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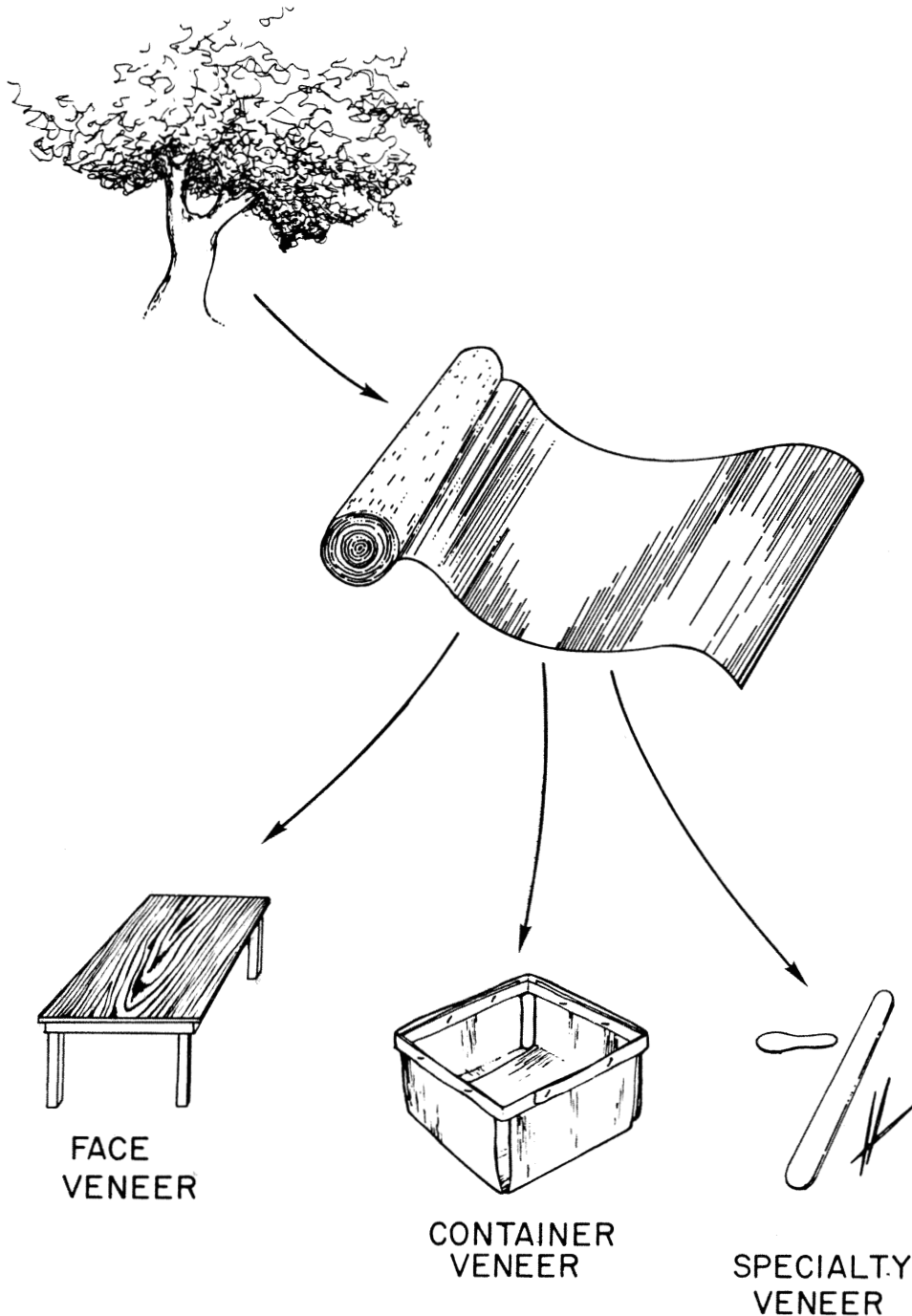
NE-RB-98



Veneer Log Production and Receipts in the Northeast, 1984

—A Periodic Assessment
of Regional Timber Output

Robert L. Nevel, Jr.
Eric H. Wharton



Abstract

During 1984, 187.3 million board feet (816,600 m³) of veneer logs were harvested from northeastern timberlands. In 1984, 30.5 more million board feet (133,000 m³) of veneer logs were harvested than in 1980--the second consecutive 19-percent increase over the past two 4-year periods. Most of the veneer logs came from Maine, Maryland, New York, and Pennsylvania. The Northeast's manufacturers of veneer received 153.8 million board feet (670,600 m³) of veneer logs during 1984, 33.3 million board feet, or 28 percent, more than that received in 1980. The veneer mills in the Northeast generated 14.2 million cubic feet of manufacturing residues in 1984--nearly all of which was used for wood fiber, fuel, and agricultural uses.

The Authors

Robert L. Nevel, Jr., forest products industry specialist, received a B.S. degree in forest technology from The Pennsylvania State University in 1965 and an M.F. degree in wood technology from Yale University in 1968. He then joined the Northeastern Forest Experiment Station's Forestry Sciences Laboratory at Princeton, West Virginia. In June 1978, he transferred to the Forest Inventory, Analysis, and Economics unit, Broomall, Pennsylvania, where he is assigned to the timber removals group.

Eric H. Wharton, research forester, received a B.A. degree from Lycoming College in 1974, and an M.F. degree from Duke University in 1975. He joined the Northeastern Forest Inventory, Analysis, and Economics unit in 1978, and is a resource analyst.

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Highlights

The 1984 veneer industry survey in the Northeast showed that since 1980:

- * Veneer log production rose 19 percent to over 187 million board feet¹ (816,600 m³).
- * Veneer log receipts at northeastern veneer mills rose 28 percent to nearly 154 million board feet (670,000 m³).
- * Five fewer plants were operating in the Northeast.
- * The Northeast continued to grow as a net exporter of veneer logs, exporting more than 26 million board feet (113,800 m³) more logs than it received from outside the region.

¹Based on recent timber and utilization surveys conducted by the USDA Forest Service in the Northeast, 1,000 board feet (International 1/4-inch rule) equals 4.36 m³.

Background

The U.S. Department of Agriculture, Forest Service, conducts forest and forest-products industry surveys to provide current information on timber and related resources of the Nation. Periodically in the Northeast, production and consumption of a single timber product are surveyed by the Northeastern Forest Experiment Station to determine the product's importance in relation to the entire timber-products industry in the region. The manufacture of veneer ranks third in the region, as measured by annual receipts of industrial timber products, such as sawlogs, pulpwood, veneer logs, and other roundwood. Veneer-industry surveys have taken place every 4 years since 1963 to assess veneer log and bolt harvest and use. These and other evaluations of the timber-products industry and the timber resource of the Northeast show change within the veneer industry and its resource use.

