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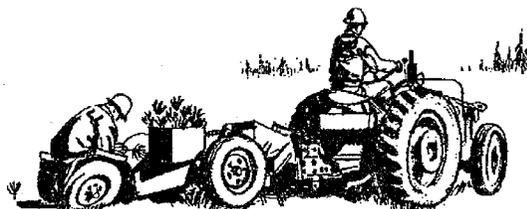
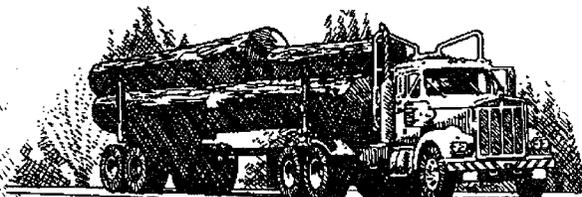
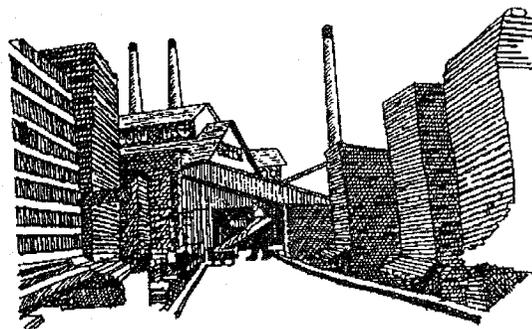
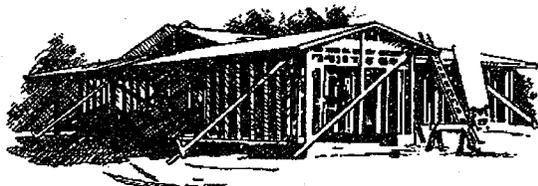


Southern  
Research Station

Resource Bulletin  
SRS-40

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

Daniel Stratton and  
Larry Lowe

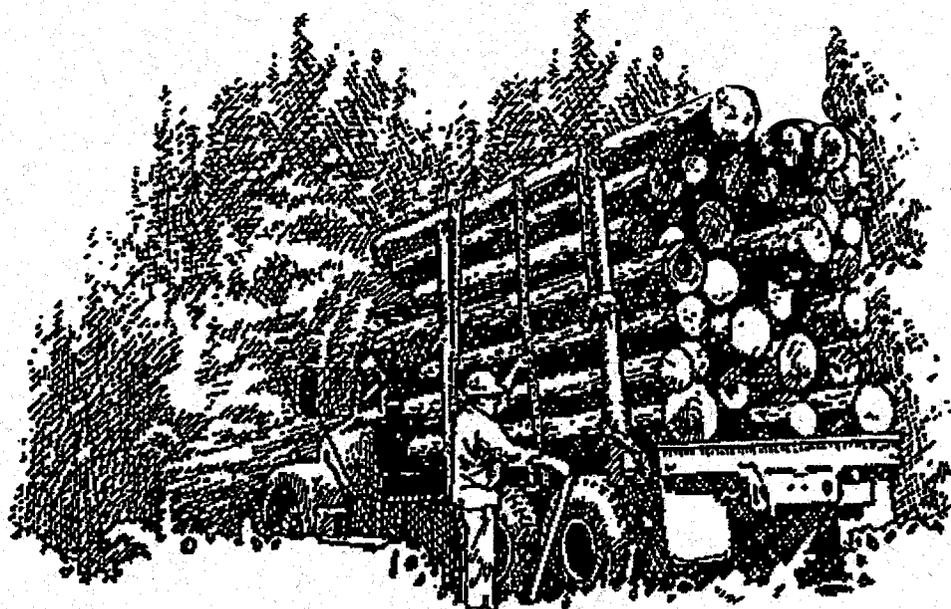


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**The Authors:**

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July 1999

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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 Kentucky and presents changes in product output and residue use since 1995. It complements the Forest Inventory and Monitoring (FIM) periodic inventory of volume and removals from the State's timberland. The canvass was conducted to determine the amount and source of wood receipts and annual timber product drain by county in 1997 and to determine interstate and cross-regional movement of industrial roundwood. Only primary wood-using mills were canvassed. Primary mills are those that process roundwood in log or bolt form or as chipped roundwood. Examples of industrial roundwood products are saw logs, pulpwood, veneer logs, poles, and logs used for composite board products. Mills producing products from residues generated at primary and secondary processors were not canvassed. Trees chipped in the woods were included in the estimate of timber drain only if they were delivered to a primary domestic manufacturer.

A sampled canvass of all wood processors in Kentucky 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 Kentucky timberland was incorporated into Kentucky production estimates. Each mill was canvassed by mail or through

personal contact at plant locations. Telephone contacts followed mailed questionnaire responses when additional information or clarification of response was necessary. In the event of a nonresponse, data collected in previous surveys were updated by current data collected for mills of similar size, product type, and location. Surveys for all timber products other than pulpwood began in 1948, 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 Kentucky Department 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 33 percent of mills operating in 1997: 2 pulpmills, 3 of the 4 veneer mills, 1 composite panel mill, 4 of the 19 mills manufacturing other industrial products, and 117 of the 365 sawmills. These mills accounted for 90 percent of the 1997 mill receipts.



Dear Customer:

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

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

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

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

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

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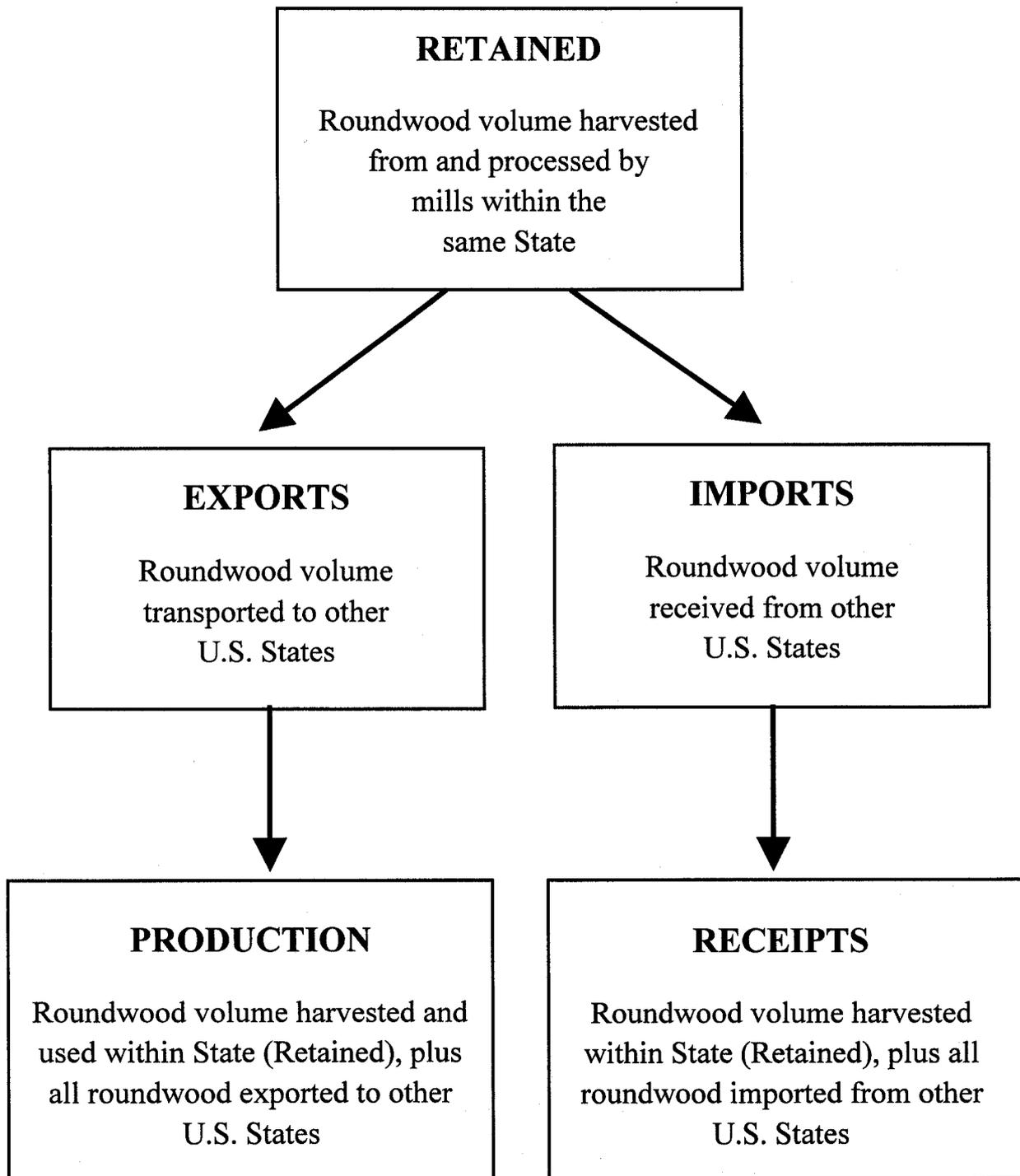
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<sup>a</sup> All tables in this report are available in Microsoft® Excel workbook files. Upon request, these files will be supplied on 3½-inch diskettes.

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.

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

Daniel Stratton and Larry Lowe

## Output of Industrial Timber Products

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

- Between 1995 and 1997, the combined industrial timber products output (TPO) from roundwood and plant byproducts declined by 1 percent from 296 to 293 million cubic feet.
- Timber products output from roundwood was up 8 million cubic feet, or 5 percent, to 195 million cubic feet, while output of plant byproducts decreased 12 million cubic feet to 98 million cubic feet.
- Output of hardwood roundwood products increased 5 percent to 184 million cubic feet, while output of softwood roundwood products declined 7 percent to 10 million cubic feet (fig. 2).
- Saw logs and pulpwood were the principal roundwood products in 1997. Combined output of these products totaled 178 million cubic feet and accounted for 91 percent of Kentucky's total roundwood output (fig. 3).
- Total receipts at Kentucky mills, which included roundwood harvested and retained in the State, as well as roundwood imported from other States, increased 2 percent to 216 million cubic feet. At the same time, the number of primary roundwood-using plants in Kentucky declined from 401 in 1995 to 391 in 1997.

