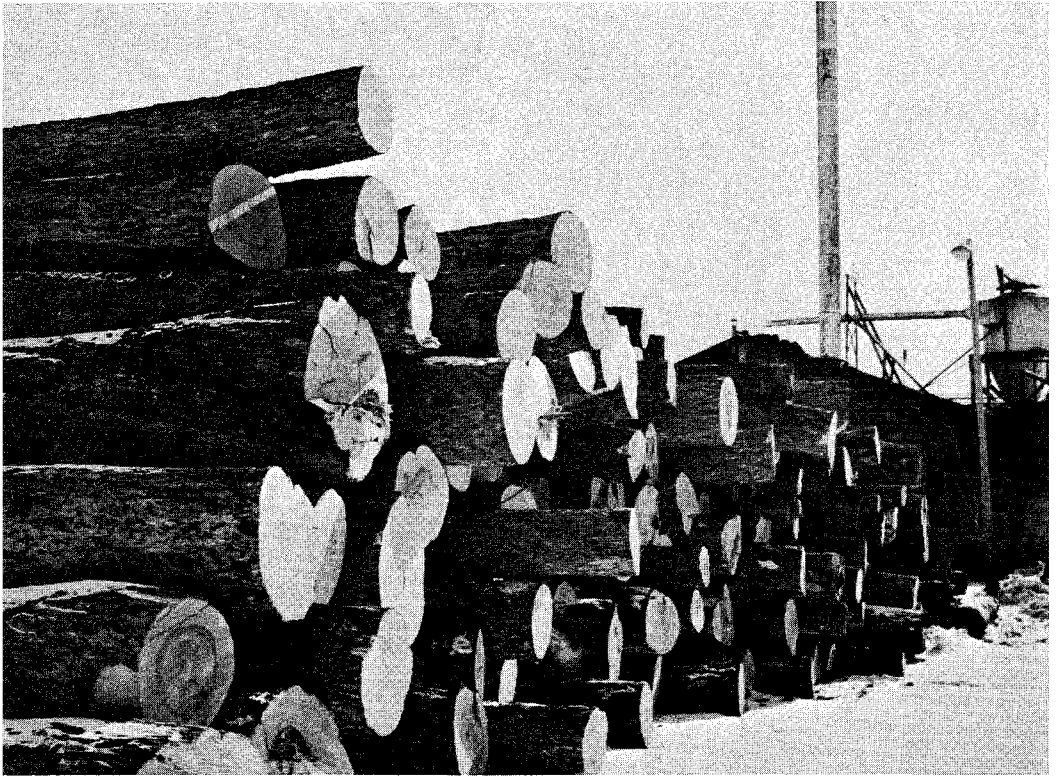


Primary Wood Products Output in NEW YORK - 1967



**by James T. Bones
and Carl E. Mayer**

**U.S.D.A. FOREST SERVICE RESOURCE BULLETIN NE-17
1969**

**NORTHEASTERN FOREST EXPERIMENT STATION, UPPER DARBY, PA.
FOREST SERVICE, U. S. DEPARTMENT OF AGRICULTURE
RICHARD D. LANE, DIRECTOR**

COVER PHOTO: *These hardwood sawlogs are awaiting manufacture at one of the larger sawmills in Herkimer County.* **Photo credit:** *New York State Conservation Department.*

FOREWORD

THE FOREST SERVICE of the U. S. Department of Agriculture conducts continuing forest surveys of all states to provide up-to-date information about the timber resources of the Nation. In the Northeastern Forest Experimentation Station's territory, all states have been surveyed at least once, and several have been resurveyed.

In the recently completed resurvey of New York, statistics about timber removals were gathered. This report is the result of a 100-percent canvass of New York primary wood processors by the Station's Forest Survey project and the New York State Conservation Department. Pulpwood production data were gathered as part of the Experiment Station's annual survey of the woodpulp producers of the Northeast.

During the canvass the Conservation Department assembled a list of all known firms and later contacted in person all in-state nonrespondents. The Experiment Station mailed questionnaires to each firm, including possible out-of-state consumers of New York wood, and later contacted all out-of-state nonrespondents by phone.

