

THE 1985 OREGON OCEAN SALMON FISHERIES

Annual Report
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by

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THE 1985 OREGON OCEAN SALMON FISHERIES

INTRODUCTION

The Ocean Salmon Management Program is responsible for collecting fishery and biological data from the commercial and recreational ocean salmon fisheries, and analyzing the data and recommending appropriate management regulations for these fisheries. Management regulations are designed to achieve the optimum sustained use of the salmon resources.

In FY 1985 we sampled and analyzed data on catch and fishing effort, investigated chinook age composition, and recovered marked and coded-wire tagged salmon caught in offshore fisheries. Short-term activities included an evaluation of a troll season extension for chinook salmon off southern Oregon, the collection of random coho scales for a Research Section scale study to identify hatchery and wild coho, and the collection of chinook lengths from the recreational fishery to maintain an ongoing data base.

We continued the "key buyer" calling of processors to estimate daily troll coho landings north and south of Cape Falcon. The key buyers represented about 90% of the total area landings.

The sampling program for the ocean salmon fisheries is supervised by a program leader and 2 project leaders, one each for the troll and recreational fisheries. We sampled at 11 major ports along the coast utilizing 8 troll and 23 recreational samplers and 2 crew chiefs. The two crew chiefs acted as liaison between samplers and the project leaders in Newport and helped sample whenever necessary. They also brought the survey data and coded wire tags to Newport each week. Three seasonal employees helped Newport staff edit, key-punch, and computer process the sampled data.

Sampling program activities for 1985 were reduced by not using a central coast crew chief and not sampling commercial landings at Pacific City and Depoe Bay. These reductions were implemented because of the limited commercial coho fishery south of Cape Falcon. Normally, coho predominate in the landings at both Pacific City and Depoe Bay, and with a limited fishery, sampling was not justified.

Funding of the ocean sampling program came from two sources: (1) Anadromous Fisheries Act 89-304 (Project Number AFC-130-1) and (2) Bonneville Power Administration-Pacific Marine Fisheries Commission (Contract Numbers 85-014 and 84-0016).

THE 1985 OCEAN TROLL SALMON FISHERY
REGULATIONS

Chinook and Pink Salmon

For all areas barbless hooks were required (Table 1). There were exceptions for bait hooks and plugs north of Cape Falcon.

In the area north of Cape Falcon, the season opened from May 1 to May 31 or until a quota of 27,000 chinook was landed. Preliminary estimates by WDF caused a closure on May 14. Close examination of landing records showed that the quota was not reached and the season reopened on May 21 and continued through May 31. A one-day season was open on August 21 from the Columbia River buoy line to Cape Falcon. Minimum size was 28" for chinook and 16" for pink salmon.

In the area from Cape Falcon to Cape Blanco the season was open from May 1 to October 31. State waters were open from Tower Rock to Cape Blanco from November 1-30 to allow additional harvest of Sixes River chinook. Minimum size was 26" for chinook and 16" for pink salmon.

From Cape Blanco to the OR/CA border no fishing was allowed in the Federal regulated area. State waters were open from Cape Blanco to Humbug Mountain from October 1 to November 30. Minimum size was 26" for chinook and 16" for pink salmon.

Coho

A one-day coho season was set for the area from the Columbia River buoy line to Cape Falcon with a quota of 10,000 fish. Barbless hooks were required except on whole bait and plugs. Minimum size was 16".

From Cape Falcon to Cape Blanco the season opened July 1 and closed July 26. Fishermen were allowed to keep one coho for every chinook retained plus

Table 1. History of Oregon Troll Regulations, 1948-85.

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	16"
1977	Same	28" N. of Tillamook Head 26" S. of Tillamook Head	Same	16"
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	16"
	South of Cape Falcon May 1-May 31 and July 1-October 31	26"	South of Cape Falcon July 1-September	16"
1980	North of Cape Falcon May 1-May 31 and July 15-September 8	28"	North of Cape Falcon July 15-September 8	16"
	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	16"
1981	North of Cape Falcon May 1-May 31 and July 15-August 24 ^a / ₁	28"	North of Cape Falcon July 15-August 24 ^a / ₁	16"
	South of Cape Falcon May 1-May 31 and July 1-October 31 ^b / ₁	26"	South of Cape Falcon July 1-August 24 ^a / ₁	16"
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 / ₁	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 / ₁	26"		

Table 1. (Continued)

Year	Chinook		Coho	
	Season	Size	Season	Size
1983	North of Cape Falcon May 1-May 31 July 1-July 31 ^{d/} August 10-September 8 ^{e/}	28"	North of Cape Falcon July 1-July 31 ^{d/}	16"
	Cape Falcon to Cape Blanco May 1-June 15 August 1-October 31	26"	Cape Falcon to Cape Kiwanda August 1-Quota 2	16"
	Cape Blanco to OR/CA border May 16-June 15 July 1-August 31 September 1-September 15 ^{f/} October 1-October 31	26" 26"	Cape Kiwanda to Heceta Head July 1-Quota 1 August 1-Quota 2	16"
			Heceta Head to OR/CA border July 1-Quota 1	16"
1984 ^{g/}	North of Cape Falcon May 1 31 or 14,000 quota August 4 - September 3 or 12,400 quota	28" 28"	August 4-September 3 or 12,400 quota	16"
	Cape Falcon to Cape Blanco May 1 - June 15	26"		
	Cape Blanco to OR/CA border May 16 - June 16 July 16 - August 22			
1985	North of Cape Falcon ^{h/} May 1-31- or 27,000 quota August 21 to 2,700 quota	28"	August 21 to 10,000 quota	16"
	Cape Falcon to Cape Blanco ^{i/} May 1 - October 31	26"	July 1 to 45,000 quota	16"

SPECIAL TROLL SEASONS IN STATE WATERS

1974-1975	November 1 through December 31 - Elk and Chetco
1976-1982	November 1 through November 30 - Elk and Chetco
1983	November 1 through November 30 - Elk River only
1984	September 1 through September 21 - Cape Falcon-Cape Blanco October 1 through October 31 - Manhattan Beach-Pyramid Rock October 1 through November 30 - Elk River area
1985	October 1 through November 30 - Elk River area November 1 through November 30 - Sixes River area

^{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.

^{d/} Must land 2 chinook for each coho. Use plugs 6" or larger.

^{e/} Limited to area from Columbia River south jetty to Cape Falcon out to 10 miles.

^{f/} 12x24 mile rectangle open around mouth of Rogue River.

^{g/} Single point barbless hooks on all gear.

^{h/} Barbless hooks except for plugs and whole bait.

^{i/} Barbless hooks on all gear.

one additional coho. The quota for this season was 45,000 fish. Barbless hooks were required on all gear. Minimum size was 16".

EFFORT AND LANDING STATISTICS

Effort and catch statistics for the 1985 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, since 1979 catch and effort estimates have also been reported by catch area (Figure 1).

Data by port of landing are reported on a port area format that corresponds to the above catch areas. The Astoria area includes the Astoria-Warrenton-Hammond complex and dory landings at Seaside and Cannon Beach. The Garibaldi-Pacific City area includes the ports of Nehalem, Garibaldi, and Pacific City; the Depoe Bay-Waldport area, the ports of Depoe Bay, Newport and Waldport; the Florence-Bandon area, the ports of Florence, Winchester Bay, Coos Bay and Bandon; and the Port Orford-Brookings area, 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 21,100 boat days in 1985, or 167% greater than the 7,900 boat days in 1984 (Table 2, Column 1). The Coos Bay and Newport area accounted for 87% of the effort (Table 3). Effort in all areas except Brookings was much higher than in 1984, due mainly to the excellent chinook fishing. Effort was heaviest during July and August corresponding to the good chinook fishing in the Coos Bay area (Table 4).

The ODFW waived the one-fish landing requirement to validate troll permits south of Cape Blanco because there was no fishing opportunity in this area. The waiver was also applied to the area north of Cape Falcon because of the limited one-day coho season in this area.

Landings

Chinook. The 1985 troll chinook landings were 237% greater than the 1984 catch and 2% greater than the 1979-82 average (Table 2, Figure 2). A total of 216,600 chinook weighing 2.03 million pounds (dressed weight) was landed in 1985 compared to 64,300 chinook in 1984 and 212,000 chinook for 1979-82.

Of the 216,600 chinook landed in 1985, 94% were caught from the Newport area south (Table 3). Catches in all areas except Brookings were higher in 1985 than in 1984.

The troll landings of chinook salmon peaked during July in the Tillamook and Newport areas and during August in the Coos Bay and Brookings areas in 1985 (Tables 4, 5, and 6). This pattern, along with a near-record landing of 39,900 chinook in May, spread the landings over the entire season instead of the single high peak usually seen in August.

Coho. The commercial troll landings in 1985 totaled 84,000 fish weighing 483,800 pounds (dressed weight) which is 500% greater than the 1984 landings and 15% of the 1979-82 average (Table 2, Figure 2).

The coho fishery south of Cape Falcon ran from July 1-26. The landings from this quota area were 55,100 fish which includes 11,100 fish caught in California south of Point Delgada. This represents landings of 10,100 fish over the quota of 45,000 fish.

The PFMC decided to reduce the coho quota for the Columbia River to Cape Falcon area from 32,000 fish to 10,000 fish to compensate for a higher than

