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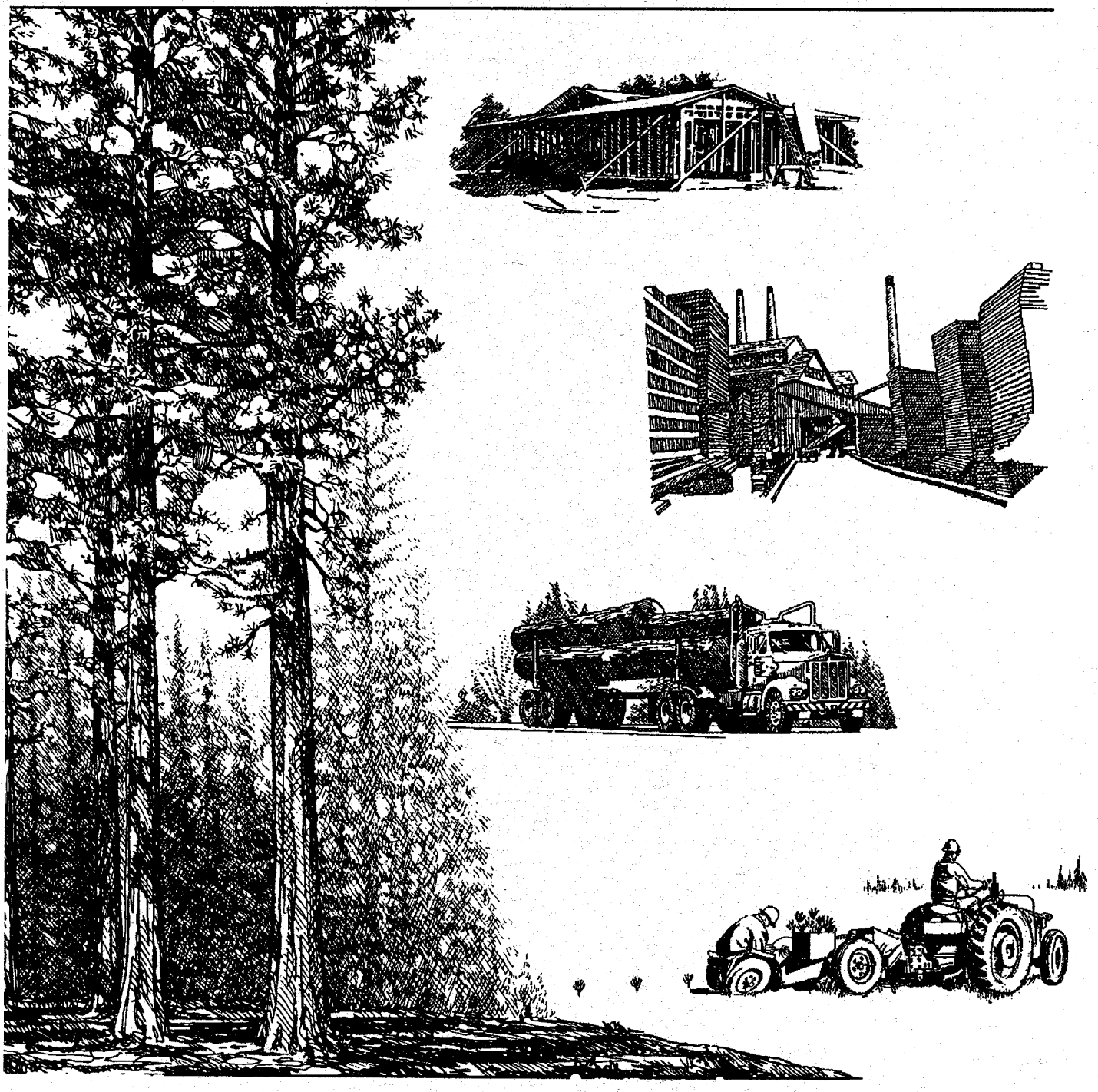
Forest Service

**Southern
Research Station**

Resource Bulletin
SRS-42

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

**Daniel Stratton and
Robert C. Wright**



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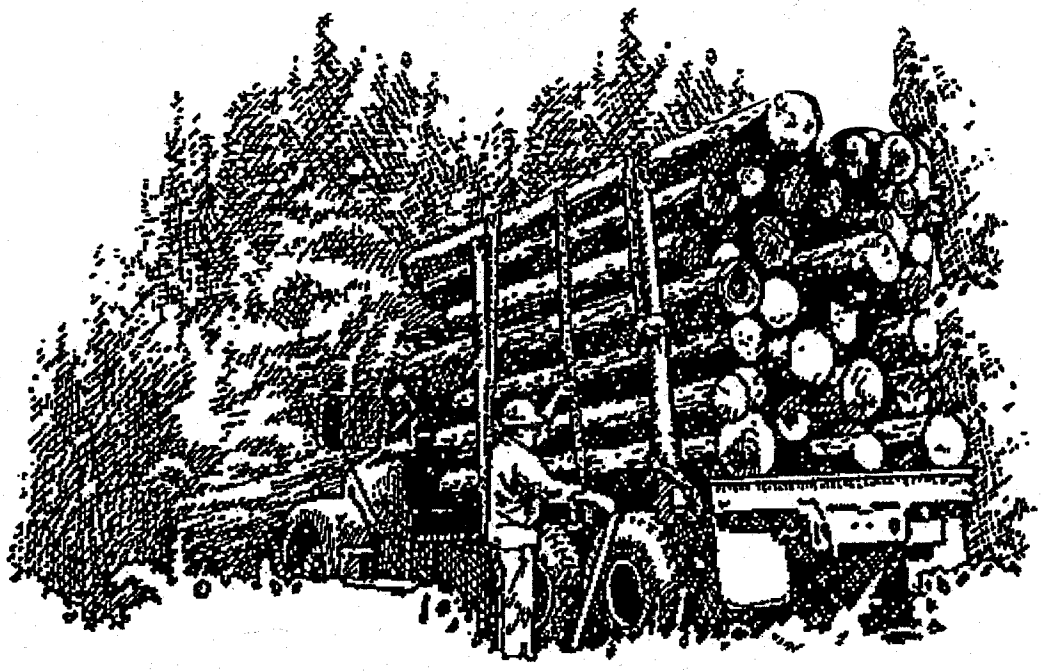

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Southern Research Station
P.O. Box 2680
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Foreword

This report contains the findings of a 1997 canvass of all primary wood-using plants in Tennessee. 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. 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 canvass of all wood processors in Tennessee 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 Tennessee timberland was incorporated into Tennessee production estimates. Each mill was canvassed by mail or through personal contact at plant locations. Surveys for all timber products other than pulpwood 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 Tennessee Department of Agriculture, Division of Forestry, 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 68 mills operating in 1997: 60 sawmills, 5 pulpmills, 2 veneer mills, and 1 mill 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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Contents

Page

Output of Industrial Timber Products 1

Plant Byproducts 4

Regional Observations 5

Total Roundwood Output 7

References 8

Definitions 9

Conversion Factors 10

Index of Tables 11

Tables 1-27[a] 13

[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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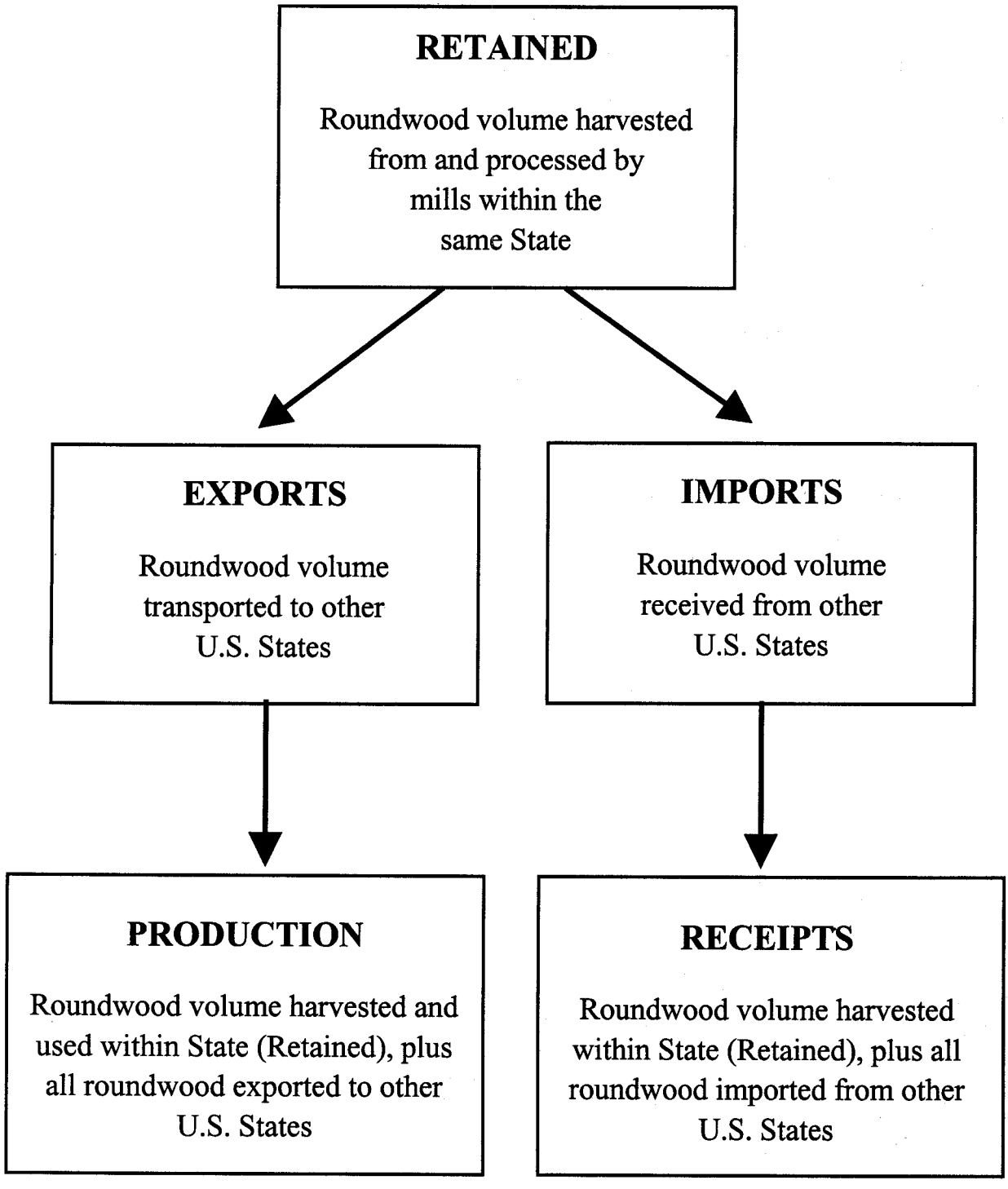

Figure 1—Movement of roundwood exports and imports within the United States.

