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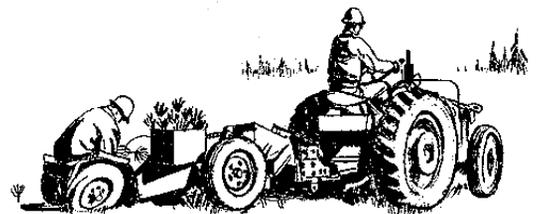
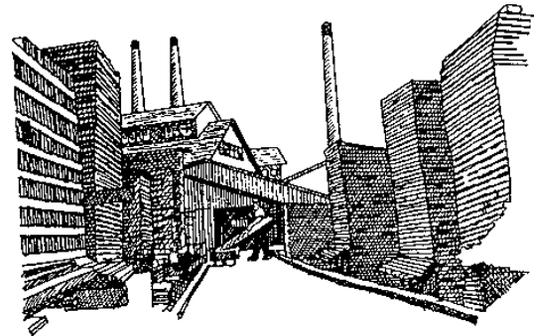
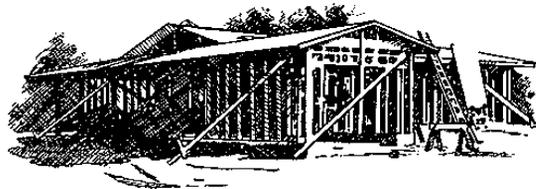


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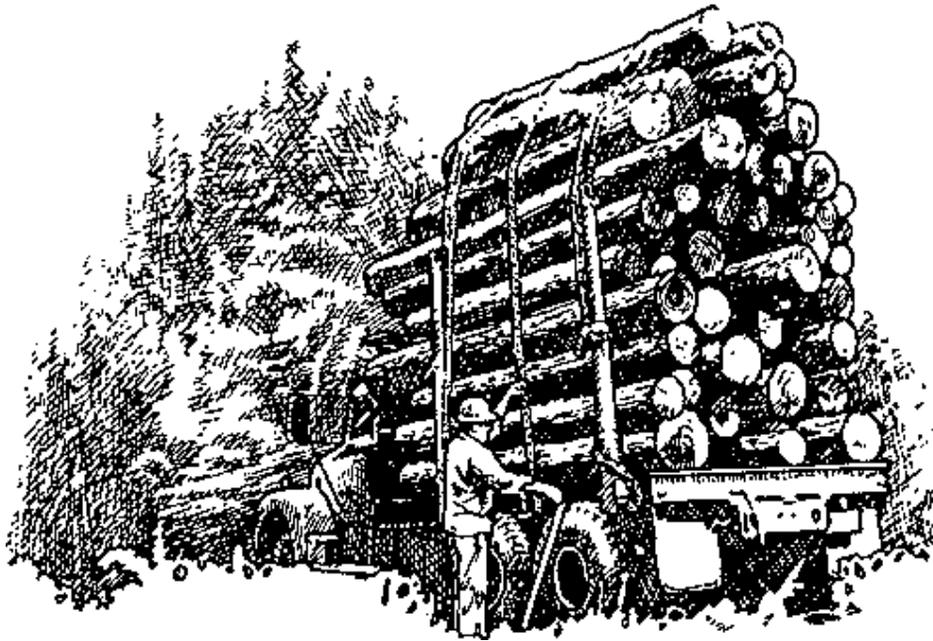
Georgia's Timber Industry— An Assessment of Timber Product Output and Use, 1997

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Foreword

This report contains the findings of a 1997 canvass of all primary wood-using plants in Georgia 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 Georgia was conducted in 1998 to obtain information for 1997. In addition, roundwood from out-of-State mills known to be using logs or bolts harvested from Georgia timberland was incorporated into Georgia production estimates. Each mill was canvassed by mail

or through personal contact at plant locations. Telephone contacts followed mailed questionnaire responses when additional information or clarification of 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 1961, and are currently conducted every 2 years.

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

The Southern Research Station gratefully acknowledges the cooperation and assistance provided by the Georgia Forestry Commission 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 96 percent of mills operating in 1997: 13 pulpmills, 11 of the 11 veneer mills, 5 of the 5 composite panel mills, 26 of the 28 mills manufacturing other industrial products, and 124 of the 129 sawmills. These mills accounted for 98 percent of the 1997 mill receipts.



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:

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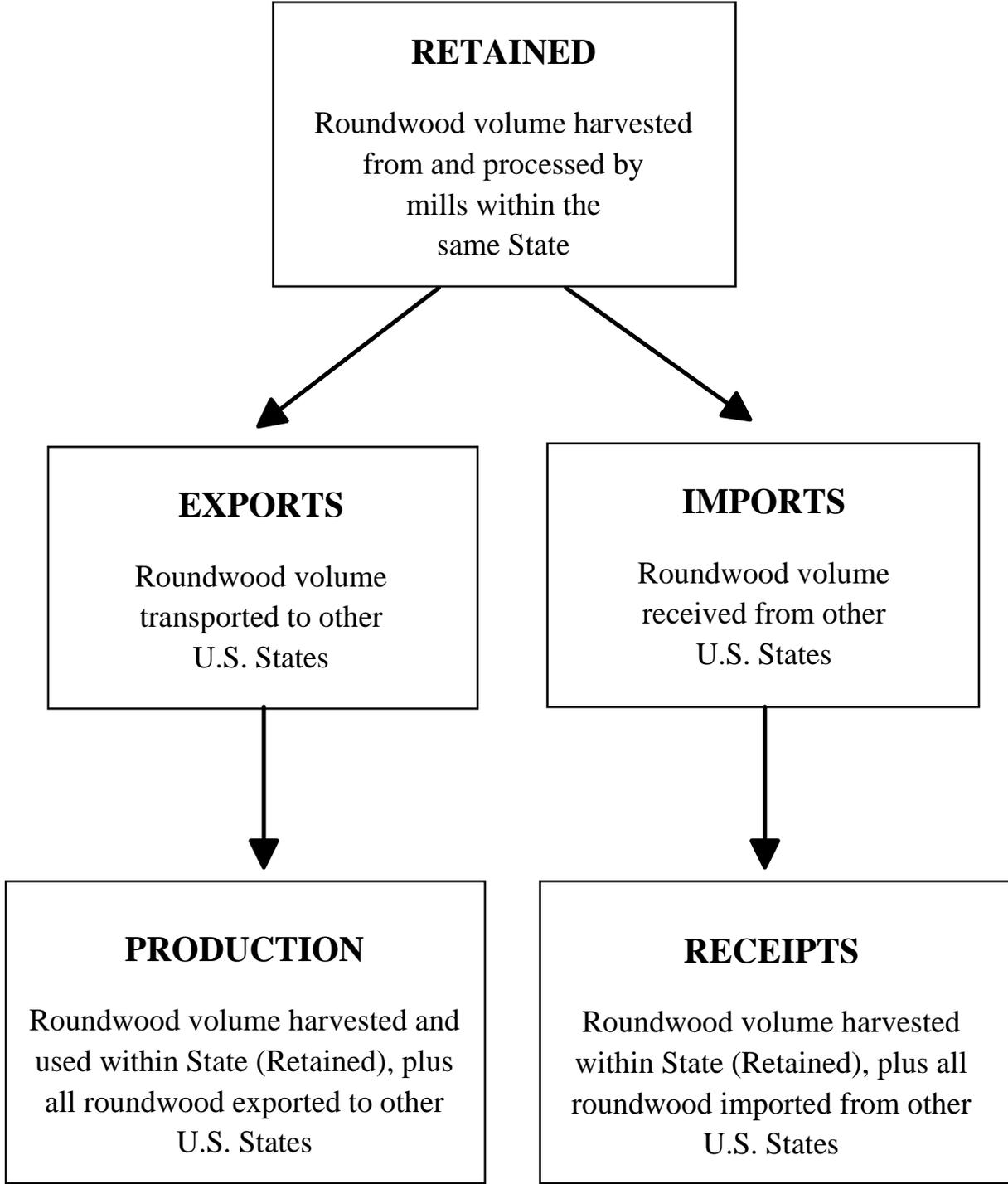
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^a All tables in this report are available in Microsoft® Excel workbook files. Upon request, these files will be supplied on 3½-inch diskettes.

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Production = Retained + Exports

Receipts = Retained + Imports

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

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

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Output of Industrial Timber Products

Note: Certain terms used in this report, e.g., 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 1 percent from 1.78 to 1.76 billion cubic feet.
- Timber products output from roundwood was down 31 million cubic feet, or 2 percent, to 1.28 billion cubic feet, while output of plant byproducts increased 5 million cubic feet to 479 million cubic feet.
- Output of softwood roundwood products, although down 2 percent, remained at 1.0 billion cubic feet, while output of hardwood roundwood products declined 4 percent to 280 million cubic feet (fig. 2).
- Pulpwood and saw logs were the principal roundwood products in 1997. Combined output of these two products totaled 1.1 billion cubic feet and accounted for 89 percent of the State's total industrial roundwood output (fig. 3).
- Total receipts at Georgia mills, which included roundwood harvested and retained in the State and roundwood imported from other States, remained stable at 1.4 billion cubic feet. At the same time, the number of primary roundwood-using plants in Georgia declined from 207 in 1995 to 186 in 1997.

