



South Coast Creel Survey Bulletin #4 – August 2011

Overview:

This bulletin provides a monthly update on estimates of recreational fishing effort and fin fish catch in the marine waters of southern British Columbia (Pacific Fishery Management Areas 11 through 29 and 121 to 127). These estimates are generated from data collected by the DFO's South Coast Creel Survey. A brief overview of the survey, the study area and methods used to collect data and generate these estimates is provided in the first bulletin of 2011, available on the DFO *ExtraNet*:

http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/salmon/sc_creelbulletins

*The estimates presented in this bulletin are based on **in-season data** and should be interpreted as **preliminary** and **subject to revision** as the data are finalized.*

Recreational Fishery Links:

It is your responsibility to know the current fishing regulations prior to fishing. A listing of recreational fishing regulations can be viewed at the Fisheries and Oceans Canada Pacific Region Recreational Fishery webpage:

<http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/index-eng.htm>

In addition, Fisheries and Oceans fishery notices of in-season regulation updates can be viewed at:

<http://ops.info.pac.dfo.ca/fishman/fnotice/fnotice.htm>

Fishery Commentary:

Salmon

Recreational fishing overall continued to be very strong in most of the South Coast marine waters in the month of August. Good weather and large abundances of chinook in most areas provided excellent recreational fisheries in the South Coast. Chinook catches to date are approximately 50% higher in the South Coast compared to the 5 year average and have been especially strong off the WCVI, which in some areas have been 2-3 times greater than average. The chinook abundances seen from 121-127 did not appear to materialize in Juan de Fuca Strait or the Strait of Georgia suggesting that this chinook abundance is, in large part, of US origin.

Combined effort in all South Coast areas is similar to the 5 year average. Increased effort was observed in Johnstone Strait and Campbell River, likely due to sockeye opportunities, and Area 124 due to large chinook abundance. Coho catches in the South Coast that were below the long-term average through July have surged to 40% above average with the largest coho catches seen coming from the WCVI. Sockeye opportunities started August 10th in most South Coast areas at 2/day and increased to 4/day August 25th.

Northeast Vancouver Island (Areas 11-13) chinook catches were average in August, with the exception of Area 11 which has seen large increases in chinook and coho catch, and an increase of 25% in effort. Effort was average in Port Hardy and up significantly in Campbell River (40%), likely due to opportunities for sockeye and the strong chinook catches seen in July. Coho catches were about average in Area 12 and slightly below average in Area 13.

In Southeast Vancouver Island (Areas 14-17) catch and effort has been average in most areas for chinook and coho. Effort and chinook catch doubled in Area 15 in August as a result of good chinook fishing around Powell River. Area 16 saw a drop in effort by about



South Coast Creel Survey Bulletin #4 – August 2011

50%, which area contacts believe is due to a decline in local tourism and poor fishing. Nanaimo continued to have above average effort and an above average chinook catch in August, but not nearly as high as it was in July. Local reports indicate that seals and sea lions have been less of an issue in the recreational fishery this summer, and killer whales sightings have been up.

Area 18 saw its effort almost triple with good weather, abundant chinook, and opportunities for sockeye and pink becoming available in August. Chinook and coho catches were significantly higher than average in Area 18, likely due to this increase in effort. Southern Vancouver Island fishing effort in the Victoria to Port Renfrew area continued to be average, as were chinook and coho catches. Recreational fisheries in Juan de Fuca Strait began to see large concentrations of pink salmon in August, and anglers were challenged to catch anything but pink salmon on certain tide cycles. Offshore 121 and Swiftsure Bank continued to see increased effort (up 25%) and higher chinook catches than normal (250% higher).

Chinook fishing has been excellent in the Bamfield, Ucluelet and Tofino areas (23-24 and 123-124), especially in offshore waters. Area 23 saw a shift in fishing effort from the inshore waters to the offshore waters (about 10%) in the month of August, even though inshore chinook fisheries have been good and targeting an abundant chinook return to the Robertson Creek hatchery. Offshore 123 chinook catches were about 60% higher than average for the month of August.