In 1985, all operating veneer mills that use logs or bolts in or from the 14 Northeastern states² were contacted for log and bolt receipts in 1984. The survey was coordinated with a similar survey in the North-Central region to avoid duplicate requests and to assess

the veneer industry and log situation for a 21-state area in the Northern United States. Information on mill location and log receipts was requested from other neighboring Forest Experiment stations and the Canadian provinces to assure complete coverage. The mills contacted by the Northeastern Forest Experiment Station were mailed questionnaires to complete and return. After two additional requests by mail, nonresponding mills were contacted by telephone by Station personnel. Veneer logs harvested and exported overseas through log brokers or concentrators are difficult to trace accurately and were not included in the survey.

Information and analysis of veneer-log use and the veneer industry are provided on a continuing basis. Those involved with the veneer, veneer log, and timber industries will find the material useful in their evaluations of state and regional timber and log supply, harvest, and use, especially for hardwoods. About one-sixth of the Nation's veneer hardwood logs are harvested and used in the Northeast as compared to less than 2 percent of all veneer logs and less than 1 percent of the softwoods.

This report deals mainly with statistics for 1984, the calendar year of the latest veneer-industry survey; and 1980, the calendar year of the last canvass. For comparison, reference is made to statistics of the earlier regional surveys. Additional related

²The name and location of Northeastern veneer mills using logs or bolts are presented in a list and map at the end of this paper.

information may be available for individual states for intervening years from reports of the Station's statewide forest-products industry surveys.

Veneer Industry Profile

There are three broad classes of veneer manufacturers in the Northeast: (1) container veneer manufacturers; (2) commercial and face veneer mills; and (3) specialty veneer mills. These classes are based on the industries they serve and the products they make. The commercial and face veneer mills produce veneer for the plywood and furniture industries. The container manufacturers fabricate mostly wooden boxes and baskets to ship produce. The specialty veneer manufacturers produce a multitude of miscellaneous items, including beverage stirrers, business cards, spoons, tongue depressors, and toothpicks.

In 1984, 31 active veneer plants were scattered throughout 10 of the Northeastern states. The mills were concentrated most heavily in New England--mostly in south-central Maine and in Vermont. The mills were located near veneer-log sources, product markets, or adequate transportation and favorable labor--considerations that determine the type and location of a plant. Proximity of log sources, inexpensive labor, and product markets are more important to container plants than to manufacturers of commercial and face veneer. The three container plants buy and sell locally in agricultural areas. The manufacture of commercial and face veneer is more exacting in its raw material requirements, and the 19 manufacturers are willing to pay more to get the logs and to make and distribute products. The nine specialty veneer plants are located near the required species and major transportation.

There were 38 fewer active veneer plants in the Northeast in 1984 than in 1963 (Fig. 1). Two-thirds of the drop resulted from the closure of container plants; the balance of the decline was primarily due to closings of commercial veneer plants. The number of specialty veneer plants has remained relatively constant throughout the period.

There were 36 active veneer mills in the Northeast during the previous 1980 industry survey. Since then, the total number of active plants dropped to 31. Eight veneer plants closed including four commercial mills, two specialty mills, and two container mills; and two commercial mills opened. An existing mill in Ohio was recognized to be operating in 1984 and was included in the total for the year.

The Container Veneer Industry

In 1963, nearly 30 container veneer plants were scattered from Ohio to Vermont. After 20 years only one-tenth as many were located only in Ohio and New Jersey. Sixteen plants closed between 1963 and 1972; four more closed by 1976; another closed by 1980; and two more closed by 1984.

Over the years, declining use of wooden containers and a lack of skilled labor forced the closing of most container veneer plants. Demand has dropped with the replacement of family farms by agribusinesses and the increased cost of wooden containers. Today, large-scale agribusinesses use automated harvesting and transporting equipment and corrugated shipping containers, and roadside produce retailers prefer to use paper bags and plastic goods to minimize packaging costs. The high cost of labor and material to produce wooden containers has made them uneconomical for use by fruit and vegetable producers. The assembly of wooden containers is labor intensive, requiring highly skilled workers who are difficult to replace.

The Commercial and Face Veneer Industry

The number of active domestic commercial and face veneer mills rose in the mid-1960's along with plywood consumption in the United States. There were 36 of these plants in the Northeast in 1968. Since 1968, only one mill has produced softwood plywood. The rest produced hardwood veneer and plywood for the furniture, cabinet, and related industries. The number of commercial and face mills then dropped throughout the 1970's despite relative stable consumption. By 1980 there were only 20 mills, and one less by 1984.

The closing of the mills was related to activity surrounding the hardwood plywood market. From 1960 to 1968, hardwood plywood imports increased slightly every year to meet increasing demand with little or no detriment to domestic shipments. From 1968 to 1980, domestic consumption of hardwood plywood averaged 5.6 billion square feet per year,³ but increased foreign dominance of the hardwood plywood market hurt domestic shipments and the commercial veneer industry in the Northeast.

According to the Forest Products Review and the U.S. Bureau of the Census, domestic consumption and hardwood plywood imports more than quadrupled between 1960 and 1972, but domestic shipments only doubled. In 1972, when domestic demand for hardwood plywood peaked at 8.1 billion square feet, imports made up over three-fourths of the annual consumption and the number of northeastern hardwood mills dropped to 25. Foreign manufacturers penetrated and dominated the United States hardwood plywood

³One square foot equals .00929 m².

Characteristics of veneer mills in the Northeast, by class of mill, 1984:

Characteristics	Class of veneer plant		
	Commercial and face	Container	Specialty
Volume of log receipts	6.0 million board feet per plant	0.4 million board feet per plant	4.2 million board feet per plant
Major species	Yellow birch, red oak, yellow pine, and mixed softwoods	Beech, hard and soft maple, sycamore, and yellow-poplar	Aspen, white birch, butternut, hard and soft maple
Size of log procurement area	From 3- to 14-state area	From consuming or neighboring state	From 3- to 5-state area
Plant location	Evenly scattered throughout Northeast	Atlantic Coastal Plain or bordering Great Lakes	Mostly Maine
Product market areas	Eastern population and Southeastern furniture industry	Local agricultural areas	Nationwide
Number of mills	19	3	9

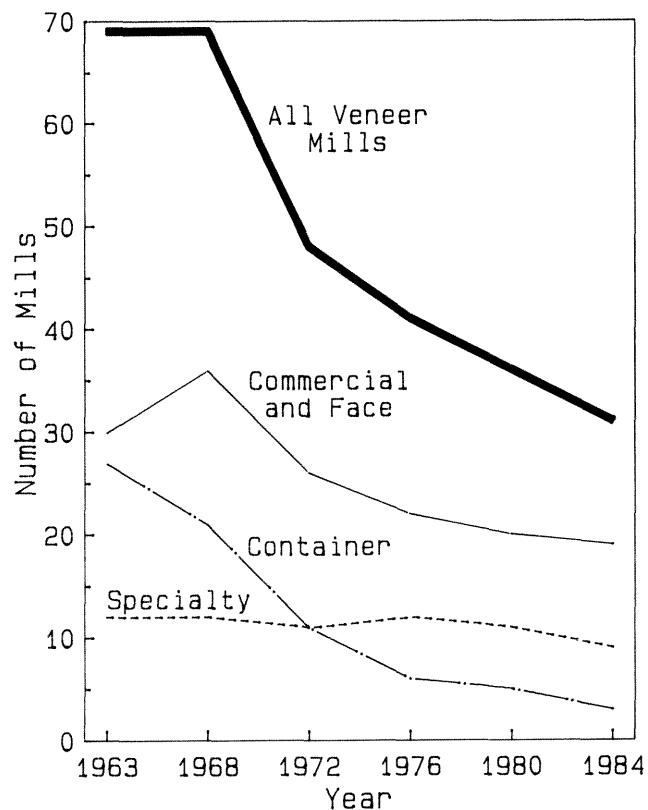


Figure 1.--Number of veneer mills operating in the Northeast, by class of plant, for selected years.

