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Maryland Timber Industry: An Assessment of Timber Product Output and Use 2008

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Abstract

In 2008, there were 30 primary wood-processing mills in Maryland, 1 more than in 2004. These mills processed 47.9 million cubic feet of industrial roundwood, of which 20.8 million cubic feet was harvested from within the State. Another 8.3 million cubic feet of the industrial roundwood harvested in Maryland was sent to primary wood-processing mills in other states and countries. The majority of roundwood harvested was for saw logs and pulpwood, accounting for 50 percent and 43 percent of the total, respectively. The harvesting of industrial roundwood products generated 16.8 million cubic feet of harvest residues. Primary wood-processing mills generated 446,320 green tons of mill residues, with less than 1 percent of those residues not used for other products.

Cover Photo

Pine plantation and regeneration, Garrett County, MD, 2009. Photo by Jack Perdue, Maryland DNR.

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INTRODUCTION

Maryland's wood products manufacturing industry[1] employs 8,300 workers and has an output of more than $2 billion (U.S. Census Bureau 2007). Given the economic importance of the State's wood products industry, the purpose of this bulletin is to analyze recent Maryland 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 2008. Such detailed information is necessary for intelligent planning and decisionmaking in wood procurement, economic research, forest resources management, and forest industry development.

The last detailed study of all industrial roundwood output in Maryland, done in 2004, was conducted for the 2007 Resources Planning Act (RPA) Assessment (Smith et al. 2009) and is used as a basis of comparison for most of this study's results. When new surveys are completed, errors and omissions from previous surveys are corrected. As a result of our ongoing efforts to improve the survey's efficiency and reliability, changes may have been made to the previous survey's data. All comparisons and analysis in this report are based on the reprocessed data from earlier surveys, which may not match earlier published data. Rows and columns of supporting tables may not sum due to rounding, but data in each table cell are accurately displayed.

Information about the forest resources of Maryland is available at the Forest Inventory and Analysis Web site at: http://nrs.fs.fed.us/fia/data-tools/state-reports/MD

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[1]North American Industry Classification System (NAICS) 321 - wood product manufacturing and NAICS 322 - paper manufacturing.

STUDY METHODS

This study was a cooperative effort between the Maryland Department of Natural Resources (MD DNR) and the Forest Inventory and Analysis (FIA) unit at the Northern Research Station (NRS) of the U.S. Forest Service. The FIA program is responsible for providing forest resource statistics for all ownerships across the United States, including timber product outputs.

MD DNR personnel surveyed all known primary wood-using mills, using questionnaires supplied by NRS. The questionnaires were 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. Completed questionnaires were processed and analyzed by NRS personnel. As part of data processing, all industrial roundwood volumes reported on the questionnaires were converted to standard units of measure using regional conversion factors (Table 1). 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 NRS. To provide a complete assessment of Maryland's timber product output, data on the State's industrial roundwood receipts were loaded into a regional timber removals database where they were supplemented with data on out-of-State uses of Maryland roundwood.

Certain terms used in this report—retained, exports, imports, production, and receipts—have specialized meanings and relationships unique to the FIA program that surveys timber product output (TPO) (Fig. 1).

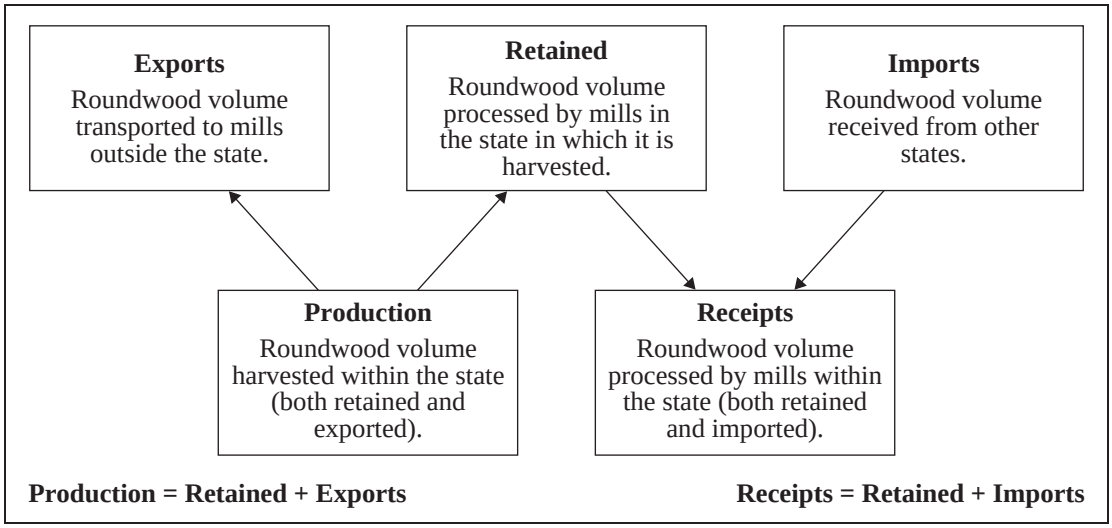

Figure 1.—The movement of industrial roundwood.

Table 1.—Conversion factors from standard units of measure

Product (Standard unit of measure)	International ¼-inch rule MBF	Doyle rule MBF	Green tons	Standard cords	Thousand pieces	Thousand cubic feet
Saw logs and handles (MBF International ¼-inch rule)	1	0.725	4.6	2	--	158
Veneer logs and cooperage (MBF International ¼-inch rule)	1	0.877	4.6	2	--	158
Pulp and composite products, and industrial fuelwood (Standard cords)	--	--	2.4	1	--	85
Mine timbers (Thousand cubic feet)	--	4.307	30.4	12.7	--	1
Poles (Pieces)	6.329	0.036	0.23	0.1	1,000	7.9
Posts (Thousand pieces)	5	3.623	24	10	1	790
Cabin logs, excelsior/shavings, and miscellaneous products (Thousand cubic feet)	6.329	4.307	30.4	12.7	--	1

PRIMARY TIMBER INDUSTRY IN MARYLAND

Industrial Roundwood

- Maryland's primary wood-using industry included 27 sawmills, 1 pulp/composite product mill, and 2 mills that produced other products (Table 2, Fig. 2). There was 1 more sawmill than in 2004.
- Receipts of industrial roundwood at Maryland primary wood-using mills totaled 47.9 million cubic feet, an increase of 5 percent from the 45.7 million cubic feet received in 2004 (Table 3).
- Forty-three percent of the industrial roundwood processed by Maryland's primary wood-using mills was harvested from within the State. West Virginia was the largest supplier of imported wood, supplying 36 percent of the total industrial roundwood processed (Table 4, Fig. 3).

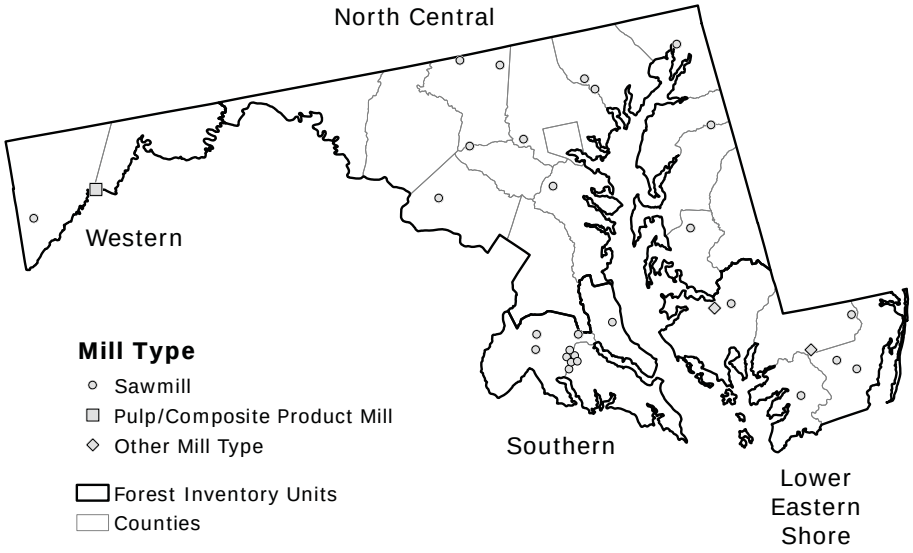

Figure 2.—Maryland Forest Inventory Units and location of primary wood-using mills, 2008.

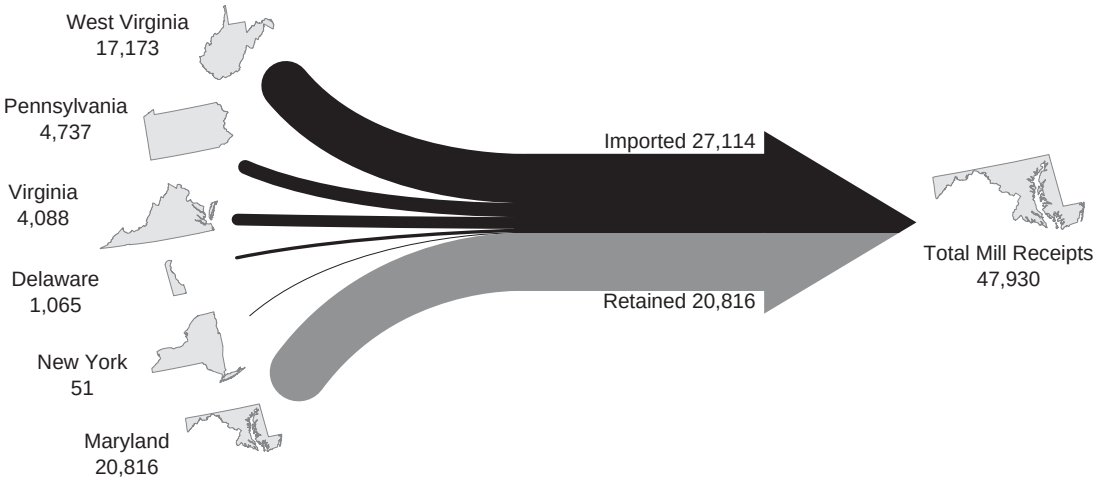

Figure 3.—Flow of industrial roundwood (thousand cubic feet) to Maryland primary wood-using mills, 2008.

- Seventy-four percent of the industrial roundwood processed by Maryland's primary wood-using mills was made up of hardwoods. Yellow-poplar, red oaks, white oaks, soft maple, and black cherry combined accounted for more than 50 percent of the total volume processed. Loblolly/shortleaf pine was the top species group processed, with 19 percent of total volume.
- Industrial roundwood production increased by 16 percent, from 25.2 million cubic feet in 2004 to 29.1 million cubic feet in 2008 (Table 5, Fig. 4).
- Seventy-two percent of industrial roundwood harvested in Maryland was retained for processing by primary wood-using mills in the State. A majority of exports, 70 percent, went to primary wood processors in Pennsylvania. The remainder of the exports went to West Virginia, Virginia, Delaware, and other countries (Table 6, Fig. 5).

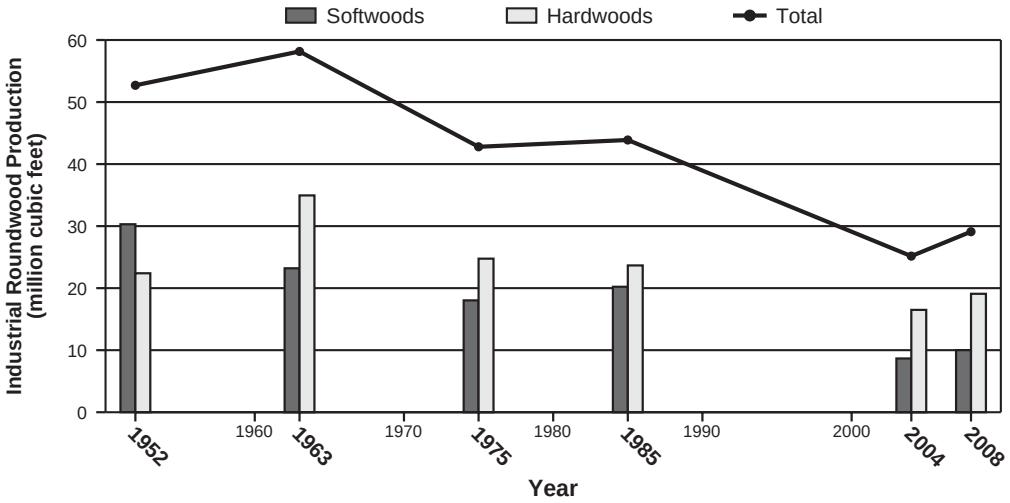

Figure 4.—Industrial roundwood production by major species group and survey year, Maryland (U.S. Department of Agriculture 1955, Ferguson 1967, Bones and Brodie 1977, Wharton and Mullarkey 1993, Smith et al. 2009).

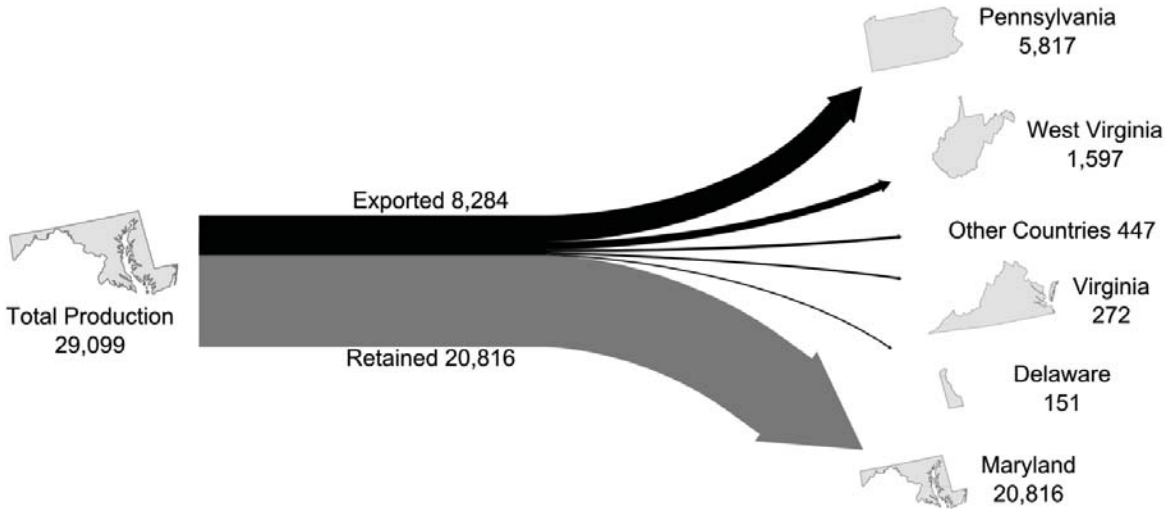

Figure 5.—Flow of industrial roundwood (thousand cubic feet) harvested in Maryland, 2008.

