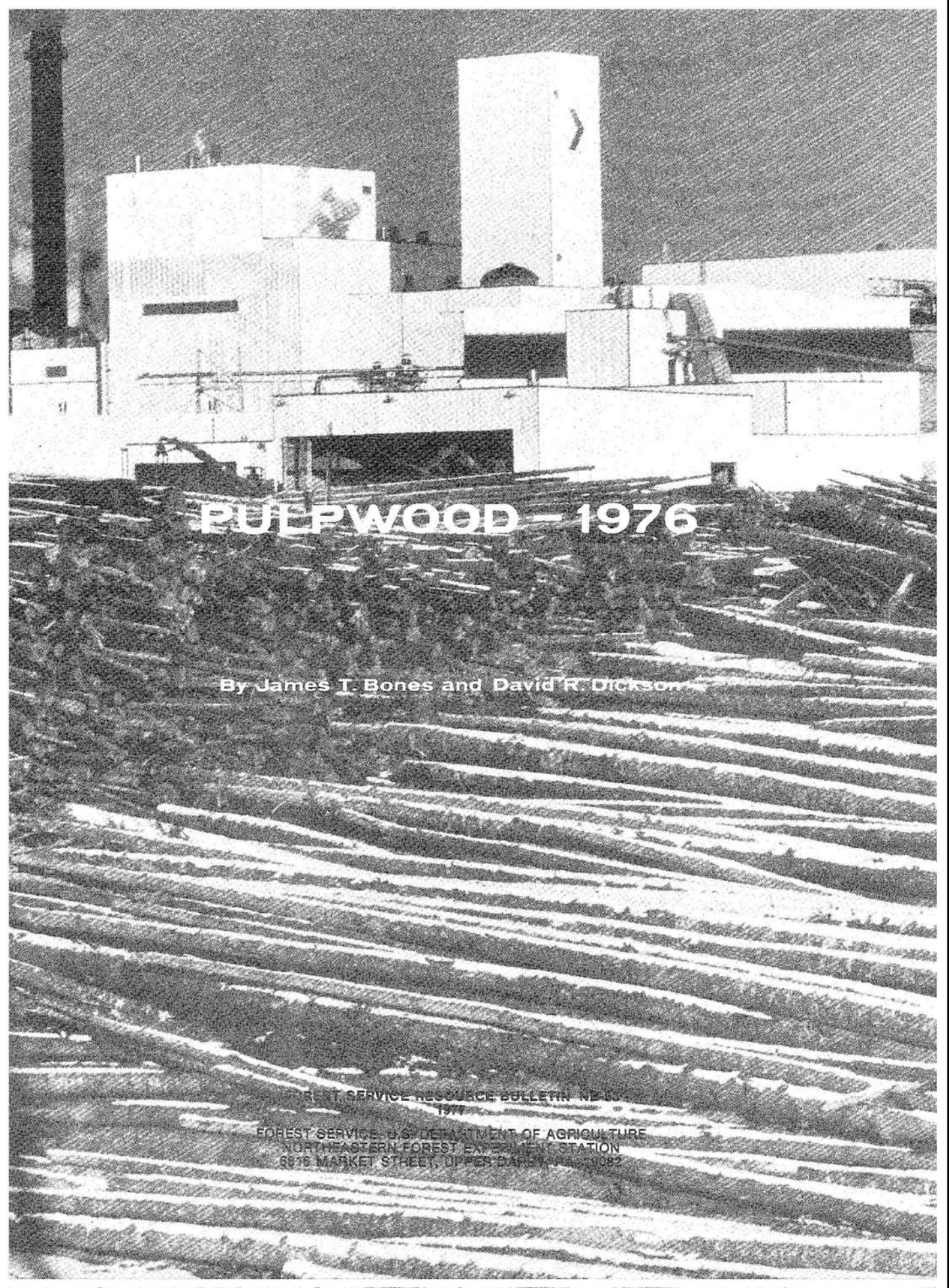




PULPWOOD - 1976

By James T. Bones and David R. Dickson

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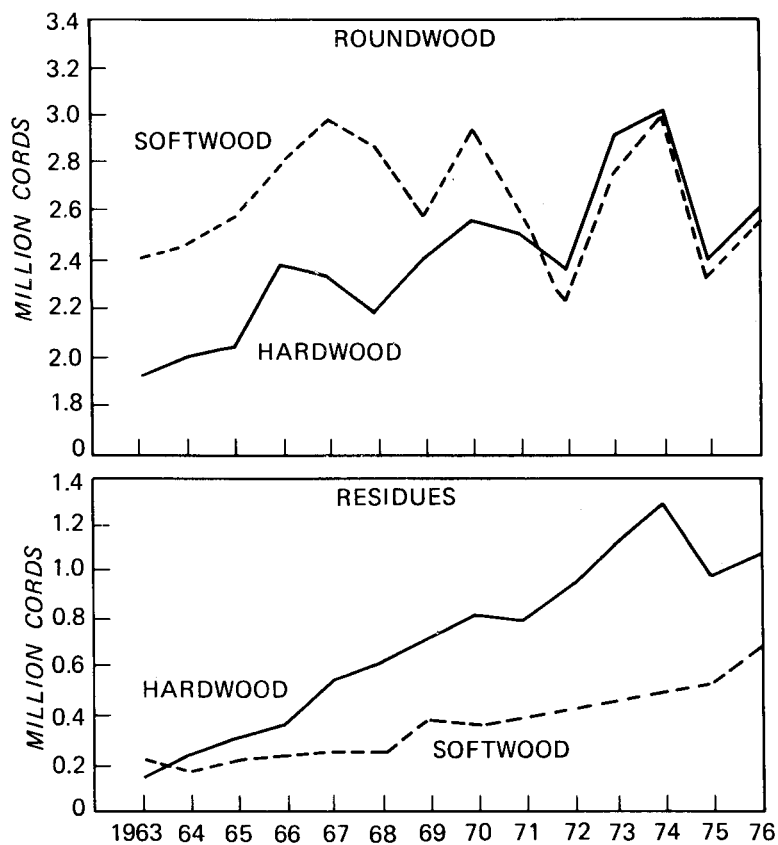
COVER PHOTO. In order to comply with new environmental standards, Scott Paper Company in Maine was faced with several alternatives; modernizing their old 450 ton-per-day sulfite mill at Winslow, replacing it with a new mill, or purchasing wood pulp on the open market to satisfy their growing requirements. Since the company owns 880,000 acres of timberlands in Maine that have yet to be fully utilized, Scott elected to replace the old mill with a modern one that could better utilize the forest resource and produce an additional volume of pulp to support future growth. The new 800 ton-per-day Kraft mill at Somerset (pictured on the cover) became operational this fall when the Winslow mill was closed. (*Cover photo credit:* Scott Paper Company).

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Figure 1.—Pulpwood production for Northeastern States, by years and sources of wood.



Background

THIS ANNUAL REPORT is based on a canvass of all pulpmills in the Northeast that use wood—either roundwood or plant residues—as a basic raw material. Cross-boundary shipments are traced by exchanging information with neighboring experiment stations that conduct similar canvasses. Mills that use pulpwood as a raw material in producing insulation board and hardboard were included in the canvass.

The statistics for production from roundwood reported in this bulletin are based upon mill receipts, which are subject to fluctuations caused by uneven wood-inventory buildups or liquidations from year to year. The plant residues are received at the pulpmill mostly in chip form. Origins of mill receipts of pulpwood from roundwood are reported by county where harvested. However, pulpwood from plant residue can be traced only to the state where it was produced. Some of the logs from which the residue came were probably harvested in states other than the one in which they were processed.

Pulpwood production continues recovery

The 6,946,900 cords¹ of pulpwood produced in the 14 northeastern states (Connecticut, Delaware, Kentucky, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, and West Virginia) in 1976 represented an increase of 14 percent over the 6,109,600 cords reported in 1975, but production was still 10 percent below the record high reached in 1974. Production of both softwood and hardwood roundwood and softwood and hardwood chips was higher in 1976 than in 1975 (Fig. 1). Softwood chip production from manufacturing residues outperformed the other components of total production, increasing 31

percent between 1975 and 1976. Chipped hardwood residues increased by 15 percent over the previous year and softwood and hardwood roundwood production increased 10 percent and 13 percent respectively.

Woodyard inventories continued to drop during the first half of 1976 as northeastern pulpmills operated at near-capacity rates. By June woodyards were at their lowest levels in 2 years and demand for replacement wood picked up. Although high pulpwood consumption in August almost offset receipts, inventories began to rise during the remainder of the year as consumption decreased.

Roundwood pulpwood production from hardwoods was almost equal to that from softwoods, exceeding it by only 73,800 cords. Although roundwood production increased 12 percent from 1975, chipped residue production increased 21 percent. Hardwoods accounted for 53 percent of all pulpwood produced in 1976, about the same percentage as in 1975.

Receipts of pulpwood at woodpulp mills in the Northeast totaled 7,487,700 cords in 1976, up 12 percent from 1975. These receipts included wood harvested in the Northeast and pulpwood imported from other regions. Hardwood receipts exceeded those of softwoods by 336,300 cords. Total receipts exceeded total production by 540,800 cords (Table 2).

Six of the 14 states (Connecticut, Delaware, Massachusetts, New Hampshire, Vermont, and West Virginia) produced more wood than they received. Delaware, Massachusetts, and West Virginia had no operating woodpulp mills, so all of their production was shipped to other states for manufacture. Vermont and Connecticut each had one operating pulpmill. Pulpwood production decreased between 1975 and 1976 in only four of the 14 northeastern states. Production declined by more than 10 percent in West Virginia and Rhode Island. Production increased by more than 25 percent in Delaware, New York, and Ohio. In New Hampshire, pulpmill receipts declined by more than 25 percent. Increases in pulpwood receipts of 25 percent or

¹One standard cord = 85 ft³ = 2.41 m³.

more over 1975 levels were registered in Connecticut and Ohio.

