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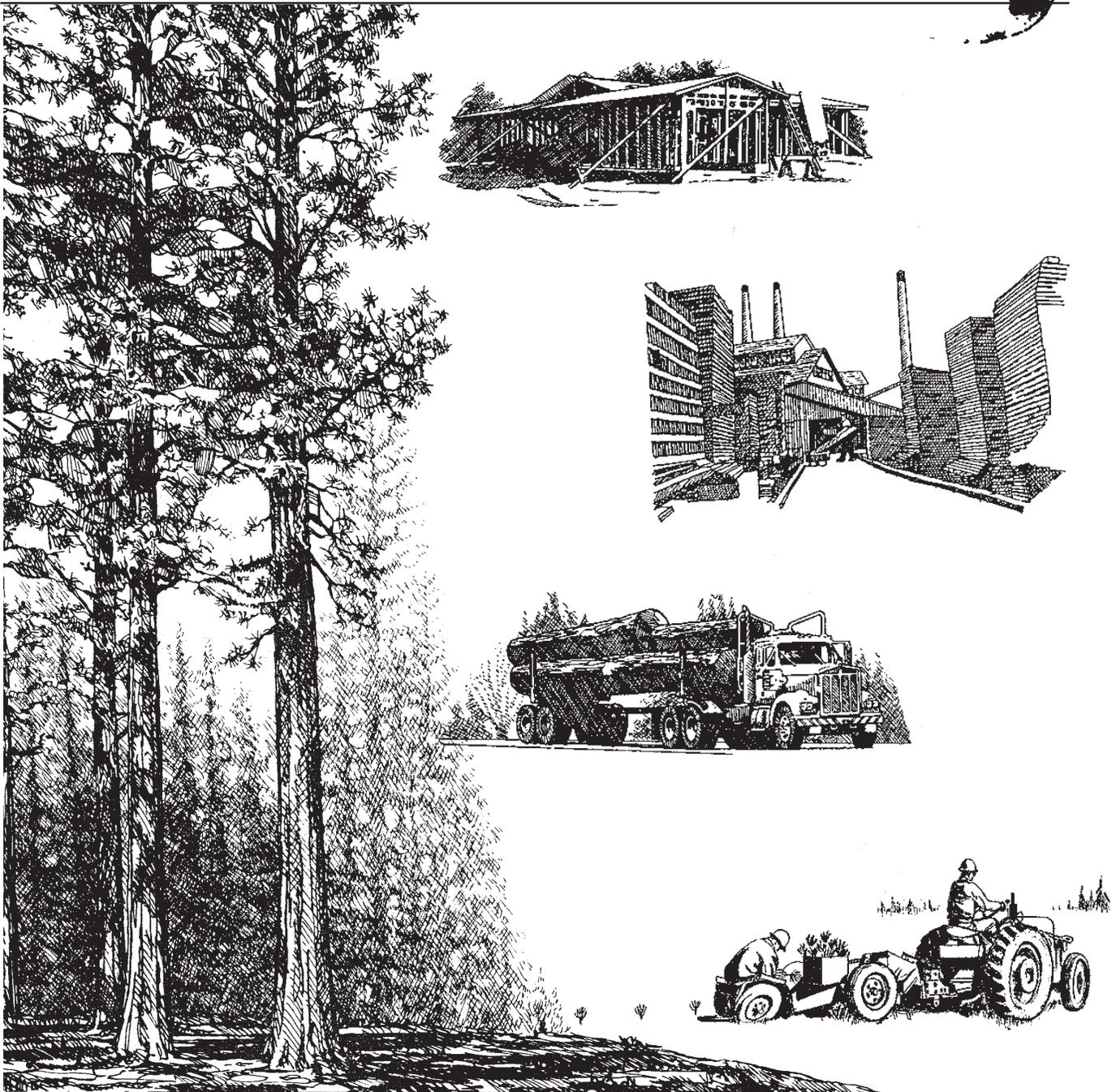
Southern
Research Station

Resource Bulletin
SRS-77

Florida's Timber Industry— An Assessment of Timber Product Output and Use, 1999

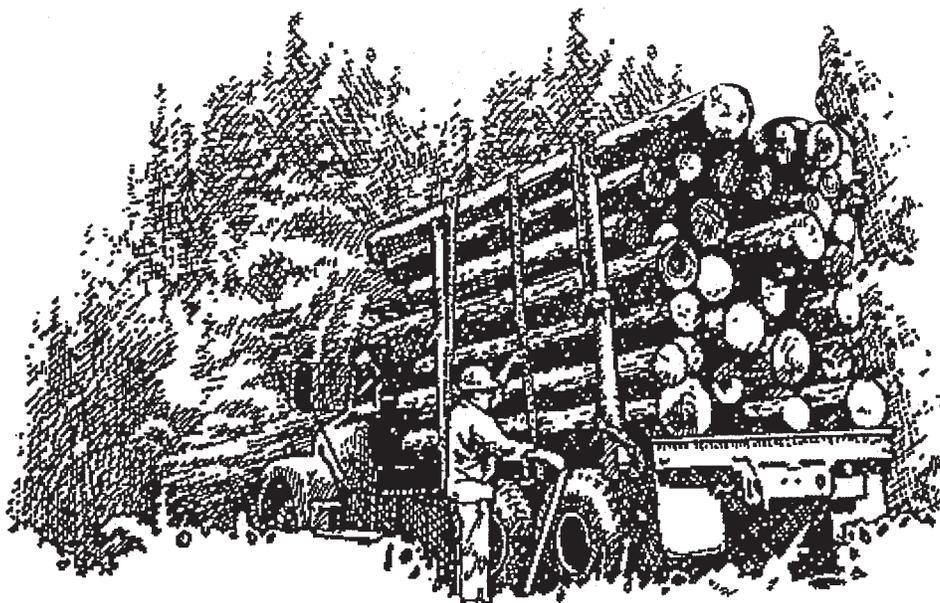


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Foreword

This report contains the findings of a 1999 canvass of all primary wood-using plants in Florida, and presents changes in product output and residue use since 1997. It complements the Forest Inventory and Analysis (FIA) periodic inventory of volume and removals from the State's timberland. The canvass was conducted to determine the amount and source of wood receipts and annual timber product drain, by county, in 1999 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 2000 to obtain information for 1999. 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 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 1958, and are currently conducted every 2 years.

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

For inventory and reporting purposes, FIA divides Florida into four survey regions: Northeast, Northwest, Central, and South. Because output of industrial roundwood products from the South region is much smaller than output from the other regions, the Central and South regions were combined for reporting purposes in this resource bulletin and are referred to as "Central and South Florida".

Acknowledgments

The authors thank Leon Irving for review and comments; Dale Gormanson from the North Central Research Station for the maps; Anne Jenkins, Susan Bowman, and Donna Burnett for tables, graphs, 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 Florida Department of Agriculture and Consumer Services, Division of Marketing and Utilization in collecting mill data. Appreciation is also extended to forest industry and mill managers for providing timber products information.

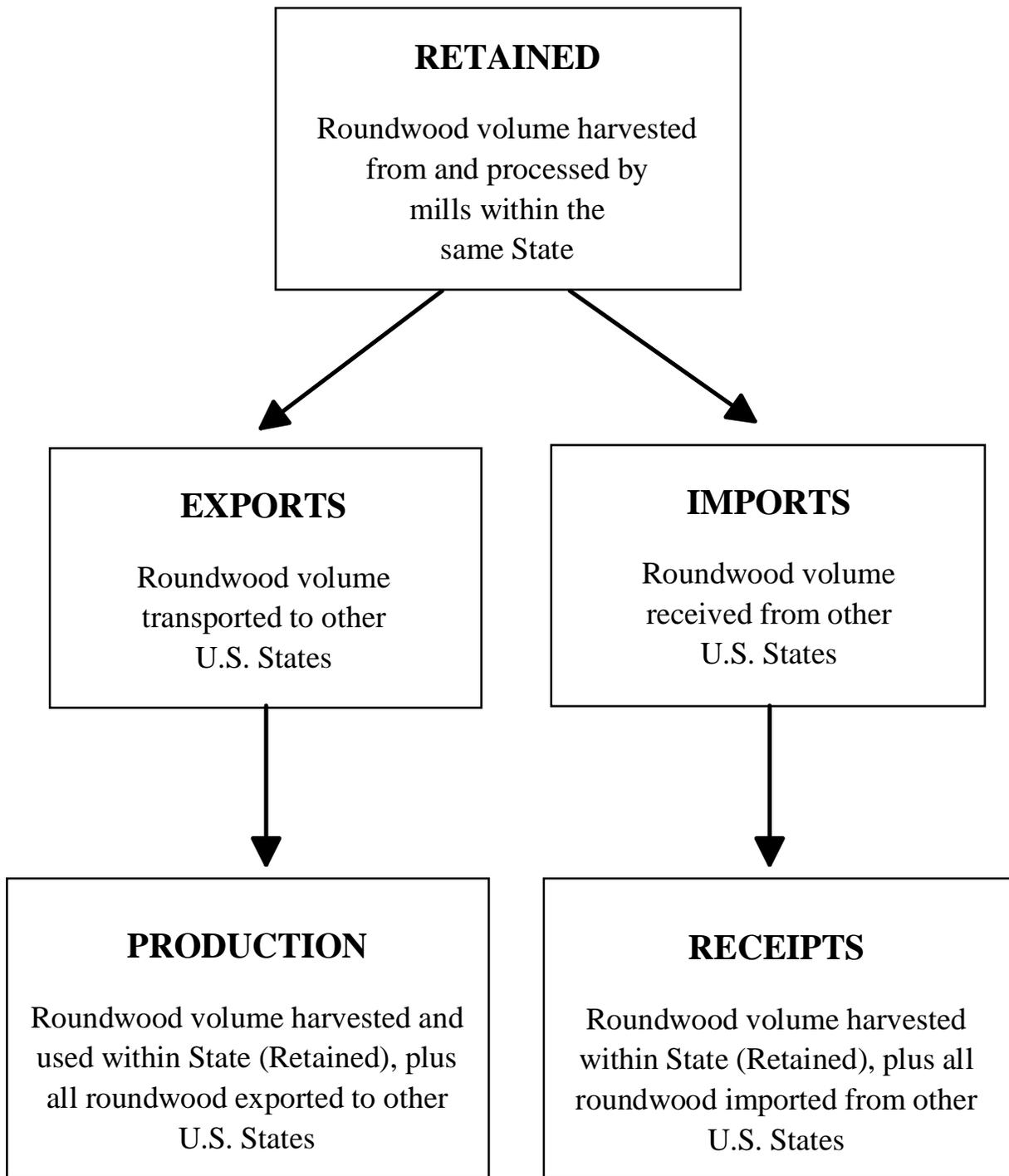


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^a All tables in this report are available in Microsoft® Excel workbook files. Upon request, these files will be supplied on 3½-inch diskettes.