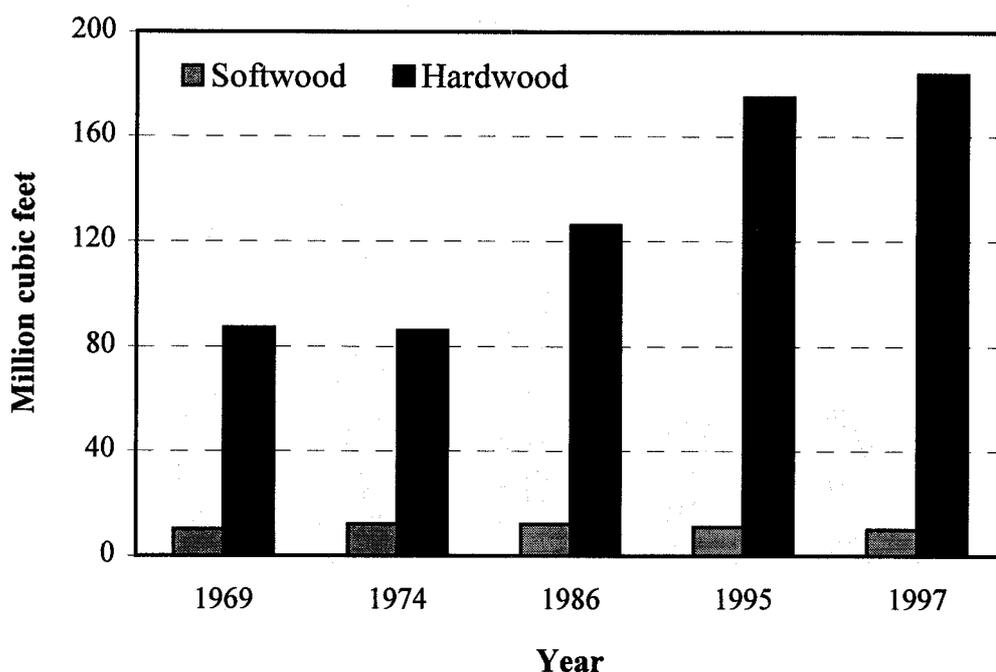


Figure 2—Roundwood production for all products by species group and year (see page 8 for references for individual years).

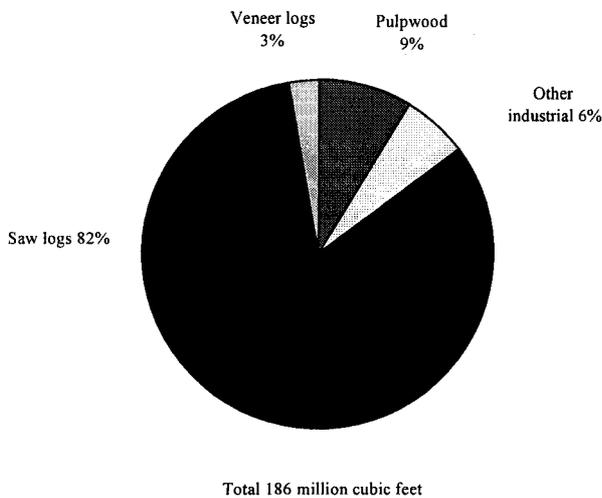


Figure 3—Roundwood production by type of product, 1997.

### Saw Logs

- Saw logs accounted for 82 percent of the State's total roundwood products. Output of hardwood saw logs remained unchanged at 155 million cubic feet (947 million board feet), while that of softwood saw logs declined 6 percent to 6 million cubic feet (31 million board feet) (fig. 4).
- Kentucky currently has 391 sawmills, a net loss of 10 mills since 1995. Total saw-log receipts decreased 7 million cubic feet to 165 million cubic

feet. Softwood saw-log receipts decreased by 3 percent to 4 million cubic feet, while those of hardwoods decreased 4 percent to 159 million cubic feet. Of the operating mills, 45 percent had receipts less than 1 million board feet, 38 percent had receipts between 1 and 4.99 million board feet, while 17 percent had receipts 5 million board feet or greater. These 66 mills accounted for 62 percent of total saw-log receipts.

- Kentucky retained 94 percent of its saw-log production for domestic manufacture; saw-log imports exceeded exports by 4 million cubic feet in 1997.

### Pulpwood

- Total pulpwood production, including chipped roundwood, was down 4 million cubic feet to 17 million cubic feet and accounted for 9 percent of the State's total roundwood TPO. Hardwood output was down 15 percent to 15 million cubic feet (191 thousand cords); softwood output dropped 29 percent to 2 million cubic feet (32 thousand cords) (fig. 5).
- Two pulpmill facilities were operating and receiving roundwood in Kentucky in 1997, the same as in 1995. Total pulpwood receipts for these mills increased 2 million cubic feet to 37 million cubic feet, accounting for 17 percent of total receipts for all mills.

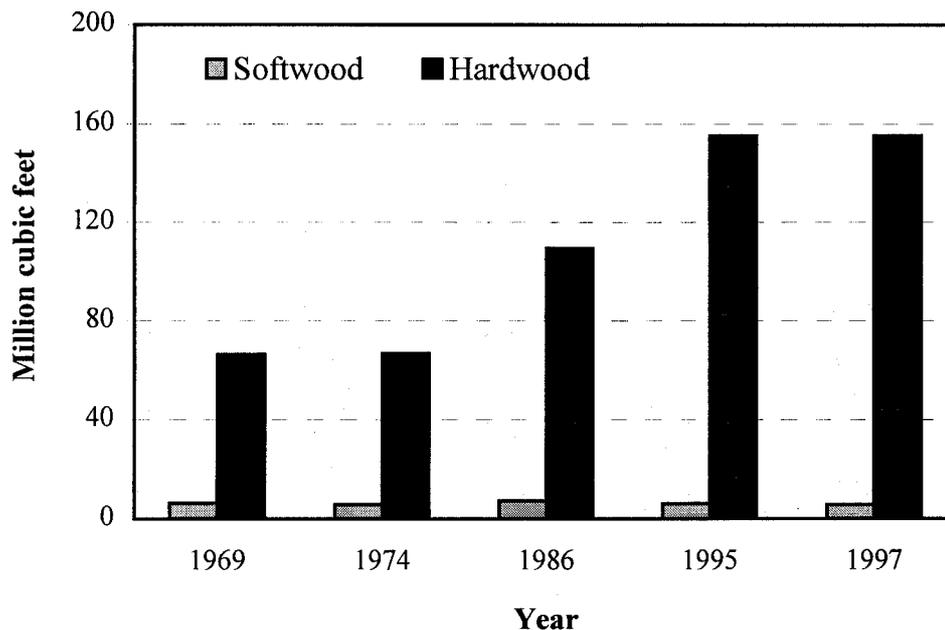


Figure 4—Roundwood saw-log production by species group and year (see page 8 for references for individual years).

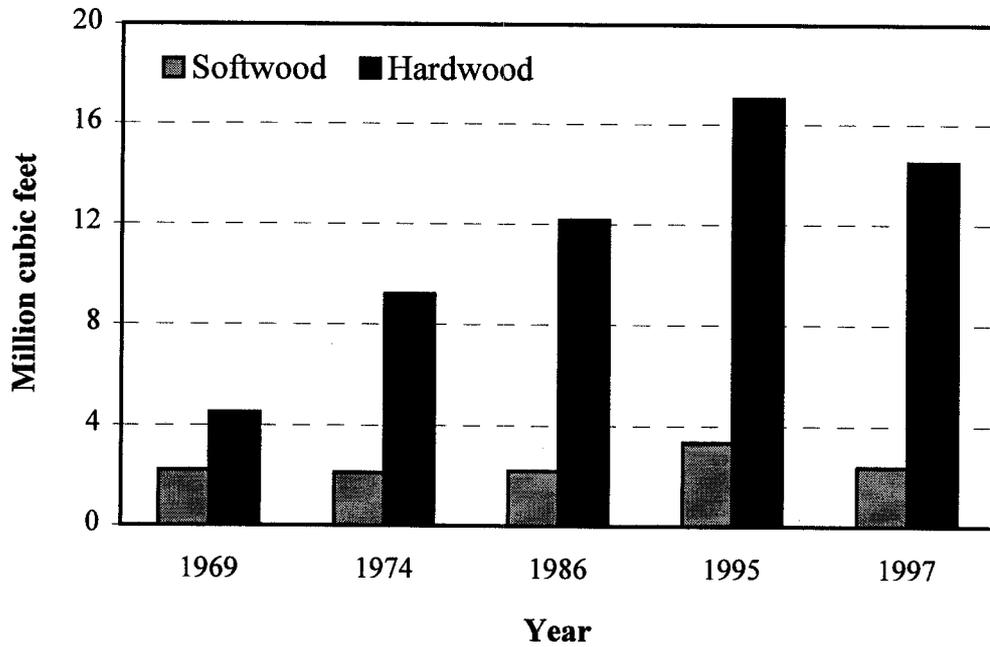


Figure 5—Roundwood pulpwood production by species group and year (see page 8 for references for individual years).

- Seventy-nine percent of roundwood cut for pulpwood was retained for processing at Kentucky pulp mills. Roundwood pulpwood accounted for 21 percent of total known exports and 61 percent of total imports. Roundwood pulpwood imports amounted to 23 million cubic feet, 20 million cubic feet more than was exported.

#### Veneer Logs

- Output of veneer logs was up fourfold in 1997 and totaled 5 million cubic feet (31 million board feet), 98 percent of which was hardwood (fig. 6). Veneer-log production accounted for 3 percent of the State's total roundwood TPO volume.

