

**THE 1982 OREGON
OCEAN SALMON FISHERIES**

**Robert K. McQueen, Laimons Osis
and Stephen L. Lewis**

**OREGON DEPARTMENT OF FISH AND WILDLIFE
Anadromous Fish
Ocean Salmon Management**

THE 1982 OREGON OCEAN SALMON FISHERIES

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October 1, 1981 to September 30, 1982

by

Robert K. McQueen
Laimons Osis
Stephen L. Lewis

Oregon Department of Fish and Wildlife
Fisheries Division

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THE 1982 OREGON OCEAN SALMON FISHERIES

INTRODUCTION

The Ocean Salmon Management Program is responsible for obtaining fishery and biological data, analyzing these data and recommending appropriate management regulations for the ocean salmon fisheries. Management regulations are designed to achieve the optimum use of the salmon resource on a sustained basis.

Activities pursued during FY 1982 included the sampling and analysis of catch and effort statistics, chinook age composition, mark recovery data, and coded wire tag data. Short-term work was done on the evaluation of a troll season extension for chinook salmon off southern Oregon, and the collection of random coho scales for a Research Section scale study to separate hatchery and wild coho.

The sampling program for 1982 was upgraded by adding a person on the north coast and south coast to help supervise and assist the troll and recreational samplers in their respective areas.

THE 1982 OCEAN TROLL SALMON FISHERY

Regulations

In the area from Cape Falcon to Leadbetter Point, fishing for all species, except coho, was open from May 1-31. The fishery was then open for all salmon from July 1 until the pre-season coho quota of 89,000 fish was reached (Table 1). This regulation resulted in the closure of Oregon waters north of Falcon at noon on July 8 with landings permitted until midnight on July 8. Federal waters off Oregon north of Cape Falcon were also closed at midnight, July 8. Minimum size limits north of Cape Falcon

Table 1. History of Oregon Troll Regulations, 1948-82.

Year	Chinook		Coho	
	Season	Size	Season	Size
Prior to 1948	No Restrictions	No Restrictions	No Restrictions	No Restrictions
1948	No Restrictions	27"	July 1-November 15	Same
1949-1955	March 15-October 31	26"	June 15-October 31	Same
1956-1964	April 15-October 31	Same	Same	Same
1965-1975	Same	Same	Same	15"
1976	North of Tillamook Head May 1-June 14 and July 1-October 31	28" until 6-4-76 26" after 6-4-76	North of Tillamook Head July 1-October 31	16"
	South of Tillamook Head May 1-October 31	26"	South of Tillamook Head June 15-October 31	Same
1977	Same	28" N. of Tillamook Head 26" S. of Tillamook Head	Same	Same
1978	Boundary moved south to Cape Falcon - same dates and size limits as 1977.			
1979	North of Cape Falcon May 1-May 31 and July 1-July 24 and August 4-August 31	28"	North of Cape Falcon July 1-July 24 and August 4-August 31	Same
	South of Cape Falcon May 1-May 31 and July 1-October 31	26"	South of Cape Falcon July 1-September 3	Same
1980	North of Cape Falcon May 1-May 31 and July 15-September 8	28"	North of Cape Falcon July 15-September 8	Same
	South of Cape Falcon May 1-May 31 and June 16-June 30 (Cape Falcon to Cape Blanco only) July 15-October 31	26"	South of Cape Falcon July 15-September 8	Same
1981	North of Cape Falcon May 1-May 31 and July 15-August 24 ^{a/}	28"	North of Cape Falcon July 15-August 24 ^{a/}	Same
	South of Cape Falcon May 1-May 31 and July 1-October 31 ^{b/}	26"	South of Cape Falcon July 1-August 24 ^{a/}	Same
1982	North of Cape Falcon May 1-May 31 July 1-7	28"	North of Cape Falcon July 1-8	16"
	Cape Falcon to Cape Blanco May 1-May 31 June 1-June 15 July 1-October 31 ^{c/}	26"	Cape Falcon to OR/CA border July 1-12	16"
	Cape Blanco to OR/CA border May 1-May 31 June 1-June 8 July 1-October 31 ^{c/}	26"		

SPECIAL SOUTH COAST TROLL SEASONS OFF CHETCO AND ELK RIVERS

1974-1975 November 1 through December 31

1976-1982 November 1 through November 30

^{a/} Closed August 21 in FCZ (3-200 miles)^{b/} From 3-200 miles, chinook fishery was limited to the area between Cape Falcon and Cape Sebastian from August 25 through September 8 using whole bait or five inch or larger plugs.^{c/} Use whole bait and plugs not less than 5" from July 12 through September 5.

were 28" for chinook and 16" for coho.

From Cape Falcon to the Oregon/California border, fishing was open for all salmon, except coho, from May 1-June 15. During the period from June 1-15, only 5" or larger plugs and whole bait could be used. The fishery was then open for all salmon on July 1 to September 5 or until the pre-season quota of 488,000 coho was reached. If the coho quota was reached prior to September 5, chinook fishing, using 5" or larger plugs and whole bait would be allowed. From September 6 to October 31, fishing for all salmon, except coho, was open using barbless hooks. Minimum size limits south of Cape Falcon were 26" for chinook and 16" for coho.

This regulation resulted in a coho closure effective in state and federal waters at noon on July 12 except that coho caught north of Leadbetter Point, Washington could be landed at Astoria under special landing provision during the all species fishery from July 15-30 in that area. Coho could be landed until midnight July 12. Fishing for all salmon, except coho, continued through September 5 with special gear (whole bait and 5" minimum plugs) and then through October 31 using barbless hooks.

The Department of Fish and Wildlife extended the troll season through November in two limited areas off the southern Oregon coast within state waters. The purpose of the extension was to reduce the number of surplus hatchery chinook anticipated at the Elk and Chetco river stations. The extended fishery was restricted to the following areas:

Elk River Area: Cape Blanco south to Humbug Mountain offshore to three miles.

Chetco River Area: Goat Island south to the Oregon/California border offshore to three miles.

Catch and Effort Statistics

Catch and effort statistics for the 1981 and 1982 Oregon troll salmon fishery are preliminary. Poundages, dollar value, area of catch and days fished are obtained directly from commercial fish receiving tickets. Pounds landed are converted to number of fish utilizing average weight information. In early years, all troll catch statistics for Oregon were reported by port of landing; however, catch and effort estimates for 1979-82 are also reported by catch area (Figure 1).

Data by port of landing are reported on a port area format. The Astoria area includes the Astoria, Warrenton, Hammond complex and dory landings at Seaside and Cannon Beach. Garibaldi-Pacific City area includes the ports of Nehalem, Garibaldi and Pacific City. Depoe Bay-Waldport area includes the ports of Depoe Bay, Newport and Waldport. Florence-Bandon area includes the ports of Florence, Winchester Bay, Coos Bay and Bandon. Port Orford-Brookings area includes the ports of Port Orford, Gold Beach and Brookings.

Effort

Since 1979, Oregon's troll effort has been estimated in boat days. Cumulative effort for the troll fishery totaled 33,900 boat days in 1982 compared to 45,200 in 1981 (Table 2). The 1982 effort was 25% below that of 1981.

The Coos Bay and Brookings areas accounted for 66% of the Oregon troll effort and for the first time, the Brookings area was more active than the Newport area (Table 3). The Columbia River and Tillamook areas showed a dramatic decrease in effort compared to previous years due to the early closure of the all-species season.

Effort during July was quite high considering the very short coho season (Table 4). The effort for 1982 was lower than previous years as

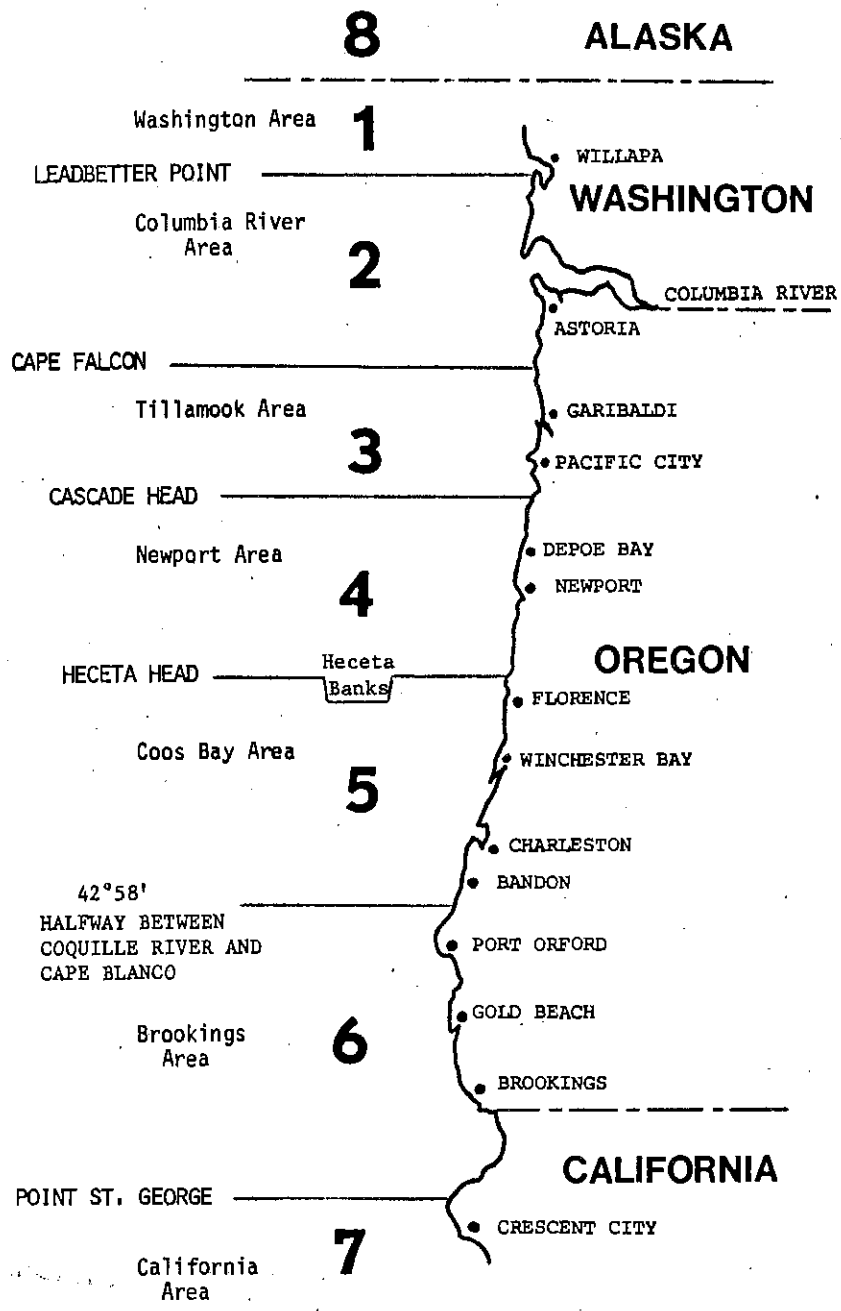


Figure 1. Oregon Ocean Salmon Management Areas

Table 2. Oregon commercial troll salmon effort and catch, 1971-82^{a/}.

Year	Effort (boat days)	Chinook		Coho		Pinks	
		No.	Lbs dr.	No.	Lbs dr.	No.	Lbs dr.
1971	-	102,900	1,000,800	1,490,100	8,765,100	2,000	9,000
1972	-	127,300	1,303,700	824,600	4,856,300	<100	100
1973	-	363,300	3,461,300	795,500	5,137,100	3,200	14,200
1974	-	224,100	2,290,400	1,137,200	7,230,900	<100	100
1975	-	224,700	2,583,300	657,400	4,087,500	200	900
1971-75 Average	-	208,500	2,127,900	981,000	6,015,400	1,800 ^{b/}	8,000 ^{b/}
1976	-	184,300	1,921,600	1,827,000	9,061,200	0	0
1977	-	340,000	3,464,900	446,100	2,640,800	88,000	396,100
1978	-	191,500	1,893,600	611,600	2,779,000	<100	200
1979	48,800	245,500	2,580,000	714,600	4,586,300	20,500	106,300
1980	39,900	209,400	2,171,500	383,300	2,190,200	300	1,600
1981 ^{c/}	45,200	160,400	1,576,000	620,300	3,324,800	60,200	323,900
1982 ^{c/}	33,900	232,600	2,351,300	522,100	2,707,900	<100	<100

^{a/} Includes catches made off California, Washington and Alaska and landed in Oregon.

