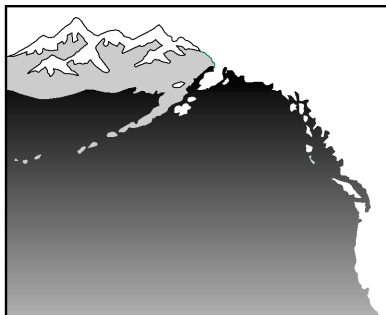


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ESTIMATES OF ANNUAL SALMON RUNS FROM THE NORTH PACIFIC, 1951-2001

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KEY WORDS

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The annual runs of adult salmon (*Oncorhynchus* spp.) to North America and Asia have been estimated from numbers of fish in catches and escapements, or catches and estimated rates of exploitation (Rogers 1987). Russian catches reported in metric tons were converted to numbers by applying average weights reported in INPFC Secretariat (1979). This may result in underestimation of the larger Asian pink and chum salmon runs if competition resulted in smaller body size. Since 1992, Russia has provided salmon escapements from surveys. Russian and Canadian runs for 1992–2000 are from North Pacific Anadromous Fish Commission documents, and very preliminary 2001 statistics are from agencies. Pink salmon escapements in Southeast Alaska have been revised (aerial index increased by 2.5) to agree with recent ADF&G statistics. The values in the most recent year are considered preliminary.

The relative accuracy of the total runs from most precise to least precise are as follows: sockeye (*O. nerka*), pink (*O. gorbuscha*), chum (*O. keta*), chinook (*O. tshawytscha*), and coho (*O. kistuch*). Run estimates for Alaska and Asia are generally more accurate than those for Canada and California, and accuracy is lowest for Washington and Oregon where total spawning abundance estimates are not available for many systems. However, total salmon production in Washington, Oregon, and California is small compared with the total North Pacific production of salmon.

REFERENCES

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- Rogers, D.E. 1987. Pacific salmon. Chapter 15. Pages 461-475 in D.W. Hood, S.T. Zimmerman (eds), The Gulf of Alaska. NOAA, Dept. Commerce.

TABLE 1. North Pacific runs of pink salmon, 1951–2001

Year	Alaska Runs		Japan Catch	Russian Run	North Pacific Total Run	SE Alaska B. C. and Wash.	Total Pacific Run	Percent Asia
	Western	Central						
51	0	10	0	141	151	58	209	67
52	<1	16	20	53	89	37	126	58
53	0	14	17	132	163	37	200	75
54	<1	21	20	43	84	29	113	56
55	0	20	55	85	160	42	202	69
56	<1	20	56	65	141	37	178	68
57	0	9	79	102	190	37	227	80
58	5	20	64	35	124	33	157	63
59	0	7	76	46	129	32	161	76
60	1	18	45	19	83	18	101	63
61	0	13	56	31	100	40	140	62
62	2	39	35	15	91	56	147	34
63	0	19	65	35	119	63	182	55
64	3	34	33	15	85	50	135	36
65	0	13	61	50	124	35	159	70
66	4	22	40	20	86	63	149	40
67	0	6	64	47	117	30	147	76
68	5	22	38	14	79	69	148	35
69	0	24	65	61	150	22	172	73
70	1	24	32	16	73	45	118	41
71	0	19	52	65	136	44	180	65
72	<1	5	29	23	54	48	102	51
73	0	5	46	83	134	33	167	77
74	2	7	30	38	77	28	105	65
75	0	12	44	93	149	29	178	77
76	2	23	22	72	119	37	156	60
77	0	19	31	168	218	56	274	73
78	18	36	17	75	146	53	199	46
79	0	46	23	145	214	58	272	62
80	7	58	21	108	194	49	243	53
81	0	61	25	120	206	76	282	51
82	3	53	20	63	139	54	193	43
83	0	38	24	161	223	108	331	56
84	7	74	20	82	183	68	251	41
85	0	57	24	137	218	139	357	45
86	1	44	14	50	109	114	223	29
87	0	49	16	128	193	56	249	58
88	3	53	13	47	116	62	178	34
89	0	69	14	205	288	120	408	54
90	2	69	11	88	170	99	269	37
91	0	84	16	290	390	130	520	59
92	1	34	14	120	169	82	251	53
93	0	63	20	166	249	111	360	52
94	4	66	21	234	325	96	421	61
95	0	97	13	171	281	105	386	48
96	1	44	17	173	235	128	363	52
97	0	57	13	229	299	81	380	64
98	1	77	14	238	330	84	414	61
99	0	82	8	215	305	135	440	51
00	0	67	17	157	241	35	276	63
01	0	80	6	211	297	230	527	41
Means								
51-60	1	16	43	72	131	36	167	67
61-70	2	22	49	30	102	47	150	52
71-80	3	23	32	87	144	44	188	63
81-90	2	57	18	108	185	90	274	45
91-00	1	67	15	199	282	99	381	56

Japan high seas catch includes Japan Sea; Japan catches off Kamchatka included in Russian run.
 Russian The 2001 runs are from catches (m.t.), mean weights and mean harvest rates

TABLE 2. North Pacific runs of sockeye salmon, 1951-2001, catch + escapement in millions. Western Alaska includes Bristol Bay, North Peninsula, and June South Peninsula catch.