- Industrial roundwood harvests were relatively balanced among the Forest Inventory Units, with the Lower Eastern Shore unit the top producer at 8.8 million cubic feet (30 percent), followed by the North Central unit (7.9 million cubic feet, 27 percent), the Western unit (7.4 million cubic feet, 26 percent), and the Southern unit (5.0 million cubic feet, 17 percent).
- Loblolly/shortleaf pine was the most harvested species group for industrial roundwood; however, hardwood species combined accounted for a much greater proportion of the total harvest than softwoods. Yellow-poplar, red oaks, white oaks, soft maple, and black cherry made up the majority of hardwood production (Fig. 6).
- Saw logs accounted for 50 percent of the total industrial roundwood produced in 2008. Pulp and composite product mills were the second largest consumers of Maryland's industrial roundwood production, using 43 percent of the total production (Table 8, Fig. 7).

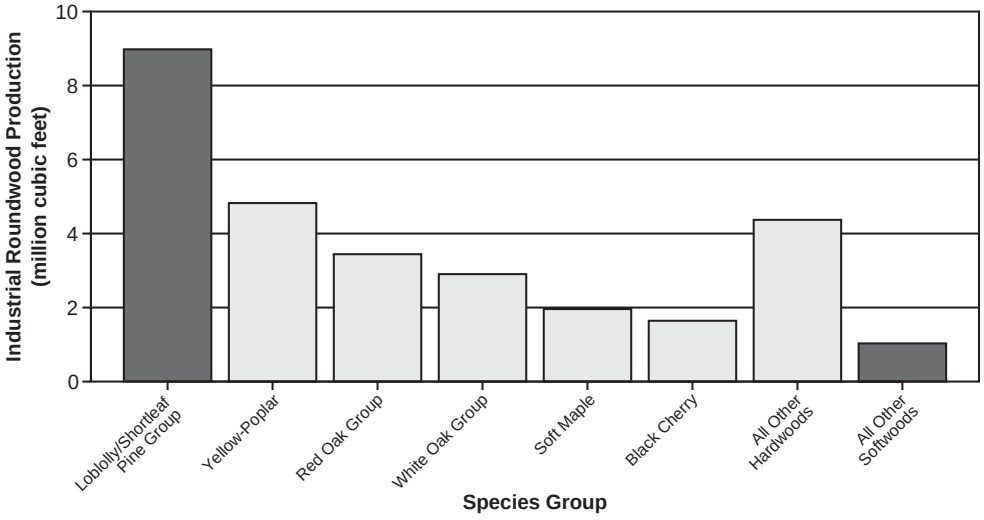

Figure 6.—Industrial roundwood production by species group, Maryland, 2008.

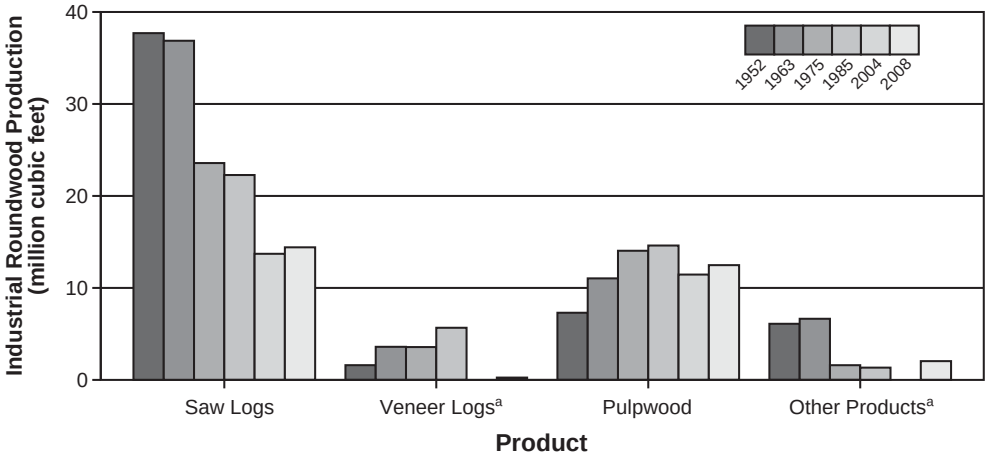

Figure 7.—Industrial roundwood production by product and survey year, Maryland (U.S. Department of Agriculture 1955, Ferguson 1967, Bones and Brodie 1977, Wharton and Mullarkey 1993, Smith et al. 2009). [a] Production levels of veneer logs and other products are not available in the 2004 survey.

Saw Logs

- Receipts at Maryland sawmills totaled 113.7 million board feet in 2008, an increase of 4 percent from 109.3 million board feet in 2004 (Table 9).
- Saw log production increased by 5 percent between 2004 and 2008, from 81.2 million board feet to 85.6 million board feet.
- Yellow-poplar and loblolly/shortleaf pine each accounted for 23 percent of the total saw log harvest. Other important species groups harvested for saw logs were red oaks, white oaks, soft maple, and sweetgum (Fig. 8).

Other Products

- Pulpwood, at 12.5 million cubic feet, was the second most harvested product from Maryland in 2008 (Table 5), an increase of 9 percent from the 11.5 million cubic feet harvested in 2004. See Johnson et al. 2011 for the results of a national pulpwood study conducted for 2008.
- Veneer log production, at 169,000 cubic feet, made up less than 1 percent of industrial roundwood harvests, a decrease of 97 percent from the peak of Maryland veneer production in 1985.
- Industrial roundwood production for other products, including cooperage, mine timbers, posts, poles, and pilings, amounted to 2 million cubic feet, or 7 percent of total production. Softwood species accounted for 98 percent of the total volume harvested for other products.
- Residential fuelwood is not included in this report.

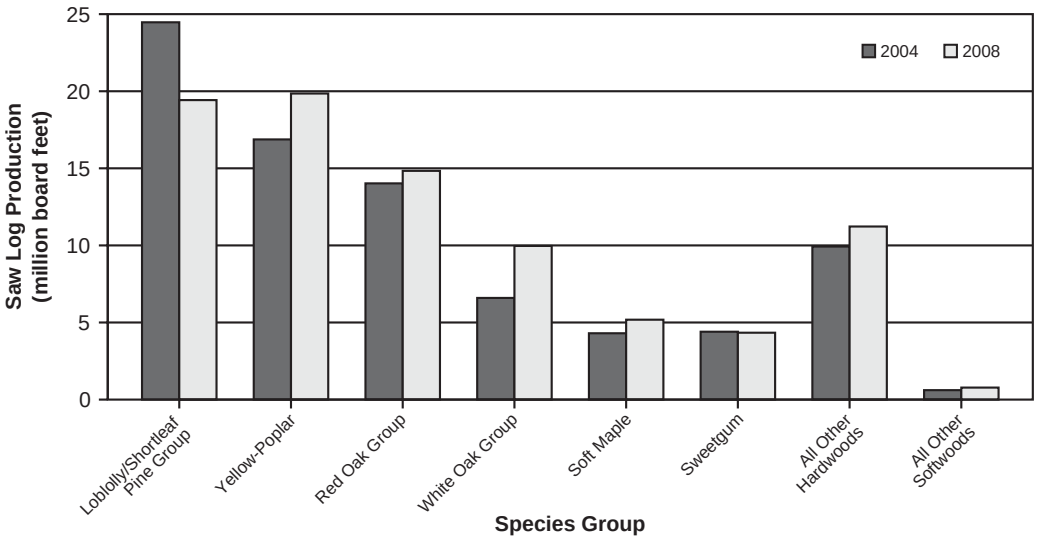

Figure 8.—Saw log production by species group, Maryland, 2004 and 2008.

Timber Removals

- During the harvest of industrial roundwood from Maryland's forests, 45.9 million cubic feet of wood material was cut with 29.1 million cubic feet (63 percent) used for primary wood products (Table 10, Fig. 9).
- Growing-stock sources, at 29.5 million cubic feet, were the largest component of removals for industrial roundwood production. Eighty-six percent of the growing stock removed was used for products with 14 percent left as logging residue. Sawtimber-size trees accounted for 84 percent of the growing-stock volume that was used for products.
- Non-growing-stock sources of industrial roundwood production amounted to 16.4 million cubic feet of wood material removed. Only 22 percent of this material was used for products; the remainder was left on the ground as logging slash. Fifty percent of the non-growing-stock material used for industrial roundwood came from the limbs of growing-stock trees, with another 39 percent coming from cull trees.
- Thirty-one percent of the total growing-stock material removed from Maryland's timberland came from the Lower Eastern Shore Forest Inventory Unit, followed by the North Central unit with 29 percent, the Western unit with 20 percent, and the Southern unit with 19 percent (Table 11).
- Nearly 129 million board feet was removed from Maryland's sawtimber inventory. Loblolly/shortleaf pine, yellow-poplar, red oaks, white oaks, and soft maple accounted for 78 percent of the total sawtimber volume removed (Table 12).
- The harvest of industrial roundwood from Maryland's forests left 16.8 million cubic feet of wood material on the ground as harvest residues (Table 13).

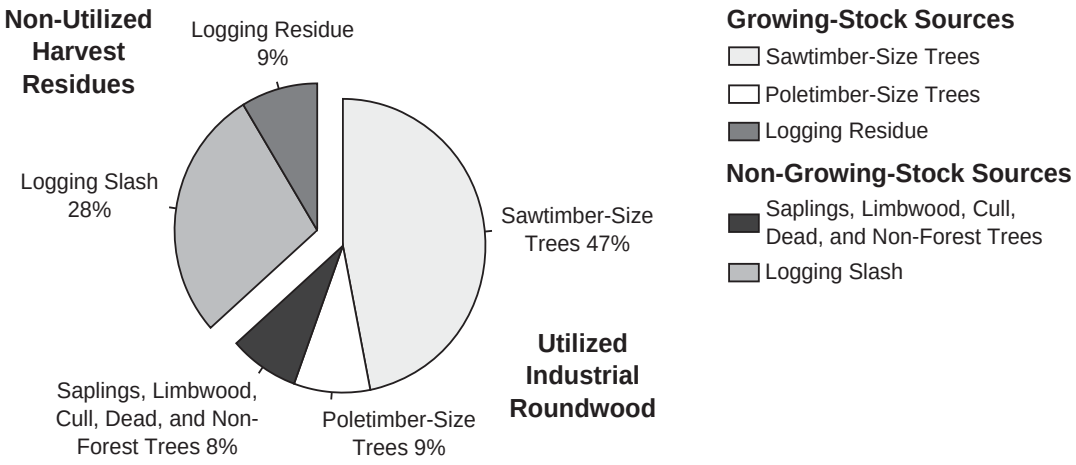

Figure 9.—Distribution of timber removals for industrial roundwood by source of material, Maryland, 2008.

Harvest Intensity

- In 2008, there were 2.5 million acres of forest land in Maryland (Lister et al. 2010). The net volume in live trees on forest land was 6.5 billion cubic feet. The 45.9 million cubic feet of total wood material removed due to harvesting was less than 1 percent of the total live volume of trees (Table 10).
- Statewide, there was 62 cubic feet of annual net growth (gross growth minus mortality) of growing stock per acre of forest land (Miles 2010) and 18 cubic feet of harvest-related wood removals per acre of forest land, a net growth to removals ratio of 3.44 to 1.
- The average harvest intensity among Maryland counties was 17.7 cubic feet of wood removals per acre of forest land (Fig. 10).
- The Lower Eastern Shore unit had the greatest harvest intensity, with 30 cubic feet of wood removals per acre of forest land. The Southern unit had the second greatest intensity with 23 cubic feet of removals per forest land acre, followed by the Western unit (19 cu. ft./acre) and the North Central unit (12 cu. ft./acre).

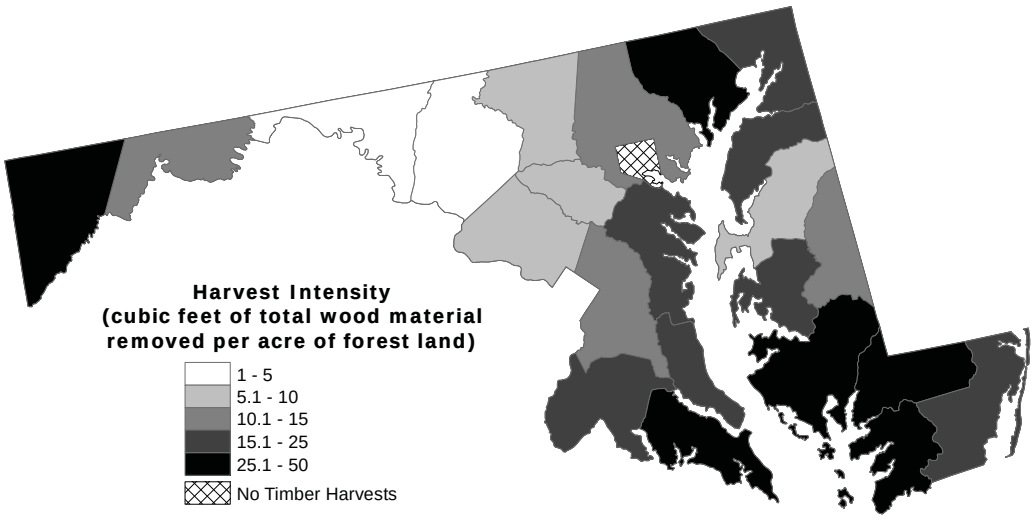

Figure 10.—Harvest intensity of industrial roundwood, Maryland, 2008.

Primary Mill Residues

- In converting industrial roundwood into products, Maryland's primary wood-using industries generated a combined 446,320 green tons of coarse wood residue (slabs, edgings, and veneer cores), fine wood residue (sawdust and veneer clippings), and bark residue (Table 14, Fig. 11a and 11b).
- More than half of mill residues generated (54 percent) were put toward miscellaneous uses, such as livestock bedding and small dimension lumber. Mulch consumed 20 percent of mill residues and fiber products consumed 16 percent. Only 0.3 percent of residues generated went unused (Fig. 12).
- The top disposal method of coarse wood residue was fiber products at 42 percent of the total, while miscellaneous uses were the top method for both fine wood residue (87 percent) and bark residue (55 percent).

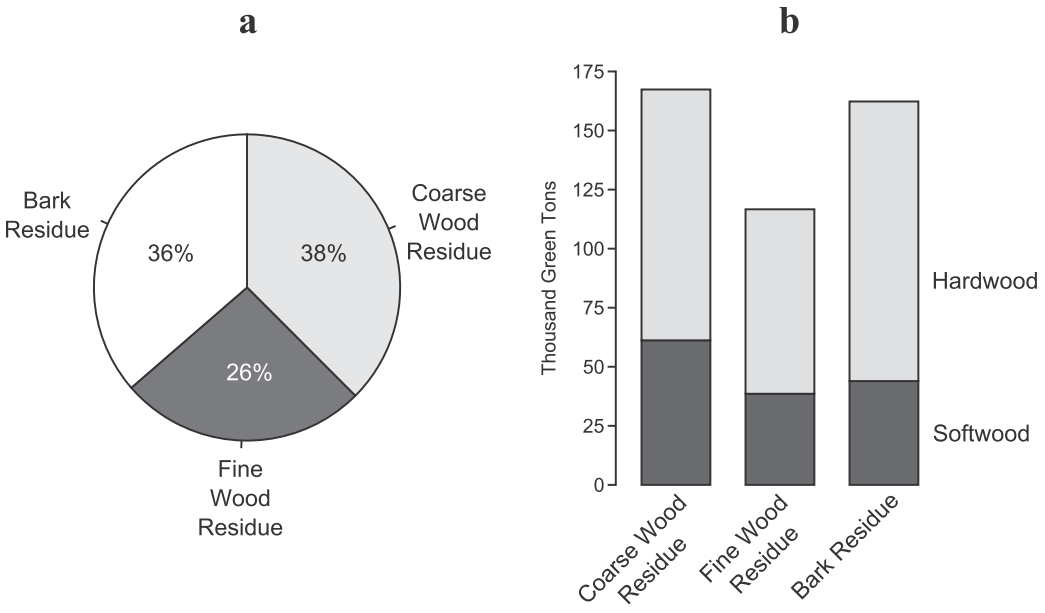

Figure 11.—Residues generated by primary wood-using mills by type of residue (a) and major species group (b), Maryland, 2008.

