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An Update on Trends in Catch of Pacific Salmon in Canada

by

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INTRODUCTION

Six species of Pacific salmon are harvested in British Columbia coastal waters. Sockeye, pink, and chum salmon are mainly harvested in commercial net fisheries while chinook and coho salmon are targeted by commercial, troll, and (increasingly) by sport fisheries located primarily in the Strait of Georgia. Steelhead constitute a minor component of the catch, and are not discussed in this document.

In general, escapement goals are established in Canada for major sockeye, pink, and chum stocks, and fisheries are managed to meet these escapement objectives. Chinook and coho fisheries are managed to achieve specified harvest rates although escapement goals have also been established for key stocks.

This document reports data on the changes in catch (numbers and total weight) for the five major salmon species caught in British Columbian waters for the period 1952-1994.

Catch Trends

The 1994 catch of 63,192 tonnes was about average for the period 1952-1994. Approximately half the 1994 catch was composed of sockeye (29,745 tonnes). The sockeye catch was well above the long term average of 17,150 tonnes reflecting the increasing trend observed in recent years. Pink catches have been in decline since 1990 and the 1994 catch of 3,276 tonnes was the lowest on record and well below the average catch of 20,858 tonnes. Catches of chum salmon have increased gradually over the last 20 years with the 1994 catch of 20,239 tonnes being slightly above the long term average of 13,400 tonnes. Chinook salmon production has decreased steadily since the early 1970s and the 1994 catch of 3,177 tonnes was the lowest catch on record and well below the average catch of 5,474 tonnes. Coho salmon catches in 1994 at 6,755 tonnes were nearly double those recorded in 1993 but were still less than the long term average of 9,250 tonnes.

Total catch by weight and numbers is reported in Tables 1 and 2 for the period 1952-94. Table 3 and 4 provides a breakdown of salmon catch by major statistical area in 1994 by weight and numbers.

FIGURES

Fig. 1 a,b. Major statistical reporting areas for Pacific salmon catches in British Columbia.

Table 1. Total salmon catch (tonnes) by species in British Columbia 1952-1994.

<u>Year</u>	<u>Chinook</u>	<u>Sockeye</u>	<u>Coho</u>	<u>Pink</u>	<u>Chum</u>	<u>Total</u>
1952	5828	13965	8892	23200	14452	66338
1953	6379	16029	9570	27901	24686	84565
1954	5551	21319	8586	11673	33747	80875
1955	5129	7549	9768	28624	8245	59315
1956	5544	9751	10531	13125	12441	51391
1957	5079	7130	9349	25840	12355	59753
1958	5828	33571	10140	15308	17283	82131
1959	5540	8172	8085	15601	10481	47878
1960	4248	7017	5827	7672	9214	33978
1961	3719	12063	10209	22464	6623	55079
1962	3712	9107	10952	42281	8186	74238
1963	4147	5376	10465	27079	6991	54058
1964	5485	10397	12967	16532	10847	56229
1965	5151	7350	15040	10310	3014	40864
1966	6176	11636	15889	33064	6965	73730
1967	6048	16587	9035	22612	5379	59661
1968	5956	18921	13052	25407	16644	79980
1969	5545	10877	7024	5991	6073	35510
1970	5745	11243	12347	23528	16744	69606
1971	7669	17039	12640	17202	5410	59960
1972	7387	9467	9429	17653	29925	73861
1973	6692	21413	10146	12936	32644	83831
1974	6721	21276	9264	11061	12465	60786
1975	6436	5635	7091	9961	5380	34502
1976	6841	12295	8283	16869	10913	55200
1977	6693	17328	8798	23759	6013	62591
1978	6987	21813	8139	15221	15804	67964
1979	6080	14343	9137	23406	4723	57690
1980	5893	8054	8225	13766	17358	53296
1981	5244	20950	6688	36861	6137	75881
1982	6341	28980	8224	3933	15055	62533
1983	4786	14197	9173	38720	4890	71767
1984	5509	12792	8779	11695	8978	47753
1985	4865	31062	7971	36546	23479	103924
1986	4486	29811	11666	29264	24922	100148
1987	4622	14714	7357	25865	11037	63596
1988	5218	11842	6155	31467	30205	84887
1989	4698	33674	7704	29593	9288	84956
1990	4642	35861	9221	25615	17184	92523
1991	4538	24525	8733	34130	10203	82129
1992	4731	20785	6370	14563	17953	64403
1993	4301	41797	3764	15328	17167	82357
1994	3177	29745	6755	3276	20239	63192

Table 2. Total salmon catch (numbers) by species in British Columbia 1952-1994.

