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A Provisional Report on the 2002 Salmon Season

by

The Working Group on Stock Assessment

Submitted to the

NORTH PACIFIC ANADROMOUS FISH COMMISSION

By

CSRS

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Overall

Canada, Japan, Russia, and the United States reported preliminary commercial catch statistics for 2002. Although harvesting is still underway, the parties have estimated that approximately 447 thousand tonnes of Pacific salmon have been reported in commercial harvests so far this year. Last year the Stock Assessment Working Group reported a preliminary catch estimate of approximately 670 thousand tonnes for a similar time period in 2001. Final reported commercial catches by the four countries were 818 thousand tonnes in 2001.

Canada reported commercial catches in 2002 continue to be at very low levels. Many fisheries were closed or reduced to protect target species or salmon species caught as by-catch. Japan reported a total harvest of 22,602 tonnes of pink salmon a substantial increase from last year. The chum catch levels to date are similar to that in 2001. Chum salmon fishing is still ongoing in Japan at this time. Alaska reported harvests of about 125 million salmon, down from last year's total of 175 million salmon. The ex-vessel value of the Alaska commercial catch was the lowest in recent history. Some runs into Western Alaska continue to be depressed. Data are not yet available for the southern United States salmon fisheries. Russia reported harvests of 155.9 thousand tonnes with the pink salmon run occurring as expected, while the western Kamchatka sockeye runs were exceptionally high. The runs of chum salmon and sockeye salmon to the Northern Bering sea were catastrophically low.

Historical catch statistics from Alaska, Canada, Russia, and Japan are contained in an appendix to help put the provisional 2002 catch statistics into context. Overall commercial catches of Pacific salmon seems to have dropped slightly from 1993 to 2001 (Figure 1).

