	815,032	63
Total	32	1,253,379	100	35	1,296,619	100

^a Based on volume received as opposed to actual capacity.

^b Mills < 1.0 million board feet were not included.

Table A.5—Roundwood receipts by species and type of mill, Louisiana, 2002

Species	Type of mill					
	All mills	Sawmills	Veneer mills		Pulpmills ^a	Other mills
			Pine plywood	Other veneer		
<i>thousand cubic feet</i>						
Softwood						
Yellow pine	367,923	210,362	132,960	0	NA	24,601
White pine	0	0	0	0	NA	0
Cedar	0	0	0	0	NA	0
Cypress	174	174	0	0	NA	0
Other softwoods	0	0	0	0	NA	0
Unclassified	277,581	0	0	0	277,581	0
Total softwoods	645,678	210,536	132,960	0	277,581	24,601
Hardwood						
Blackgum and tupelo	2,333	1,790	0	0	NA	543
Soft maple	848	419	0	0	NA	429
Sweetgum	4,827	3,025	0	0	NA	1,802
Yellow-poplar	1,385	670	0	0	NA	715
Other soft hardwood	2,423	1,665	0	0	NA	758
Hickory	1,998	1,672	0	0	NA	326
Red oak	16,561	12,754	0	0	NA	3,807
White oak	10,185	6,922	0	0	NA	3,263
Other hard hardwood	5,042	3,737	0	0	NA	1,305
Unclassified	101,612	0	0	0	101,612	0
Total hardwoods	147,214	32,654	0	0	101,612	12,948
All species	792,892	243,190	132,960	0	379,193	37,549

NA = not applicable.

^a Collected only by softwood and hardwood and includes roundwood chipped.

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

Year	Production	Exported to other States	Retained	Imported from other States	Receipts
<i>thousand cubic feet</i>					
Softwood					
1999	648,345	107,178	541,167	168,194	709,361
2002	589,691	98,772	490,919	154,759	645,678
Hardwood					
1999	153,889	32,457	121,432	58,822	180,254
2002	130,645	39,570	91,075	56,139	147,214
All species					
1999	802,234	139,635	662,599	227,015	889,614
2002	720,336	138,342	581,994	210,898	792,892

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

Product and species group	Production	Exported to other States	Retained	Imported from other States	Receipts
<i>thousand cubic feet</i>					
Saw logs					
Softwood	230,394	58,654	171,740	38,796	210,536
Hardwood	42,609	14,098	28,511	4,143	32,654
Total	273,003	72,752	200,251	42,939	243,190
Veneer logs					
Softwood	136,832	19,329	117,503	15,457	132,960
Hardwood	641	641	0	0	0
Total	137,473	19,970	117,503	15,457	132,960
Pulpwood ^a					
Softwood	191,096	12,825	178,271	99,310	277,581
Hardwood	75,219	24,212	51,007	50,605	101,612
Total	266,315	37,037	229,278	149,915	379,193
Other industrial					
Softwood	31,369	7,964	23,405	1,196	24,601
Hardwood	12,176	619	11,557	1,391	12,948
Total	43,545	8,583	34,962	2,587	37,549
All products					
Softwood	589,691	98,772	490,919	154,759	645,678
Hardwood	130,645	39,570	91,075	56,139	147,214
Total	720,336	138,342	581,994	210,898	792,892

^a Includes roundwood chipped.

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

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
Louisiana (retained)	200,251	171,740	28,511
Exports to			
Arkansas	30,088	26,478	3,610
Mississippi	31,902	22,968	8,934
Oklahoma	291	291	0
Texas	10,471	8,917	1,554
Total	72,752	58,654	14,098
Imports from			
Arkansas	8,330	7,290	1,040
Mississippi	21,829	19,719	2,110
Texas	12,780	11,787	993
Total	42,939	38,796	4,143

Table A.9—Veneer volume by destination, source, and species group, Louisiana, 2002

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
Louisiana (retained)	117,503	117,503	0
Exports to			
Arkansas	12,538	12,538	0
Mississippi	3,178	2,537	641
Texas	4,254	4,254	0
Total	19,970	19,329	641
Imports from			
Arkansas	4,347	4,347	0
Mississippi	1,014	1,014	0
Texas	10,096	10,096	0
Total	15,457	15,457	0