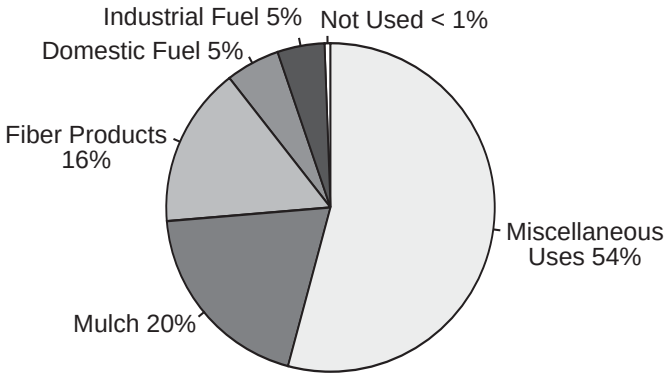

Figure 12.—Disposal of residue by product, Maryland, 2008.

ACKNOWLEDGMENTS

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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 8 feet long, to be sawn for lumber, peeled or sliced for veneer, shaved for excelsior, or converted into shingles, cooperage stock, dimension stock, blocks, blanks, or other products.

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 but are 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.

Doyle rule. A simple log rule or formula for estimating the board-foot volume of logs based on a 4-inch slabbing allowance to square the log. This rule is used in the Eastern and Southern United States.

Exports. The volume of roundwood utilized by mills outside the state where the timber was harvested.

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

Forest land. Land at least 10 percent stocked with 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 classified as forest if less than 120 feet wide.

Growing-stock removals. The growing-stock volume removed from timberland 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 larger, from 1 foot above the ground to a minimum 4.0-inch top diameter outside bark of the central stem or to 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 fuelwood. A roundwood product, with or without bark, used to generate energy at manufacturing facilities and schools, correctional institutions, or electric generating plants.

Imports. The volume of roundwood delivered to a mill or group of mills in a specific state but harvested outside that state.

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

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 received by 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 ¼-inch rule. A log rule or formula for estimating the board-foot volume of logs, allowing ½ inch of taper for each 4-foot length and assuming ¼ inch of kerf. This rule is used as the U.S. 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. Trees species of typically small size, poor form, or inferior quality that normally do not develop into trees suitable for industrial roundwood products. Noncommercial species are listed in the 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, active Christmas tree plantations, orchards, nurseries, 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, unimproved 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 such as lumber, veneer, and pulp.

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

Production. The quantity of roundwood material harvested in a geographic area plus all roundwood material exported to other geographical areas.

Receipts. The quantity of roundwood material received by commercial mills in a geographic area plus all roundwood material imported from other geographical areas.

Retained. Roundwood volume harvested from and processed by mills within the same state.

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 forks, sweep and crook, and large branches or knots), including 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.

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 diameter outside bark for softwoods and 9.0 inches diameter outside bark for hardwoods.

Sawtimber removals. As used in Table 10, sawtimber removals refers to the net volume in the merchantable central stem of sawtimber-size trees harvested for industrial roundwood products. (Note: includes the saw log and upper stem portions of sawtimber-size trees.) When referring to the sawtimber volume removed from timberland as in Table 12, sawtimber removals refers to the net volume in the saw log portion of sawtimber-size trees harvested for roundwood products or left on the ground as harvest residue, and is usually expressed in thousands of board feet (International ¼-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 perennial plant, typically large, with a single well-defined stem carrying a more or less definite crown; sometimes defined as attaining a minimum diameter of 3 in. (7.6 cm) and a minimum height of 15 ft (4.6 m) at maturity. For FIA, any plant on the tree list in the current field manual is measured as a tree.

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 to the point where the central stem breaks into limbs.

COMMON AND SCIENTIFIC NAMES OF TREE SPECIES BY SPECIES GROUP

Softwoods

Cedars	
Atlantic white-cedar	*Chamaecyparis thyoides*
Eastern redcedar	*Juniperus virginiana*
Balsam fir	*Abies balsamea*
Eastern hemlock	*Tsuga canadensis*
Shortleaf pine	*Pinus echinata*
Loblolly pine	*Pinus taeda*
Red pine	*Pinus resinosa*
White pine	*Pinus strobus*
Other pines	
Table Mountain pine	*Pinus pungens*
Pitch pine	*Pinus rigida*
Scotch pine	*Pinus sylvestris*
Virginia pine	*Pinus virginiana*
Spruce	
Norway spruce	*Picea abies*
White spruce	*Picea glauca*
Red spruce	*Picea rubens*

Hardwoods

Ash	
White ash	*Fraxinus americana*
Black ash	*Fraxinus nigra*
Green ash	*Fraxinus pennsylvanica*
Aspen/balsam poplar	
Bigtooth aspen	*Populus grandidentata*
Quaking aspen	*Populus tremuloides*
Basswood	
American basswood	*Tilia americana*
White basswood	*Tilia heterophylla*
American beech	*Fagus grandifolia*
Yellow birch	*Betula alleghaniensis*
Other birches	
Sweet birch	*Betula lenta*
River birch	*Betula nigra*
Black cherry	*Prunus serotina*
Black walnut	*Juglans nigra*
Elm	
Winged elm	*Ulmus alata*
American elm	*Ulmus americana*
Slippery elm	*Ulmus rubra*

Hickory	
Mockernut hickory	*Carya alba*
Bitternut hickory	*Carya cordiformis*
Pignut hickory	*Carya glabra*
Shellbark hickory	*Carya laciniosa*
Shagbark hickory	*Carya ovata*
Hard maples	
Black maple	*Acer nigrum*
Sugar maple	*Acer saccharum*
Soft maples	
Boxelder	*Acer negundo*
Striped maple	*Acer pensylvanicum*
Red maple	*Acer rubrum*
Silver maple	*Acer saccharinum*
Mountain maple	*Acer spicatum*
Red oak group	
Scarlet oak	*Quercus coccinea*
Southern red oak	*Quercus falcata*
Shingle oak	*Quercus imbricaria*
Pin oak	*Quercus palustris*
Northern red oak	*Quercus rubra*
Black oak	*Quercus velutina*
White oak group	
White oak	*Quercus alba*
Swamp white oak	*Quercus bicolor*
Swamp chestnut oak	*Quercus michauxii*
Chinkapin oak	*Quercus muehlenbergii*
Chestnut oak	*Quercus prinus*
Post oak	*Quercus stellata*
Sweetgum	*Liquidambar styraciflua*
American sycamore	*Platanus occidentalis*
Yellow-poplar	*Liriodendron tulipifera*
Other hardwoods	
Ohio buckeye	*Aesculus glabra*
Yellow buckeye	*Aeseulus octandra*
Common serviceberry	*Amelanchier arborea*
American hornbeam	*Carpinus caroliniana*
American chestnut	*Castanea dentata*
Northern catalpa	*Catalpa speciosa*
Hackberry	*Celtis occidentalis*
Eastern redbud	*Cercis canadensis*
Flowering dogwood	*Cornus florida*
Hawthorn spp.	*Crataegus spp.*
Common persimmon	*Diospyros virginiana*
Honeylocust	*Gleditsia triacanthos*
Butternut	*Juglans cinerea*

Cucumbertree	*Magnolia acuminata*
Mountain or Fraser magnolia	*Magnolia fraseri*
Umbrella magnolia	*Magnolia tripetala*
Apple spp.	*Malus spp*.
Blackgum	*Nyssa sylvatica*
Eastern hophornbeam	*Ostrya virginiana*
Sourwood	*Oxydendrum arboreum*
Paulownia, empress-tree	*Paulownia tomentosa*
Pin cherry	*Prunus pensylvanica*
Chokecherry	*Prunus virginiana*
Black locust	*Robinia pseudoacacia*
Black willow	*Salix nigra*
Sassafras	*Sassafras albidum*
American mountain-ash	*Sorbus americana*

TABLES

Table 2.—Number of active primary wood-using mills by mill type and survey year, Maryland[a]

Kind of mill and mill size	Survey Year					
	1952	1963	1975	1985	2004	2008
Sawmills						
Annual production 1 million board feet or greater[b]	na	57	38	na	14	15
Annual production less than 1 million board feet[b]	na	51	53	na	12	12
Total	495	108	91	na	26	27
Pulp and composite product mills	na	1	2	na	1	1
Other products[c]	na	4	3	na	2	2
All mills		113	96	na	29	30

na = Not available.

[a] *Mills that produce more than one product are counted only for the product they process the most of.*

[b] *International ¼-inch rule.*

[c] *Includes plants producing mulch, mine timbers, excelsior, shavings, etc.*

Table 3.—Industrial roundwood receipts, in million cubic feet, by mill type, softwoods and hardwoods, and survey year, Maryland

Kind of mill	Survey Year					
	1952	1963	1975	1985	2004	2008
ALL SPECIES						
Saw logs	na	na	24.2	23.7	18.4	18.9
Other products[a]	na	na	na	na	27.3	29.0
Total					45.7	47.9
SOFTWOODS						
Saw logs	na	na	6.0	7.0	6.4	5.8
Other products[a]	na	na	na	na	7.1	6.7
Total					13.6	12.5
HARDWOODS						
Saw logs	na	na	18.2	16.8	12.0	13.1
Other products[a]	na	na	na	na	20.2	22.3
Total					32.1	35.4

na = Not available.

[a] *Includes plants producing veneer, cooperage, handles, cabin logs, etc.*

All table cells without observations are indicated by -- . Table value of 0 indicates the volume rounds to less than 1 thousand cubic feet. Columns and rows may not add to their totals due to rounding.

Table 4.—Industrial roundwood receipts, in thousand cubic feet, by Forest Inventory Unit, species group, and State of origin, Maryland, 2008

ALL UNITS

Species group	Total	State of origin					
		Delaware	Maryland	New York	Penn-sylvania	Virginia	West Virginia
Softwoods							
Cedar	0	--	0	--	--	--	--
Hemlock	714	--	32	8	351	--	323
Loblolly/shortleaf pine	8,914	436	5,611	--	7	2,645	215
Red pine	87	--	72	9	6	--	0
White pine	702	--	55	21	325	--	301
Other pine	1,875	--	337	8	334	20	1,176
Spruce	218	--	59	4	107	--	47
Tamarack	13	--	--	1	12	--	--
Softwood total	12,523	436	6,166	51	1,142	2,665	2,062
Hardwoods							
Ash	730	23	174	--	110	6	416
Aspen/balsam poplar	167	18	69	--	19	--	60
Basswood	861	--	239	--	57	--	565
Beech	823	20	322	--	53	18	410
White birch	74	18	56	--	--	--	--
Yellow birch	392	19	127	--	11	--	236
Other birch	544	18	159	--	75	--	291
Black cherry	2,999	3	1,243	--	551	4	1,197
Black walnut	41	1	40	--	--	--	--
Elm	209	--	68	--	33	2	106
Hickory	1,213	2	350	--	88	14	759
Hard maple	2,090	57	535	--	296	--	1,202
Soft maple	4,050	92	1,393	--	676	25	1,865
Red oaks	6,205	122	2,916	--	583	263	2,321
White oaks	5,771	71	2,300	--	463	245	2,693
Sweetgum	735	51	643	--	--	42	--
Sycamore	299	--	101	--	3	5	190
Tupelo/gum	410	27	190	--	27	8	158
Yellow-poplar	6,630	80	3,434	--	321	787	2,008
Other hardwoods	1,163	7	291	--	229	3	633
Hardwood total	35,407	630	14,649	--	3,595	1,423	15,111
State total	47,930	1,065	20,816	51	4,737	4,088	17,173

Table 4.—continued on next page

Table 4.—continued

NORTH CENTRAL AND WESTERN UNITS[a]

Species group	Total	State of origin					
		Delaware	Maryland	New York	Penn-sylvania	Virginia	West Virginia
Softwoods							
Cedar	0	--	0	--	--	--	--
Hemlock	714	--	32	8	351	--	323
Loblolly/shortleaf pine	518	--	296	--	7	--	215
Red pine	87	--	72	9	6	--	0
White pine	702	--	55	21	325	--	301
Other pine	1,796	--	278	8	334	--	1,176
Spruce	218	--	59	4	107	--	47
Tamarack	13	--	--	1	12	--	--
Softwood total	4,048	--	792	51	1,142	--	2,062
Hardwoods							
Ash	698	23	149	--	110	--	416
Aspen/balsam poplar	167	18	69	--	19	--	60
Basswood	861	--	239	--	57	--	565
Beech	643	20	160	--	53	--	410
White birch	74	18	56	--	--	--	--
Yellow birch	392	19	127	--	11	--	236
Other birch	544	18	159	--	75	--	291
Black cherry	2,957	3	1,206	--	551	--	1,197
Black walnut	25	1	24	--	--	--	--
Elm	189	--	50	--	33	--	106
Hickory	1,059	0	211	--	88	--	759
Hard maple	2,089	57	534	--	296	--	1,202
Soft maple	3,861	92	1,228	--	676	--	1,865
Red oaks	5,103	120	2,079	--	583	--	2,321
White oaks	4,798	70	1,572	--	463	--	2,693
Sweetgum	397	51	346	--	--	--	--
Sycamore	259	--	66	--	3	--	190
Tupelo/gum	354	27	142	--	27	--	158
Yellow-poplar	4,172	80	1,762	--	321	--	2,008
Other hardwoods	1,147	7	278	--	229	--	633
Hardwood total	29,789	626	10,457	--	3,595	--	15,111
Unit total	33,836	626	11,249	51	4,737	--	17,173

SOUTHERN UNIT

Species group	Total	State of origin					
		Delaware	Maryland	New York	Penn-sylvania	Virginia	West Virginia
Softwoods							
Loblolly/shortleaf pine	91	--	71	--	--	20	--
Other pine	79	--	59	--	--	20	--
Softwood total	170	--	130	--	--	40	--
Hardwoods							
Ash	32	--	25	--	--	6	--
Beech	180	--	162	--	--	18	--
Black cherry	42	--	38	--	--	4	--
Black walnut	16	--	16	--	--	--	--
Elm	20	--	17	--	--	2	--
Hickory	126	--	113	--	--	13	--
Soft maple	190	--	165	--	--	25	--
Red oaks	1,070	--	809	--	--	261	--
White oaks	958	--	713	--	--	245	--
Sweetgum	338	--	297	--	--	42	--
Sycamore	40	--	35	--	--	5	--
Tupelo/gum	56	--	48	--	--	8	--
Yellow-poplar	2,459	--	1,671	--	--	787	--
Other hardwoods	16	--	13	--	--	3	--
Hardwood total	5,542	--	4,122	--	--	1,420	--
Unit total	5,712	--	4,253	--	--	1,459	--

Table 4.—continued on next page

Table 4.—continued

LOWER EASTERN SHORE UNIT

Species group	Total	State of origin					
		Delaware	Maryland	New York	Penn-sylvania	Virginia	West Virginia
Softwoods							
Loblolly/shortleaf pine	8,305	436	5,244	--	--	2,625	--
Softwood total	8,305	436	5,244	--	--	2,625	--
Hardwoods							
Hickory	29	1	26	--	--	1	--
Soft maple	1	--	1	--	--	--	--
Red oaks	32	2	29	--	--	1	--
White oaks	16	1	14	--	--	1	--
Hardwood total	77	4	70	--	--	4	--
Unit total	8,382	439	5,314	--	--	2,629	--

[a] *Combined to avoid disclosure of individual mills.*

All table cells without observations are indicated by -- . Table value of 0 indicates the volume rounds to less than 1 thousand cubic feet. Columns and rows may not add to their totals due to rounding.