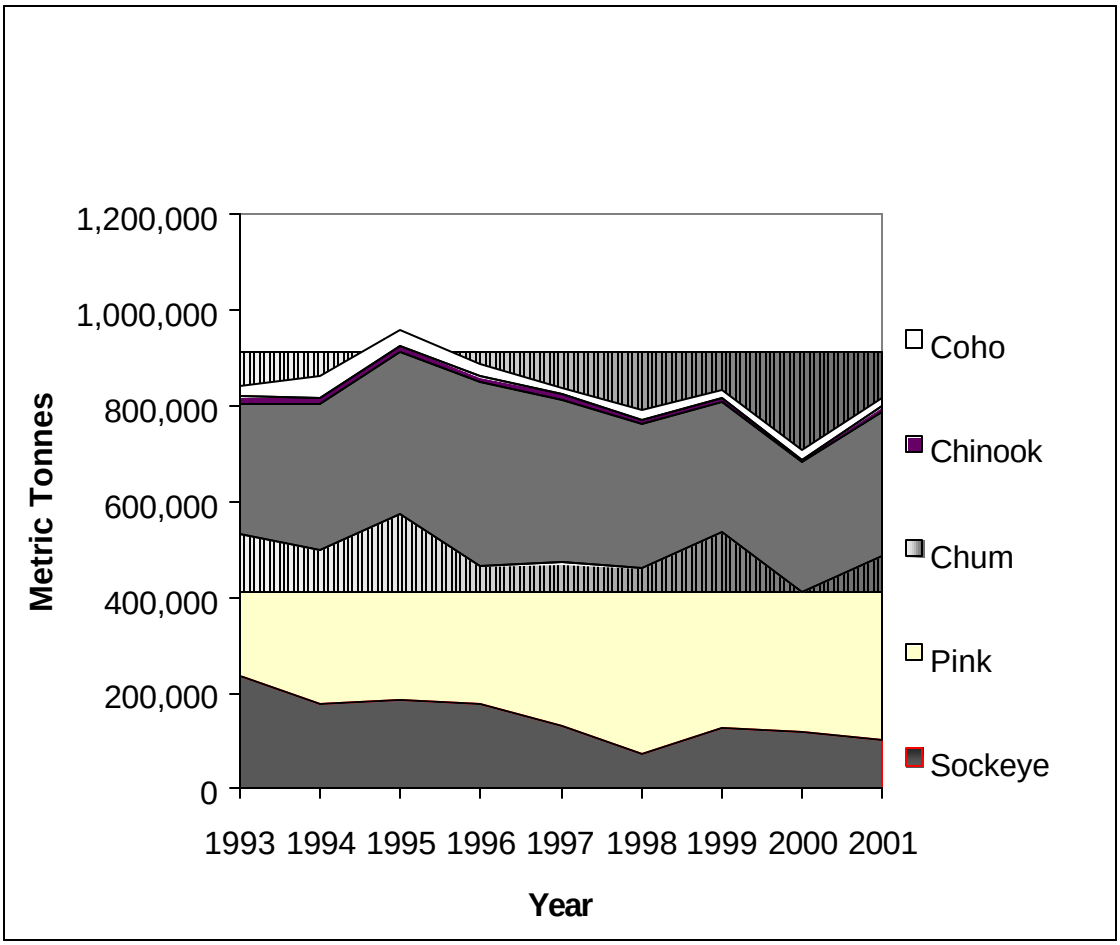

Figure 1. Commercial harvests, by species, for Canada, Japan, Russia, and the United States from 1993 to 2001 (round weight in tonnes).

Canada

Pacific salmon fisheries in Canada continued to be managed with a strong emphasis on conservation and protection of all salmon stocks in 2002. As in previous years, adjustments to fishing plans were made in-season based on in-season assessments. Commercial harvest in 2002 (to September 4th) was 9,888 tonnes (Table 1). Historical catches from 1952 to 2001 are summarized in Appendix Table 1.

Stocks of significant conservation concern in 2002 included Upper Skeena coho, Interior Fraser coho (including Thompson River), West Coast of Vancouver Island (WCVI) chinook, Rivers Inlet sockeye and Smith Inlet sockeye. Directed fisheries on these stocks of concern were very limited or not permitted, and fisheries targeting other species and stocks were constrained as required to achieve conservation objectives. Limitations on Fraser River sockeye salmon were also implemented to address escapement objectives. The concern for late run Fraser River sockeye stocks was of particular concern due to the recent trend of high pre-spawning mortality rates resulting from these stocks entering the

river significantly earlier than historical timing. A number of research activities have been implemented cooperatively with the United States to investigate this phenomenon.

District	Chinook	Chum	Coho	Pink	Sockeye	Total
North Coast (Areas 1-10)	721	920	79	4270	2199	8189
South Coast (Areas 11-27)	518	8	0	50	1117	1693
Fraser River (Area 29)	< 1	0	0	0	6	6
Total	**1239**	**928**	**79**	**4320**	**3322**	**9888**

Table 1. Preliminary 2002 commercial salmon catch in British Columbia (round weight, tonnes) by species and area. Information derived from sales slips received to September 4, 2002.

Japan

As of September 20, 2002, a total of 55,496 tonnes of chum salmon have been harvested in offshore and coastal seas around Japan (Table 2). A total of 14.7 million chum salmon, including catch and hatchery broodstock, returned to rivers or coastal seas. This total increased from the value of 13.6 million for the same period in 2001, while the number of returning adult chum salmon had been decreasing from the 1996 season to the 2000 season. Historic catch statistics for Japan are supplied for comparison in Appendix Table 2. Chum salmon runs will continue in Hokkaido and Honshu until February.

A total of 22,602 tonnes of pink salmon were harvested this season in offshore and coastal seas as of September 20 (Table 3). The number of pink salmon that returned to rivers and coastal seas has increased to 13.3 million, compared to 6.6 million from the previous year. Pink salmon runs are nearly finished for this season.

Table 2. Preliminary chum salmon catch and hatchery broodstock in Japan for the 2002 season, as of September 20.

		Coastal or offshore catch		Hatchery
		Number (thousands)	Weight (tonnes)	broodstock (thousands)
Hokkaido	Okhotsk Sea Coast	4,284	16,675	410
	Japan Sea Coast	938	3,458	74
	Pacific Coast	8,346	33,707	232
Honshu	Japan Sea Coast	na	na	na
	Pacific Coast	372	1,318	21
Offshore	Pacific	163	338	-
Total		14,103	55,496	737

Table 3. Preliminary pink salmon catch and hatchery broodstock in Japan for the 2002 season as of September 20.