Tennessee'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 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 increased 13 percent from 396 to 449 million cubic feet.
- Timber products output from roundwood was up 37 million cubic feet, or 13 percent, to 321 million cubic feet, while output of plant byproducts was up 16 million cubic feet to 128 million cubic feet.
- Output of softwood roundwood products increased 31 percent to 85 million cubic feet, while output of hardwood roundwood products increased 8 percent to 236 million cubic feet (fig. 2).
- Saw logs and pulpwood were the principal roundwood products in 1997. Combined output of these products totaled 301 million cubic feet and accounted for 94 percent of Tennessee's total industrial roundwood output (fig. 3).
- Total receipts at Tennessee mills, which included roundwood harvested and retained in the State as well as roundwood imported from other States, increased by 36 percent to 356 million cubic feet. At the same time, the number of primary roundwood-using plants in Tennessee was up slightly from 503 in 1995 to 505 in 1997.

Saw Logs

- Saw logs accounted for 56 percent of the State's total industrial roundwood products. Output of softwood saw logs increased 33 percent to 20 million cubic feet (113 million board feet), while that of hardwood saw logs was up 5 percent to 159 million cubic feet (960 million board feet) (fig. 4).

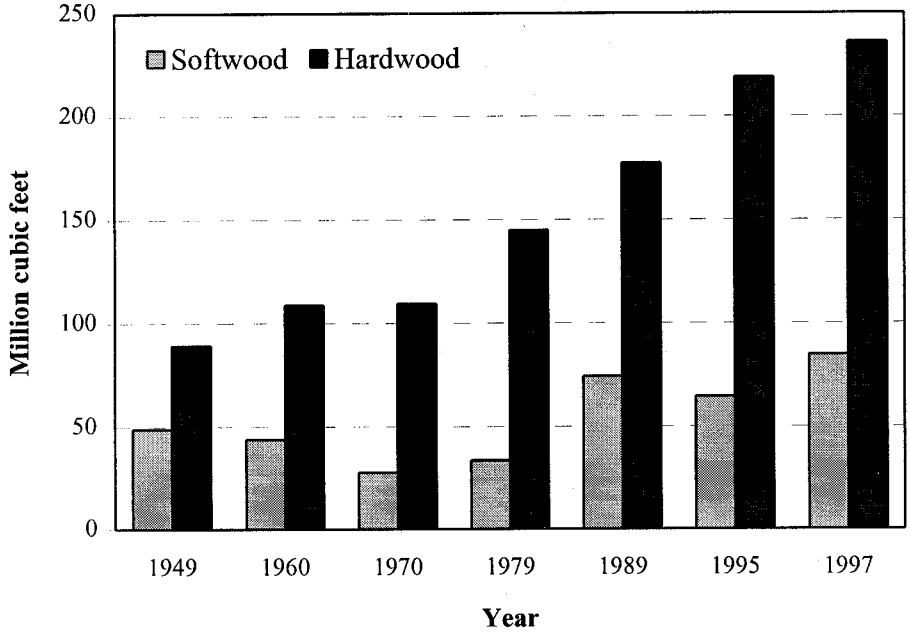


Figure 2—Roundwood production for all products by species group and year (see page 8 for references for individual years).

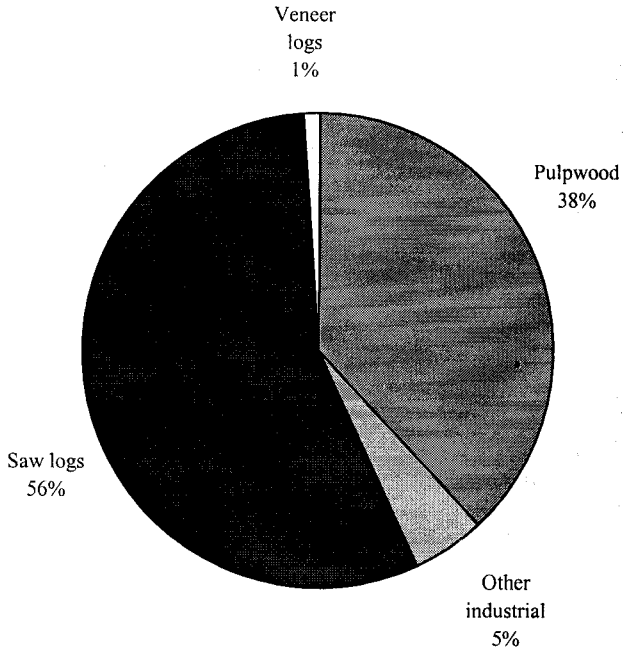


Figure 3—Roundwood production by type of product, 1997.

- Tennessee currently has 496 sawmills, a gain of 1 mill since 1995. Total saw-log receipts were up 7 million cubic feet to 175 million cubic feet. Softwood saw-log receipts increased 14 percent to 16 million cubic feet, while those of hardwoods increased 3 percent to 159 million cubic feet. Of the currently operating mills, 58 percent had receipts less than 1 million board feet, while 11 percent had receipts greater than 5 million board feet. Those 57 mills accounted for 58 percent of total saw-log receipts.

- Tennessee retained 88 percent of its saw-log production for domestic manufacture; saw-log exports exceeded imports by 4 million cubic feet in 1997.

Pulpwood

- Total pulpwood production increased 12 million cubic feet to 122 million cubic feet and accounted for 38 percent of the State's total industrial roundwood TPO. Softwood output was up 13 percent to 51 million cubic feet (700 thousand cords); hardwood output increased 10 percent to 71 million cubic feet (924 thousand cords) (fig. 5).

- Five pulpmill facilities were operating and receiving roundwood in Tennessee in 1997. Total pulpwood receipts for these mills were up 70 million cubic feet to 159 million cubic feet, accounting for 45 percent of total receipts for all mills.

- Fifty-two percent of roundwood cut for pulpwood was retained for processing at Tennessee pulpmills. Roundwood pulpwood accounted for 71 percent of total known exports and 82 percent of total imports. Roundwood pulpwood imports amounted to 96 million cubic feet, or 37 million cubic feet more than was exported.

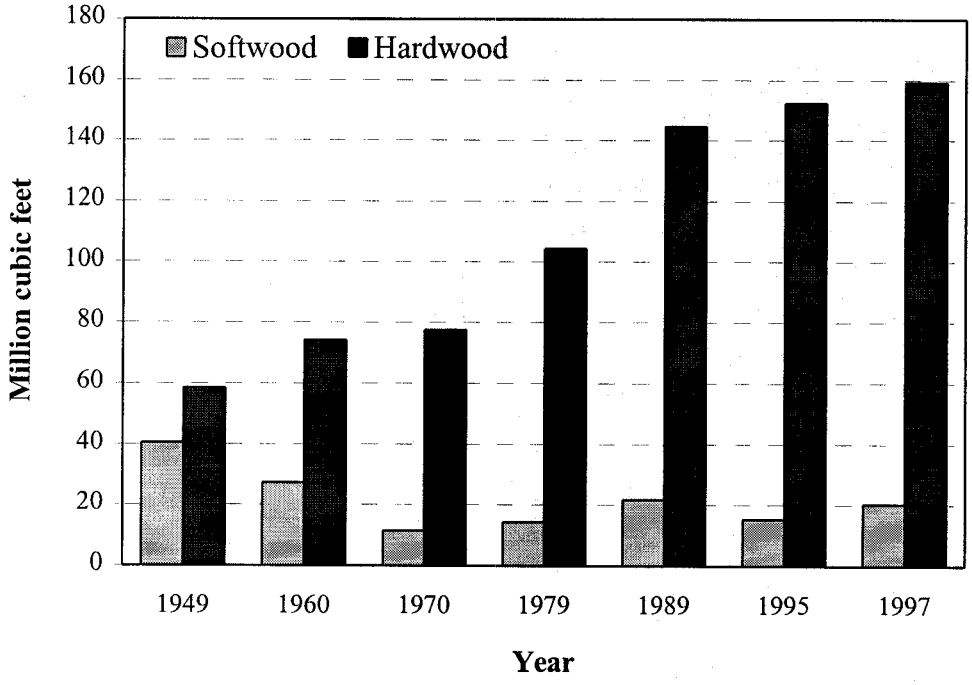
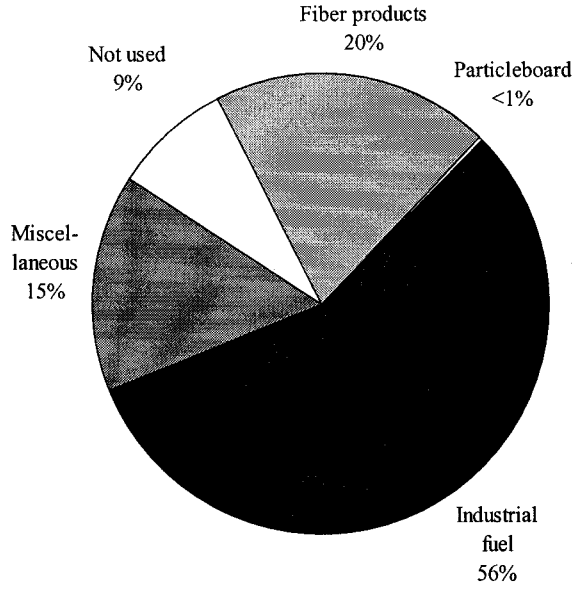


Figure 4—Roundwood saw-log production by species group and year (see page 8 for references for individual years).