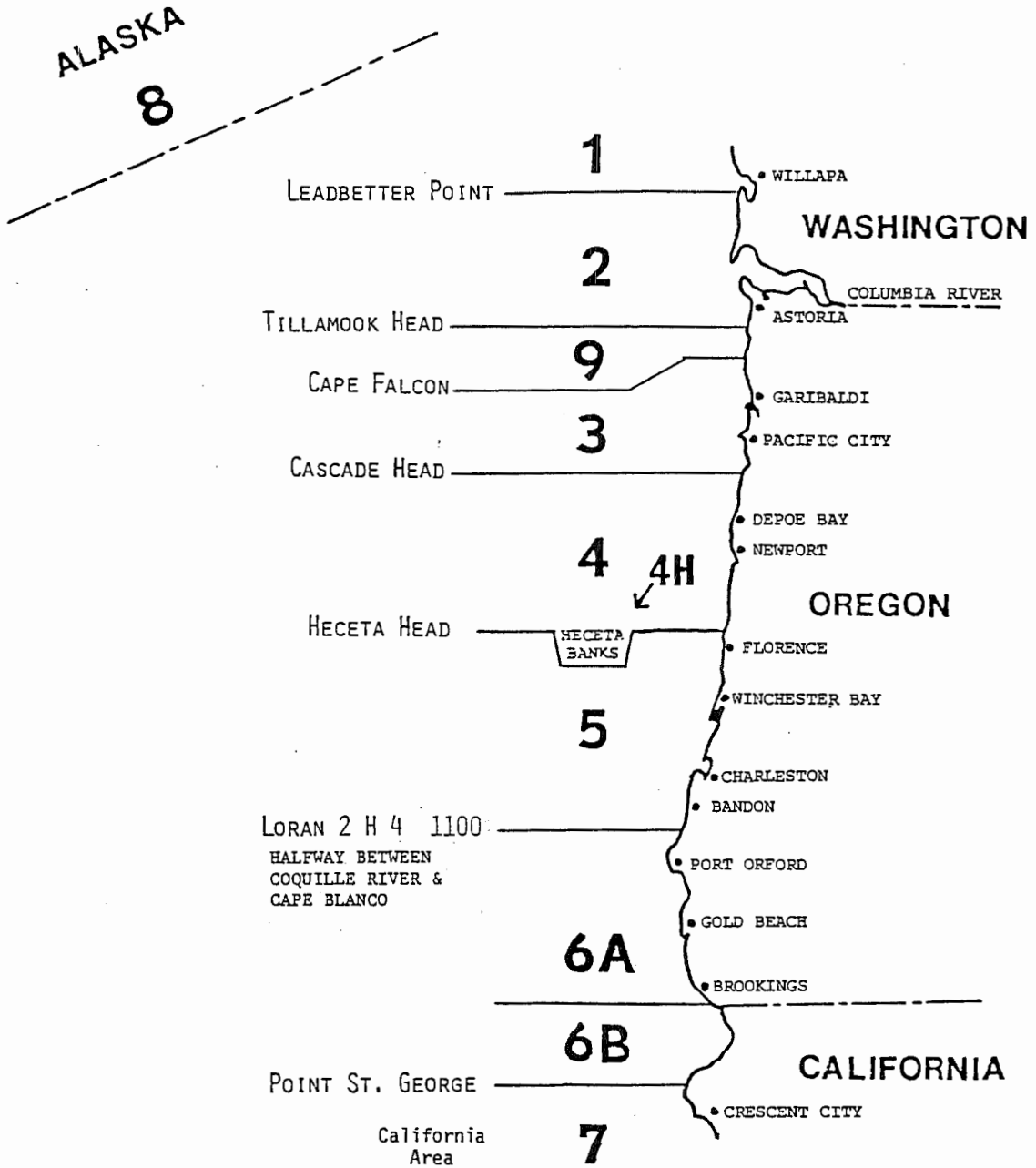


Figure 1. Ocean Salmon Management Areas

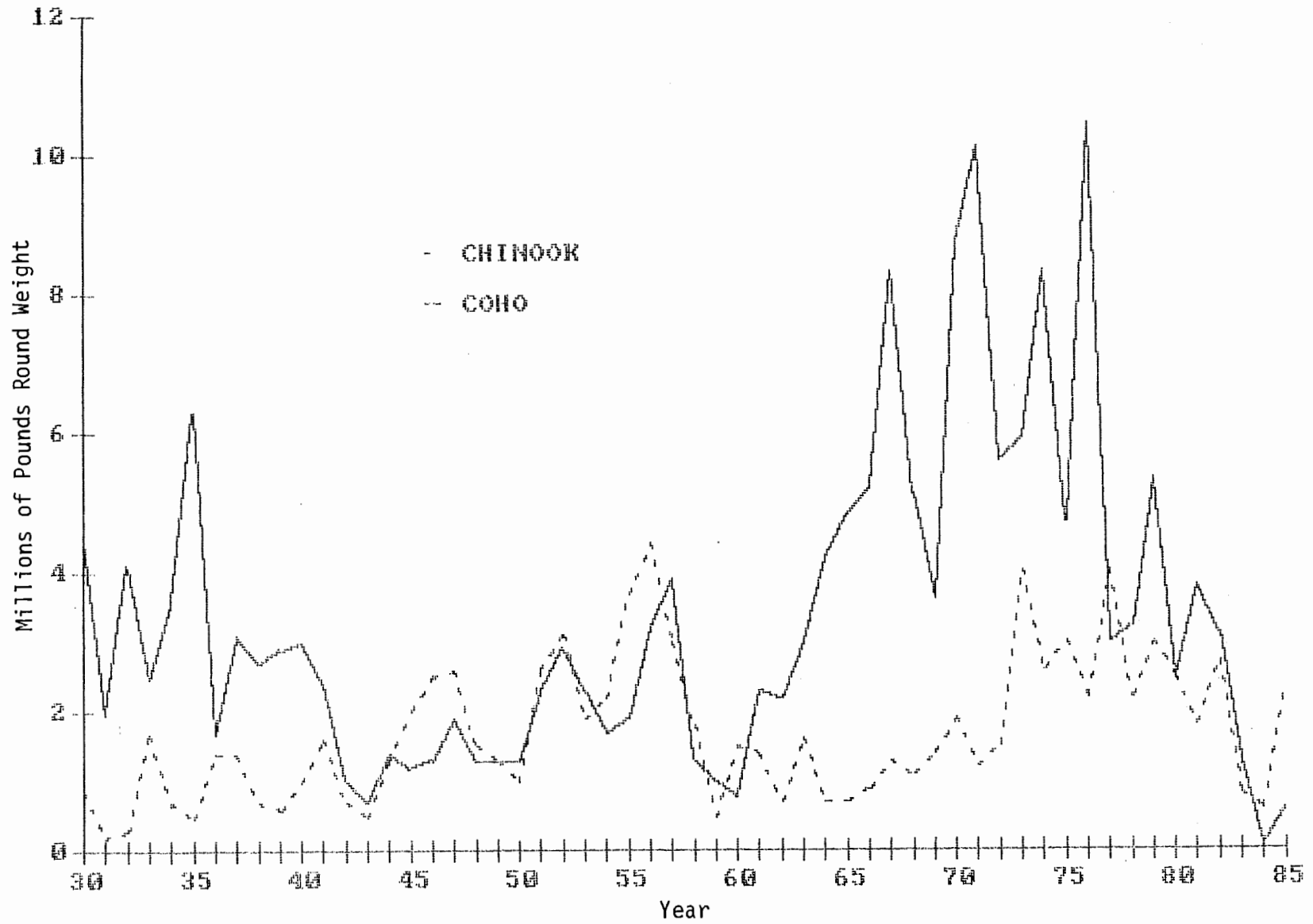


Figure 2. Oregon Ocean Troll Salmon Production, 1930-1985.

Table 2. Oregon Commercial Troll Salmon Effort and Landings in Number of Fish and Pounds Dressed, 1971-1985^{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	45,200	160,400	1,573,400	620,300	3,324,300	60,200	324,000
1982	33,900	232,600	2,351,300	522,200	2,708,400	0	0
1979-82 Average	42,000	212,000	2,169,100	560,100	3,202,600	40,400 ^{b/}	215,200 ^{b/}
1983	22,200	79,600	655,300	319,800	1,097,900	<100	200
1984	7,900	64,300	549,700	14,000	71,000	0	0
1985 ^{c/}	21,100	216,600	2,029,800	84,100	483,800	44,900	258,600

^{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 Landings by Area of Catch in Number of Fish, 1979-85.

Year	Area of Catch						Alaska	Wash.	Calif.	Total
	Col. 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	2,500	8,600	11,000	13,400	9,300	44,800	0	200	100	45,200
1982	800	3,600	5,800	13,600	8,900	32,800	0	700	400	33,900
1983	1,100	3,000	7,100	6,900	3,700	21,700	0	200	300	22,200
1984	500	500	1,900	2,300	2,600	7,800	0	100	<100	7,900
1985a/	600	1,400	4,100	14,000	600	20,800	0	300	<100	21,100
LANDINGS										
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	8,400	12,200	27,100	24,400	86,000	158,200	0	1,000	1,300	160,400
1982	7,300	9,000	27,600	109,200	69,500	222,600	0	7,000	3,100	232,600
1983	5,400	4,900	24,000	19,800	22,000	76,100	0	1,600	1,900	79,600
1984	1,500	1,600	18,700	15,400	24,600	61,800	0	200	300	64,300
1985a/	5,500	3,300	41,700	155,600	6,100	212,200	0	3,600	800	216,600
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	41,900	160,400	192,400	161,400	53,500	609,600	0	10,400	300	620,300
1982	24,100	114,800	117,800	227,900	22,300	506,800	0	14,100	1,200	522,200
1983	4,900	63,300	118,000	109,700	22,500	318,400	0	100	1,300	319,800
1984	13,900	0	0	0	0	13,900	0	200	0	14,000
1985a/	18,300	1,600	12,600	29,400	200	62,100	0	21,900	<100	84,100

a/ Preliminary

Table 4. Oregon Commercial Troll Effort and Landings of Coho and Chinook in Number of Fish by Month, 1971-75 Average and 1979-85^a/.

		April	May	June	July	August	September	October	November ^b /	Total
EFFORT (Boat Days)										
1971-75										
Average		NA	NA	NA	NA	NA	NA	NA	NA	NA
1979	Monthly	-	1,400	<100 ^c /	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	Monthly	-	3,300 ^e /	-	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	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
1983	Monthly	-	1,600	1,900	12,200	4,100	1,200	1,100	100	
	Cumulative	-	1,600	3,500	15,700	19,800	21,000	22,100	22,200	22,200
1984	Monthly	-	400	400	2,100	4,300	200	300	200	
	Cumulative	-	400	900	2,900	7,200	7,400	7,700	7,900	7,900
1985	Monthly	-	3,100	2,100	6,300	6,600	1,900	900	200	
Prelim.	Cumulative	-	3,100	5,200	11,500	18,100	20,000	20,900	21,100	21,100
Chinook										
1971-75										
Average		500	8,300	27,500	56,600	69,700	31,400	13,700	1,300	
	Monthly	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	207,200	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 ^c /	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	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	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
1983	Monthly	-	9,500	16,300	34,100	11,500	2,700	4,600	900	
	Cumulative	-	9,500	25,800	59,900	71,400	74,100	78,700	79,600	79,600
1984	Monthly	-	4,600	2,400	17,800	36,900	700	1,000	900	
	Cumulative	-	4,600	7,000	24,800	61,700	62,400	63,400	64,300	64,300
1985	Monthly	-	39,900	14,900	57,900	76,300	21,400	5,300	900	
Prelim.	Cumulative	-	39,900	54,800	112,700	189,000	210,400	215,700	216,600	216,600

COHO 1971-75 Average		Monthly	Cumulative	-	-	227,800	414,400	305,800	29,700	3,300	-	981,000
1978	Monthly	-	-	279,600	227,200	506,800	92,800	599,700	10,400	1,600	-	611,600
1978	Cumulative	-	-	279,600	227,200	506,800	92,800	599,700	10,400	1,600	-	611,600
1979	Monthly	-	-	400 ^{c/}	534,000	534,000	178,700	713,100	1,600	-	-	714,600
1979	Cumulative	-	-	400	534,000	534,000	178,700	713,100	1,600	-	-	714,600
1980	Monthly	-	-	-	228,700	228,700	137,500	366,200	17,100	-	-	383,300
1980	Cumulative	-	-	-	228,700	228,700	137,500	366,200	17,100	-	-	383,300
1981	Monthly	-	-	-	350,300	350,300	270,000	620,300	-	-	-	620,300
1981	Cumulative	-	-	-	350,300	350,300	270,000	620,300	-	-	-	620,300
1982	Monthly	-	-	-	522,200	522,200	-	-	-	-	-	522,200
1982	Cumulative	-	-	-	522,200	522,200	-	-	-	-	-	522,200
1983	Monthly	-	-	-	275,300	275,300	36,100	311,400	8,400	-	-	319,800
1983	Cumulative	-	-	-	275,300	275,300	36,100	311,400	8,400	-	-	319,800
1984	Monthly	-	-	-	-	-	14,000	14,000	-	-	-	14,000
1984	Cumulative	-	-	-	-	-	14,000	14,000	-	-	-	14,000
1985	Monthly	-	-	-	65,700	65,700	18,300	84,000	-	-	-	84,000
1985	Prelim. Cumulative	-	-	-	65,700	65,700	18,300	84,000	-	-	-	84,000

^{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.

Table 5. Oregon Troll Salmon Effort and Landings, in Numbers of Fish by Area of Catch and by Statistical Month, 1985.

Month	Oregon							Total			
	Columbia R	Tillamook	Newport	Coos Bay	Brookings	Subtotal	Alaska		Wash.	Calif.	
	<u>EFFORT (Boat Days)</u>										
May	400	<100	900	1,700	<100	3,000	0	100	<100	3,100	
June	0	100	400	1,600	0	2,100	0	0	<100	2,100	
July	0	600	1,600	4,000	<100	6,100	0	200	<100	6,300	
August	300	500	900	4,800	100	6,600	0	0	<100	6,600	
September	0	100	100	1,500	100	1,900	0	0	<100	1,900	
October	0	100	100	500	200	900	0	0	0	900	
November	0	0	0	0	200	200	0	0	0	200	
Total	600	1,400	4,100	14,000	600	20,800	0	300	<100	21,100	
	<u>Chinook</u>										
May	5,000	<100	14,200	19,000	100	38,400	0	1,500	<100	39,900	
June	0	200	3,700	11,000	0	14,900	0	0	<100	14,900	
July	0	1,700	15,900	37,800	400	55,800	0	2,100	100	57,900	
August	500	900	6,600	65,400	2,100	75,500	0	0	700	76,200	
September	0	300	700	18,600	1,700	21,400	0	-	<100	21,400	
October	0	200	500	3,800	800	5,200	0	-	0	5,300	
November	0	0	0	0	900	900	0	-	-	900	
Total	5,500	3,300	41,700	155,600	6,100	212,200	0	3,600	800	216,600	
	<u>Coho</u>										
June	-	-	-	-	-	-	0	-	-	-	
July	-	1,600	12,600	29,400	200	43,800	0	21,900	<100	65,700	
August	18,300	-	-	-	-	18,300	0	-	-	18,300	
September	-	-	-	-	-	-	0	-	-	-	
Total	18,300	1,600	12,600	29,400	200	62,100	0	21,900	<100	84,100	

expected coho catch north of Leadbetter Point in July. We decided to open the season for one day only. Oregon trollers landed 18,300 coho and Washington trollers landed 14,200 coho for a total of 32,500 coho for the August 21 fishing period.

Pink Salmon

Pink salmon landings in 1985 were 44,900 fish. Catches from the Coos Bay area accounted for 74% of the total Oregon landings.

THE DOLLAR VALUE OF THE LANDINGS

The chinook landings in 1985 were worth \$5,043,000 to the fishermen, the coho \$729,000. The average price per pound for chinook was \$2.48, for coho \$1.51 (Table 7).

EXTENDED TROLL SEASON LANDINGS

Chinook landings during the 1985 Elk and Sixes River area extended season were 31,300 pounds dressed weight or an estimated 1,600 fish.

One objective of the extended seasons has been the harvest of mature, surplus local stocks of fish. The available data indicate that both extended seasons accomplished this objective.

AVERAGE WEIGHT DATA

Data on average dressed weights from chinook and coho by port of landing enabled us to convert landings in pounds to numbers of fish.

The seasonal average weight for chinook in 1985 was 9.4 pounds dressed weight compared to 8.5 pounds in 1984 (Table 8). In 1985, the average weights were larger in all areas except Tillamook when compared to 1984.

Table 6. Oregon Troll Salmon Landings by Species in Pounds Dressed, by Calendar Month and Port Area, 1985.

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	43,459	4,134	131,035	133,326	3,320	315,274
June	869	2,557	37,886	145,553	1,622	188,487
July	19,759	12,573	144,633	427,382	7,981	612,328
August	3,863	11,285	48,977	564,417	12,443	640,985
September	862	4,596	10,951	182,952	9,487	208,848
October	729	2,201	5,262	24,171	12,644	45,007
November	117	0	0	386	18,410	18,913
Total	69,658	37,346	378,744	1,478,187	65,907	2,029,842
<u>COHO</u>						
July	86,894	9,851	78,404	198,841	1,433	375,423
August	62,207	25,151	18,860	2,186	0	108,404
Total	149,101	35,002	97,264	201,027	1,433	483,827

Table 7. Estimates of Ex-vessel Value^{a/} of Oregon Troll Salmon Landings and Average Price per Pound, 1971-85.

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	4,036,000	2.57	5,535,000	1.66	9,571,000
1982	6,094,000	2.59	3,801,000	1.40	9,895,000
1983	1,244,000	1.90	1,052,000	0.96	2,296,000
1984	1,513,00	2.75	118,000	1.67	1,631,000
1985 ^{b/}	5,043,000	2.48	729,000	1.51	5,838,000

^{a/} Dressed weight value

^{b/} Preliminary

Table 8. Observed Average Dressed Weight and Calculated Number of Chinook Landed in Oregon by Calendar Month and Port Area, 1985.

