United States
Department of
Agriculture

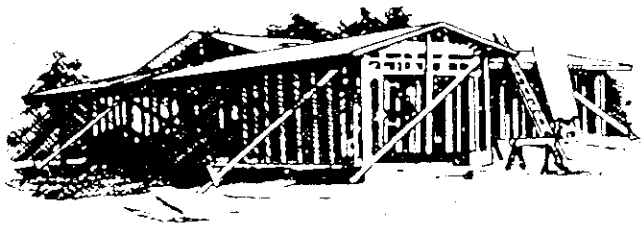
Forest Service

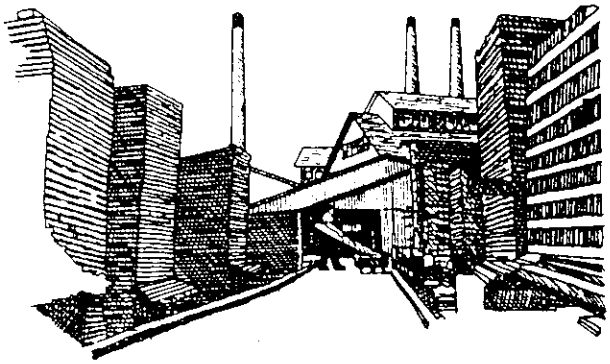
Southern Research
Station

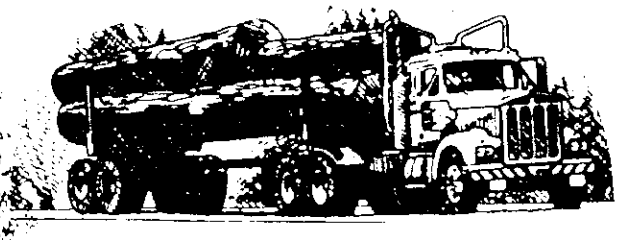
Resource Bulletin
SE-153

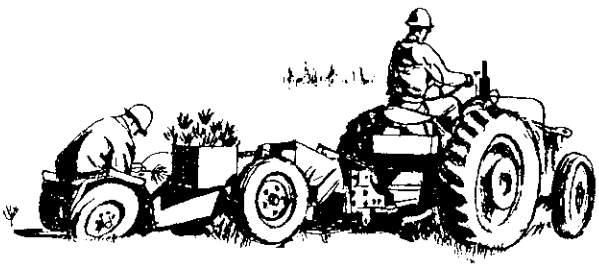
Florida's Timber Industry—An Assessment of Timber Product Output and Use, 1993

Michael Howell



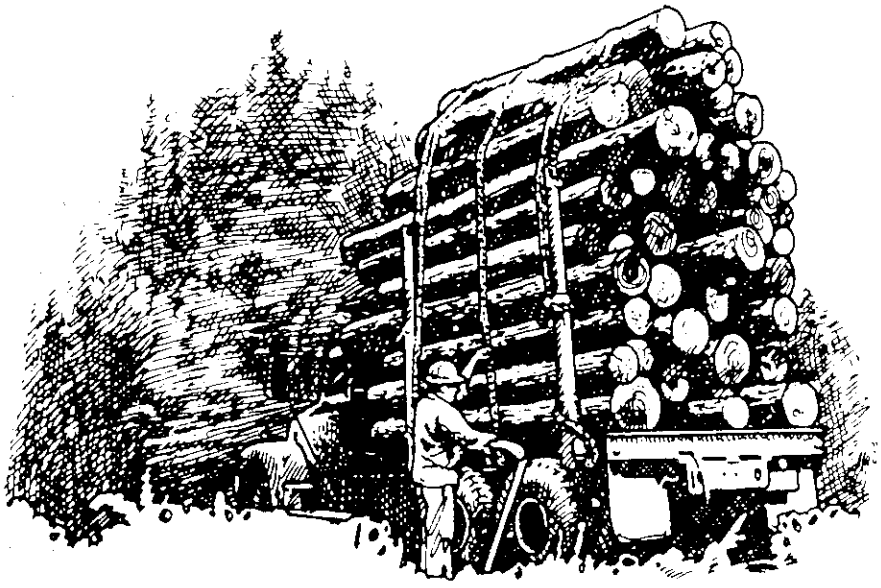






The Author:

Michael Howell is a Resource Forester,
with the Forest Inventory and Analysis group,
Southern Research Station, Asheville, NC.



May 1995

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

Foreword

This report contains the findings of a 1993 canvass of all primary wood-using plants in Florida and presents changes in product output and residue use since 1991. It complements the Forest Inventory and Analysis periodic inventory of volume and removals from the State's timberland. The canvass was conducted to determine the amount and source of wood receipts and annual timber product drain by county in 1993 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 1994 to obtain information for 1993. Out-of-State mills known to be using logs or bolts harvested from Florida timberland were also contacted. 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 response was necessary. In the event of a nonresponse, data collected in previous surveys were updated by 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, conducted annually in cooperation with the American Pulpwood Association. Medium density fiberboard, insulating board, and hardboard plants were included in this survey.

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. The information in this report is based on responses from 92 percent of mills operating in 1993; 8 pulpmills, 4 of the 5 veneer mills, 8 of the 10 mills manufacturing other industrial products, and 58 of the 64 sawmills. These mills accounted for 98 percent of the 1993 mill receipts.

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

Florida's Timber Industry: An Assessment of Timber Product Output and Use, 1993

Output of Industrial Timber Products

Between 1991 and 1993, the combined industrial timber products output from roundwood and plant byproducts declined 2 percent from 707 to 691 million cubic feet. Timber product output (TPO) from roundwood was down 15 million cubic feet or almost 3 percent, while output of plant byproducts dropped 1 million cubic feet, or nearly 1 percent (table 1). Output of softwood roundwood products declined almost 6 percent to 468 million cubic feet and accounted for 90 percent of the State's total output of roundwood timber products (fig. 1). Hardwood roundwood products increased 39 percent to 50 million cubic feet.

Pulpwood and saw logs were the principal roundwood products in 1993. Combined output of these two products totaled more than 456 million cubic feet and accounted for 87 percent of the State's total roundwood output (fig. 2).

Pulpwood

Between 1991 and 1993, pulpwood production, including chipped roundwood, fell 26 million cubic feet to 304 million cubic feet (4.1 million cords).

Despite this 8-percent decline, pulpwood production accounted for nearly 58 percent of the State's total roundwood TPO and remained the leading roundwood product in Florida. Pulpwood accounted for as much as 74 percent of roundwood output in 1969 and as little as 56 percent of the annual roundwood output in 1985 (Howell 1994). Softwood output declined 12 percent to 262 million cubic feet, while hardwood output increased almost 34 percent to 41 million cubic feet (fig. 3). Softwoods accounted for 86 percent of Florida's pulpwood production in 1993, down 5 percent from 1991.

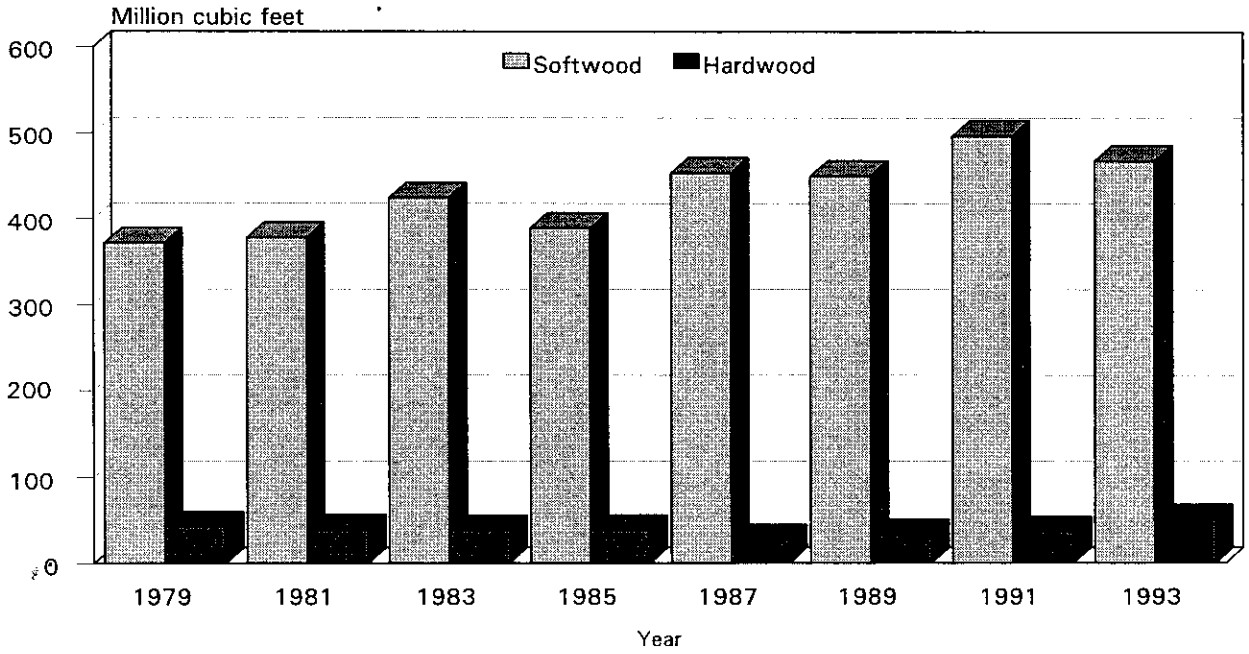


Figure 1— Roundwood production for all production, by species group and year.

