

United States
Department of
Agriculture

Forest Service



Southern
Research Station

Resource Bulletin
SRS-180

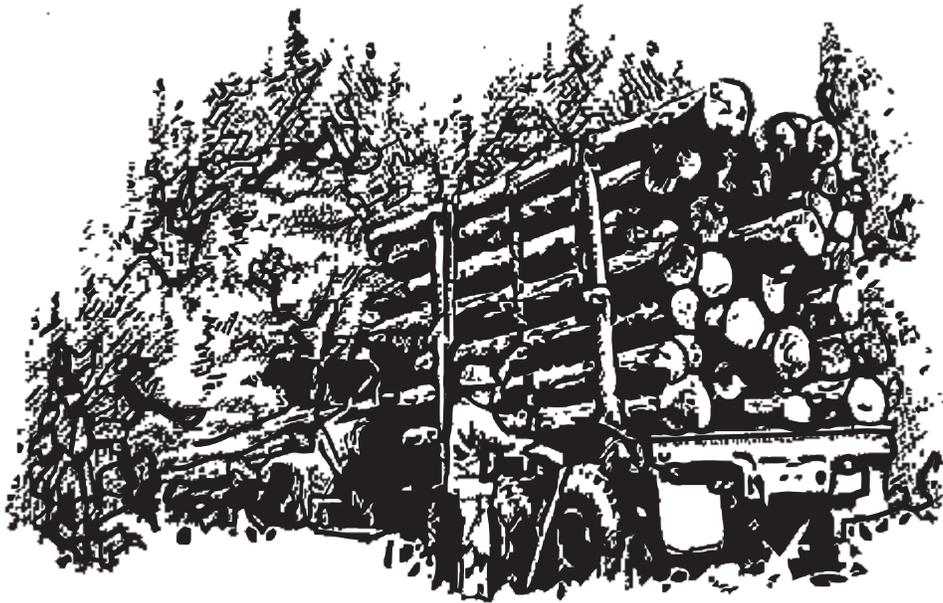
Florida's Timber Industry—An Assessment of Timber Product Output and Use, 2009

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July 2011

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Foreword

This report contains the findings of a 2009 canvass of all primary wood-using plants in Florida, and presents changes in product output and residue use since 2007. It complements the Forest Inventory and Analysis annual inventory of volume and removals from the State's timberland. The canvass was conducted to determine the amount and source of wood receipts and annual timber product drain, by county, in 2009 and to determine interstate and cross-regional movement of industrial roundwood. Only primary wood-using mills were canvassed. Primary mills are those that process roundwood in log or bolt form or as chipped roundwood. Examples of industrial roundwood products are saw logs, pulpwood, veneer logs, poles, and logs used for composite board products. Mills producing products from residues generated at primary and secondary processors were not canvassed. Trees chipped in the woods were included in the estimate of timber drain only if they were delivered to a primary domestic manufacturer.

A 100-percent canvass of all wood processors in Florida was conducted in 2010 to obtain information for 2009. In addition, roundwood from out-of-State mills known to be using logs or bolts harvested from Florida timberland was incorporated into Florida production estimates. Each mill was canvassed by mail or email. Telephone contacts followed mailed/mailed questionnaires 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 1958, and are currently conducted every 2 years.

Pulpwood production data were taken from an annual canvass of all southern pulpmills. Medium density fiberboard, insulating board, and hardboard plants were included in this survey.

Acknowledgments

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

The authors thank John G. Greis and Anthony T. Grossman for review and comments; Carolyn Steppleton and Michael Howell for their tireless efforts in processing and accuracy of the data; Helen Beresford for timber product output database maintenance and support; Anne Jenkins, Janet Griffin, Sharon Johnson, and Charlene Walker for tables, graphs, statistical checking, and styling; and the SRS Technical Publications Team for editorial review and publication of this report.



Timber Product Output Database Retrieval System

The Forest Inventory and Analysis (FIA) Research Work Unit of the USDA Forest Service developed the Timber Product Output (TPO) Database Retrieval System to help customers answer questions about timber harvesting and use in the Southern region. This system acts as an interface to a standard set of consistently coded TPO data for each State and county in the region and Nation. This regional and national set of TPO data consists of 11 variables that describe for each county the roundwood products harvested, logging residues left in the woods, other timber removals (i.e. land clearing and reserved timber removals), and wood and bark residues generated by the county's primary wood-using mills. The system is available through the FIA Web site: <http://srsfia2.fs.fed.us/>.

The database is well documented and easy to use. The retrieval system allows the user to select the TPO variables of interest and generate a standard set of timber products, removals, and mill residue tables for the specified resource area, State, or region. The system has been logically divided into two sections to assist the user in making specific data requests. In section 1, the user is asked to define the resource area, and section 2 generates tables for the specified area. In each section, the user is asked to select specific options that will serve to customize the database retrieval.

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

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

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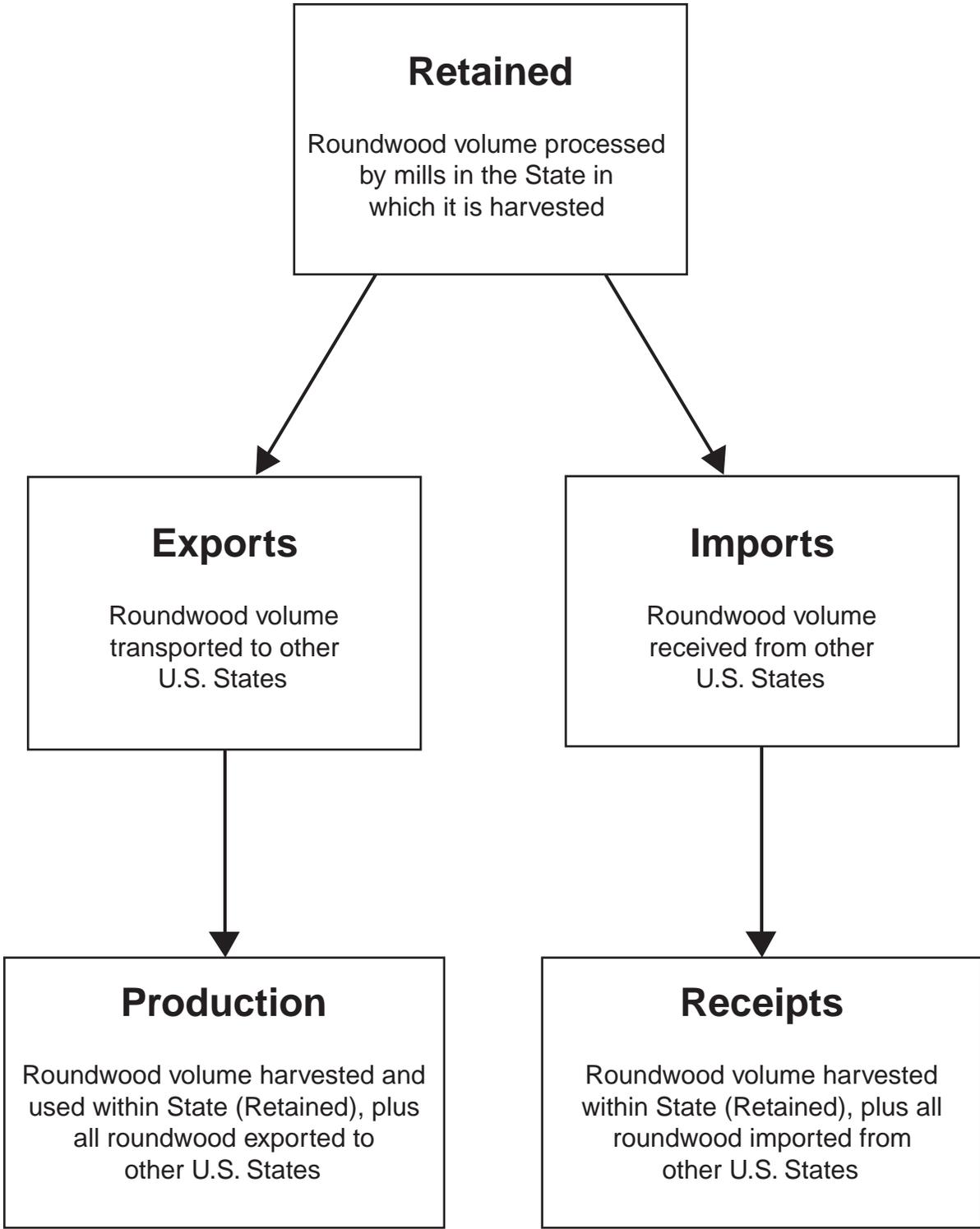
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^a All tables in this report are available in Microsoft® Excel workbook files. Upon request, these files will be supplied in the format the customer requests. The use of trade or firm names in this publication is for reader information and does not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



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 report—retained, export, import, production, and receipts—have specialized meanings and relationships unique to the Forest Inventory and Analysis Units across the country that deal with timber product output (TPO) (fig. 1). Unless otherwise indicated, the context for production and receipts comparisons (increases, decreases, or stabilizations) throughout the report is the change from 2007 to 2009.