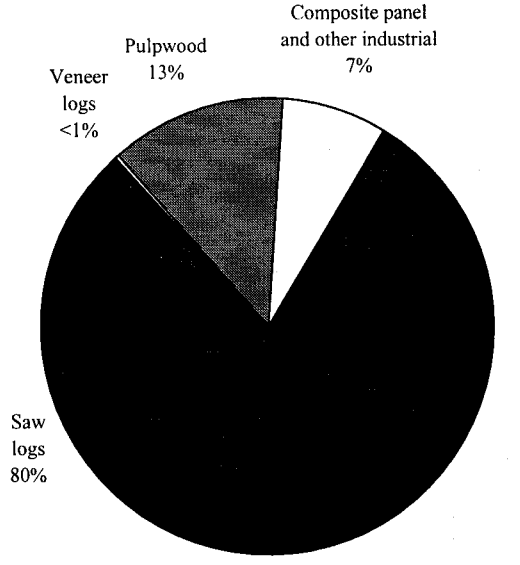
- Nine percent of the wood and bark residues were not used for a product, while 56 percent of the residues were used for industrial fuel (fig. 9). More than 27 million cubic feet, or 45 percent, of the coarse residues were used to manufacture fiber products. Most of the bark was used for industrial fuel or other miscellaneous products, and 73 percent of the sawdust and shavings was used for industrial fuel.



Total 140 million cubic feet

Figure 9—Disposal of residue by product, 1997.

- Sawmills generated 112 million cubic feet of mill residues, accounting for 80 percent of the total residues produced (fig. 10).



Total 140 million cubic feet

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

Regional Observations

- Output of industrial roundwood products increased across all regions of Tennessee except the Western region, which experienced a 5-percent decline. The Plateau and Eastern regions both recorded 22-percent increases in roundwood production.

West Region

- Roundwood output for both softwood and hardwood combined from the Western region totaled more than 55 million cubic feet, down 5 percent. Softwood output increased 7 percent to 6 million cubic feet, while hardwood output declined 6 percent to 49 million cubic feet.

- Saw log production of 41 million cubic feet accounted for 73 percent of the region's total roundwood output and 23 percent of the State's total saw-log output. Pulpwood accounted for 27 percent of the region's TPO with 15 million cubic feet, an 11-percent decline since 1995. Hardwood pulpwood output declined 17 percent to 10 million cubic feet.

- Seventy-eight primary wood-using plants were operating during 1997: 77 sawmills and 1 veneer mill (fig. 11). These mills accounted for 17 percent of the State's total TPO.

West Central Region

- Seventy-six million cubic feet of roundwood were produced in the West Central region, a 13-percent increase from 1995. Softwood output increased 80 percent to 13 million cubic feet, while hardwood output increased 5 percent to 63 million cubic feet.

- Pulpwood production of 42 million cubic feet accounted for 56 percent of the region's total roundwood output and 35 percent of the State's total pulpwood output. Softwood output increased 73 percent to 11 million cubic feet.

- Saw-log production (34 million cubic feet) accounted for 44 percent of the region's total roundwood output and 19 percent of the State's total saw log output. Hardwood output increased 5 percent to 32 million cubic feet.

- Eighty-seven sawmills and 2 pulpmills were operating in 1997 and these mills accounted for 24 percent of the State's total TPO.

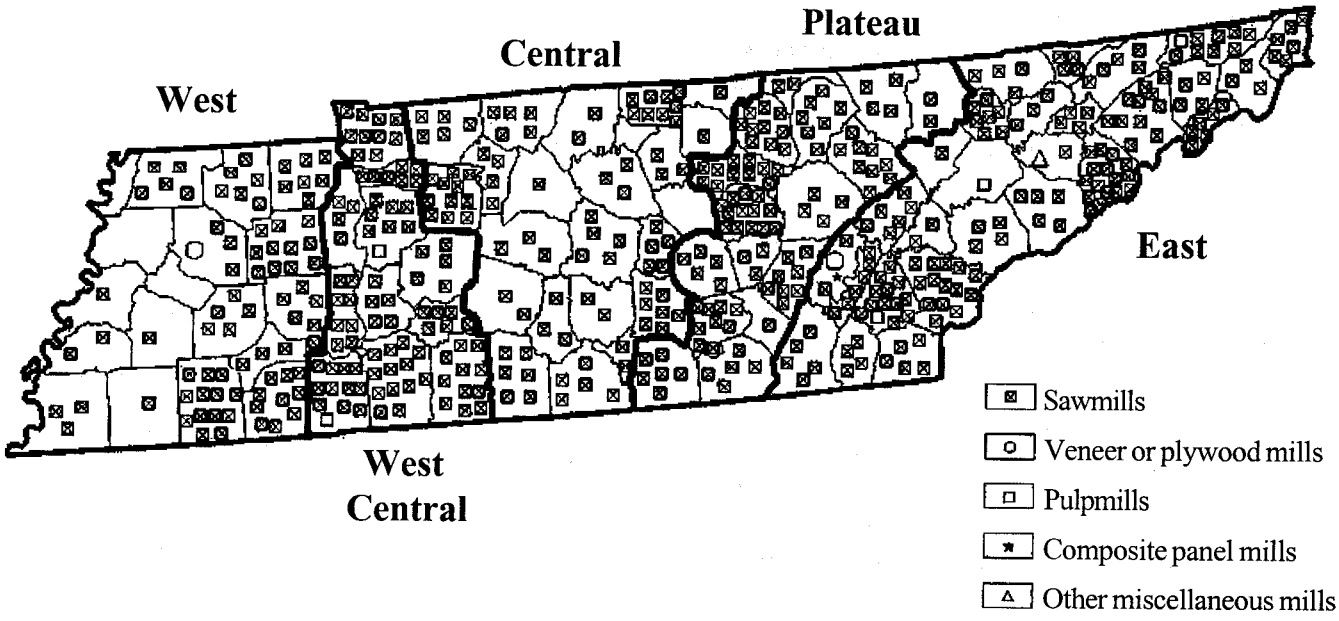


Figure 11—Primary wood-using mills by region, 1997.

Central Region

- Roundwood output for both softwood and hardwood combined from the Central region totaled 45 million cubic feet, up 12 percent. Softwood output increased 87 percent to 4 million cubic feet, while hardwood output increased 8 percent to 41 million cubic feet.

- Saw-log production of 40 million cubic feet accounted for another 89 percent of region's total roundwood output and 22 percent of the State's total saw-log output. Softwood output increased 71 percent to 3 million cubic feet.

- Pulpwood production of 4 million cubic feet accounted for 10 percent of the region's total TPO. Soft and hardwood combined increased 196 percent to 4 million cubic feet.

- Eighty-five sawmills were operating in 1997 and these mills accounted for 14 percent of the State's total TPO.

Plateau Region

- Roundwood output for both softwood and hardwood combined from the Plateau region totaled 69 million cubic feet, up 22 percent. Softwood output increased 62 percent to 24 million cubic feet, while hardwood output increased 8 percent to 45 million cubic feet.

- Thirty-three million cubic feet of saw-log production accounted for 48 percent of the total roundwood output and made up 19 percent of the State's total sawlog output. Softwood output increased 45 percent to 4 million cubic feet. Pulpwood production accounted for 39 percent of the region's total roundwood output with 27 million cubic feet, an increase of 5 percent from 1995.

- In the Plateau region, 99 sawmills were operating during 1997; these mills accounted for 21 percent of the State's total TPO.

East Region

- Roundwood output for both softwood and hardwood combined from the Eastern region totaled 75 million cubic feet, up 22 percent. Softwood output increased 8 percent to 37 million cubic feet, while hardwood output increased 40 percent to 38 million cubic feet, accounting for 12 percent of the State's total roundwood output.

- Pulpwood production accounted for 44 percent of the region's total TPO with 33 million cubic feet, up 13 percent. Softwood output was down 9 percent to 19 million cubic feet with hardwood output up 69 percent to 14 million cubic feet. Saw-log production of 32 million cubic feet accounted for 42 percent of the region's total roundwood output and 18 percent of the State's total saw-log output. Hardwood saw-log output increased 24 percent to 22 million cubic feet.

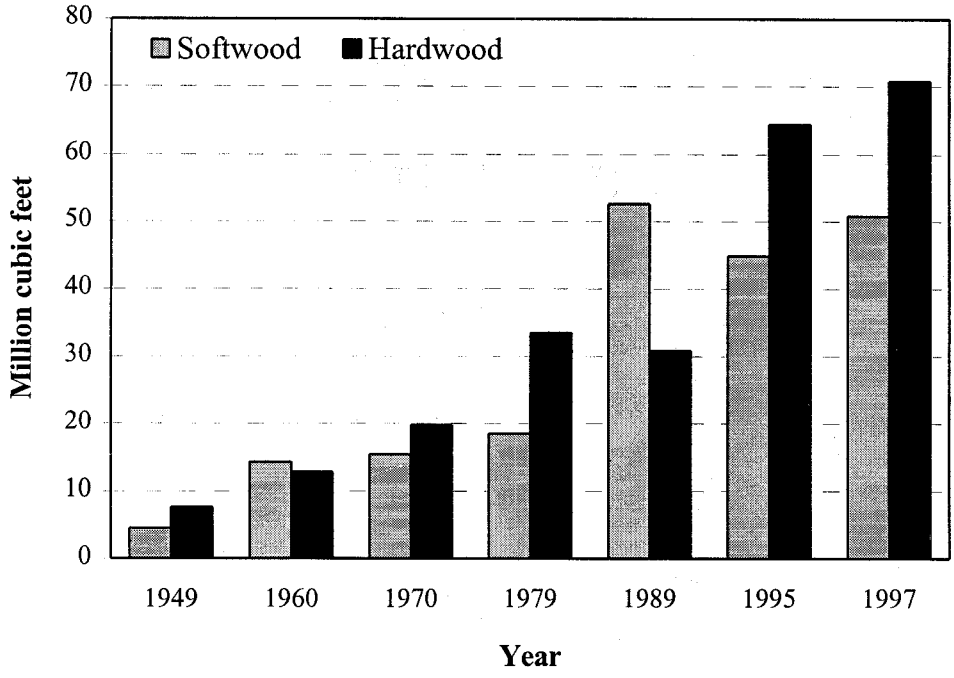


Figure 5—Roundwood pulpwood production by species group and year (see page 8 for references for individual years).

