

United States
Department of
Agriculture

Forest Service

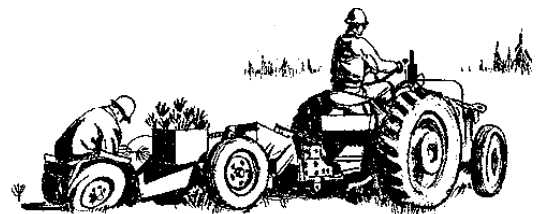
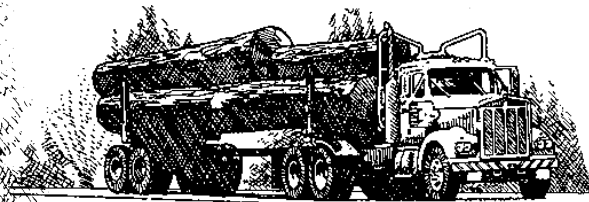
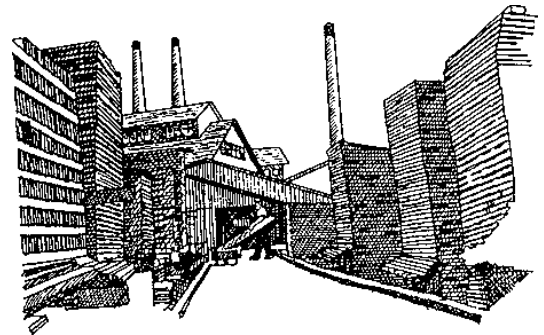
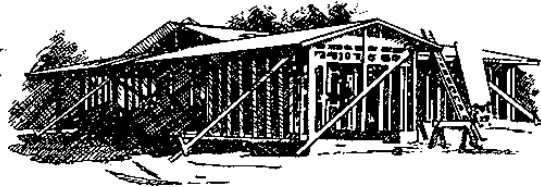


Southern Research
Station

Resource Bulletin
SRS-43

Florida's Timber Industry— An Assessment of Timber Product Output and Use, 1997

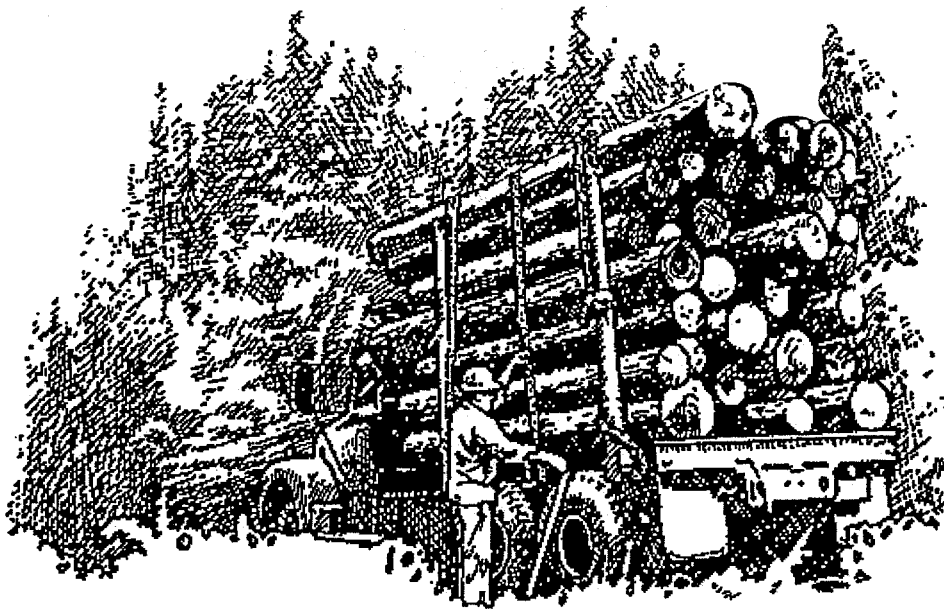
Michael Howell and Eric Ford



The Authors:

Michael Howell is a Resource Analyst with the Forest Inventory and Monitoring Research Work Unit, Southern Research Station, U.S. Department of Agriculture, Forest Service, Starkville, MS 39760.

Eric Ford is a Forester with the Florida Division of Forestry, Tallahassee, FL 32399-1650.



September 1999

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

Foreword

This report contains the findings of a 1997 canvass of all primary wood-using plants in Florida and presents changes in product output and residue use since 1995. It complements the Forest Inventory and Monitoring (FIM) 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 1997 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 1998 to obtain information for 1997. 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 67 percent of mills operating in 1997; 8 pulpmills, 3 of the 5 veneer mills, 18 of the 30 mills manufacturing other industrial products, and 39 of the 58 sawmills. These mills accounted for 89 percent of the 1997 mill receipts.

For inventory and reporting purposes, FIM 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."



Dear Customer:

In addition to the timber product assessment reports generated for each of the 13 Southern States, the Timber Product Output (TPO) Database Retrieval System is available through the Starkville, MS, web site. That address is:

<http://www.srsfia.usfs.msstate.edu/rpa/tpo>

The database is well documented and very user friendly. This retrieval system allows you, the user, to select the TPO variables of interest and generate a standard set of timber removals and mill residue tables for the specified resource area or areas. The system has been logically divided into four sections to assist you in developing a database retrieval. In section one you will be asked to define the resource area, section two customizes the removals data for the area, section three customizes the mill residue data, and in section four you will generate the tables for the resource area you have defined. In each section you will be asked to supply specific inputs that will serve to customize your database retrieval.

There are four options available for defining the geographic area of interest. Each option provides an increasing level of detail. The area can be defined by region, subregion, State, or county level. Select the option that best suits the level of detail required to meet your needs. If you select "county" as your option, be aware that some counties may have been combined due to data sensitivity.

If additional explanation or clarification is needed, feel free to contact:

Tony Johnson
Southern Research Station
USDA Forest Service
P.O. Box 2680
Asheville, NC 28802
(828) 257-4836

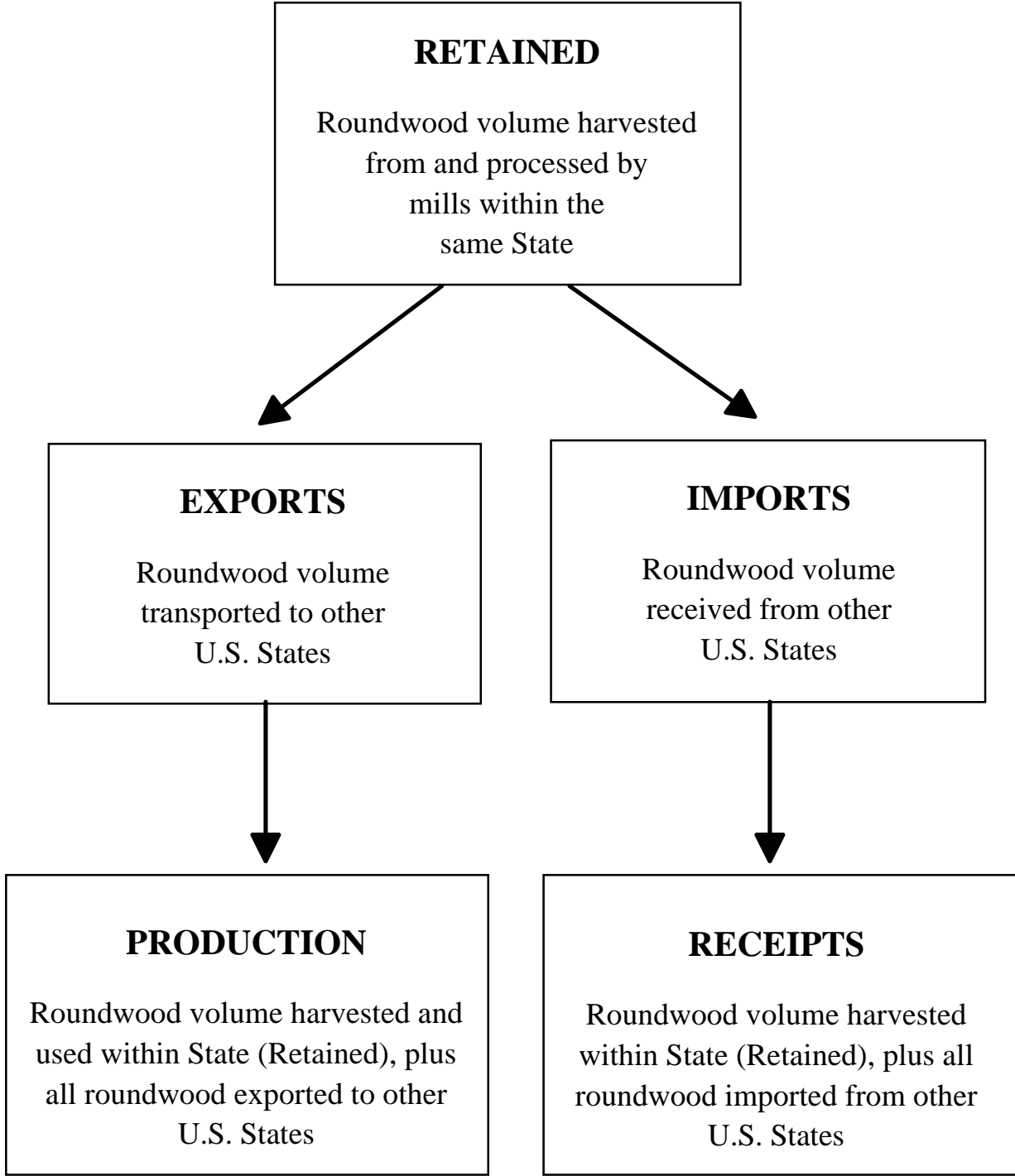
Carolyn Steppleton
Southern Research Station
USDA Forest Service
P.O. Box 2680
Asheville, NC 28802
(828) 257-4848

Contents

	<i>Page</i>
Output of Industrial Timber Products	1
Plant Byproducts	3
Regional Trends	5
Total Roundwood Output	7
References	8
Definitions	9
Conversion Factors	10
Index of Tables	11
Tables 1-24 ^a	13

^a All tables in this report are available in Microsoft® Excel workbook files. Upon request, these files will be supplied on 3½- or 5¼-inch diskettes.

