



NOAA Technical Memorandum NMFS-AFSC-66

Oregon, Washington, and Alaska Exports of Edible Fishery Products, 1995

by
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U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
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ABSTRACT

Oregon, Washington, and Alaska (defined in this report as the 'Pacific Northwest) exports of edible fishery products in 1995 declined slightly in quantity from 1994 to 1.4 billion pounds (lb) or 633,188 metric tons (t). The value of these fishery exports increased by 3.7% to \$2.15 billion. The increases in exports of groundfish, salmon, and herring were dampened by the 41% decrease of crab exports. In 1995, groundfish exports of \$985 million and Salmon exports of \$792 million accounted for 45.8% and 36.9%, respectively, of the total value of Pacific Northwest fishery exports. The value of Pacific Northwest exports comprised 65.9% of total U.S. edible fishery exports, down slightly from 66.3% in 1994. In 1995, Pacific Northwest exports were shipped to 42 countries with the top 4 countries (Japan, Canada, the United Kingdom, and the Republic of Korea) accounting for 92.7% of the total. Increased trade with Canada, the People's Republic of China, France and the United Kingdom, offset the decreased trade of fishery products with the Republic of Korea. Exports to Japan totaled \$1.64 billion or 76.4% of the total, up 1.8% in value from \$1.61 billion in 1994. Canada was in the second spot with shipments of \$184 million or 8.6% of total exports. Pacific Northwest exports to the United Kingdom increased 7.3% from 1994 to \$86 million or 4.0% of the total exports. The Republic of Korea dropped to the fourth spot with \$79.5 million or 3.7% of the total exports, down 10% from \$88 million in 1994.

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INTRODUCTION

Exports of edible fishery products from Oregon; Washington, and Alaska continue to be a major contributor to both total U.S. fishery exports and to the economy of the Pacific Northwest. This report compares exports of edible fishery products from the Pacific Northwest with total U.S. fishery exports, examines fishery exports by product and major importing country, reviews changes in patterns in exports, and updates the report of Kinoshita and Terry (1996).

For the purposes of these analyses, the Pacific Northwest is defined as the states of Oregon, Washington, and Alaska. The export data used in this report are from the U.S. Department of Commerce, Bureau of the Census. The database is maintained by the National Marine Fisheries Service (NMFS), Fisheries Statistics Division, Silver Spring, Maryland.

Export data from the Oregon, Washington, and Alaska customs districts were used in this report. This method covers the major exports of salmon, groundfish, crabs, and herring. Also included are categories of exports not identified by species but as whole or dressed fish, minced fish, fish balls, cakes and pudding, and fish sticks. This approach to assessing exports of fishery products is not without problems. First, species harvested in the Pacific Northwest may be exported from customs districts outside the region. Second, species harvested from outside the region may be shipped from Oregon, Washington, and Alaska customs districts. However, both problems appear to be minor. There were 20 export items in 1995 that were likely to have originated from other parts of the United States. Of these 20 fishery products, most were tropical tunas and lobsters., and they accounted for 0.41% of the total value of 1995 Pacific Northwest exports and were not included in this report. Most fishery products are shipped from the general area where they are harvested or processed, provided there are sufficient quantities to be shipped. Two major

products shipped from the Pacific Northwest, whole or dressed Pacific salmon and frozen crab, accounted for 90.4% and 92.8%, respectively, of total U.S. exports of these two products in 1995. In recent years, much of the fish harvested in Alaska has been shipped directly to Pacific Rim countries. Other products may be first shipped to Washington state, then exported to their final destination.

The Harmonized System (HS) of coding imports and exports replaced the old Tariff Schedule of the United States (TSUSA) in 1989. The HS product codes, in most cases, provided greater detail by species, product, and condition. The HS in 1989 had 179 categories compared with only 62 under the old TSUSA. Since 1989, there has been numerous changes as products were added, while others were eliminated. In 1995, there were over 200 export categories of edible fishery products. After eliminating products not likely to originate from the Pacific Northwest and products not exported in 1995, there were 155 products recorded. The 155 products were then consolidated down to 43 items. The HS product codes appear in Appendix Table 1. Scientific names of species identified in this report are listed in Appendix Table 2. Note that totals and percentages in the tables may not always agree because of rounding, and that percentage changes may not agree because they were calculated from unrounded data.

PACIFIC NORTHWEST EXPORTS

The value of Pacific Northwest exports of edible fishery products quadrupled between 1984 and 1992, but since then they have leveled off at around \$2.1 billion. Exports of edible fishery product in 1995 increased 3.7% from 1994 to \$2.15 billion, and accounted for 65.9% of the total U.S. exports of edible fishery products (Table 1). The quantity of Pacific Northwest exports on a product weight basis totaled 1.4 billion pounds (lb) or 633,188 metric tons. (t), a drop of just 0.2% from 1994 (Table 2 and Fig. 1).

Table 1.--Pacific Northwest exports of edible fishery products (million dollars) excluding and including joint venture sales and percent of total U.S. exports of edible fishery products, 1981-95.*

Year	Excluding joint ventures			Including joint ventures		
	Pacific Northwest	Total U.S.	% Total U.S.	Pacific Northwest	Total U.S.	% Total U.S.
1981	\$ 805	\$1,073	75.0	\$ 818	\$1,094	74.8
1982	739	999	74.0	775	1,035	74.9
1983	668	908	73.6	715	959	74.6
1984	648	842	77.0	724	921	78.6
1985	837	1,010	82.9	940	1,115	84.3
1986	1,034	1,290	80.2	1,187	1,445	82.1
1987	1,232	1,578	78.1	1,432	1,792	79.9
1988	1,700	2,162	78.6	1,920	2,383	80.6
1989	1,747	2,277	76.7	1,872	2,395	78.2
1990	2,071	2,779	74.5	2,114	2,831	74.7
1991	2,218	3,037	73.0	2,218	3,041	72.9
1992	2,570	3,357	76.6	2,570	3,357	76.6
1993	2,154	3,077	70.0	2,154	3,077	70.0
1994	2,072	3,126	66.3	2,072	3,126	66.3
1995	2,148	3,262	65.9	2,148	3,262	65.9

Note: Joint ventures off the Pacific Northwest ended in 1990 and ended off the East Coast in 1991.

* - Total U.S. exports for 1993-95 include both domestic and foreign (re-exports) .

Sources: U.S. Dep. Commer., Bureau of the Census; database from Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910; Alaska Fish. Sci. Cent., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070; and Natl. Mar. Fish. Serv., Fisheries of the United States, 1991, Silver Spring, MD 20910.

Table 2.--Pacific Northwest exports of edible fishery products, percent change in quantity (million lb) and value (million dollars) from 1994 to 1995.

Product	Quantity			Value		
	1994	1995	% change	1994	1995	% change
Fresh and frozen						
Salmon						
Chinook	6.4	6.3	-1.6	\$ 14.9	\$ 16.7	12.1
Chum	21.7	24.6	13.4	22.0	27.3	24.3
Pink	19.8	11.6	-41.5	23.2	15.7	-32.4
Sockeye	176.2	190.4	8.0	356.6	373.1	4.6
Coho	25.1	22.0	-12.2	45.9	35.7	-22.2
Not specified	7.1	12.1	70.2	16.6	24.2	45.7
Subtotal	256.3	266.9	4.1	479.1	492.7	2.8
Groundfish						
Halibut	6.9	5.6	-18.9	15.1	12.6	-16.8
Flatfish	170.5	171.1	.4	103.0	102.7	-.3
Cod	85.9	83.2	-3.1	76.0	83.7	10.0
Pollock	3.0	5.7	88.8	1.2	2.7	126.1
Mackerel	38.1	65.8	72.6	16.3	32.8	100.7
Whiting	6.8	3.0	-56.1	5.8	3.8	-34.5
Sablefish	33.5	35.5	6.0	87.2	95.7	9.8
Other, nspf	77.3	64.3	-16.8	58.5	54.2	-7.4
Subtotal	422.0	434.2	2.9	363.2	388.2	6.9
Herring	72.5	70.8	-2.3	50.2	65.6	30.6
Fish roe						
Pollock	19.6	33.1	68.6	88.4	143.7	62.5
Herring	12.8	28.2	120.3	23.0	37.8	64.3
Salmon	22.9	24.7	7.8	113.1	127.3	12.6
Other, nspf	8.1	6.7	-17.5	20.7	20.6	-.3
Subtotal	63.4	92.7	46.1	245.2	329.5	34.4
Filletts						
Cod	3.1	1.5	-52.1	3.3	2.2	-33.6
Halibut	.7	.6	-22.2	2.6	1.7	-34.0
Pollock	9.6	12.6	31.5	8.5	16.2	90.2
Other, nspf	5.2	3.9	-23.7	8.8	7.1	-18.8
Subtotal	18.5	18.6	0.2	23.2	27.2	17.3
Other						
Surimi	307.4	294.8	-4.1	312.9	349.0	11.5
Minced	3.7	6.8	83.6	2.8	5.9	109.2
Meat	34.6	16.3	-52.8	29.1	17.8	-38.8
Balls, cake, etc.	.4	.7	83.5	.6	1.2	93.3
Fish sticks	16.1	19.3	19.6	19.0	27.7	45.3
Subtotal	362.2	338.0	-6.7	364.5	401.5	10.1

Table 2.--Continued.

Product	Quantity			Value		
	1994	1995	% change	1994	1995	% change
Cod, cured	2.3	3.1	36.9	\$ 3.1	\$ 3.4	11.5
Canned						
Salmon						
Pink	43.0	37.9	-11.8	63.7	54.3	-14.8
Sockeye	39.2	49.4	25.8	84.0	105.4	25.5
Other	7.8	6.9	-11.6	14.2	11.9	-16.4
Subtotal	90.1	94.2	4.6	162.0	171.6	6.0
Fish, other	11.5	15.8	37.5	12.9	23.1	79.8
Crab						
King	7.7	6.0	-21.3	46.3	33.3	-28.2
Snow	67.5	26.8	-60.4	251.9	121.8	-51.6
Dungeness	.9	1.1	28.4	2.7	4.7	75.4
Not specified	4.3	6.1	39.5	17.4	28.7	64.9
Subtotal	80.4	40.0	-50.3	318.4	188.5	-40.8
Crabmeat	3.8	2.0	-47.6	12.9	6.6	-48.7
Sea urchin	3.5	3.2	-7.9	7.6	9.6	26.9
Caviar	.1	.6	353.1	1.3	4.0	213.1
Shrimp	2.8	3.5	25.2	11.9	16.9	41.9
Crustaceans	.1	.2	57.6	.7	.8	2.9
Molluscs	9.4	12.3	30.2	15.6	19.2	23.2
Total	1,398.9	1,395.9	-0.2	\$2,071.6	\$2,148.5	3.7

nspf - Not specifically provided for.

