

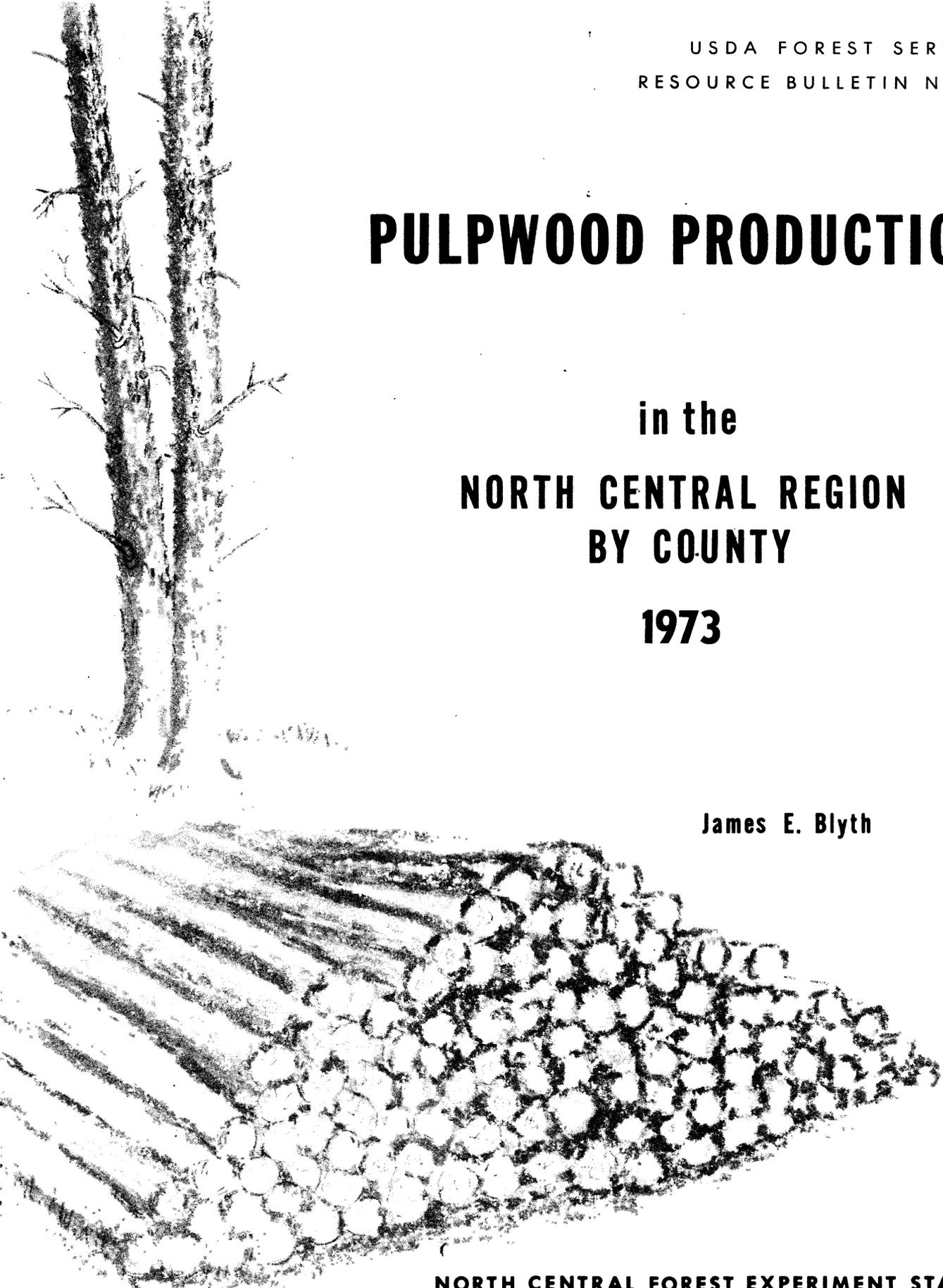
PULPWOOD PRODUCTION

in the
NORTH CENTRAL REGION
BY COUNTY
1973

James E. Blyth

NORTH CENTRAL FOREST EXPERIMENT STATION
FOREST SERVICE

U. S. DEPARTMENT OF AGRICULTURE



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1975

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This is the 15th annual report on the pulpwood harvest in Lake States counties and the 14th annual report on the Central States harvest. The Lake States (Michigan, Minnesota, and Wisconsin) and Central States (Illinois, Indiana, Iowa, and Missouri) are discussed separately because the timber types in each area are different and less information can be released about the Central States (more detailed data published on pulpwood production and receipts in the Central States would reveal the operations of individual mills).

Quantities shown may vary slightly from one table to another because of rounding differences. These differences are insignificant.

Pulpmills using North Central States timber in 1973 reported their pulpwood receipts by State and county. Their cooperation is gratefully acknowledged. Thanks are also due to Al Boelter, Staff Forester, Forest Resource Development, Michigan Department of Natural Resources, for collecting data on the Michigan pulpmills.

LAKE STATES

Production Rises 10 Percent

Pulpwood production¹ in the Lake States rose to 4.7 million cords in 1973 from 4.3 million cords in 1972, because pulpmills were operating at a higher rate in 1973. Changes in pulpwood stockpiles during 1973 were nominal compared to the mill inventory at the end of 1972.

¹Pulpwood production is defined as the pulpwood volume from timber land in a specified area that was received at all mills during 1973, whereas pulpwood receipts are defined as the volume of wood received by mills in a specified area regardless of the geographic source.

All but 2 percent of the pulpwood was consumed in the Lake States (table 1). Nine out of 10 cords were roundwood (including chips from roundwood); the remainder was residue from local wood-using plants.² Eighty-four percent of the residue was hardwood. Use of Lake States residue for pulp has climbed an average of 15 percent annually since 1964.

Harvesting of all species, except hemlock, increased. Output of aspen surged higher by 134,000 cords over 1972; harvesting of miscellaneous hardwoods (chiefly maple, elm, ash, and oak) was up by 129,000 cords. More birch pulpwood was cut than ever before.

1972 Pulpwood Production by State

Wisconsin produced 37 percent of the Lake States pulpwood, Michigan 34 percent, and Minnesota 29 percent. Production rose in each of these States.

Wisconsin production rises 221,000 cords.--Demand for hardwoods improved sharply while harvesting of hemlock, pine, and tamarack fell. Wisconsin wood residue shipped to pulpmills rose 46 percent. Four-fifths of the pulpwood output came from northeast and northwest Wisconsin. Top-producing counties were Oneida, Price, and Bayfield.

Michigan expands output 185,000 cords.--Nearly all (98 percent) of the production increase was in hardwoods. Upper Peninsula loggers provided most (75 percent) of the additional roundwood cut. Iron, Baraga, and Delta were the leading pulpwood-producing counties.

²Residue is the byproduct from sawmills, veneer mills, cooperage mills, and other wood-using plants that is used for pulping. Residue includes slabs, edgings, veneer cores, sawdust, wood flour, and chips manufactured from these byproducts.

Table 1.--Production and imports of pulpwood, Lake States, 1973

(In standard cords, unpeeled)

