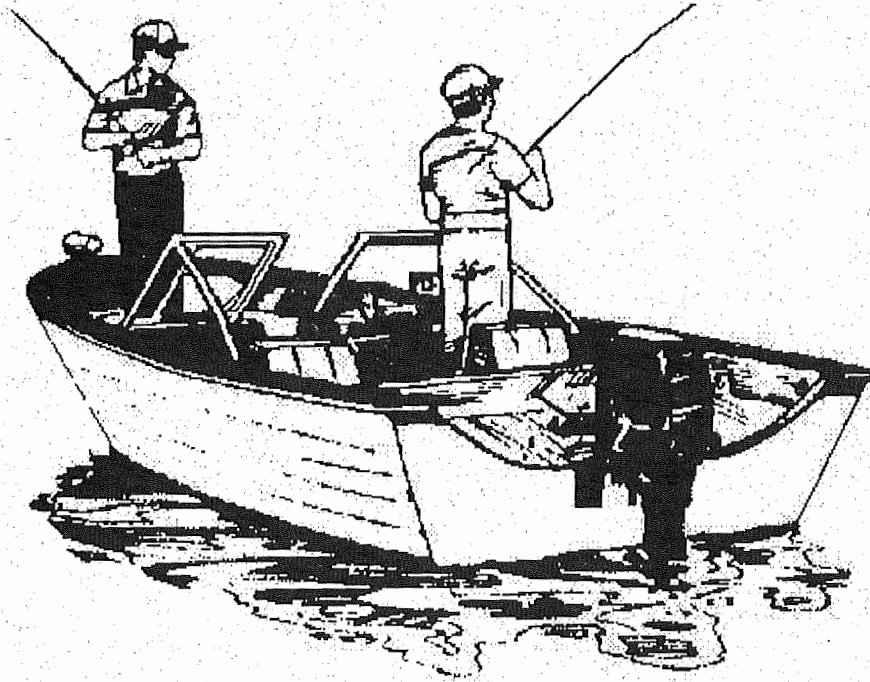


THE 1995 OREGON OCEAN SALMON FISHERIES



Eric Schindler
Tom Loynes
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OREGON DEPARTMENT OF FISH AND WILDLIFE
Ocean Salmon Management

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Annual Report
1995

by
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Oregon Department of Fish and Wildlife
Fish Division
Ocean Salmon Management Program

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INTRODUCTION

The Ocean Salmon Management Program (OSMP) monitors ocean commercial and recreational salmon fisheries, coordinates Oregon coastal salmon spawning surveys, and conducts ocean and coastal rivers investigations for the Oregon Department of Fish and Wildlife (ODFW). The program uses data from these and other sources to develop management recommendations for the best use of Oregon's salmon resources, and to evaluate proposed ocean salmon fishery regulations. Major forums in which OSMP staff participate include the Pacific Fishery Management Council (PFMC) and its salmon technical teams (STT and SSC), the Pacific Salmon Commission (PSC) and their technical committees, and the Klamath Fishery Management Council (KFMC).

The OSMP fulfills Oregon's technical and management responsibilities to these management entities as directed under the U.S./Canada Salmon Interception Treaty (1986), the Magnuson Fishery Conservation and Management Act (MFCMA) PL 94-265 (1976), and the Anadromous Fisheries Act 89-304.

This report summarizes the activities of OSMP's Ocean Salmon Sampling Project for the 1995 ocean season. In 1995, we collected and analyzed data on Oregon's catch and fishing effort, recovered coded wire tags (CWTs), and gathered average weight data from commercial salmon landings. We also collected chinook salmon scales for aging. During 1995, we conducted an extensive creel of the Tillamook estuary and nearshore ocean fall chinook fisheries, and collected tissue samples from chinook for genetic stock analysis of a troll fishery near Gold Beach.

The OSMP sampling project is permanently staffed by a project leader and an assistant project leader at Newport, and one sampling coordinator at Tillamook. The sampling coordinator serves as liaison between field samplers, fishery participants, and program staff at Newport; delivers data and coded wire tags to Newport; and also samples when necessary.

The Oregon Coast has twelve substantial ocean ports and access points to the ocean salmon fishery, and an additional ten locations that anglers or commercial fishermen use to access the ocean occasionally. In 1995, we sampled at nine of the primary Oregon coastal ports, utilizing seventeen seasonal samplers: four were commercial troll samplers, ten were recreational samplers, and three were "combination" commercial-recreational samplers. Several of these samplers were picked up on loan from other projects or were hired for very short periods (Appendix Table 1). One additional employee helped edit and computer process the sampled data under the direction of OSMP's Data Management Project.

1995 OCEAN TROLL SALMON FISHERY

BACKGROUND

The commercial salmon troll fishery was developing off the Oregon Coast by the year 1912 (Mullen, 1981). By 1919, there were between one and two thousand boats trolling off the mouth of the Columbia River. The State of Oregon began recording troll landings separately from gillnet fisheries in 1925.

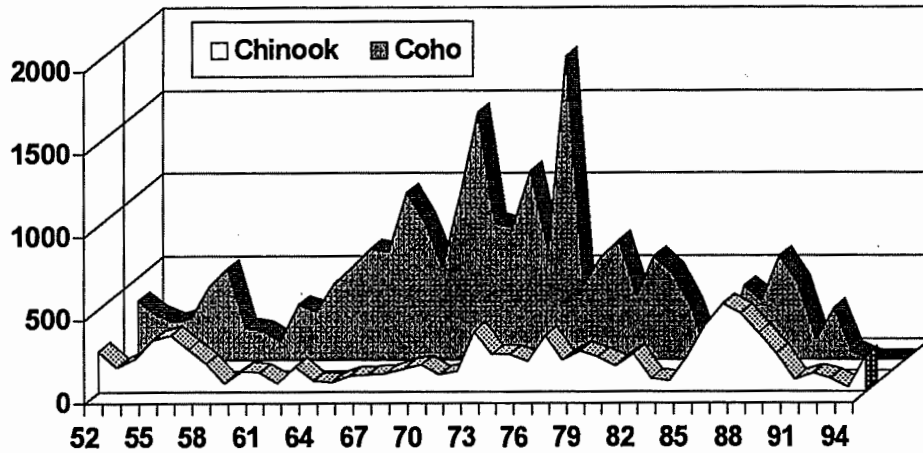
Landings of ocean troll caught coho salmon remained relatively stable from 1925 to 1941, with landings between 2,000,000 and 4,000,000 pounds (dressed weight: head-on, viscera removed) for most years (Figure 1). From 1942 to 1950 catches remained near 1,000,000 pounds annually, but by 1957 landings had climbed back up to 3,400,000 pounds. The El Niño of 1958-59 resulted in landings dropping back below 1,000,000 pounds or 200,000 fish. During the 1960s and early 1970s, improved hatchery production and rearing techniques, a growing troll fleet, and good ocean survival rates of smolts to adults resulted in record landings that peaked in 1976 with 1,800,000 coho landed. From the mid 1970s and continuing into the 1990s, Oregon's ocean coho fishery has been characterized by continuing poor ocean environmental conditions and poor overall survival, increasing management restrictions, and reduced ocean harvest opportunities.

Although chinook harvest by the Oregon troll fishery has also seen dramatic fluctuations, the long term trend has been one of increasing landings. The troll chinook fishery had record harvests in 1987 and 1988. The late 1980s and early 1990s have seen a decline in harvest due to decreases in many stocks, concern for critical natural stocks under both state and federal management and the federal Endangered Species Act (ESA), together with increasing allocation conflicts between river and ocean user groups.

Historically, coho salmon predominated in the landings, but for the last decade chinook landings have equaled coho, and in many years made up the majority of the catch. This is primarily due to lower coho survival rates and much higher chinook survival rates and catch in the late 1980s (Figure 1, Table 1). Chinook will continue to predominate in the landings until coho abundance increases enough to allow fisheries to resume.

Entry into the troll fishery was unrestricted until 1980 when a permit moratorium was adopted. Although 4,311 vessels already had Oregon troll permits, a goal of 2,400 vessels licensed to troll for salmon in Oregon was established. As a result of the 1993 Oregon legislative session, the troll permit goal was lowered to 1,800 vessels. By the end of 1995, the number of renewed troll permits had declined to 1,462. Of the permitted vessels, only 475 recorded landings of salmon in 1995. No ocean troll coho fishing was allowed in 1995. Salmon fishing was closed completely north of Cape Falcon due to concerns for regional wild coho stocks and for chinook stocks listed

FISH (thousands)



POUNDS DRESSED (thousands)

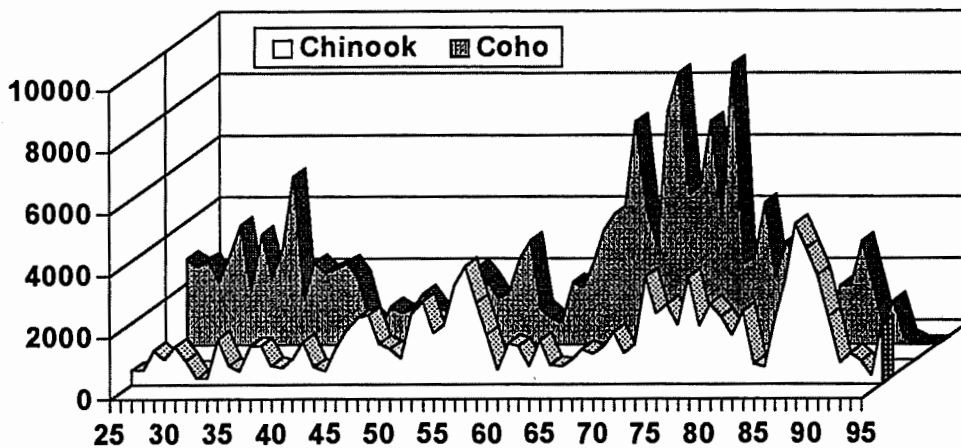


Figure 1. Historical Oregon troll salmon landings in numbers of fish (1952-95), and in pounds dressed, head on viscera removed (1925-95).

Table 1. Oregon commercial troll salmon effort (deliveries and boat days) and landings (number of fish and pounds dressed), 1952-95. Includes effort and catches made off California, Washington, and Alaska and landed in Oregon.

