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# Indiana's Timber Industry - An Assessment of Timber Product Output and Use, 1995

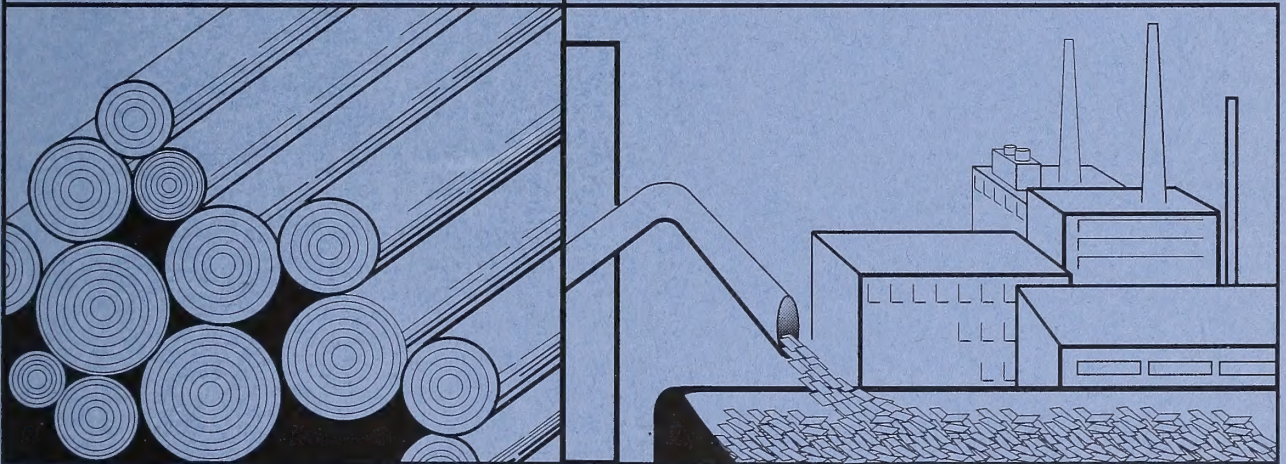
Ronald L. Hackett and Jeff Settle



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## FOREWORD

In this bulletin, we discuss recent Indiana forest industry trends and report the results of a detailed study of forest industry, industrial roundwood production, and associated primary mill wood and bark residue in Indiana in 1995. Such detailed information is necessary for intelligent planning and decisionmaking in wood procurement, forest resource management, and forest industry development. Likewise, researchers need current forest industry and industrial roundwood information for planning projects.

Special thanks are given to the primary wood-using firms that supplied information for this study and to the Indiana Department of Natural Resources for canvassing the respondents. Their cooperation is greatly appreciated.

All board foot data in this report have been converted to International 1/4-inch scale by applying a multiplier of 1.08 to all saw log volume reported in Scribner Decimal C scale by sawmills, a multiplier of 1.04 to all veneer log volume reported in Scribner Decimal C scale by veneer mills, a multiplier of 1.38 to all saw log volume reported in Doyle scale by sawmills, and a multiplier of 1.14 to all veneer log volume reported in Doyle scale by veneer mills.

The last published report from a detailed study of all industrial roundwood output in Indiana was in 1990. Most comparisons in this report are with the 1990 study results. Row and column data of tables may not sum due to rounding, but data in each table cell are accurately displayed.

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# Indiana's Timber Industry—An Assessment of Timber Product Output and Use, 1995

Ronald L. Hackett and Jeff Settle

## HIGHLIGHTS

### PRIMARY TIMBER INDUSTRY—INDUSTRIAL ROUNDWOOD

- In 1995, Indiana's primary wood-using industry was comprised of 209 mills, including 3 pulpmills, 12 veneer mills, and 2 miscellaneous mills (table 1).
- Most of the State's primary wood-using mills are located in the Lower Wabash and Knobs Forest Survey Units (figs. 1, 2).
- Between 1990 and 1995, Indiana's primary wood-using industry decreased by 61 mills, most of which were sawmills.
- In 1995, Indiana's primary wood-using industry processed 75.9 million cubic feet of roundwood, a decline of 5 percent or 4.2 million cubic feet from 1990 (table 2).
- Indiana's 192 sawmills processed more than 67 million cubic feet of roundwood in 1995, a decrease of more than 7 percent from 1990. Pulpwood decreased from 3 million cubic feet in 1990 to 1.3 million cubic feet in 1995. However, veneer log and bolts processed increased by more than 160 percent from 1990 to 1995.
- Hardwoods made up 98 percent of the roundwood processed by the State's primary wood-using industry in 1995.
- In 1995, more than 66 million cubic feet of industrial roundwood was harvested from Indiana's forest, a decrease of more than 17 percent from 1990 (table 3). Hardwoods decreased by an average of 19 percent during the same period; softwoods increased from 117 thousand cubic feet to 1,315 thousand cubic feet or more than 11 times the volume of 1990 softwoods harvested.
- The decrease in hardwood production was associated with the decreased use of red oak and yellow-poplar for saw logs. This was actually offset by the increased use of red oak and yellow-poplar for veneer logs and pulpwood.
- The elevenfold increase in softwood production was associated with the increased use of shortleaf and other pines for saw logs and pulpwood.
- Saw logs remained the predominant roundwood product harvested from Indiana's forests (fig. 3).
- The State's industrial roundwood production was concentrated in the Knobs Unit, which provided more than 40 percent of the State's 1995 production. The Lower Wabash and Northern Units provided another 26 and 25 percent of the industrial roundwood, respectively (fig. 4).
- The Knobs Unit provided more than one-third of the saw logs, nearly two-thirds of the veneer logs, and two-thirds of the pulpwood in 1995. The Lower Wabash and Northern Units combined provided more than half of the saw logs, nearly one-third of the veneer logs, and one-third of the pulpwood production in the State.

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# INDIANA

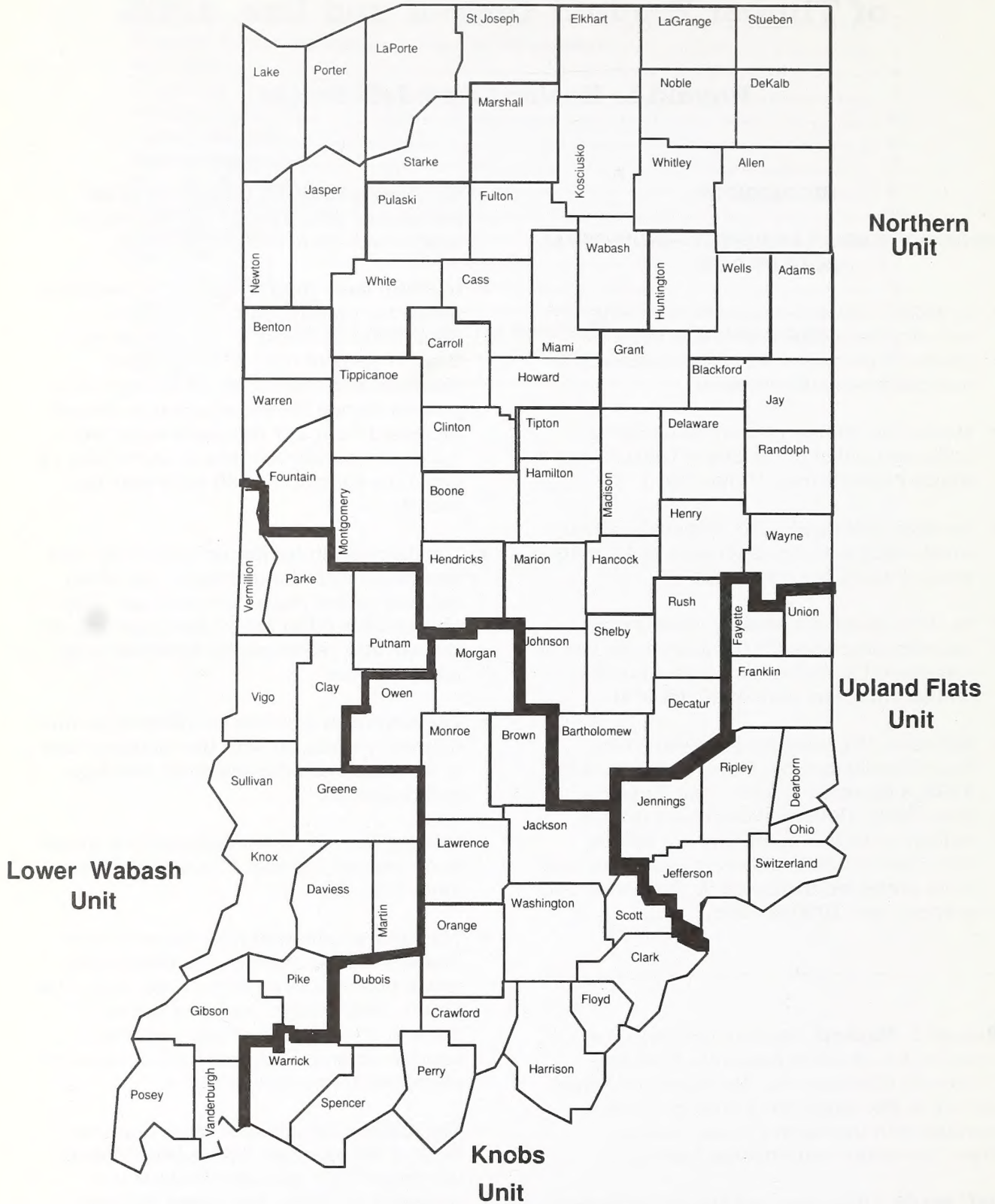


Figure 1.—Forest Survey Units in Indiana.



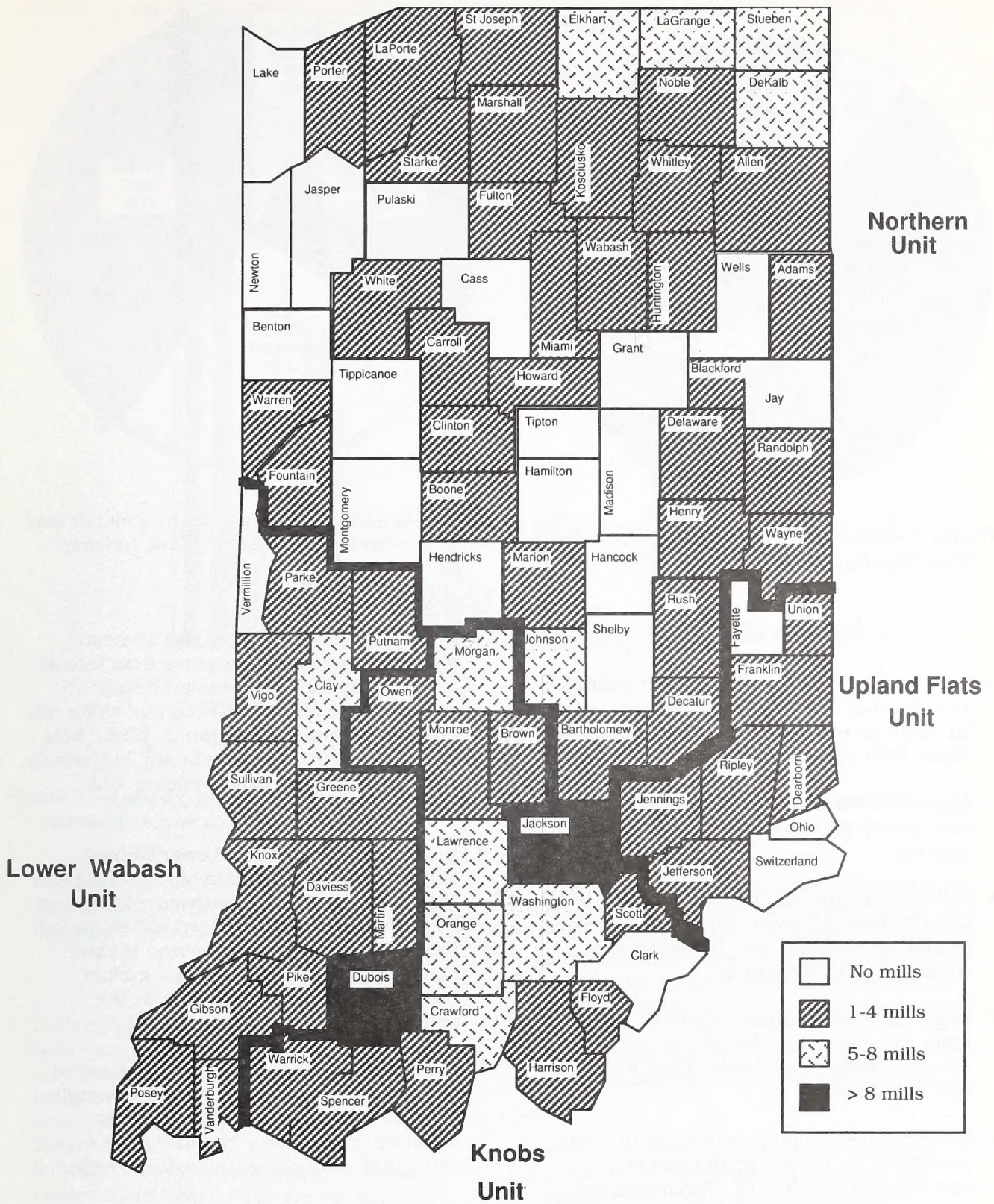


Figure 2.—Number of primary wood-using mills by county, Indiana, 1995.



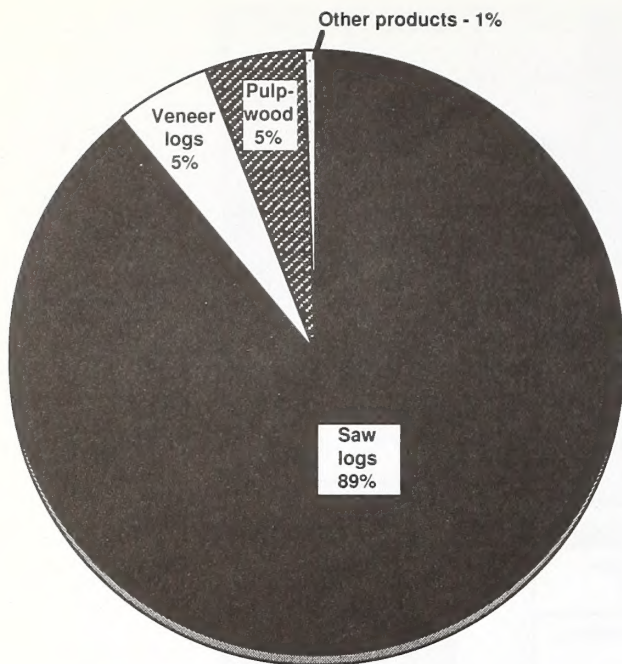


Figure 3.—Distribution of industrial roundwood production by product, Indiana, 1995.

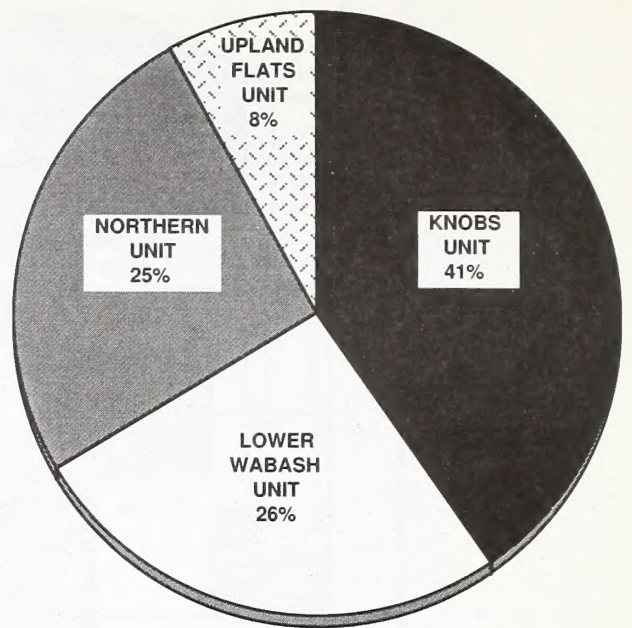


Figure 4.—Distribution of industrial roundwood production by Forest Survey Unit, Indiana, 1995.

### SAW LOGS

- Loggers harvested more than 353 million board feet of saw logs from Indiana's forest in 1995, down nearly 19 percent (82 million board feet) from 1990 (table 4).
- Most of the decline was associated with red oak, yellow-poplar, white oak, and sycamore.
- Saw-log receipts also decreased by more than 20 percent; most of the decline was associated with red oak, yellow-poplar, white oak, and sycamore.
- Major saw-log producing counties with more than 10 million board feet each were Dubois, Owen, Washington, Clay, Greene, and Vigo (table 5).
- Indiana sawmills processed more than 96 percent of the State's production of saw logs (table 6) (fig. 5). The remainder was exported to Michigan, Kentucky, Ohio, and other States outside the region.
- Ohio and other States were the two largest recipients of Indiana saw logs. Red and white oak and black walnut were the largest species exported to Ohio. Other States

received 4.7 million board feet of mostly shortleaf pine and other pines from Indiana in 1995. Indiana loggers sent nearly 1.5 million board feet, mostly red and white oak and soft maple, to Michigan in 1995. Kentucky received 2.9 million board feet, mostly red and white oak, yellow-poplar, and tupelo.

- In 1995, the Knobs and Lower Wabash Units provided 2.8 million board feet of saw logs to Kentucky, the Northern and Upland Flats Units provided nearly 5 million board feet to Ohio, and the Knobs and Upland Flats Units provided nearly 4.7 million board feet to other States outside the region.
- Indiana supplied more than 85 percent of the saw-log volume needed by its sawmills in 1995 (table 7). The remainder was imported from Illinois, Kentucky, Michigan, Ohio, and other States outside the region.
- In 1995, of the 192 sawmills in Indiana, four mills produced handle blanks. These mills used more than 116 thousand board feet of hardwoods—mainly ash (93 mbf), hickory (13 mbf), and hard maple (10 mbf)—in producing handle blanks. Handle blank mills in Indiana received more than 6



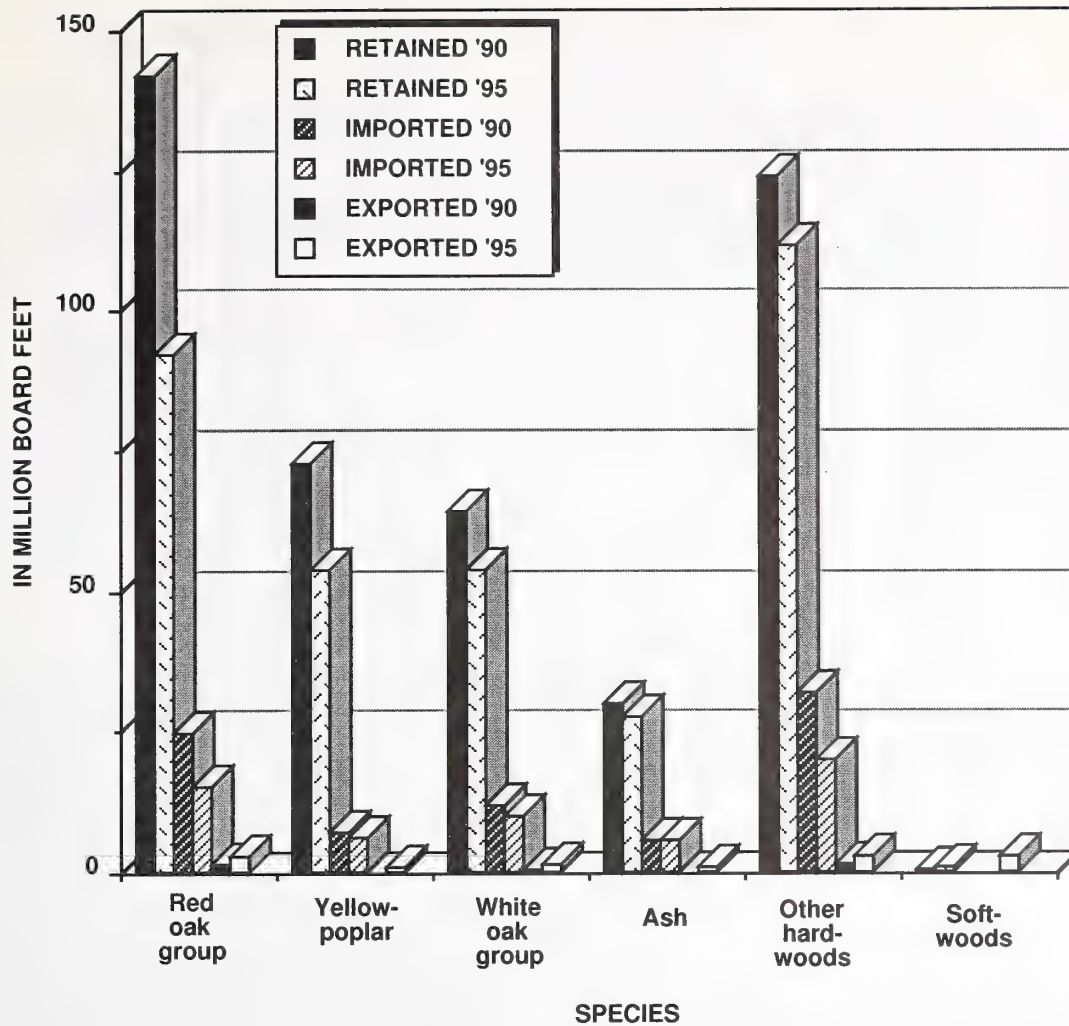


Figure 5.—Saw-log production exported (mills outside Indiana), imported, and retained by select species in Indiana, 1990 and 1995.

thousand board feet of hardwood from Kentucky; the other 110 thousand board feet came from Indiana's forestland.

### PULPWOOD

- Indiana's pulpwood production (including both roundwood and mill residues generated by the State's other primary wood-using industries) has been increasing over time except in 1990 (table 8).
- In 1995, pulpwood production in Indiana totaled more than 310 thousand cords of roundwood and mill residues, a 64-percent increase from 1990. Much of the increase was concentrated in hardwood residues.
- Mill residues supplied more than 85 percent of the pulpwood produced in 1995.
- Indiana's pulpwood and particleboard mills consumed more than 68 percent of the State's production of pulpwood. The remainder was shipped out of State for processing in the Southern States, Northeastern States, and Lake States (table A).
- Hard hardwoods was the major species group of roundwood pulpwood exported in 1995.
- The Knobs Unit provided more than two-thirds of the roundwood pulpwood harvested in the State in 1995 (table 9).
- Three counties—Greene, Owen, and Perry—each reported harvesting more than 5 thousand cords of roundwood pulpwood in 1995.



Table A.—Indiana pulpwood production by product form, species group, and destination, 1995<sup>1</sup>

Forest Survey Regions	Roundwood				Residues			All wood material
	Soft-woods	Soft hard-woods	Hard hard-woods	Total	Soft-woods	Hard-woods	Total	
- - - - - (In standard cords, unpeeled) - - - - -								
Central States	—	5.4	19.9	25.3	35.3	151.9	187.2	212.5
Lake States	—	—	—	—	—	14.2	14.2	14.2
Northeastern States	3.6	*	*	3.6	—	2.4	2.4	6.0
Southern States	—	—	15.6	15.6	*	62.2	62.2	77.8
Total	3.6	5.4	35.5	44.5	35.3	230.7	266.0	310.5

\* = Less than 50 cords.

<sup>1</sup> Pulpwood Production in the North-Central Region, 1995, RB-NC-180.

*Pulpwood is a major product in the North Central Region. A yearly study is done of all pulpmills and particleboard mills in the region. A separate publication, "Pulpwood Production in the North-Central Region, 1995," by Ronald J. Piva, RB-NC-180, is available from the North Central Research Station.*

### VENEER LOGS

- Between 1990 and 1995, veneer log production in Indiana increased by more than 41 percent (table 10). At the same time veneer log receipts increased by more than one-third, from 35 million board feet in 1990 to 47 million in 1995.
- Black walnut veneer log production declined by 43 percent between 1990 and 1995; this was offset by increases in red and white oak, and black cherry for the same time period. Black walnut receipts at mills in Indiana decreased by 40 percent, from 5 million board feet in 1990 to 3 million board feet in 1995. This decline in the use of black walnut was offset by increased use of yellow-poplar, hard maple, and ash.
- Indiana retained nearly three-quarters of the veneer log volume it harvested in 1995 (table 11) (fig. 6). The remaining one-quarter was shipped out of State for processing, mostly to neighboring Ohio and other States outside the region.

- The white oak group was the major species of veneer log exported from Indiana.
- Nearly two-thirds of all the veneer log and bolt volume was produced in the Knobs Unit (table 12).
- Indiana supplied more than 37 percent of the State's veneer log requirements in 1995 (table 13). Another 35 percent was provided by other States outside the region, and the remaining 28 percent was provided by Michigan, Kentucky, Illinois, Ohio, surrounding States, and Canada.
- Red and white oak, black cherry, and hard maple make up nearly two-thirds of the veneer log volume processed in the State. More than 68 percent of these four species combined were imported from neighboring and other States outside the region.

### OTHER PRODUCTS

- Loggers cut more than 300 thousand cubic feet of other industrial roundwood products in Indiana in 1995, almost all of which was cooperage logs.
- Cooperage log harvesting occurred mainly in the Knobs and Upland Flats Units—all white oak (1.8 million board feet).
- An estimated 136 thousand cubic feet of roundwood was cut from Indiana's forest in 1995 for building log cabins.



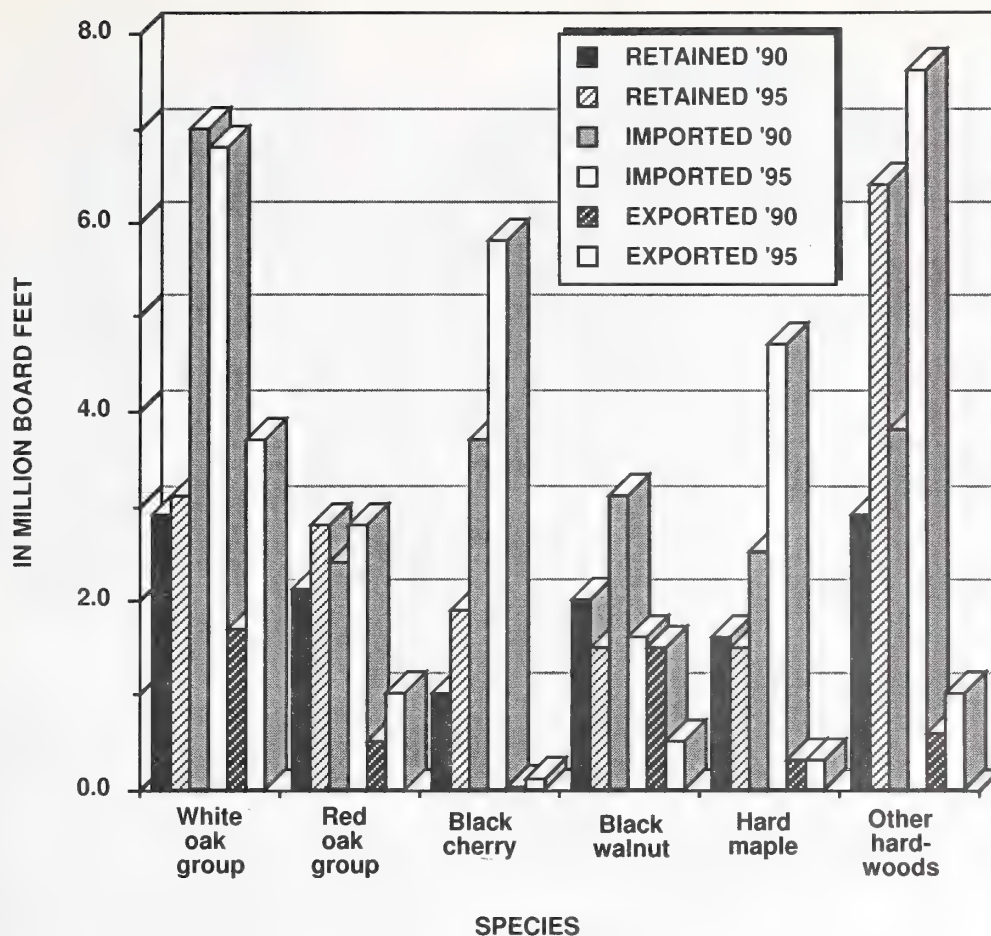


Figure 6.—Veneer log and bolt production retained, imported, and exported (to mills outside Indiana) by select species in Indiana, 1990 and 1995.

- The remaining volume produced in the State was a small amount of oak and honeylocust (12 cords) used as industrial fuelwood at a rendering plant.

*Residential fuelwood is a nonindustrial product in Indiana. The results of a residential fuelwood study conducted in 1996 are available in a separate Station publication, "Residential fuelwood consumption and production in Indiana, 1996," by Dennis M. May, Jeff Settle, and Tamara Benjamin, RB-NC-188, is available from the North Central Research Station.*

#### TIMBER REMOVALS

- In 1995, loggers harvested more than 116.5 million cubic feet of wood material from Indiana's forest (table 14).
- More than 77 million cubic feet of the total 116.5 million cubic feet was cut from the growing-stock inventory on Indiana's timberland, a decrease of nearly 20 percent from 1990 (fig. 7).
- Nearly 40 percent of the growing-stock removals came from the Knobs Unit, the region of the State where production of saw logs and veneer logs is concentrated (table 15).
- Red and white oak accounted for more than 43 percent of all growing-stock removals.
- Industrial roundwood harvesting also removed more than 407 million board feet of wood from the sawtimber portion of the growing-stock inventory in 1995 (table 16), a decrease of nearly 20 percent from 1990.