		Coastal or offshore catch		Hatchery
		Number (thousands)	Weight (tonnes)	broodstock (thousands)
Hokkaido	Okhotsk Sea Coast	10,121	16,036	913
	Japan Sea Coast	8	5	0
	Pacific Coast	2,069	3,227	162
Offshore	Japan Sea	551	541	-
	Pacific	2,355	2,793	-
Total		15,104	22,602	1,075

United States

Alaska

The all-species forecasted harvest of 128 million fish was not reached in 2002. The final harvest will probably be about 125 million salmon, down from last year's total of 175 million salmon. This will be the 18 th largest salmon harvest in Alaska's history. This is below both the 5-year average harvest (161 million fish) and the 20-year average harvest (154 million fish.). In terms of biomass, the catch will probably slightly exceed 203 thousand tonnes, slightly lower than last year's value of 349,000 tonnes. It now appears that in 2002, Alaska will have the 11th largest harvest of pink salmon in the past hundred years. The current preliminary estimate of ex-value of $117 million is the lowest in recent years. Detailed catch statistics for Alaska are found in Table 4.

In Southeast Alaska, the preliminary total chinook salmon harvest was very close to the harvest objectives. The pink salmon harvest was below the recent 10 year average. Coho runs were very strong; however harvests of coho salmon were only about half the recent 10-year average. Harvests were constrained due to low fishing effort in response to the low prices paid to fishermen. The hatchery runs of chum salmon were below the levels observed in recent years.

Sockeye runs to the Copper River and to Prince William Sound were good in 2002. In Prince William Sound, hatchery and wild runs of pink salmon as well as wild runs of chum salmon were much lower than anticipated. The hatchery runs of chum salmon to Prince William Sound was very strong.

Returns of sockeye salmon to Cook Inlet were above the preseason forecast. The sockeye salmon catch of just of over 2.8 million was about 1 million above the forecast.

In Lower Cook Inlet, sockeye runs were nearly normal, pink salmon runs were very good and chum salmon runs generally good.

The 2002 Alaska Peninsula Area sockeye salmon harvest of approximately 2.27 million fish is about half of the previous 10-year average of 4.72 million fish. The 2002 pink salmon harvest of 2.21 million fish was 3.4 million below the preseason projection and was 5.2 million below the previous 10-year average.

The 2002 Kodiak Area sockeye salmon harvest of approximately 1.83 million fish was half of the previous 10-year average. The sockeye runs to the Ayakulik River, the Olga Bay area, and Afognak Lake were very weak with no commercial fishing time allowed in these areas. The 2002 preliminary pink salmon harvest of 18.29 million fish, although lower than preseason projections, was almost double the previous even-year average. Participation in the Kodiak Area commercial salmon fisheries was was the lowest since limited entry began in 1975.

The Chignik Area sockeye salmon harvest was 1.0 million was substantially lower than the 10-year average.

The inshore run of sockeye salmon to Bristol Bay of approximately 17.20 million fish was the smallest inshore run in over 20 years, and it was 53% below the 20-year average of 36.34 million. The overall sockeye run to Bristol Bay was approximately 2% above the preseason forecast of 16.76 million fish. The Egegik, Ugashik, and Togiak Districts all had sockeye runs that were higher than preseason forecasts, while the Naknek/Kvichak sockeye run was 5% below the preseason forecast and the Nushagak District was 13% below the forecast. The Naknek River run was approximately 30% higher than its preseason forecast. A total escapement of approximately 6.56 million sockeye salmon was achieved. The commercial harvest of approximately 44,000 chinook salmon was the seventh smallest catch in the last 20 years and it was half the 20-year average of 88,000. It was, however the second largest harvest in five years. The chum salmon harvest totaled approximately 461,000 fish, which is about half the 20-year average of 1.03 million. The pink salmon harvest of about 500 fish was the smallest recorded catch for even-year returns in over 20 years. The coho salmon harvest of approximately 8,760 fish was 95% below the 20-year average of 167,700.

In the Kuskokwim River the chum salmon runs was above average. Runs for chinook, sockeye and coho salmon were below average. No commercial fishing periods were announced during June and July because processors were not interested in buying chum salmon. The average price paid per pound for coho was the lowest since 1972. The commercial coho salmon harvest of 83,688 fish is the second lowest on record. It appears Commercial harvests of chinook, sockeye, chum and coho salmon in Kuskokwim Bay were below average likely the result of below average effort, coupled with below average prices paid to fishermen.

