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Harvest, Employment, Exports, and Prices in Pacific Northwest Forests, 1965–2007

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Abstract

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Provides historical information on log harvest; employment in the forest industries; international trade in logs, lumber, and chips; and volume and average prices of sawtimber stumpage sold by national forests.

Keywords: Log harvest, employment (forest products industries), exports (forest products), and stumpage prices.

Summary

The following tables have been compiled from historical publications of “Production, Prices, Employment, and Trade in Northwest Forest Industries” (1968-2007).¹ This report presents data from 1965 through 2007 for the Pacific Northwest forest industries. In most industries, dramatic changes are shown through the years. In the Oregon and Washington harvest statistics, high peaks occurred in 1968 and 1973, and the lowest harvests were in 1998 for Oregon and in 2006 for Washington. Employment in the forest industries has continued to steadily decline. Enormous changes are shown in log exports from the Pacific Northwest: highest volumes were in 1988 and 1989, and now the volumes are back to the 1960s level. The chip market remained fairly steady in volume, with prices hitting their peaks in 1995. The lumber exports (like the logs) peaked in 1988 and 1989, but the total average prices were highest in 2006. The national forest sawtimber volume was highest in 1970 and dropped off to the lowest in 2000 with only 155 million board feet.

¹ See Austin 1968–70, Darr 1970–72, Hamilton 1964–68, Holt 1972–74, Ruderman 1974–85, and Warren 1985–2007.

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Table 1—Oregon timber harvest by ownership, 1965–2006

Year	Private	State	National forest	Bureau of Land Management	Bureau of Indian Affairs	Other public	Total
<i>Million board feet, Scribner scale</i>							
1965	4,034	254	3,781	1,240	74	11	9,394
1966	4,123	184	3,269	1,244	60	41	8,921
1967	3,833	127	3,181	1,092	110	14	8,357
1968	4,354	161	3,642	1,470	100	16	9,743
1969	4,165	200	3,464	1,206	92	23	9,150
1970	3,874	150	2,832	1,037	79	10	7,982
1971	4,230	158	3,197	1,340	87	16	9,028
1972	3,919	246	3,944	1,419	80	22	9,630
1973	3,610	288	3,836	1,501	36	95	9,366
1974	3,822	225	3,163	1,025	11	15	8,361
1975	3,781	160	2,661	626	123	20	7,371
1976	3,561	203	3,174	1,082	108	25	8,153
1977	3,590	228	2,913	1,021	115	11	7,876
1978	3,549	235	3,235	1,039	121	22	7,997
1979	3,209	223	3,167	956	111	29	7,694
1980	3,134	186	2,399	797	105	19	6,639
1981	2,702	216	1,981	677	95	24	5,695
1982	3,440	175	1,688	312	126	17	5,758
1983	3,374	257	2,902	789	112	31	7,464
1984	3,078	249	3,164	920	101	38	7,550
1985	3,332	268	3,480	891	121	34	8,127
1986	3,494	225	3,850	1,042	104	28	8,743
1987	3,281	199	3,451	1,115	117	52	8,215
1988	3,259	270	3,487	1,439	121	39	8,615
1989	3,721	198	3,307	1,026	124	44	8,420
1990	3,229	137	2,014	704	98	37	6,219
1991	3,312	91	2,068	486	87	36	6,080
1992	3,581	135	1,403	483	111	29	5,742
1993	3,608	116	1,102	361	75	31	5,294
1994	3,244	130	596	92	80	25	4,167
1995	3,432	109	515	139	79	30	4,304
1996	3,018	115	401	289	71	29	3,923
1997	3,133	176	523	136	79	35	4,081
1998	2,840	141	333	122	71	25	3,532
1999	3,014	246	233	150	68	49	3,759
2000	3,167	255	245	83	62	42	3,854
2001	2,905	268	135	38	63	30	3,440
2002	3,319	269	166	55	71	42	3,922
2003	3,313	293	203	78	63	52	4,002
2004	3,606	291	337	96	79	42	4,451
2005	3,495	341	275	121	61	61	4,355
2006	3,596	296	216	131	56	34	4,328

Source: Oregon Department of Forestry 1965–2007.

Table 2—Washington timber harvest by ownership, 1965–2006

Year	Private	State	National forest	Bureau of Land Management	Bureau of Indian Affairs	Other public	Total
<i>Million board feet, Scribner scale</i>							
1965	3,591	685	1,720	1	460	65	6,522
1966	3,460	538	1,573	4	431	69	6,075
1967	3,311	467	1,599	3	466	90	5,936
1968	3,856	681	1,795	4	530	105	6,971
1969	4,230	744	1,519	2	421	88	7,004
1970	4,045	602	1,378	3	368	63	6,459
1971	3,946	722	1,261	4	416	101	6,450
1972	4,015	1,004	1,488	3	489	82	7,081
1973	4,728	998	1,613	1	445	24	7,809
1974	4,337	685	1,290	0	452	112	6,876
1975	4,062	540	1,098	1	419	65	6,185
1976	4,414	766	1,214	3	516	55	6,968
1977	4,068	797	1,171	4	477	75	6,592
1978	4,036	955	1,261	3	460	36	6,751
1979	4,068	1,095	1,276	^a	432	98	6,969
1980	3,507	745	1,089	0	336	43	5,720
1981	3,266	468	875	1	260	20	4,890
1982	3,740	440	728	1	152	18	5,079
1983	4,025	548	1,240	8	238	28	6,087
1984	3,545	795	1,189	1	205	57	5,792
1985	3,561	1,013	1,128	5	213	43	5,963
1986	3,989	1,064	1,232	4	235	32	6,556
1987	4,367	970	1,423	5	238	35	7,037
1988	4,406	826	1,486	0	271	56	7,045
1989	4,520	842	1,141	1	262	22	6,788
1990	4,147	657	817	4	182	42	5,849
1991	3,650	535	704	1	172	42	5,104
1992	3,844	476	461	^a	186	51	5,018
1993	3,321	461	322	^a	192	33	4,330
1994	3,421	323	200	^a	199	14	4,156
1995	3,489	496	150	^a	230	26	4,392
1996	3,274	600	182	^a	270	40	4,366
1997	3,139	645	166	^a	226	44	4,221
1998	3,044	546	111	^a	275	46	4,022
1999	3,246	662	117	^a	334	24	4,383
2000	3,131	559	81	^a	334	24	4,130
2001	2,818	496	68	^a	324	11	3,717
2002	2,722	457	72	^a	319	12	3,582
2003	2,697	567	80	^a	161	34	3,539
2004	2,754	588	96	^a	456	52	3,946
2005	2,609	594	81	^a	415	32	3,731
2006	2,528	404	75	^a	418	59	3,484

^a Less than 1 million board feet.