SPECIES AND DESTINATION	PRODUCTION BY STATES 1/				IMPORTS			TOTAL RECEIPTS
	MICHIGAN	MINNESOTA	WISCONSIN	REGIONAL TOTAL	OTHER U.S. 2/	CANADA	TOTAL	
							IMPORTS	
ASPFN								
MICHIGAN	399532	42	4801	404375	0	0	0	404375
MINNESOTA	0	609226	0	609226	0	9023	9023	618249
WISCONSIN	196054	58822	753468	1005344	0	142	142	1005486
EXPORTED 3/	7713	7257	2612	17582	0	0	0	0
TOTAL	603299	672347	760881	2036527	0	9165	9165	2028110
BALSAM FIR								
MICHIGAN	36455	0	781	37236	0	0	0	37236
MINNESOTA	0	60223	0	60223	0	0	0	60223
WISCONSIN	31936	5078	66275	103289	0	23	23	103312
EXPORTED 3/	0	149	0	149	0	0	0	0
TOTAL	68391	65450	67056	208897	0	23	23	200771
RIPCH								
MICHIGAN	58701	63	4832	63596	0	0	0	63596
MINNESOTA	0	40690	0	40690	0	0	0	40690
WISCONSIN	818	46	67070	67934	0	0	0	67934
EXPORTED 3/	0	1387	576	1963	0	0	0	0
TOTAL	59519	42186	72478	174183	0	0	0	172220
HEMLOCK								
MICHIGAN	34686	0	1366	34052	0	0	0	36052
WISCONSIN	22940	0	31073	54013	0	0	0	54013
TOTAL	57626	0	32439	90065	0	0	0	90065
PINE								
MICHIGAN	133324	0	1171	134495	0	0	0	134495
MINNESOTA	0	154221	0	154221	0	1100	1100	155321
WISCONSIN	70335	49096	230560	349991	37097	145	37242	387233
EXPORTED 3/	0	1667	0	1667	0	0	0	0
TOTAL	203659	204986	231711	640374	37097	1245	38342	677049
SPRUCE								
MICHIGAN	13823	0	196	14019	0	0	0	14019
MINNESOTA	0	141871	0	141871	0	500	500	142371
WISCONSIN	32476	56939	16247	105662	0	118768	118768	224430
EXPORTED 3/	0	14665	0	14665	0	0	0	0
TOTAL	46299	215275	16443	278017	0	119268	119268	380820
TAMARACK								
MICHIGAN	3968	0	157	4125	0	0	0	4125
MINNESOTA	0	4436	0	4436	0	0	0	4436
WISCONSIN	949	25835	1187	27971	0	0	0	27971
TOTAL	4917	32271	1344	38532	0	0	0	38532
MISC. HARDWOODS								
MICHIGAN	326129	313	24159	350601	0	0	0	350601
MINNESOTA	0	37656	0	37656	0	4107	4107	37763
WISCONSIN	30736	115	167246	398097	0	0	0	398097
EXPORTED 3/	8356	2007	8140	18503	0	0	0	0
TOTAL	365221	34091	399545	800857	0	4107	4107	786461
TOTAL ROUNDWOOD								
MICHIGAN	1006618	418	37463	1044499	0	0	0	1044499
MINNESOTA	0	1046323	0	1046323	0	14730	14730	1061053
WISCONSIN	386244	192931	1533126	2112301	37097	119078	156175	2268476
EXPORTED 3/	16069	28932	11328	56329	0	0	0	0
TOTAL	1408931	1268604	1581917	4259452	37097	133808	170905	4374028
RESIDUE-SOFTWOOD								
MICHIGAN	11076	0	976	12052	0	0	0	12052
MINNESOTA	0	23632	0	23632	25766	1992	27758	51390
WISCONSIN	3527	961	16741	21229	253685	3607	257292	278521
EXPORTED 3/	13025	1084	3276	17385	0	0	0	0
TOTAL	27628	25677	20993	74298	279451	5599	285050	341963
RESIDUE-HARDWOOD								
MICHIGAN	113247	0	16750	129997	12333	0	12333	142330
MINNESOTA	0	82435	14530	96965	3244	10264	13508	110473
WISCONSIN	28476	0	120980	149456	0	0	0	149456
EXPORTED 3/	7151	0	3181	10332	0	0	0	0
TOTAL	148874	82435	155441	386750	15577	10264	25841	402259
ALL WOOD MATERIAL								
MICHIGAN	1130941	418	55189	1186548	12333	0	12333	1198881
MINNESOTA	0	1152390	14530	1168020	29010	26986	55996	1222916
WISCONSIN	418247	193892	1470847	2282986	290782	122685	413467	2696453
EXPORTED 3/	36245	30016	17785	84046	0	0	0	0
TOTAL	1585433	1376716	1758351	4720500	332125	149671	481796	5118250

1/ VERTICAL COLUMNS OF FIGURES UNDER BOX HEADING -PRODUCTION BY STATES- PRESENT THE AMOUNT OF PULPWOOD CUT IN EACH STATE
 2/ MOSTLY WESTERN STATES.
 3/ PULPWOOD SHIPPED TO MILLS OUTSIDE OF REGION.

Minnesota production inches up 2 percent.--Demand for Minnesota pulpwood remained strong in 1973 after a major production gain in 1972. Pulpwood producers in northeastern Minnesota furnished 54,000 more cords than in 1972, while output dropped slightly in the Central Pine and Rainy River Units. St. Louis, Koochiching, and Itasca Counties supplied 60 percent of the roundwood.

The distribution of the harvest is shown in two ways: first, the amount of pulpwood cut relative to commercial forest area (fig. 1); second, the amount of pulpwood cut relative to the merchantable volume in major pulpwood species (fig. 2). Heaviest cutting pressure (per 1,000 cords of merchantable volume in principal pulpwood species) was in central and north-east Wisconsin and in Upper Michigan.

Receipts Up 11 Percent

Forty-one Lake States plants received 5.1 million cords of pulpwood in 1973. All but two of these plants used aspen in 1973, and more plants used each species than in 1972 (table 2).

Receipts of hemlock and pine fell, but increased for all other species. Procurement of miscellaneous hardwoods outranked pine for the first time. Birch is becoming a major pulpwood source: receipts were double those in 1969. Deliveries of softwood residue in the Lake States rose for the 8th straight year.

Of the imported wood, 31 percent came from Canada and the remainder from various States. Montana, Wyoming, and South Dakota each supplied more than 70,000 cords, primarily as chips. Since 1969, imports of softwood roundwood from other areas of the U.S. have dropped each year, while imports of softwood residue have surged ahead.

Pulpwood marketing advanced 268,000 cords in Michigan in 1973. Every species group, except spruce, shared the gain. Demand for aspen, miscellaneous hardwoods, and hardwood residue was strong.

In Wisconsin, pulpwood demand expanded 246,000 cords over 1972. Aspen, spruce, miscellaneous hardwoods, and softwood residue receipts were significantly higher, while pine receipts declined. Wisconsin is the principal market for softwood residue from western States.

Pulpwood requirements remained steady at Minnesota mills. Roundwood procurement declined (primarily aspen), but was offset by larger purchases of residue.

Regional Mill Capacity Stable--Sawmill Interest Increasing

Closure of two small pulpmills had little effect on Lake States mill capacity (table 3). Two large firms, formerly not producing Lake States pulp, purchased mills in Wisconsin.

During the last 2 years, Lake States pulp producers have shown increased interest in sawmills. Some have purchased, built, or expanded sawmills, and some are seeking opportunities to purchase chips from sawmills. Competition between sawmills and pulpmills for stumpage has intensified as more sawmills have been built or modified to saw smaller logs.

CENTRAL STATES

Production Dips 2 Percent

After 5 years of rising output, Central States pulpwood production fell slightly to 454,000 cords in 1973 from 463,000 cords in 1972. More than half (54 percent) of the pulpwood was hardwood residue, the only pulpwood category to increase over 1972. The lower output resulted from smaller pulpwood exports to adjacent States.

Only Illinois produced more pulpwood than in 1972 (table 4). Indiana and Missouri are the major suppliers of pulpwood to mills outside the Central States; their export shipments constituted one-fourth of all Central States pulpwood produced (table 5).

Loggers harvested pulpwood in 135 counties: 44 in Illinois, 43 in Indiana, 35 in Missouri, and 13 in Iowa (fig. 3). Procurement areas in Illinois included several additional counties in the south-central section of the State. In the other States, procurement territories were similar to those in 1972.