market to bring the closing of many domestic plants and the relocation of manufacturing facilities overseas. The recent long-term worldwide economic slowdown further impacted domestic hardwood plywood consumption. By 1980, the demand for hardwood plywood dropped to less than 3-1/2 billion square feet, imports dropped significantly to account for about two-thirds of the national consumption, and six more hardwood mills closed. With an improved national economy, domestic hardwood plywood consumption rose by 14 percent to 3.8 billion square feet by 1984. However, domestic mills were unable to meet demand, and production remained rather flat. Between 1980 and 1984, imported plywood shipments had risen by 24 percent to account for nearly three-fourths of the domestic demand, and a new mill had opened in New York.

As the economy continues to improve, the commercial and face veneer industry in the Northeast likely will continue to produce larger volumes of hardwood and softwood veneers and plywood. However, the industry will still be facing increasing costs, decreased log quality, and competition from manufacturers of alternative and imported products.

The Specialty Veneer Industry

The specialty veneer mills provide stability to the wood-using industry. The species they use and the products they make seldom change. Although these mills numbered around a dozen between 1963 and 1980, only nine operated in 1984. They still account for about three-tenths of all the veneer mills in the Northeast. In 1984, six of these veneer mills were located in central and southern Maine; the rest were located within 400 miles in New Hampshire, Vermont, and New York. For the most part, white birch and hard maple bolts are used to make such items as toothpicks, ice cream spoons, tongue depressors, and stirrers. One specialty mill used a variety of species to make parts for a manufacturer of large industrial reels.

Veneer Log Harvest Continued to Rise--Plant Receipts Rose Even More Significantly

Harvest Jumped Another 19 Percent

In 1984, Northeastern timber harvesters supplied veneer mills in the region, neighboring states, and Canada with over 187 million board feet of logs and bolts. The veneer log and bolt harvest was up by 19 percent since 1980 and up by over 52 percent since the recent low of 123 million board feet in 1972 (Fig. 2). The rise since 1980 follows a similar jump for the 1976-80 period. The harvest was higher since 1980 in 8 of the 14 northeastern states, including Rhode Island. Historically, veneer logs have never been produced in Rhode Island. Individual gains for the states ranged from 15 percent in Kentucky to well over 100 percent in New York. The percentage of production decreased slightly in Maryland and significantly in Delaware and

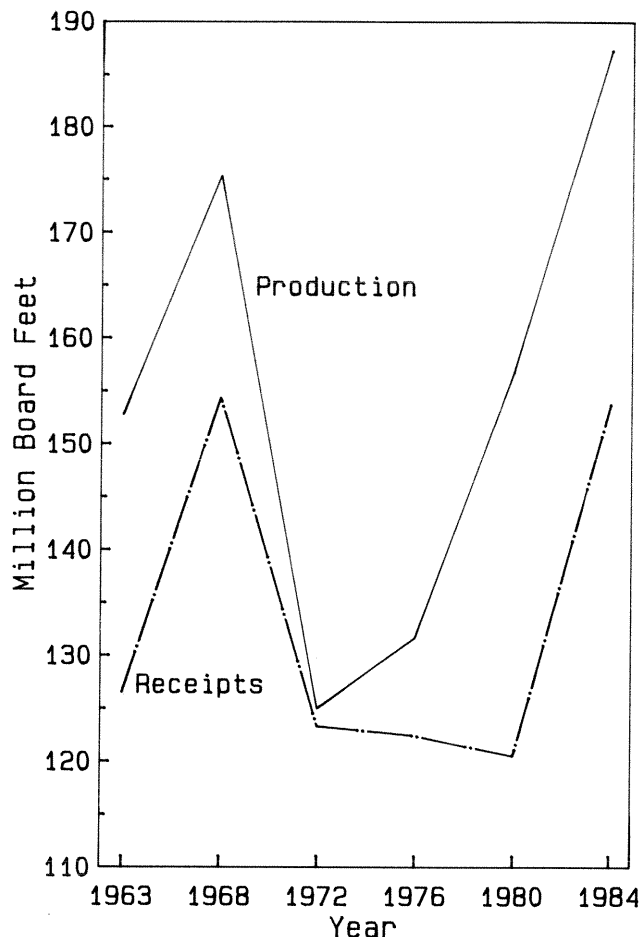
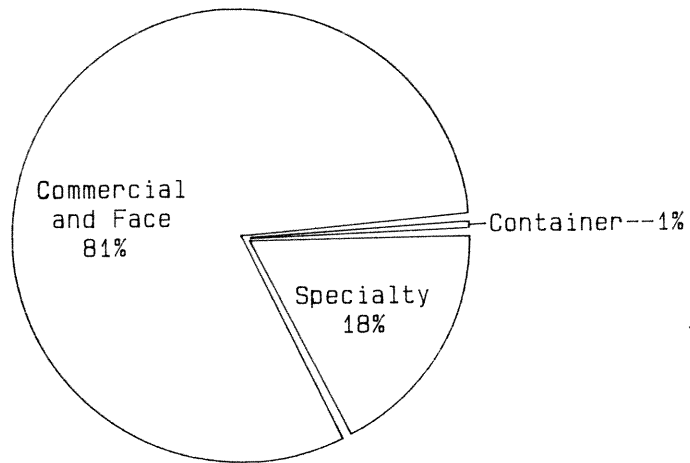


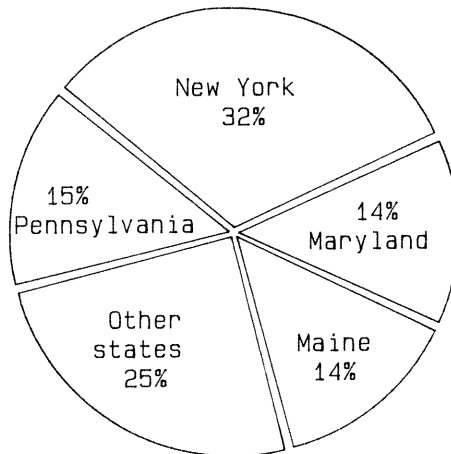
Figure 2.--Veneer log production and receipts in the Northeast for selected years.