Source: Washington Department of Natural Resources.

Table 3—Employment in forest products industries in Washington and Oregon, 1965–2007

Year	Washington and Oregon			Washington			Oregon		
	Total	Lumber wood products	Paper allied products	Total	Lumber wood products	Paper allied products	Total	Lumber wood products	Paper allied products
<i>Thousands of persons</i>									
1965	148.4	121.1	27.3	66.7	46.9	19.8	81.7	74.2	7.5
1966	148.0	119.6	28.4	66.9	46.6	20.3	81.1	73.0	8.1
1967	141.8	113.4	28.4	63.9	44.0	19.9	77.9	69.4	8.5
1968	147.1	118.3	28.8	65.9	45.9	20.0	81.2	72.4	8.8
1969	145.3	116.2	29.1	65.2	45.2	20.0	80.1	71.0	9.1
1970	138.2	109.0	29.2	62.0	42.2	19.8	76.2	66.8	9.4
1971	141.2	113.8	27.4	61.5	43.4	18.1	79.7	70.4	9.3
1972	150.2	122.5	27.7	65.5	47.3	18.2	84.7	75.2	9.5
1973	155.3	127.9	27.4	66.8	49.1	17.7	88.5	78.8	9.7
1974	152.1	124.5	27.6	67.3	49.7	17.6	84.8	74.8	10.0
1975	137.2	110.8	26.4	60.4	43.8	16.6	76.8	67.0	9.8
1976	150.9	123.4	27.5	68.4	51.0	17.4	82.5	72.4	10.1
1977	159.2	131.4	27.8	71.6	53.9	17.7	87.6	77.5	10.1
1978	159.3	136.5	22.8	69.1	55.1	14.0	90.2	81.4	8.8
1979	159.0	133.4	25.6	68.4	52.6	15.8	90.6	80.8	9.8
1980	144.1	116.1	28.0	64.1	46.5	17.6	80.0	69.6	10.4
1981	135.6	108.1	27.5	61.6	44.4	17.2	74.0	63.7	10.3
1982	120.4	94.6	25.8	55.2	39.0	16.2	65.2	55.6	9.6
1983	128.7	103.7	25.0	56.8	41.1	15.7	71.9	62.6	9.3
1984	132.9	107.7	25.2	57.2	41.0	16.2	75.7	66.7	9.0
1985	126.1	100.9	25.2	53.4	37.3	16.0	72.7	63.6	9.1
1986	126.0	100.6	25.4	53.1	36.7	16.4	72.9	63.9	9.0
1987	131.9	105.8	26.2	56.5	39.2	17.3	75.4	66.5	8.9
1988	135.6	109.6	26.0	58.8	41.7	17.1	76.8	67.9	8.9
1989	135.1	108.2	27.0	59.0	41.1	17.9	76.1	67.0	9.1
1990	130.8	103.6	27.2	58.0	39.9	18.1	72.8	63.7	9.1
1991	120.7	93.5	27.2	54.3	36.4	17.9	66.4	57.1	9.3
1992	117.6	90.8	26.8	54.3	36.5	17.8	63.3	54.3	9.0
1993	115.2	89.4	25.8	52.8	36.1	16.7	62.5	53.4	9.1
1994	117.5	91.1	26.3	53.9	36.7	17.2	63.6	54.5	9.1
1995	116.1	89.7	26.4	52.8	35.5	17.4	63.3	54.2	9.1
1996	111.6	86.0	25.6	52.3	35.5	16.9	59.3	50.6	8.7
1997	112.0	87.3	24.7	51.7	35.4	16.3	60.3	51.9	8.4
1998	110.4	85.9	24.5	51.9	35.6	16.3	58.5	50.3	8.2

Table 3—Employment in forest products industries in Washington and Oregon, 1965–2007 (continued)

Year	Washington and Oregon			Washington			Oregon		
	Total	Lumber wood products	Paper allied products	Total	Lumber wood products	Paper allied products	Total	Lumber wood products	Paper allied products
<i>Thousands of persons</i>									
1999	107.0	83.0	24.0	49.8	34.0	15.7	57.3	49.0	8.3
2000	105.9	82.4	23.5	49.0	33.4	15.6	56.9	49.0	7.9
2001	99.9	77.5	22.4	46.4	31.5	14.9	53.5	46.0	7.5
2002	98.7	78.2	20.5	45.5	32.3	13.2	53.2	45.9	7.3
2003	102.6	82.5	20.1	36.8	23.5	13.3	45.7	38.9	6.8
2004	101.3	81.6	19.7	35.7	23.0	12.7	45.9	38.9	7.0
2005	103.1	84.3	18.8	37.5	25.3	12.2	46.8	40.2	6.6
2006	82.8	64.4	18.4	37.3	25.4	11.9	45.5	39.0	6.5
2007	78.4	61.1	17.4	35.4	24.2	11.2	43.1	36.9	6.2

Source: Oregon Employment Department 1965–2007, the lumber and wood products industry includes logging, lumber, plywood, poles and pilings, and miscellaneous wood products. The paper and allied products industry includes pulp, paper, paperboard, and building board products. Data are based on place of residence.