Receipts Advance 6 Percent

Thirteen Central States' plants received 379,000 cords of pulpwood in 1973 (table 6). Seventeen percent was imported from other States. Additional wood received above the 1972 level was chiefly

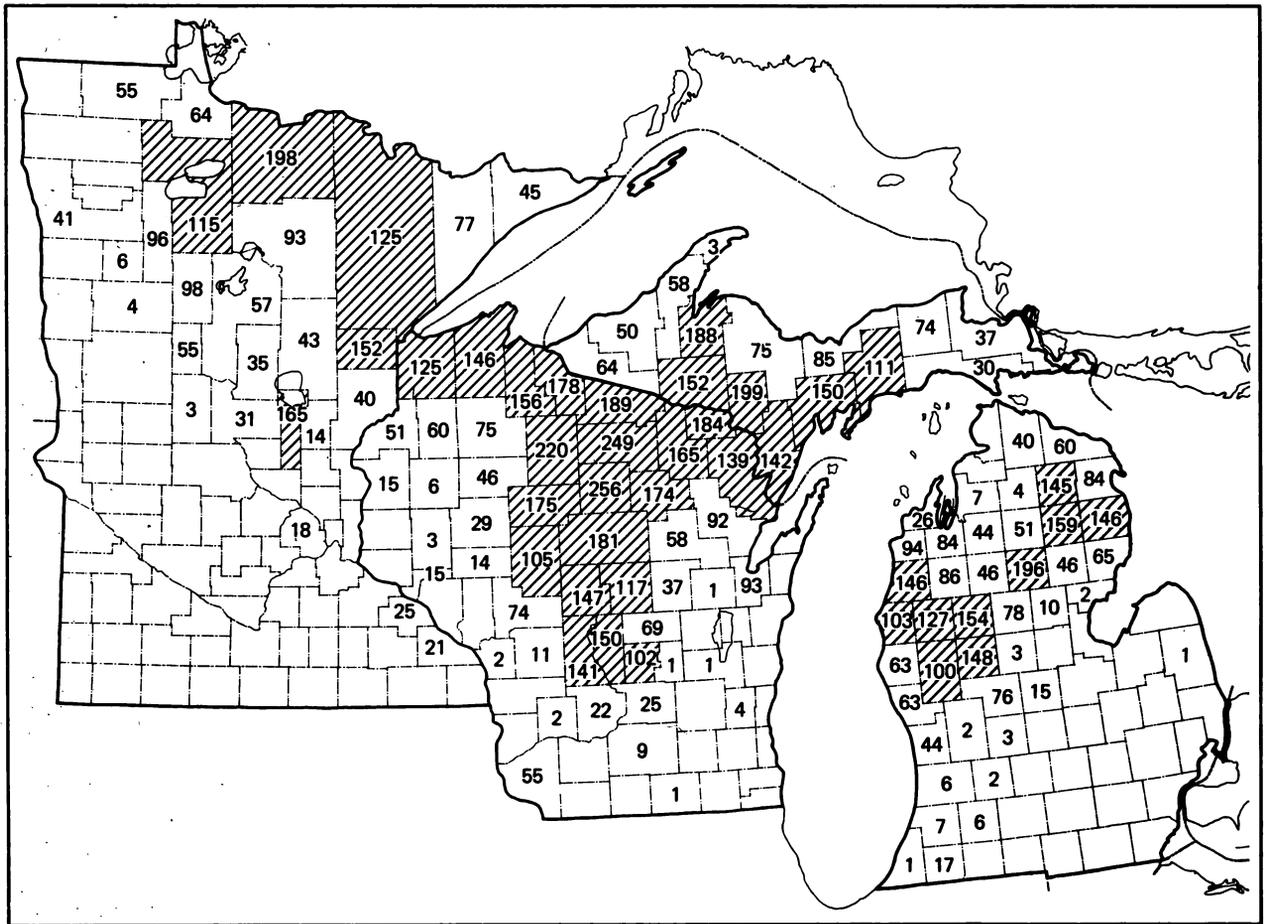
hardwood residue. More pulpwood was delivered to Illinois mills than in any previous year.

nearby States. Consequently, the decline in exports is likely to be short-lived.

Pulping capacity remained near 1,500 tons per day (table 7). No significant capacity changes have been reported in the region, but capacity is increasing in

* * *

Other detailed pulpwood production data are found in the Appendix.



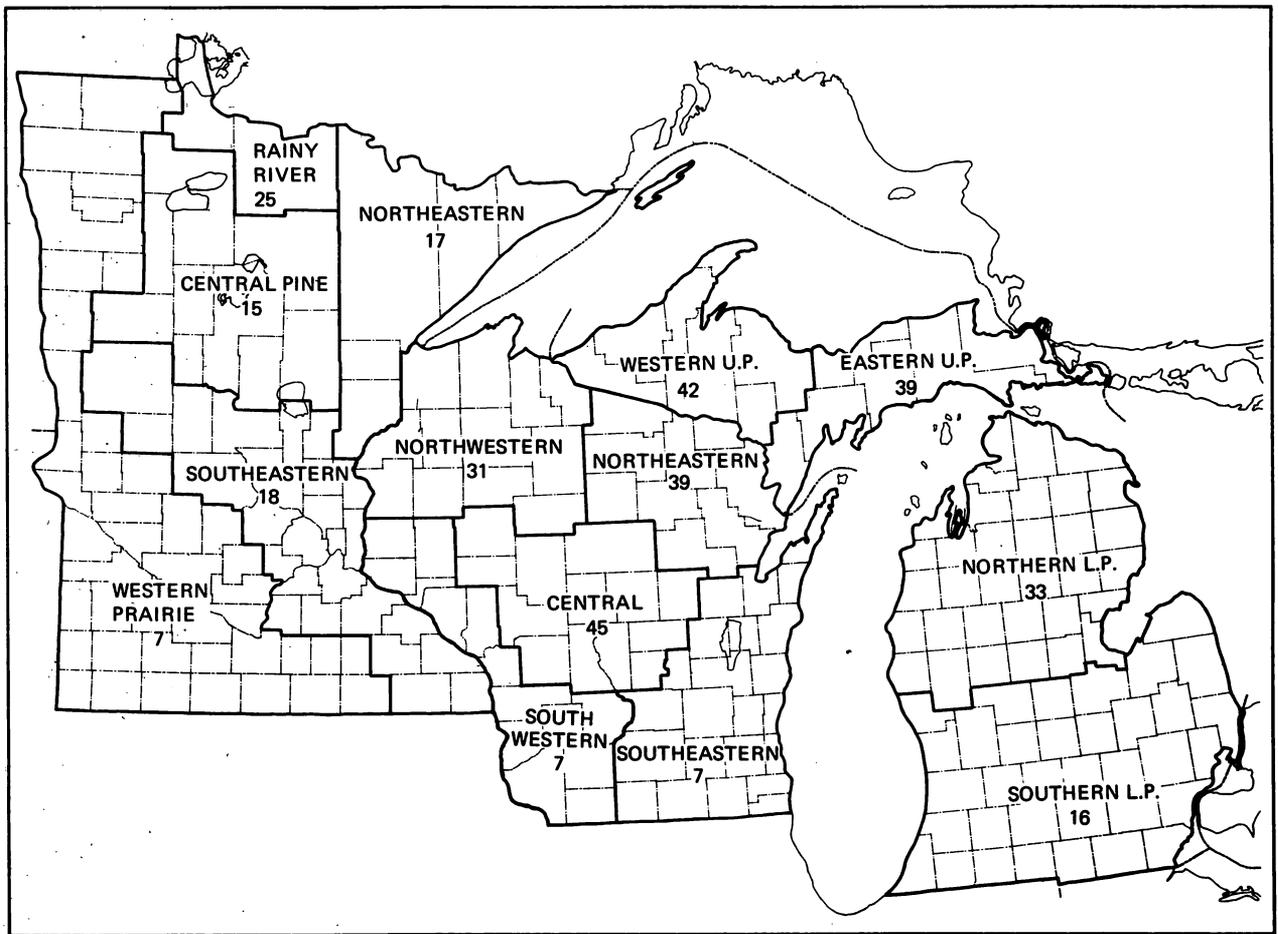


Figure 2.--Cords of pulpwood bolts and logs harvested per 1,000 cords of merchantable volume in principal pulpwood species by Forest Survey Unit, 1973. The heavy lines delineate the boundaries of the Forest Survey Units in each State.

Table 2.--Plants using the different species of wood for pulping in 1973
(In numbers)

SPECIES AND KIND OF MATERIAL	: LAKE : : STATES :	: MINNESOTA :	: WISCONSIN :	: MICHIGAN :
ASPEN	39	9	22	8
BALSAM FIR	17	5	9	3
BIRCH	13	2	8	3
HEMLOCK	10	--	9	1
PINE	12	3	5	4
SPRUCE	20	5	12	3
TAMARACK	7	2	4	1
MISCELLANEOUS HARDWOODS	19	2	11	6
WOOD CHIPS (RESIDUE)	16	3	8	5
SLABWOOD AND OTHER RESIDUE	6	1	3	2
TOTAL PLANTS ^{1/}	41	9	24	8

^{1/} SOME PLANTS USE MORE THAN ONE SPECIES, SO NUMBERS IN COLUMNS CANNOT BE ADDED.