Year	Alaska Runs		Japan High Seas Catch	Russian Run	North Pacific Total Run	SE Alaska and British Columbia	Total Pacific Run	Percent Western Alaska
	Western	Central						
51	11	8	0	5	24	9	59	19
52	21	7	1	6	35	10	45	47
53	11	6	2	4	23	13	36	31
54	9	6	4	3	22	18	40	23
55	9	5	13	2	29	7	36	25
56	27	6	11	4	48	8	56	48
57	12	4	21	4	41	9	50	24
58	7	3	13	2	25	25	50	14
59	14	4	10	6	34	8	42	33
60	38	5	15	5	63	7	70	54
61	19	5	14	7	45	9	54	35
62	11	6	11	3	31	8	39	28
63	8	4	9	2	23	6	29	28
64	12	5	7	2	26	8	34	35
65	54	6	12	4	76	8	84	64
66	19	7	8	3	37	10	47	40
67	11	5	11	2	29	14	43	26
68	9	6	9	3	27	13	40	23
69	21	5	8	2	36	10	46	46
70	42	7	10	3	62	9	71	59
71	17	6	7	2	32	12	44	39
72	6	5	7	1	19	8	27	22
73	3	4	6	1	14	15	29	10
74	12	4	5	1	22	14	36	33
75	25	3	5	2	35	7	42	60
76	13	7	6	1	27	10	37	35
77	11	10	3	3	27	13	40	28
78	22	9	3	4	38	14	52	42
79	44	7	3	3	57	12	69	64
80	69	8	3	4	84	7	91	76
81	40	10	3	4	57	15	72	56
82	27	14	3	3	47	20	67	40
83	51	15	2	5	73	10	83	61
84	45	14	2	7	68	11	79	57
85	42	15	1	8	66	23	89	47
86	27	17	1	6	51	18	69	39
87	30	22	1	8	61	11	72	42
88	27	17	<1	5	49	10	59	46
89	48	17	<1	6	71	24	95	51
90	53	18	<1	12	83	24	107	50
91	48	19	<1	8	75	20	95	51
92	52	23	0	10	85	18	103	50
93	60	19	0	10	89	29	118	51
94	56	16	0	8	80	20	100	56
95	67	17	0	10	94	12	106	63
96	41	20	0	13	74	15	89	46
97	24	18	0	9	51	22	73	33
98	23	14	0	8	45	7	52	44
99	44	20	0	8	72	5	77	57
00	32	12	0	6	50	6	56	57
01	24	14	0	11	49	6	55	44
Means								
51-60	16	5	9	4	34	11	48	32
61-70	21	6	10	3	39	10	49	38
71-80	22	6	5	2	36	11	47	41
81-90	39	16	1	6	63	17	79	49
91-00	45	18	0	9	71	15	87	51

Japan high seas catches in 1992-2000 included in Russian run.

TABLE 3. North Pacific runs of chum salmon, 1951-2001, catch + escapement in millions of fish. Western Alaska includes Bristol Bay, North Peninsula, and the Yukon-Kuskokwim region.