^{b/} Odd-year average

^{c/} Preliminary

Table 3. Summary of Oregon commercial troll effort and catch by area of catch in number of fish, 1979-82.

Year	Area of Catch						Alaska	Wash.	Calif.	Total
	Columbia R.	Tillamook	Newport	Coos Bay	Brookings	Oregon Subtotal				
Effort										
(Boat Days)										
1979	2,400	6,300	12,800	16,800	9,900	48,200	0	600	100	48,800
1980	1,700	6,000	10,700	12,400	8,300	39,100	50	700	30	39,900
1981 ^{a/}	2,500	8,600	11,000	13,400	9,300	44,800	0	200	100	45,200
1982 ^{a/}	800	3,600	5,800	13,600	8,900	32,800	0	700	400	33,900
Catch										
Chinook										
1979	5,900	5,000	38,600	68,700	123,800	242,000	0	2,600	900	245,500
1980	5,600	7,800	48,700	74,800	68,400	205,300	300	2,900	900	209,400
1981 ^{a/}	8,400	12,200	27,100	24,400	86,000	158,200	0	1,000	1,300	160,400
1982 ^{a/}	7,300	9,000	27,600	109,200	69,500	222,600	0	7,000	3,100	232,600
Coho										
1979	48,700	77,900	211,800	263,100	101,200	702,700	0	11,300	600	714,600
1980	23,500	80,600	137,300	99,200	33,500	374,200	1,800	7,200	40	383,300
1981 ^{a/}	41,900	160,400	192,400	161,400	53,500	609,600	0	10,400	300	620,300
1982 ^{a/}	24,100	114,700	117,800	227,900	22,300	506,800	0	14,100	1,200	522,100

^{a/} Preliminary

Table 4. Oregon commercial troll effort and landings of coho and chinook by month, 1971-75 average and 1978-82^{a/}.

		April	May	June	July	August	September	October	November ^{b/}	Season Total
EFFORT (Boat Days)										
1971-75 Average		NA	NA	NA	NA	NA	NA	NA	NA	NA
1979	Monthly	-	1,400	<100 ^{a/}	21,500	21,700	1,300	2,000	800	
	Cumulative	-	1,400	1,500	23,000	44,700	46,000	48,000	48,800	48,800
1980	Monthly	-	2,100	3,700 ^{d/}	12,100	14,600	4,600	2,300	500	
	Cumulative	-	2,100	5,800	17,900	32,500	37,100	39,400	39,900	39,900
1981 Prelim.	Monthly	-	3,300 ^{a/}	-	21,300	16,700	1,600	1,900	500	
	Cumulative	-	3,300	3,300	24,600	41,300	42,800	44,700	45,200	45,200
1982 Prelim.	Monthly	-	2,300	2,100	18,800	5,600	2,800	1,500	600	
	Cumulative	-	2,300	4,500	23,300	29,000	31,800	33,300	33,900	33,900
CHINOOK										
1971-75 Average		500	8,300	27,500	56,600	69,700	31,400	13,700	1,300	
	Cumulative	500	8,800	36,400	93,000	162,800	194,200	207,900	209,200	209,200
1978	Monthly	-	3,200	40,600	63,100	46,900	25,000	9,300	3,500	
	Cumulative	-	3,200	43,800	106,900	153,800	178,800	188,100	191,500	191,500
1979	Monthly	-	11,000	200 ^{a/}	73,600	119,500	13,200	25,200	2,600	
	Cumulative	-	11,000	11,300	84,900	204,400	217,700	242,900	245,500	245,500
1980	Monthly ^{b/}	-	25,800	29,700 ^{d/}	47,700	64,000	25,200	16,000	1,000	
	Cumulative	-	25,800	55,400	103,200	167,200	192,300	208,400	209,400	209,400
1981 Prelim.	Monthly	-	28,600 ^{e/}	-	34,900	65,700	16,900	13,200	1,200	
	Cumulative	-	28,600	28,600	63,500	129,200	146,100	159,200	160,400	160,400
1982 Prelim.	Monthly	-	23,000	14,800	125,400	46,100	15,000	6,900	1,400	
	Cumulative	-	23,000	37,800	163,200	209,300	224,300	231,200	232,600	232,600
COHO										
1971-75 Average		-	-	227,800	414,400	305,800	29,700	3,300	-	
	Cumulative	-	-	227,800	642,200	948,000	977,700	981,000	-	981,000
1978	Monthly	-	-	279,600	227,200	92,800	10,400	1,600	-	
	Cumulative	-	-	279,600	506,800	599,700	610,000	611,600	-	611,600
1979	Monthly	-	-	400 ^{a/}	534,000	178,700	1,600	-	-	
	Cumulative	-	-	400	534,400	713,100	714,600	-	-	714,600
1980	Monthly	-	-	-	228,700	137,500	17,100	-	-	
	Cumulative	-	-	-	228,700	366,200	383,300	-	-	383,300
1981 Prelim.	Monthly	-	-	-	350,300	270,000	-	-	-	
	Cumulative	-	-	-	350,300	620,300	-	-	-	620,300
1982 Prelim.	Monthly	-	-	-	522,100	-	-	-	-	
	Cumulative	-	-	-	522,100	-	-	-	-	522,100

^{a/} Statistics from 1971-78 are reported by calendar months; monthly totals from 1979-82 are the sum of statistical weeks with closest fit to calendar months. Includes catches made off California, Washington, and Alaska and landed in Oregon.

^{b/} Late season at mouth of Elk and Chetco Rivers only (initiated in 1974). Averages for November include only 1974-75.

^{c/} Caught off California and landed in Oregon.

^{d/} Totals for June 1980 include landings made through July 6.

^{e/} Totals for May 1981 include landings made through June 7.

many boats didn't continue fishing after the coho season was closed.

Chinook Catch

The 1982 troll chinook catch was above both 1981 and the 1971-75 average (Table 2, Figure 2). A total of 232,600 chinook weighing 2.4 million pounds (dressed weight) was landed in 1982 compared to 160,400 chinook in 1981 and 208,500 chinook for 1971-75. The 1982 catch was 45% above 1981 and 12% above the 1971-75 average.

Of the total Oregon chinook catch, 89% was caught from the Newport area south (Table 3). Catches in the Columbia River and Tillamook areas decreased in 1982 as compared to 1981. Coos Bay area catches increased by 348% over the 1981 landings.

The troll catch of chinook salmon peaked in July 1982 when 54% of the total catch was made (Tables 4, 5 and 6). This is an unusual situation because August has normally been the peak month for chinook landings.

Coho Catch

The commercial troll coho catch in 1982 totaled 522,100 fish weighing 2.7 million pounds (dressed weight) which is 84% of the 1981 landings and 53% of the 1971-75 average (Table 2, Figure 2). The season was the shortest on record, running from July 1 to July 12.

The distribution of the 1982 coho catch was similar to 1981 (Table 3). Of the total coho catch off Oregon during 1982, 91% were caught in the Tillamook, Newport and Coos Bay areas. Coos Bay was the hot spot with 45% of the state total.

Pink Catch

The 1982 troll pink landings were almost non-existent with only 8 fish reported. This is not unusual for Oregon on the even year cycle.

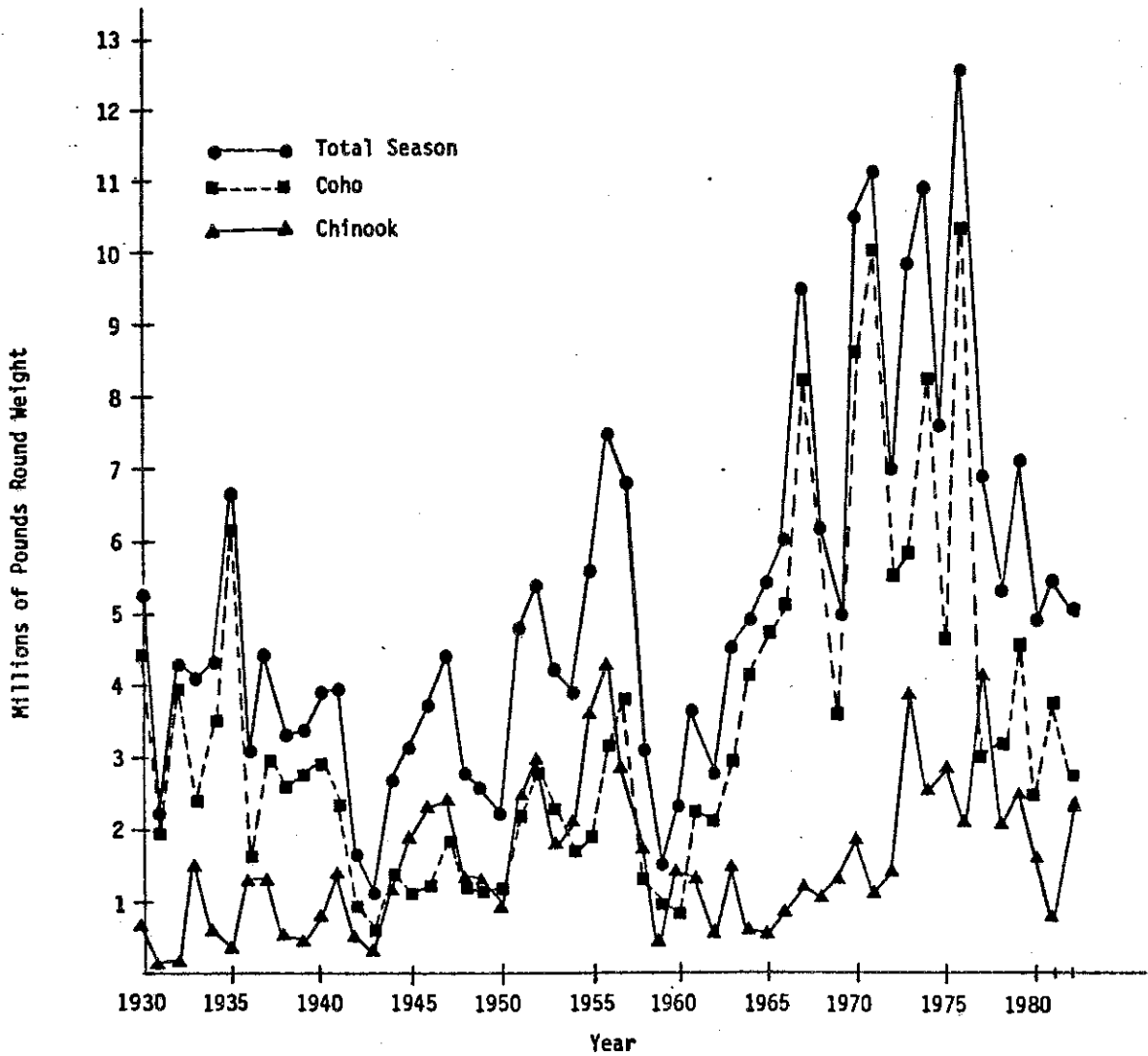


Figure 2. Trends in Oregon Ocean Salmon Troll Catches, 1930-1982.

Table 5. Oregon troll salmon effort and catch in numbers of fish by area of catch and by statistical month, 1982.

Month	Columbia	Oregon				Subtotal	Alaska	Wash.	Calif.	Total
	River	Tillamook	Newport	Coos Bay	Brookings					
<u>EFFORT (Boat Days)</u>										
May	353	179	529	772	342	2,175	0	119	24	2,318
June	67	110	713	953	191	2,034	0	42	73	2,149
July	407	2,810	3,552	8,411	2,911	18,091	0	586	170	18,847
August	-	273	338	2,079	2,901	5,591	0	0	57	5,648
September	-	150	337	1,228	1,048	2,763	0	0	50	2,813
October	-	79	348	169	939	1,535	0	0	0	1,535
November	-	-	-	3	583	586	0	0	0	586
Total	827	3,601	5,817	13,615	8,915	32,775	0	747	374	33,896
<u>CHINOOK</u>										
May	5,027	3,739	4,426	4,631	2,463	21,423	0	2,414	325	23,025
June	1,137 ^{a/}	908	4,992	5,883	641	12,424	0	667	636	14,864
July	1,178	3,054	11,043	75,927	29,343	120,545	0	3,887	957	125,389
August	-	702	1,355	14,402	28,850	45,309	0	0	786	46,095
September	-	423	2,537	7,521	4,098	14,579	0	0	392	14,971
October	-	154	3,203	813	2,707	6,877	0	0	0	6,877
November	-	-	-	14	1,377	1,391	0	0	0	1,391
Total	7,342	8,980	27,556	109,191	69,479	222,548	0	6,968	3,096	232,612
<u>COHO</u>										
July	24,057	114,745	117,824	227,879	22,265	506,770	0	14,104	1,226	552,100

^{a/} Fish caught in May but landed in June

Table 6. Oregon troll salmon catch by species in pounds dressed by calendar month and port area, 1982.