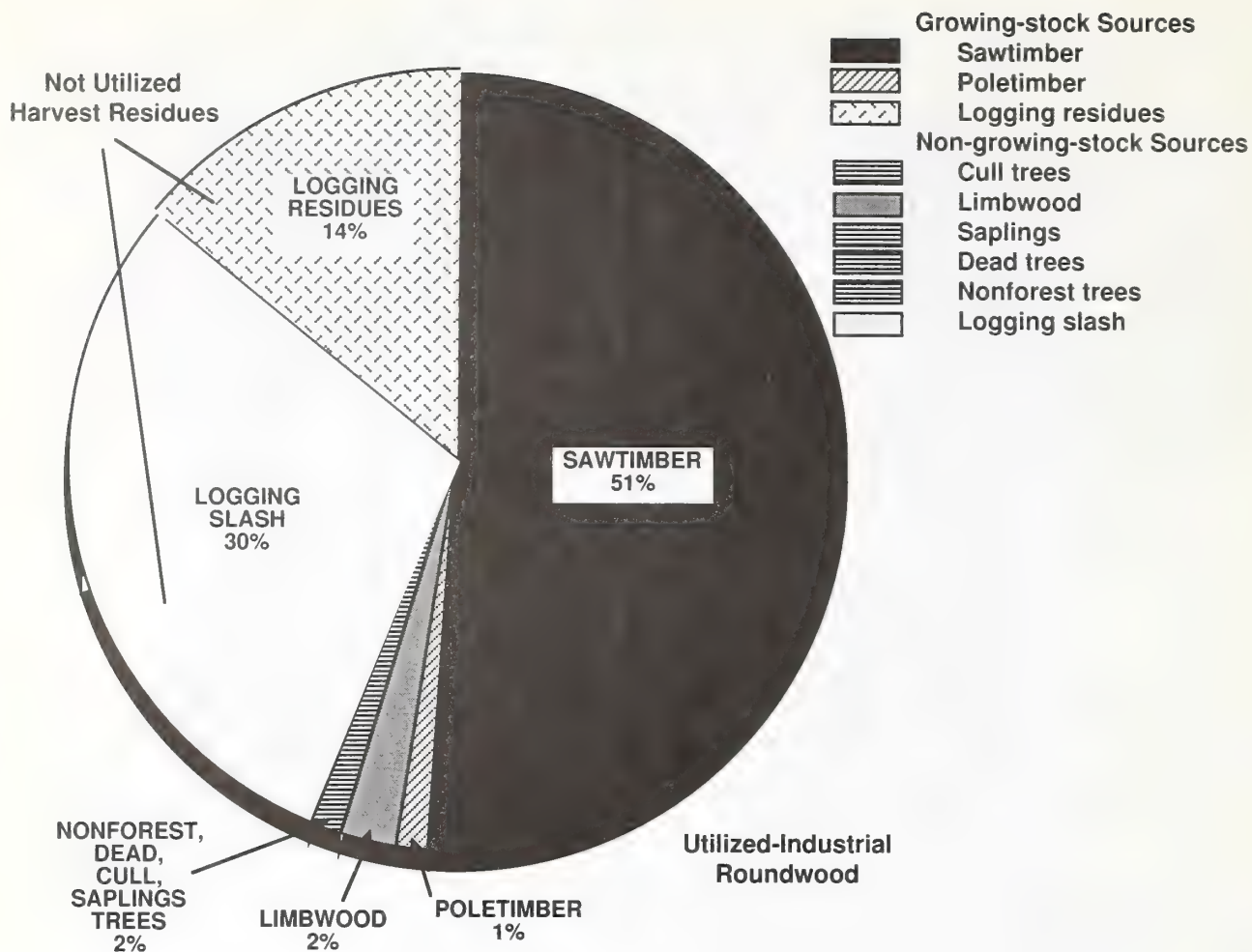


Figure 7.—Distribution of timber removals for industrial roundwood by source of material, Indiana, 1995.

- Nearly 40 percent of all sawtimber removals occurred in the Knobs Unit, the area of the State where saw-log production is concentrated.
- Sawtimber removals were concentrated in four species—red oak, white oak, yellow-poplar, and ash—which together accounted for more than two-thirds of all sawtimber removals. Red and white oak accounted for more than 43 percent of all sawtimber removals.

**HARVEST RESIDUES**

- In 1995, harvesting of industrial roundwood products left more than 51 million cubic feet of harvest residues on the ground (table 17), a decrease of nearly 20 percent from 1990, generally due to the decrease in harvesting of saw logs in 1995.

- The Knobs Unit had more than 37 percent of the harvest residues in the State in 1995. The Lower Wabash and Northern Units had more than 27 percent each of harvest residues in the State.
- Four species—red oak, white oak, yellow-poplar, and ash—accounted for more than two-thirds of all harvest residues.

**PRIMARY MILL RESIDUE**

- In converting industrial roundwood into milled products, such as lumber, sheathing, and wood pulp, Indiana’s primary wood-using industry generated 1.2 million green tons of wood and bark residues (table 18).
- Coarse and bark wood residues together made up three-quarters of the total volume in 1995; fine wood residue made up the remainder (fig. 8).



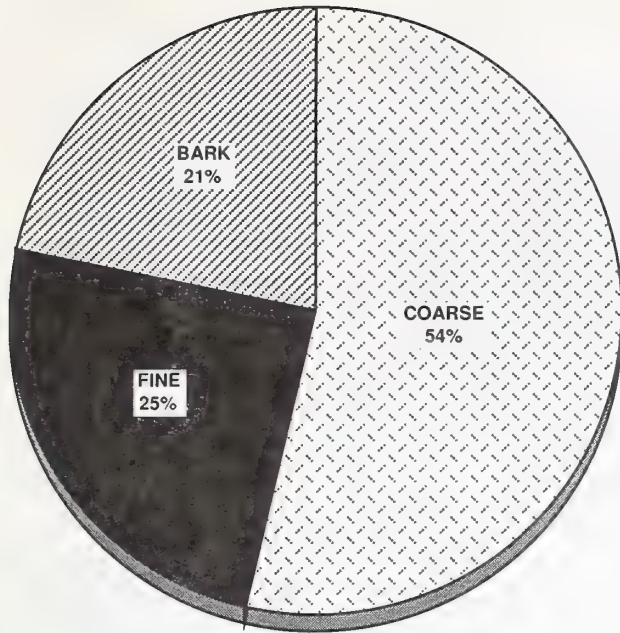


Figure 8.—Distribution of residues generated by primary wood-using mills by type of residue, Indiana, 1995.

- Almost all the mill residues were used; 40 percent ended up as miscellaneous products such as mulch and animal bedding (fig. 9).
- In general, most coarse wood residues were used for fiber products such as pulpwood or particleboard. Most fine and bark residues were used for miscellaneous products such as mulch and animal bedding.
- More than two-thirds of the mill residues were generated in the Knobs and Northern Units combined, and more than 43 percent of all unused mill residues were located in the Northern Unit.

### REGIONAL TRENDS

#### Knobs Unit

- In 1995, more than 26 million cubic feet of roundwood was produced in the 17 counties that make up the Knobs Unit of Indiana; this accounted for more than 40 percent of the State's total output.

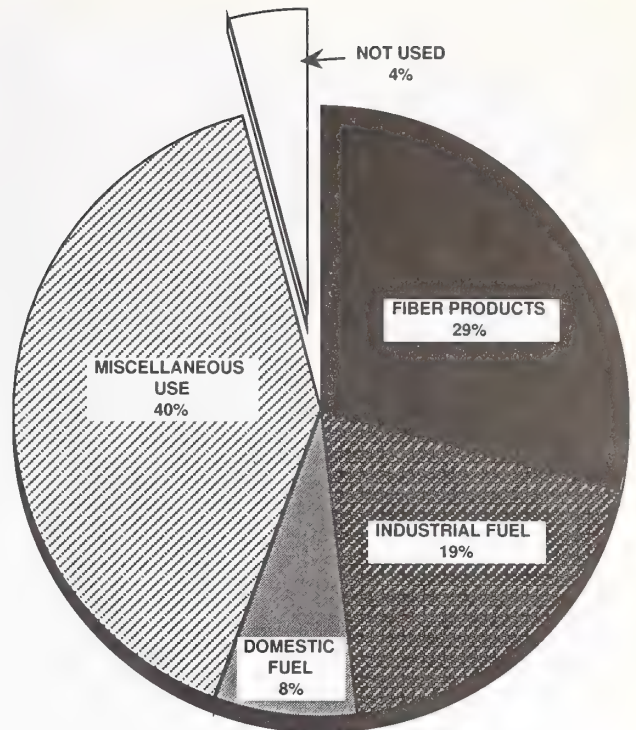


Figure 9.—Distribution of residues generated by primary wood-using mills by method of disposal, Indiana, 1995.

- The 26 million cubic feet of industrial roundwood reflects a 30-percent decline between 1990 and 1995.
- Saw-log production of more than 21 million cubic feet accounted for more than four-fifths of the total roundwood production in this unit, reflecting a 10-percent decline from 1990.
- Veneer log production tripled from 1990 to 1995—from 690 thousand cubic feet to more than 2 million cubic feet. It accounted for more than 7 percent of the unit's total roundwood output.
- Pulpwood production increased by nearly 15 percent from 1990 to 1995 and accounted for more than 7 percent of the unit's total roundwood output.
- The Knobs Unit produced nearly 38 percent of the State's saw logs, nearly 63 percent of the veneer logs, more than 66 percent of the pulpwood, and nearly 79 percent of the cooperage logs (fig. 10).

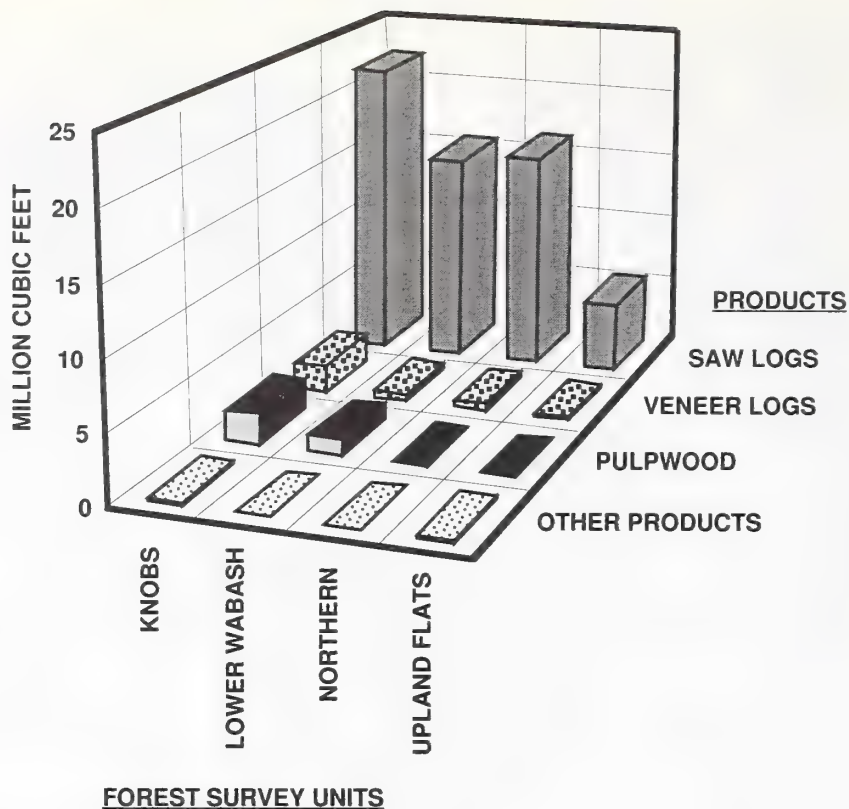


Figure 10.—Distribution of roundwood products harvested by unit, Indiana, 1995.

- In 1995, the Knobs Unit had 74 sawmills, 5 veneer mills, 2 particleboard mills, and 1 miscellaneous mill.
- Nearly 60 percent of the sawmills in the region had receipts greater than 1 million board feet, while 28 percent of the mills had less than 500 thousand board feet of receipts.
- Veneer log production increased by more than 30 percent between 1990 and 1995, and accounted for nearly 3 percent of the unit's total roundwood output in 1995.
- Pulpwood production between 1990 and 1995 increased by more than 14 percent and accounted for more than 6 percent of the unit's total roundwood output.

#### Lower Wabash Unit

- Between 1990 and 1995, roundwood production from the 14 counties that make up the Lower Wabash Unit decreased by 2 percent to 17 million cubic feet.
- This unit accounted for more than 26 percent of the State's total roundwood output in 1995, an increase of 5 percent from 1990.
- Saw-log production of more than 15 million cubic feet accounted for more than 90 percent of the total roundwood production in this unit.
- The Lower Wabash Unit produced more than 26 percent of the saw logs, more than 15 percent of the veneer logs, more than 31 percent of the pulpwood, and nearly 3 percent of the cooperage logs in the State.
- In 1995, 34 mills including 30 sawmills, 2 veneer mills, 1 pulpmill, and 1 miscellaneous mill operated in the Lower Wabash Unit.
- Only 22 sawmills in the Lower Wabash Unit had receipts of more than 1 million board feet, while 20 percent of the mills had receipts less than 500 thousand board feet.



## Northern Unit

- The 52-county Northern Unit produced the third largest amount of roundwood in the State. In 1995, this unit produced almost 17 million cubic feet of industrial roundwood, 10 percent less than in 1990. Total production of industrial roundwood was more than one-quarter of the State's total industrial roundwood output.
- Saw-log production of more than 16 million cubic feet accounted for nearly 97 percent of the total roundwood produced in this unit in 1995.
- Veneer log production decreased by more than 43 percent between 1990 and 1995, and accounted for nearly 3 percent of the unit's total roundwood output in 1995.
- Pulpwood production increased from none in 1990 to 79 thousand cubic feet in 1995, and accounted for less than 1 percent of the unit's total roundwood output in 1995.
- The Northern Unit produced nearly 27 percent of the State's saw logs, more than 14 percent of the veneer logs, and more than 2 percent of the pulpwood produced in 1995.
- In 1995, 75 sawmills and 5 veneer mills operated in the Northern Unit.
- Nearly half of the sawmills in the Northern Unit had receipts of 1 million board feet or more, while more than 40 percent of the mills had receipts of less than 500 thousand board feet.

## Upland Flats Unit

- In 1995, the nine counties that make up the Upland Flats Unit produced more than 5 million cubic feet of industrial roundwood, nearly 18 percent less than in 1990. Total production of industrial roundwood in 1995 was nearly 8 percent of the State's total industrial roundwood output.
- Saw-log production decreased by 10 percent between 1990 and 1995 to 4.9 million cubic feet, this volume accounted for more than 94 percent of the unit's industrial roundwood production.
- Veneer log production declined by more than 41 percent from 1990 to 230 thousand cubic feet of roundwood output in 1995. Veneer log production accounted for more than 4 percent of the unit's total roundwood output.
- Cooperage log production quadrupled to 56 thousand cubic feet in 1995; this volume accounted for more than 1 percent of the unit's roundwood output.
- The Upland Flats Unit produced more than 8 percent of the State's saw logs, 7 percent of the veneer logs, and more than 18 percent of the cooperage logs.
- In 1995, 13 sawmills operated in the Upland Flats Unit.
- More than 38 percent of the sawmills in the unit had receipts of more than 1 million board feet; more than 46 percent of the mills had receipts of less than 500 thousand board feet.

## APPENDIX

### STUDY METHODS

This study was a cooperative effort of the Indiana Department of Natural Resources (IDNR) and the North Central Research Station (NCRS). Using mail questionnaires supplied by NCRS and designed to determine the size and composition of the State's primary wood-using industry, its use of roundwood, and its generation and disposition of wood residues, the IDNR canvassed all primary wood-using mills within the State. The IDNR followed up

on nonresponding mills by using additional mailings, telephone, and personal contacts until a 100-percent response was achieved. Completed questionnaires were sent to NCRS for editing and processing.

As part of data editing and processing, all industrial roundwood volumes reported on the questionnaires were converted to standard units of measure using regional conversion factors. Timber removals by source of material and harvest residues generated during logging

were estimated from standard product volumes using factors developed from logging utilization studies previously conducted by NCRS. Finalized data on Indiana's industrial roundwood receipts were loaded into a regional timber removals data base and supplemented with data on out-of-State uses of Indiana roundwood to provide a complete assessment of Indiana's timber product output.

## DEFINITION OF TERMS

**Board foot.**—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).

**Bolt.**—A short log, no more than 16 to 20 feet long, to be sawn for lumber or peeled for veneer.

**Central stem.**—The portion of a tree between a 1-foot stump and the minimum 4.0-inch top diameter outside bark, or point where the central stem breaks into limbs.

**Coarse mill residue.**—Wood residue suitable for chipping such as slabs, edgings, and veneer cores.

**Commercial species.**—Tree species presently or prospectively suitable for industrial wood products. (Note: Excludes species of typically small size, poor form, or inferior quality such as hophornbeam, Osage-orange, and redbud.)

**Cull removals.**—Net volume of rough and rotten trees plus the net volume in sections of the central stem of growing-stock trees that do not meet regional merchantability standards, harvested for industrial roundwood products.

**Dead removals.**—Net volume of dead trees harvested for industrial roundwood products.

**Diameter at breast height (d.b.h.).**—The outside bark diameter at 4.5 feet above the forest floor on the uphill side of the tree. For determining breast height, the forest floor includes the duff layer that may be present, but does not include unincorporated woody debris that may rise above the ground line.

**Fine mill residue.**—Wood residue not suitable for chipping such as sawdust and veneer clippings.

**Forest land.**—Land at least 16.7 percent stocked by forest trees of any size, or formerly having had such tree cover, and not currently developed for nonforest use. (Note: Stocking is measured by comparing specified standards with basal area and/or number of trees, age or size, and spacing.) The minimum area for classification of forest land is 1 acre. Roadside, streamside, and shelterbelt strips of timber must have a crown width of at least 120 feet to qualify as forest land. Unimproved roads and trails, streams, or other bodies of water or clearings in forest areas shall be classed as forest if less than 120 feet wide.

**Growing-stock removals.**—The growing-stock volume removed from the timberland inventory by harvesting industrial roundwood products. (Note: Includes sawtimber removals, poletimber removals, and logging residues.)

**Growing-stock tree.**—A live timberland tree of commercial species that meets specified standards of size, quality, and merchantability. (Note: Excludes rough, rotten, and dead trees.)

**Growing-stock volume.**—Net volume of growing-stock trees 5.0 inches d.b.h. and over, from 1 foot above the ground to a minimum 4.0-inch top diameter outside bark of the central stem or the point where the central stem breaks into limbs.

**Hardwoods.**—Dicotyledonous trees, usually broad-leaved and deciduous.

**Harvest residues.**—The total net volume of unused portions of trees cut or killed by logging. (Note: Includes both logging residues and logging slash.)

**Industrial roundwood products.**—Saw logs, pulpwood, veneer logs, poles, commercial posts, piling, cooperage logs, particleboard bolts, shaving bolts, lath bolts, charcoal bolts, and chips from roundwood used for pulp or board products.



**Industrial roundwood exports.**—The quantity of industrial roundwood harvested in a geographical area and transported to other geographical areas.

**Industrial roundwood imports.**—The quantity of industrial roundwood received from other geographical areas.

**Industrial roundwood production.**—The quantity of industrial roundwood harvested in a geographic area plus all industrial roundwood exported to other geographical areas.

**Industrial roundwood receipts.**—The quantity of industrial roundwood harvested for commercial mills in a geographic area plus all industrial roundwood imported from other geographical areas.

**Industrial roundwood retained.**—The quantity of industrial roundwood harvested from and processed by commercial mills within the same geographical area.

**International 1/4-inch rule.**—A log rule or formula for estimating the board foot volume of logs, allowing 1/2-inch of taper for each 4-foot length. The rule appears in a number of forms that allow for kerf. In the form used by FIA, a 1/4-inch of kerf is assumed. This rule is used as the USDA Forest Service standard log rule in the Eastern United States.

**Limbwood removals**—Net volume of all portions of a tree other than the central stem, (including forks, large limbs, tops, and stumps) harvested for industrial roundwood products.

**Logging residue.**—The net volume of unused portions of the merchantable central stem of growing-stock trees cut or killed by logging.

**Logging slash.**—The net volume of unused portions of the unmerchantable (non-growing-stock) sections of trees cut or killed by logging.

**Merchantable sections.**—Refers to sections of the central stem of growing-stock trees that meet either pulpwood or saw-log specifications.

**Net volume.**—Gross volume less deductions for rot, sweep, or other defects affecting use for roundwood products.

**Noncommercial species.**—Tree species of typically small size, poor form, or inferior quality that normally do not develop into trees suitable for industrial roundwood products. Classified in volume tables as rough trees.

**Nonforest land.**—Land that has never supported forests, and land formerly forested where use for timber management is precluded by development for other uses. (Note: Includes areas used for crops, orchards, Christmas trees, improved pasture, residential areas, city parks, improved roads of any width and adjoining clearings, powerline clearings of any width, and 1- to 39.9-acre areas of water classified by the Bureau of the Census as land. If intermingled in forest areas, improved roads and nonforest strips must be more than 120 feet wide and more than 1 acre to qualify as nonforest land.)

**Nonforest land removals.**—Net volume of trees on nonforest lands harvested for industrial roundwood products.

**Poletimber.**—A growing-stock tree at least 5.0 inches d.b.h. but smaller than sawtimber size (9.0 inches d.b.h. for softwoods, 11.0 inches d.b.h. for hardwoods).

**Poletimber removals.**—Net volume in the merchantable central stem of poletimber trees harvested for industrial roundwood products.

**Primary wood-using mills.**—Mills receiving roundwood or chips from roundwood for processing into products.

**Primary wood-using mill residue.**—Wood materials (coarse and fine) and bark generated at manufacturing plants from roundwood processed into principal products. These residues include wood products (byproducts) obtained incidental to production of principal products and wood materials not utilized for some product.



**Rotten tree.**—A tree that does not meet regional merchantability standards because of excessive unsound cull.

**Rough tree.**—A tree that does not meet regional merchantability standards because of excessive sound cull. Includes noncommercial tree species.

**Roundwood.**—Logs, bolts, or other round sections cut from trees (including chips from roundwood).

**Sapling.**—A live tree between 1.0 and 5.0 inches d.b.h.

**Sapling removals.**—Net volume in saplings harvested for industrial roundwood products.

**Saw-log portion.**—That portion of the central stem of sawtimber trees between the stump and the saw-log top.

**Saw-log top.**—The point on the central stem of sawtimber trees above which a saw log cannot be produced. The minimum saw-log top is 7.0 inches d.o.b. for softwoods and 9.0 inches d.o.b. for hardwoods.

**Sawtimber removals.**—As used in table 14, sawtimber removals refers to the net volume in the merchantable central stem of sawtimber trees harvested for industrial roundwood products. (Note: Includes the saw-log and upper stem portions of sawtimber trees.) When referring to the sawtimber volume removed from the timberland inventory as in table 16, sawtimber removals refers to the net volume in the saw-log portion of sawtimber trees harvested for roundwood products or left on the ground as harvest residue, and is usually expressed in thousands of board feet (International 1/4-inch rule).

**Sawtimber tree.**—A growing-stock tree containing at least a 12-foot saw log or two noncontiguous saw logs 8 feet or longer, and meeting regional specifications for freedom from defect. Softwoods must be at least 9.0 inches d.b.h. and hardwoods must be at least 11.0 inches d.b.h.

**Sawtimber volume.**—Net volume in the saw-log portion of sawtimber trees.

**Softwoods.**—Coniferous trees, usually evergreen, having needles or scale-like leaves.

**Timber product output.**—The volume of roundwood products produced from an area's forests.

**Timberland.**—Forest land that is producing, or is capable of producing, in excess of 20 cubic feet per acre per year of industrial roundwood products under natural conditions, is not withdrawn from timber utilization by statute or administrative regulation, and is not associated with urban or rural development.

**Tree.**—A woody plant usually having one or more perennial stems, a more or less definitely formed crown of foliage, and a height of at least 12 feet at maturity.

**Upper stem portion.**—That portion of the central stem of sawtimber trees between the saw-log top and the minimum top diameter of 4.0 inches outside bark or the point where the central stem breaks into limbs.

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

#### COMMON AND SCIENTIFIC NAMES OF TREE SPECIES MENTIONED IN THIS REPORT

##### SOFTWOODS

Pine  
Shortleaf pine ..... *Pinus echinata*  
Virginia pine ..... *Pinus virginiana*  
Eastern white pine ..... *Pinus strobus*  
Red pine ..... *Pinus resinosa*  
Scotch pine ..... *Pinus sylvestris*  
Cypress ..... *Taxodium distichum*  
Eastern redcedar ..... *Juniperus virginiana*

##### HARDWOODS

White oak  
White oak ..... *Quercus alba*  
Swamp white oak ..... *Quercus bicolor*  
Bur oak ..... *Quercus macrocarpa*  
Swamp chestnut oak ..... *Quercus michauxii*  
Chinkapin oak ..... *Quercus muehlenbergii*  
Chestnut oak ..... *Quercus prinus*  
Post oak ..... *Quercus stellata*  
Red oak

Northern red oak ..... *Quercus rubra*  
Cherrybark oak ..... *Quercus falcata*  
var. *pagodaefolia*  
Shumard oak ..... *Quercus shumardii*  
Black oak ..... *Quercus velutina*  
Scarlet oak ..... *Quercus coccinea*  
Southern red oak ..... *Quercus falcata*  
Shingle oak ..... *Quercus imbricaria*  
Pin oak ..... *Quercus palustris*  
Hickory  
Mockernut hickory ..... *Carya tomentosa*  
Shagbark hickory ..... *Carya ovata*  
Shellbark hickory ..... *Carya laciniata*  
Pecan ..... *Carya illinoensis*  
Pignut hickory ..... *Carya glabra*  
Bitternut hickory ..... *Carya cordiformis*  
Hard maple ..... *Acer saccharum*  
Soft maple  
Red maple ..... *Acer rubrum*  
Silver maple ..... *Acer saccharinum*  
Beech ..... *Fagus grandifolia*  
Sweetgum ..... *Liquidambar styraciflua*  
Blackgum ..... *Nyssa sylvatica*  
Tupelo  
Black tupelo .... *Nyssa sylvatica* var. *sylvatica*  
Swamp tupelo .... *Nyssa sylvatica* var. *biflora*  
Ash  
White ash ..... *Fraxinus americana*  
Black ash ..... *Fraxinus nigra*  
Green ash ..... *Fraxinus pennsylvanica*  
Blue ash ..... *Fraxinus quadrangulata*  
Cottonwood ..... *Populus deltoides*  
Aspen  
Bigtooth aspen ..... *Populus grandidentata*  
Quaking aspen ..... *Populus tremuloides*  
American basswood ..... *Tilia americana*  
Yellow-poplar ..... *Liriodendron tulipifera*  
Black cherry ..... *Prunus serotina*  
Black walnut ..... *Juglans nigra*  
Elm  
Winged elm ..... *Ulmus alata*  
American elm ..... *Ulmus americana*  
Siberian elm ..... *Ulmus pumila*  
Slippery elm ..... *Ulmus rubra*  
Rock elm ..... *Ulmus thomasi*  
American sycamore ..... *Platanus occidentalis*  
Birch  
Yellow birch ..... *Betula alleghaniensis*  
River birch ..... *Betula nigra*  
Paper birch ..... *Betula papyrifera*  
Other hardwoods  
Ohio buckeye ..... *Aesculus glabra*  
Hackberry ..... *Celtis occidentalis*  
Northern catalpa ..... *Catalpa speciosa*  
Flowering dogwood ..... *Cornus florida*  
Common persimmon .... *Diospyros virginiana*  
Honeylocust ..... *Gleditsia triacanthos*  
Kentucky coffeetree ..... *Gymnocladus dioica*

Butternut ..... *Juglans cinerea*  
Osage-orange ..... *Maclura pomifera*  
Cucumber tree ..... *Magnolia acuminata*  
Black locust ..... *Robinia pseudoacacia*  
Black willow ..... *Salix nigra*  
Sassafras ..... *Sassafras albidum*  
Boxelder ..... *Acer negundo*  
Balsam poplar ..... *Populus balsamifera*

### TABLE TITLES

- Table 1.—Number of active primary wood-using mills, Indiana, 1980, 1984, 1990, and 1995
- Table 2.—Industrial roundwood receipts by type of mill in Indiana, 1966, 1984, 1990, and 1995
- Table 3.—Industrial roundwood production by Forest Survey Unit, species group, and type of product, Indiana, 1995
- Table 4.—Saw-log production and receipts in Indiana by species group, 1990 and 1995
- Table 5.—Saw-log production by Forest Survey Unit, county, and species group, Indiana, 1995
- Table 6.—Saw-log production by Forest Survey Unit, species group, and State of destination, Indiana, 1995
- Table 7.—Saw-log receipts by Forest Survey Unit, species group, and State of origin, Indiana, 1995
- Table 8.—Pulpwood production in Indiana by species group, 1966, 1976, 1984, 1990, and 1995
- Table 9.—Roundwood pulpwood production by Forest Survey Unit and species group, Indiana, 1995
- Table 10.—Veneer log and bolt production in Indiana by species group, 1966, 1976, 1984, 1990, and 1995
- Table 11.—Veneer log and bolt production by Forest Survey Unit, species group, and destination, Indiana, 1995
- Table 12.—Veneer log and bolt production by Forest Survey Unit, county, and species group, Indiana, 1995



Table 13.—Veneer log and bolt receipts by Forest Survey Unit, species group, and State of origin, Indiana, 1995

Table 14.—Wood material harvested for industrial roundwood by Forest Survey Unit, source of material, and species group, Indiana, 1995

Table 15.—Growing-stock removals from timberland for industrial roundwood by Forest Survey Unit, county, and species group, Indiana, 1995

Table 16.—Sawtimber removals from timberland for industrial roundwood by Forest Survey Unit, county, and species group, Indiana, 1995

Table 17.—Harvest residues generated by industrial roundwood harvesting from timberland by Forest Survey Unit, county, and species group, Indiana, 1995

Table 18.—Residue produced at primary wood-using mills by type of material, type of use, and Forest Survey Unit, Indiana, 1995

Table 1.—Number of active primary wood-using mills, Indiana, 1980, 1984, 1990, and 1995

Kind of mill	1980	1984	1990	1995
Sawmills 1/				
Large 2/	99	112	126	108
Medium 3/	59	47	25	20
Small 4/	176	117	95	64
Total	334	276	246	192
Pulp mills	1	1	1	3
Veneer mills	16	16	14	12
Other mills 5/	16	13	9	2
Total	367	306	270	209

1/ Includes four handle plants.