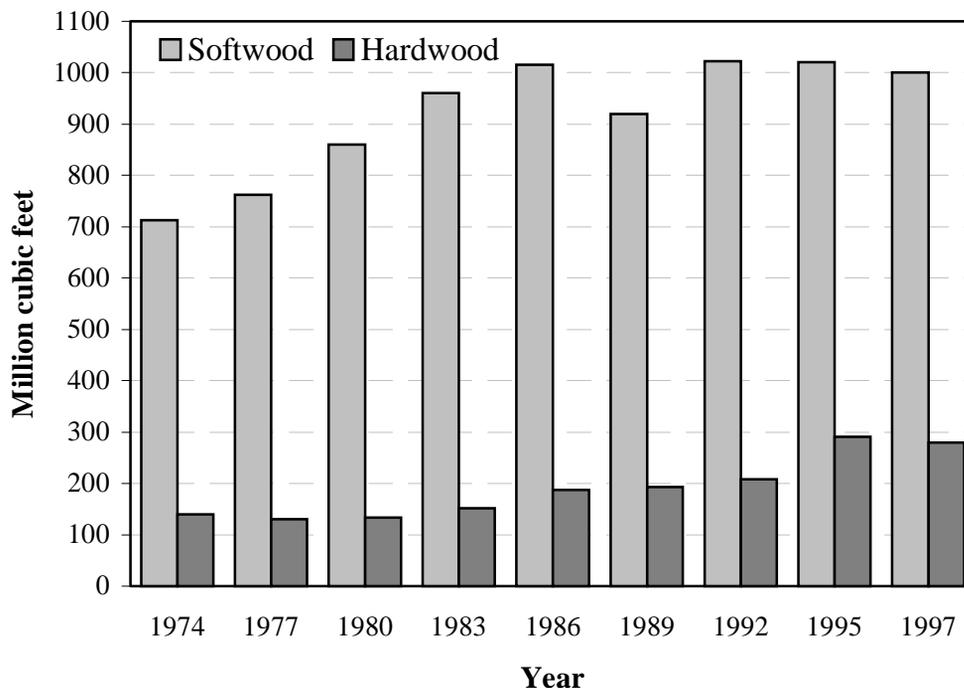
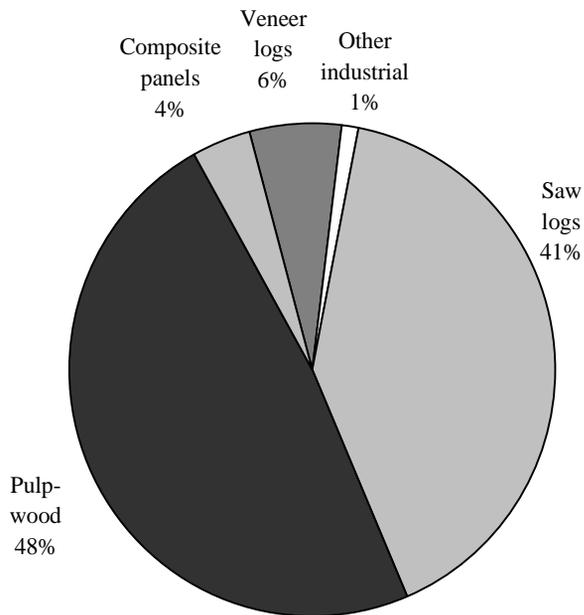


Figure 2—Roundwood production for all products by species group and year (see page 8 for references for individual years).



Total 1.3 billion cubic feet

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

Pulpwood

- Pulpwood production, including chipped roundwood, remained stable at 617 million cubic feet (8.4 million cords) and accounted for 48 percent of the State's total roundwood TPO. Softwood output increased 4 percent to 438 million cubic feet, while hardwood output declined 8 percent to 179 million cubic feet (fig. 4).

- Thirteen pulpmill facilities were operating and receiving roundwood in Georgia in 1997, one less than in 1995. Total pulpwood receipts for these mills declined 2 million cubic feet to 672 million cubic feet, accounting for 49 percent of total receipts for all mills.
- Eighty-one percent of roundwood cut for pulpwood was retained for processing at Georgia pulpmills. Roundwood pulpwood accounted for 70 percent of total known exports and an equal percentage of total imports. Roundwood pulpwood imports amounted to 169 million cubic feet, or 55 million cubic feet more than was exported.

Saw Logs

- Saw logs accounted for 41 percent of the State's total roundwood products. Output of softwood saw logs declined 9 percent to 443 million cubic feet (2.4 billion board feet), while that of hardwood saw logs increased 18 percent to 77 million cubic feet (438 million board feet) (fig. 5).
- Georgia currently has 129 sawmills, a net loss of 15 mills since 1995. The total number of sawmills does not include the several one-man sawmills in the State. With this decline in sawmills, total saw-log receipts were down 12 million cubic feet to 531 million cubic feet. Softwood saw-log receipts declined 5 percent to 459 million cubic feet, while those of hardwoods increased 20 percent to 72

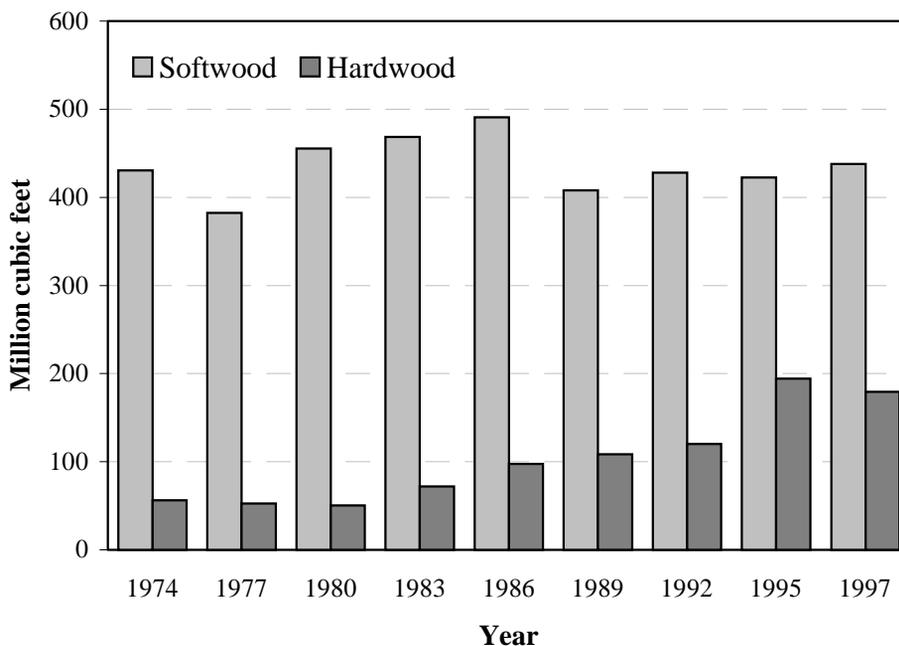


Figure 4—Roundwood pulpwood production by species group and year (see page 8 for references for individual years).

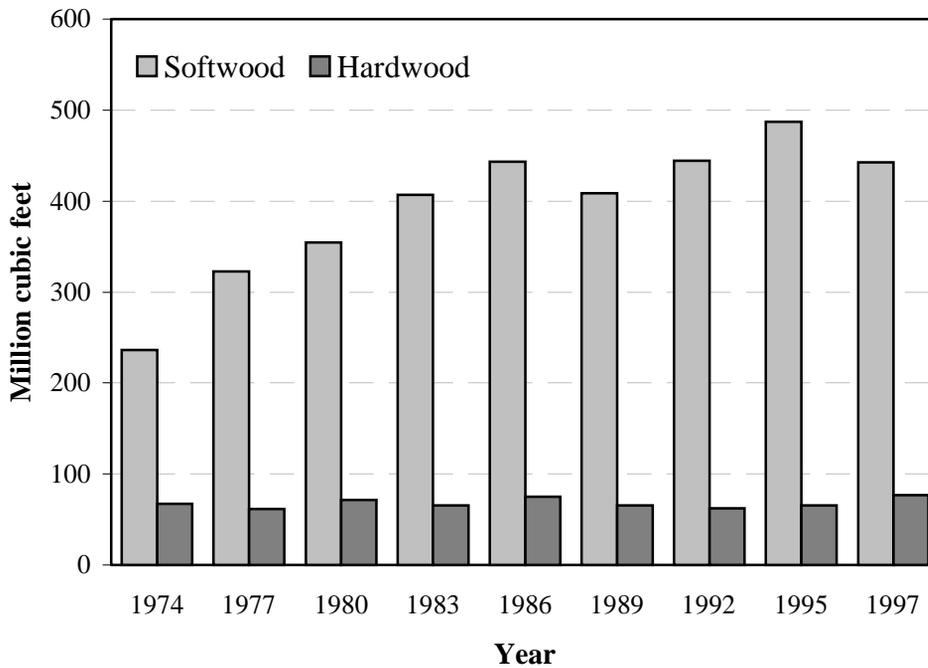


Figure 5—Roundwood saw-log production by species group and year (see page 8 for references for individual years).

million cubic feet. Of the currently operating mills, 25 percent had receipts less than 1 million board feet, while 38 percent had receipts greater than 10 million board feet. These 49 mills accounted for 93 percent of total saw-log receipts.

- Georgia retained 93 percent of its saw-log production for domestic manufacture, with saw-log imports exceeding exports by 11 million cubic feet in 1997.

Veneer Logs

- Output of veneer logs in 1997 totaled 77 million cubic feet and accounted for 6 percent of the State's total roundwood TPO volume. Softwood veneer production increased 4 percent to 61 million cubic feet (337 million board feet), while output of hardwood veneer logs declined 23 percent to 16 million cubic feet (96 million board feet) (fig. 6).

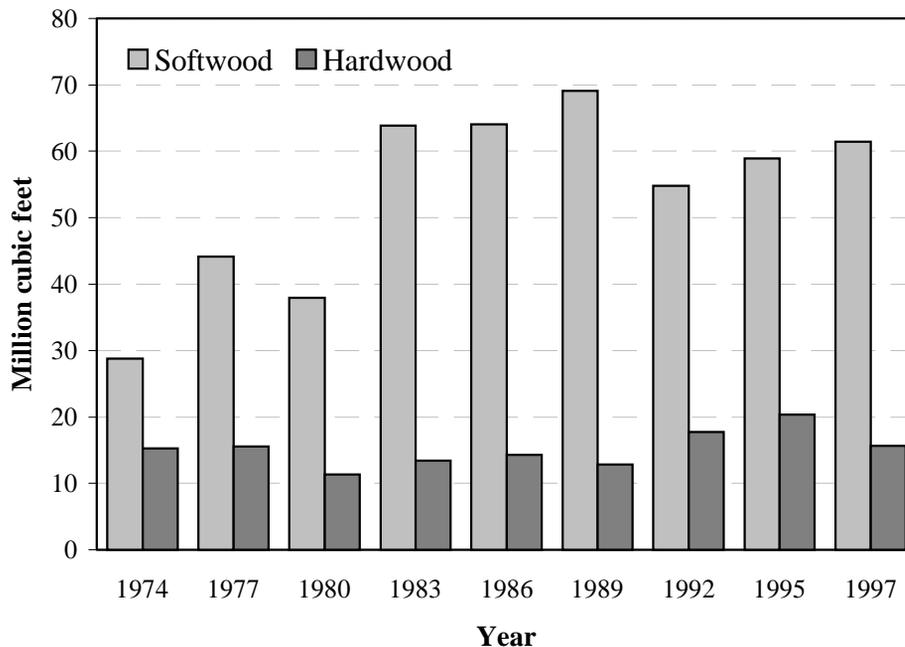


Figure 6—Roundwood veneer-log production by species group and year (see page 8 for references for individual years).

- The number of veneer mills operating in Georgia dropped from 12 to 11 since 1995. Despite the decline in veneer mills, receipts of veneer logs increased 14 percent to 80 million cubic feet. Softwood veneer receipts were up 9 million cubic feet, to 59 million cubic feet.
- Georgia retained 88 percent of its veneer-log production for processing at domestic veneer mills. Imports amounted to more than 12 million cubic feet, while exports totaled 9 million cubic feet, making the State a net importer of roundwood veneer logs.