Table 3.--Active woodpulp mills in the Lake States, by location, type of pulp produced, and capacity, 1973

COMPANY	LOCATION	MILL CAPACITY IN TONS PER 24 HOURS 1/				
		TOTAL	SULFITE	SULFATE	GROUNDWOOD AND OTHER MECHANICAL	SEMI-CHEMICAL
MICHIGAN:						
ABITIBI CORP.	ALPENA	430	0	0	430	0
CELOTEX CORP.	LANSF	270	0	0	270	0
HOERNER WALDOFF CORP.	ONTONAGON	220	0	0	0	220
MANISTIQUE PULP AND PAPER CO.	MANISTIQUE	90	0	0	90	0
MEAD CORP.	ESCANABA	750	0	600	150	0
MENASHA CORP.	OTSEGO	225	0	0	0	225
PACKAGING CORP. OF AMERICA	FILFR CITY	400	0	0	0	400
WARREN CO., S.O.	MUSKEGON	240	0	240	0	0
TOTAL	8 PLANTS	2625	0	840	940	845
MINNESOTA :						
BLANDIN PAPER CO.	GRAND RAPIDS	220	0	0	220	0
HENNEPIN PAPER CO.	LITTLE FALLS	75	0	0	75	0
POISE CASCADE CORP.	INTERNATIONAL FALLS	770	0	320	450	0
NORTHWEST PAPER CO.	CLOQUET	520	120	400	0	0
SUPERWOOD CORP.	RFWIDJI	90	0	0	90	0
ST REGIS PAPER CO.	SARTELL	125	0	0	125	0
SUPERWOOD CORP.	DULUTH	240	0	0	240	0
HOERNER WALDOFF CORP.	ST PAUL	300	0	0	0	300
CONWED CORP.	CLOQUET	350	0	0	350	0
TOTAL	9 PLANTS	2690	120	720	1550	300
WISCONSIN :						
AMERICAN CAN CO.	GREEN BAY	210	150	0	60	0
WEYERHAEUSER CO.	ROTHSCHILD	200	200	0	0	0
RANGER PAPER MILLS	PESHIGO	110	110	0	0	0
APPLETON PAPERS INC.	COMBINED LOCKS	200	0	0	200	0
CONSOLIDATED PAPERS . INC.	APPLETON	180	180	0	0	0
CONSOLIDATED PAPERS . INC.	STEVENS POINT	100	0	0	100	0
CONSOLIDATED PAPERS . INC.	WISCONSIN RAPIDS	625	0	400	225	0
GREEN BAY PACKAGING. INC.	GREEN BAY	200	0	0	0	200
FLAMBEAU PAPER CO.	PARK FALLS	115	115	0	0	0
KIMBERLY-CLARK CORP.	KIMBERLY	115	0	0	115	0
PENTAIR INDUSTRIES	NIAGARA	150	0	0	150	0
MOSINEE PAPER MILLS CO.	MOSINEE	200	0	200	0	0
NEKOOSA-EDWARDS PAPER CO.	NEKOOSA	310	0	310	0	0
NEKOOSA-EDWARDS PAPER CO.	PORT EDWARDS	215	215	0	0	0
OWENS-ILLINOIS	TOMAHAWK	620	0	0	0	620
CHARMIN PAPER PRODUCTS CO.	GREEN BAY	2/	2/	2/	2/	2/
SCOTT PAPER CO.	OCONTO FALLS	110	110	0	0	0
ST REGIS PAPER CO.	RHINECLANDER	120	120	0	0	0
FLYKOTE COMPANY	CORNELL	50	0	0	50	0
SUPERIOR FIBER PRODUCTS CO.	SUPERIOR	180	0	0	180	0
THILMANY PULP AND PAPER CO.	KAIKAIUNA	400	0	400	0	0
TOMAHAWK PULP CO., INC.	TOMAHAWK	50	0	0	50	0
WAUSAU PAPER MILLS CO.	BROOKAW	145	145	0	0	0
EVANS PRODUCTS CO.	PHILLIPS	100	0	0	100	0
TOTAL	24 PLANTS	4705	1345	1310	1230	820
ALL STATES	41 PLANTS	10020	1465	2870	3720	1965

1/ LOCKWOOD'S DIRECTORY OF THE PAPER AND ALLIED INDUSTRIES-1974 AND 1974 DIRECTORY OF THE FOREST PRODUCTS INDUSTRY.
2/ CAPACITY NOT AVAILABLE.

Table 4.--Production and imports of pulpwood, Central States, 1973

(In standard cords, unpeeled)¹

SPECIES AND DESTINATION	PRODUCTION BY STATES 2/					IMPORTS			TOTAL RECEIPTS
	ILLINOIS	INDIANA	IOWA	MISSOURI	REGIONAL	LAKE STATES	OTHER U.S.	TOTAL	
					TOTAL			IMPORTS	
SOFTWOODS									
ILLINOIS	416	0	0	3408	3824	0	0	0	3824
IND..IOWA.MO. 3/	0	0	0	0	0	0	400	400	400
EXPORTED 4/	89	0	0	414	503	0	0	0	0
TOTAL	505	0	0	3822	4327	0	400	400	4224
SOFT HARDWOODS									
ILLINOIS	35934	8747	0	800	45481	3113	183	3296	48777
IND..IOWA.MO. 3/	6430	14129	9385	10524	40468	6604	2222	8826	49794
EXPORTED 4/	1826	7572	0	1695	11093	0	0	0	0
TOTAL	44190	30448	9385	13019	97042	9717	2405	12122	98071
HARD HARDWOODS									
ILLINOIS	16344	400	0	880	17624	0	0	0	17624
IND..IOWA.MO. 3/	7353	14052	18576	7457	47438	5745	2519	8264	55702
EXPORTED 4/	1823	19119	0	11593	32535	0	0	0	0
TOTAL	25520	33571	18576	19930	97597	5745	2519	8264	73326
TOTAL ROUNDWOOD									
ILLINOIS	52694	9147	0	5088	66929	3113	183	3296	70225
IND..IOWA.MO. 3/	13783	28181	27961	17981	87906	12349	5141	17490	105396
EXPORTED 4/	3738	26691	0	13702	44131	0	0	0	0
TOTAL	70215	64019	27961	36771	198966	15462	5324	20786	175621
RESIDUE-SOFTWOOD									
ILLINOIS	5634	0	4670	1262	11566	16301	4648	20949	32515
IND..IOWA.MO. 3/	0	0	0	0	0	0	4000	4000	4000
EXPORTED 4/	0	165	0	0	165	0	0	0	0
TOTAL	5634	165	4670	1262	11731	16301	8648	24949	36515
RESIDUE-HARDWOOD									
ILLINOIS	48727	4908	1193	33842	80670	6651	2661	9312	89982
IND..IOWA.MO. 3/	11027	37298	12540	4674	65539	3181	8079	11260	76799
EXPORTED 4/	17919	41722	1735	35513	96889	0	0	0	0
TOTAL	69673	83928	15468	74029	243098	9832	10740	20572	166781
ALL WOOD MATERIAL									
ILLINOIS	90055	14055	5863	40192	159165	26065	7492	33557	192722
IND..IOWA.MO. 3/	24810	65479	40501	22655	153445	15530	17220	32750	186195
EXPORTED 4/	21657	68578	1735	49215	141185	0	0	0	0
TOTAL	146522	148112	48099	112062	453795	41595	24712	66307	378917

1/ FACTORS USED IN CONVERTING TO STANDARD GREEN CORDS (128 CU. FT.) WERE:

- 4,500 POUNDS OF SOFT HARDWOOD ROUNDWOOD;
- 5,000 POUNDS OF HARD HARDWOOD OR CONIFEROUS ROUNDWOOD;
- 4,100 POUNDS OF SOFTWOOD CHIPS (GREEN);
- 4,400 POUNDS OF HARDWOOD CHIPS (GREEN);
- 2,500 POUNDS OF CHIPS (ALL SPECIES, DRY).

2/ VERTICAL COLUMNS OF FIGURES UNDER BOX HEADING -PRODUCTION BY STATES- PRESENT THE AMOUNT OF PULPWOOD CUT IN EACH STATE.

3/ COMBINED TO PREVENT DISCLOSURE OF INDIVIDUAL MILL RECEIPTS.

4/ PULPWOOD SHIPPED TO MILLS OUTSIDE THE REGION.