2/ Annual lumber production in excess of 1 million board feet.

3/ Annual lumber production from 1/2 million to 1 million board feet.

4/ Annual lumber production to 1/2 million board feet.

5/ Includes shavings, cabin logs, excelsior, cooperage, and handle plants.

Table 2.--Industrial roundwood receipts by type of mill in Indiana, 1966, 1984, 1990, and 1995

(In million cubic feet)

<b>All species</b>				
Kind of mill	1966	1984	1990	1995
Saw logs	32.8	58.9	72.6	67.7
Pulpwood	6.8	2.8	3.0	1.3
Veneer logs	2.2	1.9	2.3	6.0
Other products 1/	3.6	2.0	2.2	0.9
<b>Total</b>	<b>45.4</b>	<b>65.6</b>	<b>80.1</b>	<b>75.9</b>

<b>Hardwoods</b>				
Kind of mill	1966	1984	1990	1995
Saw logs	32.6	58.7	72.6	67.4
Pulpwood	6.7	2.8	3.0	1.3
Veneer logs	2.2	1.9	2.3	6.0
Other products 1/	3.6	2.0	2.1	0.9
<b>Total</b>	<b>45.1</b>	<b>65.4</b>	<b>80.0</b>	<b>75.6</b>

<b>Softwoods</b>				
Kind of mill	1966	1984	1990	1995
Saw logs	0.2	0.2	2/	0.2
Pulpwood	0.1	--	--	2/
Veneer logs	--	2/	2/	2/
Other products 1/	--	--	0.1	--
<b>Total</b>	<b>0.3</b>	<b>0.2</b>	<b>0.1</b>	<b>0.2</b>

1/ Includes logs and bolts used for handles, mine timbers, cooperage, and other products.

2/ Less than 50 thousand cubic feet.



Table 3.--Industrial roundwood production by Forest Survey Unit, species group, and type of product, Indiana, 1995 1 /

Species group	Saw logs		Veneer logs		Pulpwood		Cooperage		Other products 5/ MCF 3/	All products MCF 3/
	MBF 2/	MCF 3/	MBF 2/	MCF 3/	Cords 4/	MCF 3/	MBF 2/	MCF 3/		
<b>ALL UNITS</b>										
<b>HARDWOODS</b>										
Soft maple	16,313	2,778	752	103	1,319	104	--	--	*	2,985
Hard maple	21,912	3,732	1,804	247	1,173	93	--	--	--	4,071
River birch	70	11	21	3	--	--	--	--	--	14
Yellow birch	11	2	--	--	--	--	--	--	--	2
Hickory	18,375	3,019	103	14	3,557	281	--	--	*	3,314
Pecan	107	18	252	34	--	--	--	--	--	52
Hackberry	1,187	195	13	2	--	--	--	--	--	197
Persimmon	15	2	--	--	--	--	--	--	--	2
Beech	8,843	1,453	350	48	--	--	--	--	--	1,501
Ash	27,934	4,590	1,269	174	1,387	110	--	--	--	4,873
Honeylocust	*	*	--	--	--	--	--	--	--	*
Butternut	1	*	--	--	--	--	--	--	--	*
Black walnut	9,473	1,450	1,988	280	--	--	--	--	--	1,730
Sweetgum	2,694	443	643	88	--	--	--	--	--	531
Yellow-poplar	54,440	8,945	1,749	239	4,055	320	--	--	95	9,599
Tupelo	510	84	--	--	--	--	--	--	--	84
Sycamore	9,314	1,530	1,543	211	--	--	--	--	--	1,741
Cottonwood	8,494	1,318	171	23	--	--	--	--	--	1,342
Aspen	105	17	--	--	--	--	--	--	--	17
Black cherry	9,097	1,495	2,076	284	--	--	--	--	--	1,779
Red oak group	95,103	16,092	3,835	525	11,282	891	--	--	12	17,520
White oak group	55,369	9,368	6,740	922	13,457	1,063	1,824	301	12	11,666
Black locust	35	6	--	--	--	--	--	--	--	6
Willow	5	1	--	--	--	--	--	--	--	1
Sassafras	1,229	202	156	21	--	--	--	--	--	223
Basswood	4,570	751	163	22	--	--	--	--	--	773
Elm	2,928	481	42	6	--	--	--	--	--	487
Other hardwoods	16	3	--	--	4,591	363	--	--	--	365
Total	348,150	57,984	23,670	3,246	40,822	3,225	1,824	301	120	64,876
<b>SOFTWOODS</b>										
Redcedar	681	145	--	--	--	--	--	--	--	145
Shortleaf pine	1,633	284	--	--	195	15	--	--	--	299
Red pine	125	22	--	--	--	--	--	--	5	27
White pine	111	19	--	--	--	--	--	--	12	31
Other pine	3,128	543	--	--	3,402	269	--	--	--	812
Total	5,678	1,013	--	--	3,597	284	--	--	17	1,315
All-species	353,150	58,998	23,670	3,246	44,419	3,509	1,824	301	137	66,190

(Table 3 continued on next page)

(Table 3 continued)

Species group	Saw logs		Veneer logs		Pulpwood		Cooperage		Other products 5/ MCF 3/	All products MCF 3/
	MBF 2/	MCF 3/	MBF 2/	MCF 3/	Cords 4/	MCF 3/	MBF 2/	MCF 3/		
<b>HARDWOODS</b>										
Soft maple	4,197	715	332	45	550	43	--	--	--	804
Hard maple	8,879	1,512	1,338	183	492	39	--	--	--	1,734
River birch	--	--	19	3	--	--	--	--	--	3
Yellow birch	6	1	--	--	--	--	--	--	--	1
Hickory	7,142	1,173	30	4	1,466	116	--	--	--	1,293
Pecan	81	13	--	--	--	--	--	--	--	13
Hackberry	342	56	13	2	--	--	--	--	--	58
Persimmon	7	1	--	--	--	--	--	--	--	1
Beech	3,221	529	160	22	--	--	--	--	--	551
Ash	8,075	1,327	839	115	572	45	--	--	--	1,487
Black walnut	2,037	312	1,184	167	--	--	--	--	--	479
Sweetgum	1,580	260	358	49	--	--	--	--	--	309
Yellow-poplar	25,884	4,253	867	119	1,672	132	--	--	95	4,598
Tupelo	244	40	--	--	--	--	--	--	--	40
Sycamore	2,622	431	594	81	--	--	--	--	--	512
Cottonwood	1,574	244	--	--	--	--	--	--	--	244
Aspen	22	4	--	--	--	--	--	--	--	4
Black cherry	3,008	494	1,347	184	--	--	--	--	--	678
Red oak group	36,480	6,172	2,719	372	8,689	686	--	--	12	7,243
White oak group	20,531	3,474	4,728	647	10,653	842	1,436	237	12	5,211
Black locust	4	1	--	--	--	--	--	--	--	1
Willow	2	*	--	--	--	--	--	--	--	*
Sassafras	646	106	148	20	--	--	--	--	--	126
Basswood	748	123	154	21	--	--	--	--	--	144
Elm	882	145	14	2	--	--	--	--	--	147
Other hardwoods	5	1	--	--	1,893	150	--	--	--	150
Total	128,219	21,387	14,844	2,036	25,986	2,053	1,436	237	119	25,831
<b>SOFTWOODS</b>										
Redcedar	644	138	--	--	--	--	--	--	--	138
Shortleaf pine	1,089	189	--	--	195	15	--	--	--	205
Red pine	119	21	--	--	--	--	--	--	--	21
White pine	91	16	--	--	--	--	--	--	--	16
Other pine	2,085	362	--	--	3,402	269	--	--	--	631
Total	4,028	725	--	--	3,597	284	--	--	--	1,009
All species	132,247	22,112	14,844	2,036	29,583	2,337	1,436	237	119	26,840

(Table 3 continued on next page)



(Table 3 continued)

## LOWER WABASH UNIT

Species group	Saw logs		Veneer logs		Pulpwood		Cooperage		Other products 5/	All products
	MBF 2/	MCF 3/	MBF 2/	MCF 3/	Cords 4/	MCF 3/	MBF 2/	MCF 3/		
<b>HARDWOODS</b>										
Soft maple	4,571	778	415	57	718	57	--	--	*	892
Hard maple	4,428	754	38	5	636	50	--	--	--	810
River birch	70	11	--	--	--	--	--	--	--	11
Yellow birch	6	1	--	--	--	--	--	--	--	1
Hickory	6,337	1,041	34	5	1,951	154	--	--	*	1,200
Pecan	13	2	252	34	--	--	--	--	--	37
Hackberry	501	82	--	--	--	--	--	--	--	82
Persimmon	8	1	--	--	--	--	--	--	--	1
Beech	2,662	437	8	1	--	--	--	--	--	439
Ash	6,423	1,055	168	23	760	60	--	--	--	1,138
Honeylocust	*	*	--	--	--	--	--	--	--	*
Black walnut	2,141	328	267	38	--	--	--	--	--	365
Sweetgum	491	81	285	39	--	--	--	--	--	120
Yellow-poplar	15,670	2,575	801	110	2,224	176	--	--	--	2,860
Tupelo	157	26	--	--	--	--	--	--	--	26
Sycamore	3,485	573	863	118	--	--	--	--	--	691
Cottonwood	1,754	272	--	--	--	--	--	--	--	272
Aspen	61	10	--	--	--	--	--	--	--	10
Black cherry	2,199	361	21	3	--	--	--	--	--	364
Red oak group	24,634	4,168	229	31	2,420	191	--	--	*	4,391
White oak group	14,849	2,512	328	45	2,616	207	46	8	--	2,771
Black locust	14	2	--	--	--	--	--	--	--	2
Willow	2	*	--	--	--	--	--	--	--	*
Sassafras	358	59	8	1	--	--	--	--	--	60
Basswood	1,309	215	8	1	--	--	--	--	--	216
Elm	915	150	14	2	--	--	--	--	--	152
Other hardwoods	7	1	--	--	2,517	199	--	--	--	200
Total	93,065	15,498	3,738	512	13,842	1,093	46	8	1	17,112
<b>SOFTWOODS</b>										
Redcedar	8	2	--	--	--	--	--	--	--	2
Total	8	2	--	--	--	--	--	--	--	2
All species	93,073	15,500	3,738	512	13,842	1,093	46	8	1	17,114

(Table 3 continued on next page)

(Table 3 continued)

## NORTHERN UNIT

Species group	Saw logs		Veneer logs		Pulpwood		Cooperage		Other products 5/	All products
	MBF 2/	MCF 3/	MBF 2/	MCF 3/	Cords 4/	MCF 3/	MBF 2/	MCF 3/		
<b>HARDWOODS</b>										
Soft maple	6,712	1,143	6	1	51	4	--	--	--	1,148
Hard maple	7,007	1,193	385	53	46	4	--	--	--	1,249
River birch	--	--	2	*	--	--	--	--	--	*
Hickory	3,978	654	39	5	140	11	--	--	--	670
Pecan	14	2	--	--	--	--	--	--	--	2
Hackberry	289	47	--	--	--	--	--	--	--	47
Beech	2,554	420	182	25	--	--	--	--	--	445
Ash	8,866	1,457	104	14	55	4	--	--	--	1,475
Butternut	1	*	--	--	--	--	--	--	--	*
Black walnut	4,683	717	252	35	--	--	--	--	--	752
Sweetgum	144	24	--	--	--	--	--	--	--	24
Yellow-poplar	7,386	1,214	31	4	160	13	--	--	--	1,230
Tupelo	28	5	--	--	--	--	--	--	--	5
Sycamore	2,237	368	86	12	--	--	--	--	--	379
Cottonwood	4,787	743	171	23	--	--	--	--	--	766
Aspen	22	4	--	--	--	--	--	--	--	4
Black cherry	3,128	514	329	45	--	--	--	--	--	559
Red oak group	26,560	4,494	708	97	174	14	--	--	--	4,605
White oak group	15,781	2,670	1,111	152	188	15	--	--	--	2,837
Black locust	17	3	--	--	--	--	--	--	--	3
Willow	1	*	--	--	--	--	--	--	--	*
Sassafras	159	26	--	--	--	--	--	--	--	26
Basswood	2,167	356	1	*	--	--	--	--	--	356
Elm	980	161	12	2	--	--	--	--	--	163
Other hardwoods	4	1	--	--	181	14	--	--	--	15
<b>Total</b>	<b>97,504</b>	<b>16,214</b>	<b>3,417</b>	<b>469</b>	<b>995</b>	<b>79</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>16,761</b>
<b>SOFTWOODS</b>										
Red pine	6	1	--	--	--	--	--	--	5	6
White pine	4	1	--	--	--	--	--	--	12	13
<b>Total</b>	<b>10</b>	<b>2</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>17</b>	<b>19</b>
<b>All species</b>	<b>97,514</b>	<b>16,215</b>	<b>3,417</b>	<b>469</b>	<b>995</b>	<b>79</b>	<b>--</b>	<b>--</b>	<b>17</b>	<b>16,780</b>

(Table 3 continued on next page)



(Table 3 continued)

## UPLAND FLATS UNIT

Species group	Saw logs		Veneer logs		Pulpwood		Cooperage		Other products 5/ MCF 3/	All products MCF 3/
	MBF 2/	MCF 3/	MBF 2/	MCF 3/	Cords 4/	MCF 3/	MBF 2/	MCF 3/		
<b>HARDWOODS</b>										
Soft maple	833	142	--	--	--	--	--	--	--	142
Hard maple	1,598	272	43	6	--	--	--	--	--	278
Hickory	919	151	--	--	--	--	--	--	--	151
Hackberry	55	9	--	--	--	--	--	--	--	9
Beech	405	67	--	--	--	--	--	--	--	67
Ash	4,570	751	158	22	--	--	--	--	--	773
Black walnut	613	94	286	40	--	--	--	--	--	134
Sweetgum	479	79	--	--	--	--	--	--	--	79
Yellow-poplar	5,500	904	51	7	--	--	--	--	--	911
Tupelo	82	13	--	--	--	--	--	--	--	13
Sycamore	970	159	--	--	--	--	--	--	--	159
Cottonwood	379	59	--	--	--	--	--	--	--	59
Black cherry	762	125	378	52	--	--	--	--	--	177
Red oak group	7,429	1,257	180	25	--	--	--	--	--	1,282
White oak group	4,208	712	573	78	--	--	342	56	--	847
Sassafras	66	11	--	--	--	--	--	--	--	11
Basswood	346	57	--	--	--	--	--	--	--	57
Elm	151	25	2	*	--	--	--	--	--	25
Total	29,363	4,886	1,671	230	--	--	342	56	--	5,172
<b>SOFTWOODS</b>										
Redcedar	29	6	--	--	--	--	--	--	--	6
Shortleaf pine	544	95	--	--	--	--	--	--	--	95
White pine	17	3	--	--	--	--	--	--	--	3
Other pine	1,043	181	--	--	--	--	--	--	--	181
Total	1,632	285	--	--	--	--	--	--	--	285
All species	30,995	5,170	1,671	230	--	--	342	56	--	5,456

\* = Less than 1/2 unit of measure.

1/ Based on factors obtained from the Illinois Utilization Study, 1984.

2/ Thousand board feet, International 1/4-inch rule.

3/ Thousand cubic feet.

4/ Standard cords are 128 cubic feet consisting of 79 cubic feet of wood and 49 cubic feet of bark and air space.

5/ Other products include cabin logs and industrial fuelwood.

Columns and rows may not sum due to rounding.

Handle bolt data are included in the Saw logs category.

Table 4.--Saw-log production and receipts in Indiana by species group, 1990 and 1995

*(In thousand board feet) 1/*

Species group	Production			Receipts		
	1990	1995	Change	1990	1995	Change
<b>HARDWOODS</b>						
Ash	29,995	27,934	-2,061	35,431	32,752	-2,679
Aspen	637	105	-532	655	116	-539
Basswood	3,998	4,570	572	5,088	5,158	70
Beech	11,001	8,843	-2,158	12,063	9,804	-2,259
Birch	250	81	-169	327	10	-317
Blackgum	1,597	510	-1,087	1,557	160	-1,397
Black cherry	10,377	9,097	-1,280	12,420	10,828	-1,592
Cottonwood	8,963	8,494	-469	9,378	9,814	436
Elm	1,506	2,928	1,422	1,937	3,226	1,289
Pecan	1,287	107	-1,180	1,528	107	-1,421
Hickory	21,221	18,375	-2,846	25,392	21,039	-4,353
Hard maple	20,682	21,912	1,230	24,174	25,693	1,519
Soft maple	16,110	16,313	203	21,094	21,130	36
Red oak group	143,263	95,103	-48,160	166,435	107,119	-59,316
White oak group	64,617	55,369	-9,248	76,294	63,554	-12,740
Sweet gum	4,088	2,694	-1,394	4,118	3,144	-974
Sycamore	12,480	9,314	-3,166	14,191	10,269	-3,922
Black walnut	10,196	9,473	-723	13,705	10,597	-3,108
Yellow-poplar	72,504	54,440	-18,064	79,805	60,111	-19,694
Other hardwoods	707	2,489	1,782	735	2,895	2,160
<b>Total</b>	<b>435,419</b>	<b>348,151</b>	<b>-87,268</b>	<b>506,327</b>	<b>397,526</b>	<b>-108,801</b>
<b>SOFTWOODS</b>						
Pine	289	4,997	4,708	317	305	-12
Redcedar	100	681	581	107	686	579
<b>Total</b>	<b>389</b>	<b>5,678</b>	<b>5,289</b>	<b>424</b>	<b>991</b>	<b>567</b>
<b>All species</b>	<b>435,808</b>	<b>353,829</b>	<b>-81,979</b>	<b>506,751</b>	<b>398,518</b>	<b>-108,233</b>

1/ International 1/4-inch rule.



Table 5.--Saw-log production by Forest Survey Unit, county, and species group, Indiana, 1995

(In thousand board feet) 1/

Unit and county	Short-leaf pine			Total soft-woods			Hard maple	River birch	Yellow birch	Hickory	Pecan	Hack-berry	Persimmon	Beech	Ash	Butter-nut	Black walnut
	Red-cedar	Red-pine	White-pine	Other-pine	Soft-maple	Other-woods											
<b>KNOBS UNIT</b>																	
Brown	--	--	--	--	76	--	379	--	--	905	--	9	--	109	411	--	216
Clark	--	8	6	521	25	535	356	--	--	76	--	4	--	51	291	--	13
Crawford	77	--	--	--	100	77	434	--	--	336	7	7	--	211	326	--	37
Dubois	1	--	--	--	408	1	349	--	1	652	--	7	1	318	245	--	198
Floyd	--	8	3	521	17	532	413	--	--	89	--	4	--	66	406	--	6
Harrison	477	--	6	521	54	1,011	647	--	--	155	--	4	2	92	524	--	31
Jackson	--	529	40	--	528	651	568	--	1	511	--	40	--	301	566	--	82
Lawrence	--	--	28	--	378	28	615	--	1	362	61	61	--	317	574	--	133
Monroe	--	--	--	--	191	--	408	--	--	600	--	12	--	126	368	--	169
Morgan	--	--	--	--	131	--	373	--	--	310	--	10	--	138	478	--	295
Orange	48	--	--	--	195	48	406	--	--	458	7	11	--	253	334	--	107
Owen	--	--	--	--	545	--	1,169	--	1	912	--	79	--	339	1,096	--	450
Perry	--	--	--	--	79	--	569	--	--	404	--	6	--	135	391	--	32
Scott	--	8	3	521	511	538	555	--	--	439	--	40	--	177	337	--	7
Spencer	4	--	--	--	260	4	257	--	--	274	--	--	4	138	404	--	97
Warrick	--	--	--	--	146	--	103	--	--	102	--	--	--	64	244	--	21
Washington	38	529	31	--	552	604	1,280	--	1	558	7	49	--	388	1,081	--	142
Total	644	1,089	119	91	4,197	4,028	8,879	--	6	7,142	81	342	7	3,221	8,075	--	2,037
<b>LOWER WABASH UNIT</b>																	
Clay	--	--	--	--	431	--	611	70	1	479	--	27	--	373	763	--	109
Daviess	--	--	--	--	424	--	301	--	1	716	--	43	--	320	497	--	252
Gibson	--	--	--	--	336	--	72	--	--	422	--	43	--	74	278	--	60
Greene	--	--	--	--	467	--	721	--	--	960	7	92	--	269	583	--	350
Knox	--	--	--	--	404	--	117	--	--	482	--	54	--	78	322	--	89
Martin	1	--	--	--	407	1	427	--	1	693	7	7	1	349	335	--	182
Parke	--	--	--	--	196	--	468	--	1	373	--	39	--	288	610	--	312
Pike	6	--	--	--	394	6	187	--	--	568	--	45	--	135	409	--	207
Posey	--	--	--	--	322	--	106	--	--	209	--	--	--	72	259	--	23
Putnam	--	--	--	--	185	--	439	--	--	427	--	9	--	214	655	--	280
Sullivan	--	--	--	--	393	--	180	--	--	360	--	59	--	95	185	--	80
Vanderburgh	2	--	--	--	219	2	172	--	--	190	--	--	2	51	396	--	14
Vermillion	--	--	--	--	21	--	61	--	--	75	--	2	--	60	99	--	53
Vigo	--	--	--	--	372	--	564	--	1	383	--	81	--	286	1,032	--	129
Total	8	--	--	--	4,571	8	4,428	70	6	6,337	13	501	8	2,662	6,423	--	2,141

(Table 5 continued on next page)

(Table 5 continued)

Unit and county	Short-			Total					River birch	Yellow birch	Hickory	Pecan	Hack- berry	Persim- mon	Beech	Ash	Butter- nut	Black walnut
	Red- cedar	leaf pine	Red pine	White pine	Other pine	soft- woods	Soft maple	Hard maple										
<b>NORTHERN UNIT</b>																		
Adams	--	--	--	--	--	81	93	--	--	43	*	17	--	107	106	--	49	
Allen	--	--	--	--	--	421	690	--	--	176	1	49	--	98	696	--	509	
Bartholomew	--	--	6	--	--	38	128	6	--	138	*	9	--	39	163	--	58	
Benton	--	--	--	--	--	--	2	--	--	2	*	--	--	2	5	--	3	
Boone	--	--	--	--	--	3	9	--	--	7	*	1	--	4	43	--	16	
Carroll	--	--	--	--	--	131	240	--	--	41	*	--	--	28	207	--	85	
Cass	--	--	--	--	--	123	291	--	--	51	*	4	--	45	202	--	78	
Clinton	--	--	--	--	--	10	4	--	--	29	*	--	--	10	10	--	--	
De Kalb	--	--	--	--	--	584	422	--	--	221	1	50	--	165	479	--	264	
Decatur	--	--	--	--	--	64	206	--	--	198	1	--	--	71	398	--	107	
Delaware	--	--	--	--	--	--	8	--	--	10	*	--	--	--	14	--	17	
Elkhart	--	--	--	--	--	296	202	--	--	141	*	6	--	111	137	--	62	
Fountain	--	--	--	--	--	62	91	--	--	194	1	9	--	135	253	--	323	
Fulton	--	--	--	--	--	102	224	--	--	55	*	4	--	49	181	--	83	
Grant	--	--	--	--	--	22	29	--	--	10	*	--	--	10	55	--	44	
Hamilton	--	--	--	--	--	1	28	--	--	4	*	3	--	4	137	--	52	
Hancock	--	--	--	--	--	5	33	--	--	9	*	1	--	1	137	--	53	
Hendricks	--	--	--	--	--	2	20	--	--	43	*	1	--	2	61	--	33	
Henry	--	--	--	--	--	6	47	--	--	9	*	1	--	1	166	--	67	
Howard	--	--	--	--	--	4	6	--	--	6	*	1	--	9	8	--	2	
Huntington	--	--	--	--	--	42	45	--	--	10	*	2	--	11	36	--	35	
Jasper	--	--	--	--	--	3	2	--	--	3	*	--	--	2	2	--	--	
Jay	--	--	--	--	--	1	*	--	--	*	*	--	--	*	1	--	--	
Johnson	--	--	--	--	--	6	87	--	--	128	*	1	--	6	161	--	135	
Kosciusko	--	--	--	--	--	928	436	--	--	262	1	3	--	249	531	--	272	
La Grange	--	--	--	--	--	537	357	--	--	188	1	7	--	158	373	1	225	
La Porte	--	--	--	--	--	145	105	--	--	71	*	1	--	67	107	--	55	
Lake	--	--	--	--	--	--	36	--	--	--	--	--	--	--	72	--	--	
Madison	--	--	--	--	--	2	20	--	--	13	*	1	--	4	58	--	33	
Marion	--	--	--	--	--	7	65	--	--	26	*	3	--	4	187	--	105	
Marshall	--	--	--	--	--	244	169	--	--	135	*	1	--	121	166	--	87	
Miami	--	--	--	--	--	295	679	--	--	140	*	14	--	131	562	--	424	
Montgomery	--	--	--	--	--	44	80	--	--	177	1	9	--	43	123	--	110	
Noble	--	--	--	--	--	678	629	--	--	233	1	24	--	204	629	--	380	
Porter	--	--	--	--	--	4	40	--	--	4	*	--	--	4	76	--	--	
Pulaski	--	--	--	--	--	10	9	--	--	119	*	--	--	2	2	--	--	
Randolph	--	--	--	--	--	8	16	--	--	3	*	--	--	--	83	--	16	
Rush	--	--	--	--	--	9	19	--	--	7	*	--	--	18	515	--	24	
Shelby	--	--	--	--	--	12	54	--	--	28	*	1	--	17	220	--	55	

(Table 5 continued on next page)



(Table 5 continued)

Unit and county	Short-				Total				Ash	Butter-nut	Black walnut						
	Red-cedar	leaf pine	Red pine	White pine	Other pine	soft-woods	Soft maple	Hard maple				River birch	Yellow birch	Hickory	Pecan	Hack-berry	Persim-mon
<b>NORTHERN UNIT (continued)</b>																	
St. Joseph	--	--	--	--	--	--	306	168	--	--	110	*	1	--	100	180	68
Stark	--	--	--	--	--	--	37	34	--	--	219	1	--	--	21	33	15
Steuben	--	--	--	--	--	--	439	355	--	--	153	1	32	--	150	307	236
Tippecanoe	--	--	--	--	--	--	27	56	--	--	66	*	9	--	23	79	74
Tipton	--	--	--	--	--	--	5	11	--	--	10	*	--	--	6	12	29
Wabash	--	--	--	--	--	--	706	410	--	--	223	1	4	--	224	337	50
Warren	--	--	--	--	--	--	18	23	--	--	72	*	--	--	33	36	45
Wayne	--	--	--	--	--	--	25	105	--	--	20	*	1	--	1	279	62
Wells	--	--	--	--	--	--	9	9	--	--	6	*	5	--	3	22	3
White	--	--	--	4	--	4	5	6	--	--	79	*	--	--	6	8	6
Whitley	--	--	--	--	--	--	202	207	--	--	85	*	14	--	56	211	232
Total	--	--	6	4	--	10	6,712	7,007	--	--	3,978	14	289	--	2,554	8,866	4,683
<b>UPLAND FLATS UNIT</b>																	
Dearborn	--	--	--	--	--	--	29	291	--	--	45	--	4	--	5	1,926	226
Fayette	--	--	--	--	--	--	69	112	--	--	48	--	--	--	23	216	56
Franklin	--	--	--	--	--	--	172	329	--	--	120	--	--	--	39	899	103
Jefferson	14	8	--	3	521	546	271	368	--	--	216	--	41	--	101	283	1
Jennings	--	8	--	6	521	535	184	268	--	--	320	--	4	--	149	443	116
Ohio	--	--	--	--	--	--	--	29	--	--	--	--	--	--	--	35	--
Ripley	--	--	--	6	--	6	90	140	--	--	148	--	4	--	81	313	78
Switzerland	14	529	--	3	--	546	5	32	--	--	4	--	1	--	5	27	1
Union	--	--	--	--	--	--	13	30	--	--	20	--	--	--	1	429	32
Total	29	544	--	17	1,043	1,632	833	1,598	--	--	919	--	55	--	405	4,570	613
State total	681	1,633	125	111	3,128	5,678	16,313	21,912	70	11	18,375	107	1,187	15	8,843	27,934	9,473