Composite Panels

- Roundwood harvested from Georgia’s forests for composite panels increased 5 percent and totaled 50 million cubic feet. Softwood output increased 16 percent to 43 million cubic feet, while hardwood production was down 31 percent to 7 million cubic feet (fig. 7).
- One composite panel mill and four oriented strand board (OSB) mills were operating in Georgia in 1997, the same as in 1995. Total receipts for these mills were 59 million cubic feet, or 4 percent of the State’s total receipts.

- Almost all (98 percent) of the roundwood production harvested for composite panels was retained for processing at Georgia’s mills.

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 17 million cubic feet, an 8-percent increase from 1995. Softwood made up 97 percent of the other industrial product volume.
- The number of plants producing other industrial products declined from 32 to 28 since 1995. Combined receipts of other industrial products from softwood and hardwood remained at 16 million cubic feet.
- Georgia was a net exporter of roundwood used for other industrial products, but only by a small margin; all of the 2 million cubic feet exported and 1 million cubic feet imported were softwood.

Plant Byproducts

- In 1997, processing of primary products in Georgia mills generated 483 million cubic feet of wood and bark residues. Coarse residues from all primary products amounted to 186 million cubic feet, while bark

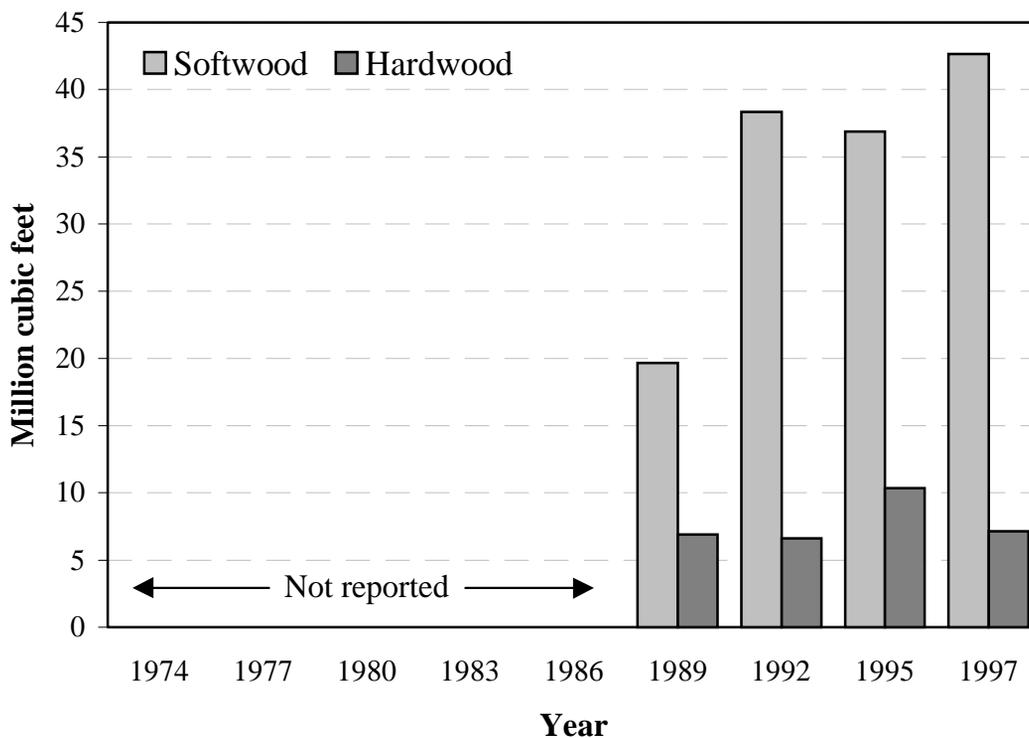
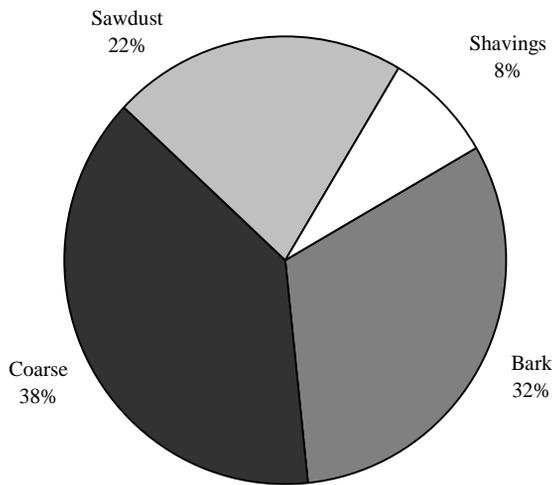


Figure 7—Roundwood production for composite panels by species group and year (see page 8 for references for individual years).

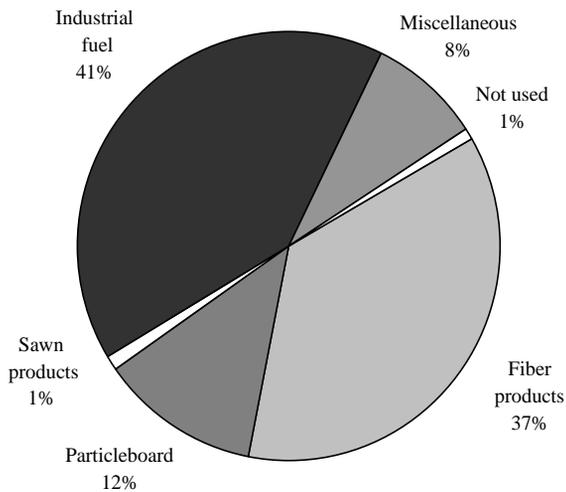
volume totaled 153 million cubic feet. Collectively, sawdust and shavings made up 30 percent of total residues, or 144 million cubic feet (fig. 8).



Total 483 million cubic feet

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

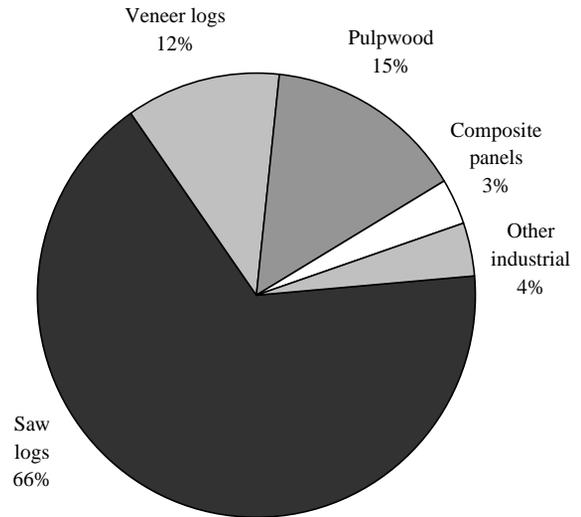
- Virtually all of the wood and bark residues were used for a product; less than 1 percent was not used, while 41 percent of the residues were used for industrial fuel (fig. 9). More than 162 million cubic feet, or 87 percent, of the coarse residues were used for fiber products. Most of the bark was used for industrial fuel or other miscellaneous products, while 47 percent of the sawdust and shavings were used for industrial fuel.



Total 483 million cubic feet

Figure 9—Disposal of residue by product, 1997.

- Sawmills generated 322 million cubic feet of mill residues, accounting for two-thirds of the total residues produced (fig. 10).



Total 483 million cubic feet

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

Regional Trends

- Output of industrial roundwood products increased in the North, North Central, and Southwest regions; the North Central region had the largest increase at 19 percent. Outputs of industrial roundwood products decreased in the Southeast and Central regions.

Southeast Region

- Roundwood output from the Southeast Georgia region totaled 439 million cubic feet, down 5 percent since 1995.
- Pulpwood accounted for 55 percent of the region's TPO and 40 percent of the State's roundwood pulpwood output. The 167 million cubic feet of saw logs accounted for 38 percent of the total roundwood output for the region and 32 percent of the State's total saw-log output, the highest of any region.
- In the Southeast region, 51 primary wood-using plants were operating during 1997: 30 sawmills, 3 veneer or plywood mills, 6 pulpmills, and 12 other miscellaneous mills (fig. 11). These mills processed 34 percent of the State's total roundwood output.

Southwest Region

- One hundred and seventy-five million cubic feet of roundwood were produced in the Southwest Georgia region, an increase of 6 percent.

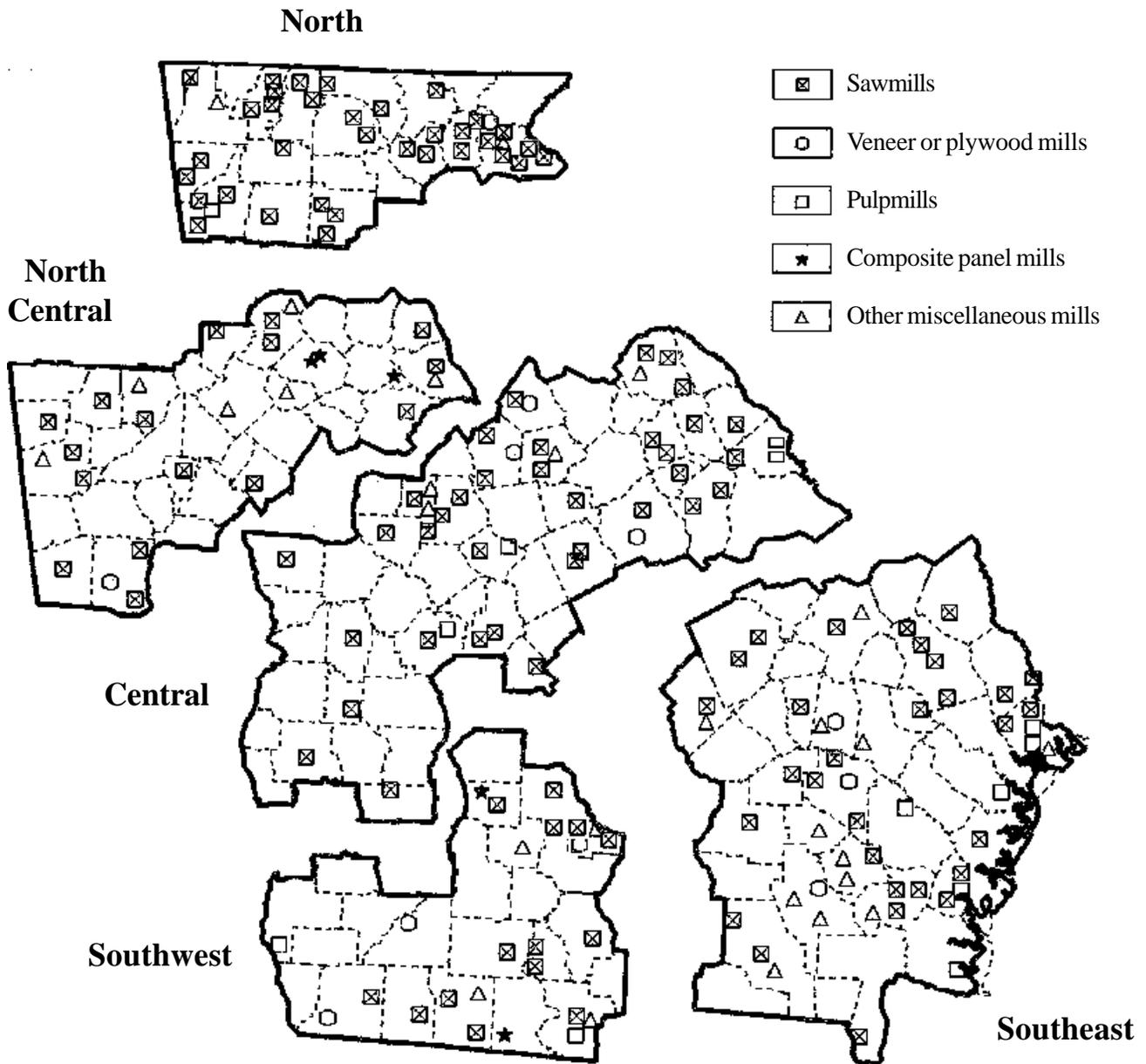


Figure 11—Primary wood-using mills by region, 1997.