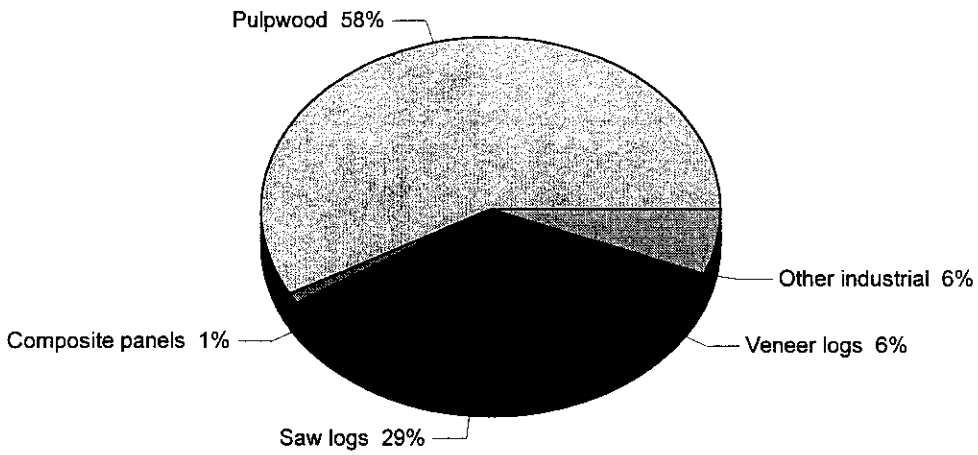


Figure 2—Roundwood production, by type of product, 1993

Saw Logs

Saw logs accounted for 29 percent of the State's total roundwood products in 1993, reflecting no change from 1991. This product ranked second behind pulpwood in roundwood production. Production of softwood and hardwood saw logs combined declined 2 percent between 1991 and 1993 to 152 million cubic feet. Output of softwood saw logs fell 4 percent to 148 million cubic feet (767 million board feet), while that of hardwood saw logs increased nearly 89 percent to 4 million cubic feet (26 million board feet). In 1993, softwoods accounted for 97 percent of the State's saw-log production, 2 percent less than 1991. In 1985, hardwood saw-log production peaked at 10 million cubic feet, 7 percent of saw-log production, compared with 4 million cubic feet, 3 percent of saw-log production in 1993 (fig. 4).

Veneer Logs

Output of veneer logs in 1993 totaled 30 million cubic feet, a 41-percent increase since 1991. Veneer production accounted for 6 percent of the State's total roundwood TPO volume in 1993. With pine plywood the principal product, softwoods dominated the veneer industry in Florida, accounting for 95 percent of the veneer production. Softwood veneer production totaled 28 million cubic feet (145 million board feet), a 45-percent increase. This is a return to production levels seen in the mid-1980's (fig. 5). In contrast, output of hardwood veneer logs declined nearly 4 percent to 1.6 million cubic feet (9.4 million board feet).

Composite Panels

Between 1991 and 1993, roundwood harvested from Florida's forests for composite panels increased almost three-fold and totaled nearly 3 million cubic feet. Softwood made up 12 percent and hardwood made up 88 percent of the State's total composite panel output.

Other Industrial Products

Roundwood harvested for other industrial uses such as poles, posts, mulch, firewood, logs for log homes, and all other industrial products totaled 29 million cubic feet in 1993, up nearly 17 percent since 1991. Softwoods made up 99 percent of the other industrial product volume (fig. 6). Hardwood volume used for other industrial products fell from 395 thousand cubic feet in 1991 to 336 thousand cubic feet in 1993. Roundwood used for other industrial products accounted for 6 percent of the total volume of all products in 1993.

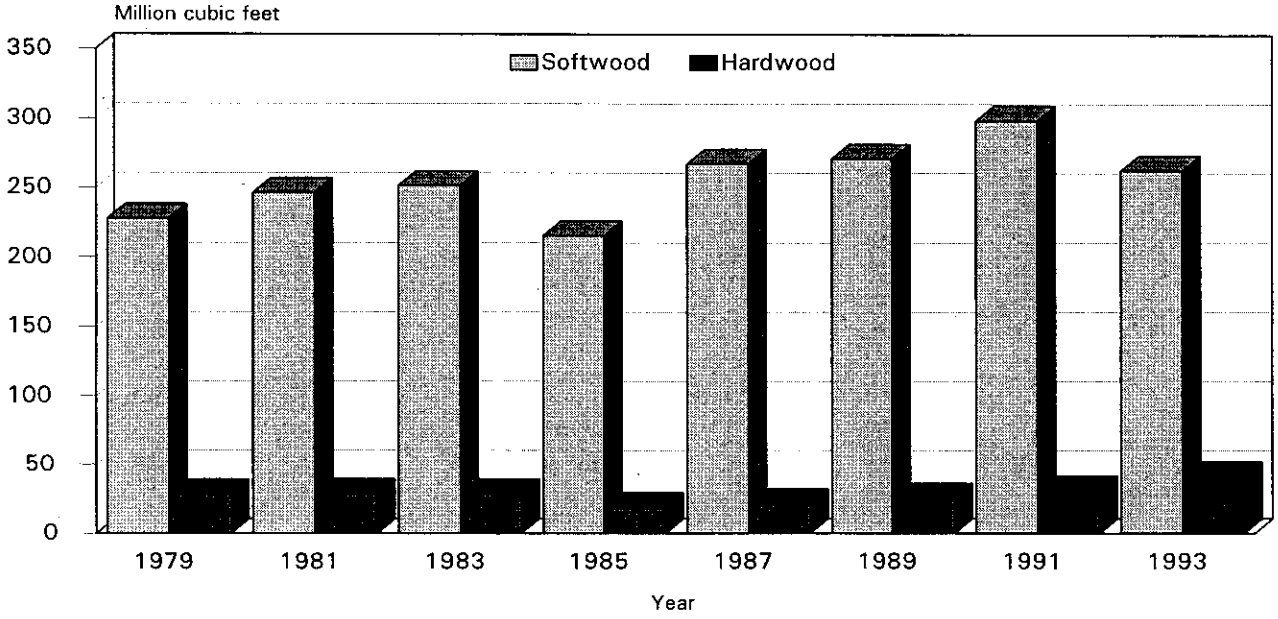


Figure 3—Roundwood pulpwood production, by species group and year.

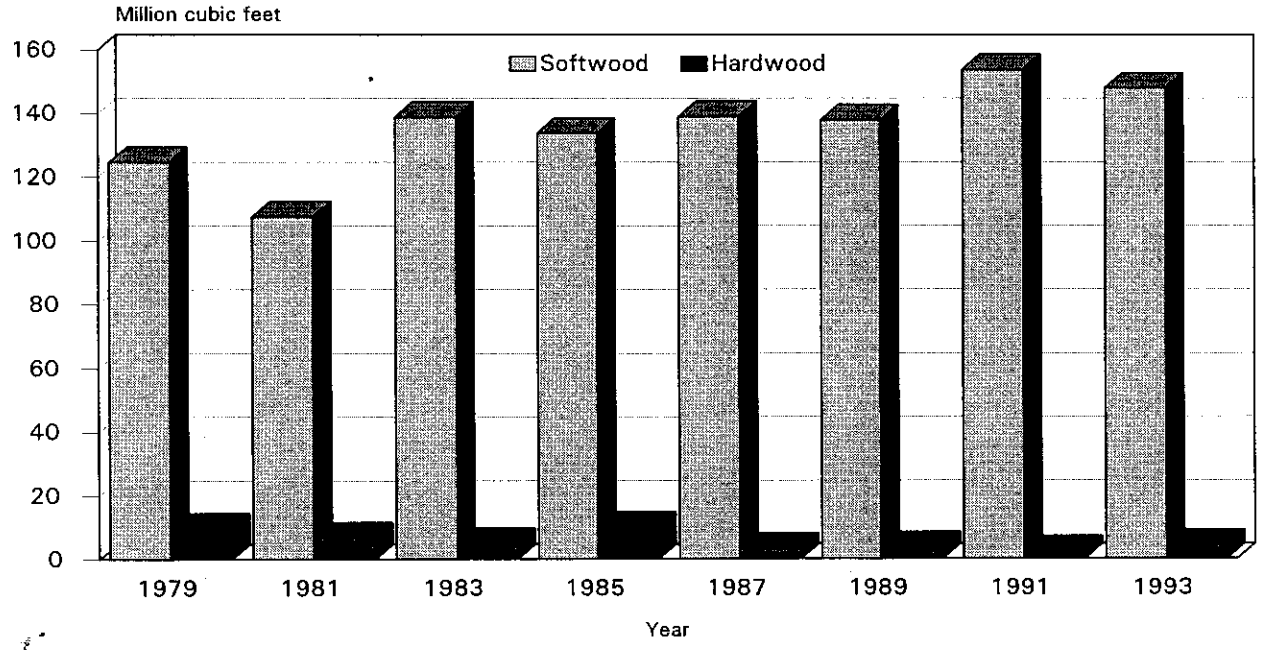


Figure 4—Roundwood saw-log production, by species group and year.