Note: Discrepancies in totals are due to rounding and percentages are based on unrounded numbers.

Sources: U.S. Dep. Commer., Bur. of the Census; database from Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910; and Alaska Fish. Sci. Cent., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

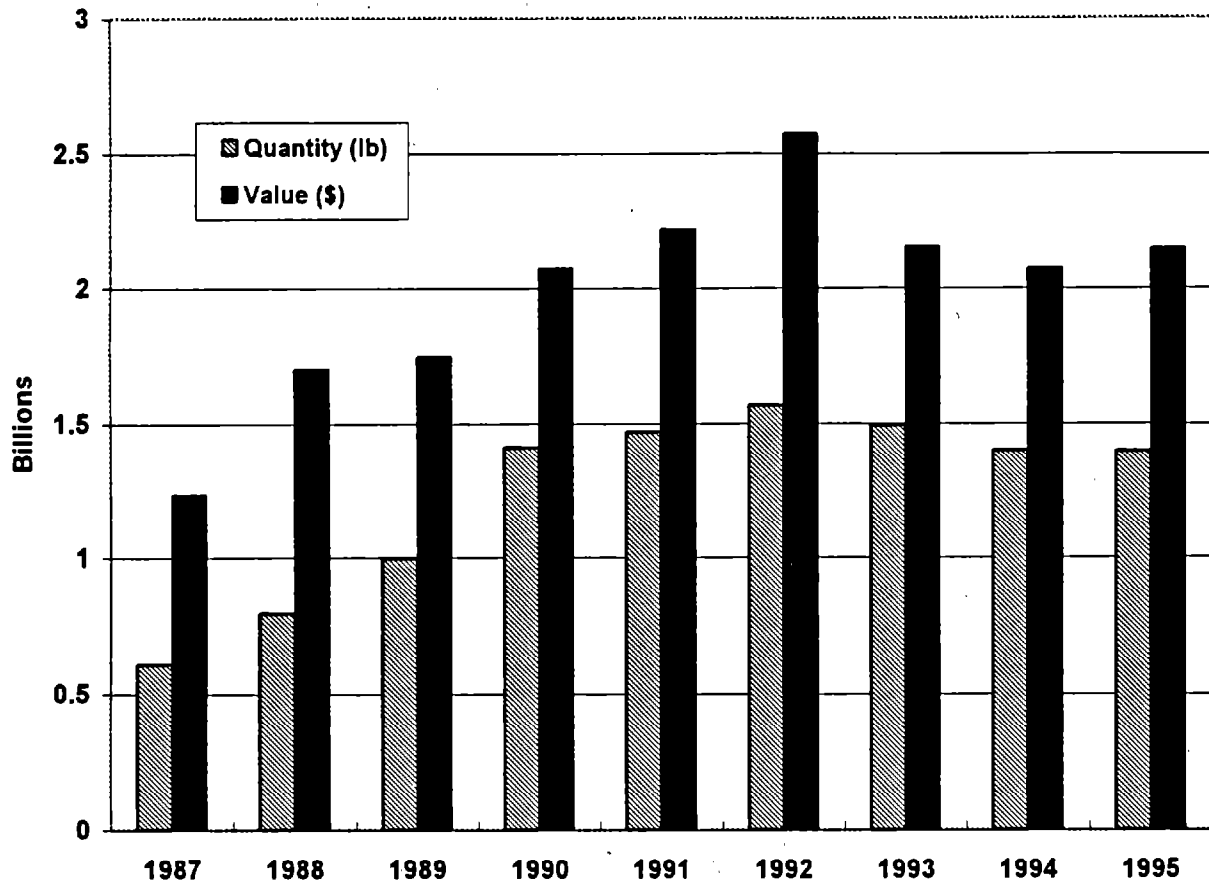


Figure 1. --Quantity and value of Pacific Northwest exports of edible fishery products, 1987-95.

The upward trend, which started in 1985, was reversed in 1993-95 (Fig. 2). The decline in the last 3 years resulted mostly from lower groundfish and salmon prices, and from the decline of the king and snow crab resource and consequently affected exports. Exports of whole or dressed salmon were up 2.8% from 1994, while exports of groundfish were up 14% from a year earlier.

Major Products

Groundfish exports, including halibut, increased 14% in value to \$985 million or 45.8% of the region's exports of edible fishery products in 1995. Since 1990, groundfish exports have accounted for 38% to 48% of total Pacific Northwest exports. Pacific salmon exports increased by 5% from \$754 million in 1994 to \$792 million in 1995, and comprised 36.9% of fishery exports, up from 36.4% in 1994. Prior to 1990 and before the major expansion of the domestic Alaska groundfish fishery, salmon exports had accounted for 50% to 76% of total Pacific Northwest exports. Crab products ranked third with a value of \$195 million or 9.1% of the total, followed by herring products with \$103 million or 4.8% of the total. The Pacific Northwest exports of edible fishery products, by major products and product groups for 1994 and 1995, are presented in Table 2. Table 3 and Figure 3 summarize Pacific Northwest exports in more general product groups.

Exports of fresh, frozen, cured, and processed groundfish were virtually unchanged in quantity but increased by 14% in value from \$863 million in 1994 to \$985 million in 1995. The increase in groundfish exports resulted mostly from higher Atka mackerel landings and pollock roe yields off Alaska and higher cod and surimi prices. In Japan, the major market for groundfish, the economy picked up slightly and demand improved. Groundfish exports were made up of \$388 million of whole or dressed fish; \$27 million of fillets; \$164 million of

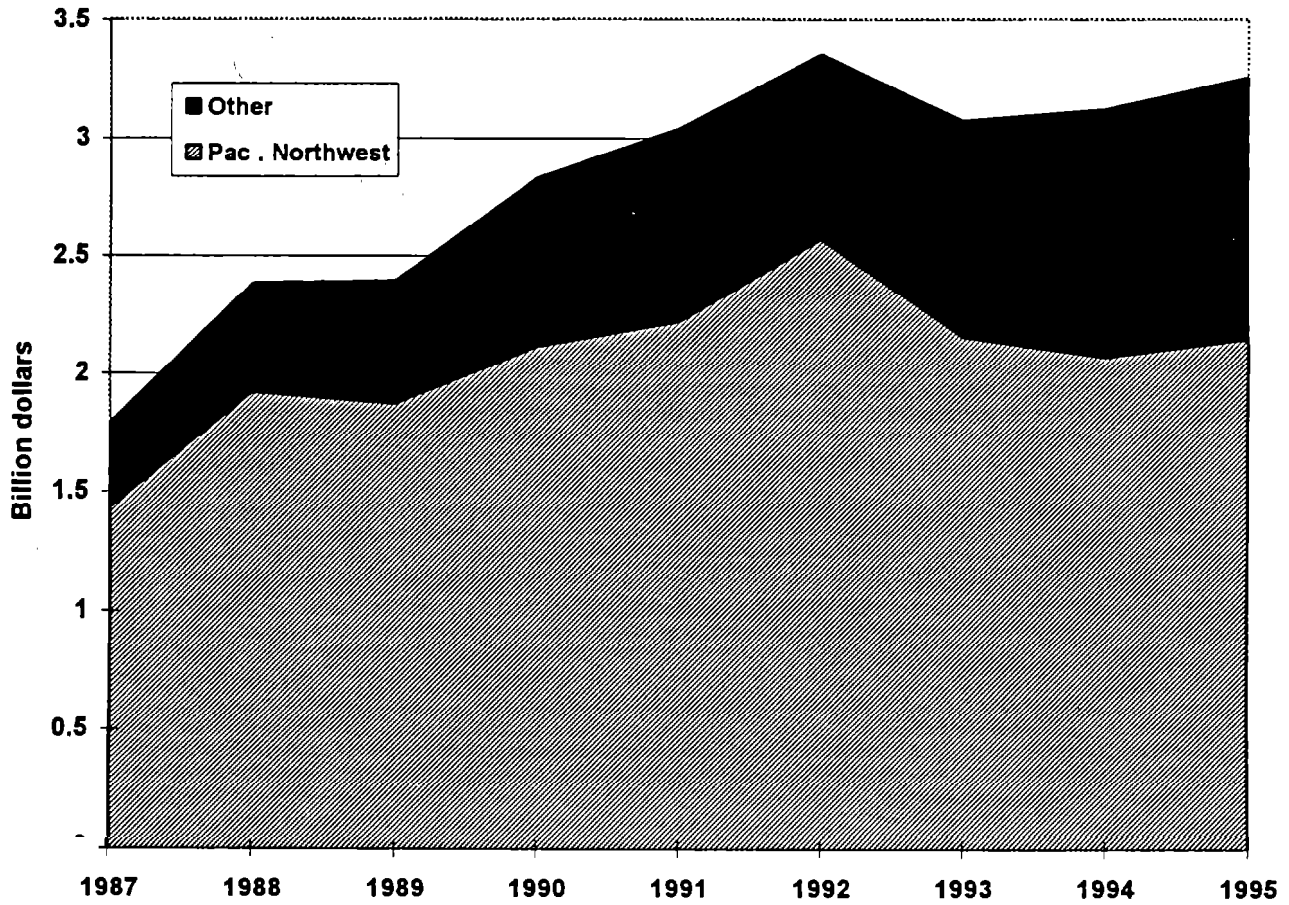


Figure 2. --Pacific Northwest and total U.S. exports of edible fishery products, 1987-95. Includes joint venture sales.

Table 3.--Pacific Northwest exports of edible fishery products or product groups (million dollars) and percent of total, 1981-95.

Year	Salmon	Herring	Ground- fish*	Crab	Other	Total
Value						
1981	\$572	\$ 57	\$ 30	\$106	\$40	\$ 805
1982	531	60	25	87	36	739
1983	510	67	23	40	29	668
1984	480	60	47	36	25	648
1985	597	104	66	53	17	837
1986	707	78	126	107	16	1,034
1987	728	93	204	184	24	1,232
1988	967	115	358	231	29	1,700
1989	878	59	531	242	37	1,747
1990	822	71	795	345	38	2,071
1991	612	76	1,074	417	39	2,218
1992	891	89	1,112	433	45	2,570
1993	797	73	833	403	48	2,154
1994	754	73	863	331	51	2,072
1995	792	103	985	195	73	2,148
Percent						
1981	71.0	7.1	3.7	13.2	5.0	100.0
1982	71.9	8.1	3.3	11.8	4.9	100.0
1983	76.4	10.0	3.4	6.0	4.3	100.0
1984	74.1	9.3	7.2	5.5	3.9	100.0
1985	71.3	12.4	7.9	6.4	2.0	100.0
1986	68.4	7.5	12.2	10.4	1.5	100.0
1987	59.1	7.5	16.6	14.9	1.9	100.0
1988	56.9	6.8	21.0	13.6	1.7	100.0
1989	50.3	3.4	30.4	13.8	2.1	100.0
1990	39.7	3.4	38.4	16.7	1.8	100.0
1991	27.6	3.4	48.4	18.8	1.8	100.0
1992	34.7	3.5	43.3	16.8	1.7	100.0
1993	37.0	3.4	38.7	18.7	2.2	100.0
1994	36.4	3.5	41.6	16.0	2.5	100.0
1995	36.9	4.8	45.8	9.1	3.4	100.0

* Other fresh, frozen, cured, roe, and processed finfish excluding salmon, herring, and other nongroundfish species.