- Saw-log production of 89 million cubic feet accounted for 51 percent of the region's total roundwood output. Production of pulpwood was down 8 percent and accounted for 35 percent of the region's total roundwood output.
- The 25 mills operating in the Southwest Georgia region in 1997 included: 14 sawmills, 3 veneer or plywood mills, 2 pulpmills, 2 composite panel mills, and 4 other miscellaneous mills. These mills accounted for 14 percent of the total roundwood output for the State.

Central Region

- Roundwood output from the Central Georgia region totaled 387 million cubic feet, down 13 percent. Roundwood production from this region accounted for 30 percent of the total roundwood TPO for the State.
- Pulpwood production declined by 7 percent to 194 million cubic feet, accounting for 50 percent of the region's total TPO. Saw-log production of 161 million cubic feet accounted for another 42 percent of the region's total roundwood output.

- The 47 primary wood-using plants operating in Central Georgia included: 4 pulpmills, 36 sawmills, 3 veneer or plywood mills, and 4 other miscellaneous mills.

North Central Region

- Roundwood output from the North Central Georgia region totaled 205 million cubic feet, a 19-percent increase since 1995. This region accounted for 16 percent of the State's total TPO.
- Saw-log production increased 11 percent to 70 million cubic feet, accounting for 34 percent of the region's total roundwood output. Production of pulpwood rose 18 percent and accounted for 39 percent of the region's total roundwood output.
- In the North Central region, 25 primary wood-using plants were operating during 1997: 15 sawmills, 1 veneer or plywood mill, 3 composite panel mills, and 6 other miscellaneous mills.

Northern Region

- Roundwood output from the Northern Georgia region totaled 76 million cubic feet, an increase of 10 percent since 1995.
- Saw-log production declined 3 percent to 32 million cubic feet and accounted for 43 percent of the region's total roundwood output. Pulpwood production was up 22 percent and accounted for 52 percent of the region's total TPO.
- In the Northern region, 38 primary wood-using plants were operating during 1997: 34 sawmills, 1 veneer or plywood mill, 1 pulpmill, and 2 other miscellaneous mills. These mills processed 6 percent of the State's total roundwood output.

Total Roundwood Output

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

Source

- In addition to the 1.3 billion cubic feet of roundwood output for industrial roundwood, an estimated 118 million cubic feet was harvested for domestic fuelwood bringing Georgia's total roundwood output to 1.4 billion cubic feet.

- Eighty-eight percent of total roundwood output was considered growing-stock volume from timberland sources, with other sources contributing an estimated 168 million cubic feet, or 12 percent of total roundwood output (fig. 12).

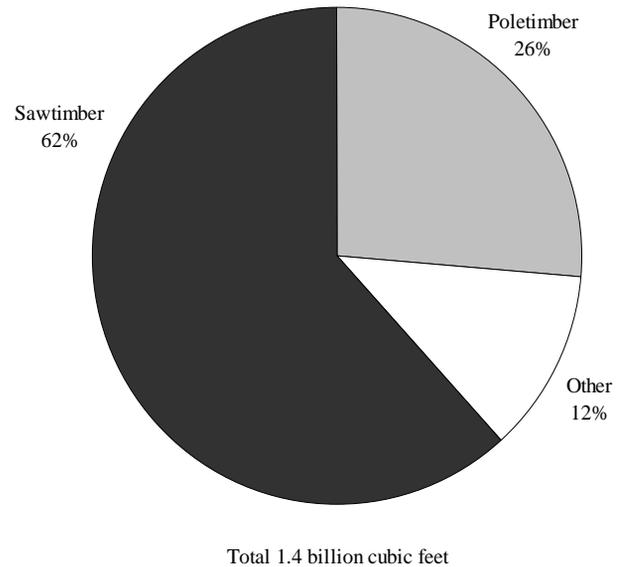


Figure 12—Roundwood output by source, 1997.

Ownership

- An estimated 957 million cubic feet, or 68 percent, of the total roundwood output came from nonindustrial private forest (NIPF) lands. Forest industry lands contributed 386 million cubic feet, or 28 percent of the output. Public lands made up the remaining 4 percent, or 56 million cubic feet (fig. 13).

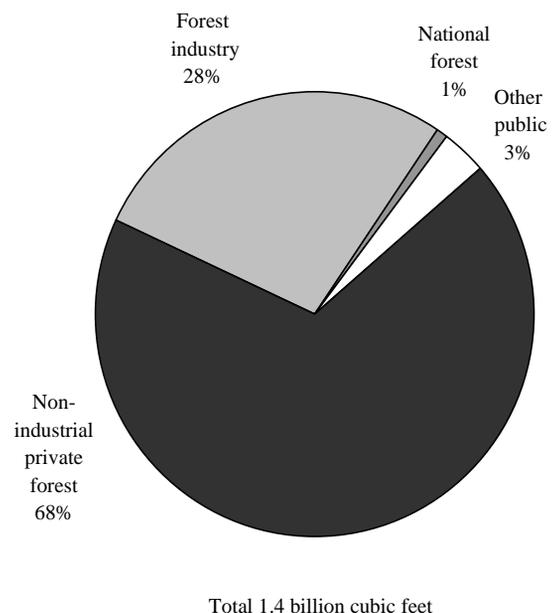


Figure 13—Roundwood output by ownership, 1997.

Species

- The loblolly and shortleaf pine group provided the most volume of any softwood species group, accounting for 57 percent of the total softwood output (fig. 14). Slash and longleaf pine type accounted for 38 percent of the softwood output. In hardwoods, the red oak and white oak groups combined accounted for 149 million cubic feet, or 39 percent of total hardwood output (fig. 15).

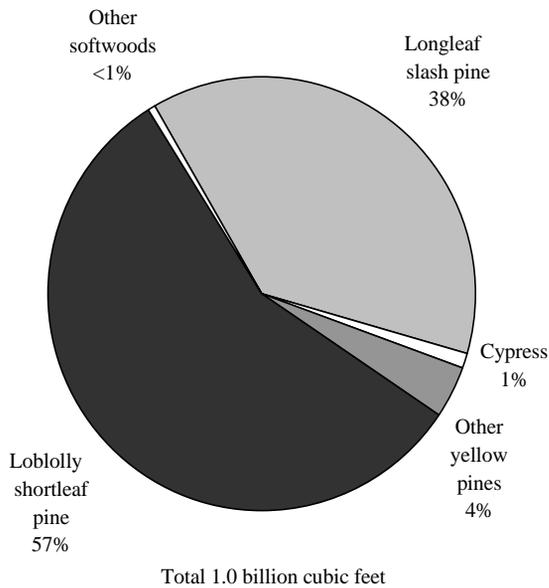


Figure 14—Roundwood output by softwood species group, 1997.

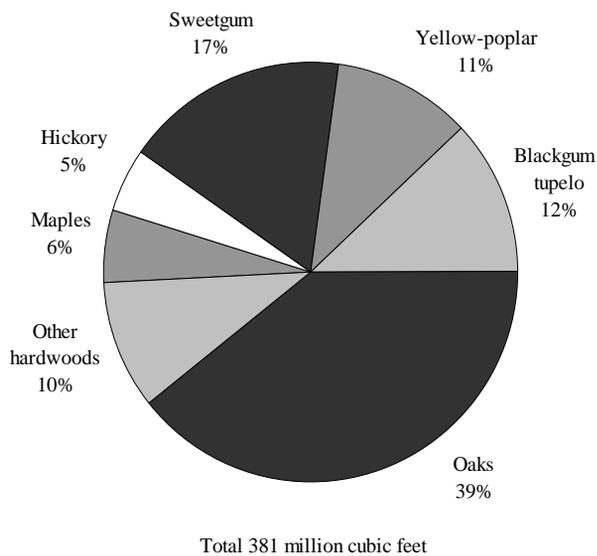


Figure 15—Roundwood output by hardwood species group, 1997.

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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	0.18393 cubic foot = 1 board foot 5.44 board feet = 1 cubic foot
Hardwood	0.17597 cubic foot = 1 board foot 5.68 board feet = 1 cubic foot

Veneer logs

Softwood	0.16260 cubic foot = 1 board foot 6.15 board feet = 1 cubic foot
Hardwood	0.16394 cubic foot = 1 board foot 6.10 board feet = 1 cubic foot

Pulpwood^b

Softwood	72.6 cubic feet per cord
Hardwood	76.4 cubic feet per cord

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

^b Cubic feet of solid wood per cord.