THE AUTHORS

JAMES T. BONES, research forester, received his bachelor's degree in soil conservation from Utah State University in 1952 and his master's degree in forest management from the same university in 1956. He worked in Forest Survey at the Pacific Northwest Station and the Institute of Northern Forestry before transferring to the Northeastern Forest Experiment Station in March 1968. He is now stationed in Upper Darby, Pa., where he is working in the timber-removals phase of Forest Survey.

CARL E. MAYER is the Forest Survey project leader at the Northeastern Forest Experiment Station. He received his bachelor's degree in forestry from Iowa State University in 1943. After military service as an officer in the U. S. Marine Corps, he spent 12 years in Forest Survey at the Pacific Northwest Station in Portland, Oregon. He transferred to the Northeastern Station in 1958. Since that time he has directed the Forest Survey of the Northeastern area.

Primary Wood Products Output in NEW YORK - 1967



CONTENTS

Highlights	1
Trends in total output	1
Lumber production — the past 100 years	2
Number of sawmills decreasing	3
More pulpmill wood from New York forests	4
Veneer industry rebounding	5
Plant residues find ready markets	6
Tables of statistical data	7

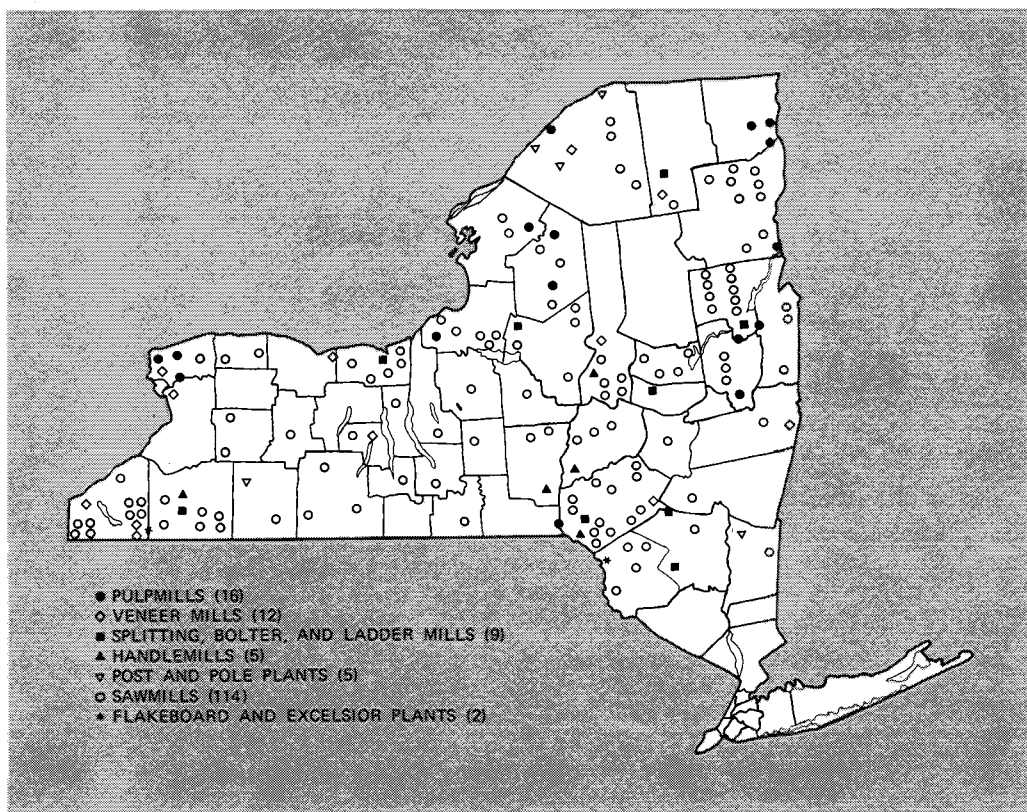


Figure 1.—The location of primary wood-using plants in New York. The numbers in parentheses indicate the number operating in 1967. Sawmills shown are those producing more than 1 million board feet.

Highlights

- ★ Nearly 100 million cubic feet of industrial roundwood were harvested in 1967 from New York forests — up 7 percent from 1950.
- ★ New York pulpwood suppliers continued to provide a high percentage of domestic mill receipts.
- ★ The veneer industry shifted production emphasis from basket veneer to face veneer.
- ★ Use of plant residues increased — to 76 percent of the total available.
- ★ Warren County was a major wood processor, receiving nearly 34 million board feet of sawlogs and producing over 36 thousand cords of pulpwood.

