

TCCOHO 8801

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PACIFIC SALMON COMMISSION
JOINT COHO TECHNICAL COMMITTEE REPORT

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SNAPSHOT OF 1988 COHO FISHERIES

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INTRODUCTION

A summary of coastwide coho catches by troll, net and sport fisheries for the period 1983-88 is presented in Table 1. Data for 1988 is incomplete and preliminary.

A catch ceiling of 1.8 million coho was established for the WCVI troll fishery. Coho management regimes for other fisheries in 1988 were not specified in the Coho salmon chapter.

ALASKA

No coho management regimes for Southeast Alaska fisheries have been specified by the PSC. These fisheries are managed by the Alaska Department of Fish and Game to achieve coho conservation objectives, and for gear allocation objectives established by the Alaska Board of Fisheries.

In 1988, Southeast Alaska fisheries harvested an estimated 1,056,000 coho salmon, the lowest since 1976 and approximately half the 1980-87 average of 2,010,000. The troll fishery is the primary coho directed fishery in Southeast Alaska and usually accounts for about 60 to 65 percent of the region coho salmon harvest (In 1988, however, the troll percentage was only 47 percent.) Catches by gear type were: troll - 498,000 (47%); net - 525,000 (50%); recreational (projected) - 33,000 (3%).

Southeast Alaska coho fisheries are managed inseason. Time/area regulations and recreational bag limits based on run strength assessment are the primary management measures; catch ceilings are not utilized.

The opening date for the 1988 general summer troll season was delayed until July 1 for chinook management purposes. This opening date was 11 days later than the June 20 opening date in 1986 and 1987.

A number of conservation measures were implemented for the troll fishery during 1988 in response to weak coho returns. Two

10-day troll closures were implemented (July 26 - August 4, and August 15-24) to reduce troll harvest rates on coho throughout the region. Continued weakness in coho returns to central and southern areas of the region resulted in those areas being closed for an additional 21 days from September 1 until the end of the summer troll season on September 20. Stronger coho returns to the northern areas of the region permitted additional troll openings in Districts 12, 14, 15, 16, and the Yakutat area during September 3-20. The 1988 troll coho harvest of 498,000 was the lowest since 1975.

Most of the Southeast Alaska drift gillnet coho harvest occurs during late August and September when some fisheries target primarily on coho and others harvest significant numbers of coho while targeting primarily on fall chum runs. Substantial time/area closures were also implemented in drift gillnet fisheries during 1988 for coho conservation. The most extensive coho conservation measures were taken in central and southern portions of the region with the District 8 (Stikine) gillnet fishery being closed entirely during the traditional fall coho season, and the District 6 fishery (Sumner Strait / upper Clarence Strait) being closed during September when most of the coho harvest normally occurs in that district. Nighttime closures and shortened fishing weeks were implemented in the District 1 (Tree Point) gillnet fishery beginning in late August. Additional time/area closures were implemented in drift gillnet fisheries based on coho abundance, and relative abundance of other targeted species. The drift gillnet coho catch of 162,000 was the third lowest since 1980.

Significant numbers of coho salmon are also harvested incidentally in the purse seine fishery. Southeast Alaska seine fisheries are managed primarily for the targeted species of pink, sockeye and chum salmon. Purse seine fishing effort was restricted during 1988 in response to weak pink salmon returns. This, combined with weak

coho returns, resulted in an incidental purse seine coho catch of 154,000, the second lowest since 1980.

Recreational bag limits were reduced from six to two coho salmon from September 1 until the end of the season in the central and southern portions of the region in response to weak coho returns to these areas. The projected 1988 recreational coho harvest of 32,800 was the second lowest since 1980.

CANADA

West Coast of Vancouver Island

Troll: The WCVI troll fishery started on July 1st and ended on September 7th, approximately two weeks after the fishery was closed to chinook salmon retention. A total of 1,529,000 coho were caught, 271,000 below the Pacific Salmon Treaty catch ceiling of 1,800,000. Closures designed to slow down the chinook catch in combination with a lower than 1987 abundance level, are thought to have contributed to the shortfall.

Net: The WCVI net catch of coho of approximately 4,000 pieces was taken incidentally during fisheries directed at sockeye and chum salmon.

Georgia Strait

Troll: The troll season ran from July 1st to September 30th, during which time 229,000 coho were caught. This is slightly greater than the average for the previous three years of 213,000.

Sport: The sport fishery catch to date (end of October) of 1,078,000 coho is the largest catch since 1980 when the current creel survey program was initiated. The 1988 catch far surpasses the recent three year average catch (1985 to 1987) of 647,000.