All Products

- Industrial TPO from roundwood declined 16.5 million cubic feet, or 3 percent, from 491.1 million cubic feet in 2007 to 474.6 million cubic feet in 2009.
- Output of softwood roundwood products was down 3 percent to 454.5 million cubic feet, while hardwood roundwood products declined 12 percent to 20.1 million cubic feet (fig. 2).

- Pulpwood and saw logs were the principal roundwood products in 2009. Combined output of these products totaled 384.9 million cubic feet and accounted for 81 percent of Florida's total roundwood output (fig. 3).
- Total receipts at Florida mills, which included roundwood harvested and retained in the State, and roundwood imported from other States, was down 748,000 cubic feet to 505.4 million cubic feet, while output of utilized plant products was down 49.9 million cubic feet, or 30 percent.
- Fifty-nine primary roundwood-using plants operated in Florida in 2009, 10 less than in 2007 (fig. 4).
- Across all products, 88 percent of roundwood harvested was retained for processing at Florida mills. Exports of roundwood to other States amounted to 57.2 million cubic feet, while imports of roundwood amounted to 88.0 million cubic feet making the State a net importer of roundwood. Tables A.8 to A.11 show exports to and imports from other States by individual product type.

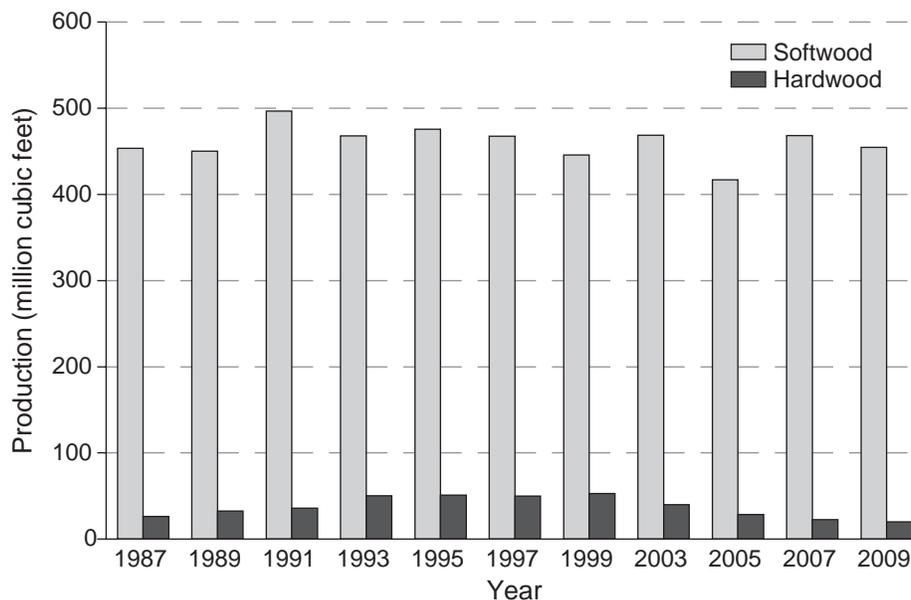


Figure 2—Roundwood production for all products by species group and year (see page 8 for references for individual years), Florida.

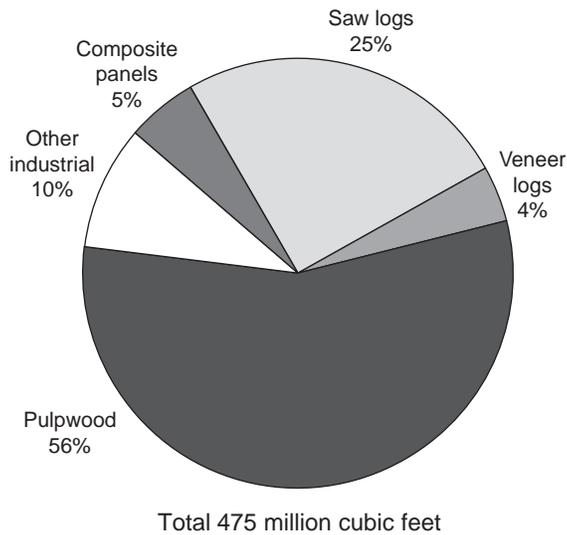


Figure 3—Roundwood production by type of product, Florida, 2009.

Pulpwood

- Total pulpwood production, including chipped roundwood, was up 28.7 million cubic feet, or 12 percent, to 265.2 million cubic feet and accounted for 56 percent of the State's total roundwood TPO. Softwood output increased 13 percent to 249.2 million cubic feet (3.5 million cords); hardwood output increased 3 percent to 16.0 million cubic feet (214,000 cords) (fig. 5).
- Six pulpmills were operating and receiving roundwood in Florida in 2009, the same since 1999. Total pulpwood receipts for these mills increased 43.8 million cubic feet to 292.2 million cubic feet, accounting for 58 percent of total receipts for all mills.
- Eighty-five percent of roundwood cut for pulpwood was retained for processing at Florida pulpmills. Roundwood pulpwood accounted for 68 percent of total known exports and 75 percent of total imports. Roundwood pulpwood imports amounted to 65.8 million cubic feet, while exports amounted to 38.9 million cubic feet, making the State a net importer of pulpwood for processing.

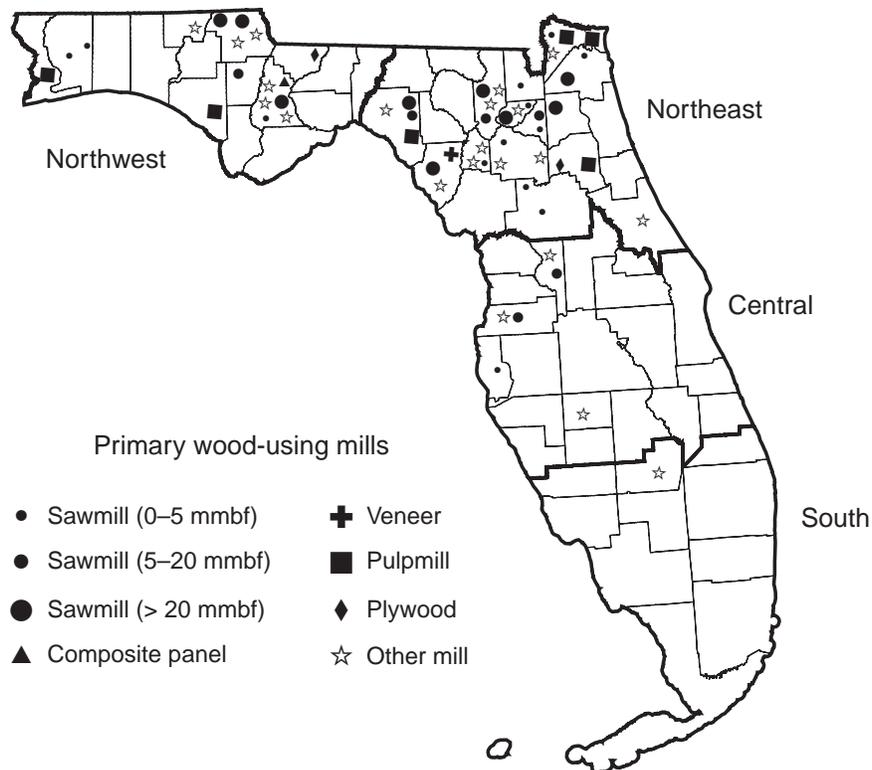


Figure 4—Primary wood-using mills by region, Florida, 2009.

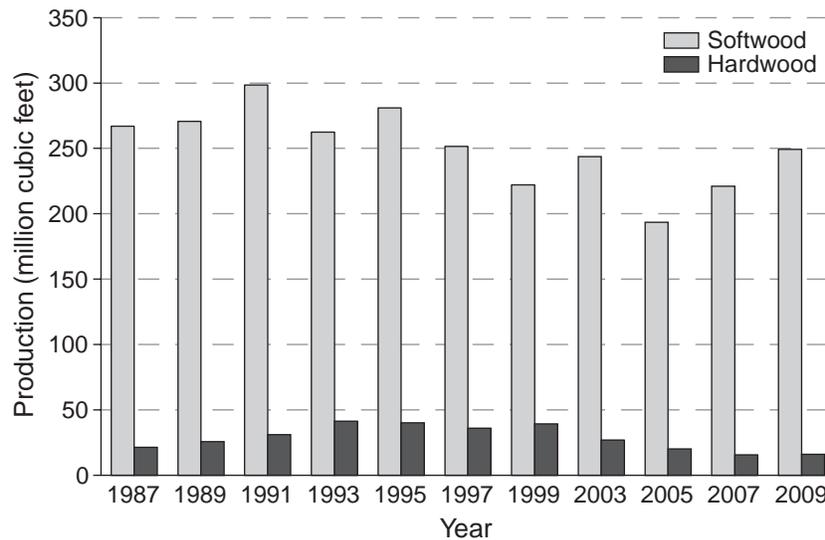


Figure 5—Roundwood pulpwood production by species group and year (see page 8 for references for individual years), Florida.