Month	Port of Landing					Total
	Astoria	Garibaldi to Pacific City	Depoe Bay to Waldport	Florence to Bandon	Port Orford to Brookings	
<u>CHINOOK</u>						
May	101,468	10,459	49,322	43,592	25,255	230,096
June	15,645	3,065	48,435	55,515	14,764	137,424
July	53,048	28,482	147,007	766,375	270,302	1,265,214
August	399	10,076	22,772	174,561	313,489	521,297
September	150	4,379	19,800	45,396	36,328	106,053
October	427	2,794	25,055	7,535	37,523	73,334
November	0	0	0	222	17,671	17,893
Total	171,137	59,255	312,391	1,093,196	715,332	2,351,311
<u>COHO</u>						
July	192,629	509,601	667,878	1,203,148	133,883	2,707,139
August	728	-	-	-	-	728
Total	193,357	509,601	667,878	1,203,148	133,883	2,707,867

The Dollar Value of the Catch

The chinook landings in 1982 were worth \$6,092,000 to the fishermen. The coho value was \$3,800,000. The average price for chinook was \$2.59 and for coho, \$1.40 (Table 7).

Extended Troll Season Landings

Chinook landings during the 1982 extended troll season were 17,900 pounds dressed weight or an estimated 1,400 fish.

An anticipated benefit of the extended season has always been the high incidence of mature Elk and Sixes river chinook observed in the catch. The available data indicate that the extended season is taking primarily mature local stocks of fish.

Average Weight Data

Average dressed weight data were collected by port of landing from chinook and coho for conversion of landings in pounds to numbers of fish.

The seasonal average weight for chinook in 1982 was 10.1 pounds dressed weight compared to 9.8 pounds in 1981 (Table 8). In 1982, the average weights were larger in all areas except the Depoe Bay-Waldport area.

The seasonal average weight for coho in 1982 was 5.2 pounds dressed weight compared to 5.4 pounds in 1981 (Table 9). With the short season in 1982, it is impossible to say anything about trends in average weights during the season.

Troll Salmon Mark Sampling

Two samplers were assigned to Astoria, Newport and Charleston in 1982. Garibaldi, Pacific City, Depoe Bay, Winchester Bay, Port Orford and Brookings were assigned one sampler each. Some minimal sampling was done at Florence

Table 7. Estimates of ex-vessel value^{a/} of Oregon troll salmon landings and average price per pound, 1971-82.

Year	Chinook		Coho		Total Value
	\$ Value	\$/Lb	\$ Value	\$/Lb	
1971	587,000	0.59	3,155,000	0.36	3,742,000
1972	982,000	0.75	2,475,000	0.51	3,457,000
1973	3,520,000	1.02	4,004,000	0.78	7,524,000
1974	2,412,000	1.05	5,525,000	0.76	7,937,000
1975	2,680,000	1.04	3,128,000	0.77	5,808,000
1976	3,410,000	1.77	11,458,000	1.26	14,868,000
1977	7,938,000	2.29	3,546,000	1.34	11,484,000
1978	3,584,000	1.89	3,756,000	1.35	7,340,000
1979	6,639,000	2.57	10,350,000	2.26	16,988,000
1980	5,259,000	2.42	2,926,000	1.34	8,185,000
1981 ^{b/}	4,044,000	2.57	5,536,000	1.66	9,580,000
1982 ^{b/}	6,092,000	2.59	3,800,000	1.40	9,892,000

^{a/} Dressed weight value

^{b/} Preliminary

Table 8. Observed average dressed weight and calculated number of chinook by calendar month and port area, 1982.

Port of Landing	Month							Total
	May	June	July	August	Sept.	Oct.	Nov.	
<u>Astoria</u>								
Numbers	11,082	1,547	4,396	32	17	59	0	17,133
Pounds	101,468	15,645	53,048	399	150	427	0	171,137
Ave. wt.	9.2	10.1	12.1	12.5	8.8	7.2	0	10.0
<u>Garibaldi-Pacific City</u>								
Numbers	1,306	288	2,369	764	460	170	0	5,357
Pounds	10,459	3,065	28,482	10,076	4,379	2,794	0	59,255
Ave. wt.	8.0	10.6	12.0	13.1	9.5	16.4	0	11.1
<u>Depoe Bay-Waldport</u>								
Numbers	4,697	4,705	13,384	1,595	2,555	3,434	0	30,370
Pounds	49,322	48,435	147,007	22,772	19,800	25,055	0	312,391
Ave. wt.	10.5	10.3	11.0	14.3	7.7	7.3	0	10.3
<u>Florence-Bandon</u>								
Numbers	4,818	5,329	73,902	17,019	5,438	978	11	107,495
Pounds	43,592	55,515	766,375	174,561	45,396	7,535	222	1,093,196
Ave. wt.	9.0	10.4	10.4	10.3	8.3	7.7	20.2	10.2
<u>Port Orford-Brookings</u>								
Numbers	2,750	1,461	27,777	32,449	3,578	2,868	1,375	72,258
Pounds	25,255	14,764	270,302	313,489	36,328	37,523	17,671	715,332
Ave. wt.	9.1	10.1	9.7	9.7	10.2	13.1	12.9	9.9
<u>Total</u>								
Numbers	24,653	13,330	121,828	51,859	12,048	7,509	1,386	232,613
Pounds	230,096	137,424	1,265,214	521,297	106,053	73,334	17,893	2,351,311
Ave. wt.	9.3	10.3	10.4	10.1	8.8	9.8	12.9	10.1

Table 9. Observed average dressed weight and calculated number of coho by calendar month and port area, 1982.

Port of Landing	Month		Total
	July	August ^{a/}	
<u>Astoria</u>			
Number	42,085	131	42,216
Pounds	192,629	728	193,357
Ave. wt.	4.6	5.6	4.6
<u>Garibaldi-Pacific City</u>			
Number	102,297	-	102,297
Pounds	509,601	-	509,601
Ave. wt.	5.0	-	5.0
<u>Depoe Bay-Waldport</u>			
Number	132,027	-	132,027
Pounds	667,878	-	667,878
Ave. wt.	5.1	-	5.1
<u>Florence-Bandon</u>			
Number	222,332	-	222,332
Pounds	1,203,148	-	1,203,148
Ave. wt.	5.4	-	5.4
<u>Port Orford-Brookings</u>			
Number	23,228	-	23,228
Pounds	133,883	-	133,883
Ave. wt.	5.8	-	5.8
<u>Total</u>			
Number	521,969	131	522,100
Pounds	2,707,139	728	2,707,867
Ave. wt.	5.2	5.6	5.2

^{a/} Fish caught north of Leadbetter Point, Washington but landed at Astoria under special landing law provision.

and Gold Beach by using some of the recreational samplers' time. This sampling effort resulted in 30% of all chinook and 21% of all coho landings being examined for coded wire tags. Detailed sampling information for 1982 is presented in Tables 10 and 11 for chinook and coho.

Samplers found 3,439 adipose-clipped chinook in the 1982 troll landings and obtained 3,326 snouts. Technicians found tags in 2,791 or 84% of the total. The main contributing agencies were:

California Department of Fish and Game	59%
Oregon Department of Fish and Wildlife	30%
National Marine Fisheries Service	5%

Samplers found 5,442 adipose-clipped coho in the 1982 troll coho landings and obtained 5,393 snouts. Technicians found coded-wire tags in 4,627 or 86%. The main contributing agencies were:

Oregon Department of Fish and Wildlife	39%
Washington Department of Fisheries	22%
U.S. Fish and Wildlife Service	14%
Oregon Aqua Foods	11%
California Department of Fish and Game	7%

Table 10. Oregon troll chinook mark sampling by calendar month and port area, 1982.

Port of Landing	Month							Total
	May	June	July	August	Sept.	Oct.	Nov.	
Astoria								
No. Examined	4,692	1,515	2,350	8	0	0	0	8,565
No. Landed	11,082	1,547	4,396	32	17	59	0	17,133
% Examined	42	98	53	25	0	0	0	50
No. Marks	120	40	81	0	0	0	0	241
Garibaldi-Pacific City								
No. Examined	692	46	348	138	4	0	0	1,228
No. Landed	1,306	288	2,369	764	460	170	0	5,357
% Examined	53	16	15	18	9	0	0	23
No. Marks	26	0	19	1	1	0	0	47
Depoe Bay-Waldport								
No. Examined	861	1,467	3,160	472	1,042	1,497	0	8,499
No. Landed	4,697	4,705	13,384	1,595	2,555	3,434	0	30,370
% Examined	18	31	24	30	41	44	0	28
No. Marks	30	46	98	18	68	112	0	372
Florence-Bandon								
No. Examined	1,200	1,294	9,596	3,649	2,151	275	0	18,165
No. Landed	4,818	5,329	73,902	17,019	5,438	978	11	107,495
% Examined	25	24	13	21	40	28	0	17
No. Marks	46	41	524	193	127	11	0	942
Port Orford-Brookings								
No. Examined	719	494	11,893	13,959	1,855	2,253	1,004	32,177
No. Landed	2,750	1,461	27,777	32,449	3,578	2,868	1,375	72,258
% Examined	26	34	43	43	52	79	73	45
No. Marks	34	23	696	858	97	75	54	1,837
Total								
No. Examined	8,164	4,816	27,847	18,226	5,052	4,025	1,004	68,634
No. Landed	24,653	13,330	121,828	51,859	12,048	7,509	1,386	232,613
% Examined	33	36	23	35	42	54	72	30
No. Marks	256	150	1,418	1,070	293	198	54	3,439

Table 11. Oregon troll coho mark sampling by calendar month and port area, 1982.

Port of Landing	Month		Total
	July	August ^{a/}	
<u>Astoria</u>			
No. Examined	15,985	131	16,116
No. Landed	42,085	131	42,216
% Examined	38	100	38
No. Marks	500	5	505
<u>Garibaldi-Pacific City</u>			
No. Examined	21,386	0	21,386
No. Landed	102,297	0	102,297
% Examined	21	0	21
No. Marks	894	0	894
<u>Depoe Bay-Waldport</u>			
No. Examined	33,785	0	33,785
No. Landed	132,027	0	132,027
% Examined	26	0	26
No. Marks	1,644	0	1,644
<u>Florence-Bandon</u>			
No. Examined	24,365	0	24,365
No. Landed	222,332	0	222,332
% Examined	11	0	11
No. Marks	1,412	0	1,412
<u>Port Orford-Brookings</u>			
No. Examined	11,801	0	11,801
No. Landed	23,228	0	23,228
% Examined	51	0	51
No. Marks	987	0	987
<u>Total</u>			
No. Examined	107,322	131	107,453
No. Landed	521,969	131	522,100
% Examined	21	100	21
No. Marks	5,437	5	5,442

^{a/} Fish caught north of Leadbetter Point, Washington but landed at Astoria under special landing law provision.

THE 1982 RECREATIONAL OCEAN SALMON FISHERY

Oregon recreational fishermen had the shortest ocean salmon fishing season ever in 1982 with the season closing after August 1 for most of the Oregon coast. Ocean conditions in July concentrated fish near shore and resulted in good fishing success. A total of 38,700 chinook and 175,100 coho were caught while 226,000 salmon and bottomfish angler trips were recorded.

Regulations

Ocean salmon regulations for Oregon's recreational fishery in 1982 were the most restrictive ever (Table 12). These restrictive regulations were implemented by the Pacific Fishery Management Council and the Department of Fish and Wildlife because of the continued poor status of coho salmon stocks along the Pacific coast.

The pre-season coho quota was 100,000 fish between Leadbetter Point in Washington and Cape Falcon in Oregon. South of Cape Falcon, including California, the coho quota was set at 114,000 fish.

The season for all species opened on May 29 south of Cape Blanco. The Oregon Fish and Wildlife Commission set a special season for chinook, using barbless hooks, in state waters north of Cape Blanco from May 29 through June 11. The National Marine Fisheries Service preempted a similar action in state waters north of Cape Falcon and the Columbia River area remained closed until June 12 when the entire coast opened for all species of salmon.

