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Abstract

This publication provides current and historical information on primary and secondary hardwood product production, prices, international trade, and employment.

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Introduction

This is the first in a series of statistical bulletins to be released by the USDA Forest Service, Northeastern Forest Experiment Station. These statistics are for use by hardwood related industries, forest managers, the academic community, and the general public. Current as well as historical data are presented for comparison.

The statistics presented in this bulletin are not inclusive. Specific series were selected based on their completeness and representativeness. For instance, Ohio log and stumpage prices have been included because prices for all major species and log grades have been reported on a biannual basis for over two decades. Because not all data series are included in this first issue, future bulletins will probably include

additional tables as well as updates of existing tables.

Future issues of these reports will also contain a feature article concerning some aspect of the domestic or international market for hardwood stumpage, roundwood, primary hardwood products, or secondary hardwood products. These articles will be based on current research findings by economic and utilization scientists at the Forestry Sciences Laboratory at Princeton, West Virginia.

We need your opinion to make this series more useful. We need your input on alternative data series we can publish and more useful breakdowns of the data that are currently published. Send your comments to Jean W. Nolley; Northeastern Forest Experiment Station; Forestry Sciences Laboratory; Route 2, Box 562-B; Princeton, WV 24740.

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HARDWOOD STUMPAGE, LOG, AND LUMBER PRICES

Table 1.--Average hardwood stumpage prices in Ohio,
biannual, 1975-87
(Dollars per thousand board feet, Doyle Scale)

Year/season	White oak	Red oak	Cherry	Yellow- poplar
1975/spring	71	64	77	58
1975/fall	72	63	77	58
1976/spring	72	67	75	59
1976/fall	68	67	74	55
1977/spring	89	85	95	65
1977/fall	93	88	93	70
1978/spring	112	108	114	81
1978/fall	131	117	132	85
1979/spring	151	125	166	87
1979/fall	160	142	177	95
1980/spring	133	122	143	77
1980/fall	148	135	166	81
1981/spring	149	142	161	93
1981/fall	130	134	148	84
1982/spring	135	130	145	82
1982/fall	142	145	144	86
1983/spring	147	145	162	89
1983/fall	174	172	185	99
1984/spring	164	184	180	102
1984/fall	169	181	183	107
1985/spring	163	168	180	94
1985/fall	168	180	176	101
1986/spring	NA	NA	NA	NA
1986/fall	191	213	212	113
1987/spring	188	221	205	111
1987/fall	211	252	234	118

NA - Not available.

Source: Ohio Agricultural Statistics Service, Columbus,
Ohio.

Table 2.--Prices of red oak logs in Ohio, biannual, 1975-87
(Dollars per thousand board feet, Doyle Scale)

Year/season	Average all grades	Grade 1 16 inches	Grade 1	Grade 2	Grade 3
1975/spring	113	161	127	95	70
1975/fall	118	183	137	98	74
1976/spring	130	205	146	110	84
1976/fall	142	224	158	119	90
1977/spring	141	258	184	127	94
1977/fall	162	268	190	126	91
1978/spring	181	308	217	151	103
1978/fall	197	332	247	168	117
1979/spring	197	371	277	183	123
1979/fall	209	363	256	176	119
1980/spring	193	332	252	170	113
1980/fall	203	320	241	165	111
1981/spring	216	324	247	168	110
1981/fall	202	339	237	161	100
1982/spring	203	351	250	170	110
1982/fall	277	356	257	173	112
1983/spring	245	385	285	184	111
1983/fall	273	441	301	195	118
1984/spring	322	476	348	193	133
1984/fall	293	465	327	194	124
1985/spring	278	447	326	184	116
1875/fall	303	479	347	211	124
1986/spring	284	469	324	196	119
1986/fall	310	519	370	230	121
1987/spring	306	550	392	228	121
1987/fall	333	608	446	248	130

Source: Ohio Agricultural Statistics Service, Columbus, Ohio.

Table 3.--Prices of grade 1 white oak, cherry,
and poplar logs in Ohio, biannual, 1975-87
(Dollars per thousand board feet, Doyle Scale)

Year/season	Grade 1		
	White oak	Cherry	Poplar
1975/spring	131	143	110
1975/fall	140	162	121
1976/spring	153	169	130
1976/fall	165	187	132
1977/spring	181	208	141
1977/fall	197	214	143
1978/spring	217	256	159
1978/fall	250	290	175
1979/spring	280	309	179
1979/fall	261	294	165
1980/spring	258	270	160
1980/fall	270	283	161
1981/spring	281	300	176
1981/fall	232	263	175
1982/spring	240	272	162
1982/fall	242	283	166
1983/spring	252	287	164
1983/fall	270	305	166
1984/spring	288	373	166
1984/fall	301	328	177
1985/spring	277	308	173
1985/fall	269	312	166
1986/spring	256	308	175
1986/fall	294	335	172
1987/spring	316	336	171
1987/fall	359	390	180

Source: Ohio Agricultural Statistics Service,
Columbus, Ohio.