In previous years, a major portion of the northeastern requirement for pulpwood was satisfied by shipments of Canadian softwood into the Northeast. This trend has been changing as more southern pulpwood has been finding its way into northern woodyards and as pulp-mills used larger amounts of hardwood. In 1976, about 48 percent of the roundwood shipments into the Northeast came from Canada, and 44 percent came from the southern states. The remaining 8 percent came from the North Central States. Although softwood roundwood imports exceeded hardwood imports in 1976 by more than 2 to 1, the reverse was true for chipped manufacturing residue imports.

Production from roundwood up 12 percent

The production of pulpwood from roundwood increased by 535,100 cords—a 12 percent increase from 1975. The 5,173,800 cords of roundwood produced in 1976 represents a restoration of the incremental climb that was begun in 1972 and interrupted by the 1975 economic slowdown. A decade ago, roundwood production in the Northeast first exceeded 5 million cords and it has remained above that level for 7 of the last 10 years.

The 1976 pulpwood production from roundwood was up from 1975 in 9 of the 14 states. Massachusetts, New Hampshire, New Jersey, Rhode Island, and West Virginia all registered production declines. West Virginia's 22 percent production decline to 213,200 cords was the most severe year-to-year loss. New York and Ohio registered production gains of more than 25 percent. Maine, which accounts for 54 percent of the roundwood harvest in the Northeast, registered a 12 percent increase in production between 1975 and 1976.

Twenty counties top 50-thousand-cord mark

Twenty counties in six states produced more than 50,000 cords of pulpwood from roundwood in 1976. This is an increase of seven counties from the 1975 level, and it equals the previous high that was reached in 1974. The 3.3 million

cords of roundwood harvested from these counties represents 64 percent of the total roundwood harvest in the Northeast.

A significant increase in the harvest in New York was responsible for adding four counties to this year's list of high producers. A Pennsylvania county was also restored to the list after not being represented last year. As in previous years, Maine counties dominated the high-producer list, accounting for 11 of the 20 counties listed. Counties that produced more than 50,000 cords of pulpwood from roundwood in 1976 and their production totals are:

<i>County</i>	<i>Production (thousand cords)</i>
Aroostook Co., Maine	567.1
Piscataquis Co., Maine	431.7
Somerset Co., Maine	358.8
Washington Co., Maine	353.1
Penobscot Co., Maine	288.7
Oxford Co., Maine	268.6
Franklin Co., Maine	147.5
Coos Co., New Hampshire	136.7
Essex Co., Vermont	93.4
Essex Co., New York	78.9
Kennebec Co., Maine	64.6
Greenbrier Co., W. Virginia	62.4
Hamilton Co., New York	59.8
Hancock Co., Maine	57.3
Warren Co., New York	55.0
St. Lawrence Co., New York	54.3
Lycoming Co., Pennsylvania	53.2
Saratoga Co., New York	52.8
Waldo Co., Maine	52.3
Cumberland Co., Maine	51.4

Total-tree harvesting

Total-tree harvesting—removal of the entire aboveground portion of the tree—continues to be the most important breakthrough in harvesting technology in the Northeast. Most logging operators agree that fiber yields per acre can be increased by 50 to 100 percent and that the system has the potential of doubling the daily productivity per worker in normal pulpwood logging operations.

But total acceptance of the system in the Northeast will continue to depend on pulpmill personnel. In the future, grit-free, uniform, unbarked chips will be acceptable at most of the region's mills, so quality control is a key to acceptance. One indication of the growing acceptance of total-tree chips by northeastern paper and paperboard manufacturers is the growth in output that has been experienced in the past 2 years. The following tabulation compares total-

tree chip output by states in 1974 with that in 1976:

	1974	1976	Change
	- (thousand cords) -		(percent)
Maine	99.4	179.3	+80
Maryland	0	8.3	(a)
New Hampshire	23.1	35.6	+54
New Jersey	.1	.6	(b)
New York	5.0	11.6	(b)
Ohio	74.4	147.6	+98
Pennsylvania	26.8	35.1	+31
Vermont	0	30.8	(a)
West Virginia	7.3	23.5	(b)

^a No output in 1974.

^b Greater than 100 percent change.

Overall, between 1974 and 1976, the total-tree chip harvest in the Northeast increased 87 percent. In Maine and Ohio, where the use of total tree chips for woodpulp was pioneered, production increased 80 percent and 98 percent, respectively. The 179,300 cords that were produced in Maine in 1976 accounted for only 6 percent of the total harvest, but the 147,600 cords produced in Ohio represented 55 percent of the total harvest.

Roundwood harvest as related to growing-stock inventory

Although Figures 3, 4, and 5 show the total roundwood harvest by production class and county in the Northeast, these figures do not relate the volume harvested to the volume of growing-stock trees that are actually present. Growing-stock volume is net volume in cubic feet of sound live trees of commercial species that are 5.0 inches d.b.h. or larger, from a 1-foot stump to a minimum 4.0-inch top diameter outside bark of the central bole, or to the point where the bole breaks into limbs.² The growing-stock volumes by species group and states that are used for making this comparison are based on those compiled for the 1970 National Timber Review.

The following tabulation of harvesting intensity shows the volume of growing stock present per unit harvested—by state and species

group—in thousand cubic feet of growing stock present for each cord of pulpwood harvested in 1976:

<i>Softwood</i>	
Maryland	4.7
Delaware	6.0
Maine	7.8
Average	10.8
West Virginia	12.3
New York	15.1
Vermont	16.8
New Jersey	18.0
Ohio	19.7
Rhode Island	33.2
Kentucky	34.9
Pennsylvania	44.6
New Hampshire	51.6
Connecticut	53.0
Massachusetts	120.3

<i>Hardwoods</i>	
Maine	7.1
Ohio	15.6
New Hampshire	17.1
New York	25.8
Average	27.7
Vermont	29.7
Pennsylvania	31.7
Maryland	41.2
Delaware	80.8
West Virginia	84.1
Rhode Island	117.5
Kentucky	151.5
Connecticut	879.2
Massachusetts	927.1
New Jersey	1,221.5

The states have been ranked (top to bottom) from the state in which the roundwood harvest was most intensive to the state in which the harvest was least intensive. The average for the region is shown where it falls in the ranking. These rankings and the regional averages should not be viewed as an index or standard for harvesting, but simply as a means of directing individuals engaged in pulpwood procurement from several alternative areas toward the most promising one.

For each cord of pulpwood harvested in the Northeast in 1976, there were 10,800 cubic feet of softwood growing stock and 27,700 cubic feet of hardwood growing stock. The softwood harvest was more intensive than the regional average in Maryland, Delaware, and Maine. The hardwood harvest was more intensive than the regional average in Maine, Ohio, New

²1 ft³ = 0.028 m³
5.0 in = 12.7 cm
4.0 in = 10.16 cm
1000 ft³ = 28 m³

Hampshire, and New York. Harvesting intensity was relatively low in the more urban states of the Northeast.

Wood chip production increases 21 percent

The production of wood chips and sawdust from plant residues for use as woodpulp increased 21 percent from the 1,470,900 cord equivalents produced in 1975. A pickup in primary wood manufacturing that started late in 1975 continued throughout 1976, increasing pulp-chip availability. In hardwood-producing regions of the Northeast, which registered a production decrease in 1975, a 15 percent gain was experienced in pulp chip production. Softwood manufacturers, buoyed by increased housing starts, had a 31 percent increase in pulp chip production between 1975 and 1976.

Pulpwood chip production by states in 1975 and 1976 are compared in the following tabulation:

	1975	1976	Change
	(thousand cord --- equivalents) ---		(percent)
Connecticut	2.2	2.4	+9
Delaware	—	12.6	b
Kentucky	193.3	238.0	+23
Maine	374.9	484.1	+29
Maryland	100.9	108.3	+7
Massachusetts	29.9	32.1	+7
New Hampshire	120.3	140.1	+16
New Jersey	7.6	7.5	-1
New York	124.1	156.5	+26
Ohio	93.4	112.7	+21
Pennsylvania	244.1	284.3	+16
Rhode Island	a	a	c
Vermont	44.5	44.6	c
West Virginia	135.7	149.9	+10
Total	1,470.9	1,773.1	+21