Port of Landing	Month							Total
	May	June	July	Aug.	Sept.	Oct.	Nov.	
<u>Astoria</u>								
Numbers	4,969	97	1,935	360	75	86	13	7,535
Pounds	43,459	869	19,759	3,863	862	729	117	69,658
Ave. wt.	8.7	9.0	10.2	10.7	11.5	8.5	9.0	9.2
<u>Garibaldi-Pacific City</u>								
Numbers	530	264	1,367	892	328	114	0	3,495
Pounds	4,134	2,557	12,573	11,285	4,596	2,201	0	37,346
Ave. wt.	7.8	9.7	9.2	12.7	14.0	19.3	0	10.7
<u>Depoe Bay-Waldport</u>								
Numbers	13,064	3,824	14,315	5,365	1,145	599	0	38,312
Pounds	131,035	37,886	144,633	48,977	10,951	5,262	0	378,744
Ave. wt.	10.0	9.9	10.1	9.1	9.6	8.8	0	9.9
<u>Florence-Bandon</u>								
Numbers	15,508	15,972	42,938	62,976	21,765	2,756	23	161,938
Pounds	133,326	145,553	427,382	564,417	182,952	24,171	386	1,478,187
Ave. wt.	8.6	9.1	10.0	9.0	8.4	8.8	16.8	9.1
<u>Port Orford-Brookings</u>								
Numbers	400	151	747	1,354	1,034	707	945	5,338
Pounds	3,320	1,622	7,981	12,443	9,487	12,644	18,410	65,907
Ave. wt.	8.3	10.7	10.7	9.2	9.2	17.9	19.5	12.3
<u>Total</u>								
Numbers	34,471	20,308	61,302	70,947	24,347	4,262	981	216,618
Pounds	315,274	188,487	612,328	640,985	208,848	45,007	18,913	2,029,842
Ave. wt.	9.1	9.3	10.0	9.0	8.6	10.6	19.3	9.4

The seasonal average weight for coho in 1985 was 5.8 pounds dressed weight compared to 5.1 pounds in 1984 (Table 9). The average weight for 1985 is of less value than that of previous years when used for comparison purposes, since the fish were sampled from a fishery operating for a relatively short period of time. Previous data cover a range of areas and time.

The seasonal average weight for pink salmon in 1985 was 5.8 pounds dressed weight (Table 10). This is the largest average weight for pink salmon on record in Oregon.

TROLL SALMON MARK SAMPLING

In 1985, two samplers were assigned to Newport and Charleston and one each to Astoria, Garibaldi, Winchester Bay and Port Orford. Some sampling of the troll fishery was done at Florence by the recreational sampler. In 1985, 39% of all chinook and 41% of all coho landings were examined for coded wire tags (Table 11, 12).

Chinook. Samplers found 4,420 adipose-clipped chinook in the 1985 troll landings and obtained 4,406 random snouts. Technicians found tags in 3,853 or 87% of the snouts. The main agencies contributing the tags were:

Oregon Department of Fish and Wildlife	60%
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Coho. Samplers found 1,683 adipose-clipped coho in the 1985 troll coho landings and obtained 1,620 random snouts. Technicians found coded-wire tags in 1,433 or 88% of the snouts. The main agencies contributing tags were:

Oregon Department of Fish and Wildlife	43%
Washington Department of Fisheries	23%
Oregon Aqua-Foods	11%
U.S. Fish and Wildlife Service	7%

Table 9. Observed Average Dressed Weight and Calculated Number of Coho Landed in Oregon by Calendar Month and Port Area, 1985.

Port of Landing	July	August	Sept.	Total
<u>Astoria</u>				
Numbers	19,111	10,599	0	29,710
Pounds	86,894	62,207	0	149,101
Ave. wt.	4.5	5.9	0	5.0
<u>Garibaldi-Pacific City</u>				
Numbers	1,743	4,183	0	5,926
Pounds	9,851	25,151	0	35,002
Ave. wt.	5.7	6.0	0	5.9
<u>Depoe Bay-Waldport</u>				
Numbers	13,444	3,157	0	16,601
Pounds	78,404	18,860	0	97,264
Ave. wt.	5.8	6.0	0	5.9
<u>Florence-Bandon</u>				
Numbers	31,209	371	0	31,580
Pounds	198,841	2,186	0	196,492
Ave. wt.	6.4	5.9	0	6.3
<u>Port Orford-Brookings</u>				
Numbers	231	0	0	231
Pounds	1,433	0	0	1,433
Ave. wt.	6.2	0	0	6.2
<u>Total</u>				
Numbers	65,738	18,310	0	84,048
Pounds	375,423	108,404	0	483,827
Ave. wt.	5.7	5.9	0	5.8

Table 10. Observed Average Dressed Weight and Calculated Number of Pink Salmon by Calendar Month and Port Area, 1985.

Port of Landing	May	June	July	August	Sept.	Oct.	Nov.	Total
<u>Astoria</u>								
Numbers	0	0	754	1,331	0	0	0	2,085
Pounds	0	0	3,141	7,884	0	0	0	11,025
Ave. wt.	0	0	4.2	5.9	0	0	0	5.3
<u>Garibaldi-Pacific City</u>								
Numbers	13	24	79	4,909	2	0	0	5,027
Pounds	23	63	342	28,796	11	0	0	29,235
Ave. wt.	1.8	2.6	4.3	5.9	5.5	0	0	5.8
<u>Depoe Bay-Waldport</u>								
Numbers	15	59	230	2,806	0	0	0	3,110
Pounds	39	179	1,232	16,082	0	0	0	17,532
Ave. wt.	2.6	3.0	5.4	5.7	0	0	0	5.6
<u>Florence-Bandon</u>								
Numbers	1,356	664	5,733	26,605	12	0	0	34,370
Pounds	2,686	1,997	32,146	162,409	74	0	0	199,312
Ave. wt.	2.0	3.0	5.6	6.1	6.2	0	0	5.8
<u>Port Orford-Brookings</u>								
Numbers	57	3	61	177	0	0	0	298
Pounds	125	10	318	1,078	0	0	0	1,531
Ave. wt.	2.2	3.3	5.2	6.1	0	0	0	5.2
<u>Total</u>								
Numbers	1,441	750	6,857	35,828	14	0	0	44,890
Pounds	2,873	2,249	37,179	216,249	85	0	0	258,635
Ave. wt.	2.0	3.0	5.4	6.0	6.1	0	0	5.8

Table 11. Oregon Troll Chinook Mark Sampling by Calendar Month and Port Area, 1985.

Port of Landing	Month							Total
	May	June	July	Aug.	Sept.	Oct.	Nov.	
<u>Astoria</u>								
No. Examined	1,945	97	560	89	0	0	0	2,691
No. Landed	4,969	97	1,935	360	75	86	13	7,535
% Examined	39	100	29	25	0	0	0	36
No. Marks	40	5	14	4	0	0	0	63
<u>Garibaldi-Pacific City</u>								
No. Examined	117	14	648	296	21	20	0	1,116
No. Landed	530	264	1,367	892	328	114	0	3,495
% Examined	22	5	47	33	6	18	0	32
No. Marks	1	0	10	6	0	1	0	18
<u>Depoe Bay-Waldport</u>								
No. Examined	4,036	1,619	8,048	3,243	150	213	0	17,309
No. Landed	13,064	3,824	14,315	5,365	1,145	599	0	38,312
% Examined	31	42	56	61	13	36	0	45
No. Marks	118	35	125	82	9	28	0	397
<u>Florence-Bandon</u>								
No. Examined	7,335	6,315	15,332	20,137	9,322	993	0	59,434
No. Landed	15,508	15,972	42,938	62,976	21,765	2,756	23	161,938
% Examined	47	40	36	32	43	36	0	37
No. Marks	162	193	453	1,639	863	65	0	3,375
<u>Port Orford-Brookings</u>								
No. Examined	384	97	513	1,002	923	659	810	4,388
No. Landed	400	151	747	1,354	1,034	707	945	5,338
% Examined	95	64	69	74	89	93	86	82
No. Marks	7	3	8	125	95	69	81	388
<u>Total</u>								
No. Examined	13,817	8,142	25,101	24,767	10,416	1,885	810	84,938
No. Landed	34,471	20,308	61,302	70,947	24,347	4,262	981	216,618
% Examined	40	40	41	35	43	44	83	39
No. Marks	328	236	610	1,856	967	163	81	4,241

Table 12. Oregon Troll Coho Mark Sampling by Calendar Month and Port Area, 1985.

Port of Landing	Month			Total
	July	August	Sept.	
<u>Astoria</u>				
No. Examined	5,996	3,926	0	9,922
No. Landed	19,111	10,599	0	29,710
% Examined	31	37	0	33
No. Marks	252	210	0	462
<u>Garibaldi-Pacific City</u>				
No. Examined	1,039	2,631	0	3,670
No. Landed	1,743	4,183	0	5,926
% Examined	60	64	0	62
No. Marks	34	109	0	143
<u>Depoe Bay-Waldport</u>				
No. Examined	7,182	1,732	0	8,914
No. Landed	13,444	3,157	0	15,601
% Examined	53	55	0	54
No. Marks	314	82	0	396
<u>Florence-Bandon</u>				
No. Examined	12,063	0	0	12,063
No. Landed	31,209	371	0	31,580
% Examined	39	0	0	38
No. Marks	640	0	0	640
<u>Port Orford-Brookings</u>				
No. Examined	159	0	0	159
No. Landed	231	0	0	231
% Examined	69	0	0	69
No. Marks	7	0	0	7
<u>Total</u>				
No. Examined	25,534	8,289	0	34,728
No. Landed	65,738	18,310	0	84,048
% Examined	40	45	0	41
No. Marks	1,170	401	0	1

THE 1985 RECREATIONAL OCEAN SALMON FISHERY

The 1985 recreational ocean salmon fishery rebounded from the record low 1984 season but it was still under tight regulatory restraints. The coho stocks were, with some limited exceptions, not targeted by the commercial fleet and there was no commercial trolling allowed between Cape Blanco in Oregon and Point Delgada in California. The recreational anglers also had some unique restrictions as discussed under "REGULATIONS".

The recreational fleet was hampered by scattered coho stocks during the initial weeks in July and by foggy conditions throughout the season. However, the salmon showed good growth and condition. Near record chinook catches and a very strong showing of pink salmon partly compensated for the restrictive coho quota.

In 1985 our ocean recreational fishery survey estimated a catch of 55,867 chinook, 182,486 coho and 7,711 pink salmon with 252,793 salmon angler trips and 19,277 bottomfish trips. The chinook catch is the highest since 1977 and the pink salmon catch is a record high for Oregon anglers.

REGULATIONS

Ocean salmon regulations for Oregon's recreational fishery in 1985 were restrictive with low quotas, late opening dates and other special regulations. The regulations were implemented by the Pacific Fishery Management Council and the Oregon Department of Fish and Wildlife in response to expected low abundance of coho and many chinook stocks along the Pacific coast (Table 13).

A recreational quota of 99,000 coho and 12,100 chinook was established between Leadbetter Point, Washington and Cape Falcon, Oregon.

A conservation zone closure was in effect out to 200 miles between the red buoy line on the South Jetty of the Columbia River to Klipsan Beach and inside 3 miles from Klipsan Beach to Leadbetter Point (Figure 3 and Table 13). South of Cape Falcon, including California, the recreational coho quota was set at 170,000 fish. There were no conservation zone closures for Oregon anglers south of Cape Falcon.

Both size and possession limits were different north and south of Cape Falcon. North of Cape Falcon, the daily bag limit was 2 salmon, with minimum size limits of 24 inches for chinook and 16 inches for other salmon. Only barbless hooks were permitted. There was an annual bag limit of 40 salmon or steelhead. However, ocean salmon angling was only permitted Sunday through Thursday.

South of Cape Falcon, the daily bag limit was also 2 salmon but the first two salmon hooked per day had to be retained regardless of species or size. Barbed or barbless hooks were allowed. In addition to the annual bag limit of 40 salmon or steelhead, there was a further restriction that not more than 6 salmon could be caught in 7 consecutive days. The salmon season opened July 1 south of Cape Falcon and June 30 northward. The all salmon season closed on September 2 south of Cape Falcon and August 22 north of Cape Falcon. The Buoy 10 fishery inside the Columbia River mouth was opened to salmon fishing on August 18 and catches in this area counted towards ocean quotas until the ocean season closed August 22.

A PFMC-scheduled recreational salmon fishery continued south of Cape Blanco through October for all species except coho. State waters off Tillamook Bay were open to chinook fishing from September 15 until October 31. There had been a November target fishery on chinook in state waters off the Elk and Chetco rivers from 1977 to 1982. The Chetco River area has been

closed since 1983 because of low abundance of Chetco fish. The fishery off the Elk River has been scheduled every year but is not accessible to most recreational boats (Tables 13 and 14).

OCEAN SALMON SAMPLING

Twenty-three seasonal aides sampled the ocean recreational fishery in 1985. Newport had 4 samplers; Astoria, Garibaldi, Winchester Bay, Coos Bay and Brookings each had 3; Pacific City, Depoe Bay, Florence and Gold Beach each had one sampler. All samplers made boat counts and sampled anglers.

A modified random sampling design was used at each port to survey the ocean recreational fishery. Catch per unit effort data were collected at least 5 days a week, including all weekends and holidays through interviews with ocean anglers at boat ramps, moorages, and charter docks. The salmon catch was sampled for species, marks, scales, and lengths. Snouts were collected from marked (adipose-clipped) fish and their coded wire tags were later recovered.

Effort was primarily obtained through boat counts by ODFW samplers but Coast Guard bar crossing counts and information from charter boat offices were also used. In Pacific City, total effort was estimated from a combination of trailer counts and angler interviews. All catch and effort data were key-punched and processed on Oregon State University's CYBER computer. The survey provided accurate weekly estimates of Oregon's ocean recreational effort and catch within 7 days after the week ended. Preliminary catch estimates were available within a day after the fishing week ended.

Department samplers checked 110,907 salmon in 1985 compared to 60,266 salmon in 1984. Catch sampling rates in 1985 ranged from 72% at Pacific City to 29% at Florence. Overall, 47% of the total combined salmon catch from all ports was sampled in 1985, an increase of 5% over 1984 (Table 15).

Table 13. Recreational Management Measures Approved for 1985 Ocean Salmon Fisheries.