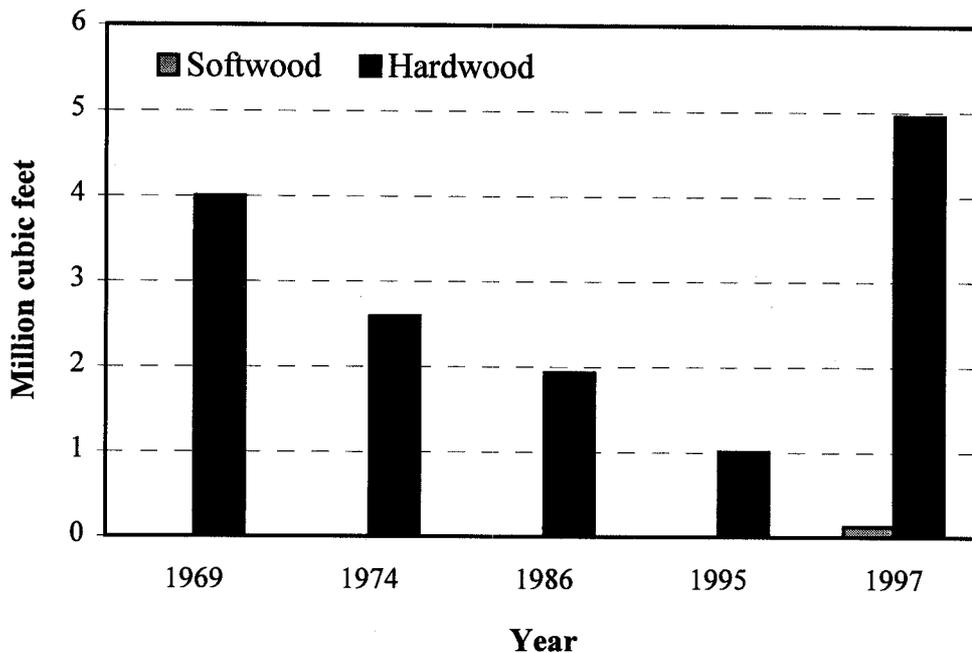


Figure 6—Roundwood veneer-log production by species group and year (see page 8 for references for individual years).

- Four veneer mills operated in Kentucky in 1997. Total receipts of veneer logs increased 112 percent from 1.5 million cubic feet to 3 million cubic feet.
- Kentucky retained 38 percent of its veneer-log production for processing at domestic veneer mills. Imports amounted to 1 million cubic feet, and exports totaled 3 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, and all other industrial products, totaled 12 million cubic feet (fig. 7) and accounted for 6 percent of the State's total timber products output. Hardwood made up 81 percent of the other industrial product volume.
- Between 1995 and 1997, the number of plants producing other industrial products remained unchanged at 19. Combined receipts of other industrial products from softwood and hardwood totaled 11 million cubic feet.
- Kentucky was a net exporter of roundwood used for other industrial products; of the 881 thousand cubic feet imported, 70 percent was softwood.

**Plant Byproducts**

- In 1997, processing of primary products in Kentucky mills generated more than 103 million cubic feet of wood and bark residues. Coarse residues from all primary products amounted to 45 million cubic feet, and bark volume totaled more than 24 million cubic feet. Sawdust and shavings made up 34 percent of total residues, or 35 million cubic feet (fig. 8).

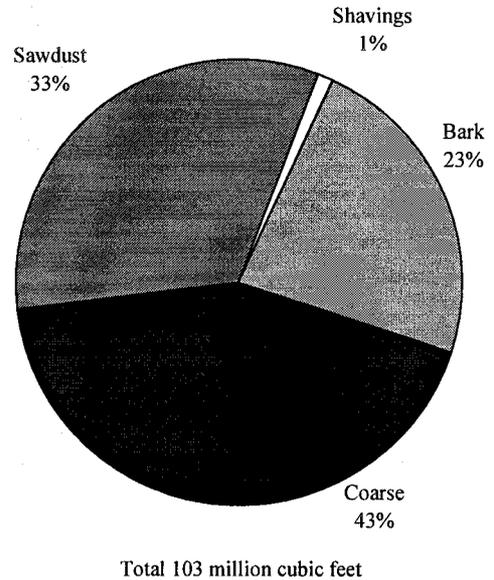


Figure 8—Primary mill residue by residue type, 1997.

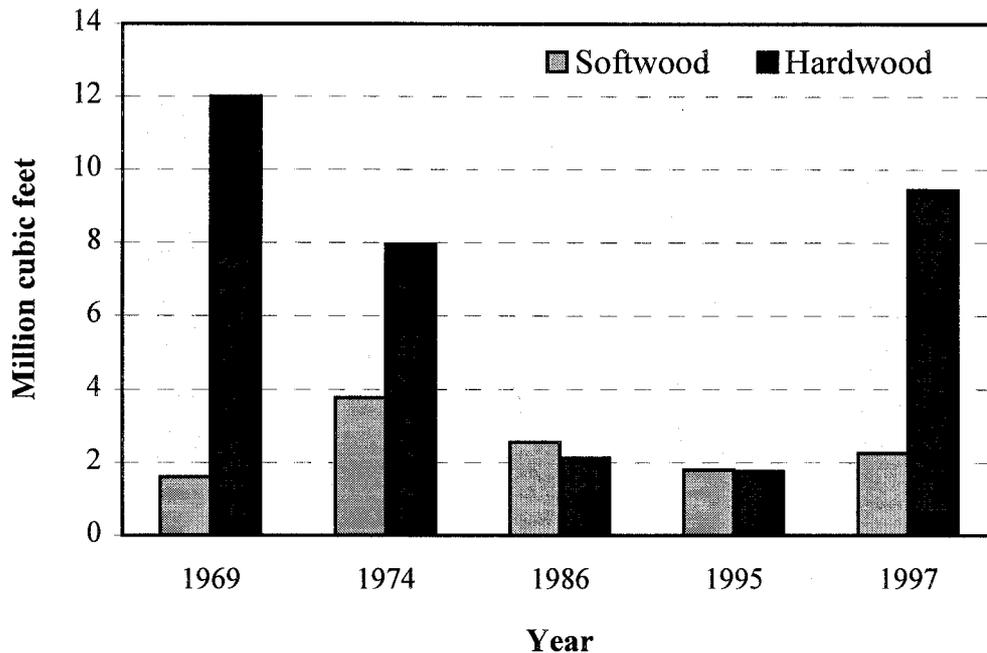
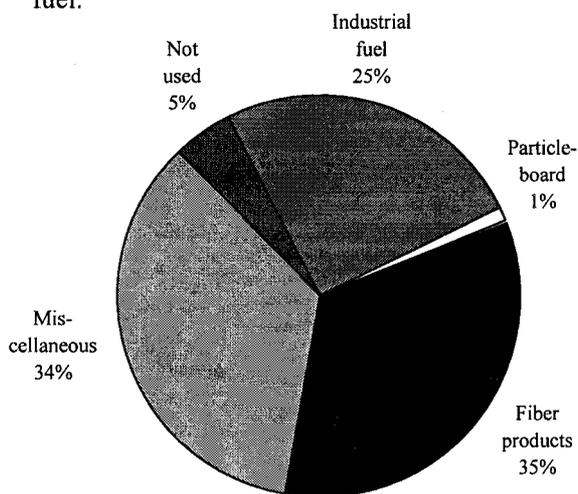


Figure 7—Roundwood production for other industrial by species group and year (see page 8 for references for individual years).

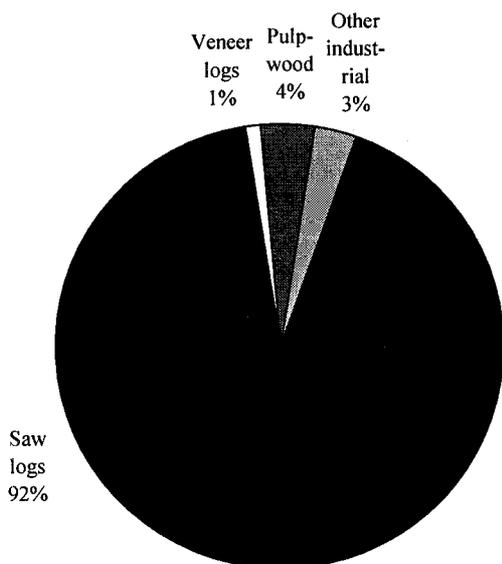
- More than 95 percent of the wood and bark residues were used for product manufacture, with 35 percent of the residues used for fiber products (fig. 9). Thirty-four million cubic feet, or 77 percent, of the coarse residues were used to manufacture fiber products. Most of the bark was used for other miscellaneous products or industrial fuel, and 46 percent of the sawdust and shavings was used for fuel.



Total 103 million cubic feet

Figure 9—Disposal of residue by product, 1997.

- Sawmills generated 95 million cubic feet of mill residues, accounting for 92 percent of the total residues produced (fig. 10).



Total 103 million cubic feet

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

## Regional Trends

- Output of industrial roundwood products increased across all regions of Kentucky except the Western Coalfield and Northern regions, which had 12- and 2-percent declines, respectively. The largest output change occurred in the Eastern region (a 36-percent increase) and the Bluegrass region (a 20-percent increase).

### Eastern Region

- Roundwood output from the Eastern region totaled 19 million cubic feet.
- Saw logs accounted for 68 percent of the region's TPO and 8 percent of the State's roundwood saw-log output. Pulpwood and other industrial products accounted for the remainder of the volume for the region.
- In the Eastern region, 19 primary wood-using plants were operating during 1997: 18 sawmills and 1 other miscellaneous mill (fig. 11). These mills processed 10 percent of the State's total roundwood output.

### Northern Cumberland Region

- More than 23 million cubic feet of roundwood were produced in the Northern Cumberland region.
- Saw-log production of 19 million cubic feet accounted for 84 percent of the region's total roundwood output. Production of pulpwood at 3 million cubic feet accounted for 12 percent of the region's total roundwood output.
- The 55 mills operating in the Northern Cumberland region in 1997 included: 49 sawmills and 6 other miscellaneous mills. These mills accounted for 12 percent of the State's total roundwood output.

### Southern Cumberland Region

- Roundwood output from the Southern Cumberland region totaled 36 million cubic feet, or 18 percent of the State's total roundwood TPO.
- Saw-log production of 27 million cubic feet accounted for 75 percent of the region's total TPO; other industrial products accounted for 13 percent. Pulpwood production of 2.4 million cubic feet accounted for another 7 percent of the region's total roundwood output.