Saw Logs

- Saw-log output dropped 33 percent, or 57.8 million cubic feet, to 119.6 million cubic feet, accounting for 25 percent of the State’s total roundwood products.
- Output of softwood saw logs declined 32 percent to 117.8 million cubic feet (616.7 million board feet, International ¼-inch rule), while that of hardwood saw logs was down 52 percent to >1.8 million cubic feet (11.1 million board feet, International ¼-inch rule) (fig. 6).
- In 2009, Florida had 28 sawmills, 9 fewer than in 2007. Total saw-log receipts fell 63.4 million cubic feet to 122.2 million cubic feet. Softwood saw-log receipts were down 34 percent to 120.8 million cubic feet, while those of hardwoods were down 61 percent to 1.4 million cubic feet. Of the 28 mills operating in 2009, 13 mills, or 46 percent had receipts of <5 million board feet. Thirty-nine percent, or 11 mills, had receipts of >10 million board feet and accounted for 95 percent of saw-log receipts.
- Florida retained 90 percent of its saw-log production for within State manufacture; saw-log imports of 14.5 million cubic feet exceeded exports of 11.9 million cubic feet by 2.6 million cubic feet in 2009.

Veneer Logs

- Output of veneer logs in 2009 totaled 19.9 million cubic feet, and accounted for 4 percent of the State’s total roundwood TPO volume. Softwood veneer production declined 23 percent to 18.7 million cubic feet (108.7 million board feet, International ¼-inch rule), while output of hardwood veneer logs dropped 8 percent to 1.3 million cubic feet (7.8 million board feet, International ¼-inch rule) (fig. 7).
- Three veneer mills operated in Florida in 2009, the same since 2003. Total veneer log receipts declined 11 percent to 25.0 million cubic feet. Softwood receipts were down 12 percent to 24.0 million cubic feet, while hardwood receipts remained relatively stable at 917,000 cubic feet.
- Florida retained 97 percent of its veneer-log production for processing at veneer mills within State. Imports amounted to 5.7 million cubic feet, while exports totaled 0.6 million cubic feet, making the State a net importer of roundwood veneer logs.

Composite Panels

- Roundwood harvested from Florida’s forests for composite panels declined 14 percent from 29.6 million

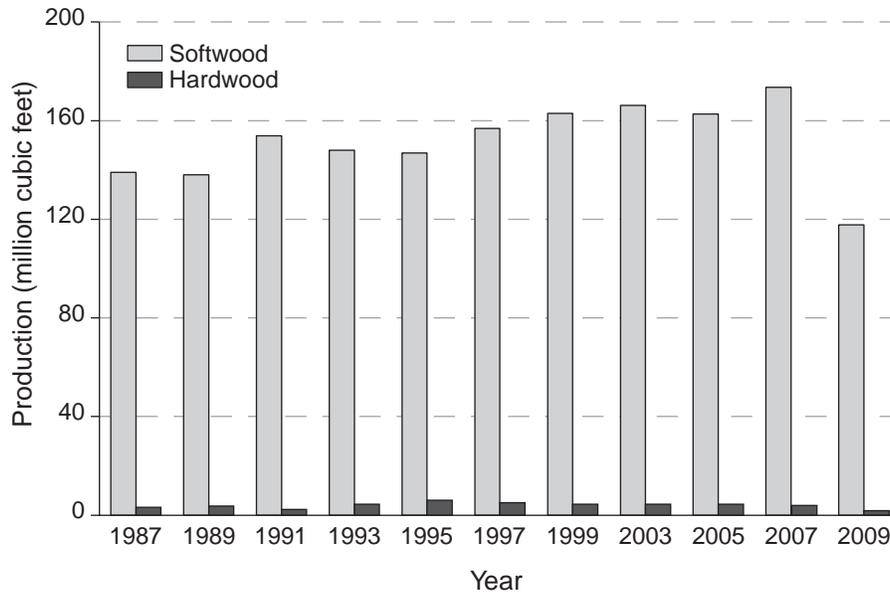


Figure 6—Roundwood saw-log production by species group and year (see page 8 for references for individual years), Florida.

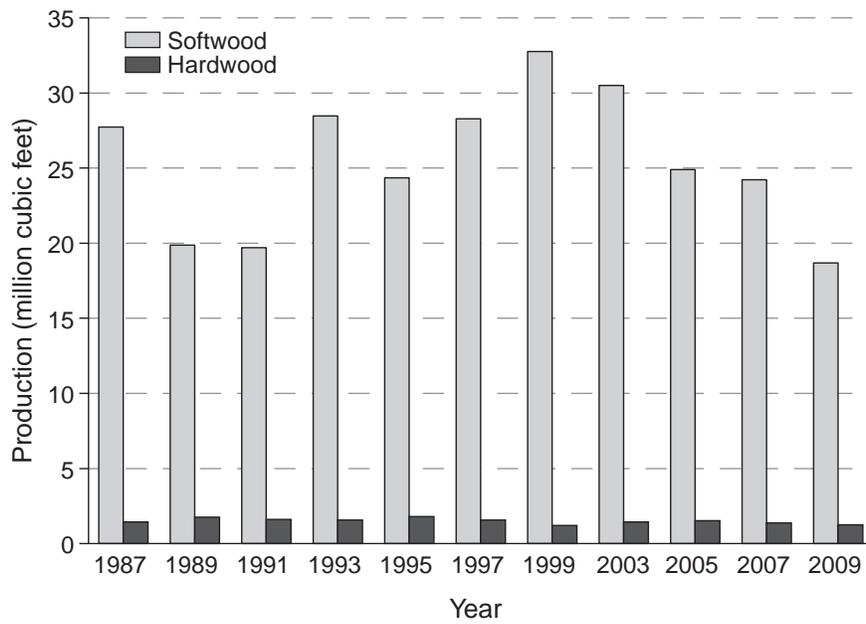


Figure 7—Roundwood veneer-log production by species group and year (see page 8 for references for individual years), Florida.

cubic feet to 25.3 million cubic feet. Softwood output totaled 25.1 million cubic feet (353,700 cords); hardwood production dropped 81 percent from 1.2 million cubic feet to 0.2 million cubic feet (3,200 cords) (fig. 8).

Other Industrial Products

- Roundwood harvested for other industrial uses, such as poles, posts, mulch, industrial fuel, residential firewood, logs for log homes, and all other industrial products, more than doubled to 44.4 million cubic feet and accounted for 10 percent of the State’s total TPO. Softwood made-up 99 percent of the other industrial product volume (fig. 9).
- The total number of plants producing other industrial products totaled 21 mills in 2009, 1 less than in 2007. Total other industrial receipts increased 50 percent to 66.0 million cubic feet. Softwood receipts were up 51 percent to 65.3 million cubic feet, while hardwood receipts remained stable at 664,000 cubic feet. Roundwood used for industrial fuel amounted to 27.0 million cubic feet, or 41 percent, of total other industrial receipt volume.
- Florida retained 92 percent of its other industrial production for processing at mills within State. Exports amounted to 5.8 million cubic feet, while imports totaled 2.0 million cubic feet, making the State a net exporter of roundwood used for other industrial products.

Plant Byproducts

- In 2009, processing of primary products in Florida mills generated 117.1 million cubic feet of wood and bark residues. Coarse residues from all primary products amounted to 39.2 million cubic feet, and bark volume totaled 44.2 million cubic feet. Sawdust and shavings made-up 29 percent of total residues, or 33.7 million cubic feet (fig. 10).
- The processing of saw logs generated 71.0 million cubic feet of mill residues, accounting for 61 percent of the total residues produced (fig. 11).
- Virtually all residues were used for a product with 49 percent of mill residue used for industrial fuel (fig. 12). More than 93 percent, or 36.5 million cubic feet, of the coarse residues were used to manufacture fiber products. Seventy-seven percent of the bark was used for industrial fuel with the remaining 23 percent of bark residue used for other miscellaneous products such as mulch. Seventy percent of the sawdust and shavings was used for industrial fuel.