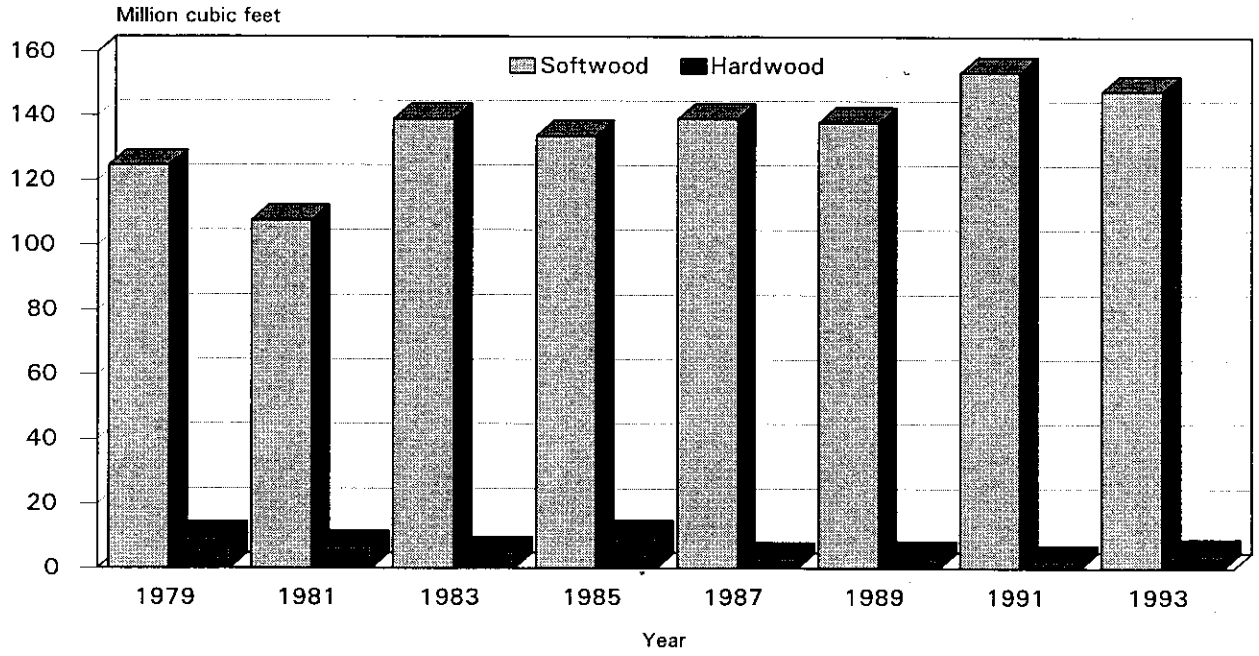


Figure 5—Roundwood veneer-log production, by species group and year.

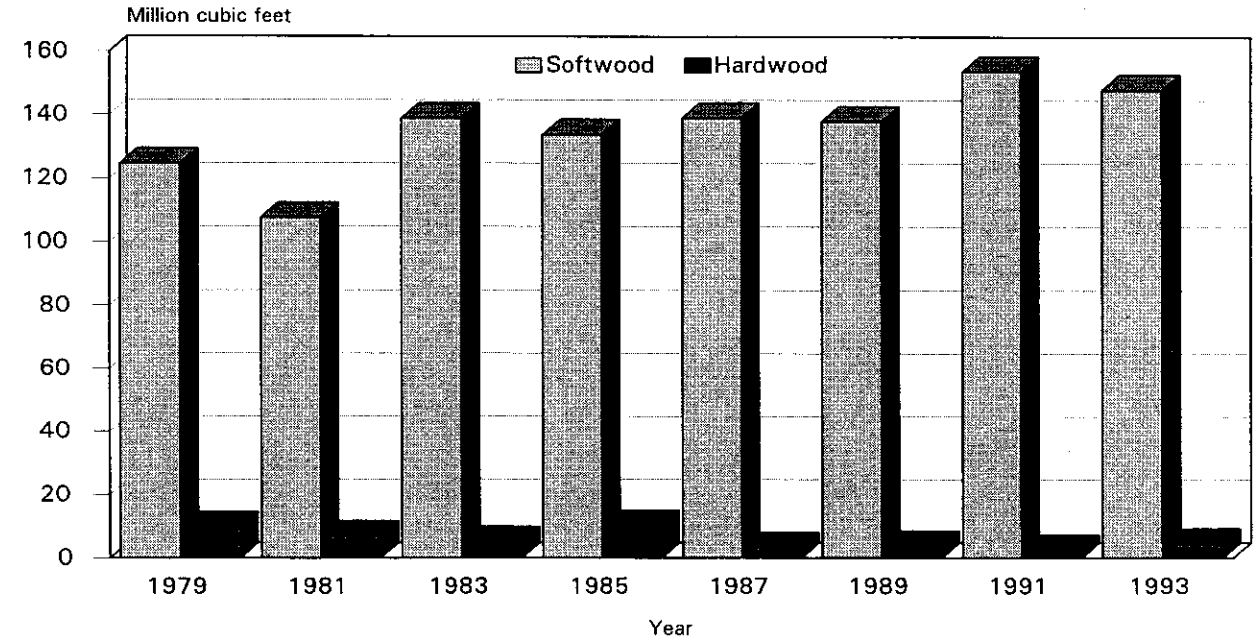


Figure 6—Roundwood production for other industrial, by species group and year.

Receipts and Number of Mills

Total receipts at Florida mills, which included roundwood harvested and retained in the State and roundwood imported from other States, declined 9 percent to 548 million cubic feet (table 2). At the same time, the number of primary roundwood-using plants in Florida declined from 115 in 1991 to 109 in 1993, a 5-percent decline (table 3). This continues the general downward trend that began in 1986.

Pulpmills. American Papermaker (1992) reported 11 pulpmill facilities were operating in Florida. Of these, eight were operating and receiving roundwood in 1993, one less than in 1991. The remaining three mills rely on pulp from a primary manufacturer or on post-consumer fibers. Florida's total pulpwood receipts were down 14 percent to 335 million cubic feet and the 24-hour pulping capacity for these mills declined from 12,055 tons to 10,911 tons in 1993 (Howell 1993; Howell and Hartsell 1995). Receipts of round pulpwood in 1993 accounted for 61 percent of total receipts for all mills. Softwood receipts were down 17 percent to 289 million cubic feet, while hardwood receipts increased 5 percent to 46 million cubic feet. Softwoods accounted for 86 percent of the pulpwood receipts.

Sawmills. Florida lost seven sawmills between 1991 and 1993. The number of sawmills in Florida peaked at 112 in 1979; since then, the number has declined to 64 in 1993. Total saw-log receipts declined nearly 4 million cubic feet to 153 million cubic feet, a 3-percent decline since 1991. Softwood saw-log receipts was down 4 percent to 149 million cubic feet while those of hardwoods increased 72 percent to 4 million cubic feet. Yellow pine and cypress accounted for 97 percent of the State's total saw-log receipts. Of the 64 mills currently operating, 47 percent had receipts less than 1 million board feet while only 28 percent had receipts greater than 10 million board feet. These mills accounted for 92 percent of Florida's total receipts (table 4).

Veneer Mills. The number of veneer mills operating in Florida remained at five in 1993. Between 1991 and 1993 receipts of veneer logs increased 23 percent to 35 million cubic feet. Both softwood and hardwood output increased. Hardwood veneer output increased 64 percent to 1.5 million cubic feet. Softwood veneer receipts increased, nearly 6 million cubic feet, or 22 percent, to 34 million cubic feet. All softwood veneer receipts were in southern yellow pine used in the manufacture of plywood (table 5). Sweetgum and yellow-poplar made up the bulk of hardwood veneer logs, with 21 percent of these logs used in the manufacture of plywood. Veneer accounted for 6 percent of Florida's total receipts for all products.

Other Industrial Mills. The number of plants producing other industrial products increased from 30 to 32 since 1991. However, combined receipts of both softwood and hardwood other industrial products declined 4 percent to 25 million board feet. Cypress was the main species used for other industrial products, with mulch being the primary product. Receipts of cypress totaled 18 million cubic feet while yellow pine contributed nearly 7 million cubic feet. Cypress and yellow pine combined accounted for 99 percent of total receipts.

Roundwood Movement

Note: To follow the logic of this section, the reader must understand that certain terms—namely, 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. 7).

Florida continues to be a net importer of industrial roundwood. In 1993, the State retained 446 million cubic feet, or 86 percent of its production (table 6). Imports from other States totaled 102 million cubic feet, a 19-percent decrease from 1991. Exports to mills outside Florida amounted to 73 million cubic feet, up 31 percent. Imports of all softwood products exceeded exports by 28 million cubic feet.

Roundwood pulpwood accounted for 52 percent of total known exports and 68 percent of total imports (table 7). Round pulpwood imports amounted to 69 million cubic feet, or 31 million cubic feet more than was exported. Saw logs accounted for the next largest share, 27 percent, of the export total while accounting for nearly 20 percent of the import total.

Saw Logs. Florida retained 87 percent of its saw-log production for domestic manufacture (table 8), a 9-percent decline from 1991. Saw-log imports and exports show a fairly even mix in Florida where imports exceeded exports by only 117 thousand cubic feet in 1993. About 20 million cubic feet of saw logs were imported, with softwoods making up over 99 percent of imports. Florida mills received saw logs from Georgia (52 percent), Alabama (47 percent), and North Carolina and South Carolina (less than 1 percent each). Saw-log exports of nearly 20 million cubic feet were divided among Georgia (56 percent), and Alabama (44 percent). Softwoods accounted for nearly 98 percent of exports.