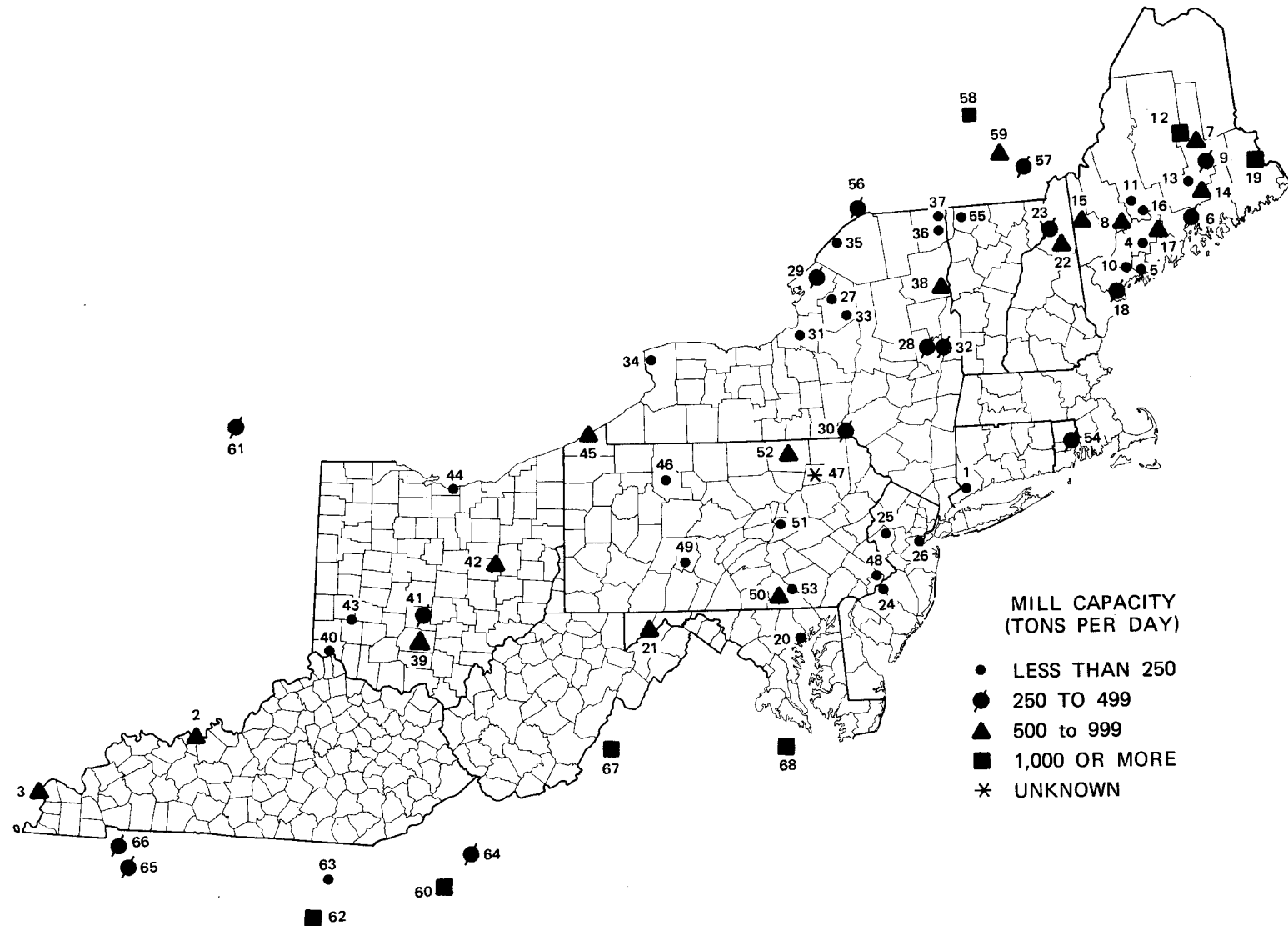
a Less than 50 cord equivalents.

b No production in 1975.

c Less than 0.5 percent change.

Chip production was up in 13 of the 14 states. New Jersey experienced a 1 percent decrease in chip production. The highest absolute volume gain and percentage gain was made by Maine; up 109,200 cords or 29 percent over 1975. The 1976 production of chips and sawdust from manufacturing residues accounted for 26 percent of the northeastern pulpwood production total, up 2 percentage points from 1975. Chip production for softwoods in 1976 stands at an all-time record level.

Figure 2.—Mills using northeastern pulpwood in 1976.



Woodpulp mills using northeastern pulpwood by location, type of pulp produced, and capacity in tons per 24 hours, 1976

Location	Company name	Total	Sulfate	Ground-wood	Semi-chemical	Sulfite	Miscellaneous ^a	Type of pulp produced (Capacity in tons/24 hrs.)
WITHIN THE NORTHEAST								
Connecticut:								
1. Stratford	Tilo Company	35	—	—	—	—	—	35
Total (1 mill)		35	—	—	—	—	—	35
Kentucky:								
2. Hawesville	Westcor and Western Kraft ^a	620	320	—	—	300	—	—
3. Wickliffe	Westvaco Corp.	600	600	—	—	—	—	—
Total (3 mills)		1,220	920	—	—	300	—	—
Maine:								
4. Augusta	Stalder Tissue Co.	*	—	—	—	—	—	—
5. Brunswick	Pejepscot Paper Co. ^b	110	110	—	—	—	—	—
6. Bucksport	St. Regis Paper Co. ^b	470	150	320	—	—	—	—
7. E. Millinocket	Great Northern-Nekoosa Corp.	920	—	920	—	—	—	—
8. Jay	International Paper Co. ^b	775	600	175	—	—	—	—
9. Lincoln	Premold Corp.	360	360	—	—	—	—	—
10. Lisbon Falls	U.S. Gypsum	100	100	—	—	—	—	—
11. Madison	Pennitech Paper Inc.	170	—	170	—	—	—	—
12. Millinocket	Great Northern-Nekoosa Corp. ^b	1,400	—	800	600	—	—	—
13. Old Town	Lily Tulip Corp.	50	—	50	—	—	—	—
14. Old Town	Diamond International Corp. ^b	760	760	—	—	—	—	—
15. Rumford	Boise Cascade Corp. ^b	695	585	110	—	—	—	—
16. Shawmut	Keyes Fibre Co.	105	—	105	—	—	—	—
17. Skowhegan	Scott Paper Co.	750	750	—	—	—	—	—
18. Westbrook	Scott Paper Co.	300	300	—	—	—	—	—
19. Woodland	Georgia Pacific Corp. ^b	1,040	800	240	—	—	600	—
Total (21 mills)		8,005	4,305	3,100	—	—	—	—
Maryland:								
20. Finksburg	Conogoleum Corp.	45	789	—	—	—	—	45
21. Luke	Westvaco	789	789	—	—	—	—	—
Total (2 mills)		834	789	—	—	—	—	45
New Hampshire:								
22. Berlin	Brown Company ^b	975	725	—	—	250	—	—
23. Groveton	Diamond International Corp.	250	—	—	—	250	—	—
Total (3 mills)		1,225	725	—	—	500	—	—
New Jersey:								
24. Gloucester City	GAF Corp.	192	—	—	—	—	—	192
25. Manville	Johns-Manville	100	—	—	—	—	—	100
26. Perth Amboy	Jim Walter Corp.	100	—	—	—	—	—	100
Total (3 mills)		392	—	—	—	—	—	392

WITHIN THE NORTHEAST

Location	Company name	Type of pulp produced (Capacity in tons/24 hrs.)					
		Total	Sulfate	Ground-wood	Semi-chemical	Sulfite	Miscellaneous a
New York:							
27. Beaver Falls	Latex Fiber Industries	70	—	70	—	—	—
28. Corinth	International Paper	255	—	255	—	—	—
29. Deferiet	St. Regis Paper Co.	280	—	280	—	—	—
30. Deposit	Jim Walter Corp.	300	—	—	—	—	300
31. Fulton	Armstrong Cork	130	—	—	—	—	130
32. Glen Falls	Finch Pruyn & Co.	220	—	—	—	220	—
33. Lyons Falls	Georgia Pacific Corp.	120	—	—	120	—	—
34. Niagara Falls	Nitec Paper Corp.	100	—	100	—	—	—
35. Ogdenburg	Diamond International Corp.	110	—	110	—	—	—
36. Plattsburg	Diamond International Corp.	50	—	50	—	—	—
37. Plattsburg	Georgia Pacific Corp.	100	—	—	100	—	—
38. Ticonderoga	International Paper	500	500	—	—	—	—
Total (12 mills)		2,235	500	865	220	220	430
Ohio:							
39. Chillicothe	Mead Corporation	600	600	—	—	—	—
40. Cincinnati	Celotex Corporation	100	—	—	—	—	100
41. Circleville	Container Corp. of America	300	—	—	300	—	—
42. Coshocton	Stone Container Corp.	650	—	—	650	—	—
43. Franklin	Bird & Son, Inc.	80	—	—	—	—	80
44. Milan	Certain-Teed Corp.	90	—	—	—	—	90
Total (6 mills)		1,820	600	—	950	—	270
Pennsylvania:							
45. Erie	Hammermill Paper Co.	700	—	—	700	—	—
46. Johnsonburg	Penntech Paper	190	190	—	—	—	—
47. Mehoopany	Charmin Paper Products	b	—	—	—	c	—
48. Philadelphia	Jim Walter Corp.	160	—	—	—	—	160
49. Roaring Springs	Appleton Paper, Inc.	180	180	—	—	—	—
50. Spring Grove	P.H. Glatfelter Co.	525	525	—	—	—	—
51. Sunbury	Jim Walter Corp.	240	—	—	240	—	—
52. Towanda	Masonite Corp.	500	—	—	—	—	500
53. York	Certain-Teed Products Corp.	50	—	—	—	—	50
Total (9 mills)		2,545	895	—	940	c	710
Rhode Island:							
54. Phillipsdale	Bird and Son, Inc.	275	—	—	—	—	275
Total (1 mill)		275	—	—	—	—	275
Vermont:							
55. Sheldon Springs	Saxon Industries	50	—	50	—	—	—
Total (1 mill)		50	—	50	—	—	—
All northeast states (62 mills)		18,636	8,734	4,015	2,910	820	2,157