Year	Effort		Chinook		Coho		Pink	
	Del.	Bt. Days	No.	Lbs. Dr.	No.	Lbs. Dr.	No. ^a	Lbs. Dr. ^b
1952	-	-	247,747	2,686,323	356,487	2,491,705	1	3
1953	-	-	150,922	1,675,517	274,957	2,041,681	653	3,527
1954	-	-	197,396	1,924,210	227,197	1,508,204	0	0
1955	-	-	309,876	3,219,518	255,951	1,693,561	1,145	6,187
1956	-	-	343,045	3,825,914	443,214	2,781,851	0	0
1957	-	-	256,917	2,630,601	551,074	3,355,135	16,119	87,090
1958	-	-	174,876	1,595,335	196,612	1,165,957	0	0
1959	-	-	53,884	463,217	175,362	873,483	1,036	5,597
1960	-	-	127,834	1,328,362	112,472	731,819	10	54
1961	-	-	116,136	1,227,542	328,817	2,007,231	33	180
1962	-	-	52,559	597,664	293,234	1,870,442	0	0
1963	-	-	152,771	1,407,486	457,710	2,609,320	3,805	20,557
1964	-	-	67,505	628,387	558,109	3,683,144	12	67
1965	-	-	57,724	572,600	666,665	4,202,189	35,194	190,156
1966	-	-	95,569	799,680	646,145	4,488,517	0	0
1967	-	-	99,745	1,115,939	1,003,994	7,201,349	172,546	932,269
1968	-	-	110,150	993,410	825,352	4,398,335	659	3,560
1969	-	-	140,285	1,201,470	557,337	3,171,539	48,050	259,613
1970	-	-	164,688	1,685,028	989,743	7,536,094	162	873
1971	43,934	-	102,926	1,000,710	1,490,122	8,765,148	1,676	9,054
1972	38,354	-	127,287	1,303,729	824,602	4,856,335	21	115
1973	33,378	-	363,267	3,461,321	795,477	5,137,061	2,634	14,229
1974	51,058	-	224,110	2,290,403	1,137,193	7,230,870	13	70
1975	44,627	-	224,708	2,583,326	657,387	4,087,541	167	905
1976	71,868	-	184,345	1,921,577	1,826,968	9,061,161	1,026	5,546
1977	85,086	-	340,014	3,464,945	446,122	2,640,800	73,319	396,144
1978	45,693	-	191,532	1,893,620	611,638	2,778,964	45	244
1979	43,604	48,799	245,487	2,579,967	714,639	4,586,296	20,499	106,336
1980	29,633	39,933	209,369	2,171,509	383,288	2,190,209	316	1,570
1981	35,098	45,334	160,666	1,572,489	622,490	3,324,309	60,173	323,982
1982	26,478	33,715	232,125	2,351,252	518,421	2,708,375	0	0
1983	17,388	22,066	79,541	654,992	319,630	1,097,881	79	231
1984	5,595	7,927	64,302	549,448	13,793	69,806	0	0
1985	15,663	21,003	217,019	2,029,488	84,222	483,827	44,313	258,597
1986	25,696	32,528	402,656	3,370,301	440,398	1,904,649	4	11
1987	30,977	39,493	529,255	5,182,350	353,981	1,915,935	17,648	87,343
1988	40,860	51,076	469,988	4,386,951	623,234	3,335,987	4	11
1989	33,393	42,286	353,481	3,531,858	455,726	1,995,515	3,833	17,629
1990	20,220	26,231	232,442	2,180,867	122,295	633,804	0	0
1991	10,965	14,898	74,753	694,847	306,946	1,410,999	1,786	7,561
1992	6,212	9,224	110,489	1,012,622	49,762	206,622	3	16
1993	6,018	9,532	81,523	760,574	1,669	9,075	12	29
1994	2,425	3,770	25,275	286,680	0	0	0	0
1995	5,012	7,942	214,786	1,940,626	0	0	129	364

^a Numbers of pink salmon from 1952-78 are estimated by dividing the pounds landed by the 1979-94 average weight of pink salmon landed in Oregon from 1979-94 (5.403 lbs/per pink salmon).

^b Pounds dressed for pink salmon for the period of 1952-78 is back calculated from round weights landed by dividing total pounds by the standard conversion factor of 1.15. Poundages from this period may also include landings of pinks from other commercial fisheries.

under the Endangered Species Act. July was closed in the area from Cape Falcon to Humbug Mountain to reduce incidental hooking mortality impacts on coho salmon. The area south of Humbug Mountain saw limited troll chinook salmon opportunities in 1995 (Figure 2).

SAMPLING METHODOLOGY

Sampling Areas and Staffing

For 1995, a seasonal staff of four troll salmon samplers and three combination (troll/recreational) samplers were deployed at Oregon coastal ports (Appendix Tables 1 and 2). Samplers worked at both permanent and temporary buying stations in Garibaldi, Pacific City, Newport, Florence, Winchester Bay, Charleston, Gold Beach, Port Orford, and Brookings. Troll sampling was supplemented at times by permanent staff.

Sampling Design

Sampling is conducted via an established sampling plan using a stratified random design. Samplers are instructed to sample proportionate landings from trip boats and day boats, from landings throughout the week, and from all major buyers. Sampling data is recorded by individual vessel landings on forms designed to be read by an optical scanner. Data forms are then transferred to the Newport office and scanned into a personal computer. Future data collection is scheduled to move to handheld data entry units. All individual landings are kept confidential.

Average Weights and Coded Wire Tags

Salmon are sorted and weighed by fish plant personnel. Simultaneously, OSMP employees tally fish by species and grade, record corresponding total weights, and examine the salmon for clipped adipose fins. A clipped adipose fin indicates that the fish has a coded wire tag (CWT) implanted in its snout.

Quota Assessment

Ocean salmon harvests within the PFMC area are managed to achieve specific spawning escapement goals for regional salmon stocks as adopted by the PFMC, provide for in-river fisheries, and Native American treaty requirements. Quotas or harvest ceilings for specific time and area fisheries are a primary tool of harvest management. Quotas are set based on estimates of adult recruitment, stock mix, anticipated ocean harvest patterns, impacts on critical stocks, and spawning escapement goals.

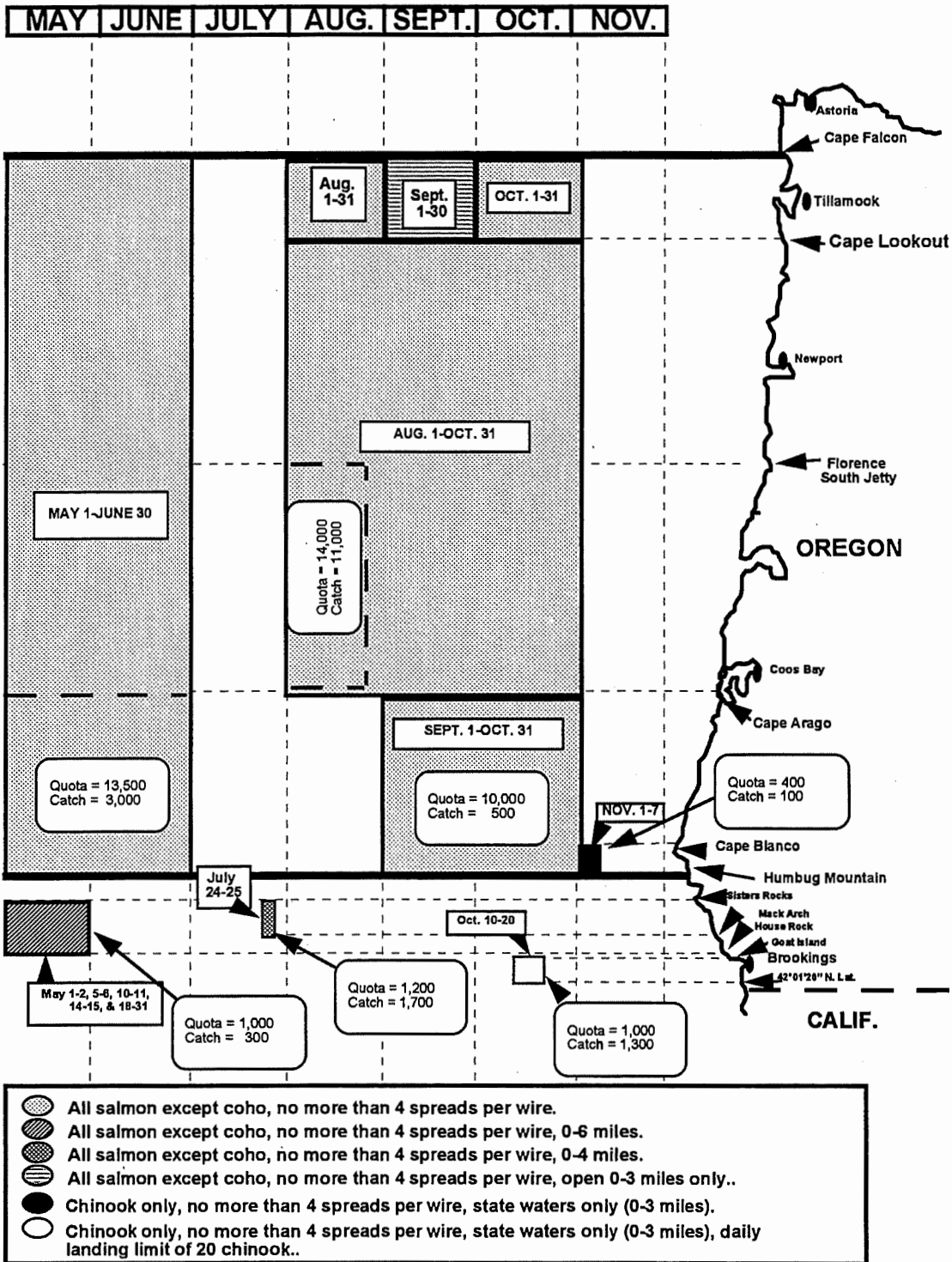


Figure 2. Ocean commercial salmon troll seasons off Oregon, 1995.

A fish receiving ticket is required for each troll salmon landing. Estimates of the number of salmon landed are derived by taking poundages from fish receiving tickets and applying average weight data from port sampling. Intensive ocean troll fisheries and quotas make it necessary for managers to be able to monitor catches timely and with reasonable accuracy. Standard processing of fish ticket data may take more than three weeks, and cannot be effectively used for in-season quota management.

To overcome the fish ticket time lag, the OSMP developed a commercial troll fishery "key buyer" program in 1983. This program monitors daily or periodic troll landings at major ("key") buyers along the coast as needed to provide assessment of landings. Sampling staff contact major salmon buyers in each port and summarize total pounds of salmon purchased for a specific time period and fishery. The sampler then contacts OSMP staff at the Newport office with the poundages and the summarized sample data for the same period. Total poundages landed at key buyers are expanded to account for the buyers who were not contacted. By dividing the estimated poundage of salmon landed within a given port by the average weight from the sampling data for that port, a reasonable estimate of the landings can be made within 24 hours. Key buyers typically represent more than 90% of the landings and allow for expansion of the landings with minimal error.

Estimates are also made for fish "on the water", and buyer percentages are adjusted in season to reflect current delivery patterns. As "hard data" from the fish ticket system becomes available, it is used to replace the early key buyer "soft data". Assessment of fish on the water becomes less precise as the level of trip boat participation increases, and can be complicated by buyer boats, out of area landings, and mobile buying stations.