Year	Alaska Runs		Japan Catches		Russian Run	North Pacific Total Run	SE Alaska B.C. and Wash.	Total Pacific Run	Percent Asia
	Western	Central	High Seas	Coastal					
51	3.1	3.0	0	6	37	49	18	67	64
52	3.2	5.5	1	2	24	36	15	51	53
53	3.4	4.0	4	2	18	31	18	49	49
54	3.9	5.1	12	3	28	52	19	71	61
55	2.9	2.4	26	2	36	69	8	77	83
56	3.6	5.5	23	2	42	76	8	84	80
57	3.0	7.1	16	3	18	47	13	60	62
58	3.2	5.0	29	3	16	56	12	68	70
59	4.0	3.6	23	2	24	57	7	64	77
60	5.6	5.4	21	2	24	58	6	64	73
61	3.8	3.1	14	4	22	47	7	54	74
62	3.8	5.6	15	4	18	46	10	56	66
63	3.2	3.4	15	5	20	47	6	53	76
64	3.7	6.0	19	5	14	48	9	57	67
65	3.0	2.4	16	7	18	46	5	51	80
66	3.0	3.6	22	4	18	51	10	61	73
67	3.5	1.9	19	5	12	41	8	49	73
68	3.2	3.5	17	3	10	37	12	49	62
69	3.3	2.1	13	5	6	29	5	34	70
70	6.0	5.2	17	6	7	42	11	53	58
71	4.7	6.5	17	10	7	45	7	52	65
72	4.7	4.5	22	9	4	45	17	62	57
73	6.5	3.5	16	12	3	41	15	56	56
74	6.8	1.9	22	13	5	48	10	58	68
75	8.4	2.1	19	20	4	54	5	59	74
76	7.5	3.4	22	12	8	53	9	62	68
77	9.1	5.9	12	15	9	51	5	56	64
78	7.3	4.3	7	18	11	47	9	56	63
79	7.5	4.0	6	28	12	58	4	62	75
80	12.0	5.1	6	26	7	56	11	67	58
81	11.6	8.3	6	34	9	69	6	75	66
82	7.4	8.9	7	30	7	60	9	69	63
83	8.0	7.0	6	37	12	70	6	76	73
84	11.4	6.5	6	38	7	69	13	82	62
85	8.8	5.5	4	51	12	82	17	99	68
86	8.9	8.1	3	49	14	83	17	100	66
87	8.0	6.2	3	43	13	73	12	85	69
88	10.8	8.7	2	51	13	86	20	106	62
89	9.0	4.9	1	55	13	83	9	92	75
90	6.5	4.6	1	68	13	94	13	107	77
91	8.2	5.2	1	60	10	84	11	95	74
92	6.4	4.4	0	46	17	74	16	90	70
93	4.3	3.8	0	61	21	90	21	111	74
94	8.0	6.0	0	69	26	109	21	130	73
95	11.0	6.5	0	78	24	120	20	140	73
96	7.9	6.0	0	87	25	126	30	156	72
97	5.1	5.6	0	74	18	103	18	121	76
98	4.9	4.1	0	61	16	86	27	113	68
99	3.2	6.3	0	50	15	75	25	100	65
00	2.7	9.7	0	46	10	68	26	94	59
01	2.5	8.0	0	40	16	67	10	77	73
Means									
51-60	3.6	4.7	16	3	27	53	12	66	67
61-70	3.7	3.7	17	5	15	43	8	52	70
71-80	7.5	4.1	15	16	7	50	9	59	65
81-90	9.0	6.9	4	46	11	77	12	89	68
91-00	6.2	5.8	0	63	18	93	22	115	71

1992-1999 Japan catches in Russian 200 mi zone are included in Russian runs.

Japan coastal catch includes in-river catch (hatchery returns).

Russian runs during 1951-91 are estimated from catch and assumed .5 harvest rate.

2001 are very preliminary, based mainly on catches and past harvest rates

TABLE 4. Annual estimates of coho salmon runs in the North Pacific (millions), 1951–2001.

Year	SE Alaska-Calif.	Central Alaska	Western Alaska	Russia	Japan h.s. catch	Pacific run	Percent SE AK-Calif
51	15.5	1.6	0.3	1.3	0.0	18.7	83
52	12.2	1.2	0.3	2.3	0.2	16.2	75
53	10.0	0.9	0.2	3.2	0.6	14.9	67
54	9.3	1.8	0.3	3.7	1.9	17.0	55
55	10.0	1.2	0.2	3.2	4.3	18.9	53
56	10.3	1.3	0.2	1.8	4.3	17.9	57
57	10.8	0.8	0.4	2.5	1.2	15.7	69
58	9.0	1.2	0.9	1.3	4.2	16.6	54
59	8.9	0.8	0.4	1.8	2.6	14.5	61
60	5.6	1.4	0.3	1.0	2.5	10.8	52
61	9.4	1.0	0.2	2.2	1.8	14.6	65
62	10.5	1.6	0.4	2.2	2.8	17.5	60
63	10.3	1.4	0.4	3.7	3.4	19.2	54
64	12.3	1.9	0.4	0.5	5.2	20.3	61
65	13.7	0.9	0.2	1.7	3.1	19.6	70
66	15.3	1.3	0.2	1.5	1.9	20.2	76
67	11.7	1.0	0.4	1.7	1.6	16.4	71
68	14.6	2.0	0.8	1.7	2.3	21.4	68
69	8.2	0.6	0.5	1.7	4.6	15.6	53
70	12.9	1.3	0.2	2.7	2.4	19.5	66
71	15.8	1.0	0.1	2.2	2.8	21.9	72
72	11.5	0.5	0.2	0.8	3.0	16.0	72
73	11.7	0.7	0.4	1.2	4.8	18.8	62
74	14.5	0.6	0.4	2.0	4.6	22.1	66
75	10.5	0.8	0.4	2.0	3.9	17.6	60
76	15.5	0.9	0.3	1.8	3.6	22.1	70
77	10.5	0.9	0.9	2.0	1.8	16.1	65
78	10.5	1.4	0.8	1.2	3.1	17.0	62
79	11.5	2.3	1.5	2.3	1.5	19.1	60
80	10.7	2.2	1.5	1.2	1.9	17.5	61
81	8.5	2.4	1.4	1.8	1.9	16.0	53
82	10.0	3.8	2.9	2.0	2.4	21.1	47
83	11.5	2.3	0.9	1.8	1.4	17.9	64
84	10.0	2.9	3.1	2.5	1.7	20.2	50
85	10.7	3.1	1.6	3.0	0.9	19.3	55
86	15.2	1.6	3.4	2.5	0.5	23.2	66
87	12.0	1.6	1.6	1.8	0.5	17.5	68
88	10.1	2.9	2.6	1.7	0.3	17.6	57
89	12.3	2.5	2.4	1.8	0.2	19.2	64
90	13.1	2.4	1.6	1.2	0.2	18.5	71
91	13.3	2.7	1.6	1.3	0.0	18.9	70
92	13.0	2.7	2.6	1.7	0.0	20.0	65
93	10.0	2.5	1.8	1.5	0.0	15.8	63
94	13.1	4.0	2.8	1.6	0.0	21.5	61
95	8.9	3.5	1.5	0.8	0.0	14.7	61
96	6.0	2.5	2.8	1.2	0.0	12.5	48
97	5.0	1.5	0.8	1.3	0.0	8.6	58
98	6.0	2.0	1.4	1.0	0.0	10.4	58
99	5.7	1.4	0.7	0.8	0.0	8.6	66
00	3.5	2.3	1.2	0.9	0.0	7.9	44
01	5.0	2.5	0.6	0.8	0.0	8.9	56
Means							
51-60	10.2	1.2	0.4	2.2	2.2	16.1	63
61-70	11.9	1.3	0.4	1.9	2.9	18.4	64
71-80	12.3	1.1	0.7	1.7	3.1	18.8	65
81-90	11.3	2.6	2.2	2.0	1.0	19.1	60
91-00	8.5	2.5	1.7	1.2	0.0	13.9	59