Table A.10—Pulpwood volume by destination, source, and species group, Louisiana, 2002^a

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
Louisiana (retained)	229,278	178,271	51,007
Exports to			
Alabama	3	0	3
Arkansas	9,931	1,969	7,962
Mississippi	6,202	773	5,429
Oklahoma	78	78	0
South Carolina	14	8	6
Texas	20,809	9,997	10,812
Total	37,037	12,825	24,212
Imports from			
Alabama	13,315	5,115	8,200
Arkansas	32,149	26,628	5,521
Florida	35	0	35
Georgia	1	0	1
Kentucky	301	0	301
Mississippi	83,779	52,630	31,149
North Carolina	191	0	191
Oklahoma	18	0	18
Texas	20,126	14,937	5,189
Total	149,915	99,310	50,605

^a Includes roundwood chipped and delivered to nonpulp mills, then chipped and sold to pulpmills.

Table A.11—Other industrial volume by destination, source, and species group, Louisiana, 2002

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
Louisiana (retained)	34,962	23,405	11,557
Exports to			
Arkansas	419	419	0
Mississippi	21	21	0
Texas	8,143	7,524	619
Total	8,583	7,964	619
Imports from			
Arkansas	615	430	185
Mississippi	1,206	0	1,206
Texas	766	766	0
Total	2,587	1,196	1,391

Table A.12—Primary mill residue volume by roundwood type, species group, and residue type, Louisiana, 2002

Roundwood type and species group	All types	Residue type			
		Bark	Coarse	Sawdust	Shavings
<i>thousand cubic feet</i>					
Saw logs					
Softwood	119,374	17,491	57,123	29,108	15,652
Hardwood	20,320	3,728	9,177	6,846	569
Total	139,694	21,219	66,300	35,954	16,221
Veneer logs					
Softwood	86,522	12,266	40,825	33,431	0
Hardwood	0	0	0	0	0
Total	86,522	12,266	40,825	33,431	0
Pulpwood					
Softwood	27,547	27,547	0	0	0
Hardwood	12,603	12,603	0	0	0
Total	40,150	40,150	0	0	0
Other industrial ^a					
Softwood	6,807	6,180	627	0	0
Hardwood	3,312	3,312	0	0	0
Total	10,119	9,492	627	0	0
Total					
Softwood	240,250	63,484	98,575	62,539	15,652
Hardwood	36,235	19,643	9,177	6,846	569
Total	276,485	83,127	107,752	69,385	16,221

^a Includes poles, pilings, posts, composite panels, and other industrial products.

Table A.13—Disposal of residue at primary wood-using plants by product, species group, and type of residue, Louisiana, 1999 and 2002

Product and species group	All types		Bark		Coarse		Sawdust		Shavings	
	1999	2002	1999	2002	1999	2002	1999	2002	1999	2002
<i>thousand cubic feet</i>										
Fiber products										
Softwood	86,834	87,663	0	0	86,360	87,189	0	0	474	474
Hardwood	5,449	6,861	0	0	5,449	6,861	0	0	0	0
Total	92,283	94,524	0	0	91,809	94,050	0	0	474	474
Particleboard										
Softwood	9,111	8,478	0	0	2,143	2,143	2,690	2,690	4,278	3,645
Hardwood	2,316	2,316	0	0	2,316	2,316	0	0	0	0
Total	11,427	10,794	0	0	4,459	4,459	2,690	2,690	4,278	3,645
Sawn products										
Softwood	9,081	5,729	0	0	9,081	5,729	0	0	0	0
Hardwood	29	0	0	0	29	0	0	0	0	0
Total	9,110	5,729	0	0	9,110	5,729	0	0	0	0
Fuel										
Softwood	139,679	133,788	68,036	61,081	2,055	2,056	59,852	59,476	9,736	11,175
Hardwood	30,094	26,727	23,746	19,526	0	0	5,756	6,632	592	569
Total	169,773	160,515	91,782	80,607	2,055	2,056	65,608	66,108	10,328	11,744
Miscellaneous										
Softwood	2,470	2,789	1,123	1,442	749	749	373	373	225	225
Hardwood	11	331	11	117	0	0	0	214	0	0
Total	2,481	3,120	1,134	1,559	749	749	373	587	225	225
Not used										
Softwood	1,094	1,803	961	961	0	709	0	0	133	133
Hardwood	0	0	0	0	0	0	0	0	0	0
Total	1,094	1,803	961	961	0	709	0	0	133	133
All products										
Softwood	248,269	240,250	70,120	63,484	100,388	98,575	62,915	62,539	14,846	15,652
Hardwood	37,899	36,235	23,757	19,643	7,794	9,177	5,756	6,846	592	569
Total	286,168	276,485	93,877	83,127	108,182	107,752	68,671	69,385	15,438	16,221