Table 5.—Industrial roundwood production, in thousand cubic feet, by product, softwoods and hardwoods, and survey year, Maryland

Product	Survey Year					
	1952	1963	1975	1985	2004	2008
ALL SPECIES						
Saw logs	37,700	36,872	23,576	22,274	13,711	14,415
Veneer logs	1,600	3,597	3,571	5,666	na	169
Pulpwood	7,300	11,039	14,041	14,610	11,451	12,476
Other products[a]	6,100	6,646	1,598	1,335	na	2,040
Total	52,700	58,154	42,786	43,885	25,162	29,099
SOFTWOODS						
Saw logs	22,300	13,469	5,251	6,055	4,357	3,510
Veneer logs	0	222	2,770	4,293	na	--
Pulpwood	6,000	5,800	8,839	8,653	4,308	4,510
Other products[a]	2,000	3,713	1,173	1,223	na	1,991
Total	30,300	23,204	18,033	20,224	8,665	10,010
HARDWOODS						
Saw logs	15,400	23,403	18,325	16,219	9,354	10,906
Veneer logs	1,600	3,375	801	1,373	na	169
Pulpwood	1,300	5,239	5,202	5,957	7,143	7,966
Other products[a]	4,100	2,933	425	112	na	49
Total	22,400	34,950	24,753	23,661	16,497	19,089

na = Not available.

[a] *Includes plants producing cooperage, mine timers, post, poles, pilings, excelsior, etc.*

All table cells without observations are indicated by -- . Table value of 0 indicates the volume rounds to less than 1 thousand cubic feet. Columns and rows may not add to their totals due to rounding.

Table 6.—Industrial roundwood production, in thousand cubic feet, by Forest Inventory Unit, species group, and State of destination, Maryland, 2008

ALL UNITS

Species group	Total	State of destination					
		Delaware	Maryland	Penn-sylvania	Virginia	West Virginia	Other countries
Softwoods							
Cedar	0	--	0	--	--	--	--
Hemlock	32	--	32	--	--	--	--
Loblolly/shorleaf pine	8,979	--	5,611	3,317	50	--	--
Red pine	83	--	72	--	--	12	--
White pine	85	--	55	24	--	6	--
Other pine	770	--	337	385	45	2	--
Spruce	61	--	59	3	--	--	--
Softwood total	10,010	--	6,166	3,729	95	20	--
Hardwoods							
Ash	236	--	174	43	0	8	11
Aspen/balsam poplar	75	--	69	2	--	3	--
Basswood	331	--	239	19	--	73	--
Beech	399	--	322	77	--	1	--
White birch	56	--	56	--	--	--	--
Yellow birch	127	--	127	--	--	--	--
Other birch	192	--	159	33	--	--	--
Black cherry	1,643	1	1,243	74	1	276	48
Black walnut	52	--	40	12	0	--	--
Cottonwood	4	--	--	4	--	--	--
Elm	119	--	68	27	--	24	--
Hickory	419	--	350	68	--	1	--
Hard maple	646	--	535	21	--	34	55
Soft maple	1,960	53	1,393	240	13	178	84
Red oaks	3,442	20	2,916	256	19	119	113
White oaks	2,903	14	2,300	327	67	59	137
Sweetgum	891	34	643	178	36	--	--
Sycamore	148	--	101	37	--	10	--
Tupelo/gum	270	15	190	53	--	12	--
Yellow-poplar	4,824	14	3,434	563	41	773	--
Other hardwoods	353	--	291	53	--	9	--
Hardwood total	19,089	151	14,649	2,088	177	1,577	447
State total	29,099	151	20,816	5,817	272	1,597	447

NORTH CENTRAL UNIT

Species group	Total	State of destination					
		Delaware	Maryland	Penn-sylvania	Virginia	West Virginia	Other countries
Softwoods							
Cedar	0	--	0	--	--	--	--
Hemlock	1	--	1	--	--	--	--
Loblolly/shortleaf pine	445	--	231	214	--	--	--
White pine	42	--	18	24	--	--	--
Other pine	233	--	15	207	12	--	--
Spruce	7	--	5	3	--	--	--
Softwood total	729	--	270	447	12	--	--
Hardwoods							
Ash	128	--	93	35	0	--	--
Aspen/balsam poplar	57	--	55	2	--	--	--
Basswood	1	--	0	1	--	--	--
Beech	149	--	89	60	--	--	--
White birch	52	--	52	--	--	--	--
Yellow birch	68	--	68	--	--	--	--
Other birch	82	--	53	28	--	--	--
Black cherry	132	0	72	60	0	--	--
Black walnut	47	--	34	12	0	--	--
Cottonwood	4	--	--	4	--	--	--
Elm	11	--	--	11	--	--	--
Hickory	181	--	123	58	--	--	--
Hard maple	175	--	174	1	--	--	--
Soft maple	492	5	313	173	--	--	--
Red oaks	1,617	5	1,397	215	0	--	--
White oaks	1,002	3	820	159	21	--	--
Sweetgum	422	3	274	145	--	--	--
Sycamore	78	--	51	27	--	--	--
Tupelo/gum	106	--	72	34	--	--	--
Yellow-poplar	2,220	2	1,715	499	3	--	--
Other hardwoods	96	--	53	43	--	--	--
Hardwood total	7,122	19	5,509	1,570	25	--	--
Unit total	7,850	19	5,779	2,016	36	--	--

Table 6.—continued on next page

Table 6.—continued

SOUTHERN UNIT

Species group	Total	State of destination					
		Delaware	Maryland	Penn-sylvania	Virginia	West Virginia	Other countries
Softwoods							
Loblolly/shortleaf pine	612	--	365	197	50	--	--
Other pine	432	--	223	175	33	--	--
Softwood total	1,044	--	588	372	83	--	--
Hardwoods							
Ash	22	--	22	0	0	--	--
Basswood	1	--	1	0	--	--	--
Beech	208	--	193	15	--	--	--
Black cherry	44	--	41	3	0	--	--
Black walnut	5	--	5	--	--	--	--
Elm	18	--	17	0	--	--	--
Hickory	110	--	104	6	--	--	--
Soft maple	231	--	198	20	13	--	--
Red oaks	736	--	700	18	19	--	--
White oaks	675	--	606	22	46	--	--
Sweetgum	307	--	257	14	36	--	--
Sycamore	31	--	30	0	--	--	--
Tupelo/gum	45	--	42	3	--	--	--
Yellow-poplar	1,498	--	1,405	56	38	--	--
Other hardwoods	14	--	13	1	--	--	--
Hardwood total	3,944	--	3,634	159	151	--	--
Unit total	4,987	--	4,222	531	235	--	--

LOWER EASTERN SHORE UNIT

Species group	Total	State of destination					
		Delaware	Maryland	Penn-sylvania	Virginia	West Virginia	Other countries
Softwoods							
Loblolly/shortleaf pine	7,922	--	5,015	2,906	--	--	--
Other pine	3	--	--	3	--	--	--
Softwood total	7,924	--	5,015	2,909	--	--	--
Hardwoods							
Ash	27	--	24	3	0	--	--
Aspen/balsam poplar	1	--	1	--	--	--	--
Beech	17	--	15	2	--	--	--
White birch	4	--	4	--	--	--	--
Yellow birch	4	--	4	--	--	--	--
Other birch	4	--	4	--	--	--	--
Black cherry	5	1	2	2	--	--	--
Hickory	16	--	14	1	--	--	--
Hard maple	1	--	1	--	--	--	--
Soft maple	255	48	176	32	--	--	--
Red oaks	150	16	118	15	--	--	--
White oaks	87	11	68	8	--	--	--
Sweetgum	162	31	113	19	--	--	--
Sycamore	1	--	1	--	--	--	--
Tupelo/gum	86	15	63	9	--	--	--
Yellow-poplar	55	12	37	7	--	--	--
Other hardwoods	19	--	18	1	--	--	--
Hardwood total	893	132	661	100	0	--	--
Unit total	8,817	132	5,676	3,009	0	--	--

Table 6.—continued on next page

Table 6.—continued

WESTERN UNIT

Species group	Total	State of destination					
		Delaware	Maryland	Penn-sylvania	Virginia	West Virginia	Other countries
Softwoods							
Hemlock	31	--	31	--	--	--	--
Red pine	83	--	72	--	--	12	--
White pine	43	--	37	0	--	6	--
Other pine	102	--	99	1	--	2	--
Spruce	54	--	54	--	--	--	--
Softwood total	314	--	293	1	--	20	--
Hardwoods							
Ash	58	--	36	4	0	8	11
Aspen/balsam poplar	17	--	13	--	--	3	--
Basswood	329	--	238	18	--	73	--
Beech	26	--	25	--	--	1	--
Yellow birch	56	--	56	--	--	--	--
Other birch	107	--	102	5	--	--	--
Black cherry	1,462	--	1,129	9	0	276	48
Black walnut	0	--	--	0	0	--	--
Elm	90	--	50	15	--	24	--
Hickory	112	--	109	2	--	1	--
Hard maple	470	--	360	20	--	34	55
Soft maple	981	--	706	14	--	178	84
Red oaks	940	--	701	8	0	119	113
White oaks	1,139	--	806	138	0	59	137
Sycamore	38	--	18	10	--	10	--
Tupelo/gum	32	--	13	8	--	12	--
Yellow-poplar	1,050	--	277	1	--	773	--
Other hardwoods	224	--	207	8	--	9	--
Hardwood total	7,131	--	4,846	260	1	1,577	447
Unit total	7,445	--	5,139	261	1	1,597	447

All table cells without observations are indicated by -- . Table value of 0 indicates the volume rounds to less than 1 thousand cubic feet. Columns and rows may not add to their totals due to rounding.

Table 7.—Industrial roundwood production, in thousand cubic feet, by Forest Inventory Unit, county, and species group, Maryland, 2008

Forest Inventory Unit and county	All species	Softwoods								Hardwoods						
		Cedar	Hemlock	Loblolly/ shortleaf pine	Red pine	White pine	Other pine	Spruce	Total softwoods	Ash	Aspen/ balsam poplar	Bass-wood	Beech	White birch	Yellow birch	Other birch
North Central Unit																
Anne Arundel	745	0	--	26	--	13	71	--	111	20	1	--	13	--	--	1
Baltimore	706	--	--	--	--	2	13	1	16	10	9	--	6	6	6	6
Caroline	507	--	--	186	--	--	31	--	217	0	--	--	1	--	0	0
Carroll	286	--	--	--	--	14	--	--	14	3	2	--	0	1	5	2
Cecil	784	--	--	0	--	--	5	--	5	2	--	--	41	--	3	1
Frederick	380	--	--	7	--	--	9	--	16	20	7	--	2	6	6	6
Harford	1,358	--	--	6	--	--	7	--	13	22	5	--	46	5	15	26
Howard	298	0	--	15	--	10	0	--	26	1	5	--	0	4	4	4
Kent	359	--	--	12	--	--	--	--	12	4	--	--	5	--	--	--
Montgomery	387	--	--	--	--	1	7	6	14	3	10	--	4	8	8	8
Prince George's	876	--	--	4	--	--	88	--	93	6	--	--	13	--	--	1
Queen Anne's	358	--	--	20	--	--	--	--	20	12	5	--	0	4	4	4
Talbot	556	--	--	169	--	--	0	--	170	15	15	--	16	15	15	15
Washington	250	--	1	--	--	1	1	--	3	10	--	1	0	2	2	7
Unit total	7,850	0	1	445	--	42	233	7	729	128	57	1	149	52	68	82
Southern Unit																
Calvert	628	--	--	--	--	--	7	--	7	0	--	--	60	--	--	--
Charles	2,016	--	--	69	--	--	131	--	200	22	--	--	49	--	--	--
St. Mary's	2,343	--	--	543	--	--	294	--	837	--	--	1	99	--	--	--
Unit total	4,987	--	--	612	--	--	432	--	1,044	22	--	1	208	--	--	--
Lower Eastern Shore Unit																
Dorchester	2,100	--	--	1,819	--	--	2	--	1,821	--	1	--	1	1	1	1
Somerset	2,143	--	--	2,031	--	--	--	--	2,031	13	--	--	0	0	0	0
Wicomico	3,059	--	--	2,821	--	--	--	--	2,821	4	--	--	7	2	2	2
Worcester	1,515	--	--	1,251	--	--	0	--	1,251	11	--	--	8	1	1	1
Unit total	8,817	--	--	7,922	--	--	3	--	7,924	27	1	--	17	4	4	4
Western Unit																
Allegany	1,593	--	--	--	--	3	96	--	99	22	1	62	--	--	--	11
Garrett	5,852	--	31	--	83	40	6	54	215	36	16	267	26	--	56	95
Unit total	7,445	--	31	--	83	43	102	54	314	58	17	329	26	--	56	107
State total	29,099	0	32	8,979	83	85	770	61	10,010	236	75	331	399	56	127	192