Veneer Logs. Florida retained 80 percent of its veneer-log production for processing at domestic veneer mills (table 9). Imports amounted to nearly 11 million cubic feet while exports totaled about 6 million cubic feet, making the State a net importer

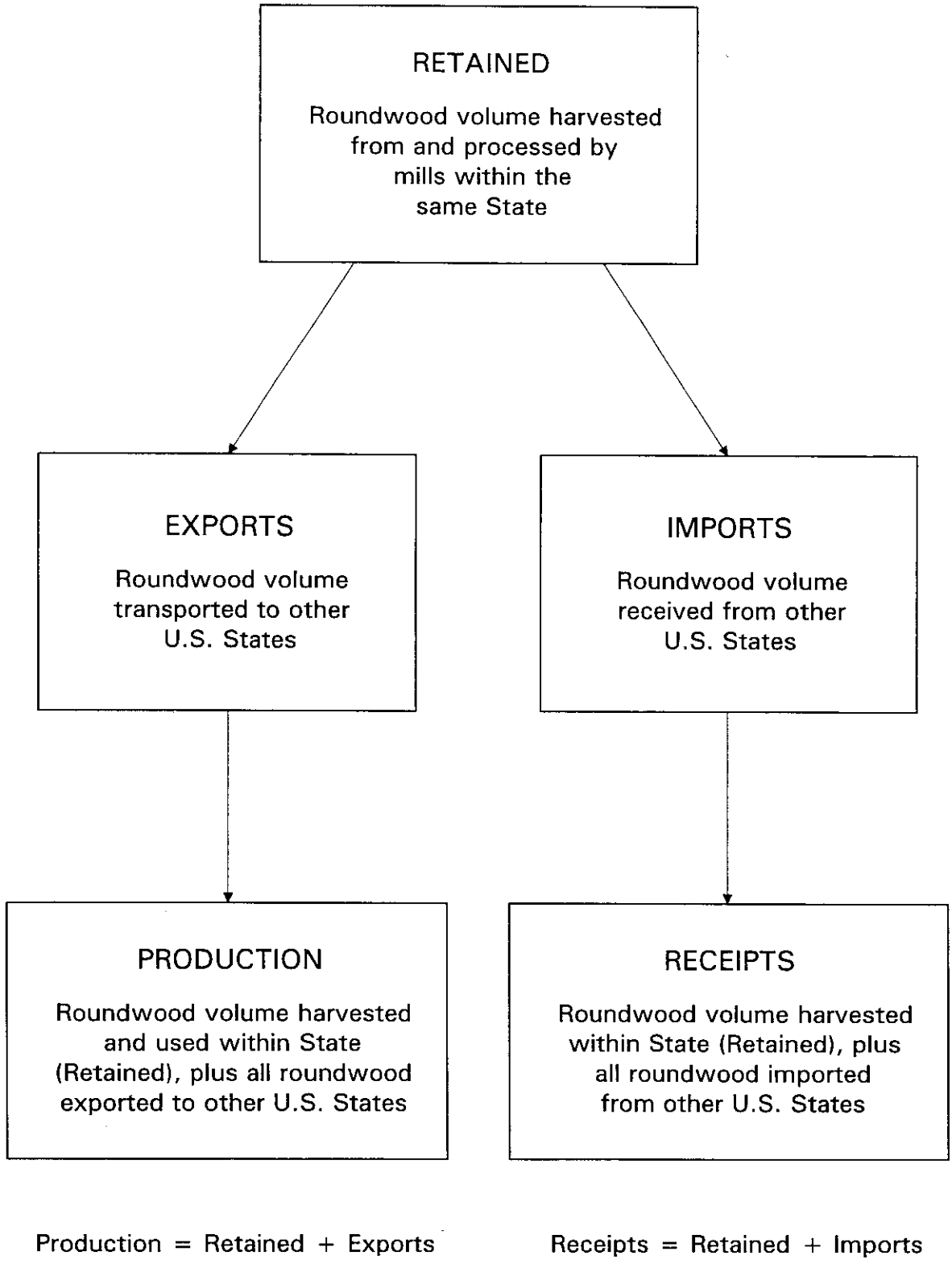


Figure 7—Movement of roundwood exports and imports within the United States.

of roundwood veneer logs. The majority of imports were from Georgia, 98 percent, with Alabama contributing the remainder. At 62 and 38 percent, Georgia and Alabama, respectively, were the recipients of Florida veneer-log exports. Softwood accounted for 96 percent of exports.

Pulpwood. Over 87 percent of roundwood cut for pulpwood was retained for processing at Florida pulpmills (table 10). Imports of 69 million cubic feet exceeded exports by 82 percent, making the State a net importer of pulpwood. Imports came from Georgia (61 percent), Alabama (38 percent), and South Carolina (1 percent). Exports totaling 38 million cubic feet went to Georgia (58 percent) and Alabama (42 percent).

Composite Panels. All of the roundwood production harvested for composite panels, 2.9 million cubic feet, was exported to Georgia mills. Of the 2.9 million cubic feet exported, 88 percent was hardwood (table 11).

Other Industrial. Florida was a net exporter of roundwood used for other industrial products (table 12). All of the 6 million cubic feet exported for other industrial products were softwood. Eighty-nine percent of the exports went to Georgia; the remainder went to Alabama. Softwood accounted for over 99 percent of the 2 million cubic feet imported for other industrial products. Sources of the imports were Georgia (59 percent), Alabama (39 percent), and North Carolina and South Carolina (1 percent each).

Plant Byproducts

In 1993, processing of primary products in Florida mills generated nearly 173 million cubic feet of wood and bark residues (table 13). Coarse residues from all primary products and bark volume contributed nearly equal amounts, 63 million cubic feet (36 percent), and 62 million cubic feet (36 percent), respectively (fig. 8). Collectively, sawdust and shavings made up nearly 28 percent of total residues, or 48 million cubic feet. Of the mill residues generated, 94 percent was from the processing of softwoods and 6 percent from hardwoods. Virtually all of the residues generated, 99 percent, became miscellaneous products or industrial fuel (fig. 9). Nearly 49 million cubic feet, or 77 percent, of the coarse residues were used for fiber products, while 8 million cubic feet were utilized for miscellaneous uses. The remainder became sawn products and industrial fuel (table 14). Most of the bark was used for industrial fuel or other miscellaneous products. Seventy-one percent of the sawdust and shavings was used for industrial fuel; 17 percent for other miscellaneous products; 7 percent for fiber products, and 5 percent for the manufacture of particleboard.

Saw Logs. In 1993, sawmills generated 96 million cubic feet of mill residues, accounting for 55 percent of the total residues produced (fig. 10). Most of the 45 million cubic feet of coarse residues from saw logs were used for fiber products. The 37 million cubic feet of bark and sawdust generated were used mostly for industrial fuel and other miscellaneous products. Shavings from dressed lumber totaled 13 million cubic feet. Fifty-two percent of this material was used for industrial fuelwood; 19 percent for mulch, bedding, and other miscellaneous products; 15 percent for the manufacture of particleboard; and the remainder for fiber products.

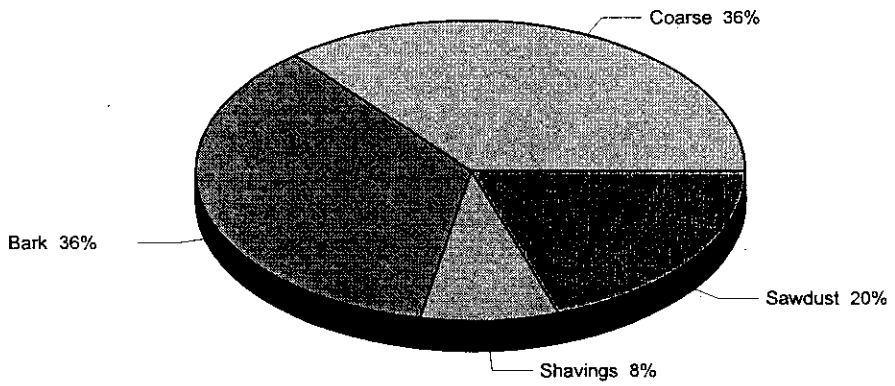


Figure 8—Primary mill residue, by residue type.

Veneer Logs. Veneer mills generated nearly 21 million cubic feet of all types of residues in 1993, representing 12 percent of the State's total primary mill residue volume. Nearly 22 percent of the 9 million cubic feet of coarse veneer residues were veneer cores, which were sawn into framing studs or landscape timbers. The slabs from these cores, along with other coarse residues, were used mostly for fiber products. Sawdust and bark, totaling nearly 12 million cubic feet, were used mostly for industrial fuel.

Pulpwood. Bark, the only residue associated with the production of pulpwood, represented about 22 percent of total mill residue volume. Bark volume reported from the eight pulpmills in operation totaled 38 million cubic feet. About 90 percent of the bark was used for fuel in the mills where it was generated, while the remainder was used for miscellaneous products such as mulch. Bark from roundwood pulpwood accounted for 61 percent of the total bark volume at all primary mills.

Other Industrial. Residues of all types from other industrial products totaled 18 million cubic feet, nearly 11 percent of Florida's total mill residue volume. Coarse residues of more than 9 million cubic feet were used mainly for mulch, fuel, and fiber products. Sawdust and bark, totaling 9 million cubic feet, were used mostly for industrial fuel and mulch.

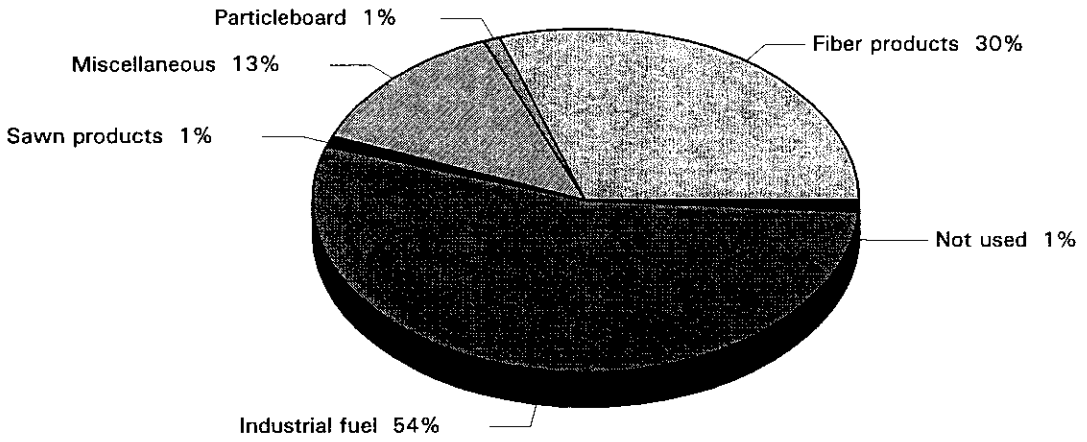


Figure 9—Disposal of residue, by product.