Federal waters north of Cape Falcon and Washington waters south of Leadbetter Point closed on July 25 when the recreational fishery was expected to reach the harvest quota.

The Oregon Fish and Wildlife Commission increased the recreational quota

Table 12. Summary of Oregon's Recreational Ocean Salmon Regulations, 1946-82.

Year	Season	Regulations
1946	All year	3 fish/day; 9 in possession.
1947	All year	2 fish/day; 6 in possession.
1948-54	All year	2 fish/day; 4 in possession; 20 fish annual limit.
1955-57	All year	2 fish/day; 4 in possession; 20 fish annual limit; 20" minimum size, both species.
1958-64	All year	2 fish/day; 4 in possession; 20 fish annual limit; 20" minimum size, both species except 22" minimum size north of Tillamook Head (July 1-October 31).
1965-69	All year	3 fish/day; 6 in possession; 20 fish annual limit; 20" minimum size, both species.
1970-75	All year	3 fish/day; no possession limit; 40 fish annual limit; North of Tillamook Head, 20" minimum size both species. South of Tillamook Head, no size limits.
1976	April 10-Dec. 31	3 fish/day; 40 fish annual limit. North of Tillamook Head-chinook, 24" minimum size; coho, 16" minimum size. South of Tillamook Head, no size limits.
1977	April 30-Oct. 31 November 1-31	Same as in 1976. State waters off Elk and Chetco rivers. 3 chinook/day; no size limit.
1978	April 28-Oct. 31 November 1-30	3 fish/day; 40 fish annual limit. North of Cape Falcon-chinook, 24" minimum size; coho, 16" minimum size. South of Cape Falcon, chinook, 22" minimum size; coho, 16" minimum size. Off Elk and Chetco rivers-3 chinook/day; 22" minimum size.
1979	May 12-Sept. 16 November 1-30	2 fish/day south of Cape Falcon; 3 fish/day north of Cape Falcon, of which only 2 may be chinook or coho; 40 fish annual limit. Size limits as in 1978. (State waters off Elk and Chetco rivers) 2 chinook/day; 22" minimum size.
1980	May 10-Sept. 14 ^{a/} Sept. 15-Oct. 31 Nov. 1-30	3 fish/day lowered to 2 fish/day on July 16; 40 fish annual limit. Size limits as in 1978. (South of Cape Falcon) 2 chinook/day; 22" minimum size. (State waters off Elk and Chetco rivers) As above.
1981	May 15-Sept. 20 ^{b/} (South of Cape Falcon) May 23-Sept. 7 ^{b/} (North of Cape Falcon) Sept. 21-Oct. 31 Nov. 1-30	2 fish/day increased to 3/fish/day on August 14 south of Cape Falcon only; 40 fish annual limit. Size limits as in 1978. (South of Cape Blanco) 2 chinook per day; 22" minimum size. (State waters off Elk and Chetco rivers) As above.
1982	May 26-June 11 (Between Cape Blanco and Cape Falcon in state waters) May 28-Aug. 1 ^{c/} (South of Cape Blanco) June 12-Aug. 1 ^{c/} (Entire coast) Aug. 2-Oct. 31, Nov. 1-30	First two chinook taken per day; barbless hook only. Bag limit 2 fish/day north of Cape Falcon; first 2 fish taken/day south of Cape Falcon, regardless of size. Size limit north of Cape Falcon same as in 1978. 40 fish annual limit. (South of Cape Blanco) First 2 chinook taken/day. (State waters off Elk and Chetco rivers) First 2 chinook taken/day.

^{a/} Federal waters (3-200 miles) closed to coho fishing effective Sept. 1.

^{b/} Federal waters closed August 26-September 20 for all species of salmon.

^{c/} Federal waters closed to coho fishing on July 21, north of Cape Falcon and July 25 south of Cape Falcon.

to 108,000 coho and the season continued through August 1 in state waters.

South of Cape Falcon, the all-species season closed July 21 in federal waters. The Fish and Wildlife Commission increased the recreational allocation to 145,000 coho and the salmon season remained open through August 1 inside of 3 miles.

South of Cape Blanco, all waters remained open for the taking of all species except coho through October 31. A special chinook season continued inside of 3 miles for a limited area off the Elk and Chetco rivers through November 30.

A 2-fish daily bag limit was in effect for the 1982 season. From July 26 through August 1, recreational fishermen in state waters north of Cape Falcon were restricted to one coho (within the 2 fish bag limit) and the use of barbless hooks. The ocean fishery had no weekly possession limit and the annual bag limit was 40 salmon and steelhead. North of Cape Falcon, minimum size limits were 16 inches for coho and 24 inches for chinook. South of Cape Falcon, there was no minimum size limit and fishermen were required to keep the first 2 salmon caught, regardless of size.

Ocean Sampling Program

All 10 major ports were surveyed in 1982 including: Astoria, Garibaldi, Pacific City, Depoe Bay, Newport, Florence, Winchester Bay, Coos Bay, Gold Beach, and Brookings. Every port was sampled for the entire season. The ports sampled represent about 99% of the total Oregon ocean salmon catch. Nineteen seasonal aides were employed, the same as in 1981. Three samplers were assigned to Newport; two each to Astoria, Garibaldi, Winchester Bay and Coos Bay, and one at each remaining port. A boat counter was stationed in Newport while Astoria and Winchester Bay each had a boat counter that

also did some sampling.

A new feature in 1982 was the hiring of two "crew chiefs"; one for the north coast and one for the south coast. They brought the survey data and coded wire tag snouts to Newport every week, acted as liaison between samplers and Newport and also helped sample as necessary. The crew chiefs assisted with both the troll and recreational sampling. Two seasonal people also helped edit, keypunch and computer process the recreational sampling data.

A random sampling design was used at each port to survey the ocean recreational fishery. Catch per unit effort data was collected at least 5 days a week, including all weekends and holidays by interviewing ocean anglers at boat ramps, moorages, and charter docks. The salmon catch was sampled for species, marks, scales, and lengths. Snouts were collected from adipose-clipped fish to recover coded wire tags. Ocean-caught bottomfish catches were also sampled and recorded by species.

Effort was estimated by counting boats or by using Coast Guard bar crossing counts and by checking with charter boat offices. In Pacific City, a combination of trailer counts and angler interviews were used to assign total effort. All catch and effort data was keypunched and processed on the Oregon State University CYBER computer. The survey at its present level provides accurate weekly estimates of Oregon's total ocean recreational catch with a 5 day lag time. A preliminary estimate is possible within a day of the data arriving in Newport.

Department samplers interviewed 122,200 ocean anglers and looked at 95,000 salmon in 1982 (Table 13). In 1981, 128,300 anglers and 89,800 salmon were sampled in the same ports. The sampling data in Table 13 were used to estimate the effort and catch by port and week for Oregon's ocean recreational fishery. Sampling rates in 1982 ranged from 87% at Pacific City

Table 13. Oregon Ocean Recreational Salmon Catch Statistics from Sampling Data, 1982_{a/}.

Port	Catch						Pinks	Marked Coho	Marked Chinook	Salmon Angler Trips	Total Salmon	Salmon per Angler Trip
	Coho			Chinook								
	Adult	Jack	Total	Adult	Jack	Total						
Columbia R.	35,476	0	35,476	8,211	24	8,235	0	1,002	243	27,882	43,711	1.6
Garibaldi	16,538	7	16,545	717	12	729	0	409	8	18,447	17,274	0.9
Pac. City	6,547	0	6,547	631	0	631	0	304	18	6,157	7,178	1.2
Depoe Bay	18,319	92	18,411	1,229	51	1,280	4	826	40	17,645	19,695	1.1
Newport	25,520	116	25,636	2,103	112	2,215	2	1,265	75	35,835	27,853	0.8
Florence	6,815	10	6,825	1,601	148	1,749	3	309	50	8,687	8,577	1.0
Winchester	31,972	192	32,164	4,236	356	4,592	0	1,183	54	32,109	36,756	1.1
Coos Bay	16,513	100	16,613	2,889	858	3,747	5	898	106	18,559	20,365	1.1
Gold Beach	1,105	7	1,112	1,266	91	1,357	0	86	66	6,785	2,469	0.4
Brookings	15,719	80	15,799	12,722	1,459	14,181	0	1,317	559	54,569	29,980	0.5
Total	174,524	604	175,128	35,605	3,111	38,716	14	7,599	1,219	226,029	213,858	0.9

a/ All ports were sampled the entire season

to 30% at Brookings, with an average of 44% of the total salmon catch observed from all ports (Table 14). The 1981 statewide average sampling rate was 39%.

Table 14. Recreational Ocean Salmon Sampling Rates at Oregon Ports, 1975-1982^{a/}.

Port	Percent of Catch Sampled ^{a/}							
	1975	1976	1977	1978	1979	1980	1981	1982
Astoria	10	8	9	29	35	20	40	42
Garibaldi	16	36	48	33	43	39	36	55
Pacific City	34	-	-	41	-	-	82	87
Depoe Bay	20	30	26	49	47	45	50	68
Newport	9	15	15	15	31	39	40	31
Florence	-	26	-	-	-	-	30	37
Winchester Bay	10	24	21	22	35	33	26	32
Coos Bay	10	30	32	51	47	49	57	63
Gold Beach	41	-	29	23	42	50	48	62
Brookings	21	21	19	20	29	22	21	30
Combined Ports	13	20	19	27	37	34	39	44
Number of Samplers	8	8	8	11	13	14	16	16
Sampler Months	27	26	27	36	47	54	62	51

^{a/} Percentage of total catch observed by samplers = Number of salmon observed/estimated catch of salmon.

Effort

Ocean fishing effort data have always included a small number of bottom-fishing trips. The sampling design was revised in 1979 to separate salmon fishing trips from such bottomfish trips.

In 1982, it was estimated that 226,000 trips or 82% of the total 275,900 ocean angler trips targeted on salmon for all or part of their trip (Tables 15 and 16). This compares to 311,000 trips (89%) in 1981, 331,400

Table 15. Oregon Ocean Recreational Salmon Catch and Effort for 1966-82^{a/}.

Year	Effort (Angler Trips)		Catch			Fish/Angler
	Salmon	Total	Coho	Chinook	Pinks	
1966	-	-	227,900	37,400	-	-
1967	-	-	351,000	42,800	-	-
1968	-	-	265,800	25,100	-	-
1969	-	-	232,900	31,800	-	-
1970	-	-	257,400	42,900	-	-
1971	-	303,700	311,700	29,600	121	1.12
1972	-	331,700	248,400	44,100	58	.88
1973	-	350,400	232,068	60,984	2,008	.84
1974	-	335,849	314,501	36,729	34	1.05
1975	-	407,498	252,209	75,719	1,218	.81
1971-75 Av.	-	345,829	271,776	49,426	1,115 ^{c/}	.93
1976	-	538,414	501,306	79,316	50	1.08
1977	-	404,534	195,277	61,364	4,037	.62
1978	-	403,740	259,769	22,844	24	.70
1979	301,343	341,770	180,834	20,902	607	.67
1980	331,443	362,015	325,843	19,014	24	1.04
1981	311,027	350,937	199,812	29,173	1,589	.74
1982	226,029 ^{b/}	275,947	175,128	38,716	14	.95

^{a/} Prior to 1981, sampling data were supplemented with salmon/steelhead tag data for ports and time periods not sampled.

^{b/} Preliminary

^{c/} Odd year average

Table 16. Oregon Ocean Recreational Effort by Port, by Month and by Trip Type, 1982.