The use of trade or firm names in this publication is for reader information and does not imply endorsement by the U.S. Department of Agriculture of any product or service.



Production = Retained + Exports

Receipts = Retained + Imports

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

Florida's Timber Industry— An Assessment of Timber Product Output and Use, 1997

Michael Howell and Eric Ford

Output of Industrial Timber Products

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

- Between 1995 and 1997, the combined industrial timber products output (TPO) from roundwood and plant byproducts declined slightly from 689 to 679 million cubic feet.
- Timber product output from roundwood was down 10 million cubic feet or 2 percent, while output of plant byproducts dropped 300 thousand cubic feet.
- Output of softwood roundwood products was down 2 percent to 468 million cubic feet, while hardwood roundwood products decreased 3 percent to 50 million cubic feet (fig. 2).
- Pulpwood and saw logs were the principal roundwood products in 1997. Combined output of these products totaled more than 449 million cubic feet and accounted for 87 percent of Florida's total roundwood output (fig. 3).
- Total receipts at Florida mills, which included roundwood harvested and retained in the State and roundwood imported from other States, declined 6 percent to 532 million cubic feet. At the same time, the number of primary roundwood-using plants in Florida declined from 113 in 1995 to 101 in 1997.

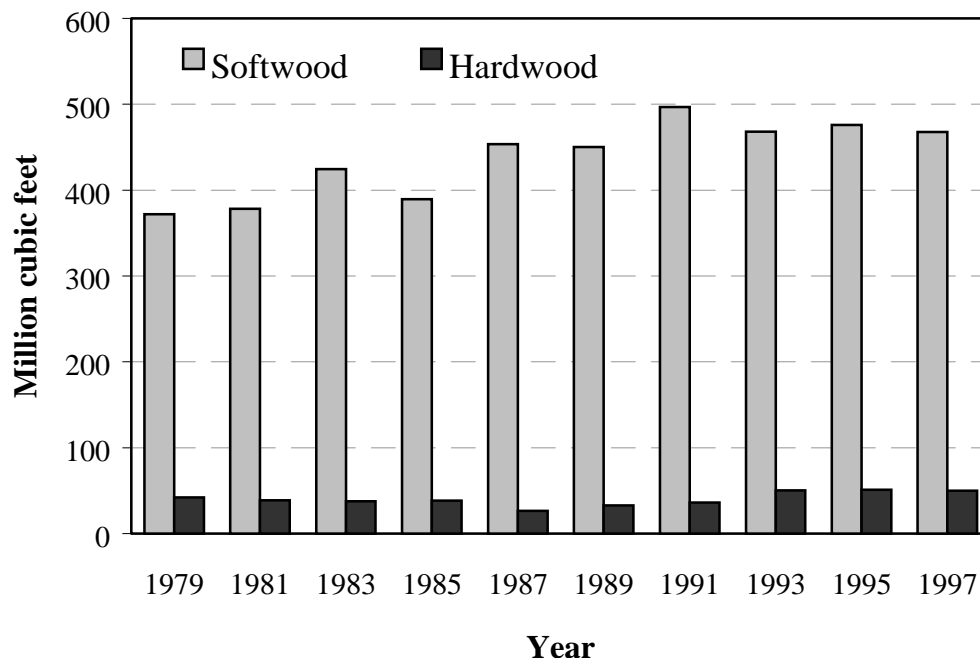


Figure 2—Roundwood production for all products by species group and year (see page 8 for references for individual years).

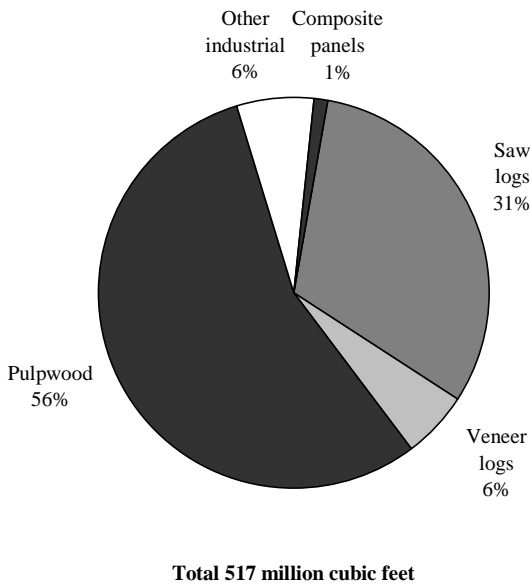


Figure 3—Roundwood production by type of product, 1997.

Pulpwood

- Total pulpwood production, including chipped roundwood, was down 34 million cubic feet to 288 million cubic feet (4.0 million cords) but still accounted for 56 percent of the State’s total roundwood TPO. Softwood output was down 10 percent to 252 million cubic feet; hardwood output declined 11 percent to 36 million cubic feet (fig. 4).

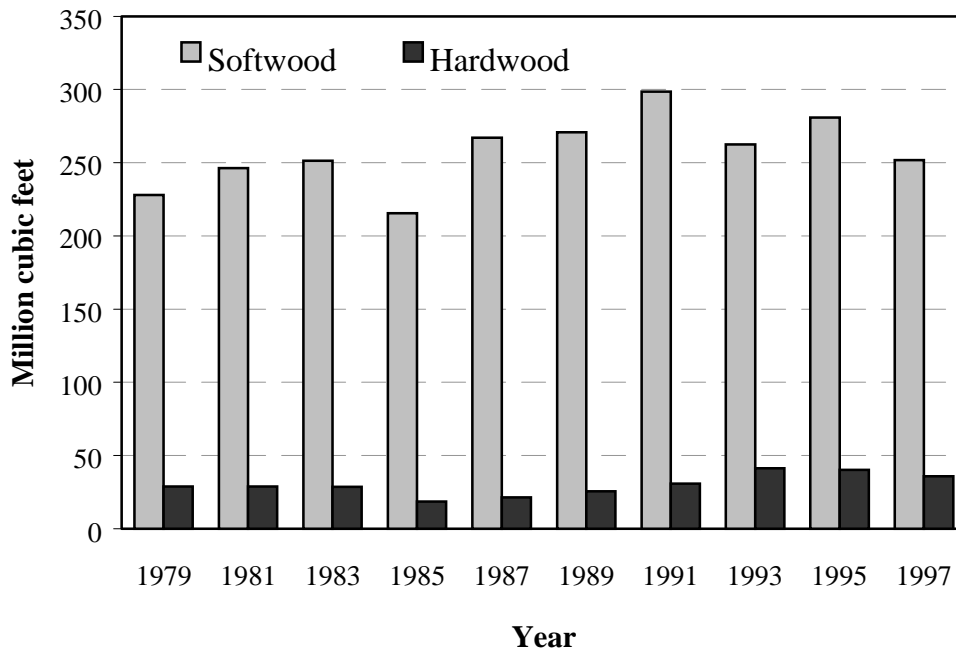


Figure 4—Roundwood pulpwood production by species group and year (see page 8 for references for individual years).

- Eight pulpmills were operating and receiving roundwood in Florida in 1997, the same as in 1995. Total pulpwood receipts for these mills decreased 39 thousand cubic feet to 322 million cubic feet, accounting for 61 percent of total receipts for all mills.
- Eighty-three percent of roundwood cut for pulpwood was retained for processing at Florida pulpmills. Roundwood pulpwood accounted for 52 percent of total known exports and 77 percent of total imports. Roundwood pulpwood imports amounted to 83 million cubic feet, 35 million cubic feet more than was exported.