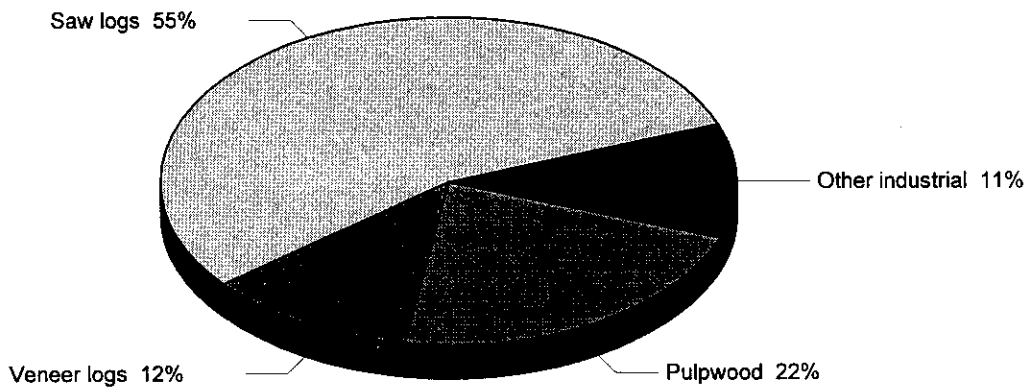


Figure 10—Primary mill residue, by residue type.

Regional Trends

Between 1991 and 1993, output of industrial roundwood products declined in all but the Northwest Florida region. Both the Northeast and Central-South Florida regions experienced about the same percentage decline of 10.5 and 10.1 percent, respectively. Output for all softwood products declined in all but the Northwest Florida region, while hardwood made substantial gains in all regions. Changes in output varied considerably by product and by region; however softwoods accounted for at least 85 percent of the total TPO in each of the regions.

Northeast Region

Roundwood output from the 21 counties of the Northeast Florida region totaled 315 million cubic feet in 1993, down 11 percent from 1991 (table 15). Decreases in the production of softwood saw logs and softwood pulpwood accounted for the decrease. Nearly 92 percent of the total TPO was softwood. Output of hardwood increased in all product categories with an overall increase of 43 percent.

Pulpwood production for this region was down 17 percent, or nearly 38 million cubic feet, primarily a result of one pulpmill's conversion from roundwood to recycled material. However, at 181 million cubic feet, pulpwood was still the leading product in the region, accounting for 57 percent of the region's TPO and for 60 percent of the State's roundwood pulpwood output. The 97 million cubic feet of saw logs accounted for 31 percent of the regions roundwood output and 64 percent of the State's saw-log output. Of the 21 counties in this area, 3 produced more than 20 million cubic feet; 13 produced more than 10 million cubic feet; and the remaining 5 produced between 5 and 10 million cubic feet (table 16). In the Northeast region, 59 primary wood-using plants were operating during 1993, the same as 1991: 5 pulpmills, 36 sawmills, 3 veneer or plywood mills, 3 pole or post mills, and 12 other miscellaneous mills (fig. 11). These mills processed 61 percent of the State's total roundwood output.

Northwest Region

In 1993, nearly 168 million cubic feet of roundwood were produced in the 16-county Northwest Florida region. This total reflects an increase of nearly 19 percent between 1991 and 1993 (table 17). The region ranks second in the State in the production of roundwood products, with 32 percent of the total output. Softwood production increased 16 percent and accounted for 87 percent of the total roundwood output. Hardwood output for all products increased nearly 38 percent, with the largest increases in saw logs and composite panel production.

Pulpwood was the leading product in this region, accounting for 63 percent of the total TPO. Pulpwood production increased by 16 percent from 90 million cubic feet to 105 million cubic feet. Saw-log production of nearly 50 million cubic feet accounted for another 30 percent of the region's total roundwood output. The region experienced a substantial increase in veneer-log output and contributed nearly one-third of the State's veneer-log production. This region also produced about one-third of the State's saw logs, nearly 35 percent of the pulpwood, 25 percent of the composite panel production, and 7 percent of the roundwood used for other industrial products. Of the 16 counties in the area, 7 produced more than 10 million cubic feet (table 18). The 22 mills operating in the Northwest Florida region in 1993 included 3 pulpmills, 13 sawmills, 4 pole or post mills, 1 plywood mill, and 1 other miscellaneous mill.

Central-South Region

Historically, output of industrial roundwood products from the two southern regions of Florida has been much smaller than output from either the Northeast or Northwest regions. For this reason, the Central and South regions were combined for reporting purposes in this Bulletin and are referred to as the "Central-South region." Roundwood output from the 30 counties making up the Central-South Florida region declined 10 percent to about 36 million cubic feet (table 19). The region produced 7 percent of the State's total roundwood TPO. Softwood production declined 11 percent to 34 million cubic feet but still accounted for 95 percent of the total roundwood output. Total hardwood output increased nearly 20 percent; all the increase occurred in hardwood pulpwood. Although total pulpwood output declined by 14 percent, over one-half of the roundwood cut from this region was used for pulpwood. At 12 million cubic feet, roundwood used for other industrial products accounted for 34 percent of the total production for the region. Saw-log production declined 16 percent to 5 million cubic feet, accounting for 14 percent of the total roundwood production for this area.

This region produced 3 percent of the State's saw logs, 1 percent of the veneer logs, 6 percent of the pulpwood, and 42 percent of the roundwood used for other industrial products. Only 1 of the 30 counties in this area produced more than 5 million cubic feet (table 20). In 1993, 28 primary wood-using plants were operating in Central-South Florida, 8 less than in 1991; 15 sawmills, 1 veneer mill, 2 pole or post mills, and 10 other miscellaneous mills. No pulpmills were operating in this region.

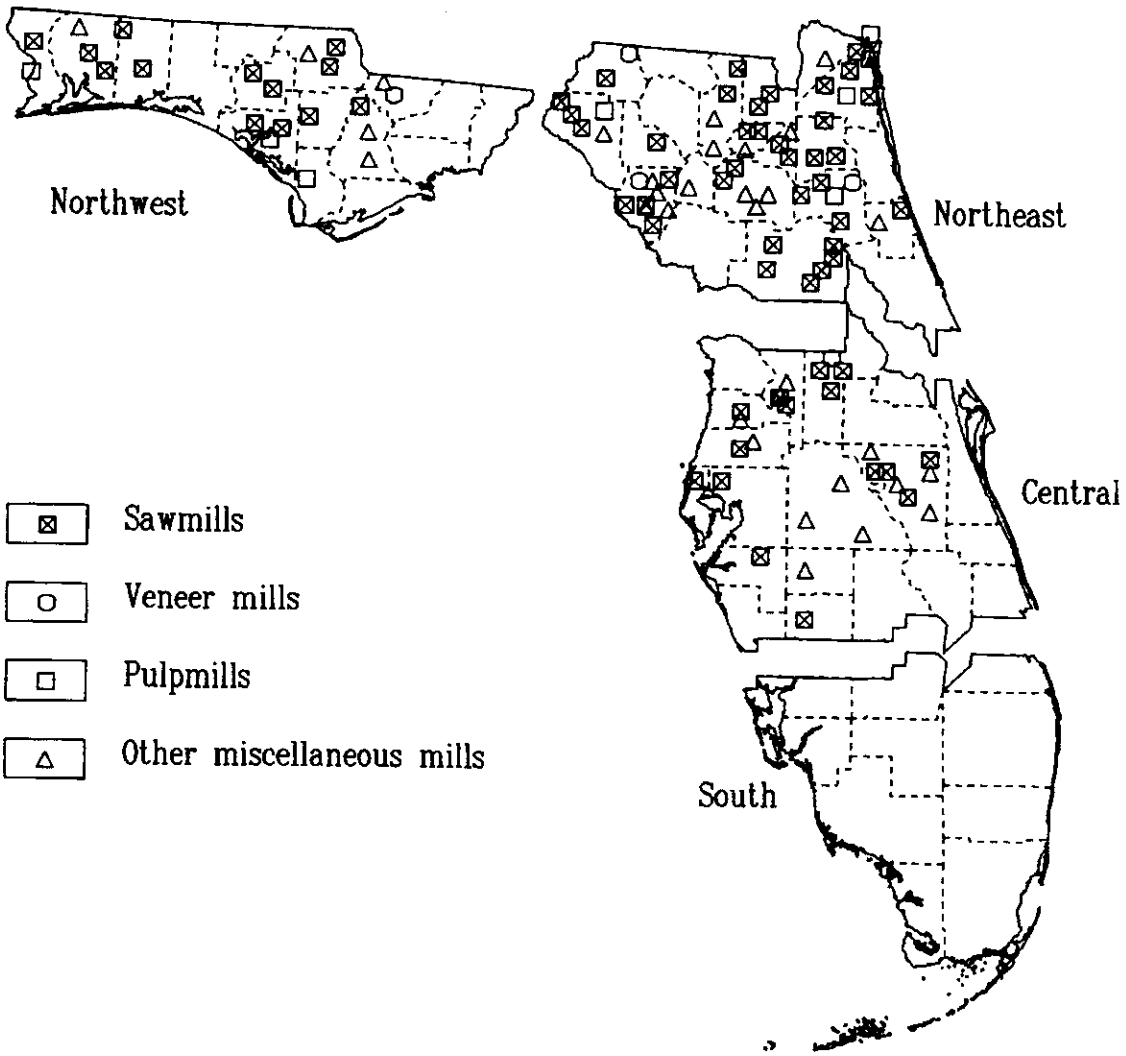


Figure 11—Primary wood-using mills by regions.