Japan high seas catch since 1991 included in Russian runs.
Preliminary estimates for 2001

TABLE 5. Annual estimates of chinook salmon runs in the North Pacific (millions), 1951–2001.

Year	SE Alaska-Calif.	Central Alaska	Western Alaska	Russia	Japan h.s. catch	Pacific run	Percent SE AK-Calif
1951	5.1	0.4	0.5	0.2	0.0	6.2	82
52	5.3	0.2	0.5	0.1	0.0	6.1	87
53	5.2	0.2	0.5	0.2	0.0	6.1	86
54	5.2	0.2	0.5	0.1	0.1	6.1	85
55	5.8	0.2	0.6	0.2	0.1	6.9	84
56	5.9	0.2	0.5	0.2	0.2	7.0	84
57	5.0	0.1	0.6	0.2	0.1	6.0	84
58	4.6	0.1	0.6	0.1	0.1	5.5	83
59	4.2	0.1	0.6	0.2	0.1	5.2	81
60	3.7	0.1	0.6	0.2	0.3	4.9	76
61	3.9	0.1	0.6	0.2	0.1	4.9	80
62	3.7	0.1	0.5	0.2	0.3	4.8	78
63	4.3	0.1	0.5	0.2	0.2	5.3	82
64	4.5	0.0	0.7	0.3	0.6	6.1	73
65	4.3	0.1	0.6	0.2	0.3	5.5	79
66	4.5	0.0	0.5	0.2	0.3	5.5	82
67	4.2	0.1	0.7	0.2	0.2	5.4	78
68	4.4	0.0	0.6	0.2	0.5	5.7	78
69	4.6	0.1	0.6	0.2	0.6	6.1	76
70	4.9	0.1	0.7	0.2	0.6	6.5	76
71	5.0	0.1	0.6	0.3	0.4	6.4	78
72	5.2	0.1	0.5	0.3	0.4	6.5	80
73	6.0	0.1	0.4	0.4	0.3	7.2	83
74	5.3	0.1	0.5	0.3	0.6	6.8	78
75	5.7	0.1	0.4	0.4	0.3	6.9	83
76	5.6	0.1	0.5	0.3	0.5	7.0	80
77	5.8	0.1	0.6	0.5	0.2	7.2	81
78	5.2	0.2	0.9	0.5	0.4	7.2	72
79	5.2	0.2	0.9	0.5	0.4	7.2	72
80	4.8	0.1	0.9	0.2	1.0	7.0	69
81	4.3	0.2	1.2	0.3	0.3	6.3	68
82	4.8	0.2	1.0	0.3	0.3	6.6	73
83	3.3	0.3	1.0	0.4	0.3	5.3	62
84	3.7	0.2	0.8	0.4	0.2	5.3	70
85	3.7	0.3	0.8	0.4	0.2	5.4	69
86	4.6	0.3	0.6	0.5	0.1	6.1	75
87	5.2	0.4	0.8	0.3	0.2	6.9	75
88	6.3	0.4	0.6	0.3	0.1	7.7	82
89	4.2	0.3	0.7	0.2	0.1	5.5	76
90	4.2	0.3	0.6	0.2	0.1	5.4	78
91	3.7	0.3	0.6	0.2	0.1	4.9	76
92	3.2	0.3	0.7	0.2	0.0	4.4	73
93	3.0	0.2	0.6	0.3	0.0	4.1	73
94	2.5	0.3	0.6	0.2	0.0	3.6	69
95	2.8	0.4	0.7	0.2	0.0	4.1	68
96	1.9	0.3	0.5	0.2	0.0	2.9	66
97	2.6	0.2	0.6	0.2	0.0	3.6	72
98	1.8	0.3	0.5	0.4	0.0	3.0	60
99	1.7	0.2	0.3	0.2	0.0	2.4	71
2000	1.4	0.2	0.2	0.2	0.0	2.0	70
2001	2.2	0.2	0.2	0.1	0.0	2.7	81
Means							
51-60	5.0	0.2	0.6	0.2	0.1	6.0	83
61-70	4.3	0.1	0.6	0.2	0.4	5.6	78
71-80	5.4	0.1	0.6	0.4	0.5	6.9	78
81-90	4.4	0.3	0.8	0.3	0.2	6.1	73
91-00	2.5	0.3	0.5	0.2	0.0	3.5	70