Saw Logs

- Saw logs accounted for 31 percent of the State’s total roundwood products. Output of softwood saw logs increased 7 percent to 157 million cubic feet (821 million board feet), while that of hardwood saw logs decreased 17 percent to 5 million cubic feet (30 million board feet) (fig. 5).
- Florida currently has 58 sawmills, a loss of 10 mills since 1995. Total saw-log receipts increased 3 million cubic feet to 151 million cubic feet. Softwood saw-log receipts were up 3 percent to 146 million cubic feet while those of hardwoods decreased 24 percent to 5 million cubic feet. Of the 58 mills currently operating, 50 percent had receipts less than 1 million board feet. Twenty-nine percent (17 mills) had

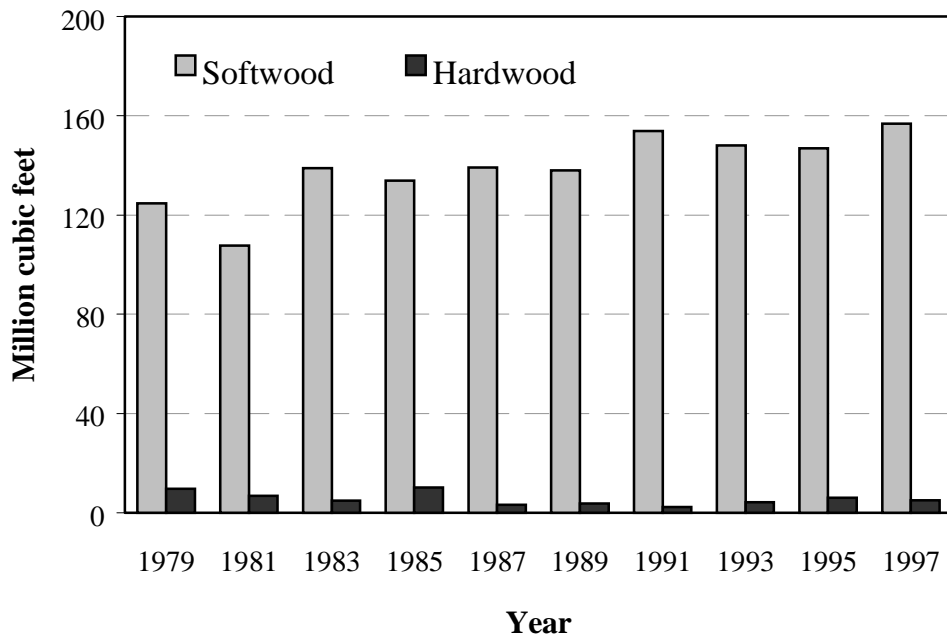


Figure 5—Roundwood saw-log production by species group and year (see page 8 for references for individual years).

receipts greater than 10 million board feet and accounted for 93 percent of saw-log receipts.

- Florida retained 85 percent of its saw-log production for domestic manufacture; saw-log exports exceeded imports by more than 10 million cubic feet in 1997.

Veneer Logs

- Output of veneer logs in 1997 totaled 30 million cubic feet, and accounted for 6 percent of the State's total roundwood TPO volume. Softwood veneer production increased 16 percent to 28 million cubic feet (164 million board feet), while output of hardwood veneer logs declined 14 percent to 1.6 million cubic feet (10 million board feet) (fig. 6).
- The number of veneer mills operating in Florida remained at five. Receipts of both softwood and hardwood veneer logs declined 2 percent to 32 million cubic feet. Softwood receipts were down 1 percent to 31 million cubic feet, while hardwood receipts were down 7 percent to 1.4 million cubic feet.
- Florida retained 77 percent of its veneer-log production for processing at domestic veneer mills. Imports amounted to 9 million cubic feet, and exports totaled 7 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, increased 33 percent to 32 million cubic feet. Softwood made up 97 percent of the other industrial product volume (fig. 7).
- Between 1995 and 1997, the number of plants producing other industrial products declined from 32 to 30. At the same time, combined receipts of both softwood and hardwood other industrial products increased 17 percent to 26 million cubic feet.
- Florida was a net exporter of roundwood used for other industrial products; all of the 7 million cubic feet exported was softwood. Imports amounted to 1.5 million cubic feet.

Plant Byproducts

- In 1997, processing of primary products in Florida mills generated 162 million cubic feet of wood and bark residues. Coarse residues from all primary products amounted to 61 million cubic feet, and bark volume totaled 57 million cubic feet. Sawdust and shavings made up 27 percent of total residues, or 44 million cubic feet (fig. 8).

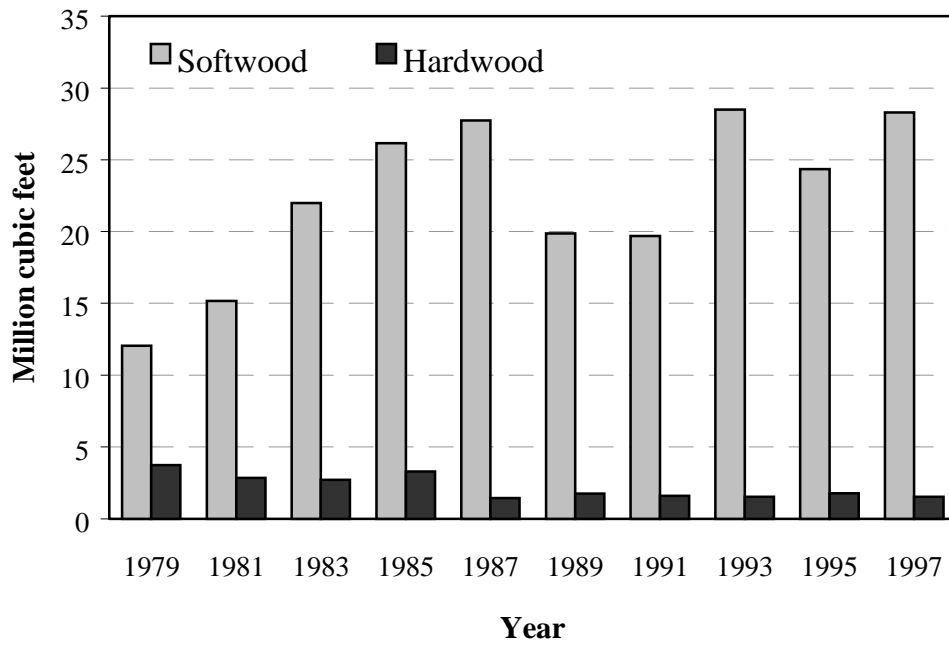


Figure 6—Roundwood veneer-log production by species group and year (see page 8 for references for individual years).

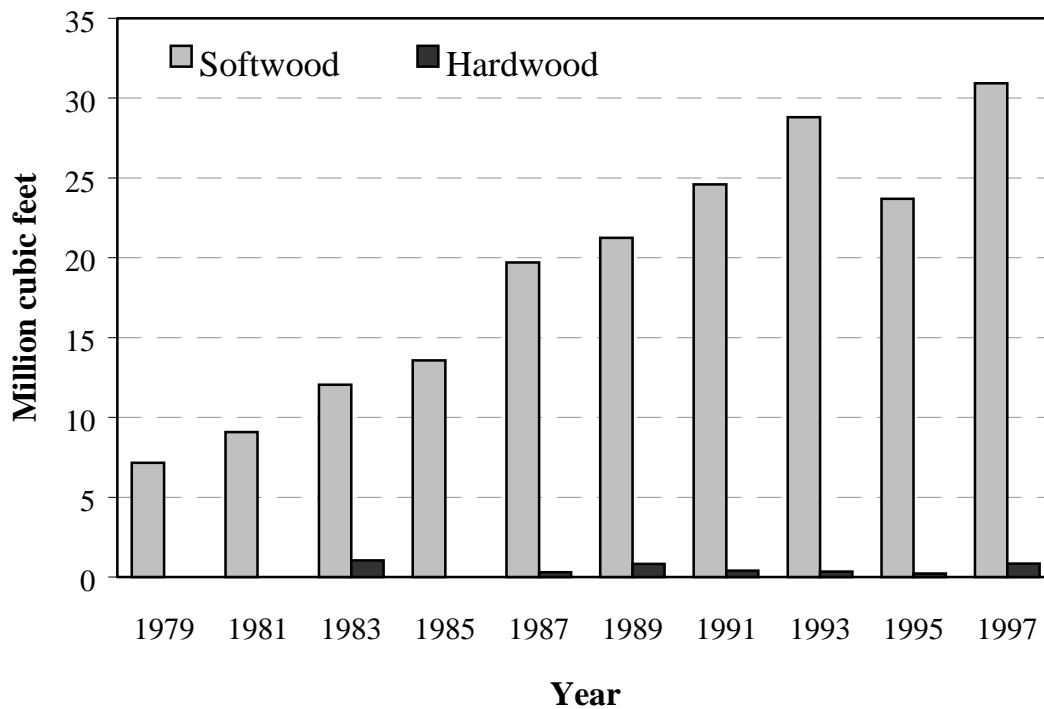


Figure 7—Roundwood production for other industrial products by species group and year (see page 8 for references for individual years).

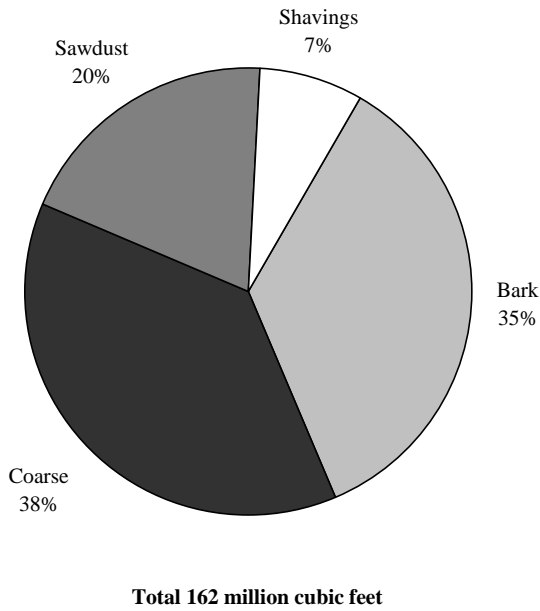


Figure 8—Primary mill residue by residue type, 1997.

- Virtually all residues were used for product manufacture (fig. 9). Forty-seven million cubic feet, or 76 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 74 percent of the sawdust and shavings was used for industrial fuel.