Literature Cited

American Papermaker. 1992. Southern mills by state. 55(12):52.

Howell, Michael. 1993. Southern pulpwood production, 1991. Resour. Bull. SE-137. Asheville, NC: U.S. Department of Agriculture, Forest Service, South eastern Forest Experiment Station. 25 p.

Howell, Michael. 1994. Historical trends of timber product output in the Southeast. Resour. Bull. SE-150. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 23 p.

Howell, Michael; Hartsell, Andrew J. 1995. Southern pulpwood production, 1993. Resour. Bull. SE-152. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 24 p.

Definitions

Board feet. 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).

Composite panels. Consists of structural panels (oriented strand board or waferboard), particleboard (industrial underlayment, thin panelboard).

Consumption. The quantity of a commodity, such as pulpwood, utilized.

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.

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, poles, pilings, veneer logs, pulpwood, posts, or cooperage logs.

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

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

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

Coarse residues. Suitable for chipping such as slabs, edgings, trim, veneer cores, and ends.

Fine residues. Not suitable for chipping such as sawdust, shavings, and veneer clippings.

Primary wood-using plants. Industries that receive roundwood or chips from roundwood for the manufacture of products such as veneer, pulp, and lumber.

Production. The total volume of roundwood harvested from land within the specified State, regardless of where consumed. Production is the sum of timber harvested and used within the State, plus all roundwood exported to other U.S. 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 U.S. States.

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

Roundwood. Logs, bolts, or other round sections cut from trees for industrial manufacture or consumer use.

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

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

Saw log. A log meeting minimum standards of diameter, length, and defect, including logs at least 8 feet long, sound and straight, and with minimum diameter inside bark of 6 inches for softwoods and 8 inches for hardwoods.

Standard cord. A unit measure applied to roundwood, usually bolts or split wood. It relates to a stack of wood 4 feet high, 4 feet wide, and 8 feet long—encompassing 128 cubic feet of wood, bark, and air space. In Florida this usually translates to 74.8 cubic feet of solid wood for pulpwood, since pulpwood is more uniform.

Timber products output. Roundwood production in an area's forests (equals roundwood product drain).

Timber removals. The merchantable volume of trees removed from the timberland inventory by harvesting, cultural operations such as stand improvement, land clearing, or changes in land use.

Veneer log. Logs to be used in the production of plywood, finished panels, or veneer sheets, both rotary cut and sliced.

Conversion Factors[a]

Saw Logs	
Softwood	0.19305 cubic foot = 1 board foot 5.18 board feet = 1 cubic foot
Hardwood	0.17094 cubic foot = 1 board foot 5.85 board feet = 1 cubic foot
Veneer Logs	
Softwood	0.19608 cubic foot = 1 board foot 5.10 board feet = 1 cubic foot
Hardwood	0.16806 cubic foot = 1 board foot 5.95 board feet = 1 cubic foot
Pulpwood[b]	
Softwood	74.00 cubic feet/cord
Hardwood	79.00 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.

Table 1—Output of industrial products, by product, and species group, Florida, 1991 and 1993

Product and species group	Year 1991	Year 1993	Change	Percent change
		Thousand cubic feet		
Saw logs				
Softwood	153,825	148,044	-5,781	-3.8
Hardwood	2,312	4,365	2,053	88.8
Total	156,137	152,409	-3,728	-2.4
Veneer logs				
Softwood	19,698	28,478	8,780	44.6
Hardwood	1,616	1,559	-57	-3.5
Total	21,314	30,037	8,723	40.9
Pulpwood[a]				
Softwood	298,454	262,372	-36,082	-12.1
Hardwood	30,936	41,384	10,448	33.8
Total	329,390	303,756	-25,634	-7.8
Composite panels				
Softwood	291	360	69	23.7
Hardwood	776	2,581	1,805	232.6
Total	1,067	2,941	1,874	175.6
Other industrial				
Softwood	24,609	28,795	4,186	17.0
Hardwood	395	336	-59	-14.9
Total	25,004	29,131	4,127	16.5
All industrial				
Softwood	496,877	468,049	-28,828	-5.8
Hardwood	36,035	50,225	14,190	39.4
Total	532,912	518,274	-14,638	-2.7
Byproduct output				
Softwood	165,607	162,198	-3,409	-2.1
Hardwood	8,139	10,337	2,198	27.0
Total	173,746	172,535	-1,211	-0.7
Total output				
Softwood	662,484	630,247	-32,237	-4.9
Hardwood	44,174	60,562	16,388	37.1
Total	706,658	690,809	-15,849	-2.2

-- = negligible.

[a] Includes roundwood that was delivered to non-pulpmills and then chipped and sold to pulpmills (12,040,000 cubic feet in 1991 and 12,336,000 cubic feet in 1993).

Table 2—Roundwood receipts, by product and species group, Florida, 1991 and 1993

Product and species group	Year		Change	Percent change
	1991	1993		
	Thousand cubic feet			
Saw logs				
Softwood	154,191	148,547	-5,644	-3.7
Hardwood	2,317	3,979	1,662	71.7
Total	156,508	152,526	-3,982	-2.5
Veneer logs				
Softwood	27,580	33,514	5,934	21.5
Hardwood	905	1,486	581	64.2
Total	28,485	35,000	6,515	22.9
Pulpwood[a]				
Softwood	348,091	289,359	-58,732	-16.9
Hardwood	43,394	45,637	2,243	5.2
Total	391,485	334,996	-56,489	-14.4
Composite panels				
Softwood	0	0	0	0
Hardwood	0	0	0	0
Total	0	0	0	0
Other industrial				
Softwood	25,799	24,758	-1,041	-4.0
Hardwood	395	341	-54	-13.7
Total	26,194	25,099	-1,095	-4.2
Total output				
Softwood	555,661	496,178	-59,483	-10.7
Hardwood	47,011	51,443	4,432	9.4
Total	602,672	547,621	-55,051	9.1

-- = negligible.

[a] Includes roundwood that was delivered to non-pulpmills and then chipped and sold to pulpmills (12,040,000 cubic feet in 1991 and 12,336,000 cubic feet in 1993).

Table 3—Number of primary wood-using plants, by industry, Florida, 1977-1993

Industry	Year							
	1977	1979	1983	1986	1987	1989	1991	1993
Sawmills	104	112	108	106	97	85	71	64
Veneer mills	10	10	10	6	5	5	5	5
Pulpmills	10	10	9	9	10	9	9	8
Composite panel mills	0	0	0	0	0	0	0	0
Other mills	16	16	16	30	31	28	30	32
All plants	140	148	143	151	143	127	115	109

Table 4—Roundwood receipts, by sawmill size, Florida, 1991 and 1993

Sawmill size class[a] (*million board feet*)	1991			1993		
	Number of mills	Thousand board feet	Percent of volume	Number of mills	Thousand board feet	Percent of volume
< 1.0	36	9,703	1	30	6,533	1
1.0 - 4.99	14	31,109	4	12	29,125	4
5.0 - 9.99	4	30,801	4	4	24,550	3
10.0 - 49.99	11	271,431	33	11	238,585	30
> 50	6	470,327	58	7	494,152	62
Total	71	813,371	100	64	792,945	100

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

Table 5—Roundwood receipts, by species and type of mill, Florida, 1993

Species	All mills	Type of mill					
		Sawmills	Veneer mills		OSB and panels[a]	Pulpmills[b]	Other mills
			Pine plywood	Other veneer			
	Thousand cubic feet						
Softwood							
Yellow pine	179,152	138,974	33,514	0	0	NA	6,664
White cedar	51	51	0	0	0	NA	0
Cypress	27,616	9,522	0	0	0	NA	18,094
Unclassified	289,359	0	0	0	0	289,359	0
Total softwoods	496,178	148,547	33,514	0	0	289,359	24,758
Hardwood							
Soft hardwoods	3,085	1,599	310	1,176	0	NA	0
Hard hardwoods	2,721	2,380	0	0	0	NA	341
Unclassified	45,637	0	0	0	0	45,637	0
Total hardwoods	51,443	3,979	310	1,176	0	45,637	341
All species	547,621	152,526	33,824	1,176	0	334,996	25,099

NA = not applicable.

[a] OSB = oriented strand board.

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

Table 6—Industrial roundwood movement, by year and species group, Florida, 1991 and 1993

Year	Production	Exported to other States	Retained	Imported from other States	Receipts
	Thousand cubic feet				
			SOFTWOOD		
1991	496,877	44,813	452,064	103,597	555,661
1993	468,049	57,651	410,398	85,780	496,178
			HARDWOOD		
1991	36,035	10,723	25,312	21,699	47,011
1993	50,225	14,963	35,262	16,181	51,443
			ALL SPECIES		
1991	532,912	55,536	477,376	125,296	602,672
1993	518,274	72,614	445,660	101,961	547,621

Table 7—Industrial roundwood movement, by product and species group, Florida, 1993

Year	Production	Exported to other States	Retained	Imported from other States	Receipts
			Thousand cubic feet		
Saw logs					
Softwood	148,044	19,394	128,650	19,897	148,547
Hardwood	4,365	438	3,927	52	3,979
Total	152,409	19,832	132,577	19,949	152,526
Veneer logs					
Softwood	28,478	5,719	22,759	10,755	33,514
Hardwood	1,559	208	1,351	135	1,486
Total	30,037	5,927	24,110	10,890	35,000
Pulpwood[a]					
Softwood	262,372	26,287	236,085	53,274	289,359
Hardwood	41,384	11,736	29,648	15,989	45,637
Total	303,756	38,023	265,733	69,263	334,996
Composite panels					
Softwood	360	360	0	0	0
Hardwood	2,581	2,581	0	0	0
Total	2,941	2,941	0	0	0
Other industrial					
Softwood	28,795	5,891	22,904	1,854	24,758
Hardwood	336	0	336	5	341
Total	29,131	5,891	23,240	1,859	25,099
All products					
Softwood	468,049	57,651	410,398	85,780	496,178
Hardwood	50,225	14,963	35,262	16,181	51,443
Total	518,274	72,614	445,660	101,961	547,621

[a] Includes roundwood chipped.