TABLE 6. Annual commercial catches of pink salmon in millions of fish.

Year	North America					Asia				Pacific Total	Percent Asia	
	Washington	SE	Central	Western	N.A.	Japan		USSR	Asia			
	Brit. Colum.	Alaska	Alaska	Alaska	Total	High seas	Coastal*	Coastal	Total			
means												
1921-50	11.4	28.1	18.3	0.2	58	4	57	37	98	156	63	
1951-70	10.4	11.7	13.5	0.8	36	37	10	36	83	119	70	
1971-80	10.6	10.3	17.4	1.7	40	24	8	52	84	124	68	
1981-90	17.7	31.4	38.1	1.8	89	11	7	65	83	172	47	
1971	11.0	9.3	14.1	0.1	35	40	12	39	91	126	73	
1972	14.2	12.4	3.3	0.2	30	21	8	14	43	73	59	
1973	9.1	6.5	3.3	0.1	19	36	10	50	96	115	83	
1974	7.4	4.9	3.8	1.2	17	22	8	23	53	70	75	
1975	6.0	4.0	8.9	+	19	34	10	56	100	119	84	
1976	10.3	5.3	18.3	1.2	35	16	6	43	65	100	65	
1977	12.7	13.8	14.7	0.1	41	24	7	101	132	173	76	
1978	10.5	21.2	26.5	6.1	64	10	7	45	62	126	49	
1979	16.5	11.0	38.4	0.7	67	17	6	87	110	177	62	
1980	8.2	14.5	43.1	5.7	72	15	6	65	86	158	55	
1981	22.2	19.0	40.5	0.6	82	18	7	72	97	179	54	
1982	2.7	24.2	37.4	3.2	68	14	6	38	58	126	46	
1983	25.9	37.5	22.7	0.1	86	18	6	97	121	207	58	
1984	7.5	24.7	45.8	5.8	84	14	6	49	69	153	45	
1985	24.5	52.0	38.4	+	115	15	9	82	106	221	48	
1986	18.0	43.4	30.5	0.5	92	8	6	30	44	136	32	
1987	15.5	10.2	36.2	+	62	8	8	77	93	155	60	
1988	23.1	11.2	37.8	1.3	73	6	7	28	41	114	36	
1989	20.6	59.5	37.4	+	118	7	7	123	137	255	54	
1990	17.2	32.4	54.6	1.3	106	5	6	53	64	170	38	
1991	27.3	61.9	65.9	+	155	0	16	177	193	348	55	
1992	10.3	35.0	24.1	1.1	71	3	11	69	83	154	54	
1993	12.4	57.3	52.0	0.2	122	3	17	82	102	224	46	
1994	2.2	57.6	56.8	2.3	119	1	20	104	125	244	51	
1995	14.6	47.4	80.0	0.1	142	2	11	104	117	259	45	
1996	5.9	64.7	32.6	0.6	104	1	20	81	102	206	50	
1997	8.5	28.9	42.7	0.1	80	1	12	137	150	230	65	
1998	2.4	39.6	60.6	0.6	103	3	13	163	179	282	63	
1999	6.1	77.7	68.2	0.1	152	1	7	156	164	316	52	
2000	4.3	21.1	52.1	+	78	6	11	105	122	200	61	
2001	6.0	67.1	59.2	+	132	3	3	127	133	265	50	

* Mostly off Russian coast or in Japan Sea, i.e. mostly Russian origin.

Source through 1999: INPFC/NPAFC Statistical Yearbooks

2000-2001 catches are preliminary from agencies and compiled by D.E. Rogers, Fish. Res. Inst.

The runs in 2001 were estimated from m.t. and mean weights and harvest rates.

TABLE 7. Annual commercial catches of sockeye salmon in millions of fish.