Table A.14—Roundwood timber product output by product and species group, North Delta Region of Louisiana, 1999 and 2002

Product and species group	Year		Change	Change
	1999	2002		
	----- <i>thousand cubic feet</i> -----			<i>percent</i>
Saw logs				
Softwood	11,024	11,494	470	4.3
Hardwood	11,226	10,875	-351	-3.1
Total	22,250	22,369	119	0.5
Veneer logs				
Softwood	4,780	4,705	-75	-1.6
Hardwood	641	641	0	—
Total	5,421	5,346	-75	-1.4
Pulpwood ^a				
Softwood	4,694	6,254	1,560	33.2
Hardwood	12,323	13,390	1,067	8.7
Total	17,017	19,644	2,627	15.4
Other industrial				
Softwood	189	210	21	11.1
Hardwood	0	0	0	—
Total	189	210	21	11.1
All industrial				
Softwood	20,687	22,663	1,976	9.6
Hardwood	24,190	24,906	716	3.0
Total	44,877	47,569	2,692	6.0

— = negligible.

^a Includes roundwood delivered to nonpulp mills, then chipped and sold to pulp mills (0 cubic feet in 1999 and 0 cubic feet in 2002).

Table A.15—Roundwood timber product output by parish, product, and species group, North Delta Region of Louisiana, 2002

Parish	All products		Saw logs		Veneer logs		Pulpwood ^a		Other industrial	
	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood
	<i>thousand cubic feet</i>									
Catahoula	6,832	2,306	1,868	899	1,408	0	3,556	1,407	0	0
Concordia	287	2,905	277	1,000	0	0	10	1,905	0	0
East Carroll	563	1,641	563	893	0	0	0	748	0	0
Franklin	2,464	2,108	1,861	1,346	91	0	323	762	189	0
Madison	955	4,471	953	1,636	0	341	2	2,494	0	0
Morehouse	8,283	3,167	2,950	1,294	3,206	0	2,106	1,873	21	0
Richland	1,463	2,171	1,448	1,244	0	0	15	927	0	0
Tensas	133	5,004	128	1,842	0	300	5	2,862	0	0
West Carroll	1,683	1,133	1,446	721	0	0	237	412	0	0
All parishes	22,663	24,906	11,494	10,875	4,705	641	6,254	13,390	210	0

^a Includes roundwood delivered to nonpulp mills, then chipped and sold to pulp mills (0 cubic feet in 2002).

Table A.16—Roundwood timber product output by product and species group, South Delta Region of Louisiana, 1999 and 2002

Product and species group	Year		Change	Change
	1999	2002		
	----- thousand cubic feet -----			percent
Saw logs				
Softwood	7,915	7,997	82	1.0
Hardwood	9,109	8,171	-938	-10.3
Total	17,024	16,168	-856	-5.0
Veneer logs				
Softwood	1,705	2,105	400	23.5
Hardwood	12	0	-12	-100.0
Total	1,717	2,105	388	22.6
Pulpwood ^a				
Softwood	1,866	1,329	-537	-28.8
Hardwood	4,228	4,378	150	3.5
Total	6,094	5,707	-387	-6.4
Other industrial				
Softwood	0	0	0	—
Hardwood	6,632	6,632	0	—
Total	6,632	6,632	0	—
All industrial				
Softwood	11,486	11,431	-55	-0.5
Hardwood	19,981	19,181	-800	-4.0
Total	31,467	30,612	-855	-2.7

— = negligible.

^a Includes roundwood delivered to nonpulp mills, then chipped and sold to pulp mills (508,000 cubic feet in 1999 and 584,000 cubic feet in 2002).