County Data

- Table A.14 shows softwood and hardwood product output by county and individual product type. Fifty-four

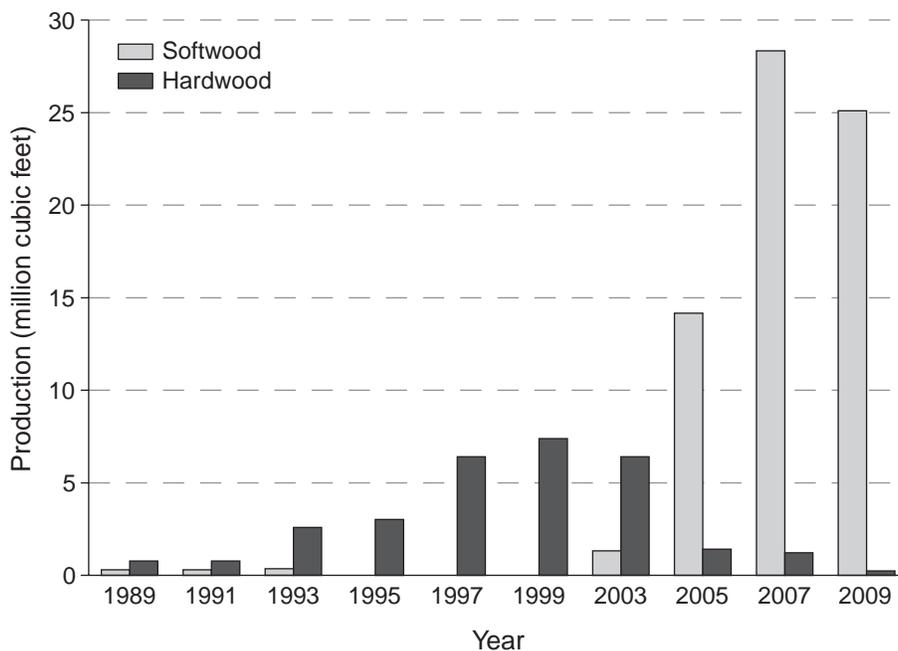


Figure 8—Roundwood production for composite panels by species group and year (see page 8 for references for individual years), Florida.

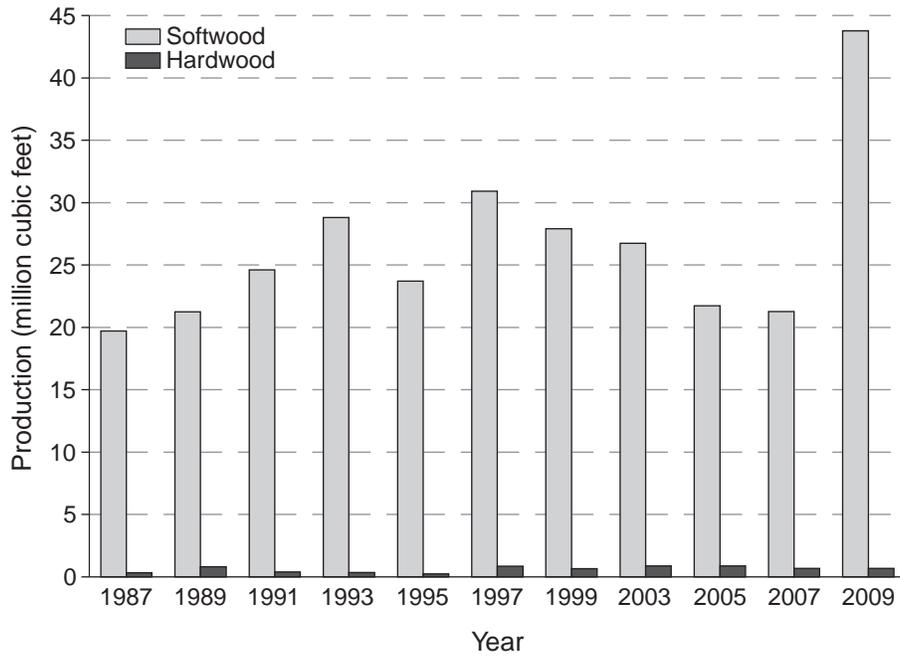


Figure 9—Roundwood production for other industrial products by species group and year (see page 8 for references for individual years), Florida.

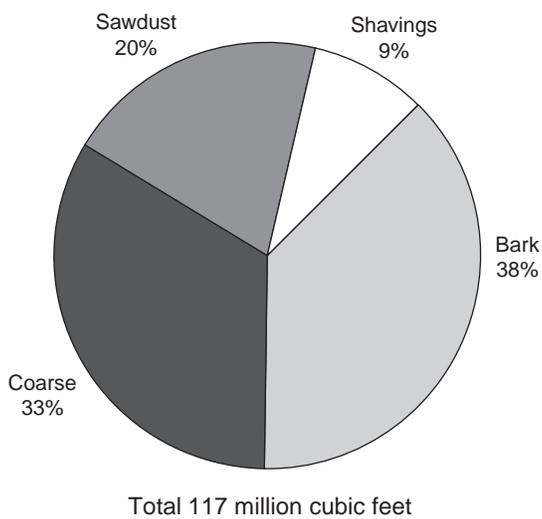


Figure 10—Primary mill residue by residue type, Florida, 2009.

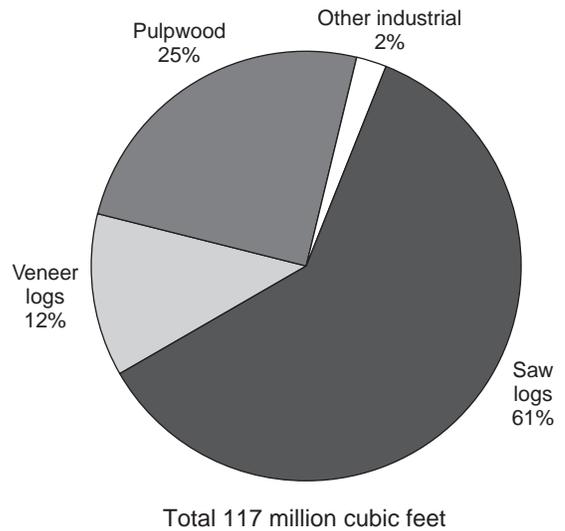


Figure 11—Primary mill residue produced by roundwood type, Florida, 2009.

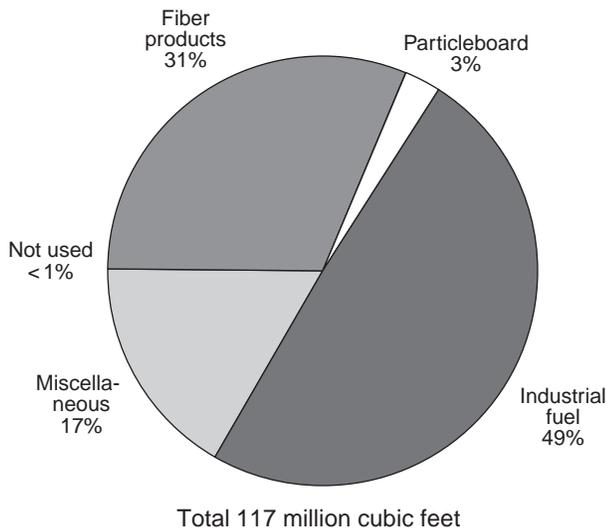


Figure 12—Disposal of residue by product, Florida, 2009.

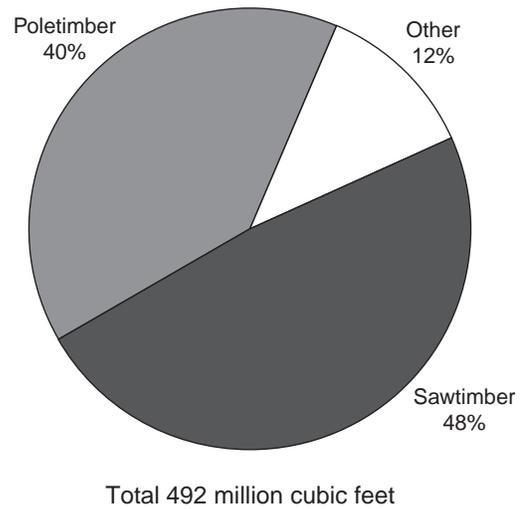


Figure 13—Roundwood output by source, Florida, 2009.

of the 67 counties in Florida had either softwood or hardwood output. Ten counties (Bay, Calhoun, Clay, Hamilton, Jackson, Levy, Madison, Nassau, Taylor, and Washington) had combined softwood and hardwood product output of >15 million cubic feet each. These 10 counties total product output amounted to >230.9 million cubic feet and accounted for 49 percent of the State's total product output.

Total Roundwood Output

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

Source

- In addition to the 474.6 million cubic feet of roundwood output for industrial products, an estimated 17.7 million cubic feet was harvested for residential fuelwood, bringing Florida's total roundwood output to nearly 492.3 million cubic feet.
- Eighty-eight percent was considered growing-stock volume (sawtimber and poletimber) from timberland sources. Other sources (such as saplings; stumps, tops, and limbs of trees on timberland; and trees on nonforest land) contributed an estimated 58.3 million cubic feet, or 12 percent of total roundwood output (fig. 13).

Ownership

- Forest industry contributed 97.2 million cubic feet, or 20 percent, and nonindustrial private forest lands contributed 366.0 million cubic feet, or 74 percent, of the total roundwood output. Public lands contributed the remaining 6 percent, or 29.1 million cubic feet (fig. 14).