Note: Discrepancies in totals are due to rounding.

Sources: U.S. Dep. Commer., Bureau of the Census; database from Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910; and Alaska Fish. Sci. Cent., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

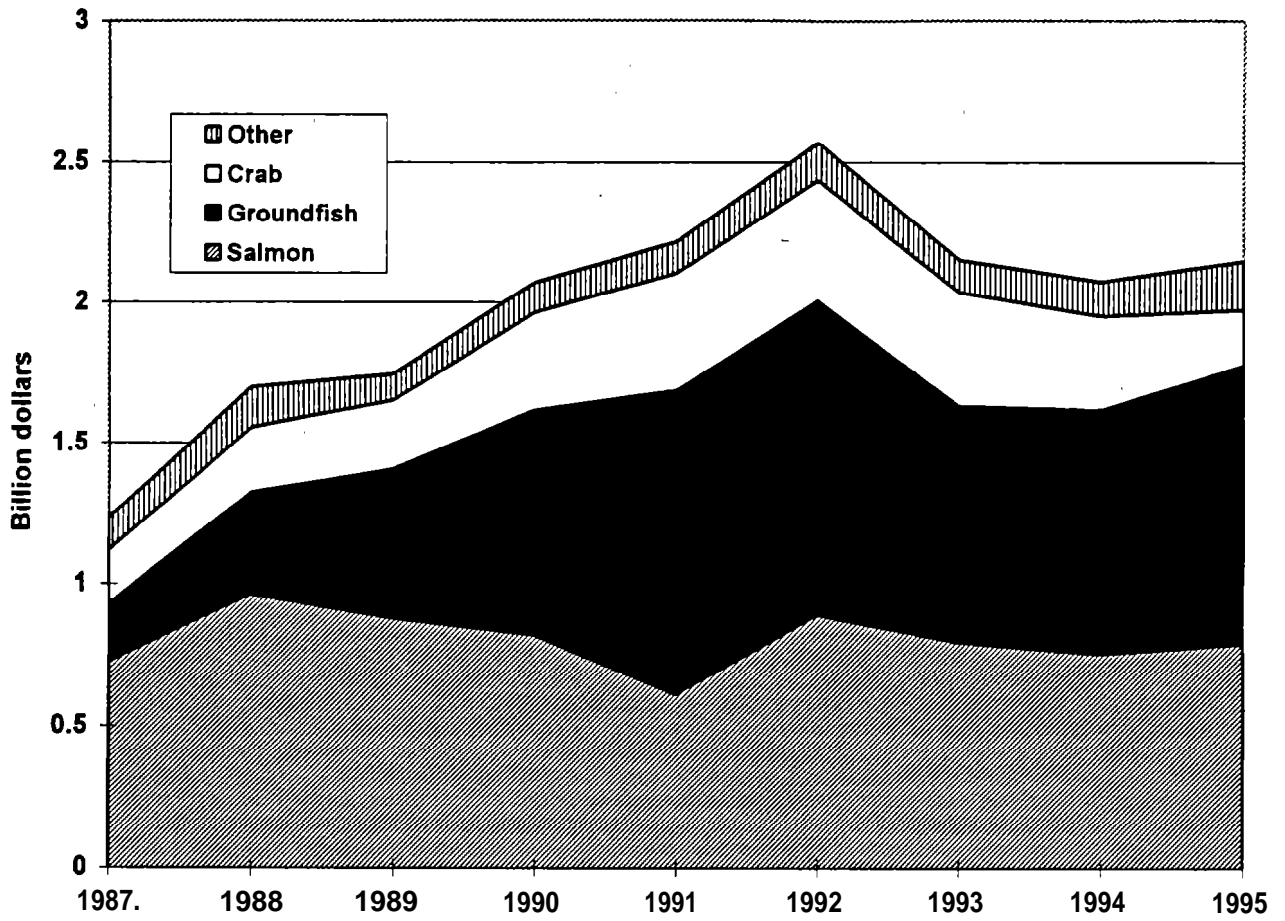


Figure 3.-- Pacific Northwest exports of edible fishery products by major products groups, 1987-95.

fish roe; \$402 million of surimi and minced fish including meat, balls, cakes, and minced fish sticks; and \$3.4 million of cured fish (Table 4).

The Alaska groundfish landings in 1995 were down 1.1% from 1994 to just over 4 billion lb (1.83 million t) . The catch of the most important species, walleye (Alaska) pollock, declined 6.5% to 2.85 billion lb (1.29 million t) in 1995 from a year earlier. The decline in pollock landings were partially offset by higher Pacific cod and Atka mackerel landings. Production of a major export commodity, pollock surimi, amounted to 392 million lb (177,893 t), down 2.2% from 1994, as production was shifted to pollock fillets, which increased 8.9% from 1994 (Tromble 1996). Exports of surimi and minced fish including meat, balls, cakes, and sticks declined 6.7% from 362 million lb in 1994 to 338 million lb in 1995, with the value increasing by 10% to \$402 million. Surimi exports in 1995 totaled 295 million lb, and were valued at \$349 million. Exports of whole or dressed groundfish were up 2.9% to 434 million lb in 1995, and with higher prices, the value rose by 6.9% to \$388 million. An increase in the cod quota was not reflected in exports of whole or dressed cod as cod exports fell 3.1% to 83.2 million lb, -while the value increased 10% to \$83.7 million. Flatfish exports were about the same as a year earlier, while sablefish exports increased by almost 10% in value from 1994. Pollock roe exports increased by 62.5% in value due to the 68.6% increase in quantity. Groundfish exports by country of destination are shown in Appendix Table 3.

The quantity of total salmon exports in 1995 increased by 4.5% to 386 million lb, and the value rose 5% to \$792 million. The 1995 Alaska salmon catch totaled 1.1 billion lb, up 27% from the 867 million lb in 1994 (Bearden 1996). The sockeye salmon catch increased by 18% to 347 million lb, and the pink salmon catch increased 19% to 434 million lb. The Alaska salmon catch was valued \$496 million, up 16.8% from \$424 million in 1994. The quantity of whole

Table 4.--Pacific Northwest exports of groundfish products including Pacific halibut, percent change in quantity (million lb) and value (million dollars) from 1994 to 1995.

Product	Quantity			Value		
	1994	1995	% change	1994	1995	% change
Whole or dressed						
Halibut	6.9	5.6	-18.9	\$ 15.1	\$ 12.6	-16.8
Flatfish	170.5	171.1	.4	103.0	102.7	-.3
Cod	85.9	83.2	-3.1	76.0	83.7	10.0
Pollock	3.0	5.7	88.8	1.2	2.7	126.1
Mackerel	38.1	65.8	72.6	16.3	32.8	100.7
Whiting	6.8	3.0	-56.1	5.8	3.8	-34.5
Sablefish	33.5	35.5	6.0	87.2	95.7	9.8
Other, nspf	77.3	64.3	-16.8	58.5	54.2	-7.4
Subtotal	422.0	434.2	2.9	363.2	388.2	6.9
Fish roe						
Pollock	19.6	33.1	68.6	88.4	143.7	62.5
Other, nspf	8.1	6.7	-17.5	20.7	20.6	-.3
Subtotal	27.8	39.8	43.4	109.1	164.3	50.6
Filletts						
Cod	3.1	1.5	-52.1	3.3	2.2	-33.6
Halibut	.7	.6	-22.2	2.6	1.7	-34.0
Pollock	9.6	12.6	31.5	8.5	16.2	90.2
Other, nspf	5.2	3.9	-23.7	8.8	7.1	-18.8
Subtotal	18.5	18.6	0.2	23.2	27.2	17.3
Other						
Surimi	307.4	294.8	-4.1	312.9	349.0	11.5
Minced	3.7	6.8	83.6	2.8	5.9	109.2
Meat	34.6	16.3	-52.8	29.1	17.8	-38.8
Balls, cake, etc.	.4	.7	83.5	.6	1.2	93.3
Fish sticks	16.1	19.3	19.6	19.0	27.7	45.3
Subtotal	362.2	338.0	-6.7	364.5	401.5	10.1
Cured, cod	2.3	3.1	36.9	3.1	3.4	11.5
Total	832.8	833.7	0.1	\$863.1	\$984.7	14.1

nspf - Not specifically provided for.

Note: Discrepancies in totals are due to rounding and percentages are based on unrounded numbers.

Sources: U.S. Dep. Commer., Bur. of the Census; database from Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910; and Alaska Fish. Sci. Cent., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

or dressed salmon exported in 1995 increased by 4.1% from 1994, and the value rose by 2.8% to \$493 million. The overall-increase of salmon exports was due to the 8% increase in quantity of sockeye salmon exports. In Japan, the major buyer of U.S. salmon, prices were held in line by increased competition from farmed salmon from Norway and Chile and by higher domestic chum salmon landings (Atkinson 1995). With higher Alaska salmon landings, canned salmon exports were also up, 4.6% in quantity and 6% in value from 1994. Exports by country of destination for total salmon, whole or dressed salmon, and canned salmon are presented in Appendix Tables 4, 5, and 6, respectively.

Exports of crab and crabmeat fell to 42 million lb in 1995, down 50%, and were valued at \$195 million, down 41% by value from 1994. Catch of snow crab (Chionocetes opilio) was 50% below 1994 and amounted to 74 million lb in 1995. The catch of Tanner crab (c. bairdi) crab was down by 42% to 6.7 million lb. The king crab catch was up 22.7% from 1994 to 14.7 million lb in 1995, but well below the average 24 million lb landed in 1991-93.

Exports of herring products in 1995 totaled 99 million lb and were valued at \$103 million, up 16% by quantity and 41% by value. Exports of whole herring were off by 2.3% by quantity from 1994, while, herring roe exports were up by 120%. By value, whole fish were up by 30.6%, and herring roe was up by 64.3%. The supply of herring was up slightly as the Alaska catch increased to 106 million lb, up 0.9% from 1994.