(Table 5 continued on next page)

(Table 5 continued)

Unit and county	Sweet-gum	Yellow poplar	Tupelo	Sycamore	Cotton-wood	Aspen	Black cherry	Red oak group	White oak group	Black locust	Willow	Sassafras	Bass-wood	Elm	Other hardwoods	Total hardwoods species
<b>KNOBNS UNIT</b>																
Brown	27	1,675	--	86	21	--	130	2,578	1,145	--	--	80	90	28	--	7,965
Clark	13	867	4	16	7	--	104	1,214	735	--	--	8	4	1	--	3,789
Crawford	48	1,194	2	80	1	--	148	1,958	1,287	--	--	16	20	43	--	6,255
Dubois	326	2,356	69	266	27	1	343	3,044	1,657	--	--	12	18	133	--	10,433
Floyd	6	544	41	53	6	--	81	662	361	--	--	6	2	39	--	2,801
Harrison	33	1,117	30	48	9	--	130	1,507	784	--	--	8	8	3	--	5,186
Jackson	57	1,441	4	299	427	--	161	2,382	1,825	--	--	72	34	36	--	9,333
Lawrence	125	1,359	2	142	11	1	378	3,042	1,584	--	--	79	24	165	--	9,413
Monroe	24	1,419	--	95	55	2	137	2,145	920	--	1	49	48	27	2	6,799
Morgan	--	2,177	--	147	85	4	137	2,173	806	1	--	50	57	18	--	7,391
Orange	75	1,484	4	253	156	1	233	2,177	1,269	--	--	14	58	77	--	7,570
Owen	28	3,779	1	400	115	11	310	4,386	1,729	3	1	131	251	118	3	15,858
Perry	102	1,201	2	149	19	--	12	1,534	1,381	--	--	23	1	31	--	6,071
Scott	361	1,073	41	52	196	--	107	1,116	617	--	--	40	7	7	--	5,681
Spencer	100	965	2	220	104	--	77	1,577	1,219	--	--	3	52	55	--	5,807
Warrick	86	426	2	128	100	--	3	566	368	--	--	2	--	*	--	2,362
Washington	172	2,809	41	189	235	--	515	4,418	2,842	--	--	51	75	103	--	15,507
Total	1,580	25,884	244	2,622	1,574	22	3,008	36,480	20,531	4	2	646	748	882	5	128,219
<b>LOWER WABASH UNIT.</b>																
Clay	27	2,414	4	419	137	9	163	2,704	1,060	1	--	46	122	37	--	10,008
Daviess	21	768	28	366	137	3	272	2,520	2,300	--	--	1	240	223	--	9,433
Gibson	58	213	3	184	177	3	46	869	722	--	--	--	43	43	--	3,647
Greene	28	1,949	3	335	170	3	382	3,244	2,015	1	--	59	154	153	--	11,945
Knox	19	333	3	118	133	3	86	1,236	887	--	--	6	47	47	--	4,465
Martin	100	1,692	74	408	190	3	250	2,668	1,725	--	--	8	169	147	--	9,843
Parke	21	2,024	1	491	172	8	73	1,995	1,010	6	1	82	172	55	2	8,399
Pike	70	695	3	164	126	3	295	1,533	1,138	--	--	1	49	58	--	6,087
Posey	39	539	3	83	62	3	38	752	405	--	--	--	--	--	--	2,915
Putnam	8	1,974	1	297	125	11	114	2,055	831	3	1	53	92	25	5	7,804
Sullivan	9	543	3	118	72	3	88	988	626	--	--	14	66	56	--	3,936
Vanderburgh	37	459	28	71	47	3	52	723	401	--	--	2	3	3	--	2,870
Vermillion	2	240	--	69	38	2	8	250	158	1	--	3	20	3	--	1,166
Vigo	52	1,827	4	361	169	7	332	3,099	1,569	2	--	83	133	64	--	10,547
Total	491	15,670	157	3,485	1,754	61	2,199	24,634	14,849	14	2	358	1,309	915	7	93,065

(Table 5 continued on next page)



(Table 5 continued)

Unit and county	Sweet-gum	Yellow poplar	Tupelo	Sycamore	Cottonwood	Aspen	Black cherry	Red oak group	White oak group	Black locust	Willow	Sassafras	Basswood	Elm	Other hardwoods	Total hardwoods	All species
<b>NORTHERN UNIT</b>																	
Adams	--	90	--	187	215	--	13	324	286	--	--	--	80	37	--	1,728	1,728
Allen	--	118	--	105	127	--	237	1,922	712	--	--	6	172	25	--	6,063	6,063
Bartholomew	24	425	5	40	35	--	59	620	307	--	--	13	31	12	--	2,142	2,148
Benton	--	--	--	2	4	--	2	19	5	--	--	--	2	--	--	49	49
Boone	--	10	--	12	5	--	1	28	19	--	--	--	1	1	--	161	161
Carrroll	--	179	--	28	35	--	86	536	199	--	--	3	142	43	--	1,983	1,983
Cass	3	190	*	46	58	--	86	522	204	--	--	3	130	48	--	2,085	2,085
Clinton	--	34	--	35	18	2	2	78	40	--	--	--	4	4	--	280	280
De Kalb	--	179	--	129	260	--	131	1,279	828	--	--	6	98	31	--	5,127	5,127
Decatur	64	655	12	105	81	--	96	1,353	999	--	--	2	66	36	--	4,502	4,502
Delaware	--	26	--	1	1	--	8	81	28	--	--	2	3	--	--	199	199
Elkhart	--	85	--	87	98	--	118	542	228	--	--	3	41	46	--	2,202	2,202
Fountain	14	637	3	203	107	6	38	729	560	2	1	21	60	21	3	3,474	3,474
Fulton	3	105	*	18	16	--	61	554	392	--	--	3	133	56	--	2,040	2,040
Grant	--	26	--	17	30	--	9	134	101	--	--	--	16	9	--	513	513
Hamilton	--	8	--	8	3	--	3	36	29	--	--	--	--	--	--	316	316
Hancock	--	47	--	4	--	--	30	260	433	--	--	2	9	--	--	1,021	1,021
Hendricks	--	56	--	6	3	--	9	127	46	--	--	4	5	--	--	418	418
Henry	--	53	--	4	--	--	38	303	461	--	--	2	9	1	--	1,166	1,166
Howard	1	12	*	9	13	--	6	41	14	--	--	1	6	4	--	143	143
Huntington	--	21	--	6	2	--	20	100	65	--	--	2	16	3	--	416	416
Jasper	--	2	--	2	--	--	1	11	3	--	--	--	1	1	--	33	33
Jay	--	1	--	1	--	--	--	5	6	--	--	--	--	--	--	15	15
Johnson	--	243	--	12	6	--	54	607	179	--	--	16	27	2	--	1,673	1,673
Kosciusko	5	239	1	23	246	--	259	1,398	780	--	--	3	65	52	--	5,753	5,753
La Grange	--	240	--	57	179	3	173	1,008	500	5	--	2	59	26	1	4,100	4,100
La Porte	--	179	--	44	28	--	152	724	294	--	--	1	65	56	--	2,093	2,093
Lake	--	111	--	--	--	--	--	309	230	--	--	--	--	--	--	759	759
Madison	--	33	--	5	5	--	12	108	39	--	--	2	6	2	--	341	341
Marion	--	187	--	8	3	--	33	303	94	--	--	6	8	--	--	1,039	1,039
Marshall	5	188	1	66	89	--	135	722	400	--	--	1	69	74	--	2,674	2,674
Miami	9	356	2	147	215	--	248	1,795	514	--	--	10	291	104	--	5,935	5,935
Montgomery	--	460	--	133	30	2	27	445	334	1	--	14	29	16	--	2,079	2,079
Noble	--	234	--	88	208	2	258	1,766	761	4	--	7	121	33	--	6,259	6,259
Porter	--	115	--	4	4	--	4	394	314	--	--	--	4	4	--	970	970
Pulaski	--	9	--	2	1,039	--	8	1,251	279	--	--	--	1	1	--	2,733	2,733
Randolph	--	9	--	5	1	--	17	170	407	--	--	--	8	2	--	745	745
Rush	5	538	1	11	4	--	42	334	557	--	--	--	9	4	--	2,098	2,098
Shelby	4	176	1	16	--	--	47	424	670	--	--	2	11	--	--	1,739	1,739

(Table 5 continued on next page)

(Table 5 continued)

Unit and county	Sweet-gum	Yellow poplar	Tupelo	Sycamore	Cottonwood	Aspen	Black cherry	Red oak group	White oak group	Black locust	Willow	Sassafras	Basswood	Elm	Other hardwoods	Total hardwoods	All species
<b>NORTHERN UNIT (continued)</b>																	
St. Joseph	--	165	--	26	57	--	129	800	374	--	--	1	43	34	--	2,563	2,563
Stark	5	45	1	1	221	--	76	672	656	--	--	--	10	24	--	2,071	2,071
Steuben	--	147	--	127	263	2	98	966	565	5	--	8	92	39	1	3,986	3,986
Tippecanoe	--	99	--	43	19	2	29	290	169	--	--	11	26	14	--	1,036	1,036
Tipton	--	29	--	15	9	1	11	69	61	--	--	--	4	3	--	274	274
Wabash	3	306	*	200	468	--	143	733	466	--	--	2	108	89	--	4,473	4,473
Warren	--	145	--	55	30	2	2	175	106	--	--	3	21	7	--	774	774
Wayne	--	106	--	24	--	--	43	354	509	--	--	--	8	3	--	1,542	1,542
Wells	--	1	--	2	1	--	3	25	23	--	--	--	6	1	--	118	118
White	--	4	--	6	483	--	7	517	178	--	--	--	6	5	--	1,317	1,321
Whitley	--	60	--	60	74	--	64	596	366	--	--	2	44	11	--	2,284	2,284
Total	144	7,386	28	2,237	4,787	22	3,128	26,560	15,781	17	1	159	2,167	980	4	97,504	97,514
<b>UPLAND FLATS UNIT</b>																	
Dearborn	--	130	--	4	4	--	130	852	74	--	--	4	65	--	--	3,790	3,790
Fayette	*	355	--	140	*	--	95	515	702	--	--	2	19	*	--	2,354	2,354
Franklin	7	1,314	--	350	7	--	117	1,280	975	--	--	3	21	7	--	5,742	5,742
Jefferson	184	954	38	101	110	--	148	889	499	--	--	41	13	2	--	4,258	4,804
Jennings	191	1,086	3	258	176	--	123	2,042	979	--	--	10	138	87	--	6,576	7,110
Ohio	--	107	--	--	--	--	17	136	38	--	--	--	--	--	--	362	362
Ripley	91	964	3	101	78	--	87	1,381	485	--	--	4	75	52	--	4,174	4,180
Switzerland	5	98	38	9	3	--	16	83	45	--	--	--	2	2	--	376	922
Union	1	491	--	7	1	--	29	251	410	--	--	2	13	2	--	1,732	1,732
Total	479	5,500	82	970	379	--	762	7,429	4,208	--	--	66	346	151	--	29,363	30,995
State total	2,694	54,440	510	9,314	8,494	105	9,097	95,103	55,369	35	5	1,229	4,570	2,928	16	348,150	353,829

\* = Less than 500 board feet.

1/ International 1/4-inch rule.

Columns and rows may not sum due to rounding.



Table 6.--Saw-log production by Forest Survey Unit, species group,  
and State of destination, Indiana, 1995

(In thousand board feet) 1/

ALL UNITS						
Species	Total	Indiana	Michigan	Kentucky	Ohio	Other States
<b>HARDWOODS</b>						
Soft maple	16,313	16,070	149	10	84	--
Hard maple	21,912	21,515	111	75	211	--
River birch	70	10	--	60	--	--
Yellow birch	11	--	--	11	--	--
Hickory	18,375	18,298	11	10	56	--
Pecan	107	107	--	--	--	--
Hackberry	1,187	1,187	--	--	--	--
Persimmon	15	15	--	*	--	--
Beech	8,843	8,735	2	75	31	--
Ash	27,934	27,272	84	20	557	--
Honeylocust	*	*	--	--	--	--
Butternut	1	1	--	--	--	--
Black walnut	9,473	8,212	25	21	1,215	--
Sweetgum	2,694	2,694	--	--	--	--
Yellow-poplar	54,440	53,760	18	567	96	--
Tupelo	510	156	--	354	--	--
Sycamore	9,314	9,149	--	80	85	--
Cottonwood	8,494	8,404	--	80	10	--
Aspen	105	105	--	--	--	--
Black cherry	9,097	9,046	36	--	15	--
Red oak group	95,103	92,099	729	822	1,454	--
White oak group	55,369	53,523	276	561	1,009	--
Black locust	35	35	--	--	--	--
Willow	5	5	--	--	--	--
Sassafras	1,229	1,229	--	--	--	--
Basswood	4,570	4,360	20	71	119	--
Elm	2,928	2,840	--	71	17	--
Other hardwoods	16	16	--	--	--	--
Total	348,150	338,844	1,459	2,888	4,959	--
<b>SOFTWOODS</b>						
Redcedar	681	681	--	--	--	--
Shortleaf pine	1,633	69	--	--	--	1,564
Red pine	125	125	--	--	--	--
White pine	111	111	--	--	--	--
Other pine	3,128	--	--	--	--	3,128
Total	5,678	986	--	--	--	4,692
All species	353,829	339,830	1,459	2,888	4,959	4,692

(Table 6 continued on next page)

(Table 6 continued)

**KNOBS UNIT**

Species	Total	Indiana	Michigan	Kentucky	Ohio	Other States
<b>HARDWOODS</b>						
Soft maple	4,197	4,191	--	5	--	--
Hard maple	8,879	8,824	--	55	--	--
Yellow birch	6	--	--	6	--	--
Hickory	7,142	7,136	--	6	--	--
Pecan	81	81	--	--	--	--
Hackberry	342	342	--	--	--	--
Persimmon	7	7	--	*	--	--
Beech	3,221	3,184	--	37	--	--
Ash	8,075	8,069	--	6	--	--
Black walnut	2,037	2,029	--	8	--	--
Sweetgum	1,580	1,580	--	--	--	--
Yellow-poplar	25,884	25,619	--	265	--	--
Tupelo	244	67	--	177	--	--
Sycamore	2,622	2,607	--	15	--	--
Cottonwood	1,574	1,535	--	39	--	--
Aspen	22	22	--	--	--	--
Black cherry	3,008	3,008	--	--	--	--
Red oak group	36,480	36,041	--	439	--	--
White oak group	20,531	20,208	--	324	--	--
Black locust	4	4	--	--	--	--
Willow	2	2	--	--	--	--
Sassafras	646	646	--	--	--	--
Basswood	748	733	--	15	--	--
Elm	882	848	--	33	--	--
Other hardwoods	5	5	--	--	--	--
Total	128,219	126,788	--	1,431	--	--
<b>SOFTWOODS</b>						
Redcedar	644	644	--	--	--	--
Shortleaf pine	1,089	46	--	--	--	1,043
Red pine	119	119	--	--	--	--
White pine	91	91	--	--	--	--
Other pine	2,085	--	--	--	--	2,085
Total	4,028	900	--	--	--	3,128
All species	132,247	127,688	--	1,431	--	3,128

(Table 6 continued on next page)



(Table 6 continued)

LOWER WABASH UNIT

Species	Total	Indiana	Michigan	Kentucky	Ohio	Other States
<b>HARDWOODS</b>						
Soft maple	4,571	4,567	--	5	--	--
Hard maple	4,428	4,408	--	20	--	--
River birch	70	10	--	60	--	--
Yellow birch	6	--	--	6	--	--
Hickory	6,337	6,332	--	4	--	--
Pecan	13	13	--	--	--	--
Hackberry	501	501	--	--	--	--
Persimmon	8	8	--	*	--	--
Beech	2,662	2,625	--	38	--	--
Ash	6,423	6,414	--	8	--	--
Honeylocust	*	*	--	--	--	--
Black walnut	2,141	2,128	--	13	--	--
Sweetgum	491	491	--	--	--	--
Yellow-poplar	15,670	15,368	--	302	--	--
Tupelo	157	45	--	112	--	--
Sycamore	3,485	3,426	--	58	--	--
Cottonwood	1,754	1,720	--	34	--	--
Aspen	61	61	--	--	--	--
Black cherry	2,199	2,199	--	--	--	--
Red oak group	24,634	24,252	--	383	--	--
White oak group	14,849	14,612	--	237	--	--
Black locust	14	14	--	--	--	--
Willow	2	2	--	--	--	--
Sassafras	358	358	--	--	--	--
Basswood	1,309	1,259	--	50	--	--
Elm	915	882	--	33	--	--
Other hardwoods	7	7	--	--	--	--
Total	93,065	91,703	--	1,362	--	--
<b>SOFTWOODS</b>						
Redcedar	8	8	--	--	--	--
Total	8	8	--	--	--	--
All species	93,073	91,710	--	1,362	--	--

(Table 6 continued on next page)

(Table 6 continued)

**NORTHERN UNIT**

Species	Total	Indiana	Michigan	Kentucky	Ohio	Other States
<b>HARDWOODS</b>						
Soft maple	6,712	6,480	149	--	84	--
Hard maple	7,007	6,716	111	--	180	--
Hickory	3,978	3,924	11	--	43	--
Pecan	14	14	--	--	--	--
Hackberry	289	289	--	--	--	--
Beech	2,554	2,524	2	--	29	--
Ash	8,866	8,515	84	--	266	--
Butternut	1	1	--	--	--	--
Black walnut	4,683	3,533	25	--	1,125	--
Sweetgum	144	144	--	--	--	--
Yellow-poplar	7,386	7,334	18	--	35	--
Tupelo	28	28	--	--	--	--
Sycamore	2,237	2,186	--	--	52	--
Cottonwood	4,787	4,778	--	--	9	--
Aspen	22	22	--	--	--	--
Black cherry	3,128	3,079	36	--	13	--
Red oak group	26,560	24,841	729	--	991	--
White oak group	15,781	14,848	276	--	657	--
Black locust	17	17	--	--	--	--
Willow	1	1	--	--	--	--
Sassafras	159	159	--	--	--	--
Basswood	2,167	2,039	20	--	108	--
Elm	980	967	--	--	14	--
Other hardwoods	4	4	--	--	--	--
Total	97,504	92,440	1,459	--	3,604	--
<b>SOFTWOODS</b>						
Red pine	6	6	--	--	--	--
White pine	4	4	--	--	--	--
Total	10	10	--	--	--	--
All species	97,514	92,451	1,459	--	3,604	--

(Table 6 continued on next page)



(Table 6 continued)

**UPLAND FLATS**

Species	Total	Indiana	Michigan	Kentucky	Ohio	Other States
<b>HARDWOODS</b>						
Soft maple	833	833	--	--	--	--
Hard maple	1,598	1,567	--	--	31	--
Hickory	919	905	--	--	13	--
Hackberry	55	55	--	--	--	--
Beech	405	403	--	--	2	--
Ash	4,570	4,273	--	6	291	--
Black walnut	613	523	--	--	90	--
Sweetgum	479	479	--	--	--	--
Yellow-poplar	5,500	5,439	--	--	61	--
Tupelo	82	17	--	65	--	--
Sycamore	970	929	--	7	33	--
Cottonwood	379	372	--	7	1	--
Black cherry	762	760	--	--	2	--
Red oak group	7,429	6,966	--	--	463	--
White oak group	4,208	3,856	--	--	352	--
Sassafras	66	66	--	--	--	--
Basswood	346	329	--	6	11	--
Elm	151	143	--	5	3	--
Total	29,363	27,913	--	95	1,355	--
<b>SOFTWOODS</b>						
Redcedar	29	29	--	--	--	--
Shortleaf pine	544	23	--	--	--	521
White pine	17	17	--	--	--	--
Other pine	1,043	--	--	--	--	1,043
Total	1,632	68	--	--	--	1,564
All species	30,995	27,981	--	95	1,355	1,564

\* = Less than 500 board feet.

1/ International 1/4-inch rule.

Columns and rows may not sum due to rounding.

Table 7.--Saw-log receipts by Forest Survey Unit, species group,  
and State of origin, Indiana, 1995

(In thousand board feet) 1/

Species group	ALL UNITS						
	All States	State of origin					Other States
	Indiana	Illinois	Michigan	Kentucky	Ohio		
<b>HARDWOODS</b>							
Soft maple	21,130	16,070	2,357	1,356	858	487	1
Hard maple	25,693	21,515	738	1,328	1,677	431	4
River birch	10	10	--	--	--	--	--
Hickory	21,039	18,298	1,401	452	743	145	--
Pecan	107	107	--	--	--	--	--
Hackberry	1,454	1,187	166	36	10	55	--
Persimmon	20	15	--	--	5	--	--
Beech	9,804	8,735	381	428	155	105	--
Ash	32,752	27,272	1,472	1,152	2,005	828	22
Honeylocust	*	*	--	--	--	--	--
Butternut	2	1	--	1	--	--	--
Black walnut	10,597	8,212	789	538	764	272	23
Sweetgum	3,144	2,694	162	--	288	--	--
Yellow-poplar	60,111	53,760	2,898	991	2,214	240	8
Tupelo	160	156	4	--	--	--	--
Sycamore	10,269	9,149	676	233	66	146	1
Cottonwood	9,814	8,404	764	298	115	232	--
Aspen	116	105	8	3	--	--	--
Black cherry	10,828	9,046	431	578	572	166	35
Red oak group	107,119	92,099	6,107	3,726	3,580	1,559	49
White oak group	63,554	53,523	3,884	1,404	2,648	1,989	104
Black locust	50	35	9	6	--	--	--
Willow	5	5	--	--	--	--	--
Sassafras	1,347	1,229	63	31	11	13	--
Basswood	5,158	4,360	230	428	14	125	1
Elm	3,226	2,840	165	182	5	34	--
Other hardwoods	17	16	--	1	--	--	--
<b>Total</b>	<b>397,526</b>	<b>338,844</b>	<b>22,705</b>	<b>13,170</b>	<b>15,730</b>	<b>6,828</b>	<b>249</b>
<b>SOFTWOODS</b>							
Redcedar	686	681	--	--	5	--	--
Shortleaf pine	69	69	--	--	--	--	--
Red pine	125	125	--	--	--	--	--
White pine	111	111	--	--	--	--	--
<b>Total</b>	<b>991</b>	<b>986</b>	<b>--</b>	<b>--</b>	<b>5</b>	<b>--</b>	<b>--</b>
<b>All species</b>	<b>398,518</b>	<b>339,830</b>	<b>22,705</b>	<b>13,170</b>	<b>15,735</b>	<b>6,828</b>	<b>249</b>

\* = less than 500 board feet.

(Table 7 continued on next page)

1/ International 1/4-inch rule.

Rows and columns may not sum due to rounding.

(Table 7 continued)

Species group	KNOBS UNIT						
	All States	State of origin					Other States
	Indiana	Illinois	Michigan	Kentucky	Ohio		
<b>HARDWOODS</b>							
Soft maple	5,993	4,955	162	--	848	29	--
Hard maple	11,138	9,395	81	--	1,652	10	--
Hickory	7,700	6,816	133	--	740	10	--
Pecan	94	94	--	--	--	--	--
Hackberry	540	519	--	--	10	10	--
Persimmon	20	15	--	--	5	--	--
Beech	3,496	3,295	37	--	154	10	--
Ash	8,993	7,401	96	--	1,494	2	--
Honeylocust	*	*	--	--	--	--	--
Black walnut	3,526	2,469	297	--	741	--	19
Sweetgum	2,221	1,909	26	--	286	--	--
Yellow-poplar	28,441	26,282	334	--	1,788	31	6
Tupelo	47	47	--	--	--	--	--
Sycamore	2,656	2,548	38	--	60	10	--
Cottonwood	1,658	1,522	11	--	115	10	--
Aspen	2	2	--	--	--	--	--
Black cherry	4,304	3,590	123	--	550	10	32
Red oak group	43,261	39,190	714	--	3,320	31	6
White oak group	24,806	22,281	471	--	2,023	31	--
Sassafras	762	741	--	--	11	10	--
Basswood	549	543	--	--	6	--	--
Elm	821	816	--	--	5	--	--
Total	151,029	134,430	2,522	--	13,807	207	63
<b>SOFTWOODS</b>							
Redcedar	686	681	--	--	5	--	--
Shortleaf pine	69	69	--	--	--	--	--
Red pine	125	125	--	--	--	--	--
White pine	66	66	--	--	--	--	--
Total	946	941	--	--	5	--	--
All species	151,975	135,370	2,522	--	13,812	207	63

(Table 7 continued on next page)



(Table 7 continued)

Species group	LOWER WABASH UNIT						
	All States	Indiana	Illinois	Michigan	Kentucky	Ohio	Other States
<b>HARDWOODS</b>							
Soft maple	6,080	3,906	2,175	--	--	--	--
Hard maple	4,505	3,841	644	20	--	--	--
River birch	10	10	--	--	--	--	--
Hickory	6,996	5,776	1,215	--	--	6	--
Hackberry	578	412	166	--	--	--	--
Beech	2,941	2,619	322	--	--	--	--
Ash	8,292	6,932	1,335	--	16	8	--
Black walnut	2,851	2,241	487	--	--	123	--
Sweetgum	372	236	136	--	--	--	--
Yellow-poplar	16,296	13,795	2,501	--	--	--	--
Tupelo	44	40	4	--	--	--	--
Sycamore	3,905	3,332	572	--	--	--	--
Cottonwood	2,484	1,796	687	--	--	--	--
Aspen	64	60	4	--	--	--	--
Black cherry	2,013	1,713	299	--	--	--	--
Red oak group	25,030	19,815	5,215	--	--	--	--
White oak group	14,334	11,094	3,240	--	--	--	--
Black locust	30	21	9	--	--	--	--
Willow	5	5	--	--	--	--	--
Sassafras	375	311	63	--	--	--	--
Basswood	1,577	1,358	219	--	--	--	--
Elm	984	826	158	--	--	--	--
Other hardwoods	15	15	--	--	--	--	--
Total	99,778	80,153	19,453	20	16	137	--
All species	99,778	80,153	19,453	20	16	137	--

(Table 7 continued on next page)

(Table 7 continued)

Species group	NORTHERN UNIT						
	All States	State of origin					Other States
	Indiana	Illinois	Michigan	Kentucky	Ohio		
<b>HARDWOODS</b>							
Soft maple	8,455	6,610	20	1,356	9	458	1
Hard maple	8,984	7,218	13	1,308	22	420	4
Hickory	5,901	5,267	53	452	--	129	--
Pecan	14	14	--	--	--	--	--
Hackberry	334	254	--	36	--	44	--
Beech	3,149	2,605	21	428	--	95	--
Ash	12,932	10,754	41	1,152	216	746	22
Butternut	2	1	--	1	--	--	--
Black walnut	4,047	3,329	5	538	22	149	4
Sweetgum	175	175	--	--	--	--	--
Yellow-poplar	8,829	7,664	64	991	11	97	2
Tupelo	28	28	--	--	--	--	--
Sycamore	2,807	2,368	66	233	4	135	1
Cottonwood	5,324	4,738	66	298	--	222	--
Aspen	50	43	4	3	--	--	--
Black cherry	4,091	3,324	9	578	22	155	4
Red oak group	34,327	28,612	178	3,726	256	1,513	43
White oak group	22,520	18,256	174	1,404	624	1,958	104
Black locust	20	14	--	6	--	--	--
Sassafras	209	175	--	31	--	3	--
Basswood	2,767	2,194	10	428	9	125	1
Elm	1,244	1,021	7	182	--	34	--
Other hardwoods	2	1	--	1	--	--	--
Total	126,212	104,665	731	13,150	1,196	6,284	186
<b>SOFTWOODS</b>							
White pine	4	4	--	--	--	--	--
Total	4	4	--	--	--	--	--
All species	126,216	104,669	731	13,150	1,196	6,284	186

(Table 7 continued on next page)

(Table 7 continued)

Species group	UPLAND FLATS UNIT						
	All States	State of origin					Other States
		Indiana	Illinois	Michigan	Kentucky	Ohio	
<b>HARDWOODS</b>							
Soft maple	601	599	--	--	1	--	--
Hard maple	1,065	1,062	--	--	3	1	--
Hickory	442	439	--	--	3	--	--
Hackberry	3	3	--	--	--	--	--
Beech	218	217	--	--	1	--	--
Ash	2,535	2,185	--	--	279	72	--
Black walnut	173	173	--	--	--	--	--
Sweetgum	376	374	--	--	1	--	--
Yellow-poplar	6,546	6,019	--	--	415	112	--
Tupelo	41	41	--	--	--	--	--
Sycamore	902	900	--	--	1	--	--
Cottonwood	348	348	--	--	--	--	--
Black cherry	420	419	--	--	--	1	--
Red oak group	4,501	4,482	--	--	4	15	--
White oak group	1,893	1,892	--	--	1	--	--
Sassafras	1	1	--	--	--	--	--
Basswood	265	265	--	--	--	--	--
Elm	177	177	--	--	--	--	--
Total	20,507	19,596	--	--	711	200	--
<b>SOFTWOODS</b>							
White pine	41	41	--	--	--	--	--
Total	41	41	--	--	--	--	--
All species	20,549	19,638	--	--	711	200	--



Table 8.--Pulpwood production in Indiana by species group, 1966, 1976, 1984, 1990, and 1995

*(In standard cords, unpeeled)*

Species group	1966	1976	1984	1990	1995
<b>ROUNDWOOD</b>					
Soft hardwoods	45,365	17,555	14,912	11,594	5,375
Hard hardwoods	48,064	40,379	20,420	26,332	35,448
Softwoods	662	--	--	--	3,597
Total	94,091	57,934	35,332	37,926	44,419
<b>RESIDUE</b>					
Hardwoods	2,349	114,060	170,568	151,108	230,698
Softwoods	--	--	--	266	35,303
All material	96,440	171,994	205,900	189,300	310,421

Table 9.--Roundwood pulpwood production by Forest Survey Unit and species group, Indiana, 1995

(In standard cords, unpeeled) 1/

Species group	All Units	Knobs Unit	Lower Wabash Unit	Northern Unit	Upland Flats Unit
<b>HARDWOODS</b>					
Soft maple	1,319	550	718	51	--
Hard maple	1,173	492	636	46	--
Hickory	3,557	1,466	1,951	140	--
Ash	1,387	572	760	55	--
Yellow-poplar	4,055	1,672	2,224	160	--
Red oak group	11,282	8,689	2,420	174	--
White oak group	13,457	10,653	2,616	188	--
Other hardwoods	4,591	1,893	2,517	181	--
Total	40,822	25,986	13,842	995	--
<b>SOFTWOODS</b>					
Shortleaf pine	195	195	--	--	--
Other softwoods	3,402	3,402	--	--	--
Total	3,597	3,597	--	--	--
All species	44,419	29,583	13,842	995	--

1/ A standard cord, unpeeled, is 128 cubic feet consisting of 79 cubic feet of wood and 49 cubic feet of bark and air space.

