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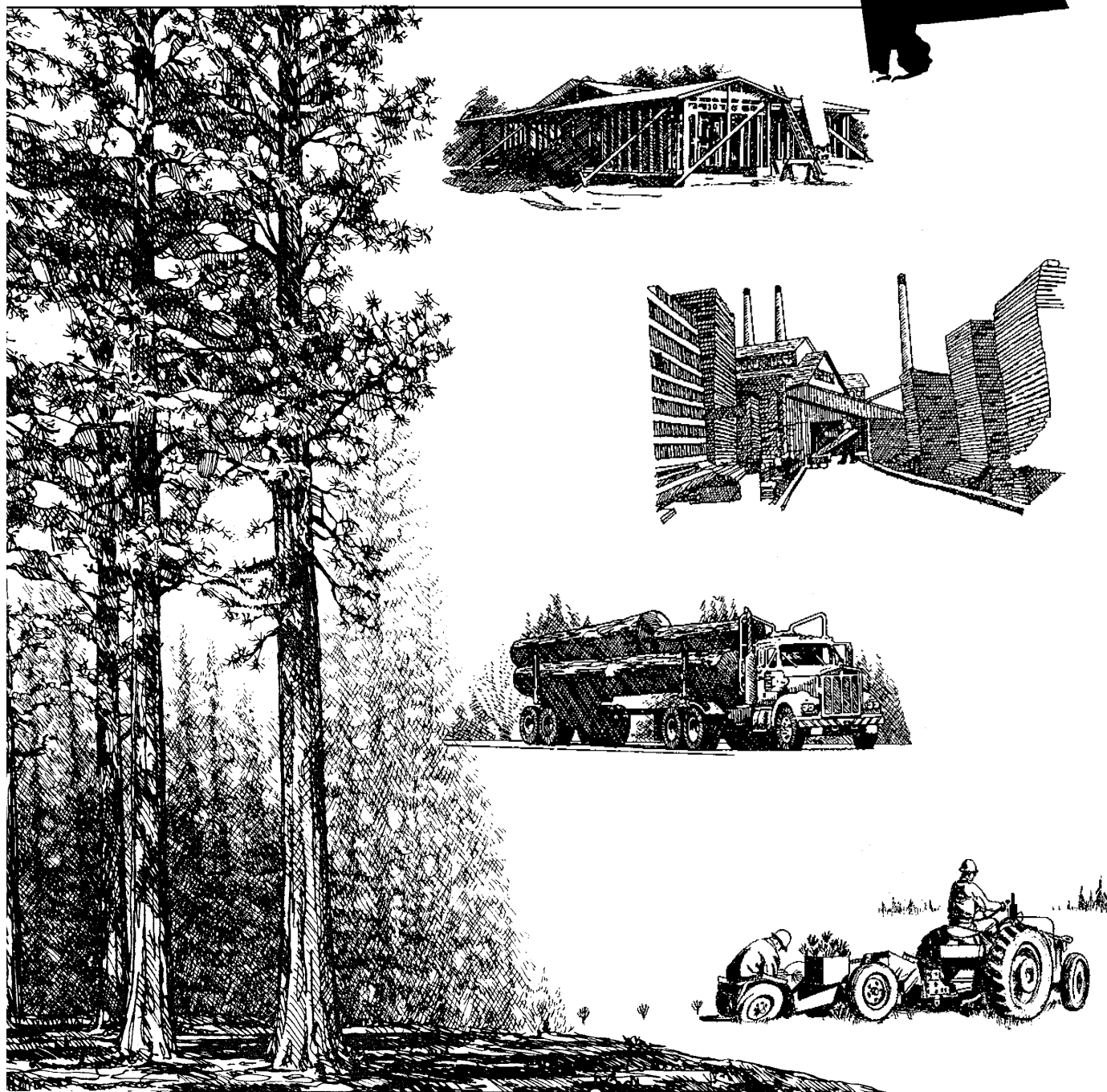
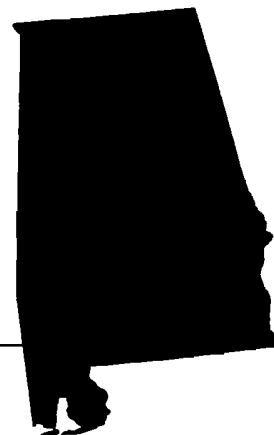


Southern  
Research Station

Resource Bulletin  
SRS-45

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

Michael Howell, Jim R. Gober,  
and J. Stephen Nix

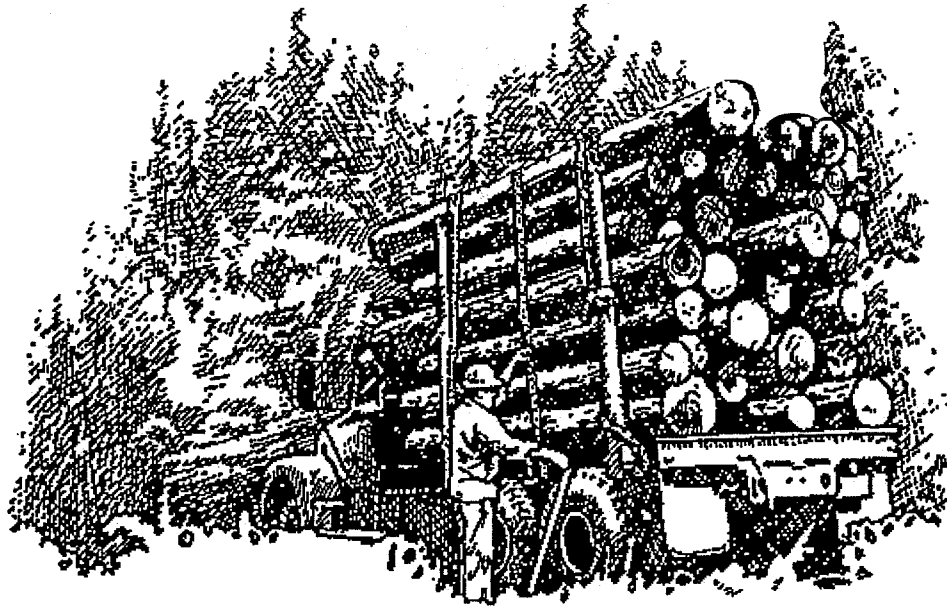


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**The Authors:**

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November 1999

Southern Research Station  
P.O. Box 2680  
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## Foreword

This report contains the findings of a 1997 canvass of primary wood-using plants in Alabama. It complements the Forest Inventory and Analysis (FIA) periodic inventory of volume and removals from the State's timberland. The canvass was conducted to determine the amount and source of wood receipts and annual timber product drain by county in 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 sampled survey of wood processors in Alabama 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 Alabama

timberland was incorporated into Alabama 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. Surveys for all timber products other than pulpwood began in 1951, 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 Alabama 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 36 percent of the 212 mills operating in 1997: 16 pulpmills, 48 of the 145 sawmills, 6 of the 26 veneer mills, and 6 of the 25 mills manufacturing other industrial products.



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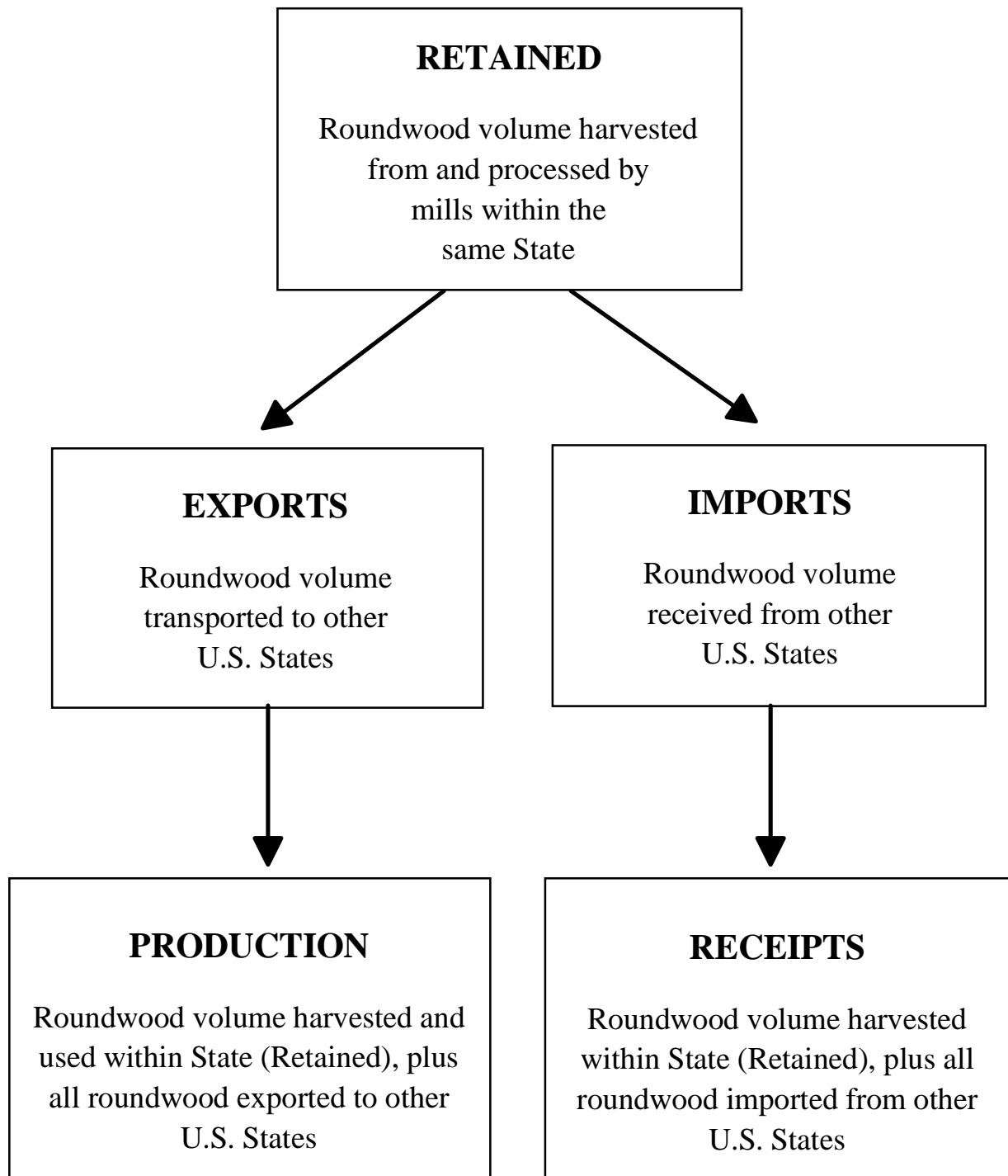
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<sup>a</sup> All tables in this report are available in Microsoft® Excel workbook files. Upon request, these files will be supplied on 3½-inch diskettes.