Port/Trip type	Month							Total
	May	June	July	August	Sept.	Oct.	Nov.	
Columbia R.	0	4,906	22,345	625	6			27,882
Salmon	-	4,906	22,330	-	-			27,236
Bottomfish	0	0	15	625	6			646
Garibaldi	317	3,409	17,721	4,409	1,647			27,503
Salmon	80	2,008	16,359	-	-			18,447
Bottomfish	237	1,401	1,362	4,409	1,647			9,056
Pacific City	110	1,327	5,703	1,362	559			9,061
Salmon	0	736	5,421	-	-			6,157
Bottomfish	110	591	282	1,362	559			2,904
Depoe Bay	193	3,372	16,145	3,052	952			23,714
Salmon	0	2,407	15,238	-	-			17,645
Bottomfish	193	965	907	3,052	952			6,069
Newport	835	7,016	32,983	7,863	1,999			50,696
Salmon	191	4,903	30,741	-	-			35,835
Bottomfish	644	2,113	2,242	7,863	1,999			14,861
Florence	0	905	7,782	0				8,687
Salmon	0	905	7,782	-				8,687
Bottomfish	0	0	0	0				0
Winchester Bay	32	6,922	25,301	370	38			32,663
Salmon	29	6,832	25,248	-				32,109
Bottomfish	3	90	53	370	38			554
Coos Bay	140	4,764	14,804	1,964	593			22,265
Salmon	63	4,246	14,250	-	-			18,559
Bottomfish	77	518	554	1,964	593			3,706
Gold Beach	5	345	3,730	3,025	931			8,036
Salmon	2	148	3,575	2,561	499			6,785
Bottomfish	3	197	155	464	432			1,251
Brookings	849	8,075	37,477	10,753	4,842	3,046	400	65,442
Salmon	368	5,027	36,135	7,678	2,477	2,606	278	54,569
Bottomfish	481	3,048	1,342	3,075	2,365	440	122	10,873
Total South of Cape Falcon	2,481	36,135	161,646	32,798	11,561	3,046	400	248,067
Salmon	733	27,212	154,749	10,239	2,976	2,606	278	198,793
Bottomfish	1,748	8,923	6,897	22,559	8,585	440	122	49,274
Statewide Total	2,481	41,041	183,991	33,423	11,567	3,046	400	275,949
Salmon	733	32,118	177,079	10,239	2,976	2,606	278	226,029
Bottomfish	1,748	8,923	6,912	23,184	8,591	440	122	49,920

salmon trips (92%) in 1980, and 299,500 salmon angler trips (88%) in 1979. The four-year average of these percentages is 88%. Specific information on percentage of salmon angler trips out of all ocean trips is not available before 1979 but it was considerably more than 88%. The increase in bottom-fishing trips in 1982 is probably attributable to the short salmon season. There was an increase compared to past years in such trips during the late May-early June period and also during August when most of the coast was closed to salmon fishing.

July is usually the peak month for ocean salmon fishing. This was especially true in 1982 when 177,100 salmon angler trips or 78% of the total salmon angler trips occurred in July (Tables 16 and 17). August is usually a close second in effort, but was closed in 1982.

Brookings and Newport were the busiest ports in 1982 with 54,600 and 35,800 salmon angler trips, respectively (Table 16). Winchester Bay also made a strong showing with 32,300 salmon angler trips. All sampled ports except Pacific City and Gold Beach had fewer angler trips in 1982 compared to 1981. Table 18 shows ocean salmon recreational effort by management area.

Catch Statistics

The sampling survey estimates represent the total chinook and coho catch figures for Oregon's ocean fishery in 1982 (Table 13). There were minor landings at other ports, but these are not included since they represent less than one percent of the total catch off Oregon and aren't available until late 1983. There was a limited fishery for salmon just inside the jetties of many bays after August 1 and the data from a limited census through September 6 showed that about 6,400 coho and 600 chinook were landed. These data are not included in the annual ocean catch information.

Table 17. Oregon ocean salmon recreational effort and catch (numbers of fish) by month, 1974-75 average and 1978-82.

		April ^{a/}	May	June	July	August	September	October	November	Season Total
EFFORT (Salmon Angler Trips)										
1974-75^{b/} Average										
	Monthly	1,800	9,800	39,300	124,700	129,800	61,300	5,100	-	
	Cumulative	1,800	11,500	50,900	175,600	305,300	366,600	371,700	-	371,700
1978	Monthly	-	12,300	78,700	144,500	115,900	37,600	13,300	1,500	
	Cumulative	-	12,300	90,900	235,500	351,500	388,900	402,200	403,700	403,700
1979	Monthly	-	8,900	42,800	104,900	131,500	7,300	4,800	1,100	
	Cumulative	-	8,900	51,700	156,600	288,100	295,400	300,200	301,300	301,300
1980	Monthly	-	5,900	78,400	140,000	84,700	19,100	2,900	400	
	Cumulative	-	5,900	84,300	224,300	309,000	328,100	331,000	331,400	331,400
1981	Monthly	-	13,800	45,700	112,200	110,300	26,400	2,300	300	
	Cumulative	-	13,800	59,500	171,700	282,000	308,400	310,700	311,000	311,000
1982 Prelim.	Monthly	-	700	32,100	177,100	10,200	3,000	2,600	300	
	Cumulative	-	700	32,800	209,900	220,100	223,100	225,700	226,000	226,000
CHINOOK										
1974-75^{b/} Average										
	Monthly	200	900	4,800	19,700	19,700	9,200	1,800	-	
	Cumulative	200	1,100	5,900	25,500	45,300	54,500	56,200	-	56,200
1978	Monthly	100	900	4,700	5,000	9,600	1,600	900	100	
	Cumulative	100	1,000	5,700	10,700	20,200	21,900	22,800	22,800	22,800
1979	Monthly	-	800	4,700	5,100	9,400	200	600	100	
	Cumulative	-	800	5,600	10,700	20,000	20,200	20,800	20,900	20,900
1980	Monthly	-	300	4,700	6,900	5,400	1,300	300	100	
	Cumulative	-	300	5,000	11,900	17,300	18,600	19,000	19,000	19,000
1981	Monthly	-	700	3,100	10,300	12,500	2,200	300	<100	
	Cumulative	-	700	3,800	14,200	26,600	28,800	29,100	29,200	29,200
1982 Prelim.	Monthly	-	<100	4,700	31,900	1,600	200	200	<100	
	Cumulative	-	<100	4,700	36,700	38,300	38,500	38,700	38,700	38,700
COHO										
1974-75^{b/} Average										
	Monthly	800	5,800	36,500	102,500	103,000	33,900	900	-	
	Cumulative	800	6,600	43,100	145,600	248,600	282,500	283,400	-	283,400
1978	Monthly	200	5,100	101,500	71,400	67,800	13,200	500	-	
	Cumulative	200	5,300	106,900	178,300	246,100	259,300	259,800	-	259,800
1979	Monthly	-	5,400	35,800	73,800	64,200	1,600	-	-	
	Cumulative	-	5,400	41,200	115,000	179,200	180,800	-	-	180,800
1980	Monthly	-	6,000	114,200	156,100	45,100	4,400	-	-	
	Cumulative	-	6,000	120,200	276,300	321,400	325,800	-	-	325,800
1981	Monthly	-	9,200	26,300	70,800	80,600	12,900	-	-	
	Cumulative	-	9,200	35,500	106,300	186,900	199,800	-	-	199,800
1982 Prelim.	Monthly	-	-	24,200	151,000	-	-	-	-	
	Cumulative	-	-	24,200	175,100	-	-	-	-	175,100

a/ April value includes any early season catches.

b/ Only 1974 and 1975 of 1971-75 period are available on a monthly basis.

NOTE: After 1978 monthly totals are sum of statistical weeks' estimates with closest fit to calendar month.

Table 18. Summary of Oregon recreational ocean salmon effort and catch data by area, 1974-75 average and 1976-82.

Year	Area ^{a/}					Total
	Columbia River	Tillamook	Newport	Coos Bay	Brookings	
<u>EFFORT</u>						
<u>(Salmon Angler Trips)^{c/}</u>						
1974-75 Ave.	75,900	40,900	91,300	104,300	59,200	371,700
1978	63,400	31,700	115,600	104,400	88,600	403,700
1979	43,300	31,000	72,400	94,700	59,900	301,300
1980	46,300	47,800	83,900	97,400	56,000	331,400
1981	44,700	38,000	77,300	83,900	67,100	311,000
1982 ^{b/}	27,200	24,600	53,500	59,400	61,300	226,000
<u>CATCH</u>						
<u>Chinook</u>						
1974-75 Ave.	32,600	2,000	4,300	6,800	10,600	56,200
1976	44,600	2,300	4,600	14,600	13,200	79,300
1977	22,600	1,500	2,600	22,700	11,800	61,400
1978	7,900	800	2,100	4,800	7,300	22,800
1979	7,500	1,000	1,400	4,500	6,400	20,900
1980	5,500	1,600	1,800	5,300	4,800	19,000
1981	11,500	1,900	2,400	4,500	8,900	29,200
1982 ^{b/}	8,200	1,400	3,500	10,100	15,500	38,700
<u>Coho</u>						
1974-75 Ave.	70,700	27,200	65,100	90,100	30,200	283,400
1976	116,700	50,000	118,100	164,800	51,800	501,300
1977	55,300	15,600	34,000	76,300	14,000	195,300
1978	60,200	8,500	61,200	82,800	47,100	259,800
1979	38,000	9,400	36,300	79,000	18,200	180,800
1980	55,600	28,900	72,400	135,900	33,000	325,800
1981	54,300	17,700	61,900	57,600	8,300	199,800
1982 ^{b/}	35,500	23,100	44,000	55,600	16,900	175,100

^{a/} Columbia River area includes Astoria, Warrenton and Hammond; Tillamook area includes Garibaldi and Pacific City; Newport area includes Depoe Bay and Newport; Coos Bay area includes Florence, Winchester Bay and Coos Bay; Brookings area includes Gold Beach and Brookings.

^{b/} Preliminary

^{c/} 1979-1982 effort consists of salmon angler trips only.

The 1982 total salmon catch for the ocean recreational fishery was 213,900 fish, which is only 16,700 salmon below the 1981 catch of 230,600 fish (Table 15). The lowest catch of salmon was in 1979 when 202,343 fish were taken. The highest total recreational salmon catch of 580,672 fish occurred in 1976. Figure 3 compares 1982 catches with those since 1966.

Chinook Catch

The recreational harvest of 38,700 chinook in 1982 was well above the 1981 level when 29,200 chinook were taken during a longer season. The 1982 landings were 33% above the 1981 catch and only 22% below the 1971-75 average catch (Table 15).

July was the peak month for chinook landings accounting for 82% of the total catch (Table 17). In 1981, July and August together accounted for 78% of the total year's chinook catch.

Brookings accounted for 37% of the total catch or 14,200 chinook (Table 19). Astoria, which traditionally has the largest chinook catch came in second with 8,200 fish landed. Most of Astoria's chinook landings usually take place in August. The shorter fishing season, coupled with the 24-inch minimum size limit that was implemented in 1976 has resulted in greatly lower chinook catches in the Columbia River area. The 8,200 chinook landed in 1982 contrasts with the average 1974-75 landings of 32,600 fish in Astoria (Table 18).

Coho Catch

The ocean recreational coho catch was a record low of 175,100 fish in 1982 (Table 15). This is 12% less than the 1981 harvest of 199,800 fish and 36% below the 1971-75 average of 271,800 coho.