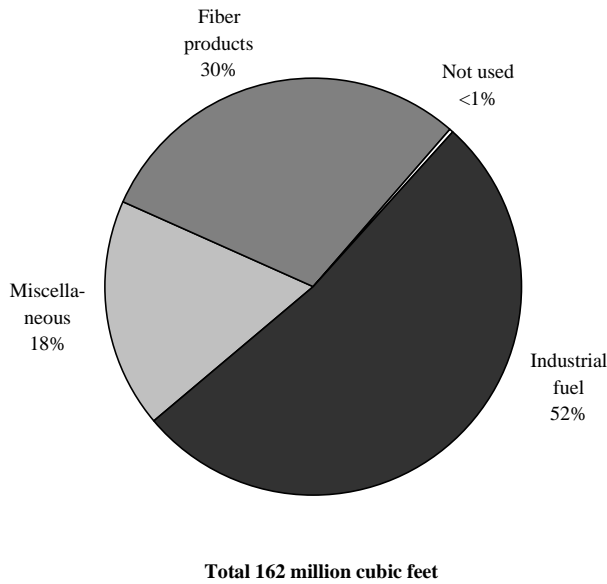


Figure 9—Disposal of residue by product, 1997.

- Sawmills generated 87 million cubic feet of mill residues, accounting for 54 percent of the total residues produced (fig. 10).

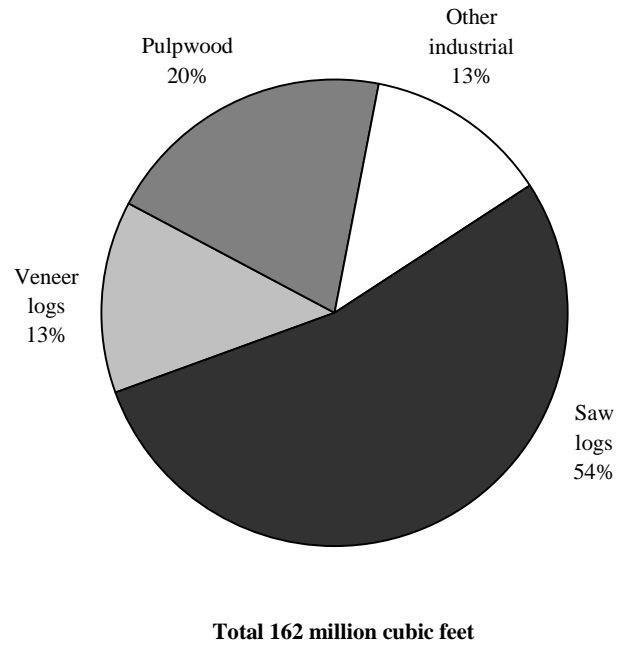


Figure 10—Primary mill residue produced by mill type, 1997.

Regional Trends

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

Northeast Region

- Roundwood output from the Northeast Florida region totaled 318 million cubic feet, up 1 percent. Softwood output increased 2 percent to 291 million cubic feet; hardwood output declined 5 percent to 27 million cubic feet.
- Pulpwood production accounted for 51 percent of the region's TPO and 56 percent of the State's roundwood pulpwood output. Saw-log production of 113 million cubic feet accounted for 35 percent of the total roundwood output for the region.

- In the Northeast region, 55 primary wood-using plants were operating during 1997: 31 sawmills, 3 veneer or plywood mills, 5 pulpmills, and 16 other miscellaneous mills (fig. 11). These mills processed 61 percent of Florida's total roundwood output.

Northwest Region

- One hundred sixty-nine million cubic feet of round wood were produced in the Northwest Florida region, a decline of 7 percent. Softwood production was down 8 percent to 149 million cubic feet and hardwood production declined 2 percent to 20 million cubic feet.
- Pulpwood, saw log, and veneer products declined 11, 5, and 24 percent, respectively. Pulpwood production of 110 million cubic feet accounted for 65 percent of the total TPO for the region; saw-log

production of 44 million cubic feet accounted for 26 percent of the region's total roundwood output.

- The 23 mills operating in the Northwest Florida region in 1997 included 14 sawmills, 1 plywood mill, 3 pulpmills, and 5 other miscellaneous mills. These mills accounted for 33 percent of Florida's total TPO.

Central-South Region

- Roundwood output from the Central-South Florida region remained at 30 million cubic feet. Fifty-two percent of the roundwood cut from this region was used for pulpwood. Roundwood production from this region accounted for 6 percent of the total TPO for the State.
- The number of primary wood-using plants operating in Central-South Florida declined to 23; 13 saw mills, 1 veneer mill, and 9 other miscellaneous mills. No pulpmills were operating in this region.

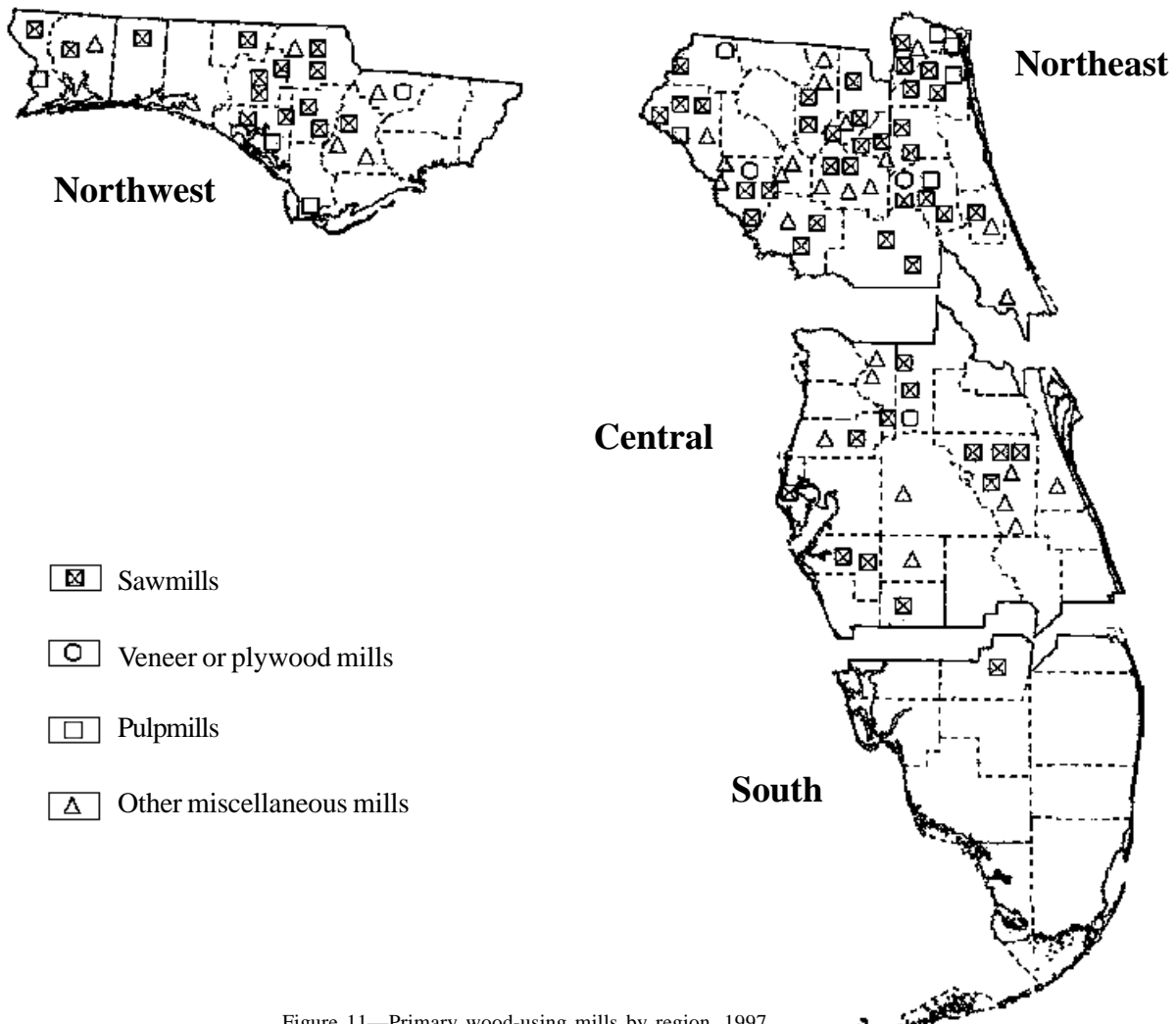


Figure 11—Primary wood-using mills by region, 1997.

Total Roundwood Output

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

Source

- In addition to the 517 million cubic feet of roundwood output for industrial products, an estimated 25 million cubic feet was harvested for domestic fuelwood, bringing Florida's total roundwood output to 542 million cubic feet.
- Ninety percent was considered growing-stock volume (sawtimber and poletimber) from timberland sources. Other sources contributed an estimated 55 million cubic feet, or 10 percent of total roundwood output (fig. 12).