New Jersey. Together, Delaware and New Jersey produced less than 2 million board feet in 1984. Maine, Maryland, New York, and Pennsylvania continued to have the largest individual harvests. Each of these states produced at least 26 million board feet of veneer logs in 1984. Their harvests totaled 142.3 million board feet for over three-fourths of the veneer logs produced in the Northeast (Fig. 3).

**By
Product**



**By
State**



**By
Species**

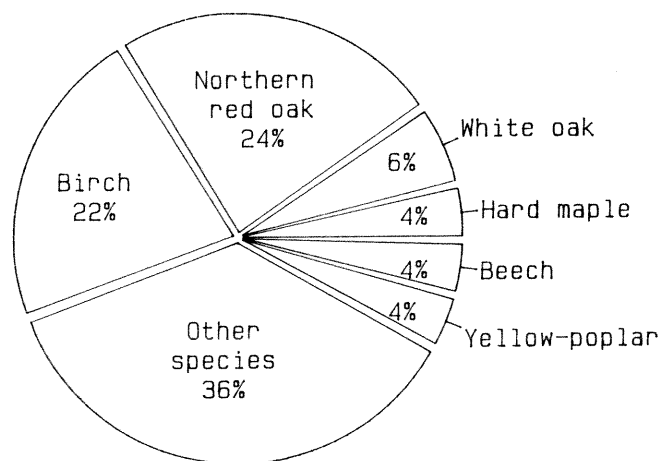


Figure 3.--Veneer log production in percent, 1984.

During the last 16 years, most of the veneer log production in the Northeast has gone to producers of commercial and face veneer (Fig. 4). Over 81 percent--152 million board feet--of the region's veneer logs went to these plants in 1984 (Figs. 3 and 4). The volume of logs cut for these plants was up 23 percent over 1980 when nearly 124 million board feet, or 79 percent, of the total northeastern veneer log harvest went to these mills. In 1984, nearly 34 million board feet, or 18 percent, of the total harvest went to specialty veneer mills. Less than 1 percent went to container manufacturers.

Harvest Characteristics

Between 1976 and 1984, the harvest of veneer logs for the commercial and face veneer mills differed from the previous 8 years. From 1968 through 1976, veneer log production for these mills decreased. Since 1976, the harvest for these mills rose significantly. Most of the rise between 1976 and 1980 resulted from increased shipments from Maine and New York to Canadian firms near the international border. Since 1980, shipments to Canada continued to

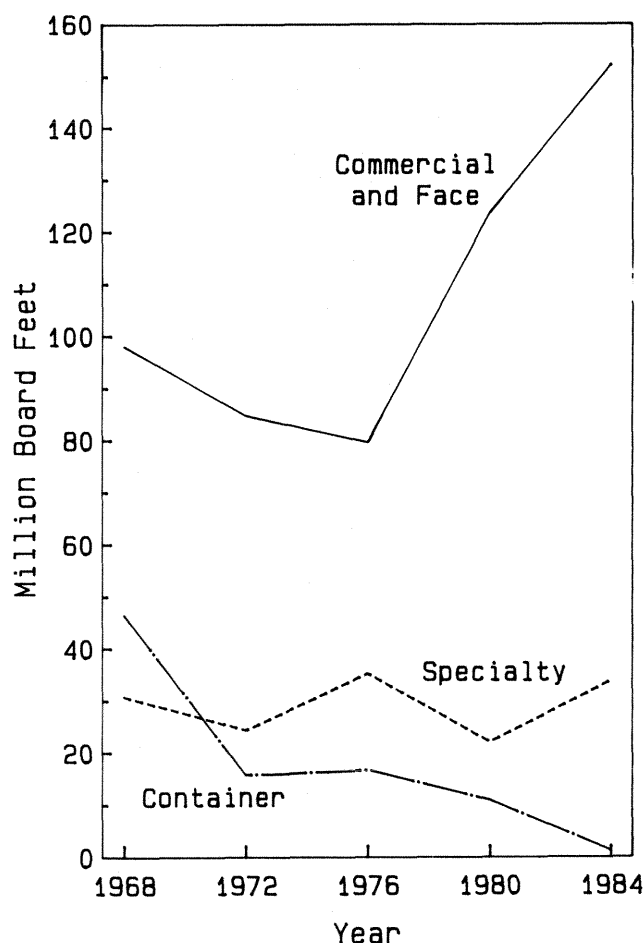


Figure 4.--Production of veneer logs in the Northeast, by class of plant, for selected years.

rise, along with increased demand in Pennsylvania and New York. During the recent period, a new veneer mill was built in each state to make commercial and face veneer.

The harvests of veneer logs and bolts for specialty mills have risen and fallen over the years since 1968. As changes in the economy and in the demand and competition for specialty veneer products have fluctuated, so have the harvests of roundwood to make these products. After reaching a new low in 1980, log production for the specialty veneer mills rose again in 1984. Overall, the specialty veneer-log harvest has decreased slightly over the years. Though similar, harvest highs and lows between 1976 and 1984 are slightly lower than those of the prior periods.

The harvests of veneer logs for container mills have continued to decline over the 16-year period since 1968. Few veneer logs and bolts were used to make containers in 1984. Few mills remain as the industry continues to lose markets to imported and substitute products.

In 1984, New York led the Northeast in veneer logs harvested from a state's timberlands. The 60.2 million board feet represented a 145-percent increase since 1980. This was twice the volume of any other state and nearly one-third of the total for the Northeast (Fig. 3). About 98 percent of New York's veneer logs were sent to manufacturers of commercial and face veneer. Most of the increased harvest went to a softwood plywood mill recently constructed within the state and Canadian hardwood face veneer mills.

Until recent years, more veneer logs have been produced and used in Maine than in any other state. Except for 1980, over half of the veneer logs harvested annually in the state since 1968 went to its specialty veneer mills. Most of the balance went to its commercial and face veneer mills. In 1980, 54 percent of the state's logs were harvested to make commercial and face veneer. When a softwood plywood mill opened in New Brunswick. With the mill's closure and the demand for New York logs, Maine quickly lost its dominance in the Northeast to rank second.

In 1984, 26.9 million board feet, or about 14 percent, of the region's total veneer-log harvest were harvested in Maine. Nearly two-thirds of Maine's veneer-log harvest was white birch logs sent to specialty mills in the state. About 14 percent of the harvest consisted of yellow-birch logs sent to Vermont's hardwood veneer mills.

In 1984, birch, red oak, white oak, beech, hard maple, and yellow-poplar were the preferred hardwood species accounting for 64 percent of the harvest in the Northeast (Fig. 3).

Softwoods made up nearly one-fourth of the total production. Most of the softwood production was from Maryland's southern pine and New York's eastern white pine forests.

Hickory, red oak, and black walnut registered production gains of 38 percent or more between 1980 and 1984. The largest volume gains were shown in red oak and birch, which accounted for nearly half of the harvest. Production for each of these two species increased significantly, reaching over 41 million board feet for each species. The softwood veneer log harvest rose 21 percent in the last 4 years to nearly 46 million board feet. The largest declines in volume occurred with beech, soft maple, and white oak.