Year	North America					Asia			Pacific Total	% W Ak
	Washington Brit. Colum.	SE Alaska	Central Alaska	Western Alaska	N.A. total	Japan High seas	USSR Coastal	Asia total		
Means										
1921-50	5.5	1.7	6.0	13.8	27	2.3	7.9	10	37	37
1951-70	6.3	0.9	3.4	8.4	19	9.8	1.6	11	30	28
1971-80	7.2	0.8	4.2	9.1	21	4.8	0.8	6	27	29
1981-90	10.9	1.6	11.9	25.6	50	1.4	2.9	4	54	46
1971	9.4	0.6	3.6	9.9	24	6.6	0.9	8	31	32
1972	4.8	0.9	3.1	2.6	11	6.9	0.4	7	19	14
1973	10.1	1.0	2.5	0.9	15	5.9	0.7	7	21	4
1974	9.9	0.7	2.5	1.6	15	5.4	0.4	6	21	8
1975	4.0	0.2	2.0	5.2	11	5.2	0.6	6	17	30
1976	6.1	0.6	4.9	6.3	18	5.8	0.4	6	24	26
1977	8.2	1.0	6.0	5.1	20	2.8	0.7	4	24	21
1978	8.6	0.7	6.5	10.8	27	3.2	1.3	5	31	35
1979	7.4	1.0	4.0	23.4	36	2.9	1.1	4	40	59
1980	3.7	1.1	7.0	25.1	37	3.2	1.5	5	42	60
1981	9.8	1.1	7.7	27.6	46	3.1	1.5	5	51	54
1982	13.0	1.5	10.8	16.8	42	2.5	1.1	4	46	37
1983	5.9	1.6	11.8	39.6	59	2.5	1.7	4	63	63
1984	6.8	1.2	10.6	26.6	45	1.9	2.4	4	50	54
1985	15.2	1.9	10.7	26.4	54	1.3	3.4	5	59	45
1986	12.6	1.4	12.0	18.4	44	0.9	3.0	4	48	38
1987	7.4	1.4	16.6	17.4	43	0.8	4.3	5	48	36
1988	5.4	1.5	12.9	16.4	36	0.3	3.0	3	40	42
1989	16.0	2.1	11.5	30.5	60	0.3	3.7	4	64	48
1990	16.4	2.2	14.5	36.2	69	0.3	5.3	6	75	48
1991	12.2	2.1	13.2	30.3	58	0.2	5.4	6	63	48
1992	8.8	2.7	18.7	37.6	68	2.4	5.9	8	76	49
1993	21.0	3.2	16.9	44.8	86	2.8	5.2	8	94	48
1994	13.5	2.4	11.8	38.2	66	1.2	3.9	5	71	54
1995	4.9	1.8	13.7	47.4	68	2.1	5.2	7	75	63
1996	6.3	2.8	15.8	31.6	57	1.9	6.2	8	65	49
1997	12.1	2.5	14.0	14.6	43	3.4	3.7	7	50	29
1998	1.8	1.4	10.0	11.2	24	2.6	4.6	7	32	35
1999	0.7	1.2	16.8	26.0	45	2.7	5.5	8	53	49
2000	3.9	1.2	9.6	22.5	37	0.0	5.5	6	43	53
2001	0.9	2.0	8.1	15.1	26	0.0	6.6	7	33	46

Japan high seas catch through 1977 includes Alaskan sockeye.

Source through 1996: INPFC/NPAFC Statistical Yearbooks

1997-1999 catches are preliminary from agencies and compiled by D.E. Rogers, Fish. Res. Inst.

1992-2000 Japan high seas is within Russian 200 mi zone.

The catches in 2001 were estimated from catch in m.t. and mean body weights.

TABLE 8. Annual commercial catches of chum salmon in millions of fish.

Year	North America					Asia				Pacific Total	Percent Asia
	Washington	Southeast	Central	Western	N.A.	Japan		USSR	Total		
	Brit. Colum.	Alaska	Alaska	Alaska	Total	High seas	Coastal	Coastal			
means											
1921-50	5.7	4.8	2.5	0.5	14	4	13*	14	32	46	70
1951-70	2.9	2.4	2.9	0.8	9	16	4	10	30	39	77
1971-80	3.3	1.4	2.5	2.5	10	15	16	3	35	44	78
1981-90	4.2	2.5	5.0	3.6	15	4	46	6	55	70	78
1971	1.5	1.9	4.3	1.4	9	17	10	3	30	39	77
1972	7.0	2.9	2.7	1.4	14	22	9	2	33	47	70
1973	6.8	1.8	2.1	2.0	13	16	12	2	30	43	70
1974	2.7	1.7	0.9	2.2	8	22	13	2	37	45	83
1975	1.3	0.7	1.3	2.3	6	19	20	2	41	47	88
1976	2.7	1.0	2.2	2.7	9	22	12	4	38	47	82
1977	1.6	0.7	3.4	3.2	9	12	15	4	31	40	78
1978	4.3	0.9	2.6	3.2	11	7	18	5	30	41	73
1979	1.0	0.9	2.3	2.7	7	6	28	6	40	47	85
1980	4.3	1.7	3.6	4.3	14	6	26	4	36	50	72
1981	1.7	0.9	6.8	5.0	14	6	34	5	45	59	76
1982	4.1	1.4	6.9	2.7	15	7	30	3	40	55	73
1983	1.6	1.2	5.3	3.7	12	6	37	6	49	61	81
1984	2.6	4.1	4.4	4.6	16	6	38	4	48	64	75
1985	6.7	3.3	3.9	3.4	17	4	51	6	61	78	78
1986	6.7	3.4	6.0	2.5	19	3	49	7	59	78	76
1987	3.7	2.7	4.6	3.2	14	3	43	6	52	66	79
1988	8.0	3.5	6.5	4.2	22	2	51	7	60	82	73
1989	2.7	2.0	2.2	3.8	11	1	55	6	62	73	85
1990	4.3	2.2	3.4	2.4	12	1	68	7	76	88	86
1991	3.4	3.3	3.0	2.9	13	1	60	5	66	79	84
1992	5.5	4.9	2.6	2.4	15	6	46	5	57	72	79
1993	5.4	7.9	3.0	1.2	18	4	61	7	70	88	80
1994	5.6	10.4	4.6	1.6	22	6	69	9	75	97	77
1995	3.2	10.0	4.5	3.2	21	8	78	8	94	115	82
1996	2.1	16.1	3.7	2.0	24	6	87	7	99	123	81
1997	2.3	11.7	3.6	0.9	19	5	74	6	85	104	82
1998	4.7	15.2	2.5	0.8	23	12	61	8	81	104	78
1999	1.1	14.9	5.1	1.0	22	0	50	7	57	79	72
2000	0.8	15.4	5.6	0.4	22	0	45	10	55	77	71
2001	0.5	8.7	5.8	1.1	16	0	35	8	43	59	73