Table 7.—continued on next page

Table 7.—continued

Forest Inventory Unit and county	Hardwoods														
	Black cherry	Black walnut	Cotton-wood	Elm	Hickory	Hard maple	Soft maple	Red oaks	White oaks	Sweet-gum	Syca-more	Tupelo/ gum	Yellow-poplar	Other hardwoods	Total hardwoods
North Central Unit															
Anne Arundel	5	14	--	0	22	--	15	79	81	80	3	14	276	8	634
Baltimore	14	8	--	0	21	--	29	180	64	3	15	5	304	5	690
Caroline	3	--	--	--	4	--	68	86	28	45	2	7	41	4	290
Carroll	9	0	--	--	10	--	6	110	47	--	--	2	75	1	272
Cecil	18	6	--	--	23	--	51	212	65	48	13	1	267	31	779
Frederick	3	1	--	0	10	0	7	105	101	--	2	5	82	1	364
Harford	51	8	--	6	20	--	73	337	152	86	6	11	459	17	1,345
Howard	6	0	--	--	10	--	23	67	29	0	3	1	113	0	272
Kent	1	--	--	--	5	--	63	38	50	64	--	3	109	6	347
Montgomery	12	1	4	2	1	1	20	104	62	--	10	3	106	5	373
Prince George's	7	7	--	1	34	--	48	104	154	20	17	22	342	6	783
Queen Anne's	2	0	--	2	17	--	51	67	87	50	--	13	19	1	338
Talbot	0	1	--	--	2	46	36	87	48	27	5	19	17	9	386
Washington	0	0	--	--	3	129	4	42	34	--	0	0	11	0	247
Unit total	132	47	4	11	181	175	492	1,617	1,002	422	78	106	2,220	96	7,122
Southern Unit															
Calvert	9	--	--	2	30	--	27	81	120	34	20	8	231	1	622
Charles	18	5	--	16	37	--	65	354	303	205	10	18	705	8	1,816
St. Mary's	17	--	--	--	43	--	139	301	252	67	0	20	562	5	1,506
Unit total	44	5	--	18	110	--	231	736	675	307	31	45	1,498	14	3,944
Lower Eastern Shore Unit															
Dorchester	3	--	--	--	15	--	61	93	37	38	--	16	9	2	279
Somerset	0	--	--	--	--	1	37	5	13	27	1	12	--	1	112
Wicomico	1	--	--	--	0	--	59	32	14	47	--	32	29	8	238
Worcester	1	--	--	--	0	0	99	19	22	50	--	26	17	7	263
Unit total	5	--	--	--	16	1	255	150	87	162	1	86	55	19	893
Western Unit															
Allegany	90	0	--	46	38	124	112	220	472	--	38	31	190	39	1,494
Garrett	1,372	--	--	44	75	346	870	719	668	--	--	1	860	186	5,637
Unit total	1,462	0	--	90	112	470	981	940	1,139	--	38	32	1,050	224	7,131
State total	1,643	52	4	119	419	646	1,960	3,442	2,903	891	148	270	4,824	353	19,089

All table cells without observations are indicated by -- . Table value of 0 indicates the volume rounds to less than 1 thousand cubic feet. Columns and rows may not add to their totals due to rounding.

Table 8.—Industrial roundwood production by Forest Inventory Unit, species group, and product, Maryland, 2008

ALL UNITS

Species group	All products MCF[a]	Saw logs MBF[b]	Saw logs MCF[a]	Veneer logs MBF[b]	Veneer logs MCF[a]	Pulp and composite products Cords[c]	Pulp and composite products MCF[a]	Posts, poles, and pilings MCF[a]	Other products MCF[a]
Softwoods									
Cedar	0	2	0	--	--	--	--	--	--
Hemlock	32	--	--	--	--	374	32	--	--
Loblolly/shortleaf pine	8,979	19,425	3,374	--	--	42,509	3,613	860	1,132
Red pine	83	--	--	--	--	981	83	--	--
White pine	85	98	17	--	--	801	68	--	--
Other pine	770	653	114	--	--	7,720	656	--	--
Spruce	62	26	5	--	--	670	57	--	--
Softwood total	10,010	20,204	3,510	--	--	53,055	4,510	860	1,132
Hardwoods									
Ash	236	962	158	2	0	908	77	--	--
Aspen/balsam poplar	75	338	56	--	--	227	19	--	--
Basswood	331	--	--	--	--	3,889	331	--	--
Beech	399	1,556	256	--	--	1,691	144	--	--
White birch	56	338	56	--	--	--	--	--	--
Yellow birch	127	435	72	--	--	656	56	--	--
Other birch	192	338	56	--	--	1,609	137	--	--
Black cherry	1,643	1,460	240	5	1	16,493	1,402	--	--
Black walnut	52	260	40	1	0	145	12	--	--
Cottonwood	4	--	--	--	--	52	4	--	--
Elm	119	106	17	--	--	1,191	101	--	--
Hickory	419	1,367	225	--	--	2,284	194	--	--
Hard maple	646	1,782	304	--	--	4,031	343	--	--
Soft maple	1,960	5,182	883	--	--	12,672	1,077	--	--
Red oaks	3,442	14,835	2,510	1	0	10,965	932	--	--
White oaks	2,903	9,967	1,686	4	1	13,746	1,168	--	48
Sweetgum	891	4,337	713	--	--	2,099	178	--	--
Sycamore	148	502	83	--	--	773	66	--	--
Tupelo	270	1,119	184	--	--	1,011	86	--	--
Yellow-poplar	4,824	19,851	3,262	1,222	167	16,410	1,395	--	--
Other hardwoods	353	663	109	--	--	2,869	244	1	--
Hardwood total	19,089	65,399	10,906	1,235	169	93,721	7,966	1	48
State total	29,099	85,603	14,415	1,235	169	146,776	12,476	860	1,180

Table 8.—continued on next page

Table 8.—continued

NORTH CENTRAL UNIT

Species group	All products MCF[a]	Saw logs MBF[b]	Saw logs MCF[a]	Veneer logs MBF[b]	Veneer logs MCF[a]	Pulp and composite products Cords[c]	Pulp and composite products MCF[a]	Posts, poles, and pilings MCF[a]	Other products MCF[a]
Softwoods									
Cedar	0	2	0	--	--	--	--	--	--
Hemlock	1	--	--	--	--	13	1	--	--
Loblolly/shortleaf pine	445	1,156	201	--	--	2,519	214	23	7
White pine	42	98	17	--	--	294	25	--	--
Other pine	233	209	36	--	--	2,449	208	--	--
Spruce	7	26	5	--	--	30	3	--	--
Softwood total	729	1,425	248	--	--	5,305	451	23	7
Hardwoods									
Ash	128	553	91	1	0	435	37	--	--
Aspen/balsam poplar	57	334	55	--	--	29	2	--	--
Basswood	1	--	--	--	--	13	1	--	--
Beech	149	540	89	--	--	706	60	--	--
White birch	52	315	52	--	--	--	--	--	--
Yellow birch	68	412	68	--	--	--	--	--	--
Other birch	82	315	52	--	--	354	30	--	--
Black cherry	132	438	72	3	0	703	60	--	--
Black walnut	47	224	34	1	0	145	12	--	--
Cottonwood	4	--	--	--	--	52	4	--	--
Elm	11	--	--	--	--	135	11	--	--
Hickory	181	741	122	--	--	697	59	--	--
Hard maple	176	1,017	173	--	--	26	2	--	--
Soft maple	492	1,866	318	--	--	2,055	175	--	--
Red oaks	1,617	8,264	1,398	1	0	2,570	218	--	--
White oaks	1,002	4,825	816	2	0	1,940	165	--	20
Sweetgum	422	1,684	277	--	--	1,708	145	--	--
Sycamore	78	311	51	--	--	321	27	--	--
Tupelo	106	443	73	--	--	395	34	--	--
Yellow-poplar	2,220	10,433	1,714	23	3	5,914	503	--	--
Other hardwoods	96	318	52	--	--	509	43	1	--
Hardwood total	7,122	33,033	5,506	31	4	18,708	1,590	1	20
Unit total	7,850	34,458	5,754	31	4	24,013	2,041	24	28

SOUTHERN UNIT

Species group	All products MCF[a]	Saw logs MBF[b]	Saw logs MCF[a]	Veneer logs MBF[b]	Veneer logs MCF[a]	Pulp and composite products Cords[c]	Pulp and composite products MCF[a]	Posts, poles, and pilings MCF[a]	Other products MCF[a]
Softwoods									
Loblolly/shortleaf pine	612	684	119	--	--	5,797	493	--	--
Other pine	432	511	89	--	--	4,041	343	--	--
Softwood total	1,044	1,195	208	--	--	9,837	836	--	--
Hardwoods									
Ash	22	133	22	0	0	3	0	--	--
Basswood	1	--	--	--	--	8	1	--	--
Beech	208	920	151	--	--	668	57	--	--
Black cherry	44	203	33	0	0	122	10	--	--
Black walnut	6	36	6	--	--	--	--	--	--
Elm	18	106	17	--	--	2	0	--	--
Hickory	110	536	88	--	--	255	22	--	--
Soft maple	231	898	153	--	--	913	78	--	--
Red oaks	736	3,963	671	0	0	769	65	--	--
White oaks	675	3,327	563	1	0	993	84	--	28
Sweetgum	307	1,782	293	--	--	163	14	--	--
Sycamore	31	185	30	--	--	2	0	--	--
Tupelo	46	206	34	--	--	136	12	--	--
Yellow-poplar	1,498	7,841	1,288	9	1	2,454	209	--	--
Other hardwoods	14	65	11	--	--	41	3	--	--
Hardwood total	3,944	20,200	3,360	11	2	6,529	555	--	28
Unit total	4,987	21,395	3,567	11	2	16,366	1,391	--	28

Table 8.—continued on next page

Table 8.—continued

LOWER EASTERN SHORE UNIT

Species group	All products MCF[a]	Saw logs MBF[b]	Saw logs MCF[a]	Veneer logs MBF[b]	Veneer logs MCF[a]	Pulp and composite products Cords[c]	Pulp and composite products MCF[a]	Posts, poles, and pilings MCF[a]	Other products MCF[a]
Softwoods									
Loblolly/shortleaf pine	7,922	17,585	3,055	--	--	34,193	2,906	836	1,124
Other pine	3	--	--	--	--	30	3	--	--
Softwood total	7,924	17,585	3,055	--	--	34,223	2,909	836	1,124
Hardwoods									
Ash	27	146	24	0	0	39	3	--	--
Aspen/balsam poplar	1	4	1	--	--	--	--	--	--
Beech	17	93	15	--	--	19	2	--	--
White birch	4	23	4	--	--	--	--	--	--
Yellow birch	4	23	4	--	--	--	--	--	--
Other birch	4	23	4	--	--	--	--	--	--
Black cherry	5	17	3	--	--	21	2	--	--
Hickory	16	86	14	--	--	17	1	--	--
Hard maple	1	5	1	--	--	--	--	--	--
Soft maple	255	1,310	223	--	--	380	32	--	--
Red oaks	150	793	134	--	--	181	15	--	--
White oaks	87	465	79	--	--	98	8	--	--
Sweetgum	162	871	143	--	--	228	19	--	--
Sycamore	1	6	1	--	--	--	--	--	--
Tupelo	86	470	77	--	--	104	9	--	--
Yellow-poplar	55	295	48	--	--	78	7	--	--
Other hardwoods	19	109	18	--	--	11	1	--	--
Hardwood total	893	4,739	793	0	0	1,176	100	--	--
Unit total	8,817	22,324	3,847	0	0	35,398	3,009	836	1,124

WESTERN UNIT

Species group	All products MCF[a]	Saw logs MBF[b]	Saw logs MCF[a]	Veneer logs MBF[b]	Veneer logs MCF[a]	Pulp and composite products Cords[c]	Pulp and composite products MCF[a]	Posts, poles, and pilings MCF[a]	Other products MCF[a]
Softwoods									
Hemlock	31	--	--	--	--	360	31	--	--
Red pine	83	--	--	--	--	981	83	--	--
White pine	43	--	--	--	--	507	43	--	--
Other pine	102	--	--	--	--	1,200	102	--	--
Spruce	54	--	--	--	--	640	54	--	--
Softwood total	314	--	--	--	--	3,689	314	--	--
Hardwoods									
Ash	58	130	21	0	0	432	37	--	--
Aspen/balsam poplar	17	--	--	--	--	197	17	--	--
Basswood	329	--	--	--	--	3,867	329	--	--
Beech	26	4	1	--	--	298	25	--	--
Yellow birch	56	--	--	--	--	656	56	--	--
Other birch	107	--	--	--	--	1,255	107	--	--
Black cherry	1,462	802	132	2	0	15,647	1,330	--	--
Black walnut	0	--	--	0	0	0	0	--	--
Elm	90	--	--	--	--	1,054	90	--	--
Hickory	112	4	1	--	--	1,315	112	--	--
Hard maple	470	760	129	--	--	4,005	340	--	--
Soft maple	981	1,108	189	--	--	9,324	793	--	--
Red oaks	940	1,814	307	0	0	7,445	633	--	--
White oaks	1,139	1,350	228	1	0	10,716	911	--	--
Sycamore	38	--	--	--	--	450	38	--	--
Tupelo	32	--	--	--	--	376	32	--	--
Yellow-poplar	1,050	1,282	211	1,189	163	7,963	677	--	--
Other hardwoods	224	171	28	--	--	2,307	196	--	--
Hardwood total	7,131	7,426	1,247	1,193	163	67,309	5,721	--	--
Unit total	7,445	7,426	1,247	1,193	163	70,998	6,035	--	--

[a] *Thousand cubic feet.*

[b] *Thousand board feet, International ¼-inch rule.*

[c] *Standard cords are 128 cubic feet consisting of 85 cubic feet of wood and 43 cubic feet of bark and air space.*

All table cells without observations are indicated by -- . Table value of 0 indicates the volume rounds to less than ½ unit of measure. Columns and rows may not add to their totals due to rounding.

Table 9.—Saw log receipts and production, in thousand board feet, International ¼-inch rule, by species group, Maryland, 2004 and 2008

Species group	Receipts			Production		
	2004	2008	Percent change	2004	2008	Percent change
Softwood						
Cedar	2	2	0%	2	2	0%
Cypress	--	--	--	25	--	--
Loblolly/shortleaf pine	37,074	33,839	-9%	24,472	19,425	-21%
White pine	102	102	0%	98	98	0%
Other pine	324	522	61%	461	653	42%
Spruce	26	26	0%	26	26	0%
Softwood total	37,528	34,491	-8%	25,083	20,204	-19%
Hardwood						
Ash	1,219	1,274	5%	902	962	7%
Aspen/balsam poplar	450	450	0%	338	338	0%
Basswood	277	--	--	122	--	--
Beech	1,225	1,791	46%	917	1,556	70%
White birch	450	450	0%	338	338	0%
Yellow birch	548	548	0%	435	435	0%
Other birch	450	450	0%	338	338	0%
Black cherry	3,787	1,821	-52%	1,889	1,460	-23%
Black walnut	357	267	-25%	239	260	9%
Elm	--	120	--	--	106	--
Hickory	1,061	1,478	39%	877	1,367	56%
Hard maple	2,612	2,301	-12%	1,602	1,782	11%
Soft maple	5,518	5,669	3%	4,301	5,182	20%
Red oak group	18,472	17,471	-5%	14,023	14,835	6%
White oak group	8,219	11,692	42%	6,593	9,967	51%
Sweetgum	4,586	4,485	-2%	4,401	4,337	-1%
Sycamore	480	531	11%	450	502	12%
Tupelo/gum	1,014	1,243	23%	945	1,119	18%
Yellow-poplar	20,460	25,964	27%	16,874	19,851	18%
Other hardwoods	596	1,241	108%	534	663	24%
Hardwood total	71,781	79,247	10%	56,119	65,399	17%
All species	109,309	113,738	4%	81,202	85,603	5%

All table cells without observations are indicated by -- . Table value of 0 indicates the volume rounds to less than 1 thousand board feet. Columns and rows may not add to their totals due to rounding.