Table A.17—Roundwood timber product output by parish, product, and species group, South Delta Region of Louisiana, 2002

Parish	All products		Saw logs		Veneer logs		Pulpwood ^a		Other industrial	
	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood
	<i>thousand cubic feet</i>									
Acadia	1,150	256	480	256	536	0	134	0	0	0
Ascension	797	321	787	248	0	0	10	73	0	0
Assumption	0	25	0	0	0	0	0	25	0	0
Avoyelles	1,524	2,606	562	1,487	579	0	383	32	0	1,087
Iberville	1,542	1,600	1,430	582	0	0	112	366	0	652
Jefferson	150	3	0	0	135	0	15	3	0	0
Lafayette	16	1,470	0	599	0	0	16	1	0	870
Lafourche	0	158	0	0	0	0	0	158	0	0
Orleans	0	1,880	0	749	0	0	0	44	0	1,087
Plaquemines	0	13	0	0	0	0	0	13	0	0
Pointe Coupee	1,888	3,148	1,740	776	0	0	148	1,502	0	870
St. Bernard	0	10	0	0	0	0	0	10	0	0
St. James	1	739	0	0	0	0	1	739	0	0
St. John the Baptist	0	2	0	0	0	0	0	2	0	0
St. Landry	2,011	2,740	1,740	1,138	0	0	271	297	0	1,305
St. Martin	2	1,464	0	657	0	0	2	46	0	761
Terrebonne	0	8	0	0	0	0	0	8	0	0
Vermilion	2	0	0	0	0	0	2	0	0	0
West Baton Rouge	356	378	248	292	0	0	108	86	0	0
West Feliciana	1,992	2,360	1,010	1,387	855	0	127	973	0	0
All parishes	11,431	19,181	7,997	8,171	2,105	0	1,329	4,378	0	6,632

^a Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (584,000 cubic feet in 2002).

Table A.18—Roundwood timber product output by product and species group, Southwest Region of Louisiana, 1999 and 2002

Product and species group	Year		Change	Change
	1999	2002		
	----- thousand cubic feet -----			percent
Saw logs				
Softwood	42,251	48,589	6,338	15.0
Hardwood	5,653	7,415	1,762	31.2
Total	47,904	56,004	8,100	16.9
Veneer logs				
Softwood	58,824	60,775	1,951	3.3
Hardwood	0	0	0	—
Total	58,824	60,775	1,951	3.3
Pulpwood ^a				
Softwood	119,459	105,183	-14,276	-12.0
Hardwood	14,114	14,762	648	4.6
Total	133,573	119,945	-13,628	-10.2
Other industrial				
Softwood	4,715	10,934	6,219	131.9
Hardwood	3,044	3,044	0	—
Total	7,759	13,978	6,219	80.2
All industrial				
Softwood	225,249	225,481	232	0.1
Hardwood	22,811	25,221	2,410	10.6
Total	248,060	250,702	2,642	1.1

— = negligible.

^a Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (1,669,000 cubic feet in 1999 and 1,919,000 cubic feet in 2002).

Table A.19—Roundwood timber product output by parish, product, and species group, Southwest Region of Louisiana, 2002

Parish	All products		Saw logs		Veneer logs		Pulpwood ^a		Other industrial	
	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood
	<i>thousand cubic feet</i>									
Allen	11,598	3,977	976	1,060	6,160	0	4,001	1,939	461	978
Beauregard	33,581	2,477	6,158	549	5,671	0	21,718	1,928	34	0
Calcasieu	2,974	168	214	162	867	0	1,893	6	0	0
Evangeline	9,104	1,952	1,059	1,066	5,731	0	1,634	16	680	870
Grant	11,960	678	3,698	461	4,280	0	3,482	217	500	0
Jefferson Davis	284	116	0	116	134	0	150	0	0	0
La Salle	19,481	1,820	4,910	561	6,324	0	8,103	1,259	144	0
Natchitoches	28,042	3,052	9,943	629	7,837	0	9,372	2,423	890	0
Rapides	19,483	4,587	2,987	1,851	8,196	0	7,834	1,540	466	1,196
Sabine	40,446	2,586	9,611	230	10,828	0	18,868	2,356	1,139	0
Vernon	48,528	3,808	9,033	730	4,747	0	28,128	3,078	6,620	0
All parishes	225,481	25,221	48,589	7,415	60,775	0	105,183	14,762	10,934	3,044

^a Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (1,919,000 cubic feet in 2002).