Table 4.--Air-dried hardwood prices
(Dollars per thousand board feet)

Year	4/4 Appalachian red oak 1C	4/4 Poplar 1C	4/4 Cherry 1C	4/4 Northern hard maple 1C	4/4 Northern soft maple 1C
1978	378	251	535	290	281
1979	410	272	600	328	318
1980	350	257	585	336	303
1981	371	278	580	335	290
1982	394	273	570	330	290
1983	481	260	570	320	290
1984	588	260	610	323	301
1985	484	267	605	300	305
1986	483	301	615	284	305
1987:					
1st quarter	565	313	615	290	305
2nd quarter	585	313	615	295	305
3rd quarter	595	313	620	300	305
4th quarter	625	308	665	315	305
1988:					
1st quarter	635	300	725	325	305
2nd quarter	635	300	780	355	315

Source: By permission from the Hardwood Market Report, Memphis, TN.

Table 5.--Kiln-dried hardwood lumber prices, 1987-88
(Dollars per thousand board feet)

Date	4/4 Appalachian red oak 1C	4/4 Poplar 1C	4/4 Cherry 1C	4/4 Northern hard maple 1C	4/4 Northern soft maple 1C
12/86	760-820	NA	NA	NA	NA
1/87	740-850	NA	NA	NA	NA
2/87	760-865	NA	750-770	NA	NA
3/87	825-880	NA	NA	560-600	NA
4/87	NA	NA	690-725	340-390	NA
5/87	875-950	350-410	NA	370-400	NA
6/87	850-940	340-400	740-815	380-460	NA
7/87	850-940	340-400	740-815	380-460	390-440
8/87	850-940	340-400	760-820	380-460	390-440
9/87	875-995	340-400	775-835	380-460	390-440
10/87	875-995	340-400	825-900	380-460	390-440
11/87	850-1010	340-400	875-950	380-460	390-440
12/87	850-1010	340-400	900-975	380-460	390-440
1/88	835-995	340-400	920-1020	495-570	410-485
2/88	815-975	340-400	920-1020	495-570	410-485
3/88	815-975	340-400	960-1060	495-570	410-485
4/88	815-955	340-400	970-1070	495-570	410-485

NA - Not available.

Source: Weekly Hardwood Review, Charlotte, NC.

HARDWOOD PRODUCT PRICES, PRODUCTION, AND EMPLOYMENT

Table 6.--Producer price indexes for selected wood industries, 1978-88
(1982=100)

Year	Hardwood dimension	Wood kitchen cabinets	Wood household furniture	Upholstered household furniture	Wood office furniture
1978	NA	76.2	71.9	78.7	71.8
1979	NA	83.1	78.2	82.6	79.6
1980	NA	90.8	88.3	90.3	87.0
1981	97.4	96.1	95.3	95.8	94.0
1982	100.0	100.0	100.0	100.0	100.0
1983	102.9	100.6	103.3	102.1	104.1
1984	114.4	103.7	107.9	104.3	108.6
1985	115.6	105.1	111.2	108.1	113.4
1986	115.8	107.2	113.6	109.4	117.5
1987:					
1st quarter	120.1	109.0	115.8	110.6	120.4
2nd quarter	121.3	109.7	117.1	111.5	121.5
3rd quarter	122.6	111.0	118.1	112.7	122.0
4th quarter	122.9	111.7	119.5	115.4	122.6
1988:					
1st quarter	124.5	113.1	121.3	116.0	124.0

NA - Not available.

Source: Producer Price Indexes, U.S. Department of Labor, Bureau of
Labor Statistics.

Table 7.--Total wood household furniture and parts (imports c.i.f.), 1972-87
(in millions of dollars)

Year	Value of ^a domestic wood furniture shipments (actual \$)	Value of ^a domestic wood furniture shipments (1982 \$)	Value of ^b wood furniture imports (actual \$)	Value of wood ^c furniture imports (1982 \$)	Ratio of ^d (imports to exports)
1972	2870	5657	137	284	.06
1973	3201	6011	184	359	.06
1974	3381	5382	220	384	.07
1975	3095	4539	182	301	.06
1976	3780	5106	258	402	.07
1977	4140	5781	322	478	.08
1978	4864	6400	463	637	.10
1979	4942	6000	560	710	.11
1980	5009	5529	581	656	.12
1981	5322	5472	663	695	.12
1982	5057	4846	727	727	.14
1983	5702	5228	953	913	.17
1984	6163	5633	1310	1197	.19
1985	6728	5554	1739	1541	.23
1986	7117	5747	1937	1680	.27
1987	7675	6039	2115	1787	.28

^a Source: U.S. Department of Commerce, International Trade Administration.

^b Source: U.S. Department of Commerce, Bureau of the Census.

^c Deflated by wood furniture price index reported in U.S. Industrial Outlook.

^d Developed from columns 1 and 3.