Location	Company name	Type of pulp produced (Capacity in tons/24 hrs.)					
		Total	Sulfate	Ground-wood	Semi-chemical	Sulfite	Miscellaneous ^a
OUTSIDE THE NORTHEAST							
Canada:							
56. Cornwall	Domtar Woodlands, Ltd.	400	400	—	—	—	—
57. East Angus	Domtar Woodlands, Ltd. ^b	340	220	—	120	—	—
58. Three Rivers	Kruger Pulp & Paper, Ltd. ^b	1,150	—	940	—	210	—
59. Windsor	Domtar Woodlands, Ltd.	500	500	—	—	—	—
Total (6 mills)		2,390	1,120	940	120	210	—
North Carolina:							
60. Canton	Champion International Corp.	1,385	1,385	—	—	—	—
Total (1 mill)		1,385	1,385	—	—	—	—
Michigan:							
61. Otsego	The Menasha Corp.	250	—	—	250	—	—
Total (1 mill)		250	—	—	250	—	—
Tennessee:							
62. Calhoun	Bowater Southern Paper Corp. ^b	1,625	500	925	—	200	—
63. Harriman	Harriman Paperboard Corp.	190	—	—	190	—	—
64. Kingsport	Mead Corporation	250	—	—	—	250	—
65. New Johnsonville	Inland Container Corp.	450	—	—	450	—	—
66. Paris	The Celotex Corp.	300	—	—	—	—	300
Total (7 mills)		2,815	500	925	640	450	300
Virginia:							
67. Covington	Westvaco Corp. ^b	1,210	1,050	—	160	—	—
68. West Point	Chesapeake Corp. of Va.	1,150	1,150	—	—	—	—
Total (3 mills)		2,360	2,200	—	160	—	—
Total all other states		9,200	5,205	1,865	1,170	660	300
Total all states		27,836	13,939	5,880	4,080	1,480	2,457

^a Roofing, insulation board, and hard board plants.

^b More than one pulpmill operating.

^c Capacity unknown.

* Mill no longer produces pulp.

Tabular data

- Table 1.—Total production of pulpwood in the Northeast, by source and state, 1976. (In thousands of rough cords)
- Table 2.—Total production and receipts of pulpwood in the Northeast, by state and species group, 1976. (In thousands of rough cords)
- Table 3.—Pulpwood production from roundwood in the Northeast, by state and species group and destination of shipments, 1976. (In thousands of rough cords)
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- Table 15.—Pulpwood production from roundwood in Delaware, Maryland, and New Jersey, by state and county and species group, 1976. (In thousands of rough cords)
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Table 1.—Total production of pulpwood in the Northeast, by source and state, 1976

(In thousands of rough cords) ^a

State	Source		
	From roundwood	From plant residues	From all sources
Connecticut	6.2	2.4	8.6
Delaware	43.7	12.6	56.3
Kentucky	70.1	238.0	308.1
Maine	2,802.5	484.1	3,286.6
Maryland	173.6	108.3	281.9
Massachusetts	8.5	32.1	40.6
New Hampshire	187.8	140.1	327.9
New Jersey	22.5	7.5	30.0
New York	575.9	156.5	732.4
Ohio	270.3	112.7	383.0
Pennsylvania	625.2	284.3	909.5
Rhode Island	2.7	b	2.7
Vermont	171.6	44.6	216.2
West Virginia	213.2	149.9	363.1
All states	5,173.8	1,773.1	6,946.9

^a 128 cubic feet of wood, bark, and air space.

^b Less than 50 cord equivalents.

Table 2.—Total production and receipts of pulpwood in the Northeast, by state and species group, 1976

(In thousands of rough cords)

State	Total production		Total receipts		Production Surplus (+) or deficit (-)
	Softwood	Hardwood	Softwood	Hardwood	
Connecticut	5.5	3.1	(D)	(D)	+(D)
Delaware	44.7	11.6	—	—	+56.3
Kentucky	28.7	279.4	141.5	481.6	-315.0
Maine	2,306.9	979.7	2,612.5	1,048.6	-374.5
Maryland	174.5	107.4	161.4	269.5	-149.0
Massachusetts	24.4	16.2	—	—	+40.6
New Hampshire	155.3	172.6	56.8	248.9	+22.2
New Jersey	26.6	3.4	39.2	10.5	-19.7
New York	247.8	484.6	314.8	448.3	-30.7
Ohio	6.3	376.7	11.8	486.2	-115.0
Pennsylvania	56.2	853.3	205.6	911.8	-207.9
Rhode Island	.6	2.1	(D)	(D)	-(D)
Vermont	107.6	108.6	(D)	(D)	+(D)
West Virginia	59.1	304.0	—	—	+363.1
All states	3,244.2	3,702.7	3,575.7	3,912.0	-540.8

(D) Data withheld to avoid disclosure for individual mills.

Table 3.—Pulpwood production from roundwood in the Northeast, by state and species group, and destination of shipments, 1976

(In thousands of rough cords)

State	Softwood				Hardwood				Total production
	Cut and retained in state	Shipped to other states		Total softwood	Cut and retained in state	Shipped to other states		Total hardwood	
		In Northeast	Outside Northeast			In Northeast	Outside Northeast		
Connecticut	3.4	0.9	—	4.3	—	1.9	—	1.9	6.2
Delaware	—	18.0	20.4	38.4	—	4.9	0.4	5.3	43.7
Kentucky	.1	—	17.7	17.8	23.9	21.0	7.4	52.3	70.1
Maine	1,882.7	6.2	.5	1,889.4	874.0	39.1	—	913.1	2,802.5
Maryland	25.3	40.5	46.1	111.9	55.8	5.6	.3	61.7	173.6
Massachusetts	—	6.4	—	6.4	—	2.1	—	2.1	8.5
New Hampshire	12.3	43.9	—	56.2	113.1	18.5	—	131.6	187.8
New Jersey	21.4	—	—	21.4	1.1	a	—	1.1	22.5
New York	187.2	2.3	28.3	217.8	306.0	23.8	28.3	358.1	575.9
Ohio	—	6.3	—	6.3	264.0	—	—	264.0	270.3
Pennsylvania	28.1	7.8	—	35.9	538.0	51.3	—	589.3	625.2
Rhode Island	.6	—	—	.6	2.1	—	—	2.1	2.7
Vermont	15.7	74.3	—	90.0	—	81.6	—	81.6	171.6
West Virginia	—	51.0	2.6	53.6	—	82.7	76.9	159.6	213.2
All states	2,176.8	257.6	115.6	2,550.0	2,178.0	332.5	113.3	2,623.8	5,173.8

^a Less than 50 cords.

Table 4.—Pulpwood chip production from plant residues in the Northeast, by state and species group, 1976

(In thousands of rough-cord equivalents)

State	Softwood				Hardwood				Total production
	Produced and retained in state	Shipped to other states		Total softwood	Produced and retained in state	Shipped to other states		Total hardwood	
		In Northeast	Outside Northeast			In Northeast	Outside Northeast		
Connecticut	—	1.2	—	1.2	—	1.2	—	1.2	2.4
Delaware	—	6.3	—	6.3	—	6.3	—	6.3	12.3
Kentucky	—	8.0	2.9	10.9	163.9	33.1	30.1	227.1	238.0
Maine	417.2	.3	—	417.5	62.6	4.0	—	66.6	484.1
Maryland	6.2	34.1	22.3	62.6	11.3	34.4	—	45.7	108.3
Massachusetts	—	18.0	—	18.0	—	14.1	—	14.1	32.1
New Hampshire	29.7	61.3	8.1	99.1	14.8	24.1	2.1	41.0	140.1
New Jersey	3.5	1.7	—	5.2	—	2.3	—	2.3	7.5
New York	18.2	11.8	—	30.0	49.1	62.6	14.8	126.5	156.5
Ohio	—	—	—	—	111.0	1.7	—	112.7	112.7
Pennsylvania	19.1	1.2	—	20.3	220.1	43.9	—	264.0	284.3
Rhode Island	—	—	—	—	—	a	—	a	a
Vermont	—	17.6	—	17.6	—	27.0	a	27.0	44.6
West Virginia	—	1.5	4.0	5.5	—	71.3	73.1	144.4	149.9
All states	493.9	163.0	37.3	694.2	632.8	326.0	120.1	1,078.9	1,773.1

^a Less than 50 cord equivalents.

Table 5.—Pulpwood receipts from roundwood in the Northeast, by state and species group, 1976

(In thousands of rough cords)

State ^a	Softwood				Hardwood				Total receipt
	Cut and retained in state	Receipts from other states		Total softwood	Cut and retained in state	Receipts from other states		Total hardwood	
		In Northeast	Outside Northeast			In Northeast	Outside Northeast		
Connecticut	3.4	(D)	(D)	(D)	—	(D)	(D)	(D)	(D)
Kentucky	.1	—	107.6	107.7	23.9	—	80.1	104.0	211.7
Maine	1,882.7	24.8	178.2	2,085.7	874.0	18.3	69.6	961.9	3,047.6
Maryland	25.3	58.9	42.9	127.1	55.8	112.5	7.8	176.1	303.2
New Hampshire	12.3	9.9	—	22.2	113.1	102.2	7.3	222.6	244.8
New Jersey	21.4	.9	—	22.3	1.1	b	—	1.1	23.4
New York	187.2	89.7	.8	277.7	306.0	29.2	5.2	340.4	618.1
Ohio	—	—	—	—	264.0	28.2	4.0	296.2	296.2
Pennsylvania	28.1	66.1	39.3	133.5	538.0	37.8	.6	576.4	709.9
Rhode Island	.6	(D)	(D)	(D)	2.1	(D)	(D)	(D)	(D)
Vermont	15.7	(D)	(D)	(D)	—	(D)	(D)	(D)	(D)
All states	2,176.8	257.7	372.3	2,806.8	2,178.0	332.6	174.6	2,685.2	5,492.0

^a States with no pulp mills are omitted.