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

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
Saw logs				
Softwood	486,848	442,584	-44,264	-9.1
Hardwood	65,361	77,028	11,667	17.9
Total	552,209	519,612	-32,597	-5.9
Veneer logs				
Softwood	58,924	61,469	2,545	4.3
Hardwood	20,367	15,649	-4,718	-23.2
Total	79,291	77,118	-2,173	-2.7
Pulpwood^a				
Softwood	422,807	437,957	15,150	3.6
Hardwood	194,458	179,336	-15,122	-7.8
Total	617,265	617,293	28	0.0
Composite panels				
Softwood	36,900	42,653	5,753	15.6
Hardwood	10,343	7,134	-3,209	-31.0
Total	47,243	49,787	2,544	5.4
Other industrial				
Softwood	15,027	16,234	1,207	8.0
Hardwood	472	537	65	13.8
Total	15,499	16,771	1,272	8.2
All industrial				
Softwood	1,020,506	1,000,897	-19,609	-1.9
Hardwood	291,001	279,684	-11,317	-3.9
Total	1,311,507	1,280,581	-30,926	-2.4
Byproduct output				
Softwood	394,601	394,117	-484	-0.1
Hardwood	78,874	84,568	5,694	7.2
Total	473,475	478,685	5,210	1.1
Total output				
Softwood	1,415,107	1,395,014	-20,093	-1.4
Hardwood	369,875	364,252	-5,623	-1.5
Total	1,784,982	1,759,266	-25,716	-1.4

^a Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpwood (25,574,000 cubic feet in 1995 and 23,958,000 cubic feet in 1997).

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

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
Saw logs				
Softwood	482,759	458,837	-23,922	-5.0
Hardwood	59,813	71,837	12,024	20.1
Total	542,572	530,674	-11,898	-2.2
Veneer logs				
Softwood	50,041	59,219	9,178	18.3
Hardwood	20,121	20,741	620	3.1
Total	70,162	79,960	9,798	14.0
Pulpwood^a				
Softwood	455,821	480,105	24,284	5.3
Hardwood	218,069	191,823	-26,246	-12.0
Total	673,890	671,928	-1,962	-0.3
Composite panels				
Softwood	38,030	44,837	6,807	17.9
Hardwood	13,495	14,222	727	5.4
Total	51,525	59,059	7,534	14.6
Other industrial				
Softwood	15,757	15,840	83	0.5
Hardwood	472	559	87	18.4
Total	16,229	16,399	170	1.0
Total output				
Softwood	1,042,408	1,058,838	16,430	1.6
Hardwood	311,970	299,182	-12,788	-4.1
Total	1,354,378	1,358,020	3,642	0.3

^a Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (28,336,000 cubic feet in 1995 and 26,658,000 cubic feet in 1997).

Table 3 Number of primary wood-using plants by industry, Georgia, 1977-1997

Industry	Year							
	1977	1980	1983	1986	1989	1992	1995	1997
Sawmills	280	265	222	239	172	178	144	129
Veneer mills	23	22	19	18	16	14	12	11
Pulpmills	15	15	15	15	14	13	14	13
Composite panel mills	0	0	0	0	3	4	5	5
Other mills	26	25	28	29	26	41	32	28
All plants	344	327	284	301	231	250	207	186

Table 4 Roundwood receipts by sawmill size, Georgia, 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	34	9,689	0	32	8,449	0
1.0 - 4.99	34	96,571	3	32	88,731	3
5.0 - 9.99	28	188,326	6	16	111,749	4
10.0 - 49.99	25	640,538	22	27	654,110	23
> 50	23	2,028,362	69	22	2,038,801	70
Total	144	2,963,486	100	129	2,901,840	100

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

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

Species	Type of mill						
	All mills	Sawmills	Veneer mills		OSB ^a and panels	Pulpmills ^b	Other mills
			Pine plywood	Other veneer			
<i>Thousand cubic feet</i>							
Softwood							
Yellow pine	572,420	453,238	50,654	8,565	44,837	NA	15,126
White pine	1,481	1,481	0	0	0	NA	0
Cedar	704	4	0	0	0	NA	700
Cypress	4,128	4,114	0	0	0	NA	14
Unclassified	480,105	0	0	0	0	480,105	0
Total softwoods	1,058,838	458,837	50,654	8,565	44,837	480,105	15,840
Hardwood							
Blackgum and tupelo	8,712	2,425	0	1,627	4,660	NA	0
Soft maple	5,418	3,147	0	1,178	1,093	NA	0
Sweetgum	13,950	7,823	3,616	1,232	1,254	NA	25
Yellow-poplar	24,040	10,743	7,619	2,542	3,094	NA	42
Other soft hardwood	7,328	1,734	1,039	418	4,121	NA	16
Hickory	3,545	3,267	0	0	0	NA	278
Red oak	25,579	24,599	0	841	0	NA	139
White oak	12,234	11,781	0	419	0	NA	34
Other hard hardwood	6,553	6,318	0	210	0	NA	25
Unclassified	191,823	0	0	0	0	191,823	0
Total hardwoods	299,182	71,837	12,274	8,467	14,222	191,823	559
All species	1,358,020	530,674	62,928	17,032	59,059	671,928	16,399

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, Georgia, 1995 and 1997**

Year	Production	Exported to other States	Retained	Imported from other States	Receipts
<i>Thousand cubic feet</i>					
Softwood					
1995	1,020,506	131,907	888,599	153,809	1,042,408
1997	1,000,897	118,659	882,238	176,600	1,058,838
Hardwood					
1995	291,001	45,308	245,693	66,277	311,970
1997	279,684	44,542	235,142	64,040	299,182
All species					
1995	1,311,507	177,215	1,134,292	220,086	1,354,378
1997	1,280,581	163,201	1,117,380	240,640	1,358,020

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

Product and species group	Production	Exported to other States	Retained	Imported from other States	Receipts
<i>Thousand cubic feet</i>					
Saw logs					
Softwood	442,584	30,857	411,727	47,110	458,837
Hardwood	77,028	6,229	70,799	1,038	71,837
Total	519,612	37,086	482,526	48,148	530,674
Veneer logs					
Softwood	61,469	9,161	52,308	6,911	59,219
Hardwood	15,649	281	15,368	5,373	20,741
Total	77,118	9,442	67,676	12,284	79,960
Pulpwood^a					
Softwood	437,957	76,556	361,401	118,704	480,105
Hardwood	179,336	37,747	141,589	50,234	191,823
Total	617,293	114,303	502,990	168,938	671,928
Composite panels					
Softwood	42,653	597	42,056	2,781	44,837
Hardwood	7,134	269	6,865	7,357	14,222
Total	49,787	866	48,921	10,138	59,059
Other industrial					
Softwood	16,234	1,488	14,746	1,094	15,840
Hardwood	537	16	521	38	559
Total	16,771	1,504	15,267	1,132	16,399
All products					
Softwood	1,000,897	118,659	882,238	176,600	1,058,838
Hardwood	279,684	44,542	235,142	64,040	299,182
Total	1,280,581	163,201	1,117,380	240,640	1,358,020

^a Includes roundwood chipped.

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

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>Thousand cubic feet</i>			
Georgia (retained)	482,526	411,727	70,799
Exports to:			
Alabama	20,833	19,951	882
Florida	6,961	6,415	546
North Carolina	2,536	195	2,341
South Carolina	6,756	4,296	2,460
Total	37,086	30,857	6,229
Imports from:			
Alabama	7,918	7,094	824
Florida	19,211	19,084	127
North Carolina	259	255	4
South Carolina	19,742	19,659	83
Tennessee	1,018	1,018	0
Total	48,148	47,110	1,038

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

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>Thousand cubic feet</i>			
Georgia (retained)	67,676	52,308	15,368
Exports to:			
Alabama	841	826	15
Florida	8,359	8,335	24
North Carolina	47	0	47
South Carolina	195	0	195
Total	9,442	9,161	281
Imports from:			
Alabama	4,756	2,071	2,685
Florida	4,878	4,668	210
Kentucky	1,004	86	918
North Carolina	206	0	206
South Carolina	206	0	206
Virginia	1,234	86	1,148
Total	12,284	6,911	5,373

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

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>Thousand cubic feet</i>			
Georgia (retained)	502,990	361,401	141,589
Exports to:			
Alabama	43,519	23,261	20,258
Florida	51,431	40,155	11,276
Louisiana	1,123	1,057	66
North Carolina	1,171	293	878
South Carolina	1,096	3	1,093
Tennessee	15,880	11,787	4,093
Texas	83	0	83
Total	114,303	76,556	37,747
Imports from:			
Alabama	52,785	46,138	6,647
Florida	41,776	33,502	8,274
Kentucky	2	1	1
North Carolina	928	731	197
South Carolina	71,985	37,630	34,355
Tennessee	1,413	653	760
Virginia	49	49	0
Total	168,938	118,704	50,234

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

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

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>Thousand cubic feet</i>			
Georgia (retained)	48,921	42,056	6,865
Exports to:			
Tennessee	866	597	269
Total	866	597	269
Imports from:			
Florida	6,539	0	6,539
South Carolina	3,599	2,781	818
Total	10,138	2,781	7,357

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

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>Thousand cubic feet</i>			
Georgia (retained)	15,267	14,746	521
Exports to:			
Alabama	99	99	0
Florida	1,226	1,210	16
South Carolina	179	179	0
Total	1,504	1,488	16
Imports from:			
Alabama	38	0	38
Florida	937	937	0
South Carolina	157	157	0
Total	1,132	1,094	38

^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, Georgia, 1997

Roundwood type and species group	All types	Residue type			
		Bark	Coarse	Sawdust	Shavings
<i>Thousand cubic feet</i>					
Saw logs					
Softwood	280,618	40,433	134,260	67,320	38,605
Hardwood	41,206	7,972	18,134	14,640	460
Total	321,824	48,405	152,394	81,960	39,065
Veneer logs					
Softwood	40,348	5,891	18,402	16,055	0
Hardwood	15,453	2,470	6,598	6,385	0
Total	55,801	8,361	25,000	22,440	0
Pulpwood					
Softwood	46,999	46,999	0	0	0
Hardwood	23,981	23,981	0	0	0
Total	70,980	70,980	0	0	0
Composite panels					
Softwood	11,315	10,014	1,301	0	0
Hardwood	4,035	3,636	399	0	0
Total	15,350	13,650	1,700	0	0
Other industrial^a					
Softwood	19,003	11,589	7,001	413	0
Hardwood	314	69	176	69	0
Total	19,317	11,658	7,177	482	0
Total					
Softwood	398,283	114,926	160,964	83,788	38,605
Hardwood	84,989	38,128	25,307	21,094	460
Total	483,272	153,054	186,271	104,882	39,065