Table A.20—Roundwood timber product output by product and species group, Southeast Region of Louisiana, 1999 and 2002

Product and species group	Year		Change	Change
	1999	2002		
	----- thousand cubic feet -----			percent
Saw logs				
Softwood	39,510	39,665	155	0.4
Hardwood	6,324	5,295	-1,029	-16.3
Total	45,834	44,960	-874	-1.9
Veneer logs				
Softwood	11,951	7,343	-4,608	-38.6
Hardwood	42	0	-42	-100.0
Total	11,993	7,343	-4,650	-38.8
Pulpwood ^a				
Softwood	29,072	23,159	-5,913	-20.3
Hardwood	12,767	4,548	-8,219	-64.4
Total	41,839	27,707	-14,132	-33.8
Other industrial				
Softwood	0	0	0	—
Hardwood	0	0	0	—
Total	0	0	0	—
All industrial				
Softwood	80,533	70,167	-10,366	-12.9
Hardwood	19,133	9,843	-9,290	-48.6
Total	99,666	80,010	-19,656	-19.7

— = negligible.

^a Includes roundwood delivered to nonpulp mills, then chipped and sold to pulp mills (1,341,000 cubic feet in 1999 and 1,541,000 cubic feet in 2002).

Table A.21—Roundwood timber product output by parish, product, and species group, Southeast Region of Louisiana, 2002

Parish	All products		Saw logs		Veneer logs		Pulpwood ^a		Other industrial	
	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood
	<i>thousand cubic feet</i>									
East Baton Rouge	2,958	1,430	2,567	1,085	217	0	174	345	0	0
East Feliciana	6,576	1,809	4,078	1,394	1,072	0	1,426	415	0	0
Livingston	10,303	1,443	5,502	424	2,387	0	2,414	1,019	0	0
St. Helena	11,566	2,122	5,891	1,429	847	0	4,828	693	0	0
St. Tammany	7,403	271	4,264	271	795	0	2,344	0	0	0
Tangipahoa	13,821	2,310	8,692	287	1,808	0	3,321	2,023	0	0
Washington	17,540	458	8,671	405	217	0	8,652	53	0	0
All parishes	70,167	9,843	39,665	5,295	7,343	0	23,159	4,548	0	0

^a Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (1,541,000 cubic feet in 2002).

Table A.22—Roundwood timber product output by product and species group, Northwest Region of Louisiana, 1999 and 2002

Product and species group	Year		Change	Change
	1999	2002		
	----- thousand cubic feet -----			percent
Saw logs				
Softwood	129,159	122,649	-6,510	-5.0
Hardwood	6,889	10,853	3,964	57.5
Total	136,048	133,502	-2,546	-1.9
Veneer logs				
Softwood	70,517	61,904	-8,613	-12.2
Hardwood	0	0	0	—
Total	70,517	61,904	-8,613	-12.2
Pulpwood ^a				
Softwood	91,581	55,171	-36,410	-39.8
Hardwood	59,004	38,141	-20,863	-35.4
Total	150,585	93,312	-57,273	-38.0
Other industrial				
Softwood	19,133	20,225	1,092	5.7
Hardwood	1,881	2,500	619	32.9
Total	21,014	22,725	1,711	8.1
All industrial				
Softwood	310,390	259,949	-50,441	-16.3
Hardwood	67,774	51,494	-16,280	-24.0
Total	378,164	311,443	-66,721	-17.6

— = negligible.

^a Includes roundwood delivered to nonpulp mills, then chipped and sold to pulpmills (225,000 cubic feet in 1999 and 259,000 cubic feet in 2002).