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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 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 products output (fig. 1).

All Products

- Between 1997 and 1999, the combined industrial timber products output (TPO) from roundwood and plant byproducts declined from 679 to 650 million cubic feet.
- Timber product output from roundwood was down 19 million cubic feet, or 4 percent, while output of plant byproducts dropped 10 million cubic feet.

- Output of softwood roundwood products was down 5 percent to 446 million cubic feet, while hardwood roundwood products increased 6 percent to 53 million cubic feet (fig. 2).
- Figures 3 and 4 display softwood and hardwood county-level intensity of roundwood production for all industrial products across Florida. The data are depicted in cubic feet produced per acre of census land area. Counties with the highest production intensity are depicted in the darker shades. For softwoods the darkest shade represents more than 35 cubic feet of production per acre, while for hardwoods the darkest shade represents more than 8 cubic feet per acre.

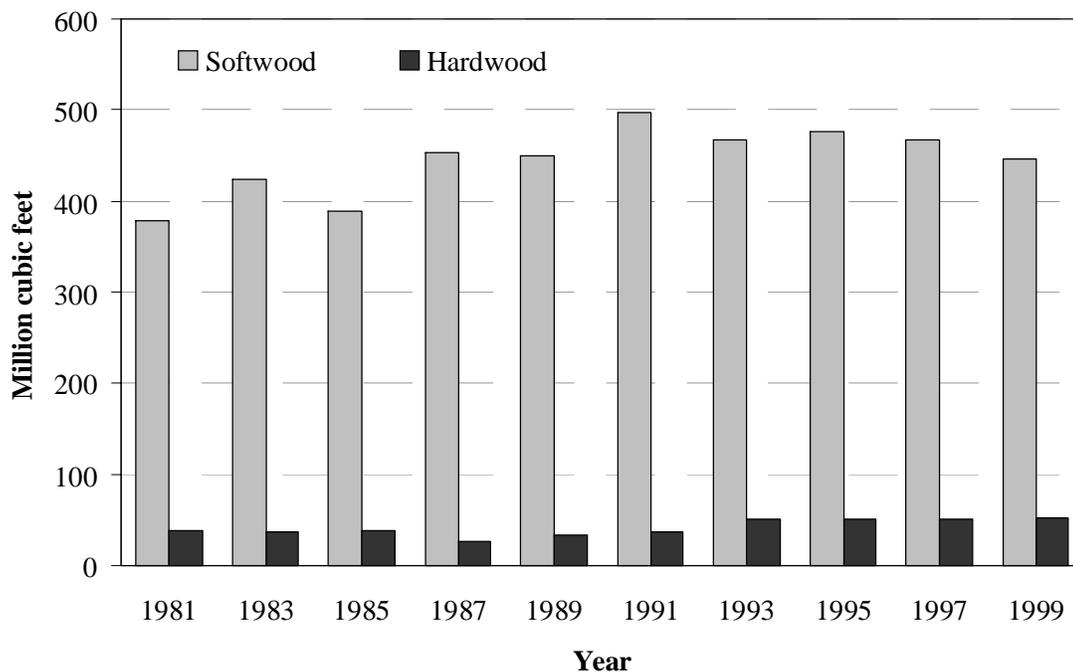


Figure 2—Roundwood production for all products by species group and year (see page 10 for references for individual years).

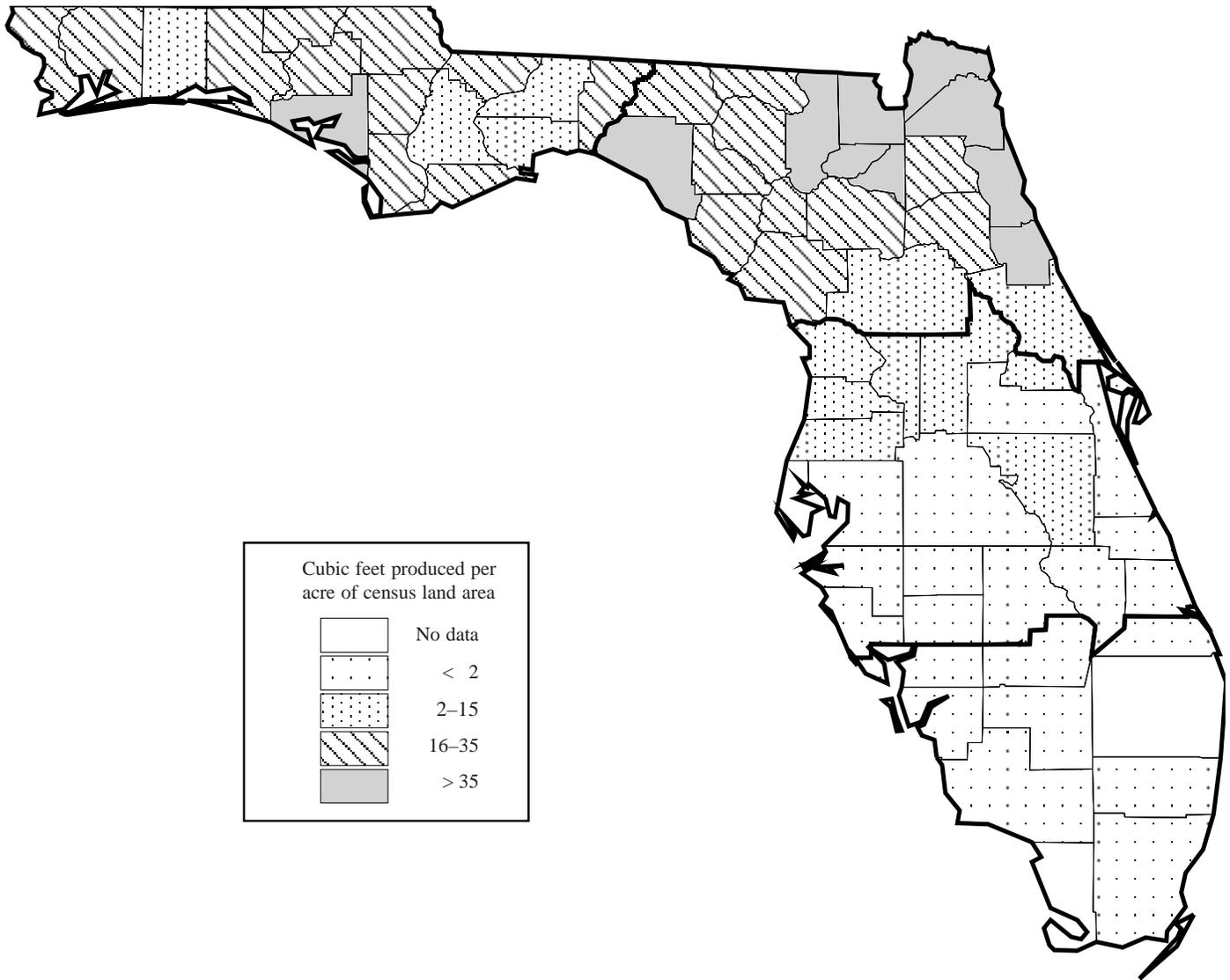


Figure 3—Intensity of roundwood softwood output for all industrial products in Florida by county, 1999.

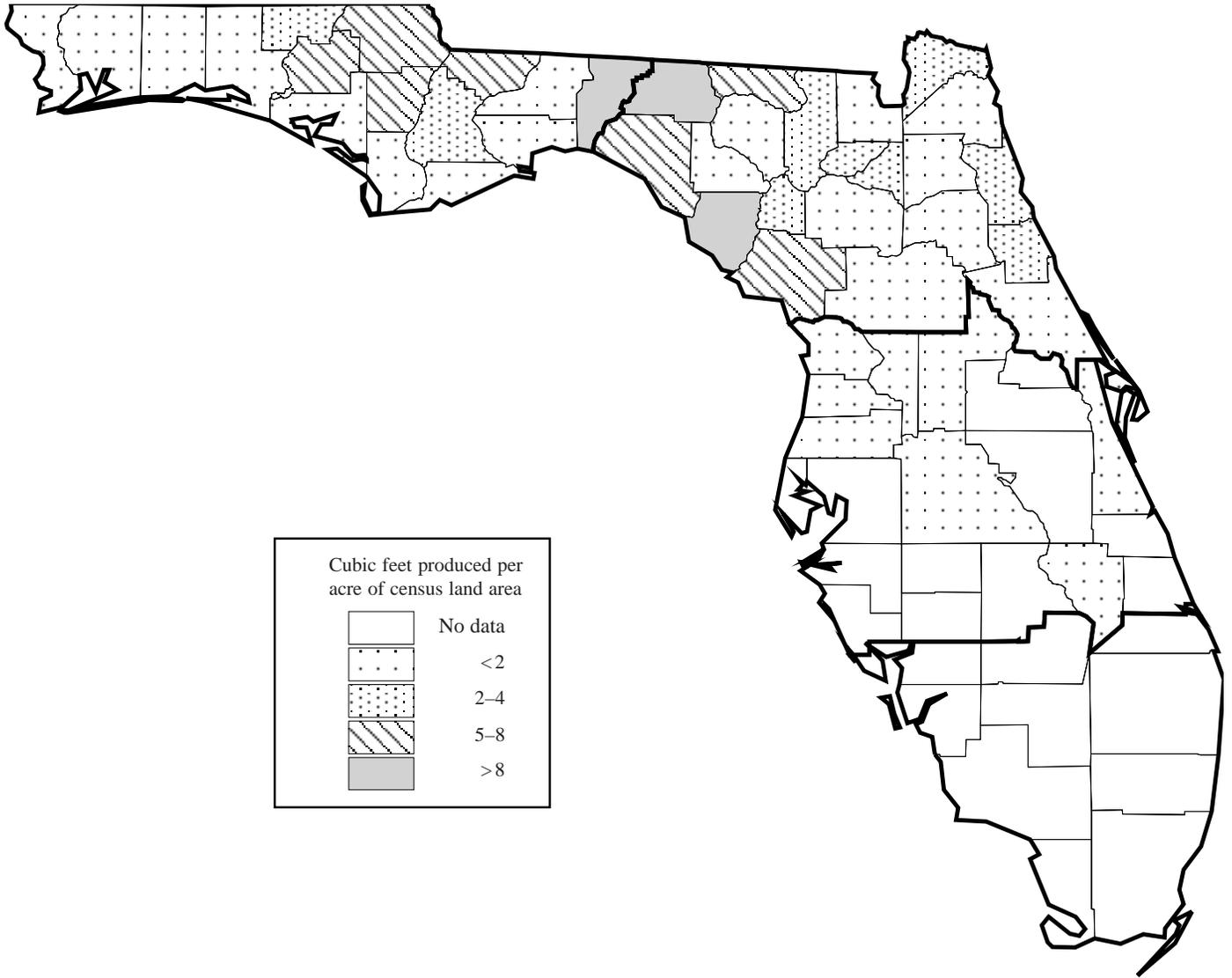


Figure 4—Intensity of roundwood hardwood output for all industrial products in Florida by county, 1999.