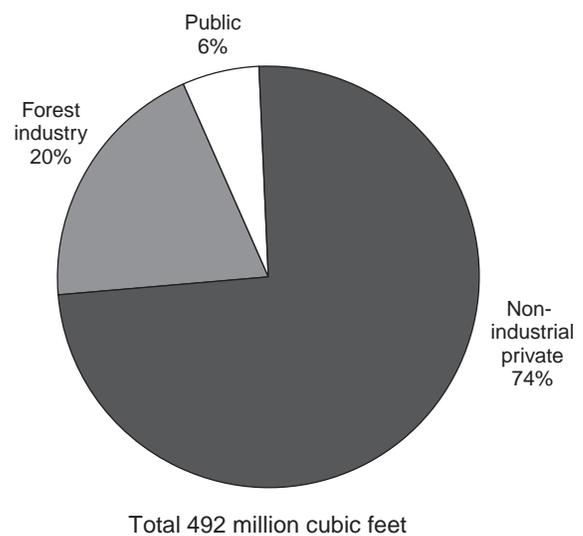


Figure 14—Roundwood output by ownership, Florida, 2009.

Species

- The longleaf and slash pine group provided more volume than any other softwood species group; at 361.7 million cubic feet, it accounted for 79 percent of total softwood output (fig. 15). The red oak and white oak groups combined accounted for 15.4 million cubic feet of total hardwood output, or 42 percent (fig. 16).

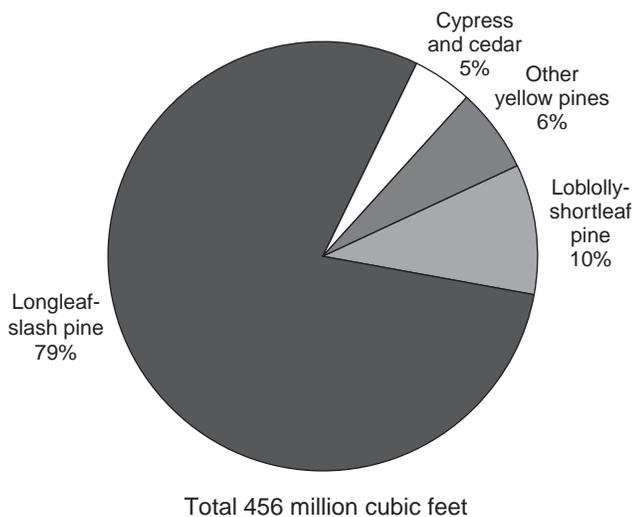


Figure 15—Roundwood output by softwood species group, Florida, 2009.

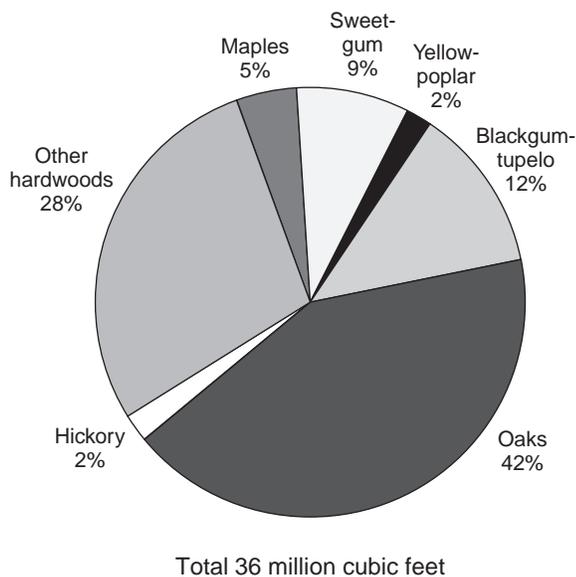


Figure 16—Roundwood output by hardwood species group, Florida, 2009.

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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.

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 , such as gums, yellow-poplar, cottonwoods, red maple, basswoods, and willows.

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

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

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

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

International ¼-inch rule. A log rule or formula for estimating the board-foot volume of logs, allowing ½-inch of taper for each 4-foot length. The rule appears in a number of forms that allow for kerf. In the form used by FIA, a ¼-inch of kerf is assumed. This rule is used as the U.S. 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 portion of trees cut or destroyed during logging operations.

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

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

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

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

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

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

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

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

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

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

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

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

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

Corporate. Owned by corporations, including incorporated farm ownerships.

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

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

Miscellaneous Federal land. Federal land other than national forests.

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

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

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

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

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

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

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

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

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

Production. The total volume of known roundwood harvested from land within a State, regardless of where it is consumed. Production is the sum of timber harvested and used within a State, and all roundwood exported to other States.

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

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

Residential fuelwood. The volume of roundwood harvested to produce heat for residential settings.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Standard unit. A unit measure applied to roundwood timber products. Board feet (International 1/4-inch rule) is the standard unit used for saw logs and veneer; cords are used for pulpwood, composite panel, and fuelwood; hundred pieces for poles; thousand pieces for posts; and thousand cubic feet for all other miscellaneous forest products.

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

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

Timber products. Roundwood products and byproducts.

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

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

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

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

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

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

Conversion Factors^a

Saw logs	
Softwood	0.19121 cubic foot = 1 board foot 5.23 board feet = 1 cubic foot
Hardwood	0.16807 cubic foot = 1 board foot 5.95 board feet = 1 cubic foot
Veneer logs	
Softwood	0.17241 cubic foot = 1 board foot 5.80 board feet = 1 cubic foot
Hardwood	0.16129 cubic foot = 1 board foot 6.20 board feet = 1 cubic foot
Pulpwood ^b	
Softwood	71.00 cubic feet per cord
Hardwood	75.00 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 Florida 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	Sweetgum	<i>Liquidambar styraciflua</i> L.
Eastern redcedar	<i>J. virginiana</i> L.	Yellow-poplar	<i>Liriodendron tulipifera</i> L.
Slash pine	<i>Pinus clausa</i> (Chapm. ex Englem.) Vasey ex Sarg.	Osage-orange	<i>Maclura pomifera</i> (Raf.) Schneid.
Shortleaf pine	<i>P. echinata</i> Mill.	Cucumbertree	<i>Magnolia acuminata</i> L.
Slash pine	<i>P. elliotii</i> Engelm.	Southern magnolia	<i>M. grandiflora</i> L.
Spruce pine	<i>P. glabra</i> Walt.	Bigleaf magnolia	<i>M. macrophylla</i> Michx.
Longleaf pine	<i>P. palustris</i> Mill.	Sweetbay	<i>M. virginiana</i> L.
Pond pine	<i>P. serotina</i> Michx.	Apple	<i>Malus</i> spp. Mill.
Loblolly pine	<i>P. taeda</i> L.	Chinaberry	<i>Melia azedarach</i> L.
Baldcypress	<i>Taxodium distichum</i> (L.) Rich.	White mulberry	<i>Morus alba</i> L.
Pondcypress	<i>T. distichum</i> var. <i>nutans</i>	Red mulberry	<i>M. rubra</i> L.
Hardwoods		Water tupelo	<i>Nyssa aquatica</i> L.
Florida maple	<i>Acer barbatum</i> Michx.	Blackgum	<i>N. sylvatica</i> Marsh.
Boxelder	<i>A. negundo</i> L.	Swamp tupelo	<i>N. sylvatica</i> var. <i>biflora</i> (Walt.) Sarg.
Red maple	<i>A. rubrum</i> L.	Eastern hophornbeam	<i>Ostrya virginiana</i> (Mill.) K. Koch
Silver maple	<i>A. saccharinum</i> L.	Sourwood	<i>Oxydendrum arboreum</i> (L.) DC.
Ailanthus	<i>Ailanthus altissima</i> (Mill.) Swingle	Redbay	<i>Persea borbonia</i> (L.) Spreng.
Tung-oil tree	<i>Aleurites fordii</i> Hemsl.	American sycamore	<i>Platanus occidentalis</i> L.
Serviceberry	<i>Amelanchier</i> spp. Med.	Cottonwood	<i>Populus</i> spp. L.
River birch	<i>Betula nigra</i> L.	Black cherry	<i>Prunus serotina</i> Ehrh.
American hornbeam	<i>Carpinus caroliniana</i> Walt.	White oak	<i>Quercus alba</i> L.
Hickory	<i>Carya</i> spp. Nutt.	Scarlet oak	<i>Q. coccinea</i> Muenchh.
Water hickory	<i>C. aquatica</i> (Michx. f.) Nutt.	Durand oak	<i>Q. durandii</i> Buckl.
Bitternut hickory	<i>C. cordiformis</i> (Wangenh.) K. Koch	Southern red oak	<i>Q. falcata</i> Michx.
Pignut hickory	<i>C. glabra</i> (Mill.) Sweet	Cherrybark oak	<i>Q. falcata</i> var. <i>pagodifolia</i> Ell.
Pecan	<i>C. illinoensis</i> (Wangenh.) K. Koch	Bluejack oak	<i>Q. incana</i> Bartr.
Shellbark hickory	<i>C. laciniosa</i> (Michx. f.) Loud.	Turkey oak	<i>Q. laevis</i> Walt.
Nutmeg hickory	<i>C. myristiciformis</i> (Michx. f.) Nutt.	Laurel oak	<i>Q. laurifolia</i> Michx.
Shagbark hickory	<i>C. ovata</i> (Mill.) K. Koch	Overcup oak	<i>Q. lyrata</i> Walt.
Black hickory	<i>C. texana</i> Buckl.	Swamp chestnut oak	<i>Q. michauxii</i> Nutt.
Mockernut hickory	<i>C. tomentosa</i> (Poir.) Nutt.	Chinkapin oak	<i>Q. muehlenbergii</i> Engelm.
Allegheny chinkapin	<i>Castanea pumila</i> Mill.	Water oak	<i>Q. nigra</i> L.
Chinkapin	<i>Castanopsis</i> (D. Don) Spach	Nuttall oak	<i>Q. nuttallii</i> Palmer
Catalpa	<i>Catalpa</i> spp. Scop.	Pin oak	<i>Q. palustris</i> Muenchh.
Sugarberry	<i>Celtis laevigata</i> Willd.	Willow oak	<i>Q. phellos</i> L.
Hackberry	<i>C. occidentalis</i> L.	Shumard oak	<i>Q. shumardii</i> Buckl.
Eastern redbud	<i>Cercis canadensis</i> L.	Post oak	<i>Q. stellata</i> Wangenh.
Flowering dogwood	<i>Cornus florida</i> L.	Black oak	<i>Q. velutina</i> Lam.
Hawthorn	<i>Crataegus</i> spp. L.	Live oak	<i>Q. virginiana</i> Mill.
Common persimmon	<i>Diospyros virginiana</i> L.	Willow	<i>Salix</i> spp. L.
American beech	<i>Fagus grandifolia</i> Ehrh.	Sassafras	<i>Sassafras albidum</i> (Nutt.) Nees
White ash	<i>Fraxinus americana</i> L.	American basswood	<i>Tilia americana</i> L.
Pumpkin ash	<i>F. profunda</i> (Bush) Bush	White basswood	<i>T. heterophylla</i> Vent.
Blue ash	<i>F. quadrangulata</i> Michx.	Winged elm	<i>Ulmus alata</i> Michx.
Waterlocust	<i>Gleditsia aquatica</i> Marsh.	American elm	<i>U. americana</i> L.
Honeylocust	<i>G. triacanthos</i> L.	Cedar elm	<i>U. crassifolia</i> Nutt.
American holly	<i>Ilex opaca</i> Ait.	Slippery elm	<i>U. rubra</i> Muhl.
Black walnut	<i>Juglans nigra</i> L.	September elm	<i>U. serotina</i> Sarg.
		Rock elm	<i>U. thomasi</i> Sarg.