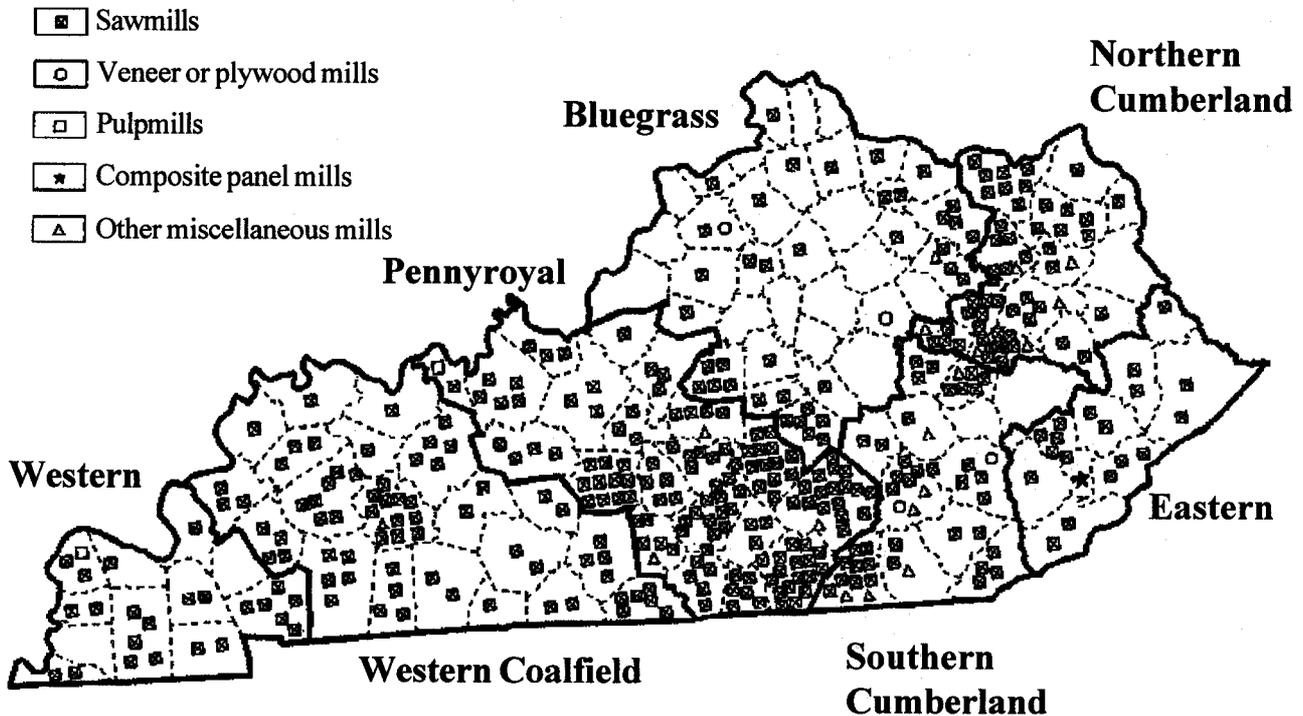


Figure 11—Primary wood-using mills by region, 1997.

- The 48 primary wood-using plants operating in the Southern Cumberland region included: 39 sawmills, 2 plywood or veneer mills, and 7 other miscellaneous mills.

#### Bluegrass Region

- Roundwood output from the Bluegrass region totaled 12 million cubic feet. Roundwood production from this region accounted for 6 percent of the State's total roundwood TPO.
- Saw-log production of 10 million cubic feet accounted for 87 percent of the region's total roundwood output. Production of veneer and other industrial products accounted for the remainder of the region's total roundwood output.
- In the Bluegrass region, 42 primary wood-using plants were operating during 1997: 39 sawmills, 2 veneer mills, and 1 other miscellaneous mill.

#### Pennyroyal Region

- Roundwood output from the Pennyroyal region totaled 52 million cubic feet and accounted for 27 percent of the State's total roundwood output.

- Saw-log production of 49 million cubic feet accounted for 95 percent of the region's total roundwood output and 31 percent of the State's roundwood saw-log output. Pulpwood production of 1.2 million cubic feet accounted for 2 percent of the region's total TPO.

- In the Pennyroyal region, 135 primary wood-using plants were operating during 1997: 130 sawmills, 1 pulpmill, and 4 other miscellaneous mills.

#### Western Coalfield Region

- Roundwood output from the Western Coalfield region totaled 40 million cubic feet.
- Saw-log production of 34 million cubic feet accounted for 86 percent of the region's total roundwood output, and 21 percent of the State's total saw-log output. At 5 million cubic feet, production of pulpwood accounted for 13 percent of the region's total roundwood output.

- In the Western Coalfield region, 68 primary wood-using plants were operating during 1997: 67 sawmills and 1 other miscellaneous mill. These mills processed 20 percent of the State's total roundwood output.

### Western Region

- Roundwood output from the Western region totaled 14 million cubic feet and accounted for 7 percent of the State's total roundwood output.
- Saw-log production of 9 million cubic feet accounted for 64 percent of the region's total roundwood output. At 5 million cubic feet, pulpwood production accounted for the remainder of the region's total TPO. In the Western region, 24 primary wood-using plants were operating during 1997: 23 sawmills and 1 pulpmill.

### Total Roundwood Output

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

### Source

- In addition to the 195 million cubic feet of roundwood output for industrial roundwood, an estimated 26 million cubic feet were harvested for domestic fuelwood bringing Kentucky's total roundwood output to 221 million cubic feet.
- More than 71 percent of total roundwood output was considered growing-stock volume (sawtimber and poletimber) from timberland sources; other sources contributed an estimated 64 million cubic feet, or 29 percent of total roundwood output (fig. 12).

### Ownership

- An estimated 198 million cubic feet, or 89 percent, of the total roundwood output in 1997 came from nonindustrial private forest lands. Public lands contributed 22 million cubic feet, or 10 percent of the output. Forest industry lands made up the remaining 1 percent, or 2 million cubic feet (fig. 13).

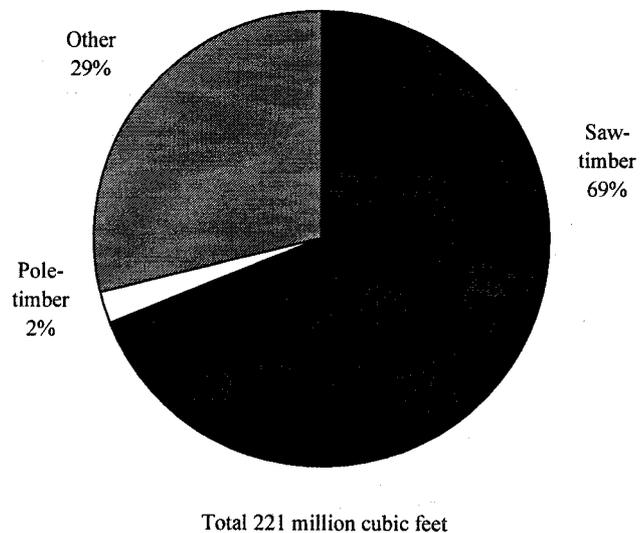


Figure 12—Roundwood output by source, 1997.

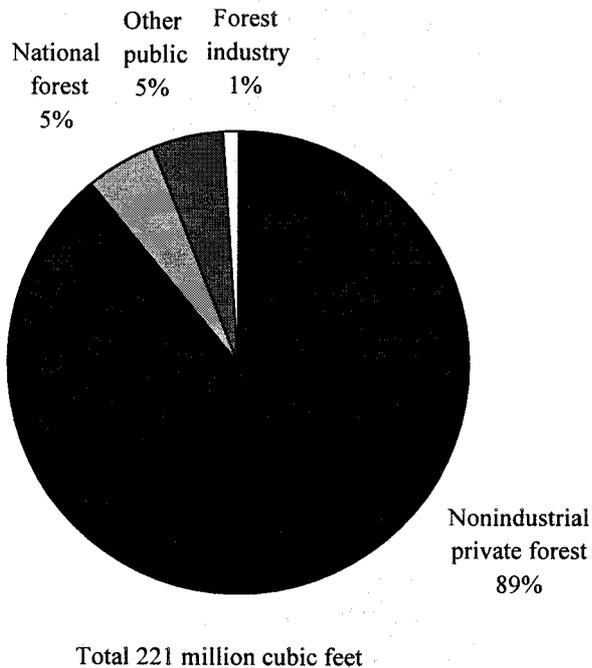
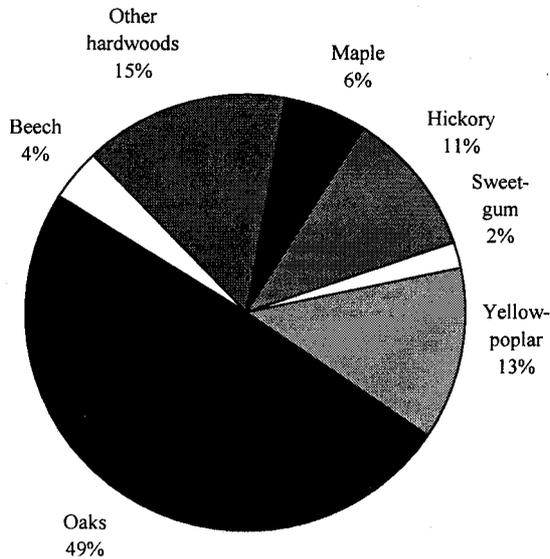


Figure 13—Roundwood output by ownership, 1997.