Table 4—Volume and average value of softwood log exports from the Seattle Customs District to all countries, by species, 1965–2007

Year	Total		Douglas-fir		Western hemlock		Other softwoods	
	Volume	Average value	Volume	Average value	Volume	Average value	Volume	Average value
<i>Million board feet, value in dollars per thousand board feet</i>								
1965	618	72.13	65	68.87	<i>a</i>	<i>a</i>	553	72.51
1966	720	77.52	80	73.25	<i>a</i>	<i>a</i>	640	78.06
1967	1,069	83.71	173	80.32	<i>a</i>	<i>a</i>	896	84.36
1968	1,321	97.69	252	98.62	<i>a</i>	<i>a</i>	1,069	97.22
1969	1,309	112.75	258	113.73	<i>a</i>	<i>a</i>	1,052	112.50
1970	1,579	122.52	308	120.00	<i>a</i>	<i>a</i>	1,271	123.13
1971	1,320	123.00	294	119.35	<i>a</i>	<i>a</i>	1,025	124.05
1972	1,907	132.57	566	129.17	<i>a</i>	<i>a</i>	1,341	134.00
1973	1,833	245.41	555	217.52	<i>a</i>	<i>a</i>	1,278	257.52
1974	1,424	263.40	405	255.84	<i>a</i>	<i>a</i>	1,019	266.40
1975	1,427	263.91	437	255.94	<i>a</i>	<i>a</i>	990	267.43
1976	1,793	273.43	528	268.98	<i>a</i>	<i>a</i>	1,265	275.29
1977	1,675	314.30	556	308.29	<i>a</i>	<i>a</i>	1,118	317.26
1978	1,916	332.89	620	342.70	<i>a</i>	<i>a</i>	1,296	328.21
1979	2,250	440.68	732	453.14	1,247	409.17	270	552.23
1980	1,699	491.73	645	492.57	880	469.21	175	602.07
1981	1,316	429.80	579	460.85	624	391.35	113	482.47
1982	1,597	378.94	730	410.40	765	345.12	102	407.83
1983	1,740	333.67	796	341.97	824	312.24	119	426.69
1984	1,789	321.87	847	332.76	829	299.56	113	404.06
1985	1,879	312.41	844	329.10	939	289.12	95	393.88
1986	1,739	317.55	766	335.18	879	330.25	94	453.02
1987	2,064	369.69	983	380.10	965	337.39	115	551.91
1988	2,295	450.04	1,217	450.87	922	427.90	156	574.52
1989	2,357	443.37	1,158	489.66	1,030	373.67	169	558.47
1990	1,932	524.97	1,077	550.04	718	486.61	138	528.77
1991	1,548	544.62	834	588.90	623	481.21	92	572.24
1992	1,394	649.07	761	761.13	557	498.42	76	629.61
1993	958	952.85	558	1,036.09	345	836.42	55	837.66
1994	891	912.42	584	1,006.03	263	726.97	45	778.21
1995	999	856.28	574	1,034.48	354	619.71	71	596.66
1996	917	848.00	644	945.52	233	595.03	40	752.06
1997	599	807.84	377	901.56	192	627.12	31	784.23
1998	477	686.36	347	762.40	91	521.67	40	396.70

Table 4—Volume and average value of softwood log exports from the Seattle Customs District to all countries, by species, 1965–2007 (continued)

Year	Total		Douglas-fir		Western hemlock		Other softwoods	
	Volume	Average value	Volume	Average value	Volume	Average value	Volume	Average value
<i>Million board feet, value in dollars per thousand board feet</i>								
1999	435	692.07	322	748.75	85	515.93	28	573.47
2000	360	765.44	280	836.08	51	544.73	29	470.60
2001	290	632.60	208	726.31	41	436.18	41	354.08
2002	239	608.71	177	644.00	40	445.39	23	617.30
2003	177	587.23	121	667.34	36	389.33	20	397.26
2004	226	736.74	154	836.64	38	460.64	34	590.67
2005	195	786.77	135	874.25	25	555.01	35	552.86
2006	204	772.73	135	918.10	16	515.95	53	483.97
2007	313	625.92	133	842.57	70	530.13	109	422.45

^a Prior to 1979, western hemlock was included in “Other softwoods.”

Source: U.S. Department of Commerce 1965–2007.

Table 5—Volume and average value of softwood log exports from the Columbia-Snake Customs District to all countries, by species, 1965–2007