Table 10.—Wood material harvested for industrial roundwood, in thousand cubic feet, by Forest Inventory Unit, source of material, and species group, Maryland, 2008[a]

ALL UNITS

Species group	Source of material: Growing stock: Used for products: Sawtimber	Growing stock: Used for products: Pole-timber	Growing stock: Logging residue (not used)	Growing stock: Total growing stock	Non-growing stock: Used for products: Limbwood	Saplings	Cull trees	Dead trees	Nonforest trees	Non-growing stock: Logging slash (not used)	Non-growing stock: Total non-growing stock	Total used	Harvest residues (total not used)	Total harvested
Softwoods														
Cedar	0.3	--	0.0	0.3	--	--	0.0	--	--	0.2	0.2	0.3	0.2	0.5
Hemlock	8.2	22.9	0.4	31.5	--	--	0.6	--	--	9.5	10.1	31.7	9.8	41.6
Loblolly/shortleaf pine	5,729.0	3,002.0	513.1	9,244.1	0.2	140.0	78.9	28.4	--	5,596.5	5,844.0	8,978.6	6,109.5	15,088.1
Red pine	21.6	60.2	1.0	82.8	--	--	1.6	--	--	24.9	26.5	83.4	25.9	109.3
White pine	34.7	49.1	2.6	86.4	--	--	1.3	--	--	42.1	43.4	85.1	44.7	129.8
Other pine	283.7	473.4	19.6	776.7	--	--	12.6	--	--	341.4	353.9	769.7	361.0	1,130.7
Spruce	19.3	41.1	1.1	61.5	--	--	1.1	--	--	22.8	23.9	61.5	24.0	85.5
Softwood total	6,096.8	3,648.8	537.7	10,283.4	0.2	140.0	96.1	28.4	--	6,037.4	6,302.1	10,010.3	6,575.1	16,585.4
Hardwoods														
Ash	198.4	3.0	49.7	251.2	19.4	--	12.6	2.0	--	103.8	137.8	235.5	153.5	389.0
Aspen/balsam poplar	64.7	0.8	17.2	82.7	5.5	--	3.2	0.7	--	36.3	45.6	74.8	53.4	128.2
Basswood	205.0	13.0	12.6	230.6	56.9	--	53.6	2.1	--	6.7	119.3	330.6	19.2	349.8
Beech	332.2	5.6	81.1	419.0	34.7	--	23.4	3.4	--	168.2	229.7	399.4	249.3	648.7
White birch	52.8	--	16.4	69.2	2.2	--	0.0	0.5	--	35.9	38.6	55.5	52.3	107.9
Yellow birch	102.6	2.2	23.3	128.0	12.4	--	9.1	1.0	--	47.3	69.8	127.3	70.6	197.8
Other birch	137.6	5.4	21.6	164.6	25.7	--	22.2	1.4	--	38.7	88.0	192.3	60.3	252.6
Black cherry	1,098.4	55.0	124.3	1,277.7	250.7	--	227.3	11.2	--	183.5	672.7	1,642.6	307.8	1,950.4
Black walnut	41.0	0.5	3.7	45.1	2.8	--	3.1	0.1	4.8	5.5	16.3	52.3	9.2	61.5
Cottonwood	2.8	0.2	0.2	3.1	0.8	--	0.7	0.0	--	0.1	1.6	4.4	0.3	4.7
Elm	79.3	4.0	9.0	92.3	18.1	--	16.4	0.8	--	13.3	48.6	118.6	22.3	140.9
Hickory	333.9	7.6	73.8	415.3	42.2	--	31.6	3.4	--	149.1	226.3	418.7	222.9	641.6
Hard maple	500.1	13.4	92.8	606.4	72.9	--	57.5	2.2	--	186.2	318.7	646.1	279.0	925.2
Soft maple	1,504.5	42.3	273.1	1,819.8	225.8	--	180.2	6.8	--	543.2	956.0	1,959.6	816.2	2,775.8
Red oaks	2,913.3	36.6	732.6	3,682.5	258.4	--	164.4	69.7	--	1,413.3	1,905.8	3,442.3	2,146.0	5,588.2
White oaks	2,337.4	45.9	524.5	2,907.8	267.1	--	202.7	50.3	--	961.4	1,481.4	2,903.2	1,485.9	4,389.2
Sweetgum	788.2	7.0	217.6	1,012.7	58.5	--	29.3	8.1	--	464.2	560.1	891.0	681.8	1,572.8
Sycamore	119.2	2.6	26.9	148.7	14.5	--	10.7	1.2	--	54.7	81.1	148.2	81.6	229.8
Tupelo	228.1	3.4	57.6	289.1	22.0	--	14.0	2.3	--	120.6	158.9	269.8	178.2	448.0
Yellow-poplar	4,133.0	54.7	1,042.8	5,230.5	367.2	--	228.0	40.6	--	2,146.2	2,781.9	4,823.5	3,188.9	8,012.4
Other hardwoods	255.0	9.7	41.5	306.2	46.2	0.0	39.6	2.6	0.1	75.4	163.9	353.2	116.9	470.1
Hardwood total	15,427.5	312.7	3,442.3	19,182.5	1,803.9	0.0	1,329.6	210.5	4.9	6,753.5	10,102.3	19,089.1	10,195.7	29,284.8
State total	21,524.4	3,961.5	3,980.0	29,465.8	1,804.1	140.0	1,425.7	238.9	4.9	12,790.8	16,404.4	29,099.4	16,770.8	45,870.2

Table 10.—continued on next page

Table 10.—continued

NORTH CENTRAL UNIT

Species group	Source of material: Growing stock: Used for products: Sawtimber	Growing stock: Used for products: Pole-timber	Growing stock: Logging residue (not used)	Growing stock: Total growing stock	Non-growing stock: Used for products: Limbwood	Saplings	Cull trees	Dead trees	Nonforest trees	Non-growing stock: Logging slash (not used)	Non-growing stock: Total non-growing stock	Total used	Total not used	Total harvested
Softwoods														
Cedar	0.3	--	0.0	0.3	--	--	0.0	--	--	0.2	0.2	0.3	0.2	0.5
Hemlock	0.3	0.8	0.0	1.1	--	--	0.0	--	--	0.3	0.4	1.1	0.4	1.5
Loblolly/shortleaf pine	282.3	157.8	26.2	466.2	0.0	--	5.2	--	--	322.5	327.7	445.2	348.7	793.9
White pine	23.5	18.0	2.1	43.6	--	--	0.5	--	--	29.2	29.7	42.0	31.3	73.3
Other pine	78.8	150.2	5.0	234.0	--	--	4.0	--	--	93.9	97.9	233.0	99.0	332.0
Spruce	5.2	1.8	0.5	7.5	--	--	0.1	--	--	6.6	6.6	7.1	7.1	14.2
Softwood total	390.3	328.6	33.8	752.8	0.0	--	9.7	--	--	452.8	462.5	728.7	486.6	1,215.3
Hardwoods														
Ash	109.5	1.5	28.3	139.2	9.9	--	6.0	1.1	--	59.5	76.6	128.0	87.8	215.8
Aspen/balsam poplar	53.7	0.1	16.3	70.1	2.6	--	0.4	0.6	--	35.5	39.1	57.4	51.8	109.2
Basswood	0.7	0.0	0.0	0.8	0.2	--	0.2	0.0	--	0.0	0.4	1.1	0.1	1.2
Beech	121.5	2.4	28.5	152.4	13.8	--	9.8	1.2	--	58.5	83.3	148.7	87.0	235.7
White birch	49.2	--	15.3	64.5	2.0	--	0.0	0.5	--	33.5	36.0	51.8	48.8	100.5
Yellow birch	64.4	--	20.0	84.4	2.6	--	0.0	0.7	--	43.8	47.1	67.7	63.8	131.5
Other birch	67.9	1.2	16.5	85.5	7.2	--	4.9	0.7	--	34.1	46.9	81.8	50.5	132.3
Black cherry	105.9	2.3	23.6	131.8	13.1	--	9.7	1.1	--	47.7	71.6	132.1	71.3	203.5
Black walnut	36.4	0.5	3.2	40.1	2.7	--	2.9	0.1	4.1	4.8	14.7	46.7	8.0	54.8
Cottonwood	2.8	0.2	0.2	3.1	0.8	--	0.7	0.0	--	0.1	1.6	4.4	0.3	4.7
Elm	7.1	0.4	0.4	8.0	2.0	--	1.9	0.1	--	0.2	4.1	11.4	0.7	12.1
Hickory	152.5	2.3	38.3	193.1	14.9	--	9.7	1.6	--	79.9	106.1	181.0	118.1	299.1
Hard maple	165.6	0.1	45.7	211.3	8.3	--	1.5	0.0	--	102.4	112.2	175.4	148.0	323.5
Soft maple	409.5	6.9	90.2	506.5	44.6	--	30.4	1.1	--	191.2	267.3	492.4	281.4	773.9
Red oaks	1,436.4	8.6	396.7	1,841.7	92.2	--	42.8	36.9	--	781.3	953.2	1,616.9	1,178.0	2,794.9
White oaks	880.4	6.5	238.0	1,124.9	60.3	--	32.9	21.8	--	457.2	572.3	1,001.9	695.3	1,697.2
Sweetgum	353.2	5.7	87.4	446.3	35.8	--	23.7	3.6	--	181.8	244.9	422.0	269.2	691.2
Sycamore	65.6	1.1	16.2	82.8	6.7	--	4.4	0.7	--	33.6	45.4	78.4	49.8	128.2
Tupelo	90.0	1.3	22.8	114.1	8.6	--	5.5	0.9	--	47.7	62.7	106.3	70.5	176.8
Yellow-poplar	1,944.6	19.7	526.6	2,490.9	153.3	--	82.5	19.9	--	1,118.3	1,374.0	2,220.0	1,644.9	3,864.9
Other hardwoods	76.7	1.8	17.1	95.6	9.5	0.0	7.1	0.8	0.1	34.7	52.1	96.0	51.8	147.7
Hardwood total	6,193.3	62.5	1,631.3	7,887.1	491.1	0.0	277.1	93.3	4.2	3,345.8	4,211.6	7,121.6	4,977.1	12,098.7
Unit total	6,583.7	391.1	1,665.1	8,639.9	491.1	0.0	286.9	93.3	4.2	3,798.6	4,674.1	7,850.3	5,463.7	13,314.0

SOUTHERN UNIT

Species group	Source of material: Growing stock: Used for products: Sawtimber	Growing stock: Used for products: Pole-timber	Growing stock: Logging residue (not used)	Growing stock: Total growing stock	Non-growing stock: Used for products: Limbwood	Saplings	Cull trees	Dead trees	Nonforest trees	Non-growing stock: Logging slash (not used)	Non-growing stock: Total non-growing stock	Total used	Total not used	Total harvested
Softwoods														
Loblolly/shortleaf pine	246.5	355.5	18.3	620.3	--	--	9.5	--	--	299.3	308.8	611.5	317.6	929.1
Other pine	177.7	247.8	13.4	439.0	--	--	6.6	--	--	216.2	222.8	432.2	229.6	661.8
Softwood total	424.2	603.3	31.7	1,059.3	--	--	16.1	--	--	515.5	531.6	1,043.7	547.2	1,590.9
Hardwoods														
Ash	21.0	0.0	6.5	27.5	0.9	--	0.0	0.2	--	14.2	15.3	22.2	20.7	42.8
Basswood	0.4	0.0	0.0	0.5	0.1	--	0.1	0.0	--	0.0	0.3	0.7	0.0	0.7
Beech	178.9	2.2	46.8	227.9	15.7	--	9.3	1.8	--	98.8	125.6	207.9	145.7	353.5
Black cherry	38.3	0.4	10.3	49.0	3.1	--	1.7	0.4	--	21.8	27.0	43.8	32.1	75.9
Black walnut	4.6	--	0.4	5.0	0.1	--	0.1	--	0.7	0.7	1.6	5.5	1.2	6.7
Elm	16.7	0.0	5.2	21.9	0.7	--	0.0	0.2	--	11.3	12.2	17.6	16.4	34.0
Hickory	97.1	0.8	26.9	124.8	7.2	--	3.6	1.0	--	57.3	69.0	109.7	84.2	193.9
Soft maple	193.1	3.0	43.2	239.3	20.4	--	13.6	0.5	--	91.9	126.3	230.5	135.1	365.6
Red oaks	664.3	2.6	188.7	855.6	37.4	--	14.2	17.5	--	373.8	442.9	735.9	562.6	1,298.5
White oaks	601.0	3.3	166.3	770.6	36.6	--	19.2	14.8	--	314.9	385.5	674.9	481.2	1,156.1
Sweetgum	286.9	0.5	87.1	374.6	13.8	--	2.4	2.9	--	189.5	208.7	306.6	276.6	583.2
Sycamore	29.0	0.0	9.0	38.0	1.2	--	0.1	0.3	--	19.6	21.2	30.6	28.6	59.2
Tupelo	39.4	0.5	10.5	50.3	3.3	--	1.9	0.4	--	22.2	27.8	45.4	32.6	78.1
Yellow-poplar	1,355.4	8.2	389.2	1,752.8	86.1	--	34.6	13.9	--	837.0	971.5	1,498.1	1,226.1	2,724.3
Other hardwoods	12.3	0.1	3.3	15.7	1.0	--	0.6	0.1	--	7.0	8.7	14.2	10.3	24.4
Hardwood total	3,538.3	21.8	993.4	4,553.5	227.5	--	101.3	54.0	0.7	2,060.1	2,443.6	3,943.6	3,053.4	6,997.1
Unit total	3,962.6	625.1	1,025.1	5,612.8	227.5	--	117.4	54.0	0.7	2,575.5	2,975.2	4,987.3	3,600.6	8,587.9