Table 10.--Veneer log and bolt production in Indiana by species group,  
1966, 1976, 1984, 1990, and 1995

(In thousand board feet) 1/

Species group	1966	1976	1984	1990	1995
Ash	381	609	461	640	1,269
Basswood	2	15	16	8	163
Black cherry	140	99	34	708	2,076
Cottonwood	1,129	668	383	464	171
Sweetgum	502	386	165	165	643
Pecan	732	354	231	298	252
Hard maple	1,080	273	234	1,895	1,804
Soft maple	36	266	314	200	752
Red oak group	429	1,683	3,184	2,620	3,835
White oak group	1,681	5,428	4,968	4,549	6,740
Sycamore	565	525	330	271	1,543
Black walnut	6,412	3,426	2,889	3,472	1,988
Yellow-poplar	2,469	1,242	565	761	1,749
Other hardwoods	205	6	382	693	685
Pine	--	--	21	21	--
All species	17,729	16,956	14,177	16,765	23,670

1/ International 1/4-inch rule.



Table 11.--Veneer log and bolt production by Forest Survey Unit, species group, and destination, Indiana, 1995

(In thousand board feet) 1/

ALL UNITS

Species group	Total	Destination										Other countries	
		Indiana	Illinois	Michigan	Missouri	Wisconsin	Kentucky	Ohio	States	Canada			
Soft maple	752	747	--	6	--	--	--	--	--	--	--	--	--
Hard maple	1,804	1,485	--	14	--	--	--	195	87	9	14	--	--
River birch	21	21	--	--	--	--	--	--	--	--	--	--	--
Hickory	103	68	--	34	--	--	--	--	--	--	--	--	--
Pecan	252	251	--	--	--	--	--	--	--	1	--	--	--
Hackberry	13	13	--	--	--	--	--	--	--	--	--	--	--
Beech	350	168	--	182	--	--	--	--	--	--	--	--	--
Ash	1,269	1,013	--	3	--	--	--	18	223	2	10	--	--
Black walnut	1,988	1,486	--	10	--	--	42	140	87	207	16	--	--
Sweetgum	643	643	--	--	--	--	--	--	--	--	--	--	--
Yellow-poplar	1,749	1,749	--	--	--	--	--	--	--	--	--	--	--
Sycamore	1,543	1,457	--	86	--	--	--	--	--	--	--	--	--
Cottonwood	171	--	--	171	--	--	--	--	--	--	--	--	--
Black cherry	2,076	1,952	--	51	62	--	--	8	--	2	--	--	--
Red oak group	3,835	2,819	--	14	250	6	242	349	156	626	--	--	--
White oak group	6,740	3,065	57	62	815	162	431	772	209	824	--	--	--
Sassafras	156	156	--	--	--	--	--	--	--	--	--	--	--
Basswood	163	161	--	--	--	--	--	--	--	--	2	--	--
Elm	42	--	--	7	--	--	--	--	--	35	--	--	--
<b>Total</b>	<b>23,670</b>	<b>17,254</b>	<b>57</b>	<b>640</b>	<b>853</b>	<b>210</b>	<b>1,034</b>	<b>1,169</b>	<b>815</b>	<b>815</b>	<b>824</b>	<b>815</b>	<b>824</b>

\* = Less than 500 board feet.

1/ International 1/4-inch rule.

Columns and rows may not sum due to rounding.

(Table 11 continued on next page)

(Table 11 continued)

## KNOBS UNIT

Species group	Total	Destination										Other States	Canada	Other countries	
		Indiana	Illinois	Michigan	Missouri	Wisconsin	Kentucky	Ohio	Other						
Soft maple	332	332	--	--	--	--	--	--	--	--	--	--	--	--	--
Hard maple	1,338	1,245	--	--	--	--	--	81	--	--	--	9	--	3	--
River birch	19	19	--	--	--	--	--	--	--	--	--	--	--	--	--
Hickory	30	30	--	--	--	--	--	--	--	--	--	--	--	--	--
Hackberry	13	13	--	--	--	--	--	--	--	--	--	--	--	--	--
Beech	160	160	--	--	--	--	--	--	--	--	--	--	--	--	--
Ash	839	692	--	--	--	--	--	144	--	--	--	1	--	2	--
Black walnut	1,184	963	--	--	--	--	28	56	--	--	134	--	--	3	--
Sweetgum	358	358	--	--	--	--	--	--	--	--	--	--	--	--	--
Yellow-poplar	867	867	--	--	--	--	--	--	--	--	--	--	--	--	--
Sycamore	594	594	--	--	--	--	--	--	--	--	--	--	--	--	--
Black cherry	1,347	1,297	--	--	--	--	49	--	--	--	--	2	--	--	--
Red oak group	2,719	2,112	--	--	--	--	238	6	--	--	333	30	--	--	--
White oak group	4,728	2,236	--	--	--	773	513	154	--	732	198	121	--	--	--
Sassafras	148	148	--	--	--	--	--	--	--	--	--	--	--	--	--
Basswood	154	153	--	--	--	--	--	--	--	--	--	--	--	1	--
Elm	14	--	--	--	--	--	--	--	--	--	14	--	--	--	--
Total	14,844	11,219	--	--	--	773	800	188	--	1,013	691	160	--	--	--

(Table 11 continued on next page)

(Table 11 continued)

LOWER WABASH UNIT

Species group	Total	Destination										
		Indiana	Illinois	Michigan	Missouri	Wisconsin	Kentucky	Ohio	Other States	Canada	Other countries	
Soft maple	415	415	--	--	--	--	--	--	--	--	--	--
Hard maple	38	36	--	--	--	--	--	--	--	--	--	2
Hickory	34	34	--	--	--	--	--	--	--	--	--	--
Pecan	252	251	--	--	--	--	--	--	--	1	--	--
Beech	8	8	--	--	--	--	--	--	--	--	--	--
Ash	168	136	--	--	--	--	--	31	--	*	1	--
Black walnut	267	208	--	--	--	7	--	14	35	--	2	--
Sweetgum	285	285	--	--	--	--	--	--	--	--	--	--
Yellow-poplar	801	801	--	--	--	--	--	--	--	--	--	--
Sycamore	863	863	--	--	--	--	--	--	--	--	--	--
Black cherry	21	21	--	--	--	--	--	--	--	--	--	--
Red oak group	229	212	--	--	--	*	--	--	--	--	17	--
White oak group	328	204	57	--	--	--	--	--	--	--	67	--
Sassafras	8	8	--	--	--	--	--	--	--	--	--	--
Basswood	8	8	--	--	--	--	--	--	--	--	--	--
Elm	14	--	--	--	--	--	--	--	14	--	--	--
Total	3,738	3,489	57	--	--	7	--	45	50	--	89	--

(Table 11 continued on next page)



(Table 11 continued)

Species group	NORTHERN UNIT										
	Total	Indiana	Illinois	Michigan	Missouri	Wisconsin	Kentucky	Ohio	Other States	Canada	Other countries
Soft maple	6	--	--	6	--	--	--	--	--	--	--
Hard maple	385	182	--	14	--	--	--	174	6	1	8
River birch	2	2	--	--	--	--	--	--	--	--	--
Hickory	39	4	--	34	--	--	--	--	--	--	--
Beech	182	--	--	182	--	--	--	--	--	--	--
Ash	104	69	--	3	--	--	--	7	18	*	6
Black walnut	252	140	--	10	--	--	--	62	9	21	9
Yellow-poplar	31	31	--	--	--	--	--	--	--	--	--
Sycamore	86	--	--	86	--	--	--	--	--	--	--
Cottonwood	171	--	--	171	--	--	--	--	--	--	--
Black cherry	329	268	--	51	--	6	--	3	--	*	--
Red oak group	708	410	--	14	--	11	--	165	--	16	92
White oak group	1,111	278	--	62	42	28	--	281	40	11	371
Basswood	1	--	--	--	--	--	--	--	--	--	1
Elm	12	--	--	7	--	--	--	--	--	5	--
Total	3,417	1,384	--	640	42	46	--	692	73	54	487
UPLAND FLATS UNIT											
Hard maple	43	22	--	--	--	--	--	21	--	--	1
Ash	158	115	--	--	--	--	--	11	30	*	1
Black walnut	286	174	--	--	--	7	--	78	7	17	2
Yellow-poplar	51	51	--	--	--	--	--	--	--	--	--
Black cherry	378	366	--	--	7	--	--	5	--	*	--
Red oak group	180	86	--	--	--	--	--	77	--	--	17
White oak group	573	348	--	--	--	8	--	150	--	--	67
Elm	2	--	--	--	--	--	--	--	--	2	--
Total	1,671	1,162	--	--	7	15	342	38	20	88	88

Table 12.--Veneer log and bolt production by Forest Survey Unit, county, and species group, Indiana, 1995

(In thousand board feet) 1/

Unit and county	Soft maple	Hard maple	River birch	Hickory	Pecan	Hack-berry	Beech	Ash	Black walnut	Sweet-gum	Yellow poplar	Sycamore	Cotton-wood	Black cherry	Red oak group	White oak group	Sassafras	Bass-wood	Elm	All species
<b>KNOS UNIT</b>																				
Brown	--	108	--	6	--	--	--	2	17	35	17	14	--	111	242	374	--	--	--	925
Clark	5	7	--	1	--	3	--	--	85	--	7	--	--	63	86	446	--	--	--	702
Crawford	15	76	--	1	--	5	8	22	126	35	36	22	--	77	245	591	8	8	--	1,274
Dubois	205	234	--	--	--	--	118	357	188	57	376	285	--	160	759	991	109	110	4	3,951
Floyd	3	6	--	1	--	5	--	14	85	--	9	--	--	63	86	392	--	1	--	664
Harrison	10	18	--	1	--	--	8	21	11	--	20	8	--	11	42	76	8	9	--	243
Jackson	--	66	--	4	--	--	--	11	20	--	4	--	--	139	81	68	--	--	--	397
Lawrence	--	125	--	5	--	--	--	13	22	35	19	14	--	134	297	92	--	--	4	762
Monroe	--	199	--	5	--	--	--	92	166	35	48	14	--	232	323	499	--	--	--	1,616
Morgan	--	155	--	4	--	--	--	90	166	--	33	--	--	232	127	459	--	--	--	1,271
Orange	10	115	--	3	--	--	8	24	20	35	34	22	--	28	141	284	8	8	--	739
Owen	65	139	--	3	--	--	--	78	141	92	188	185	--	67	116	278	--	--	3	1,355
Perry	10	61	--	1	--	--	8	22	10	35	31	22	--	11	131	70	8	9	--	429
Spencer	10	18	--	1	--	--	8	20	11	--	17	8	--	11	42	76	8	9	--	240
Warrick	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	1	--	2
Washington	--	11	--	--	--	--	74	118	--	--	26	--	--	10	1	31	--	--	3	274
Total	332	1,338	19	30	--	13	160	839	1,184	358	867	594	--	1,347	2,719	4,728	148	154	14	14,844
<b>LOWER WABASH UNIT</b>																				
Clay	65	--	--	--	--	--	--	--	--	57	146	171	--	--	--	--	--	--	--	439
Daviess	65	--	--	--	--	--	--	--	--	57	147	171	--	--	--	57	--	--	6	503
Gibson	16	--	--	7	50	--	--	--	5	--	--	--	--	--	--	76	--	--	--	154
Greene	65	11	--	--	--	--	74	117	117	57	172	171	--	10	--	39	--	--	4	720
Knox	16	--	--	7	50	--	--	--	5	--	--	--	--	--	--	76	--	--	--	154
Martin	65	--	--	--	--	--	--	--	--	57	146	171	--	--	92	--	--	--	4	535
Pike	26	16	--	7	50	--	8	20	15	--	16	8	--	11	44	40	8	8	--	278
Posey	16	--	--	7	50	--	--	--	5	--	--	--	--	--	--	--	--	--	--	78
Putnam	--	11	--	--	--	--	74	117	--	--	26	--	--	--	--	39	--	--	--	267
Sullivan	65	--	--	--	--	--	--	--	--	57	147	171	--	--	--	--	--	--	--	440
Vanderburgh	16	--	--	7	50	--	--	--	5	--	--	--	--	--	--	--	--	--	--	78
Vermillion	--	--	--	--	--	--	--	--	--	--	--	--	--	--	93	--	--	--	--	93
Total	415	38	--	34	252	--	8	168	267	285	801	863	--	21	229	328	8	8	14	3,738

(Table 12 continued on next page)

(Table 12 continued)

Unit and county	Red													White		All species				
	Soft maple	Hard maple	River birch	Hickory	Pecan	Hack-berry	Beech	Ash	Black walnut	Sweet-gum	Yellow poplar	Sycamore	Cotton-wood	Black cherry	Red oak group		White oak group	Sassafras	Bass-wood	Elm
<b>NORTHERN UNIT</b>																				
Adams											11	10								21
Allen	*										7				29	37				74
Bartholomew		71							16						48	152				318
Benton																				*
Boone																				*
Carroll																				1
Cass																			1	1
Clinton																				*
De Kalb	1					18						8	12		20	43				102
Decatur											7				21	51				79
Delaware																				*
Elkhart	*					12														13
Fountain						15						12			108					135
Fulton																			1	1
Grant																				*
Hancock																				*
Hendricks																				*
Henry																				*
Howard																				*
Huntington																				*
Jasper																				*
Johnson		172	2	39			104	203			31				98	376				1,196
Kosciusko	1					28						12			21	41			1	103
La Grange	1					17														18
La Porte																			1	1
Madison																				*
Marion		71							16						32	152				318
Marshall						13													1	14
Miami	*					14						9	10		28				4	65
Montgomery												8								8
Noble	1					23					5	10	10	12	27	40				118
Porter																				*
Pulaski													49		19					68

(Table 12 continued on next page)

**NORTHERN UNIT (continued)**



(Table 12 continued)

Unit and county	Soft maple	Hard maple	River birch	Hickory	Pecan	Hack-berry	Beech	Ash	Black walnut	Sweet-gum	Yellow poplar	Sycamore	Cottonwood	Black cherry	Red oak group	White oak group	Sassafras	Basswood	Elm	All species
<b>NORTHERN UNIT (continued)</b>																				
Randolph	--	--	--	--	--	--	--	--	--	--	--	--	--	--	108	--	--	*	--	108
Rush	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	*	--	*
Shelby	--	71	--	--	--	--	--	16	--	--	--	--	--	48	32	186	--	*	--	353
St. Joseph	*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	*	--	*
Starke	--	--	--	--	--	--	--	--	--	--	--	--	10	--	--	34	--	*	--	45
Steuben	*	--	--	--	--	17	--	--	--	--	--	8	12	--	--	--	--	*	*	38
Tippecanoe	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	*	--	*
Tipton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	*	--	*
Wabash	1	--	--	--	--	25	--	--	--	--	--	12	22	--	--	--	--	*	3	63
Warren	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	*	--	0
Wayne	--	--	--	--	--	--	--	--	--	--	--	--	--	--	135	--	--	*	--	135
Wells	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	*	--	*
White	--	--	--	--	--	--	--	--	--	--	--	--	23	--	--	--	--	*	--	23
Whitley	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	*	--	*
Total	6	385	2	39	--	182	104	252	31	86	171	329	708	1,111	12	1	--	--	12	3,417
<b>UPLAND FLATS UNIT</b>																				
Dearborn	--	--	--	--	--	--	--	--	--	--	--	--	--	70	--	68	--	--	--	138
Fayette	--	--	--	--	--	--	--	--	--	--	--	--	--	--	40	--	--	--	--	40
Franklin	--	--	--	--	--	--	--	--	--	--	--	--	--	70	123	123	--	--	--	317
Jefferson	--	21	--	--	--	--	80	156	26	--	85	--	--	103	--	--	--	--	--	471
Jennings	--	23	--	--	--	--	78	130	25	--	82	33	170	544	--	--	--	--	--	544
Ripley	--	--	--	--	--	--	--	--	--	--	70	23	68	161	--	--	--	--	--	161
Total	--	43	--	--	51	158	286	378	180	573	2	1,671	2	1,671	2	1,671	2	1,671	2	1,671
State total	752	1,804	21	103	252	13	350	1,269	1,988	643	1,749	1,543	171	2,076	3,835	6,740	156	163	42	23,670

\* = Less than 500 board feet.

1/ International 1/4-inch rule.

Columns and rows may not sum due to rounding.

Table 13.--Veneer log and bolt receipts by Forest Survey Unit, species group, and State of origin, Indiana, 1995

(In thousand board feet) 1/

Species group	Total	State of origin											Other States	Canada	
		Indiana	Illinois	Iowa	Michigan	Missouri	Wisconsin	Kentucky	Ohio	Oklahoma					
<b>HARDWOODS</b>															
Soft maple	1,716	747	57	--	--	--	--	--	--	--	--	--	--	912	--
Hard maple	6,172	1,485	63	3	2,261	46	65	231	75	--	--	--	--	1,920	23
River birch	112	21	3	--	67	--	1	--	1	--	--	--	--	17	1
Hickory	169	68	11	--	3	--	3	57	3	--	--	--	--	20	3
Pecan	2,531	251	--	--	--	--	--	--	--	724	--	--	--	1,556	--
Hackberry	1,016	13	--	--	--	--	--	--	--	--	--	--	--	1,003	--
Beech	168	168	--	--	--	--	--	--	--	--	--	--	--	--	--
Ash	2,321	1,013	2	--	24	--	7	18	7	--	--	--	--	1,243	7
Black walnut	3,073	1,486	409	1	169	192	21	300	232	--	--	--	--	256	7
Sweetgum	748	643	57	--	--	--	--	48	--	--	--	--	--	--	--
Yellow-poplar	3,276	1,749	228	--	3	--	--	279	3	--	--	--	--	1,012	3
Sycamore	1,669	1,457	114	--	--	--	--	98	--	--	--	--	--	--	--
Black cherry	7,738	1,952	47	3	426	137	187	163	201	--	--	--	--	4,564	57
Red oak group	5,639	2,819	108	2	498	31	61	583	155	--	--	--	--	1,346	34
White oak group	9,823	3,065	950	6	236	65	61	2,553	349	--	--	--	--	2,532	7
Sassafras	156	156	--	--	--	--	--	--	--	--	--	--	--	--	--
Basswood	166	161	--	--	--	--	--	--	--	--	--	--	--	5	--
Total	46,491	17,254	2,049	16	3,687	471	406	4,330	1,026	724	16,386	143			
<b>SOFTWOODS</b>															
Shortleaf pine	33	--	--	--	--	--	--	--	--	--	--	--	--	33	--
Total	33	--	--	--	--	--	--	--	--	--	--	--	--	33	--
All species	46,524	17,254	2,049	16	3,687	471	406	4,330	1,026	724	16,419	143			

1/ International 1/4-inch rule.

Columns and rows may not sum due to rounding.

(Table 13 continued on next page)

(Table 13 continued)

Species group	KNOBS UNIT											Other States	Canada	
	Total	Indiana	Illinois	Iowa	Michigan	Missouri	Wisconsin	Kentucky	Ohio	Oklahoma	State of origin			
<b>HARDWOODS</b>														
Soft maple	1,124	212	--	--	--	--	--	--	--	--	--	--	912	--
Hard maple	1,974	669	--	--	2	--	--	163	--	--	--	--	1,140	--
River birch	40	--	--	--	40	--	--	--	--	--	--	--	--	--
Hickory	92	12	11	--	--	--	--	57	--	--	--	--	11	--
Pecan	23	--	--	--	--	--	--	--	--	--	--	--	23	--
Hackberry	1,016	13	--	--	--	--	--	--	--	--	--	--	1,003	--
Beech	168	168	--	--	--	--	--	--	--	--	--	--	--	--
Ash	1,477	429	--	--	--	--	--	18	--	--	--	--	1,031	--
Black walnut	511	464	2	--	--	--	--	14	7	--	--	--	25	--
Sweetgum	292	244	--	--	--	--	--	48	--	--	--	--	--	--
Yellow-poplar	1,520	466	--	--	--	--	--	51	--	--	--	--	1,003	--
Sycamore	301	260	--	--	--	--	--	41	--	--	--	--	--	--
Black cherry	663	406	--	--	--	--	--	--	--	--	--	--	258	--
Red oak group	1,862	1,476	--	--	33	--	--	194	--	--	--	--	158	--
White oak group	3,894	1,733	228	--	--	--	--	1,659	--	--	--	--	274	--
Sassafras	156	156	--	--	--	--	--	--	--	--	--	--	--	--
Basswood	166	161	--	--	--	--	--	--	--	--	--	--	5	--
<b>Total</b>	<b>15,279</b>	<b>6,869</b>	<b>242</b>	<b>--</b>	<b>75</b>	<b>--</b>	<b>--</b>	<b>2,244</b>	<b>7</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>5,843</b>	<b>--</b>
<b>SOFTWOODS</b>														
Shortleaf pine	33	--	--	--	--	--	--	--	--	--	--	--	33	--
<b>Total</b>	<b>33</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>33</b>	<b>--</b>
<b>All species</b>	<b>15,312</b>	<b>6,869</b>	<b>242</b>	<b>--</b>	<b>75</b>	<b>--</b>	<b>--</b>	<b>2,244</b>	<b>7</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>5,876</b>	<b>--</b>

(Table 13 continued on next page)



(Table 13 continued)

Species group	LOWER WABASH UNIT												Other States	Canada	
	Total	Indiana	Illinois	Iowa	Michigan	Missouri	Wisconsin	Kentucky	Ohio	Oklahoma	State of origin				
<b>HARDWOODS</b>															
Soft maple	592	535	57	--	--	--	--	--	--	--	--	--	--	--	--
Hickory	34	34	--	--	--	--	--	--	--	--	--	--	--	--	--
Pecan	2,391	251	--	--	--	--	--	--	724	1,416	--	--	--	--	--
Black walnut	23	23	--	--	--	--	--	--	--	--	--	--	--	--	--
Sweetgum	456	399	57	--	--	--	--	--	--	--	--	--	--	--	--
Yellow-poplar	1,482	1,026	228	--	--	--	228	--	--	--	--	--	--	--	--
Sycamore	1,368	1,197	114	--	--	--	57	--	--	--	--	--	--	--	--
Black cherry	348	348	--	--	--	--	--	--	--	--	--	--	--	--	--
White oak group	285	285	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	6,978	4,097	456	--	--	--	285	--	724	1,416	--	--	--	--	--
<b>NORTHERN UNIT</b>															
Hard maple	4,198	816	63	3	2,258	46	65	68	75	--	--	780	23		
River birch	72	21	3	--	27	--	1	--	1	--	--	17	1		
Hickory	42	22	--	--	3	--	3	--	3	--	--	9	3		
Pecan	117	--	--	--	--	--	--	--	--	--	--	117	--		
Ash	844	584	2	--	24	--	7	--	7	--	--	212	7		
Black walnut	2,539	999	406	1	169	192	21	286	225	--	--	231	7		
Yellow-poplar	274	257	--	--	3	--	--	--	3	--	--	9	3		
Black cherry	6,727	1,199	47	3	426	137	187	163	201	--	--	307	57		
Red oak group	3,777	1,343	108	2	465	31	61	389	155	--	--	1,188	34		
White oak group	5,644	1,047	722	6	236	65	61	895	349	--	--	2,258	7		
Total	24,234	6,288	1,351	16	3,612	471	406	1,801	1,019	--	--	9,127	143		

Table 14.--Wood material harvested for industrial roundwood by Forest Survey Unit, source of material, and species group, Indiana, 1995 1/

(In thousand cubic feet)

ALL UNITS

Species group	Growing stock				Non-growing stock						Total material used for products	Total material not used	Total material harvested	
	Used for products		Logging residue (not used)	Total	Used for products			Dead trees	Nonforest trees	Logging slash (Not used)				Total
	Saw-timber	Pole-timber			Limb-wood	Sap-lings	Cull trees							
<b>HARDWOODS</b>														
Soft maple	2,752.2	66.9	746.3	3,565.4	140.2	4.4	20.0	1.4	--	1,648.7	1,814.9	2,985.3	2,395.0	5,380.3
Hard maple	3,798.1	59.3	1,018.7	4,876.1	182.5	3.9	26.0	1.3	--	2,220.2	2,433.9	4,071.1	3,238.9	7,310.0
River birch	13.8	--	3.8	17.6	0.4	--	--	0.1	--	7.6	8.1	14.4	11.4	25.8
Yellow birch	1.7	--	0.5	2.3	0.1	--	--	*	--	1.2	1.3	1.8	1.7	3.6
Hickory	2,927.3	181.8	895.1	4,004.2	152.5	12.1	7.2	33.3	--	1,956.5	2,161.6	3,314.1	2,851.6	6,165.8
Pecan	51.2	--	10.4	61.6	0.7	--	--	0.2	--	13.4	14.3	52.1	23.8	75.9
Hackberry	187.1	--	57.9	245.1	7.6	--	0.1	1.9	--	126.2	135.8	196.7	184.1	380.8
PerSIMMON	2.3	--	0.7	3.1	0.1	--	--	*	--	1.6	1.7	2.5	2.3	4.8
Beech	1,429.3	--	437.0	1,866.2	56.6	--	0.9	14.1	--	942.0	1,013.6	1,500.9	1,378.9	2,879.8
Ash	4,553.6	70.9	1,383.6	6,008.1	192.4	4.7	4.9	46.2	--	2,978.4	3,226.6	4,872.7	4,362.0	9,234.7
Honeylocust	0.1	0.1	*	0.3	0.1	*	*	*	--	*	0.2	0.4	0.1	0.5
Butternut	0.2	--	*	0.2	*	--	*	*	--	0.1	0.1	0.2	0.2	0.3
Black walnut	1,455.0	--	134.7	1,589.7	26.5	--	38.8	--	210.1	215.0	490.4	1,730.5	349.6	2,080.1
Sweetgum	508.8	--	144.1	652.9	17.2	--	0.3	4.3	--	291.3	313.1	530.6	435.4	966.0
Yellow-poplar	8,882.1	207.2	2,709.7	11,799.0	391.9	13.8	11.6	92.5	--	5,861.7	6,371.4	9,599.0	8,571.4	18,170.5
Tupelo	79.7	--	24.8	104.4	3.3	--	0.1	0.8	--	54.2	58.3	83.8	78.9	162.7
Sycamore	1,665.8	--	484.3	2,150.1	59.6	--	0.9	14.9	--	1,001.4	1,076.9	1,741.2	1,485.7	3,226.9
Cottonwood	1,323.0	--	197.2	1,520.2	13.6	--	5.1	--	--	747.2	765.9	1,341.7	944.4	2,286.1
Aspen	16.4	--	5.1	21.5	0.7	--	*	0.2	--	11.1	12.0	17.2	16.2	33.5
Black cherry	1,704.9	--	484.7	2,189.6	58.2	--	0.9	14.6	--	982.7	1,056.4	1,778.6	1,467.4	3,246.0
Red oak group	15,895.0	246.9	4,572.4	20,714.3	765.0	15.0	180.2	417.5	--	8,993.3	10,371.0	17,519.6	13,565.7	31,085.3
White oak group	10,403.4	270.7	2,843.0	13,517.2	531.9	16.2	195.8	248.0	--	5,290.1	6,282.0	11,666.0	8,133.1	19,799.2
Black locust	5.5	--	1.7	7.2	0.2	--	*	0.1	--	3.7	4.0	5.8	5.4	11.2
Willow	0.8	--	0.2	1.0	*	--	*	*	--	0.5	0.6	0.8	0.8	1.6
Sassafras	213.3	--	62.9	276.2	7.9	--	0.1	2.0	--	131.7	141.7	223.2	194.6	417.9
Basswood	736.1	--	225.4	961.5	29.2	--	0.5	7.3	--	486.6	523.6	773.1	712.0	1,485.1
Elm	463.1	--	143.2	606.2	18.7	--	0.3	4.7	--	311.3	335.0	486.8	454.4	941.2
Other hardwoods	58.0	234.6	0.8	293.4	45.1	15.6	6.9	5.1	--	7.2	79.9	365.3	8.0	373.3
Total	59,127.9	1,338.4	16,588.2	77,054.5	2,702.2	85.8	500.6	910.5	210.1	34,284.8	38,694.1	64,875.5	50,873.1	115,748.6
<b>SOFTWOODS</b>														
Redcedar	144.3	--	0.8	145.1	--	--	1.0	--	--	81.0	82.0	145.3	81.8	227.2
Shortleaf pine	287.3	11.1	30.5	329.0	--	--	0.6	--	--	367.8	368.4	299.1	398.3	697.4
Red pine	26.7	--	2.9	29.6	--	--	*	--	--	34.3	34.3	26.8	37.1	63.9
White pine	31.3	--	3.4	34.7	--	--	*	--	--	40.1	40.2	31.4	43.5	74.9
Other pines	612.5	193.9	61.2	867.6	--	--	5.7	--	--	776.0	781.7	812.1	837.2	1,649.3
Total	1,102.1	205.0	98.8	1,406.0	--	--	7.4	--	--	1,299.2	1,306.6	1,314.6	1,398.0	2,712.6
All species	60,230.1	1,543.5	16,687.0	78,460.5	2,702.2	85.8	508.1	910.5	210.1	35,584.0	40,000.7	66,190.2	52,271.0	118,461.2

\* = Less than 100 cubic feet.