(D) Data withheld to avoid disclosure for individual mills.

^b Less than 50 cords.**Table 6.—Pulpwood chip receipts from plant residues in the Northeast, by state and species group, 1976 ^a**

(In thousands of rough-cord equivalents)

State ^b	Softwood				Hardwood				Total receipts
	Produced and retained in state	Receipts from other states		Total softwood	Produced and retained in state	Receipts from other states		Total hardwood	
		In Northeast	Outside Northeast			In Northeast	Outside Northeast		
Connecticut	—	(D)	(D)	(D)	—	(D)	(D)	(D)	(D)
Kentucky	—	—	33.8	33.8	163.9	—	213.7	377.6	411.4
Maine	417.2	71.7	37.9	526.8	62.6	23.2	.9	86.7	613.5
Maryland	6.2	1.4	26.7	34.3	11.3	75.0	7.1	93.4	127.7
New Hampshire	29.7	4.2	.7	34.6	14.8	8.1	3.4	26.3	60.9
New Jersey	3.5	13.4	—	16.9	—	9.4	—	9.4	26.3
New York	18.2	18.8	.1	37.1	49.1	42.0	16.8	107.9	145.0
Ohio	—	8.8	3.0	11.8	111.0	71.4	7.6	190.0	201.8
Pennsylvania	19.1	42.9	10.1	72.1	220.1	96.8	18.5	335.4	407.5
Rhode Island	—	(D)	(D)	(D)	—	(D)	(D)	(D)	(D)
Vermont	—	(D)	(D)	(D)	—	(D)	(D)	(D)	(D)
All states	493.9	162.7	112.3	768.9	632.8	326.0	268.0	1,226.8	1,995.7

^a Includes sawmill slabs and edgings, sawdust, veneer cores, and post and pole trimmings.^b States with no pulp mills are omitted.

(D) Data withheld to avoid disclosure for individual mills.

Table 7.—Pulpwood from roundwood received from states outside the Northeast, by state (or province) of origin and species group, 1976

(In thousands of rough cords)

Receiving state ^a	State or province of origin	Total softwood	Total hardwood	All species
Kentucky	Illinois	1.6	10.7	12.3
	Indiana	—	18.6	18.6
	Mississippi	99.2	30.5	129.7
	Missouri	.2	9.1	9.3
	Tennessee	6.6	11.2	17.8
Maine	New Brunswick	176.0	59.1	235.1
	Quebec	2.2	10.5	12.7
Maryland	Virginia	42.9	7.8	50.7
New Hampshire ...	Quebec	—	7.3	7.3
New York	Ontario	.7	4.8	5.5
	Quebec	.1	.4	.5
Ohio	Indiana	—	4.0	4.0
Pennsylvania	Virginia	39.3	.6	39.9
Vermont	Quebec	3.5	—	3.5
All states		372.3	174.6	546.9

^a States with no receipts are omitted.

Table 8.—Pulpwood chip receipts from wood-using plants outside the Northeast, by state (or province) of origin and species group, 1976

(In thousands of rough-cord equivalents)

Receiving state ^a	State or province of origin	Total softwood	Total hardwood	All species
Kentucky	Alabama	—	3.2	3.2
	Illinois	5.1	36.4	41.5
	Indiana	—	55.8	55.8
	Mississippi	28.7	16.0	44.7
	Missouri	—	65.0	65.0
	Tennessee	—	37.3	37.3
Maine	New Brunswick	4.4	.8	5.2
	Quebec	33.5	.1	33.6
Maryland	Virginia	26.7	7.1	33.8
New Hampshire ...	Quebec	.7	3.4	4.1
New York	Ontario	—	7.2	7.2
	Quebec	.1	9.6	9.7
Ohio	Indiana	—	3.3	3.3
	Virginia	3.0	4.3	7.3
Pennsylvania	Virginia	10.1	18.5	28.6
All states		112.3	268.0	380.3

^a States with no receipts are omitted.

Table 9.—Pulpwood production from roundwood in Northeast, by state and species group, 1976

(In thousands of rough cords)

State	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwoods	Total	
Connecticut	—	—	4.3	4.3	—	0.9	1.0	1.9	6.2
Delaware	—	—	38.4	38.4	—	3.5	1.8	5.3	43.7
Kentucky	—	—	17.8	17.8	4.3	37.4	10.6	52.3	70.1
Maine	1,501.5	195.5	192.4	1,889.4	80.3	30.8	802.0	913.1	2,802.5
Maryland	—	.7	111.2	111.9	—	38.2	23.5	61.7	173.6
Massachusetts	.1	—	6.3	6.4	—	.8	1.3	2.1	8.5
New Hampshire	36.7	3.6	15.9	56.2	15.9	2.5	113.2	131.6	187.8
New Jersey	—	—	21.4	21.4	—	a	1.1	1.1	22.5
New York	88.7	50.2	78.9	217.8	42.2	25.8	290.1	358.1	575.9
Ohio	—	—	6.3	6.3	12.8	145.0	106.2	264.0	270.3
Pennsylvania	—	4.0	31.9	35.9	44.4	235.0	309.9	589.3	625.2
Rhode Island	—	—	.6	.6	—	1.0	1.1	2.1	2.7
Vermont	78.6	4.2	7.2	90.0	9.4	1.9	70.3	81.6	171.6
West Virginia	.2	3.9	49.5	53.6	.1	33.7	125.8	159.6	213.2
All states	1,705.8	262.1	582.1	2,550.0	209.4	556.5	1,857.9	2,623.8	5,173.8

^a Less than 50 cords.

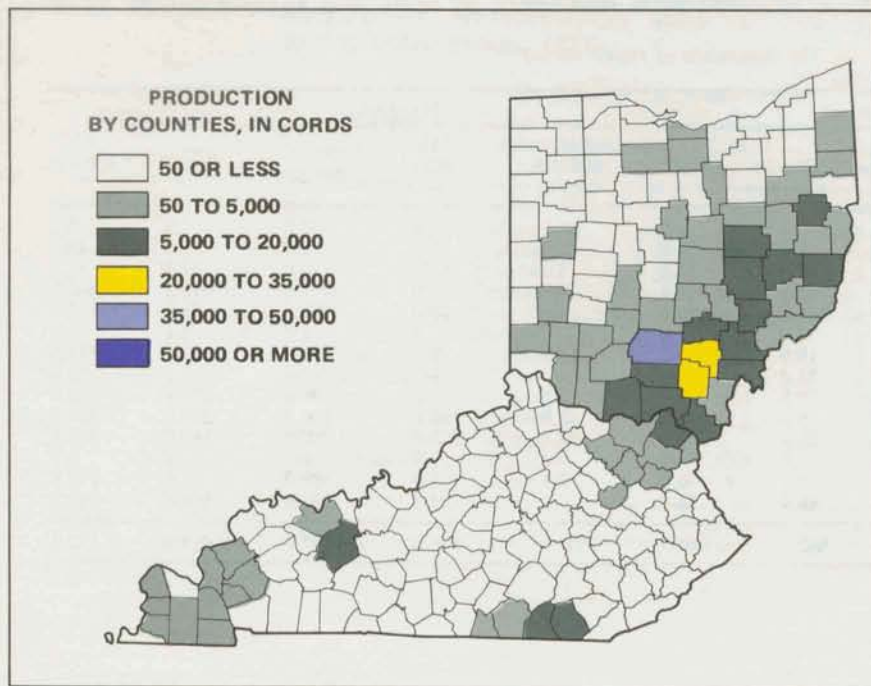


Figure 3.—Geographical pattern of pulpwood production from roundwood in Kentucky and Ohio by counties, 1976.

Table 10. Pulpwood production from roundwood in Kentucky and Ohio, by state and county and species group, 1976
(In thousands of rough cords)

County ^a	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwoods	Total	
KENTUCKY									
Ballard	—	—	—	—	0.8	1.8	1.4	4.0	4.0
Bath	—	—	b	b	—	—	b	b	b
Boyd	—	—	—	—	b	.6	.1	.7	.7
Caldwell	—	—	—	—	.1	.2	.2	.5	.5
Calloway	—	—	—	—	.1	.4	.2	.7	.7
Carlisle	—	—	—	—	.6	1.3	1.0	2.9	2.9
Carter	—	—	b	b	.2	1.9	.3	2.4	2.4
Christian	—	—	—	—	—	b	b	b	b
Clinton	—	—	—	—	—	1.8	.4	2.2	2.2
Crittenden	—	—	—	—	.1	.2	.2	.5	.5
Daviess	—	—	—	—	—	.2	—	.2	.2
Elliot	—	—	—	—	b	.2	b	.2	.2
Fleming	—	—	—	—	.1	.9	.1	1.1	1.1
Floyd	—	—	b	b	—	—	—	—	b
Graves	—	—	—	—	.6	1.8	1.7	4.1	4.1
Greenup	—	—	—	—	1.0	9.6	1.4	12.0	12.0
Hickman	—	—	—	—	.2	.5	.5	1.2	1.2
Lewis	—	—	—	—	.3	3.0	.3	3.6	3.6
Livingston	—	—	—	—	.1	.2	.1	.4	.4
Lyon	—	—	0.1	0.1	.1	.3	.2	.6	.7
McCreary	—	—	5.7	5.7	—	.1	1.0	1.1	6.8
Marshall	—	—	—	—	—	b	.1	.1	.1
Menifee	—	—	b	b	b	.5	.1	.6	.6
Ohio	—	—	—	—	—	10.4	—	10.4	10.4
Rowan	—	—	b	b	b	.4	.1	.5	.5
Wayne	—	—	.4	.4	—	.4	.2	.6	1.0
Whitley	—	—	11.6	11.6	—	.7	1.0	1.7	13.3
Total	—	—	17.8	17.8	4.3	37.4	10.6	52.3	70.1