- Pulpwood and saw logs were the principal roundwood products in 1999. Combined output of these products totaled 429 million cubic feet and accounted for 86 percent of Florida's total roundwood output (fig. 5).
- Total receipts at Florida mills, which included roundwood harvested and retained in the State, and roundwood imported from other States, declined 7 percent to 494 million cubic feet. At the same time, the number of primary roundwood-using plants in Florida declined from 101 in 1997 to 93 in 1999.

Pulpwood

- Total pulpwood production, including chipped roundwood, was down 26 million cubic feet to 261 million cubic feet (4.0 million cords) but still accounted for 52 percent of the State's total roundwood TPO. Softwood output was down 12 percent to 222 million cubic feet; hardwood output increased 9 percent to 39 million cubic feet (fig. 6).

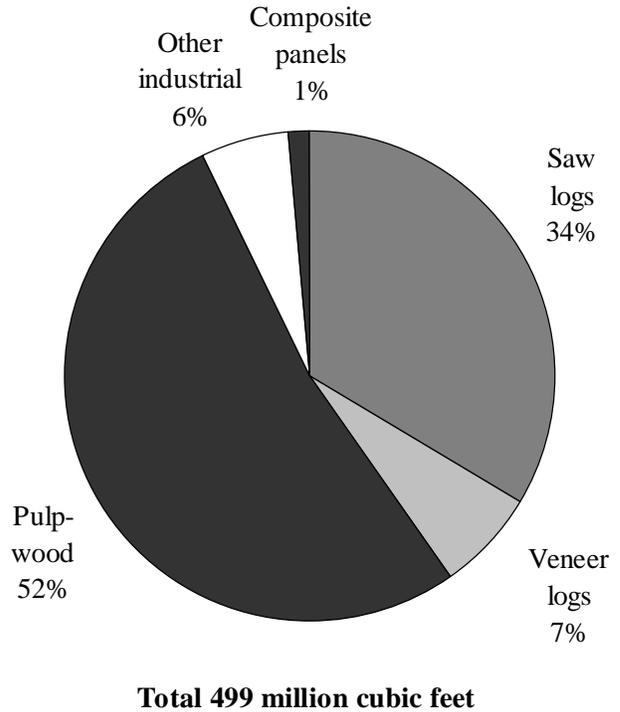


Figure 5—Roundwood production by type of product, 1999.

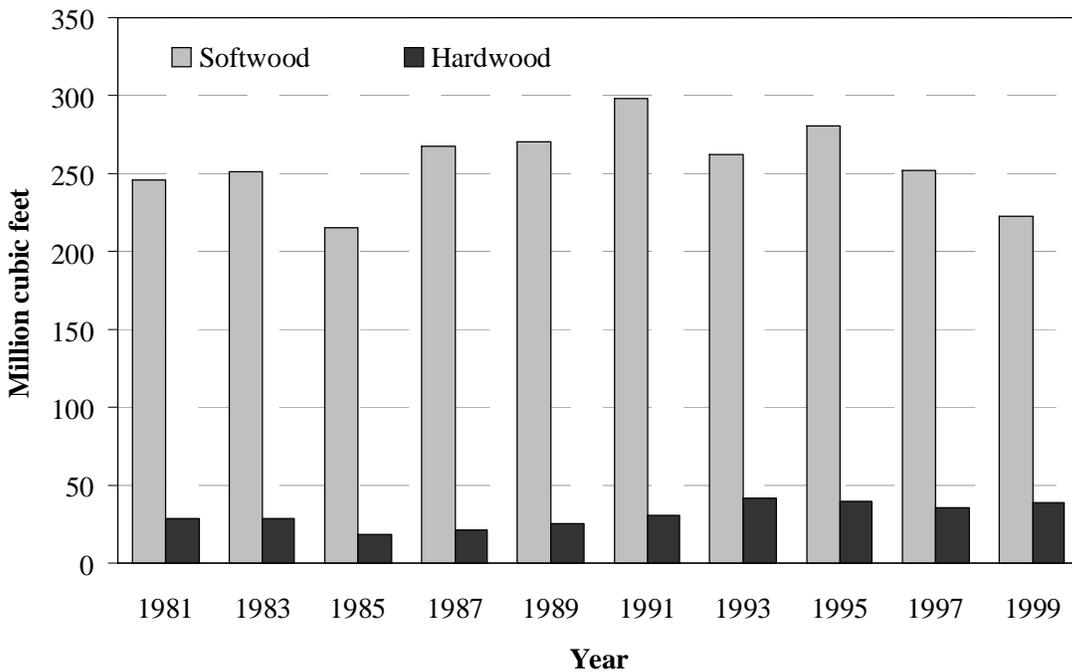


Figure 6—Roundwood pulpwood production by species group and year (see page 10 for references for individual years).

- Six pulpmills were operating and receiving roundwood in Florida in 1999, two fewer than in 1997. Total pulpwood receipts for these mills declined 35 million cubic feet to 287 million cubic feet, accounting for 58 percent of total receipts for all mills.
- Eighty-two percent of roundwood cut for pulpwood was retained for processing at Florida pulpmills. Roundwood pulpwood accounted for 50 percent of total known exports and 80 percent of total imports. Roundwood pulpwood imports amounted to 73 million cubic feet, 26 million cubic feet more than was exported.

Saw Logs

- Saw logs accounted for 34 percent of the State's total roundwood products. Output of softwood saw logs increased 4 percent to 163 million cubic feet (852 million board feet, International 1/4-inch rule), while that of hardwood saw logs decreased 14 percent to 4 million cubic feet (26 million board feet, International 1/4-inch rule) (fig. 7).

- In 1999, Florida had 53 sawmills, a loss of 5 mills since 1997. Total saw-log receipts declined 2 million cubic feet to 149 million cubic feet. Softwood saw-log receipts were down 1 percent to 144 million cubic feet, while those of hardwoods were down 5 percent to 4.7 million cubic feet. Of the 53 mills operating in 1999, 43 percent had receipts of less of than 1 million board feet. Thirty-two percent, or 17 mills, had receipts greater than 10 million board feet and accounted for 94 percent of saw-log receipts.
- Florida retained 83 percent of its saw-log production for domestic manufacture; saw-log exports exceeded imports by more than 18 million cubic feet in 1999.

Veneer Logs

- Output of veneer logs in 1999 totaled 34 million cubic feet, and accounted for 7 percent of the State's total roundwood TPO volume. Softwood veneer production increased 16 percent to 33 million cubic feet (190 million board feet, International 1/4-inch rule), while output of hardwood veneer logs declined 22 percent to 1.2 million cubic feet (7.5 million board feet, International 1/4-inch rule) (fig. 8).

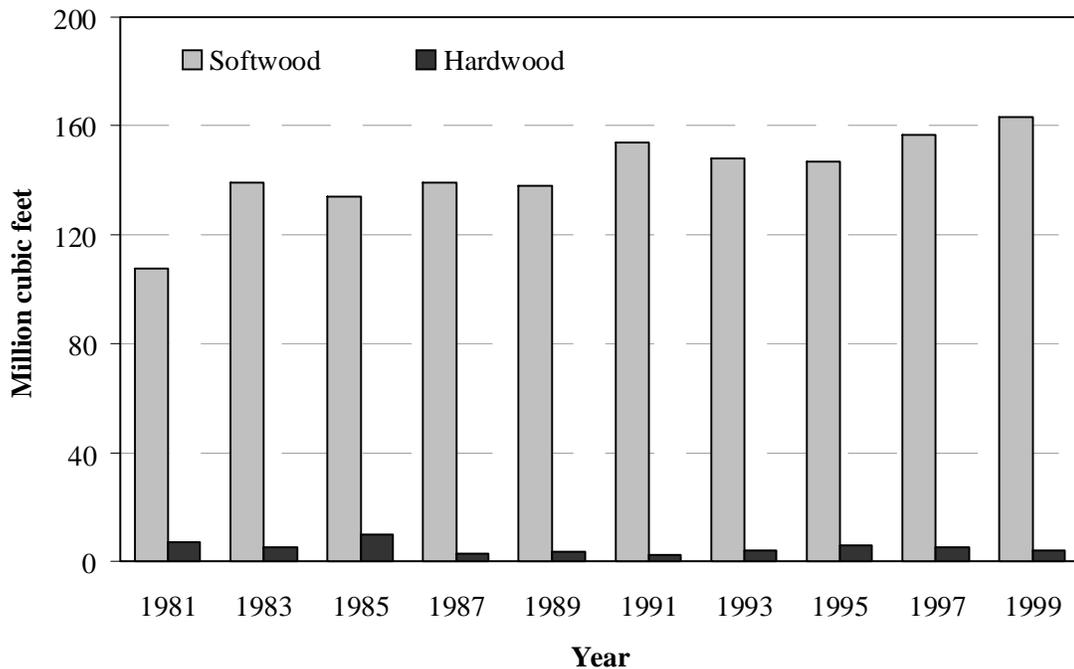


Figure 7—Roundwood saw-log production by species group and year (see page 10 for references for individual years).