In Area 124 effort increased significantly in the offshore fishery compared to the long-term average (up 60%), with the majority of the offshore effort taking place between Ucluelet and Tofino. Chinook catch is more than double the long term average in Area 124. The 123-124 areas, like some other areas in the South Coast, have also seen a re-distribution of effort to the offshore waters from the inshore waters, predominantly due to the very strong offshore chinook fishery in 2011 and the likelihood of a September halibut closure (since announced), which causes anglers to fish in areas where they can target both salmon and halibut. Coho catches in 23-24, 123-124 were all well above the long term average.

Nootka Sound chinook catches in Area 25 continued to be strong in the month of August (catches up about 25%, effort up about 7%) and chinook catch to date in Area 25 is about double the long term average. Nootka Sound has experienced one of the best chinook fisheries in many years and is one of the few areas in the South Coast where inshore effort has increased in 2011, rather than being re-distributed offshore, due to the strong returns of Conuma River chinook and the exceptional chinook catches inshore. Coho catches were above average in both the inshore and offshore fisheries.

Catches reported from the Kyuquot Sound area continue to indicate a strong chinook fishery but lodge manifests and data collection are not complete at this time. Chinook catch will likely be above average in this area. Inshore coho catches appear to be below average and offshore catches are higher than average.

The Quatsino Sound inshore fishery saw a large decrease in effort (down 40%) and chinook catch in August (down 23%) while the offshore fishery had average effort and above average chinook

Groundfish

Halibut catches in most South Coast areas continued to be lower than average in August,



South Coast Creel Survey Bulletin #4 – August 2011

with a combined catch being approximately 25% below the 5 year average. Catches from Northeast Vancouver Island (Areas 11-12), and inshore waters in Area 27 and 25, were slightly higher than average, with the rest of the areas being below average. Area 123, which typically produces the largest halibut catch in the South Coast Area, had a catch of less than 50% of the long term average. Comments from the recreational fleet indicate that some of this catch reduction is due to less angler effort targeting groundfish because of the exceptional salmon fishing in Area 123. Many anglers have also reported that halibut have not been easy to catch in Area 123 this year. Halibut continues to be a very controversial issue in the recreational fishery and the announced September closure has raised the concern of access to this species by the recreational fishery.

Lingcod catches in the South Coast are lower than average in most areas of the South Coast with the exception of NWVI (Areas 125-127) which are higher than average. Some of this catch reduction is likely due to less angler effort targeting groundfish because of the exceptional salmon fishing in most South Coast areas. Lingcod releases are increasing in some areas potentially indicating that there are an increasing number of juvenile lingcod recruiting to those areas.

Rockfish catches in the South Coast are lower than average in most areas with the exception of NWVI (Areas 125-127) which are higher than average. Directed effort on rockfish is lower due to high salmon abundances in most South Coast areas.

Creel Survey Data:

A summary of survey statistics and preliminary recreation effort, measured in boat trips, by Pacific Fishery Management Area (PFMA) are presented in Table 1 (attached). A map of PFMA's is available in the 2011-2013 British Columbia Tidal Waters Sport Fishing Guide.

Recreational Catch Estimates:

A summary of preliminary kept and released catch estimates by PFMA for key salmon (Tables 2 and 3) and groundfish (Tables 4 and 5) species are attached. These tables track the cumulative kept and released catches of these key species as well as the 5-year average cumulative kept and release catch to allow comparison with recent catch trends. In addition, a breakdown of Aggregate Abundance and Individual Stock based management breakdowns of Chinook retained catch (AABM and ISBM, respectively) for west coast fishing areas is shown in Table 6. The cumulative catches reported in tables sum catch estimates from June through August. A map of PFMA's is available in the 2011-2013 British Columbia Tidal Waters Sport Fishing Guide.