<u>Year</u>	<u>Chinook</u>	<u>Sockeye</u>	<u>Coho</u>	<u>Pink</u>	<u>Chum</u>	<u>Total</u>
1952	806820	4887841	2966553	11416053	2645125	22722392
1953	888958	5920736	2972662	11213989	4885716	25882061
1954	781990	6964773	2558635	5617377	6535457	22458232
1955	718182	2835650	3039679	11427754	1632837	19654102
1956	749114	3258034	3179493	7591671	2588733	17367045
1957	720938	3040484	3256678	11442233	2440689	20901022
1958	813548	12050515	3052587	7520634	3215829	26653113
1959	771060	3255621	2953544	6784159	2029961	15794345
1960	593796	2859754	2104415	4459446	1841197	11858608
1961	512902	4565756	3391118	8323400	1287168	18080344
1962	518202	3503898	3768580	24285980	1604063	33680723
1963	812272	2089350	3543012	12208649	1603430	20256713
1964	982681	3620732	4331933	9683589	3035439	21654374
1965	999699	3020880	4538723	5113191	802166	14474659
1966	1190649	4022769	5600971	17767361	1499944	30081694
1967	1088940	6691284	3231030	9792822	1105098	21909174
1968	1031123	6345646	5004088	20166469	3094683	35642009
1969	1056304	4267694	2376685	2569217	1310445	11580345
1970	1179975	4077930	3897760	13516991	3679390	26352046
1971	1593252	6306007	4788842	8455992	1262977	22407070
1972	1548849	3562689	3355852	13996264	6031462	28495116
1973	1423792	7585778	3530197	6521341	6225042	25286150
1974	1466846	7225360	3693968	7373961	2201804	21961939
1975	1411706	2271494	2331676	4633607	1147184	11795667
1976	1543060	4813793	3698416	10348865	1901061	22305195
1977	1492516	6346302	3316546	10356377	1088184	22599925
1978	1367868	7221754	3349967	10748013	2978708	25666310
1979	1329230	5691342	3646858	11822526	866324	23356280
1980	1476408	3260096	3835871	8418658	3452751	20443784
1981	1331589	8443091	3138642	18085803	1122961	32122086
1982	1365458	10074474	3588233	2679553	2974848	20682566
1983	1154668	5523728	4534183	24000538	1005661	36218778
1984	1424876	5081199	4048203	7500864	1850797	19905939
1985	1137642	12250917	3681122	20319522	5492723	42881926
1986	1019717	10557884	5479257	17980804	5581417	40619079
1987	937419	5418141	4027972	13446962	2302062	26132556
1988	892440	4490092	3835265	23131194	6194142	38543133
1989	847471	13796395	3977130	17174907	1828401	37624304
1990	859345	14242568	4522247	17268954	3224319	40117433
1991	855936	10467706	3742379	24275731	2364147	41705899
1992	881621	8339244	3645070	10321920	4029580	27217435
1993	827351	18258281	2748680	10300434	4231334	36366080
1994	559215	11603947	2867624	2235701	4315333	21581820

Table 3. 1994 salmon catch (tonnes) by statistical area.