Table 5.--Central States pulpwood production by state and destination, 1969-1973

(In thousand standard cords)

YEAR	ILLINOIS			INDIANA			IOWA			MISSOURI		
	: DESTINATION		:									
	TOTAL	CENTRAL	OTHER									
	: STATES:STATES:		:									
1969	132	128	4	132	107	25	31	30	1	81	71	10
1970	118	110	8	148	95	53	58	57	1	82	57	25
1971	133	99	34	139	77	62	53	52	1	97	62	35
1972	139	103	36	152	71	81	55	54	1	117	78	39
1973	146	124	22	148	80	68	48	46	2	112	63	49

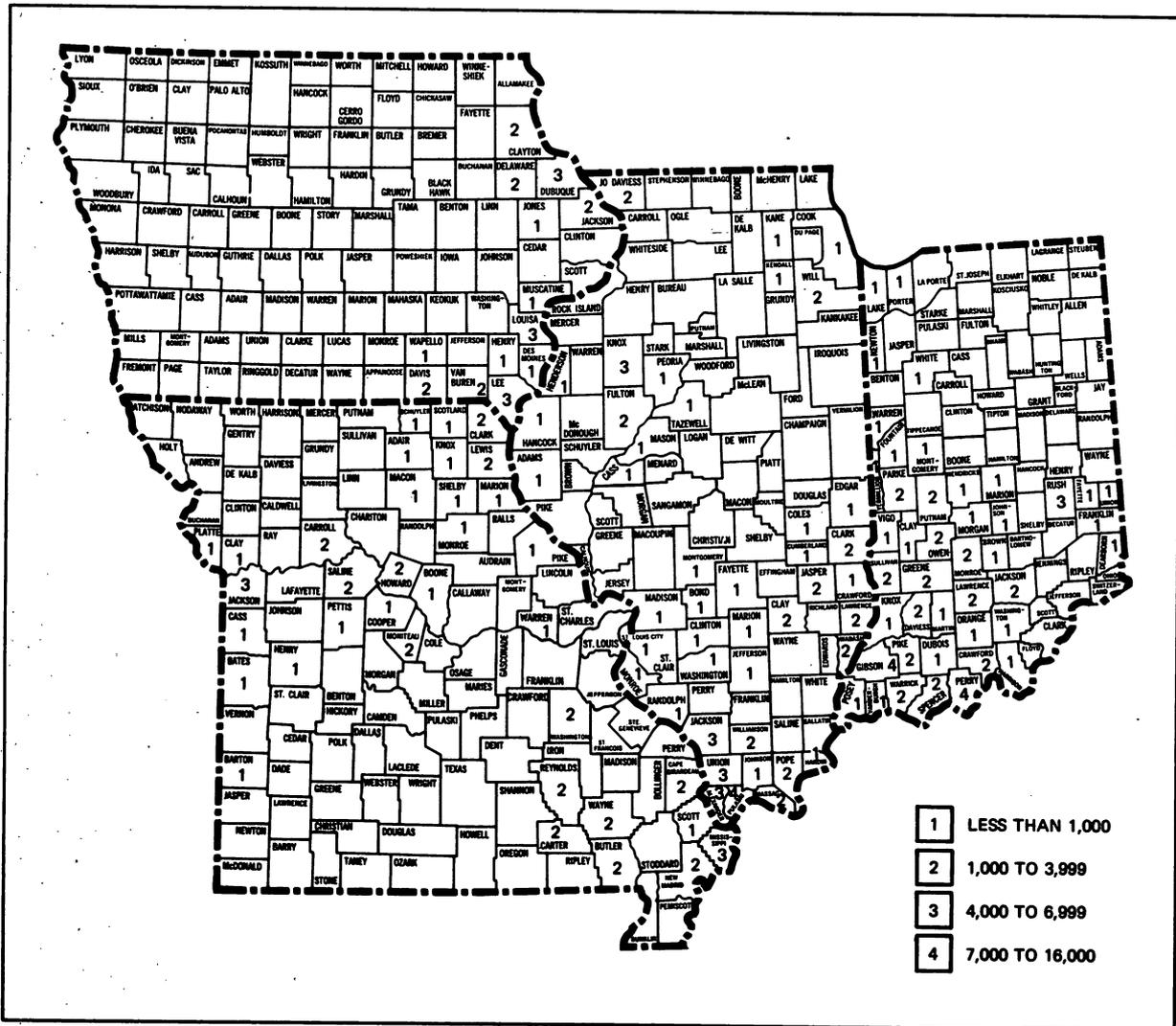


Figure 3.--Harvest of pulpwood bolts in the Central States, by counties, in standard cords, 1973.

Table 6.--Trends in receipts of roundwood and residue as pulpwood, Central States, 1969-1973

(In thousand standard cords, unpeeled)

TYPE OF MATERIAL AND AREA	1969	1970	1971	1972	1973
ROUNDWOOD					
ILLINOIS	50	62	57	67	70
INDIANA, IOWA, MISSOURI	146	131	107	99	106
TOTAL	196	193	164	166	176
RESIDUE					
ILLINOIS	135	100	107	116	122
INDIANA, IOWA, MISSOURI	64	68	67	74	81
TOTAL	199	168	174	190	203
ALL MATERIAL	395	361	338	356	379

Table 7.--Active woodpulp mills in the Central States, by location, type of pulp produced, and capacity, 1973

COMPANY	LOCATION	MILL CAPACITY IN TONS PER 24 HOURS 1/				
		TOTAL	SULFITE	SULFATE	GROUNDWOOD AND OTHER MECHANICAL	SEMI-CHEMICAL
ILLINOIS:						
ALTON ROX BOARD CO.	ALTON	300	0	0	0	300
BIRD AND SON, INC.	CHICAGO	40	0	0	40	0
CELOTEX CORP.	PFORIA	190	0	0	190	0
CERTAIN-TEED PRODUCTS CORP.	EAST ST LOUIS	100	0	0	100	0
FLINTKOTE CO., THE	MT CARMEL	40	0	0	40	0
GAF CORP.	JOLIET	100	0	0	100	0
JOHNS-MANVILLE PRODUCTS CORP.	WAUKEGAN	65	0	0	65	0
CELOTEX CORP.	WILMINGTON	30	0	0	30	0
TOTAL	8 PLANTS	865	0	0	565	300
INDIANA :						
WESTON PAPER AND MFG. CO.	TERRF HAUTE	270	0	0	0	270
TOTAL	1 PLANT	270	0	0	0	270
IOWA :						
CELOTEX CORP.	DURJOIE	90	0	0	0	90
CONSOLIDATED PACKAGING CORP.	FORT MADISON	140	0	0	0	140
TOTAL	2 PLANTS	230	0	0	0	230
MISSOURI :						
GAF CORP.	KANSAS CITY	90	0	0	90	0
HUERFERT FIBREBOARD, INC.	ROONEVILLE	60	0	0	60	0
TOTAL	2 PLANTS	150	0	0	150	0
ALL STATES	13 PLANTS	1515	0	0	715	800

1/ LOCKWOOD'S DIRECTORY OF THE PAPER AND ALLIED INDUSTRIES-1974, AND 1974 DIRECTORY OF THE FOREST PRODUCTS INDUSTRY.
2/ CAPACITY NOT AVAILABLE.

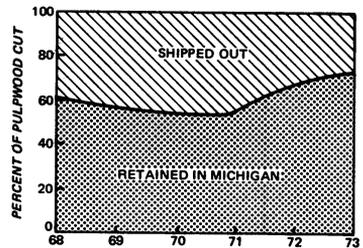
APPENDIX

Table 8.--Lake States pulpwood production, by state of origin and destination, 1969-1973

(In thousand standard cords)

MICHIGAN

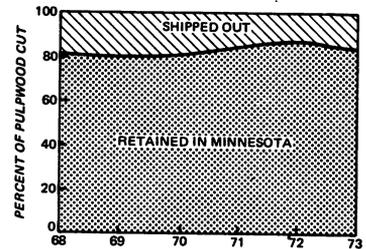
YEAR	TOTAL : CUT	DESTINATION OF PULPWOOD			
		MINNESOTA	WISCONSIN	MICHIGAN	OTHER
1969	1,302	--	537	752	13
1970	1,406	--	610	785	11
1971	1,267	--	567	688	12
1972	1,401	--	470	917	14
1973	1,585	--	418	1,131	36
5-YEAR AVERAGE	1,392	--	520	855	17



MINNESOTA

YEAR	TOTAL : CUT	DESTINATION OF PULPWOOD			
		MINNESOTA	WISCONSIN	MICHIGAN	OTHER
1969	1,192	977	188	--	27
1970	1,224	981	219	*	24
1971	1,196	992	188	*	16
1972	1,354	1,168	166	--	20
1973	1,376	1,152	194	*	30
5-YEAR AVERAGE	1,268	1,054	191	*	23

*Less than 500 cords.