Contacts:

For additional information on the South Coast Creel Survey Programs, please contact:

Johnstone Strait and North Island Surveys (PFMA's 11, 12, 27, & 127)
Pieter Van Will - Program Head, Johnstone Strait Salmon Stock Assessment
250-949-9273

Strait of Georgia Survey (PFMA's 13 – 20, 28 & 29)
Steve Baillie - Program Head, Strait of Georgia Salmon Stock Assessment
250-756-7227

West Coast Vancouver Island Survey (PFMA's 20 – 26 & 121 – 126)
Karin Mathias - Program Head, WCVI Salmon Stock Assessment
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South Coast Creel Survey Bulletin #4 – August 2011

Table 1 Creel survey statistics (number of interviews and flights) and preliminary effort estimates (number of boat trips) by Pacific Fishery Management Area, August 2011.

Pacific Fishery Management Area (PFMA)	Number of Creel Interviews	Number of Effort Count Flights ¹	Effort			
			Estimate	%SE ²	Year to date ³	Year to date 5-yr. average ³
11	177	8	538	19%	1,602	1,024
12	874	8	7,001	11%	16,264	14,162
13	136	10	9,319	7%	17,407	14,139
14	120	10	2,339	11%	5,139	4,969
15	39	10	892	13%	1,973	1,408
16	30	10	525	13%	1,463	2,102
17	158	10	1,730	10%	6,418	5,063
18	90	10	2,362	8%	3,563	2,558
19	256	10	1,972	10%	4,990	5,402
20	1396	10	13,702	5%	26,914	30,262
21	12	7	92	31%	134	472
121	179	9	1,036	24%	2,255	1,785
23	617	9	12,130	4%	22,890	24,906
123	262	9	4,060	13%	6,552	8,219
24	83	9	433	17%	859	1,299
124	341	9	2,316	19%	3,590	2,629
25	374	9	5,504	14%	12,772	10,683
125	294	9	1,860	13%	3,029	2,329
26 ⁵	7	8	235	0%	-	797
126 ⁵	16	8	1,184	0%	-	1,329
27	418	8	1,438	7%	3,069	3,841
127	256	8	1,414	15%	2,635	3,416
28	47	9	1,760	16%	4,379	3,318
29	39	9	2,596	23%	4,384	3,228
Totals ⁴	6,221		76,437		152,279	147,214

¹ The number of flights where weather conditions allowed effort counts, not including on-water counts

² %SE is a measure of uncertainty; one Standard Error as a percentage of the estimate.

³ Cumulative effort to date (June through August) summed across periods where surveys are active

⁴ Individual flights cover multiple PFMA's, so an additive total is not appropriate

⁵ Effort estimates are expanded to estimate effort on days not flown and are not expanded using an activity profile and are therefore underestimates.



South Coast Creel Survey Bulletin #4 – August 2011

Table 2 Preliminary recreational kept catch estimates (number of fish) for key salmon species by Pacific Fishery Management Area (PFMA), August 2011. Percent standard error (%SE; one standard error as a percentage of the estimate), a measure of uncertainty, is indicated for estimates from PFMA's where they are calculated in-season.

Pacific Fishery Management Area (PFMA)	Chinook				Coho				Sockeye			
	Estimate	%SE	Year to date ¹	Year to date 5-yr. average ¹	Estimate	%SE	Year to date ¹	Year to date 5-yr. average ¹	Estimate	%SE	Year to date ¹	Year to date 5-yr. average ¹
11	974	17%	3,804	1,370	787	17%	2,726	605	3	81%	3	37
12	3,523	10%	8,569	6,114	573	17%	3,480	3,409	1,179	19%	1,233	3,487
13	2,955	22%	8,397	6,512	34	99%	107	449	3,950	33%	3,950	5,111
14	656	36%	1,178	1,380	10	59%	27	75	15	82%	15	31
15	184	46%	469	327	2	110%	2	0	0	0%	0	0
16	0	0%	42	165	0	0%	0	2	0	0%	0	0
17	129	38%	1,467	621	11	101%	11	5	19	69%	19	0
18	449	40%	607	214	215	68%	215	3	0	0%	0	200
19	486	21%	1,128	700	37	59%	70	20	109	42%	109	38
20	8,322	7%	15,207	16,943	1,337	12%	2,214	2,709	1,758	13%	1,908	6,945
21	32	89%	43	630	0	0%	22	94	0	0%	0	0
121	4,601	12%	10,652	3,690	772	30%	2,932	3,085	0	0%	0	300
23	21,293	9%	27,228	19,690	5,611	13%	8,566	4,921	42	63%	40,343	48,070
123	12,562	11%	23,684	18,450	7,569	17%	9,423	7,459	34	60%	324	161
24	3	80%	450	800	1,172	15%	1,892	1,106	3	80%	3	8
124	8,475	15%	14,563	7,140	2,748	25%	3,383	1,619	39	51%	51	150
25	6,384	16%	20,341	10,640	3,716	18%	10,367	3,886	5	88%	90	32
125	3,255	15%	5,276	3,470	1,053	18%	2,196	1,148	33	68%	47	44
26 ²	547	0%	1,011	1,449	186	0%	291	899	0	0%	0	3
126 ²	4,276	0%	5,332	3,860	1,636	0%	2,227	1,233	6	0%	6	40
27	868	11%	2,179	2,077	3,183	8%	7,340	7,797	2	98%	2	28
127	3,640	16%	5,710	4,906	1,015	19%	1,720	1,490	8	104%	8	33
28	66	62%	88	203	60	67%	133	315	554	38%	554	85
29	169	59%	807	229	78	98%	83	99	4,022	42%	4,022	3,892
Kept Total³	83,850		158,232	111,579	31,807		59,426	42,429	11,783		52,688	68,696