Year	Total		Douglas-fir		Western hemlock		Other softwoods	
	Volume	Average value	Volume	Average value	Volume	Average value	Volume	Average value
<i>Million board feet; value in dollars per thousand board feet</i>								
1965	283	91.36	45	73.44	<i>a</i>	<i>a</i>	238	93.45
1966	389	92.70	48	80.54	<i>a</i>	<i>a</i>	341	94.82
1967	502	99.97	93	76.91	<i>a</i>	<i>a</i>	409	103.20
1968	653	112.72	116	85.78	<i>a</i>	<i>a</i>	537	115.99
1969	561	128.39	99	97.29	<i>a</i>	<i>a</i>	462	132.33
1970	637	137.29	144	110.08	<i>a</i>	<i>a</i>	493	142.70
1971	517	137.16	122	118.55	<i>a</i>	<i>a</i>	395	142.61
1972	730	145.05	201	119.91	<i>a</i>	<i>a</i>	529	146.66
1973	806	303.63	309	140.75	<i>a</i>	<i>a</i>	497	314.04
1974	766	310.21	311	286.66	<i>a</i>	<i>a</i>	455	323.09
1975	798	284.61	329	291.51	<i>a</i>	<i>a</i>	469	291.54
1976	944	301.73	418	275.20	<i>a</i>	<i>a</i>	526	304.82
1977	881	340.94	410	298.10	<i>a</i>	<i>a</i>	471	340.89
1978	931	380.48	520	340.51	<i>a</i>	<i>a</i>	411	372.38
1979	984	496.62	577	387.37	229	538.65	178	408.65
1980	933	507.50	617	506.62	242	434.54	74	690.05
1981	671	472.80	438	513.91	184	364.40	49	827.71
1982	971	422.12	698	478.88	232	341.04	41	733.41
1983	852	366.21	621	430.85	187	313.29	44	580.89
1984	933	351.44	722	366.69	167	300.80	44	594.86
1985	1,125	342.58	905	348.59	173	295.28	47	547.45
1986	1,041	362.45	845	341.00	154	290.90	42	522.40
1987	1,104	436.96	861	367.70	185	346.87	58	692.24
1988	1,387	499.59	1,062	438.92	242	405.42	83	784.22
1989	1,257	539.73	876	498.91	321	338.15	60	1,009.60
1990	1,076	620.26	786	581.52	224	469.02	66	920.76
1991	994	606.18	741	637.93	195	446.77	58	885.12
1992	788	754.11	635	784.24	117	508.84	36	1,029.58
1993	750	1,024.97	613	1,055.45	109	784.21	28	1,290.32
1994	681	1,044.36	585	1,053.58	72	779.12	24	1,622.50
1995	606	1,080.47	540	1,104.61	50	728.06	16	1,316.13
1996	586	1,049.50	547	1,062.44	26	702.94	13	1,253.23
1997	443	912.16	413	918.05	21	668.74	9	1,259.89
1998	391	743.58	372	743.09	10	577.54	9	925.22

Table 5—Volume and average value of softwood log exports from the Columbia-Snake Customs District to all countries, by species, 1965–2007 (continued)

Year	Total		Douglas-fir		Western hemlock		Other softwoods	
	Volume	Average value	Volume	Average value	Volume	Average value	Volume	Average value
<i>Million board feet; value in dollars per thousand board feet</i>								
1999	359	793.62	347	792.89	6	587.74	6	1,126.00
2000	399	849.34	389	847.33	5	586.81	5	1,341.40
2001	352	748.44	346	749.21	5	483.92	1	1,871.00
2002	360	693.21	357	690.48	2	611.30	1	2,057.00
2003	385	690.55	367	690.33	2	458.51	16	657.50
2004	396	810.20	387	813.50	2	453.27	7	667.00
2005	341	837.49	339	836.35	1	620.80	1	1,569.00
2006	330	878.60	323	884.06	2	453.88	5	748.60
2007	361	739.74	339	755.68	19	454.80	3	693.37

^a Prior to 1979, western hemlock was included in “Other softwoods.”

Source: U.S. Department of Commerce 1965–2007.

Table 6—Volume and average value of chips exported from the Columbia-Snake and Seattle Customs Districts, 1965–2007

Year	Columbia-Snake Customs District		Seattle Customs District	
	Volume	Average value	Volume	Average value
<i>Short tons, on a dry-weight basis; value in dollars per short ton</i>				
1965	91,646	19.74	0	0
1966	219,181	19.68	0	0
1967	603,314	19.75	0	0
1968	1,102,669	20.25	112,132	22.23
1969	1,460,669	21.10	160,165	24.52
1970	1,605,062	19.31	238,757	19.56
1971	1,504,169	20.94	229,237	17.87
1972	2,081,032	22.12	168,725	19.56
1973	2,778,829	24.85	272,196	21.84
1974	3,177,465	26.50	390,370	28.62
1975	2,436,807	34.74	326,083	38.56
1976	2,881,577	39.90	457,801	33.39
1977	2,892,333	43.33	281,540	49.17
1978	2,650,423	42.98	299,140	46.16
1979	3,125,103	42.55	346,209	50.05
1980	2,849,927	88.44	268,103	79.53
1981	2,076,612	85.51	296,461	80.74
1982	1,914,439	83.31	328,374	79.27
1983	1,668,971	68.17	247,935	74.24
1984	1,632,815	70.96	216,089	76.89
1985	1,626,490	74.22	276,054	76.16
1986	1,577,739	72.02	446,226	73.97
1987	1,852,920	72.75	464,426	79.06
1988	2,015,988	78.06	681,811	89.24
1989	2,252,282	96.73	800,563	85.20
1990	2,081,199	95.84	744,397	95.51
1991	2,141,958	104.73	681,161	103.10
1992	1,766,502	106.84	583,141	101.28
1993	1,544,904	104.28	588,564	95.63
1994	1,563,772	102.46	755,872	75.78
1995	1,329,590	130.04	542,694	113.24
1996	1,230,966	108.51	589,989	95.97
1997	1,247,092	89.54	611,888	72.28
1998	1,076,786	96.78	835,594	62.27
1999	1,024,223	82.64	753,147	60.51
2000	992,062	94.01	461,874	78.54
2001	856,164	96.58	353,074	86.00
2002	893,184	84.31	262,395	71.10
2003	760,965	82.39	252,050	82.58
2004	744,356	75.89	330,760	62.28
2005	918,475	83.71	421,042	61.44
2006	841,646	92.67	198,292	47.57
2007	863,947	119.43	410,625	48.48

Source: U.S. Department of Commerce 1965–2007.