Trends in Total Output

Nearly 100 million cubic feet of industrial roundwood were harvested from New York forests in 1967 (table 1). Although output in the early 1950's was greater, it was inflated because of timber-salvage operations. Today there are indications that a healthier, more stable industry is developing and that New York forests are furnishing a greater proportion of industry's wood requirements.

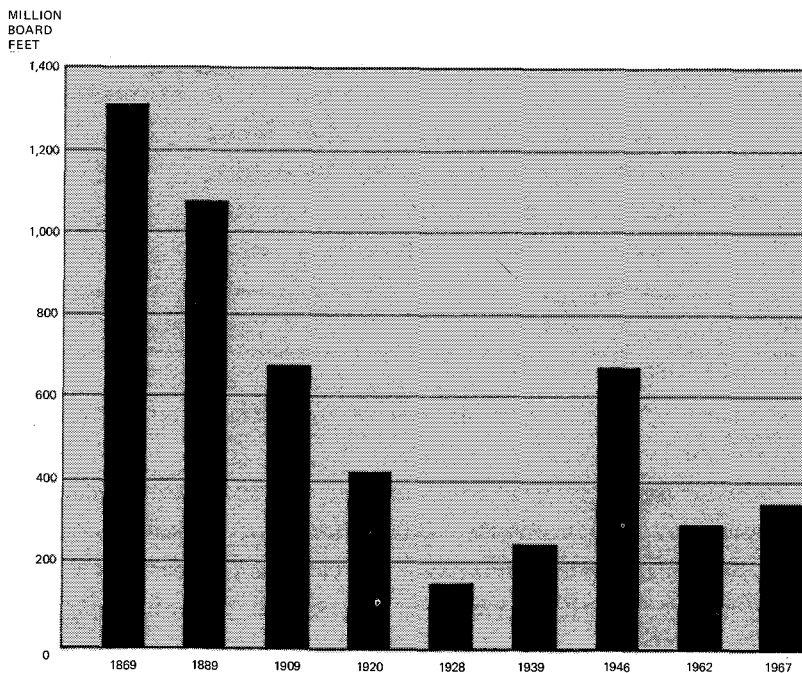
Sawlog and pulpwood production, which accounted for 89 percent of the total 1967 output, were up 4 and 46 percent respectively from 1950 levels (table 2). Output of veneer logs, poles and posts, and miscellaneous products was down.

A major shift occurred in the species harvested for roundwood products between 1950 and 1967. The volume of softwood removals dropped 48 percent, while the volume of hardwood removals rose 56 percent.

Lumber Production— The Past 100 Years

In 1869, when New York lumber production was 1.3 billion board feet, the sawmilling zenith had already been reached; and production was diminishing rapidly (fig. 2). By the turn of the century, 1,042 sawmills produced 878 million board feet. An historic low was recorded during the predepression year of 1928

Figure 2.—Lumber production in New York for selected years, 1870-1967.



when 364 sawmills produced 157 million board feet. Since then the industry has been recovering slowly. The heavy demands for wood during World War II and the hurricane blowdown timber salvage program of the early 1950's contributed greatly to the upturn. Our canvass showed that in 1967 the 302 operating sawmills in New York produced 353 million board feet of lumber.

**Number of
Sawmills Decreasing**

From 364 operating sawmills in 1928, the number rose to 1,557 mills in 1952 as many small seasonal and marginal producers entered the industry in response to the high wartime lumber requirements. Between 1952 and 1967, while stumpage and operating costs were increasing, the diameter and quality of the average sawlog available to the mill operator was decreasing. These negative factors, coupled with a slackened lumber demand, drove