Table 8.--Selected production indexes for major
hardwood products, 1972-87
(1972=100)

Year	Wood ^a pallets	Oak strip ^b flooring	Wood ^c furniture
1972	100.0	100.0	100.0
1973	119.4	70.7	106.3
1974	132.3	41.5	95.1
1975	102.6	37.4	80.2
1976	126.5	41.7	90.3
1977	152.3	42.1	102.2
1978	174.2	40.7	113.1
1979	191.0	37.0	106.1
1980	166.5	29.9	97.7
1981	162.6	31.8	96.7
1982	147.1	28.7	85.7
1983	166.5	37.6	92.4
1984	196.1	42.0	99.6
1985	216.1	46.6	98.2
1986	240.6	55.6	101.6
1987	270.0	66.6	106.7

^a Derived from National Wood Pallet and
Container Association statistics.

^b Derived from National Oak Flooring
Manufacturing Association statistics.

^c Derived from U.S. Industrial Outlook, 1988.

Table 9.--Employment in select hardwood using industries, 1978-87
(In thousands)

Year	Wood office	Upholstered household	Wood household	Kitchen cabinets	Dimension and flooring
1978	16.5	101.5	147.8	50.0	33.3
1979	17.4	101.8	143.8	54.2	34.0
1980	18.2	93.5	135.5	48.1	31.3
1981	22.7	86.1	136.2	47.1	30.0
1982	24.6	79.8	123.9	41.2	25.1
1983	25.2	82.7	126.5	47.7	27.7
1984	28.9	88.9	134.4	56.0	31.5
1985	31.3	89.8	135.0	59.1	31.1
1986:					
1st quarter	32.1	91.1	132.3	61.9	31.0
2nd quarter	32.1	90.3	134.0	63.2	32.0
3rd quarter	31.5	88.5	132.5	65.6	32.1
4th quarter	32.3	93.1	132.3	66.7	33.2
1987:					
1st quarter	32.4	94.5	139.1	68.3	32.5
2nd quarter	32.6	96.1	140.6	70.0	33.0

Source: U.S. Department of Labor.

Table 10.--Employment index in select hardwood-using industries, 1978-87
(1978=100)

Year	Wood office	Upholstered household	Wood household	Kitchen cabinets	Dimension and flooring
1978	100.0	100.0	100.0	100.0	100.0
1979	105.5	100.3	97.3	108.4	102.1
1980	110.3	92.1	91.7	96.2	94.0
1981	138.6	84.8	92.2	94.2	90.1
1982	149.1	78.6	83.8	82.4	75.4
1983	152.7	81.5	85.6	95.4	83.2
1984	175.2	87.6	90.9	112.0	94.6
1985	189.7	88.5	91.3	118.2	93.4
1986:					
1st quarter	194.6	89.8	89.5	123.8	93.1
2nd quarter	194.6	89.0	90.7	126.4	96.1
3rd quarter	190.9	87.2	89.7	131.2	96.4
4th quarter	195.8	91.7	89.5	133.4	99.7
1987:					
1st quarter	196.4	93.1	94.1	136.6	97.6
2nd quarter	197.6	94.7	95.1	140.0	99.1

Source: U.S. Department of Labor.

INTERNATIONAL HARDWOOD PRODUCT TRADE

Table 11.--International exchange rate, foreign currency per U.S. dollar, 1978-88

Year	Canada (dollar)	Mexico (peso)	U.K. (pound)	Denmark (krone)	Belgium (franc)	France (franc)	Germany (mark)	Netherlands (guilder)	Italy (lira)	Japan (yen)
1978	1.1407	22.77	0.521	5.515	31.492	4.5128	2.0086	2.1636	848.7	210.44
1979	1.1714	22.81	0.471	5.261	29.319	4.2545	1.8329	2.0060	830.9	219.14
1980	1.1692	22.95	0.430	5.636	29.242	4.2256	1.8177	1.9881	856.4	226.74
1981	1.1989	24.51	0.493	7.123	37.129	5.4346	2.2600	2.4952	1136.8	220.54
1982	1.2337	56.46	0.571	8.332	45.691	6.5721	2.4266	2.6702	1352.5	249.08
1983	1.2324	120.09	0.659	9.145	51.132	7.6213	2.5533	2.8541	1518.8	237.51
1984	1.2951	167.83	0.748	10.357	57.784	8.7391	2.8459	3.2087	1757.0	237.52
1985	1.3655	256.87	0.771	10.596	59.378	8.9852	2.9440	3.3214	1909.4	238.54
1986:										
1st quarter	1.4037	423.64	0.694	8.637	48.025	7.2077	2.3463	2.6491	1598.2	187.88
2nd quarter	1.3842	552.15	0.663	8.305	45.865	7.1468	2.2464	2.5313	1539.0	170.13
3rd quarter	1.3854	665.69	0.671	7.846	43.109	6.7777	2.0856	2.3518	1435.8	155.77
4th quarter	1.3847	835.61	0.700	7.576	41.689	6.5722	2.0076	2.2679	1390.2	160.29
1987:										
1st quarter	1.3378	1025.66	0.659	6.950	38.130	6.1278	1.8395	2.0765	1306.2	153.17
2nd quarter	1.3329	1241.66	0.609	6.801	37.415	6.0254	1.8052	2.0359	1299.7	142.67
3rd quarter	1.3223	1460.77	0.619	7.038	38.170	6.1352	1.8393	2.0713	1329.9	146.92
4th quarter	1.3110	1784.64	0.570	6.572	35.621	5.7545	1.7055	1.9192	1248.5	135.79
1988:										
1st quarter	1.2674	NA	0.557	6.419	35.057	5.6688	1.6758	1.8824	1235.3	128.00

NA - Not available.