1/ Factors for determining the amount of wood in each category are based on the Illinois Utilization Study, 1984.

Rows and columns may not sum due to rounding.

(Table 14 continued on next page)

**KNOBS UNIT**

Species group	Growing stock				Non-growing stock						Total material used for products	Total material not used	Total material harvested		
	Used for products		Logging residue (not used)	Total	Limb-wood	Used for products			Dead trees	Nonforest trees				Logging slash (Not used)	Total
	Saw-timber	Pole-timber				Sap-lings	Cull trees	trees							
<b>HARDWOODS</b>															
Soft maple	729.8	27.6	194.9	952.3	38.2	1.8	5.6	0.6	0.6	0.6	471.7	803.6	620.4	1,423.9	
Hard maple	1,622.6	24.5	425.3	2,072.4	74.1	1.6	10.7	0.5	0.5	0.5	991.5	1,734.1	1,329.8	3,063.9	
River birch	2.6	--	0.4	3.0	--	--	--	--	--	--	0.2	2.6	0.5	3.1	
Yellow birch	0.9	--	0.3	1.1	--	--	--	--	--	--	0.6	0.9	0.9	1.8	
Hickory	1,137.4	74.9	347.7	1,560.0	60.1	5.0	2.9	13.0	13.0	13.0	841.5	1,293.3	1,108.2	2,401.5	
Pecan	12.6	--	3.9	16.5	0.5	--	--	0.1	0.1	0.1	9.2	13.2	12.5	25.7	
Hackberry	55.2	--	16.9	72.1	2.2	--	--	0.5	0.5	0.5	39.2	58.0	53.4	111.3	
Persimmon	1.1	--	0.3	1.4	--	--	--	--	--	--	0.7	1.1	1.1	2.2	
Beech	525.0	--	159.8	684.8	20.6	--	0.3	5.2	5.2	5.2	343.4	551.1	503.2	1,054.3	
Ash	1,383.1	29.2	409.7	1,822.0	57.3	1.9	1.7	13.5	13.5	13.5	865.0	1,486.8	1,274.7	2,761.4	
Black walnut	405.8	--	36.2	442.1	5.7	--	8.4	--	--	58.8	127.7	478.7	91.1	569.7	
Sweetgum	295.9	--	84.2	380.0	10.1	--	0.2	2.5	2.5	--	170.7	308.7	254.9	563.5	
Yellow-poplar	4,272.1	85.4	1,303.8	5,661.3	185.7	5.7	5.2	44.2	44.2	--	2,819.2	4,598.2	4,123.0	8,721.2	
Tupelo	38.1	--	11.9	49.9	1.6	--	--	0.4	0.4	--	25.9	40.1	37.8	77.8	
Sycamore	490.8	--	139.6	630.4	16.8	--	0.3	4.2	4.2	--	283.2	512.0	422.8	934.9	
Cottonwood	240.8	--	35.9	276.7	2.5	--	0.9	--	--	--	138.2	244.3	174.1	418.4	
Aspen	3.4	--	1.0	4.4	0.1	--	--	--	--	--	2.3	3.5	3.3	6.9	
Black cherry	654.1	--	173.8	827.9	19.2	--	0.3	4.8	4.8	--	330.2	678.5	504.0	1,182.5	
Red oak group	6,483.5	114.3	1,794.2	8,392.0	352.5	6.2	123.6	162.6	162.6	--	3,470.6	7,242.6	5,264.8	12,507.5	
White oak group	4,553.1	127.4	1,148.8	5,829.3	274.2	6.7	154.4	95.1	95.1	--	1,994.8	5,210.9	3,143.6	8,354.5	
Black locust	0.6	--	0.2	0.8	--	--	--	--	--	--	0.4	0.7	0.6	1.3	
Willow	0.3	--	0.1	0.4	--	--	--	--	--	--	0.2	0.3	0.3	0.6	
Sassafras	121.1	--	34.4	155.6	4.1	--	0.1	1.0	1.0	--	69.8	126.4	104.2	230.6	
Basswood	138.0	--	39.5	177.5	4.8	--	0.1	1.2	1.2	--	80.7	144.0	120.2	264.2	
Elm	139.6	--	43.1	182.7	5.6	--	0.1	1.4	1.4	--	93.7	146.7	136.9	283.6	
Other hardwoods	23.7	96.7	0.2	120.6	18.6	6.4	2.8	2.1	2.1	--	32.7	150.3	3.0	153.4	
<b>Total</b>	<b>23,331.2</b>	<b>580.0</b>	<b>6,406.1</b>	<b>30,317.4</b>	<b>1,154.8</b>	<b>35.4</b>	<b>317.3</b>	<b>353.1</b>	<b>353.1</b>	<b>58.8</b>	<b>14,802.4</b>	<b>25,830.7</b>	<b>19,289.1</b>	<b>45,119.8</b>	
<b>SOFTWOODS</b>															
Redcedar	136.6	--	0.8	137.4	--	--	1.0	--	--	--	76.7	137.6	77.5	215.1	
Shortleaf pine	192.9	11.1	20.4	224.4	--	--	0.5	--	--	--	246.7	204.5	267.1	471.6	
Red pine	20.6	--	2.2	22.8	--	--	--	--	--	--	26.4	20.6	28.6	49.2	
White pine	15.7	--	1.7	17.4	--	--	--	--	--	--	20.2	15.8	21.9	37.6	
Other pines	431.5	193.9	41.8	667.3	--	--	5.5	--	--	--	544.1	631.0	585.9	1,216.9	
<b>Total</b>	<b>797.4</b>	<b>205.0</b>	<b>66.9</b>	<b>1,069.4</b>	<b>--</b>	<b>--</b>	<b>7.0</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>914.1</b>	<b>1,009.5</b>	<b>981.0</b>	<b>1,990.5</b>	
<b>All species</b>	<b>24,128.6</b>	<b>785.1</b>	<b>6,473.1</b>	<b>31,386.8</b>	<b>1,154.8</b>	<b>35.4</b>	<b>324.4</b>	<b>353.1</b>	<b>353.1</b>	<b>58.8</b>	<b>15,723.5</b>	<b>26,840.2</b>	<b>20,270.1</b>	<b>47,110.3</b>	

(Table 14 continued on next page)

(Table 14 continued)

## LOWER WABASH UNIT

Species group	Growing stock					Non-growing stock					Total material harvested		
	Used for products		Logging residue (not used)	Total	Limbo-wood	Used for products			Logging slash (Not used)	Total			
	Saw-timber	Pole-timber				Sap-lings	Cull trees	Dead trees				Nonforest trees	
<b>HARDWOODS</b>													
Soft maple	803.2	36.7	213.3	1,053.2	42.7	2.4	6.1	0.8	464.1	516.1	892.0	677.3	1,569.3
Hard maple	727.6	32.5	199.2	959.2	40.8	2.2	5.8	0.7	446.5	496.0	809.5	645.7	1,455.2
River birch	10.9	--	3.4	14.3	0.4	--	*	0.1	7.4	8.0	11.5	10.8	22.3
Yellow birch	0.9	--	0.3	1.2	*	--	*	*	0.6	0.6	0.9	0.9	1.8
Hickory	1,018.1	99.7	308.7	1,426.4	59.7	6.6	3.6	12.3	675.6	757.7	1,200.0	984.2	2,184.2
Pecan	36.5	--	5.8	42.3	0.1	--	*	*	3.4	3.5	36.6	9.2	45.8
Hackberry	78.3	--	24.4	102.7	3.2	--	0.1	0.8	53.3	57.3	82.4	77.6	160.0
Persimmon	1.3	--	0.4	1.6	0.1	--	*	*	0.9	0.9	1.3	1.2	2.6
Beech	417.0	--	129.6	546.6	17.0	--	0.3	4.3	282.8	304.4	438.6	412.4	850.9
Ash	1,035.4	38.9	315.6	1,389.9	48.6	2.6	1.8	11.1	684.3	748.4	1,138.3	999.9	2,138.2
Honeylocust	0.1	0.1	*	0.3	0.1	*	*	*	0.0	0.2	0.4	0.1	0.5
Black walnut	306.3	--	28.7	335.0	6.0	--	8.8	--	46.5	105.5	365.3	75.2	440.5
Sweetgum	115.6	--	29.7	145.3	3.1	--	*	0.8	54.4	58.3	119.6	84.1	203.6
Yellow-poplar	2,584.1	113.6	778.0	3,475.7	122.1	7.6	4.9	27.5	1,673.2	1,835.3	2,859.8	2,451.2	5,311.0
Tupelo	24.5	--	7.6	32.1	1.0	--	0.0	0.3	16.7	17.9	25.8	24.3	50.1
Sycamore	662.4	--	187.0	849.4	22.3	--	0.3	5.6	377.0	405.2	690.6	564.0	1,254.6
Cottonwood	268.4	--	40.0	308.3	2.8	--	1.1	--	154.0	157.9	272.2	194.0	466.2
Aspen	9.6	--	3.0	12.6	0.4	--	*	0.1	6.5	7.0	10.1	9.5	19.6
Black cherry	346.4	--	107.3	453.8	14.1	--	0.2	3.5	233.7	251.6	364.3	341.1	705.3
Red oak group	3,938.1	123.8	1,162.5	5,224.4	186.4	8.2	25.8	108.6	2,320.4	2,649.4	4,390.9	3,482.9	7,873.8
White oak group	2,420.5	133.7	706.4	3,260.6	123.7	8.9	18.0	66.7	1,401.7	1,619.0	2,771.4	2,108.1	4,879.6
Black locust	2.2	--	0.7	2.9	0.1	--	*	*	1.5	1.6	2.3	2.2	4.5
Willow	0.3	--	0.1	0.4	*	--	*	*	0.2	0.2	0.3	0.3	0.6
Sassafras	57.0	--	17.6	74.6	2.3	--	*	0.6	38.1	41.0	59.9	55.7	115.6
Basswood	205.6	--	63.8	269.4	8.4	--	0.1	2.1	139.1	149.7	216.2	202.9	419.1
Elm	144.8	--	44.7	189.6	5.9	--	0.1	1.5	97.3	104.7	152.2	142.0	294.2
Other hardwoods	31.5	128.6	0.3	160.5	24.7	8.6	3.8	2.8	3.8	43.6	200.0	4.1	204.1
Total	15,246.6	707.6	4,378.0	20,332.1	736.0	47.1	80.8	250.1	9,182.8	10,341.0	17,112.4	13,560.8	30,673.1
<b>SOFTWOODS</b>													
Redcedar	1.7	--	*	1.7	--	--	*	--	0.9	0.9	1.7	0.9	2.6
Total	1.7	--	*	1.7	--	--	*	--	0.9	0.9	1.7	0.9	2.6
All species	15,248.3	707.6	4,378.0	20,333.8	736.0	47.1	80.8	250.1	9,183.7	10,341.9	17,114.0	13,561.7	30,675.7

(Table 14 continued on next page)



Species group	NORTHERN UNIT											Total material harvested			
	Growing stock					Non-growing stock							Total material used for products	Total material not used	
	Used for products		Logging residue (not used)	Total	Limb-wood	Used for products			Dead trees	Nonforest trees	Logging slash (Not used)				Total
	Saw-timber	Pole-timber				Sap-lings	Cull trees	Limb-wood							
<b>HARDWOODS</b>															
Soft maple	1,084.8	2.6	300.8	1,388.2	52.9	0.2	7.5	0.1	--	--	675.4	735.9	1,147.9	976.2	2,124.1
Hard maple	1,184.0	2.3	321.8	1,508.1	55.1	0.2	7.8	0.1	--	--	708.0	771.1	1,249.4	1,029.8	2,279.2
River birch	0.3	--	*	0.3	--	--	--	--	--	--	*	*	0.3	0.1	0.4
Hickory	628.3	7.2	194.1	829.6	26.8	0.5	0.6	6.5	*	--	422.9	457.4	669.9	617.0	1,287.0
Pecan	2.2	--	0.7	2.8	0.1	--	--	--	--	--	1.5	1.6	2.3	2.1	4.4
Hackberry	45.1	--	14.0	59.1	1.8	--	--	0.5	--	--	30.6	33.0	47.4	44.7	92.1
Beech	423.9	--	127.9	551.8	16.3	--	0.3	4.1	--	--	272.7	293.4	444.6	400.6	845.2
Ash	1,399.6	2.8	433.0	1,835.4	57.3	0.2	1.0	14.2	--	--	942.4	1,015.1	1,475.1	1,375.4	2,850.5
Butternut	0.2	--	*	0.2	0.0	--	--	0.0	--	--	0.1	0.1	0.2	0.2	0.3
Black walnut	629.4	--	59.5	689.0	13.1	--	19.2	--	90.7	--	97.9	220.9	752.4	157.5	909.9
Sweetgum	22.4	--	7.0	29.4	0.9	--	--	0.2	--	--	15.3	16.4	23.6	22.2	45.8
Yellow-poplar	1,159.8	8.2	359.6	1,527.6	48.8	0.5	1.0	12.0	--	--	784.9	847.2	1,230.4	1,144.4	2,374.8
Tupelo	4.3	--	1.3	5.7	0.2	--	--	*	--	--	2.9	3.2	4.5	4.3	8.8
Sycamore	361.2	--	110.5	471.6	14.3	--	0.2	3.6	--	--	238.3	256.4	379.3	348.8	728.1
Cottonwood	755.8	--	112.6	868.5	7.7	--	2.9	--	--	--	421.7	432.2	766.3	534.3	1,300.7
Aspen	3.4	--	1.1	4.5	0.1	--	--	--	--	--	2.3	2.5	3.6	3.4	7.0
Black cherry	533.7	--	158.8	692.4	20.0	--	0.3	5.0	--	--	334.8	360.2	559.0	493.6	1,052.6
Red oak group	4,279.5	8.9	1,262.8	5,551.2	177.0	0.6	24.2	114.4	--	--	2,502.5	2,818.7	4,604.5	3,765.4	8,369.9
White oak group	2,638.2	9.6	764.5	3,412.3	106.0	0.6	14.5	68.1	--	--	1,492.5	1,681.7	2,837.0	2,257.0	5,094.1
Black locust	2.7	--	0.8	3.5	0.1	--	--	*	--	--	1.8	1.9	2.8	2.6	5.4
Willow	0.2	--	*	0.2	*	--	--	*	--	--	0.1	0.1	0.2	0.2	0.3
Sassafras	24.9	--	7.7	32.6	1.0	--	--	0.3	--	--	16.9	18.2	26.2	24.7	50.8
Basswood	338.5	--	105.3	443.9	13.9	--	0.2	3.5	--	--	230.1	247.6	356.1	335.4	691.5
Elm	154.7	--	47.9	202.6	6.3	--	0.1	1.6	--	--	104.2	112.1	162.7	152.1	314.7
Other hardwoods	2.8	9.3	0.2	12.3	1.8	0.6	0.3	0.2	--	--	0.6	3.5	15.0	0.8	15.8
<b>Total</b>	<b>15,679.9</b>	<b>50.8</b>	<b>4,392.1</b>	<b>20,122.9</b>	<b>621.6</b>	<b>3.4</b>	<b>80.0</b>	<b>234.3</b>	<b>90.7</b>	<b>9.300.5</b>	<b>10,330.5</b>	<b>16,760.7</b>	<b>13,692.7</b>	<b>30,453.4</b>	
<b>SOFTWOODS</b>															
Red pine	6.1	--	0.7	6.8	--	--	*	--	--	--	7.9	7.9	6.1	8.5	14.7
White pine	12.7	--	1.4	14.1	--	--	*	--	--	--	16.3	16.3	12.7	17.7	30.4
<b>Total</b>	<b>18.8</b>	<b>--</b>	<b>2.0</b>	<b>20.9</b>	<b>--</b>	<b>--</b>	<b>*</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>24.2</b>	<b>24.2</b>	<b>18.9</b>	<b>26.2</b>	<b>45.0</b>
<b>All species</b>	<b>15,698.8</b>	<b>50.8</b>	<b>4,394.2</b>	<b>20,143.8</b>	<b>621.6</b>	<b>3.4</b>	<b>80.0</b>	<b>234.3</b>	<b>90.7</b>	<b>9,324.7</b>	<b>10,354.7</b>	<b>16,779.6</b>	<b>13,718.9</b>	<b>30,498.4</b>	

(Table 14 continued on next page)

(Table 14 continued)

Species group	UPLAND FLATS UNIT													
	Growing stock					Non-growing stock					Total			
	Used for products		Logging residue (not used)	Used for products		Dead trees	Nonforest trees	Logging slash (Not used)	Total	Total material used for products	Total material not used	Total material harvested		
	Saw-timber	Pole-timber		Sap-lings	Cull trees									
<b>HARDWOODS</b>														
Soft maple	134.4	--	37.3	171.7	6.5	--	0.9	--	83.8	91.2	141.8	121.1	262.9	
Hard maple	263.9	--	72.5	336.4	12.5	--	1.8	--	161.1	175.3	278.1	233.6	511.7	
Hickory	143.5	--	44.6	188.1	5.9	--	0.1	1.5	97.6	105.0	150.9	142.2	293.1	
Hackberry	8.5	--	2.6	11.2	0.3	--	*	0.1	5.8	6.2	9.0	8.4	17.4	
Beech	63.3	--	19.7	83.0	2.6	--	*	0.6	43.1	46.3	66.6	62.8	129.4	
Ash	735.5	--	225.4	960.8	29.2	--	0.5	7.3	486.6	523.6	772.5	712.0	1,484.5	
Black walnut	113.4	--	10.2	123.6	1.7	--	2.5	--	15.7	36.3	134.0	25.9	160.0	
Sweetgum	74.9	--	23.3	98.2	3.1	--	*	0.8	50.9	54.8	78.8	74.2	153.0	
Yellow-poplar	866.1	--	268.3	1,134.4	35.2	--	0.5	8.8	584.5	629.0	910.7	852.8	1,763.5	
Tupelo	12.7	--	4.0	16.7	0.5	--	*	0.1	8.7	9.3	13.4	12.6	26.0	
Sycamore	151.5	--	47.1	198.6	6.2	--	0.1	1.6	103.0	110.8	159.3	150.1	309.4	
Cottonwood	58.1	--	8.7	66.7	0.6	--	0.2	--	33.3	34.1	58.9	42.0	100.8	
Black cherry	170.7	--	44.8	215.5	4.9	--	0.1	1.2	83.9	90.1	176.9	128.7	305.6	
Red oak group	1,193.9	--	352.8	1,546.7	49.0	--	6.7	31.9	699.8	787.4	1,281.5	1,052.6	2,334.1	
White oak group	791.7	--	223.2	1,014.9	28.0	--	9.0	18.1	401.1	456.1	846.7	624.3	1,471.0	
Sassafras	10.2	--	3.2	13.4	0.4	--	*	0.1	7.0	7.5	10.8	10.1	20.9	
Basswood	54.0	--	16.8	70.8	2.2	--	*	0.6	36.7	39.5	56.8	53.5	110.3	
Elm	23.9	--	7.4	31.3	1.0	--	*	0.2	16.1	17.3	25.1	23.5	48.6	
Total	4,870.1	--	1,412.0	6,282.1	189.8	--	22.5	72.9	2,918.5	3,220.2	5,171.8	4,330.5	9,502.3	
<b>SOFTWOODS</b>														
Redcedar	6.0	--	*	6.1	--	--	*	--	3.4	3.4	6.1	3.4	9.5	
Shortleaf pine	94.4	--	10.1	104.6	--	--	0.1	--	121.1	121.2	94.5	131.2	225.7	
White pine	2.9	--	0.3	3.2	--	--	*	--	3.7	3.7	2.9	4.0	6.9	
Other pine	180.9	--	19.4	200.3	--	--	0.2	--	231.9	232.1	181.1	251.3	432.4	
Total	12.9	--	29.9	314.1	--	--	0.4	--	360.0	360.4	284.6	389.9	674.5	
All species	4,883.0	--	1,412.7	6,295.8	189.8	--	22.5	72.9	3,278.5	3,580.5	5,456.4	4,720.3	10,176.8	

Table 15.--Growing-stock removals from timberland for industrial roundwood by Forest Survey Unit, county, and species group, Indiana, 1995

(in thousand cubic feet)

Unit and county	Total																	
	Red-cedar	Short-leaf pine	Red pine	White pine	Other pines	Total soft-woods	Soft maple	Hard maple	River birch	Yellow birch	Hickory	Pecan	Hack-berry	Persimmon	Beech	Ash	Honey-locust	Butternut
<b>KNOBNS UNIT</b>																		
Brown	--	--	--	--	--	--	16	95	--	--	186	--	2	--	22	84	--	--
Clark	--	1	--	1	100	103	6	74	--	--	16	--	1	--	10	60	--	--
Crawford	16	--	--	--	--	16	23	101	--	--	69	1	2	--	45	70	--	--
Dubois	*	--	--	--	--	*	116	109	--	*	133	--	1	*	84	106	--	--
Floyd	--	1	--	1	100	102	4	86	--	--	18	--	2	--	13	85	--	--
Harrison	102	1	--	1	100	204	13	136	--	--	32	--	1	*	20	111	--	--
Jackson	--	103	16	8	30	156	119	136	*	*	132	--	8	--	62	128	--	--
Lawrence	--	--	--	5	--	5	78	146	*	*	75	13	13	--	65	120	--	--
Monroe	--	--	--	--	--	--	39	115	1	--	124	--	3	--	26	90	--	--
Morgan	--	--	--	--	--	--	27	101	1	--	64	--	2	--	28	112	--	--
Orange	10	--	--	--	--	10	42	102	1	--	94	1	2	--	53	72	--	--
Owen	--	--	--	--	--	--	147	284	*	*	253	--	16	--	69	262	--	--
Perry	--	1	--	--	11	12	18	127	--	--	83	--	1	--	29	83	--	--
Scott	--	14	1	1	326	342	106	115	--	--	90	--	8	--	36	69	--	--
Spencer	1	--	--	--	--	1	55	56	--	--	56	--	--	1	30	86	--	--
Warrick	--	--	--	--	--	--	30	21	--	--	21	--	--	--	13	50	--	--
Washington	8	102	6	1	--	117	114	266	--	*	114	1	10	--	79	233	--	--
Total	137	224	23	17	667	1,069	952	2,072	3	1	1,560	17	72	1	685	1,822	--	--
<b>LOWER WABASH UNIT</b>																		
Clay	--	--	--	--	--	--	106	132	14	*	116	--	6	--	76	163	*	--
Daviess	--	--	--	--	--	--	98	62	--	*	147	--	9	--	66	102	--	--
Gibson	--	--	--	--	--	--	72	15	--	--	87	8	9	--	15	57	--	--
Greene	--	--	--	--	--	--	124	166	--	--	244	1	19	--	55	149	--	--
Knox	--	--	--	--	--	--	91	28	--	--	113	8	11	--	16	71	--	--
Martin	*	--	--	--	--	*	94	88	--	--	142	1	1	*	71	69	*	--
Parke	--	--	--	--	--	--	45	100	--	*	88	--	8	--	59	129	--	--
Pike	1	--	--	--	--	1	85	41	--	--	117	8	9	1	29	87	--	--
Posey	--	--	--	--	--	--	69	22	--	--	44	8	--	--	15	53	--	--
Putham	--	--	--	--	--	--	38	92	--	--	87	--	2	--	44	146	--	--
Sullivan	--	--	--	--	--	--	94	40	--	--	83	--	12	--	19	41	--	--
Vanderburgh	*	--	--	--	--	*	48	35	--	--	40	8	--	*	10	81	--	--
Vermillion	--	--	--	--	--	--	5	13	--	--	18	--	*	--	12	21	--	--
Vigo	--	--	--	--	--	--	85	124	--	*	101	--	16	--	58	220	--	--
Total	2	--	--	--	--	2	1,053	959	14	1	1,426	42	103	2	547	1,390	*	--

\* = Less than 500 cubic feet  
 Rows and columns may not sum due to rounding. (Table 15 continued on next page)

(Table 15 continued)

Unit and county	Short-			Total			Hard maple	River birch	Yellow birch	Hickory	Pecan	Hack-berry	Persimmon	Beech	Ash	Honey-locust	Butter-nut
	Red-cedar	Short-leaf pine	Red pine	White pine	Other pines	Total soft-woods											
<b>NORTHERN UNIT</b>																	
Adams						17	19			9	*	3		22	22		
Allen						87	142			36	*	10		20	142		
Bartholomew			1			8	38			28	*	2		8	33		
Benton							*			*	*			*	1		
Boone						1	2			1	*	*		1	9		
Carroll						27	49			8	*			6	42		
Cass						25	60			11	*	1		9	41		
Clinton						2	1			6	*			2	2		
De Kalb						121	87			45	*	10		37	98		
Decatur						13	43			41	*			15	81		
Delaware							2			2	*				3		
Elkhart			2			61	42			29	*	1		25	28		
Fountain						13	19			40	*	2		30	52		
Fulton						21	46			11	*	1		10	37		
Grant						5	6			2	*			2	11		
Hamilton						*	6			1	*	1		1	28		
Hancock						1	7			2	*	*		*	28		
Hendricks						*	4			9	*	*		*	13		
Henry						1	10			2	*	*		*	34		
Howard						1	1			1	*	*		2	2		
Huntington						9	9			2	*	*		2	7		
Jasper						1	*			1	*	*		*	*		
Jay						*	*			*	*	*		*	*		
Johnson						1	45			32	*	*		1	49		
Kosciusko						191	90			54	*	1		55	109		
La Grange			2			111	74			38	*	2		35	76		*
La Porte						30	22			15	*	*		14	22		
Lake							7								15		
Madison						*	4			3	*	*		1	12		
Marion						5	28			14	*	1		1	42		
Marshall						50	35			28	*	*		27	34		
Miami						61	140			29	*	3		29	115		
Montgomery						9	17			36	*	2		9	25		
Noble						140	130			48	*	5		45	129		
Porter						1	8			1	*	*		1	16		
Pulaski						2	2			24	*	*		*	*		
Randolph						2	3			1	*	*			17		
Rush						2	4			1	*	*		4	105		
Shelby						2	22			6	*	*		4	45		
St. Joseph			2			63	35			23	*	*		20	37		

(Table 15 continued on next page)

NORTHERN UNIT (continued)



(Table 15 continued)

Unit and county	Short-leaf pine			Total soft-woods			Total									
	Red-cedar	Red pine	White pine	Other pines	Soft maple	Hard maple	River birch	Yellow birch	Hickory	Pecan	Hack-berry	Persimmon	Beech	Ash	Honey-locust	Butter-nut
<b>NORTHERN UNIT (continued)</b>																
Stark					8	7			45	*			4	7		
Steuben					91	73			31	*	7		33	63		*
Tippecanoe					5	12			14	*	2		5	16		
Tipton					1	2			2	*			1	2		
Wabash					146	84			46	*	1		50	69		
Warren					4	5			15	*			7	7		
Wayne					5	22			4	*	*		*	57		
Wells					2	2			1	*	1		1	4		
White			1		1	1			16	*			1	2		
Whitley					42	43			17	*	3		11	43		
Total		7	14		1,388	1,508	*		830	3	59		552	1,835		*
<b>UPLAND FLATS UNIT</b>																
Dearborn					6	60			9		1		1	394		
Fayette					14	23			10				5	44		
Franklin					35	68			25				8	184		
Jefferson	3	1	1	100	56	79			44		8		21	70		
Jennings		1	1	100	38	59			65		1		31	103		
Ohio						6								7		
Ripley			1		18	29			30		1		17	64		
Switzerland	3		1		1	7			1		*		1	6		
Union					3	6			4				*	88		
Total	6	105	3	200	172	336			188		11		83	961		*
State total	145	329	30	35	3,565	4,876	18	2	4,004	62	245	3	1,866	6,008		*