* Mostly off USSR coast

Source through 1999: INPFC/NPAFC Statistical Yearbooks

Japan coastal includes in-river catch. Japan high seas after 1992 in Russian 200 mi zone.

2000-2001 catches are preliminary from agencies and compiled by D.E. Rogers, Fish. Res. Inst.

TABLE 9. Annual commercial and sport catches of coho salmon in millions of fish.

Year	North America							Asia		Pacific Total	Percent Ca-Wa
	Calif.- Wash.		British Columbia		Alaska			Japan	USSR		
	Comm.	Sport	Comm.	Sport	Southeast	Central	Western	High seas	Coastal		
means											
1921-50	1.8		2.2		1.7	0.8	<.1	0.3	1.7	9	21
1951-70	1.8	0.6	3.4	0.1	1.3	0.5	0.1	2.5	1.2	12	21
1971-80	3.1	1.0	3.5	0.6	1.0	0.6	0.4	3.1	1.0	14	29
1981-90	2.0	0.7	3.5	0.6	2.1	1.6	1.2	1.0	1.2	14	19
1971	4.1	1.2	4.8	0.4	0.9	0.5	<.1	2.8	1.3	16	33
1972	2.3	0.9	3.4	0.3	1.5	0.2	0.1	3.0	0.5	12	26
1973	3.0	0.8	3.5	0.4	0.8	0.3	0.3	4.8	0.7	15	26
1974	4.1	1.2	3.7	0.8	0.6	0.3	0.3	4.6	1.2	17	32
1975	2.8	1.0	2.3	0.5	0.4	0.4	0.2	3.9	1.2	13	30
1976	5.6	1.7	3.7	0.4	0.8	0.4	0.2	3.6	1.2	18	41
1977	2.2	0.9	3.3	0.7	0.9	0.4	0.4	1.8	1.3	12	26
1978	2.4	1.0	3.4	1.1	1.7	0.7	0.4	3.1	0.7	15	23
1979	2.5	0.8	3.6	0.4	1.1	1.1	0.8	1.5	1.3	13	25
1980	2.3	0.8	3.4	0.6	1.1	1.2	0.8	1.9	0.6	13	24
1981	2.0	0.7	2.8	0.4	1.4	1.2	0.9	1.9	1.3	13	21
1982	2.5	0.6	3.2	0.5	2.1	2.3	1.7	2.4	1.2	17	19
1983	1.4	0.7	4.1	0.4	2.0	1.2	0.5	1.4	1.2	13	16
1984	1.2	0.4	3.6	0.4	1.9	1.7	1.8	1.7	1.3	14	11
1985	1.7	0.6	3.0	0.7	2.6	2.3	0.8	0.9	2.1	15	16
1986	2.3	0.7	4.9	0.6	2.9	1.2	1.7	0.5	1.5	16	18
1987	2.6	0.7	3.4	0.7	1.6	1.2	0.8	0.5	1.1	13	26
1988	2.4	0.8	2.7	1.1	1.0	2.2	1.3	0.3	0.9	13	25
1989	2.1	0.7	3.4	0.6	2.2	1.3	1.2	0.2	0.9	13	22
1990	1.6	0.9	3.9	0.8	2.9	1.8	0.8	0.2	0.7	14	18
1991	1.8	1.2	3.5	0.3	3.2	1.9	1.1	0.2	1.0	14	21
1992	0.6	0.6	3.0	0.8	3.7	2.1	1.3	0.0	1.3	13	9
1993	0.4	0.4	1.9	0.9	3.6	1.5	0.9	0.1	0.8	10	7
1994	0.6	0.1	2.6	0.5	5.7	2.4	1.4	0.0	0.8	14	5
1995	0.5	0.2	1.9	0.3	3.1	2.1	0.7	0.0	0.4	9	8
1996	0.4	0.2	1.4	0.3	3.1	1.5	1.5	0.2	0.6	9	7
1997	0.2	0.2	0.2	0.3	2.0	0.8	0.4	0.0	0.8	5	8
1998	0.3	0.2	0.0	0.0	2.8	1.0	0.6	0.7	0.6	6	8
1999	0.3	0.1	0.0	0.0	3.6	0.7	0.3	0.5	0.4	6	7
2000	0.7	0.2	0.0	0.0	1.5	1.3	0.6	0.0	0.6	5	19
2001	0.5	0.3	0.1	0.1	3.3	1.3	0.3	0.0	0.5	6	13