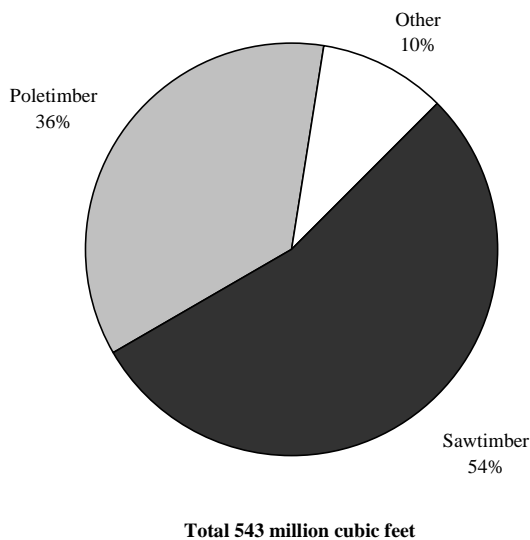


Figure 12—Roundwood output by source, 1997.

Ownership

- Two hundred forty-four million cubic feet, or 45 percent, of the total roundwood output came from forest industry lands. Nonindustrial private forest lands contributed 246 million cubic feet, or 45 percent of the output. Public lands made up the remaining 10 percent, or 52 million cubic feet (fig. 13).

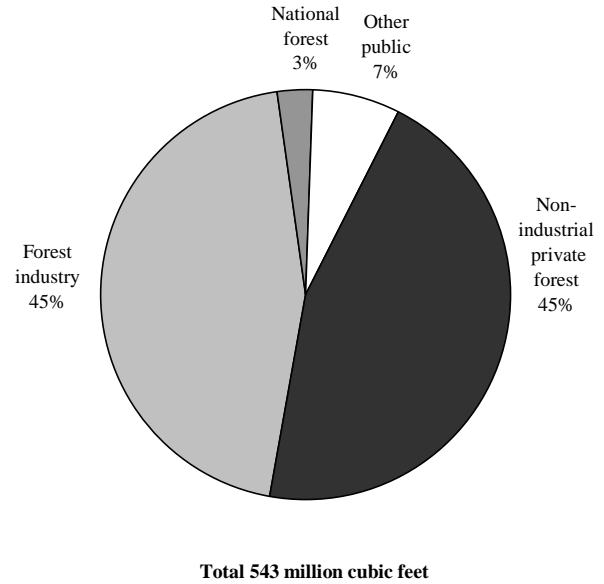


Figure 13—Roundwood output by ownership, 1997.

Species

- The slash and longleaf pine group provided more volume than any other softwood species group; at 368 million cubic feet, it accounted for 78 percent of total softwood output (fig. 14). The red oak and white oak groups combined accounted for 33 million cubic feet of total hardwood output, or 46 percent (fig. 15).

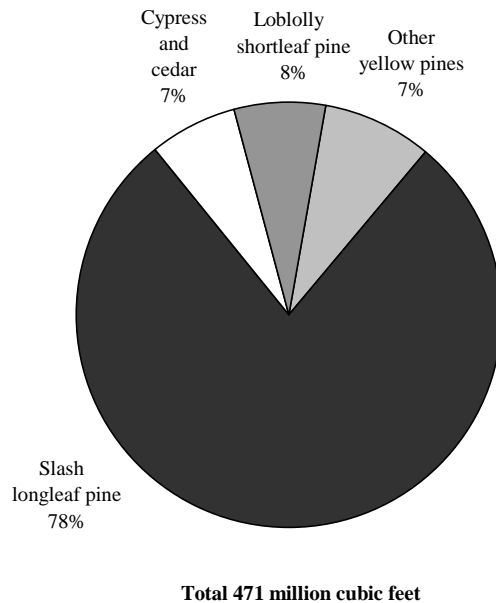
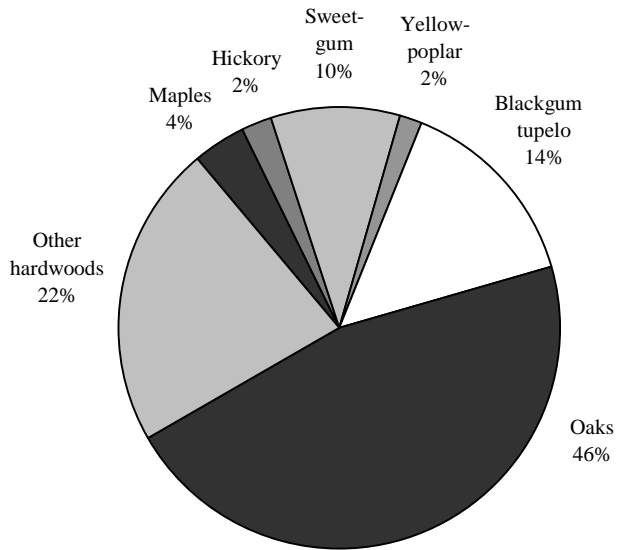


Figure 14—Roundwood output by softwood species group, 1997.



Total 71 million cubic feet

Figure 15—Roundwood output by hardwood species group, 1997.

References

- Davenport, Edgar L.** 1991. Changes in Florida's roundwood products output, 1987-1989. Resour. Bull. SE-125. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 21 p. [1987, 1989].
- Davenport, Edgar L.** 1993. Florida's timber industry—an assessment of timber product output and use, 1991. Resour. Bull. SE-139. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 21 p. [1991].
- Davenport, Edgar L.; Tansey, John B.** 1990. Changes in Florida's roundwood products output, 1977-1987. Resour. Bull. SE-116. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 21 p. [1979, 1981, 1983, 1985, 1986, 1987].
- 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, Southeastern Forest Experiment Station. 29 p. [1993].
- Johnson, Tony G.; Jenkins, Anne; Haxby, Tom S.** 1997. Florida's timber industry—an assessment of timber product output and use, 1995. Resour. Bull. SRS-13. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 29 p. [1995].

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) or 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.

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

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 States in the United 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 nonpulp mills, chipped, and then sold to pulp mills 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 the South, this usually translates to approximately 75.0 cubic feet of solid wood for pulpwood, because 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. A log to be used in the production of plywood, finished panels, or veneer sheets, both rotary cut and sliced.

Conversion Factors^a

Saw logs

Softwood	0.19121 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

Pulwood^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.

Index of Tables

1. Output of industrial products by product and species group, Florida, 1995 and 1997
2. Roundwood receipts by product and species group, Florida, 1995 and 1997
3. Number of primary wood-using plants by industry, Florida, 1979-1997
4. Roundwood receipts by sawmill size, Florida, 1995 and 1997
5. Roundwood receipts by species and type of mill, Florida, 1997
6. Industrial roundwood movement by year and species group, Florida, 1995 and 1997
7. Industrial roundwood movement by product and species group, Florida, 1997
8. Saw-log volume by destination, source, and species group, Florida, 1997
9. Veneer volume by destination, source, and species group, Florida, 1997
10. Pulpwood volume by destination, source, and species group, Florida, 1997
11. Composite panel volume by destination, source, and species group, Florida, 1997
12. Other industrial volume by destination, source, and species group, Florida, 1997
13. Primary mill residue volume by roundwood type, species group, and residue type, Florida, 1997
14. Disposal of residue at primary wood-using plants by product, species group, and type of residue, Florida, 1995 and 1997
15. Roundwood timber products output by product and species group, Northeast Florida, 1995 and 1997
16. Roundwood timber products output by county, product, and species group, Northeast Florida, 1997
17. Roundwood timber products output by product and species group, Northwest Florida, 1995 and 1997
18. Roundwood timber products output by county, product, and species group, Northwest Florida, 1997
19. Roundwood timber products output by product and species group, Central and South Florida, 1995 and 1997
20. Roundwood timber products output by county, product, and species group, Central and South Florida, 1997
21. Total roundwood output by product, species group, and source of material, Florida, 1997
22. Total roundwood output by species group, survey unit, and ownership, Florida, 1997
23. Total roundwood output by species group, detailed species group, and product, Florida, 1997
24. Total roundwood output by species group, detailed species group, and ownership, Florida, 1997

Table 1 Output of industrial products by product and species group, Florida, 1995 and 1997

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
Saw logs				
Softwood	146,856	156,779	9,923	6.8
Hardwood	6,078	5,075	-1,003	-16.5
Total	152,934	161,854	8,920	5.8
Veneer logs				
Softwood	24,347	28,279	3,932	16.1
Hardwood	1,802	1,559	-243	-13.5
Total	26,149	29,838	3,689	14.1
Pulpwood^a				
Softwood	280,917	251,618	-29,299	-10.4
Hardwood	40,094	35,883	-4,211	-10.5
Total	321,011	287,501	-33,510	-10.4
Composite panels				
Softwood	0	0	0	--
Hardwood	3,012	6,403	3,391	112.6
Total	3,012	6,403	3,391	112.6
Other industrial				
Softwood	23,697	30,921	7,224	30.5
Hardwood	231	838	607	262.8
Total	23,928	31,759	7,831	32.7
All industrial				
Softwood	475,817	467,597	-8,220	-1.7
Hardwood	51,217	49,758	-1,459	-2.8
Total	527,034	517,355	-9,679	-1.8
Byproduct output				
Softwood	149,683	151,058	1,375	0.9
Hardwood	11,879	10,791	-1,088	-9.2
Total	161,562	161,849	287	0.2
Total output				
Softwood	625,500	618,655	-6,845	-1.1
Hardwood	63,096	60,549	-2,547	-4.0
Total	688,596	679,204	-9,392	-1.4

-- = negligible.

^a Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (5,998,000 cubic feet in 1995 and 7,878,000 cubic feet in 1997).