AREA AND SEASON	SALMON SPECIES	Quota		Minimum Size Limit (inches)		Daily Bag Limit and Special Restrictions by Area
		Chinook	Coho	Chinook	Coho	
QUEETS RIVER TO U.S.-CANADA BORDER June 30 through Sept. 1 Sunday through Thursday only	All	1,700	28,400	24	16	2 fish, except no more than one chinook; barbless hooks.
LEADBETTER POINT TO QUEETS RIVER June 30 thru Sept. 9 Sunday through Thursday only	All	23,000	74,000	24	16	2 fish; barbless hooks; closed inside 3 miles.
CAPE FALCON TO LEADBETTER POINT June 30 thru Aug. 22 Sunday through Thursday only	All	12,100	99,000	24	16	2 fish; barbless hooks; Area closures: (1) Red Buoy line on Columbia R. mouth ^{b/} north to Klipsan Beach, 0-200 miles. (2) North of Klipsan Beach to Leadbetter Pt. closed inside 3 miles. NOTE: Fishery closed on Fridays and Saturdays.
TWIN ROCKS TO PYRAMID ROCK (OFF TILLAMOOK BAY) State waters only Sept. 15 thru Oct. 31	All except coho	None	-	None	None	
CAPE BLANCO TO CAPE FALCON July 1 thru Sept. 2	All	None	a/	None	-	First 2 fish hooked per day must be retained; no more than 6 fish may be retained in 7 consecutive days.
TOWER ROCK TO HUMBUG MT. (ELK R.) State waters only Oct. 1 thru Nov. 30	All except coho	None	-	None	-	
OR-CA BORDER TO CAPE BLANCO May 25 thru May 31 July 1 thru Sept. 2 Sept. 3 thru Oct. 31	All All All except coho	None None None	a/ - -	None None None	None None -	First 2 fish hooked per day must be retained; no more than 2 fish retained per day; no more than 6 fish may be retained in 7 consecutive days.
U.S.-MEXICO BORDER TO OR-CA BORDER Feb. 16 through Nov. 17	All	None	a/	20	20	2 fish; barbless hooks; Conservation Zone 2 (Mouth of Klamath River is closed Aug. 1 thru Aug. 31 ^{c/})

a/ Coho quota south of Cape Falcon is 170,000.

b/ Red Buoy Line. The line extends seaward along the south jetty of the Columbia River to the visible tip of the jetty and then to Buoy #2S, then southwesterly to Buoy #4, continuing southwesterly to Buoy #2, and then to the Lightship Buoy, then due west along 46°11'6" N latitude.

c/ Conservation Zone 2 is defined as: The ocean area surrounding the Klamath River mouth bounded on the north by 41°38'48" N latitude (approximately 6 nautical miles north of the Klamath River mouth) on the west by 124°23'00" W longitude (approximately 12 miles from shore), and on the south by 41°26'48" N latitude approximately 6 nautical miles south of the Klamath River mouth.

Table 14. Summary of Oregon's Recreational Ocean Salmon Regulations, 1946-84

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 29-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. (State waters 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 November 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 November 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 28-June 11 (Between Cape Blanco and Cape Falcon in state waters) May 28-Aug. 1 ^c / (South of Cape Blanco) June 12-August 1 ^c / (Entire coast) Aug. 2-Oct. 31 November 1-30	First 2 chinook taken per day; barbless hook only. 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.

Table 14 (Continued)

Year	Season	Regulations
1983	May 28-Sept. 18 (South of Cape Blanco)	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.
	June 18-Sept. 11 (North of Cape Falcon)	
	June 18-Sept. 18 (Entire coast south of Cape Falcon)	
	Sept. 19-Oct. 31 November 1-30	(South of Cape Blanco) First 2 chinook taken/day. (State waters off Elk River)--first 2 chinook taken/day.
1984	July 9-Aug. 7	(South of Cape Falcon) 2 fish/day; 40 fish annual limit. Minimum size 20". Single-point barbless hooks.
	July 28-Aug. 8	(Cape Falcon to Columbia River, South Jetty) 2 coho/day; 40 fish annual limit. Minimum size 16". No chinook allowed. Single-point barbless hooks.
	Aug. 9-Aug. 24	(South of Cape Blanco)--2 chinook/day; 20" minimum size. Single-point barbless hooks.
	Aug. 25-Sept. 3 (State waters only)	(Cape Falcon to Cape Blanco)--1 fish/day; 20" minimum size. Single-point barbless hooks. (Cape Blanco to OR/CA border)--2 fish/day, one of which can be coho; 20" minimum size. Single-point barbless hooks.
	Sept. 4-Oct. 31	(Cape Blanco to OR/CA border)--2 chinook/day; 20" minimum size. Single-point barbless hooks.
	Sept. 15-Sept. 21 ^{d/} (State waters only)	(Manhattan Beach to Pyramid Rock--off Tillamook Bay) 2 chinook/day; 20" minimum size. Single-point barbless hooks.
	November 1-30 (State waters only)	(Cape Blanco to Humbug Mountain-Elk River)--2 chinook/day; 20" minimum size. Single-point barbless hooks.

^{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.

^{d/} Pacific Ocean between 45 degrees 38 minutes N. Latitude and 45 degrees 29 minutes 45 seconds N. latitude and seaward 3 miles.

Table 15. Recreational Ocean Salmon Sampling Rates at Oregon Ports, 1977-85.

Port	Percent of Catch Sampled ^{a/}								
	1977	1978	1979	1980	1981	1982	1983	1984	1985
Astoria	9	29	35	20	40	42	44	31	57
Garibaldi	48	33	43	39	36	55	61	35	47
Pacific City	-	41	-	-	82	87	82	71	72
Depoe Bay	26	49	47	45	50	68	60	65	60
Newport	15	15	31	39	40	31	34	48	36
Florence	-	-	-	-	30	37	44	27	29
Winchester Bay	21	22	35	33	26	32	33	27	34
Coos Bay	32	51	47	49	57	63	47	54	48
Gold Beach	29	23	42	50	48	62	43	47	43
Brookings	19	20	29	22	21	30	36	42	49
Combined Ports	19	27	37	34	39	44	42	42	47
Number of Samplers	8	11	13	14	16	16	19	20	23
Sampler months	27	36	47	54	62	51	60	55	47
^{a/} Percentage of total catch observed by samplers =						$\frac{\text{number of salmon observed}}{\text{estimated catch of salmon}}$			

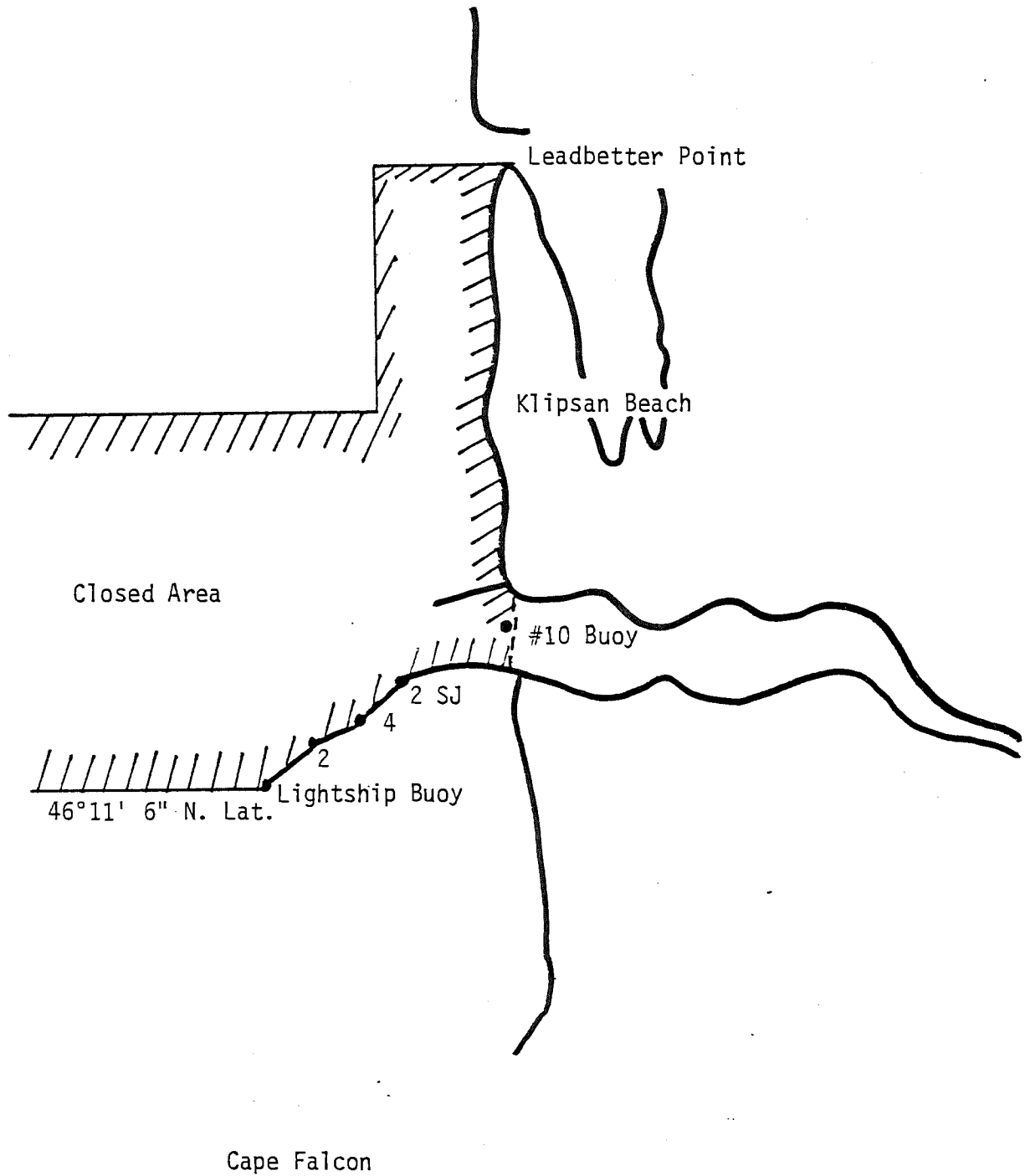


Figure 3. Area Restrictions in the Ocean Recreational Salmon Fishery off the Columbia River, 1985.

EFFORT AND CATCH STATISTICS

Effort

Historically, ocean fishing effort data have always included a small number of bottomfishing trips. Since 1979, salmon fishing trips have been tallied separately. The majority of ocean anglers choose salmon fishing over bottomfishing when both fisheries are available. In 1985, 251,600 trips (93%) targeted on salmon and 19,300 trips went out for bottomfish during the salmon season for a combined total of 270,900 angler trips. The 1985 salmon angler trips fell only 2% below the 1979-84 average while the total trips are 9% below the 1979-84 average. The total effort is 22% below the 1971-84 average of 347,968 angler trips which includes years with no closed season or 8 month seasons (Table 16).

July is usually the peak month for recreational ocean salmon effort, followed by August. The seasons have been largely restricted to those two months for the last four years. From Winchester Bay south, July tends to have the highest effort while to the north, August is the peak month (Tables 17, 18). That relationship also held in 1985. Coast-wide, 126,200 angler trips or 50% of the total salmon trips occurred in August and 106,800 trips or 42% of the total took place in July. August was also the top month for bottomfishing effort with 11,500 trips or 60% of the total bottomfish trips (Table 17).

Brookings had the highest effort in 1985 with 52,400 or 21% of the total salmon trips. The salmon season was also the longest on the southern Oregon coast (May 25-31 and July 1 through October 31). Newport had the second highest salmon effort with 45,600 angler trips followed by Winchester Bay with 34,400. Salmon effort increased from the record low 1984 levels in all ports (Table 18). Table 19 shows past ocean recreational effort and catch by management areas.

Table 16. Oregon Ocean Recreational Salmon Catch and Effort for 1966-85^{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	0.88
1973	-	350,400	232,068	60,984	2,008	0.84
1974	-	335,849	314,501	36,729	34	1.05
1975	-	407,498	252,209	75,719	1,218	0.81
1971-75 Avg	-	345,829	271,776	49,426	1,115^{b/}	0.93
1976	-	538,414	501,306	79,316	50	1.08
1977	-	404,534	195,277	61,364	4,037	0.62
1978	-	403,740	259,769	22,844	24	0.70
1979	301,343	341,770	180,834	20,902	607	0.67
1980	331,443	362,015	325,843	19,014	24	1.04
1981	311,027	350,937	199,812	29,173	1,589	0.74
1982	226,029	275,947	175,128	38,716	14	0.95
1983	226,022	261,456	146,904	24,677	69	0.76
1984	153,061	203,591	123,325	16,992	3	0.91
Long-term average	258,154	347,968	252,741	38,954	1,378^{b/}	0.97
1985	251,583	270,860	182,486	55,867	7,711	0.97

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

^{b/} Odd year average

Table 17. Oregon Ocean Recreational Effort by Port, by Month and by Trip Type, 1985.

Port/Trip Type	Month						Total
	May	June	July	August	Sept.	Oct.	
Columbia R.	-	605	7,940	11,607	-	-	20,152
Salmon	-	605	7,838	11,578	-	-	20,021
Bottomfish	-	0	102	29	-	-	131
Garibaldi	-	-	11,704	20,053	2,131	1,603	35,491
Salmon	-	-	9,876	18,143	2,057	1,603	31,679
Bottomfish	-	-	1,828	1,910	74	-	3,812
Pacific City	-	-	3,396	3,774	212	-	7,382
Salmon	-	-	3,151	3,573	153	-	6,877
Bottomfish	-	-	245	201	59	-	505
Depoe Bay	-	-	9,592	16,771	734	-	27,097
Salmon	-	-	8,454	15,817	716	-	24,987
Bottomfish	-	-	1,138	954	18	-	2,110
Newport	-	-	16,652	32,882	1,224	-	50,758
Salmon	-	-	15,856	28,604	1,107	-	45,567
Bottomfish	-	-	796	4,278	117	-	5,191
Florence	-	-	5,434	7,906	434	-	13,774
Salmon	-	-	5,406	7,906	434	-	13,746
Bottomfish	-	-	28	0	0	-	28
Winchester Bay	-	-	19,241	14,798	597	-	34,636
Salmon	-	-	19,188	14,641	570	-	34,399
Bottomfish	-	-	53	157	27	-	237
Coos Bay	-	-	8,833	7,872	383	-	17,081
Salmon	-	-	8,542	6,645	169	-	15,356
Bottomfish	-	-	284	1,227	214	-	1,725*
Gold Beach	-	-	3,077	3,963	187	-	7,227
Salmon	-	-	2,948	3,441	152	-	6,541
Bottomfish	-	-	129	522	35	-	686
Brookings	4,761	-	26,213	18,141	4,042	4,105	57,262
Salmon	4,556	-	25,590	15,892	2,405	3,967	52,410
Bottomfish	205	-	623	2,249	1,637	138	4,852
Total south of Cape Falcon	4,761	-	104,135	126,160	9,944	4,105	250,708
Salmon	4,556	-	99,011	114,662	7,763	5,570	231,562
Bottomfish	205	-	5,124	11,498	2,181	138	19,146
State Total	4,761	605	112,075	137,767	9,944	5,708	270,860
Salmon	4,556	605	106,849	126,240	7,763	5,570	251,583
Bottomfish	205	0	5,226	11,527	2,181	138	19,277

* Includes 7 tuna angler trips.