In 1984, red oak surpassed birch as the northeastern species harvested most to make veneer (Fig. 5). Birch had been declining in usage to red oak since 1963 when red oak accounted for only 7 percent of the veneer log harvest and birch made up 35 percent. Red oak has become the preferred species to make face veneer.

The proportion of veneer made from hard maple and yellow-poplar has also decreased over the last 21 years. The use of hard maple has given way to other species, such as beech and white oak, which are less competitive with the solid wood products industry. Demand for yellow-poplar veneer logs has dropped off with the decreased production of wooden containers.

Mill Receipts Rose More Than The Harvest

Veneer plants in the Northeast received 153.8 million board feet of veneer logs in 1984. This volume was about 33-1/3 million board feet, or 28 percent, more than the amount received in 1980. Veneer log receipts dropped in 3 and rose in 7 of the 11 northeastern states with operating veneer mills. New York registered the largest gain--increasing more than threefold, or about 27 million board feet--to account for nearly one-fourth of the region's total receipts. Over half of the logs received were harvested from softwoods, mostly white pine, growing in the state. Most of the hardwood logs received came from beech, hard maple, and yellow birch trees within the state for use by the state's face and specialty mills.

Interregional and Interstate Shipments

The Northeast continues to be a supplier of high-quality veneer logs to mills outside and inside the region. Since 1963, regional exports have exceeded imports--more veneer logs have gone out of the Northeast than have been shipped into it for conversion. This surplus decreased from 1963 to 1976. Net exports dropped from 26 million board feet in 1963 to 21 million board feet in 1968. The surplus of outshipments nearly reached equilibrium at 1.7 million board feet in 1972 when demand for veneer logs was

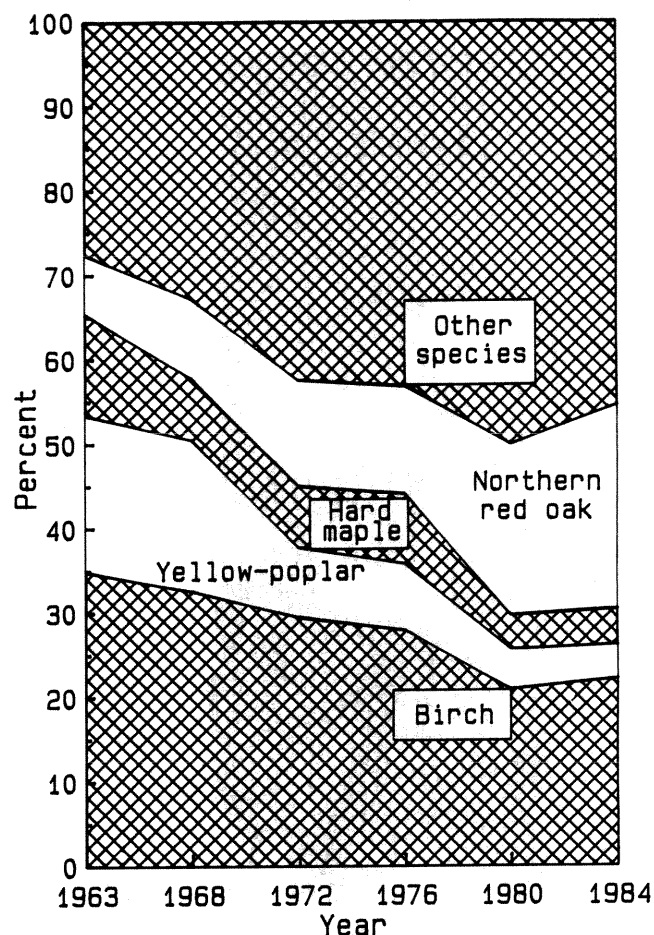


Figure 5.--Species mix of veneer log production in the Northeast for selected years.

high. Then, in 1976, during a weak market for hardwood logs, extraregional shipments exceeded imports by 9 million board feet. By 1980, exports exceeded imports by more than 36 million board feet for a surplus of 23 percent.

Between 1980 and 1984, there was a large drop in net exports and a change in species mix exported. In 1984, net exports of veneer logs from the Northeast fell to just over 26 million board feet, for a 14-percent surplus. The region's mills used more logs from outside the region, while the volume of logs exported dropped slightly.

The species mix of exported veneer logs also changed between 1980 and 1984. Most of the 1980 export surplus came from shipments of softwood veneer logs out of the region. By 1984, the New Brunswick plywood mill that had used large volumes of spruce and fir from Maine had closed. The 1984 export surplus resulted from increased shipments of hardwood logs out of the region, particularly from Pennsylvania and New York to Canada. Red oak, white oak, and cherry were the preferred hardwoods.

Among the Northeastern states with operating mills, Kentucky, New Hampshire, New York, and Pennsylvania exported greater volumes of veneer logs than they imported in 1984. With the loss of its Canadian market, Maine went from a large net exporter to a net importer.

In both 1980 and 1984, twice as many veneer logs were shipped out of the Northeast as in 1976. In 1980, the 58.7 million board feet of exported logs made up 37 percent of the year's veneer log production. By 1984, the volume shipped outside the region dropped by 4 percent to 56.2 million board feet, accounting for 30 percent of the total harvest.

Although most veneer logs are high-value timber products likely to be shipped considerable distances, most Northeastern mills are able to rely on the local and regional timber resource to meet their needs. In 1984, 123.7 million board feet or 80 percent, of the veneer logs received by mills in the Northeast came from states within the region. Nearly two-thirds of the mill receipts were harvested in the state where the mills were located. Over 89 million board feet, or 48 percent, of the veneer logs harvested in the region were shipped out of the state in which they were cut. Nearly four-tenths of the out-of-state shipments remained within the region.

Nearly All Manufacturing Residues Used

The manufacture of veneer from logs and bolts generates residues in the form of bark, clippings, and cores. The value and utility of these residues continue to rise. The wood industry and other industrial facilities in the Northeast have been using the wood residues from veneer mills and other manufacturing plants as dependable and readily available sources of raw material for pulp and energy. Environmental concerns have discouraged wood-product manufacturers from burning or dumping their residues, and have encouraged the plants to use or market this material.

The veneer mills in the Northeast generated 14.2 million cubic feet of manufacturing residues in 1984. Almost 7 million cubic feet were in the form of coarse woody material large enough to be made into wood chips. Nearly 5 million cubic feet were fine woody material too small for chipping, but valuable as fuel. About 2-1/2 million cubic feet were bark.

Both the use of veneer manufacturing residues and the use of these residues for industrial fuel have increased tremendously in recent years. Nearly all of the residues were used in 1984 (Fig. 6). Most of these residues were used by the veneer plants for boiler fuel. Very little of any type residue was burned to heat homes. Nearly two-fifths of the coarse wood residues, very little of the fine wood residues, and none of the bark were used to make pulp and other fiber products. One percent or less of

each type residue went unused. Most of the unused material was burned, piled, or buried.

Definition of Terms

Harvest

Harvest. The aggregate volume of timber produced for industrial or consumer uses.

Industrial timber harvest. Total production of round timber for conversion into wood products, except fuelwood.