For the Kotzebue area, there were very limited markets and less than 4 permit holders have fished in the 2002 season. The 2002 harvest was the lowest on record and well below the harvest outlook of 150-200 thousand fish.

In the Yukon River, the chinook salmon was similar to 2001 and near preseason expectations. A small amount of commercial fishing was allowed, and sport fishing was open with reduced bag limits. Subsistence fishing opportunity was not reduced and subsistence harvest levels are anticipated to be near average. Chinook salmon escapement appeared adequate in most of the drainage, although the Koyukuk River escapement was slightly lower than desired levels. The run of summer chum salmon was much better than 2001 and above preseason expectations. A small amount of directed summer chum commercial fishing was allowed and escapements appeared to be adequate in 4 of 7 streams where chum escapement was monitored. The fall chum salmon run was very weak and slightly smaller than last year and the harvestable surplus is less than the amount necessary to allow full subsistence utilization. There have been no directed commercial, personal use or sport fishing for fall chum salmon.

Commercial harvests in the Norton Sound Area were lowest since the commercial fishery was established in 1961. This was due to low prices and lack of buyers.

Table 4. Very preliminary Pacific salmon catch statistics for Alaska as of October 1, 2002. Note that some harvest as of that date are not included.

VERY PRELIMINARY DATA: 2002 Salmon Season

		Harvest of Salmon		Est. Value
		Number of Fish	Tonnes	US$
Area	**Species**	*(thousands)*		*(thousands)*
SOUTHEAST	CHINOOK	317	2,075	
	SOCKEYE	737	1,734	
	COHO	1,650	6,138	
	PINK	42,108	40,892	
	CHUM	6,821	12,613	
	totals	51,633	63,452	$23,355
PRINCE WILLIAM SOUND	CHINOOK	41	369	
	SOCKEYE	2,224	6,176	
	COHO	614	2,687	
	PINK	18,865	12,936	
	CHUM	6,208	14,179	
	totals	27,952	36,347	$25,529
COOK INLET	CHINOOK	14	127	
	SOCKEYE	3,031	9,446	
	COHO	251	816	
	PINK	2,466	3,802	
	CHUM	262	1,002	
	totals	6,024	15,193	$13,135
BRISTOL BAY	CHINOOK	42	363	
	SOCKEYE	10,719	29,397	
	COHO	9	27	
	PINK	1	1	
	CHUM	366	1,490	
	totals	11,137	31,278	$29,751
KODIAK	CHINOOK	19	87	
	SOCKEYE	1,830	4,689	
	COHO	483	1,733	
	PINK	18,296	30,582	
	CHUM	651	2,295	
	totals	21,279	39,386	$12,083
CHIGNIK	CHINOOK	2	6	
	SOCKEYE	1,030	3,286	
	COHO	49	164	
	PINK	66	118	
	CHUM	54	184	
	totals	1,201	3,758	$4,655

Table 4 (cont.). Very preliminary Pacific salmon catch statistics for Alaska as of October 1, 2002. Note that some harvest as of that date are not included.

AK PEN/ALEUTIAN IS.	CHINOOK	10	60	
	SOCKEYE	2,375	6,116	
	COHO	220	710	
	PINK	2,211	3,529	
	CHUM	864	2,903	
	totals	5,680	13,318	$7,365
KUSKOKWIM	CHINOOK	12	79	
	SOCKEYE	23	73	
	COHO	106	403	
	PINK	0	0	
	CHUM	34	125	
	totals	175	680	$323
YUKON	CHINOOK	10	215	
	SOCKEYE	0		
	COHO	0		
	PINK	0		
	CHUM	7	42	
	totals	17	257	$1,633
NORTON SOUND	CHINOOK	0		
	SOCKEYE	0		
	COHO	2	6	
	PINK	0		
	CHUM	1	2	
	totals	3	8	$3
KOTZEBUE*	CHINOOK	0		
	SOCKEYE	0		
	COHO	0		
	PINK	0		
	CHUM	0		
	totals	0	0	0
ALASKA TOTALS	CHINOOK	467	3,381	$9,555
	SOCKEYE	21,969	60,917	$73,966
	COHO	3,384	12,684	$9,670
	PINK	84,013	91,860	$13,371
	CHUM	15,268	34,835	$11,270
	totals	**125,101**	**203,677**	**$117,832**

*Catch and value is confidential due to the limited amount of permit holders that fished.