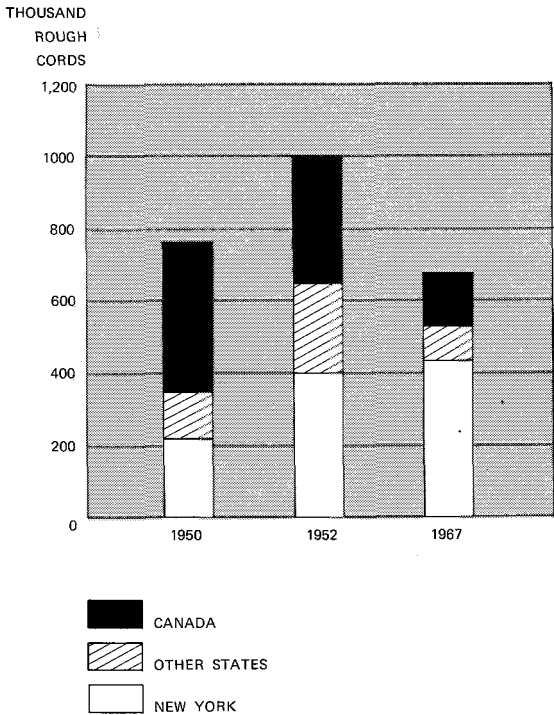


Figure 3.—Total pulpwood receipts in New York, by source, for selected years.

many mills out of business and reduced the number of operating sawmills to 302 (table 3). Note the high mortality of small producers — 780 in the 0-to-49-thousand board-foot class — as compared to four in the 1,000+ class.

More Pulpmill Wood from New York Forests

Historically the New York woodpulp industry has been sustained by coniferous roundwood purchased mainly from other states and Canada (fig. 3). The industry grew rapidly after the first mill was established in 1866, and by 1910 it had 98 pulpmills and led the Nation in pulp production. Production generally has mirrored the national economy but as late as 1950, New York

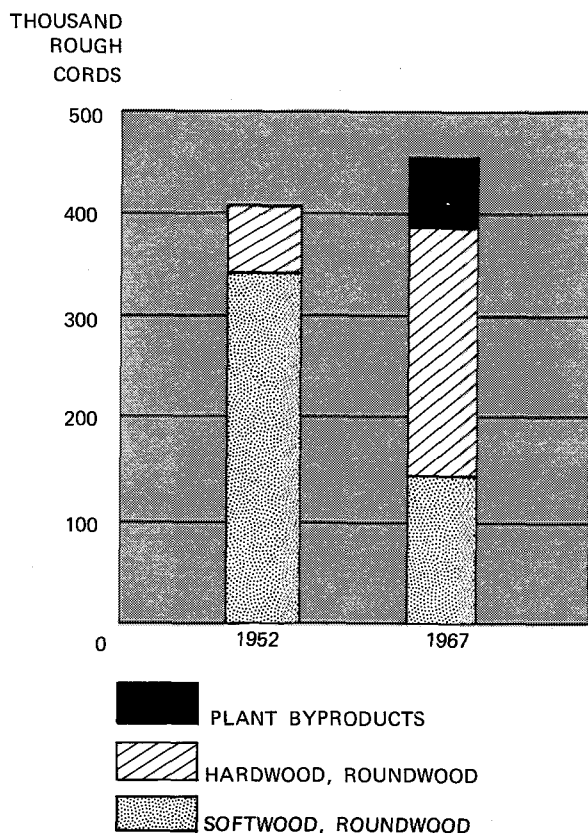


Figure 4.—Total pulpwood production in New York, 1952 and 1967.

forests were accounting for only 27 percent of the industry's total wood receipts in New York State.

In the past 15 years advances in pulping technology have caused radical changes in the industry. Today's mills produce pulp from hardwoods as well as softwoods, and are equipped for receiving and processing large quantities of both roundwood and chips (fig. 4).

In 1952, 85 percent of New York's pulpwood came from softwood trees, but by 1967 only 29 percent came from this species group. Also in 1952, less than 3 thousand cord-equivalents of New York pulpwood production came from chips generated as a byproduct of other primary wood manufacturing plants, but by 1967 nearly 69 thousand cords came from this source. Because New York has ample quantities of the kind of raw material that local woodpulp mills now require, it furnished 449 thousand cords in 1967; this represented two-thirds of the industry's total receipts.

Veneer Industry Rebounding

Recent developments in the veneer industry could be setting the stage for a rebound of this segment of New York's primary wood processors.

Twenty-nine firms consumed 23 million board feet of wood in 1952. Fourteen of these firms were producing basket veneer for western New York fruit and vegetable growers.

In 1967, a dozen firms consumed an equal quantity of wood (23.7 million board feet) but only three of these firms were producing basket veneer. The expansion of existing face-veneer plants and the establishing of new ones caused wood consumption to rebound from a low of 13 million board feet in fiscal-year 1963-64 to present levels.