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.

# Alabama'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—retained, export, import, production, and receipts—have specialized meanings unique to the Forest Inventory and Analysis 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 increased from 1.77 billion cubic feet to 1.82 billion cubic feet.
- Timber products output from roundwood was up 46 million cubic feet, or 4 percent, to 1.35 billion cubic feet, while output of plant byproducts was up 6 million cubic feet to 477 million cubic feet.
- Output of softwood roundwood products increased 4 percent to 957 million cubic feet, while output of hardwood roundwood products increased 4 percent to 389 million cubic feet (fig. 2).
- Pulpwood and saw logs were the principal roundwood products in 1997. Combined output of these products totaled 1.22 billion cubic feet and accounted for 90 percent of Alabama's total roundwood output (fig. 3).
- Total receipts at Alabama mills, which included roundwood harvested and retained in the State as well as roundwood imported from other States, increased 1 percent to 1.43 billion cubic feet. The number of primary roundwood-using plants in Alabama totaled 212 in 1997.

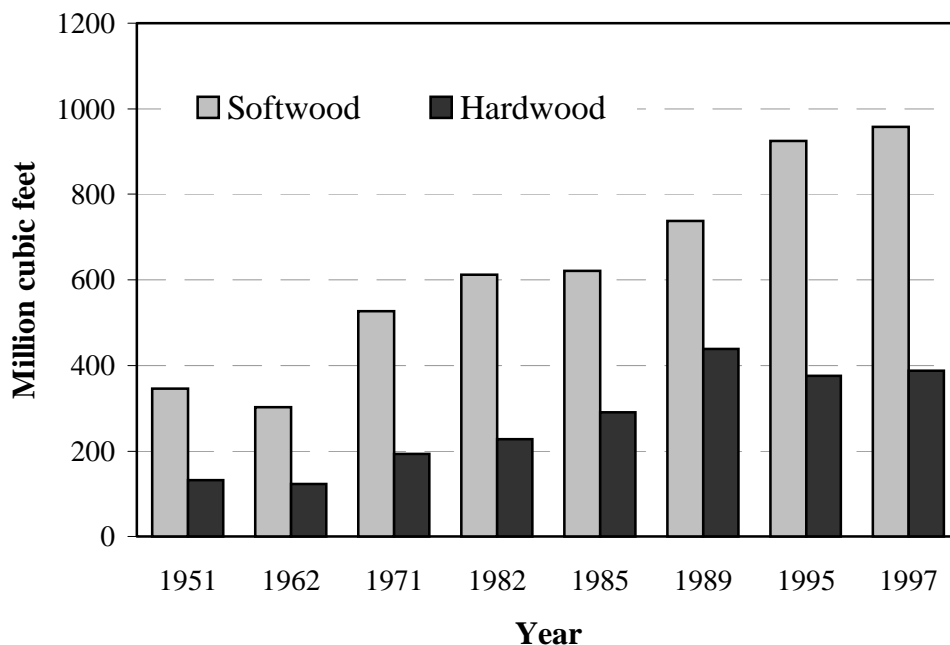


Figure 2—Roundwood production for all products by species group and year (see page 8 for references for individual years).

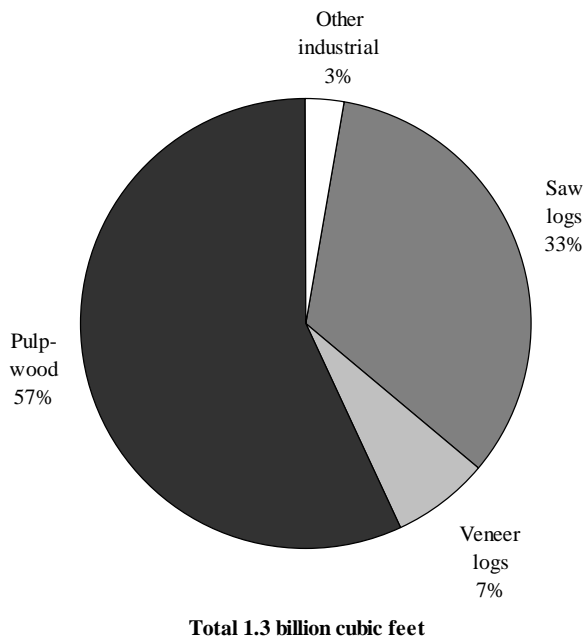


Figure 3—Roundwood production by type of product, 1997.

### Pulpwood

- Total pulpwood production, including chipped roundwood, increased 67 million cubic feet to 765 million cubic feet (10.3 million cords) and accounted for 57 percent of the State's total roundwood TPO. Softwood output increased 11 percent to 463 million cubic feet; hardwood output increased 7 percent to 302 million cubic feet (fig. 4).

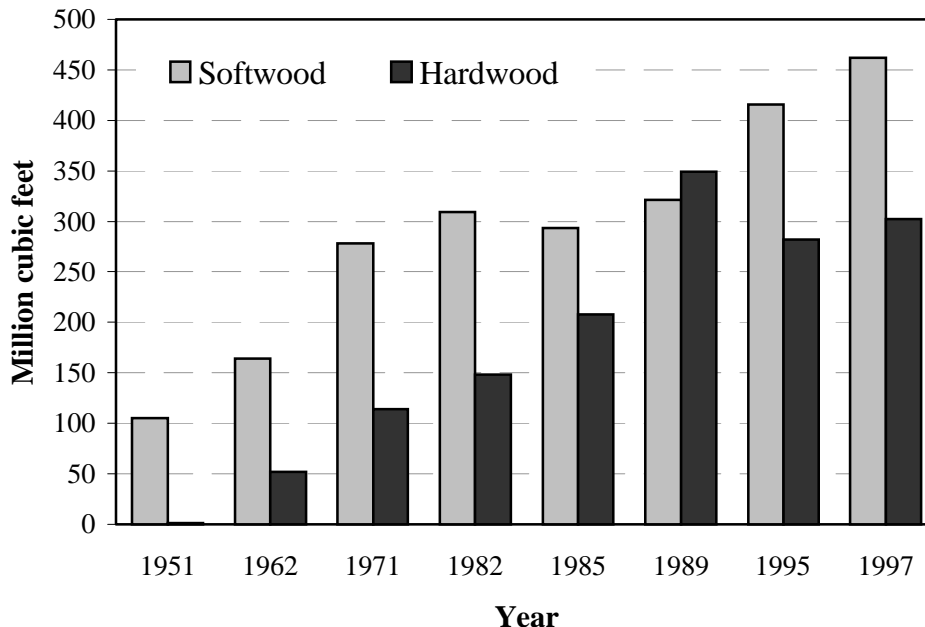


Figure 4—Roundwood pulpwood production by species group and year (see page 8 for references for individual years).

- Sixteen pulpmill facilities were operating and receiving roundwood in Alabama in 1997, the same as 1995. Total pulpwood receipts for these mills increased 38 million cubic feet to 843 million cubic feet, accounting for 59 percent of total receipts for all mills.
- Eighty-three percent of roundwood cut for pulpwood was retained for processing at Alabama pulpmills. Roundwood pulpwood accounted for 64 percent of total known exports and 74 percent of total imports. Roundwood pulpwood imports amounted to 209 million cubic feet, 78 million cubic feet more than was exported.

### Saw Logs

- Saw logs accounted for 33 percent of the State's total roundwood products. Output of softwood saw logs fell 4 percent to 382 million cubic feet (2.1 billion board feet), while that of hardwood saw logs declined 8 percent to 68 million cubic feet (386 million board feet) (fig. 5).
- Alabama currently has 145 sawmills, a net loss of 3 mills since 1995. Total saw-log receipts declined 21 million cubic feet to 453 million cubic feet. Softwood saw-log receipts were down 4 percent to 381 million cubic feet, while those of hardwoods declined 5 percent to 72 million cubic feet. Of the operating mills, 20 percent had receipts less than 1 million board feet, while 34 percent had receipts



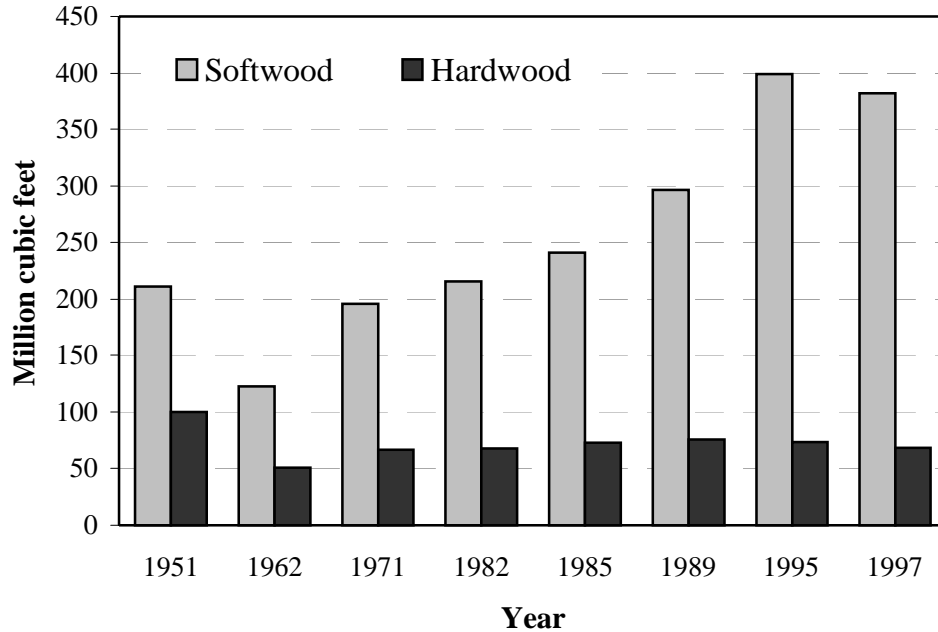


Figure 5—Roundwood saw-log production by species group and year (see page 8 for references for individual years).

greater than 10 million board feet. These 50 mills, however, accounted for 88 percent of total saw-log receipts.