Catch

The sampling survey estimated the total salmon catch by species for Oregon's ocean fishery in 1985 except for minor landings at unsurveyed ports (Table 20). Fish landed at these unsurveyed ports represent less than one percent of the total catch off Oregon and will not be available until late 1986. The 1985 total ocean recreational salmon catch was 246,100 fish, a 43% increase over the record low 1984 level. This is still only 42% of the record high recreational ocean catch (580,700) in 1976 but 84% of the 1966-84 average of 291,700 fish (Table 16). Figure 4 shows the trend in recreational ocean catches since 1966.

Chinook. The recreational harvest of 55,900 chinook in 1985 was the highest since 1977, exceeding the 1971-75 average catch of 49,400 fish by 12% and the long-term 1966-84 average catch of 39,000 fish by 30% (Table 16).

July accounted for 56% of the catch (31,400 fish) with Brookings taking 69% of those fish. Brookings also dominated the total chinook landings, harvesting 33,600 fish or 60% of the total. Winchester Bay and the Columbia River area had the next highest catches with 6,100 and 3,600 chinook respectively (Table 21). Historically, the Columbia River and the Brookings areas have been the most important chinook catch areas but the complex fisheries issues north of Cape Falcon have very much dampened catches in that area. The Coos Bay-Winchester Bay areas also are prominent catch areas most years (Tables 19 and 22).

Coho. The ocean recreational coho catch of 182,500 fish was 32% higher than the record low 1984 catch but only 67% of the 1971-75 average of 271,800 coho. In comparison, the long term 1966-84 average coho catch is 252,700 fish (Table 16).

In the abbreviated 1985 season, 108,300 or 59% of the total recreational coho catch was made in August and 71,100 coho (39%) were taken in July. The August catch was especially significant from Newport north. Newport landed the most coho, 35,200 fish or 19% of the total season's catch, but Astoria, Winchester Bay, Depoe Bay and Garibaldi also made substantial landings, together accounting for another 63% of the total catch. Coho catches increased from the 1984 season in all ports except Brookings and Gold Beach (Table 23). A historical perspective on salmon catch by month and management area is shown in Tables 19 and 24.

Table 18. Oregon Recreational Effort in Salmon Angler Trips by Management Area^{a/} and Month for 1979-1985.

Area	April	May	June	July	August	Sept.	Oct.	Nov.	Season ^{b/}
<u>Columbia R</u>									
1979	-	800	5,000	14,800	19,700	2,900	-	-	43,300
1980	-	1,300	7,800	13,700	19,700	3,800	-	-	46,300
1981	-	1,000	4,900	14,100	20,100	4,600	-	-	44,700
1982	-	-	4,900	22,300	-	-	-	-	27,200
1983	-	-	2,700	12,900	11,500	3,800	-	-	30,900
1984	-	-	-	2,000	5,100	-	-	-	7,100
1985	-	-	600	7,800	11,600	-	-	-	20,000
<u>Tillamook</u>									
1979	-	900	3,200	11,800	14,500	600	-	-	31,000
1980	-	400	8,500	17,300	18,100	3,600	-	-	47,800
1981	-	1,300	2,200	11,500	16,500	6,600	-	-	38,000
1982	-	100	2,700	21,800	-	-	-	-	24,600
1983	-	-	1,200	12,600	7,800	3,700	-	-	25,300
1984	-	-	-	11,800	10,800	1,200	-	-	23,800
1985	-	-	-	13,000	21,700	2,200	1,600	-	38,600
<u>Newport</u>									
1979	-	2,000	8,200	33,200	28,700	200	-	-	72,400
1980	-	1,800	16,700	39,000	22,600	3,800	-	-	83,900
1981	-	2,300	8,200	27,600	31,700	7,500	-	-	77,300
1982	-	200	7,300	46,000	-	-	-	-	53,500
1983	-	-	3,600	22,800	10,900	5,200	-	-	42,600
1984	-	-	-	24,000	19,200	800	-	-	44,000
1985	-	-	-	24,300	44,400	1,800	-	-	70,600
<u>Coos Bay</u>									
1979	-	4,800	21,500	42,900	25,200	300	-	-	94,700
1980	-	2,200	32,100	46,200	14,300	2,600	-	-	97,400
1981	-	6,600	13,900	35,200	22,700	5,500	-	-	83,900
1982	-	100	12,000	77,300	-	-	-	-	59,400
1983	-	-	14,200	36,900	13,600	6,900	-	-	71,600
1984	-	-	-	22,000	17,900	300	-	-	40,200
1985	-	-	-	33,100	29,200	1,200	-	-	63,500
<u>Brookings</u>									
1979	-	300	4,900	27,100	18,500	3,300	5,000	900	59,900
1980	-	200	13,300	23,900	10,000	5,300	2,900	400	56,000
1981	-	2,700	16,500	23,700	19,300	2,300	2,300	300	67,100
1982	-	400	5,200	39,700	10,200	3,000	2,600	300	61,400
1983	-	800	9,800	22,700	11,200	6,100	5,000	100	55,700
1984	-	-	-	15,100	16,800	2,900	3,100	-	38,000
1985	-	4,600	-	28,500	19,300	2,600	4,000	-	59,000
<u>All Areas</u>									
1979	-	8,900	42,800	129,800	106,700	7,300	5,000	900	301,300
1980	-	5,900	78,400	140,000	84,700	19,100	2,900	400	331,400
1981	-	13,800	45,700	112,200	110,300	26,400	2,300	300	311,000
1982	-	700	32,100	177,100	10,200	3,000	2,600	300	226,000
1983	-	800	31,500	108,000	55,100	25,500	5,000	100	226,000
1984	-	-	-	74,900	69,800	5,300	3,100	-	153,100
1985	-	4,600	600	106,800	126,200	7,800	5,600	-	251,600

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/ By area and calendar month. Season totals may vary from summarized months due to rounding.

Table 19. Summary of Oregon Recreational Ocean Salmon Effort and Catch by Area, 1974-75 Average and 1976-85.

Year	Area ^{a/}					Total
	Columbia R.	Tillamook	Newport	Coos Bay	Brookings	
EFFORT						
(Salmon Angler Trips) ^{b/}						
1974-75 Avg.	75,900	40,900	91,300	104,300	59,200	371,700
1976	100,900	56,500	132,200	154,600	94,200	538,400
1977	60,500	57,500	92,200	113,000	81,200	404,500
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	27,200	24,600	53,500	59,400	61,300	226,000
1983	30,900	25,300	42,600	71,600	55,700	226,000
1984	7,100	23,800	44,000	40,200	38,000	153,100
1985	20,200	38,500	70,600	63,500	59,000	251,600
CATCH						
Chinook						
1974-75 Avg.	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	8,200	1,400	3,500	10,100	15,500	38,700
1983	3,400	700	1,600	6,600	12,400	24,700
1984	< 100	1,100	2,000	4,900	9,000	17,000
1985	3,600	2,600	4,100	9,500	36,100	55,900
Coho						
1974-75 Avg.	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	35,500	23,100	44,000	55,600	16,900	175,100
1983	37,200	8,800	21,800	62,700	16,300	146,900
1984	10,900	20,300	41,200	39,400	11,500	123,300
1985	31,000	31,000	61,900	51,200	7,400	182,500

^{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/} 1979-1985 effort consists of salmon angler trips only.

Table 20. Expanded Oregon Ocean Recreational Salmon Catch Statistics from Sampling Data, 1985^{a/}.

Port	Catch				Steelhead Trout	Marked Coho	Marked Chinook	Angler Trips	Salmon Catch	Salmon per Angler Trip
	Chinook	Coho	Pink	Chum						
Columbia R.	3,567	31,009	33	0	8	1,385	122	20,021	34,608	1.7
Garibaldi	2,175	23,637	494	0	38	1,045	59	31,679	26,306	0.8
Pacific City	435	7,346	507	2	4	431	18	6,877	8,290	1.2
Depoe Bay	1,499	26,735	937	0	17	1,372	67	24,987	29,171	1.2
Newport	2,593	35,162	1,902	9	31	1,907	103	45,567	39,666	0.9
Florence	1,517	9,333	109	0	0	461	72	13,746	10,959	0.8
Winchester Bay	6,051	29,531	2,531	0	7	1,506	263	34,399	38,113	1.1
Coos Bay	1,888	12,298	1,125	0	6	654	125	15,356	15,311	1.0
Gold Beach ^{b/}	2,580	707	0	0	4	88	111	6,541	3,287	0.5
Brookings	33,562	6,728	73	0	30	1,203	1,228	52,410	40,363	0.8
Total	55,867	182,486	7,711	11	145	10,052	2,170	251,583	246,075	0.98

^{a/} All ports except Gold Beach were sampled the entire season.

^{b/} Sampling ended September 2.

Table 21. Oregon Ocean Recreational Chinook Catch by Port by Month^{a/}, 1985.

Port	Month							Total
	May	June	July	Aug.	Sept.	Oct.	Nov.	
Columbia R.	-	27	1,330	2,210	-	-	-	3,567
Garibaldi	-	-	839	1,234	60	42	-	2,175
Pacific City	-	-	302	128	5	-	-	435
Depoe Bay	-	-	548	922	29	-	-	1,499
Newport	-	-	879	1,695	19	-	-	2,593
Florence	-	-	565	934	18	-	-	1,517
Winchester Bay	-	-	2,722	3,256	73	-	-	6,051
Coos Bay	-	-	1,139	741	8	-	-	1,888
Gold Beach	-	-	1,323	1,140	117	-	-	2,580
Brookings	2,450	-	21,720	8,557	271	564	-	33,562
Total South of Cape Falcon	2,450	27	30,037	18,607	600	606	-	52,300
Statewide Total	2,450	27	31,367	20,817	600	606	-	55,867

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

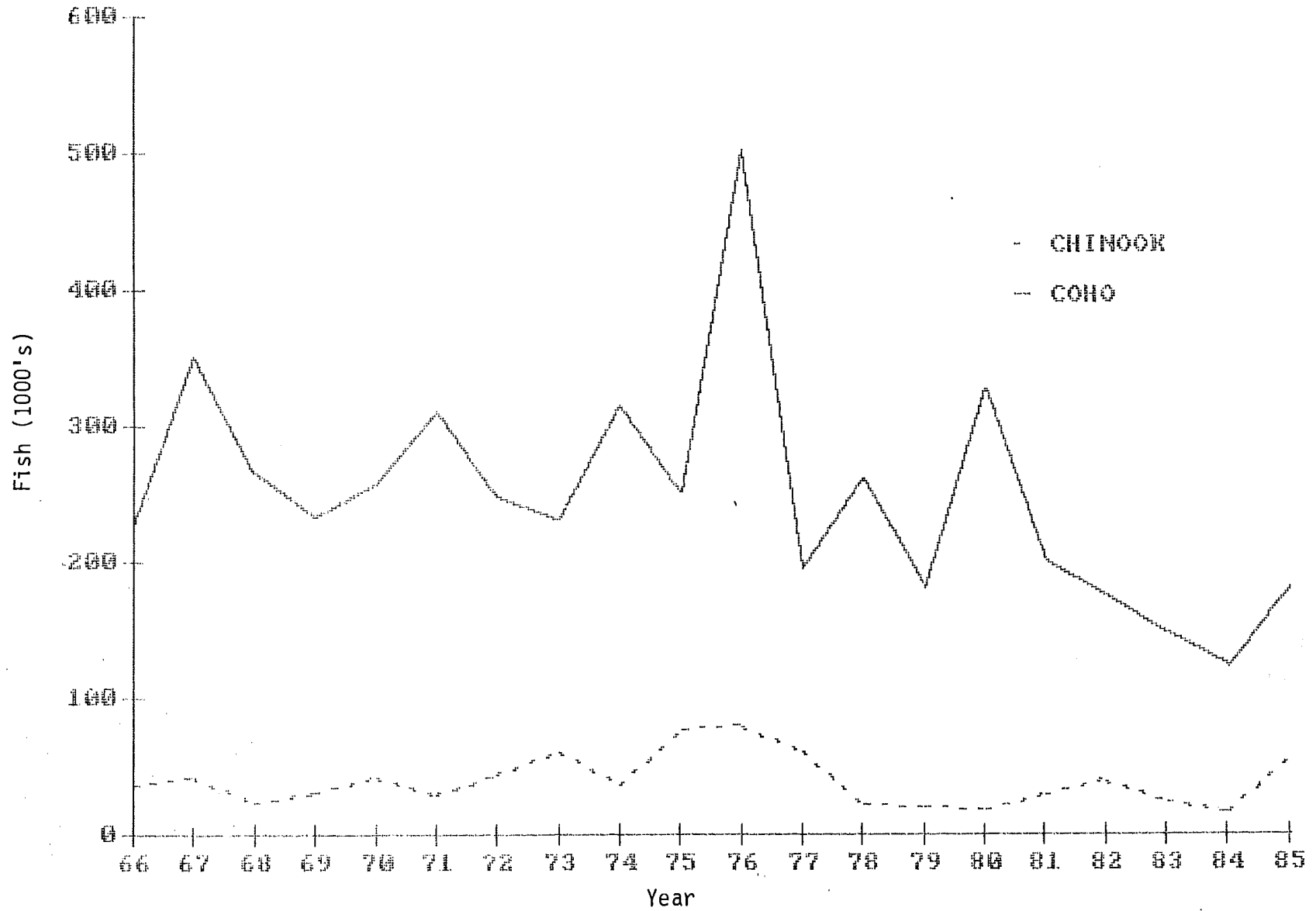


Figure 4. Trends in Oregon's Recreational Ocean Salmon Catch, 1966-1985.

Table 22. Oregon Ocean Recreational Chinook Catch (Number of Fish) by Catch Area and Month, 1979-85, with 1974-75 Average.