Table 2 Roundwood receipts by product and species group, Florida, 1995 and 1997

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
Saw logs				
Softwood	142,208	146,401	4,193	2.9
Hardwood	6,457	4,899	-1,558	-24.1
Total	148,665	151,300	2,635	1.8
Veneer logs				
Softwood	31,223	30,787	-436	-1.4
Hardwood	1,482	1,372	-110	-7.4
Total	32,705	32,159	-546	-1.7
Pulpwood^a				
Softwood	308,007	273,320	-34,687	-11.3
Hardwood	53,778	48,986	-4,792	-8.9
Total	361,785	322,306	-39,479	-10.9
Composite panels				
Softwood	0	0	0	--
Hardwood	0	0	0	--
Total	0	0	0	--
Other industrial				
Softwood	22,290	25,535	3,245	14.6
Hardwood	231	850	619	268.0
Total	22,521	26,385	3,864	17.2
Total output				
Softwood	503,728	476,043	-27,685	-5.5
Hardwood	61,948	56,107	-5,841	-9.4
Total	565,676	532,150	-33,526	-5.9

-- = negligible.

^a Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (6,591,000 cubic feet in 1995 and 8,254,000 cubic feet in 1997).

Table 3 Number of primary wood-using plants by industry, Florida, 1979-1997

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

Table 4 Roundwood receipts by sawmill size, Florida, 1995 and 1997

Sawmill size class ^a	1995			1997		
	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	35	9,692	1	29	9,955	1
1.0 - 4.99	10	22,479	3	9	24,301	3
5.0 - 9.99	5	34,962	5	3	20,883	3
10.0 - 49.99	11	222,606	28	10	194,216	24
> 50	7	493,272	63	7	546,310	69
Total	68	783,011	100	58	795,665	100

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

Table 5 Roundwood receipts by species and type of mill, Florida, 1997

Species	Type of mill						
	All mills	Veneer mills			OSB and panels ^a	Pulpmills ^b	Other mills
		Sawmills	Pine plywood	Other veneer			
<i>Thousand cubic feet</i>							
Softwood							
Yellow pine	176,644	137,628	30,787	0	0	NA	8,229
Eastern white pine	41	41	0	0	0	NA	0
Cedar	37	20	0	0	0	NA	17
Cypress	25,988	8,701	0	0	0	NA	17,287
Other softwood	13	11	0	0	0	NA	2
Unclassified	273,320	0	0	0	0	273,320	0
Total softwoods	476,043	146,401	30,787	0	0	273,320	25,535
Hardwood							
Blackgum and tupelo	386	153	0	131	0	NA	102
Soft maple	32	16	16	0	0	NA	0
Sweetgum	1,148	631	5	444	0	NA	68
Yellow-poplar	627	67	33	527	0	NA	0
Other soft hardwood	827	611	0	216	0	NA	0
Hickory	85	60	0	0	0	NA	25
Red oak	1,439	1,370	0	0	0	NA	69
White oak	241	216	0	0	0	NA	25
Other hard hardwood	2,336	1,775	0	0	0	NA	561
Unclassified	48,986	0	0	0	0	48,986	0
Total hardwoods	56,107	4,899	54	1,318	0	48,986	850
All species	532,150	151,300	30,841	1,318	0	322,306	26,385

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, 1995 and 1997**

Year	Production	Exported to other States	Retained	Imported from other States	Receipts
<i>Thousand cubic feet</i>					
Softwood					
1995	475,817	61,853	413,964	89,764	503,728
1997	467,597	76,205	391,392	84,651	476,043
Hardwood					
1995	51,217	16,718	34,499	27,449	61,948
1997	49,758	17,086	32,672	23,435	56,107
All species					
1995	527,034	78,571	448,463	117,213	565,676
1997	517,355	93,291	424,064	108,086	532,150

Table 7 Industrial roundwood movement by product and species group, Florida, 1997

Product and species group	Production	Exported to other States	Retained	Imported from other States	Receipts
<i>Thousand cubic feet</i>					
Saw logs					
Softwood	156,779	24,286	132,493	13,908	146,401
Hardwood	5,075	736	4,339	560	4,899
Total	161,854	25,022	136,832	14,468	151,300
Veneer logs					
Softwood	28,279	6,656	21,623	9,164	30,787
Hardwood	1,559	217	1,342	30	1,372
Total	29,838	6,873	22,965	9,194	32,159
Pulpwood^a					
Softwood	251,618	38,391	213,227	60,093	273,320
Hardwood	35,883	9,730	26,153	22,833	48,986
Total	287,501	48,121	239,380	82,926	322,306
Composite panels					
Softwood	0	0	0	0	0
Hardwood	6,403	6,403	0	0	0
Total	6,403	6,403	0	0	0
Other industrial					
Softwood	30,921	6,872	24,049	1,486	25,535
Hardwood	838	0	838	12	850
Total	31,759	6,872	24,887	1,498	26,385
Total output					
Softwood	467,597	76,205	391,392	84,651	476,043
Hardwood	49,758	17,086	32,672	23,435	56,107
Total	517,355	93,291	424,064	108,086	532,150

^a Includes roundwood chipped.

Table 8 Saw-log volume by destination, source, and species group, Florida, 1997

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>Thousand cubic feet</i>			
Florida (retained)	136,832	132,493	4,339
Exports to:			
Alabama	5,089	4,479	610
Georgia	19,894	19,768	126
North Carolina	39	39	0
Total	25,022	24,286	736
Imports from:			
Alabama	7,069	7,069	0
Georgia	7,199	6,670	529
North Carolina	140	109	31
South Carolina	60	60	0
Total	14,468	13,908	560

Table 9 Veneer volume by destination, source, and species group, Florida, 1997

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>Thousand cubic feet</i>			
Florida (retained)	22,965	21,623	1,342
Exports to:			
Alabama	1,760	1,748	12
Georgia	5,113	4,908	205
Total	6,873	6,656	217
Imports from:			
Alabama	358	358	0
Georgia	8,836	8,806	30
Total	9,194	9,164	30

Table 10 Pulpwood volume by destination, source, and species group, Florida, 1997^a

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>Thousand cubic feet</i>			
Florida (retained)	239,380	213,227	26,153
Exports to:			
Alabama	8,106	6,498	1,608
Georgia	40,015	31,893	8,122
Total	48,121	38,391	9,730
Imports from:			
Alabama	31,127	19,361	11,766
Georgia	50,586	39,519	11,067
North Carolina	53	53	0
South Carolina	1,160	1,160	0
Total	82,926	60,093	22,833

^a Includes roundwood chipped that was delivered to nonpulpmills and then chipped and sold to pulpmills.

Table 11 Composite panel volume by destination, source, and species group, Florida, 1997

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>Thousand cubic feet</i>			
Florida (retained)	0	0	0
Exports to:			
Georgia	6,403	0	6,403
Total	6,403	0	6,403

Table 12 Other industrial volume by destination, source, and species group, Florida, 1997^a

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>Thousand cubic feet</i>			
Florida (retained)	24,887	24,049	838
Exports to:			
Alabama	5,697	5,697	0
Georgia	1,175	1,175	0
Total	6,872	6,872	0
Imports from:			
Alabama	212	212	0
Georgia	1,248	1,236	12
North Carolina	19	19	0
South Carolina	19	19	0
Total	1,498	1,486	12

^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, 1997

Roundwood type and species group	All types	Residue type			
		Bark	Coarse	Sawdust	Shavings
<i>Thousand cubic feet</i>					
Saw logs					
Softwood	83,930	12,163	39,485	20,241	12,041
Hardwood	3,206	560	1,611	1,028	7
Total	87,136	12,723	41,096	21,269	12,048
Veneer logs					
Softwood	20,443	2,840	9,862	7,741	0
Hardwood	1,027	163	442	422	0
Total	21,470	3,003	10,304	8,163	0
Pulpwood					
Softwood	26,733	26,733	0	0	0
Hardwood	6,139	6,139	0	0	0
Total	32,872	32,872	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	20,276	8,440	9,797	2,039	0
Hardwood	477	105	267	105	0
Total	20,753	8,545	10,064	2,144	0
Total					
Softwood	151,382	50,176	59,144	30,021	12,041
Hardwood	10,849	6,967	2,320	1,555	7
Total	162,231	57,143	61,464	31,576	12,048