With the abbreviated season, July accounted for 86% of the coho landings or 151,000 fish (Tables 17 and 20). July and August are usually the peak

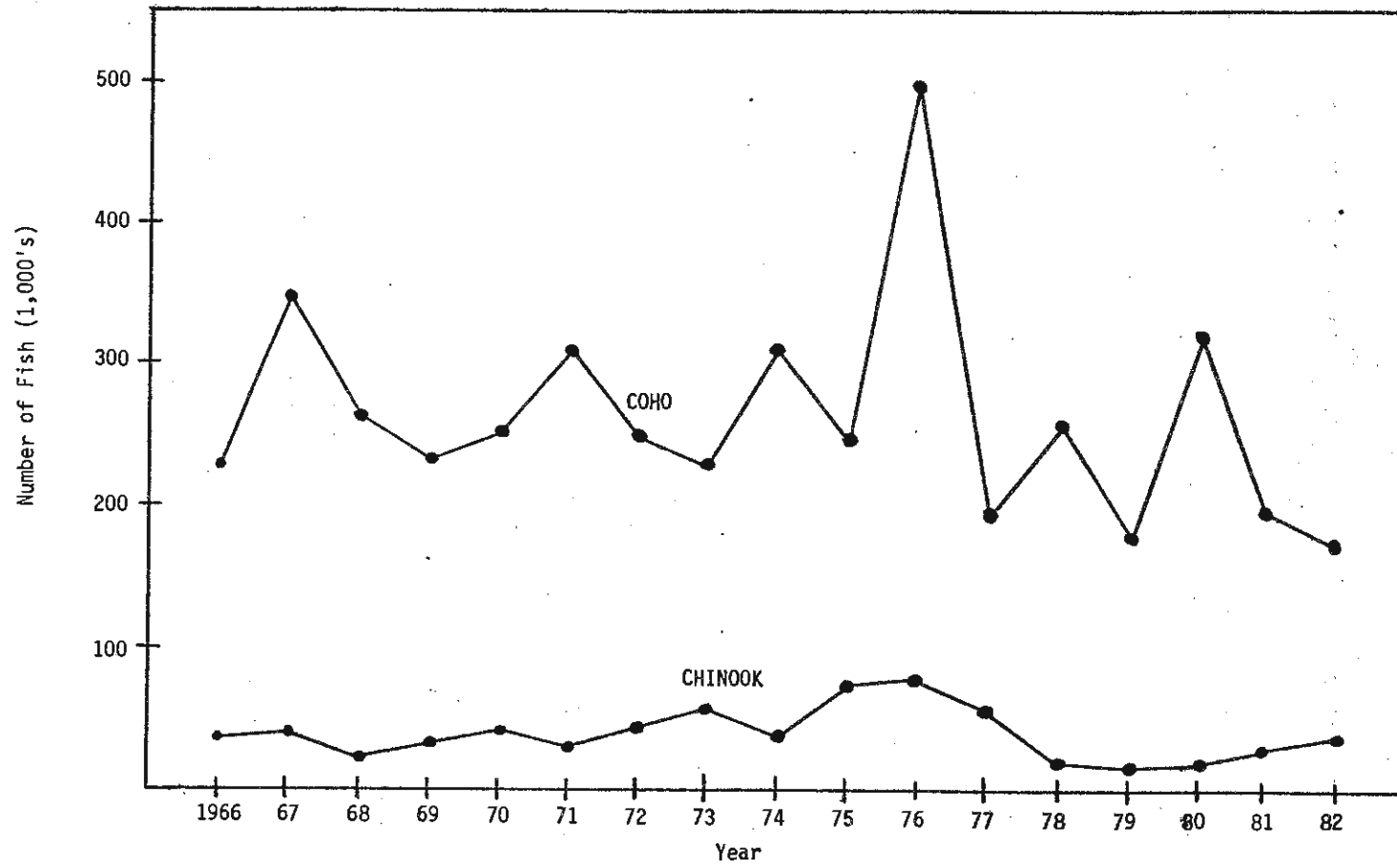


Figure 3. Trends in Oregon Recreational Ocean Salmon Catches, 1966-82.

Table 19. Oregon Ocean Recreational Chinook Catch by Port by Month, 1982.

Port	Month							Total
	May	June	July	August	Sept.	Oct.	Nov.	
Columbia R.	-	2,237	5,998	-	-	-	-	8,235
Garibaldi	0	45	684	-	-	-	-	729
Pacific City	0	45	586	-	-	-	-	631
Depoe Bay	0	129	1,151	-	-	-	-	1,280
Newport	0	461	1,754	-	-	-	-	2,215
Florence	0	213	1,536	-	-	-	-	1,749
Winchester Bay	5	466	4,121	-	-	-	-	4,592
Coos Bay	0	345	3,402	-	-	-	-	3,747
Gold Beach	0	24	752	552	29	0	-	1,357
Brookings	2	776	11,961	992	198	236	16	14,181
Total South of Cape Falcon	7	2,504	25,947	1,544	227	236	16	30,481
Statewide Total	7	4,741	31,945	1,544	227	236	16	38,716

Table 20. Oregon Ocean Recreational Coho Catch by Port by Month, 1982^{a/}.

Port	Month					Total
	May	June	July	August	September	
Columbia R.	-	5,307	30,169	-	-	35,476
Garibaldi	-	735	15,810	-	-	16,545
Pacific City	-	597	5,950	-	-	6,547
Depoe Bay	-	2,065	16,346	-	-	18,411
Newport	-	1,513	24,123	-	-	25,636
Florence	-	139	6,686	-	-	6,825
Winchester Bay	-	6,769	25,395	-	-	32,164
Coos Bay	-	5,311	11,302	-	-	16,613
Gold Beach	0	41	1,071	-	-	1,112
Brookings	5	1,670	14,124	-	-	15,799
Total	5	24,147	150,976	0	0	175,128

^{a/} Monthly totals are the sum of statistical weeks estimates with closest fit to calendar month.

months for recreational coho catch. While the June landings of 24,200 fish were 34% less than the 1974-75 average, the trend was reversed in July when 151,000 coho were caught. This is 47% more than the 1974-75 average catch for July.

The Columbia River area accounted for the most coho caught with 35,500 fish or 20% of the total (Tables 18 and 20). Winchester Bay and Newport together registered another 33% of the total catch. The coho catch was down in 1982 from 1981 in all ports except Garibaldi, Winchester Bay and Gold Beach.

Evaluation of Minimum Size Limits

In 1982, minimum size limits were in effect only north of Cape Falcon. The chinook minimum size remained at 24 inches. The number of shakers (undersized salmon) were estimated from interview data collected during the ocean sampling survey. The estimated number of chinook released by ocean recreational anglers during the 1982 season near the Columbia River was 6,900 fish or 46% of the total catch for that port (Table 21). This is less than in 1981 when 21,700 chinook or 65% of the chinook caught were released. This table also illustrates the importance of August to the chinook fishery in the Columbia River area since a large portion of the total season's catch normally occurs in that month.

South of Cape Falcon, anglers were required to keep the first two salmon caught. In order to get 1982 data that was somewhat comparable to past years, department samplers were asked to randomly measure chinook catches and all coho salmon that were less than 17 inches in length. This data would give us information on what percentage of fish would have been released under past minimum size regulations (16" for coho and 22" for chinook).

Table 21. Chinook Salmon Released by Oregon Ocean Recreational Fishery off the Columbia River June 12-August 1^{a/}, 1979-1982. Total Season's Landings and Percentage Released are Shown in Parenthesis.

Year	Number of Fish Retained	Number of Fish Released	Total Number of Fish Caught	Percentage of Catch Released
1979	2,621 (7,072)	1,397 (8,719)	4,018 (15,791)	35 (55)
1980	2,242 (5,503)	4,262 (7,891)	6,504 (13,394)	65 (59)
1981	3,414 (11,516)	8,286 (21,664)	11,700 (33,180)	71 (65)
1979-81 Average	2,759 (8,030)	4,648 (12,758)	7,407 (20,788)	63 (61)
1982	8,235 (8,235)	6,949 (6,949)	15,184 (15,184)	46 (46)

^{a/} Time period ranges from June 11 through August 3, depending on statistical week fit.

Past shaker data has varied substantially from year to year in any one port. There has probably always been some sorting of fish, irrespective of minimum size limits. In 1982, some pleasure boat anglers volunteered that they would not keep "small fish". If one can assume that charter boat anglers were under stricter pressure to conform to regulations than recreational anglers in private boats, some clues to sorting may be gleaned. As in the past, few small coho were sampled and most of our length data are for chinook. Table 22 is a summary of the chinook length data by port and fishery. In all ports, the charter fleet landed a higher percentage of fish less than 22 inches in length than did the private boats. The discrepancy was widest in Coos Bay (18%) and least in Newport (3%).

The smallest charter caught chinook measured 12.4 inches (315 mm) while the pleasure boat minimum was 12 inches (304 mm). The average length of charter caught chinook tended to be less than that of the average pleasure boat catch but the difference was often small (Table 22).

Table 22. Analysis of Chinook Lengths from Oregon Ocean Recreational Fishery, June 12-August 1, 1982.

	Average Size (mm)			Minimum Size (mm)		Percentage <560 mm			Percentage of
	Charter	Rec.	Comb.	Charter	Rec.	Charter	Rec.	Comb.	Fish Tagged Comb.
Garibaldi N=241	772	766	767	339	465	8.0	2.7	3.3	2.07
Pacific City N=404	-	801	802	-	367	0.0	1.7	1.7	3.21
Depoe Bay N=689	758	781	774	315	387	9.2	3.2	5.1	3.19
Newport N=302	769	773	771	352	304	10.4	7.1	8.6	3.97
Florence N=139	-	773	773	-	342	-	8.6	8.6	4.31
Winchester Bay N=1064	697	727	719	335	322	23.8	15.1	17.1	1.12
Coos Bay N=700	629	691	672	340	310	41.2	23.1	28.7	4.42
Gold Beach ^{1/} N=658	681	686	685	387	273	34.1	27.8	29.5	4.40

N = Number of fish measured

^{1/} Data from June 12 through Sept. 5

A comparison of the 1982 lengths with 1979-81 season's average shaker rates showed very little difference. South of Cape Falcon, 18.7% or 5,700 chinook were less than 22 inches in length out of the 30,500 fish landed. The 1979-81 average shaker rate (fish released) was 21.8% or 3,958 chinook out of 18,146 fish caught (Table 23). Keeping in mind that the shaker data can be quite variable, the 1982 chinook length data suggest that Oregon's ocean salmon anglers south of Cape Falcon fished chinook in the same manner as they did in 1979-81 and that the reduction in minimum size increased catches by 5,700 chinook.

The minimum size limit for coho in the Columbia River area was 16 inches. The shaker rate was 6% in 1982, compared to 3% in 1981 and 1980 and 12% in 1979 (Table 24). The coho shaker rates for the rest of the coast have always been low, averaging 1.7% in 1979-81 and 0.8% in 1982 (Table 25). The samplers were asked to measure all coho that were less than 17 inches, total length. Only 205 small coho were sampled but the data suggest an even lower shaker rate for coho than in past years.

While coho salmon fishing ended after August 1 along the coast, bottom-fishing along the entire coast and chinook fishing south of Cape Blanco was still permitted. As a result, some coho were hooked and released by these fisheries. These shaker data are included in Table 25.

Special Recreational Seasons

Oregon's ocean recreational salmon anglers had two fishing opportunities aside from the all-species season, (1) an early June chinook-only fishery in state waters between Cape Blanco and Cape Falcon, and (2) a November season off the mouths of the Elk and Chetco rivers, again, in state waters.

Table 23. Chinook Salmon Released (Col. R.) or Landed, Less than 22"* in Length from the Ocean Recreational Fishery off Oregon in 1982, by Port with 1979-81 Averages in Parenthesis.

Port	Number of Fish Retained		Number of Fish Released or <22* inches in length		Total Number of Fish Caught		Percentage of Catch Released or <22"*	
	1982	79-81 Ave.	1982	79-81 Ave.	1982	79-81 Ave.	1982	79-81 Ave.
Columbia R.	8,235	(22,218)	6,949	(12,758)	15,184	(20,788)	45.7	(61.3)
Garibaldi	729	(1,095)	24	(7)	729	(1,102)	3.3	(0.6)
Pacific City	631	(117) ^{1/}	11	(2) ^{1/}	631	(119) ^{1/}	1.7	(1.7) ^{1/}
Depoe Bay	1,280	(509)	64	(40)	1,280	(549)	5.1	(7.3)
Newport	2,215	(1,353)	190	(46)	2,215	(1,398)	8.6	(3.3)
Florence	1,749	(764) ^{1/}	30	(155)	1,749	(919) ^{1/}	1.7	(16.9) ^{1/}
Winchester Bay	4,592	(2,939)	790	(1,484)	4,592	(4,423)	17.1	(33.6)
Coos Bay	3,747	(1,122)	1,075	(655)	3,747	(1,776)	28.6	(36.9)
Gold Beach	1,357	(817)	400	(67)	1,357	(884)	29.5	(7.6)
Brookings	14,181	(5,472)	3,120 ^{2/}	(1,502)	14,181	(6,975)	22.0 ^{2/}	(22.0)
S. of Falcon Total	30,481	(14,188)	5,704	(3,958)	30,481	(18,146)	18.7	(21.8)
Statewide Total	38,716	(22,218)	12,653	(16,716)	45,665	(38,933)	27.7	(42.9)

* Columbia River area size limit is 24 inches.

^{1/} 1981 Data only

^{2/} Estimate based on 1979-81 average shaker rate of 22%

Table 24. Coho Salmon Released by Ocean Recreational Fishermen, In Columbia River Area, 1979-1982.

Year	Number of Fish Retained	Number of Fish Released	Total Fish Caught	Percentage of Catch Released
1979	37,894	4,905	42,799	12
1980	55,647	1,905	57,552	3
1981	54,294	1,643	55,937	3
1982	35,476	2,082	37,558	6

Table 25. Coho Salmon Released by Ocean Recreational Fishery by Port in 1982.