0.0= less than 50,000

Preliminary estimates for 2001

TABLE 10. Annual commercial, sport, and subsistence catches of chinook salmon.

Year	North America							Asia		Pacific Total	Percent Ca-Wa
	Calif.- Wash.		British Columbia		Alaska			Japan	USSR		
	Comm.	Sport	Comm.	Sport	Southeast	Central	Western	High Seas	Coastal		
means											
1921-50	1.9		0.6		0.5	0.1	0.1	<0.1	0.1	3.3	58
1951-70	1.4	0.4	1.0	0.1	0.3	<.1	0.2	0.2	0.1	3.7	49
1971-80	1.6	0.6	1.4	0.3	0.3	0.1	0.4	0.4	0.2	5.3	41
1981-90	1.4	0.5	0.9	0.2	0.3	0.1	0.5	0.2	0.2	4.2	45
1971	1.3	0.6	1.6	0.1	0.3	0.1	0.4	0.3	0.2	4.9	39
1972	1.3	0.6	1.5	0.2	0.3	0.1	0.3	0.4	0.2	4.9	39
1973	2.2	0.7	1.4	0.2	0.3	<.1	0.3	0.3	0.2	5.6	52
1974	1.5	0.7	1.5	0.3	0.3	<.1	0.2	0.5	0.2	5.2	42
1975	1.7	0.8	1.4	0.4	0.3	<.1	0.2	0.3	0.2	5.3	47
1976	1.6	0.6	1.5	0.5	0.2	0.1	0.3	0.5	0.2	5.5	40
1977	1.7	0.6	1.5	0.4	0.3	<.1	0.4	0.3	0.3	5.5	42
1978	1.3	0.5	1.4	0.5	0.4	0.1	0.5	0.3	0.3	5.3	34
1979	1.5	0.5	1.3	0.4	0.4	0.1	0.5	0.3	0.3	5.3	38
1980	1.4	0.4	1.3	0.4	0.3	<.1	0.5	0.9	0.1	5.3	34
1981	1.2	0.4	1.1	0.3	0.3	<.1	0.6	0.3	0.1	4.3	37
1982	1.6	0.4	1.2	0.2	0.3	0.1	0.6	0.3	0.1	4.8	42
1983	0.7	0.4	1.0	0.2	0.3	0.1	0.6	0.3	0.2	3.8	29
1984	0.8	0.3	1.0	0.4	0.3	<.1	0.4	0.2	0.2	3.6	31
1985	1.0	0.4	0.9	0.3	0.2	0.1	0.5	0.2	0.2	3.8	37
1986	1.5	0.4	0.8	0.2	0.2	0.1	0.4	0.1	0.2	3.9	49
1987	2.2	0.6	0.8	0.2	0.3	0.1	0.4	0.2	0.2	5.0	56
1988	2.7	0.6	0.7	0.2	0.3	<.1	0.4	0.1	0.2	5.2	63
1989	1.6	0.5	0.6	0.2	0.3	0.1	0.4	0.1	0.1	3.9	54
1990	1.1	0.5	0.7	0.2	0.3	0.1	0.3	0.1	0.1	3.4	47
1991	0.7	0.4	0.6	0.2	0.3	0.2	0.3	0.1	0.1	2.9	38
1992	0.6	0.4	0.7	0.3	0.3	0.1	0.4	0.0	0.1	2.9	34
1993	0.6	0.4	0.6	0.2	0.3	0.1	0.3	0.1	0.2	2.8	36
1994	0.5	0.4	0.4	0.2	0.4	0.2	0.4	0.0	0.2	2.7	34
1995	1.1	0.7	0.2	0.2	0.2	0.2	0.4	0.0	0.1	3.0	57
1996	0.8	0.4	0.1	0.2	0.2	0.2	0.3	0.0	0.1	2.3	51
1997	0.6	0.2	0.2	0.2	0.3	0.1	0.3	0.0	0.1	2.0	41
1998	0.3	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.1	1.9	21
1999	0.4	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.1	1.6	31
2000	0.7	0.2	0.1	0.1	0.2	0.1	0.1	0.0	0.1	1.5	57
2001	0.8	0.2	0.1	0.1	0.2	0.1	0.0	0.0	0.1	1.6	63

Subsistence catches in Western Alaska only

0.0= less than 50,000