^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, Georgia, 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	148,158	154,920	0	2,217	143,398	144,569	4,208	6,783	552	1,351
Hardwood	14,845	21,596	0	1,044	14,830	17,876	15	2,673	0	3
Total	163,003	176,516	0	3,261	158,228	162,445	4,223	9,456	552	1,354
Particleboard										
Softwood	38,600	57,338	0	375	19	3,627	15,904	25,879	22,677	27,457
Hardwood	46	1,119	0	0	0	679	0	400	46	40
Total	38,646	58,457	0	375	19	4,306	15,904	26,279	22,723	27,497
Composite panels										
Softwood	0	0	0	0	0	0	0	0	0	0
Hardwood	3	0	0	0	0	0	0	0	3	0
Total	3	0	0	0	0	0	0	0	3	0
Sawn products										
Softwood	5,533	3,630	0	0	5,533	3,630	0	0	0	0
Hardwood	1,055	1,535	0	0	1,055	1,535	0	0	0	0
Total	6,588	5,165	0	0	6,588	5,165	0	0	0	0
Fuel										
Softwood	169,727	142,718	90,961	86,699	9,524	6,397	54,288	42,872	14,954	6,750
Hardwood	60,564	55,355	38,481	33,888	4,503	3,960	17,353	17,118	227	389
Total	230,291	198,073	129,442	120,587	14,027	10,357	71,641	59,990	15,181	7,139
Miscellaneous										
Softwood	32,583	35,511	18,917	25,089	2,633	1,943	8,915	6,082	2,118	2,397
Hardwood	2,361	4,963	1,130	3,109	309	1,104	876	722	46	28
Total	34,944	40,474	20,047	28,198	2,942	3,047	9,791	6,804	2,164	2,425
Not used										
Softwood	3,830	4,166	1,465	546	864	798	1,392	2,172	109	650
Hardwood	513	421	141	87	174	153	196	181	2	0
Total	4,343	4,587	1,606	633	1,038	951	1,588	2,353	111	650
All products										
Softwood	398,431	398,283	111,343	114,926	161,971	160,964	84,707	83,788	40,410	38,605
Hardwood	79,387	84,989	39,752	38,128	20,871	25,307	18,440	21,094	324	460
Total	477,818	483,272	151,095	153,054	182,842	186,271	103,147	104,882	40,734	39,065

Table 15 Roundwood timber products output by product and species group, Southeast Georgia, 1995 and 1997

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
Saw logs				
Softwood	181,119	152,514	-28,605	-15.8
Hardwood	9,689	14,716	5,027	51.9
Total	190,808	167,230	-23,578	-12.4
Veneer logs				
Softwood	13,279	12,640	-639	-4.8
Hardwood	3,530	2,345	-1,185	-33.6
Total	16,809	14,985	-1,824	-10.9
Pulpwood^a				
Softwood	170,080	185,296	15,216	8.9
Hardwood	71,367	57,936	-13,431	-18.8
Total	241,447	243,232	1,785	0.7
Composite panels				
Softwood	537	1,946	1,409	262.4
Hardwood	0	1,112	1,112	--
Total	537	3,058	2,521	469.5
Other industrial				
Softwood	11,312	10,091	-1,221	-10.8
Hardwood	0	0	0	--
Total	11,312	10,091	-1,221	-10.8
All industrial				
Softwood	376,327	362,487	-13,840	-3.7
Hardwood	84,586	76,109	-8,477	-10.0
Total	460,913	438,596	-22,317	-4.8

-- = negligible.

^a Includes roundwood that was delivered to nonpulp mills and then chipped and sold to pulp mills (8,349,000 cubic feet in 1995 and 10,943,000 cubic feet in 1997).

Table 16 Roundwood timber products output by county, product, and species group, Southeast Georgia, 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>												
Appling	15,430	1,754	4,407	94	2,067	160	8,913	1,500	0	0	43	0
Atkinson	6,154	449	2,305	6	516	0	2,739	425	114	18	480	0
Bacon	7,160	1,059	2,996	67	516	80	3,052	912	0	0	596	0
Brantley	19,611	1,100	7,115	0	516	0	11,506	1,100	0	0	474	0
Bryan	5,694	1,460	2,299	0	0	0	3,285	1,460	0	0	110	0
Bulloch	12,772	3,487	6,595	60	0	0	6,122	3,427	0	0	55	0
Camden	19,262	3,248	6,976	0	0	0	12,285	3,248	0	0	1	0
Candler	7,093	1,441	5,103	87	0	152	1,781	1,202	0	0	209	0
Charlton	20,299	1,012	6,011	2	884	0	13,024	1,010	0	0	380	0
Chatham	3,524	1,657	944	77	0	64	2,536	1,516	0	0	44	0
Clinch	25,066	1,771	9,090	2	1,917	0	13,516	1,303	0	466	543	0
Coffee	7,983	1,049	4,068	216	1,373	76	2,055	748	229	9	258	0
Dodge	9,037	3,215	5,711	255	428	152	2,235	2,754	344	54	319	0
Echols	17,707	782	8,279	2	910	21	8,155	293	0	466	363	0
Effingham	9,491	2,641	5,375	334	0	0	4,027	2,307	0	0	89	0
Emanuel	12,540	3,941	7,378	2,341	0	47	4,386	1,553	344	0	432	0
Evans	4,354	1,233	3,243	63	0	75	960	1,095	0	0	151	0
Glynn	12,659	2,155	5,325	0	0	0	7,170	2,155	0	0	164	0
Jeff Davis	8,565	3,045	3,134	198	1,713	200	3,273	2,647	0	0	445	0
Jenkins	5,521	2,414	2,597	416	0	0	2,869	1,998	0	0	55	0
Johnson	3,653	2,516	1,732	1,309	0	36	1,692	1,171	229	0	0	0
Laurens	7,190	4,023	4,760	1,956	0	0	2,158	2,058	229	9	43	0
Liberty	12,909	3,698	4,717	0	0	0	7,973	3,698	0	0	219	0
Long	7,948	3,037	2,585	43	0	0	5,266	2,994	0	0	97	0
McIntosh	8,290	1,786	2,867	0	0	0	5,422	1,786	0	0	1	0
Montgomery	2,455	2,865	1,159	1,650	0	192	944	1,023	114	0	238	0
Pierce	7,249	1,025	2,779	33	0	40	3,337	952	0	0	1,133	0
Screven	10,106	4,654	7,317	669	0	60	2,743	3,925	0	0	46	0
Tattnall	6,547	1,398	3,699	94	0	160	2,542	1,144	0	0	306	0
Telfair	8,387	3,226	2,246	1,816	856	256	4,945	1,073	114	81	226	0
Toombs	4,513	2,395	2,520	1,393	0	279	1,727	723	0	0	266	0
Treutlen	2,806	579	0	0	0	47	2,439	532	0	0	367	0
Ware	24,226	325	8,173	2	0	0	14,782	323	0	0	1,271	0
Wayne	21,810	3,205	6,712	0	516	0	14,067	3,205	0	0	515	0
Wheeler	4,476	2,464	2,297	1,531	428	248	1,370	676	229	9	152	0
All counties	362,487	76,109	152,514	14,716	12,640	2,345	185,296	57,936	1,946	1,112	10,091	0

^a Includes roundwood that was delivered to nonpulp mills and then chipped and sold to pulpmills (10,943,000 cubic feet in 1997).

Table 17 Roundwood timber products output by product and species group, Southwest Georgia, 1995 and 1997

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
Saw logs				
Softwood	67,550	85,845	18,295	27.1
Hardwood	4,612	3,580	-1,032	-22.4
Total	72,162	89,425	17,263	23.9
Veneer logs				
Softwood	8,417	9,369	952	11.3
Hardwood	4,375	3,558	-817	-18.7
Total	12,792	12,927	135	1.1
Pulpwood^a				
Softwood	47,048	39,789	-7,259	-15.4
Hardwood	19,916	21,836	1,920	9.6
Total	66,964	61,625	-5,339	-8.0
Composite panels				
Softwood	4,297	5,965	1,668	38.8
Hardwood	7,160	2,377	-4,783	-66.8
Total	11,457	8,342	-3,115	-27.2
Other industrial				
Softwood	2,087	2,248	161	7.7
Hardwood	9	16	7	77.8
Total	2,096	2,264	168	8.0
All industrial				
Softwood	129,399	143,216	13,817	10.7
Hardwood	36,072	31,367	-4,705	-13.0
Total	165,471	174,583	9,112	5.5

^a Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (3,493,000 cubic feet in 1995 and 4,303,000 cubic feet in 1997).

Table 18 Roundwood timber products output by county, product, and species group, Southwest Georgia, 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>												
Baker	3,585	1,249	1,203	0	452	0	1,930	1,249	0	0	0	0
Ben Hill	6,725	1,765	3,190	133	428	152	2,049	1,462	919	18	139	0
Berrien	8,273	395	6,244	0	428	76	1,265	133	114	186	222	0
Brooks	6,907	1,844	5,406	0	226	0	914	1,183	229	661	132	0
Colquitt	11,758	168	9,236	44	452	0	1,611	97	344	27	115	0
Cook	5,279	740	4,263	19	0	0	902	628	114	93	0	0
Crisp	8,668	2,268	5,851	21	0	0	2,515	2,220	229	27	73	0
Decatur	10,686	4,559	5,824	1,252	905	1,253	3,835	2,046	0	0	122	8
Dooly	2,496	870	1,927	176	0	0	455	640	114	54	0	0
Early	6,498	4,339	1,994	131	452	208	4,052	4,000	0	0	0	0
Grady	5,480	2,282	1,645	471	905	461	2,719	1,333	114	9	97	8
Irwin	5,303	545	2,572	0	1,284	152	915	32	459	361	73	0
Lanier	5,793	179	4,397	0	0	0	1,091	179	0	0	305	0
Lowndes	8,499	1,595	5,940	0	0	24	2,440	1,105	0	466	119	0
Miller	3,154	688	2,581	119	0	208	573	361	0	0	0	0
Mitchell	5,703	2,750	1,203	190	905	54	2,032	2,311	1,493	195	70	0
Seminole	2,504	789	1,538	120	0	208	966	461	0	0	0	0
Thomas	7,232	1,548	4,255	148	565	263	2,315	1,137	0	0	97	0
Tift	2,483	314	1,354	4	428	76	225	171	229	63	247	0
Turner	4,712	288	3,119	0	428	152	802	45	229	91	134	0
Wilcox	8,235	1,097	4,692	467	428	152	2,111	424	919	54	85	0
Worth	13,243	1,095	7,411	285	1,083	119	4,072	619	459	72	218	0
All counties	143,216	31,367	85,845	3,580	9,369	3,558	39,789	21,836	5,965	2,377	2,248	16

^a Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (4,303,000 cubic feet in 1997).

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

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
Saw logs				
Softwood	162,539	126,589	-35,950	-22.1
Hardwood	31,044	34,626	3,582	11.5
Total	193,583	161,215	-32,368	-16.7
Veneer logs				
Softwood	25,492	13,806	-11,686	-45.8
Hardwood	8,812	5,928	-2,884	-32.7
Total	34,304	19,734	-14,570	-42.5
Pulpwood^a				
Softwood	131,863	124,555	-7,308	-5.5
Hardwood	77,213	69,246	-7,967	-10.3
Total	209,076	193,801	-15,275	-7.3
Composite panels				
Softwood	6,098	10,029	3,931	64.5
Hardwood	624	923	299	47.9
Total	6,722	10,952	4,230	62.9
Other industrial				
Softwood	466	1,503	1,037	222.5
Hardwood	57	82	25	43.9
Total	523	1,585	1,062	203.1
All industrial				
Softwood	326,458	276,482	-49,976	-15.3
Hardwood	117,750	110,805	-6,945	-5.9
Total	444,208	387,287	-56,921	-12.8

^a Includes roundwood that was delivered to nonpulp mills and then chipped and sold to pulpmills (8,542,000 cubic feet in 1995 and 4,889,000 cubic feet in 1997).