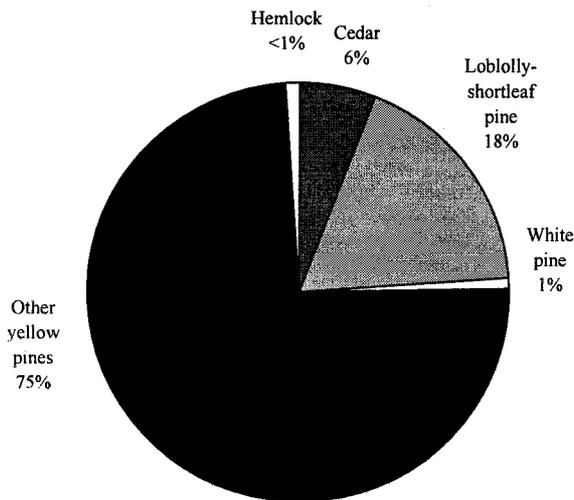
## Species

- The red and white oak groups combined accounted for 102 million cubic feet, or 49 percent of total hardwood output (fig. 14). Yellow-poplar and hickory accounted for 13 and 11 percent, respectively, of total hardwood output. Other yellow pines provided more volume than any other softwood species group, accounting for 75 percent of the total softwood output (fig. 15). The loblolly and shortleaf pine types accounted for 18 percent of the softwood output.



Total 210 million cubic feet

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



Total 11 million cubic feet

Figure 15—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 pulp mills for use as fiber. Includes tops, jump sections, and whole trees.

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

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

**Standard cord.** A unit measure applied to roundwood, usually bolts or split wood. It relates to a stack of wood 4 feet high, 4 feet wide, and 8 feet long encompassing 128 cubic feet of wood, bark, and air space. In the South, this usually translates to approximately 75.0 cubic feet of solid wood for pulpwood, because pulpwood is more uniform.

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

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

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

## Conversion Factors<sup>a</sup>

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### Saw logs

Softwood	0.18282 cubic foot = 1 board foot 5.47 board feet = 1 cubic foot
Hardwood	0.16393 cubic foot = 1 board foot 6.10 board feet = 1 cubic foot

### Veneer logs

Softwood	0.16129 cubic foot = 1 board foot 6.20 board feet = 1 cubic foot
Hardwood	0.16000 cubic foot = 1 board foot 6.25 board feet = 1 cubic foot

### Pulpwood<sup>b</sup>

Softwood	73.3 cubic feet per cord
Hardwood	76.1 cubic feet per cord

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

<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, Kentucky, 1995 and 1997**

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
<b>Saw logs</b>				
Softwood	6,015	5,668	-347	-5.8
Hardwood	155,225	155,297	72	0.0
Total	161,240	160,965	-275	-0.2
<b>Veneer logs</b>				
Softwood	0	126	126	100.0
Hardwood	1,009	4,954	3,945	391.0
Total	1,009	5,080	4,071	403.5
<b>Pulpwood<sup>a</sup></b>				
Softwood	3,336	2,359	-977	-29.3
Hardwood	17,034	14,502	-2,532	-14.9
Total	20,370	16,861	-3,509	-17.2
<b>Other industrial</b>				
Softwood	1,805	2,263	458	25.4
Hardwood	1,762	9,436	7,674	435.5
Total	3,567	11,699	8,132	228.0
<b>All industrial</b>				
Softwood	11,156	10,416	-740	-6.6
Hardwood	175,030	184,189	9,159	5.2
Total	186,186	194,605	8,419	4.5
<b>Byproduct output</b>				
Softwood	4,124	3,837	-287	-7.0
Hardwood	105,624	94,400	-11,224	-10.6
Total	109,748	98,237	-11,511	-10.5
<b>Total output</b>				
Softwood	15,280	14,253	-1,027	-6.7
Hardwood	280,654	278,589	-2,065	-0.7
Total	295,934	292,842	-3,092	-1.0

<sup>a</sup> Includes roundwood that was delivered to nonpulp mills and then chipped and sold to pulp mills (589,000 cubic feet in 1997).

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

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
<b>Saw logs</b>				
Softwood	6,667	6,455	-212	-3.2
Hardwood	165,647	158,567	-7,080	-4.3
Total	172,314	165,022	-7,292	-4.2
<b>Veneer logs</b>				
Softwood	0	38	38	100.0
Hardwood	1,456	3,047	1,591	109.3
Total	1,456	3,085	1,629	111.9
<b>Pulpwood<sup>a</sup></b>				
Softwood	5,335	4,139	-1,196	-22.4
Hardwood	28,832	32,524	3,692	12.8
Total	34,167	36,663	2,496	7.3
<b>Other industrial</b>				
Softwood	2,090	1,807	-283	-13.5
Hardwood	1,812	9,448	7,636	421.4
Total	3,902	11,255	7,353	188.4
<b>Total output</b>				
Softwood	14,092	12,439	-1,653	-11.7
Hardwood	197,747	203,586	5,839	3.0
Total	211,839	216,025	4,186	2.0

<sup>a</sup> Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (712,000 cubic feet in 1997).

**Table 3—Number of primary wood-using plants by industry, Kentucky, 1948-1997**

Industry	Year						
	1948	1964	1969	1974	1986	1995	1997
Sawmills	2,168	620	538	388	408	376	365
Veneer or plywood mills	6	3	4	4	3	3	4
Pulpmills	0	0	2	2	2	2	2
Composite panel mills	0	0	0	0	0	1	1
Other mills	90	30	45	26	22	19	19
All plants	2,264	653	589	420	435	401	391

**Table 4—Roundwood receipts by sawmill size, Kentucky, 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	170	43,719	4	165	41,012	4
1.0 - 4.99	142	351,092	34	138	340,190	34
5.0 - 9.99	42	283,583	27	40	276,380	28
> 10	22	368,115	35	22	344,361	34
Total	376	1,046,509	100	365	1,001,943	100

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

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

Species	Type of mill					
	All mills	Sawmills	Veneer mills		Pulpmills <sup>a</sup>	Other mills
			Plywood	Other veneer		
<i>Thousand cubic feet</i>						
<b>Softwood</b>						
Yellow pine	4,482	3,250	0	12	NA	1,220
White pine	523	497	0	26	NA	0
Cedar	2,575	1,988	0	0	NA	587
Cypress	27	27	0	0	NA	0
Other softwood	693	693	0	0	NA	0
Unclassified	4,139	0	0	0	4,139	0
Total softwoods	12,439	6,455	0	38	4,139	1,807
<b>Hardwood</b>						
Blackgum and tupelo	899	899	0	0	NA	0
Soft maple	2,964	2,038	2	0	NA	924
Sweetgum	813	813	0	0	NA	0
Yellow-poplar	40,233	30,821	15	1,215	NA	8,182
Other soft hardwood	4,716	4,520	0	12	NA	184
Hickory	5,725	5,590	0	135	NA	0
Red oak	49,909	49,208	2	699	NA	0
White oak	36,638	35,963	0	675	NA	0
Other hard hardwood	29,165	28,715	0	292	NA	158
Unclassified	32,524	0	0	0	32,524	0
Total hardwoods	203,586	158,567	19	3,028	32,524	9,448
<b>All species</b>	<b>216,025</b>	<b>165,022</b>	<b>19</b>	<b>3,066</b>	<b>36,663</b>	<b>11,255</b>

NA = not applicable.

<sup>a</sup> Only collected by softwood and hardwood and includes roundwood chipped.

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

Year	Production	Exported to other States	Retained	Imported from other States	Receipts
<i>Thousand cubic feet</i>					
<b>Softwood</b>					
1995	11,156	1,966	9,190	4,902	14,092
1997	10,416	1,751	8,665	3,774	12,439
<b>Hardwood</b>					
1995	175,030	9,433	165,597	32,150	197,747
1997	184,189	15,241	168,948	34,638	203,586
<b>All species</b>					
1995	186,186	11,399	174,787	37,052	211,839
1997	194,605	16,992	177,613	38,412	216,025

**Table 7—Industrial roundwood movement by product and species group, Kentucky, 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	5,668	216	5,452	1,003	6,455
Hardwood	155,297	9,161	146,136	12,431	158,567
Total	160,965	9,377	151,588	13,434	165,022
<b>Veneer logs</b>					
Softwood	126	88	38	0	38
Hardwood	4,954	3,046	1,908	1,139	3,047
Total	5,080	3,134	1,946	1,139	3,085
<b>Pulpwood<sup>a</sup></b>					
Softwood	2,359	834	1,525	2,614	4,139
Hardwood	14,502	2,766	11,736	20,788	32,524
Total	16,861	3,600	13,261	23,402	36,663
<b>Other industrial</b>					
Softwood	2,263	613	1,650	157	1,807
Hardwood	9,436	268	9,168	280	9,448
Total	11,699	881	10,818	437	11,255
<b>All products</b>					
Softwood	10,416	1,751	8,665	3,774	12,439
Hardwood	184,189	15,241	168,948	34,638	203,586
Total	194,605	16,992	177,613	38,412	216,025

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

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

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>Thousand cubic feet</i>			
<b>Kentucky (retained)</b>	151,588	5,452	146,136
<b>Exports to:</b>			
Indiana	2,745	2	2,743
Missouri	619	0	619
Ohio	1,278	17	1,261
South Carolina	1	0	1
Tennessee	3,131	197	2,934
West Virginia	1,603	0	1,603
Total	9,377	216	9,161
<b>Imports from:</b>			
Illinois	1,380	2	1,378
Indiana	563	11	552
New Jersey	42	0	42
Ohio	40	5	35
Tennessee	10,860	981	9,879
Virginia	423	4	419
West Virginia	126	0	126
Total	13,434	1,003	12,431

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

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>Thousand cubic feet</i>			
<b>Kentucky (retained)</b>	1,946	38	1,908
<b>Exports to:</b>			
Georgia	976	88	888
Indiana	762	0	762
Michigan	109	0	109
Missouri	93	0	93
North Carolina	1,024	0	1,024
Ohio	115	0	115
Wisconsin	55	0	55
<b>Total</b>	<b>3,134</b>	<b>88</b>	<b>3,046</b>
<b>Imports from:</b>			
Indiana	158	0	158
Maine	4	0	4
Maryland	68	0	68
Massachusetts	68	0	68
Michigan	90	0	90
Minnesota	3	0	3
New Hampshire	73	0	73
North Carolina	4	0	4
Ohio	68	0	68
Pennsylvania	324	0	324
Tennessee	55	0	55
Virginia	34	0	34
West Virginia	190	0	190
<b>Total</b>	<b>1,139</b>	<b>0</b>	<b>1,139</b>

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

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>Thousand cubic feet</i>			
<b>Kentucky (retained)</b>	13,261	1,525	11,736
<b>Exports to:</b>			
Alabama	150	129	21
Georgia	1	0	1
Mississippi	40	0	40
North Carolina	35	0	35
Ohio	2,864	404	2,460
South Carolina	2	2	0
Tennessee	508	299	209
<b>Total</b>	<b>3,600</b>	<b>834</b>	<b>2,766</b>
<b>Imports from:</b>			
Illinois	2,209	227	1,982
Indiana	823	0	823
Mississippi	1,283	169	1,114
Missouri	900	77	823
New York	823	0	823
Tennessee	16,541	2,141	14,400
Virginia	823	0	823
<b>Total</b>	<b>23,402</b>	<b>2,614</b>	<b>20,788</b>

<sup>a</sup> Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills.