WISCONSIN

YEAR	TOTAL : CUT	DESTINATION OF PULPWOOD			
		MINNESOTA	WISCONSIN	MICHIGAN	OTHER
1969	1,450	17	1,412	9	12
1970	1,656	11	1,627	10	8
1971	1,552	35	1,502	*	15
1972	1,537	28	1,493	2	14
1973	1,758	14	1,671	55	18
5-YEAR AVERAGE	1,590	21	1,541	15	13

*Less than 500 cords.

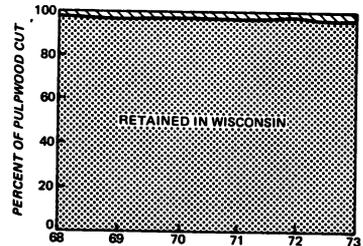


Table 9.--Lake States pulpwood production, by Forest Survey Unit and destination by state, 1973

(In hundred standard cords, roughwood basis)

MICHIGAN					
UNIT	TOTAL	DESTINATION OF PULPWOOD			
	CUT	MICHIGAN	MINNESOTA	WISCONSIN	OTHER
F. UPPER PENINSULA	3992	2430	0	1555	7
W. UPPER PENINSULA	5631	2835	0	2622	168
N. LOWER PENINSULA	5557	5404	0	0	153
S. LOWER PENINSULA	674	640	0	0	34
TOTAL	15854	11709	0	4187	362

MINNESOTA					
UNIT	TOTAL	DESTINATION OF PULPWOOD			
	CUT	MICHIGAN	MINNESOTA	WISCONSIN	OTHER
NORTHEASTERN	5457	0	4272	1072	113
CENTRAL PINE	4465	4	3662	713	86
RAINY RIVER	3154	0	2954	104	96
SOUTHEASTERN	529	0	512	12	5
WESTERN PRAIRIE	162	0	124	38	0
TOTAL	13767	4	11524	1939	300

WISCONSIN					
UNIT	TOTAL	DESTINATION OF PULPWOOD			
	CUT	MICHIGAN	MINNESOTA	WISCONSIN	OTHER
NORTHEASTERN	7494	497	0	6997	0
NORTHWESTERN	6546	55	87	6399	5
CENTRAL	3008	0	29	2946	33
SOUTHWESTERN	753	0	29	213	111
SOUTHEASTERN	184	0	0	154	30
TOTAL	17585	552	145	16709	179

Table 10.--Lake States pulpwood production by species, state, and Survey Unit, 1969-1973

(In thousand standard cords, roughwood basis)

UNIT	MICHIGAN									
	ASPEN					BALSAM FIR				
	ANNUAL PRODUCTION					ANNUAL PRODUCTION				
	1969	1970	1971	1972	1973	1969	1970	1971	1972	1973
E. 1/2 UPPER PENINSULA	119	124	125	89	93	27	41	26	33	41
W. 1/2 UPPER PENINSULA	184	180	177	188	225	16	25	25	24	26
N. 1/2 LOWER PENINSULA	296	288	242	241	275	1	*	1	3	2
S. 1/2 LOWER PENINSULA	7	4	3	11	10	--	--	--	--	--
TOTAL	606	596	547	529	603	44	66	52	60	69

MINNESOTA										
NORTHEASTERN	204	208	205	241	284	10	9	9	9	13
CENTRAL PINE	289	249	246	260	221	18	22	20	26	28
RAINY RIVER	148	127	135	160	142	12	14	11	31	24
SOUTHEASTERN	5	11	20	25	24	--	*	--	--	--
WESTERN PRAIRIE	14	5	2	3	2	--	--	--	--	*
TOTAL	660	600	608	689	673	40	45	40	66	65

WISCONSIN										
NORTHEASTERN	416	430	402	349	380	28	40	35	25	34
NORTHWESTERN	244	296	302	311	331	22	29	19	23	32
CENTRAL	35	44	31	23	46	*	*	*	1	1
SOUTHWESTERN	*	*	--	1	3	--	--	--	--	--
SOUTHEASTERN	2	1	1	*	1	--	--	--	--	--
TOTAL	697	771	736	684	761	50	69	54	49	67

LAKE STATES										
	1,963	1,967	1,891	1,902	2,037	134	180	146	175	201

*LESS THAN 500 CORDS.

(Table 10 continued on next page)

(Table 10 continued)

MICHIGAN										
UNIT	BIRCH					HEMLOCK				
	ANNUAL PRODUCTION					ANNUAL PRODUCTION				
	1969	1970	1971	1972	1973	1969	1970	1971	1972	1973
E. 1/2 UPPER PENINSULA	1	4	1	10	19	11	17	8	17	22
W. 1/2 UPPER PENINSULA	1	2	3	7	16	52	52	34	33	36
N. 1/2 LOWER PENINSULA	21	27	19	19	25	*	*	--	--	--
S. 1/2 LOWER PENINSULA	*	--	--	--	--	--	--	--	--	--
TOTAL	23	33	23	36	60	63	69	42	50	58
MINNESOTA										
NORTHEASTERN	3	17	8	15	17	--	--	--	--	--
CENTRAL PINE	*	12	26	26	23	--	--	--	--	--
RAINY RIVER	--	2	1	1	1	--	--	--	--	--
SOUTHEASTERN	--	--	*	*	1	--	--	--	--	--
WESTERN PRAIRIE	--	*	--	--	--	--	--	--	--	--
TOTAL	3	31	35	42	42	--	--	--	--	--
WISCONSIN										
NORTHEASTERN	23	32	22	20	30	32	33	28	26	21
NORTHWESTERN	37	42	28	26	40	16	16	13	13	10
CENTRAL	3	2	1	*	1	3	3	1	2	1
SOUTHWESTERN	--	--	--	1	1	--	--	--	--	--
SOUTHEASTERN	--	--	--	--	--	--	--	--	--	*
TOTAL	63	76	51	47	72	51	52	42	41	32
LAKE STATES	89	140	109	125	174	114	121	84	91	90

*LESS THAN 500 CORDS.

MICHIGAN										
UNIT	PINE					SPRUCE				
	ANNUAL PRODUCTION					ANNUAL PRODUCTION				
	1969	1970	1971	1972	1973	1969	1970	1971	1972	1973
E. 1/2 UPPER PENINSULA	59	57	80	84	67	20	29	22	20	28
W. 1/2 UPPER PENINSULA	38	34	41	37	36	18	22	22	18	16
N. 1/2 LOWER PENINSULA	109	145	110	102	88	1	*	1	--	*
S. 1/2 LOWER PENINSULA	1	4	4	5	12	--	--	--	--	--
TOTAL	207	240	235	228	203	39	51	45	38	46
MINNESOTA										
NORTHEASTERN	133	123	119	121	113	66	64	64	76	83
CENTRAL PINE	74	68	57	66	68	27	31	29	35	35
RAINY RIVER	18	19	26	19	17	60	85	74	80	92
SOUTHEASTERN	*	1	*	1	1	*	*	--	--	--
WESTERN PRAIRIE	12	10	12	9	6	1	1	1	1	5
TOTAL	237	221	214	216	205	154	181	168	192	215
WISCONSIN										
NORTHEASTERN	63	72	68	53	43	10	12	9	9	10
NORTHWESTERN	77	96	105	99	100	3	4	3	4	6
CENTRAL	75	87	93	90	85	*	*	*	*	--
SOUTHWESTERN	*	2	1	2	3	--	--	--	--	--
SOUTHEASTERN	1	2	1	2	1	--	--	--	--	--
TOTAL	216	259	268	246	232	13	16	12	13	16
LAKE STATES	660	720	717	690	640	206	248	225	243	277

*LESS THAN 500 CORDS.