Veneer Logs

- Output of veneer logs in 1997 totaled 1.3 million cubic feet and accounted for less than 1 percent of the State's total industrial roundwood TPO volume. Softwood veneer production increased thirteenfold to 122 thousand cubic feet (709 thousand board feet), while output of hardwood veneer logs declined 28 percent to 1.2 million cubic feet (7.7 million board feet) (fig. 6).

- The number of veneer mills operating in Tennessee remained at two. Receipts of hardwood veneer logs declined 20 percent to 322 thousand cubic feet.

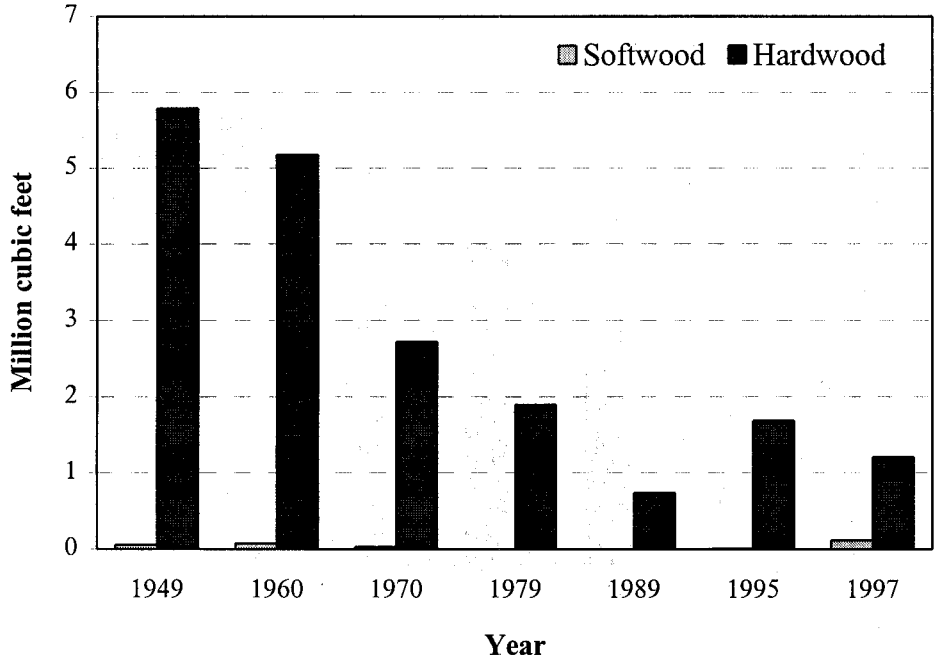


Figure 6—Roundwood veneer-log production by species group and year (see page 8 for references for individual years).

- Tennessee retained 24 percent of its veneer-log production for processing at domestic veneer mills. Imports amounted to 9 thousand cubic feet, and exports totaled 1 million cubic feet, making the State a net exporter of roundwood veneer logs.

Other Industrial Products

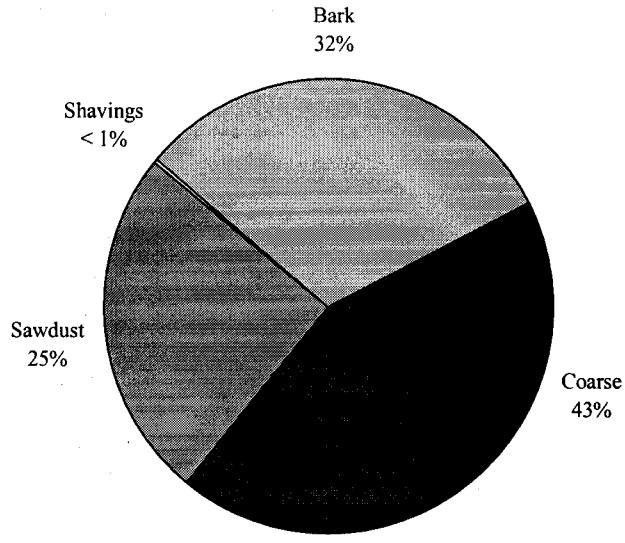
- Roundwood harvested for other industrial uses, such as composite panels, poles, posts, mulch, firewood, logs for log homes, and all other industrial products, totaled 18 million cubic feet. Softwoods made up 73 percent of the other industrial product volume (fig. 7).

- Only two plants were producing other industrial products. Receipts of other industrial products totaled 21 million cubic feet.

- Ninety-six percent of the other industrial production was retained for processing at Tennessee mills. Imports amounted to more than 3.5 million cubic feet, while exports totaled 700 thousand cubic feet, making the State a net importer of roundwood used for other industrial products.

Plant Byproducts

- In 1997, processing of primary products in Tennessee mills generated 140 million cubic feet of wood and bark residues. Coarse residues from all primary products amounted to 61 million cubic feet, and bark volume totaled over 44 million cubic feet. Sawdust and shavings made up 25 percent of total residues, or 35 million cubic feet (fig. 8).



Total 140 million cubic feet

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

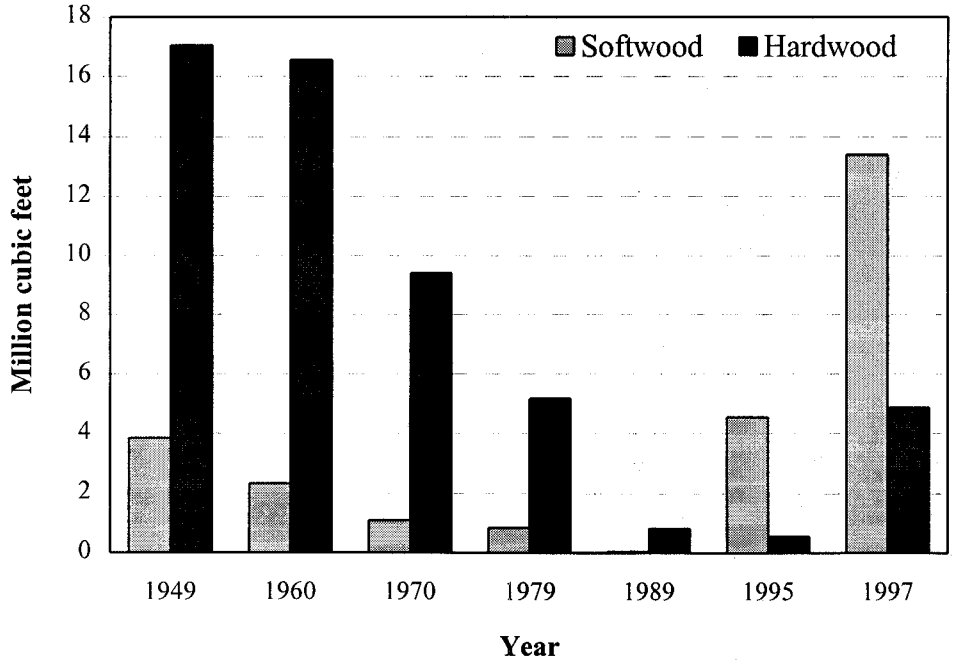


Figure 7—Roundwood production for other industrial products by species group and year (see page 8 for references for individual years).

- In the Eastern region, 154 primary wood-using plants were operating during 1997: 148 sawmills, 1 veneer or plywood mill, 3 pulpmills, and 2 other industrial mills. These mills accounted for 24 percent of the State's total TPO.

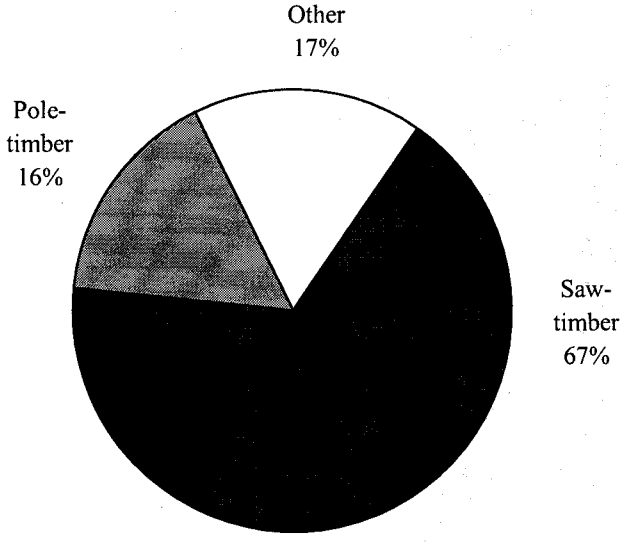
Total Roundwood Output

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

Source

- In addition to the 321 million cubic feet of roundwood output for industrial products, an estimated 82 million cubic feet were harvested for domestic fuelwood, bringing Tennessee's total roundwood output to 403 million cubic feet.