Major Importers

Pacific Northwest exports of edible fishery products were sold to 42 countries in 1995, with Japan being the leading buyer. The top four countries, Japan, Canada, the United Kingdom, and the Republic of Korea, purchased 92.7% of the total (Tables 5 and 6, and Fig. 4). There were significant increases in the value of exports to Canada (21.2%), the People's

Table 5.--Quantity (million lb) and value (million dollars) of Pacific Northwest edible fishery products exported to the leading countries for 1994 and 1995 and percent change, 1994-95.

Country	Quantity			Value		
	1994	1995	% change	1994	1995	% change
Japan	1,009.9	958.3	-5.1	\$1,612.3	\$1,641.3	1.8
Canada	90.6	114.0	25.9	152.1	184.3	21.2
United Kingdom	43.2	45.1	4.3	81.5	86.0	5.5
Rep. of Korea	129.1	119.3	-7.6	88.1	79.5	-9.8
People's Republic of China	41.2	78.1	89.3	34.7	46.6	34.5
Australia	11.9	11.5	-3.0	18.9	18.9	-.0
France	9.2	12.6	38.0	11.7	16.4	40.0
Netherlands	10.5	9.8	-6.9	16.0	14.3	-10.6
Taiwan	11.8	9.5	-19.2	12.2	12.1	-1.3
Hong Kong	3.8	3.7	-1.3	5.4	9.1	69.8
Belgium	2.7	4.9	84.6	3.8	6.3	64.8
Federal Republic of Germany	8.7	2.8	-67.1	9.2	5.6	-39.1
Norway	.2	4.4	2,151.3	.3	4.8	1,376.2
Spain	1.9	4.3	127.7	2.6	4.2	58.7
Denmark	3.6	2.9	-17.3	4.2	3.6	-13.2
Sweden	.9	1.7	80.3	1.1	2.2	99.5
Thailand	6.3	2.4	-62.7	3.8	2.1	-44.4
Malaysia	3.2	1.7	-47.1	2.9	1.8	-38.4
South Africa	.3	1.4	288.5	.4	1.6	337.4
New Zealand	.6	.9	36.9	1.0	1.4	42.2
Ireland	.9	.8	-11.8	1.5	1.3	-9.0
Italy	1.9	.8	-56.7	2.0	1.1	-44.3
Portugal	5.4	.5	-91.0	4.8	.6	-88.2
Other	1.2	4.5	279.8	1.2	3.4	187.3
Total	1,398.9	1,395.9	-0.2	\$2,071.6	\$2,148.5	3.7

Note: Discrepancies in totals are due to rounding.
Percentages are based on unrounded data.

Sources: U.S. Dep. Commer., Bureau of the Census, database from Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910; and Alaska Fish. Sci. Cent., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 6.--Value (million dollars) and percent of Pacific Northwest edible fishery products exported to major countries, 1987-95.

Country	1987	1988	1989	1990	1991	1992	1993	1994	1995
Value									
Japan	\$ 936.7	\$1,401.3	\$1,426.1	\$1,608.1	\$1,660.4	\$2,060.9	\$1,717.3	\$1,612.3	\$1,641.3
Canada	92.5	90.4	124.8	100.6	96.0	96.7	142.4	152.1	184.3
United Kingdom	58.4	66.0	56.5	80.5	113.8	125.7	77.3	81.5	86.0
Rep. of Korea	31.5	35.9	52.5	94.4	145.9	127.4	98.3	88.1	79.5
People's Republic of China	0.0	0.0	0.0	0.1	12.4	17.9	24.4	34.7	46.6
Australia	14.3	15.3	16.2	14.4	11.8	15.7	13.3	18.9	18.9
Other	<u>98.4</u>	<u>91.2</u>	<u>71.2</u>	<u>172.4</u>	<u>178.0</u>	<u>126.1</u>	<u>81.3</u>	<u>84.0</u>	<u>91.9</u>
Total	\$1,231.8	\$1,700.1	\$1,747.3	\$2,071.1	\$2,218.3	\$2,570.4	\$2,154.4	\$2,071.6	\$2,148.5
Percent									
Japan	76.0	82.4	81.6	77.7	74.9	80.2	79.7	77.8	76.4
Canada	7.5	5.3	7.2	4.8	4.3	3.8	6.6	7.3	8.6
United Kingdom	4.7	3.9	3.2	3.9	5.1	4.9	3.6	3.9	4.0
Rep. of Korea	2.6	2.1	3.0	4.6	6.6	4.9	4.6	4.3	3.7
People's Republic of China	0.0	0.0	0.0	0.0	0.6	0.7	1.1	1.7	2.1
Australia	1.2	0.9	0.9	0.7	0.5	0.6	0.6	0.9	0.9
Other	<u>8.0</u>	<u>5.4</u>	<u>4.1</u>	<u>8.3</u>	<u>8.0</u>	<u>4.9</u>	<u>3.8</u>	<u>4.1</u>	<u>4.3</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Discrepancies in totals are due to rounding.

Sources: U.S. Dep. Commer., Bur. of the Census; database from Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910; and Alaska Fish. Sci. Cent., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0700.

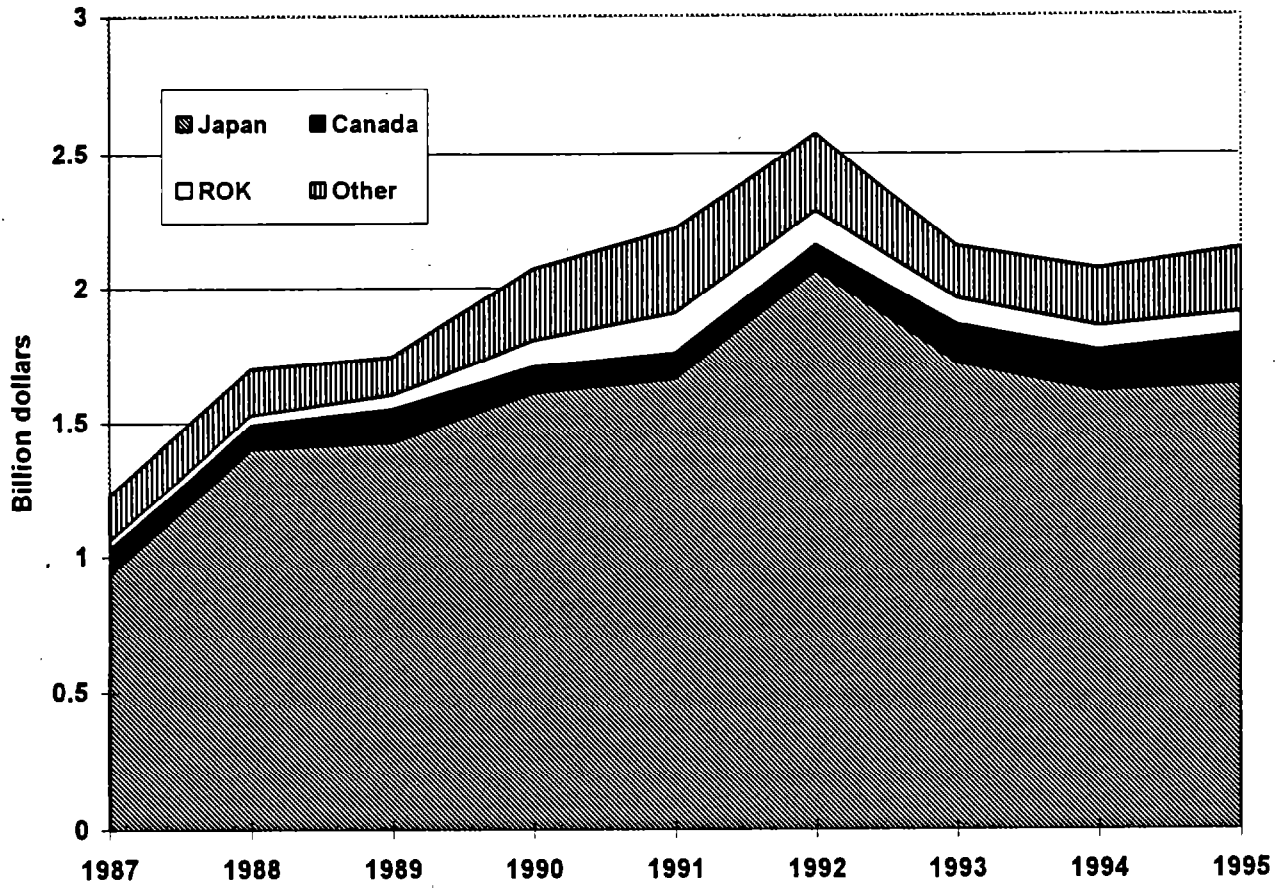


Figure 4. --Pacific Northwest exports of edible fishery products by country of destination, 1987-95.

Republic of China (34.5%), the United Kingdom (5.5%), and France (40%) in 1995. At the same time, exports declined to the Netherlands (10.6%), and the Republic of Korea (9.8%).

Japan's imports of edible fishery products from the Pacific Northwest increased 1.8% to \$1.64 billion and accounted for 76.4% of the total value of the Pacific Northwest's fishery exports in 1995. Purchases by Japan in the 1987-95 period have ranged from 76% to 82% of Pacific Northwest fishery exports. In 1995, the Japanese were the leading buyers of whole or dressed Pacific salmon (82.7%), whole Pacific herring (80.3%), sablefish (97.2%), crab (94.6%), surimi (89%), and total fish roe (95%) (Appendix Table 7). Exports of the most important category sold to Japan, whole or dressed salmon, declined 3.7% in quantity and declined 4.1% in value to \$407.5 million. Lower catches of snow and Tanner crab off Alaska reduced supplies available for export. Exports of crab to Japan were off by 48% and the value dropped by 38.7% from 1994. A number of products increased by value in 1995, as exports of Atka mackerel, sablefish, fish roe, and surimi all increased over 1994. The increase of exports to Japan can be attributed partially to the slightly better economy and resulting increase in consumption. The Japanese economy in 1995 was up slightly from 1994, with real gross national expenditures up 0.9% from 1994, and household incomes up 0.6%.

Canada was the second largest importer, with purchases of \$184 million or 8.6% of the total Pacific Northwest fishery exports, up 21% from \$152 million in 1994. Increased purchases of whole or dressed and canned salmon accounted for most of the increase (Appendix Table 8). Canada continues to be a net exporter of salmon products, and will augment their supply of salmon by purchasing fresh, frozen, and canned salmon from U.S. producers. The British Columbia salmon catch in 1995 totaled 106 million lb (48,157 t), down 26% from 1994.