Pacific Northwest

No Pacific Northwest salmon catch statistics are available at this time.

Russia

Very preliminary catch data for Russian Far East salmon fisheries are presented in Table 5. The pink salmon run was as predicted, while the western Kamchatka sockeye was exceptionally high. The abundance of chum runs has increased in some areas. In general the abundance of coho salmon and chinook salmon were extremely low. It is noteworthy that runs of salmon to the northern Bering Sea areas, including Anadyr chum salmon and Chukotka sockeye salmon were catastrophically low.

Table 5. Pacific salmon catches (metric tonnes) on the Russian Far East coast in 2002

REGIONS, SUBREGIONS	PINK	CHUM	SOCKEYE	COHO	CHINOOK	**Total**
Western Bering Sea		64.77	18.5			83.3
Eastern Kamchatka	2280.7	7622.45	3304.9	818.2	528.4	14554.7
Kuriles	38812.0	1289.0	120.0	25.0	1.0	40247.0
The Sea of Okhotsk						
Western Kamchatka	48421.7	5797.52	19566.0	245.2	25.9	74056.3
Continental coast	289.3	4815.7	7.6	168.7		5281.3
Sakhalin coast	6986.6	806.0		2.0		7794.6
Amur basin	1554.0	1588.8				3142.8
The Sea of Japan						
Primor'e	7569.6					7569.6
Southwestern Sakhalin	1743.0	1390.0				3133.0
Total	107656.9	23374.24	23017.0	1259.1	555.3	155862.6

Appendix Table 1. Historic commercial salmon catches in Canada, in units of fish.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1952	906,000	4,838,000	2,752,000	11,217,000	2,479,000	22,192,000
1953	1,021,000	5,914,000	2,893,000	11,110,000	4,672,000	25,610,000
1954	880,000	6,702,000	2,445,000	5,439,000	5,838,000	21,304,000
1955	876,000	2,835,000	2,976,000	11,240,000	1,569,000	19,496,000
1956	983,000	3,257,000	3,050,000	7,352,000	2,458,000	17,100,000
1957	948,000	3,036,000	3,137,000	11,310,000	2,412,000	20,843,000
1958	1,074,000	12,045,000	2,989,000	6,908,000	3,192,000	26,207,000
1959	956,000	3,260,000	2,897,000	6,776,000	2,015,000	15,904,000
1960	753,000	2,858,000	2,030,000	4,098,000	1,837,000	11,575,000
1961	701,000	4,564,000	3,300,000	8,305,000	1,218,000	18,088,000
1962	722,000	3,499,000	3,626,000	23,429,000	1,496,000	32,771,000
1963	803,000	2,086,000	3,421,000	12,201,000	1,463,000	19,975,000
1964	965,000	3,619,000	4,148,000	9,628,000	2,253,000	20,614,000
1965	981,000	3,020,000	4,443,000	5,109,000	633,000	14,186,000
1966	1,165,000	4,020,000	5,412,000	17,261,000	1,311,000	29,169,000
1967	1,130,000	6,750,000	3,318,000	9,846,000	1,130,000	22,174,000
1968	1,083,000	6,346,000	5,262,000	20,249,000	3,095,000	36,035,000
1969	1,100,000	4,268,000	2,407,000	2,571,000	1,310,000	11,656,000
1970	1,212,000	4,078,000	3,945,000	13,601,000	3,680,000	26,518,000
1971	1,593,000	6,306,000	4,789,000	8,456,000	1,263,000	22,407,000
1972	1,549,000	3,563,000	3,356,000	13,996,000	6,031,000	28,495,000
1973	1,424,000	7,586,000	3,530,000	6,521,000	6,225,000	25,286,000
1974	1,467,000	7,225,000	3,694,000	7,374,000	2,202,000	21,962,000
1975	1,412,000	2,271,000	2,332,000	4,634,000	1,147,000	11,796,000
1976	1,543,000	4,814,000	3,698,000	10,349,000	1,901,000	22,305,000
1977	1,493,000	6,346,000	3,317,000	10,356,000	1,088,000	22,600,000
1978	1,368,000	7,222,000	3,350,000	10,748,000	2,979,000	25,666,000
1979	1,329,000	5,691,000	3,647,000	11,823,000	866,000	23,356,000
1980	1,272,000	3,260,000	3,442,000	8,419,000	3,453,000	19,846,000
1981	1,134,000	8,443,000	2,822,000	18,086,000	1,123,000	31,608,000
1982	1,241,000	10,074,000	3,177,000	2,677,000	2,975,000	20,144,000