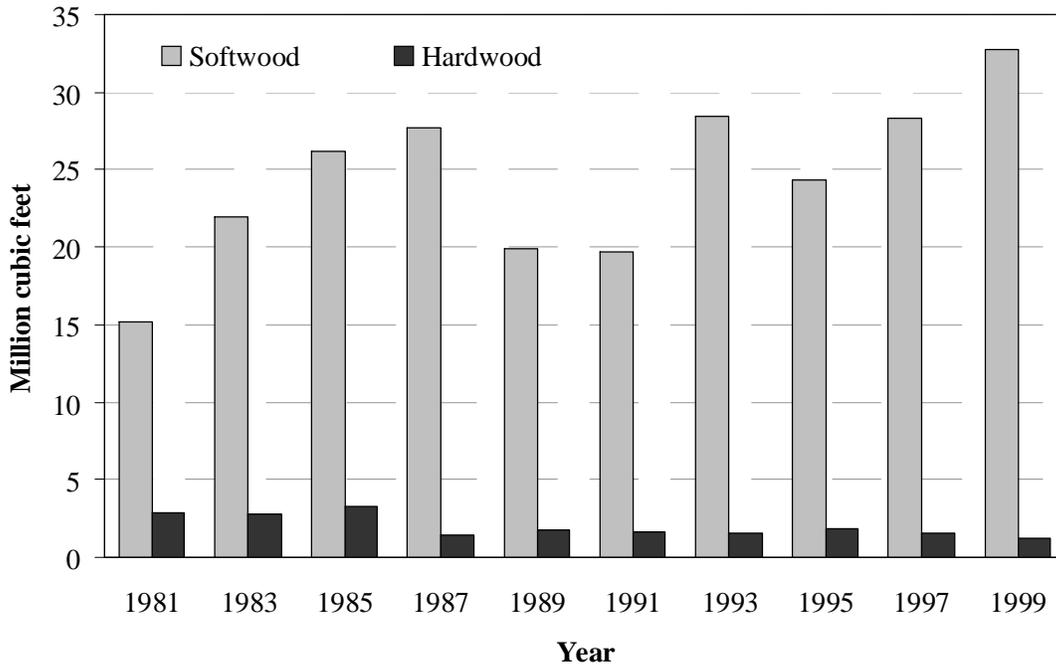


Figure 8—Roundwood veneer-log production by species group and year (see page 10 for references for individual years).

- The number of veneer mills operating in Florida dropped from five in 1997 to four in 1999. Total veneer log receipts increased 11 percent to 36 million cubic feet. Softwood receipts were up 13 percent to 35 million cubic feet, while hardwood receipts were down 35 percent to 900 thousand cubic feet.
- Florida retained 86 percent of its veneer-log production for processing at domestic veneer mills. Imports amounted to 7 million cubic feet, while exports totaled 5 million cubic feet, making the State a net importer of roundwood veneer logs.

Other Industrial Products

- Roundwood harvested for other industrial uses, such as poles, posts, mulch, firewood, logs for log homes, and all other industrial products, declined 10 percent to 29 million cubic feet. Softwood made up 98 percent of the other industrial product volume (fig. 9).
- Between 1997 and 1999, the number of plants producing other industrial products remained at 30. At the same time, combined receipts of both softwood and hardwood

other industrial products fell 16 percent to 22 million cubic feet.

- Florida was a net exporter of roundwood used for other industrial products; all of the 8 million cubic feet exported was softwood. Imports amounted to 1.4 million cubic feet.

Plant Byproducts

- In 1999, processing of primary products in Florida mills generated 152 million cubic feet of wood and bark residues. Coarse residues from all primary products amounted to 56 million cubic feet, and bark volume totaled 52 million cubic feet. Sawdust and shavings made up 29 percent of total residues, or 44 million cubic feet (fig. 10).
- Virtually all residues were used for a product (fig. 11). Forty-five million cubic feet, or 80 percent, of the coarse residues were used to manufacture fiber products. Most of the bark was used for industrial fuel or other miscellaneous products, and 67 percent of the sawdust and shavings was used for industrial fuel.

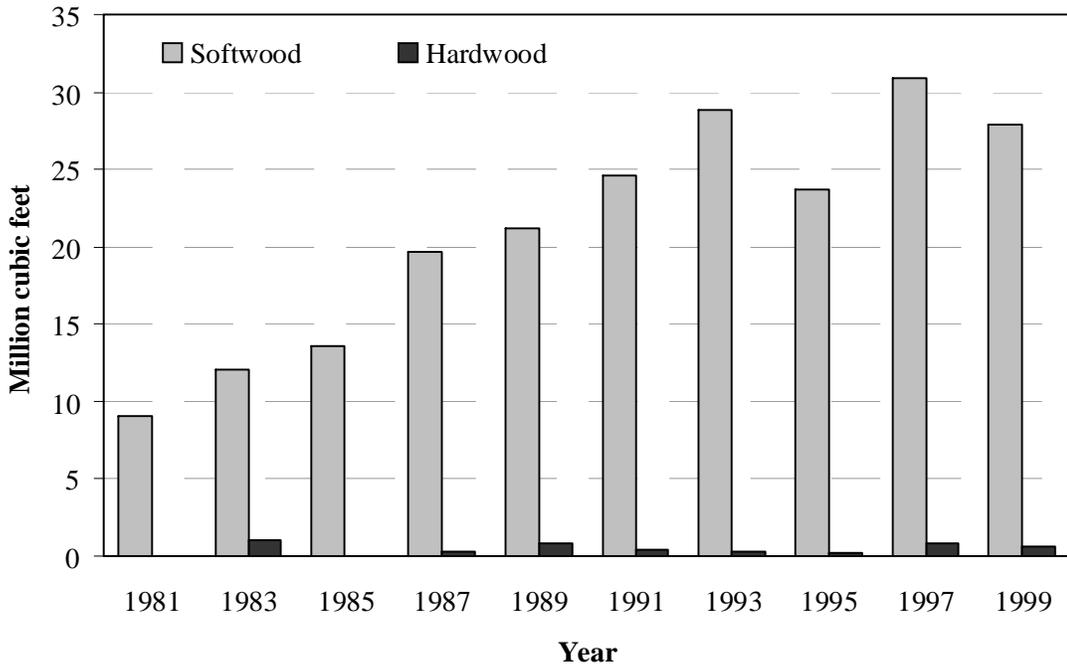


Figure 9—Roundwood production for other industrial by species group and year (see page 10 for references for individual years).

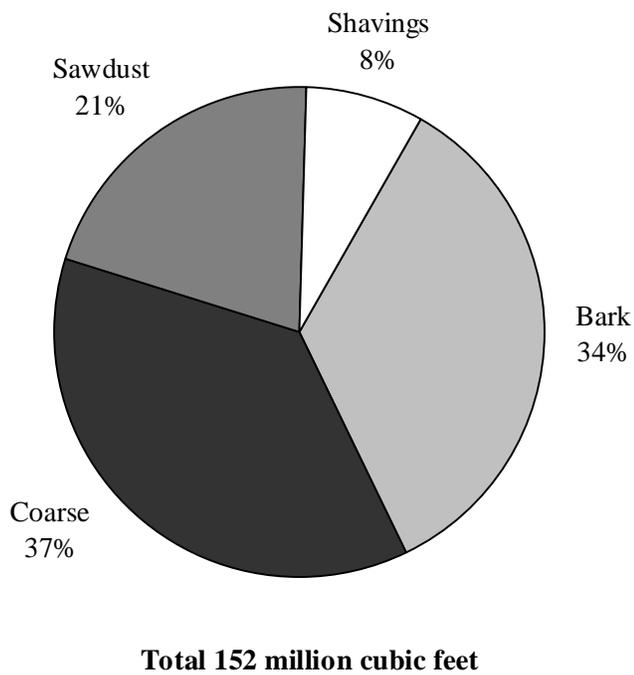


Figure 10—Primary mill residue by residue type, 1999.

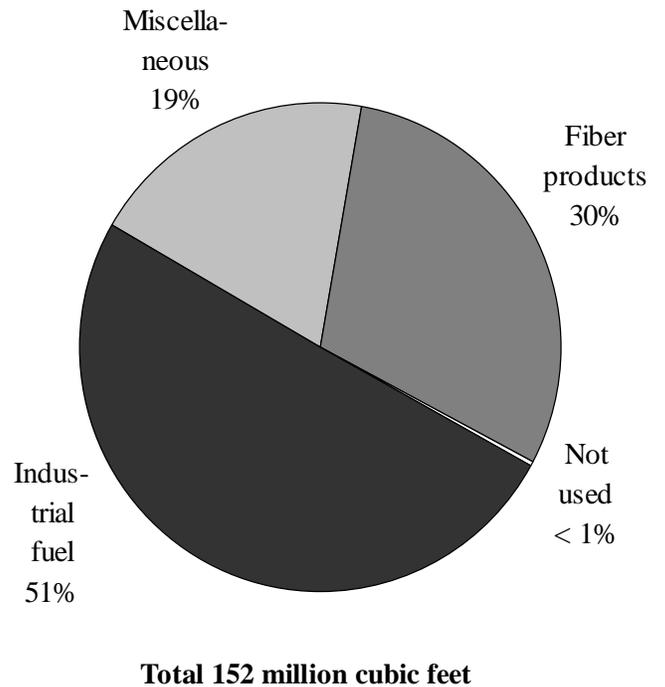


Figure 11—Disposal of residue by product, 1999.

- The processing of saw logs generated 85 million cubic feet of mill residues, accounting for 56 percent of the total residues produced (fig. 12).