The United Kingdom was the third largest importer with purchases of \$86 million or 4% of the total (Appendix Table 9). The quantity of imported edible fishery products increased by 4.3%, and the value rose by 5.5% from 1994. Most of the increase was attributed to higher sales of canned salmon, which increased 6.3% in 1995 to 43 million lb in quantity and rose by 6.3% to \$82.9 million in value. Canned salmon dominated fishery exports to the United Kingdom with 96.3% of exports. The United Kingdom was the leading buyer of canned salmon in 1995, with 48.3% of the Pacific Northwest canned salmon exports, up slightly from 48.1% in 1994.

In the fourth spot, down from third in 1994, was the Republic of Korea which imported 3.7% of the total exports. Exports fell 7.6% in quantity, and the value declined 9.8% from 1994 to \$79.5 million in 1995. Reduced purchases of crab and fish roe were responsible for most the decline, while increases of whole or dressed groundfish exports partially moderated the decline (Appendix Table 10).

In the fifth spot was the People's Republic of China, with purchases of \$46.6 million, up 34.5% from \$34.7 million in 1994. The People's Republic of China's purchases were concentrated on two products, whole or dressed flatfish and whole herring, which accounted for 55.5% and 18%, respectively, of the total imports (Appendix Table 11). Fishery exports to this country began in 1990 with only \$132,000 of edible fishery products imported which has increased each year since. Although shipments to the People's Republic of China have grown at a rapid pace, a substantial portion of the product are shipped here for processing, then shipped to a third country.

Exports to Australia ranked sixth, declining 3% in quantity to 11.5 million lb but were unchanged in value at \$18.9 million (Appendix Table 12). The gain in surimi exports was offset by the 7.3% decline of canned

salmon exports. Australia was the third leading buyer of canned salmon, with \$17.1 million or 10% of the total canned salmon exports from the Pacific Northwest.

Rounding out the top 10 leading importers were France, the Netherlands, Taiwan, and Hong Kong with purchases of \$16.4, \$14.3, \$12.1, and \$9.1 million, respectively. Exports to France ranked seventh, up two spots from 1994, as exports rebounded 38% in quantity and 40% in value to 12.6 million lb and \$16.4 million, respectively (Appendix Table 15). The increase was attributed to higher shipments of whole or dressed salmon, up 35% from 1994 and comprised 70% of fishery exports to France. Exports to the Netherlands fell by 10.6% from \$16 million-in 1994, primarily due to reduced purchases of canned salmon, down nearly 10% from 1994 (Appendix Table 13). In the ninth position was Taiwan, down 1.3% from the previous year, resulting from a sizable drop in surimi exports that more than offset gains in salmon, groundfish, and shellfish exports (Appendix Table 14). Exports to Hong Kong were up nearly 70% from 1994 to \$9.1 million in 1995 (Appendix Table 16).

Exports by Customs District

By quantity; 1.0 billion lb or 72.7% of Pacific Northwest fishery exports in 1995 were shipped from the Alaska customs district, compared with 361 million lb or 25.8% from Washington, and 19.6 million lb or 1.4% from Oregon (Tables 7 and 8). By value, \$1.43 billion or 66.7% of the total was from Alaska, \$682 million or 31.7% was from Washington, and \$33.6 million or 1.6% was from Oregon' (Fig. 5). Table 9 presents the percentage distribution by customs district for 1977-95.'

Pacific Northwest fishery exports in 1995 destined for Pacific Rim countries increased to \$1.8 billion or 84.4% of total exports compared with the \$1.78 billion in 1994, with almost \$1.4 billion shipped from Alaska and

Table 7.--Quantity (1,000 pounds), value (1,000 dollars), and percent of total 1994 value of Pacific Northwest edible fishery products exported by customs district to area or country of destination, 1994.

District	Asia*	Europe	Canada	Other	Total
Quantity					
Alaska	973,773	18,242	18,028	16	1,010,059
Washington	217,579	71,380	72,532	435	361,926
Oregon	26,926	--	7	4	26,937
Total	1,218,278	89,622	90,567	455	1,398,922
Value					
Alaska	\$1,311,326	\$ 17,376	\$ 22,009	\$ 91	\$1,350,802
Washington	428,136	122,000	130,079	453	680,669
Oregon	40,206	--	11	7	40,225
Total	\$1,779,668	\$139,376	\$152,099	\$551	\$2,071,696
Percent of total value					
Alaska	63.3	0.8	1.1	0.0	65.2
Washington	20.7	5.9	6.3	0.0	32.9
Oregon	1.9	--	0.0	0.0	1.9
Total	85.9	6.7	7.4	0.0	100.0

* Includes Australia and New Zealand.

Note: Discrepancies in totals are due to rounding.

Sources: U.S. Dep. Commer., Bureau of the Census; database from Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910; and Alaska Fish. Sci. Cent., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 8.--Quantity (1,000 pounds), value (1,000 dollars), and percent of total 1995 value of Pacific Northwest edible fishery products exported by customs district to area or country of destination, 1995.

District	Asia*	Europe	Canada	Other	Total
Quantity					
Alaska	986,436	8,356	20,593	--	1,015,385
Washington	181,980	83,834	93,389	1,737	360,940
Oregon	18,692	887	23	--	19,602
Total	1,187,108	93,077	114,005	1,737	1,395,927
Value					
Alaska	\$1,397,304	\$ 7,290	\$ 28,612	--	\$1,433,206
Washington	384,543	139,742	155,627	\$1,766	681,678
Oregon	32,518	1,090	43	--	33,651
Total	\$1,814,365	\$148,122	\$184,281	\$1,766	\$2,148,533
Percent of total value					
Alaska	65.0	0.3	1.3	--	66.7
Washington	17.9	6.5	7.2	0.1	31.7
Oregon	1.5	0.1	0.0	--	1.6
Total	84.4	6.9	8.6	0.1	100.0

* Includes Australia and New Zealand.

Note: Discrepancies in totals are due to rounding.

Sources: U.S. Dep. Commer., Bureau of the Census; database from Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910; and Alaska Fish. Sci. Cent., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

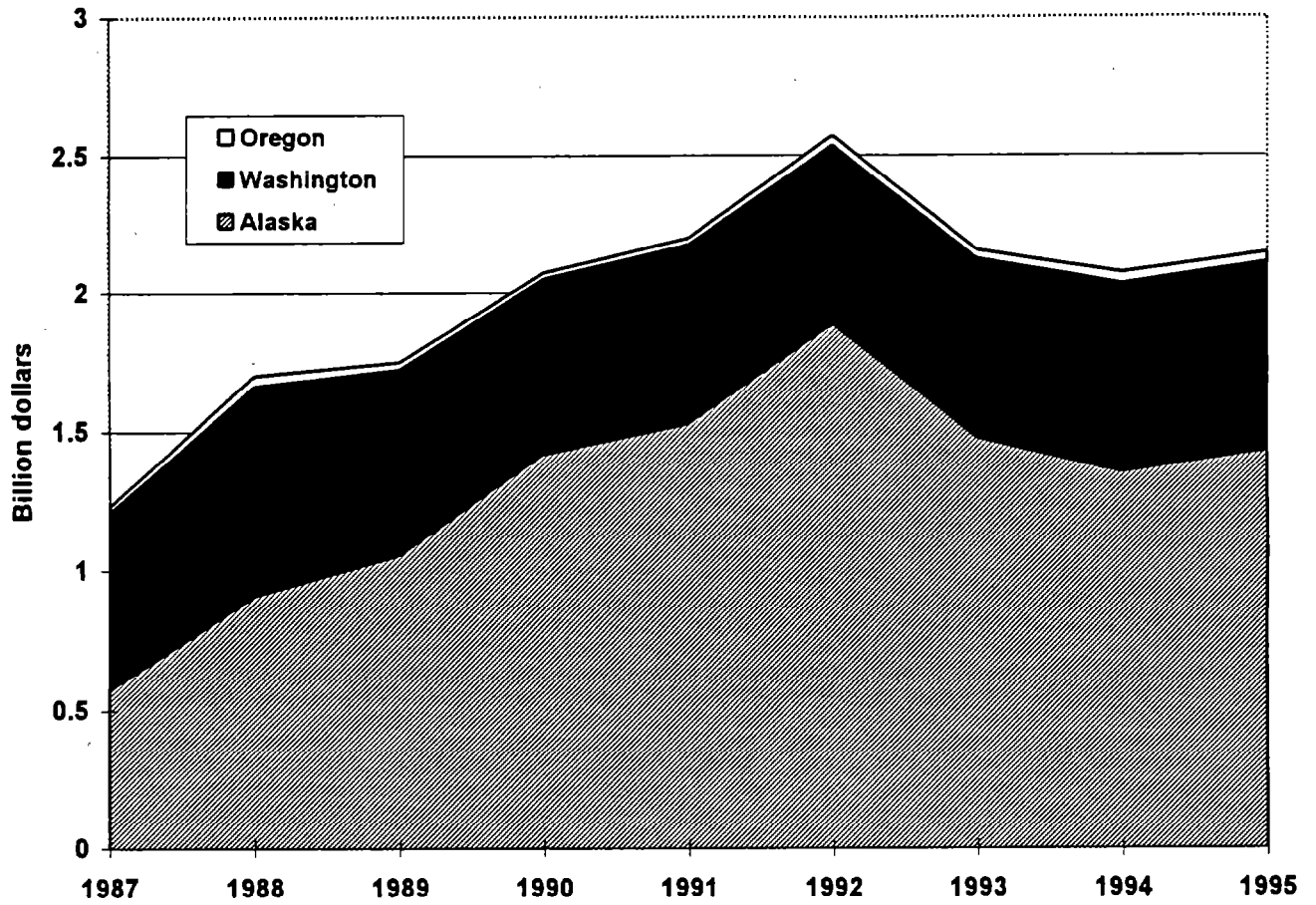


Figure 5.--Pacific Northwest exports of edible fishery products by customs districts, 1987-95.

Table 9 --Pacific Northwest exports of edible fishery products by customs districts 'as percentage of the total, 1977-95.