Table A.23—Roundwood timber product output by parish, product, and species group, Northwest Region of Louisiana, 2002

Parish	All products		Saw logs		Veneer logs		Pulpwood ^a		Other industrial	
	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood
	<i>thousand cubic feet</i>									
Bienville	41,581	4,957	19,484	417	12,886	0	4,947	4,043	4,264	497
Bossier	17,207	5,788	10,489	943	3,899	0	1,821	4,597	998	248
Caddo	13,509	3,557	7,067	831	3,911	0	1,131	2,107	1,400	619
Caldwell	11,866	2,895	3,833	779	1,521	0	6,275	2,096	237	20
Claiborne	23,198	2,608	13,387	1,467	6,810	0	1,414	872	1,587	269
De Soto	21,421	5,658	6,451	319	6,884	0	6,387	5,339	1,699	0
Jackson	24,418	4,661	10,626	918	3,981	0	7,009	3,411	2,802	332
Lincoln	13,288	2,948	7,336	242	2,433	0	1,472	2,478	2,047	228
Ouachita	10,941	4,059	6,192	1,368	599	0	3,534	2,609	616	82
Red River	4,634	782	2,327	231	674	0	1,181	531	452	20
Union	22,809	6,738	11,950	1,151	3,184	0	6,764	5,505	911	82
Webster	18,306	2,674	11,432	1,327	3,574	0	1,923	1,244	1,377	103
Winn	36,771	4,169	12,075	860	11,548	0	11,313	3,309	1,835	0
All parishes	259,949	51,494	122,649	10,853	61,904	0	55,171	38,141	20,225	2,500

^a Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (259,000 cubic feet in 2002).

Table A.24—Total roundwood output by product, species group, and source of material, Louisiana, 2002

Product and species group	All sources	Total	Growing-stock trees		Other sources
			Sawtimber	Poletimber	
<i>thousand cubic feet</i>					
Saw logs					
Softwood	230,394	222,915	198,394	24,521	7,479
Hardwood	42,609	41,810	40,502	1,308	799
Total	273,003	264,725	238,896	25,829	8,278
Veneer logs and bolts					
Softwood	136,832	133,693	128,345	5,348	3,139
Hardwood	641	631	631	0	10
Total	137,473	134,324	128,976	5,348	3,149
Pulpwood					
Softwood	191,096	155,499	113,228	42,271	35,597
Hardwood	75,219	63,927	44,309	19,618	11,292
Total	266,315	219,426	157,537	61,889	46,889
Other industrial					
Softwood	23,863	15,680	4,656	11,024	8,183
Hardwood	12,176	10,109	6,736	3,373	2,067
Total	36,039	25,789	11,392	14,397	10,250
Poles and posts					
Softwood	7,506	7,039	5,406	1,633	467
Hardwood	0	0	0	0	0
Total	7,506	7,039	5,406	1,633	467
Total industrial products					
Softwood	589,691	534,826	450,029	84,797	54,865
Hardwood	130,645	116,477	92,178	24,299	14,168
Total	720,336	651,303	542,207	109,096	69,033
Fuelwood					
Softwood	1,565	1,415	914	501	150
Hardwood	19,301	16,767	11,737	5,030	2,534
Total	20,866	18,182	12,651	5,531	2,684
All products					
Softwood	591,256	536,241	450,943	85,298	55,015
Hardwood	149,946	133,244	103,915	29,329	16,702
Total	741,202	669,485	554,858	114,627	71,717

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

Table A.25—Total roundwood output by species group, survey region, and ownership class, Louisiana, 2002

Species group and survey region	Total	Ownership class		
		Public	Forest industry	Nonindustrial private
<i>thousand cubic feet</i>				
Softwoods				
North Delta	22,723	0	13,310	9,413
South Delta	11,460	0	0	11,460
Southwest	226,079	3,772	126,789	95,518
Southeast	70,355	2,309	21,721	46,325
Northwest	260,639	5,145	112,503	142,991
Total softwoods	591,256	11,226	274,323	305,707
Hardwoods				
North Delta	28,585	2,531	6,532	19,522
South Delta	22,014	542	2,444	19,028
Southwest	28,947	209	14,867	13,871
Southeast	11,296	158	2,604	8,534
Northwest	59,104	96	19,973	39,035
Total hardwoods	149,946	3,536	46,420	99,990
All species	741,202	14,762	320,743	405,697

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

Table A.26—Total roundwood output by species group, detailed species group, and product, Louisiana, 2002