Source: International Monetary Fund.

Table 12.--U.S. hardwood log exports, by country and species, 1978-87
(Thousand board feet)

Year	Canada			Central & South America and Caribbean			Western Europe		
	Total	R.oak	W.oak	Total	R.oak	W.oak	Total	R.oak	W.oak
1978	43,235	10,842	3,464	3,659	512	2,023	55,300	4,239	22,204
1979	51,083	14,001	3,828	5,486	1,613	1,919	61,693	7,323	29,520
1980	44,090	10,093	4,669	6,244	1,645	1,324	85,715	8,864	54,158
1981	38,468	12,713	1,434	7,393	770	2,743	98,863	7,604	33,900
1982	29,661	12,603	1,493	4,737	2,203	1,147	44,438	7,021	25,373
1983	35,780	13,552	1,247	4,631	1,996	1,479	51,292	9,798	27,147
1984	49,882	14,591	946	7,405	4,149	2,507	44,861	12,296	21,246
1985	33,349	8,697	595	12,396	6,993	3,804	37,497	6,638	17,315
1986:									
1st quarter	5,984	2,605	155	1,097	865	123	19,925	1,007	14,718
2nd quarter	4,298	3,101	53	2,704	1,730	469	8,848	495	4,621
3rd quarter	4,388	1,625	86	783	652	47	2,015	196	817
4th quarter	7,003	2,281	116	2,778	1,255	1,291	42,954	807	38,190
1986 total	21,673	9,612	410	7,362	4,502	1,930	73,742	2,505	58,346
1987:									
1st quarter	8,351	3,186	84	867	439	86	15,593	814	8,547
2nd quarter	4,711	3,062	181	1,949	788	550	26,922	1,291	22,027
3rd quarter	5,604	2,609	175	346	193	42	4,027	710	2,047
4th quarter	10,944	1,062	359	1,764	1,344	164	14,986	1,442	8,433
1987 total	29,610	9,919	799	4,926	2,764	842	61,528	4,257	41,054
Year	Asia			All other			Total		
	Total	R.oak	W.oak	Total	R.oak	W.oak	Total	R.oak	W.oak
1978	8,325	906	611	268	50	119	110,787	16,549	28,421
1979	10,429	679	706	82	7	17	128,773	23,623	35,990
1980	15,452	1,302	518	304	49	61	151,805	21,953	60,730
1981	12,019	3,480	1,429	382	117	19	157,125	24,684	39,525
1982	14,103	4,932	823	222	0	13	93,161	26,759	28,849
1983	19,754	9,838	1,904	51	0	15	111,508	35,184	31,792
1984	23,383	10,162	2,793	23	4	5	125,554	41,202	27,497
1985	27,883	15,442	2,003	71	0	4	111,196	37,770	23,721
1986:									
1st quarter	10,101	3,501	1,154	48	0	0	37,155	7,978	16,150
2nd quarter	12,331	6,011	1,741	40	0	23	28,221	11,337	6,907
3rd quarter	5,860	3,056	834	3	0	0	13,049	5,529	1,784
4th quarter	7,696	3,427	1,116	27	0	27	60,458	7,770	40,740
1986 total	35,988	15,995	4,845	118	0	50	138,883	32,614	65,581
1987:									
1st quarter	14,823	3,743	2,310	98	0	69	39,732	8,182	11,096
2nd quarter	12,385	4,453	2,528	44	0	23	46,011	9,594	25,309
3rd quarter	8,166	3,047	685	91	42	31	18,234	6,601	2,980
4th quarter	17,481	6,504	2,614	146	0	92	45,321	10,352	11,662
1987 total	52,855	17,747	8,137	379	42	215	149,298	34,729	51,047

Source: U.S. Department of Commerce, Bureau of the Census.

Table 15.--U.S. hardwood plywood exports, by country and species, 1978-87
(Thousand square feet)

Year	Canada			Central & South America and Caribbean			Western Europe		
	Total	Birch	Oak	Total	Birch	Oak	Total	Birch	Oak
1978	22,399	1,117	487	5,375	1,414	122	3,535	53	350
1979	21,898	698	2,148	6,493	945	42	2,767	390	29
1980	18,017	2,113	3,462	15,474	2,943	527	7,663	74	1,093
1981	31,007	8,652	9,322	17,245	3,477	1,511	2,266	475	491
1982	18,833	5,231	8,327	16,192	2,463	443	2,977	141	2,053
1983	22,541	3,797	11,618	11,507	1,638	216	4,831	107	4,567
1984	15,308	3,087	6,029	13,853	1,997	777	4,676	155	3,941
1985	16,754	3,775	4,586	17,198	2,274	1,346	2,927	0	1,060
1986:									
1st quarter	3,238	375	992	4,155	625	77	6,182	0	0
2nd quarter	4,035	550	1,898	3,549	198	286	1,221	33	102
3rd quarter	5,501	1,011	1,574	4,977	769	386	2,402	771	0
4th quarter	12,596	1,227	2,538	4,030	139	603	1,444	1,092	116
1986 total	25,370	3,163	7,002	16,711	1,731	1,352	11,249	1,896	218
1987:									
1st quarter	5,476	637	2,043	4,490	147	571	4,960	0	101
2nd quarter	4,216	683	1,496	5,248	358	1,142	2,473	0	50
3rd quarter	5,150	333	1,505	8,351	1,289	1,267	1,960	0	748
4th quarter	3,789	403	1,549	9,678	2,168	1,230	836	0	305
1987 total	18,631	2,056	6,593	27,767	3,962	4,210	10,229	0	1,204