Table 7—Volume and average value of softwood lumber exports from the Seattle Customs District to all countries, by species, 1965–2007

Year	Total		Douglas-fir		Western hemlock		Other softwoods	
	Volume	Average value	Volume	Average value	Volume	Average value	Volume	Average value
<i>Million board feet; value in dollars per thousand board feet</i>								
1965	96	NA	62	NA	9	NA	25	NA
1966	98	NA	63	NA	3	NA	32	NA
1967	111	NA	68	NA	5	NA	38	NA
1968	104	NA	66	NA	6	NA	33	NA
1969	106	NA	70	NA	2	NA	34	NA
1970	136	NA	76	NA	12	NA	47	NA
1971	130	NA	89	NA	10	NA	32	NA
1972	164	177.86	100	195.96	22	98.99	43	176.10
1973	325	211.88	144	262.75	105	166.56	76	178.33
1974	332	242.67	174	267.93	79	205.45	78	224.26
1975	264	220.36	152	228.52	52	191.93	60	224.40
1976	312	260.23	155	280.33	95	217.02	62	275.88
1977	257	278.19	124	291.17	92	242.18	41	320.55
1978	310	290.19	129	309.81	118	266.70	63	294.06
1979	414	401.51	99	471.86	211	371.57	104	395.90
1980	522	324.62	107	361.19	271	310.48	144	324.13
1981	468	332.62	139	360.84	173	322.81	156	318.31
1982	473	301.01	117	308.04	237	291.53	119	313.02
1983	553	301.26	152	297.07	223	317.28	177	284.66
1984	423	314.01	121	322.95	162	304.50	140	317.24
1985	424	308.35	106	323.13	184	313.75	134	289.26
1986	747	329.03	193	348.17	355	320.86	199	325.01
1987	918	345.41	234	370.78	458	343.77	226	321.98
1988	1,047	346.21	330	363.75	426	348.28	291	323.32
1989	1,002	364.27	348	302.90	366	403.99	288	408.18
1990	886	424.64	300	438.20	293	416.25	294	421.18
1991	761	449.31	271	472.43	254	424.13	236	449.84
1992	617	491.47	244	529.45	209	415.66	163	531.85
1993	582	580.01	236	635.89	161	539.22	185	544.22
1994	536	637.48	238	704.12	146	639.14	152	531.39
1995	567	648.97	267	692.72	149	641.22	151	579.33
1996	568	687.84	299	748.39	148	642.48	120	593.20
1997	538	660.69	201	762.45	63	713.26	274	573.92
1998	282	609.74	99	657.84	25	728.43	158	560.64

Table 7—Volume and average value of softwood lumber exports from the Seattle Customs District to all countries, by species, 1965–2007 (continued)

Year	Total		Douglas-fir		Western hemlock		Other softwoods	
	Volume	Average value	Volume	Average value	Volume	Average value	Volume	Average value
<i>Million board feet; value in dollars per thousand board feet</i>								
1999	238	667.69	89	696.10	30	852.32	118	598.95
2000	263	605.06	72	694.90	20	700.01	171	556.44
2001	201	603.65	47	638.86	10	497.93	143	599.34
2002	180	615.67	49	628.82	6	416.62	125	620.60
2003	194	650.94	45	616.71	6	500.13	143	667.65
2004	139	708.16	31	730.31	12	495.28	95	727.15
2005	128	749.90	37	809.29	5	588.46	87	733.82
2006	145	788.71	64	797.96	5	538.29	76	796.32
2007	196	771.84	104	777.40	10	496.03	82	796.31

NA = not available.

Source: U.S. Department of Commerce 1965–2007.

Table 8—Volume and average value of softwood lumber exports from the Columbia-Snake Customs District to all countries, by species, 1965–2007

Year	Total		Douglas-fir		Western hemlock		Other softwoods	
	Volume	Average value	Volume	Average value	Volume	Average value	Volume	Average value
<i>Million board feet; value in dollars per thousand board feet</i>								
1965	242	NA	223	NA	11	NA	8	NA
1966	237	NA	215	NA	9	NA	13	NA
1967	246	NA	217	NA	9	NA	20	NA
1968	273	NA	238	NA	5	NA	29	NA
1969	246	NA	216	NA	9	NA	21	NA
1970	274	NA	228	NA	22	NA	24	NA
1971	204	NA	179	NA	12	NA	13	NA
1972	242	229.39	222	236.06	9	112.13	11	189.95
1973	475	309.68	389	327.79	65	188.54	21	349.63
1974	388	318.98	323	332.98	45	223.32	20	306.82
1975	353	295.09	263	315.86	73	216.16	16	315.10
1976	387	365.57	323	384.21	51	225.95	13	449.34
1977	292	394.31	249	412.17	33	236.43	10	469.56
1978	275	443.46	245	452.34	17	265.25	13	499.35
1979	426	631.60	328	699.47	69	393.73	29	542.65
1980	463	561.77	342	623.19	68	357.18	53	426.36
1981	466	441.75	312	470.44	95	379.24	59	390.55
1982	415	434.95	302	460.46	70	292.09	44	486.70
1983	469	418.66	361	445.80	72	272.89	37	478.61
1984	526	376.39	375	404.05	96	259.55	55	391.65
1985	482	357.69	321	389.09	118	265.39	43	375.97
1986	404	415.74	271	458.75	97	299.18	36	406.41
1987	535	456.08	361	495.76	109	345.85	65	420.01
1988	771	434.96	463	495.40	162	373.35	145	311.29
1989	942	506.07	598	555.17	170	428.19	173	412.88
1990	693	566.07	443	630.19	110	448.56	141	456.02
1991	669	574.47	455	625.94	117	438.65	98	497.84
1992	560	621.01	413	651.75	72	480.55	75	587.10
1993	493	735.58	367	764.90	51	575.84	75	700.60
1994	412	816.39	301	856.33	45	661.62	66	739.60
1995	454	763.18	342	771.91	39	630.34	73	793.66
1996	443	790.00	357	824.08	24	635.64	62	655.26
1997	332	763.69	198	857.46	14	546.54	121	636.06
1998	187	735.17	123	793.15	7	568.05	56	630.70

Table 8—Volume and average value of softwood lumber exports from the Columbia-Snake Customs District to all countries, by species, 1965–2007 (continued)

Year	Total		Douglas-fir		Western hemlock		Other softwoods	
	Volume	Average value	Volume	Average value	Volume	Average value	Volume	Average value
<i>Million board feet; value in dollars per thousand board feet</i>								
1999	201	757.15	136	819.71	15	634.94	51	624.50
2000	201	744.92	138	837.92	14	531.41	49	543.71
2001	111	765.45	84	785.14	5	386.60	22	775.77
2002	69	713.31	41	750.72	8	422.54	19	759.88
2003	61	721.59	33	823.03	11	370.22	17	746.24
2004	52	834.77	33	946.86	5	363.63	14	751.05
2005	24	808.96	10	1,187.10	4	355.60	9	596.29
2006	26	838.57	12	1,164.87	1	614.39	14	573.18
2007	36	659.18	12	993.00	1	807.79	23	474.54

NA = not available.