^a Common and scientific and common names of tree species ≥ 1.0 inch d.b.h. occurring in the FIA sample.

^b Little (1979).

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Table A.1—Output of industrial products by product and species group, Florida, 2007 and 2009

Product and species group	Year		Change	Change
	2007	2009		
	<i>----- thousand cubic feet -----</i>			<i>percent</i>
Saw logs				
Softwood	173,532	117,773	-55,759	-32.1
Hardwood	3,899	1,864	-2,035	-52.2
Total	177,431	119,637	-57,794	-32.6
Veneer logs				
Softwood	24,229	18,686	-5,543	-22.9
Hardwood	1,371	1,256	-115	-8.4
Total	25,600	19,942	-5,658	-22.1
Pulpwood ^a				
Softwood	221,021	249,195	28,174	12.7
Hardwood	15,533	16,029	496	3.2
Total	236,554	265,224	28,670	12.1
Composite panels				
Softwood	28,335	25,104	-3,231	-11.4
Hardwood	1,218	236	-982	-80.6
Total	29,553	25,340	-4,213	-14.3
Other industrial				
Softwood	21,257	43,769	22,512	105.9
Hardwood	666	666	0	0.0
Total	21,923	44,435	22,512	102.7
All industrial				
Softwood	468,374	454,527	-13,847	-3.0
Hardwood	22,687	20,051	-2,636	-11.6
Total	491,061	474,578	-16,483	-3.4

0.0 = a value of > 0.00 but < 0.05 for the cell.

^a Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (1,403,000 cubic feet in 2007 and 3,821,000 cubic feet in 2009).

Table A.2—Roundwood receipts by product and species group, Florida, 2007 and 2009

Product and species group	Year		Change	Change
	2007	2009		
	----- thousand cubic feet -----			percent
Saw logs				
Softwood	181,979	120,806	-61,173	-33.6
Hardwood	3,701	1,427	-2,274	-61.4
Total	185,680	122,233	-63,447	-34.2
Veneer logs				
Softwood	27,258	24,047	-3,211	-11.8
Hardwood	916	917	1	0.1
Total	28,174	24,964	-3,210	-11.4
Pulpwood ^a				
Softwood	238,145	279,076	40,931	17.2
Hardwood	10,176	13,079	2,903	28.5
Total	248,321	292,155	43,834	17.7
Other industrial ^b				
Softwood	43,260	65,335	22,075	51.0
Hardwood	664	664	0	0.0
Total	43,924	65,999	22,075	50.3
Total output				
Softwood	490,642	489,264	-1,378	-0.3
Hardwood	15,457	16,087	630	4.1
Total	506,099	505,351	-748	-0.1

0.0 = a value of > 0.00 but < 0.05 for the cell.

^a Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (1,434,000 cubic feet in 2007 and 4,378,000 cubic feet in 2009).

^b Includes 26,953,000 cubic feet used as industrial fuel in 2009.

Table A.3—Number of primary wood-using plants by type of mill, Florida, 1987 to 2009

Type of mill	Year										
	1987	1989	1991	1993	1995	1997	1999	2003	2005	2007	2009
	<i>number</i>										
Sawmills	97	85	71	64	68	58	53	53	53	37	28
Veneer mills	5	5	5	5	5	5	4	3	3	3	3
Pulpmills	10	9	9	8	8	8	6	6	6	6	6
Composite panel mills	0	0	0	0	0	0	0	0	1	1	1
Other mills	31	28	30	32	32	30	30	30	30	22	21
All plants	143	127	115	109	113	101	93	92	93	69	59

Table A.4—Roundwood receipts by sawmill size, Florida, 2007 and 2009

Sawmill size class ^a <i>mmbf</i>	2007			2009		
	Mills	Volume		Mills	Volume	
	<i>number</i>	<i>mbf</i>	<i>percent</i>	<i>number</i>	<i>mbf</i>	<i>percent</i>
< 1.0	14	5,286	1	10	3,361	0
1.0–4.99	4	7,871	1	3	4,169	1
5.0–9.99	5	32,343	3	4	23,609	4
10.0–49.99	5	112,765	11	5	129,832	20
> 50	9	816,717	84	6	481,215	75
Total	37	974,982	100	28	642,186	100

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

Table A.5—Roundwood receipts by species and type of mill, Florida, 2009

Species	All mills	Sawmills	Type of mill			
			Veneer mills		Pulpmills ^a	Other mills ^b
			Pine plywood	Other veneer		
<i>thousand cubic feet</i>						
Softwood						
Yellow pine	191,515	117,108	24,047	0	NA	50,360
Eastern white pine	0	0	0	0	NA	0
Cedar	0	0	0	0	NA	0
Cypress	12,904	3,659	0	0	NA	9,245
Other softwood	5,769	39	0	0	NA	5,730
Unclassified	279,076	0	0	0	279,076	0
Total softwoods	489,264	120,806	24,047	0	279,076	65,335
Hardwood						
Blackgum and tupelo	92	0	0	92	NA	0
Soft maple	92	0	0	92	NA	0
Sweetgum	480	205	0	275	NA	0
Yellow-poplar	366	0	0	366	NA	0
Other soft hardwood	0	0	0	0	NA	0
Hickory	133	86	0	0	NA	47
Red oak	979	818	0	0	NA	161
White oak	196	167	0	0	NA	29
Other hard hardwood	670	151	0	92	NA	427
Unclassified	13,079	0	0	0	13,079	0
Total hardwoods	16,087	1,427	0	917	13,079	664
All species	505,351	122,233	24,047	917	292,155	65,999

NA = not applicable.

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

^b Includes 26,953,000 cubic feet used as industrial fuel in 2009.