Table 20 Roundwood timber products output by county, product, and species group, Central Georgia, 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>												
Baldwin	6,827	1,770	4,200	580	838	398	1,789	792	0	0	0	0
Bibb	3,780	1,334	1,176	187	251	108	2,239	1,039	114	0	0	0
Bleckley	2,609	374	1,841	251	0	0	703	123	0	0	65	0
Burke	12,501	14,320	5,845	3,281	0	135	6,655	10,904	0	0	1	0
Butts	3,530	701	1,361	216	838	180	1,187	305	114	0	30	0
Calhoun	776	2,601	299	684	0	627	477	1,290	0	0	0	0
Chattahoochee	3,372	763	1,961	358	0	7	1,411	398	0	0	0	0
Clay	2,703	941	515	11	0	7	2,188	923	0	0	0	0
Columbia	7,074	872	6,102	165	0	0	972	707	0	0	0	0
Crawford	6,507	2,482	1,376	152	0	0	5,017	2,312	114	18	0	0
Dougherty	2,093	923	546	244	339	0	1,208	679	0	0	0	0
Glascok	1,514	870	1,030	248	0	0	370	622	114	0	0	0
Greene	8,388	1,403	4,337	6	2,332	0	639	1,158	994	239	86	0
Hancock	13,009	3,149	6,391	413	0	0	6,504	2,736	114	0	0	0
Harris	7,372	2,068	3,071	461	344	152	3,858	1,455	0	0	99	0
Houston	4,218	748	520	428	0	0	3,584	311	114	9	0	0
Jasper	12,396	3,034	7,062	1,562	1,258	723	4,021	749	0	0	55	0
Jefferson	8,540	6,700	4,561	4,146	0	45	3,750	2,509	229	0	0	0
Jones	8,420	2,253	4,641	156	1,258	723	2,377	1,374	114	0	30	0
Lamar	6,221	581	1,632	463	0	0	4,369	118	0	0	220	0
Lee	2,487	179	1,087	0	0	0	1,171	161	229	18	0	0
Lincoln	4,844	1,272	4,546	0	0	0	298	1,272	0	0	0	0
McDuffie	3,431	4,171	2,315	56	0	0	1,116	4,115	0	0	0	0
Macon	3,595	933	1,221	788	0	0	2,260	63	114	0	0	82
Marion	5,998	1,294	515	687	0	0	5,483	607	0	0	0	0
Monroe	7,581	2,912	2,976	867	587	180	4,018	1,865	0	0	0	0
Morgan	9,716	1,779	2,863	702	2,332	0	1,902	932	2,619	145	0	0
Muscogee	1,257	809	350	176	172	329	735	304	0	0	0	0
Peach	1,144	381	938	356	0	0	206	25	0	0	0	0
Pike	1,993	1,081	1,465	783	172	152	356	146	0	0	0	0
Pulaski	989	552	490	519	0	0	342	15	114	18	43	0
Putnam	11,126	2,216	4,672	448	1,258	723	4,621	1,020	520	25	55	0
Quitman	3,588	496	998	11	0	0	2,476	476	114	9	0	0
Randolph	9,333	6,250	2,437	765	0	627	6,896	4,858	0	0	0	0
Richmond	2,107	1,851	1,484	32	0	0	623	1,819	0	0	0	0
Schley	2,146	574	966	223	0	0	1,180	351	0	0	0	0
Stewart	8,651	2,474	2,960	123	0	0	5,577	2,342	114	9	0	0
Sumter	3,616	2,580	1,913	192	0	0	1,589	2,361	114	27	0	0
Talbot	5,829	2,231	1,202	665	172	381	3,706	1,104	229	81	520	0
Taliaferro	3,493	760	3,043	252	0	0	450	508	0	0	0	0
Taylor	3,037	1,276	460	815	0	0	1,773	452	804	9	0	0
Terrell	3,013	1,093	1,835	244	226	0	952	849	0	0	0	0
Twiggs	8,481	3,831	4,745	2,371	419	108	3,317	1,352	0	0	0	0
Upton	3,690	996	1,268	577	172	152	2,050	267	0	0	200	0
Warren	7,276	1,857	4,926	378	0	0	2,350	1,479	0	0	0	0
Washington	7,365	7,954	3,892	3,770	0	63	3,159	4,121	229	0	85	0
Webster	5,903	863	193	455	0	0	5,596	408	114	0	0	0
Wilkes	13,993	2,574	6,706	507	0	0	4,693	1,751	2,580	316	14	0
Wilkinson	8,950	7,679	5,656	3,852	838	108	2,342	3,719	114	0	0	0
All counties	276,482	110,805	126,589	34,626	13,806	5,928	124,555	69,246	10,029	923	1,503	82

^a Includes roundwood that was delivered to nonpulp mills and then chipped and sold to pulpmills (4,889,000 cubic feet in 1997).

Table 21 Roundwood timber products output by product and species group, North Central Georgia, 1995 and 1997

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
Saw logs				
Softwood	50,595	53,168	2,573	5.1
Hardwood	12,201	16,424	4,223	34.6
Total	62,796	69,592	6,796	10.8
Veneer logs				
Softwood	11,736	25,482	13,746	117.1
Hardwood	3,328	3,373	45	1.4
Total	15,064	28,855	13,791	91.5
Pulpwood^a				
Softwood	49,308	59,266	9,958	20.2
Hardwood	18,134	19,995	1,861	10.3
Total	67,442	79,261	11,819	17.5
Composite panels				
Softwood	23,116	22,175	-941	-4.1
Hardwood	2,279	2,252	-27	-1.2
Total	25,395	24,427	-968	-3.8
Other industrial				
Softwood	1,021	2,060	1,039	101.8
Hardwood	316	363	47	14.9
Total	1,337	2,423	1,086	81.2
All industrial				
Softwood	135,776	162,151	26,375	19.4
Hardwood	36,258	42,407	6,149	17.0
Total	172,034	204,558	32,524	18.9

^a Includes roundwood that was delivered to nonpulp mills and then chipped and sold to pulpmills (4,662,000 cubic feet in 1995 and 3,469,000 cubic feet in 1997).

Table 22 Roundwood timber products output by county, product, and species group, North Central Georgia, 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>												
Banks	3,470	1,244	1,109	572	0	41	542	401	1,819	224	0	6
Barrow	1,377	322	0	0	699	0	118	226	525	89	35	7
Carroll	9,493	3,914	3,496	1,444	1,185	381	4,812	2,089	0	0	0	0
Clarke	802	604	463	73	233	0	106	531	0	0	0	0
Clayton	2,936	93	506	63	2,332	0	98	30	0	0	0	0
Cobb	1,130	584	481	447	172	0	477	127	0	0	0	10
Coweta	11,275	1,931	2,752	710	344	152	8,179	1,069	0	0	0	0
De Kalb	1,920	797	1,571	529	172	152	144	109	0	0	33	7
Douglas	1,522	85	798	4	172	0	552	81	0	0	0	0
Elbert	7,690	5,203	1,320	3,297	699	0	2,182	1,615	2,583	291	906	0
Fayette	1,943	125	1,034	66	172	0	737	59	0	0	0	0
Forsyth	911	176	172	38	0	0	92	71	647	67	0	0
Franklin	3,157	984	1,748	498	0	41	709	356	700	89	0	0
Fulton	5,395	1,883	2,900	1,181	516	152	1,779	466	0	0	200	84
Gwinnett	3,794	967	741	547	1,216	152	1,501	183	0	0	336	85
Hall	3,412	1,698	596	1,076	0	41	2,458	534	291	16	67	31
Haralson	5,504	1,441	2,231	528	172	152	3,101	761	0	0	0	0
Hart	1,942	321	1,890	9	0	41	52	271	0	0	0	0
Heard	5,708	1,538	2,139	533	675	176	2,894	716	0	0	0	113
Henry	3,209	781	1,922	541	172	0	1,115	240	0	0	0	0
Jackson	8,474	885	564	4	2,099	0	1,015	369	4,795	512	1	0
Madison	5,297	1,418	567	7	2,099	0	879	1,203	1,587	208	165	0
Meriwether	13,503	2,730	4,358	955	516	557	8,629	1,218	0	0	0	0
Newton	11,670	879	2,362	227	4,570	397	2,119	110	2,619	145	0	0
Oconee	2,069	603	698	0	466	0	614	587	291	16	0	0
Oglethorpe	14,627	2,235	5,217	526	2,099	0	1,615	1,197	5,380	512	316	0
Paulding	8,233	2,170	2,707	402	602	557	4,924	1,191	0	0	0	20
Polk	4,580	1,058	1,436	140	0	0	3,144	918	0	0	0	0
Rockdale	1,024	131	901	116	0	0	123	15	0	0	0	0
Spalding	1,754	959	1,381	850	0	0	373	109	0	0	0	0
Troup	8,557	3,265	4,068	233	602	381	3,887	2,651	0	0	0	0
Walton	5,773	1,383	1,040	808	3,498	0	296	492	938	83	1	0
All counties	162,151	42,407	53,168	16,424	25,482	3,373	59,266	19,995	22,175	2,252	2,060	363

^a Includes roundwood that was delivered to nonpulp mills and then chipped and sold to pulpmills (3,469,000 cubic feet in 1997).

Table 23 Roundwood timber products output by product and species group, North Georgia, 1995 and 1997

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
Saw logs				
Softwood	25,045	24,468	-577	-2.3
Hardwood	7,815	7,682	-133	-1.7
Total	32,860	32,150	-710	-2.2
Veneer logs				
Softwood	0	172	172	--
Hardwood	322	445	123	38.2
Total	322	617	295	91.6
Pulpwood^a				
Softwood	24,508	29,051	4,543	18.5
Hardwood	7,828	10,323	2,495	31.9
Total	32,336	39,374	7,038	21.8
Composite panels				
Softwood	2,852	2,538	-314	-11.0
Hardwood	280	470	190	67.9
Total	3,132	3,008	-124	-4.0
Other industrial				
Softwood	141	332	191	135.5
Hardwood	90	76	-14	-15.6
Total	231	408	177	76.6
All industrial				
Softwood	52,546	56,561	4,015	7.6
Hardwood	16,335	18,996	2,661	16.3
Total	68,881	75,557	6,676	9.7

-- = negligible.