- Eighty-three percent of total roundwood output was considered growing-stock volume (sawtimber and poletimber) from timberland sources (fig. 12); other sources contributed an estimated 70 million cubic feet, or 13 percent of total roundwood output.

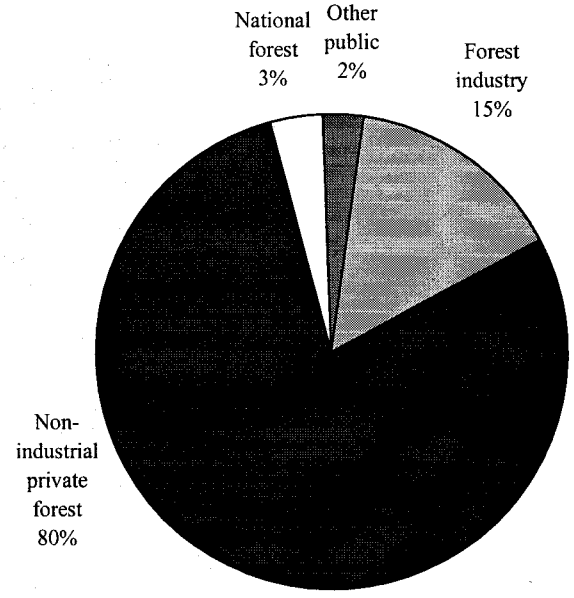


Total 403 million cubic feet

Figure 12—Roundwood output by source, 1997.

Ownership

- An estimated 321 million cubic feet, or 80 percent, of the total roundwood output in 1997 came from nonindustrial private forest lands. Forest industry lands contributed 61 million cubic feet, or 15 percent of the output. Public lands made up the remaining 5 percent, or 21 million cubic feet (fig. 13).

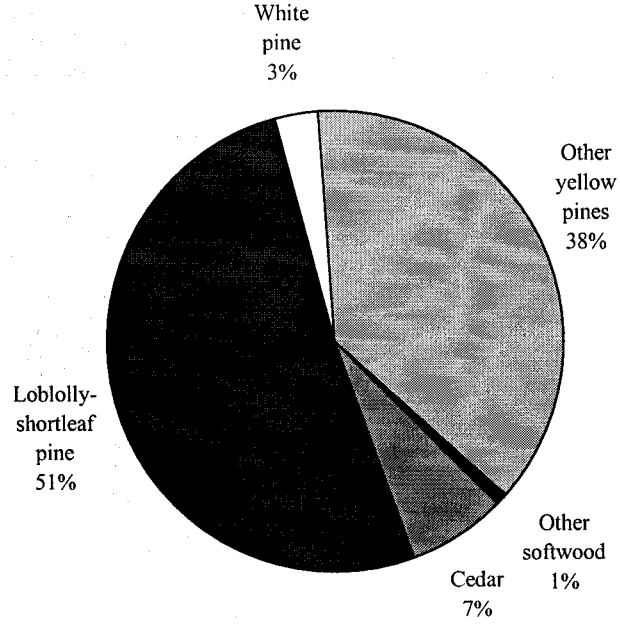


Total 403 million cubic feet

Figure 13—Roundwood output by ownership, 1997.

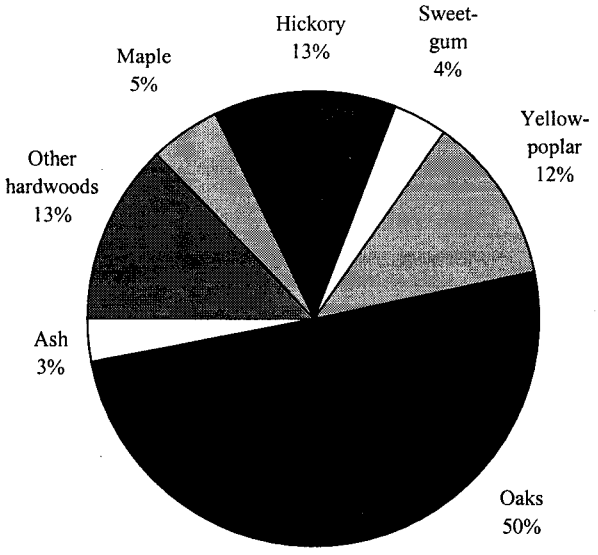
Species

- The loblolly and shortleaf pine group provided more volume than any other softwood species group, accounting for 51 percent of the total softwood output (fig. 14). Other yellow pine types accounted for another 38 percent of the softwood output. The red oak and white oak groups combined accounted for 155 million cubic feet, or 50 percent of total hardwood output (fig. 15).



Total 93 million cubic feet

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



Total 310 million cubic feet

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 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[a]

Saw logs

Softwood	0.18018 cubic foot = 1 board foot 5.55 board feet = 1 cubic foot
Hardwood	0.16556 cubic foot = 1 board foot 6.04 board feet = 1 cubic foot

Veneer logs

Softwood	0.17391 cubic foot = 1 board foot 5.75 board feet = 1 cubic foot
Hardwood	0.15873 cubic foot = 1 board foot 6.30 board feet = 1 cubic foot

Pulpwood[b]

Softwood	72.5 cubic feet per cord
Hardwood	76.6 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 Tennessee during the most recent survey period.

[b] Cubic feet of solid wood per cord.

Index of Tables

1. Output of industrial products by product and species group, Tennessee, 1995 and 1997
2. Roundwood receipts by product and species group, Tennessee, 1995 and 1997
3. Number of primary wood-using plants by industry, Tennessee, 1949-1997
4. Roundwood receipts by sawmill size, Tennessee, 1995 and 1997
5. Roundwood receipts by species and type of mill, Tennessee, 1997
6. Industrial roundwood movement by year and species group, Tennessee, 1995 and 1997
7. Industrial roundwood movement by product and species group, Tennessee, 1997
8. Saw-log volume by destination, source, and species group, Tennessee, 1997
9. Veneer volume by destination, source, and species group, Tennessee, 1997
10. Pulpwood volume by destination, source, and species group, Tennessee, 1997
11. Other industrial volume by destination, source, and species group, Tennessee, 1997
12. Primary mill residue volume by roundwood type, species group, and residue type, Tennessee, 1997
13. Disposal of residue at primary wood-using plants by product, species group, and type of residue, Tennessee, 1995 and 1997
14. Roundwood timber products output by product and species group, West Region of Tennessee, 1995 and 1997
15. Roundwood timber products output by county, product, and species group, West Region of Tennessee, 1997
16. Roundwood timber products output by product and species group, West Central Region of Tennessee, 1995 and 1997
17. Roundwood timber products output by county, product, and species group, West Central Region of Tennessee, 1997
18. Roundwood timber products output by product and species group, Central Region of Tennessee, 1995 and 1997
19. Roundwood timber products output by county, product, and species group, Central Region of Tennessee, 1997
20. Roundwood timber products output by product and species group, Plateau Region of Tennessee, 1995 and 1997
21. Roundwood timber products output by county, product, and species group, Plateau Region of Tennessee, 1997
22. Roundwood timber products output by product and species group, East Region of Tennessee, 1995 and 1997
23. Roundwood timber products output by county, product, and species group, East Region of Tennessee, 1997
24. Total roundwood output by product, species group, and source of material, Tennessee, 1997
25. Total roundwood output by species group, survey unit, and ownership, Tennessee, 1997
26. Total roundwood output by species group, detailed species group, and product, Tennessee, 1997
27. Total roundwood output by species group, detailed species group, and ownership, Tennessee, 1997

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

Product and species group	Year		Change	Percent change
	1995	1997		
	Thousand cubic feet			
Saw logs				
Softwood	15,187	20,263	5,076	33.4
Hardwood	152,369	159,278	6,909	4.5
Total	167,556	179,541	11,985	7.2
Veneer logs				
Softwood	9	122	113	1,255.6
Hardwood	1,685	1,208	-477	-28.3
Total	1,694	1,330	-364	-21.5
Pulpwood				
Softwood	44,838	50,813	5,975	13.3
Hardwood	64,440	70,768	6,328	9.8
Total	109,278	121,581	12,303	11.3
Other industrial				
Softwood	4,551	13,397	8,846	194.4
Hardwood	548	4,868	4,320	788.3
Total	5,099	18,265	13,166	258.2
All industrial				
Softwood	64,585	84,595	20,010	31.0
Hardwood	219,042	236,122	17,080	7.8
Total	283,627	320,717	37,090	13.1
Byproduct output				
Softwood	20,124	27,024	6,900	34.3
Hardwood	92,477	101,135	8,658	9.4
Total	112,601	128,159	15,558	13.8
Total output				
Softwood	84,709	111,619	26,910	31.8
Hardwood	311,519	337,257	25,738	8.3
Total	396,228	448,876	52,648	13.3

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

Product and species group	Year		Change	Percent change
	1995	1997		
	Thousand cubic feet			
Saw logs				
Softwood	13,796	15,706	1,910	13.8
Hardwood	154,833	159,541	4,708	3.0
Total	168,629	175,247	6,618	3.9
Veneer logs				
Softwood	0	0	0	0
Hardwood	403	322	-81	-20.1
Total	403	322	-81	-20.1
Pulpwood				
Softwood	63,580	100,937	37,357	58.8
Hardwood	25,742	58,004	32,262	125.3
Total	89,322	158,941	69,619	77.9
Other industrial				
Softwood	3,686	15,629	11,943	324.0
Hardwood	0	5,400	5,400	0
Total	3,686	21,029	17,343	470.5
Total output				
Softwood	81,062	132,272	51,210	63.2
Hardwood	180,978	223,267	42,289	23.4
Total	262,040	355,539	93,499	35.7

Table 3—Number of primary wood-using plants by industry, Tennessee, 1949-1997

Industry	Year						
	1949	1960	1970	1979	1989	1995	1997
Sawmills	2,789	1,135	546	694	490	495	496
Veneer mills	14	9	6	5	3	2	2
Pulpmills	4	5	7	7	6	5	5
Composite panel mills	0	0	0	0	0	0	1
Other mills	177	133	64	32	24	1	1
All plants	2,984	1,282	623	738	523	503	505