Source: U.S. Department of Commerce 1965–2007.

Table 9—Volume of sawtimber sold on national forests, by selected species, Pacific Northwest Region, 1965–2007

Year	Douglas-fir		Ponderosa		White pine	Lodgepole pine	Engelmann spruce	Sitka spruce	Western hemlock	Cedars	Larch	Noble fir and Shasta red fir	Other true firs	All species
	West side	East side	East and Jeffrey pines	Sugar pine										
1965	1,918,578	314,346	776,602	26,395	38,855	40,571	9,122	16,069	718,479	99,165	58,424	71,222	324,017	4,424,132
1966	1,966,836	296,528	774,379	35,211	37,706	49,107	10,819	7,196	755,726	116,614	67,216	105,202	401,666	4,683,387
1967	1,819,760	317,393	760,936	33,317	58,417	111,995	11,377	12,725	609,780	96,234	31,748	97,782	362,242	4,374,499
1968	2,040,381	358,069	698,117	42,421	34,938	71,794	12,695	14,025	745,522	112,993	33,989	79,316	358,078	4,637,869
1969	1,831,821	295,218	652,647	36,377	83,936	92,132	7,729	9,890	671,723	110,919	28,096	74,536	392,745	4,363,143
1970	2,062,934	367,393	837,457	42,367	90,768	125,942	23,387	12,161	699,558	124,067	85,265	120,792	479,973	5,128,462
1971	1,662,483	298,849	771,152	34,855	42,750	42,135	16,028	17,050	628,716	96,814	43,817	51,755	363,324	4,094,686
1972	1,985,962	262,267	754,423	33,772	29,637	95,781	9,967	11,956	688,977	115,783	34,217	53,589	412,988	4,517,127
1973	1,614,694	287,848	750,289	44,969	16,525	124,607	7,870	18,410	653,910	102,885	28,005	35,331	419,943	4,133,468
1974	1,735,849	305,767	700,673	35,603	24,696	62,862	7,149	13,690	677,822	72,024	21,214	42,297	451,138	4,175,910
1975	1,859,458	326,002	854,923	31,110	30,931	81,713	12,955	16,842	745,569	110,711	28,548	57,340	334,672	4,515,556
1976	1,268,830	230,006	629,486	21,120	28,891	60,821	7,453	4,824	576,844	71,443	36,670	67,680	253,979	3,281,382
1977	1,714,208	268,450	761,204	31,474	22,352	109,875	7,961	14,097	708,569	105,596	21,400	52,141	352,265	4,182,983
1978	1,862,836	372,649	837,907	40,184	15,461	63,415	23,894	14,592	676,873	105,477	33,929	56,742	468,281	4,591,047
1979	1,945,657	390,267	822,590	32,775	15,367	138,898	16,149	15,321	796,519	129,712	38,265	106,412	496,967	4,971,797
1980	2,036,853	318,056	706,859	33,676	14,773	122,721	20,047	19,775	671,012	126,567	38,537	80,176	477,542	4,694,220
1981	1,944,177	336,430	764,421	31,104	10,725	125,794	11,121	17,828	711,204	115,513	62,210	193,265	506,357	4,739,430
1982	1,837,759	260,715	667,280	30,926	11,902	130,687	17,560	13,430	673,672	122,696	26,674	72,532	420,896	4,303,374
1983	1,773,547	295,243	662,176	22,116	11,005	129,753	15,462	7,025	564,168	116,264	30,969	41,842	516,251	4,201,457
1984	1,740,340	276,669	646,407	25,137	11,670	144,280	12,365	8,389	536,458	95,038	18,682	64,631	439,762	4,054,833
1985	1,491,475	236,592	587,990	30,312	11,366	109,264	19,164	11,981	413,541	75,697	33,608	106,656	367,335	3,531,908
1986	2,094,394	386,494	814,884	29,709	20,618	93,677	21,984	14,166	698,341	123,268	46,364	61,384	421,708	4,859,978
1987	1,876,085	286,167	680,770	34,524	10,593	80,925	27,906	9,573	495,796	103,239	34,841	118,646	397,108	4,206,502
1988	1,790,538	289,044	643,546	39,436	10,917	136,398	39,222	10,232	330,541	99,038	66,308	49,729	407,048	4,267,356
1989	599,527	222,795	452,393	17,288	5,891	69,981	30,314	2,358	100,717	33,950	38,834	24,497	200,921	1,982,321
1990	1,931,649	269,703	513,635	25,035	6,581	158,096	24,965	3,360	278,068	71,847	69,441	41,829	384,564	4,270,541
1991	124,078	94,537	211,308	1,050	561	86,157	11,480	322	41,324	8,551	25,920	9,085	152,952	799,445
1992	131,359	70,198	113,187	1,328	695	73,563	1,600	251	39,227	6,696	9,452	7,186	69,772	534,968
1993	113,985	43,974	150,418	2,886	178	20,082	4,356	61	7,272	3,596	2,350	1,007	47,025	412,700
1994	59,333	37,560	21,418	1,847	332	31,501	1,816	45	9,454	3,126	10,251	1,305	27,009	222,121
1995	161,107	72,291	87,349	2,885	985	31,194	1,568	176	29,358	8,012	7,953	19,606	51,284	499,871
1996	66,447	319,093	89,490	15,443	824	34,968	1,870	279	32,291	3,326	12,484	10,883	128,497	769,512
1997	61,852	179,294	55,173	2,086	2,560	17,884	82	1,186	24,553	2,243	3,374	11,156	50,661	452,332
1998	31,883	115,978	90,082	299	535	41,860	47	937	17,235	2,204	1,142	3,369	89,777	413,415
1999	18,922	92,888	58,382	380	898	33,223	196	7	10,241	1,450	2,375	4,970	36,114	278,439
2000	23	63,493	34,857	157	0	15,880	7	10	182	1,283	38	0	37,894	155,084
2001	12,326	55,614	21,642	19	0	35,418	669	0	7,954	1,093	678	0	28,276	170,771
2002	24,665	110,040	28,268	0	19	23,311	0	1,094	11,408	1,133	4,165	3,339	31,942	170,771
2003	20,523	191,225	32,050	462	25	22,887	958	5	33,855	4,451	11	90	37,639	352,337
2004	8,969	201,727	121,327	3,897	25	13,394	12	294	23,232	2,871	188	272	68,296	456,744
2005	3,582	214,629	66,758	0	24	13,919	819	0	20,323	4,040	68	0	58,978	387,988
2006	0	237,614	58,122	7	127	33,937	1,334	0	19,021	2,514	356	736	63,186	417,101
2007	0	286,868	60,965	0	19	27,325	454	0	36,795	4,430	97	2,206	38,617	461,018