REGULATIONS

Ocean salmon regulations are set by the PFMC for all ocean salmon fisheries in the Exclusive Economic Zone (EEZ) from 3 to 200 miles. For state waters (0 to 3 miles), ocean salmon regulations are set by the Oregon Fish and Wildlife Commission within the ocean salmon harvest impact guidelines established by the PFMC. Special all-species-except-coho fisheries are set by the Oregon Fish and Wildlife Commission for state waters within 3 miles of shore.

All 1995 Oregon and PFMC area ocean troll salmon fisheries had the gear restrictions of single point, single shank barbless hooks; and not more than four terminal gear spreads per wire. Minimum length restrictions were 26 inches total length for chinook caught south of Cape Falcon (Figure 2, Appendix Table 3).

Cape Falcon to Cape Lookout

The all-salmon-except-coho fishery from Cape Falcon to Cape Lookout was open from May 1 through June 30, August 1 through 31, and October 1 through 31 (123 fishing days). There were no chinook quota restrictions in this area. In addition, an all-salmon-except-coho season was authorized for state waters from September 1 through 30 (30 fishing days). A control zone (Appendix Figure 1) was established off the mouth of Tillamook Bay and was closed in June to limit catch on locally depressed stocks of spring chinook, and closed in August and September to reduce incidental hooking mortality on coho (Appendix Figure 1).

Cape Lookout to Cape Arago

The all species except coho season from Cape Lookout to Cape Arago was open May 1 through June 30 and August 1 through October 31 (153 fishing days). One subarea chinook quota was adopted within this area. A quota of 14,000 chinook was set for the period August 1 - 31 from the Florence South Jetty to Cape Arago. The quota was not met, and the season continued to its scheduled closing date.

Cape Arago to Humbug Mountain

The all species except coho season from Cape Arago to Humbug Mountain was open May 1 through June 30 and September 1 through October 31 (122 fishing days). Subarea chinook quotas were adopted for both time periods: the first quota for the period May 1 through June 30 allowed a catch of 13,500 chinook, and the second quota of 10,000 chinook was set for September 1 through October 31. Neither quota was met, and the seasons continued to their scheduled closing dates.

An all-salmon-except-coho season was authorized by the Oregon Fish and Wildlife Commission for state waters (0-3 miles) for the area from Cape Blanco to Humbug Mountain. This fishery was scheduled for November 1 - 7, or the quota of 400 chinook. The season opened November 1 and continued through its scheduled closing date of November 7 (7 fishing days). All chinook were required to be landed into Port Orford.

Humbug Mountain to Horse Mountain

An all-salmon-except-coho season opened May 1 for waters from Sisters Rock to House Rock (0-6 miles). This fishery was scheduled on a cycle of two days open and two days closed from May 1 through May 31 or the quota of 1,000 chinook. The season was open May 1-2, 5-6, 10-11, 14-15, and due to low catches the two day cycle was dropped on May 18 and the season continued until May 31 (22 fishing days). Vessels were required to land and deliver their fish at either Port Orford, Gold Beach or Brookings within 24 hours of each closure.

An all-salmon-except-coho fishery for waters within 4 miles of shore was authorized for the area of Sisters Rocks to Mack Arch. This fishery was scheduled to open July 24 and continue on a cycle of two days open and two days closed through August 31 or the quota of 1,200 chinook. The season opened on July 24 and continued one more day through July 25. Vessels were required to land and deliver their fish at either Port Orford, Gold Beach or Brookings within 24 hours of each closure.

A chinook-only season was authorized by the Oregon Fish and Wildlife Commission for state waters (0-3 miles) for the area from Goat Island to 42° 01' 20" N. Lat. This fishery was scheduled to open October 10 and continue through October 31 or the quota of 1,000 chinook. A daily landing limit of 20 fish was in effect to keep the fishery manageable. The season opened October 10 and continued through October 20. All chinook were required to be landed into Brookings.

EFFORT AND CATCH STATISTICS

Poundages, dollar value, area of catch, and days fished were obtained directly from Oregon's commercial fish receiving tickets. Pounds landed were converted to number of fish by using average weight information collected by port samplers. Prior to 1979, all Oregon troll catch statistics were reported by port of landing. Beginning in 1979, catch and effort estimates have also been reported by ocean catch area (Figure 3). Landings are allocated to correct catch areas to properly assess ocean fishery impacts. Area of catch data are recorded on fish tickets by buyers and are cross-checked with available OSMP sampling data.

Effort

Historically, Oregon's troll effort has been estimated in vessel deliveries and, since 1979, in boat days. Troll effort for 1995 totaled 7,900 boat days. This more than doubled the effort of 3,800 boat days fished in 1994, but was only 28% of the 1979-94 average of 28,000 boat days, and only 15% of the record 51,100 days observed in 1988 (Table 1). The increase in troll effort in 1995 was due to a number of factors including: good chinook catches especially in the Newport catch area, and an increase from 1994 in days open for fishing from Cape Falcon to Cape Arago.

Most 1995 effort (59%) occurred within the Newport catch area, but effort was up in all fishery areas, except the Columbia River catch area which had no effort or catch due to a complete closure to salmon fishing (Figure 4, and Appendix Tables 4 and 5).

Historically, peak effort levels have occurred during the general coho season in July and August. Most of the 1995 troll effort occurred in August and September, and coincided with the chinook openings from Cape Falcon to Humbug Mountain.

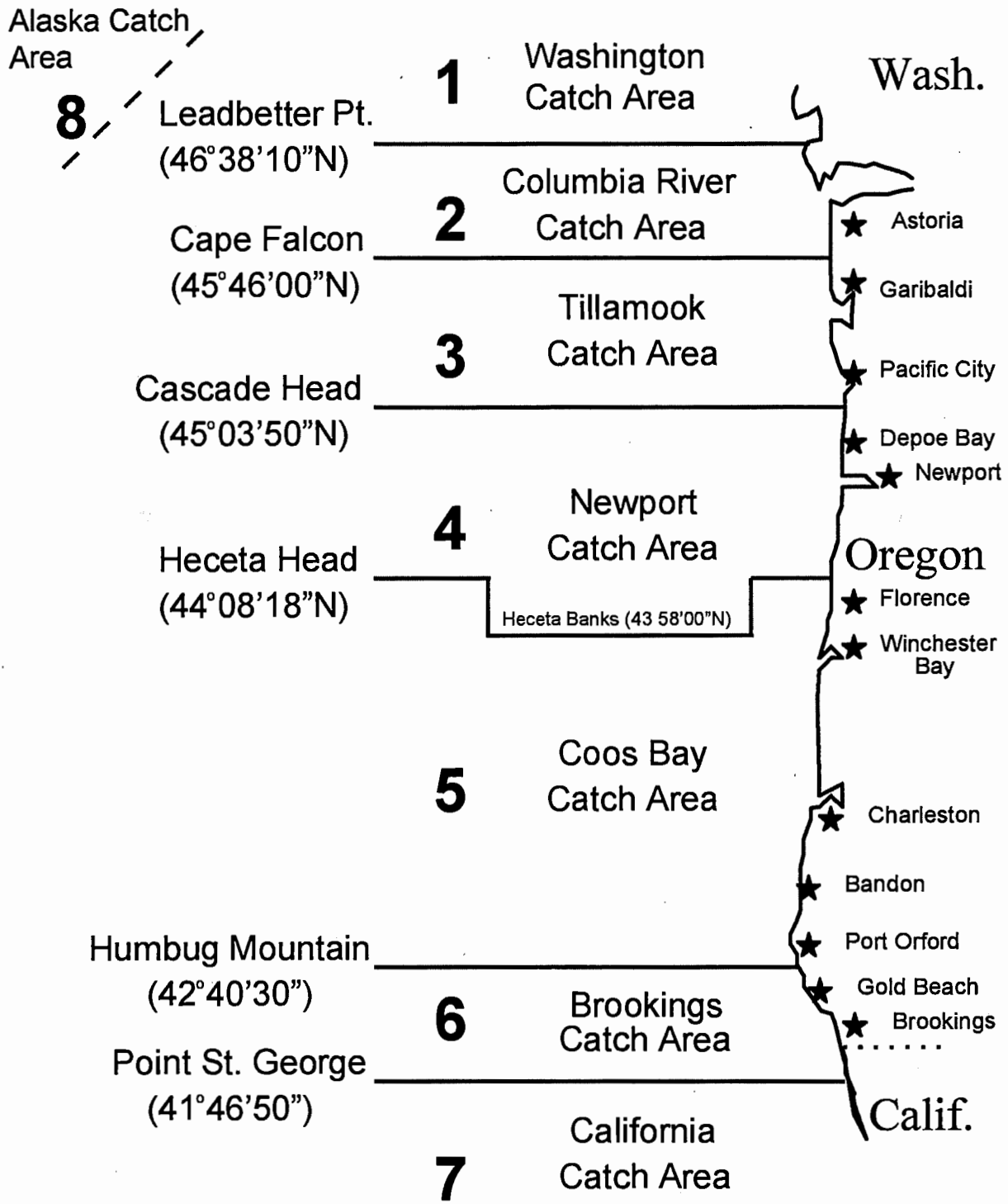
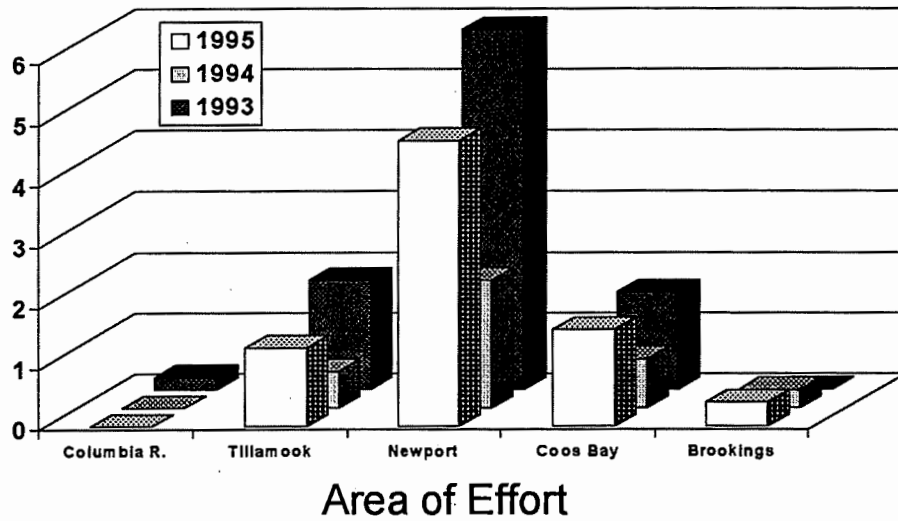


Figure 3. Oregon ocean salmon fishery catch areas and major ports where commercial troll salmon are landed.