CONTINUED

Table 10.—Continued

County ^a	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwoods	Total	
OHIO									
Adams	—	—	—	—	0.7	4.9	2.1	7.7	7.7
Ashland	—	—	—	—	—	—	.4	.4	.4
Athens	—	—	1.3	1.3	.8	4.7	4.2	9.7	11.0
Belmont	—	—	—	—	—	—	10.3	10.3	10.3
Brown	—	—	b	b	.1	2.2	.3	2.6	2.6
Butler	—	—	—	—	—	—	.4	.4	.4
Carroll	—	—	—	—	—	—	6.5	6.5	6.5
Clermont	—	—	—	—	.4	2.9	1.1	4.4	4.4
Clinton	—	—	—	—	.2	3.7	.7	4.6	4.6
Coshocton	—	—	—	—	—	—	9.6	9.6	9.6
Crawford	—	—	—	—	—	—	b	b	b
Erie	—	—	—	—	—	—	.1	.1	.1
Fairfield	—	—	—	—	b	.9	.5	1.4	1.4
Fayette	—	—	—	—	b	.1	b	.1	.1
Gallia	—	—	.6	.6	.3	3.6	.5	4.4	5.0
Guernsey	—	—	—	—	—	—	6.6	6.6	6.6
Hardin	—	—	—	—	—	b	—	b	b
Harrison	—	—	—	—	—	—	2.3	2.3	2.3
Highland	—	—	—	—	.2	2.8	.4	3.4	3.4
Hocking	—	—	—	—	.8	5.0	2.6	8.4	8.4
Holmes	—	—	—	—	—	—	3.5	3.5	3.5
Huron	—	—	—	—	—	—	.6	.6	.6
Jackson	—	—	.1	.1	1.4	19.8	2.5	23.7	23.8
Jefferson	—	—	—	—	—	—	.2	.2	.2
Knox	—	—	—	—	—	—	1.5	1.5	1.5
Lawrence	—	—	.8	.8	.9	9.4	1.5	11.8	12.6
Licking	—	—	—	—	—	—	1.8	1.8	1.8
Lorain	—	—	—	—	—	—	b	b	b
Madison	—	—	—	—	—	.1	.1	.2	.2
Mahoning	—	—	1.9	1.9	—	—	—	—	1.9
Meigs	—	—	1.0	1.0	.4	6.9	.9	8.2	9.2
Monroe	—	—	—	—	—	—	2.0	2.0	2.0
Montgomery	—	—	—	—	—	—	.4	.4	.4
Morgan	—	—	—	—	—	—	5.6	5.6	5.6
Morrow	—	—	—	—	—	—	.4	.4	.4
Muskingum	—	—	—	—	—	—	11.5	11.5	11.5
Noble	—	—	—	—	—	—	3.7	3.7	3.7
Perry	—	—	—	—	.1	.2	3.6	3.9	3.9
Pickaway	—	—	—	—	.4	1.4	.7	2.5	2.5
Pike	—	—	—	—	.7	8.3	1.1	10.1	10.1
Ross	—	—	—	—	2.2	31.8	3.9	37.9	37.9
Scioto	—	—	b	b	1.1	13.3	1.9	16.3	16.3
Seneca	—	—	—	—	—	—	.1	.1	.1
Shelby	—	—	—	—	—	.1	b	.1	.1
Stark	—	—	—	—	—	—	1.3	1.3	1.3
Trumbull	—	—	.6	.6	—	—	—	—	.6
Tuscarawas	—	—	—	—	—	—	3.9	3.9	3.9
Vinton	—	—	—	—	2.1	22.9	3.9	28.9	28.9
Warren	—	—	—	—	—	—	.6	.6	.6
Washington	—	—	b	b	—	—	.4	.4	.4
Total	—	—	6.3	6.3	12.8	145.0	106.2	264.0	270.3

^a Counties with no production are omitted.^b Less than 50 cords.

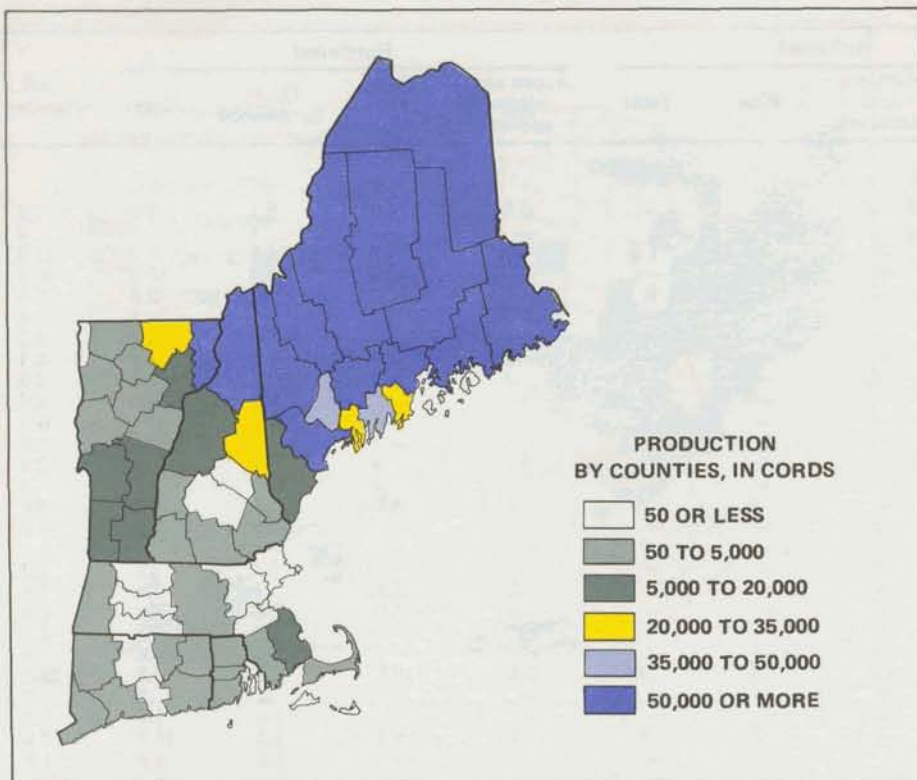


Figure 4.—Geographical pattern of pulpwood production from roundwood in the New England States, 1976.

Table 11.—Pulpwood production from roundwood in Southern New England, by state and county and species group, 1976

(In thousands of rough cords)

County ^a	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwoods	Total	
CONNECTICUT									
Fairfield	—	—	1.2	1.2	—	—	—	—	1.2
Litchfield	—	—	.6	.6	—	—	—	—	.6
New Haven	—	—	1.7	1.7	—	—	—	—	1.7
New London	—	—	.1	.1	—	0.1	0.2	0.3	.4
Tolland	—	—	.1	.1	—	.1	.1	.2	.3
Windham	—	—	.6	.6	—	.7	.7	1.4	2.0
Total	—	—	4.3	4.3	—	0.9	1.0	1.9	6.2
MASSACHUSETTS									
Barnstable	—	—	0.5	0.5	—	—	—	—	0.5
Berkshire	0.1	—	—	.1	—	—	0.4	0.4	.5
Bristol	—	—	1.0	1.0	—	0.4	.4	.8	1.8
Plymouth	—	—	4.3	4.3	—	.4	.5	.9	5.2
Worcester	—	—	.5	.5	—	—	—	—	.5
Total	0.1	—	6.3	6.4	—	0.8	1.3	2.1	8.5
RHODE ISLAND									
Kent	—	—	0.2	0.2	—	0.5	0.6	1.1	1.3
Providence	—	—	.3	.3	—	.3	.3	.6	.9
Washington	—	—	.1	.1	—	.2	.2	.4	.5
Total	—	—	0.6	0.6	—	1.0	1.1	2.1	2.7

^a Counties with no production are omitted.

Table 12.—Pulpwood production from roundwood in Northern New England, by state and county and species group, 1976

(In thousands of rough cords)