The State consumed more veneer logs than it produced. Veneer-log production was 22.1 million board feet in 1967. Approximately 1.5 million board feet of New York logs were shipped to five neighboring states, while 3.2 million board feet were purchased from seven states by New York processors (tables 4 and 5). Red oak and hard maple were the most important species exported; white birch and yellow-poplar were important imports.

Plant Residues Find Ready Markets

Nearly 33 million cubic feet of wood residues were generated by New York primary wood manufacturers in 1967. Seventy-six percent, or 25 million cubic feet, of these residues were used (see tables 8 and 9).

Traditionally most of the fine material (sawdust and shavings) is used by the dairy industry as livestock bedding. In 1967 over 8 million cubic feet, representing 59 percent of the total available, went to this use.

During the past decade, debarkers and chippers were installed in many of the large sawmills, and the slabs and edgings were converted into pulp chips. Nearly 8 million cubic feet of chips were produced in 1967, representing 41 percent of the coarse residues available. Fuel — both industrial and domestic — also represents a major use of coarse residues.



Table 1.—Volume of industrial roundwood production in New York, 1967

Product	Volume in standard units				Roundwood volume		
	Standard units	All species	Softwoods	Hardwoods	All species	Softwoods	Hardwoods
					<i>Thousand cubic feet</i>		
Sawlogs	M board feet ¹	353,376	63,526	289,850	56,025	10,988	45,037
Pulpwood	Standard cords	394,300	132,600	261,700	31,544	10,608	20,936
Veneer logs	M board feet ¹	22,053	—	22,053	3,426	—	3,426
Poles	M pieces	5	5	—	31	31	—
Posts	M pieces	4,800	700	4,100	2,976	434	2,542
Miscellaneous products ²	M cubic feet	3,882	97	3,785	3,882	97	3,785
Total	—	—	—	—	97,884	22,158	75,726

¹ International 1/4-inch rule.

² Includes handle stock, excelsior, bobbin and shuttle blocks, and miscellaneous dimension stock.

Table 2.—Timber products output from roundwood for New York, 1950 and 1967

Product	All species			Softwoods			Hardwoods		
	1950	1967	Change	1950	1967	Change	1950	1967	Change
	<i>Million cubic feet</i>		<i>Percent</i>	<i>Million cubic feet</i>		<i>Percent</i>	<i>Million cubic feet</i>		<i>Percent</i>
Sawlogs	53.7	56.0	+ 4	26.0	11.0	—58	27.7	45.0	+ 63
Pulpwood	21.6	31.5	+46	16.2	10.6	—35	5.4	20.9	+287
Veneer logs	4.4	3.4	—23	—	—	—	4.4	3.4	— 23
Poles and posts	3.6	3.0	—17	.6	.4	—33	3.0	2.6	— 13
Miscellaneous products ²	8.0	3.9	—51	(¹)	.1	+96	8.0	3.8	— 53
Total	91.3	97.8	+ 7	42.8	22.1	—48	48.5	75.7	+ 56

¹ Less than 50,000 cubic feet.

² Includes cooperage bolts, piling, chemical wood, handle stock, and excelsior. Does not include fuelwood.

Table 3.—Number of sawmills in New York, by annual production class, 1952 and 1967

Production class (thousands of board feet)	Sawmills	
	1952	1967
	<i>Number</i> 200	<i>Number</i> 137
Idle		
0-49	817	37
50-199	334	59
200-499	189	50
500-999	99	42
1000+	118	114
Total number operating	1,557	302

Table 4.—Production of veneer logs and bolts in New York, and state where used, by species 1967

(In thousands of board feet, International ¼-inch rule)

Species	Indiana	Kentucky	New Hampshire	New York	Pennsylvania	West Virginia	All states
Ash	1	—	—	—	—	—	1
Basswood	—	—	—	1,105	—	—	1,105
Beech	—	—	—	1,753	—	—	1,753
Yellow birch	—	—	38	4,729	—	—	4,767
White birch	—	—	—	667	—	—	667
Butternut	1	—	—	—	—	12	13
Cherry	82	—	—	658	—	—	740
Elm	—	—	—	3,396	—	—	3,396
Hickory	—	—	—	31	—	110	141
Hard maple	204	—	—	2,947	—	—	3,151
Soft maple	—	—	—	584	—	—	584
White oak	2	—	—	35	—	120	157
Red oak	—	81	171	2,385	552	172	3,361
Black oak	—	—	—	2,106	—	—	2,106
Yellow-poplar	—	—	—	66	—	—	66
Other	—	—	—	45	—	—	45
All species	290	81	209	20,507	552	414	22,053