Effort

BOAT DAYS (thousands)



BOAT DAYS (thousands)

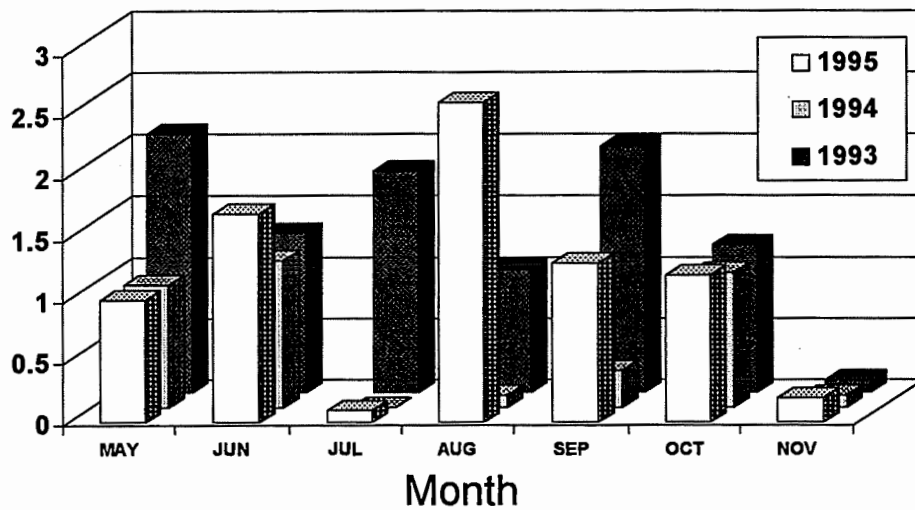


Figure 4. Oregon commercial ocean troll salmon effort in boat days by area of catch and by month, 1993-95.

Landings

Chinook: The 1995 troll chinook landings totalled 214,800 fish. The landings were more than eight times the record low 1994 catch of only 25,200 chinook, and 98% of the 1979-94 average of 218,000 chinook (Table 1; and Appendix Tables 4 and 6).

Most chinook were caught in the Newport catch area (81%). Catches were up from 1994 in all catch areas. The increase in chinook catch in the Brookings catch area was a result of more time and area fishing opportunities (including a state waters fishery), and were not necessarily a result of changes in chinook abundance (Figure 5).

July is typically the month of greatest chinook landings. However, a general statewide closure during July resulted in August making up 42%, September 22%, and June and October each 13% of the chinook catch (Table 2).

Table 2. Oregon troll chinook salmon landings in pounds dressed, by calendar month, and port of landing, 1995.

Month	May	June	July	August	Sept.	Oct.	Nov.	Total
Astoria	181	816	193	2,264	1,752	133	731	6,070
Garibaldi	4,374	6,318	1,167	50,070	14,160	13,784	0	89,873
Pacific City	121	94	0	4,701	587	591	0	6,094
Depoe Bay	1,408	4,531	0	6,654	2,487	954	0	16,034
Newport	97,852	170,366	46,763	546,761	267,301	181,519	4,013	1,314,575
Florence	2,219	25,716	0	47,670	30,786	4,418	30	110,839
Winchester	2,644	19,118	1,062	47,193	11,172	4,457	0	85,646
Charleston	11,525	34,050	5,168	109,340	73,558	17,270	221	251,132
Bandon	907	2,371	0	1,797	450	0	0	5,525
Port Orford	170	3,075	6,572	0	46	9,842	1,679	21,384
Gold Beach	121	0	2,311	483	51	0	0	2,966
Brookings	2,904	496	5,652	0	345	21,091	0	30,488
Total	124,426	266,951	68,888	816,933	402,695	254,059	6,674	1,940,626

AVERAGE WEIGHT DATA

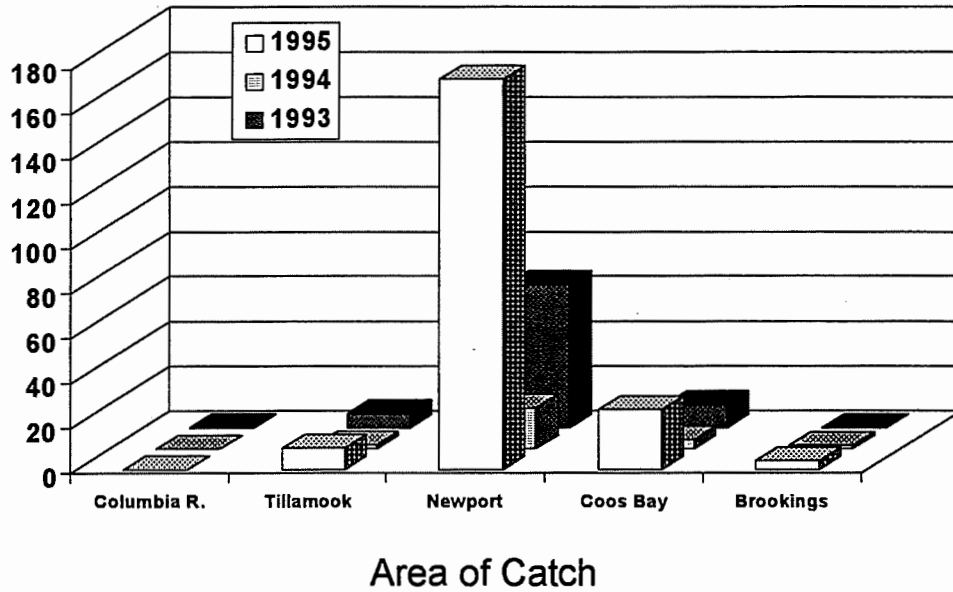
Average ocean troll salmon weight data was gathered from most port landing locations by OSMP port samplers and allowed for conversion of fish ticket poundage information to fish numbers. The 1995 seasonal average dressed weight (head on, viscera removed) for chinook was 9.0 pounds (Table 3). This was 20% lower than the 1994 average weight of 11.3 pounds.

Table 3. Observed average dressed weight and calculated number of chinook landed in the Oregon commercial ocean troll fishery by calendar month and area of catch, 1995.

Area of Landing	Month							Total
	May	June	July	Aug.	Sept.	Oct.	Nov.	
<u>Columbia R. (2)</u>								
Numbers	-	-	-	-	-	-	-	0
Pounds	-	-	-	-	-	-	-	0
Ave. wt.	-	-	-	-	-	-	-	NA
<u>Tillamook (3)</u>								
Numbers	422	765	19	6,280	1,385	785	-	9,656
Pounds	4,944	7,228	193	56,656	16,499	14,393	-	99,913
Ave. wt.	11.7	9.5	10.2	9.0	11.9	18.3	-	10.4
<u>Newport (4)</u>								
Numbers	10,712	20,732	4,937	72,070	40,461	24,474	617	174,039
Pounds	100,163	194,241	47,725	659,278	346,276	199,760	4,774	1,552,217
Ave. wt.	9.4	9.4	9.7	9.2	8.6	8.2	7.7	8.9
<u>Coos Bay (5)</u>								
Numbers	1,727	6,558	560	11,392	4,653	1,817	123	26,840
Pounds	16,337	59,928	5,399	100,999	39,920	18,112	1,827	242,522
Ave. wt.	9.5	9.1	9.6	8.9	8.6	10.0	13.7	9.0
<u>Brookings (6)</u>								
Numbers	280	25	1,682	-	-	1,456	4	3,447
Pounds	2,982	278	14,535	-	-	21,794	73	39,662
Ave. wt.	10.7	11.1	8.6	-	-	15.0	18.3	11.5
<u>Oregon Subtotal</u>								
Numbers	13,140	28,116	7,198	89,742	46,499	28,532	754	213,982
Pounds	124,426	261,675	67,852	816,933	402,695	254,059	6,674	1,934,314
Ave. Wt.	9.5	9.3	9.4	9.1	8.7	8.9	8.9	9.0
<u>Alaska (8)</u>								
Numbers	-	-	-	-	-	-	-	0
Pounds	-	-	-	-	-	-	-	0
Ave. Wt.	-	-	-	-	-	-	-	NA
<u>Washington (1)</u>								
Numbers	-	-	-	-	-	-	-	0
Pounds	-	-	-	-	-	-	-	0
Ave. Wt.	-	-	-	-	-	-	-	NA
<u>California (7)</u>								
Numbers	-	729	75	-	-	-	-	804
Pounds	-	5,276	1,036	-	-	-	-	6,312
Ave. Wt.	-	7.2	13.8	-	-	-	-	7.9
<u>Total</u>								
Numbers	13,141	28,845	7,273	89,742	46,499	28,532	754	214,786
Pounds	124,426	266,951	68,888	816,933	402,695	254,059	6,674	1,940,626
Ave. wt.	9.5	9.3	9.5	9.1	8.7	8.9	8.9	9.0

Chinook

FISH (thousands)



FISH (thousands)

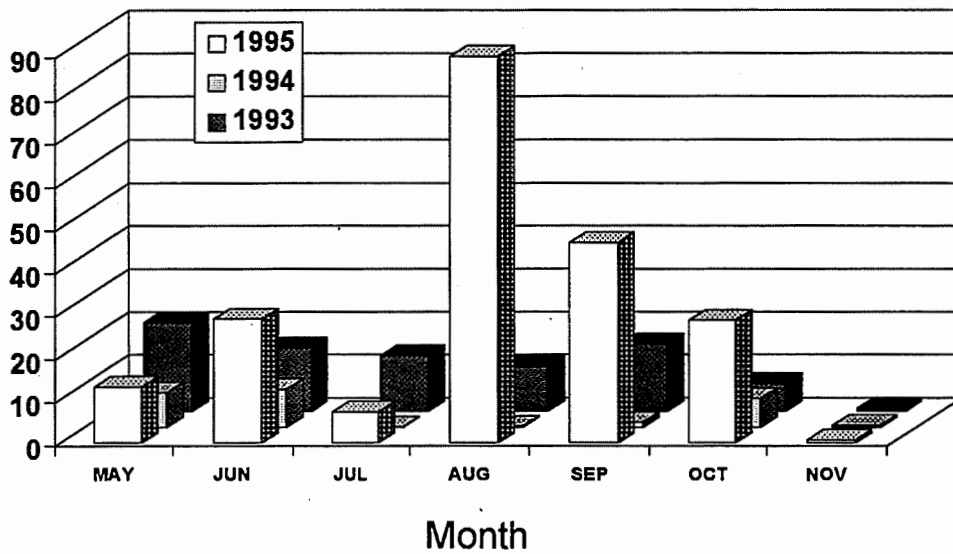


Figure 5. Oregon commercial ocean troll chinook landings by area of catch and by month, 1993-95.

THE DOLLAR VALUE OF OCEAN SALMON LANDINGS

The 1995 Oregon troll chinook landings had an ex-vessel value of \$3,294,000. This was almost 5 times the ex-vessel value in 1994, but was only 73% of the 1971-94 average of \$4,500,000. The average price of \$1.69 per pound was down 30% from the 1994 average price of \$2.40 per pound and was the lowest price paid since 1975 (dollar values are not adjusted for inflation) (Appendix Table 7).