County ^a	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwoods	Total	
MAINE									
Androscoggin	3.6	6.1	16.0	25.7	1.6	0.6	15.8	18.0	43.7
Aroostook	430.0	12.4	6.0	448.4	10.4	4.0	104.3	118.7	567.1
Cumberland	2.8	5.6	19.2	27.6	2.1	.8	20.9	23.8	51.4
Franklin	32.9	8.1	6.0	47.0	8.8	3.4	88.3	100.5	147.5
Hancock	27.4	5.8	5.5	38.7	1.6	.6	16.4	18.6	57.3
Kennebec	7.0	11.3	20.5	38.8	2.3	.9	22.6	25.8	64.6
Knox	7.2	4.8	9.4	21.4	.8	.3	8.4	9.5	30.9
Lincoln	6.0	7.2	16.2	29.4	1.4	.5	14.1	16.0	45.4
Oxford	60.3	20.6	25.6	106.5	14.3	5.5	142.4	162.2	268.7
Penobscot	147.1	40.7	10.1	197.9	8.0	3.1	79.7	90.8	288.7
Piscataquis	324.4	11.4	3.1	338.9	8.2	3.1	81.5	92.8	431.7
Sagadahoc	3.5	2.6	10.6	16.7	.5	.2	4.5	5.2	21.9
Somerset	263.8	14.1	14.8	292.7	5.8	2.2	58.1	66.1	358.8
Waldo	17.9	6.1	12.3	36.3	1.4	.5	14.1	16.0	52.3
Washington	167.0	36.4	8.6	212.0	12.4	4.8	123.9	141.1	353.1
York	.6	2.3	8.5	11.4	.7	.3	7.0	8.0	19.4
Total	1,501.5	195.5	192.4	1,889.4	80.3	30.8	802.0	913.1	2,802.5
NEW HAMPSHIRE									
Carroll	1.0	0.7	12.1	13.8	0.4	0.1	16.4	16.9	30.7
Cheshire	.2	—	—	.2	—	—	.1	.1	.3
Coos	32.5	2.5	3.0	38.0	13.1	1.6	84.0	98.7	136.7
Grafton	1.9	.4	.3	2.6	2.2	.6	10.5	13.3	15.9
Hillsborough	—	—	b	b	—	.1	.1	.2	.2
Merrimack	b	—	—	b	—	—	—	—	b
Rockingham	—	—	.4	.4	—	b	.3	.3	.7
Strafford	.1	b	.1	.2	.2	.1	1.7	2.0	2.2
Sullivan	1.0	b	—	1.0	.1	—	—	.1	1.1
Total	36.7	3.6	15.9	56.2	16.0	2.5	113.1	131.6	187.8
VERMONT									
Addison	1.1	0.2	0.4	1.7	0.1	0.1	1.6	1.8	3.5
Bennington	2.0	.2	.1	2.3	.2	.2	5.1	5.5	7.8
Caledonia	12.7	.3	.9	13.9	.7	.1	2.9	3.7	17.6
Chittenden	1.0	b	1.1	2.1	.2	b	.8	1.0	3.1
Essex	35.0	1.0	.4	36.4	5.2	.9	50.9	57.0	93.4
Franklin	.3	—	—	.3	—	—	b	b	.3
Lamoille	1.4	.2	—	1.6	—	—	.6	.6	2.2
Orange	—	.1	b	.1	b	b	.2	.2	.3
Orleans	16.6	1.0	.4	18.0	1.0	.2	1.1	2.3	20.3
Rutland	2.7	b	2.3	5.0	.6	.1	2.0	2.7	7.7
Washington	1.2	—	—	1.2	.4	—	.4	.8	2.0
Windham	1.8	.3	.2	2.3	b	.2	3.2	3.4	5.7
Windsor	2.8	.9	1.4	5.1	1.0	.1	1.5	2.6	7.7
Total	78.6	4.2	7.2	90.0	9.4	1.9	70.3	81.6	171.6

^a Counties with no production are omitted.

^b Less than 50 cords.

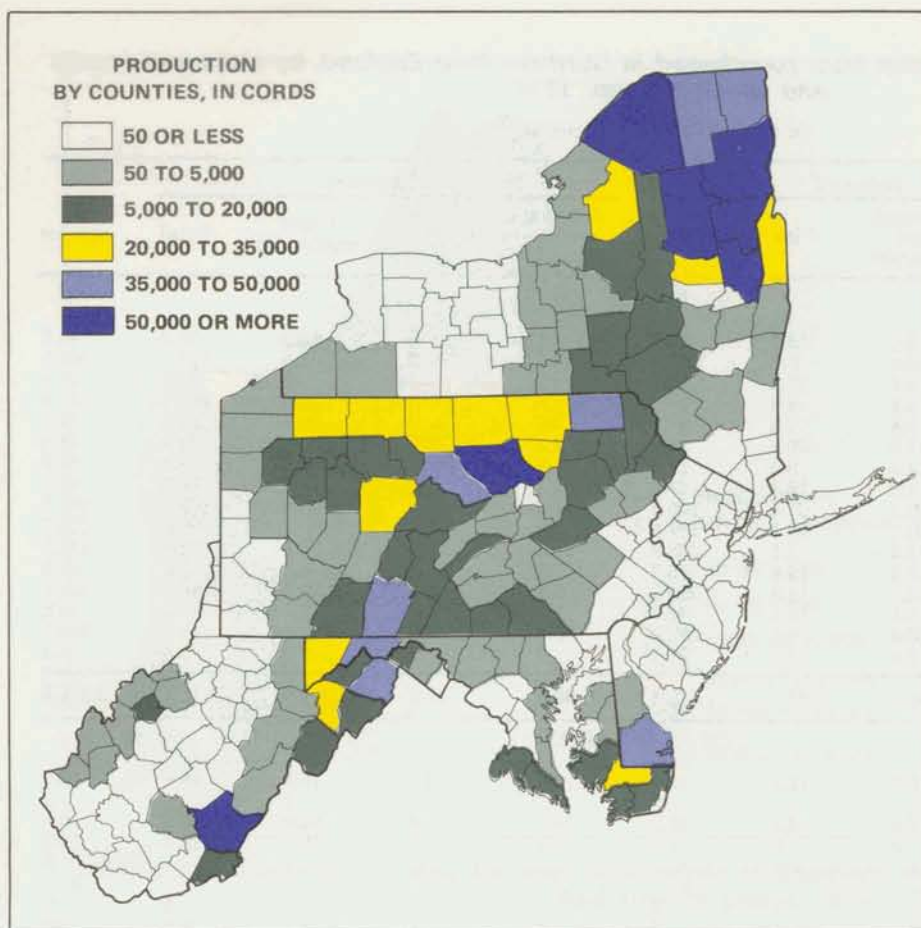


Figure 5.—Geographical pattern of pulpwood production from roundwood in the Middle Atlantic States, 1976.

Table 13.—Pulpwood production from roundwood in New York, by county and species group, 1976

(In thousands of rough cords)

County ^a	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwoods	Total	
Albany	0.2	—	1.5	1.7	b	—	—	b	1.7
Broome	—	—	—	—	0.6	1.9	4.7	7.2	7.2
Cattaraugus	—	—	2.0	2.0	—	.6	.3	.9	2.9
Cayuga	.3	—	—	.3	b	—	—	b	.3
Chautauqua	—	—	—	—	—	—	1.2	1.2	1.2
Chemung	—	b	—	b	.8	1.8	1.7	4.3	4.3
Chenango	7.1	—	.6	7.7	.3	.7	3.3	4.3	12.0
Clinton	9.1	3.7	10.0	22.8	6.6	3.4	13.8	23.8	46.6
Columbia	—	—	.1	.1	.1	—	b	.1	.2
Cortland	.4	—	—	.4	.1	.1	.1	.3	.7
Delaware	4.2	—	.2	4.4	.1	.3	2.1	2.5	6.9
Essex	3.2	4.4	8.8	16.4	4.3	1.9	56.3	62.5	78.9
Franklin	18.5	4.5	5.7	28.7	3.6	3.0	12.8	19.4	48.1
Fulton	.1	5.3	5.3	10.7	1.1	b	18.0	19.1	29.8
Green	—	b	—	b	—	—	—	—	b
Hamilton	5.5	3.6	1.3	10.4	3.2	1.8	44.4	49.4	59.8
Herkimer	5.2	.3	.6	6.1	1.0	.2	10.2	11.4	17.5
Jefferson	.6	—	1.6	2.2	.6	—	.7	1.3	3.5
Lewis	6.3	.2	2.0	8.5	3.1	.1	21.5	24.7	33.2
Madison	1.4	—	.9	2.3	.1	b	b	.1	2.4
Montgomery	—	—	b	b	b	—	—	b	b
Oneida	2.6	b	3.1	5.7	.5	b	3.2	3.7	9.4
Onondaga	—	—	—	—	b	b	.1	.1	.1

CONTINUED

Table 13.—Continued

County ^a	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwoods	Total	
Oswego	.1	—	.4	.5	.1	b	.5	.6	1.1
Otsego	1.7	—	6.1	7.8	.1	—	—	.1	7.9
Rennselaer	.2	.2	.5	.9	.1	.4	3.0	3.5	4.4
St. Lawrence	19.2	4.9	6.1	30.2	7.7	3.5	12.9	24.1	54.3
Saratoga	.2	8.7	8.1	17.0	4.3	2.0	29.5	35.8	52.8
Schenectady	—	—	—	—	b	—	—	b	b
Schoharie	.5	b	.8	1.3	—	—	b	b	1.3
Sullivan	—	—	.3	.3	—	—	—	—	.3
Tioga	—	—	—	—	.4	.7	2.4	3.5	3.5
Tompkins	—	—	—	—	.3	1.2	2.4	3.9	3.9
Ulster	—	—	—	—	—	b	.1	.1	.1
Warren	2.0	8.7	8.2	18.9	2.7	.6	32.8	36.1	55.0
Washington	.1	5.7	4.7	10.5	.4	1.6	12.1	14.1	24.6
Total	88.7	50.2	78.9	217.8	42.2	25.8	290.1	358.1	575.9

^a Counties with no production are omitted.^b Less than 50 cords.