Appendix Table 1 (continued). Historic commercial salmon catches in Canada.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1983	956,000	5,524,000	4,130,000	23,946,000	1,006,000	35,561,000
1984	1,011,000	5,081,000	3,602,000	7,491,000	1,851,000	19,036,000
1985	881,000	12,248,000	2,951,000	20,228,000	5,493,000	41,801,000
1986	825,000	10,557,000	4,905,000	17,978,000	5,580,000	39,844,000
1987	778,000	5,393,000	3,360,000	13,357,000	2,299,000	25,185,000
1988	738,000	4,473,000	2,745,000	23,122,000	6,189,000	37,267,000
1989	659,000	13,782,000	3,435,000	17,051,000	1,821,000	36,748,000
1990	678,000	14,197,000	3,872,000	17,257,000	3,144,000	39,148,000
1991	649,000	10,360,000	3,510,000	23,978,000	2,358,000	40,856,000
1992	697,000	8,218,000	2,963,000	10,263,000	4,023,000	26,164,000
1993	635,000	18,132,000	1,896,000	10,127,000	4,229,000	35,020,000
1994	442,000	11,570,000	2,567,000	2,207,000	4,340,000	21,127,000
1995	210,000	4,489,000	1,889,000	11,728,000	2,477,000	20,793,000
1996	70,000	5,932,000	1,415,000	5,903,000	1,371,000	14,691,000
1997	214,000	10,693,000	229,000	6,503,000	1,892,000	19,531,000
1998	142,000	1,766,000	4,000	2,412,000	4,462,000	8,786,000
1999	86,000	634,000	3,000	5,928,000	812,000	7,463,000
2000	78,000	3,352,000	3,000	4,326,000	557,000	8,316,000
2001	95,379	2,224,269	14,096	5,930,598	1,101,785	8,274,369
2002						

Appendix Table 2. Historic commercial salmon catches (tonne) in Japan.