- Alabama retained 87 percent of its saw-log production for domestic manufacture; saw-log imports exceeded exports by 4 million cubic feet in 1997.

### Veneer Logs

- Output of veneer logs in 1997 totaled 93 million cubic feet and accounted for 7 percent of the State's total roundwood TPO volume. Softwood veneer production remained at 75 million cubic feet (459 million board feet); output of hardwood veneer logs declined 9 percent to 18 million cubic feet (109 million board feet) (fig. 6).

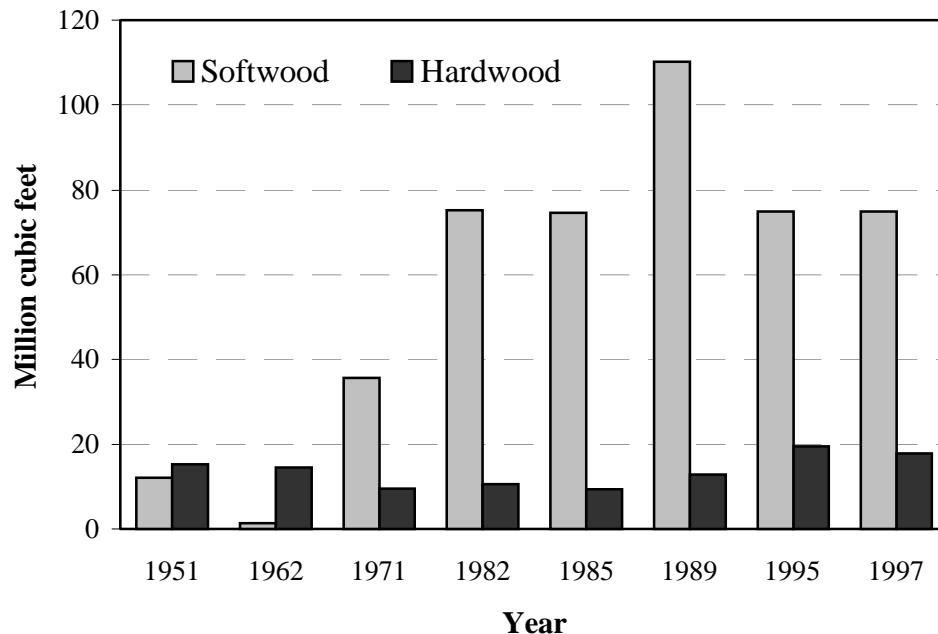


Figure 6—Roundwood veneer-log production by species group and year (see page 8 for references for individual years).

- Twenty-six veneer mills were operating in Alabama in 1997. Total receipts of veneer logs decreased 3 percent to 86 million cubic feet. Softwood veneer receipts increased 3 million cubic feet to 71 million cubic feet.
- Alabama retained 86 percent of its veneer-log production for processing at domestic veneer mills. Imports amounted to 6 million cubic feet, and exports totaled 13 million cubic feet, making the State a net exporter of roundwood veneer logs.

### Other Industrial Products

- Roundwood harvested for other industrial uses, such as poles, posts, mulch, firewood, composite panels, and all other industrial products, increased 7 percent to 37 million cubic feet. Other industrial product volume accounted for 3 percent of the State's total TPO volume. Softwood made up 99 percent of the other industrial product volume (fig. 7).
- A total of 25 plants produced other industrial products in 1997. Combined receipts of other industrial products from softwood and hardwood increased 9 percent to 43 million cubic feet.
- Alabama was a net importer of roundwood used for other industrial products; all of the 5.8 million cubic feet imported was softwood.

### Plant Byproducts

- In 1997, processing of primary products in Alabama mills generated 480 million cubic feet of wood and bark residues. Coarse residues from all primary products was 177 million cubic feet, while bark volume totaled 179 million cubic feet. Sawdust and shavings made up 26 percent of total residues, or 124 million cubic feet (fig. 8).

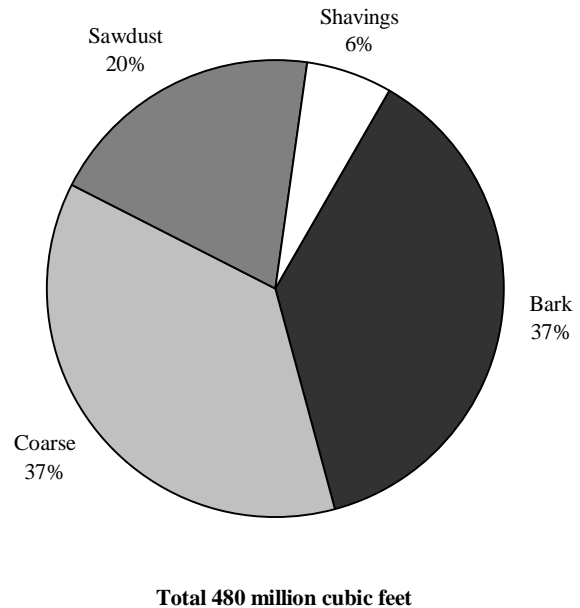


Figure 8—Primary mill residue by residue type, 1997.

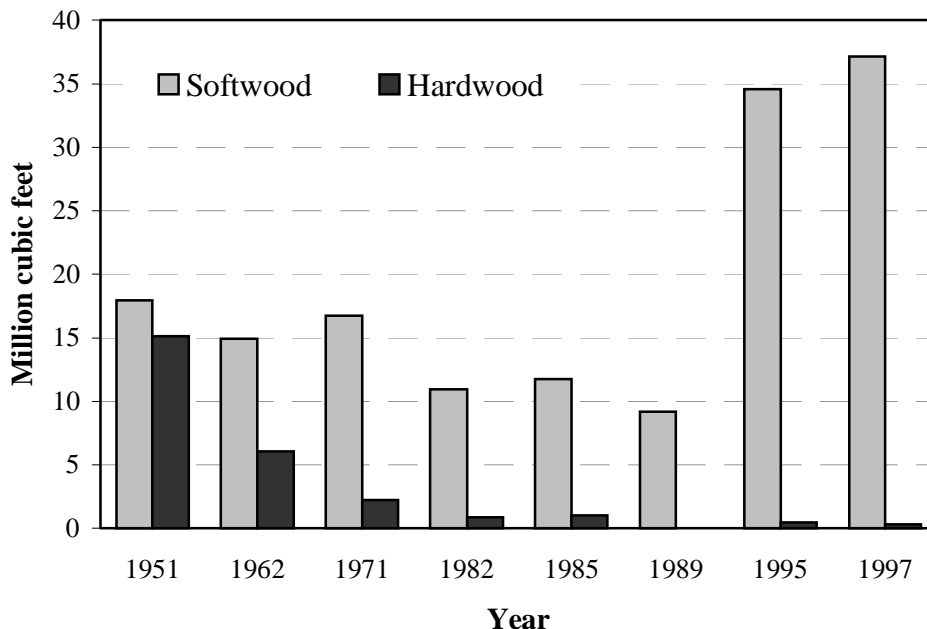


Figure 7—Roundwood production for other industrial products by species group and year (see page 8 for references for individual years).

- Virtually all of the wood and bark residues were used for product manufacture; only 1 percent was not used, while 58 percent of the residues were used for industrial fuel (fig. 9). More than 135 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, while 69 percent of the sawdust and shavings were used for industrial fuel.

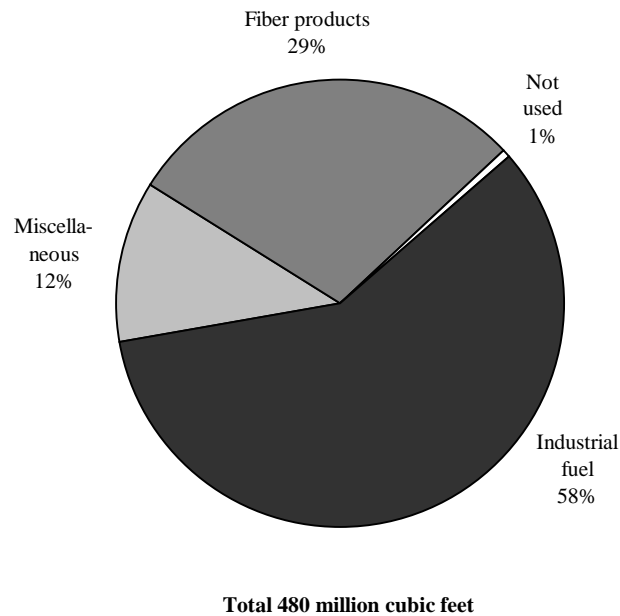


Figure 9—Disposal of residue by product, 1997.

- Sawmills generated 264 million cubic feet of mill residues, accounting for 55 percent of the total residues produced (fig. 10).

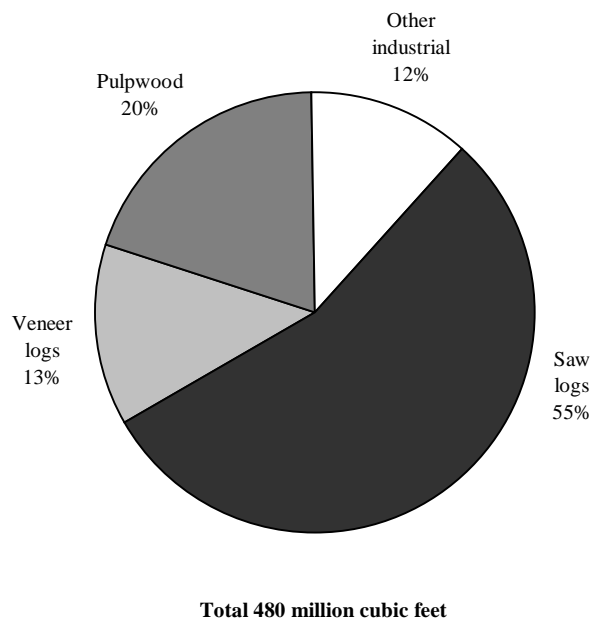


Figure 10—Primary mill residue produced by mill type, 1997.