^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, 1995 and 1997

Product and species group	All types		Bark		Coarse		Sawdust		Shavings	
	1995	1997	1995	1997	1995	1997	1995	1997	1995	1997
<i>Thousand cubic feet</i>										
Fiber products										
Softwood	43,344	46,888	0	0	43,072	45,203	50	425	222	1,260
Hardwood	1,378	1,410	0	3	1,378	1,407	0	0	0	0
Total	44,722	48,298	0	3	44,450	46,610	50	425	222	1,260
Particleboard										
Softwood	6,317	2,652	0	0	43	0	1,863	431	4,411	2,221
Hardwood	0	0	0	0	0	0	0	0	0	0
Total	6,317	2,652	0	0	43	0	1,863	431	4,411	2,221
Charcoal/chemical wood										
Softwood	0	1,012	0	0	0	1,012	0	0	0	0
Hardwood	0	0	0	0	0	0	0	0	0	0
Total	0	1,012	0	0	0	1,012	0	0	0	0
Sawn products										
Softwood	2,910	1,746	0	0	2,910	1,746	0	0	0	0
Hardwood	28	0	0	0	28	0	0	0	0	0
Total	2,938	1,746	0	0	2,938	1,746	0	0	0	0
Fuel										
Softwood	75,273	77,137	43,158	42,139	3,354	3,727	22,886	24,114	5,875	7,157
Hardwood	9,124	7,697	7,354	6,656	493	20	1,274	1,017	3	4
Total	84,397	84,834	50,512	48,795	3,847	3,747	24,160	25,131	5,878	7,161
Miscellaneous										
Softwood	21,838	21,623	8,602	7,792	7,533	7,397	4,546	5,031	1,157	1,403
Hardwood	1,350	1,684	224	308	580	835	545	538	1	3
Total	23,188	23,307	8,826	8,100	8,113	8,232	5,091	5,569	1,158	1,406
Not used										
Softwood	175	324	73	245	71	59	31	20	0	0
Hardwood	82	58	1	0	59	58	22	0	0	0
Total	257	382	74	245	130	117	53	20	0	0
All products										
Softwood	149,858	151,382	51,834	50,176	56,983	59,144	29,376	30,021	11,665	12,041
Hardwood	11,961	10,849	7,578	6,967	2,538	2,320	1,841	1,555	4	7
Total	161,819	162,231	59,412	57,143	59,521	61,464	31,217	31,576	11,669	12,048

Table 15 Roundwood timber products output by product and species group, Northeast Florida, 1995 and 1997

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
Saw logs				
Softwood	97,227	111,917	14,690	15.1
Hardwood	1,505	1,023	-482	-32.0
Total	98,732	112,940	14,208	14.4
Veneer logs				
Softwood	16,592	22,236	5,644	34.0
Hardwood	954	946	-8	-0.8
Total	17,546	23,182	5,636	32.1
Pulpwood^a				
Softwood	157,180	141,443	-15,737	-10.0
Hardwood	24,137	20,634	-3,503	-14.5
Total	181,317	162,077	-19,240	-10.6
Composite panels				
Softwood	0	0	0	--
Hardwood	2,018	4,610	2,592	128.4
Total	2,018	4,610	2,592	128.4
Other industrial				
Softwood	14,137	15,307	1,170	8.3
Hardwood	140	108	-32	-22.9
Total	14,277	15,415	1,138	8.0
All industrial				
Softwood	285,136	290,903	5,767	2.0
Hardwood	28,754	27,321	-1,433	-5.0
Total	313,890	318,224	4,334	1.4

-- = negligible.

^a Includes roundwood that was delivered to nonpulp mills and then chipped and sold to pulp mills (4,455,000 cubic feet in 1995 and 7,340,000 cubic feet in 1997).

Table 16 Roundwood timber products output by county, product, and species group, Northeast Florida, 1997

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	16,349	824	4,191	0	1,884	0	9,155	770	0	0	1,119	54
Baker	11,654	117	4,228	0	942	19	6,209	98	0	0	275	0
Bradford	10,613	1,085	3,986	0	942	0	5,456	1,085	0	0	229	0
Clay	10,216	444	5,523	0	942	0	3,751	444	0	0	0	0
Columbia	17,817	971	5,206	0	2,022	125	10,436	846	0	0	153	0
Dixie	10,404	5,131	3,626	416	942	125	4,750	4,142	0	448	1,086	0
De Soto	16,352	272	8,093	4	2,022	0	5,141	268	0	0	1,096	0
Flagler	15,748	707	6,505	0	942	0	7,278	707	0	0	1,023	0
Gilchrist	5,870	423	1,914	0	942	83	2,843	308	0	0	171	32
Hamilton	11,079	1,357	3,171	0	589	0	6,587	909	0	448	732	0
Lafayette	7,066	309	4,132	0	942	41	1,748	268	0	0	244	0
Levy	20,134	2,615	8,377	328	942	166	7,399	2,099	0	0	3,416	22
Madison	9,854	3,245	3,873	0	2,155	83	3,332	1,305	0	1,857	494	0
Marion	14,794	1,500	4,631	16	942	24	8,508	1,460	0	0	713	0
Nassau	25,657	711	12,627	3	1,080	0	11,219	708	0	0	731	0
Putnam	10,648	770	3,803	0	942	24	5,502	746	0	0	401	0
St. Johns	14,078	1,063	5,923	0	942	0	6,912	1,063	0	0	301	0
Suwannee	8,226	580	2,967	0	942	83	4,127	497	0	0	190	0
Monroe	30,616	4,354	9,058	256	238	125	20,432	2,116	0	1,857	888	0
Union	10,067	306	4,106	0	942	0	4,898	306	0	0	121	0
Volusia	13,661	537	5,977	0	0	48	5,760	489	0	0	1,924	0
All counties	290,903	27,321	111,917	1,023	22,236	946	141,443	20,634	0	4,610	15,307	108

^a Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (7,340,000 cubic feet in 1997).

Table 17 Roundwood timber products output by product and species group, Northwest Florida, 1995 and 1997

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
Saw logs				
Softwood	41,443	39,601	-1,842	-4.4
Hardwood	4,407	4,037	-370	-8.4
Total	45,850	43,638	-2,212	-4.8
Veneer logs				
Softwood	7,755	6,043	-1,712	-22.1
Hardwood	483	248	-235	-48.7
Total	8,238	6,291	-1,947	-23.6
Pulpwood^a				
Softwood	109,202	95,678	-13,524	-12.4
Hardwood	14,680	14,069	-611	-4.2
Total	123,882	109,747	-14,135	-11.4
Composite panels				
Softwood	0	0	0	--
Hardwood	994	1,793	799	80.4
Total	994	1,793	799	80.4
Other industrial				
Softwood	3,629	7,673	4,044	111.4
Hardwood	91	44	-47	-51.6
Total	3,720	7,717	3,997	107.4
All industrial				
Softwood	162,029	148,995	-13,034	-8.0
Hardwood	20,655	20,191	-464	-2.2
Total	182,684	169,186	-13,498	-7.4

-- = negligible.

^a Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (1,080,000 cubic feet in 1995 and 367,000 cubic feet in 1997).

Table 18 Roundwood timber products output by county, product, and species group, Northwest Florida, 1997

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	14,646	302	3,352	252	0	0	10,777	50	0	0	517	0
Calhoun	13,296	2,607	3,651	1,112	358	16	9,102	1,479	0	0	185	0
Escambia	10,960	1,324	3,883	610	629	0	5,392	714	0	0	1,056	0
Franklin	14,602	0	1,991	0	0	0	12,525	0	0	0	86	0
Gadsden	10,261	1,890	1,334	356	955	205	6,625	1,305	0	0	1,347	24
Gulf	5,016	450	1,039	372	0	15	3,908	63	0	0	69	0
De Soto	7,220	880	2,866	10	0	0	4,201	870	0	0	153	0
Jackson	9,603	1,733	4,049	422	1,075	12	4,284	1,299	0	0	195	0
Jefferson	11,455	2,949	7,523	128	1,075	0	2,744	1,024	0	1,793	113	4
Leon	3,216	1,484	574	128	238	0	2,287	1,348	0	0	117	8
Liberty	5,716	1,002	1,358	453	119	0	4,101	549	0	0	138	0
Okaloosa	9,157	601	801	0	629	0	7,555	601	0	0	172	0
Santa Rosa	12,213	535	804	0	0	0	8,283	535	0	0	3,126	0
Wakulla	3,733	123	1,584	0	238	0	1,823	115	0	0	88	8
Walton	8,674	1,213	1,822	6	489	0	6,176	1,207	0	0	187	0
Washington	9,227	3,098	2,970	188	238	0	5,895	2,910	0	0	124	0
All counties	148,995	20,191	39,601	4,037	6,043	248	95,678	14,069	0	1,793	7,673	44

^a Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (367,000 cubic feet in 1997).

Table 19 Roundwood timber products output by product and species group, Central and South Florida, 1995 and 1997

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
Saw logs				
Softwood	8,186	5,261	-2,925	-35.7
Hardwood	166	15	-151	-91.0
Total	8,352	5,276	-3,076	-36.8
Veneer logs				
Softwood	0	0	0	--
Hardwood	365	365	0	--
Total	365	365	0	--
Pulpwood^a				
Softwood	14,535	14,497	-38	-0.3
Hardwood	1,277	1,180	-97	-7.6
Total	15,812	15,677	-135	-0.9
Composite panels				
Softwood	0	0	0	--
Hardwood	0	0	0	--
Total	0	0	0	--
Other industrial				
Softwood	5,931	7,941	2,010	33.9
Hardwood	0	686	686	--
Total	5,931	8,627	2,696	45.5
All industrial				
Softwood	28,652	27,699	-953	-3.3
Hardwood	1,808	2,246	438	24.2
Total	30,460	29,945	-515	-1.7

-- = negligible.

^a Includes roundwood that was delivered to nonpulp mills and then chipped and sold to pulp mills (463,000 cubic feet in 1995 and 171,000 cubic feet in 1997).