Port	Number of Fish Retained	Number of Fish Released	Total Fish Caught	Percent of Catch Released
Columbia R.	35,476	2,082	37,558	5.5
Garibaldi	16,545	70	16,615	0.4
Pacific City	6,547	2	6,549	0.03
Depoe Bay	18,411	59	18,470	0.3
Newport	25,636	144	25,780	0.0
Florence	6,825	0	6,825	0.0
Winchester Bay	32,164	72	32,236	0.2
Coos Bay	16,613	14	16,627	0.1
Gold Beach	1,112	277	1,389	19.9
Brookings	15,799	542	16,341	3.4
Total South of Cape Falcon	139,652	1,180	140,832	0.8
Coastwide Total	175,128	3,262	178,390	1.8

Early Chinook Season

The special chinook-only ocean recreational fishery was established by the Fish and Wildlife Department for state waters from May 29 through June 11, 1982. Gear was restricted to barbless hooks. This season was an attempt to prolong the fishing opportunity on healthy coastal chinook stocks while the Oregon coho stocks remained depressed.

The season started in confusion when the U.S. Commerce Department, at the request of the State of Washington, preempted the fishery management authority of the State of Oregon and did not permit a special fishery north of Cape Falcon. This action, which took place just before the proposed season's opening May 29, was misrepresented in the press and other news media as applying to the entire Oregon coast. Many people believed that even the area south of Cape Blanco, which was open to both chinook and coho fishing on May 29, was closed. This coastwide confusion persisted well into the first week of the special season.

The special fishery was monitored by three methods: (1) the regular port sampling obtained data on effort and catch and fish released by pleasure and charter boat anglers; (2) a voluntary charter boat log to document incidence of coho catch and condition of released fish and, (3) an observer program where Department employees rode along on some charter boat trips and monitored the incidence of coho catch and condition of released fish.

The limited data suggests that Oregon's ocean recreational salmon fishermen are not accustomed to relying on chinook as a target species. Charter boat operators in Garibaldi and Charleston did not attempt to schedule any salmon fishing trips during the special season. Depoe Bay, Newport and Winchester Bay charter offices were willing to schedule salmon trips but public interest was very low. As a result, logs were returned by only two charter

boat operators, both in Newport. Thirty-eight charter boat anglers caught 19 chinook and released 5 coho according to these logs. Only two department observation trips were made, both out of Newport. Anglers did not hook any coho on these trips while 6 chinook were landed.

Our sampling estimated 87 salmon charter angler trips during the special season compared to a 2,005 average salmon angler trips during comparable time periods in 1979-81, a 96% drop in effort (Table 26). Private boat salmon angler trips were reduced by 87% from the 1979-81 average. An estimated 23 chinook were landed by charter boat anglers while 40 chinook were taken by recreational boat anglers. Eight coho were released by charter boat anglers while recreational boat anglers caught and released an estimated 67 coho (Table 27).

The limited data suggest that there was a shift from salmon angling to fishing for bottomfish where such opportunity existed. Florence had no angling effort but all other ports showed increased bottomfish angling effort during the special season. The charter fleet showed a 46% increase in bottomfish angler trips over 1981 while pleasure boats registered a 103% increase in bottomfish trips over 1981 (Table 28). The increases in 1982 over the 1979-81 averages were 68% for the charter fleet and a substantial 180% increase for the non-charter boat fleet. Newport boats dominated this last statistic.

Late Chinook Season

There has been a late chinook fishery permitted off the mouths of the Elk and Chetco rivers in state waters since 1977. Sampling in Brookings indicated that 278 salmon angler trips and 122 bottomfishing trips took place in November (Tables 16 and 17). Sixteen chinook were landed in 1982 as compared to 10 fish in 1981, sixty-three chinook in 1980 and 75 fish in 1979.

Table 26. Total Number of Salmon Angler Trips, Chinook and Coho Caught Between Cape Falcon and Cape Blanco from May 29-June 11, 1982 Compared to Similar Periods for 1979-81.

Year	Number of Salmon Angler Trips		Chinook Catch		Coho Catch	
	Charter	Pleasure	Charter	Pleasure	Charter	Pleasure
1982	87	718	23	40	8	67
1981	1,990	6,073	35	85	1,630*	3,488*
1980	1,848	6,849	966	896	3,043*	8,692*
1979	2,176	3,392	186	225	1,558*	2,041*
1979-81 Ave.	2,005	5,438	396	402	2,077*	4,740*

* = coho kept

Table 27. Number of Salmon Angler Trips, Chinook Caught and Coho Released from Cape Falcon to Cape Blanco, May 29-June 11, 1982, by Port and Fishery, from Angler Creel Survey.

Port	Number of Salmon Angler Trips		Chinook Catch		Coho Catch	
	Charter	Pleasure	Charter	Pleasure	Charter	Pleasure
Garibaldi	0	127	0	4	0	0
Pacific City	0	5	0	0	0	0
Depoe Bay	9	6	1	0	0	2
Newport	56	348	20	22	5	0
Florence	0	0	0	0	0	0
Winchester Bay	22	154	2	11	3	65
Coos Bay	0	78	0	3	0	0
Total	87	718	23	40	8	67

Table 28. A Comparison of Salmon Angler Effort and Bottomfish Angler Effort, May 29-June 11, 1982 and Comparable Time Periods by Port and Fishery, Cape Falcon to Cape Blanco.

Port	Number of Salmon Angler Trips		Number of Bottomfish Angler Trips	
	Charter	Pleasure	Charter	Pleasure
Garibaldi				
1982	0	127	527	338
1981	72	403	237	161
1980	60	594	316	78
1979	-	-	-	-
Pacific City				
1982	0	5	11	389
1981	18	127	0	247
1980	-	-	-	-
1979	-	-	-	-
Depoe Bay				
1982	9	6	605	154
1981	362	193	478	22
1980	279	100	423	122
1979	498	49	633	79
Newport				
1982	56	348	762	1,161
1981	314	805	647	526
1980	284	1,413	479	517
1979	277	763	494	283
Florence				
1982	0	0	0	0
1981	0	275	0	0
1980	-	-	-	-
1979	-	-	-	-
Winchester Bay				
1982	22	154	76	17
1981	751	2,647	0	12
1980	648	3,083	12	0
1979	964	2,318	0	0
Coos Bay				
1982	0	78	180	264
1981	473	1,623	119	179
1980	577	1,659	0	104
1979	437	262	21	161
Totals				
1982	87	718	2,161	2,323
1981	1,990	6,073	1,481	1,147
1980	1,848	6,849	1,230	821
1979	2,176	3,392	1,148	523
<hr/>				
1979-81 Ave.	2,005	5,438	1,286	830

Charter/Private Boat Fisheries

There were 253 charter boat licenses issued in 1982 although all licenses were not active. We do not have a count of the number of private boats that actually participated in the fishery. Our creel sampling did differentiate between boat types.

The 1982 salmon charter boat fishing effort was estimated at 43,300 salmon angler trips, compared to 65,400 salmon angler trips in 1981 (Table 29). Charter boat salmon effort comprised 19% of the 226,000 total ocean salmon recreational angler trips for 1982, compared to 21% in 1981 and the 1973-81 average of 29% (Figure 4). The 43,300 charter salmon angling trips represent a record low effort and is 57% below the 1973-81 average of 101,586 trips. The Columbia River area, Winchester Bay, Depoe Bay and Newport had the most salmon charter trips in 1982, as they did in 1981.

Salmon charter boat anglers took 48,400 coho and 8,200 chinook in 1982 (Table 29). An additional 34 coho and 12 chinook were caught incidentally by bottomfish charter anglers. The total catch of 56,600 chinook and coho salmon by charter boat anglers in 1982 was below the 1981 catch of 71,200 salmon and the 1973-81 average of 100,800 fish. Charter boat anglers landed 26% of the total recreational salmon catch in 1982 compared to 31% in 1981 and the 1973-81 average of 37%. Oregon's largest charter boat fleet operating out of the Columbia River (Astoria, Hammond, Warrenton) landed 21,100 salmon or 27% of the total charter boat catch in 1982 (Table 29). Depoe Bay and Winchester Bay had the next best landings with slightly over 9,000 salmon each or 16% each of the total charter catch. The average angler success on charter boats in 1982 was 1.3 salmon per salmon angler trip. This compares with the 1973-81 average success rate of 1.1 salmon per salmon charter trip.

In 1982, 43,300 or 69% of the 62,400 total charter anglers targeted on

Table 29. Oregon Ocean Recreational Salmon Statistics by Boat-Type, 1982^{a/}.

Port	Salmon Charter Boats				Salmon Private Boats			
	Boat Trips	Angler Trips	Catch		Boat Trips	Angler Trips	Catch	
			Coho	Chinook			Coho	Chinook
Columbia R.	1,490	11,794	17,184	3,950	4,525	15,442	18,292	4,285
Garibaldi	267	1,859	16,513	729	5,913	16,588	14,159	671
Pacific City	55	210	267	5	1,992	5,947	6,280	626
Depoe Bay	1,068	7,883	8,608	421	3,406	9,762	9,803	857
Newport	923	6,754	5,957	517	9,756	29,081	19,679	1,689
Florence	0	0	0	0	3,176	8,687	6,825	1,749
46 Winchester Bay	1,095	7,186	8,008	1,052	8,536	24,923	24,156	3,540
Coos Bay	534	4,231	5,203	1,012	4,807	14,328	11,392	2,732
Gold Beach	389	1,993	271	469	1,904	4,792	839	888
Brookings	239	1,398	565	669	22,226	53,171	15,234	13,502
Totals	6,060	43,308	48,451	8,165	66,241	182,721	126,677	30,551
Combined totals for all Oregon craft	72,301	226,029	175,128	38,716				

^{a/} All ports were sampled the entire ocean salmon season

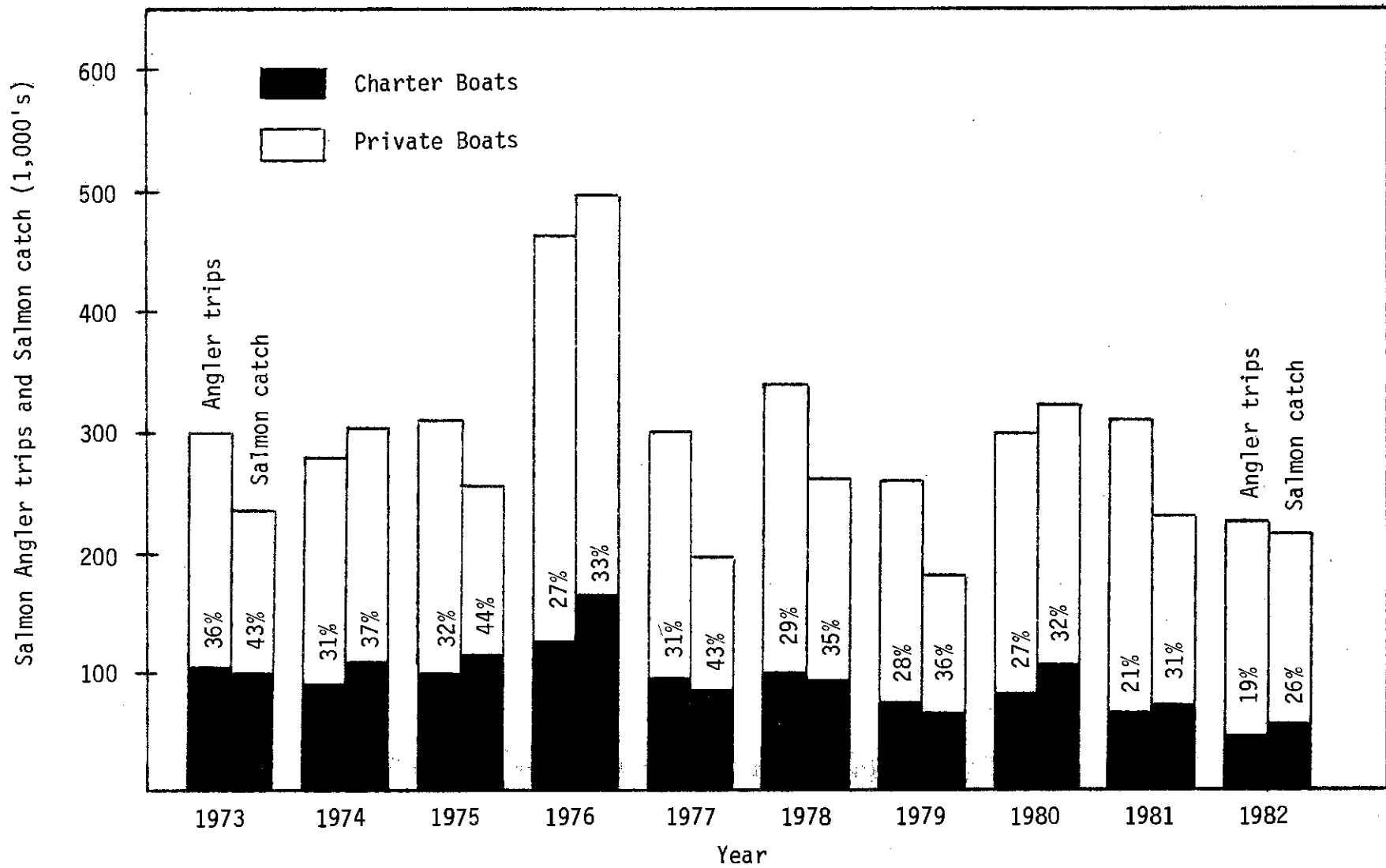


Figure 4. Oregon Ocean Recreational Salmon Fishery Statistics by Boat-Type 1973-1982.

salmon fishing (Table 30). This compares with 65,400 salmon charter angler trips in 1981, 79,100 in 1980 and 73,700 salmon charter anglers in 1979. The comparable bottomfish angling statistics were 19,300 charter angler trips in 1982, a 24% increase over the 15,500 trips in 1981, 12,500 charter bottomfish angler trips in 1980 and 16,100 trips in 1979. The 1979-81 average for bottom-fishing charter trips was 14,700 trips.