## Regional Trends

- Output of industrial roundwood products increased substantially in the North Central and Northern regions of Alabama with 20 and 26 percent increases, respectively. Softwood output accounted for at least two-thirds of total output for all regions, except the Northern region, where softwoods accounted for 46 percent of total output.

### Southwest South Region

- Roundwood output from the Southwest South region totaled 152 million cubic feet in 1997, a 1-percent decline. Softwood output remained stable at 123 million cubic feet; hardwood output declined 9 percent to 29 million cubic feet.
- Pulpwood accounted for 54 percent of the region's TPO and 11 percent of the State's roundwood pulpwood output. The 49 million cubic feet of saw logs accounted for 32 percent of the total roundwood output for the region.
- In the Southwest South region, 22 primary wood-using plants were operating during 1995: 11 sawmills, 3 pulpmills, and 8 other miscellaneous mills (fig. 11). These mills processed 11 percent of the State's total roundwood output.

### Southwest North Region

- Two hundred and ninety-seven million cubic feet of roundwood were produced in the Southwest North region of Alabama, a 4-percent decline. Softwood output declined 3 percent to 223 million cubic feet; hardwood production was down 9 percent to 74 million cubic feet.
- Saw-log production of 110 million cubic feet accounted for 37 percent of the region's total roundwood output. Production of pulpwood at 161 million cubic feet accounted for 54 percent of the region's total roundwood output.
- The 45 mills operating in the Southwest North region in 1997 included 23 sawmills, 7 veneer or plywood mills, 7 pulpmills, and 8 other miscellaneous mills.

### Southeast Region

- Roundwood output from the Southeast region totaled 351 million cubic feet in 1997, a 2-percent increase. Softwood production was up 1 percent to 249 million cubic feet; hardwood output increased 5 percent to 102 million cubic feet.

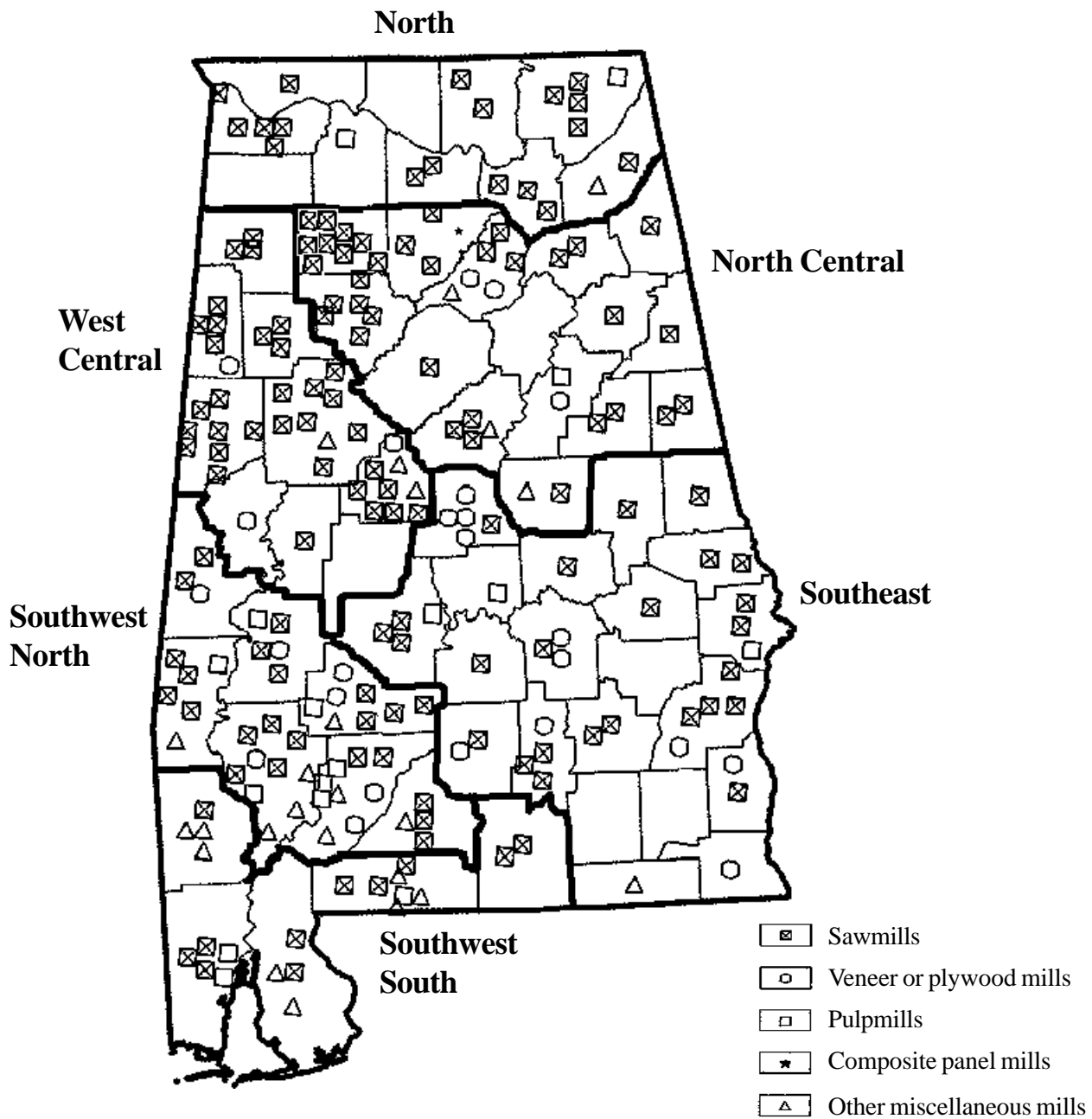


Figure 11—Primary wood-using mills by region, 1997.

- Pulpwood accounted for 64 percent of the region's TPO and 30 percent of the State's roundwood pulpwood output. The 96 million cubic feet of saw logs accounted for 27 percent of the total roundwood output for the region.
- In the Southeast region, 40 primary wood-using plants were operating during 1997: 25 sawmills, 11 veneer or plywood mills, 3 pulpmills, and 1 other miscellaneous mill (fig. 11). These mills processed 26 percent of the State's total roundwood output.

#### West Central Region

- Roundwood output from the West Central region totaled 187 million cubic feet, a 5-percent decline. Softwood output declined 3 percent to 124 million cubic feet; hardwood output was down 8 percent to 63 million cubic feet. Roundwood production from this region accounted for 14 percent of the total roundwood TPO for the State.

- Pulpwood production of 88 million cubic feet accounted for 47 percent of the region's total TPO. Saw-log production of 84 million cubic feet accounted for another 45 percent of the region's total roundwood output.
- The 39 primary wood-using plants operating in the West Central region included 33 sawmills, 3 veneer or plywood mills, and 3 other miscellaneous mills.

### North Central Region

- Roundwood output from the North Central region totaled 286 million cubic feet in 1997, a 20-percent increase. Softwood output increased 21 percent from 170 million cubic feet in 1995 to 205 million cubic feet in 1997. Hardwood production increased 20 percent to 81 million cubic feet.
- Production of pulpwood at 164 million cubic feet accounted for 57 percent of the region's total roundwood output. Saw-log production of 86 million cubic feet accounted for 30 percent of the region's total roundwood output.
- In the North Central region, 43 primary wood-using plants were operating during 1997: 35 sawmills, 3 veneer or plywood mills, 1 pulpmill, 1 composite panel mill, and 3 other miscellaneous mills.

### North Region

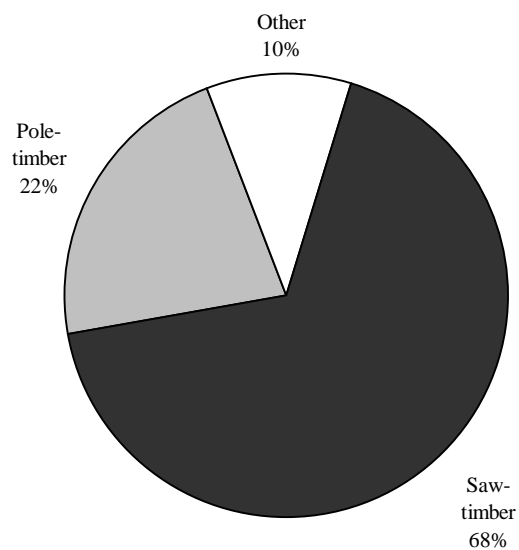
- Roundwood output from the Northern region totaled 73 million cubic feet, a 26-percent increase since 1995. Softwood output was up 17 percent to 33 million cubic feet; hardwood output increased 34 percent to 40 million cubic feet.
- Saw-log production totaled 26 million cubic feet and accounted for 35 percent of the region's total roundwood output. Pulpwood production of 44 million cubic feet accounted for 61 percent of the region's total TPO.
- In the North region, 21 primary wood-using plants were operating during 1997: 18 sawmills, 2 pulpmills, and 1 other miscellaneous mill.

### Total Roundwood Output

Using the most recent inventory data for Alabama, 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 products, an estimated 114 million cubic feet was harvested for domestic fuelwood, bringing Alabama's total roundwood output to 1.4 billion cubic feet.
- Ninety percent of total roundwood output was considered growing-stock volume (sawtimber and pole-timber) from timberland sources, with other sources contributing an estimated 151 million cubic feet, or 10 percent of total roundwood output (fig. 12).



Total 1.5 billion cubic feet

Figure 12—Roundwood output by source, 1997.

### Ownership

- An estimated 970 million cubic feet, or 67 percent, of the total roundwood output came from nonindustrial private forest lands.
- Forest industry lands contributed 444 million cubic feet, or 30 percent of the output.
- Public lands made up the remaining 3 percent, or 44 million cubic feet (fig. 13).

### Species

- The loblolly and shortleaf pine group provided more volume than any other softwood species group, accounting for 77 percent of the total softwood output (fig. 14). The slash and longleaf pine type accounted for 18 percent of the softwood output.