Year	Quantity (%)			Value (%)		
	Oregon	Washington	Alaska	Oregon	Washington	Alaska
1977	2.1	83.3	14.6	2.2	81.6	16.2
1978	2.5	68.3	29.3	2.4	65.1	32.5
1979	2.8	51.6	45.6	1.9	51.6	46.5
1980	1.4	55.4	43.2	1.4	59.5	39.1
1981	1.4	53.9	44.7	1.5	57.5	41.0
1982	2.0	42.4	55.6	2.3	50.1	47.6
1983	1.3	40.6	58.1	1.6	48.8	49.6
1984	1.8	43.8	54.4	1.8	53.9	44.3
1985	1.7	39.5	58.8	1.7	45.6	52.7
1986	1.5	45.5	53.1	1.9	49.0	49.2
1987	1.6	46.4	52.0	1.8	51.6	46.6
1988	1.6	34.5	63.9	2.2	44.3	53.5
1989	1.1	31.7	67.2	1.4	38.2	60.4
1990	0.6	21.9	77.5	1.0	30.7	68.3
1991	0.7	23.1	76.2	1.0	29.4	69.6
1992	1.1	20.8	78.1	1.3	25.4	73.3
1993	1.0	25.0	74.0	1.4	30.2	68.4
1994	1.9	25.9	72.2	1.9	32.9	65.2
1995	1.4	25.9	72.7	1.6	31.7	66.7

Note: Discrepancies in percentages not adding to 100% are due to rounding.

Sources: U.S. Dep. Commer., Bureau of the Census; database from Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910; and Alaska Fish. Sci. Cent., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

\$384.5 million from Washington in 1995. Exports to Europe totaled \$148 million in 1995, or 6.9% of the total, up from \$139 million and 6.7% of total exports in 1994, with nearly \$140 million shipped from Washington and \$7.3 million from Alaska in 1995. Exports to Europe rose by 6.3% as increased sales of canned salmon to the United Kingdom and of whole or dressed salmon to France contributed to most of the increase.

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APPENDIX

Appendix Table 1.--Export categories of edible fishery products for 1995.

Product description
Trout, rainbow, fresh, farmed fresh
Salmon, Atlantic, fresh, farmed Atlantic, fresh, wild chinook, fresh chum, fresh pink, fresh sockeye, fresh coho, fresh Danube, fresh
Salmonidae, nspf, fresh
Flatfish, halibut, Greenland turbot, fresh plaice, fresh sole, fresh nspf, fresh
Tuna, albacore, fresh
Herring, fresh
Groundfish, cod, nspf, fresh
Groundfish, pollock, Atlantic, fresh
Mackerel, fresh
Shark, dogfish, fresh
Eels, fresh
Sablefish, fresh
Lingcod, fresh
Fish, nspf, fresh
Fish, nspf, liver and roe, fresh
Salmon, chinook, frozen chum, frozen pink, frozen sockeye, frozen coho, frozen Pacific, nspf, frozen
Trout, frozen
Salmon, Atlantic, Danube, frozen
Salmonidae, nspf, frozen
Flatfish, halibut, Atlantic, Pacific, frozen turbot, Greenland, frozen plaice, frozen sole, frozen nspf, frozen
Tuna, albacore, frozen
Herring, frozen
Groundfish, cod, nspf, frozen
Groundfish, pollock, Atlantic, frozen
Mackerel, frozen
Shark, dogfish, frozen

Appendix Table 1.--Continued.

Product description
Eels, frozen
Sea bass, frozen
Groundfish, hake, whiting, frozen
Sablefish, frozen
Fish, nspf, frozen
Sturgeon roe, frozen
Herring roe, frozen
Salmon, nspf, roe, frozen
Groundfish, pollock, Alaska roe, frozen
Fish, nspf, liver and roe, frozen
Fish, nspf, fillet, fresh
Groundfish, cod fillet, frozen
Flatfish, halibut, nspf, fillet, frozen
Groundfish, pollock, Alaska fillet, frozen
Fish, nspf, fillet, frozen
Surimi
Groundfish, cod, nspf, minced, frozen > 6.8 kg
Fish, nspf, minced, frozen > 6.8 kg
Fish, nspf, meat, frozen
Salmon, nspf, roe, cured
Herring roe, cured
Fish, nspf, liver and roe, cured
Fish, nspf, fillet, dried/salted/brined
Salmon, smoked
Herring, smoked
Fish, nspf, smoked
Groundfish, cod, dried
Fish, nspf, dried
Herring, salted
Groundfish, cod, salted
Fish, nspf, salted
Shrimp, shell-on, frozen c 15 count size
shell-on, frozen 15/20 count size
shell-on, frozen 21/25 count size
shell-on, frozen 26/30 count size
shell-on, frozen 31/40 count size
shell-on, frozen 41/50 count size
shell-on, frozen 51/60 count size
shell-on, frozen 61/70 count size
shell-on, frozen > 70 count size
peeled, frozen
Crabmeat, nspf, frozen
Crab, king, frozen
snow, frozen
Dungeness, frozen
nspf, frozen

Appendix Table I.--Continued.

Product description

Crawfish', freshwater, frozen
Crustaceans, nspf, frozen
Shrimp, live/fresh/dried/salted/brined
Crabmeat, nspf, fresh/dried/salted/brined
Crab, nspf, live/fresh/dried/salted/brined
Crustaceans, nspf, live/fresh/dried/salted/brined
Oysters, live/fresh/frozen/dried/salted/brined
Scallops, live/fresh
Scallops, frozen/dried/salted/brined
Mussels, live/fresh, farmed
live/fresh, wild
frozen/dried/salted/brined
Squid, (Loligo), live/fresh
nspf, live/fresh
nspf, and cuttlefish, live/fresh
nspf, fillet, frozen
(Loligo opalescens), frozen/dried/salted/brined
(Loligo pealei), frozen/dried/salted/brined
(Loligo, nspf), frozen/dried/salted/brined
nspf, frozen/dried/salted/brined
and cuttlefish, frozen/dried/salted/brined
octopus, live/fresh
frozen/dried/salted/brined
Snail, other than sea snail, live/fresh/frozen/salted
Sea urchin, roe, fresh
live/fresh
Molluscs, nspf, live/fresh
Clam, frozen/dried/salted;/brined
Molluscs, nspf, frozen/dried/salted/brined
Fish, shellfish, nspf, juice
Salmon, nspf, canned in oil
chum, canned not in oil
pink, canned not in oil
sockeye, canned not in oil
nspf, canned not in oil
nspf, prepared/preserved not in airtight container
Herring, prepared/preserved
Mackerel, prepared/preserved
Sticks, type products, coated, not minced .
type products, not coated, not minced
Fish, nspf, prepared meals containing shellfish
Fish balls, cakes, pudding, prepared/preserved
Sticks, type products, coated of minced
type products, not coated of minced
Caviar, caviar substitute, prepared/preserved

Appendix Table 1.--Continued.

Product description

Crab product prepared meals containing fish
Crabmeat, king in airtight container
 snow (Chionocetes opilio) in airtight container
 snow, other in airtight container
 Dungeness in airtight container
 nspf, in airtight container
 king, frozen
 snow (Chionocetes opilio), frozen
 snow, other, frozen
 Dungeness, frozen
 nspf, frozen
 nspf, other preparations
Crab, nspf, other preparations
Shrimp, products prepared meals containing fish
 frozen in airtight containers
 frozen
 canned
 other preparations
Crustaceans, nspf, products prepared meals containing fish
 nspf, prepared/preserved
Molluscs/other, nspf, products prepared meals containing fish
Clam, prepared/preserved
Abalone, prepared/preserved
Scallops, prepared/preserved
Squid (Loligo), prepared/preserved
Squid, nspf, 'prepared/preserved
Molluscs, nspf, prepared/preserved
Soups, broths, based on fish or other seafood

nspf - Not specifically provided for.

Sources: U.S. Dep. Commer., Bur. of the Census; U.S. Dep. of
Treasury, Bur. of Customs; and available from Alaska Fish.
Sci. Cent, 7600 Sand Point Way N.E., BIN C15700, Seattle,
WA 98115-0070.

Appendix Table 2. --Scientific names of species identified in this report.

Common name	Scientific name
FISH	
Cod, Pacific	<u>Gadus macrocephalus</u>
Flounders and soles	<u>Pleuronectidae</u> family
Halibut, Pacific	<u>Hippoglossus stenolepis</u>
Herring, Pacific	<u>Clupea pallasii</u>
Mackerel, Atka	<u>Pleurogrammus monopterygius</u>
Perch, Pacific ocean	<u>Sebastes alutus</u>
Pollock, walleye	<u>Theragra chalcogramma</u>
Rockfish	<u>Sebastes</u> and <u>Sebastolobus</u> species
Sablefish	<u>Anoplopoma fimbria</u>
Salmon, Pacific	<u>Oncorhynchus</u> species
Chinook	<u>O. tshawytscha</u>
Chum	<u>O. keta</u>
Coho	<u>O. kisutch</u>
Pink	<u>O. gorbuscha</u>
Sockeye	<u>O. nerka</u>
Turbot, Greenland	<u>Reinhardtius hippoglossoides</u>
Whiting (hake), Pacific	<u>Merluccius productus</u>
CRUSTACEANS	
Crab, Dungeness	<u>Cancer magister</u>
Crab, king	<u>Lithodes</u> and <u>Paralithodes</u> species
Crab, snow (Tanner)	<u>Chionoecetes bairdi</u> and <u>opilio</u>
Shrimp	<u>Pandalus</u> , <u>Pandalopsis</u> , and <u>Crangon</u> species

Appendix Table 3. --Pacific Northwest exports of groundfish products including halibut by country of destination, quantity (million lb), value (million dollars), and percent change from 1994 to 1995.

Country	Quantity			Value		
	1994	1995	% change	1994	1995	% change
Japan	604.7	593.1	-1.9	\$684.3	\$806.2	17.8
Rep. of Korea	123.4	117.6	-4.8	79.0	76.6	-3.1
Canada	26.4	29.8	13.1	43.0	41.1	-4.3
People's Republic of China	34.0	65.2	91.7	13.3	28.5	114.4
Taiwan	9.9	7.5	-23.9	9.0	7.8	-13.7
Hong Kong	3.0	2.3	-24.1	3.7	5.3	44.0
Norway	.2	4.0	2,439.1	.3	3.5	1,255.9
France	.9	2.6	192.6	2.7	3.3	20.3
Spain	1.7	2.9	64.6	2.5	2.7	8.4
Malaysia	3.2	1.7	-47.6	2.9	1.8	-39.2
Australia	.5	1.6	188.6	.5	1.6	248.9
Federal Republic of Germany	7.6	.7	-90.4	7.0	1.6	-77.5
United Kingdom	1.6	.5	-71.1	2.4	.9	-62.0
Thailand	5.6	1.8	-67.2	2.8	.8	-72.6
Italy	1.9	.7	-64.7	2.0	.8	-61.6
Portugal	5.4	.4	-93.1	4.8	.5	-89.9
Other	2.8	1.4	-51.3	3.1	1.9	-38.3
Total	832.8	833.7	0.1	\$863.1	\$984.7	14.1

Note: Discrepancies in totals are due to rounding and percentages are based on unrounded numbers.