Table 10.—continued on next page

Table 10.—continued

LOWER EASTERN SHORE UNIT

Species group	Source of material: Growing stock: Used for products: Sawtimber	Growing stock: Used for products: Pole-timber	Growing stock: Logging residue (not used)	Growing stock: Total growing stock	Non-growing stock: Used for products: Limbwood	Saplings	Cull trees	Dead trees	Nonforest trees	Non-growing stock: Logging slash (not used)	Non-growing stock: Total non-growing stock	Total used	Total not used	Total harvested
Softwoods														
Loblolly/shortleaf pine	5,200.2	2,488.8	468.6	8,157.6	0.2	140.0	64.3	28.4	--	4,974.7	5,207.5	7,921.8	5,443.3	13,365.1
Other pine	0.7	1.8	0.0	2.5	--	--	0.0	--	--	0.7	0.8	2.5	0.8	3.3
Softwood total	5,200.9	2,490.6	468.6	8,160.1	0.2	140.0	64.3	28.4	--	4,975.4	5,208.3	7,924.4	5,444.0	13,368.4
Hardwoods														
Ash	24.9	0.1	7.2	32.2	1.5	--	0.6	0.3	--	15.6	17.9	27.3	22.8	50.1
Aspen/balsam poplar	0.6	--	0.2	0.8	0.0	--	0.0	0.0	--	0.4	0.5	0.7	0.6	1.3
Beech	15.5	0.1	4.6	20.2	0.9	--	0.3	0.2	--	9.9	11.2	16.9	14.5	31.4
White birch	3.6	--	1.1	4.7	0.1	--	0.0	0.0	--	2.4	2.6	3.8	3.6	7.3
Yellow birch	3.6	--	1.1	4.7	0.1	--	0.0	0.0	--	2.4	2.6	3.8	3.6	7.3
Other birch	3.6	--	1.1	4.7	0.1	--	0.0	0.0	--	2.4	2.6	3.8	3.6	7.3
Black cherry	3.7	0.1	0.9	4.7	0.4	--	0.3	0.0	--	1.8	2.6	4.5	2.7	7.3
Hickory	14.3	0.1	4.2	18.6	0.8	--	0.2	0.1	--	9.2	10.3	15.5	13.4	28.9
Hard maple	0.8	--	0.2	1.0	0.0	--	0.0	--	--	0.5	0.5	0.9	0.7	1.6
Soft maple	231.5	1.3	59.9	292.7	15.8	--	6.7	0.2	--	132.4	155.1	255.4	192.4	447.8
Red oaks	134.4	0.6	37.9	172.8	7.9	--	3.2	3.5	--	74.9	89.5	149.6	112.7	262.3
White oaks	78.3	0.3	22.2	100.8	4.5	--	1.8	2.1	--	43.9	52.2	87.0	66.0	153.0
Sweetgum	148.1	0.8	43.1	191.9	8.9	--	3.2	1.5	--	92.9	106.5	162.5	136.0	298.4
Sycamore	0.9	--	0.3	1.2	0.0	--	0.0	0.0	--	0.6	0.7	1.0	0.9	1.9
Tupelo	78.9	0.3	23.2	102.4	4.5	--	1.5	0.8	--	50.1	56.9	86.1	73.3	159.3
Yellow-poplar	50.2	0.3	14.6	65.1	3.0	--	1.1	0.5	--	31.5	36.1	55.1	46.1	101.2
Other hardwoods	17.6	0.0	5.3	23.0	0.9	--	0.2	0.2	--	11.6	12.8	18.8	16.9	35.8
Hardwood total	810.6	3.9	227.1	1,041.6	49.6	--	19.0	9.5	--	482.6	560.7	892.6	709.7	1,602.3
Unit total	6,011.5	2,494.5	695.7	9,201.7	49.8	140.0	83.3	37.9	--	5,458.0	5,769.0	8,817.0	6,153.7	14,970.7

WESTERN UNIT

Species group	Source of material: Growing stock: Used for products: Sawtimber	Pole-timber	Logging residue (not used)	Total growing stock	Non-growing stock: Used for products: Limbwood	Saplings	Cull trees	Dead trees	Nonforest trees	Logging slash (not used)	Total non-growing stock	Total used	Total not used	Total harvested
Softwoods														
Hemlock	7.9	22.1	0.3	30.4	--	--	0.6	--	--	9.1	9.7	30.6	9.5	40.1
Red pine	21.6	60.2	1.0	82.8	--	--	1.6	--	--	24.9	26.5	83.4	25.9	109.3
White pine	11.2	31.1	0.5	42.8	--	--	0.8	--	--	12.9	13.7	43.1	13.4	56.5
Other pine	26.5	73.6	1.2	101.2	--	--	1.9	--	--	30.5	32.4	102.0	31.6	133.6
Spruce	14.1	39.3	0.6	54.0	--	--	1.0	--	--	16.3	17.3	54.4	16.9	71.3
Softwood total	81.4	226.3	3.6	311.2	--	--	6.0	--	--	93.7	99.6	313.6	97.2	410.8
Hardwoods														
Ash	43.1	1.4	7.7	52.2	7.1	--	6.0	0.4	--	14.5	28.1	58.0	22.2	80.3
Aspen/balsam poplar	10.4	0.7	0.6	11.7	2.9	--	2.7	0.1	--	0.3	6.1	16.8	1.0	17.8
Basswood	203.9	12.9	12.5	229.3	56.6	--	53.3	2.1	--	6.7	118.6	328.7	19.1	347.9
Beech	16.4	1.0	1.2	18.5	4.4	--	4.1	0.2	--	1.0	9.6	26.0	2.1	28.1
Yellow birch	34.6	2.2	2.1	38.9	9.6	--	9.0	0.4	--	1.1	20.1	55.8	3.2	59.0
Other birch	66.2	4.2	4.1	74.4	18.4	--	17.3	0.7	--	2.2	38.5	106.7	6.2	112.9
Black cherry	950.5	52.2	89.5	1,092.2	234.1	--	215.6	9.7	--	112.1	571.5	1,462.0	201.7	1,663.7
Black walnut	0.0	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Elm	55.6	3.5	3.4	62.5	15.4	--	14.5	0.6	--	1.8	32.3	89.6	5.2	94.8
Hickory	70.0	4.4	4.4	78.8	19.3	--	18.1	0.7	--	2.7	40.8	112.5	7.2	119.6
Hard maple	333.8	13.4	47.0	394.1	64.5	--	56.0	2.2	--	83.3	206.0	469.8	130.3	600.1
Soft maple	670.5	31.1	79.8	781.3	145.1	--	129.6	5.0	--	127.6	407.3	981.3	207.3	1,188.6
Red oaks	678.1	24.8	109.3	812.3	120.9	--	104.2	11.8	--	183.4	420.3	939.9	292.7	1,232.6
White oaks	777.6	35.7	98.1	911.4	165.7	--	148.8	11.6	--	145.4	471.4	1,139.4	243.4	1,382.9
Sycamore	23.7	1.5	1.5	26.7	6.6	--	6.2	0.2	--	0.8	13.8	38.2	2.2	40.4
Tupelo	19.8	1.3	1.2	22.3	5.5	--	5.2	0.2	--	0.6	11.5	32.0	1.9	33.9
Yellow-poplar	782.8	26.6	112.4	921.8	124.7	--	109.8	6.3	--	159.4	400.3	1,050.3	271.8	1,322.1
Other hardwoods	148.4	7.7	15.8	171.8	34.9	--	31.8	1.5	--	22.1	90.3	224.2	37.9	262.1
Hardwood total	4,885.3	224.5	590.5	5,700.2	1,035.7	--	932.1	53.6	0.0	865.0	2,886.5	7,131.3	1,455.5	8,586.7
Unit total	4,966.6	450.8	594.0	6,011.4	1,035.7	--	938.1	53.6	0.0	958.7	2,986.1	7,444.8	1,552.7	8,997.6

[a] *Based on factors obtained from regional utilization studies.*

All table cells without observations are indicated by -- . Table value of 0.0 indicates the volume rounds to less than 0.1 thousand cubic feet. Columns and rows may not add to their totals due to rounding.

Table 11.—Growing-stock removals from timberland for industrial roundwood, in thousand cubic feet, by Forest Inventory Unit, county, and species group, Maryland, 2008

Forest Inventory Unit and county	All species	Softwoods								Hardwoods						
		Cedar	Hemlock	Loblolly/ shortleaf pine	Red pine	White pine	Other pine	Spruce	Total softwoods	Ash	Aspen/ balsam poplar	Bass-wood	Beech	White birch	Yellow birch	Other birch
North Central Unit																
Anne Arundel	759	0	--	26	--	13	71	--	111	18	1	--	11	--	--	1
Baltimore	807	--	--	--	--	2	13	2	16	11	10	--	7	8	8	8
Caroline	537	--	--	190	--	--	31	--	221	0	--	--	0	--	0	0
Carroll	341	--	--	--	--	15	--	--	15	3	2	--	0	2	6	2
Cecil	887	--	--	0	--	--	5	--	5	2	--	--	44	--	3	1
Frederick	436	--	--	7	--	--	9	--	16	24	8	--	1	7	7	8
Harford	1,402	--	--	6	--	--	7	--	13	24	7	--	45	6	18	21
Howard	318	0	--	15	--	11	0	--	26	2	6	--	0	6	6	6
Kent	439	--	--	12	--	--	--	--	12	5	--	--	7	--	--	--
Montgomery	429	--	--	--	--	1	7	6	14	2	12	--	3	10	10	10
Prince George's	935	--	--	4	--	--	89	--	94	6	--	--	13	--	--	1
Queen Anne's	417	--	--	21	--	--	--	--	21	13	6	--	1	5	5	5
Talbot	658	--	--	185	--	--	0	--	186	18	18	--	20	18	18	18
Washington	275	--	1	--	--	1	1	--	3	10	--	1	0	3	3	6
Unit total	8,640	0	1	466	--	44	234	8	753	139	70	1	152	65	84	85
Southern Unit																
Calvert	771	--	--	--	--	--	7	--	7	0	--	--	75	--	--	--
Charles	2,434	--	--	71	--	--	134	--	205	27	--	--	61	--	--	--
St. Mary's	2,407	--	--	550	--	--	297	--	847	--	--	0	93	--	--	--
Unit total	5,613	--	--	620	--	--	439	--	1,059	28	--	0	228	--	--	--
Lower Eastern Shore Unit																
Dorchester	2,209	--	--	1,896	--	--	2	--	1,898	--	1	--	1	1	1	1
Somerset	2,160	--	--	2,031	--	--	--	--	2,031	15	--	--	0	0	0	0
Wicomico	3,187	--	--	2,908	--	--	--	--	2,908	4	--	--	8	2	2	2
Worcester	1,645	--	--	1,323	--	--	0	--	1,323	14	--	--	10	1	1	1
Unit total	9,202	--	--	8,158	--	--	2	--	8,160	32	1	--	20	5	5	5
Western Unit																
Allegany	1,340	--	--	--	--	3	95	--	98	18	0	43	--	--	--	8
Garrett	4,671	--	30	--	83	40	6	54	213	34	11	186	19	--	39	67
Unit total	6,011	--	30	--	83	43	101	54	311	52	11	229	19	--	39	74
State total	29,466	0	32	9,244	83	86	777	62	10,283	251	82	231	419	69	128	165

Forest Inventory Unit and county	Hardwoods														
	Black cherry	Black walnut	Cotton-wood	Elm	Hickory	Hard maple	Soft maple	Red oaks	White oaks	Sweet-gum	Syca-more	Tupelo/ gum	Yellow-poplar	Other hardwoods	Total hardwoods
North Central Unit															
Anne Arundel	5	12	--	0	22	--	13	83	84	74	3	13	303	6	648
Baltimore	16	7	--	0	23	--	30	208	75	3	17	6	350	5	791
Caroline	3	--	--	--	4	--	72	96	29	50	2	8	46	5	316
Carroll	11	0	--	--	12	--	7	131	55	--	--	2	91	2	326
Cecil	19	5	--	--	26	--	56	238	70	55	16	1	310	34	882
Frederick	3	1	--	0	11	0	6	123	115	--	2	5	96	1	421
Harford	46	6	--	5	19	--	62	384	168	73	6	10	477	13	1,389
Howard	7	0	--	--	8	--	20	70	31	0	3	1	127	0	293
Kent	1	--	--	--	6	--	76	45	61	79	--	4	135	7	427
Montgomery	11	1	3	1	1	1	18	120	72	--	9	3	124	4	415
Prince George's	8	6	--	1	36	--	44	114	172	19	17	22	379	5	841
Queen Anne's	2	0	--	1	20	--	57	79	103	59	--	16	22	1	396
Talbot	0	1	--	--	3	56	43	105	58	33	6	24	21	11	472
Washington	0	0	--	--	2	155	4	46	33	--	0	0	9	0	272
Unit total	132	39	3	8	193	211	507	1,842	1,125	446	83	114	2,491	96	7,887
Southern Unit															
Calvert	11	--	--	2	37	--	32	98	144	42	24	9	288	1	764
Charles	23	5	--	20	46	--	78	427	365	255	13	23	877	10	2,229
St. Mary's	15	--	--	--	42	--	129	331	262	77	1	18	588	5	1,561
Unit total	49	5	--	22	125	--	239	856	771	375	38	50	1,753	16	4,553
Lower Eastern Shore Unit															
Dorchester	3	--	--	--	18	--	64	106	42	42	--	18	10	2	311
Somerset	0	--	--	--	--	1	42	6	15	32	1	14	--	1	129
Wicomico	1	--	--	--	0	--	67	38	17	56	--	38	34	10	280
Worcester	1	--	--	--	0	0	119	23	26	62	--	32	21	9	322
Unit total	5	--	--	--	19	1	293	173	101	192	1	102	65	23	1,042
Western Unit															
Allegany	78	0	--	32	26	112	97	204	378	--	27	21	166	30	1,242
Garrett	1,014	--	--	30	53	282	684	608	533	--	--	1	756	142	4,458
Unit total	1,092	0	--	62	79	394	781	812	911	--	27	22	922	172	5,700
State total	1,278	45	3	92	415	606	1,820	3,682	2,908	1,013	149	289	5,231	306	19,182

All table cells without observations are indicated by -- . Table value of 0 indicates the volume rounds to less than 1 thousand cubic feet. Columns and rows may not add to their totals due to rounding.