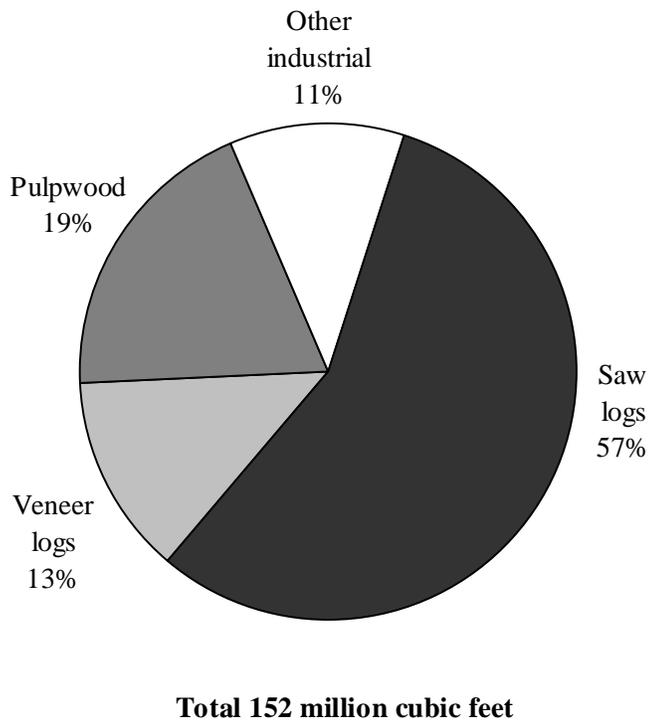


Figure 12—Primary mill residue produced by roundwood type, 1999.

Regional Trends

- Output of industrial roundwood products declined in all but the Northeast region. Pulpwood was the leading product in all regions.

Northeast Region

- Roundwood output from the Northeast region was up 1.0 million cubic feet to 319 million cubic feet. Softwood output was down 1.0 million cubic feet, or less than 1 percent, to 290 million cubic feet; however, hardwood output increased 8 percent, or 2 million cubic feet, to 29 million cubic feet.

- Pulpwood production accounted for 49 percent of the region's TPO and 59 percent of the State's roundwood pulpwood output. Saw-log production of 115 million cubic feet accounted for 36 percent of the total roundwood output for the region.

- Fifty-two primary wood-using plants were operating during 1999: 29 sawmills, 3 veneer or plywood mills, 4 pulpmills, and 16 other miscellaneous mills. These mills processed 64 percent of Florida's total roundwood output.

Northwest Region

- One hundred fifty-five million cubic feet of roundwood were produced in the Northwest region, a decline of 8 percent. Softwood production was down 10 percent to 134 million cubic feet, while hardwood production increased 7 percent to more than 21 million cubic feet.
- Pulpwood and veneer product output declined 16 and 22 percent, respectively, while saw-log output increased 9 percent. Pulpwood production of 93 million cubic feet accounted for 60 percent of the total TPO for the region; saw-log production of 47 million cubic feet accounted for 30 percent of the region's total roundwood output.
- The 21 mills operating in the Northwest region in 1999 included 13 sawmills, 1 plywood mill, 2 pulpmills, and 5 other miscellaneous mills. These mills accounted for 31 percent of Florida's total TPO.

Central and South Region

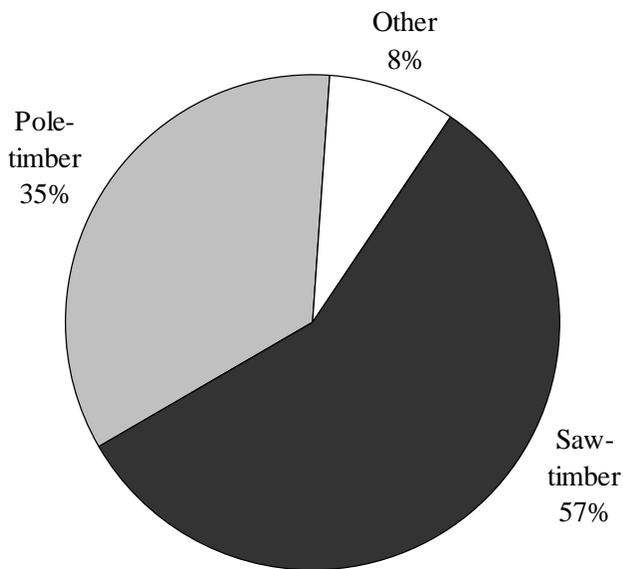
- Roundwood output from the Central and South region declined to 24 million cubic feet. Fifty-seven percent of the roundwood cut from this region was used for pulpwood. Roundwood production from this region accounted for 5 percent of the total TPO for the State.
- The number of primary wood-using plants operating in this region declined to 20: 11 sawmills and 9 other miscellaneous mills. No pulpmills were operating in this region.

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 499 million cubic feet of roundwood output for industrial products, an estimated 14 million cubic feet was harvested for domestic fuelwood, bringing Florida's total roundwood output to 512 million cubic feet.
- Ninety-two 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 42 million cubic feet, or 8 percent of total roundwood output (fig. 13).



Total 512 million cubic feet

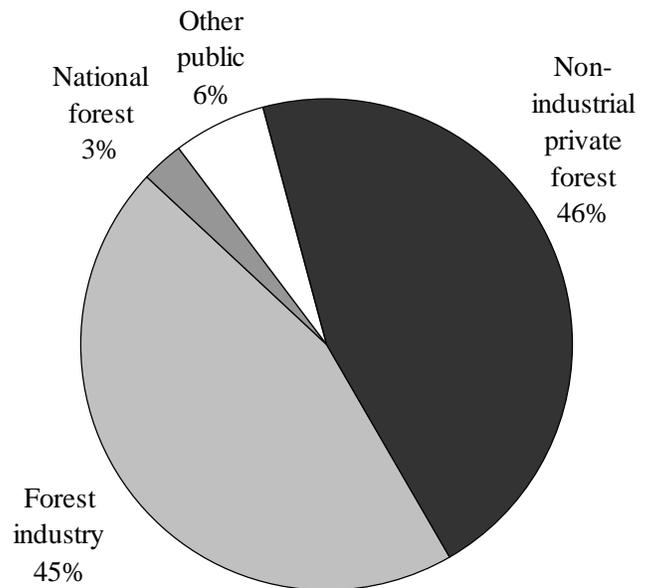
Figure 13—Roundwood output by source, 1999.

Ownership

- Nonindustrial private forest (NIPF) lands contributed 235 million cubic feet, or 46 percent of the total roundwood output, while forest industry lands accounted for 232 million cubic feet, or 45 percent, of the total output. Public lands made up the remaining 9 percent, or 46 million cubic feet (fig. 14).

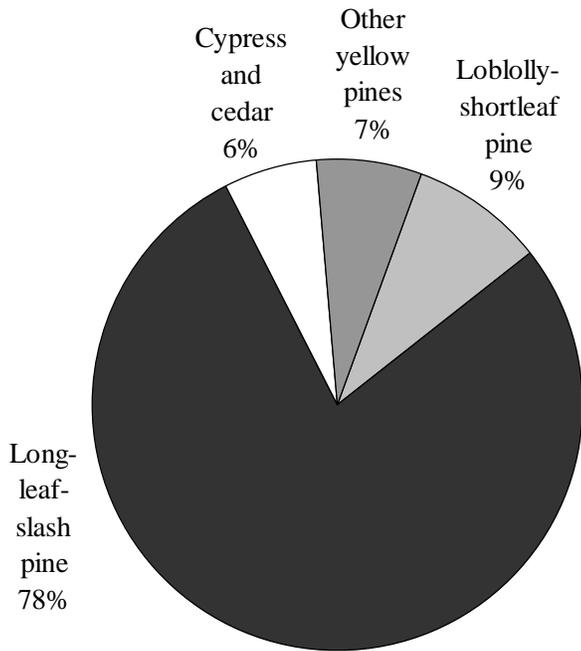
Species

- The longleaf and slash pine group provided more volume than any other softwood species group; at 350 million cubic feet, it accounted for 78 percent of total softwood output (fig. 15). The red oak and white oak groups combined accounted for 29 million cubic feet of total hardwood output, or 45 percent (fig. 16).



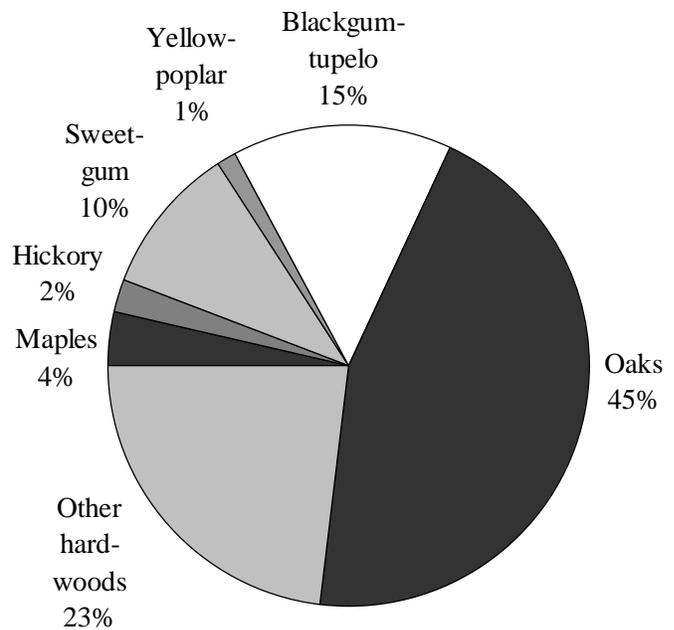
Total 512 million cubic feet

Figure 14—Roundwood output by ownership, 1999.



Total 448 million cubic feet

Figure 15—Roundwood output by softwood species group, 1999.



Total 65 million cubic feet

Figure 16—Roundwood output by hardwood species group, 1999.

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Definition of Terms

Board foot. Unit of measure applied to roundwood. It relates to lumber that is 1-foot long, 1-foot wide, and 1-inch thick (or its equivalent).

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

Composite products. 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 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 waferboard or chipboard.

Fuelwood production. The volume of roundwood harvested to produce some form of energy, e.g., heat, 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 greater than 0.50, such as oaks, hard maples, hickories, and beech.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Corporate. Owned by corporations, including incorporated farm ownerships.

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

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

Miscellaneous Federal land. Federal land other than national forests.

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

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

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

Fine residues. Material, such as sawdust, shavings, and veneer chippings, 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.

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.

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

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 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 chipboard, 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 nonpulp mills, chipped, and then sold to pulpmills for use as fiber. Includes tops, jump sections, whole trees, and pulpwood sticks.

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

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

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.

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 less than 1.0 inch d.b.h. and greater than 1 foot tall for hardwoods, greater than 6 inches tall for softwood, and greater than 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 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 products. Roundwood products and byproducts.

Timber products output. The total volume of roundwood products from all sources plus the volume of byproducts

recovered from mill residues (equals roundwood product drain).