Area	Chinook	Sockeye	Coho	Pink	Chum	Total
1	804	356	1575	408	144	3288
2E	74	36	123	131	577	941
2W	449	1926	212	109	59	2754
3	95	835	741	750	1211	3631
4	104	1605	273	374	660	3017
5	11	87	114	71	114	397
6	27	50	82	182	406	747
7	27	34	66	21	656	804
8	110	587	250	838	2423	4207
9	3	127	21	35	51	238
10	10	327	40	19	97	494
11	81	1789	72	20	39	2001
12	57	9983	142	256	3584	14022
13	36	3874	25	37	3095	7068
14	31	2	69	1	1616	1719
15	3	0	2	0	0	5
16	5	401	2	0	1	409
17	2	0	4	0	42	47
18	0	81	0	0	2	84
19	0	1	0	0	0	1
19	0	0	0	0	0	0
19	0	0	0	0	0	0
20	56	2332	305	4	3	2700
21	93	33	569	1	3896	4591
22	0	0	0	0	0	0
23	249	507	1076	1	4	1836
23	0	0	0	0	0	0
23	0	0	0	0	0	0
24	122	182	386	0	12	702
25	107	80	142	1	841	1170
26	134	71	166	1	7	379
27	291	137	218	14	22	681
28	0	0	0	0	0	0
29	114	4125	18	0	623	4880
Total	3094	29566	6692	3276	20186	62814

Table 4. 1994 salmon catch (numbers) by statistical area.

<u>Area</u>	<u>Chinook</u>	<u>Sockeye</u>	<u>Coho</u>	<u>Pink</u>	<u>Chum</u>	<u>Total</u>
1	98528	147274	482485	296648	43490	1068425
2E	9179	15129	37519	87630	129716	279173
2W	54523	789713	60114	77162	17599	999111
3	14071	351429	218949	505159	293870	1383478
4	13214	654521	82955	230849	164133	1145672
5	1594	36740	33180	48158	28025	147697
6	3695	20550	22455	117800	75494	239994
7	3352	13499	17449	12230	190608	237138
8	14304	231862	66562	572364	493398	1378490
9	552	48027	5760	19840	10890	85069
10	1556	129056	11025	11101	20627	173365
11	10286	727638	19819	12954	10216	780913
12	9518	3718325	44199	181849	679809	4633700
13	27385	1478013	51309	41709	606927	2205343
14	18464	1137	137393	2788	362710	522492
15	3716	157	4003	363	29	8268
16	11853	156523	7733	153	261	176523
17	7873	1047	21475	138	8593	39126
18	1605	37590	632	28	548	40403
19	0	593	0	0	0	593
19A	167	0	141	0	0	308
19B	14372	3043	118617	292	9	136333
20	13841	876558	121280	2492	712	1014883
21	15704	13784	286542	513	824618	1141161
22	0	0	0	0	0	0
23	42658	218799	559716	524	1003	822700
23A	14224	30261	19	0	0	44504
23B	32415	1038	15522	61	5	49041
24	19879	78067	201567	378	2707	302598
25	14876	33175	56395	605	198753	303804
26	18240	29600	67480	1021	1900	118241
27	38170	56925	83890	10389	5914	195288
28	986	1138	3699	2	1	5826
29	14950	1640191	11041	147	130768	1797097
TOTAL	545750	11541402	2850925	2235347	4303333	21476757

READ CAREFULLY

- 1 Reporting of all catches to the Dept of Fisheries and Oceans is the responsibility of the fisherman and a condition of licence renewal.
- 2 Accurate catch reports must include the map number or numbers showing the area in which your fish were caught.
- 3 The statistical areas shown on this map are to be used as a guide only. For more exact information refer to the Pacific Fishery Management Area Regulations.

- Dept of Fisheries and Oceans Office
 - Statistical areas are divided by red lines
 - Surfline
- Note: All areas revised February 1985