(Table 10 continued on next page)

(Table 10 continued)

MICHIGAN

UNIT	TAMARACK					MISCELLANEOUS HARDWOODS				
	ANNUAL PRODUCTION					ANNUAL PRODUCTION				
	1969	1970	1971	1972	1973	1969	1970	1971	1972	1973
E. 1/2 UPPER PENINSULA	1	2	1	2	2	10	18	14	50	93
W. 1/2 UPPER PENINSULA	1	1	2	1	3	38	28	41	97	123
N. 1/2 LOWER PENINSULA	--	--	--	--	--	141	143	136	153	145
S. 1/2 LOWER PENINSULA	--	--	--	--	--	7	7	6	9	5
TOTAL	2	3	3	3	5	196	196	197	309	366

MINNESOTA

NORTHEASTERN	4	5	4	4	4	11	14	12	11	14
CENTRAL PINE	14	23	22	19	16	11	3	*	1	1
RAINY RIVER	2	7	5	8	11	8	9	9	18	16
SOUTHEASTERN	--	--	--	--	1	1	1	9	--	5
WESTERN PRAIRIE	1	1	1	*	1	1	--	--	--	--
TOTAL	21	36	32	31	33	32	27	30	30	36

WISCONSIN

NORTHEASTERN	1	2	2	2	1	87	110	105	128	150
NORTHWESTERN	1	2	1	1	*	61	79	67	84	104
CENTRAL	*	*	*	*	--	81	99	89	111	136
SOUTHWESTERN	--	--	--	--	--	5	4	5	5	6
SOUTHEASTERN	--	--	--	--	--	4	4	3	5	4
TOTAL	2	4	3	3	1	238	296	269	333	400

LAKE STATES

25 43 38 37 39 466 519 496 672 802

*LESS THAN 500 CORDS.

MICHIGAN

UNIT	RESIDUE					ALL SPECIES ^{1/}				
	ANNUAL PRODUCTION					ANNUAL PRODUCTION				
	1969	1970	1971	1972	1973	1969	1970	1971	1972	1973
E. 1/2 UPPER PENINSULA	29	37	40	36	35	277	329	317	344	400
W. 1/2 UPPER PENINSULA	54	63	36	54	80	402	407	381	460	563
N. 1/2 LOWER PENINSULA	6	12	12	20	21	575	615	521	538	556
S. 1/2 LOWER PENINSULA	33	40	35	33	40	48	55	48	58	67
TOTAL	122	152	123	143	176	1,302	1,406	1,267	1,400	1,586

MINNESOTA

NORTHEASTERN	6	12	12	15	18	437	452	433	492	546
CENTRAL PINE	4	28	26	33	55	437	436	426	466	447
RAINY RIVER	5	5	8	8	12	253	268	269	325	315
SOUTHEASTERN	30	38	23	32	21	36	51	52	58	53
WESTERN PRAIRIE	--	--	--	--	2	29	17	16	13	16
TOTAL	45	83	69	88	108	1,192	1,224	1,196	1,354	1,377

WISCONSIN

NORTHEASTERN	49	43	42	43	80	709	774	713	655	749
NORTHWESTERN	17	17	17	18	32	478	581	555	579	655
CENTRAL	16	20	24	20	31	213	255	239	247	301
SOUTHWESTERN	27	24	26	27	22	32	30	32	36	35
SOUTHEASTERN	11	9	8	13	12	18	16	13	20	18
TOTAL	120	113	117	121	177	1,450	1,656	1,552	1,537	1,758

LAKE STATES

287 348 309 352 461 3,944 4,286 4,015 4,291 4,721

^{1/} INCLUDES RESIDUE.

Table 11.--Lake States pulpwood production by county and species, 1973

(In hundred standard cords, roughwood basis)

MICHIGAN

UNIT AND COUNTY	ALL SPECIES	ASPEN	BALSAM	BIRCH	HEMLOCK	PINE	SPRUCE	TAMARACK	MISC. HARDWOODS	CENAR	RESIDUES
E. UPPER PENINSULA											
ALGON	454	50	28	38	29	112	10	3	184	0	
CHIPPEWA	280	40	22	16	23	91	12	3	73	0	
DELTA	932	224	110	46	39	161	122	4	224	0	
LUCY	391	24	34	21	41	138	27	4	102	0	
HACKINAC	164	21	14	12	0	39	6	1	62	0	
MEMMINEE	722	458	97	11	20	6	45	3	82	0	
SCHOOLCRAFT	701	115	100	42	54	126	57	6	201	0	
TOTAL	3995	934	405	186	215	673	279	24	928	0	351
W. UPPER PENINSULA											
HARAGA	999	395	35	60	73	77	10	6	334	0	
DICKINSON	889	580	39	26	20	38	44	4	138	0	
GOGHEIC	404	156	20	3	108	9	5	1	100	0	
HOLIGHTON	323	150	12	6	20	13	4	1	117	0	
IRON	1040	540	81	22	39	38	54	4	262	0	
KEMUNAW	6	0	2	0	0	0	2	0	2	0	
MARGUETTE	812	204	67	38	74	173	53	9	194	0	
ONTONAGON	360	226	8	5	27	8	3	1	82	0	
TOTAL	5632	2251	264	160	361	356	184	26	1231	0	799
N. LOWER PENINSULA											
ALCONA	461	255	1	31	0	7	0	0	127	0	
ALPENA	170	82	9	24	0	25	1	0	29	0	
ANTHUR	14	11	0	1	0	1	0	0	1	0	
ARENAC	2	1	0	0	0	0	0	0	1	0	
BEAUFORT	112	63	0	4	0	0	0	0	45	0	
CHEBOYGAN	133	60	1	25	0	21	0	0	26	0	
CLARE	174	121	0	10	0	15	0	0	28	0	
CRAWFORD	151	11	0	0	0	138	0	0	2	0	
GLADWIN	18	11	0	1	0	5	0	0	1	0	
GRAND TRAVERSE	132	102	0	11	0	2	0	0	17	0	
IOSCO	155	4	0	0	0	151	0	0	0	0	
ISABELLA	3	3	0	0	0	0	0	0	0	0	
KALKASKA	118	60	0	5	0	38	0	0	15	0	
LAKE	368	101	0	6	0	52	0	0	200	0	
LEFFLANA	27	21	0	1	0	0	0	0	5	0	
MANISTEE	316	168	0	11	0	13	0	0	124	0	
MASON	159	76	0	7	0	1	0	0	75	0	
MECOSTA	209	153	0	2	0	23	0	0	31	0	
MIDLAND	0	0	0	0	0	0	0	0	0	0	
MISSAUKEE	103	75	0	6	0	5	0	0	17	0	
MONTMORENCY	410	166	2	21	0	110	0	0	111	0	
NEWAYGO	301	157	0	3	0	33	0	0	100	0	
OCFANA	91	52	0	1	0	10	0	0	28	0	
OGEMAW	108	49	0	8	0	32	0	0	19	0	
OSCEOLA	260	158	0	2	0	3	0	0	97	0	
OSHTON	474	294	1	28	0	66	0	0	85	0	
OSHTON	0	3	0	0	0	3	0	0	3	0	
PRESQUE ISLE	167	92	2	30	0	3	0	0	40	0	
ROSCOMMON	516	303	0	6	0	54	0	0	153	0	
WEXFORD	186	59	0	5	0	70	0	0	52	0	
TOTAL	5560	2751	16	249	0	881	1	0	1441	0	213
S. LOWER PENINSULA											
ALLEGAN	8	3	0	0	0	0	0	0	5	0	
BARRETT	2	0	0	0	0	0	0	0	2	0	
BEAUFORT	0	0	0	0	0	0	0	0	0	0	
CASS	11	0	0	0	0	10	0	0	1	0	
GRATIOT	7	5	0	0	0	0	0	0	2	0	
IONIA	1	1	0	0	0	0	0	0	0	0	
KALAMAZOO	4	3	0	0	0	0	0	0	1	0	
KENT	2	0	0	0	0	1	0	0	1	0	
LENAWEE	0	0	0	0	0	0	0	0	0	0	
MONTCALM	94	73	0	0	0	3	0	0	18	0	
MUSKOGON	99	7	0	0	0	78	0	0	14	0	
OAKLAND	0	0	0	0	0	0	0	0	0	0	
OTTAWA	34	0	0	0	0	33	0	0	1	0	
SAGINAW	0	0	0	0	0	0	0	0	0	0	
SANILAC	0	0	0	0	0	0	0	0	0	0	
VAN BUREN	6	5	0	0	0	0	0	0	1	0	
TOTAL	672	97	0	0	0	125	0	0	46	0	404
STATE TOTAL	15459	6033	685	595	576	2035	464	50	3654	0	1767

1/ INCLUDES ONLY THOSE COUNTIES THAT SUPPLIED PULPWOOD IN 1973.
2/ COUNTY FIGURES ARE NOT AVAILABLE.
X=LESS THAN 50 CORDS.