Table 8—Saw-log volume, by destination, source, and species group, Florida 1993

Destination and source	All species	Species group	
		Softwood	Hardwood
		Thousand cubic feet	
Florida (retained)	132,577	128,650	3,927
Exports to:			
Alabama	8,769	8,769	0
Georgia	11,063	10,625	438
Total	19,832	19,394	438
Imports from:			
Alabama	9,379	9,327	52
Georgia	10,448	10,448	0
North Carolina	61	61	0
South Carolina	61	61	0
Total	19,949	19,897	52

Table 9—Veneer volume, by destination, source, and species group, Florida 1993

Destination and source	All species	Species group	
		Softwood	Hardwood
		Thousand cubic feet	
Florida (retained)	24,110	22,759	1,351
Exports to:			
Alabama	2,234	2,234	0
Georgia	3,693	3,485	208
Total	5,927	5,719	208
Imports from:			
Alabama	225	225	0
Georgia	10,665	10,530	135
Total	10,890	10,755	135

Table 10—Pulpwood volume, by destination, source, and species group, Florida 1993[a]

Destination and source	All species	Species group	
		Softwood	Hardwood
		Thousand cubic feet	
Florida (retained)	265,733	236,085	29,648
Exports to:			
Alabama	16,142	5,993	10,149
Georgia	21,881	20,294	1,587
Total	38,023	26,287	11,736
Imports from:			
Alabama	26,064	15,950	10,114
Georgia	42,167	36,357	5,810
Mississippi	79	14	65
South Carolina	953	953	0
Total	69,263	53,274	15,989

[a] Includes roundwood chipped that was delivered to non-pulpmills and then chipped and sold to pulpmills.

Table 11—Composite panel volume, by destination, source, and species group, Florida, 1993

Destination and source	All species	Species group	
		Softwood	Hardwood
		Thousand cubic feet	
Florida (retained)	0	0	0
Exports to:			
Georgia	2,941	360	2,581
Total	2,941	360	2,581

Table 12—Other industrial volume, by destination, source, and species group, Florida, 1993[a]

Destination and source	All species	Species group	
		Softwood	Hardwood
		Thousand cubic feet	
Florida (retained)	23,240	22,904	336
Exports to:			
Alabama	640	640	0
Georgia	5,251	5,251	0
Total	5,891	5,891	0
Imports from:			
Alabama	733	733	0
Georgia	1,088	1,083	5
North Carolina	19	19	0
South Carolina	19	19	0
Total	1,859	1,854	5

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

Table 13—Primary mill residue volume, by roundwood type, species group, and residue type, Florida, 1993

Roundwood type and species group	All types	Residue type			
		Bark	Coarse	Sawdust	Shavings
		Thousand cubic feet			
Saw logs					
Softwood	93,105	13,243	43,762	22,664	13,436
Hardwood	2,655	471	1,277	866	41
Total	95,760	13,714	45,039	23,530	13,477
Veneer logs					
Softwood	19,601	2,942	8,640	8,019	0
Hardwood	1,131	180	487	464	0
Total	20,732	3,122	9,127	8,483	0
Pulpwood					
Softwood	31,433	31,433	0	0	0
Hardwood	6,349	6,349	0	0	0
Total	37,782	37,782	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	18,167	6,989	9,008	2,170	0
Hardwood	202	45	113	44	0
Total	18,369	7,034	9,121	2,214	0
Total					
Softwood	162,306	54,607	61,410	32,853	13,436
Hardwood	10,337	7,045	1,877	1,374	41
Total	172,643	61,652	63,287	34,227	13,477

[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, 1991 and 1993

Product and species group	All types		Bark		Coarse		Sawdust		Shavings	
	1991	1993	1991	1993	1991	1993	1991	1993	1991	1993
	Thousand cubic feet									
Fiber products										
Softwood	51,533	50,812	3,052	0	46,865	47,427	0	1,562	1,616	1,823
Hardwood	1,224	1,162	695	0	529	1,162	0			
Total	52,757	51,974	3,747	0	47,394	48,589	0	1,562	1,616	1,823
Particleboard										
Softwood	3,956	2,351	79	0	736	0	160	271	2,981	2,080
Hardwood	0	0	0	0	0	0	0	0	0	0
Total	3,956	2,351	79	0	736	0	160	271	2,981	2,080
Composite panels										
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	1,465	1,966	1	0	1,464	1,966	0	0	0	0
Hardwood	0	0	0	0	0	0	0	0	0	0
Total	1,465	1,966	1	0	1,464	1,966	0	0	0	0
Fuel										
Softwood	79,298	85,392	47,996	48,691	2,960	3,949	23,676	25,780	4,666	6,972
Hardwood	5,939	8,283	5,246	6,914	235	360	419	970	39	39
Total	85,237	93,675	53,242	55,605	3,195	4,309	24,095	26,750	4,705	7,011
Miscellaneous										
Softwood	29,355	21,677	9,955	5,887	7,999	8,004	7,911	5,225	3,490	2,561
Hardwood	976	892	152	131	404	355	419	404	1	2
Total	30,331	22,569	10,107	6,018	8,403	8,359	8,330	5,629	3,491	2,563
Not used										
Softwood	1,757	108	590	29	1,164	64	3	15	0	0
Hardwood	29	0	1	0	27	0	1	0	0	0
Total	1,786	108	591	29	1,191	64	4	15	0	0
All products										
Softwood	167,364	162,306	61,673	54,607	61,188	61,410	31,750	32,853	12,753	13,436
Hardwood	8,168	10,337	6,094	7,045	1,195	1,877	839	1,374	40	41
Total	175,532	172,643	67,767	61,652	62,383	63,287	32,589	34,227	12,793	13,477

Table 15—Roundwood timber products output, by product and species group, Northeast Florida, 1991 and 1993

Product and species group	Year		Change	Percent change
	1991	1993		
	Thousand cubic feet			
Saw logs				
Softwood	104,436	95,837	-8,599	-8.2
Hardwood	1,530	1,571	41	2.7
Total	105,966	97,408	-8,558	-8.1
Veneer logs				
Softwood	16,719	18,956	2,237	13.4
Hardwood	270	877	607	224.8
Total	16,989	19,833	2,844	16.7
Pulpwood[a]				
Softwood	202,360	159,214	-43,146	-21.3
Hardwood	15,952	21,570	5,618	35.2
Total	218,312	180,784	-37,528	-17.2
Composite panels				
Softwood	192	201	9	4.7
Hardwood	512	2,013	1,501	293.2
Total	704	2,214	1,510	214.5
Other industrial				
Softwood	9,929	14,520	4,591	46.2
Hardwood	140	218	78	55.7
Total	10,069	14,738	4,669	46.4
All industrial				
Softwood	333,636	288,728	-44,908	-13.5
Hardwood	18,404	26,249	7,845	42.6
Total	352,040	314,977	-37,063	-10.5

-- = negligible.

[a] Includes roundwood that was delivered to non-pulpmills and then chipped and sold to pulpmills (10,463,000 cubic feet in 1991 and 6,589,000 cubic feet in 1993).

Table 16—Roundwood timber products output, by county, product and species group, Northeast Florida, 1993

County	All products		Saw logs		Veneer logs		Pulpwood[a]		Composite panels		Other industrial	
	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood
	Thousand cubic feet											
Alachua	15,847	1,065	3,390	60	2,231	0	10,107	932	0	0	119	73
Baker	15,103	557	6,467	0	1,115	18	7,138	539	0	0	383	0
Bradford	15,751	1,233	8,671	0	1,115	0	5,879	1,233	0	0	86	0
Clay	11,096	417	5,101	0	1,115	0	4,727	417	0	0	153	0
Columbia	19,217	1,425	7,186	1	1,115	105	9,015	622	21	697	1,880	0
Dixie	17,969	3,592	7,387	363	1,115	105	8,603	3,124	0	0	864	0
Duval	10,313	455	2,496	44	1,115	0	5,883	411	0	0	819	0
Flagler	12,478	807	4,572	0	1,115	0	5,921	807	0	0	870	0
Gilchrist	7,500	508	2,463	0	1,115	70	3,479	365	0	0	443	73
Hamilton	10,062	670	2,060	0	0	0	4,401	670	0	0	3,601	0
Lafayette	7,515	414	2,893	0	1,115	35	3,082	379	0	0	425	0
Levy	13,793	2,136	5,552	320	1,115	141	6,401	1,639	0	0	725	36
Madison	6,895	2,649	2,624	0	0	107	3,734	1,923	159	619	378	0
Marion	15,709	1,818	5,599	453	1,115	23	7,977	1,306	0	0	1,018	36
Nassau	17,076	1,436	6,255	3	0	0	9,918	1,433	0	0	903	0
Putnam	9,667	904	3,596	28	1,115	23	4,796	853	0	0	160	0
St. Johns	11,803	1,105	3,549	3	1,115	0	6,866	1,102	0	0	273	0
Suwannee	11,143	741	4,297	0	1,115	70	5,590	671	0	0	141	0
Taylor	47,724	3,297	8,665	296	0	133	38,233	2,171	21	697	805	0
Union	6,460	413	2,150	0	1,115	0	3,093	413	0	0	102	0
Volusia	5,607	607	864	0	0	47	4,371	560	0	0	372	0
All counties	288,728	26,249	95,837	1,571	18,956	877	159,214	21,570	201	2,013	14,520	218

[a] Includes roundwood that was delivered to non-pulpmills and then chipped and sold to pulpmills (5,362,000 cubic feet in 1993).