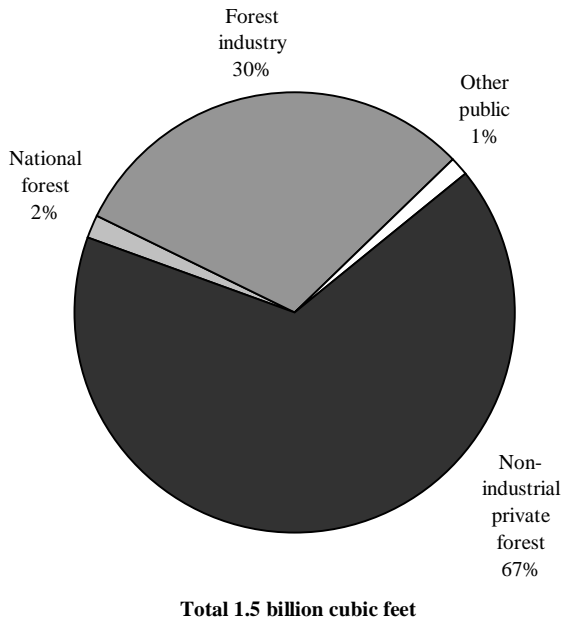


Figure 13—Roundwood output by ownership, 1997.

- The red oak and white oak groups combined accounted for 236 million cubic feet, or 48 percent of total hardwood output (fig. 15).

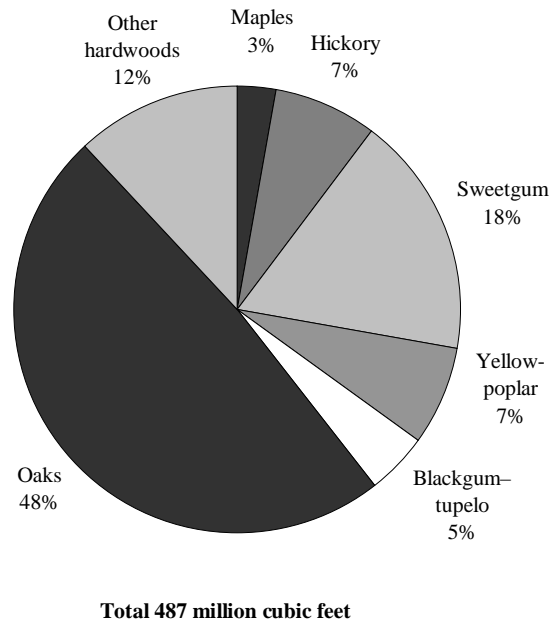


Figure 15—Roundwood output by hardwood species group, 1997.

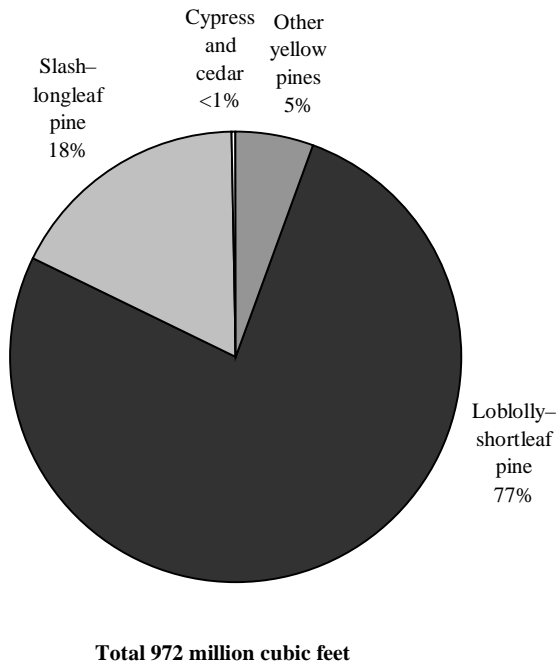


Figure 14—Roundwood output by softwood species group, 1997.

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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 nonpulpmills, chipped, and then sold to pulpmills for use as fiber. Includes tops, jump sections, and whole trees.

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

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

**Standard cord.** A unit measure applied to roundwood, usually bolts or split wood. It relates to a stack of wood 4 feet high, 4 feet wide, and 8 feet long encompassing 128 cubic feet of wood, bark, and air space. In 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<sup>a</sup>**

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### **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<sup>b</sup>**

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

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<sup>a</sup> Conversion factors vary with stem size (d.b.h.) and species.

<sup>b</sup> Cubic feet of solid wood per cord.



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**Table 1—Output of industrial products by product and species group, Alabama, 1995 and 1997**

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
<b>Saw logs</b>				
Softwood	399,291	382,123	-17,168	-4.3
Hardwood	73,509	68,003	-5,506	-7.5
Total	472,800	450,126	-22,674	-4.8
<b>Veneer logs</b>				
Softwood	74,873	74,921	48	0.1
Hardwood	19,559	17,887	-1,672	-8.5
Total	94,432	92,808	-1,624	-1.7
<b>Pulpwood<sup>a</sup></b>				
Softwood	415,503	462,596	47,093	11.3
Hardwood	281,998	302,310	20,312	7.2
Total	697,501	764,906	67,405	9.7
<b>Other industrial</b>				
Softwood	34,559	37,125	2,566	7.4
Hardwood	457	347	-110	-24.1
Total	35,016	37,472	2,456	7.0
<b>All industrial</b>				
Softwood	924,226	956,765	32,539	3.5
Hardwood	375,523	388,547	13,024	3.5
Total	1,299,749	1,345,312	45,563	3.5
<b>Byproduct output</b>				
Softwood	362,738	372,163	9,425	2.6
Hardwood	108,680	105,017	-3,663	-3.4
Total	471,418	477,180	5,762	1.2
<b>Total output</b>				
Softwood	1,286,964	1,328,928	41,964	3.3
Hardwood	484,203	493,564	9,361	1.9
Total	1,771,167	1,822,492	51,325	2.9

<sup>a</sup> Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (12,660,000 cubic feet in 1997).

**Table 2—Roundwood receipts by product and species group, Alabama, 1995 and 1997**

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
<b>Saw logs</b>				
Softwood	398,555	381,282	-17,273	-4.3
Hardwood	76,068	72,361	-3,707	-4.9
Total	474,623	453,643	-20,980	-4.4
<b>Veneer logs</b>				
Softwood	68,621	70,616	1,995	2.9
Hardwood	19,663	15,023	-4,640	-23.6
Total	88,284	85,639	-2,645	-3.0
<b>Pulpwood<sup>a</sup></b>				
Softwood	395,493	434,793	39,300	9.9
Hardwood	409,392	408,424	-968	-0.2
Total	804,885	843,217	38,332	4.8
<b>Other industrial</b>				
Softwood	38,942	42,457	3,515	9.0
Hardwood	462	309	-153	-33.1
Total	39,404	42,766	3,362	8.5
<b>Total output</b>				
Softwood	901,611	929,148	27,537	3.1
Hardwood	505,585	496,117	-9,468	-1.9
Total	1,407,196	1,425,265	18,069	1.3

<sup>a</sup> Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (13,807,000 cubic feet in 1997).

**Table 3—Number of primary wood-using plants by industry, Alabama, 1946-1997**

Industry	Year							
	1946	1951	1962	1971	1982	1985	1995	1997
Sawmills	3,030	1,450	555	323	239	250	148	145
Veneer mills	50	42	34	32	28	28	23	26
Pulpmills	5	7	9	15	16	16	16	16
Composite panel mills	0	0	0	0	0	0	1	1
Other mills	90	71	47	36	35	47	23	24
All plants	3,175	1,570	645	406	318	341	211	212

**Table 4—Roundwood receipts by sawmill size, Alabama, 1995 and 1997**

Sawmill size class <sup>a</sup>	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	30	8,560	0	29	7,780	0
1.0 - 4.99	39	102,947	4	40	102,742	4
5.0 - 9.99	25	170,876	7	26	180,637	8
10.0 - 49.99	37	909,097	35	31	650,386	26
> 50	17	1,408,076	54	19	1,541,767	62
Total	148	2,599,556	100	145	2,483,312	100

<sup>a</sup> Based on volume received as opposed to actual capacity.

**Table 5—Roundwood receipts by species and type of mill, Alabama, 1997**

Species	Type of mill						
	All mills	Veneer mills			OSB <sup>a</sup> and		
		Sawmills	Pine plywood	Other veneer	panels	Pulpmills <sup>b</sup>	Other mills
<i>Thousand cubic feet</i>							
<b>Softwood</b>							
Yellow pine	493,435	380,366	70,616	0	0	NA	42,453
White pine	0	0	0	0	0	NA	0
Cedar	19	15	0	0	0	NA	4
Cypress	116	116	0	0	0	NA	0
Other softwood	785	785	0	0	0	NA	0
Unclassified	434,793	0	0	0	0	434,793	0
Total softwoods	929,148	381,282	70,616	0	0	434,793	42,457
<b>Hardwood</b>							
Blackgum and tupelo	331	289	30	12	0	NA	0
Soft maple	351	174	165	12	0	NA	0
Sweetgum	6,439	3,003	938	2,498	0	NA	0
Yellow-poplar	9,823	5,275	1,581	2,672	0	NA	295
Other soft hardwood	5,454	2,149	321	2,984	0	NA	0
Hickory	6,494	6,062	0	421	0	NA	11
Red oak	25,732	24,065	1,659	5	0	NA	3
White oak	18,918	17,511	215	1,192	0	NA	0
Other hard hardwood	14,151	13,833	18	300	0	NA	0
Unclassified	408,424	0	0	0	0	408,424	0
Total hardwoods	496,117	72,361	4,927	10,096	0	408,424	309
<b>All species</b>	1,425,265	453,643	75,543	10,096	0	843,217	42,766

NA = not applicable.