Area ^a	Chinook								Season ^b
	April	May	June	July	August	Sept.	Oct.	Nov.	
<u>Columbia R</u>									
1974-75 ave.	100	600	2,800	12,800	10,500	5,700	100	-	32,600
1979	-	600	1,600	2,100	3,100	100	-	-	7,500
1980	-	100	1,200	1,400	2,500	400	-	-	5,500
1981	-	<50	400	3,200	6,700	1,200	-	-	11,500
1982	-	-	2,200	6,000	-	-	-	-	8,200
1983	-	-	1,000	1,600	500	200	-	-	3,400
1984	-	-	-	-	-	-	-	-	-
1985	-	-	<100	1,300	2,200	-	-	-	3,600
<u>Tillamook</u>									
1974-75 ave.	<50	<50	100	200	1,100	300	200	-	2,000
1979	-	<50	<50	600	300	<50	-	-	1,000 ^{c/}
1980	-	<50	200	300	800	200	-	-	1,600 ^{c/}
1981	-	<50	<50	600	900	400	-	-	1,900
1982	-	-	100	1,300	-	-	-	-	1,400
1983	-	-	<100	400	200	100	-	-	700
1984	-	-	-	600	500	<100	-	-	1,100
1985	-	-	-	1,100	1,400	<100	<100	-	2,600
<u>Newport</u>									
1974-75 ave.	<50	<50	600	1,800	1,400	300	100	-	4,300
1979	-	200	300	500	400	<50	-	-	1,400 ^{d/}
1980	-	100	600	600	400	200	-	-	1,800 ^{d/}
1981	-	<50	100	1,100	1,000	200	-	-	2,400
1982	-	-	600	2,900	-	-	-	-	3,500
1983	-	-	400	800	300	200	-	-	1,600
1984	-	-	-	1,100	900	<100	-	-	2,000
1985	-	-	-	1,400	2,600	<100	-	-	4,100
<u>Coos Bay</u>									
1974-75 ave.	<50	200	700	1,600	2,900	1,000	200	-	6,800
1979	-	200	2,400	1,500	500	<50	-	-	4,500
1980	-	<50	1,400	2,700	700	200	-	-	5,300
1981	-	100	400	2,300	1,300	300	-	-	4,500
1982	-	<50	1,000	9,100	-	-	-	-	10,100
1983	-	-	1,300	2,400	1,100	1,700	-	-	6,600
1984	-	-	-	2,200	2,600	<100	-	-	4,900
1985	-	-	-	4,400	4,900	100	-	-	9,500
<u>Brookings</u>									
1974-75 ave.	<50	<50	300	3,400	4,200	1,200	1,000	-	10,600
1979	-	<50	300	2,100	3,400	<50	600	100	6,400
1980	-	<50	1,300	1,700	1,000	400	300	100	4,800
1981	-	500	2,200	3,200	2,600	100	300	<50	8,900
1982	-	<50	800	12,700	1,500	200	200	<50	15,500
1983	-	500	3,400	4,900	1,500	1,000	1,000	<50	12,400
1984	-	-	-	1,900	5,600	1,100	400	-	9,000
1985	-	2,500	-	23,000	9,700	400	600	-	36,100
<u>All Areas</u>									
1974-75 ave.	200	900	4,800	19,700	19,700	9,200	1,800	-	56,200
1979	-	1,000	4,600	6,700	7,700	200	600	100	20,900
1980	-	300	4,700	6,900	5,400	1,300	300	100	19,000
1981	-	700	3,100	10,300	12,500	2,200	300	<50	29,200
1982	-	<50	4,700	31,900	1,500	200	200	<50	38,700
1983	-	500	6,100	10,100	3,600	3,300	1,000	-	24,700
1984	-	-	-	5,800	9,600	1,200	400	-	17,000
1985	-	2,500	<100	31,400	20,800	600	600	-	55,900

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/ Individual monthly catches may not equal season total due to rounding. Season totals for individual catch areas for 1974-1975 data may not equal the sum of combined months due to some effort/landings not identified by port of landing. "All Areas" summary includes unidentified data. Effort for 1979-1985 consists of salmon angler trips only. Data prior to 1979 includes combined bottomfish and salmon trips.

c/ Includes Nehalem Bay.

d/ Includes Salmon and Siletz Rivers and Waldport.

Table 23. Oregon Ocean Recreational Coho Catch by Port by Month, 1985^{a/}

Port	Month					Total
	May	June	July	August	September	
Columbia R.	-	687	11,551	18,771	-	31,009
Garibaldi	-	-	5,599	17,643	395	23,637
Pacific City	-	-	3,301	4,005	40	7,346
Depoe Bay	-	-	6,758	19,346	631	26,735
Newport	-	-	8,116	26,321	725	35,162
Florence	-	-	2,658	6,385	290	9,333
Winchester Bay	-	-	19,747	9,581	203	29,531
Coos Bay	-	-	8,521	3,756	21	12,298
Gold Beach	-	-	544	159	4	707
Brookings	10	-	4,348	2,363	3	6,728
Total South of Cape Falcon	10	-	59,592	89,559	2,312	151,477
Statewide Total	10	687	71,143	108,330	2,312	182,486

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

Table 24. Oregon Ocean Recreational Coho Catch (Number of Fish) by Catch Area and Month, 1979-85, with 1974-75 Average.

Area ^{a/}	Coho								Season ^{b/}
	April	May	June	July	August	Sept.	Oct.	Nov.	
Columbia R									
1974-75 ave.	200	800	3,900	17,600	35,000	11,700	100	-	70,700
1979	-	400	6,500	13,300	16,300	1,500	-	-	38,000
1980	-	1,800	17,300	19,800	15,600	1,200	-	-	55,600
1981	-	1,700	8,300	18,100	20,200	6,000	-	-	54,300
1982	-	-	5,300	30,200	-	-	-	-	35,500
1983	-	-	3,600	18,900	9,700	5,100	-	-	37,200
1984	-	-	-	3,600	7,300	-	-	-	10,900
1985	-	-	700	11,600	18,800	-	-	-	31,000
Tillamook									
1974-75 ave.	<50	100	1,500	5,000	15,300	4,500	200	-	27,200
1979	-	100	1,100	2,600	5,600	<50	-	-	9,400 ^{c/}
1980	-	100	7,100	10,800	10,300	600	-	-	28,900 ^{c/}
1981	-	300	1,000	5,600	9,600	1,300	-	-	17,700
1982	-	-	1,300	21,800	-	-	-	-	23,100
1983	-	-	200	6,100	1,600	900	-	-	8,800
1984	-	-	-	9,300	10,600	500	-	-	20,300
1985	-	-	-	8,900	21,700	400	-	-	31,000
Newport									
1974-75 ave.	100	100	8,100	24,800	26,400	4,500	100	-	65,100
1979	-	200	3,700	18,700	13,600	<50	-	-	36,300 ^{d/}
1980	-	200	18,500	41,500	10,800	1,400	-	-	72,400 ^{d/}
1981	-	400	6,300	20,700	30,500	7,000	-	-	61,900
1982	-	-	3,600	40,500	-	-	-	-	44,000
1983	-	-	600	13,500	4,300	3,500	-	-	21,800
1984	-	-	-	24,700	16,400	100	-	-	41,200
1985	-	-	-	14,900	45,700	1,400	-	-	61,900
Coos Bay									
1974-75 ave.	300	3,400	17,900	39,100	21,000	6,700	200	-	90,100
1979	-	4,900	22,700	16,700	14,600	<50	-	-	79,000
1980	-	3,800	53,600	70,600	7,100	800	-	-	135,900
1981	-	6,300	8,100	25,100	16,500	1,700	-	-	57,600
1982	-	-	12,200	43,400	-	-	-	-	55,600
1983	-	-	20,700	28,300	9,200	4,500	-	-	62,700
1984	-	-	-	19,600	19,700	100	-	-	39,400
1985	-	-	-	30,900	19,700	500	-	-	51,200
Brookings									
1974-75 ave.	100	900	4,100	16,000	5,300	3,100	100	-	30,200
1979	-	<50	1,600	14,500	2,100	-	-	-	18,200
1980	-	100	17,700	13,400	1,400	500	-	-	33,000
1981	-	500	2,600	1,400	3,800	<100	-	-	8,300
1982	-	<50	1,700	15,200	-	-	-	-	16,900
1983	-	500	4,900	8,900	1,600	500	-	-	16,300
1984	-	-	-	7,400	4,000	200	-	-	11,500
1985	-	<50	-	4,900	2,500	<50	-	-	7,400
All Areas									
1974-75 ave.	800	5,800	36,500	102,500	103,000	33,900	900	-	283,400
1979	-	5,700	35,600	85,800	52,200	1,600	-	-	180,800
1980	-	6,000	114,200	156,100	45,100	4,400	-	-	325,800
1981	-	9,200	26,300	70,800	80,600	12,900	-	-	200,600
1982	-	<50	24,100	151,000	-	-	-	-	175,100
1983	-	500	30,000	75,600	26,400	14,400	-	-	146,900
1984	-	-	-	64,600	57,900	900	-	-	123,300
1985	-	<50	700	71,100	108,300	2,300	-	-	182,500

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/ Individual monthly catches may not equal season total due to rounding. Season totals for individual catch areas for 1974-1975 data may not equal the sum of combined months due to some effort/landings not identified by port of landing. "All Areas" summary includes unidentified data. Effort for 1979-1985 consists of salmon angler trips only. Data prior to 1979 includes combined bottomfish and salmon trips.

c/ Includes Nehalem Bay.

d/ Includes Salmon and Siletz Rivers and Waldport.

Pink Salmon. The catch of pink salmon is minor in Oregon, averaging 1,400 fish for odd years, 1971-83. The 1985 catch of 7,700 pink salmon is a record high, compared to the previous high of 4,000 fish in 1977. Winchester Bay had substantial landings in both July and August while August was the most important catch month in most other ports. Winchester Bay accounted for 2,500 fish or 32% of the total while Newport landed 1,900 fish (25%) (Table 25).

Table 25. Oregon Ocean Recreational Pink Salmon Catch by Port by Month, 1985.

Port	Month						Total
	May	June	July	Aug.	Sept.	Oct.	
Columbia R.	-	0	0	33	-	-	33
Garibaldi	-	-	2	480	12	0	494
Pacific City	-	-	12	495	0	-	507
Depoe Bay	-	-	12	916	9	-	937
Newport	-	-	158	1,738	6	-	1,902
Florence	-	-	13	96	0	-	109
Winchester Bay	-	-	1,490	1,041	-	-	2,531
Coos Bay	-	-	445	680	-	-	1,125
Gold Beach	0	-	0	0	0	0	0
Brookings	4	-	34	35	0	0	73
Total South of Cape Falcon	4	-	2,166	5,481	27	0	7,678
Statewide Total	4	0	2,166	5,514	27	0	7,711

0 = No catch

- = No season

SPECIAL RECREATIONAL SEASONS

Oregon's ocean recreational salmon anglers had three fishing opportunities in addition to the seasons set by the Pacific Fishery Management Council:

(1) a mid September-October chinook fishery off Tillamook Bay, (2) a Buoy 10 fishery inside the Columbia River that counted against the ocean quota, and (3) a November chinook fishery in state waters off the Elk River that was inaccessible to most recreational anglers and was not sampled by us.

September-October Fishery off Tillamook Bay

The Fish and Wildlife Commission set an open season for all salmon except coho in state waters off Tillamook Bay between Twin Rocks (45° 35' N. Lat.) and Pyramid Rock to the south (45° 29' 45" N. Lat.) and seaward to the latitude of the Whistle Buoy at the mouth of Tillamook Bay. The season was set for September 15 through October 31. The bag limit remained the first two fish caught with either barbed or barbless hooks permitted.

This fishery targets on returning hatchery fall chinook and most of the effort and catch is inside Tillamook Bay. Some of the boats will troll across the bar and circle right back into the bay again. Our 1985 creel between September 15 and October 31 estimated a total 19,300 angler trips of which 2,650 (18%) crossed the Tillamook Bay bar but only 600 (3%) fished only in the ocean. Our survey estimated an ocean catch of 66 chinook and 5 coho (illegal). In contrast, the 18,700 anglers that fished only in the bay took 1,454 chinook and 414 coho (Table 26). Eight percent of the ocean angler trips were on board charter boats (Table 27).

Table 26. Recreational Salmon Angler Effort and Catch in Lower Tillamook Bay and the Adjacent Ocean, September 15-October 31, 1985.

DATES	EFFORT		CATCH			
	Bay (Angler Trips)	Ocean ^{a/}	Bay Chinook	Coho	Ocean Chinook	Coho
9/15	403	242 (76) _{b/}	11	120	4	0
9/16-9/22	2,579	439 (140) _{b/}	76	149	5	5
9/23-9/29	2,077	366 (138) _{b/}	152	83	15	0
9/30-10/6	3,312	860 (181) _{b/}	180	16	38	0
10/7-10/13	3,736	613 (70) _{b/}	270	26	4	0
10/14-10/20	3,019	110 (4) _{b/}	70	14	0	0
10/21-10/27	2,273	0	421	0	0	0
10/28-10/31	1,337	20	274	6	0	0
TOTALS	18,736	2,650 (609) _{b/}	1,454	424	66	5

a/ Angler crossed the bar but fished in both the ocean and bay.

b/ Numbers in parentheses are trips that fished in the ocean only.

Table 27. Recreational Ocean Salmon Angler Effort and Catch off Tillamook Bay, September 15-October 31, 1985, by Boat and Trip Type.

	CHARTER	PLEASURE
Boat Trips	41	955
Angler Trips	205 (29) _{a/}	2,445 (580) _{a/}
Chinook	6	60
Coho	0	5

a/ Numbers in parentheses are trips that fished in the ocean only.

Buoy 10 Fishery Inside the Columbia River

The river mouth opened August 18 under the ocean quota and closed on August 22 when the coho quota was filled. The river season reopened August 31 with a 10,000 coho quota which was met by September 2. The river reopened on September 6 without a quota and remained open for the rest of the year. We creel censused the Buoy 10 fishery until the end of September. The Oregon fishery harvested 859 chinook and 8,595 coho during the sampling period (Table 28).

Table 28. Columbia River Buoy 10 Effort and Catch, Aug. 18-Sept. 30, 1985.