^a Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (528,000 cubic feet in 1995 and 354,000 cubic feet in 1997).

Table 24 Roundwood timber products output by county, product, and species group, North Georgia, 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>											
Bartow	6,999	1,445	2,931	281	0	0	4,068	1,164	0	0	0	0
Catoosa	2,379	619	325	86	0	0	1,427	264	597	269	30	0
Chattooga	2,975	1,275	1,771	517	0	0	1,159	758	0	0	45	0
Cherokee	5,480	1,399	2,417	319	172	0	2,891	1,045	0	0	0	35
Dade	309	261	41	117	0	0	253	144	0	0	15	0
Dawson	2,235	342	336	80	0	0	1,252	195	647	67	0	0
Fannin	2,032	1,562	1,280	1,261	0	199	752	102	0	0	0	0
Floyd	11,446	2,971	4,921	966	0	0	6,450	2,005	0	0	75	0
Gilmer	2,075	603	946	363	0	0	1,129	240	0	0	0	0
Gordon	1,711	898	273	81	0	0	1,438	817	0	0	0	0
Habersham	2,135	804	1,383	541	0	41	726	222	0	0	26	0
Lumpkin	1,612	288	845	70	0	41	767	177	0	0	0	0
Murray	2,613	995	705	206	0	0	1,908	789	0	0	0	0
Pickens	1,016	366	308	67	0	0	708	264	0	0	0	35
Rabun	638	540	629	389	0	41	9	110	0	0	0	0
Stephens	2,018	1,050	1,561	636	0	41	454	373	0	0	3	0
Towns	75	798	65	757	0	41	10	0	0	0	0	0
Union	166	159	67	135	0	0	99	24	0	0	0	0
Walker	2,807	1,006	1,770	391	0	0	947	615	0	0	90	0
White	3,108	681	830	355	0	41	981	145	1,294	134	3	6
Whitfield	2,732	934	1,064	64	0	0	1,623	870	0	0	45	0
All counties	56,561	18,996	24,468	7,682	172	445	29,051	10,323	2,538	470	332	76

^a Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (354,000 cubic feet in 1997).

Table 25 Total roundwood output by product, species group, and source of material, Georgia, 1997

Product and species group	All sources	Total	Growing-stock trees		Other sources
			Sawtimber	Poletimber	
<i>Thousand cubic feet</i>					
Saw logs					
Softwood	442,584	431,289	423,280	8,009	11,295
Hardwood	77,028	73,695	69,309	4,386	3,333
Total	519,612	504,984	492,589	12,396	14,628
Veneer logs and bolts					
Softwood	61,469	60,234	57,486	2,748	1,235
Hardwood	15,649	15,526	15,526	0	123
Total	77,118	75,759	73,012	2,748	1,359
Pulpwood					
Softwood	437,957	374,818	152,914	221,904	63,139
Hardwood	179,336	164,176	72,005	92,171	15,160
Total	617,293	538,994	224,918	314,076	78,299
Composite panels					
Softwood	42,653	36,504	14,892	21,611	6,149
Hardwood	7,134	6,531	2,864	3,667	603
Total	49,787	43,035	17,757	25,278	6,752
Poles and posts					
Softwood	11,862	11,380	10,933	447	482
Hardwood	0	0	0	0	0
Total	11,862	11,380	10,933	447	482
Other miscellaneous					
Softwood	4,372	3,870	2,261	1,610	502
Hardwood	537	475	278	198	62
Total	4,909	4,346	2,539	1,807	563
Total industrial products					
Softwood	1,000,897	918,094	661,765	256,330	82,803
Hardwood	279,684	260,403	159,982	100,422	19,281
Total	1,280,581	1,178,498	821,746	356,751	102,083
Fuelwood					
Softwood	16,582	6,220	4,287	1,934	10,362
Hardwood	101,328	45,598	34,990	10,608	55,730
Total	117,910	51,818	39,277	12,541	66,092
All products					
Softwood	1,017,479	924,315	666,051	258,263	93,164
Hardwood	381,012	306,001	194,972	111,030	75,011
Total	1,398,491	1,230,316	861,023	369,293	168,175

Table 26 Total roundwood output by species group, survey unit, and ownership, Georgia, 1997

Species group and survey unit	Total	National forest	Other public	Forest industry	Nonindustrial private
<i>Thousand cubic feet</i>					
Softwoods					
Southeast	368,492	0	6,602	179,087	182,804
Southwest	145,587	1,276	2,307	25,100	116,904
Central	281,065	3,250	11,983	73,532	192,300
North Central	164,837	0	4,736	32,036	128,065
North	57,498	2,392	3,830	7,689	43,587
Total softwoods	1,017,479	6,919	29,458	317,443	663,659
Hardwoods					
Southeast	103,684	0	6,213	23,164	74,307
Southwest	42,730	0	21	6,442	36,268
Central	150,947	228	2,976	24,022	123,721
North Central	57,773	0	2,564	9,370	45,838
North	25,878	5,130	2,391	5,350	13,007
Total hardwoods	381,012	5,358	14,165	68,347	293,142
All species	1,398,491	12,277	43,623	385,790	956,801

Table 27 Total roundwood output by species group, detailed species group, and product, Georgia, 1997

Species group and detailed species group	Product							
	Total	Saw log	Veneer	Pulpwood	Composite panel	Fuelwood	Poles and posts	Other miscellaneous
<i>Thousand cubic feet</i>								
Softwood								
Cedar	1,833	416	314	398	576	30	0	99
Longleaf-slash pine	386,861	174,858	17,021	172,858	6,430	6,304	8,507	884
White pine	697	315	0	370	0	11	0	0
Loblolly-shortleaf pine	577,893	244,081	43,175	242,339	32,692	9,419	2,995	3,192
Other yellow pines	38,749	17,648	613	16,627	2,841	632	219	170
Cypress	11,164	5,094	346	5,260	114	182	140	27
Hemlock	282	173	0	105	0	5	0	0
Total softwoods	<u>1,017,479</u>	<u>442,584</u>	<u>61,469</u>	<u>437,957</u>	<u>42,653</u>	<u>16,582</u>	<u>11,862</u>	<u>4,372</u>
Hardwood								
Soft maple	21,216	3,964	675	10,567	332	5,642	0	36
Hard maple	52	24	1	13	0	14	0	0
Other birch	1,908	287	70	922	121	507	0	1
Hickory	19,228	4,669	690	8,391	332	5,113	0	33
Beech	747	164	103	269	13	199	0	0
Ash	4,201	1,120	136	1,725	92	1,117	0	11
Sweetgum	66,928	15,169	2,254	30,759	856	17,799	0	92
Yellow-poplar	40,271	9,244	1,803	17,648	763	10,710	0	102
Blackgum-tupelo	45,461	5,445	1,806	25,004	1,105	12,091	0	11
Sycamore	920	215	30	411	14	244	0	4
Cottonwood	285	26	21	163	0	76	0	0
Black cherry	3,843	630	184	1,770	229	1,022	0	10
Select white oaks	20,069	4,794	1,389	8,258	250	5,337	0	40
Other white oaks	16,545	3,190	684	7,986	260	4,400	0	25
Select red oaks	5,715	1,558	169	2,254	203	1,520	0	10
Other red oaks	106,971	21,356	4,490	50,681	1,859	28,448	0	136
Basswood	83	11	0	49	0	22	0	0
Elm	4,944	975	291	2,233	129	1,315	0	0
Other Eastern hardwoods	<u>21,626</u>	<u>4,187</u>	<u>854</u>	<u>10,233</u>	<u>576</u>	<u>5,752</u>	<u>0</u>	<u>24</u>
Total hardwoods	<u>381,012</u>	<u>77,028</u>	<u>15,649</u>	<u>179,336</u>	<u>7,134</u>	<u>101,328</u>	<u>0</u>	<u>537</u>
All species	<u>1,398,491</u>	<u>519,612</u>	<u>77,118</u>	<u>617,293</u>	<u>49,787</u>	<u>117,910</u>	<u>11,862</u>	<u>4,909</u>

Table 28 Total roundwood output by species group, detailed species group, and ownership, Georgia, 1997

Species group and detailed species group	Total	National forest	Other public	Forest industry	Nonindustrial private
<i>Thousand cubic feet</i>					
Softwood					
Cedar	1,833	0	27	742	1,065
Longleaf-slash pine	386,861	1,125	7,539	156,009	222,187
White pine	697	53	0	387	257
Loblolly-shortleaf pine	577,893	4,077	20,721	148,371	404,724
Other yellow pines	38,749	1,443	1,020	8,036	28,251
Cypress	11,164	0	151	3,899	7,114
Hemlock	282	220	0	0	62
Total softwoods	<u>1,017,479</u>	<u>6,919</u>	<u>29,458</u>	<u>317,443</u>	<u>663,659</u>
Hardwood					
Soft maple	21,216	400	1,294	4,048	15,473
Hard maple	52	0	0	3	49
Other birch	1,908	382	26	350	1,151
Hickory	19,228	301	817	4,449	13,660
Beech	747	0	0	90	657
Ash	4,201	18	354	703	3,126
Sweetgum	66,928	95	2,303	12,265	52,266
Yellow-poplar	40,271	964	1,789	5,867	31,651
Blackgum-tupelo	45,461	137	1,303	9,915	34,107
Sycamore	920	4	159	51	706
Cottonwood	285	0	0	61	224
Black cherry	3,843	0	99	501	3,244
Select white oaks	20,069	536	557	2,809	16,167
Other white oaks	16,545	1,085	1,840	3,356	10,264
Select red oaks	5,715	283	41	1,112	4,279
Other red oaks	106,971	931	2,778	18,185	85,077
Basswood	83	0	0	0	83
Elm	4,944	18	132	694	4,101
Other Eastern hardwoods	<u>21,626</u>	<u>205</u>	<u>673</u>	<u>3,890</u>	<u>16,858</u>
Total hardwoods	<u>381,012</u>	<u>5,358</u>	<u>14,165</u>	<u>68,347</u>	<u>293,142</u>
All species	<u>1,398,491</u>	<u>12,277</u>	<u>43,623</u>	<u>385,790</u>	<u>956,801</u>



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In 1997, roundwood output from Georgia's forests totaled 1.28 billion cubic feet, 2 percent less than in 1995. Mill byproducts generated from primary manufacturers increased 1 percent to 479 million cubic feet. Almost all plant residues were used primarily for fuel and fiber products. Pulpwood was the leading roundwood product at 617 million cubic feet; saw logs ranked second at 520 million cubic feet; veneer logs were third at 77 million cubic feet. The number of primary processing plants declined from 207 in 1995 to 186 in 1997. Total receipts remained stable at 1.4 billion cubic feet.

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

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