		Sockeye			Pink						Chum				Coho					Chinook				Masu	
	Ref	Mothership	Pacific landbased	Japan Sea	Coastal	Freshwater	Mothership	Pacific landbased or Offshore	Japan Sea	Coastal	Freshwater	Mothership	Pacific landbased or Offshore	Japan Sea	Coastal	Freshwater	Mothership	Pacific landbased	Japan Sea	Coastal	Fresh water	Mothership	Pacific landbased	Japan Sea	Coastal	Fresh water	Coastal and Offshore	Fresh water
1976	1, 4	3,943	4,901	-	-	-	8,058	13,044	5,026	2,778	258	17,898	20,067	-	36,763	3,637	1,842	5,849	-	1	-	677	881	-	51	-	3,740	NA
1977	1, 4	2,651	1,848	-	-	-	10,191	17,978	3,834	2,816	114	10,337	11,223	-	46,828	3,521	170	3,582	-	-	-	217	609	-	88	-	3,741	NA
1978	1, 4	3,353	1,814	-	0	-	2,232	8,968	4,120	1,832	78	8,067	6,176	-	55,849	3,970	1,443	4,320	-	0	-	304	720	-	51	-	3,543	NA
1979	1, 4	3,934	1,072	-	0	-	4,192	14,326	3,830	1,448	305	6,327	4,951	-	84,521	6,135	640	2,067	-	0	-	356	752	-	117	-	2,601	NA
1980	1, 4	4,596	1,125	-	0	-	702	13,870	3,815	1,908	96	6,685	5,562	-	75,342	9,207	1,545	2,159	-	0	-	1,913	508	-	72	-	2,721	NA
1981	1, 4	3,814	1,287	-	0.5	-	4,930	13,795	3,869	2,747	360	5,237	5,320	-	101,844	8,440	1,186	2,089	-	9	-	278	662	-	245	-	2,566	NA
1982	1, 4	3,039	1,094	-	0	-	2,214	13,099	3,771	1,501	239	6,858	6,291	-	89,545	9,106	2,957	2,065	-	0.5	-	361	619	-	40	-	2,924	NA
1983	1, 4	2,992	1,387	-	0	-	5,104	13,995	3,754	1,723	747	6,450	4,838	-	113,894	8,269	598	2,034	-	0	-	270	676	-	50	0	3,262	NA
1984	1, 4	2,990	376	-	2	-	1,844	10,526	3,501	2,619	317	7,217	4,535	-	115,861	8,639	2,202	1,669	-	0.5	-	269	335	-	59	-	3,277	NA
1985	1, 4	2,284	267	-	2	-	3,605	12,881	3,975	6,525	317	6,055	2,908	-	159,092	8,639	296	1,467	-	13	-	226	354	-	109	-	3,177	NA
1986	1, 4	1,545	254	-	1	-	483	7,868	2,549	4,281	516	4,076	1,966	-	142,070	9,410	149	898	-	7	-	215	264	-	153	-	2,863	NA
1987	1, 4	1,366	263	-	0.5	-	1,258	7,766	2,206	7,047	1,091	4,065	2,058	-	132,943	7,490	77	878	-	25	-	132	263	-	311	-	2,593	NA
1988	1, 4	478	214	-	2	-	69	6,665	2,179	6,187	716	1,918	1,751	-	145,510	9,979	0.5		555	-	19	-	86	167	-	94	-	1,725	NA
1989	1, 4	473	189	-	1	-	433	6,649	1,853	7,803	854	1,264	1,661	-	165,761	12,345	4	443	-	9	-	44	184	-	77	-	2,030	NA
1990	1, 4	423	123	-	0	-	307	4,639	1,420	5,877	549	1,067	1,218	-	205,314	15,284	42	368	-	19	-	82	163	-	50	-	1,924	NA
1991	1, 4	286	112	-	2	-	425	3,929	1,234	11,863	1,436	696	935	-	184,112	11,839	34	251	-	40	-	45	105	-	141	-	1,996	NA
1992	1	-	-	-	6	3	-	1,325	1,252	16,006	1,520	-	86	-	137,114	8,630	-	-	-	18	-	-	-	-	177	-	1,265	NA
1993	2	-	-	-	20	3	-	2,737	1,207	15,224	828	-	194	-	187,664	12,240	-	-	-	20	-	-	-	-	197	-	1,543	17
1994	2	-	-	-	4	1	-	2,979	1,352	23,348	2,379	-	333	-	191,190	16,806	-	-	-	25	-	-	-	-	177	-	1,694	22
1995	2	-	-	-	6	2	-	3,290	1,240	16,008	739	-	348	-	230,705	17,736	-	-	-	42	-	-	-	-	69	-	1,403	15
1996	2	-	-	-	7	1	-	2,906	985	24,668	3,327	-	358	-	265,787	19,502	-	-	-	72	-	-	-	-	89	-	1,677	19
1997	3	-	-	-	7	0	-	3,145	711	9,184	934	-	355	-	236,993	18,588	-	-	-	101	-	-	-	-	253	-	990	21
1998	3	-	-	-	5	0	-	3,806	692	17,830	1,961	-	397	-	178,142	15,583	-	-	-	37	-	-	-	-	205	-	1,731	39
1999	3	-	-	-	3	1	-	3,936	619	10,266	1,117	-	392	-	157,909	12,449	-	-	-	22	-	-	-	-	48	-	1,129	9
2000	3	-	-	-	3	3.2	-	2,013	725	21,059	2,021	-	320	-	139,608	12,558	-	-	-	6	-	-	-	-	48	-	954	79.7
2001	3	-	-	-	2	1	-	2,844	355	6,160	648	-	248-		102,450	12,431	-	-	-	54	-	-	-	-	20	-	777	4.1-
2002		-	-	-	NA	NA	-	2,793	541	19,268	NA	-	338	-	55,496	NA	-	-	-	NA	-	-	-	-	NA	-	NA	NA

References: 1 INPFC Statistical Yearbook 1976-1992; 2 NPAFC Statistical Yearbook 1993-1996; 3 NPAFC Doc. 338, 413, 479, 480, 537, 542, 613, 618; 4 FAO yearbook, Fishery statistics, catch and landings 1976-1992. Vol. 42-74.