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

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>Thousand cubic feet</i>			
<b>Kentucky (retained)</b>	10,818	1,650	9,168
<b>Exports to:</b>			
Ohio	11	11	0
Tennessee	870	602	268
Total	881	613	268
<b>Imports from:</b>			
Indiana	10	10	0
Tennessee	100	100	0
Virginia	327	47	280
Total	437	157	280

<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, Kentucky, 1997**

Roundwood type and species group	All types	Residue type			
		Bark	Coarse	Sawdust	Shavings
<i>Thousand cubic feet</i>					
<b>Saw logs</b>					
Softwood	3,344	428	1,761	1,126	29
Hardwood	91,750	16,525	42,137	32,084	1,004
Total	95,094	16,953	43,898	33,210	1,033
<b>Veneer logs</b>					
Softwood	22	3	14	5	0
Hardwood	1,121	326	525	270	0
Total	1,143	329	539	275	0
<b>Pulpwood</b>					
Softwood	442	442	0	0	0
Hardwood	3,990	3,990	0	0	0
Total	4,432	4,432	0	0	0
<b>Other industrial<sup>a</sup></b>					
Softwood	445	203	173	69	0
Hardwood	2,193	2,102	65	26	0
Total	2,638	2,305	238	95	0
<b>Total</b>					
Softwood	4,253	1,076	1,948	1,200	29
Hardwood	99,054	22,943	42,727	32,380	1,004
Total	103,307	24,019	44,675	33,580	1,033

<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, Kentucky, 1995 and 1997**

Product and species group	Residue type									
	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	444	566	0	2	444	558	0	6	0	0
Hardwood	44,605	35,236	296	39	43,104	33,883	1,205	1,314	0	0
Total	45,049	35,802	296	41	43,548	34,441	1,205	1,320	0	0
<b>Particleboard</b>										
Softwood	1	5	0	0	1	5	0	0	0	0
Hardwood	1,270	814	103	103	699	251	468	460	0	0
Total	1,271	819	103	103	700	256	468	460	0	0
<b>Charcoal/chemical wood</b>										
Softwood	0	349	0	21	0	84	0	244	0	0
Hardwood	0	8,889	0	396	0	1,736	0	6,757	0	0
Total	0	9,238	0	417	0	1,820	0	7,001	0	0
<b>Sawn products</b>										
Softwood	0	2	0	1	0	1	0	0	0	0
Hardwood	0	44	0	17	0	27	0	0	0	0
Total	0	46	0	18	0	28	0	0	0	0
<b>Fuel</b>										
Softwood	608	965	559	504	9	232	40	228	0	1
Hardwood	18,118	25,376	5,618	7,177	649	2,354	11,605	15,752	246	93
Total	18,726	26,341	6,177	7,681	658	2,586	11,645	15,980	246	94
<b>Miscellaneous</b>										
Softwood	3,071	1,950	592	479	1,387	889	1,074	579	18	3
Hardwood	41,631	24,041	14,325	14,366	8,193	2,608	17,483	6,173	1,630	894
Total	44,702	25,991	14,917	14,845	9,580	3,497	18,557	6,752	1,648	897
<b>Not used</b>										
Softwood	472	416	76	69	207	179	165	143	24	25
Hardwood	5,999	4,654	1,098	845	2,104	1,868	2,783	1,924	14	17
Total	6,471	5,070	1,174	914	2,311	2,047	2,948	2,067	38	42
<b>All products</b>										
Softwood	4,596	4,253	1,227	1,076	2,048	1,948	1,279	1,200	42	29
Hardwood	111,623	99,054	21,440	22,943	54,749	42,727	33,544	32,380	1,890	1,004
Total	116,219	103,307	22,667	24,019	56,797	44,675	34,823	33,580	1,932	1,033

**Table 14—Roundwood timber products output by product and species group, Eastern Region of Kentucky, 1995 and 1997**

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
<b>Saw logs</b>				
Softwood	37	175	138	373.0
Hardwood	11,814	12,524	710	6.0
Total	11,851	12,699	848	7.2
<b>Veneer logs</b>				
Softwood	0	0	0	--
Hardwood	68	448	380	558.8
Total	68	448	380	558.8
<b>Pulpwood<sup>a</sup></b>				
Softwood	316	52	-264	-83.5
Hardwood	590	184	-406	-68.8
Total	906	236	-670	-74.0
<b>Composite panels</b>				
Softwood	0	0	0	--
Hardwood	913	5,265	4,352	476.7
Total	913	5,265	4,352	476.7
<b>Other industrial</b>				
Softwood	0	0	0	--
Hardwood	0	0	0	--
Total	0	0	0	--
<b>All industrial</b>				
Softwood	353	227	-126	-35.7
Hardwood	13,385	18,421	5,036	37.6
Total	13,738	18,648	4,910	35.7

-- = negligible.

<sup>a</sup> Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (4,000 cubic feet in 1997).

**Table 15—Roundwood timber products output by county, product, and species group, Eastern Region of Kentucky, 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>									
Floyd	0	1,153	0	724	0	60	0	0	0	369
Harlan	80	3,830	32	1,774	0	24	48	184	0	1,848
Knott	19	1,064	19	695	0	0	0	0	0	369
Leslie	33	3,341	33	1,834	0	121	0	0	0	1,386
Letcher	26	2,937	26	2,937	0	0	0	0	0	0
Martin	0	618	0	618	0	0	0	0	0	0
Perry	42	2,331	38	1,164	0	243	4	0	0	924
Pike	27	3,147	27	2,778	0	0	0	0	0	369
All counties	227	18,421	175	12,524	0	448	52	184	0	5,265

<sup>a</sup> Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (4,000 cubic feet in 1997).

**Table 16—Roundwood timber products output by product and species group, Northern Cumberland Region of Kentucky, 1995 and 1997**

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
<b>Saw logs</b>				
Softwood	709	755	46	6.5
Hardwood	17,243	18,220	977	5.7
Total	17,952	18,975	1,023	5.7
<b>Veneer logs</b>				
Softwood	0	0	0	--
Hardwood	126	279	153	121.4
Total	126	279	153	121.4
<b>Pulpwood<sup>a</sup></b>				
Softwood	290	229	-61	-21.0
Hardwood	4,222	2,530	-1,692	-40.1
Total	4,512	2,759	-1,753	-38.9
<b>Other industrial</b>				
Softwood	562	552	-10	-1.8
Hardwood	61	137	76	124.6
Total	623	689	66	10.6
<b>All industrial</b>				
Softwood	1,561	1,536	-25	-1.6
Hardwood	21,652	21,166	-486	-2.2
Total	23,213	22,702	-511	-2.2

-- = negligible.

<sup>a</sup> Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (115,000 cubic feet in 1997).

**Table 17—Roundwood timber products output by county, product, and species group, Northern Cumberland Region of Kentucky, 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>									
Boyd	4	762	0	560	0	0	4	202	0	0
Carter	84	2,765	11	2,185	0	0	65	580	8	0
Elliott	77	1,498	21	1,062	0	0	51	436	5	0
Greenup	50	1,863	9	1,040	0	0	31	823	10	0
Johnson	4	528	0	528	0	0	0	0	4	0
Lawrence	80	1,162	25	842	0	110	55	210	0	0
Lewis	205	4,061	186	3,690	0	109	19	247	0	15
Magoffin	25	881	7	849	0	0	0	32	18	0
Menifee	174	844	115	844	0	0	0	0	59	0
Morgan	207	1,706	69	1,696	0	0	0	0	138	10
Powell	312	1,747	97	1,677	0	60	2	0	213	10
Rowan	68	1,499	52	1,397	0	0	0	0	16	102
Wolfe	246	1,850	163	1,850	0	0	2	0	81	0
All counties	1,536	21,166	755	18,220	0	279	229	2,530	552	137

<sup>a</sup> Includes roundwood that was delivered to nonpulp mills and then chipped and sold to pulpmills (115,000 cubic feet in 1997).

**Table 18—Roundwood timber products output by product and species group, Southern Cumberland Region of Kentucky, 1995 and 1997**

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
<b>Saw logs</b>				
Softwood	1,530	1,447	-83	-5.4
Hardwood	26,387	25,438	-949	-3.6
Total	27,917	26,885	-1,032	-3.7
<b>Veneer logs</b>				
Softwood	0	38	38	100.0
Hardwood	123	1,880	1,757	1,428.5
Total	123	1,918	1,795	1,459.3
<b>Pulpwood<sup>a</sup></b>				
Softwood	1,112	465	-647	-58.2
Hardwood	2,541	1,952	-589	-23.2
Total	3,653	2,417	-1,236	-33.8
<b>Other industrial</b>				
Softwood	293	895	602	205.5
Hardwood	631	3,877	3,246	514.4
Total	924	4,772	3,848	416.5
<b>All industrial</b>				
Softwood	2,935	2,845	-90	-3.1
Hardwood	29,682	33,147	3,465	11.7
Total	32,617	35,992	3,375	10.3

<sup>a</sup> Includes roundwood that was delivered to nonpulp mills and then chipped and sold to pulp mills (218,000 cubic feet in 1997).