Table 4—Roundwood receipts by sawmill size, Tennessee, 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
Million board feet						
< 1.0	286	75,911	7	286	73,436	7
1.0 - 4.99	156	382,105	38	153	366,936	35
5.0 - 9.99	35	239,649	24	32	214,748	20
>10.0	18	311,699	31	25	393,142	38
Total	495	1,009,364	100	496	1,048,262	100

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

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

Species	All mills	Type of mill				
		Sawmills	Veneer mills		Pulpmills	Other mills
			Pine plywood	Other veneer		
		Thousand cubic feet				
Softwood						
Yellow pine	17,699	7,463	0	0	NA	10,236
Eastern white pine	3,912	2,206	0	0	NA	1,706
Cedar	4,806	1,119	0	0	NA	3,687
Cypress	137	137	0	0	NA	0
Other softwood	4,781	4,781	0	0	NA	0
Unclassified	100,937	0	0	0	100,937	0
Total softwoods	132,272	15,706	0	0	100,937	15,629
Hardwood						
Blackgum and tupelo	1,579	679	0	0	NA	900
Soft maple	2,095	1,195	0	0	NA	900
Sweetgum	4,879	3,749	0	230	NA	900
Yellow-poplar	33,022	30,255	0	67	NA	2,700
Other soft hardwood	2,764	2,739	0	25	NA	0
Hickory	24,225	24,225	0	0	NA	0
Red oak	20,232	20,232	0	0	NA	0
White oak	40,426	40,426	0	0	NA	0
Other hard hardwood	36,041	36,041	0	0	NA	0
Unclassified	58,004	0	0	0	58,004	0
Total hardwoods	223,267	159,541	0	322	58,004	5,400
All species	355,539	175,247	0	322	158,941	21,029

NA = not applicable.

Table 6—Industrial roundwood movement by year and species group, Tennessee, 1995 and 1997

Year	Production	Exported to other States	Retained	Imported from other States	Receipts
			Thousand cubic feet		
			Softwood		
1995	64,585	14,278	50,307	31,605	81,912
1997	84,595	16,318	68,277	63,995	132,272
			Hardwood		
1995	219,042	67,605	151,437	29,541	180,978
1997	236,122	65,421	170,701	52,566	223,267
			All species		
1995	283,627	81,883	201,744	61,146	262,890
1997	320,717	81,739	238,978	116,561	355,539

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

Product and species group	Production	Exported to other States	Retained	Imported from other States	Receipts
			Thousand cubic feet		
Saw logs					
Softwood	20,263	6,750	13,513	2,193	15,706
Hardwood	159,278	14,839	144,439	15,102	159,541
Total	179,541	21,589	157,952	17,295	175,247
Veneer logs					
Softwood	122	122	0	0	0
Hardwood	1,208	895	313	9	322
Total	1,330	1,017	313	9	322
Pulpwood					
Softwood	50,813	9,285	41,528	59,409	100,937
Hardwood	70,768	49,139	21,629	36,375	58,004
Total	121,581	58,424	63,157	95,784	158,941
Other industrial					
Softwood	13,397	161	13,236	2,393	15,629
Hardwood	4,868	548	4,320	1,080	5,400
Total	18,265	709	17,556	3,473	21,029
All products					
Softwood	84,595	16,318	68,277	63,995	132,272
Hardwood	236,122	65,421	170,701	52,566	223,267
Total	320,717	81,739	238,978	116,561	355,539

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

Destination and source	All species	Species group	
		Softwood	Hardwood
	Thousand cubic feet		
Tennessee (retained)	157,952	13,513	144,439
Exports to:			
Alabama	4,123	3,342	781
Georgia	992	992	0
Indiana	10	0	10
Kentucky	10,879	920	9,959
Mississippi	3,003	1,172	1,831
Missouri	204	9	195
North Carolina	1,009	299	710
South Carolina	1	0	1
Virginia	1,368	16	1,352
Total	21,589	6,750	14,839
Imports from:			
Alabama	2,936	0	2,936
Arkansas	3,016	0	3,016
Indiana	865	865	0
Kentucky	3,110	206	2,904
Mississippi	4,692	0	4,692
North Carolina	1,647	865	782
South Carolina	72	72	0
Virginia	957	185	772
Total	17,295	2,193	15,102

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

Destination and source	All species	Species group	
		Softwood	Hardwood
	Thousand cubic feet		
Tennessee (retained)	313	0	313
Exports to:			
Alabama	111	111	0
Indiana	252	0	252
Kentucky	53	0	53
Michigan	108	0	108
North Carolina	386	11	375
Virginia	106	0	106
Wisconsin	1	0	1
Total	1,017	122	895
Imports from:			
Kentucky	9	0	9
Total	9	0	9

Table 10—Pulpwood volume by destination, source, and species group, Tennessee, 1997

Destination and source	All species	Species group	
		Softwood	Hardwood
	Thousand cubic feet		
Tennessee (retained)	63,157	41,528	21,629
Exports to:			
Alabama	34,281	6,184	28,097
Georgia	1,415	653	762
Kentucky	16,521	2,130	14,391
Louisiana	2	2	0
Mississippi	1,230	0	1,230
North Carolina	4,952	293	4,659
Ohio	23	23	0
Total	58,424	9,285	49,139
Imports from:			
Alabama	25,335	16,340	8,995
Georgia	15,890	11,787	4,103
Kentucky	509	298	211
Mississippi	48,359	30,301	18,058
North Carolina	683	598	85
South Carolina	85	85	0
Virginia	4,923	0	4,923
Total	95,784	59,409	36,375

Table 11—Other industrial volume by destination, source, and species group, Tennessee, 1997

Destination and source	All species	Species group	
		Softwood	Hardwood
	Thousand cubic feet		
Tennessee (retained)	48,921	42,056	6,865
Exports to:			
Kentucky	123	123	0
Virginia	586	38	548
Total	709	161	548
Imports from:			
Georgia	868	598	270
Kentucky	869	599	270
North Carolina	868	598	270
Virginia	868	598	270
Total	3,473	2,393	1,080

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

Roundwood type and species group	All types	Residue type			
		Bark	Coarse	Sawdust	Shavings
		Thousand cubic feet			
Saw logs					
Softwood	8,639	1,054	4,639	2,785	161
Hardwood	103,827	16,537	54,933	32,110	247
Total	112,466	17,591	59,572	34,895	408
Veneer logs					
Softwood	0	0	0	0	0
Hardwood	121	35	57	29	0
Total	121	35	57	29	0
Pulpwood					
Softwood	10,406	10,406	0	0	0
Hardwood	7,367	7,367	0	0	0
Total	17,773	17,773	0	0	0
Other industrial[a]					
Softwood	8,825	7,651	1,174	0	0
Hardwood	1,213	1,213	0	0	0
Total	10,038	8,864	1,174	0	0
Total					
Softwood	27,870	19,111	5,813	2,785	161
Hardwood	112,528	25,152	54,990	32,139	247
Total	140,398	44,263	60,803	34,924	408

[a] Includes poles, pilings, posts, composite panels, and other industrial products.

Table 13—Disposal of residue at primary wood-using plants by product, species group, and type of residue, Tennessee, 1995 and 1997

Product and species group	All types		Residue type							
			Bark		Coarse		Sawdust		Shavings	
	1995	1997	1995	1997	1995	1997	1995	1997	1995	1997
	Thousand cubic feet									
Fiber products										
Softwood	1,722	1,596	0	0	1,722	1,596	0	0	0	0
Hardwood	17,117	25,831	0	0	16,898	25,654	219	177	0	0
Total	18,839	27,427	0	0	18,620	27,250	219	177	0	0
Particleboard										
Softwood	0	0	0	0	0	0	0	0	0	0
Hardwood	0	234	0	0	0	234	0	0	0	0
Total	0	234	0	0	0	234	0	0	0	0
Charcoal/chemical wood										
Softwood	0	0	0	0	0	0	0	0	0	0
Hardwood	0	348	0	14	0	78	0	256	0	0
Total	0	348	0	14	0	78	0	256	0	0
Sawn products										
Softwood	0	0	0	0	0	0	0	0	0	0
Hardwood	45	45	0	0	45	45	0	0	0	0
Total	45	45	0	0	45	45	0	0	0	0
Fuel										
Softwood	16,895	22,562	12,710	17,488	2,613	3,252	1,571	1,820	1	2
Hardwood	52,730	56,230	8,610	14,637	23,479	17,600	20,510	23,819	131	174
Total	69,625	78,792	21,320	32,125	26,092	20,852	22,081	25,639	132	176
Miscellaneous										
Softwood	1,507	2,866	347	1,516	490	536	561	655	109	159
Hardwood	22,585	18,447	8,560	8,762	7,670	5,461	6,252	4,151	103	73
Total	24,092	21,313	8,907	10,278	8,160	5,997	6,813	4,806	212	232
Not used										
Softwood	841	846	105	107	422	429	314	310	0	0
Hardwood	11,686	11,393	2,168	1,739	5,281	5,918	4,213	3,736	24	0
Total	12,527	12,239	2,273	1,846	5,703	6,347	4,527	4,046	24	0
All products										
Softwood	20,965	27,870	13,162	19,111	5,247	5,813	2,446	2,785	110	161
Hardwood	104,163	112,528	19,338	25,152	53,373	54,990	31,194	32,139	258	247
Total	125,128	140,398	32,500	44,263	58,620	60,803	33,640	34,924	368	408

Table 14—Roundwood timber products output by product and species group, West Region of Tennessee, 1995 and 1997