Timber products output. Includes roundwood (round timber) products harvested from growing stock on commercial forest land; from other sources, such as cull trees, salvageable dead trees, limbs and tops, and saplings; from trees on noncommercial and nonforest lands; and from manufacturing plant byproducts.

Manufacture

Primary wood-manufacturing plant. A plant that converts roundwood (round timber) to wood products such as woodpulp, lumber, veneer, cooperage, and dimension.

Roundwood products. Logs, bolts, and other round timber generated from harvesting trees for industrial or consumer use.

Veneer log or bolt. A roundwood product from which veneer is sliced or sawn that usually meets certain minimum standards of diameter, length, and defect.

Veneer log production (harvest). The manufacture of roundwood (round timber) products, such as logs and bolts, generated from harvesting trees for conversion into veneer products.

Veneer log receipts. Roundwood (round timber) products, such as logs and bolts, received by veneer mills for conversion into veneer products.

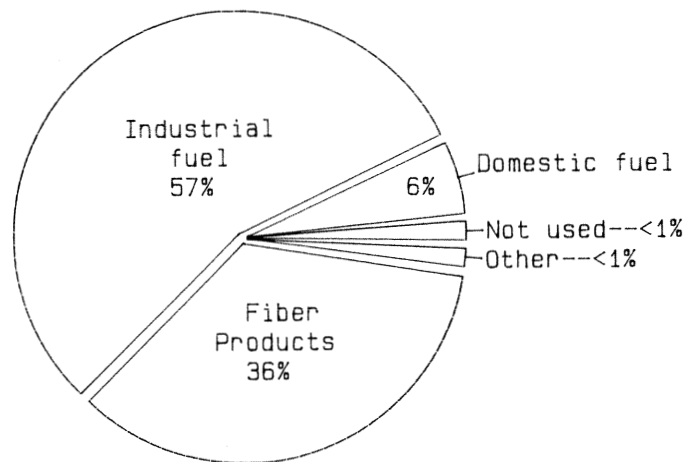
Residues

Manufacturing plant residues. Bark and woody materials that are generated when round timber (roundwood) is converted into wood products; includes slabs, edgings, trimmings, miscuts, sawdust, shavings, veneer cores and clippings, and pulp screenings.

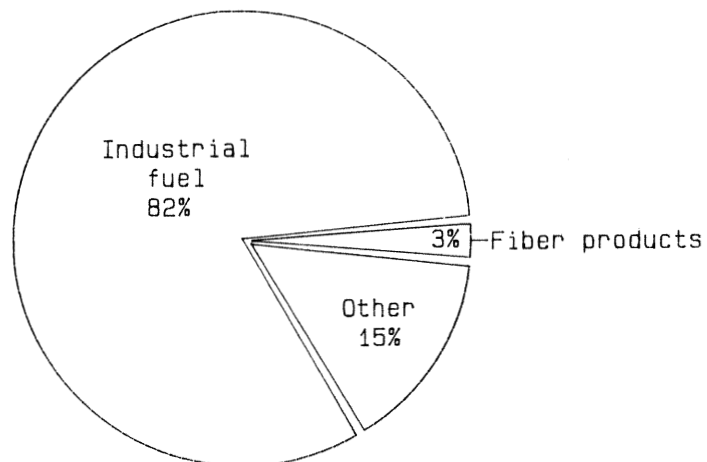
Plant byproducts. Wood products such as pulp chips, recycled from manufacturing plant residues.

Unused manufacturing residues. Plant residues that are dumped or destroyed and not recovered from plant byproducts.

**Coarse
Residue**



**Fine
Residue**



**Bark
Residue**

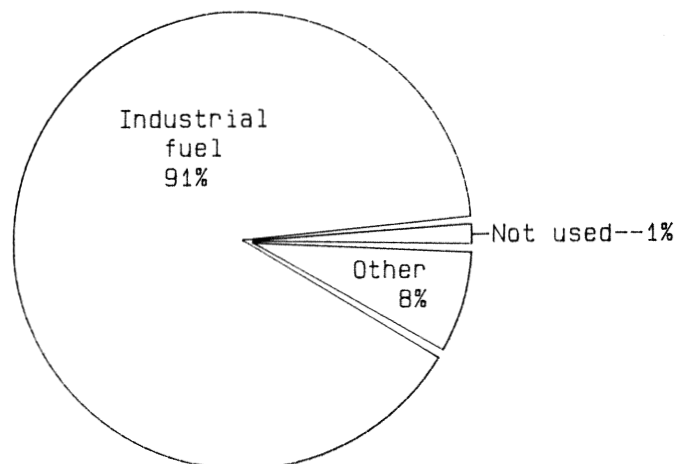


Figure 6.--Disposition of veneer plant residues in percent, 1984.

Coarse residues. Manufacturing residues suitable for chipping, such as slabs, edgings, and veneer cores.

Fine residues. Manufacturing residues not suitable for chipping, such as sawdust and shavings.

Species

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

Softwoods. Coniferous trees, usually evergreen, with needles or scale-like leaves.

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Table 1.-Veneer log production in the Northeast, by state, 1980 and 1984

State	Production		
	1980	1984	Change
	Million board feet ^a		Percent
Connecticut	0.7	1.3	+86
Delaware	5.4	1.7	-69
Kentucky	6.0	6.9	+15
Maine	39.9	26.9	-33
Maryland	28.3	26.7	- 6
Massachusetts	1.4	2.5	+79
New Hampshire	4.8	6.9	+44
New Jersey	.3	.1	-67
New York	24.6	60.2	b
Ohio	7.7	9.1	+18
Pennsylvania	20.0	28.5	+42
Rhode Island	-	c	b
Vermont	10.2	12.6	+24
West Virginia	7.5	3.9	-48
All states	156.8	187.3	+19

^aInternational $\frac{1}{4}$ -inch rule.

^bGreater than 100 percent increase.

^cLess than 100,000 board feet.

Table 2.-Species composition of veneer log harvest in the Northeast, 1980 and 1984

Species	1980		1984		Change
	<u>Million board feet</u> ^a	<u>Percent</u>	<u>Million board feet</u> ^a	<u>Percent</u>	<u>Percent</u>
Ash	5.6	3.6	3.5	1.9	-38
Basswood	.6	.4	.6	.3	0
Beech	7.6	4.8	6.7	3.6	-12
Birch	32.7	20.9	41.5	22.2	+27
Cherry	5.9	3.8	6.7	3.6	+14
Elm	.4	.3	.1	b	-75
Hickory	.8	.5	1.4	.7	+75
Maple, hard	6.2	4.0	7.9	4.2	+27
Maple, soft	2.0	1.3	1.6	.8	-20
Oak, red	31.9	20.3	45.3	24.2	+42
Oak, white	13.7	8.7	11.6	6.2	-15
Sycamore	.5	.3	.4	.2	-20
Walnut, black	1.6	1.0	2.2	1.2	+38
Yellow-poplar	7.3	4.7	7.5	4.0	+ 3
Other hardwoods ^c	2.3	1.4	4.8	2.6	d
Total hardwoods	119.1	76.0	141.8	75.7	+19
Total softwoods ^e	37.7	24.0	45.5	24.3	+21
All species	156.8	100.0	187.3	100.0	+19

^aInternational $\frac{1}{4}$ -inch rule.^bLess than 0.1 percent.^cIncludes aspen, chesnut, cottonwood, hackberry, pecan, tupelo, and other miscellaneous hardwoods.^dGreater than 100 percent increase.^eIncludes eastern white pine, red spruce, and southern yellow pines.