¹ Cumulative kept to date (June through August) summed across periods where surveys are active - no June estimate for A25, A125

² Estimates were calculated using CPUE from logbooks (interview data were not incorporated) and effort from overflights (not expanded with activity profiles).

³ Including only those areas with in-season estimates this month.



South Coast Creel Survey Bulletin #4 – August 2011

Table 3 Preliminary recreational released catch estimates (number of fish) for key salmon species by Pacific Fishery Management Area (PFMA), August 2011. Percent standard error (%SE; one standard error as a percentage of the estimate), a measure of uncertainty, is indicated for estimates from PFMA's where they are calculated in-season.

Pacific Fishery Management Area (PFMA)	Chinook				Coho				Sockeye			
	Estimate	%SE	Year to date ¹	Year to date 5-yr. average ¹	Estimate	%SE	Year to date ¹	Year to date 5-yr. average ¹	Estimate	%SE	Year to date ¹	Year to date 5-yr. average ¹
11	187	23%	1,041	511	985	20%	1,738	297			14	6
12	2,023	14%	4,489	9,102	5,046	14%	6,837	8,324	737	29%	856	487
13	1,338	24%	4,612	4,329	1,862	53%	3,789	3,291	249	77%	945	511
14	1,298	27%	1,976	1,863	310	60%	413	416			0	0
15	337	36%	556	680	146	75%	146	13			0	0
16	0	0%	41	450			0	19			0	0
17	779	29%	3,267	1,511	299	38%	330	274	2	129%	2	0
18	524	35%	760	180	350	59%	350	25			0	18
19	296	37%	482	397	66	62%	66	140			0	7
20	2,707	11%	5,921	7,375	2,379	13%	5,053	6,728	839	24%	1,520	727
21	28	102%	28	112			0	161			0	0
121	723	27%	3,175	986	725	33%	3,348	2,109			0	0
23	7,282	16%	13,647	9,588	6,548	20%	10,373	2,984	27	67%	733	2,596
123	6,830	17%	17,093	10,784	21,873	17%	26,032	14,276	22	79%	22	32
24	39	44%	337	249	1,624	23%	2,257	791			18	1
124	3,889	21%	8,056	5,386	9,379	25%	10,832	4,755	14	82%	14	56
25	2,607	23%	6,572	5,353	2,683	42%	6,627	3,020			85	5
125	586	19%	1,470	1,420	3,744	21%	8,978	4,219	20	71%	20	5
26 ²	127	0%	332	222	1,241	0%	1,584	2,137	0	0%	0	0
126 ²	1,816	0%	2,561	2,849	7,970	0%	10,032	1,582	56	0%	56	41
27	323	21%	727	2,092	1,210	15%	2,865	4,891			0	17
127	547	25%	709	2,055	730	27%	1,382	4,799			23	39
28	236	33%	291	500	9	104%	9	279	173	67%	173	1
29	587	45%	1,156	844	119	66%	119	125	1,307	75%	1,307	225
Kept Total³	35,111		79,300	68,836	69,298		103,161	65,655	3,446		5,788	4,775

¹ Cumulative released to date (June through August) summed across periods where surveys are active

² Estimates were calculated using CPUE from logbooks (interview data were not incorporated) and effort from overflights (not expanded with activity profiles).