<sup>a</sup> OSB = oriented strand board.<sup>b</sup> Only collected by softwood and hardwood and includes roundwood chipped.**Table 6—Industrial roundwood movement by year and species group, Alabama, 1995 and 1997**

Year	Production	Exported to		Imported from	
		other States	Retained	other States	Receipts
<i>Thousand cubic feet</i>					
<b>Softwood</b>					
1995	924,226	155,837	768,389	133,222	901,611
1997	956,765	160,855	795,910	133,238	929,148
<b>Hardwood</b>					
1995	375,523	34,380	341,143	164,442	505,585
1997	388,547	43,531	345,016	151,101	496,117
<b>All Species</b>					
1995	1,299,749	190,217	1,109,532	297,664	1,407,196
1997	1,345,312	204,386	1,140,926	284,339	1,425,265

**Table 7—Industrial roundwood movement by product and species group, Alabama, 1997**

Product and species group	Production	Exported to other States	Retained	Imported from other States	Receipts
<i>Thousand cubic feet</i>					
<b>Saw logs</b>					
Softwood	382,123	53,148	328,975	52,307	381,282
Hardwood	68,003	6,505	61,498	10,863	72,361
Total	450,126	59,653	390,473	63,170	453,643
<b>Veneer logs</b>					
Softwood	74,921	10,156	64,765	5,851	70,616
Hardwood	17,887	3,117	14,770	253	15,023
Total	92,808	13,273	79,535	6,104	85,639
<b>Pulpwood<sup>a</sup></b>					
Softwood	462,596	97,102	365,494	69,299	434,793
Hardwood	302,310	33,871	268,439	139,985	408,424
Total	764,906	130,973	633,933	209,284	843,217
<b>Other industrial</b>					
Softwood	37,125	449	36,676	5,781	42,457
Hardwood	347	38	309	0	309
Total	37,472	487	36,985	5,781	42,766
<b>All products</b>					
Softwood	956,765	160,855	795,910	133,238	929,148
Hardwood	388,547	43,531	345,016	151,101	496,117
Total	1,345,312	204,386	1,140,926	284,339	1,425,265

<sup>a</sup> Includes roundwood chipped.

**Table 8—Saw-log volume by destination, source, and species group, Alabama, 1997**

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>Thousand cubic feet</i>			
<b>Alabama (retained)</b>	390,473	328,975	61,498
<b>Exports to:</b>			
Florida	6,797	6,797	0
Georgia	7,863	7,085	778
Mississippi	41,854	39,234	2,620
Missouri	27	27	0
Tennessee	3,112	5	3,107
Total	59,653	53,148	6,505
<b>Imports from:</b>			
Florida	4,859	4,315	544
Georgia	20,856	19,966	890
Louisiana	157	0	157
Mississippi	33,052	24,610	8,442
Tennessee	4,246	3,416	830
Total	63,170	52,307	10,863

**Table 9—Veneer volume by destination, source, and species group, Alabama, 1997**

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>Thousand cubic feet</i>			
<b>Alabama (retained)</b>	79,535	64,765	14,770
<b>Exports to:</b>			
Florida	339	339	0
Georgia	4,749	2,077	2,672
Indiana	2	2	0
Mississippi	8,183	7,738	445
Total	13,273	10,156	3,117
<b>Imports from:</b>			
Florida	1,677	1,662	15
Georgia	848	830	18
Louisiana	36	0	36
Mississippi	3,438	3,254	184
Tennessee	105	105	0
Total	6,104	5,851	253

**Table 10—Pulpwood volume by destination, source, and species group, Alabama, 1997<sup>a</sup>**

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>Thousand cubic feet</i>			
<b>Alabama (retained)</b>	633,933	365,494	268,439
<b>Exports to:</b>			
Arkansas	306	2	304
Florida	31,681	19,690	11,991
Georgia	52,791	46,142	6,649
Louisiana	576	574	2
Mississippi	20,240	14,345	5,895
Tennessee	25,322	16,347	8,975
Texas	57	2	55
Total	130,973	97,102	33,871
<b>Imports from:</b>			
Arkansas	2	1	1
Florida	8,284	6,645	1,639
Georgia	48,175	27,173	21,002
Kentucky	148	128	20
Louisiana	343	6	337
Mississippi	117,585	29,012	88,573
South Carolina	458	82	376
Tennessee	34,286	6,251	28,035
Texas	1	1	0
Virginia	2	0	2
Total	209,284	69,299	139,985

<sup>a</sup> Includes roundwood chipped.



**Table 11—Other industrial volume by destination, source, and species group, Alabama, 1997<sup>a</sup>**

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>Thousand cubic feet</i>			
<b>Alabama (retained)</b>	36,985	36,676	309
<b>Exports to:</b>			
Florida	203	203	0
Georgia	38	0	38
Mississippi	116	116	0
Virginia	130	130	0
Total	487	449	38
<b>Imports from:</b>			
Florida	5,459	5,459	0
Georgia	99	99	0
Mississippi	223	223	0
Total	5,781	5,781	0

<sup>a</sup> Includes poles, posts, mulch, firewood, log homes, charcoal, and all other industrial products.

**Table 12—Primary mill residue volume by roundwood type, species group, and residue type, Alabama, 1997**

Roundwood type and species group	All types	Residue type			
		Bark	Coarse	Sawdust	Shavings
<i>Thousand cubic feet</i>					
<b>Saw logs</b>					
Softwood	222,001	33,599	104,146	55,915	28,341
Hardwood	42,491	8,029	18,477	14,604	1,381
Total	264,492	41,628	122,623	70,519	29,722
<b>Veneer logs</b>					
Softwood	52,062	7,026	25,891	19,145	0
Hardwood	11,957	1,685	5,918	4,354	0
Total	64,019	8,711	31,809	23,499	0
<b>Pulpwood</b>					
Softwood	43,664	43,664	0	0	0
Hardwood	51,241	51,241	0	0	0
Total	94,905	94,905	0	0	0
<b>Other industrial<sup>a</sup></b>					
Softwood	56,418	34,043	22,344	31	0
Hardwood	85	77	6	2	0
Total	56,503	34,120	22,350	33	0
<b>Total</b>					
Softwood	374,145	118,332	152,381	75,091	28,341
Hardwood	105,774	61,032	24,401	18,960	1,381
Total	479,919	179,364	176,782	94,051	29,722

<sup>a</sup> Includes poles, pilings, posts, and other industrial products.

**Table 13—Disposal of residue at primary wood-using plants by product, species group, and type of residue, Alabama, 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>										
<b>Fiber products</b>										
Softwood	147,986	119,714	0	0	133,700	116,089	14,286	3,541	0	84
Hardwood	21,715	20,246	0	0	21,670	18,490	45	1,520	0	236
Total	169,701	139,960	0	0	155,370	134,579	14,331	5,061	0	320
<b>Particleboard</b>										
Softwood	0	17,487	0	0	0	981	0	5,734	0	10,772
Hardwood	0	719	0	0	0	719	0	0	0	0
Total	0	18,206	0	0	0	1,700	0	5,734	0	10,772
<b>Composite panels</b>										
Softwood	0	64	0	0	0	0	0	0	0	64
Hardwood	0	0	0	0	0	0	0	0	0	0
Total	0	64	0	0	0	0	0	0	0	64
<b>Sawn products</b>										
Softwood	0	8,151	0	0	0	8,151	0	0	0	0
Hardwood	0	1,547	0	0	0	1,547	0	0	0	0
Total	0	9,698	0	0	0	9,698	0	0	0	0
<b>Fuel</b>										
Softwood	191,204	200,540	98,391	105,893	26,383	26,654	54,776	53,547	11,654	14,446
Hardwood	85,171	80,350	60,927	59,678	4,824	3,186	19,420	16,395	0	1,091
Total	276,375	280,890	159,318	165,571	31,207	29,840	74,196	69,942	11,654	15,537
<b>Miscellaneous</b>										
Softwood	23,548	26,207	13,079	11,329	437	448	6,273	11,612	3,759	2,818
Hardwood	1,794	2,155	733	1,020	177	171	884	910	0	54
Total	25,342	28,362	13,812	12,349	614	619	7,157	12,522	3,759	2,872
<b>Not used</b>										
Softwood	324	1,982	222	1,110	101	58	1	657	0	157
Hardwood	774	757	351	334	288	288	135	135	0	0
Total	1,098	2,739	573	1,444	389	346	136	792	0	157
<b>All products</b>										
Softwood	363,062	374,145	111,692	118,332	160,621	152,381	75,336	75,091	15,413	28,341
Hardwood	109,454	105,774	62,011	61,032	26,959	24,401	20,484	18,960	0	1,381
Total	472,516	479,919	173,703	179,364	187,580	176,782	95,820	94,051	15,413	29,722

**Table 14—Roundwood timber products output by product and species group, Southwest South Alabama, 1995 and 1997**

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
<b>Saw logs</b>				
Softwood	47,026	43,641	-3,385	-7.2
Hardwood	6,059	5,424	-635	-10.5
Total	53,085	49,065	-4,020	-7.6
<b>Veneer logs</b>				
Softwood	8,507	8,534	27	0.3
Hardwood	1,043	777	-266	-25.5
Total	9,550	9,311	-239	-2.5
<b>Pulpwood<sup>a</sup></b>				
Softwood	57,798	59,853	2,055	3.6
Hardwood	24,151	22,402	-1,749	-7.2
Total	81,949	82,255	306	0.4
<b>Other industrial</b>				
Softwood	9,122	10,888	1,766	19.4
Hardwood	0	0	0	--
Total	9,122	10,888	1,766	19.4
<b>All industrial</b>				
Softwood	122,453	122,916	463	0.4
Hardwood	31,253	28,603	-2,650	-8.5
Total	153,706	151,519	-2,187	-1.4

-- = negligible.

<sup>a</sup> Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (204,000 cubic feet in 1997).

**Table 15—Roundwood timber products output by county, product, and species group, Southwest South Alabama, 1997**

County	All products		Saw logs		Veneer logs		Pulpwood		Other industrial	
	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	28,575	5,829	9,445	168	1,355	3	14,120	5,658	3,655	0
Covington	25,476	4,615	8,138	1,745	2,802	236	13,889	2,634	647	0
Escambia	33,838	5,820	9,453	2,039	1,242	0	17,804	3,781	5,339	0
Mobile	11,585	4,307	5,221	642	1,141	146	4,749	3,519	474	0
Washington	23,442	8,032	11,384	830	1,994	392	9,291	6,810	773	0
All counties	122,916	28,603	43,641	5,424	8,534	777	59,853	22,402	10,888	0

<sup>a</sup> Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (204,000 cubic feet in 1997).