Net: The Georgia Strait/Fraser River net catch of 31,000 pieces and the Johnstone Strait catch of 65,000 were taken during fisheries directed at sockeye and chum salmon. The Area 20 net catch of 43,000 was taken during fisheries directed at

Fraser River sockeye.

North Coast

Troll: The north coast (Areas 1 to 11, 30) troll catch of 499,000 is approximately one half of the recent three year average. The 1988 troll season ran from July 1st to August 21st and re-opened for an additional eight days from August 31st to September 7th.

Net: Coho are taken as incidental catch in fisheries directed at sockeye, pink and chum. The estimated coho catch of 126,000 is well below the recent three year average of 316,800, due in part to low effort because of poor pink salmon returns to the Skeena and Nass Rivers and low coho abundance.

WASHINGTON/OREGON

Catch statistics represent preliminary information extracted from the WDF soft data system on November 23, 1988. Net fisheries have not yet been concluded for the season.

Ocean Fisheries: No specific management regimes were established by the Pacific Salmon Commission for coho fisheries off the coasts of Washington, Oregon and California. Ocean troll and sport fisheries in this area operated under coho ceilings developed through domestic regulatory processes of the PFMC in response to conservation concerns for naturally spawning coho stocks originating in Puget Sound and Washington Coastal river systems.

No nontreaty troll fishery for coho was permitted north of Cape Falcon, Oregon in 1988. The recreational fishery north of Cape Falcon was constrained by a ceiling of 100,000 coho. The treaty troll fishery operated under a coho quota of 68,000. Fisheries north of Cape Falcon were closed upon attainment of coho ceilings.

A total of 71,900 coho were harvested by 1988 troll fisheries north of Cape Falcon, Oregon, compared to 137,400 taken in 1987. The 1988 total includes approximately 2300

coho confiscated from Canadian troll vessels fishing illegally in U.S. waters. A total of 98,400 coho were harvested by recreational fisheries north of Cape Falcon, Oregon, compared to 148,400 in 1987.

PRELIMINARY STOCK STATUS ASSESSMENT

Puget Sound

Area 7/7A Net Fishery: A total of 83,700 coho salmon were harvested by net fisheries in the San Juan Islands (areas 7 and 7A). The harvest, including coho caught during test fisheries, was taken incidentally during fisheries under the control of the Fraser Panel (31,900), fisheries directed at chum salmon (28,800), and fisheries directed at coho salmon (23,100).

Strait of Juan de Fuca Net Fishery: The treaty Indian troll fishery in the Strait of Juan de Fuca (areas 4B, 5, and 6C) harvested 600 coho salmon (excluding 4,600 coho harvested in Area 4B during the PFMC management period). The net fishery in this area harvested 19,900 coho. All the all-citizen catch was taken during fisheries under control of the Fraser Panel. The treaty Indian net catch was taken incidentally during fisheries under control of the Fraser Panel and during fisheries directed at chinook and chum salmon.

Net Fisheries Other than in Juan De Fuca Strait and San Juan Islands areas: Net fisheries harvested 1,131,000 coho salmon in other areas of Puget Sound. The majority of this harvest occurred in terminal areas in which the coho run exceeded escapement requirements.

Sport Fishery: Catch estimates are not available at this time for the 1988 Puget Sound sport fishery.

Washington Coast: A total of 93,500 coho have been taken in Washington coastal net fisheries (20,900 north coast; 23,600 Grays Harbor; 49,000 Willapa Bay).

Columbia River: Through November 20th, the Columbia River coho net fisheries have harvested 316,800 coho; the lower river sport fishery has taken approximately 141,700 coho.

Southeast Alaska

Coho returns to the southern and central portions of Southeast Alaska in 1988 were especially weak. Stronger returns occurred in some northern inside areas, while near record returns occurred in the Yakukut area.

Complete information on coho escapements to index systems in 1988 is not yet available. However, preliminary information suggests that, in some portions of the region, coho escapements to small stream systems are generally poor compared to lake and larger rivers. This appears to substantiate concerns that severe freezing and scouring observed in the fall of 1985 would increase mortalities of rearing coho fry, particularly in smaller stream systems. Low survival rates for most hatchery reared coho indicates that poor marine survival also occurred, perhaps compounding the effects of poor freshwater survival for some stocks. The relative impacts of reduced natural survival and potential high seas fishing mortalities on marine survival of 1988 returning coho are not known.

Preliminary analysis indicates Alaskan hatcheries contributed about 55,000 coho salmon to common property fisheries in 1988, compared to 129,000 in 1987 and 400,000 in 1986.