**Table 19—Roundwood timber products output by county, product, and species group, Southern Cumberland Region of Kentucky, 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>									
Bell	53	1,930	53	1,212	0	701	0	17	0	0
Breathitt	19	3,989	17	2,104	0	424	2	75	0	1,386
Clay	112	2,458	72	2,320	38	138	0	0	2	0
Estill	94	2,281	92	2,223	0	58	2	0	0	0
Jackson	176	2,161	147	2,040	0	121	0	0	29	0
Knox	203	2,263	35	2,155	0	71	154	37	14	0
Laurel	637	6,878	286	3,083	0	187	229	1,668	122	1,940
Lee	48	1,653	28	1,372	0	0	6	0	14	281
McCreary	598	3,163	523	3,000	0	120	44	43	31	0
Owsley	28	840	19	778	0	60	2	0	7	2
Rockcastle	29	2,820	25	2,820	0	0	0	0	4	0
Whitley	848	2,711	150	2,331	0	0	26	112	672	268
All counties	2,845	33,147	1,447	25,438	38	1,880	465	1,952	895	3,877

<sup>a</sup> Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (218,000 cubic feet in 1997).

**Table 20—Roundwood timber products output by product and species group, Bluegrass Region of Kentucky, 1995 and 1997**

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
<b>Saw logs</b>				
Softwood	1,378	1,261	-117	-8.5
Hardwood	7,229	8,761	1,532	21.2
Total	8,607	10,022	1,415	16.4
<b>Veneer logs</b>				
Softwood	0	0	0	--
Hardwood	544	1,109	565	103.9
Total	544	1,109	565	103.9
<b>Pulpwood<sup>a</sup></b>				
Softwood	0	6	6	100.0
Hardwood	0	1	1	100.0
Total	0	7	7	100.0
<b>Other industrial</b>				
Softwood	521	427	-94	-18.0
Hardwood	5	5	0	--
Total	526	432	-94	-17.9
<b>All industrial</b>				
Softwood	1,899	1,694	-205	-10.8
Hardwood	7,778	9,876	2,098	27.0
Total	9,677	11,570	1,893	19.6

-- = negligible.

<sup>a</sup> Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (7,000 cubic feet in 1997).

**Table 21—Roundwood timber products output by county, product, and species group, Bluegrass Region of Kentucky, 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>									
Anderson	27	43	27	43	0	0	0	0	0	0
Bath	180	1,252	50	1,252	0	0	4	0	126	0
Boone	0	129	0	88	0	41	0	0	0	0
Bourbon	0	61	0	3	0	58	0	0	0	0
Boyle	66	564	17	564	0	0	0	0	49	0
Bracken	14	286	14	286	0	0	0	0	0	0
Campbell	2	2	2	2	0	0	0	0	0	0
Carroll	30	228	30	129	0	99	0	0	0	0
Clark	0	58	0	0	0	58	0	0	0	0
Fayette	0	58	0	0	0	58	0	0	0	0
Fleming	90	1,285	90	1,285	0	0	0	0	0	0
Franklin	70	41	68	41	0	0	2	0	0	0
Gallatin	30	40	30	7	0	33	0	0	0	0
Garrard	26	797	26	797	0	0	0	0	0	0
Grant	14	27	14	27	0	0	0	0	0	0
Harrison	75	38	75	38	0	0	0	0	0	0
Henry	115	133	115	58	0	75	0	0	0	0
Jefferson	0	818	0	513	0	305	0	0	0	0
Jessamine	8	58	8	0	0	58	0	0	0	0
Kenton	0	9	0	9	0	0	0	0	0	0
Lincoln	25	1,726	25	1,726	0	0	0	0	0	0
Madison	9	258	9	200	0	58	0	0	0	0
Mason	57	430	57	420	0	4	0	1	0	5
Mercer	73	15	24	15	0	0	0	0	49	0
Montgomery	180	310	26	243	0	67	0	0	154	0
Nicholas	14	15	14	15	0	0	0	0	0	0
Oldham	0	389	0	389	0	0	0	0	0	0
Owen	314	141	314	66	0	75	0	0	0	0
Pendleton	49	73	49	73	0	0	0	0	0	0
Robertson	71	75	71	75	0	0	0	0	0	0
Scott	0	61	0	3	0	58	0	0	0	0
Shelby	0	34	0	34	0	0	0	0	0	0
Spencer	40	91	40	71	0	20	0	0	0	0
Trimble	0	133	0	91	0	42	0	0	0	0
Washington	107	198	58	198	0	0	0	0	49	0
Woodford	8	0	8	0	0	0	0	0	0	0
All counties	1,694	9,876	1,261	8,761	0	1,109	6	1	427	5

<sup>a</sup> Includes roundwood that was delivered to nonpulp mills and then chipped and sold to pulpmills (7,000 cubic feet in 1997).

**Table 22—Roundwood timber products output by product and species group, Pennyroyal Region of Kentucky, 1995 and 1997**

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
<b>Saw logs</b>				
Softwood	1,623	1,429	-194	-12.0
Hardwood	44,714	47,898	3,184	7.1
Total	46,337	49,327	2,990	6.5
<b>Veneer logs</b>				
Softwood	0	88	88	100.0
Hardwood	125	965	840	672.0
Total	125	1,053	928	742.4
<b>Pulpwood<sup>a</sup></b>				
Softwood	67	84	17	25.4
Hardwood	1,141	1,068	-73	-6.4
Total	1,208	1,152	-56	-4.6
<b>Other industrial</b>				
Softwood	411	371	-40	-9.7
Hardwood	0	0	0	--
Total	411	371	-40	-9.7
<b>All industrial</b>				
Softwood	2,101	1,972	-129	-6.1
Hardwood	45,980	49,931	3,951	8.6
Total	48,081	51,903	3,822	7.9

-- = negligible.

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

**Table 23—Roundwood timber products output by county, product, and species group, Pennyroyal Region of Kentucky, 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>										
Adair	61	3,269	45	3,269	0	0	1	0	15	0
Breckinridge	57	2,884	57	2,331	0	55	0	498	0	0
Bullitt	19	835	19	813	0	22	0	0	0	0
Casey	76	3,024	27	2,981	0	0	0	43	49	0
Clinton	151	2,069	63	1,161	88	888	0	20	0	0
Cumberland	49	2,905	34	2,905	0	0	0	0	15	0
Grayson	83	3,207	0	2,705	0	0	83	502	0	0
Green	43	2,223	28	2,218	0	0	0	5	15	0
Hancock	0	931	0	931	0	0	0	0	0	0
Hardin	78	2,162	78	2,162	0	0	0	0	0	0
Hart	176	3,310	170	3,310	0	0	0	0	6	0
Larue	73	828	24	828	0	0	0	0	49	0
Marion	85	1,043	36	1,043	0	0	0	0	49	0
Meade	0	1,408	0	1,408	0	0	0	0	0	0
Metcalfe	50	3,271	44	3,271	0	0	0	0	6	0
Nelson	136	855	87	855	0	0	0	0	49	0
Pulaski	443	5,724	395	5,724	0	0	0	0	48	0
Russell	98	3,163	83	3,163	0	0	0	0	15	0
Taylor	70	3,132	15	3,132	0	0	0	0	55	0
Wayne	224	3,688	224	3,688	0	0	0	0	0	0
All counties	1,972	49,931	1,429	47,898	88	965	84	1,068	371	0

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

**Table 24—Roundwood timber products output by product and species group, Western Coalfield Region of Kentucky, 1995 and 1997**

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
<b>Saw logs</b>				
Softwood	731	585	-146	-20.0
Hardwood	38,289	33,443	-4,846	-12.7
Total	39,020	34,028	-4,992	-12.8
<b>Veneer logs</b>				
Softwood	0	0	0	--
Hardwood	23	180	157	682.6
Total	23	180	157	682.6
<b>Pulpwood<sup>a</sup></b>				
Softwood	445	580	135	30.3
Hardwood	5,465	4,624	-841	-15.4
Total	5,910	5,204	-706	-11.9
<b>Other industrial</b>				
Softwood	18	18	0	--
Hardwood	152	152	0	--
Total	170	170	0	--
<b>All industrial</b>				
Softwood	1,194	1,183	-11	-0.9
Hardwood	43,929	38,399	-5,530	-12.6
Total	45,123	39,582	-5,541	-12.3

-- = negligible.

<sup>a</sup> Includes roundwood that was delivered to nonpulp mills and then chipped and sold to pulpmills (214,000 cubic feet in 1997).

**Table 25—Roundwood timber products output by county, product, and species group, Western Coalfield Region of Kentucky, 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>										
Allen	43	3,795	37	3,773	0	0	0	22	6	0
Barren	52	2,204	46	2,201	0	0	0	3	6	0
Butler	27	3,439	27	2,444	0	0	0	995	0	0
Caldwell	359	1,547	35	1,253	0	0	324	294	0	0
Christian	89	3,164	89	3,119	0	0	0	7	0	38
Crittenden	28	1,585	0	1,214	0	0	28	371	0	0
Daviess	8	1,245	0	1,158	0	80	8	7	0	0
Edmonson	24	1,351	0	1,301	0	0	24	50	0	0
Henderson	0	1,269	0	1,168	0	100	0	1	0	0
Hopkins	138	1,441	107	1,377	0	0	31	26	0	38
Logan	33	2,079	33	2,069	0	0	0	10	0	0
McLean	13	1,112	13	1,110	0	0	0	2	0	0
Monroe	49	2,238	43	2,235	0	0	0	3	6	0
Muhlenberg	170	2,991	100	2,896	0	0	70	57	0	38
Ohio	99	5,645	4	2,982	0	0	95	2,663	0	0
Simpson	18	323	18	323	0	0	0	0	0	0
Todd	26	1,110	26	1,055	0	0	0	17	0	38
Union	0	138	0	93	0	0	0	45	0	0
Warren	7	1,130	7	1,114	0	0	0	16	0	0
Webster	0	593	0	558	0	0	0	35	0	0
All counties	1,183	38,399	585	33,443	0	180	580	4,624	18	152

<sup>a</sup> Includes roundwood that was delivered to nonpulp mills and then chipped and sold to pulpmills (214,000 cubic feet in 1997).