Table 20 Roundwood timber products output by county, product, and species group, Central and South Florida, 1997

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	664	0	3	0	0	0	636	0	0	0	25	0
Broward	1	0	0	0	0	0	1	0	0	0	0	0
Charlotte	132	0	0	0	0	0	0	0	0	0	132	0
Citrus	2,037	396	630	0	0	24	1,375	372	0	0	32	0
Collier	443	0	5	0	0	0	1	0	0	0	437	0
Dade	3	0	0	0	0	0	3	0	0	0	0	0
De Soto	80	0	76	0	0	0	4	0	0	0	0	0
Glades	751	0	314	0	0	0	0	0	0	0	437	0
Hardee	337	0	14	0	0	0	323	0	0	0	0	0
Hendry	1,862	0	43	0	0	0	1,819	0	0	0	0	0
Hernando	1,499	214	117	2	0	0	1,338	212	0	0	44	0
Highlands	515	0	0	0	0	0	31	0	0	0	484	0
Hillsborough	528	153	111	0	0	149	392	4	0	0	25	0
Indian River	176	0	0	0	0	0	176	0	0	0	0	0
Lake	2,031	561	244	0	0	48	962	84	0	0	825	429
Lee	153	0	0	0	0	0	21	0	0	0	132	0
Manatee	127	0	16	0	0	0	48	0	0	0	63	0
Martin	321	0	0	0	0	0	321	0	0	0	0	0
Monroe	4	0	0	0	0	0	4	0	0	0	0	0
Okeechobee	390	1	28	1	0	0	323	0	0	0	39	0
Orange	1,048	5	210	0	0	0	706	5	0	0	132	0
Osceola	4,198	29	715	0	0	29	1,030	0	0	0	2,453	0
Palm Beach	1	0	0	0	0	0	1	0	0	0	0	0
Pasco	2,645	240	1,037	0	0	101	945	139	0	0	663	0
Pinellas	1	0	0	0	0	0	1	0	0	0	0	0
Polk	2,937	257	1,250	0	0	0	482	0	0	0	1,205	257
St. Lucie	156	0	0	0	0	0	156	0	0	0	0	0
Sarasota	356	0	76	0	0	0	280	0	0	0	0	0
Seminole	1,723	0	107	0	0	0	1,441	0	0	0	175	0
Sumter	2,580	390	265	12	0	14	1,677	364	0	0	638	0
All counties	27,699	2,246	5,261	15	0	365	14,497	1,180	0	0	7,941	686

^a Includes roundwood that was delivered to nonpulp mills and then chipped and sold to pulp mills (463,000 cubic feet in 1997).

Table 21 Total roundwood output by product, species group, and source of material, Florida, 1997

Product and species group	All sources	Total	Growing-stock trees		Other sources
			Sawtimber	Poletimber	
<i>Thousand cubic feet</i>					
Saw logs					
Softwood	156,779	150,954	139,133	11,820	5,825
Hardwood	5,075	5,052	4,644	409	23
Total	161,854	156,006	143,777	12,229	5,848
Veneer logs and bolts					
Softwood	28,279	27,836	27,478	358	443
Hardwood	1,559	1,553	1,553		6
Total	29,838	29,390	29,032	358	448
Pulpwood					
Softwood	251,618	230,876	68,555	162,321	20,742
Hardwood	35,883	28,425	18,942	9,484	7,458
Total	287,501	259,301	87,496	171,805	28,200
Composite panel					
Softwood	0	0	0	0	0
Hardwood	6,403	5,072	3,380	1,692	1,331
Total	6,403	5,072	3,380	1,692	1,331
Poles and posts					
Softwood	13,987	13,113	10,071	3,042	874
Hardwood	0	0	0	0	0
Total	13,987	13,113	10,071	3,042	874
Other miscellaneous					
Softwood	16,934	12,908	10,875	2,034	4,026
Hardwood	838	794	94	700	44
Total	17,772	13,702	10,969	2,734	4,070
Total industrial products					
Softwood	467,597	435,687	256,113	179,574	31,910
Hardwood	49,758	40,897	28,613	12,285	8,861
Total	517,355	476,584	284,725	191,859	40,771
Fuelwood					
Softwood	3,900	2,911	2,586	325	989
Hardwood	21,574	9,107	6,173	2,934	12,467
Total	25,474	12,017	8,758	3,259	13,457
All products					
Softwood	471,497	438,597	258,699	179,899	32,900
Hardwood	71,332	50,004	34,785	15,219	21,328
Total	542,829	488,601	293,484	195,118	54,228

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

Table 22 Total roundwood output by species group, survey unit, and ownership, Florida, 1997

Species group and survey unit	Total	National forest	Other public	Forest industry	Nonindustrial private
<i>Thousand cubic feet</i>					
Softwoods					
Northeast	293,328	10,830	11,595	163,635	107,268
Northwest	150,238	4,474	14,737	56,011	75,016
Central and South	27,931	167	5,669	0	22,095
Total softwoods	471,497	15,470	32,001	219,646	204,379
Hardwoods					
Northeast	39,168	160	2,863	20,747	15,398
Northwest	28,945	13	1,090	3,980	23,862
Central and South	3,219	0	566	0	2,653
Total hardwoods	71,332	172	4,519	24,728	41,913
All species	542,829	15,643	36,520	244,374	246,292

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, 1997

Species group and detailed species group	Total	Product						
		Saw log	Veneer	Pulpwood	Composite panel	Fuelwood	Poles and posts	Other miscellaneous
<i>Thousand cubic feet</i>								
Softwood								
Cedar	351	138	27	177	0	3	5	1
Longleaf-slash pine	368,109	122,993	21,837	199,621	0	3,044	10,830	9,784
Loblolly-shortleaf pine	39,624	13,561	3,074	20,127	0	328	1,574	961
Other yellow pines	32,955	9,855	1,996	18,984	0	272	1,043	805
Cypress	30,458	10,233	1,344	12,710	0	253	536	5,383
Total softwoods	471,497	156,779	28,279	251,618	0	3,900	13,987	16,934
Hardwood								
Soft maple	2,404	105	79	1,270	168	727	0	55
Hard maple	287	8	5	98	89	87	0	0
Other birch	29	0	0	19	0	9	0	1
Hickory	1,698	109	36	845	163	513	0	31
Beech	969	288	4	384	0	293	0	0
Ash	941	101	43	435	38	285	0	39
Sweetgum	6,768	507	110	3,366	720	2,047	0	18
Yellow-poplar	1,102	271	19	477	0	333	0	2
Blackgum-tupelo	10,301	456	223	4,926	1,518	3,116	0	62
Black cherry	346	21	9	164	31	105	0	17
Select white oaks	654	141	5	296	13	198	0	1
Other white oaks	5,505	134	124	3,086	341	1,665	0	154
Select red oaks	323	11	5	206	3	98	0	0
Other red oaks	26,359	1,768	492	13,468	2,492	7,972	0	167
Basswood	163	12	5	91	4	49	0	1
Elm	660	33	19	324	44	200	0	40
Other Eastern hardwoods	12,824	1,107	381	6,428	779	3,878	0	250
Total hardwoods	71,332	5,075	1,559	35,883	6,403	21,574	0	838
All species	542,829	161,854	29,838	287,501	6,403	25,474	13,987	17,772

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, Florida, 1997

Species group and detailed species group	Total	National forest	Other public	Forest industry	Nonindustrial private
<i>Thousand cubic feet</i>					
Softwood					
Cedar	351	40	21	106	184
Longleaf-slash pine	368,109	10,179	24,981	179,200	153,748
Loblolly-shortleaf pine	39,624	614	2,513	17,935	18,563
Other yellow pines	32,955	4,394	2,582	10,765	15,215
Cypress	30,458	244	1,905	11,640	16,669
Total softwoods	<u>471,497</u>	<u>15,470</u>	<u>32,001</u>	<u>219,646</u>	<u>204,379</u>
Hardwood					
Soft maple	2,404	2	221	1,273	909
Hard maple	287	0	4	118	165
Other birch	29	0	14	3	12
Hickory	1,698	25	141	689	843
Beech	969	0	0	194	776
Ash	941	0	194	424	322
Sweetgum	6,768	7	316	2,426	4,018
Yellow-poplar	1,102	1	12	261	828
Blackgum-tupelo	10,301	2	347	5,020	4,931
Black cherry	346	0	30	83	233
Select white oaks	654	0	22	202	430
Other white oaks	5,505	1	476	878	4,150
Select red oaks	323	0	35	63	224
Other red oaks	26,359	65	1,901	9,929	14,465
Basswood	163	0	25	114	24
Elm	660	0	70	373	217
Other Eastern hardwoods	<u>12,824</u>	<u>68</u>	<u>712</u>	<u>2,679</u>	<u>9,365</u>
Total hardwoods	<u>71,332</u>	<u>172</u>	<u>4,519</u>	<u>24,728</u>	<u>41,912</u>
All species	<u>542,829</u>	<u>15,643</u>	<u>36,521</u>	<u>244,374</u>	<u>246,292</u>

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



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

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.

Howell, Michael; Ford, Eric. 1999. Florida's timber industry—an assessment of timber product output and use, 1997. Resour. Bull. SRS-43. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 32 p.

In 1997, volume of roundwood output from Florida's forests totaled 517 million cubic feet, 2 percent less than in 1995. Mill byproducts generated from primary manufacturers remained stable at 162 million cubic feet. Almost all plant residues were used primarily for fuel and fiber products. Pulpwood was the leading roundwood product at 288 million cubic feet; saw logs ranked second at 162 million cubic feet; veneer logs were third at 30 million cubic feet. Total receipts declined 6 percent to 532 million cubic feet. The number of primary processing plants declined from 113 in 1995 to 101 in 1997.

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

United States
Department of Agriculture

Forest Service

**Southern
Research Station**

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

OFFICIAL BUSINESS
Penalty for Private Use \$300