Table 3.-Veneer log receipts in the Northeast, by state, 1980 and 1984

State ^a	Receipts		
	1980	1984	Change
	<u>Million board feet</u> ^b		<u>Percent</u>
Kentucky	3.0	2.8	-7
Maine	27.0	31.5	+17
Maryland/West Virginia ^c	52.0	36.9	-29
New Hampshire/Vermont ^c	17.4	27.8	+60
New Jersey/New York ^c	10.5	36.9	d
Ohio	6.6	12.0	+82
Pennsylvania	4.0	5.9	+48
All states	120.5	153.8	+28

^aStates with no operating veneer mills are omitted.^bInternational $\frac{1}{4}$ -inch rule.^cStates paired to avoid disclosure for individual mills.^dGreater than 100 percent increase.

Table 4.-Production of veneer logs in the Northeast, by states and receiving mill classes, 1984

(Million board feet)^a

State	Class of receiving veneer mill			All classes
	Commercial and face	Container	Specialty	
Connecticut	1.3	-	-	1.3
Delaware	1.7	-	-	1.7
Kentucky	6.9	-	-	6.9
Maine	6.9	-	20.0	26.9
Maryland	26.7	-	-	26.7
Massachusetts	2.2	-	.3	2.5
New Hampshire	2.1	-	4.8	6.9
New Jersey	b	0.1	-	.1
New York	59.0	-	1.2	60.2
Ohio	7.9	1.2	-	9.1
Pennsylvania	28.5	-	-	28.5
Rhode Island	b	-	-	b
Vermont	5.0	-	7.6	12.6
West Virginia	3.9	-	-	3.9
All states	152.1	1.3	33.9	187.3

^aInternational $\frac{1}{4}$ -inch rule.

^bLess than 100,000 board feet.

Table 5.-Receipts of veneer logs in the Northeast, by states and receiving mill classes, 1984

(Million board feet)^a

State ^b	Class of receiving veneer mill		All classes
	Commercial and face	Container and specialty	
Kentucky	2.8	-	2.8
Maine	2.5	29.0	31.5
Maryland/West Virginia ^c	36.9	-	36.9
New Hampshire/Vermont ^c	20.0	7.8	27.8
New Jersey/New York ^c	35.5	1.4	36.9
Ohio	10.8	1.2	12.0
Pennsylvania	5.9	-	5.9
All states	114.4	39.4	153.8

^aInternational $\frac{1}{4}$ -inch rule.

^bStates with no operating veneer mills are omitted.

^cStates paired to avoid disclosure for individual mills.

Table 6.-Production and destination of shipment of Northeastern veneer logs, by states, 1984

(In millions of board feet)^a

State	Cut and retained in state	Out-shipments		Total production
		To other states ^b	To other Northeastern states	
Connecticut	-	1.3	1.2	1.3
Delaware	-	1.7	1.6	1.7
Kentucky	1.0	5.9	.4	6.9
Maine	20.8	6.1	4.6	26.9
Maryland	21.5	5.2	1.8	26.7
Massachusetts	-	2.5	1.8	2.5
New Hampshire	1.2	5.7	5.6	6.9
New Jersey	.1	c	-	.1
New York	34.4	25.8	8.7	60.2
Ohio	4.6	4.5	.3	9.1
Pennsylvania	4.5	24.0	3.2	28.5
Rhode Island	-	c	-	c
Vermont	9.0	3.6	3.5	12.6
West Virginia	1.0	2.9	.3	3.9
All states	98.1	89.2	33.0	187.3

^aInternational $\frac{1}{4}$ -inch rule.

^bIncludes shipments to Canada and other states outside the region.

^cLess than 100,000 board feet.

Table 7.-Extraregional recipients of veneer logs
from the Northeast, 1984

(Million board feet)^a

State or Province	Volume received
Indiana	8.7
Michigan	1.2
Missouri	.3
North Carolina	9.6
New Brunswick, Canada	.4
Ontario, Canada	23.8
Quebec, Canada	8.9
Tennessee	.8
Virginia	2.5
All states and provinces	56.2

^aInternational 1/4-inch rule.

Table 8.-Consumption and origin of shipment of veneer logs
for the Northeast, by states, 1984

(In millions of board feet)^a

State	Cut and retained in state	In-shippments ^b		Total receipts (apparent consumption)
		To other states ^c	To other Northeastern states ^b	
Kentucky	1.0	1.8	0.5	2.8
Maine	20.8	10.7	-	31.5
Maryland/West Virginia	22.5	14.4	2.7	36.9
New Hampshire/Vermont	10.2	17.6	17.3	27.8
New Jersey/New York	34.5	2.4	2.4	36.9
Ohio	4.6	7.4	1.5	12.0
Pennsylvania	4.5	1.4	1.2	5.9
All states	98.1	55.7	25.6	153.8

^aInternational 1/4-inch rule.

^bIn-shippments reported to two states are to avoid disclosure for individual mills and includes logs shipped between the two states as well as other states.

^cIncludes shipments from Canada and other states outside the region.