Sources: U.S. Dep. Commer., Bur. of the Census; database from Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910; and Alaska Fish. Sci. Cent., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Appendix Table 4. --Pacific Northwest exports of salmon products (fresh, frozen, canned, cured, and roe) by country of destination, quantity (million lb), value (million dollars), and percent change from 1994 to 1995.

Country	Quantity			Value		
	1994	1995	% change	1994	1995	% change
Japan	239.9	231.8	-3.4	\$538.0	\$531.9	-1.1
Canada	44.9	61.5	37.0	75.7	104.7	38.2
United Kingdom	41.5	43.9	5.8	79.0	83.9	6.2
Australia	11.3	9.9	-12.9	18.5	17.1	-7.3
Netherlands	9.5	9.6	1.2	15.1	14.1	-6.3
France	8.2	9.8	18.3	8.9	12.6	42.0
Belgium	2.5	4.5	79.6	3.6	5.8	61.5
People's Republic of China	.9	3.2	254.2	2.1	4.3	104.9
Denmark	2.8	2.7	-3.7	3.3	3.3	.0
Federal Republic of Germany	1.0	1.2	18.8	2.0	3.0	50.0
Taiwan	1.1	1.0	-3.6	1.4	2.0	43.9
Sweden	.2	1.3	405.7	.3	1.6	494.6
South Africa	.3	1.3	276.1	.4	1.5	329.8
Ireland	.9	.8	-11.8	1.5	1.3	-9.0
New Zealand	.5	.7	41.7	.8	1.2	50.8
Rep. of Korea	2.4	.8	-66.2	2.4	1.0	-57.4
Spain	.1	.7	859.3	.1	.8	733.6
Hong Kong	.4	.3	-25.3	.5	.5	-15.3
Other	.7	.8	13.9	.6	1.1	80.0
Total	369.2	385.8	4.5	\$754.1	\$791.7	5.0

Note: Discrepancies in totals are due to rounding and percentages are based on unrounded numbers.

Sources: U.S. Dep. Commer., Bur. of the Census; database from Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910; and Alaska Fish. Sci. Cent., 7600 sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Appendix Table 5. --Pacific Northwest exports of fresh and frozen salmon by country of destination, quantity (million lb), value (million dollars), and percent change from 1994 to 1995.

Country	Quantity			Value		
	1994	1995	% change	1994	1995	% change
Japan	215.9	207.9	-3.7	\$424.8	\$407.5	-4.1
Canada	19.4	32.3	66.6	29.2	51.6	77.0
France	8.1	9.3	15.4	8.5	11.5	35.1
People's Republic of China	.9	3.2	270.3	1.9	4.3	121.9
Denmark	2.8	2.6	-7.6	3.3	3.0	-7.7
Netherlands	1.5	2.3	52.5	2.4	2.6	12.3
Belgium	1.1	2.0	79.9	1.7	2.5	43.9
Taiwan	1.1	1.0	-7.4	1.4	1.9	38.4
Sweden	.2	1.3	405.7	.3	1.6	494.6
Federal Republic of Germany	.7	.8	20.6	1.1	1.2	11.0
South Africa	.3	.9	196.1	.3	1.0	246.2
United Kingdom	.9	.9	-4.2	.9	1.0	7.2
Rep. of Korea	2.4	.8	-66.4	2.4	1.0	-59.9
Spain	.1	.7	859.3	.1	.8	733.6
Other	.9	.9	-5.2	1.0	1.3	39.9
Total	256.3	266.9	4.1	\$479.1	\$492.7	2.8

Note: Zero indicates less than 50,000 lb or \$50,000.
Discrepancies in totals are due to rounding and percentages are based on unrounded numbers.

Sources: U.S. Dep. Commer., Bur. of the Census; database from Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910; and Alaska Fish. Sci. Cent., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA- 98115-0070.

Appendix Table 6. --Pacific Northwest exports of canned salmon by country of destination, quantity (million lb), value (million dollars), and percent change from 1994 to 1995.

Country	Quantity			Value		
	1994	1995	% change	1994	1995	% change
United Kingdom	40.5	43.0	6.1	\$ 78.0	\$ 82.9	6.3
Canada	25.5	29.2	14.5	46.6	53.1	14.0
Australia	11.3	9.9	-12.9	18.5	17.1	-7.3
Netherlands	8.0	7.3	-8.6	12.7	11.4	-9.7
Belgium	1.4	2.5	79.2	1.9	3.4	80.1
Ireland	.9	.8	-11.8	1.5	1.3	-9.0
New Zealand	.5	.7	41.7	.8	1.2	50.8
Japan	1.7	.1	-96.9	1.7	.2	-89.8
Other	.2	.6	232.8	.4	.9	120.0
Total	90.1	94.2	4.6	\$162.0	\$171.6	6.0

Note: Discrepancies in totals are due to rounding and percentages are based on unrounded numbers.

Sources: U.S. Dep. Commer., Bur. of the Census; database from Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910; and Alaska Fish. Sci. Cent., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Appendix Table 7.--Pacific Northwest exports of edible fishery products to Japan by product, quantity (million lb), value (million dollars), and percent change from 1994 to 1995.

Product	Quantity			Value		
	1994	1995	% change	1994	1995	% change
Whole or dressed						
Salmon						
Chinook	5.9	3.9	-32.8	\$ 13.8	\$ 10.2	-25.8
Chum	4.4	3.5	-20.3	4.6	3.9	-14.4
Pink	9.4	.5	-94.6	9.5	.7	-93.1
Sockeye	170.5	176.7	3.7	345.6	350.9	1.5
Coho	20.5	15.3	-25.4	37.9	25.2	-33.4
Other, nspf	5.2	7.9	52.0	13.4	16.6	24.3
Subtotal	215.9	207.9	-3.7	424.8	407.5	-4.1
Groundfish						
Halibut	1.1	1.5	30.7	2.7	3.0	10.8
Oth. flatfish	86.6	61.4	-29.1	72.0	58.2	-19.2
Cod	72.5	65.3	-10.0	62.8	65.6	4.5
Pollock	.3	.2	-21.2	.2	.4	153.0
Mackerel	27.0	51.5	90.8	12.1	27.4	127.0
Pac. hake	1.7	2.7	58.2	1.5	3.6	144.8
Sablefish	32.9	34.3	4.3	85.4	93.0	8.9
Other, nspf	59.8	45.3	-24.2	48.1	44.4	-7.7
Subtotal	282.0	262.3	-7.0	284.7	295.6	3.8
Herring	67.9	54.8	-19.2	47.8	52.7	10.1
Fish roe						
Pollock	17.6	29.7	69.2	79.9	134.6	68.4
Herring	12.7	27.8	119.4	22.7	37.2	64.2
Salmon	22.3	23.8	6.6	111.6	124.2	11.3
Other, nspf	5.7	5.8	1.6	13.6	17.1	25.4
Subtotal	58.3	87.2	49.5	227.8	313.1	37.4
Fish fillets	4.5	13.2	191.4	5.8	18.3	216.1
Other						
Surimi	263.7	259.3	-1.7	273.7	310.8	13.5
Minced	2.7	3.8	40.7	2.1	3.7	80.7
Meat, nspf	21.9	8.5	-61.0	17.1	9.9	-42.2
Ball, cake, and pudding	.2	.5	205.2	.4	.9	133.2
Sticks, minced	6.3	9.8	55.4	7.0	15.4	120.5
Subtotal	294.8	282.0	-4.3	300.2	340.7	13.5
Fish, other	8.4	9.1	7.6	8.3	13.4	61.5
Caviar	.1	.6	370.0	1.1	3.7	232.8

Appendix Table 7.--Continued.

Product	Quantity			Value		
	1994	1995	% change	1994	1995	% change
Crab						
King	7.1	5.5	-22.4	\$ 42.7	\$ 30.2	-29.2
Snow	61.5	26.0	-57.7	231.4	118.6	-48.8
Dungeness	.7	1.0	44.2	2.0	4.2	107.3
Other, nspf	3.6	5.4	50.1	14.9	25.4	70.3
Subtotal	72.8	37.8	-48.1	291.1	178.4	-38.7
Crabmeat	3.2	.8	-76.2	11.8	4.1	-64.9
Sea urchin	.9	1.1	23.2	5.9	7.5	28.1
Shrimp	.3	.7	115.9	.9	3.7	301.5
Other shellfish	.6	.8	35.3	2.1	2.7	29.0
Total	1,009.9	958.3	-5.1	\$1,612.3	\$1,641.3	1.8

nspf - Not specifically provided for.

Note: Discrepancies in totals are due to rounding and percentages are based on unrounded numbers._

Sources: U.S. Dep. Commer., Bur. of the Census; database from Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910; and Alaska Fish. Sci. Cent., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Appendix Table 8.--Pacific Northwest exports of edible fishery products to Canada by product, quantity (million lb), value (million dollars), and percent change from 1994 to 1995.

Product	Quantity			Value		
	1994	1995	% change	1994	1995	% change
Whole or dressed						
Salmon						
Chinook	0.1	2.1	1,547.9	\$ 0.3	\$ 5.9	1,840.3
Chum	6.8	8.8	30.2	6.9	10.5	52.8
Pink	5.7	7.3	28.5	9.1	10.8	18.9
Sockeye	4.1	9.4	131.8	7.2	15.5	114.6
Coho	1.6	2.8	69.5	3.3	4.7	43.8
Not specified	1.1	1.8	69.3	2.4	4.2	75.0
Subtotal	19.4	32.3	66.6	29.2	51.6	77.0
Halibut	4.1	3.0	-27.2	9.4	7.6	-18.7
Flatfish, other	.5	.3	-28.8	.9	.5	-38.6
Herring	3.7	5.8	59.0	2.0	4.0	99.9
Cod	2.3	6.3	177.7	2.6	5.5	113.5
Other	3.9	1.9	-52.5	5.2	2.7	-48.6
Fish roe	.1	.5	273.8	.8	1.2	50.5
Filletts						
Cod	1.2	.3	-79.2	1.5	.4	-73.0
Halibut	.6	.3	-46.3	2.3	1.2	-46.2
Other, nspf	3.3	2.9	-12.4	5.6	5.1	-9.2
Subtotal	5.1	3.4	-32.3	9.3	6.7	-28.2
Surimi, minced, meat, balls, cake, and pudding						
	1.7	3.8	116.7	3.4	3.4	-.3
Sticks, minced	8.5	8.2	-2.9	11.3	11.0	-2.7
Canned salmon						
Pink	15.3	15.0	-2.5	22.8	21.6	-5.4
Sockeye	6.7	12.2	83.9	16.0	28.1	76.0
Other	3.5	2.0	-43.4	7.8	3.4	-56.5
Subtotal	25.5	29.2	14.5	46.6	53.1	14.0
Fish, other	2.2	5.0	128.2	3.3	6.8	108.4

Appendix Table 8.--Continued.