(Table 15 continued on next page)

(Table 15 continued)

Unit and county	Black walnut	Sweet gum	Yellow poplar	Tupelo	Sycamore	Cottonwood	Aspen	Black cherry	Red oak group	White oak group	Black locust	Willow	Sassafras	Basswood	Elm	Other hardwoods	Total hardwoods	All species
<b>KNOBS UNIT</b>																		
Brown	32	11	417	--	20	4	--	44	574	310	--	--	16	18	6	--	1,857	1,857
Clark	13	3	179	1	3	1	--	31	262	238	--	--	2	1	*	--	900	1,003
Crawford	22	15	250	*	20	*	--	43	439	369	--	--	5	5	9	--	1,488	1,505
Dubois	53	76	542	14	99	5	*	95	769	590	--	--	20	21	28	--	2,862	2,862
Floyd	12	1	113	8	11	1	--	27	149	144	--	--	1	1	8	--	684	786
Harrison	6	7	232	6	11	2	--	28	315	181	--	--	3	3	1	--	1,107	1,311
Jackson	14	12	326	1	61	75	--	55	533	428	--	--	15	7	7	35	2,154	2,310
Lawrence	22	31	281	*	31	2	*	99	688	347	--	--	16	5	34	--	2,046	2,052
Monroe	46	10	298	--	22	10	*	65	489	267	--	*	10	10	5	*	1,629	1,629
Morgan	63	--	451	--	30	15	1	65	464	237	*	--	4	12	4	--	1,687	1,687
Orange	18	21	309	1	55	27	*	52	467	343	--	--	10	13	16	--	1,693	1,703
Owen	82	20	926	*	111	20	2	74	1,002	491	1	*	27	51	25	86	3,951	3,951
Perry	6	26	251	*	34	3	--	4	602	632	--	--	6	2	6	--	1,913	1,925
Scott	1	74	220	8	11	34	--	22	228	143	--	--	8	1	1	--	1,177	1,519
Spencer	15	20	200	*	46	18	--	17	413	367	--	--	2	12	11	--	1,406	1,407
Warrick	3	18	87	*	26	18	--	1	116	75	--	--	*	*	*	--	480	480
Washington	96	35	579	8	39	41	--	107	903	688	--	--	10	15	21	--	3,282	3,399
Total	442	380	5,661	50	630	277	4	828	8,392	5,829	1	*	156	177	183	121	30,317	31,387
<b>LOWER WABASH UNIT</b>																		
Clay	15	14	538	1	113	24	2	33	575	241	*	--	9	25	8	23	2,236	2,236
Daviess	35	13	180	6	102	24	1	56	515	479	--	--	*	49	47	--	1,990	1,990
Gibson	9	12	44	1	38	31	1	9	178	160	--	--	--	9	9	--	762	762
Greene	64	15	480	1	95	30	1	80	721	481	*	--	12	31	32	61	2,862	2,862
Knox	13	4	83	1	24	23	1	18	269	211	--	--	1	10	10	17	1,021	1,021
Martin	25	29	370	15	110	33	1	51	560	361	--	--	2	35	31	--	2,091	2,091
Parke	44	4	428	*	101	30	2	15	422	222	1	*	17	35	11	16	1,778	1,778
Pike	31	14	145	1	35	22	1	62	320	239	--	--	2	11	12	--	1,273	1,274
Possey	4	8	110	1	17	11	1	8	154	83	--	--	--	--	--	--	606	606
Putnam	55	2	408	*	61	22	2	23	420	176	1	*	11	19	5	1	1,615	1,615
Sullivan	11	11	144	1	51	13	1	18	213	140	--	--	3	13	11	11	931	931
Vanderburgh	3	8	94	6	14	8	1	11	148	82	--	--	*	1	1	--	598	598
Vermillion	7	*	52	--	14	7	*	2	68	35	*	--	1	4	1	3	265	265
Vigo	18	11	400	1	74	30	1	68	661	351	*	--	17	27	13	29	2,305	2,305
Total	335	145	3,476	32	849	308	13	454	5,224	3,261	3	*	75	269	190	161	20,332	20,334

(Table 15 continued on next page)

(Table 15 continued)

Unit and county	Black walnut	Sweet-gum	Yellow poplar	Tupelo	Sycamore	Cottonwood	Aspen	Black cherry	Red oak group	White oak group	Black locust	Willow	Sassafras	Basswood	Elm	Other hardwoods	Total hardwoods	All species
<b>NORTHERN UNIT</b>																		
Adams	7	--	19	--	40	39	--	3	66	59	--	--	--	16	8	--	348	348
Allen	71	--	24	--	23	22	--	49	397	151	--	--	1	35	5	--	1,217	1,217
Bartholomew	10	5	87	1	8	6	--	20	132	87	--	--	3	6	2	--	484	485
Benton	*	--	--	--	*	1	--	0	4	1	--	--	--	*	--	--	10	10
Boone	2	--	2	--	3	1	--	0	6	4	--	--	--	*	--	--	32	32
Carroll	12	--	37	--	6	6	--	18	110	41	--	--	1	29	9	--	400	400
Cass	11	1	39	*	9	10	--	18	107	42	--	--	1	27	10	--	421	421
Clinton	--	--	7	--	7	3	--	*	16	8	--	--	--	1	1	--	57	57
De Kalb	37	--	37	--	28	48	--	27	265	176	--	--	1	20	6	--	1,042	1,042
Decatur	15	13	134	3	23	14	--	20	280	210	--	--	*	14	7	--	925	925
Delaware	2	--	5	--	*	*	--	2	17	6	--	--	*	1	--	--	40	40
Elkhart	9	--	17	--	18	17	--	24	111	47	--	--	1	8	9	--	447	453
Fountain	45	3	130	1	44	19	1	8	166	115	*	*	4	12	4	1	708	708
Fulton	12	1	22	*	4	3	--	13	113	80	--	--	1	27	12	--	412	412
Grant	6	--	5	--	4	5	--	2	27	21	--	--	--	3	2	--	101	101
Hamilton	7	--	2	--	2	*	--	1	7	6	--	--	--	--	--	--	61	61
Hancock	7	--	10	--	1	--	--	6	53	88	--	--	*	2	--	--	205	205
Hendricks	5	--	12	--	1	*	--	2	26	9	--	--	1	1	--	--	83	83
Henry	9	--	11	--	1	--	--	8	62	94	--	--	*	2	*	--	234	234
Howard	*	--	2	--	2	2	--	1	8	3	--	--	*	1	1	--	29	29
Huntington	5	--	4	--	1	*	--	4	21	13	--	--	*	3	1	--	83	83
Jasper	--	--	*	--	*	--	--	*	2	1	--	--	--	*	*	--	7	7
Jay	--	--	*	--	*	--	--	--	1	1	--	--	--	--	--	--	3	3
Johnson	46	--	55	--	3	1	--	38	140	96	--	--	3	6	*	--	517	517
Kosciusko	38	1	49	*	5	45	--	53	289	166	--	--	1	13	11	--	1,171	1,171
La Grange	32	--	49	--	12	32	1	35	206	102	1	--	*	12	5	*	823	829
La Porte	8	--	37	--	9	5	--	31	148	60	--	--	*	13	11	--	424	424
Lake	--	--	23	--	--	--	--	--	63	47	--	--	--	--	--	--	155	155
Madison	5	--	7	--	1	1	--	2	22	8	--	--	*	1	*	--	68	68
Marion	17	--	48	--	2	*	--	14	78	55	--	--	1	2	--	11	318	318
Marshall	12	1	38	*	13	16	--	28	148	82	--	--	--	14	15	--	542	542
Miami	59	2	73	*	31	39	--	51	371	105	--	--	2	60	22	--	1,193	1,193
Montgomery	15	--	94	--	28	5	--	5	91	68	--	--	3	6	3	--	419	419
Noble	53	--	48	--	19	38	--	55	365	162	1	--	1	25	7	--	1,270	1,270
Porter	--	--	24	--	1	--	--	1	81	64	--	--	--	1	1	--	198	198
Pulaski	--	--	2	--	*	190	--	2	259	57	--	--	--	*	*	--	540	540
Randolph	2	--	2	--	1	*	--	3	52	83	--	--	--	2	*	--	168	168
Rush	3	1	110	--	2	1	--	9	68	114	--	--	--	2	1	--	428	428
Shelby	10	1	36	*	3	--	--	17	92	166	--	--	*	2	--	--	407	407
St. Joseph	9	--	34	--	5	10	--	26	164	77	--	--	*	9	7	--	519	526
<b>NORTHERN UNIT (continued)</b>																		

(Table 15 continued on next page)

(Table 15 continued)

Unit and county	Black walnut	Sweet-gum	Yellow poplar	Tupelo	Sycamore	Cottonwood	Aspen	Black cherry	Red oak group	White oak group	Black locust	Willow	Sassafras	Basswood	Elm	Other hardwoods	Total hardwoods	All species
<b>NORTHERN UNIT (continued)</b>																		
Starke	2	1	9	*	*	40	--	16	137	139	--	--	--	2	5	--	423	423
Stauben	33	--	30	--	27	48	*	20	198	116	1	--	--	2	8	*	800	800
Tippecanoe	10	--	20	--	9	3	*	6	59	34	--	--	2	5	3	--	207	207
Tipton	4	--	6	--	3	2	*	2	14	13	--	--	--	1	1	--	54	54
Wabash	7	1	63	*	43	86	--	29	150	95	--	--	*	22	19	--	910	910
Warren	6	--	30	--	11	5	*	*	36	22	--	--	1	4	1	--	155	155
Wayne	9	--	22	--	5	--	--	9	94	104	--	--	--	2	1	--	333	333
Wells	*	--	*	--	*	*	--	1	5	5	--	--	--	1	*	--	24	24
White	1	--	1	--	1	89	--	1	106	36	--	--	--	1	1	--	259	259
Whitley	32	--	12	--	12	13	--	13	122	75	--	--	*	9	2	--	451	451
Total	689	29	1,528	6	472	868	5	692	5,551	3,412	3	--	33	444	203	12	20,123	20,144
<b>UPLAND FLATS UNIT</b>																		
Dearborn	32	--	27	--	1	1	--	38	174	26	--	--	1	13	--	--	783	783
Fayette	8	*	73	--	29	*	--	19	105	150	--	--	*	4	*	--	484	484
Franklin	14	1	269	--	72	1	--	35	281	219	--	--	1	4	1	--	1,219	1,219
Jefferson	21	38	199	8	21	19	--	44	182	127	--	--	8	3	*	--	948	1,053
Jennings	33	39	226	1	53	31	--	38	423	266	--	--	2	28	18	--	1,455	1,557
Ohio	--	--	22	--	--	--	--	3	28	8	--	--	--	--	--	--	74	74
Ripley	11	19	197	1	21	14	--	29	286	127	--	--	1	15	11	--	890	891
Switzerland	*	1	20	8	2	*	--	3	17	9	--	--	--	*	*	--	77	182
Union	4	*	101	--	1	*	--	6	51	84	--	--	*	3	*	--	352	352
Total	124	98	1,134	17	199	67	--	216	1,547	1,015	*	--	13	71	31	--	6,282	6,596
State total	1,590	653	11,799	104	2,150	1,520	21	2,190	20,714	13,517	7	1	276	962	606	293	77,055	78,461



Table 16.--Sawtimber removals from timberland for industrial roundwood by Forest Survey Unit, county, and species group, Indiana, 1995

(In thousand board feet) 1/

Unit and county	Total																
	Red-cedar	Short-leaf pine	Red pine	White pine	Other pines	Soft maple	Hard maple	River birch	Yellow birch	Hickory	Pecan	Hack-berry	Persimmon	Beech	Ash	Honey-locust	Butter-nut
<b>KNOBS UNIT</b>																	
Brown	--	--	--	--	--	80	518	--	--	991	--	10	--	119	449	--	--
Clark	--	8	--	6	534	31	383	--	--	84	--	8	--	55	316	--	--
Crawford	74	--	--	--	--	121	541	--	--	366	7	12	--	238	378	--	--
Dubois	1	--	--	--	--	653	623	--	1	709	--	8	1	473	654	--	--
Floyd	--	8	--	3	534	22	443	--	--	98	--	9	--	71	457	--	--
Harrison	458	8	--	6	534	68	702	2	1	583	--	5	2	109	593	--	--
Jackson	--	545	83	41	40	566	680	2	1	398	66	43	--	328	636	--	--
Lawrence	--	--	--	28	--	400	785	2	1	398	66	66	--	344	638	--	--
Monroe	--	--	--	--	--	202	647	5	--	657	--	13	--	137	500	--	--
Morgan	--	--	--	--	--	138	563	5	--	342	--	11	--	150	618	--	--
Orange	46	--	--	--	--	217	555	3	--	498	7	12	--	285	389	--	--
Owen	--	--	--	--	--	668	1,405	3	1	1,050	--	86	--	369	1,299	--	--
Perry	--	1	--	--	15	94	668	--	--	439	--	6	--	156	449	--	--
Scott	--	25	6	3	842	543	589	--	--	478	--	43	--	192	366	--	--
Spencer	4	--	--	--	--	285	291	--	--	299	--	--	4	160	461	--	--
Warrick	--	--	--	--	--	154	108	--	--	111	--	--	--	69	266	--	--
Washington	36	542	32	6	--	584	1,365	--	1	607	7	53	--	422	1,256	--	--
Total	619	68	122	93	2,501	4,827	10,865	21	6	7,881	88	386	8	3,677	9,725	--	--
<b>LOWER WABASH UNIT</b>																	
Clay	--	--	--	--	--	532	651	76	1	537	--	30	--	405	836	*	--
Daviess	--	--	--	--	--	519	318	--	1	778	--	47	--	348	540	--	--
Gibson	--	--	--	--	--	372	77	--	--	466	55	47	--	80	302	--	--
Greene	--	--	--	--	--	579	788	--	--	1,085	7	100	--	293	730	--	--
Knox	--	--	--	--	--	449	128	--	--	543	55	59	--	84	355	--	--
Marin	1	--	--	--	--	501	451	--	1	753	7	7	1	379	365	*	--
Parke	--	--	--	--	--	211	498	--	1	416	--	43	--	313	667	--	--
Pike	5	--	--	--	--	444	216	--	--	625	55	49	6	156	467	--	--
Posey	--	--	--	--	--	357	112	--	--	234	55	--	--	78	282	--	--
Putnam	--	--	--	--	--	196	476	--	--	464	--	10	--	232	792	--	--
Sullivan	--	--	--	--	--	488	193	--	--	400	--	64	--	103	205	--	--
Vanderburgh	1	--	--	--	--	248	182	--	--	214	55	--	2	55	431	--	--
Vermillion	--	--	--	--	--	23	65	--	--	84	--	3	--	66	108	--	--
Vigo	--	--	--	--	--	400	602	--	1	436	--	88	--	311	1,130	--	--
Total	7	--	--	--	--	5,320	4,755	76	6	7,036	288	545	9	2,904	7,210	1	--

\* = Less than 500 board feet.

1/ International 1/4-inch rule.

Rows and columns may not sum due to rounding.

(Table 16 continued on next page)

(Table 16 continued)

Unit and county	Red-cedar	Short-leaf pine	Red pine	White pine	Other pines	Total soft-woods	Soft maple	Hard maple	River birch	Yellow birch	Hickory	Pecan	Hack-berry	Persimmon	Beech	Ash	Honey-locust	Butter-nut	
<b>NORTHERN UNIT</b>																			
Adams	--	--	--	--	--	--	85	98	--	--	47	*	18	--	116	115	--	--	
Allen	--	--	--	--	--	--	446	729	--	--	191	1	54	--	106	757	--	--	
Bartholomew	--	--	6	--	--	6	40	213	--	--	150	1	10	--	42	178	--	--	
Benton	--	--	--	--	--	--	--	2	--	--	2	*	1	--	2	5	--	--	
Boone	--	--	--	--	--	--	3	10	--	--	8	*	1	--	4	47	--	--	
Carroll	--	--	--	--	--	--	139	253	--	--	45	*	--	--	30	225	--	--	
Cass	--	--	--	--	--	--	130	307	--	--	56	*	5	--	49	219	--	--	
Clinton	--	--	--	--	--	--	11	4	--	--	32	*	--	--	11	11	--	--	
De Kalb	--	--	--	--	--	--	618	446	--	--	240	1	55	--	199	521	--	--	
Decatur	--	--	--	--	--	--	68	218	--	--	215	1	--	--	78	432	--	--	
Delaware	--	--	--	--	--	--	--	9	--	--	11	*	--	--	--	16	--	--	
Elihart	--	--	10	23	--	34	313	214	--	--	153	1	7	--	134	149	--	--	
Fountain	--	--	--	--	--	--	65	97	--	--	211	1	10	--	163	275	--	--	
Fulton	--	--	--	--	--	--	108	237	--	--	60	*	5	--	54	196	--	--	
Grant	--	--	--	--	--	--	23	30	--	--	11	*	--	--	11	59	--	--	
Hamilton	--	--	--	--	--	--	1	29	--	--	5	*	3	--	4	149	--	--	
Hancock	--	--	--	--	--	--	6	34	--	--	9	*	1	--	1	149	--	--	
Hendricks	--	--	--	--	--	--	2	21	--	--	47	*	1	--	2	67	--	--	
Henry	--	--	--	--	--	--	6	50	--	--	10	*	1	--	1	180	--	--	
Howard	--	--	--	--	--	--	5	7	--	--	7	*	2	--	10	8	--	--	
Huntington	--	--	--	--	--	--	44	47	--	--	11	*	2	--	12	39	--	--	
Jasper	--	--	--	--	--	--	3	2	--	--	3	*	2	--	2	2	--	--	
Jay	--	--	--	--	--	--	1	*	--	--	*	*	--	--	*	1	--	--	
Johnson	--	--	--	--	--	--	6	279	2	--	181	*	1	--	6	288	--	--	
Kosciusko	--	--	--	--	--	--	981	460	--	--	284	1	3	--	301	577	--	--	
La Grange	--	--	9	23	--	33	568	377	--	--	204	1	8	--	190	405	--	1	
La Porte	--	--	--	--	--	--	153	111	--	--	77	*	1	--	73	116	--	--	
Lake	--	--	--	--	--	--	--	38	--	--	--	--	--	--	--	79	--	--	
Madison	--	--	--	--	--	--	2	21	--	--	14	*	1	--	4	63	--	--	
Marion	--	--	--	--	--	--	10	149	--	--	36	*	3	--	4	206	--	--	
Marshall	--	--	--	--	--	--	258	178	--	--	147	1	1	--	146	181	--	--	
Miami	--	--	--	--	--	--	312	717	--	--	152	1	15	--	158	611	--	--	
Montgomery	--	--	--	--	--	--	46	85	--	--	193	1	10	--	47	134	--	--	
Noble	--	--	--	--	--	--	717	664	--	--	254	1	26	--	246	684	--	--	
Porter	--	--	--	--	--	--	4	43	--	--	5	*	--	--	5	83	--	--	
Pulaski	--	--	--	--	--	--	11	9	--	--	129	*	--	--	2	2	--	--	
Randolph	--	--	--	--	--	--	8	17	--	--	3	*	--	--	--	91	--	--	
Rush	--	--	--	--	--	--	10	20	--	--	8	*	--	--	19	560	--	--	
Shelby	--	--	--	--	--	--	12	134	--	--	30	*	1	--	19	239	--	--	
St. Joseph	--	--	10	24	--	35	324	178	--	--	120	*	1	--	109	196	--	--	

(Table 16 continued on next page)

NORTHERN UNIT (continued)

(Table 16 continued)

Unit and county	Short-											Total soft-woods	Total	Blutter-nut		
	cedar	Red-leaf pine	Red pine	White pine	Other pines	Hard maple	River birch	Yellow birch	Hickory	Pecan	Hack-berry				Persim-mon	Beech
<b>NORTHERN UNIT (continued)</b>																
Stärke	--	--	--	--	--	36	--	--	238	1	--	--	23	36	--	--
Steuben	--	--	--	--	--	375	--	--	166	1	35	--	181	334	--	1
Tippecanoe	--	--	--	--	--	59	--	--	72	*	10	--	25	86	--	--
Tipton	--	--	--	--	--	5	--	--	11	*	--	--	7	13	--	--
Wabash	--	--	--	--	--	747	--	--	242	1	5	--	270	367	--	--
Warren	--	--	--	--	--	19	--	--	78	*	--	--	36	39	--	--
Wayne	--	--	--	--	--	27	--	--	22	*	1	--	1	303	--	--
Wells	--	--	--	--	--	10	--	--	6	*	5	--	3	23	--	--
White	--	--	--	4	--	6	--	--	85	*	--	--	7	9	--	--
Whitley	--	--	--	--	--	214	--	--	93	*	15	--	61	229	--	--
<b>Total</b>	--	--	36	75	--	7,101	2	--	4,376	15	314	--	2,976	9,757	--	1
<b>UPLAND FLATS UNIT</b>																
Dearborn	--	--	--	--	--	31	--	--	49	--	5	--	5	2,094	--	--
Fayette	--	--	--	--	--	73	--	--	52	--	--	--	25	235	--	--
Franklin	--	--	--	--	--	182	--	--	130	--	--	--	43	977	--	--
Jefferson	14	8	--	3	534	286	--	--	235	--	44	--	110	394	--	--
Jennings	--	8	--	6	534	194	--	--	348	--	5	--	162	567	--	--
Ohio	--	--	--	--	--	--	--	--	--	--	--	--	--	38	--	--
Ripley	--	--	--	6	--	95	--	--	160	--	5	--	88	340	--	--
Switzerland	14	542	--	3	--	34	--	--	4	--	2	--	6	30	--	--
Union	--	--	--	--	--	14	--	--	21	--	--	--	2	466	--	--
<b>Total</b>	27	558	--	17	1,069	880	99	--	999	--	59	--	441	5,142	--	--
<b>State total</b>	653	1,695	158	185	3,570	18,129	25,179	12	20,292	390	1,304	16	9,998	31,833	1	1

(Table 16 continued on next page)

(Table 16 continued)

Unit and county	Black walnut	Sweet-gum	Yellow poplar	Tupelo	Sycamore	Cottonwood	Aspen	Black cherry	Red oak group	White oak group	Black locust	Willow	Sassafras	Basswood	Elm	Other hardwoods	Total
<b>KNOBS UNIT</b>																	
Brown	205	67	2,217	--	108	22	--	262	3,077	1,725	--	--	87	98	30	--	10,064
Clark	88	14	950	4	18	7	--	181	1,397	1,362	--	--	9	5	1	--	4,914
Crawford	146	90	1,337	2	111	1	--	245	2,369	2,091	--	--	26	31	47	--	8,161
Dubois	343	416	2,970	75	599	28	2	546	4,211	3,312	--	--	132	139	148	--	16,045
Floyd	82	6	601	44	57	6	--	157	804	858	--	--	6	4	43	--	3,767
Harrison	37	36	1,236	33	61	9	--	153	1,665	969	--	--	18	18	3	--	5,887
Jackson	90	62	1,599	4	325	445	--	326	2,676	2,110	--	--	79	37	39	30	10,661
Lawrence	137	173	1,499	2	170	11	2	557	3,589	1,846	--	--	86	26	184	--	10,982
Monroe	298	64	1,595	--	119	58	2	401	2,655	1,530	--	1	53	52	29	2	9,021
Morgan	408	--	2,403	--	160	89	4	401	2,472	1,364	1	--	55	62	20	--	9,266
Orange	111	119	1,650	4	299	163	2	284	2,491	1,870	--	--	24	71	84	--	9,135
Owen	522	130	4,631	2	635	120	12	410	4,939	2,267	3	1	143	273	132	78	19,179
Perry	38	149	1,340	2	186	20	--	25	2,921	2,990	--	--	33	10	34	--	9,561
Scott	6	392	1,167	44	56	205	--	117	1,199	751	--	--	43	7	7	--	6,206
Spencer	95	109	1,069	2	248	109	--	95	2,093	1,839	--	--	12	66	59	--	7,296
Warrick	19	94	465	2	139	105	--	3	608	396	--	--	2	1	*	--	2,543
Washington	231	187	3,083	44	206	245	--	572	4,746	3,505	--	--	55	82	114	--	17,365
Total	2,857	2,108	29,811	265	3,496	1,643	23	4,734	43,913	30,784	4	2	863	981	974	110	160,052
<b>LOWER WABASH UNIT</b>																	
Clay	95	91	2,801	4	642	143	10	178	2,925	1,160	1	--	50	133	41	20	11,362
Daviess	221	84	995	31	584	143	3	296	2,706	2,533	--	--	1	261	249	--	10,659
Gibson	57	63	232	3	201	185	3	50	933	858	--	--	--	47	47	--	4,077
Greene	413	92	2,354	3	550	178	3	427	3,536	2,262	1	--	64	167	171	53	13,856
Knox	82	20	375	3	128	139	3	94	1,341	1,051	--	--	7	51	51	15	5,033
Martin	159	170	1,999	81	630	198	3	272	2,966	1,897	--	--	8	184	165	--	11,198
Parke	274	23	2,213	1	534	180	9	80	2,155	1,099	7	1	89	187	60	15	9,073
Pike	195	76	774	3	188	131	3	333	1,694	1,266	--	--	10	62	63	--	6,816
Posey	25	42	586	3	91	65	3	42	808	435	--	--	--	--	--	--	3,217
Puinam	351	9	2,175	1	323	130	12	124	2,207	936	3	1	58	100	27	5	8,633
Sullivan	70	71	759	3	314	75	3	96	1,071	682	--	--	15	71	60	10	4,754
Vanderburgh	17	40	499	31	77	49	3	56	776	431	--	--	2	3	3	--	3,173
Vermillion	47	2	263	--	75	40	2	8	371	173	1	--	3	22	3	3	1,362
Vigo	113	57	2,010	4	392	176	7	361	3,353	1,712	2	--	90	144	70	25	11,484
Total	2,118	843	18,034	171	4,727	1,830	67	2,415	26,843	16,494	15	2	398	1,432	1,010	147	104,697

(Table 16 continued on next page)



(Table 16 continued)

Unit and county	Black walnut	Sweet gum	Yellow poplar	Tupelo	Sycamore	Cottonwood	Aspen	Black cherry	Red oak group	White oak group	Black locust	Willow	Sassafras	Basswood	Elm	Other hardwoods	Total hardwoods	All species
<b>NORTHERN UNIT</b>																		
Adams	43	--	98	--	215	235	--	14	348	307	--	--	--	87	40	--	1,869	1,869
Allen	446	--	128	--	121	133	--	258	2,096	805	--	--	7	187	27	--	6,491	6,491
Bartholomew	65	26	463	5	43	36	--	116	700	494	--	--	14	34	13	--	2,641	2,648
Benton	3	--	--	--	2	4	--	2	21	6	--	--	--	2	--	--	52	52
Boone	14	--	11	--	13	5	--	1	30	21	--	--	--	1	1	--	170	170
Carroll	75	--	195	--	31	37	--	94	576	213	--	--	3	154	47	--	2,117	2,117
Cass	69	3	207	1	50	61	--	94	560	220	--	--	3	141	52	--	2,226	2,226
Clinton	--	--	37	--	38	18	2	2	83	42	--	--	--	4	4	--	302	302
De Kalb	231	--	194	--	148	284	--	142	1,395	937	--	--	7	107	34	--	5,560	5,560
Decatur	93	69	712	13	121	84	--	104	1,475	1,118	--	--	2	72	39	--	4,915	4,915
Delaware	15	--	28	--	1	1	--	9	87	30	--	--	2	4	--	--	211	211
Elkhart	55	--	93	--	94	102	--	128	582	245	--	--	3	44	50	--	2,366	2,400
Fountain	283	15	693	3	234	112	7	42	900	602	2	1	23	66	23	3	3,829	3,829
Fulton	73	3	114	1	19	16	--	66	596	421	--	--	3	144	61	--	2,178	2,178
Grant	39	--	29	--	19	31	--	10	144	108	--	--	--	17	10	--	542	542
Hamilton	46	--	9	--	9	3	--	3	39	31	--	--	--	--	--	--	331	331
Hancock	46	--	51	--	4	--	--	32	279	465	--	--	2	9	--	--	1,089	1,089
Hendricks	29	--	61	--	7	3	--	10	136	50	--	--	4	6	--	--	445	445
Henry	59	--	58	--	5	--	--	41	325	495	--	--	2	10	1	--	1,242	1,242
Howard	1	1	13	*	10	13	--	6	44	15	--	--	1	7	4	--	153	153
Huntington	31	--	23	--	7	2	--	22	108	70	--	--	2	17	4	--	440	440
Jasper	--	--	2	--	2	--	--	1	12	3	--	--	--	1	1	--	36	36
Jay	--	--	1	--	1	--	--	--	6	6	--	--	--	--	--	--	16	16
Johnson	302	--	298	--	13	7	--	246	759	601	--	--	17	30	2	--	3,040	3,040
Kosciusko	239	6	260	1	25	269	--	282	1,525	882	--	--	3	71	57	--	6,228	6,228
La Grange	198	--	261	--	62	187	3	188	1,083	537	5	--	3	64	28	1	4,375	4,408
La Porte	48	--	194	--	48	29	--	165	778	316	--	--	1	71	61	--	2,242	2,242
Lake	--	--	120	--	--	--	--	--	332	247	--	--	--	--	--	--	817	817
Madison	29	--	35	--	5	5	--	13	116	42	--	--	2	7	2	--	362	362
Marion	107	--	212	--	9	3	--	88	370	276	--	--	7	9	--	10	1,498	1,498
Marshall	77	6	204	1	71	93	--	147	776	430	--	--	1	75	81	--	2,873	2,873
Miami	372	9	387	2	169	236	--	270	1,958	552	--	--	11	316	117	--	6,366	6,366
Montgomery	97	--	255	--	153	31	2	29	478	359	1	--	16	31	18	--	2,231	2,231
Noble	333	--	501	--	102	228	2	294	1,926	860	4	--	8	131	36	--	6,771	6,771
Porter	--	--	125	--	5	--	--	5	423	338	--	--	--	5	5	--	1,044	1,044
Pulaski	--	--	10	--	2	1,137	--	9	1,364	300	--	--	--	1	1	--	2,979	2,979
Randolph	14	--	10	--	6	1	--	18	299	437	--	--	--	8	3	--	916	916
Rush	21	6	585	1	12	5	--	45	359	599	--	--	--	10	4	--	2,264	2,264
Shelby	63	4	192	1	18	--	--	103	490	923	--	--	2	12	--	--	2,243	2,243
St. Joseph	59	--	180	--	28	60	--	140	860	402	--	--	1	47	37	--	2,741	2,776