Year	Asia			All other			Total		
	Total	Birch	Oak	Total	Birch	Oak	Total	Birch	Oak
1978	3,081	990	48	1,289	289	0	35,679	3,863	1,007
1979	1,366	199	396	941	709	0	33,465	2,941	2,615
1980	3,813	542	455	1,159	678	0	46,126	6,350	5,537
1981	2,304	197	670	2,183	1,085	152	55,005	13,886	12,146
1982	2,586	619	279	672	393	21	41,260	8,847	11,123
1983	1,269	190	314	987	598	338	41,135	6,330	17,053
1984	2,003	12	2	818	470	0	36,658	5,721	10,749
1985	6,515	979	562	629	212	0	44,023	7,240	7,554
1986:									
1st quarter	4,121	0	0	37	4	0	17,733	1,004	1,069
2nd quarter	2,128	0	45	39	16	0	10,972	797	2,331
3rd quarter	646	0	262	58	0	18	13,584	2,551	2,240
4th quarter	23	0	0	59	0	0	18,152	2,458	3,257
1986 total	6,918	0	307	193	20	18	60,441	6,810	8,897
1987:									
1st quarter	246	0	117	23	4	0	15,195	788	2,832
2nd quarter	747	30	87	22	8	0	12,706	1,079	2,775
3rd quarter	209	0	0	44	8	0	15,714	1,630	3,520
4th quarter	1,476	422	0	166	26	0	15,945	3,019	3,084
1987 total	2,678	452	204	255	46	0	59,560	6,516	12,211

Source: U.S. Department of Commerce, Bureau of the Census.

Table 16.--U.S. hardwood log imports, by country and species, 1978-87
(Thousand board feet)

Year	Africa		Asia		Canada		South America	
	Total	Mahogany	Total	Philippine Mahogany	Total	Birch/maple	Total	Mahogany
1978	3,080	1,396	246	0	11,899	9,088	127	0
1979	1,196	878	528	0	10,198	8,416	0	0
1980	1,268	900	25	0	10,222	7,403	126	0
1981	582	582	474	0	11,812	8,656	282	0
1982	770	770	322	0	16,807	10,172	0	0
1983	226	226	1,401	0	19,243	5,061	176	0
1984	464	333	1,306	0	26,727	4,395	141	0
1985	139	139	4,480	0	10,340	2,905	423	100
1986:								
1st quarter	48	34	1,552	60	1,745	418	47	0
2nd quarter	81	81	339	184	2,698	734	43	0
3rd quarter	1,082	1,082	621	0	2,407	1,045	92	0
4th quarter	0	0	2,839	1,310	2,318	800	0	0
Total 1986	1,211	1,197	5,351	1,554	9,168	2,997	182	0
1987:								
1st quarter	11	0	118	0	2,353	905	0	0
2nd quarter	39	0	777	0	1,748	606	156	0
3rd quarter	10	0	413	0	1,510	1,002	227	108
4th quarter	258	220	367	0	1,702	1,209	0	0
Total 1987	318	220	1,675	0	7,313	3,722	383	108

Year	All others				Total			
	Total	Birch/maple	Philippine mahogany	Mahogany	Total	Birch/maple	Mahogany	Philippine mahogany
1978	2,433	0	3	78	17,785	9,088	1,474	3
1979	2,646	4	315	175	14,568	8,420	1,053	315
1980	1,802	0	18	113	13,443	7,403	1,013	18
1981	394	14	0	29	13,544	8,670	611	0
1982	369	0	11	33	18,268	10,172	803	11
1983	1,492	0	263	95	22,538	5,061	321	263
1984	1,449	5	280	187	30,087	4,400	520	280
1985	13,010	1	304	92	28,392	2,906	331	304
1986:								
1st quarter	762	0	0	63	4,154	418	97	60
2nd quarter	3,606	29	0	0	6,767	763	81	184
3rd quarter	6,010	0	0	0	10,212	1,045	1,082	0
4th quarter	68	0	0	0	5,225	809	0	1,310
Total 1986	10,446	29	0	63	26,358	3,026	1,260	1,554
1987:								
1st quarter	2,764	0	0	0	5,246	905	0	0
2nd quarter	319	0	252	0	3,039	606	0	252
3rd quarter	579	49	0	0	2,739	1,051	108	0
4th quarter	488	0	0	0	2,815	1,209	220	0
Total 1987	4,150	49	252	0	13,839	3,771	328	252

Source: U.S. Department of Commerce, Bureau of the Census.