**Table 16—Roundwood timber products output by product and species group, Southwest North Alabama, 1995 and 1997**

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
<b>Saw logs</b>				
Softwood	91,314	94,938	3,624	4.0
Hardwood	15,663	14,686	-977	-6.2
Total	106,977	109,624	2,647	2.5
<b>Veneer logs</b>				
Softwood	19,285	20,094	809	4.2
Hardwood	3,376	3,232	-144	-4.3
Total	22,661	23,326	665	2.9
<b>Pulpwood<sup>a</sup></b>				
Softwood	115,454	104,332	-11,122	-9.6
Hardwood	62,591	56,614	-5,977	-9.5
Total	178,045	160,946	-17,099	-9.6
<b>Other industrial</b>				
Softwood	3,024	3,331	307	10.2
Hardwood	5	5	0	--
Total	3,029	3,336	307	10.1
<b>All industrial</b>				
Softwood	229,077	222,695	-6,382	-2.8
Hardwood	81,635	74,537	-7,098	-8.7
Total	310,712	297,232	-13,480	-4.3

-- = negligible.

<sup>a</sup> Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulp mills (530,000 cubic feet in 1997).

**Table 17—Roundwood timber products output by county, product, and species group, Southwest North Alabama, 1997**

County	All products		Saw logs		Veneer logs		Pulpwood <sup>a</sup>		Other industrial	
	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>										
Choctaw	31,789	11,673	14,780	1,184	3,159	359	13,574	10,130	276	0
Clarke	42,144	14,009	23,747	2,482	2,995	409	14,279	11,118	1,123	0
Conecuh	31,566	8,115	11,029	856	2,072	238	18,282	7,021	183	0
Marengo	21,940	16,241	10,983	7,104	1,417	1,362	9,386	7,775	154	0
Monroe	39,399	8,567	17,547	902	5,335	271	15,631	7,389	886	5
Sumter	36,367	8,569	12,000	1,316	1,229	309	23,013	6,944	125	0
Wilcox	19,490	7,363	4,852	842	3,887	284	10,167	6,237	584	0
All counties	222,695	74,537	94,938	14,686	20,094	3,232	104,332	56,614	3,331	5

<sup>a</sup> Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulp mills (530,000 cubic feet in 1997).

**Table 18—Roundwood timber products output by product and species group, Southeast Alabama, 1995 and 1997**

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
<b>Saw logs</b>				
Softwood	90,217	83,229	-6,988	-7.7
Hardwood	12,832	12,546	-286	-2.2
Total	103,049	95,775	-7,274	-7.1
<b>Veneer logs</b>				
Softwood	30,368	19,648	-10,720	-35.3
Hardwood	12,356	8,111	-4,245	-34.4
Total	42,724	27,759	-14,965	-35.0
<b>Pulpwood<sup>a</sup></b>				
Softwood	125,267	144,571	19,304	15.4
Hardwood	71,819	81,233	9,414	13.1
Total	197,086	225,804	28,718	14.6
<b>Other industrial</b>				
Softwood	1,275	1,621	346	27.1
Hardwood	0	0	0	--
Total	1,275	1,621	346	27.1
<b>All industrial</b>				
Softwood	247,127	249,069	1,942	0.8
Hardwood	97,007	101,890	4,883	5.0
Total	344,134	350,959	6,825	2.0

-- = negligible.

<sup>a</sup> Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (6,103,000 cubic feet in 1997).

**Table 19—Roundwood timber products output by county, product, and species group, Southeast Alabama, 1997**

County	All products		Saw logs		Veneer logs		Pulpwood <sup>a</sup>		Other industrial	
	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>									
Autauga	12,485	6,384	2,394	273	1,737	454	8,349	5,657	5	0
Barbour	19,376	7,995	7,331	1,151	0	571	11,963	6,273	82	0
Bullock	11,090	3,003	1,878	350	751	669	8,427	1,984	34	0
Butler	40,113	8,157	13,701	575	5,489	963	20,398	6,619	525	0
Chambers	15,911	5,266	7,253	404	414	611	8,244	4,251	0	0
Chilton	9,879	4,488	3,633	1,115	1,704	779	4,356	2,594	186	0
Coffee	10,525	2,802	3,794	333	301	5	6,341	2,464	89	0
Crenshaw	17,953	7,310	4,302	831	3,547	600	10,000	5,879	104	0
Dale	4,817	3,418	1,882	263	0	156	2,870	2,999	65	0
Dallas	14,637	8,838	4,055	1,404	479	271	10,091	7,163	12	0
Elmore	5,221	5,128	451	675	1,073	476	3,697	3,977	0	0
Geneva	4,496	3,524	796	144	0	1	3,618	3,379	82	0
Henry	9,662	3,571	4,634	244	115	230	4,647	3,097	266	0
Houston	1,460	1,955	272	19	224	607	899	1,329	65	0
Lee	13,841	3,181	8,029	798	227	103	5,585	2,280	0	0
Lowndes	8,692	4,983	2,677	416	1,407	165	4,567	4,402	41	0
Macon	9,450	3,663	4,809	759	0	134	4,641	2,770	0	0
Montgomery	6,476	3,618	1,284	735	1,078	170	4,090	2,713	24	0
Pike	10,164	4,522	1,890	914	749	379	7,484	3,229	41	0
Russell	8,971	2,656	4,445	242	0	398	4,526	2,016	0	0
Tallapoosa	13,850	7,428	3,719	901	353	369	9,778	6,158	0	0
All counties	249,069	101,890	83,229	12,546	19,648	8,111	144,571	81,233	1,621	0

<sup>a</sup> Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (6,103,000 cubic feet in 1997).

**Table 20—Roundwood timber products output by product and species group, West Central Alabama, 1995 and 1997**

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
<b>Saw logs</b>				
Softwood	85,322	70,882	-14,440	-16.9
Hardwood	15,822	13,127	-2,695	-17.0
Total	101,144	84,009	-17,135	-16.9
<b>Veneer logs</b>				
Softwood	2,873	7,743	4,870	169.5
Hardwood	1,935	2,044	109	5.6
Total	4,808	9,787	4,979	103.6
<b>Pulpwood<sup>a</sup></b>				
Softwood	33,117	39,334	6,217	18.8
Hardwood	51,256	48,319	-2,937	-5.7
Total	84,373	87,653	3,280	3.9
<b>Other industrial</b>				
Softwood	5,743	5,838	95	1.7
Hardwood	0	0	0	--
Total	5,743	5,838	95	1.7
<b>All industrial</b>				
Softwood	127,055	123,797	-3,258	-2.6
Hardwood	69,013	63,490	-5,523	-8.0
Total	196,068	187,287	-8,781	-4.5

-- = negligible.

<sup>a</sup> Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (2,318,000 cubic feet in 1997).



**Table 21—Roundwood timber products output by county, product, and species group, West Central Alabama, 1997**

County	All products		Saw logs		Veneer logs		Pulpwood <sup>a</sup>		Other industrial	
	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>										
Bibb	16,567	9,092	6,303	1,960	550	522	5,178	6,610	4,536	0
Fayette	12,651	5,368	6,768	1,138	1,150	0	4,733	4,230	0	0
Greene	13,240	5,618	10,527	855	655	415	1,869	4,348	189	0
Hale	8,619	4,055	3,935	1,090	445	109	3,781	2,856	458	0
Lamar	8,966	7,430	5,745	1,530	1,387	0	1,834	5,900	0	0
Marion	16,095	6,578	5,809	677	523	0	9,763	5,901	0	0
Perry	9,885	4,154	3,593	806	0	109	5,806	3,239	486	0
Pickens	19,080	8,902	14,818	2,283	1,883	450	2,261	6,169	118	0
Tuscaloosa	18,694	12,293	13,384	2,788	1,150	439	4,109	9,066	51	0
All counties	123,797	63,490	70,882	13,127	7,743	2,044	39,334	48,319	5,838	0

<sup>a</sup> Includes roundwood that was delivered to nonpulp mills and then chipped and sold to pulpmills (2,318,000 cubic feet in 1997).

**Table 22—Roundwood timber products output by product and species group, North Central Alabama, 1995 and 1997**

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
<b>Saw logs</b>				
Softwood	73,309	74,425	1,116	1.5
Hardwood	13,835	11,581	-2,254	-16.3
Total	87,144	86,006	-1,138	-1.3
<b>Veneer logs</b>				
Softwood	12,381	17,037	4,656	37.6
Hardwood	849	3,602	2,753	324.3
Total	13,230	20,639	7,409	56.0
<b>Pulpwood<sup>a</sup></b>				
Softwood	69,946	99,100	29,154	41.7
Hardwood	52,065	65,004	12,939	24.9
Total	122,011	164,104	42,093	34.5
<b>Other industrial</b>				
Softwood	14,414	14,466	52	0.4
Hardwood	438	328	-110	-25.1
Total	14,852	14,794	-58	-0.4
<b>All industrial</b>				
Softwood	170,050	205,028	34,978	20.6
Hardwood	67,187	80,515	13,328	19.8
Total	237,237	285,543	48,306	20.4

-- = negligible.

<sup>a</sup> Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (3,232,000 cubic feet in 1997).

**Table 23—Roundwood timber products output by county, product, and species group, North Central Alabama, 1997**

County	All products		Saw logs		Veneer logs		Pulpwood <sup>a</sup>		Other industrial	
	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>										
Blount	23,297	3,480	17,811	224	1,324	430	1,450	2,753	2,712	73
Calhoun	8,437	3,573	2,098	346	827	70	5,507	3,157	5	0
Cherokee	6,935	3,061	2,238	276	1,158	78	3,533	2,707	6	0
Clay	14,788	5,684	2,337	1,137	1,466	95	6,238	4,350	4,747	102
Cleburne	10,351	4,341	2,499	446	1,490	233	6,362	3,624	0	38
Coosa	13,197	5,123	2,129	988	2,063	375	9,005	3,760	0	0
Cullman	11,092	2,439	5,671	804	104	0	1,926	1,563	3,391	72
Etowah	6,575	4,257	2,257	868	1,490	202	2,823	3,187	5	0
Jefferson	11,414	3,291	6,802	451	227	252	3,059	2,574	1,326	14
Randolph	17,880	5,392	2,880	1,209	1,181	252	13,819	3,931	0	0
St. Clair	9,447	4,142	2,005	64	1,878	109	5,564	3,969	0	0
Shelby	18,736	3,349	6,514	697	1,258	344	10,169	2,308	795	0
Talladega	20,071	13,098	2,475	489	1,944	1,162	15,647	11,447	5	0
Walker	17,499	14,572	10,477	1,650	523	0	6,381	12,922	118	0
Winston	15,309	4,713	6,232	1,932	104	0	7,617	2,752	1,356	29
All counties	205,028	80,515	74,425	11,581	17,037	3,602	99,100	65,004	14,466	328

<sup>a</sup> Includes roundwood that was delivered to nonpulp mills and then chipped and sold to pulpmills (3,232,000 cubic feet in 1997).