Product and species group	Year		Change	Percent change
	1995	1997		
	Thousand cubic feet			
Saw logs				
Softwood	1,106	1,346	240	21.7
Hardwood	40,521	39,164	-1,357	-3.3
Total	41,627	40,510	-1,117	-2.7
Veneer logs				
Softwood	0	0	0	0
Hardwood	250	250	0	0
Total	250	250	0	0
Pulpwood				
Softwood	4,890	5,080	190	3.9
Hardwood	11,802	9,814	-1,988	-16.8
Total	16,692	14,894	-1,798	-10.8
Other industrial				
Softwood	0	0	0	0
Hardwood	0	0	0	0
Total	0	0	0	0
All industrial				
Softwood	5,996	6,426	430	7.2
Hardwood	52,573	49,228	-3,345	-6.4
Total	58,569	55,654	-2,915	-5.0

Table 15—Roundwood timber products output by county, product, and species group, West Region of Tennessee, 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
	Thousand cubic feet									
Carroll	486	3,344	39	1,969	0	12	447	1,363	0	0
Chester	702	2,101	24	1,807	0	0	678	294	0	0
Crockett	0	379	0	379	0	0	0	0	0	0
Dyer	0	605	0	529	0	76	0	0	0	0
Fayette	154	2,766	0	2,642	0	0	154	124	0	0
Gibson	2	452	2	440	0	12	0	0	0	0
Hardeman	377	8,001	4	7,153	0	12	373	836	0	0
Haywood	0	3,616	0	3,239	0	0	0	377	0	0
Henderson	410	1,900	9	1,299	0	0	401	601	0	0
Henry	223	3,612	78	2,217	0	0	145	1,395	0	0
Lake	0	50	0	50	0	0	0	0	0	0
Lauderdale	0	2,441	0	2,267	0	89	0	85	0	0
McNairy	3,212	6,874	1,098	4,672	0	0	2,114	2,202	0	0
Madison	83	2,175	24	2,104	0	12	59	59	0	0
Obion	8	1,674	8	1,661	0	13	0	0	0	0
Shelby	21	3,212	0	3,186	0	0	21	26	0	0
Tipton	1	1,995	1	1,983	0	12	0	0	0	0
Weakley	747	4,031	59	1,567	0	12	688	2,452	0	0
All counties	6,426	49,228	1,346	39,164	0	250	5,080	9,814	0	0

Table 16—Roundwood timber products output by product and species group, West Central Region of Tennessee, 1995 and 1997

Product and species group	Year		Change	Percent change
	1995	1997		
	Thousand cubic feet			
Saw logs				
Softwood	853	1,901	1,048	122.9
Hardwood	30,161	31,745	1,584	5.3
Total	31,014	33,646	2,632	8.5
Veneer logs				
Softwood	0	111	111	0
Hardwood	0	0	0	0
Total	0	111	111	0
Pulpwood				
Softwood	6,359	10,997	4,638	72.9
Hardwood	29,640	31,234	1,594	5.4
Total	35,999	42,231	6,232	17.3
Other industrial				
Softwood	0	0	0	0
Hardwood	0	0	0	0
Total	0	0	0	0
All industrial				
Softwood	7,212	13,009	5,797	80.4
Hardwood	59,801	62,979	3,178	5.3
Total	67,013	75,988	8,975	13.4

Table 17—Roundwood timber products output by county, product, and species group, West Central Region of Tennessee, 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
	Thousand cubic feet									
Benton	574	3,658	183	1,922	0	0	391	1,736	0	0
Decatur	145	3,458	29	1,966	0	0	116	1,492	0	0
Hardin	5,796	7,752	1,195	4,193	0	0	4,601	3,559	0	0
Hickman	252	7,353	58	2,397	0	0	194	4,956	0	0
Houston	0	2,236	0	2,105	0	0	0	131	0	0
Humphreys	15	4,512	0	3,472	0	0	15	1,040	0	0
Lawrence	762	7,431	162	3,903	111	0	489	3,528	0	0
Lewis	244	3,511	34	2,052	0	0	210	1,459	0	0
Perry	290	5,232	230	1,617	0	0	60	3,615	0	0
Stewart	36	7,267	0	4,018	0	0	36	3,249	0	0
Wayne	4,895	10,569	10	4,100	0	0	4,885	6,469	0	0
All counties	13,009	62,979	1,901	31,745	111	0	10,997	31,234	0	0

Table 18—Roundwood timber products output by product and species group, Central Region of Tennessee, 1995 and 1997

Product and species group	Year		Change	Percent change
	1995	1997		
	Thousand cubic feet			
Saw logs				
Softwood	1,597	2,728	1,131	70.8
Hardwood	36,628	37,261	633	1.7
Total	38,225	39,989	1,764	4.6
Veneer logs				
Softwood	0	0	0	0
Hardwood	253	311	58	22.9
Total	253	311	58	22.9
Pulpwood				
Softwood	441	1,082	641	145.4
Hardwood	1,065	3,381	2,316	217.5
Total	1,506	4,463	2,957	196.3
Other industrial				
Softwood	0	0	0	0
Hardwood	0	0	0	0
Total	0	0	0	0
All industrial				
Softwood	2,038	3,810	1,772	86.9
Hardwood	37,946	40,953	3,007	7.9
Total	39,984	44,763	4,779	12.0

Table 19—Roundwood timber products output by county, product, and species group, Central Region of Tennessee, 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
	Thousand cubic feet									
Bedford	141	255	141	251	0	0	0	4	0	0
Cannon	390	633	390	596	0	0	0	37	0	0
Cheatham	35	1,935	35	1,854	0	0	0	81	0	0
Clay	67	2,954	67	2,768	0	186	0	0	0	0
Coffee	649	1,167	4	1,105	0	0	645	62	0	0
Davidson	47	257	47	257	0	0	0	0	0	0
Dekalb	115	1,558	18	1,558	0	0	97	0	0	0
Dickson	39	3,699	0	2,756	0	0	39	943	0	0
Giles	179	2,332	84	1,550	0	0	95	782	0	0
Jackson	62	4,563	62	4,505	0	58	0	0	0	0
Lincoln	1,473	2,697	1,457	2,163	0	0	16	534	0	0
Macon	9	4,816	9	4,789	0	27	0	0	0	0
Marshall	53	870	53	855	0	0	0	15	0	0
Maury	100	1,777	54	906	0	0	46	871	0	0
Montgomery	2	3,991	2	3,991	0	0	0	0	0	0
Moore	0	370	0	370	0	0	0	0	0	0
Robertson	0	2,092	0	2,092	0	0	0	0	0	0
Rutherford	108	172	108	172	0	0	0	0	0	0
Smith	66	1,866	66	1,866	0	0	0	0	0	0
Sumner	6	1,374	6	1,334	0	40	0	0	0	0
Trousdale	2	362	2	362	0	0	0	0	0	0
Williamson	14	1,105	14	1,053	0	0	0	52	0	0
Wilson	253	108	109	108	0	0	144	0	0	0
All counties	3,810	40,953	2,728	37,261	0	311	1,082	3,381	0	0

Table 20—Roundwood timber products output by product and species group, Plateau Region of Tennessee, 1995 and 1997

Product and species group	Year		Change	Percent change
	1995	1997		
	Thousand cubic feet			
Saw logs				
Softwood	2,725	3,963	1,238	45.4
Hardwood	27,598	29,430	1,832	6.6
Total	30,323	33,393	3,070	10.1
Veneer logs				
Softwood	0	0	0	0
Hardwood	49	72	23	46.9
Total	49	72	23	46.9
Pulpwood				
Softwood	11,893	14,202	2,309	19.4
Hardwood	13,891	12,764	-1,127	-8.1
Total	25,784	26,966	1,182	4.6
Other industrial				
Softwood	210	5,831	5,621	2,676.7
Hardwood	0	2,592	2,592	0
Total	210	8,423	8,213	3,911.0
All industrial				
Softwood	14,828	23,996	9,168	61.8
Hardwood	41,538	44,858	3,320	8.0
Total	56,366	68,854	12,488	22.2

Table 21—Roundwood timber products output by county, product, and species group, Plateau Region of Tennessee, 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
	Thousand cubic feet									
Bledsoe	1,111	1,774	12	709	0	13	1,099	1,052	0	0
Campbell	560	2,404	516	2,129	0	53	10	222	34	0
Cumberland	4,081	2,893	406	1,611	0	6	1,765	412	1,910	864
Fentress	559	2,238	378	2,076	0	0	181	162	0	0
Franklin	1,209	2,542	1,197	1,492	0	0	12	1,050	0	0
Grundy	1,440	3,991	79	2,027	0	0	1,361	1,964	0	0
Marion	1,427	2,429	239	1,090	0	0	1,188	1,339	0	0
Morgan	5,031	3,346	237	742	0	0	2,884	1,740	1,910	864
Overton	199	3,754	44	3,742	0	0	155	12	0	0
Pickett	80	1,976	36	1,954	0	0	0	22	44	0
Putnam	86	2,573	19	2,495	0	0	67	78	0	0
Scott	2,648	2,794	657	1,694	0	0	58	236	1,933	864
Sequatchie	2,303	1,978	0	478	0	0	2,303	1,500	0	0
Van Buren	1,233	2,890	9	1,277	0	0	1,224	1,613	0	0
Warren	132	2,620	74	2,305	0	0	58	315	0	0
White	1,897	4,656	60	3,609	0	0	1,837	1,047	0	0
All counties	23,996	44,858	3,963	29,430	0	72	14,202	12,764	5,831	2,592

Table 22—Roundwood timber products output by product and species group, East Region of Tennessee, 1995 and 1997