Appendix Table 3. Historic commercial salmon catches in Alaska, in thousands of fish.

Year	Chinook	Sockeye	Coho	Pink	Chum	All
1972	553	6,590	1,831	15,915	7,056	31,950
1973	551	4,490	1,457	9,793	6,007	22,305
1974	557	4,878	1,859	9,852	4,722	21,873
1975	455	7,453	1,014	12,977	4,314	26,217
1976	533	11,783	1,432	24,743	5,916	44,416
1977	621	12,460	1,815	28,581	7,322	50,805
1978	836	18,138	2,820	53,807	6,673	82,281
1979	830	28,723	3,245	50,136	5,829	88,754
1980	676	33,308	3,135	63,282	9,612	110,004
1981	823	36,343	3,527	60,017	12,624	113,325
1982	854	28,832	5,976	64,828	11,090	111,572
1983	814	52,874	3,614	60,337	10,216	127,698
1984	656	38,449	5,312	76,240	13,084	133,637
1985	706	38,983	5,695	90,341	10,554	146,743
1986	617	32,207	6,293	77,289	12,510	128,962
1987	682	35,430	3,493	46,488	10,526	96,554
1988	590	30,038	4,473	50,357	15,101	100,140
1989	576	44,117	4,649	96,827	7,895	154,100
1990	669	52,772	5,476	88,242	8,008	155,165
1991	613	44,646	6,153	128,336	9,769	189,517
1992	606	58,735	7,095	60,597	9,130	136,163
1993	747	64,717	6,050	109,631	11,842	192,987
1994	650	52,400	9,480	117,000	16,500	196,030
1995	662	63,532	6,471	128,333	18,796	217,794
1996	503	49,749	5,847	97,899	21,236	175,234
1997	659	31,087	3,190	71,958	16,244	123,138
1998	380	22,437	4,238	103,433	18,400	148,887
1999	430	44,200	4,600	146,000	21,000	216,230
2000	419	28,700	4,780	92,700	15,300	142,000
2001	375	26,524	4,945	127,622	15,400	174,866
2002						

Appendix Table 4. Historic commercial salmon catches in Russia, in tonnes.

Year	Pink	Chum	Sockeye	Coho	Chinook	Total
1971	66,859	11,154	2,353	4,440	1,982	86,788
1972	20,351	6,298	1,050	1,927	2,240	31,866
1973	90,895	6,941	1,890	2,164	2,210	104,100
1974	33,025	9,066	1,050	3,880	1,830	48,851
1975	110,396	9,292	1,399	3,282	2,229	126,598
1976	54,502	12,840	1,170	3,412	1,956	73,880
1977	115,190	16,129	1,869	4,014	3,099	140,301
1978	57,651	21,931	3,377	2,349	2,947	88,255
1979	103,780	26,356	2,876	4,031	2,408	139,451
1980	79,301	17,557	3,885	2,364	1,057	104,164
1981	87,934	17,028	3,833	3,657	1,399	113,850
1982	47,781	15,723	2,967	3,758	1,342	71,570
1983	107,719	23,866	4,256	3,429	1,778	141,048
1984	56,653	15,185	6,298	4,812	1,683	84,630
1985	96,412	27,902	9,337	5,299	1,470	140,419
1986	40,964	25,621	7,542	3,279	1,800	79,206
1987	98,824	29,818	11,900	4,024	1,390	145,955
1988	40,658	29,112	8,360	3,137	1,460	82,727
1989	149,613	25,390	9,670	3,134	1,200	189,007
1990	76,111	30,359	16,399	2,608	1,000	126,477
1991	211,921	22,011	14,412	3,441	1,000	252,785
1992	87,340	21,568	15,365	4,738	1,100	130,110
1993	108,080	22,971	13,981	2,652	1,308	148,992
1994	125,170	28,229	10,660	2,507	1,101	167,667
1995	145,303	28,233	14,198	1,476	910	190,120
1996	110,030	24,916	16,802	1,949	534	154,231
1997	188,390	19,432	8,950	1,884	601	219,257
1998	192,095	25,135	10,135	1,697	461	229,523
1999	187,734	23,636	11,927	1,246	717	225,260
2000	147,568	30,773	15,107	1,707	454	195,610
2001	170,773	29,649	18,124	1,728	451	220,724