Table 14.—Pulpwood production from roundwood in Pennsylvania, by county and species group, 1976

(In thousands of rough cords)

County ^a	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwoods	Total	
Adams	—	—	0.9	0.9	—	5.4	2.6	8.0	8.9
Armstrong	—	—	—	—	—	.2	b	.2	.2
Bedford	—	0.5	8.7	9.2	—	15.0	21.8	36.8	46.0
Berks	—	—	.2	.2	—	b	—	b	.2
Blair	—	—	1.1	1.1	0.1	2.6	6.2	8.9	10.0
Bradford	—	—	—	—	5.6	7.9	12.9	26.4	26.4
Bucks	—	—	—	—	—	b	—	b	b
Butler	—	—	—	—	—	.5	—	.5	.5
Cambria	—	—	1.3	1.3	—	.1	.1	.2	1.5
Cameron	—	—	—	—	—	18.4	.8	19.2	19.2
Carbon	—	—	b	b	—	.2	.1	.3	.3
Centre	—	0.1	.6	.7	.6	8.5	6.6	15.7	16.4
Chester	—	—	—	—	—	b	—	b	b
Clarion	—	.1	—	.1	—	5.5	.2	5.7	5.8
Clearfield	—	2.6	1.3	3.9	1.3	11.2	9.8	22.3	26.2
Clinton	—	.2	b	.2	2.1	19.9	19.2	41.2	41.4
Columbia	—	—	—	—	.2	1.1	1.5	2.8	2.8
Crawford	—	—	—	—	—	b	.7	.7	.7
Cumberland	—	—	.2	.2	—	2.4	1.2	3.6	3.8
Dauphin	—	—	b	b	.1	1.2	.4	1.7	1.7
Elk	—	—	—	—	—	.8	18.2	19.0	19.0
Erie	—	—	—	—	—	—	1.2	1.2	1.2
Fayette	—	—	.1	.1	—	.4	.4	.8	.9
Forest	—	—	—	—	—	3.5	12.9	16.4	16.4
Franklin	—	—	1.0	1.0	—	7.2	3.7	10.9	11.9
Fulton	—	—	2.3	2.3	—	3.0	3.8	6.8	9.1
Huntingdon	—	.3	2.2	2.5	.3	8.0	4.0	12.3	14.8
Indiana	—	—	1.1	1.1	—	.1	b	.1	1.2
Jefferson	—	—	—	—	—	4.3	11.7	16.0	16.0
Juniata	—	—	.9	.9	b	3.5	1.7	5.2	6.1
Lackawanna	—	—	—	—	.4	2.2	2.9	5.5	5.5
Lancaster	—	—	.1	.1	—	.7	.3	1.0	1.1
Lebanon	—	—	b	b	b	.4	.3	.7	.7
Luzerne	—	—	—	—	.4	2.5	2.7	5.6	5.6
Lycoming	—	—	—	—	6.7	23.9	22.6	53.2	53.2
McKean	—	—	—	—	9.6	—	17.4	27.0	27.0
Mercer	—	—	—	—	—	.9	1.4	2.3	2.3
Mifflin	—	—	b	b	—	.4	.2	.6	.6
Monroe	—	—	—	—	.2	.8	1.0	2.0	2.0
Northumberland	—	—	b	b	—	.2	b	.2	.2

CONTINUED

Table 14.—Continued

County ^a	Softwood				Hardwood			Total	All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwoods		
Perry	—	—	1.0	1.0	b	1.9	1.0	2.9	3.9
Pike	—	—	3.6	3.6	.2	4.4	1.2	5.8	9.4
Potter	—	—	—	—	1.2	1.2	21.6	24.0	24.0
Schuylkill	—	—	.2	.2	.2	3.2	2.2	5.6	5.8
Snyder	—	—	.3	.3	—	.4	.1	.5	.8
Somerset	—	b	.7	.7	.1	6.5	6.7	13.3	14.0
Sullivan	—	—	—	—	5.5	6.2	15.4	27.1	27.1
Susquehanna	—	—	—	—	3.8	14.9	21.3	40.0	40.0
Tioga	—	.2	—	.2	3.6	5.1	13.7	22.4	22.6
Union	—	—	.1	.1	b	3.1	1.0	4.1	4.2
Venango	—	—	—	—	—	11.4	—	11.4	11.4
Warren	—	—	—	—	—	5.1	23.7	28.8	28.8
Wayne	—	—	—	—	1.1	3.8	6.7	11.6	11.6
Westmoreland	—	—	.1	.1	—	—	b	b	.1
Wyoming	—	—	—	—	1.1	2.6	3.9	7.6	7.6
York	—	—	3.9	3.9	—	2.3	.9	3.2	7.1
Total	—	4.0	31.9	35.9	44.4	235.0	309.9	589.3	625.2

^a Counties with no production are omitted.^b Less than 50 cords.

Table 15.—Pulpwood production from roundwood in Delaware, Maryland, and New Jersey, by state and county and species group, 1976

(In thousands of rough cords)

County ^a	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwoods	Total	
DELAWARE									
Kent	—	—	4.0	4.0	—	0.1	—	0.1	4.1
Sussex	—	—	34.4	34.4	—	3.4	1.8	5.2	39.6
Total	—	—	38.4	38.4	—	3.5	1.8	5.3	43.7
MARYLAND									
Allegany	—	0.5	5.0	5.5	—	20.4	10.6	31.0	36.5
Anne Arundel	—	—	3.4	3.4	—	—	—	—	3.4
Baltimore	—	—	1.7	1.7	—	.1	—	.1	1.8
Calvert	—	—	4.2	4.2	—	.1	.1	.2	4.4
Caroline	—	—	1.3	1.3	—	b	—	b	1.3
Carroll	—	—	1.8	1.8	—	.4	.1	.5	2.3
Cecil	—	—	b	b	—	—	—	—	b
Charles	—	—	9.1	9.1	—	b	—	b	9.1
Dorchester	—	—	6.2	6.2	—	.1	—	.1	6.3
Frederick	—	—	.4	.4	—	1.2	.5	1.7	2.1
Garrett	—	.2	2.0	2.2	—	14.0	11.2	25.2	27.4
Harford	—	—	b	b	—	—	—	—	b
Howard	—	—	—	—	—	b	—	b	b
Kent	—	—	b	b	—	—	—	—	b
Queen Annes	—	—	.1	.1	—	—	—	—	.1
St. Marys	—	—	9.3	9.3	—	.4	—	.4	9.7
Somerset	—	—	12.7	12.7	—	b	b	b	12.7
Talbot	—	—	b	b	—	—	—	—	b
Washington	—	—	1.5	1.5	—	1.2	.9	2.1	3.6
Wicomico	—	—	32.7	32.7	—	.3	.1	.4	33.1
Worcester	—	—	19.8	19.8	—	b	—	b	19.8
Total	—	0.7	111.2	111.9	—	38.2	23.5	61.7	173.6

CONTINUED

Table 15.—Continued

County ^a	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwoods	Total	
NEW JERSEY									
Atlantic	—	—	2.8	2.8	—	—	.2	.2	3.0
Burlington	—	—	6.4	6.4	—	—	—	—	6.4
Camden	—	—	4.0	4.0	—	b	—	b	4.0
Cape May	—	—	1.6	1.6	—	—	.4	.4	2.0
Gloucester	—	—	1.5	1.5	—	—	.5	.5	2.0
Ocean	—	—	4.5	4.5	—	—	—	—	4.5
Sussex	—	—	.6	.6	—	—	—	—	.6
Total	—	—	21.4	21.4	—	b	1.1	1.1	22.5

^a Counties with no production are omitted.^b Less than 50 cords.

Table 16.—Pulpwood production from roundwood in West Virginia by county and species group, 1976

(In thousands of rough cords)

County ^a	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwoods	Total	
Barbour	—	—	—	—	—	—	b	b	b
Berkeley	—	0.3	1.1	1.4	—	1.2	0.6	1.8	3.2
Boone	—	—	—	—	—	—	b	b	b
Cabel	—	—	.6	.6	—	—	—	—	.6
Calhoun	—	—	b	b	—	—	—	—	b
Doddridge	—	—	b	b	—	—	b	b	b
Fayette	—	—	—	—	—	—	.4	.4	.4
Grant	—	.6	3.6	4.2	—	—	18.5	18.5	22.7
Greenbrier	—	—	.8	.8	—	—	61.6	61.6	62.4
Hampshire	—	1.0	13.9	14.9	—	10.0	10.4	20.4	35.3
Hardy	—	1.0	5.7	6.7	—	4.0	1.9	5.9	12.6
Harrison	—	—	b	b	—	—	—	—	b
Jackson	—	—	1.9	1.9	—	—	—	—	1.9
Kanawha	—	—	b	b	—	—	—	—	b
Lewis	—	—	b	b	—	—	—	—	b
Lincoln	—	—	b	b	—	—	—	—	b
McDowell	—	—	b	b	—	—	—	—	b
Marshall	—	—	b	b	—	—	—	—	b
Mason	—	—	1.1	1.1	0.1	.6	.1	.8	1.9
Mercer	—	—	—	—	—	—	b	b	b
Mineral	—	.5	2.5	3.0	—	6.0	6.2	12.2	15.2
Monroe	—	—	1.6	1.6	—	—	11.4	11.4	13.0
Morgan	—	.4	5.3	5.7	—	4.0	2.5	6.5	12.2
Pendleton	—	—	1.4	1.4	—	—	4.9	4.9	6.3
Pleasants	—	—	.1	.1	—	2.1	—	2.1	2.2
Pocahontas	0.2	.1	.4	.7	—	1.0	2.5	3.5	4.2
Preston	—	—	b	b	—	—	.2	.2	.2
Putnam	—	—	1.1	1.1	—	—	—	—	1.1
Raleigh	—	—	—	—	—	—	b	b	b
Randolph	—	—	.5	.5	—	—	3.3	3.3	3.8
Ritchie	—	—	.5	.5	—	—	b	b	.5
Summers	—	—	b	b	—	—	b	b	b
Taylor	—	—	b	b	—	—	—	—	b
Tucker	—	—	.1	.1	—	.5	.5	1.0	1.1
Wirt	—	—	6.9	6.9	—	—	.8	.8	7.7
Wood	—	—	.4	.4	—	4.3	—	4.3	4.7
Total	0.2	3.9	49.5	53.6	0.1	33.7	125.8	159.6	213.2

^a Counties with no production are omitted.^b Less than 50 cords.

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