The 1982 private salmon boat fishing effort was estimated at 182,700 salmon angler trips (Table 30) compared to 245,600 salmon angler trips in 1981. This effort represents 81% of the total ocean salmon angler trips in 1982, compared to 79% in 1981 and the 1973-81 average of 71%.

Anglers from private boats landed 126,700 coho and 30,600 chinook in 1982. The total salmon catch of 157,200 fish in 1982 is almost identical to the 157,800 salmon caught by private boat anglers in 1981, even though the season was longer that year. The total catch is 10% below the 1973-1981 average of 174,400 salmon landed by private boats (Figure 3). Private boat anglers caught 74% of the total recreational salmon landed in 1982. This compares with 69% in 1981 and the 1973-81 average of 63%. Brookings and Winchester Bay anglers caught the most salmon, 28,700 and 27,700, respectively. The average angling success on private boats in 1982 was 0.9 salmon per angler, same as in 1981, and the 1973-79 average success rate of 0.7 salmon per angler.

Effort data by trip-type (salmon or bottomfish) from private boats was collected through interviews and was applied proportionately to the total effort counts for private boats by port and time period. These data show that 182,700 private boat angler trips or 86% of the total 213,300 private boat angler trips targeted on salmon (Table 30). This is down from 92% in 1981 and 93% in 1980. In the Columbia River area, Florence and Winchester Bay, almost all private boat anglers targeted on salmon. All other ports

Table 30. Oregon Ocean Recreational Catch Statistics by Boat and Trip Type^{1/} from Angler Creel Survey, 1982^{2/}.

Port	Charter						Private					
	Boat Trips		Angler Trips		Salmon Catch		Boat Trips		Angler Trips		Salmon Catch	
	Sal	Bot	Sal	Bot	Sal	Bot	Sal	Bot	Sal	Bot	Sal	Bot
Columbia R.	1,490	61	11,794	456	21,134	0	4,525	67	15,442	190	22,577	0
Garibaldi	267	568	1,859	4,966	2,412	32	5,913	1,408	16,588	4,090	14,830	0
Pacific City	55	16	210	59	272	0	1,992	897	5,947	2,845	6,906	0
Depoe Bay	1,068	608	7,883	4,439	9,033	2	3,406	563	9,762	1,628	10,660	0
Newport	923	910	6,754	6,548	6,476	9	9,756	2,670	29,081	8,313	21,368	0
Florence	0	0	0	0	0	0	3,176	0	8,687	0	8,574	0
Winchester Bay	1,095	78	7,186	509	9,060	0	8,536	10	24,923	45	27,696	0
Coos Bay	534	235	4,231	1,699	6,216	3	4,807	697	14,328	2,007	14,124	18
Gold Beach	389	26	1,993	115	740	0	1,904	449	4,792	1,136	1,727	2
Brookings	239	92	1,398	550	1,234	0	22,226	3,665	53,171	10,323	28,736	10
Total	6,060	2,594	43,308	19,341	56,577	46	66,241	10,426	182,721	30,577	157,205	30
Total for all boats:	72,301	13,020	226,029	49,918	213,782	76						

^{1/} Trip-types are separated by boat trips that target for salmon (SAL) and for bottomfish (BOT). Combination salmon and bottomfish trips are included in salmon trip estimates.

^{2/} All ports were sampled the entire ocean salmon season.

had important bottomfishing effort as well. In Newport, 22% or 8,300 private boat angler trips went after bottomfish only. As a general rule, most ocean fishermen will target on salmon if they are available but will target on bottomfish when salmon fishing is slow.

Recreational Ocean Salmon Mark Sampling

Samplers at ten ports observed 40% of the chinook and 45% of the coho landed during the 1982 sampling survey.

Chinook

The samplers examined 15,641 chinook and found 491 or 3% had an adipose fin clipped (Table 31). They collected 471 heads from these fish in order to recover coded-wire tags. An additional 19 chinook heads were taken from marked fish that were not sampled in the survey.

Department staff found tags in 423 of the 471 chinook heads for a 90% tag recovery ratio. The major contributing agencies of the chinook tags were:

California Department of Fish and Game	47%
Oregon Department of Fish and Wildlife	31%
National Marine Fisheries Service	8%
Washington Department of Fisheries	5%
U.S. Fish and Wildlife Service	4%

Coho

The samplers looked at 78,993 coho and found that 3,275 or 4% had an adipose fin clipped (Table 32). They collected 3,164 heads from these marked fish for coded wire tag recovery. An additional 98 coho heads were collected from marked fish that were not sampled in the survey.

Technicians found 2,890 tags in the 3,164 coho heads. This is a 91% tag recovery ratio. The major contributing agencies and hatcheries of coho tags were:

Table 31. Oregon Ocean Recreational Chinook Mark Sampling by port and month, 1982.

Port	Month							Total
	May	June	July	Aug.	Sept.	Oct.	Nov.	
<u>Columbia R.</u>								
No. Sampled	-	1,043	2,481	-	-	-	-	3,524
No. Landed	-	2,237	5,998	-	-	-	-	8,235
% Sampled	-	47	41	-	-	-	-	43
No. Ad Marks	-	32	71	-	-	-	-	103
<u>Garibaldi</u>								
No. Sampled	-	29	356	-	-	-	-	385
No. Landed	-	45	684	-	-	-	-	729
% Sampled	-	59	52	-	-	-	-	53
No. Ad Marks	-	1	4	-	-	-	-	5
<u>Pacific City</u>								
No. Sampled	-	39	508	-	-	-	-	547
No. Landed	-	45	586	-	-	-	-	631
% Sampled	-	87	87	-	-	-	-	87
No. Ad Marks	-	2	13	-	-	-	-	15
<u>Depoe Bay</u>								
No. Sampled	-	110	693	-	-	-	-	803
No. Landed	-	129	1,151	-	-	-	-	1,280
% Sampled	-	85	60	-	-	-	-	63
No. Ad Marks	-	5	21	-	-	-	-	26
<u>Newport</u>								
No. Sampled	-	203	494	-	-	-	-	697
No. Landed	-	461	1,754	-	-	-	-	2,215
% Sampled	-	44	28	-	-	-	-	31
No. Ad Marks	-	6	17	-	-	-	-	23
<u>Florence</u>								
No. Sampled	-	122	548	-	-	-	-	670
No. Landed	-	213	1,536	-	-	-	-	1,749
% Sampled	-	57	36	-	-	-	-	38
No. Ad Marks	-	0	16	-	-	-	-	16
<u>Winchester Bay</u>								
No. Sampled	2	199	1,211	-	-	-	-	1,412
No. Landed	5	466	4,121	-	-	-	-	4,592
% Sampled	40	43	29	-	-	-	-	31
No. Ad Marks	0	1	17	-	-	-	-	18
<u>Coos Bay</u>								
No. Sampled	-	221	2,154	-	-	-	-	2,375
No. Landed	-	345	3,402	-	-	-	-	3,747
% Sampled	-	64	63	-	-	-	-	63
No. Ad Marks	-	8	62	-	-	-	-	70
<u>Gold Beach</u>								
No. Sampled	-	17	477	271	11	0	-	776
No. Landed	-	24	752	552	29	0	-	1,357
% Sampled	-	71	63	49	38	-	-	57
No. Ad Marks	-	0	25	9	0	0	-	34
<u>Brookings</u>								
No. Sampled	1	264	3,459	507	96	114	11	4,452
No. Landed	2	776	11,961	992	198	236	16	14,181
% Sampled	50	34	29	51	48	48	69	31
No. Ad Marks	0	12	136	22	6	3	2	181
<u>Total</u>								
No. Sampled	3	2,247	12,381	778	107	114	11	15,641 ^{1/}
No. Landed	7	4,741	31,945	1,544	227	236	16	38,716
% Sampled	43	47	39	50	47	48	69	40
No. Ad Marks	0	67	275	31	6	3	2	491 ^{1/}

^{1/} In addition 19 snouts were taken from Ad-clipped fish not sampled in survey.

Table 32. Oregon Ocean Recreational Coho Mark Sampling by Port and Month, 1982.

Port	Month					Total
	May	June	July	August	September	
Columbia R.						
No. Sampled	-	2,369	12,608	-	-	14,977
No. Landed	-	5,307	30,169	-	-	35,476
% Sampled	-	45	42	-	-	42
No. Ad Marks	-	58	355	-	-	413
Garibaldi						
No. Sampled	-	487	8,651	-	-	9,138
No. Landed	-	735	15,810	-	-	16,545
% Sampled	-	66	55	-	-	55
No. Ad Marks	-	11	217	-	-	228
Pacific City						
No. Sampled	-	539	5,160	-	-	5,699
No. Landed	-	597	5,950	-	-	6,547
% Sampled	-	90	87	-	-	87
No. Ad Marks	-	12	250	-	-	262
Depoe Bay						
No. Sampled	-	1,693	10,893	-	-	12,586
No. Landed	-	2,065	16,346	-	-	18,411
% Sampled	-	82	67	-	-	68
No. Ad Marks	-	57	490	-	-	547
Newport						
No. Sampled	-	817	7,265	-	-	8,082
No. Landed	-	1,513	24,123	-	-	25,636
% Sampled	-	54	30	-	-	32
No. Ad Marks	-	23	349	-	-	372
Florence						
No. Sampled	-	87	2,453	-	-	2,540
No. Landed	-	139	6,686	-	-	6,825
% Sampled	-	63	37	-	-	37
No. Ad Marks	-	0	112	-	-	112
Winchester Bay						
No. Sampled	-	3,441	6,885	-	-	10,326
No. Landed	-	6,769	25,395	-	-	32,164
% Sampled	-	51	27	-	-	32
No. Ad Marks	-	104	270	-	-	374
Coos Bay						
No. Sampled	-	3,640	6,834	-	-	10,474
No. Landed	-	5,311	11,302	-	-	16,613
% Sampled	-	69	60	-	-	63
No. Ad Marks	-	150	403	-	-	553
Gold Beach						
No. Sampled	-	29	717	-	-	746
No. Landed	-	41	1,071	-	-	1,112
% Sampled	-	71	67	-	-	67
No. Ad Marks	-	2	57	-	-	59
Brookings						
No. Sampled	2	513	3,910	-	-	4,425
No. Landed	5	1,670	14,124	-	-	15,799
% Sampled	40	31	28	-	-	28
No. Ad Marks	0	53	302	-	-	355
Total						
No. Sampled	2	13,615	65,376	-	-	78,993 ^{1/}
No. Landed	5	24,147	150,976	-	-	175,128
% Sampled	40	56	43	-	-	45
No. Ad Marks	0	470	2,805	-	-	3,275 ^{1/}

^{1/} In addition 98 snouts were taken from Ad-clipped fish not sampled in survey.

Oregon Department of Fish and Wildlife	39%
Washington Department of Fisheries	21%
U.S. Fish and Wildlife Service	13%
Oregon Aqua-Foods	11%
California Department of Fish and Game	9%
Anadromous, Inc.	4%

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