(Table 16 continued on next page)

NORTHERN UNIT (continued)

(Table 16 continued)

Unit and county	Black walnut	Sweet gum	Yellow poplar	Tupelo	Sycamore	Cottonwood	Aspen	Black cherry	Red oak group	White oak group	Black locust	Willow	Sassafras	Basswood	Elm	Other hardwoods	Total hardwoods	All species
<b>NORTHERN UNIT (continued)</b>																		
Starke	13	6	49	1	2	242	--	82	722	742	--	--	--	11	26	--	2,267	2,267
Steuben	207	--	159	--	146	288	2	107	1,038	607	5	--	8	100	43	1	4,270	4,270
Tippecanoe	65	--	108	--	47	20	2	31	311	181	--	--	12	29	16	--	1,102	1,102
Tipton	25	--	31	--	16	9	1	11	74	66	--	--	--	4	3	--	289	289
Wabash	44	3	333	1	231	513	--	156	788	501	--	--	2	118	100	--	4,851	4,851
Warren	39	--	158	--	60	31	2	2	188	114	--	--	3	23	8	--	825	825
Wayne	55	--	116	--	26	--	--	47	527	546	--	--	--	9	3	--	1,795	1,795
Wells	3	--	2	--	2	1	--	3	26	25	--	--	--	6	1	--	127	127
White	5	--	5	--	7	529	--	7	555	191	--	--	--	7	6	--	1,425	1,425
Whitley	203	--	66	--	65	77	--	69	640	394	--	--	2	48	12	--	2,406	2,406
Total	4,335	156	8,075	30	2,526	5,181	24	3,759	29,306	18,168	18	1	173	2,357	1,079	14	107,568	107,660
<b>UPLAND FLATS UNIT</b>																		
Dearborn	198	--	141	--	5	4	--	218	915	153	--	--	5	71	--	--	4,202	4,202
Fayette	50	*	387	--	153	0	--	103	553	797	--	--	2	21	0	--	2,569	2,569
Franklin	90	8	1,429	--	380	7	--	203	1,509	1,181	--	--	4	22	7	--	6,521	6,521
Jefferson	142	200	1,066	41	110	115	--	253	955	693	--	--	44	14	2	--	5,114	5,673
Jennings	219	207	1,208	3	280	184	--	223	2,230	1,435	--	--	11	150	97	--	7,830	8,378
Ohio	--	--	116	--	--	--	--	18	146	41	--	--	--	--	--	--	390	390
Ripley	68	99	1,049	3	110	82	--	172	1,508	683	--	--	5	81	56	--	4,751	4,756
Switzerland	1	5	107	41	10	3	--	17	89	49	--	--	--	2	2	--	405	964
Union	28	2	534	--	8	1	--	32	269	440	--	--	2	14	2	--	1,867	1,867
Total	796	521	6,037	89	1,054	396	--	1,239	8,174	5,472	--	--	71	376	167	--	33,649	35,320
State total	10,105	3,628	61,956	555	11,804	9,050	114	12,148	108,237	70,918	38	5	1,506	5,147	3,230	272	405,966	412,227

Table 17.--Harvest residues generated by industrial roundwood harvesting from timberland by Forest Survey Unit, county, and species group, Indiana, 1995

(In thousand cubic feet)

Unit and county	Total																
	Short-leaf pine	Red-cedar	White-pine	Other-pines	Total soft-woods	Soft-maple	Hard-maple	River-birch	Yellow-birch	Hickory	Pecan	Hack-berry	Persim-mon	Beech	Ash	Honey-locust	Butter-nut
<b>KNOBS UNIT</b>																	
Brown	--	--	--	--	--	11	58	--	--	140	--	1	--	17	64	--	--
Clark	2	--	1	126	129	4	52	--	--	12	--	1	--	8	45	--	--
Crawford	--	9	--	--	9	15	65	--	--	52	1	1	--	33	51	--	--
Dubois	*	--	--	--	*	65	57	--	*	101	--	1	*	53	48	--	--
Floyd	2	--	1	126	128	3	60	--	--	14	--	1	--	10	63	--	--
Harrison	2	--	1	126	186	8	95	--	--	24	--	1	*	14	82	--	--
Jackson	128	20	10	9	167	77	85	*	*	80	--	6	--	47	88	--	--
Lawrence	--	--	7	--	7	55	93	*	*	56	9	9	--	49	89	--	--
Monroe	--	--	--	--	--	28	65	*	--	93	--	2	--	19	60	--	--
Morgan	--	--	--	--	--	19	59	*	--	48	--	2	--	21	77	--	--
Orange	6	--	--	--	6	29	62	*	--	71	1	2	--	39	52	--	--
Owen	--	--	--	--	--	82	174	*	*	142	--	12	--	52	172	--	--
Perry	*	--	--	4	4	12	84	--	--	63	--	1	--	21	61	--	--
Scott	6	2	1	196	204	74	81	--	--	68	--	6	--	27	52	--	--
Spencer	*	--	--	--	*	38	38	--	--	42	--	--	1	22	63	--	--
Warrick	--	--	--	--	--	21	15	--	--	16	--	--	--	10	38	--	--
Washington	5	127	8	1	141	80	186	--	*	86	1	8	--	60	169	--	--
Total	77	267	29	586	981	620	1,330	1	1	1,108	12	53	1	503	1,275	--	--
<b>LOWER WABASH UNIT</b>																	
Clay	--	--	--	--	--	65	89	11	*	75	--	4	--	58	118	*	--
Daviess	--	--	--	--	--	64	44	--	*	111	--	7	--	50	77	--	--
Gibson	--	--	--	--	--	49	11	--	--	65	1	7	--	11	43	--	--
Greene	--	--	--	--	--	70	106	--	--	149	1	14	--	42	93	--	--
Knox	--	--	--	--	--	59	17	--	--	75	1	8	--	12	50	--	--
Martin	*	--	--	--	*	61	62	--	*	107	1	1	*	54	52	*	--
Parke	--	--	--	--	--	29	68	--	*	58	--	6	--	45	94	--	--
Pike	1	--	--	--	1	58	28	--	--	88	1	7	1	21	64	--	--
Posey	--	--	--	--	--	47	15	--	--	33	1	--	--	11	40	--	--
Pulnam	--	--	--	--	--	27	64	--	--	66	--	1	--	33	103	--	--
Sullivan	--	--	--	--	--	59	26	--	--	56	--	9	--	15	29	--	--
Vanderburgh	*	--	--	--	*	32	25	--	--	30	1	--	*	8	61	--	--
Vermillion	--	--	--	--	--	3	9	--	--	12	--	*	--	9	15	--	--
Vigo	--	--	--	--	--	54	82	--	*	60	--	12	--	44	160	--	--
Total	1	--	--	--	1	677	646	11	1	984	9	78	1	412	1,000	*	--

(Table 17 continued on next page)

\* = Less than 500 cubic feet.

Rows and columns may not sum due to rounding.

(Table 17 continued)

Unit and county	Short-				Total				Honey-locust	Ash	Beech	Persimmon	Hackberry	Pecan	Hickory	Yellow birch	River birch	Hard maple	Soft maple	Other pines	White pine	Red pine	Shorleaf pine	Red-cedar	Butternut	
	Red-cedar	Shorleaf pine	White pine	Other pines	Soft maple	Hard maple	River birch	Yellow birch																		Hickory
<b>NORTHERN UNIT</b>																										
Adams					12	13				7																16
Allen					61	100				27																108
Bartholomew					5	21				21																25
Benton																										1
Boone						1				1																7
Carroll					19	35				6																32
Cass					18	42				8																31
Clinton					1	1				5																2
De Kalb					85	61				34																74
Decatur					9	30				31																62
Delaware						1				2																2
Elkhart					43	29				22																21
Fountain					9	13				30																39
Fulton					15	33				9																28
Grant					3	4				2																8
Hamilton						4				1																21
Hancock					1	5				1																21
Hendricks						3				7																9
Henry					1	7				1																26
Howard					1	1				1																1
Huntington					6	6				2																6
Jasper																										
Jay																										
Johnson					1	18				21																28
Kosciusko					135	63				40																82
La Grange					78	52				29																58
La Porte					21	15				11																17
Lake						5																				11
Madison						3				2																9
Marion					1	12				4																29
Marshall					35	25				21																26
Miami					43	99				22																87
Montgomery					6	12				27																19
Noble					99	91				36																97
Porter					1	6				1																12
Pulaski					1	1				18																
Randolph					1	2																				13
Rush					1	3				1																80
Shelby					2	10				4																34
St. Joseph					44	24				17																28

(Table 17 continued on next page)

NORTHERN UNIT (continued)



(Table 17 continued)

Unit and county	Red-cedar	Short-leaf pine	Red pine	White pine	Other pines	Total soft-woods	Soft maple	Hard maple	River birch	Yellow birch	Hickory	Pecan	Hack-berry	Persimmon	Beech	Ash	Honey-locust	Butter-nut	
<b>NORTHERN UNIT (continued)</b>																			
Stärke	--	--	--	--	--	--	5	5	--	--	34	*	--	--	3	5	--	--	
Steuben	--	--	--	--	--	--	64	52	--	--	24	*	5	--	24	48	--	--	
Tippacancoe	--	--	--	--	--	--	4	8	--	--	10	*	1	--	4	12	--	--	
Tipton	--	--	--	--	--	--	1	2	--	--	2	*	--	--	1	2	--	--	
Wabash	--	--	--	--	--	--	103	60	--	--	34	*	1	--	35	52	--	--	
Warren	--	--	--	--	--	--	3	3	--	--	11	*	--	--	5	6	--	--	
Wayne	--	--	--	--	--	--	4	15	--	--	3	*	--	--	*	43	--	--	
Wells	--	--	--	--	--	--	1	1	--	--	1	*	1	--	*	3	--	--	
White	--	--	--	1	--	1	1	1	--	--	12	*	--	--	1	1	--	--	
Whitley	--	--	--	--	--	--	29	30	--	--	13	*	2	--	9	33	--	--	
Total	--	--	9	18	--	26	976	1,030	*	--	617	2	45	--	401	1,375	--	--	
<b>UPLAND FLATS UNIT</b>																			
Dearborn	--	--	--	--	--	--	4	42	--	--	7	--	1	--	1	298	--	--	
Fayette	--	--	--	--	--	--	10	16	--	--	7	--	--	--	4	34	--	--	
Franklin	--	--	--	--	--	--	25	48	--	--	19	--	--	--	6	139	--	--	
Jefferson	2	2	--	1	126	130	39	54	--	--	33	--	6	--	16	46	--	--	
Jennings	--	2	--	1	126	129	27	40	--	--	50	--	1	--	23	71	--	--	
Ohio	--	--	--	--	--	--	--	4	--	--	--	--	--	--	--	5	--	--	
Ripley	--	--	--	1	--	1	13	20	--	--	23	--	1	--	13	48	--	--	
Switzerland	2	127	--	1	--	130	1	5	--	--	1	--	*	--	1	4	--	--	
Union	--	--	--	--	--	--	2	4	--	--	3	--	--	--	*	66	--	--	
Total	3	131	--	4	251	390	121	234	--	--	142	--	8	--	63	712	--	--	
State total	82	398	37	44	837	1,398	2,395	3,239	11	2	2,852	24	184	2	1,379	4,362	--	--	

(Table 17 continued on next page)

(Table 17 continued)

Unit and county	Black walnut	Sweet-gum	Yellow poplar	Tupelo	Sycamore	Cottonwood	Aspen	Black cherry	Red oak group	White oak group	Black locust	Willow	Sassafras	Basswood	Elm	Other hardwoods	Total hardwoods	All species
<b>KNOBS UNIT</b>																		
Brown	7	5	313	--	14	2	--	23	376	180	--	--	12	14	4	--	1,244	1,244
Clark	2	2	134	1	3	1	--	18	174	120	--	--	1	1	*	--	577	706
Crawford	4	8	186	*	13	*	--	25	283	201	--	--	3	3	7	--	952	961
Dubois	10	52	375	11	49	3	*	58	453	279	--	--	5	6	21	--	1,648	1,648
Floyd	2	1	84	6	8	1	--	14	96	64	--	--	1	*	6	--	435	563
Harrison	1	5	173	5	8	1	--	20	214	115	--	--	2	1	*	--	769	955
Jackson	3	9	224	1	46	47	--	29	339	262	--	--	11	5	6	1	1,364	1,531
Lawrence	5	20	211	*	22	1	*	62	437	228	--	--	12	4	26	--	1,391	1,397
Monroe	9	5	221	--	15	6	*	28	312	144	--	*	8	7	4	*	1,026	1,026
Morgan	13	--	338	--	23	9	1	28	310	127	*	--	8	9	3	--	1,093	1,093
Orange	4	13	231	1	40	17	*	37	311	196	--	--	2	9	12	--	1,128	1,134
Owen	18	7	627	*	67	13	2	50	627	257	*	*	20	39	18	2	2,384	2,384
Perry	1	17	187	*	24	2	--	2	242	225	--	--	4	*	5	--	951	955
Scott	*	56	166	6	8	22	--	17	157	91	--	--	6	1	1	--	840	1,044
Spencer	3	15	150	*	34	12	--	12	231	183	--	--	1	8	8	--	862	862
Warrick	1	13	66	*	20	11	--	*	80	52	--	--	*	*	*	--	344	344
Washington	7	27	436	6	29	26	--	80	623	420	--	--	8	12	16	--	2,281	2,422
Total	91	255	4,123	38	423	174	3	504	5,265	3,144	1	*	104	120	137	3	19,289	20,270
<b>LOWER WABASH UNIT</b>																		
Clay	4	6	378	1	70	15	1	25	382	150	*	--	7	19	6	*	1,483	1,483
Davies	8	5	123	4	62	15	*	42	355	326	--	--	*	37	35	--	1,364	1,364
Gibson	2	9	33	*	29	20	*	7	122	104	--	--	--	7	7	--	528	528
Greene	14	6	308	*	57	19	*	59	459	286	*	--	9	24	24	1	1,741	1,741
Knox	3	3	52	*	18	15	*	13	175	128	--	--	1	7	7	*	646	646
Martin	6	17	266	12	68	21	*	39	379	245	--	--	1	26	23	--	1,442	1,442
Parke	10	3	314	*	76	19	1	11	282	143	1	*	13	27	9	1	1,208	1,208
Pike	7	11	108	*	26	14	*	46	217	162	--	--	*	8	9	--	877	877
Posey	1	6	83	*	13	7	*	6	106	57	--	--	--	--	--	--	428	428
Pulnam	12	1	306	*	46	14	2	18	290	118	*	*	8	14	4	1	1,129	1,129
Sullivan	3	3	88	*	23	8	*	14	140	88	--	--	2	10	9	*	582	582
Vanderburgh	1	6	71	4	11	5	*	8	102	57	--	--	*	*	*	--	424	424
Vermillion	2	*	37	--	11	4	*	1	38	22	*	--	*	3	*	*	169	169
Vigo	4	8	283	1	56	19	1	51	437	222	*	--	13	21	10	1	1,539	1,539
Total	75	84	2,451	24	564	194	9	341	3,483	2,108	2	*	56	203	142	4	13,561	13,562

(Table 17 continued on next page)

(Table 17 continued)

Unit and county	Black walnut	Sweet gum	Yellow poplar	Tupelo	Sycamore	Cottonwood	Aspen	Black cherry	Red oak group	White oak group	Black locust	Willow	Sassafras	Basswood	Elm	Other hardwoods	Total hardwoods	All species	
<b>NORTHERN UNIT</b>																			
Adams	2	--	14	--	29	24	--	2	46	40	--	--	--	12	6	--	242	242	242
Allen	17	--	18	--	16	14	--	37	272	101	--	--	1	27	4	--	826	826	826
Bartholomew	2	4	66	1	6	4	--	10	88	48	--	--	2	5	2	--	318	319	319
Benton	*	--	--	--	*	*	--	*	3	1	--	--	--	*	--	--	7	7	7
Boone	1	--	2	--	2	1	--	*	4	3	--	--	--	*	--	--	22	22	22
Carroll	3	--	28	--	4	4	--	13	76	28	--	--	*	22	7	--	281	281	281
Cass	3	*	29	*	7	6	--	13	74	29	--	--	*	20	7	--	297	297	297
Clinton	--	--	5	--	5	2	*	*	11	6	--	--	--	1	1	--	41	41	41
De Kalb	9	--	28	--	20	29	--	20	181	118	--	--	1	15	5	--	714	714	714
Decatur	3	10	101	2	16	9	--	15	191	141	--	--	*	10	5	--	648	648	648
Delaware	1	--	4	--	*	*	--	1	11	4	--	--	*	1	--	--	27	27	27
Elkhart	2	--	13	--	13	11	--	18	76	32	--	--	*	6	7	--	314	322	322
Fountain	11	2	99	*	32	12	1	6	106	79	*	*	3	9	3	*	478	478	478
Fulton	3	*	16	*	3	2	--	9	78	55	--	--	*	21	9	--	289	289	289
Grant	1	--	4	--	3	3	--	1	19	14	--	--	--	2	1	--	69	69	69
Hamilton	2	--	1	--	1	*	--	*	5	4	--	--	--	--	--	--	41	41	41
Hancock	2	--	7	--	1	*	--	5	37	61	--	--	*	1	--	--	142	142	142
Hendricks	1	--	9	--	1	*	--	1	18	7	--	--	1	1	--	--	58	58	58
Henry	2	--	8	--	1	--	--	6	43	65	--	--	*	1	*	--	161	161	161
Howard	*	--	2	*	1	1	--	1	6	2	--	--	*	1	1	--	20	20	20
Huntington	1	--	3	--	1	*	--	3	14	9	--	--	*	2	1	--	57	57	57
Jasper	--	--	*	--	*	--	--	*	2	*	--	--	--	*	*	--	5	5	5
Jay	--	--	*	--	*	--	--	--	1	1	--	--	--	--	--	--	2	2	2
Johnson	9	--	39	--	2	1	--	13	88	36	--	--	2	4	*	--	263	263	263
Kosciusko	9	1	37	*	4	28	--	40	198	111	--	--	*	10	8	--	806	806	806
La Grange	7	--	37	--	9	20	*	27	142	70	1	--	*	9	4	*	570	578	578
La Porte	2	--	28	--	7	3	--	23	102	41	--	--	*	10	9	--	300	300	300
Lake	--	--	17	--	--	--	--	--	44	32	--	--	--	--	--	--	110	110	110
Madison	1	--	5	--	1	1	--	2	15	5	--	--	*	1	*	--	46	46	46
Marion	4	--	29	--	1	*	--	7	44	18	--	--	1	1	--	*	152	152	152
Marshall	3	1	29	*	10	10	--	21	102	56	--	--	*	11	11	--	380	380	380
Miami	14	1	55	*	23	24	--	38	254	73	--	--	2	45	16	--	818	818	818
Montgomery	4	--	71	--	21	3	*	4	63	47	--	--	2	4	3	--	295	295	295
Noble	12	--	36	--	14	23	*	40	250	108	1	--	1	19	5	--	869	869	869
Porter	--	--	18	--	1	--	--	1	56	44	--	--	--	1	1	--	140	140	140
Pulaski	--	--	1	--	*	116	--	1	177	39	--	--	--	--	--	--	358	358	358
Randolph	1	--	1	--	1	*	--	3	27	57	--	--	--	1	*	--	108	108	108
Rush	1	1	83	*	2	*	--	6	47	79	--	--	--	1	1	--	309	309	309
Shelby	2	1	27	*	3	--	--	9	61	100	--	--	*	2	--	--	257	257	257
St. Joseph	2	--	26	--	4	6	--	20	113	53	--	--	*	7	5	--	365	373	373
<b>NORTHERN UNIT (continued)</b>																			

(Table 17 continued on next page)

Table 17 continued

Unit and county	Black walnut	Sweet gum	Yellow poplar	Tupelo	Sycamore	Cottonwood	Aspen	Black cherry	Red oak group	White oak group	Black locust	Willow	Sassafras	Basswood	Elm	Other hardwoods	Total hardwoods	All species
<b>NORTHERN UNIT (continued)</b>																		
Stark	*	1	7	*	*	25	--	12	95	93	--	--	--	2	4	--	291	291
Steuben	8	--	23	--	20	29	*	15	136	80	1	--	1	14	6	*	549	549
Tippecanoe	2	--	15	--	7	2	*	4	41	24	--	--	2	4	2	--	143	143
Tipton	1	--	4	--	2	1	*	2	10	9	--	--	--	1	*	--	37	37
Wabash	2	*	47	*	31	52	--	22	103	66	--	--	*	17	14	--	640	640
Warren	1	--	22	--	9	3	*	*	25	15	--	--	*	3	1	--	109	109
Wayne	2	--	16	--	4	--	--	7	54	72	--	--	--	1	*	--	222	222
Wells	*	--	*	--	*	*	--	*	3	3	--	--	--	1	*	--	17	17
White	*	--	1	--	1	54	--	1	73	25	--	--	--	1	1	--	173	174
Whitley	8	--	9	--	9	8	--	10	84	52	--	--	*	7	2	--	305	305
<b>Total</b>	<b>157</b>	<b>22</b>	<b>1,144</b>	<b>4</b>	<b>349</b>	<b>534</b>	<b>3</b>	<b>494</b>	<b>3,765</b>	<b>2,257</b>	<b>3</b>	<b>*</b>	<b>25</b>	<b>395</b>	<b>152</b>	<b>1</b>	<b>13,693</b>	<b>13,719</b>
<b>UPLAND FLATS UNIT</b>																		
Dearborn	7	--	20	--	1	*	--	22	120	12	--	--	1	10	--	--	547	547
Fayette	2	*	55	--	22	*	--	15	73	100	--	--	*	3	*	--	340	340
Franklin	3	1	203	--	54	1	--	20	184	141	--	--	1	3	1	--	849	849
Jefferson	3	29	148	6	16	12	--	25	125	75	--	--	6	2	*	--	643	773
Jennings	7	30	169	*	40	19	--	21	289	152	--	--	2	21	13	--	973	1,012
Ohio	--	--	17	--	--	--	--	3	19	5	--	--	--	--	--	--	53	53
Ripley	3	14	149	*	16	9	--	16	195	74	--	--	1	12	8	--	614	615
Switzerland	*	1	15	6	1	*	--	2	12	6	--	--	--	*	*	--	56	186
Union	1	*	76	--	1	*	--	5	35	58	--	--	*	2	*	--	255	255
<b>Total</b>	<b>26</b>	<b>74</b>	<b>853</b>	<b>13</b>	<b>150</b>	<b>42</b>	<b>--</b>	<b>129</b>	<b>1,053</b>	<b>624</b>	<b>--</b>	<b>--</b>	<b>10</b>	<b>53</b>	<b>23</b>	<b>--</b>	<b>4,330</b>	<b>4,720</b>
<b>State total</b>	<b>350</b>	<b>435</b>	<b>8,571</b>	<b>79</b>	<b>1,486</b>	<b>944</b>	<b>16</b>	<b>1,467</b>	<b>13,566</b>	<b>8,133</b>	<b>5</b>	<b>1</b>	<b>195</b>	<b>712</b>	<b>454</b>	<b>8</b>	<b>50,873</b>	<b>52,271</b>



Table 18.--Residue produced at primary wood-using mills by type of material, type of use, and Forest Survey Unit, Indiana, 1995

(In thousand tons, green weight)

Survey unit and type of use	Wood residue							
	Total		Coarse 1/		Fine 2/		Bark	
	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood
<b>KNOBS UNIT</b>								
Fiber products	0.1	138.1	0.1	129.5	--	8.6	--	1.9
Charcoal	--	0.9	--	0.7	--	0.2	--	0.3
Industrial fuel-mill	*	43.6	--	31.4	*	12.2	--	5.2
Industrial fuel-sold	*	58.7	0.0	27.0	*	31.7	--	6.4
Domestic fuel	0.2	35.2	0.2	26.0	0.1	9.2	0.1	3.2
Miscellaneous 3/	1.5	60.6	1.1	14.7	0.4	45.8	0.3	69.8
Not used	*	6.6	*	2.7	--	3.9	--	8.4
Total	1.8	343.6	1.3	232.0	0.5	111.6	0.4	95.0
<b>LOWER WABASH UNIT</b>								
Fiber products	--	81.4	--	78.7	--	2.7	--	--
Industrial fuel-mill	--	8.2	--	5.7	--	2.5	--	1.8
Industrial fuel-sold	--	17.2	--	5.4	--	11.8	--	--
Domestic fuel	--	16.0	--	15.2	--	0.8	--	5.6
Miscellaneous 3/	--	90.0	--	40.8	--	49.2	--	42.0
Not used	--	0.9	--	0.4	--	0.5	--	9.6
Total	--	213.6	--	146.2	--	67.4	--	59.0
<b>NORTHERN UNIT</b>								
Fiber products	--	96.3	--	91.8	--	4.5	--	10.8
Industrial fuel-mill	--	59.3	--	41.5	--	17.8	--	2.4
Industrial fuel-sold	--	11.3	--	7.5	--	3.8	--	0.8
Domestic fuel	--	17.8	--	17.8	--	--	--	3.4
Miscellaneous 3/	0.1	102.6	*	45.7	0.1	56.9	0.1	60.6
Not used	*	13.6	*	8.2	--	5.4	*	6.4
Total	0.1	300.9	*	212.5	0.1	88.4	0.1	84.4
<b>UPLAND FLATS UNIT</b>								
Fiber products	--	8.5	--	8.5	--	--	--	--
Industrial fuel-mill	--	2.1	--	0.1	--	2.0	--	*
Domestic fuel	0.1	3.6	0.1	3.6	--	--	*	1.7
Miscellaneous 3/	*	29.1	--	15.3	*	13.8	--	9.7
Not used	*	0.1	--	--	*	0.1	--	--
Total	0.1	43.4	0.1	27.5	*	15.9	*	11.4
<b>STATE TOTAL</b>								
Fiber products	0.1	324.2	0.1	308.4	--	15.8	--	12.7
Charcoal	--	0.9	--	0.7	--	0.2	--	0.3
Industrial fuel-mill	*	113.2	--	78.7	*	34.5	--	9.4
Industrial fuel-sold	*	87.2	*	39.9	*	47.3	--	7.2
Domestic fuel	0.3	72.6	0.2	62.7	0.1	10.0	0.1	13.9
Miscellaneous 3/	1.6	282.3	1.1	116.6	0.5	165.7	0.4	182.0
Not used	*	21.2	*	11.3	*	9.9	*	24.4
Total	2.0	901.5	1.4	618.2	0.6	283.3	0.5	249.8

1/ Suitable for chipping such as slabs, edgings, veneer cores, etc.

2/ Not suitable for chipping such as sawdust, veneer clippings, etc.

3/ Livestock bedding, mulch, small dimension, and specialty items.

Rows and columns may not sum due to rounding.



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Hackett, Ronald L.; Settle, Jeff.

1998. **Indiana's timber industry—an assessment of timber product output and use, 1995**. Resour. Bull. NC-193. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Research Station. 76 p.

Discusses recent Indiana forest industry trends; production and receipts of saw logs, pulpwood, and veneer logs; and production of other timber products in 1995. Reports on harvest residue, on wood and bark residue generated at primary wood-using mills, and on disposition of this mill residue.

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**KEY WORDS:** Saw logs, pulpwood, veneer logs, residue.



Our job at the North Central Forest Experiment Station is discovering and creating new knowledge and technology in the field of natural resources and conveying this information to the people who can use it. As a new generation of forests emerges in our region, managers are confronted with two unique challenges: (1) Dealing with the great diversity in composition, quality, and ownership of the forests, and (2) Reconciling the conflicting demands of the people who use them. Helping the forest manager meet these challenges while protecting the environment is what research at North Central is all about.