Source: USDA Forest Service, 1965–2007; Includes Oregon and Washington and a small portion of northern California.

Table 10—Average stumpage prices for sawtimber sold on national forests, by selected species, Pacific Northwest Region, 1965–2007

Year	Douglas-fir		Ponderosa and Jeffrey pines		White pine	Lodgepole pine	Engelmann spruce	Sitka spruce	Western hemlock	Cedars	Larch	Noble fir and Shasta red fir	Other true firs	All species
	West side	East side	West side	East side										
1965	42.60	10.20	18.40	14.40	22.00	8.40	6.20	22.80	19.10	15.90	8.90	20.90	10.20	27.50
1966	50.00	11.80	21.10	23.20	24.60	3.40	6.40	32.00	20.60	16.20	9.20	28.80	12.40	31.50
1967	41.70	9.60	19.10	21.10	24.60	3.20	12.20	22.20	21.80	53.90	8.50	20.40	12.90	28.00
1968	61.20	20.10	23.90	27.90	30.10	10.40	22.00	34.20	35.60	22.40	18.30	38.60	31.20	42.40
1969	82.20	32.20	46.60	58.20	56.70	15.10	30.40	19.70	45.10	40.10	30.40	46.10	42.60	58.80
1970	41.90	8.40	20.30	30.00	37.30	4.20	3.90	11.70	20.50	14.70	10.90	15.10	11.80	26.70
1971	49.10	4.40	22.30	23.10	22.30	5.20	8.00	18.10	20.60	17.20	5.30	24.60	12.20	30.10
1972	71.70	15.60	38.40	26.00	35.80	10.60	27.20	28.00	49.00	67.50	13.50	100.20	33.00	53.20
1973	138.10	60.40	77.70	60.50	50.70	38.40	55.60	93.40	99.20	146.80	53.90	81.40	73.80	102.80
1974	202.40	68.20	110.60	139.10	121.00	25.70	50.20	72.60	110.80	217.00	11.00	136.20	80.90	142.40
1975	169.50	34.30	43.10	109.90	84.40	15.40	13.70	75.90	68.50	119.20	5.80	117.70	45.10	101.60
1976	176.20	38.60	79.40	118.90	116.00	40.20	10.50	83.10	78.10	160.30	20.30	105.60	55.00	113.20
1977	225.90	71.20	138.40	162.80	142.70	35.40	36.50	103.00	89.20	149.60	62.10	128.90	85.10	153.80
1978	250.31	98.50	218.70	207.90	123.70	41.60	85.40	109.50	111.70	206.60	56.40	122.50	99.10	185.00
1979	394.30	81.70	238.00	237.30	181.90	47.10	51.60	227.90	197.10	329.10	90.50	211.30	189.80	270.00
1980	432.20	70.80	190.80	167.00	102.80	44.60	34.20	306.50	208.00	301.00	43.60	241.80	167.90	285.50
1981	350.20	94.00	206.40	174.50	100.60	36.60	15.00	238.00	162.00	168.70	69.70	147.30	103.80	230.60
1982	118.20	5.80	78.60	83.60	50.00	17.40	19.50	49.50	44.60	101.90	37.50	28.40	40.00	80.20
1983	161.60	37.60	134.30	131.80	74.30	20.20	28.70	30.00	61.90	88.70	31.80	42.40	58.30	112.50
1984	132.90	43.00	143.70	201.80	93.20	21.20	21.00	52.10	61.20	186.60	42.50	92.60	43.50	94.60
1985	126.20	32.20	166.00	192.60	109.30	14.20	18.40	77.70	50.00	123.70	50.60	57.60	41.20	101.40
1986	160.70	34.10	196.30	199.10	116.70	9.40	38.10	93.90	74.10	156.30	48.50	84.30	47.70	127.90
1987	190.20	46.00	267.10	300.60	220.10	18.00	24.00	81.20	103.70	192.40	46.30	101.90	63.70	161.50
1988	256.04	83.52	295.45	253.55	236.83	40.38	51.92	98.28	161.86	259.18	80.74	134.21	89.94	206.40
1989	389.80	161.60	323.44	292.91	272.66	68.90	105.94	87.51	222.47	158.06	132.73	203.00	149.42	268.37
1990	466.35	149.07	297.78	341.35	262.42	59.39	96.80	138.53	203.04	266.30	141.66	407.83	161.08	330.00
1991	394.95	110.03	322.50	335.70	187.53	92.40	141.31	219.92	164.10	284.94	94.24	279.49	142.37	224.61
1992	477.21	183.78	487.91	454.16	239.47	103.74	143.96	176.17	164.68	231.76	258.95	193.34	183.42	309.12
1993	317.75	254.53	595.26	531.45	518.59	156.52	82.08	524.91	363.66	367.31	352.47	341.51	333.72	407.96
1994	652.36	307.87	318.20	588.27	763.67	155.72	216.00	376.68	334.80	363.51	482.19	449.81	250.13	394.14
1995	453.38	143.57	253.19	433.58	488.33	136.01	146.22	175.10	291.84	86.56	271.48	285.36	217.78	295.34
1996	398.98	267.68	165.67	58.21	328.74	96.62	60.19	107.67	221.28	497.17	217.49	204.30	139.36	231.78
1997	291.26	284.50	164.38	394.16	250.67	144.24	109.56	109.04	191.38	1,174.33	156.28	227.50	128.18	240.46
1998	201.64	199.64	122.17	473.97	233.02	82.66	56.07	74.99	101.41	268.01	218.60	165.08	84.17	139.30
1999	393.98	202.87	139.91	127.31	270.75	94.92	62.15	93.23	77.69	196.44	278.23	273.58	127.35	180.67
2000	747.86	123.20	111.36	397.16	0	144.98	84.59	139.46	158.32	560.04	65.16	0	97.38	120.63
2001	255.38	127.66	83.98	177.15	0	101.62	257.05	0	56.14	283.17	156.14	0	62.38	116.31
2002	152.56	189.52	87.75	0	10.00	149.59	0	85.71	64.71	329.65	177.18	24.43	62.63	158.74
2003	236.85	146.15	54.99	75.91	125.86	77.24	79.83	23.85	92.86	170.69	120.00	633.41	47.50	121.36
2004	105.15	138.35	93.47	98.63	274.46	100.18	65.00	173.91	50.52	113.61	86.83	75.29	74.85	107.31
2005	331.81	161.00	80.77	0	206.34	102.35	119.67	0	71.80	254.08	284.29	0	91.22	130.60
2006	0	146.30	72.72	40.38	262.63	114.07	183.04	119.67	82.92	381.81	275.99	253.00	85.79	123.24
2007	0	110.61	53.27	0	393.55	112.78	242.91	0	22.18	201.55	280.37	79.12	98.25	95.94