Table 17.--U.S. hardwood lumber imports, by country and species, 1978-87
(Thousand board feet)

Year	Africa			Asia			Canada				
	Total	Philippine Birch/ mahogany maple		Total	Philippine Birch/ mahogany maple		Total	Philippine Birch/ mahogany maple			
		Mahogany			Mahogany			Mahogany			
1978	18,403	2,677	0	0	87,476	89	47,451	0	95,109	150	74,223
1979	10,530	2,104	0	0	122,744	67	56,654	0	81,028	239	54,975
1980	3,235	543	0	0	68,253	0	46,496	0	67,318	318	47,764
1981	5,184	453	0	0	74,144	0	39,099	0	71,096	166	41,406
1982	2,631	462	0	0	34,132	156	10,303	0	72,044	170	32,284
1983	2,018	119	0	0	68,787	0	38,407	0	70,200	197	31,127
1984	2,387	492	0	0	92,356	0	47,987	0	82,603	97	32,093
1985	3,306	489	0	0	97,867	228	42,848	0	95,689	183	32,545
1986:											
1st quarter	845	105	0	0	15,991	333	9,180	0	28,048	20	17,479
2nd quarter	2,143	1,058	52	0	19,155	325	8,019	0	23,389	175	9,750
3rd quarter	943	504	0	0	21,648	36	7,922	0	23,171	52	8,865
4th quarter	406	304	0	0	25,964	167	10,891	0	25,117	112	9,341
Total 1986	4,337	1,971	52	0	82,758	861	36,012	0	99,725	359	45,435
1987:											
1st quarter	771	652	0	30	20,011	124	7,743	0	28,278	17	11,103
2nd quarter	2,776	2,166	0	0	23,112	181	9,330	0	51,426	195	13,875
3rd quarter	1,676	1,243	0	0	17,433	108	6,738	86	34,118	58	11,630
4th quarter	1,803	732	0	0	22,947	305	10,685	0	38,835	128	13,665
Total 1987	7,026	4,793	0	30	83,503	718	34,496	86	152,657	398	50,273

Table 17.--U.S. hardwood lumber imports, by country and species, 1978-87 (cont'd)
(Thousand board feet)

Year	South America				All other				Total			
	Philippine		Birch/		Philippine		Birch/		Philippine		Birch/	
	Total	Mahogany	mahogany	maple	Total	Mahogany	mahogany	maple	Total	Mahogany	mahogany	maple
1978	109,059	24,539	0	0	11,719	481	6,713	99	321,766	27,936	54,164	74,322
1979	102,839	26,791	0	0	4,959	438	352	174	322,100	29,639	57,006	55,149
1980	119,147	40,232	0	0	7,137	906	490	46	265,090	41,999	46,986	47,810
1981	104,685	41,806	0	0	5,742	314	254	570	260,851	42,739	39,353	41,976
1982	64,433	25,344	377	0	13,659	716	7,828	179	186,899	26,848	18,508	32,463
1983	83,284	39,917	799	0	6,982	687	275	30	231,271	40,920	39,481	31,157
1984	92,863	46,148	0	0	11,677	1,189	235	62	281,886	47,926	48,222	32,155
1985	100,413	57,818	235	0	14,722	2,981	51	1,410	311,997	61,699	43,134	33,955
1986:												
1st quarter	33,535	24,121	0	0	2,399	268	0	1,595	80,818	24,847	9,180	19,074
2nd quarter	26,156	15,448	0	0	719	30	0	0	71,562	17,036	8,071	9,750
3rd quarter	17,690	4,835	0	48	948	25	0	265	64,400	5,452	7,922	9,178
4th quarter	19,293	7,180	0	18	2,840	112	0	36	73,620	7,875	10,891	9,395
Total 1986	96,674	51,584	0	66	6,906	435	0	1,896	290,400	55,210	36,064	47,397
1987:												
1st quarter	20,870	9,944	0	1	3,373	13	1,388	446	73,303	10,750	9,131	11,580
2nd quarter	25,009	14,142	0	0	5,857	455	3,354	33	108,180	17,139	12,684	13,908
3rd quarter	80,417	63,584	97	0	8,764	135	6,034	8	142,408	65,128	12,869	11,724
4th quarter	58,877	41,517	66	0	1,365	97	10	21	123,827	42,779	10,761	13,686
Total 1987	185,173	129,187	163	1	19,359	700	10,786	508	447,718	135,796	45,445	50,898

Source: U.S. Department of Commerce, Bureau of the Census.