Table 17—Roundwood timber products output, by product and species group, Northwest Florida, 1991 and 1993

Product and species group	Year		Change	Percent change
	1991	1993		
	Thousand cubic feet			
Saw logs				
Softwood	43,496	47,235	3,739	8.6
Hardwood	700	2,735	2,035	290.7
Total	44,196	49,970	5,774	13.1
Veneer logs				
Softwood	2,979	9,522	6,543	219.6
Hardwood	991	327	-664	-67.0
Total	3,970	9,849	5,879	148.1
Pulpwood[a]				
Softwood	76,027	86,559	10,532	13.9
Hardwood	14,086	18,351	4,265	30.3
Total	90,113	104,910	14,797	16.4
Composite panels				
Softwood	99	159	60	60.6
Hardwood	264	568	304	115.2
Total	363	727	364	100.3
Other industrial				
Softwood	2,431	1,973	-458	-18.8
Hardwood	0	94	94	--
Total	2,431	2,067	-364	-15.0
All industrial				
Softwood	125,032	145,448	20,416	16.3
Hardwood	16,041	22,075	6,034	37.6
Total	141,073	167,523	26,450	18.7

-- = negligible.

[a] Includes roundwood that was delivered to non-pulpmills and then chipped and sold to pulpmills (1,280,000 cubic feet in 1991 and 5,362,000 cubic feet in 1993).

Table 18—Roundwood timber products output, by county, product and species group, Northwest Florida, 1993

County	All products		Saw logs		Veneer logs		Pulpwood[a]		Composite panels		Other industrial	
	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood
	Thousand cubic feet											
Bay	16,123	1,453	4,168	253	0	0	11,876	1,200	0	0	79	0
Calhoun	12,245	1,855	4,730	468	0	55	7,205	1,332	0	0	310	0
Escambia	10,063	1,271	3,929	0	1,029	0	5,096	1,271	0	0	9	0
Franklin	6,734	145	0	0	0	0	6,734	145	0	0	0	0
Gadsden	8,030	1,539	833	372	2,605	186	4,544	922	0	0	48	59
Gulf	4,976	367	1,324	331	0	0	3,606	36	0	0	46	0
Holmes	7,038	1,109	3,736	0	1,246	0	1,943	1,109	0	0	113	0
Jackson	12,904	3,115	6,684	195	2,160	0	3,691	2,920	0	0	369	0
Jefferson	5,862	1,808	2,866	267	335	43	2,492	930	159	568	10	0
Leon	5,685	2,189	1,637	259	895	43	3,143	1,867	0	0	10	20
Liberty	7,174	1,296	1,362	414	0	0	5,603	882	0	0	209	0
Okaloosa	9,232	1,236	2,357	0	0	0	6,782	1,236	0	0	93	0
Santa Rosa	18,258	1,739	3,026	0	1,029	0	13,951	1,739	0	0	252	0
Wakulla	3,620	49	1,631	0	223	0	1,623	34	0	0	143	15
Walton	10,707	683	5,656	0	0	0	4,877	683	0	0	174	0
Washington	6,797	2,221	3,296	176	0	0	3,393	2,045	0	0	108	0
All counties	145,448	22,075	47,235	2,735	9,522	327	86,559	18,351	159	568	1,973	94

[a] Includes roundwood that was delivered to non-pulpmills and then chipped and sold to pulpmills (6,589,000 cubic feet in 1993).

Table 19—Roundwood timber products output, by product and species group, Central and South Florida, 1991 and 1993

Product and species group	Year		Change	Percent change
	1991	1993		
	Thousand cubic feet			
Saw logs				
Softwood	5,893	4,972	-921	-15.6
Hardwood	82	59	-23	-28.0
Total	5,975	5,031	-944	-15.8
Veneer logs				
Softwood	0	0	0	0
Hardwood	355	355	0	0
Total	355	355	0	0
Pulpwood[a]				
Softwood	20,067	16,599	-3,468	-17.3
Hardwood	898	1,463	565	62.9
Total	20,965	18,062	-2,903	-13.8
Composite panels				
Softwood	0	0	0	0
Hardwood	0	0	0	0
Total	0	0	0	0
Other industrial				
Softwood	12,249	12,302	53	0.4
Hardwood	255	24	-231	-90.6
Total	12,504	12,326	-178	-1.4
All industrial				
Softwood	38,209	33,873	-4,336	-11.3
Hardwood	1,590	1,901	311	19.6
Total	39,799	35,774	-4,025	-10.1

-- = negligible.

[a] Includes roundwood that was delivered to non-pulpmills and then chipped and sold to pulpmills (297,000 cubic feet in 1991 and 385,000 cubic feet in 1993).

Table 20—Roundwood timber products output, by county, product and species group, Central and South Florida, 1993

County	All products		Saw logs		Veneer logs		Pulpwood[a]		Composite panels		Other industrial	
	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood
	Thousand cubic feet											
Brevard	1,010	0	2	0	0	0	1,008	0	0	0	0	0
Broward	0	0	0	0	0	0	0	0	0	0	0	0
Charlotte	88	0	0	0	0	0	88	0	0	0	0	0
Citrus	1,654	488	78	0	0	23	1,279	441	0	0	297	24
Collier	19	0	5	0	0	0	14	0	0	0	0	0
Dade	0	0	0	0	0	0	0	0	0	0	0	0
DeSoto	1,522	0	62	0	0	0	1,063	0	0	0	397	0
Glades	2,866	0	0	0	0	0	2,866	0	0	0	0	0
Hardee	577	0	0	0	0	0	495	0	0	0	82	0
Hendry	921	0	0	0	0	0	921	0	0	0	0	0
Hernando	1,710	313	553	59	0	0	1,103	254	0	0	54	0
Highlands	946	0	0	0	0	0	329	0	0	0	617	0
Hillsborough	450	172	105	0	0	145	262	27	0	0	83	0
Indian River	164	0	0	0	0	0	164	0	0	0	0	0
Lake	2,451	168	426	0	0	47	1,234	121	0	0	791	0
Lee	96	0	0	0	0	0	96	0	0	0	0	0
Manatee	26	0	16	0	0	0	10	0	0	0	0	0
Martin	2	0	0	0	0	0	2	0	0	0	0	0
Monroe	0	0	0	0	0	0	0	0	0	0	0	0
Okeechobee	428	0	0	0	0	0	0	0	0	0	428	0
Orange	322	0	31	0	0	0	291	0	0	0	0	0
Osceola	7,289	33	586	0	0	28	272	5	0	0	6,431	0
Palm Beach	0	0	0	0	0	0	0	0	0	0	0	0
Pasco	3,291	286	1,040	0	0	98	895	188	0	0	1,356	0
Pinellas	1	0	0	0	0	0	1	0	0	0	0	0
Polk	2,844	0	1,042	0	0	0	533	0	0	0	1,269	0
St. Lucie	130	0	0	0	0	0	130	0	0	0	0	0
Sarasota	768	0	412	0	0	0	356	0	0	0	0	0
Seminole	1,214	0	89	0	0	0	1,034	0	0	0	91	0
Sumter	3,084	441	525	0	0	14	2,153	427	0	0	406	0
All counties	33,873	1,901	4,972	59	0	355	16,599	1,463	0	0	12,302	24

[a] Includes roundwood that was delivered to non-pulpmills and then chipped and sold to pulpmills (385,000 cubic feet in 1993).

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

USDA prohibits discrimination on the basis of race, color, national origin, sex, age, religion, or handicapping condition. Any person who believes he or she has been discriminated against in any USDA-related activity should immediately contact the Secretary of Agriculture, Washington, DC.

Howell, Michael. 1995. Florida's timber industry: an assessment of timber product output and use, 1993. Resour. Bull. SE-153. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 29 p.

In 1993, volume of roundwood removed from Florida's forests totaled 518 million cubic feet, 3 percent less than in 1991. Mill byproducts generated from primary manufacturers declined 2 percent to 173 million cubic feet. Almost all plant residues were used, primarily for fuel and fiber products. Pulpwood was the leading roundwood product at 304 million cubic feet; saw logs ranked second at 152 million cubic feet; veneer logs were third with 30 million cubic feet. Total receipts declined 9 percent to 548 million cubic feet. The number of primary processing plants declined from 115 in 1991 to 109 in 1993.

KEYWORDS: Roundwood, residues, pulpwood, saw logs, veneer logs, wood movement.

Howell, Michael. 1995. Florida's timber industry: an assessment of timber product output and use, 1993. Resour. Bull. SE-153. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 29 p.

In 1993, volume of roundwood removed from Florida's forests totaled 518 million cubic feet, 3 percent less than in 1991. Mill byproducts generated from primary manufacturers declined 2 percent to 173 million cubic feet. Almost all plant residues were used, primarily for fuel and fiber products. Pulpwood was the leading roundwood product at 304 million cubic feet; saw logs ranked second at 152 million cubic feet; veneer logs were third with 30 million cubic feet. Total receipts declined 9 percent to 548 million cubic feet. The number of primary processing plants declined from 115 in 1991 to 109 in 1993.

KEYWORDS: Roundwood, residues, pulpwood, saw logs, veneer logs, wood movement.

Southern Research Station

Established 1921

The Southern Research Station, headquartered in Asheville, North Carolina, is one of the seven regional Stations and the Forest Products Laboratory that make up the Forest Service research organization.

RESEARCH MISSION:

To acquire the knowledge, develop the technology, and disseminate the research findings required to manage the Southern forest resources in ways that satisfy demands of goods and services while maintaining a quality environment.