CODED WIRE TAG SAMPLING

In 1995, the troll sampling program examined 27% of all landed chinook for CWTs (Table 4). Samplers observed 57,729 chinook in 1995, of which 3.1% or 1,771 of the observed chinook were marked (adipose fin clipped). Technicians recovered readable tags from 1,485 snouts (84%). Most of the CWTs recovered were released by ODFW (51%), and California Department of Fish and Game (28%). Most of the recovered CWTs were released in Oregon coastal streams (32%), the Sacramento/San Joaquin basin (30%), the Klamath basin (15%), the Rogue basin (11%), and the Columbia basin (10%) (Figure 6).

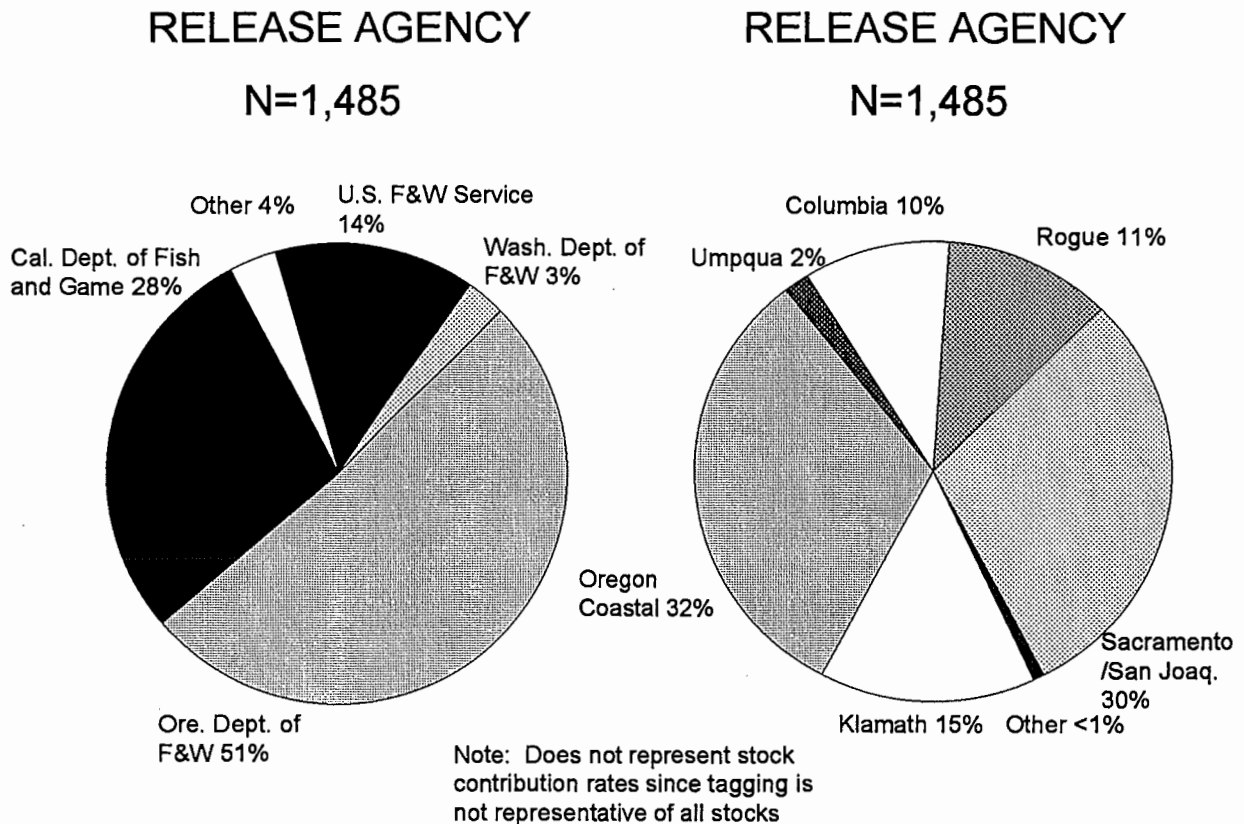


Figure 6. Observed recoveries of chinook coded wire tags from Oregon commercial ocean troll salmon landings by release agency and by basin of release, 1995.

NOTE: The above information cannot be used to estimate stock contribution since tagging is not representative of stocks, and most stocks of wild fish have no tagging programs or population estimators associated with them. Also many experimental programs have very high mark rates which may give a false impression of high contribution rates.

SPECIAL FISHERIES AND STUDIES

Elk River State Waters Chinook Fishery

A terminal ocean troll fishery designed to target returning Elk River fall chinook salmon opened immediately following the end of the general season. This fishery was open from November 1-7 within state waters (0-3 miles) in the area between Cape Blanco and Humbug Mountain.

A total of 206 chinook were landed in this fishery with an average weight of 14.4 pounds. There were 73 snouts collected from adipose fin clipped chinook from which 66 readable CWTs were recovered (90%) (these tags are included in Figure 6). All 66 CWTs were from Elk River chinook releases. Of the Elk River CWTs, 41 were three year olds (1992 brood), 21 four year olds (1991 brood), and 4 five year olds (1990 brood).

Rogue River Fall Chinook Genetic Stock Identification Study

Introduction: The PFMC authorized an experimental August ocean troll chinook fishery in waters near the Rogue River. This fishery was designed to test whether a nearshore troll fishery could target on returning Rogue River fall chinook with a reduced harvest rate on other critical stocks (i.e. Klamath River fall chinook). The test involved the collection of tissue samples to allow for the post season estimation of the stock composition through genetic stock identification (GSI) analysis. The 1995 study was made possible through federal NW salmon disaster relief funding.

The GSI process relies on genetic differences between stocks of salmon that can be measured using starch gel electrophoretic techniques. The fishery was scheduled to open July 24 and continue through the earlier of August 31 or the 1,200 chinook quota. The open area included waters from 0-4 miles between Sisters Rocks and Mack Arch, except that the area within a one mile radius of the Rogue River remained closed to all commercial salmon fishing due to state statute. The GSI sampling required a minimum sample size of 400 fish to accurately estimate stocks with low contribution rates to the fishery. To insure that ODFW could adequately sample the fishery, all salmon were required to be landed into either Port Orford, Gold Beach, or Brookings. Fishermen were required to contact ODFW via electronic pagers if samplers did not meet the boat immediately upon landing. Although required to pre-register in 1994, no permits or pre-

Table 4. Oregon ocean troll chinook mark sampling by statistical month and port of landing, 1995.

Port of Landing	Month							Total
	May	June	July	Aug.	Sept.	Oct.	Nov.	
<u>Astoria</u>								
No. Examined	-	0	-	0	0	0	0	0
No. Landed	-	126	-	309	131	3	86	655
% Examined	-	0	-	0	0	0	0	0
No. Marks	-	-	-	-	-	-	-	-
<u>Garibaldi</u>								
No. Examined	115	402	-	1,425	333	248	21	2,544
No. Landed	330	809	-	5,804	958	670	33	8,604
% Examined	35	50	-	25	35	37	64	30
No. Marks	8	9	-	39	8	10	2	76
<u>Pacific City</u>								
No. Examined	0	0	-	0	0	0	-	0
No. Landed	8	7	-	523	41	24	-	603
% Examined	0	0	-	0	0	0	-	0
No. Marks	-	-	-	-	-	-	-	-
<u>Depoe Bay</u>								
No. Examined	0	0	-	0	0	0	-	0
No. Landed	15	623	-	769	223	82	-	1,712
% Examined	0	0	-	0	0	0	-	0
No. Marks	-	-	-	-	-	-	-	-
<u>Newport</u>								
No. Examined	2,982	5,023	0	20,047	10,192	7,310	49	45,603
No. Landed	8,527	25,094	75	67,236	24,317	21,355	1,432	148,036
% Examined	35	20	0	30	42	34	3	31
No. Marks	89	113	-	554	294	179	-	1,229
<u>Florence</u>								
No. Examined	44	875	-	0	0	0	0	919
No. Landed	167	2,716	-	5,634	3,285	518	47	12,367
% Examined	26	34	-	0	0	0	0	7
No. Marks	0	15	-	-	-	-	-	15
<u>Winchester Bay</u>								
No. Examined	0	0	-	0	0	0	0	0
No. Landed	245	2,271	-	5,503	1,120	487	69	9,695
% Examined	0	0	-	0	0	0	0	0
No. Marks	-	-	-	-	-	-	-	-
<u>Charleston</u>								
No. Examined	250	692	-	2,926	2,466	118	0	6,452
No. Landed	1,179	4,313	-	11,781	8,452	2,007	34	27,766
% Examined	21	16	-	25	29	6	0	23
No. Marks	3	7	-	75	55	0	-	140
<u>Bandon</u>								
No. Examined	0	0	-	0	0	-	-	0
No. Landed	106	272	-	250	3	-	-	631
% Examined	0	0	-	0	0	-	-	0
No. Marks	-	-	-	-	-	-	-	-

Table 4 (cont.). Oregon ocean troll chinook mark sampling, 1995.

Port of Landing	Month							Total
	May	June	July	Aug.	Sept.	Oct.	Nov.	
Port Orford								
No. Examined	0	0	341	-	0	402	169	912
No. Landed	19	344	778	-	4	602	206	1,953
% Examined	0	0	44	-	0	67	82	47
No. Marks	-	-	3	-	-	174	73	250
Gold Beach								
No. Examined	0	-	165	0	0	-	-	165
No. Landed	7	-	258	45	6	-	-	316
% Examined	0	-	64	0	0	-	-	52
No. Marks	-	-	3	-	-	-	-	3
Brookings								
No. Examined	94	40	416	0	0	584	-	1,134
No. Landed	238	86	646	30	6	1,442	-	2,448
% Examined	39	47	64	0	0	40	-	46
No. Marks	3	0	6	-	-	49	-	58
Total								
No. Examined	3,485	7,032	922	24,398	12,991	8,662	239	57,729
No. Landed	10,841	36,661	1,757	97,884	38,546	27,190	1,907	214,786
% Examined	32	19	52	25	34	32	13	27
No. Marks	103	144	12	668	357	412	75	1,771

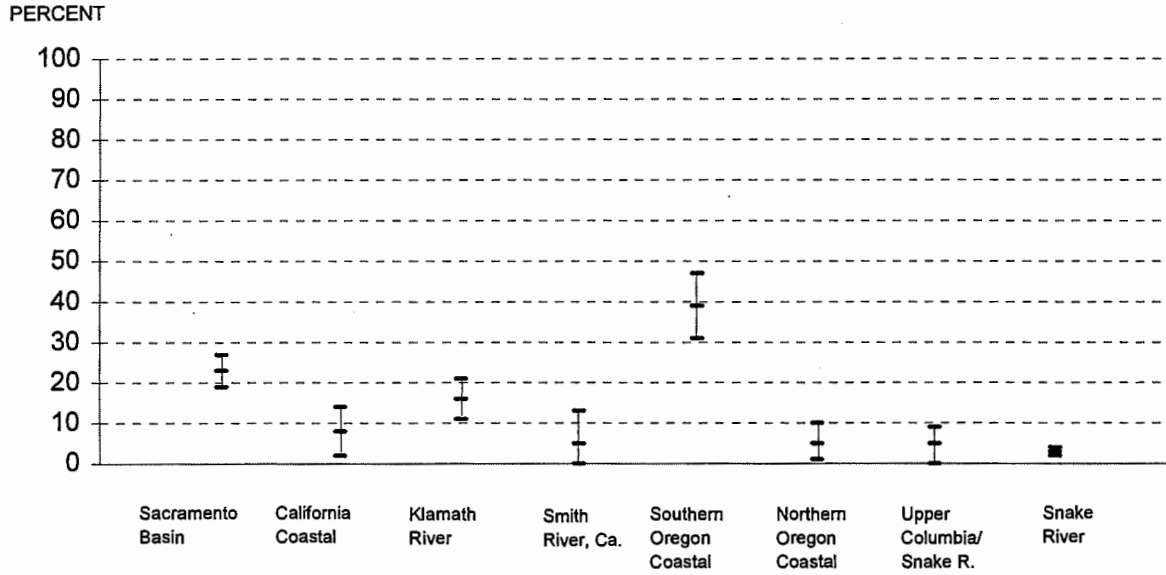
registration were required for the fishery in 1995 and only 31 vessel landings occurred during the fishery.