Table 18.--U.S. hardwood veneer imports, by country and species, 1978-87
(Million square feet)

Year	Canada			Brazil			Other South America			Philippines		
	Birch/		Philippine mahogany	Birch/		Philippine mahogany	Birch/		Philippine mahogany	Birch/		Philippine mahogany
	Total	maple		Total	maple		Total	maple		Total	maple	
1978	816.6	712.9	0.0	136.5	0.0	0.0	76.4	7.4	12.3	442.5	1.0	434.1
1979	833.5	711.6	0.0	76.3	0.0	0.0	71.8	0.0	1.8	445.4	0.0	438.7
1980	699.6	580.4	0.0	64.5	0.0	0.0	92.2	0.0	0.0	260.5	0.0	258.8
1981	752.9	602.0	0.0	70.7	0.0	0.0	92.8	0.0	0.0	329.5	0.0	320.5
1982	733.2	505.2	27.9	85.5	0.0	0.0	46.1	0.0	0.0	120.0	0.0	118.1
1983	907.8	633.3	0.0	138.3	0.0	0.0	52.3	0.0	0.0	317.4	0.0	288.7
1984	827.2	524.1	0.0	177.5	0.2	4.4	49.0	0.0	0.0	180.4	0.0	168.7
1985	728.7	491.6	0.7	198.5	0.0	10.7	32.5	0.0	0.0	108.6	0.0	102.2
1986:												
1st quarter	221.9	146.8	0.0	56.0	0.0	0.3	4.8	0.0	0.0	33.0	0.0	31.8
2nd quarter	206.3	140.8	0.0	40.7	1.2	0.0	8.9	0.0	0.0	19.7	0.0	18.1
3rd quarter	187.5	124.0	0.4	58.6	0.3	0.0	8.4	0.0	0.0	29.2	0.0	27.2
4th quarter	216.1	132.5	0.0	49.5	2.7	0.0	7.0	0.0	0.0	30.9	0.2	30.3
Total 1986	831.8	544.1	0.4	204.8	4.2	0.3	29.1	0.0	0.0	112.8	0.2	107.4
1987:												
1st quarter	225.2	136.8	0.0	35.6	0.0	0.0	7.1	0.0	0.0	21.8	0.0	21.0
2nd quarter	244.7	148.5	0.0	78.9	0.3	0.0	5.3	0.0	0.0	28.8	0.0	28.6
3rd quarter	216.5	131.1	0.0	40.4	0.0	0.0	5.2	0.0	0.0	41.7	0.0	40.5
4th quarter	224.4	138.7	0.0	62.2	1.9	0.0	9.3	0.0	0.0	30.5	0.0	30.1
Total 1987	910.8	555.1	0.0	217.1	2.2	0.0	26.9	0.0	0.0	122.8	0.0	120.2

Table 18.--U.S. hardwood veneer imports, by country and species, 1978-87 (cont'd)
(Million square feet)

Year	Other Asia			All other			Total		
	Birch/		Philippine	Birch/		Philippine	Birch/		Philippine
	Total	maple	mahogany	Total	maple	mahogany	Total	maple	mahogany
1978	90.9	0.0	62.0	69.6	1.5	2.2	1,632.5	722.8	510.6
1979	32.8	0.0	21.5	100.3	1.8	1.3	1,560.1	713.4	463.2
1980	35.7	0.5	4.5	60.8	3.3	1.8	1,213.2	584.2	265.0
1981	62.4	1.4	30.7	98.0	1.7	2.6	1,406.3	605.1	353.8
1982	24.4	0.5	18.3	222.7	1.2	4.1	1,231.9	506.8	168.4
1983	42.2	0.0	20.9	149.3	4.5	0.1	1,607.2	637.8	309.7
1984	105.0	1.8	70.2	163.9	11.2	6.1	1,503.0	537.2	249.3
1985	124.7	0.0	99.7	205.0	9.9	3.3	1,398.0	501.5	216.5
1986:									
1st quarter	46.6	0.0	42.3	57.5	0.7	1.2	419.7	147.6	75.7
2nd quarter	62.3	0.7	55.7	55.3	2.8	0.0	393.2	145.5	73.8
3rd quarter	41.0	0.0	31.2	66.8	3.7	0.0	391.5	128.0	58.8
4th quarter	47.7	0.0	41.8	48.2	0.7	0.0	399.5	136.2	72.1
Total 1986	197.6	0.7	171.0	227.8	7.9	1.2	1,603.9	557.3	280.4
1987:									
1st quarter	65.1	0.2	52.6	41.7	0.5	0.0	396.5	137.5	73.5
2nd quarter	72.7	0.3	60.2	46.5	1.5	0.0	476.9	150.5	88.8
3rd quarter	35.5	0.0	25.3	49.9	1.7	0.0	389.2	132.8	65.9
4th quarter	34.6	0.1	26.7	58.5	1.9	0.0	419.5	142.5	56.8
Total 1987	207.9	0.6	164.8	196.6	5.6	0.0	1,682.1	563.3	285.0

Source: U.S. Department of Commerce, Bureau of the Census.