Species group and detailed species group	Total	Product					Fuel-wood
		Saw logs	Veneer logs	Pulpwood	Other industrial	Poles and posts	
<i>thousand cubic feet</i>							
Softwood							
Longleaf-slash pine	75,034	19,717	17,324	35,326	1,039	1,430	199
Loblolly-shortleaf pine	493,384	192,862	118,164	152,362	22,614	6,075	1,306
Other yellow pines	19,742	15,502	1,013	2,986	189	0	52
Cypress	3,097	2,313	331	422	21	1	7
Total softwoods	591,256	230,394	136,832	191,096	23,863	7,506	1,565
Hardwood							
Soft maple	3,026	634	0	1,727	276	0	389
Hard maple	80	15	0	49	6	0	10
Hickory	7,636	1,801	23	4,336	493	0	983
Beech	1,878	436	0	1,005	195	0	242
Ash	4,815	1,450	75	1,972	698	0	620
Black walnut	75	5	0	55	5	0	10
Sweetgum	33,099	8,808	69	17,940	2,022	0	4,261
Yellow-poplar	1,196	603	0	439	0	0	154
Blackgum-tupelo	6,870	1,773	0	3,127	1,085	0	884
Sycamore	2,216	707	83	944	196	0	285
Cottonwood	3,591	1,399	102	1,581	47	0	462
Black cherry	1,075	459	0	414	64	0	138
Select white oaks	6,764	1,789	0	3,859	245	0	871
Other white oaks	9,792	2,378	18	5,575	560	0	1,261
Select red oaks	6,701	2,198	0	2,943	697	0	863
Other red oaks	38,192	10,200	100	20,012	2,963	0	4,917
Elm	3,970	1,251	53	1,729	426	0	511
Other Eastern hardwoods	18,972	6,702	116	7,514	2,198	0	2,442
Total hardwoods	149,947	42,609	640	75,219	12,176	0	19,303
All species	741,203	273,003	137,472	266,315	36,039	7,506	20,868

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

Table A.27—Total roundwood output by species group, detailed species group, and ownership class, Louisiana, 2002

Species group and detailed species group	Total	Ownership class		
		National forest	Forest industry	Nonindustrial private
<i>thousand cubic feet</i>				
Softwood				
Longleaf-slash pine	75,034	1,490	39,200	34,343
Loblolly-shortleaf pine	493,383	9,611	233,017	250,755
Other yellow pines	19,742	118	1,651	17,973
Cypress	3,097	6	455	2,635
Total softwoods	591,255	11,225	274,323	305,707
Hardwood				
Soft maple	3,026	45	525	2,456
Hard maple	80	0	22	58
Hickory	7,636	207	2,446	4,983
Beech	1,878	11	1,055	812
Ash	4,815	274	1,389	3,152
Black walnut	75	0	0	75
Sweetgum	33,099	705	10,273	22,121
Yellow-poplar	1,196	0	247	948
Blackgum-tupelo	6,869	31	2,380	4,458
Sycamore	2,215	71	356	1,789
Cottonwood	3,591	43	499	3,049
Black cherry	1,076	3	342	731
Select white oaks	6,765	19	2,647	4,099
Other white oaks	9,792	500	3,661	5,631
Select red oaks	6,701	191	2,400	4,110
Other red oaks	38,192	574	11,718	25,900
Elm	3,970	87	723	3,160
Other Eastern hardwoods	18,972	776	5739	12,457
Total hardwoods	149,948	3,537	46,421	99,989
All species	741,203	14,762	320,745	405,696

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.

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Bentley, J.W.; Howell, M.; Johnson, T.G. 2005. Louisiana's timber industry—an assessment of timber product output and use, 2002. Resour. Bull. SRS-103. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 44 p.

In 2002, industrial roundwood output from Louisiana's forests totaled 720 million cubic feet, 10 percent less than in 1999. Mill byproducts generated from primary manufacturers decreased 4 percent to 275 million cubic feet. Almost all plant residues were used primarily for fuel and fiber products. Saw logs were the leading roundwood product at 273 million cubic feet; pulpwood ranked second at 266 million cubic feet; veneer logs were third at 137 million cubic feet. The number of primary processing plants increased from 57 in 1999 to 60 in 2002. Total receipts decreased 11 percent to 793 million cubic feet.

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

United States
Department of Agriculture

Forest Service

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