Table 12.—Sawtimber removals from timberland for industrial roundwood, in thousand board feet, International ¼-inch rule, by Forest Inventory Unit, county, and species group, Maryland, 2008

Forest Inventory Unit and county	All species	Softwoods								Hardwoods						
		Cedar	Hemlock	Loblolly/ shortleaf pine	Red pine	White pine	Other pine	Spruce	Total softwoods	Ash	Aspen/ balsam poplar	Bass-wood	Beech	White birch	Yellow birch	Other birch
North Central Unit																
Anne Arundel	3,386	1	--	43	--	17	117	--	178	81	3	--	52	--	--	2
Baltimore	4,130	--	--	--	--	9	29	8	45	57	51	--	36	40	40	40
Caroline	2,097	--	--	467	--	--	39	--	506	2	--	--	2	--	1	1
Carroll	1,781	--	--	--	--	76	--	--	76	18	11	--	1	10	30	11
Cecil	4,537	--	--	0	--	--	10	--	10	11	--	--	224	--	17	3
Frederick	2,196	--	--	9	--	--	11	--	20	127	45	--	6	38	38	40
Harford	6,891	--	--	8	--	--	9	--	17	122	36	--	216	30	97	89
Howard	1,514	1	--	19	--	24	1	--	45	9	34	--	0	29	29	29
Kent	2,262	--	--	15	--	--	--	--	15	25	--	--	35	--	--	--
Montgomery	2,156	--	--	--	--	4	9	22	35	9	63	--	12	54	54	54
Prince George's	4,422	--	--	6	--	--	181	--	187	27	--	--	62	--	--	3
Queen Anne's	2,136	--	--	88	--	--	--	--	88	69	30	--	3	27	27	27
Talbot	3,443	--	--	965	--	--	0	--	966	98	98	--	103	98	98	98
Washington	1,366	--	1	--	--	2	1	--	4	49	--	3	1	15	15	27
Unit total	42,319	1	1	1,620	--	132	408	30	2,192	704	370	3	751	343	448	425
Southern Unit																
Calvert	4,066	--	--	--	--	--	31	--	31	0	--	--	396	--	--	--
Charles	12,311	--	--	181	--	--	357	--	538	146	--	--	323	--	--	--
St. Mary's	9,428	--	--	1,138	--	--	567	--	1,706	--	--	2	438	--	--	--
Unit total	25,805	--	--	1,320	--	--	955	--	2,274	146	--	2	1,156	--	--	--
Lower Eastern Shore Unit																
Dorchester	10,033	--	--	8,454	--	--	3	--	8,457	--	4	--	6	4	4	4
Somerset	6,279	--	--	5,618	--	--	--	--	5,618	75	--	--	1	2	2	2
Wicomico	10,742	--	--	9,295	--	--	--	--	9,295	21	--	--	43	11	11	11
Worcester	8,432	--	--	6,747	--	--	0	--	6,747	72	--	--	56	8	8	8
Unit total	35,487	--	--	30,113	--	--	3	--	30,116	168	4	--	106	25	25	25
Western Unit																
Allegany	5,620	--	--	--	--	4	121	--	124	79	1	169		--	--	31
Garrett	19,734	--	38	--	105	51	8	68	270	163	45	733	74	--	153	261
Unit total	25,355	--	38	--	105	54	128	68	394	242	46	902	74	--	153	293
State total	128,965	1	40	33,052	105	186	1,494	98	34,976	1,260	420	907	2,087	368	626	743

Forest Inventory Unit and county	Hardwoods														
	Black cherry	Black walnut	Cotton-wood	Elm	Hickory	Hard maple	Soft maple	Red oaks	White oaks	Sweet-gum	Syca-more	Tupelo/ gum	Yellow-poplar	Other hardwoods	Total hardwoods
North Central Unit															
Anne Arundel	22	71	--	0	103	--	55	415	415	351	13	63	1,535	27	3,208
Baltimore	81	44	--	1	117	--	145	1,076	390	17	89	29	1,812	22	4,085
Caroline	15	--	--	--	20	--	349	489	145	256	10	40	237	26	1,592
Carroll	57	2	--	--	62	--	34	686	286	--	--	9	481	8	1,706
Cecil	96	30	--	--	133	--	281	1,222	354	287	84	5	1,604	175	4,526
Frederick	18	6	--	0	56	0	27	642	591	--	12	27	499	3	2,176
Harford	213	33	--	18	88	--	276	1,973	854	326	29	49	2,370	57	6,874
Howard	32	0	--	--	39	--	90	350	157	0	14	4	651	1	1,470
Kent	7	--	--	--	34	--	390	239	318	422	--	20	719	39	2,247
Montgomery	53	6	12	5	6	5	80	618	373	--	43	15	642	14	2,120
Prince George's	40	35	--	2	179	--	200	576	876	90	85	106	1,932	23	4,235
Queen Anne's	10	0	--	5	107	--	286	411	534	306	--	81	117	7	2,048
Talbot	1	4	--	--	15	285	222	549	303	175	34	125	111	61	2,477
Washington	0	1	--	--	9	791	16	231	161	--	1	0	40	1	1,362
Unit total	643	231	12	31	968	1,081	2,450	9,477	5,756	2,230	413	573	12,749	465	40,127
Southern Unit															
Calvert	59	--	--	12	196	--	166	513	757	224	129	50	1,526	7	4,035
Charles	120	31	--	104	242	--	401	2,242	1,913	1,353	69	121	4,656	53	11,773
St. Mary's	71	--	--	--	203	--	595	1,681	1,297	399	3	85	2,927	21	7,722
Unit total	250	31	--	116	642	--	1,162	4,436	3,967	1,976	202	256	9,109	80	23,530
Lower Eastern Shore Unit															
Dorchester	14	--	--	--	94	--	315	545	217	213	--	91	53	12	1,577
Somerset	1	--	--	--	--	5	209	32	80	164	7	74	--	8	662
Wicomico	4	--	--	--	1	--	339	199	88	292	--	201	175	52	1,447
Worcester	4	--	--	--	2	1	610	118	138	331	--	169	111	49	1,685
Unit total	23	--	--	--	97	5	1,473	894	522	1,000	7	535	339	121	5,370
Western Unit															
Allegany	358	0	--	126	103	514	437	961	1,642	--	105	84	758	128	5,496
Garrett	4,164	--	--	120	208	1,222	2,908	2,724	2,308	--	--	4	3,784	596	19,465
Unit total	4,522	0	--	246	311	1,736	3,345	3,685	3,949	--	105	88	4,542	724	24,961
State total	5,438	263	12	393	2,019	2,822	8,429	18,491	14,194	5,206	726	1,453	26,740	1,391	93,988

All table cells without observations are indicated by -- . Table value of 0 indicates the volume rounds to less than 1 thousand board feet. Columns and rows may not add to their totals due to rounding.

Table 13.—Harvest residue generated by industrial roundwood harvesting, in thousand cubic feet, by Forest Inventory Unit, county, and species group, Maryland, 2008

Forest Inventory Unit and county	All species	Softwoods								Hardwoods						
		Cedar	Hemlock	Loblolly/ shortleaf pine	Red pine	White pine	Other pine	Spruce	Total softwoods	Ash	Aspen/ balsam poplar	Bass-wood	Beech	White birch	Yellow birch	Other birch
North Central Unit																
Anne Arundel	404	0	--	11	--	4	29	--	43	7	0	--	4	--	--	0
Baltimore	536	--	--	--	--	2	7	2	11	8	7	--	5	6	6	6
Caroline	311	--	--	106	--	--	10	--	116	0	--	--	0	--	0	0
Carroll	245	--	--	--	--	18	--	--	18	3	2	--	0	1	4	1
Cecil	580	--	--	0	--	--	2	--	2	2	--	--	28	--	2	0
Frederick	275	--	--	2	--	--	3	--	5	17	6	--	0	5	5	5
Harford	787	--	--	2	--	--	2	--	4	16	5	--	23	4	14	6
Howard	188	0	--	5	--	6	0	--	11	1	5	--	0	4	4	4
Kent	315	--	--	4	--	--	--	--	4	4	--	--	5	--	--	--
Montgomery	273	--	--	--	--	1	2	5	8	0	9	--	0	8	8	8
Prince George's	554	--	--	2	--	--	44	--	45	3	--	--	7	--	--	0
Queen Anne's	287	--	--	18	--	--	--	--	18	9	4	--	0	4	4	4
Talbot	540	--	--	200	--	--	0	--	200	14	14	--	14	14	14	14
Washington	170	--	0	--	--	0	0	--	1	6	--	0	0	2	2	2
Unit total	5,464	0	0	349	--	31	99	7	487	88	52	0	87	49	64	51
Southern Unit																
Calvert	565	--	--	--	--	--	7	--	7	0	--	--	56	--	--	--
Charles	1,740	--	--	43	--	--	85	--	129	21	--	--	46	--	--	--
St. Mary's	1,296	--	--	274	--	--	137	--	411	--	--	0	44	--	--	--
Unit total	3,601	--	--	318	--	--	230	--	547	21	--	0	146	--	--	--
Lower Eastern Shore Unit																
Dorchester	1,677	--	--	1,480	--	--	1	--	1,480	--	1	--	1	1	1	1
Somerset	964	--	--	877	--	--	--	--	877	10	--	--	0	0	0	0
Wicomico	2,089	--	--	1,896	--	--	--	--	1,896	3	--	--	6	2	2	2
Worcester	1,424	--	--	1,190	--	--	0	--	1,190	10	--	--	8	1	1	1
Unit total	6,154	--	--	5,443	--	--	1	--	5,444	23	1	--	14	4	4	4
Western Unit																
Allegany	428	--	--	--	--	1	30	--	31	6	0	4	--	--	--	1
Garrett	1,125	--	9	--	26	12	2	17	67	17	1	16	2	--	3	6
Unit total	1,553	--	9	--	26	13	32	17	97	22	1	19	2	--	3	6
State total	16,771	0	10	6,110	26	45	361	24	6,575	153	53	19	249	52	71	60

Forest Inventory Unit and county	Hardwoods														
	Black cherry	Black walnut	Cotton-wood	Elm	Hickory	Hard maple	Soft maple	Red oaks	White oaks	Sweet-gum	Syca-more	Tupelo/ gum	Yellow-poplar	Other hardwoods	Total hardwoods
North Central Unit															
Anne Arundel	2	2	--	0	11	--	4	47	46	35	1	6	194	1	361
Baltimore	11	2	--	0	15	--	17	136	50	2	12	4	240	2	525
Caroline	2	--	--	--	2	--	41	59	16	33	1	5	30	4	195
Carroll	8	0	--	--	9	--	4	89	37	--	--	1	67	1	227
Cecil	12	1	--	--	18	--	36	150	42	38	12	1	214	23	577
Frederick	2	0	--	0	7	0	3	82	64	--	1	4	67	0	270
Harford	19	1	--	0	9	--	22	245	103	25	3	5	280	4	783
Howard	4	0	--	--	3	--	8	40	18	0	1	0	85	0	177
Kent	1	--	--	--	5	--	54	31	42	60	--	3	102	6	312
Montgomery	5	0	0	0	1	1	7	78	47	--	4	2	86	0	264
Prince George's	5	1	--	0	22	--	19	68	106	9	10	12	246	2	509
Queen Anne's	1	0	--	0	15	--	37	53	68	42	--	11	16	1	269
Talbot	0	0	--	--	2	39	31	72	40	25	5	18	16	9	340
Washington	0	0	--	--	0	108	1	28	16	--	0	0	3	0	169
Unit total	71	8	0	1	118	148	281	1,178	695	269	50	70	1,645	52	4,977
Southern Unit															
Calvert	8	--	--	2	28	--	23	67	99	32	18	7	217	1	558
Charles	17	1	--	15	34	--	55	294	240	192	10	17	661	7	1,611
St. Mary's	7	--	--	--	22	--	57	201	142	53	0	8	348	2	884
Unit total	32	1	--	16	84	--	135	563	481	277	29	33	1,226	10	3,053
Lower Eastern Shore Unit															
Dorchester	1	--	--	--	13	--	38	67	27	27	--	12	7	1	196
Somerset	0	--	--	--	--	1	27	4	10	22	1	10	--	1	87
Wicomico	0	--	--	--	0	--	44	26	11	40	--	28	23	7	193
Worcester	1	--	--	--	0	0	84	16	18	47	--	24	16	7	234
Unit total	3	--	--	--	13	1	192	113	66	136	1	73	46	17	710
Western Unit															
Allegany	31	0	--	3	2	47	37	89	102	--	2	2	65	7	397
Garrett	171	--	--	3	5	83	171	203	141	--	--	0	207	31	1,058
Unit total	202	0	--	5	7	130	207	293	243	--	2	2	272	38	1,455
State total	308	9	0	22	223	279	816	2,146	1,486	682	82	178	3,189	117	10,196

All table cells without observations are indicated by -- . Table value of 0 indicates the volume rounds to less than 1 thousand cubic feet. Columns and rows may not add to their totals due to rounding.

Table 14.—Disposition of residues produced at primary wood-using mills, in thousand tons, green weight, by Forest Inventory Unit, disposition, residue type, and softwoods and hardwoods, Maryland, 2008

Forest Inventory Unit and disposition	Total all residues		Residue type							
			Wood residue						Bark	
			Total wood residue		Coarse		Fine			
	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood
All Units										
Fiber products	25.63	45.08	25.63	44.58	25.63	44.58	--	--	--	0.50
Industrial fuel	11.22	9.79	11.22	9.71	11.04	0.18	0.18	9.53	--	0.08
Domestic fuel	1.41	22.68	1.41	21.89	1.41	18.66	--	3.23	--	0.79
Mulch	30.88	56.39	0.14	15.52	0.14	13.76	--	1.76	30.74	40.87
Miscellaneous[b]	74.25	167.72	61.09	91.88	22.73	28.33	38.36	63.55	13.17	75.84
Not used	0.30	0.98	0.27	0.69	0.25	0.67	0.02	0.02	0.02	0.29
State total	143.69	302.63	99.76	184.27	61.19	106.19	38.57	78.08	43.93	118.36
North Central and Western Units[a]										
Fiber products	0.02	15.41	0.02	14.91	0.02	14.91	--	--	--	0.50
Industrial fuel	--	3.85	--	3.85	--	--	--	3.85	--	--
Domestic fuel	0.07	7.27	0.07	6.48	0.07	3.25	--	3.23	--	0.79
Mulch	0.23	37.27	0.14	15.52	0.14	13.76	--	1.76	0.09	21.75
Miscellaneous[b]	18.48	154.12	5.31	78.28	--	27.74	5.31	50.54	13.17	75.84
Not used	0.02	0.93	0.01	0.65	0.01	0.65	0.00	0.00	0.01	0.28
Unit total	18.82	218.85	5.55	119.69	0.25	60.32	5.31	59.38	13.27	99.16
Southern										
Fiber products	0.00	29.67	0.00	29.67	0.00	29.67	--	--	--	--
Industrial fuel	--	5.94	--	5.86	--	0.18	--	5.68	--	0.08
Domestic fuel	1.34	15.41	1.34	15.41	1.34	15.41	--	--	--	--
Mulch	0.57	18.87	--	--	--	--	--	--	0.57	18.87
Miscellaneous[b]	0.78	12.66	0.78	12.66	--	--	0.78	12.66	--	--
Not used	--	--	--	--	--	--	--	--	--	--
Unit total	2.69	82.54	2.12	63.60	1.34	45.26	0.78	18.34	0.57	18.94
Lower Eastern Shore										
Fiber products	25.60	--	25.60	--	25.60	--	--	--	--	--
Industrial fuel	11.22	--	11.22	--	11.04	--	0.18	--	--	--
Domestic fuel	--	--	--	--	--	--	--	--	--	--
Mulch	30.08	0.25	--	--	--	--	--	--	30.08	0.25
Miscellaneous[b]	55.00	0.94	55.00	0.94	22.73	0.59	32.28	0.34	--	--
Not used	0.28	0.05	0.26	0.04	0.23	0.03	0.02	0.02	0.02	0.01
Unit total	122.18	1.24	92.09	0.98	59.60	0.62	32.48	0.36	30.09	0.26

[a] *Combined to avoid disclosure of individual mills.*

[b] *Livestock bedding, small dimension, and specialty items.*

All table cells without observations are indicated by -- . Table value of 0.00 indicates the volume rounds to less than 5 green tons. Columns and rows may not add to their totals due to rounding.

Walters, Brian F.; Rider, Daniel R.; Piva, Ronald J. 2012. **Maryland timber industry: an assessment of timber product output and use, 2008.** Resour. Bull. NRS-64. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 52 p.

Presents recent Maryland forest industry trends; production and receipts of industrial roundwood; and production of saw logs, veneer logs, pulpwood, and other products in 2008. Logging residue generated from timber harvest operations is reported, as well as wood and bark residue generated at primary wood-using mills and disposition of mill residues.

KEY WORDS: industrial roundwood, harvest residue, mill residue, production, pulpwood, receipts, saw logs, veneer logs