Date	Angler Trips	Catch		Catch/Trip
		Chinook	Coho	
<u>Aug. 18-22</u>				
	3,484	699	3,823	1.30
	5,185	1,398	6,372	1.50
Total	8,669	2,097	10,195	1.42

<u>Aug 31-Sept 2</u>				
	6,012	66	3,303	0.56
	9,081	237	6,779	0.77
Total	15,093	303 ^{a/}	10,082	0.69

<u>Sept. 6-29</u>				
	2,519	94	1,469	0.62
	3,452	87	3,030	0.90
Total	5,971	181	4,499	0.78

Clatsop Spit (OR Bank)	2,423	74	611	0.28

GRAND TOTAL	32,156	2,655 ^{a/}	25,387	0.87

1984	67,365	12,177	74,370	1.28
1983	7,128	604	3,574	0.59
1982	17,336	723	18,857	1.13

^{a/} Illegal catch.

^{b/} Includes illegal catch.

CHARTER/PRIVATE BOAT FISHERIES

There were 226 charter boat licenses issued in 1985 but only about 132 vessels were active. No estimate is available of the number of individual private boats that fished. Since 1973, catch and effort statistics have been compiled by boat type at all ports sampled.

Charters

Effort. The 1985 charter boat effort was estimated at 53,400 salmon angler trips, up 54% from the record low 1984 level and almost reaching the 1979-84 average (56,400) for charter angler trips. The data prior to 1979 includes bottomfish effort. Charter anglers made up 21% of the total ocean salmon trips in 1985, compared to 16% in 1984 and the 1973-84 average of 26% (Table 29 and Figure 5).

Charter boat fleets operate out of most major Oregon ports but vary greatly in size and number of vessels. The Astoria-Warrenton-Hammond area had the largest fleet in 1985 (42 boats) but only 8,300 salmon angler trips in the ocean. In contrast, the 1979-83 average for Astoria area charter trips for comparable time periods was 12,900. This 36% decrease in 1985 reflects, in part, the Friday-Saturday prohibition on salmon fishing north of Cape Falcon. Depoe Bay, with 18 active charter boats, showed the most salmon effort with 11,900 angler trips, closely followed by Newport (33 boats) with 11,200 trips. Salmon charter effort was up in all ports compared to 1984 (Table 29).

Not all charter anglers go salmon fishing during the salmon season. Salmon is the primary pursuit of the Astoria and Winchester Bay charters but bottomfishing is important to the Garibaldi, Depoe Bay, Newport, and Coos Bay charter fleets (Table 30). Coastwide in 1985, 10,800 trips (17%) of the total

Table 29. Oregon Ocean Recreational Salmon Effort and Catch by Boat-Type, 1985^{a/}

Port	Salmon Charter Boats			Salmon Private Boats			Salmon Catch			
	Boat Trips	Angler Trips	Boat Trips	Chinook	Coho	Pink	Chinook	Coho	Pink	
Columbia R.	979	8,328	1,469	14,466	18	3,319	11,693	2,098	16,543	15
Garibaldi	613	4,855	465	6,536	211	9,736	26,824	1,710	17,101	283
Pacific City	115	477	36	650	40	2,115	6,400	399	6,696	467
Depoe Bay	1,435	11,918	691	13,155	525	4,412	13,069	808	13,580	412
Newport	1,338	11,216	669	12,052	1,104	11,550	34,351	1,924	23,100	798
Florence	68	396	57	365	6	4,929	13,350	1,460	8,968	103
Winchester Bay	1,275	8,691	2,249	8,960	1,177	8,985	25,708	3,802	20,571	1,354
Coos Bay	399	3,376	569	3,424	350	4,212	11,980	1,319	8,874	775
Gold Beach	315	1,755	723	168	0	2,054	4,786	1,857	539	0
Brookings	307	2,417	2,296	318	0	19,866	49,993	31,266	6,847	73
Total	6,844	53,429	9,224	60,167	3,431	71,178	198,154	46,643	122,819	4,280
Combined totals for all Oregon craft	78,022	251,583	55,867	182,486	7,711					

^{a/} All ports were sampled the entire ocean salmon season except Gold Beach where sampling ended Sept. 2.

Table 30. Oregon Ocean Recreational Effort and Catch by Boat and Trip Type^{a/} 1985^{b/}.

Port	Charter						Private					
	Boat Trips		Angler Trips		Total Catch		Boat Trips		Angler Trips		Total Catch	
	Sal	Bot ^{c/}	Sal	Bot ^{c/}	Sal ^{d/}	Bot ^{c/}	Sal	Bot ^{c/}	Sal	Bot ^{c/}	Sal ^{d/}	Bot ^{c/}
Columbia R.	979	11	8,328	88	15,953	372	3,319	13	11,693	43	18,655	608
Garibaldi	613	324	4,855	3,384	7,272	35,090	9,736	137	26,824	428	19,094	4,775
Pacific City	115	6	477	23	726	236	2,115	153	6,400	482	7,564	4,684
Depoe Bay	1,435	211	11,918	1,964	14,371	8,555	4,412	43	13,069	146	14,800	2,323
Newport	1,338	487	11,216	3,888	13,844	27,246	11,550	425	34,351	1,303	25,822	9,751
Florence	68	4	396	28	428	132	4,929	0	13,350	0	10,531	176
Winchester Bay	1,275	27	8,691	157	12,386	780	8,985	28	25,708	80	25,727	1,009
Coos Bay	399	81	3,376	819	4,343	5,537	4,212	298	11,980	899	10,968	8,950
Gold Beach	315	35	1,755	186	891	1,745	2,054	193	4,786	500	2,396	7,233
Brookings	307	31	2,417	223	2,677	1,602	19,866	1,740	49,993	4,629	37,686	41,130
Total	6,844	1,217	53,429	10,760	72,831	81,295	71,178	3,030	198,154	8,510	173,243	80,639

^{a/} 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.

^{b/} All ports were sampled the entire ocean salmon season except for Gold Beach where sampling ended September 2.

^{c/} Bottomfish include rockfish, lingcod, flatfish and miscellaneous species.

^{d/} Includes chinook, coho, pink, and chum salmon.

64,200 charter trips targeted on bottomfish during the salmon season. In 1984, 14,200 (37%) of the total charter anglers went bottomfishing, a reflection of the record short salmon season.

Catch. Charter anglers landed 60,200 coho, 9,200 chinook, and 3,400 pink salmon in 1985, including 297 coho, 46 chinook, and 10 pink salmon which were caught incidentally by bottomfish anglers. The total catch of 72,800 salmon by charter anglers in 1985 was well above the 1984 catch of 29,500 fish and was 73% of the 1973-84 average of 99,150 fish. The charter fleet landed 30% of the total recreational salmon catch in 1985, up from 21% in 1984 but below the 1973-84 average of 35% (Figure 5).

The Astoria area charter fleet landed 16,000 salmon or 22% of the total catch in 1985. Success remained high through most of the season with a final average of 1.9 salmon/angler. Depoe Bay, Newport, and Winchester Bay charters took 14,400, 13,800, and 12,400 salmon respectively and averaged 1.2, 1.2, and 1.4 salmon/angler. These four ports made up 78% of the charter catch (Table 29). The state-wide average charter angler success was 1.2 fish/angler, same as the 1979-84 average.

Private Anglers

Effort. The 1985 salmon effort by private boats was estimated at 198,200 angler trips or 79% of the total salmon effort. This total contrasts with the record low 1984 effort of 128,700 and is 98% of the 1979-84 average of 201,800 trips (Table 29 and Figure 6). Brookings as usual had most effort with 50,000 private salmon trips or 25% of the coast total. Brookings' relatively long salmon season, safe bar, and large population of retired people all contribute to make this the leading small boat port on the Oregon coast. Newport, often a contender with Brookings for the most effort, had 34,400 angler trips or 17% of the total. Garibaldi narrowly edged out Winchester Bay, 26,800 to 25,700

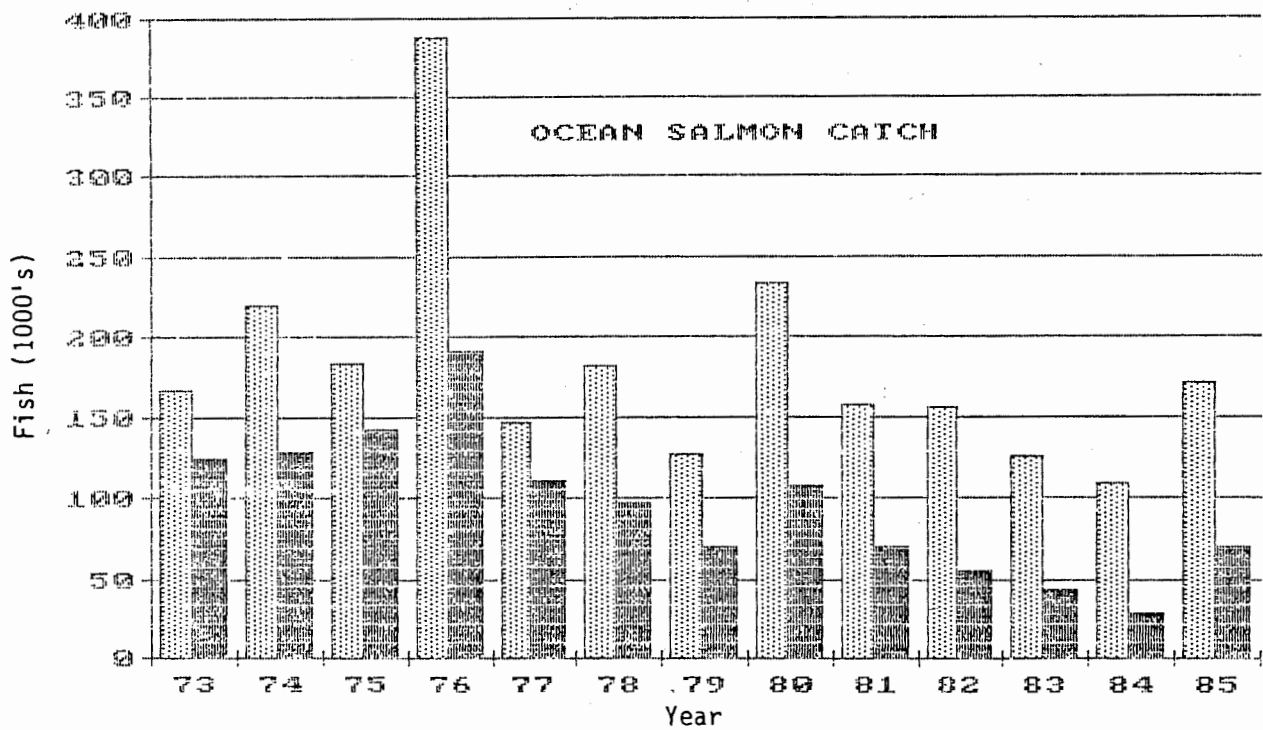
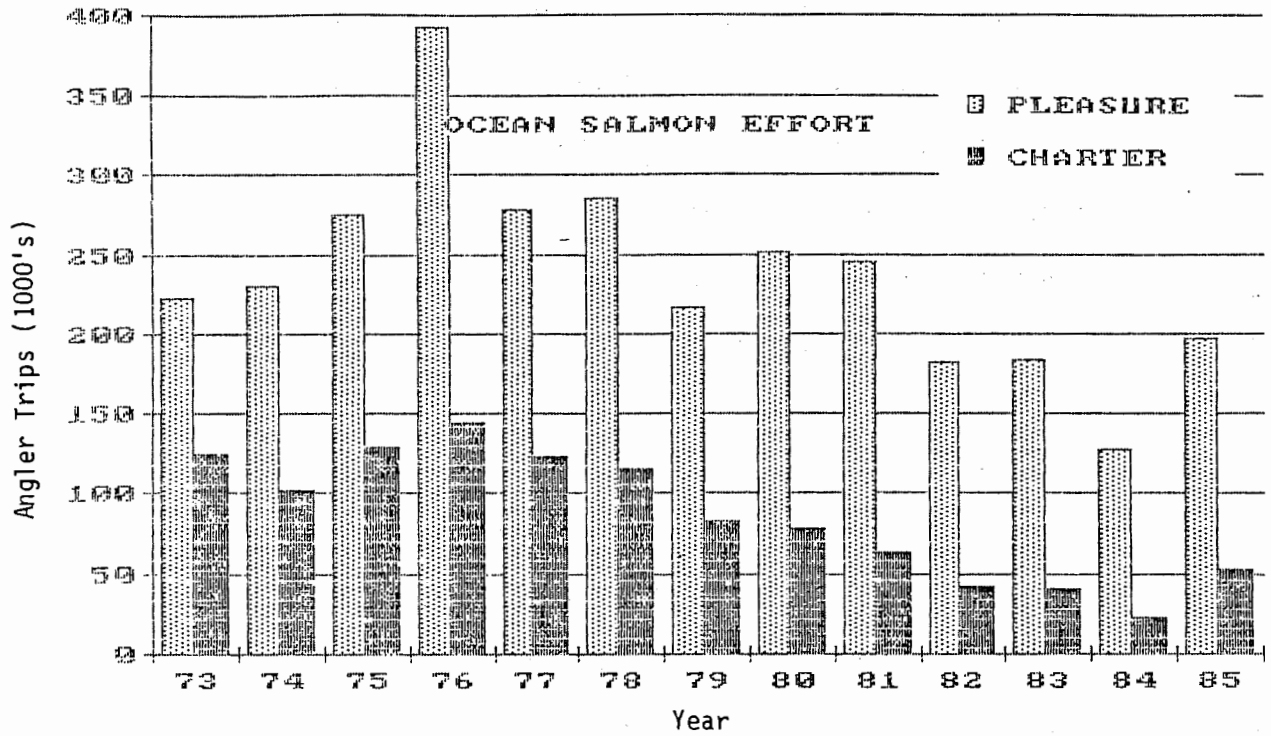


Figure 5. A Comparison of Effort and Catch by Oregon Ocean Salmon Charter and Pleasure Anglers, 1973-85.

salmon angler trips. These four ports accounted for 69% of the total private boat effort. Astoria's 11,700 angler trips is 26% below the 1979-83 average for pleasure boats for comparable time periods (15,800 angler trips). This, in part, reflects the Friday-Saturday restriction on salmon fishing.

As with charters, some private boats only fish for bottomfish, even during the salmon season. Effort data by trip type (salmon or bottomfish) was collected through interviews and applied proportionately to the total effort counts. These data showed that 8,500 angler trips or 5% of the private trips targeted on bottomfish, compared to 16,000 angler trips or 11% in 1984. Brookings had the most private bottomfish anglers, followed by Newport, a distant second (Table 30). Almost all anglers target on salmon in the Columbia River, Florence, and Winchester Bay areas.