Results: A total of 1,682 chinook were landed in the GSI test fishery by participating trollers. The ODFW staff collected GSI tissue samples from 466 of the landed chinook. The sampling goal was met and samples analyzed by a contract laboratory. Results are presented in Figure 7 and Table 5.

Most of the chinook sampled came from California stocks (99%), and 1% from the Columbia Basin. The Sacramento/San Joaquin system showed as the highest contributing stock group at 94%, with the Klamath River making up 4% of the chinook sampled.

Twelve chinook that were recovered for analysis had adipose fin clips that indicated a presence of CWTs. Ten of the chinook CWTs were from Sacramento fall chinook, the remaining two had no tags present.

Troll Chinook Stock Composition Rogue River Ocean Area August 8-31, 1994



Troll Chinook Stock Composition Rogue River Ocean Area July 24-25, 1995

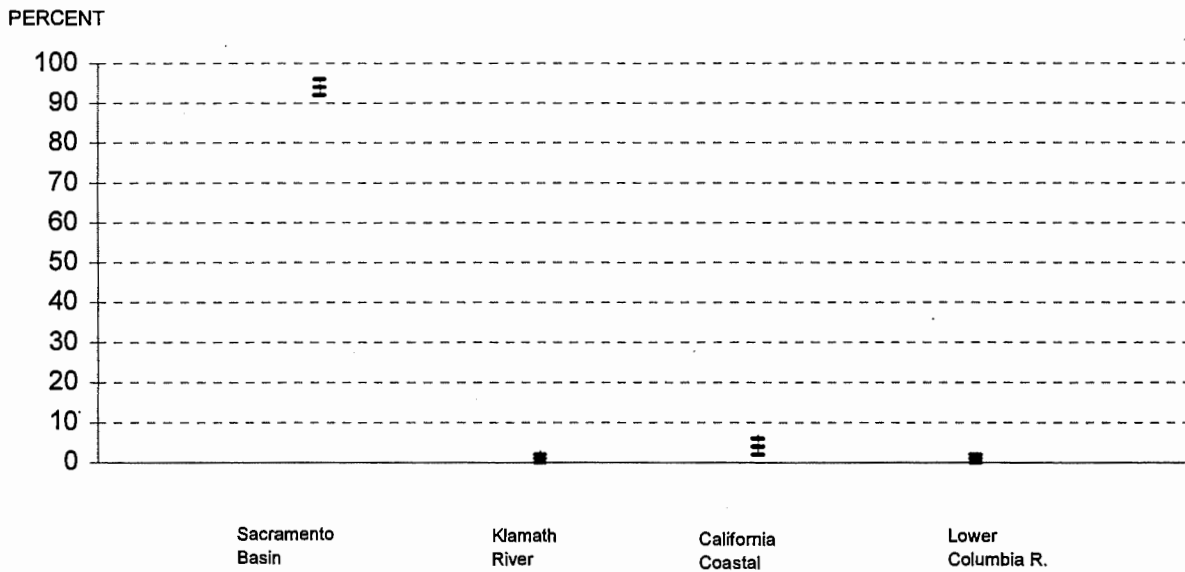


Figure 7. Estimated Oregon chinook stock composition from the troll fishery off the Rogue River, 1994 and 1995. Estimates are from genetic stock identification tissue samples (1994, n=220; 1995, n=446). Mean estimates and one standard deviation are displayed.

Discussion and conclusion: The fishery demonstrated little potential to target on returning Rogue River fall chinook in 1995. The fishery may need to be restructured by time and/or areas to better match the run return timing of the Rogue River fall chinook.

Table 5. Estimated chinook stock contribution rates from the Oregon troll fishery off the Rogue River August 8-31, 1994 and July 24 -25, 1995. Estimates based on Genetic Stock Identification (GSI) tissue samples, and analysis.

Stock Grouping ^a	1994 Estimated Contribution rate (+/- 1 Stand. Dev.) N=220		1995 Estimated Contribution rate (+/- 1 Stand. Dev.) N=446	
	Sacramento Basin (ChS+ChF+ChW)	0.23	(0.04)	0.94
California Coastal/Eel River (ChF)	0.07	(0.06)	0.01	(0.01)
Klamath River (ChS+ChF)	0.16	(0.05)	0.04	(0.02)
Smith River (ChF)	0.04	(0.09)		
Southern Oregon Coastal (ChS+ChF) ^b	0.39	(0.08)		
Northern Oregon Coastal (ChS+ChF) ^c	0.05	(0.04)		
Upper Columbia (ChSu/ChF) & Snake River (ChF)	0.04	(0.04)		
Snake River (ChSu+ChS)	0.02	(0.01)		
Lower Columbia (ChSu+Chf)			0.01	(0.01)

^a ChS = Spring chinook
ChSu = Summer chinook
ChF = Fall chinook
ChW = Winter chinook

^b Southern Oregon Coastal includes: Rogue River, Chetco River, Pistol River and the Winchuck River. Rogue River stock releases in the Lower Columbia River also fall into this stock grouping.

^c Northern Oregon Coastal includes all Oregon Coastal stocks from the Elk River north.

Chetco River State Waters Chinook Fishery

An ocean terminal troll fishery designed to target on returning Chetco River fall chinook opened on October 10 and continued through October 20, 1995. This fishery was open within state waters (0-3 miles) in the area between Goat Island and 42° 01'20" N. Lat. and had a quota of 1,000 chinook.

A total of 1,338 chinook were landed averaging 15.1 pounds. There were 49 snouts taken from adipose fin-clipped chinook from which 45 readable CWTs were recovered (92%). Chetco River releases accounted for 28 of the CWTs; 9 were from the Winchuck River; 6 from Pistol River; 1 from Hunter Creek, and 1 from Trinity River, California. Of the Chetco River CWTs, 5 were three year olds (1992 brood), 21 were

four year olds (1991 brood), and 2 were five year olds (1990 brood). This information does not represent stock composition percentages as CWT marking rates and fishery sampling rates are not accounted for.

THE 1995 OCEAN RECREATIONAL SALMON FISHERY

BACKGROUND

Oregon's ocean recreational salmon fishery originated with boats fishing in the bays on stocks returning to freshwater in the fall. A few boats would venture out into the ocean on favorable days. The late 1940s and early 1950s marked the beginning of increasing effort by both the charter and private boat fleet in the ocean. Better and safer equipment plus the development of small boat basins and launching ramps and other support facilities in many coastal towns encouraged ocean fishing (PFMC, 1978).

The primary targeted species of the Oregon recreational fleet has traditionally been coho salmon with chinook a distant second. The fishery has been sampled by ODFW's Ocean Salmon Management Program since the early 1960s. Ocean creel data was supplemented by salmon/steelhead tag license data through the 1980 season. Creel data alone have been used since 1981.

The peak catch and effort year was 1976 when 538,400 angler trips resulted in a catch of 79,300 chinook and 501,300 coho. The daily bag limit in 1976 was 3 salmon and the season lasted from mid-April to December 31. In 1995, the seasons and catch quotas were extremely limited; and resulted in an ocean catch of 6,733 chinook, 11,913 coho, and 6 pinks from 35,850 salmon angler trips (Table 6). Oregon's ocean recreational fishery has generally targetted chinook salmon beginning with the 1994 ocean season when most ocean coho salmon fishing was prohibited.

SAMPLING METHODOLOGY

Sampling areas and staffing

Thirteen seasonal employees sampled the ocean recreational fishery at eight major ports in 1995. Newport had two samplers; Coos Bay had one; Garibaldi had three samplers, and Brookings had two combination (recreational and commercial troll) samplers. Pacific City had one combination sampler and Depoe Bay one recreational sampler. Florence had one combination sport and troll sampler (Appendix Table 1). Winchester Bay was not sampled in 1995 due to reduced funding, short all-species-except-coho salmon seasons, and limited bottom fishing opportunities in the area.

Limited sampling began in May in all ports. Some of the early sampling was supported by other funds such as halibut tag moneys to assist monitoring of the concurrent halibut season. Additional personnel were added to cover late season terminal ocean area state waters salmon fisheries at Garibaldi and Brookings during September and October. All samplers counted ocean boats and checked returning anglers. Total

Table 6. Oregon ocean recreational salmon catch and effort for 1966-95^a.

Year	Effort (Angler Trips)		Salmon Catch			Fish/Angler
	Salmon	Total	Coho	Chinook	Pink	
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
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	226,022	275,947	175,128	38,716	14	0.95
1983	226,029	261,456	146,904	24,677	69	0.76
1984	153,061	203,591	123,325	16,992	3	0.91
1985	251,583	270,860	182,486	55,867	7,711	0.97
1986	186,971	216,068	218,907	22,829	8	1.29
1987	255,074	279,517	180,534	59,420	930	0.94
1988	250,657	282,849	226,873	38,327	0	1.06
1989	266,260	311,393	273,271	32,043	1,328	1.15
1990	246,555	294,031	200,646	26,548	3	0.92
1991	190,062	228,103	259,086	14,416	280	1.44
1992	165,317	219,330	185,845	12,573	19	1.20
1993	80,345	141,586	59,281	6,495	25	0.82
1994	26,897	95,143	46	6,037	0	0.22
1979-94 average	216,790	256,725	183,676	26,502	1,567 ^b	0.94
1995	35,850	105,185	11,913	6,733	6	0.52

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

^b Odd year average.

sampler months increased slightly from 1994 levels due to increased season length (Appendix Table 8).