Product and species group	Year		Change	Percent change
	1995	1997		
	Thousand cubic feet			
Saw logs				
Softwood	8,906	10,325	1,419	15.9
Hardwood	17,461	21,678	4,217	24.2
Total	26,367	32,003	5,636	21.4
Veneer logs				
Softwood	9	11	2	22.2
Hardwood	1,133	575	-558	-49.2
Total	1,142	586	-556	-48.7
Pulpwood				
Softwood	21,255	19,452	-1,803	-8.5
Hardwood	8,042	13,575	5,533	68.8
Total	29,297	33,027	3,730	12.7
Other industrial				
Softwood	4,341	7,566	3,225	74.3
Hardwood	548	2,276	1,728	315.3
Total	4,889	9,842	4,953	101.3
All industrial				
Softwood	34,511	37,354	2,843	8.2
Hardwood	27,184	38,104	10,920	40.2
Total	61,695	75,458	13,763	22.3

Table 23—Roundwood timber products output by county, product, and species group, East Region of Tennessee, 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
	Thousand cubic feet									
Anderson	435	4,066	291	1,254	0	0	122	2,812	22	0
Blount	1,513	413	234	360	0	0	1,279	53	0	0
Bradley	3,275	777	925	98	0	6	2,350	673	0	0
Carter	603	2,181	603	1,620	0	58	0	503	0	0
Claiborne	76	2,231	74	1,972	0	108	2	151	0	0
Cocke	870	3,346	337	683	0	58	164	2,605	369	0
Grainger	414	1,523	13	1,426	0	0	32	97	369	0
Greene	726	995	152	631	0	0	21	364	553	0
Hamblen	18	783	18	725	0	58	0	0	0	0
Hamilton	3,265	1,167	1,189	474	0	6	2,076	687	0	0
Hancock	71	1,441	48	1,266	0	0	23	175	0	0
Hawkins	280	1,838	77	1,100	0	0	0	464	203	274
Jefferson	951	387	30	387	0	0	0	0	921	0
Johnson	1,532	2,328	1,532	2,158	0	106	0	64	0	0
Knox	1,264	375	7	306	0	0	336	69	921	0
Loudon	414	884	18	363	0	0	396	521	0	0
McMinn	2,571	1,899	95	257	0	0	2,476	1,642	0	0
Meigs	3,810	1,730	47	276	0	0	1,853	590	1,910	864
Monroe	3,933	621	1,696	477	0	0	2,237	144	0	0
Polk	2,983	419	1,614	90	0	0	1,369	329	0	0
Rhea	4,523	1,729	150	1,074	0	33	4,373	622	0	0
Roane	2,612	1,788	374	475	0	0	328	449	1,910	864
Sevier	464	471	69	87	11	142	15	242	369	0
Sullivan	206	1,770	187	1,206	0	0	0	290	19	274
Unicoi	359	826	359	813	0	0	0	13	0	0
Union	55	1,136	55	1,136	0	0	0	0	0	0
Washington	131	980	131	964	0	0	0	16	0	0
All counties	37,354	38,104	10,325	21,678	11	575	19,452	13,575	7,566	2,276

Table 24—Total roundwood output by product, species group, and source of material, Tennessee, 1997

Product and species group	All sources	Growing-stock trees			Other sources
		Total	Sawtimber	Poletimber	
		Thousand cubic feet			
Saw logs					
Softwood	20,263	19,985	18,986	999	278
Hardwood	159,278	155,549	146,216	9,333	3,729
Total	179,541	175,535	165,203	10,332	4,006
Veneer logs and bolts					
Softwood	122	115	115	0	7
Hardwood	1,208	1,187	1,187	0	21
Total	1,330	1,302	1,302	0	28
Pulpwood					
Softwood	50,813	47,732	28,707	19,025	3,081
Hardwood	70,768	62,264	44,545	17,718	8,504
Total	121,581	109,995	73,252	36,743	11,586
Poles and posts					
Softwood	3,765	2,798	1,502	1,296	967
Hardwood	0	0	0	0	0
Total	3,765	2,798	1,502	1,296	967
Other miscellaneous					
Softwood	9,632	8,700	3,930	4,770	932
Hardwood	4,868	4,336	1,735	2,602	532
Total	14,500	13,036	5,664	7,372	1,464
Total industrial products					
Softwood	84,595	79,330	53,239	26,091	5,265
Hardwood	236,122	223,336	193,683	29,653	12,786
Total	320,717	302,666	246,923	55,744	18,051
Fuelwood					
Softwood	8,511	3,658	2,926	732	4,853
Hardwood	73,686	26,108	19,581	6,527	47,578
Total	82,197	29,766	22,507	7,259	52,431
All products					
Softwood	93,106	82,988	56,166	26,822	10,118
Hardwood	309,808	249,444	213,264	36,180	60,364
Total	402,914	332,432	269,430	63,002	70,482

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

Table 25—Total roundwood output by species group, survey unit, and ownership, Tennessee, 1997

Species group and survey unit	Total	National forest	Other public	Forest industry	Nonindustrial private
			Thousand cubic feet		
Softwoods					
West	7,071	0	0	2,645	4,426
West Central	14,319	0	0	3,429	10,890
Central	4,193	0	0	0	4,193
Plateau	26,410	0	348	7,420	18,642
East	41,113	4,980	948	6,440	28,746
Total softwoods	93,106	4,980	1,296	19,934	66,897
Hardwoods					
West	64,590	0	169	8,695	55,726
West Central	82,632	0	2,531	23,223	56,879
Central	53,734	0	40	0	53,694
Plateau	58,856	0	3,051	5,190	50,614
East	49,996	9,233	0	4,096	36,667
Total hardwoods	309,808	9,233	5,792	41,204	253,579
All species	402,914	14,213	7,087	61,138	320,476

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

Table 26—Total roundwood output by species group, detailed species group, and product, Tennessee, 1997

Species group and detailed species group	Total	Product					
		Saw log	Veneer	Pulpwood	Fuelwood	Poles and post	Other miscellaneous
		Thousand cubic feet					
Softwood							
Cedar	6,336	3,378	0	1,081	579	1,298	0
White pine	2,350	892	0	717	215	177	349
Loblolly-shortleaf pine	47,504	6,993	122	31,095	4,343	858	4,093
Other yellow pines	35,744	8,586	0	17,339	3,267	1,408	5,145
Cypress	427	38	0	349	39	0	0
Hemlock	744	376	0	232	68	23	45
Total softwoods	93,106	20,263	122	50,813	8,511	3,765	9,632
Hardwood							
Soft maple	7,103	3,228	33	1,932	1,689	0	220
Hard maple	7,631	4,176	6	1,471	1,815	0	163
Other birch	885	465	10	181	210	0	18
Yellow birch	373	194	0	55	89	0	35
Hickory	38,892	19,592	126	9,601	9,250	0	323
Beech	5,530	3,190	8	1,017	1,315	0	0
Ash	9,122	4,812	77	1,179	2,170	0	885
Black walnut	1,393	563	0	499	332	0	0
Sweetgum	11,564	6,251	44	2,459	2,750	0	59
Yellow-poplar	36,313	19,578	181	7,207	8,637	0	710
Blackgum-tupelo	5,441	2,441	13	1,453	1,294	0	241
Sycamore	562	250	1	178	134	0	1
Cottonwood	85	60	4	0	20	0	0
Black cherry	1,715	820	2	392	408	0	93
Select white oaks	53,536	24,796	182	15,429	12,733	0	396
Other white oaks	23,944	12,062	41	5,998	5,695	0	148
Select red oaks	19,483	10,372	52	4,306	4,634	0	120
Other red oaks	58,532	29,992	188	13,390	13,921	0	1,042
Basswood	1,071	435	3	277	255	0	101
Elm	4,025	2,297	7	755	958	0	9
Other Eastern hardwoods	22,608	13,706	232	2,989	5,377	0	305
Total hardwoods	309,808	159,278	1,208	70,768	73,686	0	4,868
All species	402,914	179,541	1,330	121,581	82,197	3,765	14,500

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

Table 27—Total roundwood output by species group, detailed species group, and ownership, Tennessee, 1997

Species group and detailed species group	Total	National forest	Other public	Forest industry	Nonindustrial private
			Thousand cubic feet		
Softwood					
Cedar	6,336	24	0	0	6,312
White pine	2,350	774	0	0	1,576
Loblolly-shortleaf pine	47,504	833	788	15,265	30,618
Other yellow pines	35,744	2,986	506	4,284	27,967
Cypress	427	0	0	368	59
Hemlock	744	362	2	17	364
Total softwoods	93,106	4,980	1,296	19,934	66,897
Hardwood					
Soft maple	7,103	724	191	566	5,622
Hard maple	7,631	0	320	666	6,645
Other birch	885	392	25	23	444
Yellow birch	373	190	54	5	123
Hickory	38,892	696	594	5,123	32,478
Beech	5,530	18	93	457	4,962
Ash	9,122	281	104	470	8,268
Black walnut	1,393	0	14	89	1,290
Sweetgum	11,564	0	230	1,690	9,644
Yellow-poplar	36,313	1,530	960	3,267	30,557
Blackgum-tupelo	5,441	0	73	1,030	4,339
Sycamore	562	0	10	56	497
Cottonwood	85	0	0	0	85
Black cherry	1,715	10	140	168	1,398
Select white oaks	53,536	291	1,128	10,784	41,333
Other white oaks	23,944	1,215	470	4,569	17,690
Select red oaks	19,483	1,228	284	2,508	15,463
Other red oaks	58,532	1,856	810	8,534	47,332
Basswood	1,071	0	90	26	955
Elm	4,025	0	62	240	3,723
Other Eastern hardwoods	22,608	801	141	934	20,733
Total hardwoods	309,808	9,233	5,792	41,204	253,579
All species	402,914	14,213	7,087	61,138	320,476

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

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In 1997, roundwood output from Tennessee's forests was 321 million cubic feet. Mill byproducts generated from primary manufacturers was 128 million cubic feet. Ninety-one percent of the plant residues were used primarily for fuel and fiber products. Saw logs were the leading roundwood product at 180 million cubic feet; pulpwood ranked second at 122 million cubic feet; other industrial products were third at 18 million cubic feet. There were 505 primary processing plants operating in Tennessee in 1997. Total receipts amounted to 356 million cubic feet.

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

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