Catch. Anglers from private boats landed 122,300 coho, 46,600 chinook, and 4,300 pink salmon in 1985. This includes 26 coho and 34 chinook caught incidentally by anglers targeting on bottomfish. The total salmon catch of 173,200 fish in 1985 is well above the 110,800 fish caught in 1984 and 94% of the 1973-84 average of 184,400 fish (Figure 5). Private boat anglers caught 70% of the total recreational salmon catch in 1985 compared to the 1973-84 average of 65%.

Brookings anglers caught the most salmon, 37,700, or 25% of the total private boat angler catch. Angler success was .8 fish/angler with chinook predominating. Anglers in Newport and Winchester Bay both landed over 25,000 salmon with an average success rate of .8 and 1.0 fish/angler respectively. These three ports accounted for 52% of the total private boat angler catch but Garibaldi, the Columbia River area, and Depoe Bay also had substantial catches. The average angler success on private boats was 0.9 salmon/angler, same as in 1984 and the 1973-84 average of 0.9 (Table 29).

EVALUATION OF MINIMUM SIZE LIMITS

North of Cape Falcon

The number of shakers (undersized salmon or prohibited species) was estimated from interview data collected during the ocean sampling survey. We estimated that 5,200 chinook (59%) were released in the Columbia River area during the ocean season. Shaker rates have always been high in this area with the 1979-83 average shaker rate for chinook at 58% (Table 31).

Table 31. Chinook Salmon Released by Oregon Ocean Recreational Anglers in the Columbia River Area, 1979-1985.

Year	Number of Fish Retained	Number of Fish Released	Total Number of Fish Caught	Percentage of Catch Released
1979	7,072	8,719	15,791	55
1980	5,503	7,891	13,394	59
1981	11,516	21,664	33,180	65
1982	8,235	6,949	15,184	46
1983	3,440	3,671	7,111	52
1979-83 Average	7,153	9,779	16,932	58
1984	26 ^{a/}	1,410	1,436	98
1985	3,565	5,235	8,800	59

^{a/} Illegal or taken south of Cape Falcon.

The minimum size limit for coho in the Columbia River area was 16 inches. The shaker rate was 4% in 1985, compared to the 1979-84 average of 8% (Table 32).

Table 32. Coho Salmon Released by Oregon Ocean Recreational Fishermen in the Columbia River Area, 1979-1985.

Year	Number Retained	Number Released	Total Catch	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
1983	37,245	8,318	45,563	18
1984	10,874	654	11,528	6
1979-84 Average	38,572	3,251	41,823	8
1985	31,010	1,275	32,285	4

South of Cape Falcon

Anglers were required to keep the first two salmon caught regardless of size in 1985, same as in 1983 and 1982. Samplers measured random samples of chinook and this provided an indirect estimate of what percentage of fish would have been released (shakers) under past size regulations. The 1984 minimum size limit of 20 inches resulted in shaker data that were not directly comparable with the immediate past when the chinook size limit was 22 inches. Past shaker data have varied substantially from year to year in any one port. There has probably always been some sorting of fish, irrespective of minimum size limits. If one assumes that charter boat anglers were under stricter pressure to conform to regulations than recreational anglers in private boats, some clue to sorting may be gleaned. Table 33 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 ranged from 17% to 10%.

The smallest charter-caught chinook measured 225 mm (8.9 inches) while the pleasure boat minimum was 265 mm (10.4 inches). The average length of charter caught chinook also was less than that of the average pleasure boat catch (Table 33).

A comparison of the 1985 lengths with 1979-81 season's average shaker rates showed very little difference. South of Cape Falcon, 20% or 10,600 chinook were less than 22 inches in length out of the 52,300 fish landed. This is similar to 1982 length data when 19% were less than 22 inches in length. The 1979-81 average shaker rate (fish released) was 22% or 3,958 chinook out of 18,146 fish caught (Table 34). Keeping in mind that the shaker data can be quite variable, the 1985 chinook length data suggest that Oregon's ocean salmon anglers south of Cape Falcon fished chinook in the same manner as

Table 33. Analysis of Chinook Lengths from Oregon Ocean Recreational Fishery, July 1-September 2, 1985.

	Average Size (mm)			Minimum Size (mm)		Percentage <560 mm		
	Charter	Rec.	Comb.	Charter	Rec.	Charter	Rec.	Comb.
Garibaldi N=606	628	701	685	370	280	36	19	23
Pacific City N=206	(778)	664	675	(525)	290	(5)	26	24
Depoe Bay N=819	638	675	656	225	305	35	25	30
Newport N=579	621	684	662	295	310	39	26	30
Florence N=180	-	651	651	-	310	-	28	28
Winchester Bay N=1,037	595	624	612	330	265	49	36	42
Coos Bay N=404	571	609	600	335	312	54	42	45
Gold Beach ^{a/} N=365	724	720	721	240	355	24	14	18
Brookings ^{b/} N=2,668	682	739	729	330	320	24	11	13

N = Number of fish measured

^{a/} Data from July 1 through September 2

^{b/} Data from July 1 through Oct 31

() = Less than 20 samples

Table 34. Chinook Salmon Released (1979-81 Av.) or Landed, Less than 22 inches in Length from the Ocean Recreational Fishery off Oregon in 1985 by Port.

Port	Number of Fish Retained		Number of Fish Caught <22 inches and Released		Total Number of Fish Caught		Percentage of Catch <22 in. Released	
	1985	79-81 Av.	1985	79-81 Av.	1985	79-81 Av.	1985	79-81 Av.
Garibaldi	2,175	1,095	500	21	2,175	1,102	23	0.6
Pacific City	435	117 _{a/}	104	2 _{a/}	435	119	24	2 _{a/}
Depoe Bay	1,499	509	450	40	1,499	549	30	7
Newport	2,593	1,353	778	46	2,593	1,398	30	3
Florence	1,517	764 _{a/}	425	155	1,517	919 _{a/}	28	17 _{a/}
Winchester Bay	6,051	2,939	2,541	1,484	6,051	4,423	42	34
Coos Bay	1,888	1,122	868	655	1,888	1,766	46	37
Gold Beach	2,580	817	464	67	2,580	884	18	8
Brookings	33,562	5,472	4,464	1,502	33,562	6,975	13	22
S. of Falcon Total	52,300	14,188	10,594	3,958	52,300	18,146	20	22

_{a/} 1981 data only.

they did in 1979-82 and that the reduction in minimum size increased catches by 10,500 chinook.

We only measured marked coho in 1985. The coho shaker rates have always been low, averaging 1.7% in 1979-81 and 0.8% in 1982. Coho fishing ended September 2 in 1985 but a chinook fishery continued through October 31, south of Cape Blanco. Only 31 coho were reported as "shakers" in Brookings for this time period.

RECREATIONAL OCEAN SALMON CODED-WIRE TAG SAMPLING

Samplers at ten ports observed 47% of the combined chinook and coho landed during the 1985 port sampling survey.

Chinook

The samplers examined 26,243 chinook and found 1,035 or 4% had been adipose fin clipped (Table 35). The samplers collected 1,023 heads from these fish in order to recover coded-wire tags. An additional 57 chinook heads were taken from marked fish that were not sampled in the survey. Department staff found tags in 899 of the 1,023 chinook heads for an 88% recovery ratio.

Major contributors of the chinook tags were:

California Department of Fish and Game	46%
Oregon Department of Fish and Wildlife	38%
Various private hatcheries	7%
Washington Department of Fisheries	5%

Coho

The samplers examined 84,664 coho and found that 4,579 or 5% had their adipose fin clipped (Table 36). They collected 4,518 heads from these marked fish for coded wire recovery. An additional 276 coho heads were collected from marked fish that were not sampled in the survey. Technicians found 4,053 tags in the 4,518 coho heads. This is a 90% recovery ratio.

Table 35. Chinook Coded-wire Tag Sampling in the Ocean Recreational Fishery, by Port and Month, 1985.

Port	May	June	July	August	September	October	Total
<u>Columbia R.</u>							
Total Catch	-	27	1,330	2,210	-	-	3,567
No. Sampled	-	12	798	1,164	-	-	1,974
% Sampled	-	44%	60%	53%	-	-	55%
No. Ad Marks	-	0	20	49	-	-	69
<u>Garibaldi</u>							
Total Catch	-	-	839	1,234	60	42	2,175
No. Sampled	-	-	393	521	26	14	954
% Sampled	-	-	47%	42%	43%	33%	44%
No. Ad Marks	-	-	10	20	0	0	30
<u>Pacific City</u>							
Total Catch	-	-	302	128	5	-	435
No. Sampled	-	-	242	88	5	-	335
% Sampled	-	-	80%	69%	100%	-	77%
No. Ad Marks	-	-	10	2	0	0	12
<u>Depoe Bay</u>							
Total Catch	-	-	548	922	29	-	1,499
No. Sampled	-	-	351	560	23	-	934
% Sampled	-	-	64%	61%	79%	-	62%
No. Ad Marks	-	-	6	32	2	-	40
<u>Newport</u>							
Total Catch	-	-	879	1,695	19	-	2,593
No. Sampled	-	-	332	558	8	-	898
% Sampled	-	-	38%	33%	42%	-	35%
No. Ad Marks	-	-	16	19	0	-	35
<u>Florence</u>							
Total Catch	-	-	565	934	18	-	1,517
No. Sampled	-	-	162	274	7	-	443
% Sampled	-	-	29%	29%	39%	-	29%
No. Ad Marks	-	-	6	15	0	-	21
<u>Winchester Bay</u>							
Total Catch	-	-	2,722	3,256	73	-	6,051
No. Sampled	-	-	844	937	37	-	1,818
% Sampled	-	-	31%	29%	51%	-	30%
No. Ad Marks	-	-	38	63	1	-	102
<u>Coos Bay</u>							
Total Catch	-	-	1,139	741	8	-	1,888
No. Sampled	-	-	534	409	4	-	947
% Sampled	-	-	47%	55%	50%	-	50%
No. Ad Marks	-	-	31	32	0	-	63
<u>Gold Beach</u>							
Total Catch	-	-	1,323	1,140	117	-	2,580
No. Sampled	-	-	603	433	67	-	1,103
% Sampled	-	-	45%	38%	57%	-	43%
No. Ad Marks	-	-	21	17	4	-	42
<u>Brookings</u>							
Total Catch	2,450	-	21,720	8,557	271	564	33,562
No. Sampled	1,688	-	9,795	4,869	159	326	16,837
% Sampled	69%	-	45%	57%	59%	58%	50%
No. Ad Marks	45	-	274	274	7	21	621
<u>Total</u>							
Total Catch	2,450	27	31,367	20,817	600	606	55,867
No. Sampled	1,688	12	14,054	9,813	336	340	26,243
% Sampled	69%	44%	45%	47%	56%	56%	47%
No. Ad Marks	45	0	432	523	14	21	1,035

Table 36. Coho Coded-wire Tag Sampling Data in the Ocean Recreational Fishery, by Port and Month, 1985.

Port	May	June	July	August	September	October	Total
<u>Columbia R.</u>							
Total Catch	-	687	11,551	18,771	-	-	31,009
No. Sampled	-	307	7,152	10,234	-	-	17,693
% Sampled	-	45%	62%	55%	-	-	57%
No. Ad Marks	-	8	312	452	-	-	772
<u>Garibaldi</u>							
Total Catch	-	-	5,599	17,643	395	-	23,637
No. Sampled	-	-	2,727	8,248	202	-	11,177
% Sampled	-	-	49%	47%	51%	-	47%
No. Ad Marks	-	-	99	383	9	-	491
<u>Pacific City</u>							
Total Catch	-	-	3,301	4,005	40	-	7,346
No. Sampled	-	-	2,479	2,745	37	-	5,261
% Sampled	-	-	75%	69%	93%	-	72%
No. Ad Marks	-	-	130	165	1	-	296
<u>Depoe Bay</u>							
Total Catch	-	-	6,758	19,346	631	-	26,735
No. Sampled	-	-	3,832	11,611	499	-	15,942
% Sampled	-	-	57%	60%	79%	-	60%
No. Ad Marks	-	-	176	605	24	-	805
<u>Newport</u>							
Total Catch	-	-	8,116	26,321	725	-	35,162
No. Sampled	-	-	3,362	8,865	296	-	12,523
% Sampled	-	-	41%	34%	41%	-	29%
No. Ad Marks	-	-	193	470	14	-	677
<u>Florence</u>							
Total Catch	-	-	2,658	6,385	290	-	9,333
No. Sampled	-	-	740	1,814	118	-	2,672
% Sampled	-	-	28%	28%	41%	-	29%
No. Ad Marks	-	-	35	94	5	-	134
<u>Winchester Bay</u>							
Total Catch	-	-	19,747	9,581	203	-	29,531
No. Sampled	-	-	5,874	4,348	100	-	10,322
% Sampled	-	-	30%	45%	49%	-	35%
No. Ad Marks	-	-	280	225	5	-	510
<u>Coos Bay</u>							
Total Catch	-	-	8,521	3,756	21	-	12,298
No. Sampled	-	-	3,889	1,946	12	-	5,847
% Sampled	-	-	46%	52%	57%	-	48%
No. Ad Marks	-	-	190	125	0	-	315
<u>Gold Beach</u>							
Total Catch	-	-	544	159	4	-	707
No. Sampled	-	-	262	53	2	-	317
% Sampled	-	-	48%	33%	50%	-	45%
No. Ad Marks	-	-	27	12	0	-	39
<u>Brookings</u>							
Total Catch	10	-	4,348	2,363	3	4	6,728
No. Sampled	6	-	1,845	1,055	2	2	2,910
% Sampled	60%	-	42%	45%	67%	50%	43%
No. Ad Marks	1	-	257	282	0	0	540
<u>Total</u>							
Total Catch	10	687	71,143	108,330	2,312	4	182,486
No. Sampled	6	307	32,162	50,919	1,268	2	84,664
% Sampled	60%	45%	45%	47%	55%	50%	46%
No. Ad Marks	1	8	1,699	2,813	58	0	4,579

Major agencies contributing coho tags were:

Oregon Department of Fish and Wildlife	39%
Washington Department of Fisheries	22%
Oregon Aqua-Foods	13%
California Department of Fish and Game	12%

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