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).

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/cord
Hardwood	75.00 cubic feet/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 latest survey period.

^b Cubic feet of solid wood per cord.

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Table 1—Output of industrial products by product and species group, Florida, 1997 and 1999

Product and species group	Year		Change	Percent change
	1997	1999		
<i>Thousand cubic feet</i>				
Saw logs				
Softwood	156,779	162,959	6,180	3.9
Hardwood	5,075	4,382	-693	-13.7
Total	161,854	167,341	5,487	3.4
Veneer logs				
Softwood	28,279	32,770	4,491	15.9
Hardwood	1,559	1,211	-348	-22.3
Total	29,838	33,981	4,143	13.9
Pulpwood^a				
Softwood	251,618	222,119	-29,499	-11.7
Hardwood	35,883	39,202	3,319	9.2
Total	287,501	261,321	-26,180	-9.1
Composite panels				
Softwood	0	0	0	--
Hardwood	6,403	7,380	977	15.3
Total	6,403	7,380	977	15.3
Other industrial				
Softwood	30,921	27,901	-3,020	-9.8
Hardwood	838	638	-200	-23.9
Total	31,759	28,539	-3,220	-10.1
All industrial				
Softwood	467,597	445,749	-21,848	-4.7
Hardwood	49,758	52,813	3,055	6.1
Total	517,355	498,562	-18,793	-3.6
Byproduct output				
Softwood	151,058	141,047	-10,011	-6.6
Hardwood	10,791	10,757	-34	-0.3
Total	161,849	151,804	-10,045	-6.2
Total output				
Softwood	618,655	586,796	-31,859	-5.1
Hardwood	60,549	63,570	3,021	5.0
Total	679,204	650,366	-28,838	-4.2

-- = negligible.

^a Includes roundwood delivered to nonpulp mills, then chipped and sold to pulp mills (7,878,000 cubic feet in 1997 and 7,104,000 cubic feet in 1999).

Table 2—Roundwood receipts by product and species group, Florida, 1997 and 1999

Product and species group	Year		Change	Percent change
	1997	1999		
<i>Thousand cubic feet</i>				
Saw logs				
Softwood	146,401	144,316	-2,085	-1.4
Hardwood	4,899	4,676	-223	-4.6
Total	151,300	148,992	-2,308	-1.5
Veneer logs				
Softwood	30,787	34,812	4,025	13.1
Hardwood	1,372	890	-482	-35.1
Total	32,159	35,702	3,543	11.0
Pulpwood^a				
Softwood	273,320	232,473	-40,847	-14.9
Hardwood	48,986	54,350	5,364	11.0
Total	322,306	286,823	-35,483	-11.0
Composite panels				
Softwood	0	0	0	--
Hardwood	0	0	0	--
Total	0	0	0	--
Other industrial				
Softwood	25,535	21,633	-3,902	-15.3
Hardwood	850	638	-212	-24.9
Total	26,385	22,271	-4,114	-15.6
Total output				
Softwood	476,043	433,234	-42,809	-9.0
Hardwood	56,107	60,554	4,447	7.9
Total	532,150	493,788	-38,362	-7.2

-- = negligible.

^a Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (8,254,000 cubic feet in 1997 and 7,491,000 cubic feet in 1999).

Table 3—Number of primary wood-using plants by industry, Florida, 1979–1999

Industry	Year									
	1979	1983	1986	1987	1989	1991	1993	1995	1997	1999
Sawmills	112	108	106	97	85	71	64	68	58	53
Veneer mills	10	10	6	5	5	5	5	5	5	4
Pulpmills	10	9	9	10	9	9	8	8	8	6
Composite panel mills	0	0	0	0	0	0	0	0	0	0
Other mills	16	16	30	31	28	30	32	32	30	30
All plants	148	143	151	143	127	115	109	113	101	93

Table 4—Roundwood receipts by sawmill size, Florida, 1997 and 1999

Sawmill size class ^a	1997			1999		
	Number of mills	Thousand board feet	Percent of volume	Number of mills	Thousand board feet	Percent of volume
<i>Million board feet</i>						
< 1.0	29	9,955	1	23	8,612	1
1.0–4.99	9	24,301	3	10	22,187	3
5.0–9.99	3	20,883	3	3	18,625	2
10.0–49.99	10	194,216	24	10	196,149	25
> 50	7	546,310	69	7	537,853	69
Total	58	795,665	100	53	783,426	100

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

Table 5—Roundwood receipts by species and type of mill, Florida, 1999

Species	Type of mill						
	All mills	Sawmills	Veneer mills		OSB and		Other mills
			Pine plywood	Other veneer	panels ^a	Pulpmills ^b	
<i>Thousand cubic feet</i>							
Softwood							
Yellow pine	178,145	137,080	34,367	0	0	NA	6,698
Cedar	37	20	0	0	0	NA	17
Cypress	21,962	7,205	0	0	0	NA	14,757
Other softwood	617	11	445	0	0	NA	161
Unclassified	232,473	0	0	0	0	232,473	0
Total softwoods	433,234	144,316	34,812	0	0	232,473	21,633
Hardwood							
Blackgum and tupelo	163	80	0	83	0	NA	0
Soft maple	8	8	0	0	0	NA	0
Sweetgum	744	493	0	251	0	NA	0
Yellow-poplar	450	60	59	331	0	NA	0
Other soft hardwood	936	611	0	166	0	NA	159
Hickory	78	60	0	0	0	NA	18
Red oak	1,531	1,438	0	0	0	NA	93
White oak	249	208	0	0	0	NA	41
Other hard hardwood	2,045	1,718	0	0	0	NA	327
Unclassified	54,350	0	0	0	0	54,350	0
Total hardwoods	60,554	4,676	59	831	0	54,350	638
All species	493,788	148,992	34,871	831	0	286,823	22,271

NA = not applicable.

^a OSB = oriented strand board.

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

Table 6—Industrial roundwood movement by year and species group, Florida, 1997 and 1999

Year	Production	Exported to other States	Retained	Imported from other States	Receipts
<i>Thousand cubic feet</i>					
Softwood					
1997	467,597	76,205	391,392	84,651	476,043
1999	445,749	78,564	367,185	66,049	433,234
Hardwood					
1997	49,758	17,086	32,672	23,435	56,107
1999	52,813	18,223	34,590	25,964	60,554
All species					
1997	517,355	93,291	424,064	108,086	532,150
1999	498,562	96,787	401,775	92,013	493,788

Table 7—Industrial roundwood movement by product and species group, Florida, 1999

Product and species group	Production	Exported to other States	Retained	Imported from other States	Receipts
<i>Thousand cubic feet</i>					
Saw logs					
Softwood	162,959	28,539	134,420	9,896	144,316
Hardwood	4,382	272	4,110	566	4,676
Total	167,341	28,811	138,530	10,462	148,992
Veneer logs					
Softwood	32,770	4,604	28,166	6,646	34,812
Hardwood	1,211	321	890	0	890
Total	33,981	4,925	29,056	6,646	35,702
Pulpwood^a					
Softwood	222,119	37,723	184,396	48,077	232,473
Hardwood	39,202	10,250	28,952	25,398	54,350
Total	261,321	47,973	213,348	73,475	286,823
Composite panels					
Softwood	0	0	0	0	0
Hardwood	7,380	7,380	0	0	0
Total	7,380	7,380	0	0	0
Other industrial					
Softwood	27,901	7,698	20,203	1,430	21,633
Hardwood	638	0	638	0	638
Total	28,539	7,698	20,841	1,430	22,271
Total output					
Softwood	445,749	78,564	367,185	66,049	433,234
Hardwood	52,813	18,223	34,590	25,964	60,554
Total	498,562	96,787	401,775	92,013	493,788

^a Includes roundwood chipped.

Table 8—Saw-log volume by destination, source, and species group, Florida, 1999

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>Thousand cubic feet</i>			
Florida (retained)	138,530	134,420	4,110
Exports to:			
Alabama	7,589	7,430	159
Georgia	21,183	21,070	113
North Carolina	39	39	0
Total	28,811	28,539	272
Imports from:			
Alabama	3,475	3,468	7
Georgia	6,787	6,259	528
North Carolina	140	109	31
South Carolina	60	60	0
Total	10,462	9,896	566

Table 9—Veneer volume by destination, source, and species group, Florida, 1999

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>Thousand cubic feet</i>			
Florida (retained)	29,056	28,166	890
Exports to:			
Alabama	116	0	116
Georgia	4,809	4,604	205
Total	4,925	4,604	321
Imports from:			
Alabama	627	627	0
Georgia	6,019	6,019	0
Total	6,646	6,646	0

Table 10—Pulpwood volume by destination, source, and species group, Florida, 1999^a

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>Thousand cubic feet</i>			
Florida (retained)	213,348	184,396	28,952
Exports to:			
Alabama	6,613	5,461	1,152
Georgia	41,360	32,262	9,098
Total	47,973	37,723	10,250
Imports from:			
Alabama	22,294	13,102	9,192
Georgia	49,919	34,970	14,949
Louisiana	126	0	126
Tennessee	1,131	0	1,131
Virginia	5	5	0
Total	73,475	48,077	25,398

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

Table 11—Composite panel volume by destination, source, and species group, Florida, 1999

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>Thousand cubic feet</i>			
Florida (retained)	0	0	0
Exports to:			
Georgia	7,380	0	7,380
Total	7,380	0	7,380

Table 12—Other industrial volume by destination, source, and species group, Florida, 1999^a

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>Thousand cubic feet</i>			
Florida (retained)	20,841	20,203	638
Exports to:			
Alabama	5,818	5,818	0
Georgia	1,880	1,880	0
Total	7,698	7,698	0
Imports from:			
Alabama	169	169	0
Georgia	1,223	1,223	0
North Carolina	19	19	0
South Carolina	19	19	0
Total	1,430	1,430	0

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

Table 13—Primary mill residue volume by roundwood type, species group, and residue type, Florida, 1999