Table 5.—Consumption of veneer logs and bolts in New York, and state of origin, by species 1967
(In thousands of board feet, International 1/4-inch rule)

Species	Con- necticut	Massa- chusetts	New Jersey	New York	Ohio	Penn- sylvania	Vermont	West Virginia	All states
Basswood	—	—	—	1,105	10	10	—	19	1,144
Beech	—	—	—	1,753	—	2	—	—	1,755
Yellow birch	—	86	—	4,729	—	—	86	—	4,901
White birch	—	739	—	667	—	—	738	—	2,144
Cherry	—	29	—	658	—	—	29	—	716
Elm	—	—	—	3,396	—	1	—	—	3,397
Hickory	—	—	—	31	—	—	—	—	31
Hard maple	29	—	29	2,947	5	62	—	8	3,080
Soft maple	—	—	—	584	—	—	—	2	586
White oak	—	—	—	35	14	14	—	—	63
Red oak	59	—	59	2,385	15	133	—	—	2,651
Black oak	59	—	59	2,106	—	118	—	—	2,342
Yellow-poplar	—	—	—	66	122	444	—	262	894
Other	—	—	—	45	—	—	—	—	45
All species	147	854	147	20,507	166	784	853	291	23,749

Table 6.—Sawlog production by species groups and county where used,
New York, 1967

[In thousands of board feet]¹

County	All species	Softwoods	Hardwoods
Albany	1,098	623	475
Allegany	3,608	217	3,391
Broome	1,367	194	1,173
Cattaraugus	15,047	516	14,531
Cayuga	1,993	96	1,897
Chautauqua	24,915	615	24,300
Chemung	1,550	118	1,432
Chenango	8,767	1,964	6,803
Clinton	1,851	1,130	721
Columbia	1,426	500	926
Cortland	8,485	296	8,189
Delaware	23,281	1,664	21,617
Dutchess	3,731	143	3,588
Essex	23,950	17,864	6,086
Erie	749	274	475
Franklin	651	105	546
Fulton	14,946	4,486	10,460
Genesee	1,031	—	1,031
Greene	2,829	635	2,194
Hamilton	1,072	428	644
Herkimer	23,745	1,313	22,432
Jefferson	4,149	662	3,487
Lewis	12,041	904	11,137
Livingston	5,609	292	5,317
Madison	2,498	392	2,106
Monroe	173	—	173
Montgomery	874	30	844
Nassau	—	—	—
Niagara	1,297	—	1,297
Oneida	8,993	346	8,647
Onondaga	1,231	30	1,201
Ontario	1,136	28	1,108
Orange	1,932	232	1,700
Orleans	3,889	14	3,875
Oswego	16,366	1,703	14,663
Otsego	6,169	2,847	3,322
Putnam	500	—	500
Rensselaer	3,778	2,132	1,646
Rockland	—	—	—
St. Lawrence	14,206	2,428	11,778
Saratoga	10,016	4,779	5,237
Schenectady	—	—	—
Schoharie	2,913	1,216	1,697
Schuyler	4,941	480	4,461
Seneca	2,896	135	2,761

CONTINUED

Table 6 — Continued

County	All species	Softwoods	Hardwoods
Steuben	7,144	1,756	5,388
Suffolk	202	75	127
Sullivan	7,622	864	6,758
Tioga	4,471	491	3,980
Tompkins	1,204	19	1,185
Ulster	4,314	474	3,840
Warren	33,930	7,391	26,539
Washington	7,173	264	6,909
Wayne	8,863	39	8,824
Westchester	—	—	—
Wyoming	4,945	174	4,771
Yates	1,809	148	1,661
Total	353,376	63,526	289,850

¹ International 1/4-inch rule.

Figure 5.—Sawlog production in New York in 1967, by county where used.