**Table 24—Roundwood timber products output by product and species group, North Alabama, 1995 and 1997**

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
<b>Saw logs</b>				
Softwood	12,103	15,008	2,905	24.0
Hardwood	9,298	10,639	1,341	14.4
Total	21,401	25,647	4,246	19.8
<b>Veneer logs</b>				
Softwood	1,459	1,865	406	27.8
Hardwood	0	121	121	100.0
Total	1,459	1,986	527	36.1
<b>Pulpwood<sup>a</sup></b>				
Softwood	13,921	15,406	1,485	10.7
Hardwood	20,116	28,738	8,622	42.9
Total	34,037	44,144	10,107	29.7
<b>Other industrial</b>				
Softwood	981	981	0	--
Hardwood	14	14	0	--
Total	995	995	0	--
<b>All industrial</b>				
Softwood	28,464	33,260	4,796	16.8
Hardwood	29,428	39,512	10,084	34.3
Total	57,892	72,772	14,880	25.7

-- = negligible.

<sup>a</sup> Includes roundwood that was delivered to nonpulp mills and then chipped and sold to pulp mills (273,000 cubic feet in 1997).

**Table 25—Roundwood timber products output by county, product, and species group, North Alabama, 1997**

County	All products		Saw logs		Veneer logs		Pulpwood <sup>a</sup>		Other industrial	
	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>										
Colbert	4,232	5,105	2,161	210	104	0	1,967	4,895	0	0
De Kalb	4,015	2,545	785	725	993	78	1,999	1,742	238	0
Franklin	9,023	7,722	3,171	458	104	0	5,748	7,264	0	0
Jackson	2,994	8,656	888	3,665	2	0	2,039	4,991	65	0
Lauderdale	2,184	4,441	1,270	1,301	0	0	914	3,140	0	0
Lawrence	1,732	2,769	1,150	413	0	0	582	2,356	0	0
Limestone	906	2,558	509	1,689	0	0	397	869	0	0
Madison	518	1,827	411	1,606	0	0	107	221	0	0
Marshall	3,676	1,672	1,904	273	662	43	432	1,342	678	14
Morgan	3,980	2,217	2,759	299	0	0	1,221	1,918	0	0
All counties	33,260	39,512	15,008	10,639	1,865	121	15,406	28,738	981	14

<sup>a</sup> Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (273,000 cubic feet in 1997).

**Table 26—Total roundwood output by product, species group, and source of material, Alabama, 1997**

Product and species group	All sources	Total	Growing-stock trees		Other sources
			Sawtimber	Poletimber	
<i>Thousand cubic feet</i>					
<b>Saw logs</b>					
Softwood	382,123	376,896	358,051	18,844	5,227
Hardwood	68,003	66,410	63,089	3,320	1,593
Total	450,126	443,306	421,141	22,165	6,820
<b>Veneer logs and bolts</b>					
Softwood	74,921	73,400	69,730	3,670	1,521
Hardwood	17,887	17,578	17,578	0	309
Total	92,808	90,978	87,308	3,670	1,830
<b>Pulpwood</b>					
Softwood	462,596	434,540	275,061	159,479	28,056
Hardwood	302,310	265,973	149,551	116,421	36,337
Total	764,906	700,512	424,612	275,901	64,394
<b>Poles and posts</b>					
Softwood	23,297	22,350	21,472	878	947
Hardwood	0	0	0	0	0
Total	23,297	22,350	21,472	878	947
<b>Other miscellaneous</b>					
Softwood	13,828	11,842	4,873	6,970	1,986
Hardwood	347	316	146	170	31
Total	14,175	12,158	5,019	7,139	2,017
<b>Total industrial products</b>					
Softwood	956,765	919,028	729,186	189,842	37,737
Hardwood	388,547	350,276	230,365	119,912	38,271
Total	1,345,312	1,269,304	959,551	309,753	76,008
<b>Fuelwood</b>					
Softwood	15,024	6,397	4,222	2,175	8,627
Hardwood	98,555	32,513	22,759	9,754	66,042
Total	113,579	38,910	26,981	11,929	74,669
<b>All products</b>					
Softwood	971,789	925,425	733,408	192,016	46,364
Hardwood	487,102	382,789	253,124	129,666	104,313
Total	1,458,891	1,308,214	986,532	321,682	150,677

Numbers in rows and columns may not add due to rounding.

**Table 27—Total roundwood output by species group, survey region, and ownership, Alabama, 1997**

Species group and survey region	Total	National forest	Other public	Forest industry	Nonindustrial private
<i>Thousand cubic feet</i>					
<b>Softwoods</b>					
Southwest South	124,846	6,416	2,089	56,724	59,617
Southwest North	226,193	0	2,603	89,999	133,590
Southeast	252,980	2,187	4,158	73,717	172,918
West Central	125,742	5,639	1,024	52,188	66,891
North Central	208,246	2,522	2,535	39,339	163,849
North	33,782	304	71	4,921	28,486
Total softwoods	971,789	17,068	12,481	316,889	625,351
<b>Hardwoods</b>					
Southwest South	35,858	168	340	14,440	20,910
Southwest North	93,442	0	57	29,683	63,702
Southeast	127,736	309	2,184	28,235	97,009
West Central	79,595	757	235	29,926	48,677
North Central	100,938	4,145	4,127	20,134	72,532
North	49,533	1,912	429	4,995	42,197
Total hardwoods	487,102	7,291	7,373	127,414	345,025
<b>All species</b>	1,458,891	24,359	19,854	444,303	970,376

Numbers in rows and columns may not add due to rounding.

**Table 28—Total roundwood output by species group, detailed species group, and product, Alabama, 1997**

Species group and detailed species group	Product						Other miscellaneous
	Total	Saw log	Veneer	Pulpwood	Fuelwood	Poles and posts	
<i>Thousand cubic feet</i>							
<b>Softwood</b>							
Cedar	1,880	951	145	727	29	8	19
Slash-longleaf pine	170,867	57,052	13,326	85,700	2,642	11,086	1,060
Loblolly-shortleaf pine	745,118	299,025	57,834	355,115	11,520	11,334	10,291
Other yellow pines	53,394	24,819	3,575	20,864	825	853	2,458
Cypress	530	276	40	190	8	15	0
Total softwoods	971,789	382,123	74,921	462,596	15,024	23,297	13,828
<b>Hardwood</b>							
Soft maple	12,223	2,025	422	7,295	2,473	0	7
Hard maple	1,327	565	22	471	268	0	0
Hickory	36,005	4,606	1,129	22,947	7,285	0	39
Beech	5,126	654	174	3,260	1,037	0	1
Ash	7,100	913	304	4,443	1,437	0	4
Black walnut	149	23	9	87	30	0	0
Sweetgum	85,526	11,487	3,921	52,768	17,305	0	45
Yellow-poplar	34,896	4,702	1,421	21,693	7,061	0	20
Blackgum–tupelo	22,099	2,845	751	14,015	4,471	0	17
Sycamore	1,455	383	14	764	294	0	0
Cottonwood	632	94	22	388	128	0	0
Black cherry	2,417	272	83	1,569	489	0	4
Select white oaks	43,789	6,749	1,287	26,840	8,859	0	53
Other white oaks	35,225	4,972	1,002	22,100	7,127	0	24
Select red oaks	12,586	2,353	479	7,189	2,547	0	18
Other red oaks	144,845	20,488	5,248	89,709	29,306	0	95
Basswood	972	85	43	643	197	0	5
Elm	7,458	930	382	4,629	1,509	0	8
Other Eastern hardwoods	33,272	3,858	1,175	21,499	6,732	0	8
Total hardwoods	487,102	68,003	17,887	302,310	98,555	0	347
<b>All species</b>	1,458,891	450,126	92,808	764,906	113,579	23,297	14,175

Numbers in rows and columns may not add due to rounding.



**Table 29—Total roundwood output by species group, detailed species group, and ownership, Alabama, 1997**

Species group and detailed species group	Total	National forest	Other public	Forest industry	Nonindustrial private
<i>Thousand cubic feet</i>					
<b>Softwood</b>					
Cedar	1,880	9	3	465	1,403
Slash-longleaf pine	170,867	6,609	2,759	69,952	91,547
Loblolly-shortleaf pine	745,118	9,443	8,606	229,819	497,251
Other yellow pines	53,394	1,007	1,094	16,380	34,913
Cypress	530	0	20	273	237
Total softwoods	971,789	17,068	12,481	316,889	625,351
<b>Hardwood</b>					
Soft maple	12,223	144	211	3,225	8,642
Hard maple	1,327	5	0	198	1,124
Hickory	36,005	696	945	9,350	25,015
Beech	5,126	101	43	1,380	3,601
Ash	7,100	31	47	2,043	4,979
Black walnut	149	0	0	32	117
Sweetgum	85,526	1,383	910	23,535	59,699
Yellow-poplar	34,896	612	362	7,786	26,137
Blackgum–tupelo	22,099	232	369	5,962	15,536
Sycamore	1,455	0	22	352	1,082
Cottonwood	632	0	0	74	557
Black cherry	2,417	26	8	496	1,886
Select white oaks	43,789	1,077	359	9,572	32,781
Other white oaks	35,225	679	983	8,289	25,274
Select red oaks	12,586	207	144	3,111	9,125
Other red oaks	144,845	1,802	2,434	40,155	100,455
Basswood	972	0	1	171	800
Elm	7,458	80	91	1,465	5,822
Other Eastern hardwoods	33,272	215	444	10,218	22,395
Total hardwoods	487,102	7,291	7,373	127,414	345,025
<b>All species</b>	1,458,891	24,359	19,854	444,303	970,376

Numbers in rows and columns may not add due to rounding.



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In 1997, roundwood output from Alabama's forests totaled 1.3 billion cubic feet. Mill byproducts generated from primary manufacturers amounted to 477 million cubic feet. Almost all plant residues were used primarily for fuel and fiber products. Pulpwood was the leading roundwood product at 765 million cubic feet; saw logs ranked second at 450 million cubic feet; veneer logs were third at 93 million cubic feet. The number of primary processing plants was 210. Total receipts amounted to 1.4 billion cubic feet.

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

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