Roundwood type and species group	All types	Residue type			
		Bark	Coarse	Sawdust	Shavings
<i>Thousand cubic feet</i>					
Saw logs					
Softwood	82,243	11,990	38,365	19,953	11,935
Hardwood	3,052	534	1,531	981	6
Total	85,295	12,524	39,896	20,934	11,941
Veneer logs					
Softwood	19,381	3,212	7,416	8,753	0
Hardwood	668	106	287	275	0
Total	20,049	3,318	7,703	9,028	0
Pulpwood					
Softwood	22,773	22,773	0	0	0
Hardwood	6,737	6,737	0	0	0
Total	29,510	29,510	0	0	0
Composite panels					
Softwood	0	0	0	0	0
Hardwood	0	0	0	0	0
Total	0	0	0	0	0
Other industrial^a					
Softwood	16,904	6,984	8,185	1,735	0
Hardwood	357	79	200	78	0
Total	17,261	7,063	8,385	1,813	0
Total					
Softwood	141,301	44,959	53,966	30,441	11,935
Hardwood	10,814	7,456	2,018	1,334	6
Total	152,115	52,415	55,984	31,775	11,941

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

Table 14—Disposal of residue at primary wood-using plants by product, species group, and type of residue, Florida, 1997 and 1999

Product and species group	All types		Bark		Coarse		Sawdust		Shavings	
	1997	1999	1997	1999	1997	1999	1997	1999	1997	1999
<i>Thousand cubic feet</i>										
Fiber products										
Softwood	46,888	44,696	0	0	45,203	43,523	425	50	1,260	1,123
Hardwood	1,410	1,161	3	0	1,407	1,161	0	0	0	0
Total	48,298	45,857	3	0	46,610	44,684	425	50	1,260	1,123
Particleboard										
Softwood	2,652	6,222	0	0	0	0	431	3,068	2,221	3,154
Hardwood	0	0	0	0	0	0	0	0	0	0
Total	2,652	6,222	0	0	0	0	431	3,068	2,221	3,154
Charcoal/chemical wood										
Softwood	1,012	304	0	0	1,012	304	0	0	0	0
Hardwood	0	0	0	0	0	0	0	0	0	0
Total	1,012	304	0	0	1,012	304	0	0	0	0
Sawn products										
Softwood	1,746	0	0	0	1,746	0	0	0	0	0
Hardwood	0	0	0	0	0	0	0	0	0	0
Total	1,746	0	0	0	1,746	0	0	0	0	0
Fuel										
Softwood	77,137	68,083	42,139	36,247	3,727	3,655	24,114	21,438	7,157	6,743
Hardwood	7,697	8,448	6,656	7,216	20	84	1,017	1,145	4	3
Total	84,834	76,531	48,795	43,463	3,747	3,739	25,131	22,583	7,161	6,746
Miscellaneous										
Softwood	21,623	21,742	7,792	8,520	7,397	6,436	5,031	5,871	1,403	915
Hardwood	1,684	1,148	308	240	835	716	538	189	3	3
Total	23,307	22,890	8,100	8,760	8,232	7,152	5,569	6,060	1,406	918
Not used										
Softwood	324	254	245	192	59	48	20	14	0	0
Hardwood	58	57	0	0	58	57	0	0	0	0
Total	382	311	245	192	117	105	20	14	0	0
All products										
Softwood	151,382	141,301	50,176	44,959	59,144	53,966	30,021	30,441	12,041	11,935
Hardwood	10,849	10,814	6,967	7,456	2,320	2,018	1,555	1,334	7	6
Total	162,231	152,115	57,143	52,415	61,464	55,984	31,576	31,775	12,048	11,941

Table 15—Roundwood timber products output by product and species group, Northeast Florida, 1997 and 1999

Product and species group	Year		Change	Percent change
	1997	1999		
<i>Thousand cubic feet</i>				
Saw logs				
Softwood	111,917	113,806	1,889	1.7
Hardwood	1,023	902	-121	-11.8
Total	112,940	114,708	1,768	1.6
Veneer logs				
Softwood	22,236	28,265	6,029	27.1
Hardwood	946	831	-115	-12.2
Total	23,182	29,096	5,914	25.5
Pulpwood^a				
Softwood	141,443	132,538	-8,905	-6.3
Hardwood	20,634	22,612	1,978	9.6
Total	162,077	155,150	-6,927	-4.3
Composite panels				
Softwood	0	0	0	--
Hardwood	4,610	4,797	187	4.1
Total	4,610	4,797	187	4.1
Other industrial				
Softwood	15,307	15,323	16	0.1
Hardwood	108	239	131	121.3
Total	15,415	15,562	147	1.0
All industrial				
Softwood	290,903	289,932	-971	-0.3
Hardwood	27,321	29,381	2,060	7.5
Total	318,224	319,313	1,089	0.3

-- = negligible.

^a Includes roundwood delivered to nonpulp mills, then chipped and sold to pulpmills (7,340,000 cubic feet in 1997 and 6,411,000 cubic feet in 1999).

Table 16—Roundwood timber products output by county, product, and species group, Northeast Florida, 1999

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	17,635	949	4,143	0	2,184	0	9,982	895	0	0	1,326	54
Baker	14,127	120	5,162	0	2,184	0	6,440	94	0	0	341	26
Bradford	11,716	498	5,124	0	2,184	0	4,267	498	0	0	141	0
Clay	12,350	546	6,287	0	2,184	0	3,792	526	0	0	87	20
Columbia	19,546	1,141	6,928	0	3,197	125	9,045	1,016	0	0	376	0
Dixie	11,348	3,620	3,561	225	125	125	6,549	2,827	0	443	1,113	0
Duval	18,680	244	8,570	4	3,197	0	5,739	214	0	0	1,174	26
Flagler	14,474	862	6,904	0	2,184	0	4,438	862	0	0	948	0
Gilchrist	5,546	557	1,874	0	125	83	3,313	442	0	0	234	32
Hamilton	10,477	1,794	4,883	0	677	0	4,075	1,278	0	516	842	0
Lafayette	9,724	636	4,188	0	125	41	5,094	595	0	0	317	0
Levy	18,054	3,590	8,544	328	125	166	5,942	3,074	0	0	3,443	22
Madison	11,612	5,036	5,895	0	1,263	83	3,921	3,034	0	1,919	533	0
Marion	13,371	1,385	5,096	16	0	0	7,673	1,369	0	0	602	0
Nassau	20,427	1,258	8,667	3	1,013	0	9,938	1,229	0	0	809	26
Putnam	12,574	919	4,276	0	2,630	0	5,371	886	0	0	297	33
St. Johns	15,567	914	5,239	0	2,184	0	7,383	914	0	0	761	0
Suwannee	7,613	623	2,004	0	125	83	5,294	540	0	0	190	0
Taylor	23,985	3,538	7,931	326	250	125	14,855	1,168	0	1,919	949	0
Union	12,032	544	4,234	0	2,309	0	5,368	544	0	0	121	0
Volusia	9,074	607	4,296	0	0	0	4,059	607	0	0	719	0
All counties	289,932	29,381	113,806	902	28,265	831	132,538	22,612	0	4,797	15,323	239

^a Includes roundwood delivered to nonpulp mills, then chipped and sold to pulpmills (6,411,000 cubic feet in 1999).

Table 17—Roundwood timber products output by product and species group, Northwest Florida, 1997 and 1999

Product and species group	Year		Change	Percent change
	1997	1999		
<i>Thousand cubic feet</i>				
Saw logs				
Softwood	39,601	43,922	4,321	10.9
Hardwood	4,037	3,465	-572	-14.2
Total	43,638	47,387	3,749	8.6
Veneer logs				
Softwood	6,043	4,505	-1,538	-25.5
Hardwood	248	380	132	53.2
Total	6,291	4,885	-1,406	-22.3
Pulpwood^a				
Softwood	95,678	77,538	-18,140	-19.0
Hardwood	14,069	15,149	1,080	7.7
Total	109,747	92,687	-17,060	-15.5
Composite panels				
Softwood	0	0	0	--
Hardwood	1,793	2,583	790	44.1
Total	1,793	2,583	790	44.1
Other industrial				
Softwood	7,673	7,821	148	1.9
Hardwood	44	79	35	79.5
Total	7,717	7,900	183	2.4
All industrial				
Softwood	148,995	133,786	-15,209	-10.2
Hardwood	20,191	21,656	1,465	7.3
Total	169,186	155,442	-13,744	-8.1

-- = negligible.

^a Includes roundwood delivered to nonpulp mills, then chipped and sold to pulpmills (367,000 cubic feet in 1997 and 516,000 cubic feet in 1999).

Table 18—Roundwood timber products output by county, product, and species group, Northwest Florida, 1999

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>											
Bay	17,121	352	5,653	249	0	0	11,361	103	0	0	107	0
Calhoun	8,937	2,446	3,000	1,112	626	59	5,126	1,275	0	0	185	0
Escambia	8,451	845	3,149	0	0	0	4,327	845	0	0	975	0
Franklin	6,933	664	2,050	0	0	0	4,797	0	0	664	86	0
Gadsden	8,394	1,837	3,281	343	1,126	205	3,856	1,276	0	0	131	13
Gulf	5,484	425	1,702	372	0	0	3,713	53	0	0	69	0
Holmes	7,534	1,108	2,484	29	0	0	4,883	1,079	0	0	167	0
Jackson	12,923	2,479	3,934	425	751	116	5,912	1,938	0	0	2,326	0
Jefferson	6,450	4,851	2,603	130	626	0	2,914	2,802	0	1,919	307	0
Leon	6,125	669	2,569	65	626	0	2,829	572	0	0	101	32
Liberty	4,007	1,269	1,465	433	250	0	2,154	836	0	0	138	0
Okaloosa	7,226	225	1,924	26	0	0	5,038	199	0	0	264	0
Santa Rosa	10,329	1,045	3,015	26	0	0	6,981	1,019	0	0	333	0
Wakulla	2,854	126	1,643	0	250	0	875	92	0	0	86	34
Walton	10,410	790	3,174	80	0	0	6,963	710	0	0	273	0
Washington	10,608	2,525	2,276	175	250	0	5,809	2,350	0	0	2,273	0
All counties	133,786	21,656	43,922	3,465	4,505	380	77,538	15,149	0	2,583	7,821	79

^a Includes roundwood delivered to nonpulp mills, then chipped and sold to pulpmills (516,000 cubic feet in 1999).