Product	Quantity			Value		
	1994	1995	% change	1994	1995	% change
Crab	0.7	0.6	-18.0	\$ 4.1	\$ 3.6	-11.2
Crabmeat	.5	1.1	106.2	.9	1.9	97.6
Shrimp	2.3	2.3	3.1	10.5	11.6	10.6
Shellfish, other	10.1	10.2	1.0	12.8	13.1	2.6
Total	90.6	114.0	25.9	\$152.1	\$184.3	21.2

nspf - Not specifically provided for.

Note: Discrepancies in totals are due to rounding.
Percentages are based on unrounded numbers.

Sources: U.S. Dep. Commer., Bur. of the Census; database from Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910; Alaska Fish. Sci. Cent., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Appendix Table 9. --Pacific Northwest exports of edible fishery products to the United Kingdom by product, quantity (million lb), value (million dollars), and percent change from 1994 to 1995.

Product	Quantity			Value		
	1994	1995	% change	1994	1995	% change
Whole or dressed						
Salmon	0.9	0.9	-4.2	\$ 0.9	\$ 1.0	7.2
Other	.5	.4	-30.3	.9	.7	-28.6
Filletts	.1	.0	-61.0	.2	.1	-13.9
Surimi, minced, meat and sticks	.5	.1	-85.0	.6	.1	-84.9
Canned, salmon						
Chum	15.4	12.2	-20.9	23.9	17.9	-24.9
Sockeye	23.2	27.8	19.9	50.5	59.9	18.6
Other	2.0	3.0	54.1	3.6	5.1	39.6
Subtotal	40.5	43.0	6.1	78.0	82.9	6.3
Fish, other	.6	.6	-1.1	.9	.9	-4.0
Shellfish, all	.0	.1	833.7	.1	.4	600.7
Total	43.2	45.1	4.3	\$81.5	\$86.0	5.5

Note: Discrepancies in totals are due to rounding.
Percentages are based on unrounded numbers.

Sources: U.S. Dep. Commer., Bur. of the Census; database from Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910; Alaska Fish. Sci. Cent., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Appendix Table 10. --Pacific Northwest exports of edible fishery products to the Republic of Korea by product, quantity (million lb), value (million dollars), and percent change from 1994 to 1995.

Product	Quantity			Value		
	1994	1995	% change	1994	1995	% change
Whole or dressed						
Groundfish						
Flatfish	46.1	46.2	0.0	\$15.3	\$16.3	6.7
Cod	5.3	5.7	7.5	5.3	6.6	24.4
Pollock	2.5	5.3	108.6	.9	2.2	148.6
Mackerel	11.1	14.2	28.0	4.2	5.3	25.8
Other	16.7	12.5	-25.1	8.3	5.1	-38.6
Subtotal	81.8	83.9	2.6	34.0	35.5	4.5
Salmon	2.4	.8	-66.4	2.4	1.0	-59.9
Fish roe						
Pollock	2.1	2.4	17.6	8.5	8.4	-1.5
Other	1.8	.2	-89.9	3.6	.2	-94.9
Filletts	.6	.5	-7.4	.5	.6	6.8
Other						
Surimi	28.5	23.7	-16.7	25.6	25.4	-.5
Meat, nspf	8.1	5.5	-32.2	6.2	5.2	-16.0
Minced, balls, cake, and sticks	.7	1.3	89.6	.6	1.2	102.5
Crab, all	.9	.1	-92.0	3.6	.2	-93.8
Other fish and shellfish	2.4	1.0	-59.1	3.0	1.8	-41.8
Total	129.1	119.3	-7.6	\$88.1	\$79.5	-9.8

Note: Discrepancies in totals are due to rounding and percentages are based on unrounded numbers.

Sources: U.S. Dep. Commer., Bur. of the Census; database from Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910; Alaska Fish. Sci. Cent., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Appendix Table 11. --Pacific Northwest exports of edible fishery products to the People's Republic of China by product, quantity (million lb), value (million dollars), and percent change from 1994 to 1995.

Product	Quantity			Value		
	1994	1995	% change	1994	1995	% change
Whole or dressed						
Salmon	0.9	3.2	270.3	\$ 1.9	\$ 4.3	121.9
Flatfish	32.5	60.2	85.4	12.7	25.9	104.4
Herring	.4	8.2	1,792.1	.2	8.4	3,679.0
Other	1.2	3.7	215.6	.2	1.0	399.6
Crab						
Snow	5.2	.6	-87.5	17.1	2.6	-84.9
Other	.6	.5	-25.2	1.9	2.2	20.6
Other fish and shellfish						
	.5	1.7	235.0	.7	2.2	228.4
Total	41.2	78.1	89.3	\$34.7	\$46.6	34.5

Note: Discrepancies in totals are due to rounding.
Percentages are based on unrounded numbers.

Sources: U.S. Dep. Commer., Bur. of the Census; database from Natl. Mar. Fish. Serv.', Fish. Stat. Div., Silver Spring, MD 20910; Alaska Fish Sci. Cent., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Appendix Table 12. --Pacific Northwest exports of edible fishery products to Australia by product, quantity (million lb), value (million dollars), and percent change from 1994 to 1995.

Product	Quantity			Value		
	1994	1995	% change	1994	1995	% change
Canned						
Salmon						
Pink	6.6	5.6	-15.6	\$ 9.1	\$ 7.3	-19.9
Sockeye	4.3	3.3	-22.1	8.5	7.9	-6.9
Other	.5	1.0	101.7	.8	1.9	128.9
Subtotal	11.3	9.9	-12.9	18.5	17.1	-7.3
Surimi	.4	1.5	302.0	.3	1.5	447.3
Other fish and shellfish	.2	.1	-27.2	.2	.3	47.7
Total	11.9	11.5	-3.0	\$18.9	\$18.9	-0.0

Note: Discrepancies in totals are due to rounding.
Percentages are based on unrounded numbers.

Sources: U.S. Dep. Commer., Bur. of the Census; database from Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910; Alaska Fish. Sci. Cent., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Appendix Table 13.--Pacific Northwest exports of edible fishery products to France by product, quantity (million lb), value (million dollars), and percent change from 1994 to 1995.

Product	Quantity			Value		
	1994	1995	% change	1994	1995	% change
Whole or dressed						
Salmon						
Chum	4.9	4.6	-6.5	\$ 4.3	\$ 4.3	-0.9
Pink	1.1	1.2	3.7	1.1	1.4	27.0
Sockeye	.2	.9	392.5	.3	1.6	402.8
Coho	1.4	1.7	24.4	2.2	2.7	23.3
Other	.5	.9	99.2	.6	1.5	158.7
Subtotal	8.1	9.3	15.4	8.5	11.5	35.1
Fish roe	.3	.4	36.8	1.7	1.5	-8.8
Fillets	.4	.1	-82.2	.8	.1	-90.8
Surimi, minced, meat, and fish sticks	.2	2.3	827.3	.2	2.3	822.4
Other fish and shellfish	.2	.6	186.1	.5	1.0	114.1
Total	9.2	12.6	38.0	\$11.7	\$16.4	40.0

Note: Discrepancies in totals are due to rounding.
Percentages are based on unrounded numbers.

Sources: U.S. Dep. Commer., Bur. of the Census; database from Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910; Alaska Fish Sci. Cent., 7600 Sand Point Way N.E., BIN C15750, Seattle, WA 98115-0070.

Appendix Table 14. --Pacific Northwest exports of edible fishery products to the Netherlands by product, quantity (million lb), value (million dollars), and percent change from 1994 to 1995.

Product	Quantity			Value		
	1994	1995	% change	1994	1995	% change
Whole or dressed						
Salmon						
Chum	0.3	0.4	14.3	\$ 0.4	\$ 0.6	48.9
Pink	.9	1.6	87.0	1.5	1.7	14.4
Sockeye	.1	.1	-45.7	.2	.2	-34.0
Other	.2	.2	16.1	.3	.2	-10.3
Subtotal	1.5	2.3	52.4	2.4	2.6	12.3
Canned salmon						
Pink	3.6	2.4	-35.2	4.9	3.3	-34.1
Sockeye	4.2	4.2	.6	7.5	6.9	-7.5
Other	.2	.7	331.6	.2	1.2	454.6
Subtotal	8.0	7.3	-8.6	12.7	11.4	-9.7
Other fish and Shellfish						
	1.0	.2	-79.1	1.0	.3	-74.4
Total	10.5	9.8	-6.9	\$16.0	\$14.3	-10.6

Note: Discrepancies in totals are due to rounding.
Percentages are based on unrounded numbers.

Sources: U.S. Dep. Commer., Bur. of the Census; database from Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910; Alaska Fish Sci. Cent., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Appendix Table 15.--Pacific Northwest exports of edible fishery products to Taiwan by product, quantity (million lb), value (million dollars), and percent change from 1994 to 1995.

Product	Quantity			Value		
	1994	1995	% change	1994	1995	% change
Whole or dressed						
Salmon						
Chinook	0.1	0.1	-54.8	\$ 0.3	\$ 0.2	-43.4
Chum	.3	.4	51.1	.2	.9	297.6
Sockeye	.3	.1	-74.8	.3	.2	-45.2
Coho	.3	.2	-34.9	.4	.3	-29.2
Other	.1	.3	195.8	.1	.4	203.7
Subtotal	1.1	1.0	-7.3	1.4	1.9	38.4
Groundfish						
Halibut	.6	.3	-50.1	.9	.3	-64.2
Other flatfish	.2	.8	450.0	.2	1.1	398.2
Other	.7	1.2	84.1	.8	1.3	62.4
Fish roe	.0	.2	1,422.6	.1	.5	898.0
Fillets	.1	.6	976.0	.0	.4	812.8
Other						
Surimi	6.6	3.3	-50.1	5.9	3.2	-46.2
Minced, meat, and fish sticks	1.8	1.1	-38.1	1.1	1.0	-5.8
Fish, other	.2	.1	-30.8	.3	.3	-9.7
Shellfish	.6	.9	38.3	1.5	2.1	38.8
Total	11.8	9.5	-19.2	\$12.2	\$12.1	-1.3

Note: Discrepancies in totals are due to rounding.
Percentages are based on unrounded numbers.

Sources: U.S. Dep. Commer., Bur. of the Census; database from Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910; Alaska Fish Sci. Cent., 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

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