Sampling Design

A statistical creel survey using a modified random sampling design has been used in all recent years. Catch per angler data is collected at least 4 days a week, including all weekends and holidays if salmon fishing is open. Ocean anglers are interviewed at boat ramps, moorages, and charter docks. Samplers usually work from early morning to late afternoon, but work hours vary to reflect fishing activity. The salmon catch is sampled for species, fin marks, scales and lengths. Snouts are collected from marked (adipose fin-clipped) fish and forwarded to the ODFW tag recovery laboratory in Clackamas for decoding. Bottomfish catch is also recorded. In 1995 all OSMP ocean recreational sampling data was collected with hand held data collection computers. Data was collected on a weekly basis and transported to the Newport ODFW office for error checking.

Effort information is primarily obtained through boat counts by ODFW samplers, but Coast Guard bar crossing counts, and data from charter boat offices are also sometimes used. ODFW boat counters work from dawn until 10 AM and then sample for the remainder of their shift. An expansion factor based on previous years boat counts is applied each week to account for boats going out after 10 AM. They tallied both out-going and in-coming boats crossing the bar. In Pacific City and Depoe Bay, total effort is estimated from a combination of boat trailer/moorage slip counts and a tally of outgoing vessels.

Quota Assessment

Catch and effort data are error-checked and then processed on the Department's Unisys computer (Portland) by Newport data staff. Angler interviews are stratified by charter and private boat angler to provide average catch rates by species. These catch rates, when multiplied by total effort for a particular period, give a catch estimate for that period. The same method is used to estimate total angler trips. The survey provides weekly estimates of Oregon's ocean recreational effort and catch within 4 days after the week ended. A preliminary catch estimate is available within one day of the end of the week. These catch estimates are necessary for timely monitoring of catch quotas.

Department samplers checked 6,341 salmon in 1995 compared to 1,607 in 1994. Catch sampling rates in 1995 ranged from a high of 100% at Pacific City to a low of 28% at Coos Bay. Samplers checked 34% of the total salmon catch from all ports in 1995 compared to 26% in 1994 (Appendix Table 8).

REGULATIONS

General

The Oregon Coast is divided into three general salmon management areas: north of Cape Falcon, Cape Falcon to Humbug Mountain, and south of Humbug Mountain. The 1995 regulations (Figure 8) were adopted by the PFMC and signed into law by the Secretary of Commerce. The Oregon Fish and Wildlife Commission adopted the regulations as written by PFMC for state waters (0-3 miles) and also adopted three additional special seasons in state waters. Appendix Table 9 gives an annual historical summary of recreational ocean salmon regulations.

North of Cape Falcon

An all-salmon-except-chinook season was adopted for the area from Leadbetter Point, Washington to Cape Falcon, Oregon to open July 24 and continue through September 28 or the quota of 37,500 coho. The season opened on July 24 and continued through September 5 when it appeared that the quota had been met. The season reopened for the period of September 10 through 17. This season was open from 3-200 miles, Sunday through Thursday only. The bag limit was 2 salmon per day, but not more than 4 in 7 days. The minimum size limit for coho was 16", but no minimum size was required for pink salmon. A quota of 37,500 coho was set. The Columbia River control zone was closed to salmon angling.

Cape Falcon to Humbug Mountain

The daily bag limit was 2 salmon, not more than 6 fish were allowed in 7 consecutive days, and the annual limit was 40 salmon. Minimum size limits were 20" for chinook and there was no size restriction for pink salmon. Special gear restrictions were in effect which included artificial plugs or whole bait, both 6" or larger; no more than two single point, single shank barbless hooks; and no painted weights or attractors such as flashers or colored divers (by regulation uncolored divers were not considered attractors and therefore legal in 1995).

The general season was open May 1 through June 30. There were no quotas in this area. A control zone was established around the mouth of Tillamook Bay (Appendix figure 1) to provide added protection for local salmon stocks of concern. OSMP staff erected US Coast Guard approved markers at the northern and southern boundaries of the zone. The control zone was closed June 1-30 to reduce the impact on local spring chinook.

Humbug Mountain to Horse Mountain, California

The first season in the area from Humbug Mountain, Oregon to Horse Mountain, California was scheduled to be open from May 17 through the earlier of July 8 or the

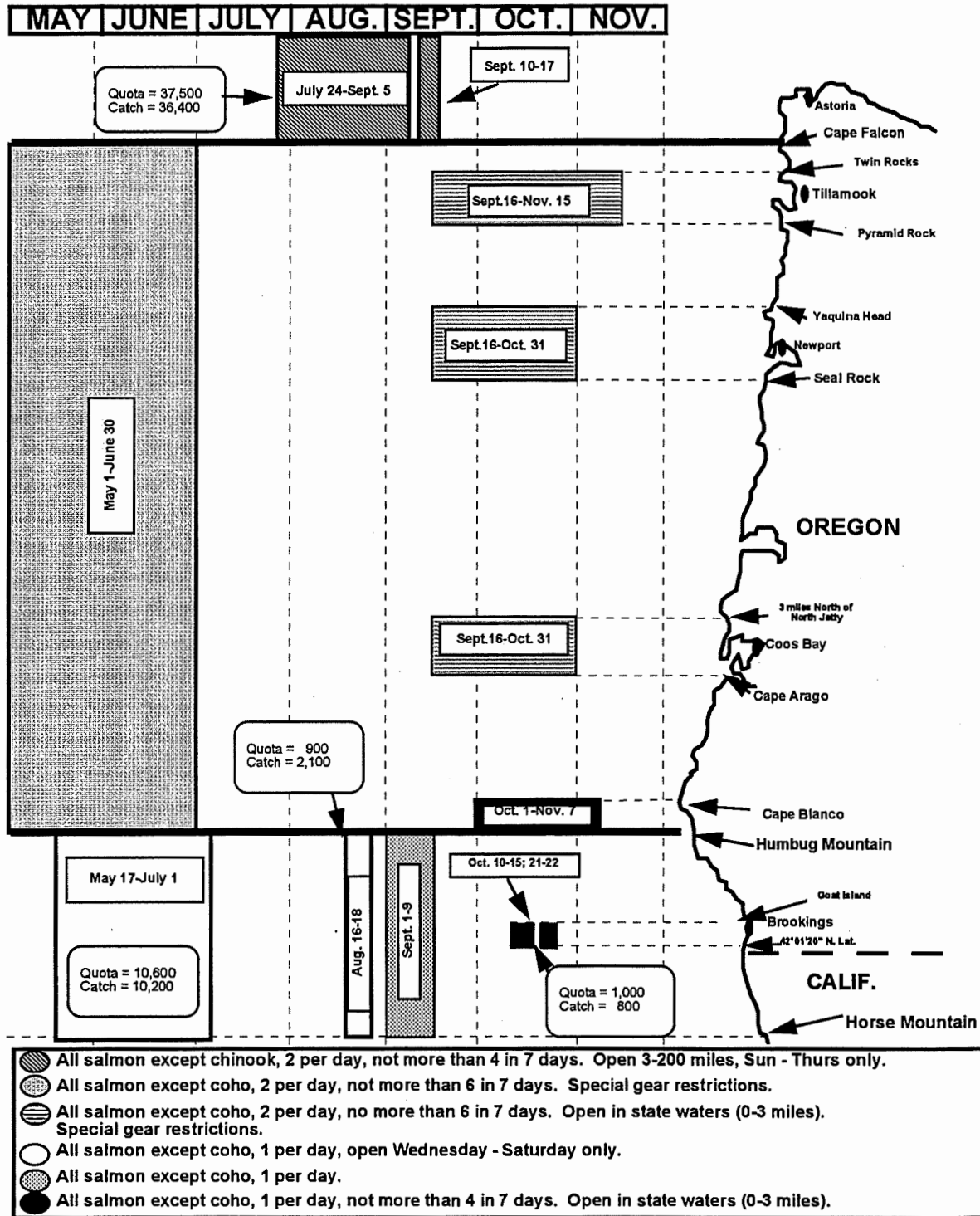


Figure 8. Ocean recreational salmon seasons off Oregon, 1995.

chinook quota of 10,600 fish. This area is referred to as the Klamath Management Zone (KMZ). The season opened May 17 and closed on July 1 when the quota was met. This fishery was open Wednesday through Saturday with a bag limit of 1 salmon per day.

The next season was to run from August 16 through the earlier of August 31 or the chinook quota of 900 fish. The season opened August 16 and closed August 18, when the quota was met. This fishery was open Wednesday through Saturday with a bag limit of 1 salmon per day.

The season re-opened September 1 through September 9 for nine days with no chinook quota. This season had a 1 salmon per day bag limit per day, and was open all days of the week.

Oregon had an annual bag limit of 40 salmon. The minimum size limit for chinook was 20", there was no size restriction for pink salmon, and the area was closed to coho salmon retention. Single point barbless hooks were required.

Late season, state waters fisheries

September-November Fishery off Tillamook Bay: The Oregon Fish and Wildlife Commission set a state waters (0-3 miles) season for all-salmon-except-coho off Tillamook Bay between Twin Rocks and Pyramid Rock. The open period was September 16 through November 15. Special gear restrictions went into effect which included: Artificial plugs or whole or plug-cut bait, both 6" or larger. No more than two single point, single shank barbless hooks; no painted weights or attractors such as flashers or colored divers (by regulation uncolored divers were not considered attractors and therefore legal in 1995). A bag limit of two salmon per day, and not more than six salmon in seven consecutive days was in effect. No quota was in effect during this season. The control zone off the mouth of Tillamook Bay was closed September 16-30 to protect returning coho salmon (Appendix Figure 1).

September/October Fishery off Yaquina Bay: The Oregon Fish and Wildlife Commission set a state waters (0-3 miles) season for all-salmon-except-coho off Yaquina Bay between Yaquina Head and Seal Rock. The open period was September 16 through October 31. Special gear restrictions were in effect which included: Artificial plugs or whole bait, both 6" or larger; no more than two single point, single shank barbless hooks; and no painted weights or attractors such as flashers or colored divers (by regulation uncolored divers were not considered attractors and therefore legal in 1995). The bag limit was two salmon per day, and not more than six salmon in seven consecutive days. No quota was in effect during this season.

September/October Fishery off Coos Bay: The Oregon Fish and Wildlife Commission set a state waters (0-3 miles) season for all-salmon-except-coho off Coos Bay between a point three miles north of the north jetty and Cape Arago. The open

period was September 16 through October 31. Special gear restrictions were in effect which included: Artificial plugs or whole bait, both 6" or larger; no more than two single point, single shank barbless hooks; and no painted weights or attractors such as flashers or colored divers (by regulation uncolored divers were not considered attractors and therefore legal in 1995). The bag limit was two salmon per day, and not more than six salmon in seven consecutive days. No quota was in effect during this season.

October/November Fishery off Port Orford: This state waters (0-3 miles) all-species-except-coho fishery extended from Cape Blanco south to Humbug Mountain and had no quota. The area was open to both commercial and recreational fishers. The season opened October 1 and closed November 7. Anglers were allowed two salmon per day, and up to six salmon in seven consecutive days. We did not sample this recreational fishery, but concentrated on commercial landings. The sport catch was minimal.