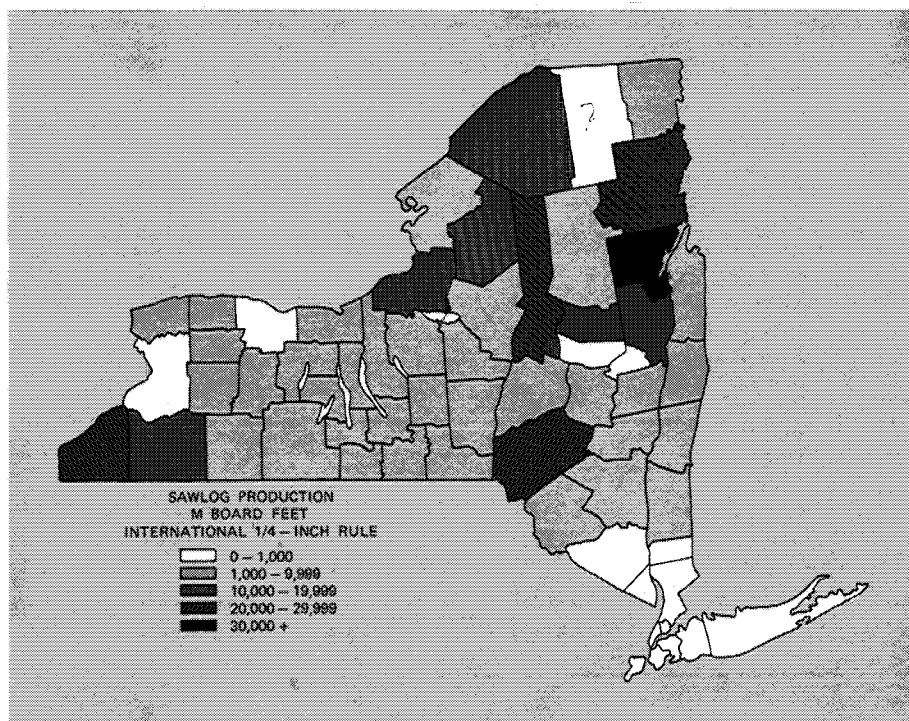


Table 7.—Pulpwood production from roundwood by species
groups and counties, New York, 1967
(In thousands of standard cords)¹

County	All species	Softwoods	Hardwoods
Albany	1.2	—	1.2
Allegany	1.1	0.5	.6
Broome	1.6	.1	1.5
Cattaraugus	1.2	(²)	1.2
Cayuga	.3	.3	—
Chautauqua	1.8	.7	1.1
Chemung	(²)	(²)	—
Chenango	4.6	3.4	1.2
Clinton	29.0	11.5	17.5
Columbia	.7	—	.7
Cortland	.7	.7	—
Delaware	4.5	1.9	2.6
Erie	3.1	.2	2.9
Essex	51.8	5.8	46.0
Franklin	25.3	20.0	5.3
Fulton	15.8	1.9	13.9
Genesee	1.2	—	1.2
Greene	.5	—	.5
Hamilton	29.7	10.1	19.6
Herkimer	11.4	5.5	5.9
Jefferson	3.1	1.9	1.2
Lewis	34.2	15.4	18.8
Livingston	(²)	(²)	—
Madison	(²)	(²)	(²)
Montgomery	2.8	.6	2.2
Niagara	1.4	—	1.4
Onondaga	10.1	4.8	5.3
Ontario	.5	.5	—
Orleans	.4	—	.4
Oswego	13.1	3.1	10.0
Otsego	10.7	9.1	1.6
Rensselaer	7.2	—	7.2
St. Lawrence	38.3	27.6	10.7
Saratoga	27.8	5.6	22.2
Schenectady	.8	—	.8
Schoharie	2.4	—	2.4
Schuyler	.1	.1	—
Steuben	.4	.4	—
Sullivan	(²)	—	(²)
Tioga	.1	—	.1
Tompkins	.1	.1	—
Warren	36.2	.4	35.8
Washington	17.4	.3	17.1
Wayne	.2	.1	.1
Wyoming	1.5	—	1.5
Total	394.3	132.6	261.7

¹ Rough wood basis.

² Less than 50 cords.