Canada:

Returns to north/central B.C. coho systems were generally poor with extremely poor returns to the Skeena River. Assessments on south coastal streams are in progress with early indications of average escapements to Vancouver Island key streams.

Washington/Oregon

Spawning Escapement data are not available at this time. Preliminary indications are that survival of wild coho

was highly variable from stock to stock (returns to some Washington coastal river systems appear to be particularly depressed).

Preliminary Indications of Potential Coho Conservation Concerns For the Management of 1989 Fisheries

Canada:

Upper Skeena River coho stocks continue to be a conservation concern.

Washington:

Preseason forecasts are scheduled to become available in February 1989. Preliminary indications are that record low flow conditions during the summer of 1987 will result in reduced production of natural stocks from Puget Sound.

TABLE 1. PRELIMINARY 1988 COHO CATCHES FROM U.S. AND CANADIAN FISHERIES a/
 COMPARED WITH 1987, 1986, 1985, 1984 AND 1983 (thousand fish)

PRELIMINARY
 11-28-88

AREA	TROLL						NET						SPORT						TOTAL					
	1988	1987	1986	1985	1984	1983	1988	1987	1986	1985	1984	1983	1988	1987	1986	1985	1984	1983	1988	1987	1986	1985	1984	1983
S.E. AK b/	498	1041	2126	1589	1133	1280	525	570	1083	951	805	703	33	50	58	60	60	55	1056	1661	3267	2600	1998	2038
CANADA	c/																							
N/Ctl	499	827	1648	632	859	1166	126	191	490	268	223	370	-	-	-	-	-	-	647	1041	2138	900	1082	1536
WCVI	1529	1821	2157	1389	2172	2169	4	7	11	8	11	9	-	-	-	-	-	-	1533	1828	2168	1397	2183	2178
G Str/Frsr	229	221	219	200	117	121	31	21	51	50	23	28	1078	642	572	728	443	404	1338	884	842	978	583	553
Jn Str	-	-	-	-	-	-	65	59	127	147	119	243	-	-	-	-	-	-	65	59	127	147	119	243
JDeF Str d/	-	-	-	-	-	-	43	223	203	225	75	17	-	-	-	-	-	-	43	223	203	225	75	17
Sub-Total	2257	2869	4024	2221	3148	3456	269	501	882	698	451	667	1100	665	572	728	443	404	3626	4035	5478	3647	4042	4527
WA INSIDE																								
JDeF Str	1	4	5	1	<1	<1	20	64	72	84	46	38	NA	126	142	89	59	72	21	194	219	174	105	110
San Juan Is	-	-	-	-	-	-	84	80	164	142	24	61	NA	11	12	9	4	8	84	91	176	151	28	69
Oth P. Snd	-	-	-	-	-	-	1131	1650	1108	930	710	827	NA	143	115	119	78	194	1131	1793	1223	1049	788	1021
Coastal	-	-	-	-	-	-	94	168	218	71	91	29	NA	NA	12	3	19	4	94	168	230	74	110	33
Sub-Total	1	4	5	1	<1	<1	1329	1962	1562	1227	871	955	0	280	281	220	160	278	1330	2246	1848	1448	1031	1233
COLUMBIA RIVER	-	-	-	-	-	-	317	141	998	195	203	7	142	48	124	27	75	4	459	189	1122	222	278	11
WA/OR/CA OCEAN																								
WA/OR N Cp Flcn	72	144	205	236	81	66	-	-	-	-	-	-	98	148	210	199	51	247	170	292	415	435	132	313
OR S Cp Flcn	627	340	394	44	0	314	-	-	-	-	-	-	216	152	175	152	112	110	843	492	569	196	112	424
California	51	44	35	11	47	60	-	-	-	-	-	-	33	46	17	15	19	28	84	90	52	26	66	88
Sub-Total	750	528	634	291	128	440	-	-	-	-	-	-	347	346	402	366	182	385	1097	874	1036	657	310	825
GRAND TOTAL	3506	4442	6789	4102	4409	5176	2440	3174	4525	3071	2330	2332	1622	1389	1437	1401	920	1126	7568	9005	12751	8574	7659	8634

a/ All totals include data as available on 10-18-88. NA catches are treated as zeros in totals.

b/ Southeast Alaska coho catches shown for calendar year. Data for 1985 are preliminary.

c/ 1988 Sport catch through October only. Other years through end of December.

Sport catch data has not been compiled for areas other than Georgia Strait.

d/ Johnstone Strait and Juan de Fuca Strait troll catch included with Georgia Strait/Fraser

e/ Some Georgia Strait/Fraser catch is included with Johnstone Strait.