Table A.6—Industrial roundwood movement by year and species group, Florida, 2007 and 2009

Year	Production	Exported to other States	Retained	Imported from other States	Receipts
<i>thousand cubic feet</i>					
Softwood					
2007	468,374	77,290	391,084	99,558	490,642
2009	454,527	52,892	401,635	87,629	489,264
Hardwood					
2007	22,687	7,357	15,330	127	15,457
2009	20,051	4,338	15,713	374	16,087
All species					
2007	491,061	84,647	406,414	99,685	506,099
2009	474,578	57,230	417,348	88,003	505,351

Table A.7—Industrial roundwood movement by product and species group, Florida, 2009

Product and species group	Production	Exported to other States	Retained	Imported from other States	Receipts
<i>thousand cubic feet</i>					
Saw logs					
Softwood	117,773	11,502	106,271	14,535	120,806
Hardwood	1,864	437	1,427	0	1,427
Total	119,637	11,939	107,698	14,535	122,233
Veneer logs					
Softwood	18,686	303	18,383	5,664	24,047
Hardwood	1,256	339	917	0	917
Total	19,942	642	19,300	5,664	24,964
Pulpwood ^a					
Softwood	249,195	35,528	213,667	65,409	279,076
Hardwood	16,029	3,324	12,705	374	13,079
Total	265,224	38,852	226,372	65,783	292,155
Other industrial					
Softwood	68,873	5,559	63,314	2,021	65,335
Hardwood	902	238	664	0	664
Total	69,775	5,797	63,978	2,021	65,999
Total output					
Softwood	454,527	52,892	401,635	87,629	489,264
Hardwood	20,051	4,338	15,713	374	16,087
Total	474,578	57,230	417,348	88,003	505,351

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

Table A.8—Saw-log volume by destination, source, and species group, Florida, 2009

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
Florida (retained)	107,698	106,271	1,427
Exports to			
Alabama	2,218	2,216	2
Georgia	9,721	9,286	435
Total	11,939	11,502	437
Imports from			
Alabama	4,805	4,805	0
Georgia	9,730	9,730	0
Total	14,535	14,535	0

Table A.10—Pulpwood volume by destination, source, and species group, Florida, 2009^a

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
Florida (retained)	226,372	213,667	12,705
Exports to			
Alabama	3,885	2,738	1,147
Georgia	34,967	32,790	2,177
Total	38,852	35,528	3,324
Imports from			
Alabama	28,261	28,190	71
Georgia	35,913	35,610	303
Mississippi	1,609	1,609	0
Total	65,783	65,409	374

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

Table A.9—Veneer volume by destination, source, and species group, Florida, 2009

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
Florida (retained)	19,300	18,383	917
Exports to			
Georgia	642	303	339
Total	642	303	339
Imports from			
Alabama	877	877	0
Georgia	4,652	4,652	0
South Carolina	135	135	0
Total	5,664	5,664	0

Table A.11—Other industrial volume by destination, source, and species group, Florida, 2009^a

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
Florida (retained)	63,978	63,314	664
Exports to			
Alabama	414	414	0
Georgia	5,383	5,145	238
Total	5,797	5,559	238
Imports from			
Georgia	2,021	2,021	0
Total	2,021	2,021	0

^a Includes poles, posts, composite panels, mulch, firewood, log homes, charcoal, and all other industrial products.

Table A.12—Primary mill residue volume by roundwood type, species group, and residue type, Florida, 2009

Roundwood type and species group	All types	Residue type			
		Bark	Coarse	Sawdust	Shavings
<i>thousand cubic feet</i>					
Saw logs					
Softwood	70,061	10,037	32,943	16,706	10,375
Hardwood	913	163	443	301	6
Total	70,974	10,200	33,386	17,007	10,381
Veneer logs					
Softwood	13,674	2,220	5,404	6,050	0
Hardwood	668	110	274	284	0
Total	14,342	2,330	5,678	6,334	0
Pulpwood					
Softwood	27,767	27,767	0	0	0
Hardwood	1,340	1,340	0	0	0
Total	29,107	29,107	0	0	0
Other industrial ^a					
Softwood	2,657	2,522	135	0	0
Hardwood	0	0	0	0	0
Total	2,657	2,522	135	0	0
Total					
Softwood	114,159	42,546	38,482	22,756	10,375
Hardwood	2,921	1,613	717	585	6
Total	117,080	44,159	39,199	23,341	10,381

^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, Florida, 2007 and 2009

Product and species group	All types		Bark		Coarse		Sawdust		Shavings	
	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009
	<i>thousand cubic feet</i>									
Fiber products										
Softwood	53,201	35,959	0	0	53,201	35,959	0	0	0	0
Hardwood	978	524	0	0	978	524	0	0	0	0
Total	54,179	36,483	0	0	54,179	36,483	0	0	0	0
Particleboard										
Softwood	7,122	3,190	0	0	241	208	21	0	6,860	2,982
Hardwood	0	0	0	0	0	0	0	0	0	0
Total	7,122	3,190	0	0	241	208	21	0	6,860	2,982
Charcoal/ chemical wood										
Softwood	0	0	0	0	0	0	0	0	0	0
Hardwood	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Sawn products										
Softwood	0	0	0	0	0	0	0	0	0	0
Hardwood	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Industrial fuel										
Softwood	68,202	55,584	34,638	32,311	1,242	160	26,624	18,318	5,698	4,795
Hardwood	2,886	2,118	1,802	1,570	95	0	989	548	0	0
Total	71,088	57,702	36,440	33,881	1,337	160	27,613	18,866	5,698	4,795
Miscellaneous										
Softwood	33,881	19,406	16,845	10,232	7,178	2,144	6,882	4,432	2,976	2,598
Hardwood	673	279	105	43	408	193	154	37	6	6
Total	34,554	19,685	16,950	10,275	7,586	2,337	7,036	4,469	2,982	2,604
Not used										
Softwood	57	20	11	3	36	11	10	6	0	0
Hardwood	5	0	1	0	3	0	1	0	0	0
Total	62	20	12	3	39	11	11	6	0	0
All products										
Softwood	162,463	114,159	51,494	42,546	61,898	38,482	33,537	22,756	15,534	10,375
Hardwood	4,542	2,921	1,908	1,613	1,484	717	1,144	585	6	6
Total	167,005	117,080	53,402	44,159	63,382	39,199	34,681	23,341	15,540	10,381

Table A.14—Roundwood timber product output by county, product, and species group, Florida, 2009

County	All products		Saw logs		Veneer logs		Pulpwood ^a		Composite panels		Other industrial	
	Soft-wood	Hard-wood	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>											
Alachua	8,692	502	2,004	0	1,077	0	5,067	404	0	0	544	98
Baker	10,181	72	2,190	0	269	0	7,621	72	0	0	101	0
Bay	25,106	434	6,196	0	0	0	15,105	434	219	0	3,586	0
Bradford	7,738	260	2,390	0	134	0	5,071	260	0	0	143	0
Brevard	156	41	0	0	134	0	22	41	0	0	0	0
Calhoun	23,175	1,219	7,269	563	741	0	8,744	656	3,289	0	3,132	0
Charlotte	717	0	0	0	0	0	12	0	0	0	705	0
Citrus	377	10	176	0	0	0	130	10	0	0	71	0
Clay	17,136	154	1,864	2	403	0	14,786	152	0	0	83	0
Columbia	11,663	135	3,996	0	134	92	7,378	43	0	0	155	0
De Soto	705	0	0	0	0	0	0	0	0	0	705	0
Dixie	11,206	1,047	2,532	120	0	156	6,466	740	556	31	1,652	0
Duval	6,404	483	1,336	3	269	0	4,708	480	0	0	91	0
Escambia	5,081	149	1,804	0	0	0	3,173	149	0	0	104	0
Flagler	5,129	350	302	0	1,077	0	3,714	350	0	0	36	0
Franklin	2,796	0	115	0	0	0	1,548	0	1,096	0	37	0
Gadsden	9,930	1,528	2,265	248	1,589	166	2,250	1,114	3,727	0	99	0
Gilchrist	5,474	445	2,607	0	0	73	1,979	288	0	0	888	84
Glades	881	0	0	0	0	0	0	0	0	0	881	0
Gulf	11,932	215	2,334	0	0	0	8,163	215	1,315	0	120	0
Hamilton	15,870	824	4,036	0	134	110	11,011	691	428	23	261	0
Hernando	512	11	290	0	134	0	17	11	0	0	71	0
Highlands	583	32	0	0	0	0	0	32	0	0	583	0
Hillsborough	227	0	184	0	0	0	0	0	0	0	43	0
Holmes	11,049	61	4,057	0	741	0	4,894	61	0	0	1,357	0
Jackson	24,297	950	8,657	0	1,059	0	7,422	950	657	0	6,502	0
Jefferson	6,929	98	1,976	0	318	0	2,232	13	2,198	85	205	0
Lafayette	12,211	375	3,645	111	0	73	7,525	191	0	0	1,041	0
Lake	1,013	172	529	0	134	0	212	172	0	0	138	0
Lee	41	0	0	0	0	0	41	0	0	0	0	0
Leon	6,936	222	628	0	318	166	1,806	56	3,946	0	238	0
Levy	14,724	1,332	3,627	75	2,558	64	7,539	1,137	0	0	1,000	56
Liberty	11,479	219	5,230	0	0	0	81	219	4,166	0	2,002	0
Madison	20,064	528	6,289	67	134	120	10,725	275	1,417	66	1,499	0
Marion	8,081	574	1,032	16	1,211	0	5,695	517	0	0	143	41
Nassau	32,008	730	6,150	436	403	0	24,045	294	0	0	1,410	0
Okaloosa	4,604	571	0	0	0	0	4,574	571	0	0	30	0
Orange	110	0	70	0	0	0	22	0	0	0	18	0
Osceola	352	0	0	0	0	0	0	0	0	0	352	0
Pasco	1,700	48	1,269	0	134	0	2	48	0	0	295	0
Polk	1,393	15	706	0	134	0	18	15	0	0	535	0
Putnam	6,474	826	973	0	1,481	0	3,795	826	0	0	225	0
St. Johns	10,622	2,684	1,080	0	942	0	8,537	2,684	0	0	63	0
Santa Rosa	5,700	310	452	0	0	0	5,113	310	0	0	135	0
Sarasota	88	0	70	0	0	0	0	0	0	0	18	0
Seminole	269	62	0	0	0	0	95	4	0	0	174	58

continued

Table A.14—Roundwood timber product output by county, product, and species group, Florida, 2009 (continued)