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Figure 1a
Canada

STATISTICAL AREA MAP

SHOWING AREAS OF CATCH FOR
BRITISH COLUMBIA WATERS
SOUTHERN HALF

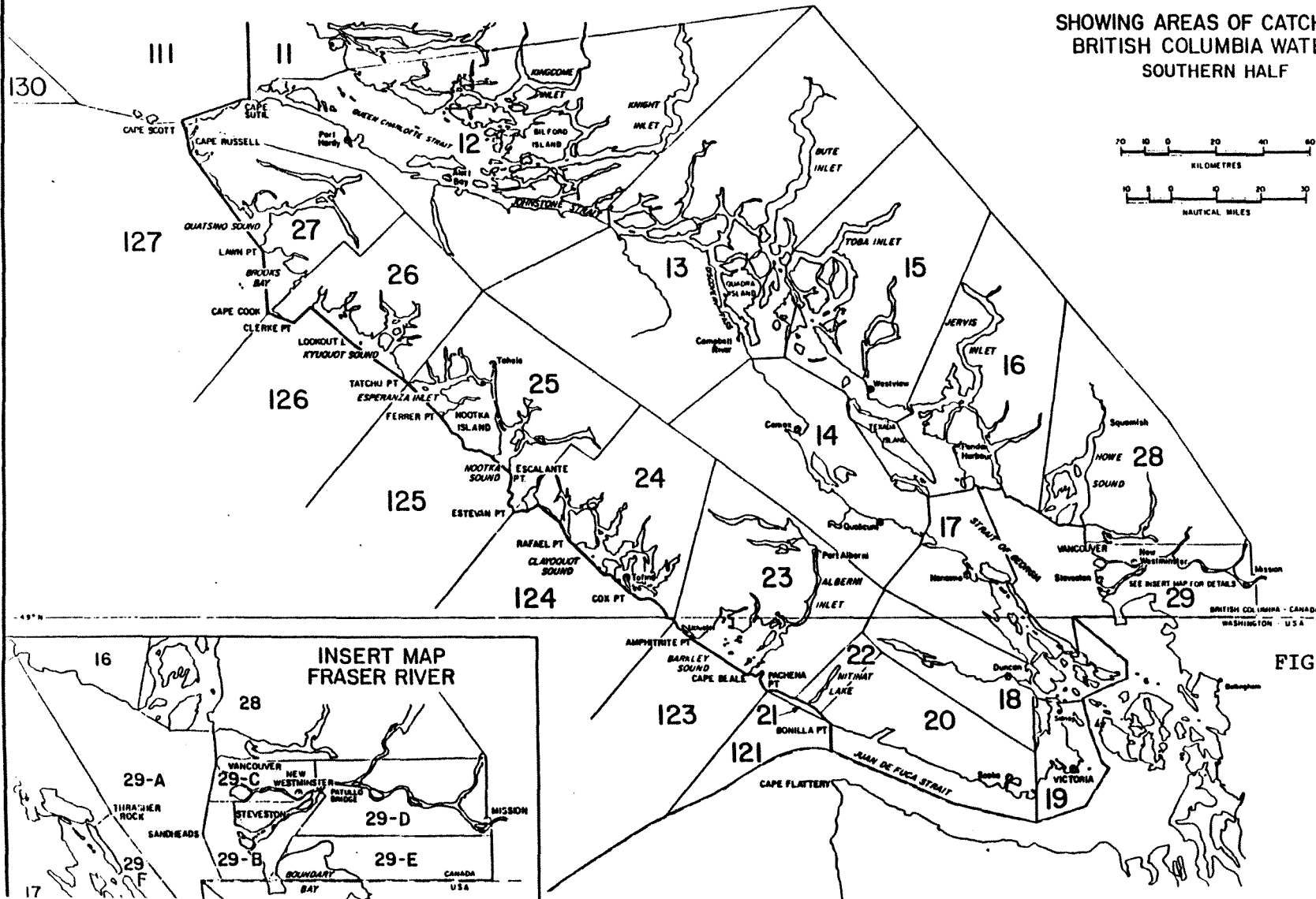


FIG. 1A.

READ CAREFULLY

1. Reporting of all catches to the Dept. of Fisheries and Oceans is the responsibility of the fisherman and a condition of licence renewal.
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Note: All areas revised February 1985

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STATISTICAL AREA MAP

SHOWING AREAS OF CATCH FOR
BRITISH COLUMBIA WATERS
NORTHERN HALF

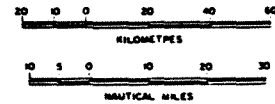


FIG. 1B.