³ Including only those areas with in-season estimates this month.



South Coast Creel Survey Bulletin #4 – August 2011

Table 4 Preliminary recreational kept catch estimates (number of fish) for key groundfish species by Pacific Fishery Management Area (PFMA), August 2011. Percent standard error (%SE; one standard error as a percentage of the estimate), a measure of uncertainty, is indicated for estimates from PFMA's where they are calculated in-season.

Pacific Fishery Management Area (PFMA)	Halibut				Lingcod				Rockfishes ¹			
	Estimate	%SE	Year to date ²	Year to date 5-yr. average ²	Estimate	%SE	Year to date ²	Year to date 5-yr. average ²	Estimate	%SE	Year to date ²	Year to date 5-yr. average ²
11	419	21%	1,705	1,306	129	27%	501	518	471	15%	1,632	1,482
12	1,449	17%	3,808	3,209	427	24%	916	544	915	17%	2,399	2,484
13			40	54	130	58%	381	462	80	58%	592	431
14			9	6	32	72%	687	164	126	46%	636	208
15			0	0	85	60%	426	54	31	68%	365	178
16			0	5	85	44%	298	318	291	31%	690	940
17			0	2	318	38%	793	643	455	34%	1,101	1,241
18			0	6	287	78%	379	212	337	71%	641	449
19	285	38%	625	765	39	58%	130	180	169	35%	776	668
20	90	46%	346	664	135	36%	300	537	999	16%	2,200	2,646
21	4	104%	16	551			0	30	9	104%	9	52
121	2,509	23%	6,128	8,932	260	32%	526	636	529	20%	881	829
23	164	40%	449	559	720	35%	1,027	707	1,325	21%	2,748	2,909
123	3,055	13%	5,616	12,569	525	22%	933	3,708	1,528	10%	2,399	4,657
24	72	51%	197	136	67	54%	248	123	226	33%	488	468
124	1,534	18%	2,917	2,024	146	26%	178	431	696	13%	957	1,189
25	428	44%	653	430	620	55%	803	604	2,065	58%	2,689	2,169
125	1,417	18%	2,024	2,028	3,051	23%	4,017	1,325	2,458	15%	3,646	2,584
26 ³	303	0%	385	478	254	0%	440	537	176	0%	349	458
126 ³	2,014	0%	2,605	2,243	3,861	0%	5,016	1,626	1,525	0%	1,957	1,079
27	326	15%	772	499	370	18%	824	679	616	12%	1,980	1,975
127	1,519	15%	3,184	3,768	3,074	18%	7,126	3,767	2,724	14%	5,887	5,324
28			0	0			73	3			0	350
29			0	0	9	60%	95	1	50	52%	295	71
Kept Total³	15,588		31,482	40,234	14,626		26,118	17,810	17,800		35,315	34,839

¹ All rockfishes; including those not identified to species

² Cumulative kept to date (June through August) summed across periods where surveys are active

² Estimates were calculated using CPUE from logbooks (interview data were not incorporated) and effort from overflights (not expanded with activity profiles).

⁴ Including only those areas with in-season estimates this month.



South Coast Creel Survey Bulletin #4 – August 2011

Table 5 Preliminary recreational released catch estimates (number of fish) for key groundfish species by Pacific Fishery Management Area (PFMA), August 2011. Percent standard error (%SE; one standard error as a percentage of the estimate), a measure of uncertainty, is indicated for estimates from PFMA's where they are calculated in-season.