Table 19—Roundwood timber products output by product and species group, Central and South Florida, 1997 and 1999

Product and species group	Year		Change	Percent change
	1997	1999		
<i>Thousand cubic feet</i>				
Saw logs				
Softwood	5,261	5,231	-30	-0.6
Hardwood	15	15	0	--
Total	5,276	5,246	-30	-0.6
Veneer logs				
Softwood	0	0	0	--
Hardwood	365	0	-365	-100.0
Total	365	0	-365	-100.0
Pulpwood^a				
Softwood	14,497	12,043	-2,454	-16.9
Hardwood	1,180	1,441	261	22.1
Total	15,677	13,484	-2,193	-14.0
Composite panels				
Softwood	0	0	0	--
Hardwood	0	0	0	--
Total	0	0	0	--
Other industrial				
Softwood	7,941	4,757	-3,184	-40.1
Hardwood	686	320	-366	-53.4
Total	8,627	5,077	-3,550	-41.1
All industrial				
Softwood	27,699	22,031	-5,668	-20.5
Hardwood	2,246	1,776	-470	-20.9
Total	29,945	23,807	-6,138	-20.5

-- = negligible.

^a Includes roundwood delivered to nonpulp mills, then chipped and sold to pulpmills (171,000 cubic feet in 1997 and 177,000 cubic feet in 1999).

Table 20—Roundwood timber products output by county, product, and species group, Central and South Florida, 1999

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>											
Brevard	700	2	68	0	0	0	632	2	0	0	0	0
Broward	2	0	0	0	0	0	2	0	0	0	0	0
Charlotte	132	0	0	0	0	0	0	0	0	0	132	0
Citrus	1,970	442	556	0	0	0	1,407	442	0	0	7	0
Collier	70	0	70	0	0	0	0	0	0	0	0	0
Dade	1	0	0	0	0	0	1	0	0	0	0	0
De Soto	127	0	127	0	0	0	0	0	0	0	0	0
Glades	315	0	315	0	0	0	0	0	0	0	0	0
Hardee	386	0	5	0	0	0	381	0	0	0	0	0
Hendry	1,332	0	0	0	0	0	1,332	0	0	0	0	0
Hernando	1,613	267	117	2	0	0	1,464	265	0	0	32	0
Highlands	501	0	0	0	0	0	1	0	0	0	500	0
Hillsborough	449	0	111	0	0	0	313	0	0	0	25	0
Indian River	243	0	65	0	0	0	178	0	0	0	0	0
Lake	2,310	271	196	0	0	0	1,113	111	0	0	1,001	160
Lee	132	0	0	0	0	0	0	0	0	0	132	0
Manatee	16	0	16	0	0	0	0	0	0	0	0	0
Martin	298	0	0	0	0	0	298	0	0	0	0	0
Okeechobee	73	1	28	1	0	0	28	0	0	0	17	0
Orange	1,008	0	347	0	0	0	406	0	0	0	255	0
Osceola	2,351	0	480	0	0	0	412	0	0	0	1,459	0
Pasco	2,597	176	938	0	0	0	940	176	0	0	719	0
Polk	2,054	160	1,491	0	0	0	364	0	0	0	199	160
St. Lucie	256	0	0	0	0	0	256	0	0	0	0	0
Sarasota	232	0	76	0	0	0	156	0	0	0	0	0
Seminole	829	0	0	0	0	0	743	0	0	0	86	0
Sumter	2,034	457	225	12	0	0	1,616	445	0	0	193	0
All counties	22,031	1,776	5,231	15	0	0	12,043	1,441	0	0	4,757	320

^a Includes roundwood delivered to nonpulp mills, then chipped and sold to pulpmills (177,000 cubic feet in 1999).

Table 21—Total roundwood output by product, species group, and source of material, Florida, 1999

Product and species group	All sources	Total	Growing-stock trees		Other sources
			Sawtimber	Poletimber	
<i>Thousand cubic feet</i>					
Saw logs					
Softwood	162,959	156,904	144,618	12,286	6,055
Hardwood	4,382	4,362	4,010	353	20
Total	167,341	161,266	148,627	12,639	6,075
Veneer logs and bolts					
Softwood	32,770	32,257	31,842	415	513
Hardwood	1,211	1,207	1,207	0	4
Total	33,981	33,463	33,049	415	518
Pulpwood					
Softwood	222,119	203,808	60,518	143,291	18,311
Hardwood	39,202	31,055	20,694	10,361	8,147
Total	261,321	234,863	81,211	153,652	26,458
Composite panel					
Softwood	0	0	0	0	0
Hardwood	7,380	5,846	3,896	1,951	1,534
Total	7,380	5,846	3,896	1,951	1,534
Poles and posts					
Softwood	13,641	12,788	9,822	2,966	853
Hardwood	0	0	0	0	0
Total	13,641	12,788	9,822	2,966	853
Other miscellaneous					
Softwood	14,260	10,870	9,158	1,712	3,390
Hardwood	638	604	71	533	34
Total	14,898	11,474	9,229	2,245	3,424
Total industrial products					
Softwood	445,749	416,628	255,957	160,670	29,121
Hardwood	52,813	43,075	29,877	13,197	9,738
Total	498,562	459,702	285,834	173,868	38,860
Fuelwood					
Softwood	2,027	1,738	1,545	194	289
Hardwood	11,758	9,060	6,141	2,919	2,698
Total	13,785	10,798	7,686	3,113	2,987
All products					
Softwood	447,776	418,366	257,502	160,864	29,410
Hardwood	64,571	52,135	36,018	16,116	12,436
Total	512,347	470,501	293,520	176,980	41,846

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

Table 22—Total roundwood output by species group, survey region, and ownership class, Florida, 1999

Species group and survey unit	Total	Ownership class			
		National forest	Other public	Forest industry	Nonindustrial private
<i>Thousand cubic feet</i>					
Softwoods					
Northeast	291,251	10,624	11,106	164,310	105,211
Northwest	134,394	3,278	11,290	44,756	75,070
Central and South	22,131	189	4,837	0	17,105
Total softwoods	447,776	14,091	27,233	209,066	197,386
Hardwoods					
Northeast	35,922	130	2,891	17,775	15,126
Northwest	26,479	7	1,168	4,927	20,377
Central and South	2,170	0	212	0	1,958
Total hardwoods	64,571	137	4,271	22,702	37,461
All species	512,347	14,229	31,504	231,767	234,847

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

Table 23—Total roundwood output by species group, detailed species group, and product, Florida, 1999

Species group and detailed species group	Total	Product						
		Saw log	Veneer	Pulpwood	Composite panel	Poles and posts	Other miscellaneous	Fuelwood
<i>Thousand cubic feet</i>								
Softwood								
Cedar	391	139	37	173	0	36	3	2
Longleaf-slash pine	350,220	126,491	26,622	175,921	0	10,355	9,246	1,585
Loblolly-shortleaf pine	39,468	15,066	3,066	18,507	0	1,632	1,018	179
Other yellow pines	30,980	10,847	1,529	16,572	0	1,243	648	140
Cypress	26,717	10,415	1,516	10,945	0	375	3,345	121
Total softwoods	447,776	162,959	32,770	222,119	0	13,641	14,260	2,027
Hardwood								
Soft maple	2,091	78	58	1,370	176	0	28	381
Hard maple	302	10	6	140	92	0	0	55
Other birch	28	0	0	22	0	0	1	5
Hickory	1,423	108	31	839	168	0	18	259
Beech	776	288	15	331	0	0	0	141
Ash	915	99	26	566	39	0	18	167
Sweetgum	6,380	406	111	3,909	752	0	40	1,162
Yellow-poplar	877	197	24	492	0	0	4	160
Blackgum-tupelo	9,614	324	196	5,688	1,593	0	63	1,751
Black cherry	324	11	10	204	33	0	7	59
Select white oaks	630	140	12	345	15	0	3	115
Other white oaks	4,267	98	46	2,888	361	0	97	777
Select red oaks	213	14	6	150	3	0	0	39
Other red oaks	23,943	1,587	411	14,773	2,618	0	194	4,360
Basswood	151	10	5	103	4	0	1	28
Elm	559	29	18	347	45	0	18	102
Other Eastern hardwoods	12,079	983	235	7,035	1,481	0	146	2,199
Total hardwoods	64,571	4,382	1,211	39,202	7,380	0	638	11,758
All species	512,347	167,341	33,981	261,321	7,380	13,641	14,898	13,785

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

Table 24—Total roundwood output by species group, detailed species group, and ownership class, Florida, 1999

Species group and detailed species group	Total	Ownership class			
		National forest	Other public	Forest industry	Nonindustrial private
<i>Thousand cubic feet</i>					
Softwood					
Cedar	391	28	24	107	232
Longleaf-slash pine	350,220	9,292	21,033	170,594	149,301
Loblolly-shortleaf pine	39,468	587	2,318	16,894	19,670
Other yellow pines	30,980	3,923	2,370	9,859	14,828
Cypress	26,717	262	1,488	11,612	13,355
Total softwoods	447,776	14,091	27,233	209,066	197,386
Hardwood					
Soft maple	2,091	2	199	1,072	817
Hard maple	302	0	5	101	196
Other birch	28	0	14	3	12
Hickory	1,423	20	133	541	729
Beech	776	0	0	155	621
Ash	915	0	190	415	309
Sweetgum	6,380	6	327	2,114	3,932
Yellow-poplar	877	1	12	228	637
Blackgum-tupelo	9,614	2	352	4,345	4,915
Black cherry	324	0	25	92	206
Select white oaks	630	0	25	226	379
Other white oaks	4,267	1	399	866	3,002
Select red oaks	213	0	17	51	145
Other red oaks	23,943	50	1,953	8,738	13,202
Basswood	151	0	30	97	25
Elm	559	0	58	282	219
Other Eastern hardwoods	12,079	55	532	3,375	8,116
Total hardwoods	64,571	137	4,271	22,702	37,461
All species	512,347	14,229	31,504	231,767	234,847

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



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In 1999, volume of roundwood output from Florida's forests totaled 499 million cubic feet, 4 percent less than in 1997. Mill byproducts generated from primary manufacturers decreased to 152 million cubic feet. Almost all plant residues were used primarily for fuel and fiber products. Pulpwood was the leading roundwood product at 261 million cubic feet; saw logs ranked second at 167 million cubic feet; veneer logs were third at 34 million cubic feet. Total receipts declined 7 percent to 494 million cubic feet. The number of primary processing plants declined from 101 in 1997 to 93 in 1999.

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

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