County	All products		Saw logs		Veneer logs		Pulpwood ^a		Composite panels		Other industrial	
	Soft-wood	Hard-wood	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>											
Sumter	1,043	287	720	0	134	0	6	287	0	0	183	0
Suwannee	14,323	227	4,828	0	134	92	8,704	135	0	0	657	0
Taylor	35,793	654	8,511	223	303	144	24,835	256	556	31	1,588	0
Union	10,594	26	7,708	0	134	0	2,641	26	0	0	111	0
Volusia	3,839	395	255	0	942	0	1,387	66	0	0	1,255	329
Wakulla	3,078	14	795	0	318	0	611	14	1,315	0	39	0
Walton	8,470	436	1,014	0	0	0	5,389	436	219	0	1,848	0
Washington	15,572	324	3,612	0	1,059	0	4,284	324	0	0	6,617	0
All counties	454,527	20,051	117,773	1,864	18,686	1,256	249,195	16,029	25,104	236	43,769	666

^a Includes roundwood delivered to nonpulp mills, then chipped and sold to pulpmills (3,821,000 cubic feet in 2009).

Table A.15—Total roundwood output by product, species group, and source of material, Florida, 2009

Product and species group	All sources	Total	Growing-stock trees		Other sources
			Sawtimber	Poletimber	
<i>thousand cubic feet</i>					
Saw logs					
Softwood	117,773	114,358	105,479	8,879	3,415
Hardwood	1,864	1,856	1,706	150	8
Total	119,637	116,214	107,184	9,030	3,423
Veneer logs and bolts					
Softwood	18,686	18,393	18,157	236	293
Hardwood	1,256	1,252	1,252	0	4
Total	19,942	19,645	19,408	236	297
Pulpwood					
Softwood	249,195	218,697	63,673	155,024	30,498
Hardwood	16,029	14,326	8,976	5,350	1,703
Total	265,224	233,024	72,650	160,374	32,200
Composite panels					
Softwood	25,104	21,923	7,212	14,711	3,181
Hardwood	236	187	125	62	49
Total	25,340	22,110	7,337	14,773	3,230
Poles and posts					
Softwood	4,228	3,964	3,044	919	264
Hardwood	0	0	0	0	0
Total	4,228	3,964	3,044	919	264
Other miscellaneous					
Softwood	39,541	23,383	19,153	4,230	16,158
Hardwood	666	539	75	464	127
Total	40,207	23,922	19,227	4,695	16,285
Total industrial products					
Softwood	454,527	400,719	216,718	184,001	53,808
Hardwood	20,051	18,159	12,133	6,027	1,892
Total	474,578	418,878	228,851	190,027	55,700
Residential fuelwood					
Softwood	1,297	1,112	988	124	185
Hardwood	16,367	13,940	8,449	5,491	2,427
Total	17,664	15,052	9,437	5,615	2,612
All products					
Softwood	455,824	401,831	217,706	184,125	53,993
Hardwood	36,418	32,100	20,582	11,518	4,318
Total	492,242	433,931	238,288	195,643	58,311

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

Table A.16—Total roundwood output by species group, survey region, and ownership class, Florida, 2009

Species group and survey region	Total	Ownership class		
		Public	Forest industry	Nonindustrial private
<i>thousand cubic feet</i>				
Softwoods				
Northeast	268,991	12,040	67,774	189,177
Northwest	176,637	11,113	23,950	141,574
Central and South	10,196	2,447	0	7,749
Total softwoods	455,824	25,600	91,724	338,500
Hardwoods				
Northeast	22,928	2,630	4,804	15,495
Northwest	12,260	678	642	10,939
Central and South	1,230	193	0	1,037
Total hardwoods	36,418	3,501	5,446	27,471
All species	492,242	29,101	97,170	365,971

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

Table A.17—Total roundwood output by species group, detailed species group, and product, Florida, 2009

Species group and detailed species group	Total	Product						
		Saw logs	Veneer logs	Pulpwood	Composite panels	Poles and posts	Other miscellaneous	Residential fuelwood
<i>thousand cubic feet</i>								
Softwood								
Cedar	670	218	22	233	71	11	113	2
Longleaf-slash pine	361,657	94,135	13,131	203,666	16,950	3,183	29,562	1,030
Loblolly-shortleaf pine	44,698	11,893	2,545	19,806	5,683	385	4,259	127
Other yellow pines	28,926	5,956	1,758	15,365	1,939	279	3,548	82
Cypress	19,873	5,571	1,231	10,125	460	370	2,058	57
Total softwoods	455,824	117,773	18,686	249,195	25,104	4,228	39,541	1,297
Hardwood								
Soft maple	1,586	36	56	770	7	0	5	713
Hard maple	66	6	6	22	3	0	0	30
Other birch	22	0	0	10		0	2	10
Hickory	773	30	30	350	4	0	12	347
Beech	574	146	0	170	0	0	0	258
Ash	514	13	11	248	1	0	10	231
Sweetgum	3,096	177	123	1,343	26	0	36	1,391
Yellow-poplar	702	114	13	260	0	0	0	316
Blackgum-tupelo	4,516	227	249	1,901	55	0	54	2,030
Black cherry	156	5	16	64	1	0	0	70
Select white oaks	458	90	6	155	1	0	0	206
Other white oaks	3,065	17	63	1,569	13	0	26	1,377
Select red oaks	300	11	11	143	0	0	0	135
Other red oaks	11,539	731	416	4,959	94	0	153	5,186
Basswood	78	3	3	35	0	0	1	35
Elm	499	24	19	226	1	0	4	224
Other eastern hardwoods	8,473	233	236	3,804	30	0	363	3,808
Total hardwoods	36,418	1,864	1,256	16,029	236	0	666	16,367
All species	492,242	119,637	19,942	265,224	25,340	4,228	40,207	17,664

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

Table A.18—Total roundwood output by species group, detailed species group, and ownership class, Florida, 2009

Species group and detailed species group	Total	Ownership class		
		Public	Forest industry	Nonindustrial private
<i>thousand cubic feet</i>				
Softwood				
Cedar	670	63	60	547
Longleaf-slash pine	361,657	19,502	74,565	267,590
Loblolly-shortleaf pine	44,698	2,354	8,106	34,237
Other yellow pines	28,926	2,693	4,439	21,793
Cypress	19,873	988	4,553	14,332
Total softwoods	455,824	25,600	91,724	338,500
Hardwood				
Soft maple	1,586	227	339	1,020
Hard maple	66	3	10	54
Other birch	22	11	1	11
Hickory	773	83	112	578
Beech	574	0	49	525
Ash	514	104	95	315
Sweetgum	3,096	261	487	2,348
Yellow-poplar	702	5	76	621
Blackgum-tupelo	4,516	262	977	3,277
Black cherry	156	13	20	123
Select white oaks	458	11	73	373
Other white oaks	3,065	401	343	2,321
Select red oaks	300	40	13	248
Other red oaks	11,539	1,358	1,952	8,229
Basswood	78	16	21	41
Elm	499	74	90	334
Other eastern hardwoods	8,473	632	787	7,054
Total hardwoods	36,418	3,501	5,446	27,471
All species	492,242	29,101	97,170	365,971

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

Johnson, Tony G.; Nowak, Jarek. 2011. Florida's timber industry—an assessment of timber product output and use, 2009. Resour. Bull. SRS-180. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 31 p.

In 2009, volume of industrial roundwood output from Florida's forests totaled 474.6 million cubic feet, 3 percent less than in 2007. Mill byproducts generated from primary manufacturers declined to 117.1 million cubic feet. Almost all plant residues were used primarily for fuel and fiber products. Pulpwood was the leading roundwood product at 265.2 million cubic feet; saw logs ranked second at 119.6 million cubic feet; other industrial products were third at 44.4 million cubic feet. Total receipts were relatively stable at 505.4 million cubic feet. The number of primary processing plants totaled 59 in 2009 compared to 69 in 2007.

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



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