Dollars per thousand board feet

Source: USDA Forest Service 1965–2007, includes Oregon and Washington and a small portion of northern California.

Common Name	Scientific Name
Cedars	<i>Juniperus</i> spp.
Douglas-fir	<i>Pseudotsuga menziesii</i> (Mirb.) Franco
Engelmann spruce	<i>Picea engelmannii</i> Parry ex Engelm.
Jeffrey pine	<i>Pinus jeffreyi</i> Grev. & Balf.
Larch	<i>Larix</i> spp.
Lodgepole pine	<i>Pinus contorta</i> Dougl. ex Loud.
Noble fir	<i>Abies procera</i> Rehd.
Ponderosa pine	<i>Pinus ponderosa</i> Dougl. ex Laws.
Shasta red fir	<i>Abies shastensis</i> (Lemmon)
Sitka spruce	<i>Picea sitchensis</i> (Bong.) Carr.
Sugar pine	<i>Pinus lambertiana</i> Dougl.
True firs	<i>Abies</i> spp.
Western hemlock	<i>Tsuga heterophylla</i> (Raf.) Sarg.
Whitebark pine	<i>Pinus albicaulis</i> Engelm.

Metric Equivalents

When you know:	Multiply by:	To get:
Board feet (logs)	4.53	Cubic meters
Board feet (lumber)	2.36	Cubic meters
Tons (short)	.907	Metric tons

Literature Cited

- Aust, P. 2008.** Personal communication. Economist, Washington Department of Natural Resources, Financial Management, MS: 47041, Olympia, WA 98504. Washington state timber harvest. [Http://www.egov.oregon.gov/odf](http://www.egov.oregon.gov/odf) (5 May)
- Austin, J.W. 1968–70.** Production, prices, employment, and trade in Northwest forest industries. Resour. Bull. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. Quarterly.
- Darr, D.R. 1970–72.** Production, prices, employment, and trade in Northwest forest industries. Resour. Bull. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. Quarterly.
- Hamilton, T.E. 1964–68.** Production, prices, employment, and trade in Northwest forest industries. Resour. Bull. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. Quarterly.

Holt, E.C. 1972–74. Production, prices, employment, and trade in Northwest forest industries. Resour. Bull. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. Quarterly.

Lettman, G. 2008. Oregon state timber harvest. [Http://www.egov.oregon.gov/odf/resource_planning, timber harvest.](http://www.egov.oregon.gov/odf/resource_planning_timber_harvest) (4 February)

Oregon Employment Department. 1965–2007. Oregon labor trends. Salem, OR: Workforce and Economic Research Division. [Http://www.QualityInfo.org](http://www.QualityInfo.org). Monthly publication.

Ruderman, F.K. 1974–85. Production, prices, employment, and trade in Northwest forest industries. Resour. Bull. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. Quarterly.

U.S. Department of Agriculture, Forest Service [USDA Forest Service]. 1965–2007. Forest Service. Portland, OR: Region 6 Natural Resource Division. [Http://www.fs.fed.us/r6/fp/FPWebPage/FP70104A.htm](http://www.fs.fed.us/r6/fp/FPWebPage/FP70104A.htm). Web site updated quarterly.

U.S. Department of Commerce. 1965–2007. Foreign Trade Division of Economics and Statistics Administration. Washington, DC: U.S. Census Bureau. [Http://dataweb.usitc.gov/](http://dataweb.usitc.gov/). Web site updated monthly.

Warren, D.D. 1985–2007. Production, prices, employment, and trade in Northwest forest industries. Resour. Bull. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. Quarterly.

Washington State Employment Security Department. 1965–2007. Washington Labor Market Quarterly Review. Olympia, WA: Labor Market and Economic Analysis. [Http://www.workforceexplorer.com](http://www.workforceexplorer.com). Quarterly publication.

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