(CONTINUED ON NEXT PAGE)

MINNESOTA

UNIT AND COUNTY	1/ ALL SPECIES	ASPFN	BALSAM	BIRCH	HEM-LOCK	PNF	SPRUCE	TAM-ARACK	MISC. HDWDS.	CEDAR	2/ RESIDUES
NORTHEASTERN											
CAPITON	464	379	5	47	0	22	6	X	5	0	
COOK	292	20	9	0	0	48	200	0	15	0	
LAKE	772	262	4	28	0	277	201	X	0	0	
PINE	153	135	X	4	0	14	X	0	0	0	
ST. LOUIS	3597	2047	113	87	0	774	419	79	118	0	
TOTAL	5457	2843	131	166	0	1135	826	39	138	0	179
CENTRAL PINE											
AITHIN	304	217	6	24	0	9	16	32	0	0	
HECKER	16	2	2	0	0	11	1	0	0	0	
HELTRAMI	945	514	92	75	0	124	122	14	4	0	
CASS	517	295	9	42	0	142	13	16	0	0	
CLIFPATER	712	225	1	8	0	27	30	21	0	0	
CROW WING	144	51	X	4	0	89	0	0	0	0	
HURHARD	400	283	3	2	0	101	2	9	0	0	
ITASCA	1219	612	167	79	0	118	172	65	6	0	
WADENA	65	8	0	0	0	57	0	0	0	0	
TOTAL	4468	2207	280	234	0	678	356	157	10	0	546
RAINY RIVER											
KOOCHICING	2773	1362	241	12	0	133	763	104	158	0	
LAKE OF THE WOODS	256	52	2	0	0	31	160	3	8	0	
TOTAL	3155	1414	243	12	0	164	923	107	166	0	126
SOUTHEASTERN											
HENNEPIN	5	0	0	0	0	0	0	0	5	0	
KANABEC	21	21	0	0	0	0	0	0	0	0	
MILIF LACS	198	173	0	7	0	0	X	8	10	0	
MORTONSON	57	44	0	2	0	11	0	0	0	0	
TOSH	3	0	0	0	0	3	0	0	0	0	
WARASHA	12	0	0	0	0	0	0	0	12	0	
WINONA	19	0	0	0	0	0	0	0	19	0	
TOTAL	528	238	0	9	0	14	0	8	46	0	213
WESTERN PRAIRIE											
KANNOEN	7	4	0	0	0	0	0	3	0	0	
HOLK	31	0	0	0	0	1	23	7	0	0	
ROSEAU	105	19	1	0	0	58	25	2	0	0	
TOTAL	141	23	1	0	0	59	48	12	0	0	18
STATE TOTAL	13749	6725	655	421	0	2050	2153	323	360	0	1082

1/ INCLUDES ONLY THOSE COUNTIES THAT SUPPLIED PULPWOOD IN 1973.
 2/ COUNTY FIGURES ARE NOT AVAILABLE.
 X=LESS THAN 50 CORDS.

(CONTINUED ON NEXT PAGE)

WISCONSIN

UNIT AND COUNTY 1/	ALL : SPECIFS :	ASPEN :	RAI SAM :	BIRCH :	HFM- : LOCK :	PINE :	SPRUCE :	TAM- : ARACK :	MISC. : HOWDS. :	CEDAR :	RESIDUES 2/
NORTHEASTERN											
FLORENCE	477	278	11	7	26	28	6	1	120	0	
FORREST	856	403	83	19	48	37	23	2	241	0	
LANGLADE	658	435	8	16	13	5	3	3	175	0	
LINCOLN	1011	568	19	37	10	102	8	1	237	0	
MARINETTE	889	595	59	12	8	82	22	X	111	0	
OCONTO	322	259	1	3	0	26	X	X	24	0	
ONFIDA	1396	803	101	77	25	82	34	2	272	0	
SHAWANO 3/	278	119	1	1	56	11	X	X	90	0	
VILAS	804	345	37	128	7	54	7	X	226	0	
TOTAL	7489	3805	340	300	211	427	103	9	1496	0	798
NORTHWESTERN											
ASHLAND	802	376	121	35	17	50	23	1	179	0	
BARRON	9	0	0	1	0	0	0	0	8	0	
HAYFIELD	1100	653	22	97	6	258	3	X	61	0	
HUBBARD	158	4	0	1	0	152	0	1	0	0	
DOUGLAS	749	471	3	16	X	239	4	X	16	0	
IRON	657	495	23	42	16	2	5	0	74	0	
POLK	33	5	0	0	0	28	0	0	0	0	
PRICE	1297	801	71	107	16	35	12	X	255	0	
RUSK	148	77	X	7	1	2	0	0	61	0	
SAWYER	455	176	71	63	7	57	9	0	72	0	
TAYLOR	624	224	12	33	32	24	2	X	297	0	
WASHINGTON	203	25	1	2	0	154	X	1	20	0	
TOTAL	6549	3307	324	404	95	1001	58	3	1043	0	314
CENTRAL											
ADAMS	367	22	0	X	0	184	0	X	161	0	
CHIPPEWA	57	16	1	5	4	3	0	X	28	0	
CLARK	280	59	X	X	1	38	0	0	182	0	
EAU CLAIRE	21	2	0	0	0	19	0	0	X	0	
JACKSON	249	6	0	X	0	229	0	X	14	0	
JUNEAU	329	45	0	1	0	141	0	0	142	0	
MARATHON	658	226	4	4	9	18	X	0	397	0	
MARQUETTE	97	1	0	0	0	8	0	0	88	0	
MONROE	24	2	0	0	0	17	0	0	5	0	
PORTAGE	178	33	X	X	2	51	X	X	92	0	
WAUPACA	57	14	2	4	X	13	0	0	24	0	
WAUSHARA	79	1	0	0	0	47	X	0	31	0	
WOOD	305	29	X	X	1	80	X	X	195	0	
TOTAL	3010	456	7	14	17	848	0	0	1359	0	309
SOUTHWESTERN											
BUFFALO	1	0	0	0	0	1	0	0	0	0	
DUNN	3	X	0	0	0	3	0	0	X	0	
GRANT	80	12	0	6	0	0	0	0	62	0	
LACROSSE	2	0	0	0	0	2	0	0	0	0	
PEPIN	6	0	0	0	0	6	0	0	0	0	
PIERCE	0	X	0	0	0	0	0	0	0	0	
RICHMOND	2	0	0	0	0	2	0	0	0	0	
SAUK	32	16	0	X	0	16	0	0	X	0	
VERNON	0	X	0	0	0	0	0	0	0	0	
TOTAL	152	28	0	6	0	30	0	0	62	0	226
SOUTHEASTERN											
BOON	34	12	0	0	2	0	0	0	20	0	
COLUMBIA	21	3	0	X	0	11	0	0	7	0	
DANE	7	0	0	0	0	0	0	0	7	0	
FOND DU LAC	0	X	0	0	0	0	0	0	0	0	
GREEN LAKE	0	0	0	0	0	X	0	0	0	0	
MILWAUKEE	2	0	0	0	0	0	0	0	2	0	
OUTAGAMIE	0	0	0	0	0	0	X	0	X	0	
ROCK	0	0	0	0	0	X	0	0	0	0	
WASHINGTON	1	0	0	0	0	0	0	0	1	0	
TOTAL	184	15	0	0	2	11	0	0	37	0	119
STATE TOTAL	17584	7611	671	724	325	2317	161	12	3997	0	1766

1/ INCLUDES ONLY THOSE COUNTIES THAT SUPPLIED PULPWOOD IN 1973.
 2/ COUNTY FIGURES ARE NOT AVAILABLE.
 3/ INCLUDES MENOMINEE COUNTY.
 X=LESS THAN 50 CORDS.

Blyth, James E.

1975. Pulpwood production in the North Central Region, 1973. North Cent. For. Exp. Stn., St. Paul, Minn., 16 p., illus. (USDA For. Serv. Resour. Bull. NC-27)

Presents 1973 pulpwood production and receipt data for the Lake States and Central States. Pulpwood production for the Lake States is given by species for each county, and production by Forest Survey Unit is compared with that of previous years. For the Central States, 1973 pulpwood production and receipt data are presented by State, and four production classes are shown by county.

OXFORD: 861.0(77):721:792. KEY WORDS: roundwood, residue, receipts, Lake States, Central States.

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