**Table 26—Roundwood timber products output by product and species group, Western Region of Kentucky, 1995 and 1997**

Product and species group	Year		Change	Percent change
	1995	1997		
<i>Thousand cubic feet</i>				
<b>Saw logs</b>				
Softwood	7	16	9	128.6
Hardwood	9,549	9,013	-536	-5.6
Total	9,556	9,029	-527	-5.5
<b>Veneer logs</b>				
Softwood	0	0	0	--
Hardwood	0	93	93	--
Total	0	93	93	--
<b>Pulpwood<sup>a</sup></b>				
Softwood	1,106	943	-163	-14.7
Hardwood	3,075	4,143	1,068	34.7
Total	4,181	5,086	905	21.6
<b>Other industrial</b>				
Softwood	0	0	0	--
Hardwood	0	0	0	--
Total	0	0	0	--
<b>All industrial</b>				
Softwood	1,113	959	-154	-13.8
Hardwood	12,624	13,249	625	5.0
Total	13,737	14,208	471	3.4

-- = negligible.

<sup>a</sup> Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (18,000 cubic feet in 1997).

**Table 27—Roundwood timber products output by county, product, and species group, Western Region of Kentucky, 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>									
Ballard	0	1,084	0	500	0	0	0	584	0	0
Calloway	108	1,600	0	1,441	0	0	108	159	0	0
Carlisle	2	1,801	2	836	0	0	0	965	0	0
Fulton	8	539	8	185	0	0	0	354	0	0
Graves	253	1,857	5	1,200	0	0	248	657	0	0
Hickman	1	899	1	464	0	37	0	398	0	0
Livingston	453	825	0	633	0	0	453	192	0	0
Lyon	134	777	0	628	0	0	134	149	0	0
McCracken	0	766	0	614	0	0	0	152	0	0
Marshall	0	1,325	0	1,088	0	56	0	181	0	0
Trigg	0	1,776	0	1,424	0	0	0	352	0	0
All counties	959	13,249	16	9,013	0	93	943	4,143	0	0

<sup>a</sup> Includes roundwood that was delivered to nonpulpmills and then chipped and sold to pulpmills (18,000 cubic feet in 1997).

**Table 28—Total roundwood output by product, species group, and source of material, Kentucky, 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	5,668	4,295	4,295	0	1,373
Hardwood	155,297	107,000	105,447	1,553	48,297
Total	160,965	111,295	109,742	1,553	49,670
<b>Veneer logs and bolts</b>					
Softwood	126	81	81	0	45
Hardwood	4,954	3,553	3,455	98	1,401
Total	5,080	3,634	3,536	98	1,446
<b>Pulpwood</b>					
Softwood	2,359	1,283	1,254	29	1,076
Hardwood	14,502	9,159	7,708	1,450	5,343
Total	16,861	10,441	8,962	1,480	6,420
<b>Poles and posts</b>					
Softwood	1,173	963	880	83	210
Hardwood	6	6	6	0	0
Total	1,179	969	886	83	210
<b>Other miscellaneous</b>					
Softwood	1,090	586	507	79	504
Hardwood	9,430	5,926	4,982	943	3,504
Total	10,520	6,512	5,490	1,022	4,008
<b>Total industrial products</b>					
Softwood	10,416	7,208	7,017	192	3,208
Hardwood	184,189	125,642	121,598	4,045	58,547
Total	194,605	132,851	128,615	4,236	61,754
<b>Fuelwood</b>					
Softwood	185	109	109	0	76
Hardwood	26,254	24,348	24,046	302	1,906
Total	26,439	24,457	24,155	302	1,982
<b>All products</b>					
Softwood	10,601	7,317	7,126	192	3,284
Hardwood	210,443	149,991	145,644	4,346	60,452
Total	221,044	157,308	152,770	4,538	63,736

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

**Table 29—Total roundwood output by species group, survey region, and ownership, Kentucky, 1997**

Species group and survey region	Total	National forest	Other public	Forest industry	Nonindustrial private
<i>Thousand cubic feet</i>					
<b>Softwoods</b>					
Eastern	230	0	0	0	230
Northern Cumberland	1,563	214	0	0	1,349
Southern Cumberland	2,898	720	12	0	2,165
Bluegrass	1,722	0	109	0	1,613
Pennyroyal	2,007	0	79	0	1,928
Western Coalfield	1,205	0	0	0	1,205
Western	976	0	0	0	976
Total softwoods	10,601	934	200	0	9,467
<b>Hardwoods</b>					
Eastern	21,047	291	0	466	20,290
Northern Cumberland	24,184	2,774	368	0	21,042
Southern Cumberland	37,872	6,741	677	0	30,454
Bluegrass	11,281	909	226	0	10,146
Pennyroyal	57,049	229	4,849	860	51,111
Western Coalfield	43,871	0	1,268	0	42,603
Western	15,139	0	2,133	377	12,629
Total hardwoods	210,443	10,944	9,521	1,703	188,275
<b>All species</b>	<b>221,044</b>	<b>11,878</b>	<b>9,722</b>	<b>1,703</b>	<b>197,742</b>

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

**Table 30—Total roundwood output by species group, detailed species group, and product, Kentucky, 1997**

Species group and detailed species group	Total	Product						Other miscellaneous
		Saw log	Veneer	Pulpwood	Composite panels	Fuelwood	Poles and posts	
<i>Thousand cubic feet</i>								
<b>Softwood</b>								
Cedar	662	523	0	0	0	11	30	99
White pine	79	54	0	1	0	1	23	0
Loblolly-shortleaf pine	1,863	524	0	586	549	35	169	0
Other yellow pines	7,927	4,507	126	1,767	53	137	947	389
Hemlock	70	60	0	5	0	1	4	0
Total softwoods	10,601	5,668	126	2,359	602	185	1,173	488
<b>Hardwood</b>								
Soft maple	7,001	5,423	56	611	17	873	0	20
Hard maple	5,563	3,736	83	720	324	694	0	5
Other birch	1,217	726	12	198	129	152	0	0
Hickory	22,926	17,559	431	1,062	990	2,860	1	24
Beech	8,160	6,202	101	387	452	1,018	0	2
Ash	5,894	4,154	346	629	21	736	0	9
Black walnut	2,636	2,075	83	118	28	329	0	2
Sweetgum	5,092	3,268	45	1,126	0	635	0	17
Yellow-poplar	26,630	18,649	519	1,575	2,547	3,323	1	15
Blackgum-tupelo	1,818	1,325	42	135	89	227	0	0
Sycamore	1,233	959	9	68	41	154	0	3
Cottonwood	739	507	13	126	0	92	0	1
Black cherry	1,294	930	36	167	0	161	0	0
Select white oaks	30,047	23,266	489	1,498	1,008	3,748	3	36
Other white oaks	15,169	11,732	143	859	534	1,893	0	7
Select red oaks	15,084	10,774	483	1,352	578	1,882	0	15
Other red oaks	41,916	30,716	1,209	2,812	1,914	5,229	1	35
Basswood	1,665	1,044	40	76	297	208	0	0
Elm	4,465	3,331	45	526	0	557	0	6
Other Eastern hardwoods	11,894	8,924	766	456	259	1,483	0	6
Total hardwoods	210,443	155,297	4,954	14,502	9,228	26,254	6	202
<b>All species</b>	<b>221,044</b>	<b>160,965</b>	<b>5,080</b>	<b>16,861</b>	<b>9,830</b>	<b>26,439</b>	<b>1,179</b>	<b>690</b>

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

**Table 31—Total roundwood output by species group, detailed species group, and ownership, Kentucky, 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	662	0	188	0	474
White pine	79	62	0	0	18
Loblolly-shortleaf pine	1,863	443	4	0	1,416
Other yellow pines	7,927	411	9	0	7,507
Hemlock	70	18	0	0	52
<b>Total softwoods</b>	<b>10,601</b>	<b>934</b>	<b>200</b>	<b>0</b>	<b>9,467</b>
<b>Hardwood</b>					
Soft maple	7,001	196	179	60	6,566
Hard maple	5,563	264	198	171	4,930
Other birch	1,217	277	0	0	941
Hickory	22,926	1,100	1,886	116	19,825
Beech	8,160	758	126	97	7,180
Ash	5,894	180	253	0	5,462
Black walnut	2,636	3	133	2	2,498
Sweetgum	5,092	0	472	0	4,620
Yellow-poplar	26,630	1,546	396	166	24,523
Blackgum-tupelo	1,818	10	139	19	1,649
Sycamore	1,233	30	62	0	1,140
Cottonwood	739	0	0	0	739
Black cherry	1,294	41	80	12	1,161
Select white oaks	30,047	994	1,889	333	26,831
Other white oaks	15,169	1,454	437	208	13,070
Select red oaks	15,084	866	824	75	13,318
Other red oaks	41,916	3,114	1,741	349	36,712
Basswood	1,665	76	0	53	1,536
Elm	4,465	4	330	5	4,126
Other Eastern hardwoods	11,894	31	377	39	11,447
<b>Total hardwoods</b>	<b>210,443</b>	<b>10,944</b>	<b>9,521</b>	<b>1,703</b>	<b>188,275</b>
<b>All species</b>	<b>221,044</b>	<b>11,878</b>	<b>9,722</b>	<b>1,703</b>	<b>197,742</b>

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











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**Stratton, Daniel; Lowe, Larry.** 1999. Kentucky's timber industry—an assessment of timber product output and use, 1997. Resour. Bull. SRS-40. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 40 p.

In 1997, roundwood output from Kentucky's forests totaled more than 195 million cubic feet, 5 percent more than in 1995. Mill byproducts generated from primary manufacturers declined 11 percent to 98 million cubic feet. Almost 95 percent of plant residues were used primarily for fuel and fiber products. Saw logs were the leading roundwood product at 161 million cubic feet; pulpwood ranked a distant second at 17 million cubic feet. The number of primary processing plants declined from 401 in 1995 to 391 in 1997. Total receipts increased 2 percent to 216 million cubic feet.

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



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