Table 19.--U.S. hardwood plywood imports, by country and species, 1978-87
(Volume in thousand square feet)

Year	Indonesia			Taiwan			Philippines			Other Asia		
	Total	Birch	Philippine mahogany	Total	Birch	Philippine mahogany	Total	Birch	Philippine mahogany	Total	Birch	Philippine mahogany
1978	0	0	0	1,732,523	84,011	834,783	302,513	0	283,042	2,788,899	125,051	870,303
1979	5,587	0	0	1,522,837	118,317	705,714	349,999	0	317,655	2,047,159	82,581	551,217
1980	36,656	0	0	858,344	102,368	422,780	199,459	0	173,084	1,062,248	64,351	395,705
1981	153,397	0	83,939	1,078,966	116,589	638,912	366,323	519	327,223	1,093,472	52,636	584,717
1982	427,218	0	382,852	850,066	118,999	549,529	146,456	0	136,093	658,459	42,605	356,349
1983	1,335,219	0	1,299,159	1,121,154	168,985	698,957	165,091	0	155,515	545,065	50,520	324,549
1984	1,537,200	0	1,517,530	902,949	183,735	445,284	83,203	0	78,726	197,971	48,707	38,117
1985	2,137,375	0	2,102,624	777,663	205,483	325,501	205,572	454	199,647	146,954	55,374	12,440
1986:												
1st quarter	812,710	0	799,040	171,631	51,469	56,784	22,729	22	21,860	37,510	14,153	2,691
2nd quarter	610,463	0	597,330	172,664	57,649	54,555	17,042	0	16,747	26,756	10,523	1,023
3rd quarter	529,236	0	506,440	207,383	66,581	66,813	19,079	0	18,592	48,999	11,836	20,010
4th quarter	563,406	0	550,434	164,679	56,107	44,112	40,542	0	40,248	57,452	10,913	2,439
Total 1986	2,515,815	0	2,453,244	716,357	231,806	222,264	99,392	22	97,447	170,717	47,425	26,163
1987:												
1st quarter	662,910	511	636,493	145,754	53,577	39,002	28,827	0	28,582	49,540	6,379	5,664
2nd quarter	680,878	0	657,962	203,152	78,903	64,456	26,054	0	25,827	39,620	16,971	5,470
3rd quarter	717,095	0	687,734	162,430	30,084	59,242	29,673	0	29,071	27,992	5,073	8,287
4th quarter	642,953	0	613,448	137,257	27,233	52,220	21,154	0	20,378	36,033	10,115	13,399
Total 1987	2,703,836	511	2,595,637	648,593	189,797	214,920	105,708	0	103,858	153,185	38,538	32,820

Table 19.--U.S. hardwood plywood imports, by country and species, 1978-87 (cont'd)
(Volume in thousand square feet)

Year	Canada			South America			All other			Total		
	Philippine		Total	Philippine		Total	Philippine		Total	Total	Total	
	Birch	mahogany		Birch	mahogany		Birch	mahogany				
1978	73,443	65,104	0	21,965	0	0	53,669	39,793	784	4,973,012	313,959	1,988,912
1979	81,577	70,448	0	24,697	0	0	42,321	34,549	632	4,074,177	305,895	1,575,218
1980	69,848	59,810	0	30,933	0	0	31,893	26,566	333	2,289,381	253,095	991,902
1981	61,080	48,118	0	29,065	0	0	39,569	31,727	568	2,821,872	249,589	1,635,359
1982	50,496	39,502	0	21,373	0	0	25,380	17,539	479	2,179,448	218,645	1,425,302
1983	53,239	29,973	0	37,750	0	0	36,393	25,376	682	3,293,911	274,854	2,478,862
1984	66,283	42,302	0	53,338	4,386	0	39,375	30,816	506	2,880,319	309,946	2,080,163
1985	62,003	39,616	0	57,324	848	0	61,452	29,101	485	3,448,343	330,876	2,640,697
1986:												
1st quarter	9,507	3,780	0	18,712	365	0	9,594	7,987	0	1,082,393	77,776	880,375
2nd quarter	9,864	3,724	0	21,810	127	0	14,106	7,720	0	872,705	79,743	669,655
3rd quarter	11,963	4,607	0	25,662	119	0	15,885	7,479	0	858,207	90,622	611,855
4th quarter	10,897	4,698	0	21,223	117	0	17,641	7,042	0	875,840	78,877	637,233
Total 1986	42,231	16,809	0	87,407	728	0	57,226	30,228	0	3,689,145	327,018	2,799,118
1987:												
1st quarter	17,117	8,556	0	11,995	0	0	11,592	7,027	0	927,735	76,050	709,741
2nd quarter	20,513	12,404	0	20,544	348	0	18,906	6,355	0	1,009,667	114,981	753,715
3rd quarter	17,867	10,005	0	25,649	511	26	15,536	8,632	128	996,242	54,305	784,488
4th quarter	22,649	15,269	0	23,096	154	298	12,269	6,607	0	895,411	59,378	699,743
Total 1987	78,146	46,234	0	81,284	1,013	324	58,303	28,621	128	3,829,055	304,714	2,947,687

Source: U.S. Department of Commerce, Bureau of the Census.

Nolley, Jean W. 1988. Bulletin of hardwood market statistics: summer 1988. Gen. Tech. Rep. NE-121. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 23 p.

Provides current and historical information on primary and secondary hardwood product production, prices, international trade, and employment.

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