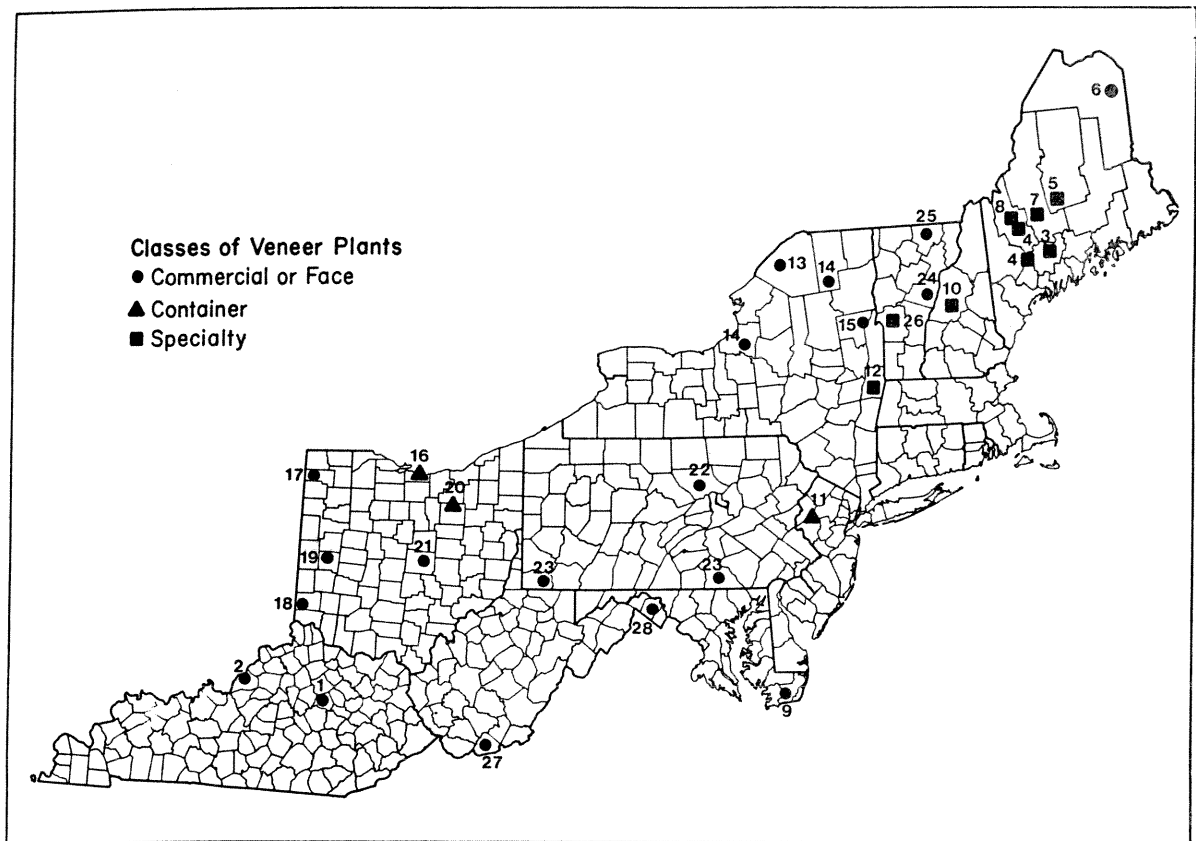
Table 9.-Disposition of veneer plant residues in the Northeast by states and type of residue and use, 1984

(In thousands of cubic feet)

Class of residue and type of use	Kentucky	Maine	Maryland	New Hampshire	New Jersey	New York	Ohio	Pennsyl- vania	Vermont	West Virginia	All states
Coarse^a											
Fiber ^b	83	599	1,343	-	-	75	94	-	242	-	2,436
Industrial fuel	79	759	133	-	6	1,514	339	55	836	166	3,887
Domestic fuel	-	20	-	90	-	58	100	23	84	9	384
Agricultural and other uses	-	-	-	-	-	-	-	45	-	-	45
Total used	162	1,378	1,476	90	6	1,647	533	123	1,162	175	6,752
Total unused	-	-	-	-	-	-	-	45	-	-	45
Fine^c											
Fiber	-	143	-	-	-	-	-	-	-	-	143
Industrial fuel	57	859	1,073	59	4	1,187	383	111	233	67	4,033
Domestic fuel	-	-	-	-	-	12	-	-	-	-	12
Agricultural and other uses	61	-	-	-	-	-	4	11	614	61	751
Total used	118	1,002	1,073	59	4	1,199	387	122	847	128	4,939
Total unused	-	-	-	7	-	-	-	-	-	-	7
Bark											
Industrial fuel	10	495	535	33	2	514	129	44	421	60	2,243
Domestic fuel	-	-	-	-	-	10	-	-	-	-	10
Agricultural and other uses	49	-	-	-	-	73	51	17	-	3	193
Total used	59	495	535	33	2	597	180	61	421	63	2,446
Total unused	-	-	6	-	-	-	13	-	-	-	19
All residues											
Fiber	83	742	1,343	-	-	75	94	-	242	-	2,579
Industrial fuel	146	2,113	1,741	92	12	3,215	851	210	1,490	293	10,163
Domestic fuel	-	20	-	90	-	80	100	23	84	9	406
Agricultural and other uses	110	-	-	-	-	73	55	73	614	64	989
Total used	339	2,875	3,084	182	12	3,443	1,100	306	2,430	366	14,137
Total unused	-	-	6	7	-	-	13	45	-	-	71

^aIncludes veneer cores and trimmings suitable for chipping.^bIncludes woodpulp and composite products.^cIncludes clipping, shavings, and rounding waste unsuitable for chipping.^dIncludes livestock bedding and farm and horticultural mulch.

Veneer Plants in the Northeast--1984



Kentucky:

1. The Freeman Corp., Winchester
2. Wood Mosaic Corp., Louisville

Maine:

3. Diamond Match Co., Oakland
4. Forster Manufacturing Co., Inc.
(Plants in E. Wilton and Strong)
5. Hardwood Products Co., Guilford
6. Columbia Plywood Corp., Presque Isle
7. Solon Manufacturing Co., Solon
8. Strong Wood Products Inc., Strong

Maryland:

9. Chesapeake Plywood Inc., Pocomoke City

New Hampshire:

10. Plymouth Manufacturing Co., Plymouth

New Jersey:

11. Califon Basket Co., Califon

New York:

12. W. J. Cowee Co., Berlin
13. Riverside Veneer Co., Inc., Heuvelton

Ohio:

14. Rutland Plywood Corp.
(Plants in Bernhards Bay and Tupper Lake)
15. Whitehall Plywood Corp., Whitehall

Ohio:

16. Berlin Fruit Box Co., Berlin Heights
17. Dimension Veneers, Edon
18. Fairfield Veneer Co., Fairfield
19. Hartzell Hardwoods Inc., Piqua
20. McIntire Basket Co., Creston
21. Universal Veneer, Newark

Pennsylvania:

22. Keystone Veneers Inc., Williamsport
23. Weyerhaeuser Co.
(Plants in Jefferson and New Freedom)

Vermont:

24. Bradford Veneer and Panel Co., Bradford
25. Columbia Plywood Corp., Newport
26. Rutland Plywood Corp., Rutland

West Virginia:

27. The Dean Co., Princeton
28. Erath Veneer Corp., Martinsburg

Nevel, Robert L., Jr.; Wharton, Eric H. 1987. **Veneer log production and receipts in the Northeast, 1984--A periodic assessment of regional timber output.** NE-RB-98. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 17 p.

Evaluates regional timber output based on a canvass of the veneer plants in the Northeast and contains statistics for 1984 on the veneer-log production and receipts by states and species, log shipments between states and regions, and the disposition of manufacturing residues. Trends in production and an outlook for the industry are presented along with a list and map of veneer plants in the Northeast.

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Keywords: Timber output, veneer logs, Northeast, primary manufacturing residues.

Headquarters of the Northeastern Forest Experiment Station are in Broomall, Pa. Field laboratories are maintained at:

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- Berea, Kentucky, in cooperation with Berea College.
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- Durham, New Hampshire, in cooperation with the University of New Hampshire.
- Hamden, Connecticut, in cooperation with Yale University.
- Morgantown, West Virginia, in cooperation with West Virginia University, Morgantown.
- Orono, Maine, in cooperation with the University of Maine, Orono.
- Parsons, West Virginia.
- Princeton, West Virginia.
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