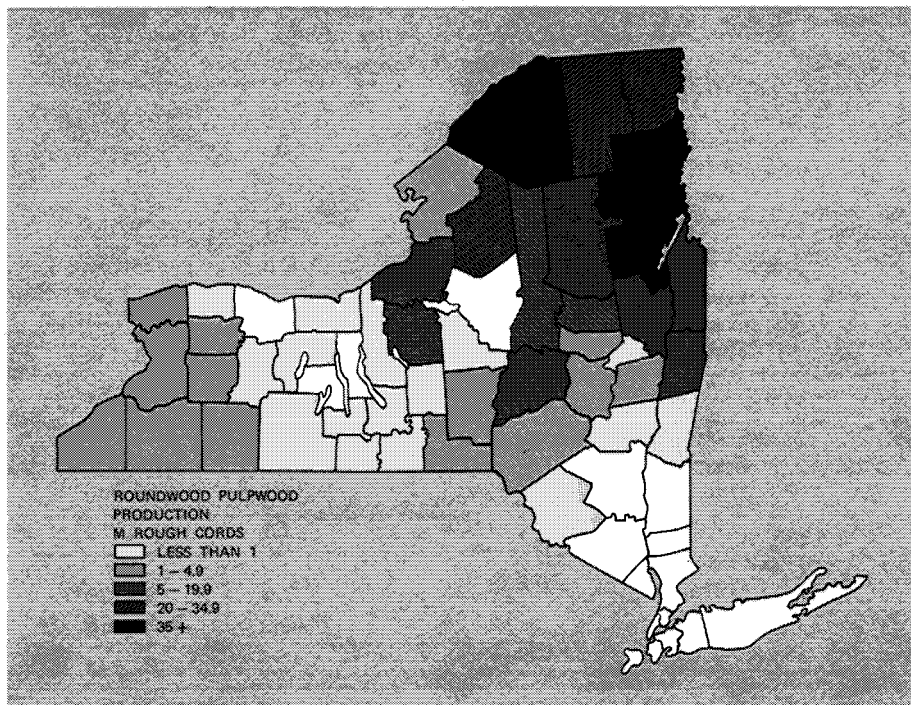


Figure 6.—Round pulpwood production in New York in 1967, by counties.

Table 8.—Total residues from primary wood-processing plants by industrial source, type of residue, and by species groups, New York, 1967

(In thousands of cubic feet)

Industrial source ¹ and type of residue	All species	Softwoods	Hardwoods
Lumber industry:			
Coarse ²	16,862	3,225	13,637
Fine ³	11,668	2,033	9,635
Total	28,530	5,258	23,272
Veneer industry:			
Coarse	827	—	827
Fine	1,234	—	1,234
Total	2,061	—	2,061
Other primary industries:			
Coarse	1,347	41	1,306
Fine	732	23	709
Total	2,079	64	2,015
All industries:			
Coarse	19,036	3,266	15,770
Fine	13,634	2,056	11,578
Total	32,670	5,322	27,348

¹ Excludes woodpulp industry.

² Coarse residues include slabs, edgings, trimmings, and other material considered suitable for chipping.

³ Fine residues include sawdust, shavings, and other material considered unsuitable for chipping.

Table 9.—Volume of byproducts from primary wood processing plants,
by source, type of use, and species groups, New York, 1967
(In thousands of cubic feet)

Source industry ¹	Type of use	All species	Softwoods	Hardwoods
Lumber	Fiber ²	7,640	995	6,645
	Fuel ³	4,329	468	3,861
	Agricultural bedding	7,750	1,460	6,290
	Other ⁴	1,119	96	1,023
	All uses	20,838	3,019	17,819
Veneer	Fiber	119	—	119
	Fuel	1,737	—	1,737
	Agricultural bedding	72	—	72
	Other	121	—	121
	All uses	2,049	—	2,049
Other industries . .	Fuel	1,049	29	1,020
	Agricultural bedding	256	1	255
	Other	567	31	536
	All uses	1,872	61	1,811
All industries . . .	Fiber	7,759	995	6,764
	Fuel	7,115	497	6,618
	Agricultural bedding	8,078	1,461	6,617
	Other	1,807	127	1,680
	Total	24,759	3,080	21,679

¹ Excludes woodpulp industry.

² Includes 5,504 M cubic feet of residues for pulp along with residues for hard-board and particle board.

³ Includes all residues used as domestic or industrial fuel whether sold or given away.

⁴ Includes residues used for charcoal, small dimension stock, specialty items, and wood flour.



THE FOREST SERVICE of the U. S. Department of Agriculture is dedicated to the principle of multiple use management of the Nation's forest resources for sustained yields of wood, water, forage, wildlife, and recreation. Through forestry research, cooperation with the States and private forest owners, and management of the National Forests and National Grasslands, it strives — as directed by Congress — to provide increasingly greater service to a growing Nation.