Pacific Fishery Management Area (PFMA)	Halibut				Lingcod				Rockfishes ¹			
	Estimate	%SE	Year to date ²	Year to date 5-yr. average ²	Estimate	%SE	Year to date ²	Year to date 5-yr. average ²	Estimate	%SE	Year to date ²	Year to date 5-yr. average ²
11	177	47%	450	170	260	23%	1,426	283	312	18%	806	791
12	141	44%	675	500	255	30%	1,512	1,042	2,626	15%	6,270	6,175
13			0	8	545	39%	1,127	1,648			41	1,514
14			0	1	167	41%	3,330	1,174	110	54%	395	903
15			0	0	60	68%	1,359	523	36	110%	306	350
16			0	0	224	29%	1,303	2,332	347	24%	908	1,634
17			0	1	1,015	30%	3,146	3,056	2,355	32%	4,337	4,067
18			0	3	514	49%	946	1,082	1,149	52%	2,022	1,759
19	19	103%	19	45	451	30%	1,426	2,148	354	30%	1,652	1,437
20			92	97	991	20%	2,810	5,041	1,163	23%	3,567	3,835
21			0	34			67	8			0	25
121	139	39%	461	412	16	63%	102	42	136	30%	152	70
23	8	86%	87	31	887	32%	1,357	1,232	494	28%	1,939	1,954
123	233	40%	344	809	402	67%	893	771	149	53%	298	356
24			7	15	132	51%	184	163	180	42%	196	372
124	117	55%	225	155	62	61%	132	527	2	145%	249	509
25			0	110	626	57%	996	665	391	44%	1,284	1,564
125	50	55%	83	277	1,362	38%	1,717	440	434	32%	915	740
26 ³	59	0%	96	7	235	0%	409	54	283	0%	384	325
126 ³	322	0%	663	889	1,171	0%	1,707	58	707	0%	933	170
27	23	55%	117	55	100	36%	269	506	268	76%	438	1,353
127	135	43%	327	585	198	39%	340	836	41	55%	184	1,167
28			0	0			0	68	17	104%	17	390
29			0	0	41	50%	278	22	170	91%	309	58
Kept Total⁴	1,423		3,648	4,204	9,714		26,833	23,718	11,725		27,602	31,520

¹ All rockfishes; including those not identified to species

² Cumulative released to date (June through August) summed across periods where surveys are active

² Estimates were calculated using CPUE from logbooks (interview data were not incorporated) and effort from overflights (not expanded with activity profiles).

⁴ Including only those areas with in-season estimates this month.



South Coast Creel Survey Bulletin #4 – August 2011

Table 6 Preliminary recreational kept Chinook catch estimates (number of fish) by Pacific Fishery Management Area (PFMA), August 2011, divided into Aggregate Abundance-based Management (AABM) and Individual Stock-based Management (ISBM) groupings.

Area	Region	AABM			ISBM		
		Estimate	Year to date ¹	Year to date 5-yr average ¹	Estimate	Year to date ¹	Year to date 5-yr average ¹
21	Nitinat	-	11	300	32	32	400
121	Swiftsure Bank	4,601	10,647	3,700	-	-	-
23 -1,2	Alberni Inlet	-	44	200	12,915	12,915	4,800
23 - 3 to 11	Barkley Sound	-	5,922	6,100	8,378	8,378	8,600
123	Offshore Barkley	12,561	24,762	18,500	-	-	-
24	Clayquot Sound	-	433	300	3	3	500
124	Offshore Clayquot	8,475	14,711	7,200	-	-	-
25	Nootka Snd. / Esperanza Inlet	-	-	100	6,384	20,340	10,500
125	Offshore Nootka	3,255	5,276	3,500	-	-	-
26 ²	Kyuquot Sound	-	-	-	547	993	1,300
126 ²	Offshore Kyuquot	4,276	5,332	4,000	-	-	-
27	Quatsino Sound	-	-	-	1,438	2,749	1,800
127	Offshore Quatsino	3,640	5,710	5,000	-	-	-
Total		36,809	72,848	48,900	29,699	45,412	27,900

¹ Cumulative kept to date (June through August) summed across periods where surveys are active

² Estimates were calculated using CPUE from logbooks (interview data were not incorporated) and effort from overflights (not expanded with activity profiles).