October Fishery off of Brookings: The Oregon Fish and Wildlife Commission set a state waters (0-3 miles) season for all-salmon-except-coho off of Brookings between Goat Island and the latitude of 42°01'20" N. The season was to open October 10 and continue through the earlier of October 31 or a catch of 1000 chinook. The season was open October 10-15 and 21-22. A bag limit of one salmon per day and no more than four in seven days was in effect.

EFFORT AND CATCH STATISTICS

Effort

Before 1979, ocean recreational effort data included a small number of bottomfishing trips. Since 1979, salmon fishing trips have been separated from bottomfishing trips. Usually ocean anglers choose salmon fishing over bottomfishing when both fisheries are available. However, bottomfishing trips tend to predominate in May and early June, especially in the Newport catch area where halibut fishing has become popular.

The sharp drop in effort caused by limited salmon seasons in recent years has not been buffered by a comparable increase in bottomfishing effort. Bottomfishing trips increased by only 3% over the 1994 season. Total combined salmon and bottomfishing effort was up 10% from 1994, but remained 59% below the 1971-94 average of 256,725 angler trips. (Tables 6 and 7).

In 1995, 35,850 trips (34%) targeted salmon coastwide, and 70,445 (66%) additional trips fished for bottomfish during the salmon season for a combined total of 105,185 angler trips. Salmon angler trips in 1995 were 33% higher than the 1994 value and 83% below the 1979-94 average.

August was the peak month for salmon effort with 12,083 salmon angler trips or 34% of the total. August was also the top month for bottomfishing effort with 21,237 trips or 30% of the total (Table 7, Figures 9 and 11, and Appendix Table 10). Historically, July has the highest effort for salmon, especially from Depoe Bay south, while August is often the top month for the Tillamook and Astoria areas. Early closures and reduced fishing seasons have obscured this trend in recent years (Appendix Table 11).

Total effort increased from 1994 levels in all ports except Garibaldi, Depoe Bay and Florence which decreased. Brookings had the highest salmon fishing effort in 1995 with 19,422 angler trips or 54% of the state's total. The Astoria and Garibaldi areas followed with 9,649 and 5,073 angler trips, respectively (Figure 11). It should be noted that 3,110 (61%) of Garibaldi angler trips occurred during the fall state waters fishery. This is a special fishery that typically was not sampled or included in the data prior to 1994.

Newport had the highest bottomfishing effort with 21,254 trips. Brookings and Garibaldi followed with 14,268 and 13,118 bottomfishing trips each, respectively (Table 7). Appendix Table 11 shows past ocean recreational effort and catch by catch areas. Please note that "port" and "catch areas" are not synonymous.

Catch

As with effort, catches were strongly influenced by reduced quotas and restrictive time and area seasons. The sport sampling survey estimated Oregon's 1995 ocean salmon catch by species, except for minor landings from some unsurveyed ports and time periods. Fish landed at minor ports usually represent less than two percent of the total catch.

The 1995 Oregon ocean recreational salmon catch was estimated at 18,652 salmon, a three-fold increase from 1994. This increase primarily reflects the opening of the coho fishery north of Cape Falcon in 1995. Catches were still well below the record catch of 580,000 in 1976 and the 1979-94 average of 211,700 salmon (Table 6). Figure 12 shows the trend in recreational ocean catches since 1966.

Chinook: The recreational harvest of 6,733 chinook in 1995 was the third lowest on record, 10% above the 1994 level but only 25% of the 1979-94 average of 26,502 fish. Traditionally, many chinook were caught incidental to the coho fishery which was closed along almost the entire coast in 1995.

Brookings took 5,731 chinook or 85% of the total catch. The rest of the coast had minimal landings except Garibaldi with 69 chinook caught during the general season, and an additional 470 taken in the fall state waters fishery. (Table 8, and Figures 13 and 14). Historically, the Columbia River area has been an important chinook catch area but was closed to retention of chinook salmon in 1995.

Table 7. Oregon ocean recreational effort in angler trips by port, by month and by trip type^a, 1995.

Port/Trip Type	Month							Total ^b
	May	June	July	August	Sept.	Oct.	Nov.	
Astoria	-	-	1,668	7,097	988	-	-	9,753
Salmon	-	-	1,668	6,999	982	-	-	9,649
Bottomfish	-	-	0	98	6	-	-	104
Garibaldi	3,522	2,505	3,522	4,535	1,567	1,008	788	17,447
Salmon	616	58	607	657	1,339	1,008	788	5,073
Bottomfish	2,930	2,455	3,198	4,165	358	12	0	13,118
Pacific City	339	596	1,131	923	95	-	-	3,084
Salmon	28	18	0	0	0	-	-	46
Bottomfish	311	578	1,131	923	95	-	-	3,038
Depoe Bay	2,105	2,194	3,155	3,672	82	-	-	11,208
Salmon	23	24	0	0	0	-	-	47
Bottomfish	2,103	2,193	3,155	3,672	82	-	-	11,205
Newport	4,311	3,959	4,642	5,841	1,913	1,162	-	21,828
Salmon	116	236	0	0	427	117	-	896
Bottomfish	4,235	3,840	4,642	5,841	1,607	1,089	-	21,254
Florence	56	192	-	-	-	-	-	248
Salmon	34	192	-	-	-	-	-	226
Bottomfish	22	0	-	-	-	-	-	22
Coos Bay	930	1,478	2,006	2,353	1,002	158	-	7,927
Salmon	30	302	0	0	138	21	-	491
Bottomfish	900	1,176	2,006	2,353	864	137	-	7,436
Brookings	3,898	8,361	4,959	8,612	4,379	3,481	-	33,690
Salmon	2,336	6,221	0	4,427	3,028	3,410	-	19,422
Bottomfish	1,562	2,140	4,959	4,185	1,351	71	-	14,268
State Total	15,161	19,285	21,083	33,033	10,026	5,809	788	105,185
Salmon	3,183	7,051	2,275	12,083	5,914	4,556	788	35,850
Bottomfish	12,063	12,382	19,091	21,237	4,363	1,309	0	70,445

^a Bottomfish effort is estimated only for those time periods when port sampling occurred.

^b Totals may be less than the sum of trip types because of a small number of combination trips on charter boats.

ANGLER TRIPS

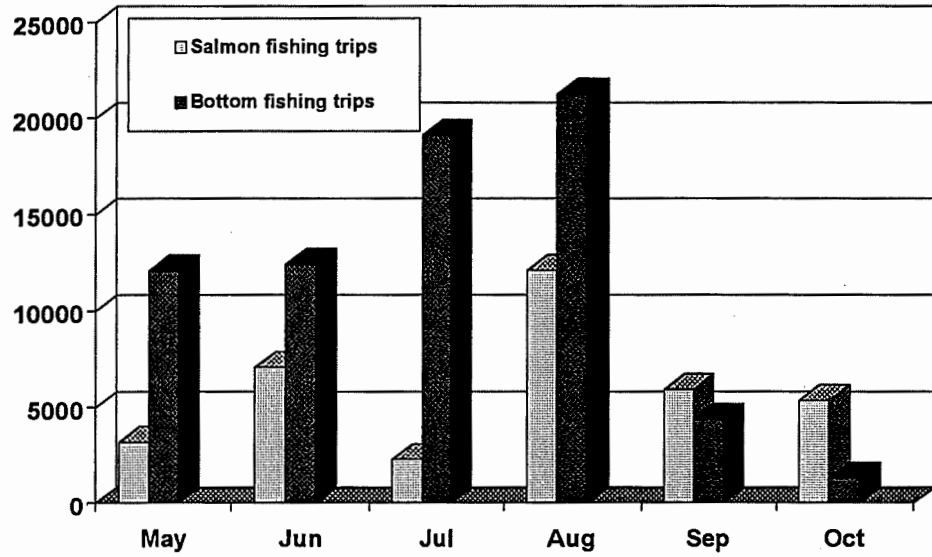


Figure 9. Oregon ocean angler trips by target species during the 1995 salmon season.

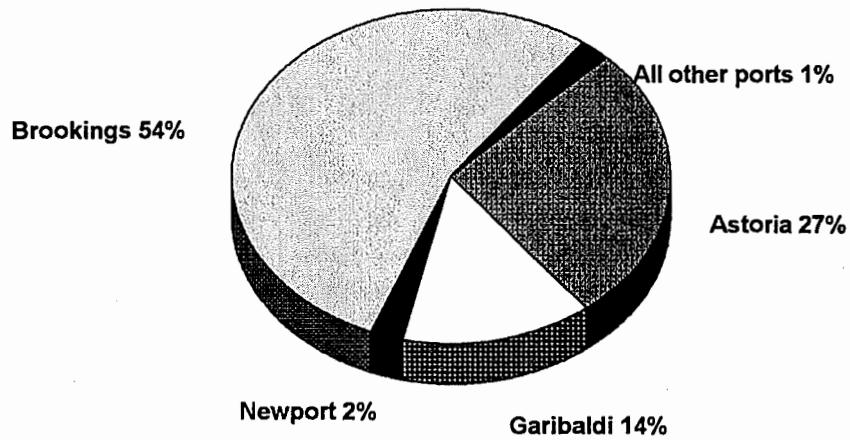
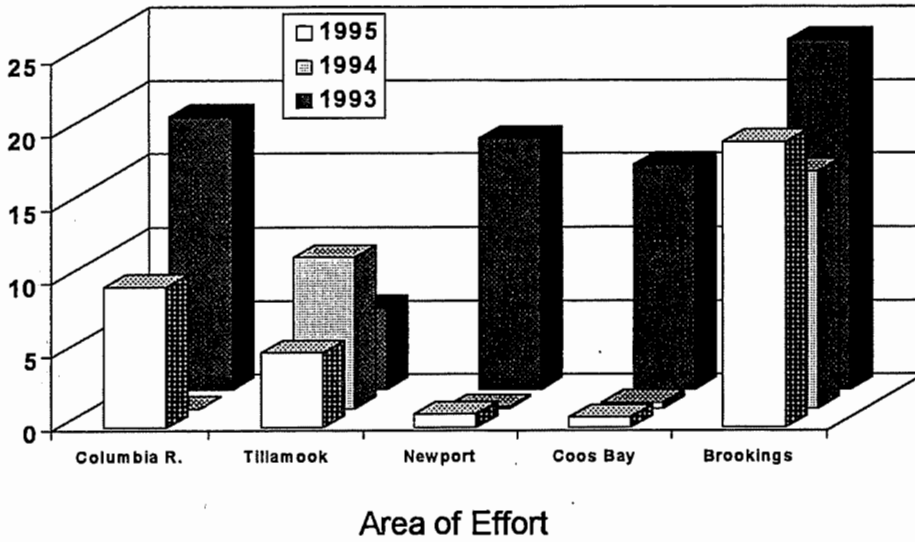


Figure 10. Recreational ocean salmon angler trips by port, 1995.

Effort

ANGLER TRIPS (thousands)



ANGLER TRIPS (thousands)

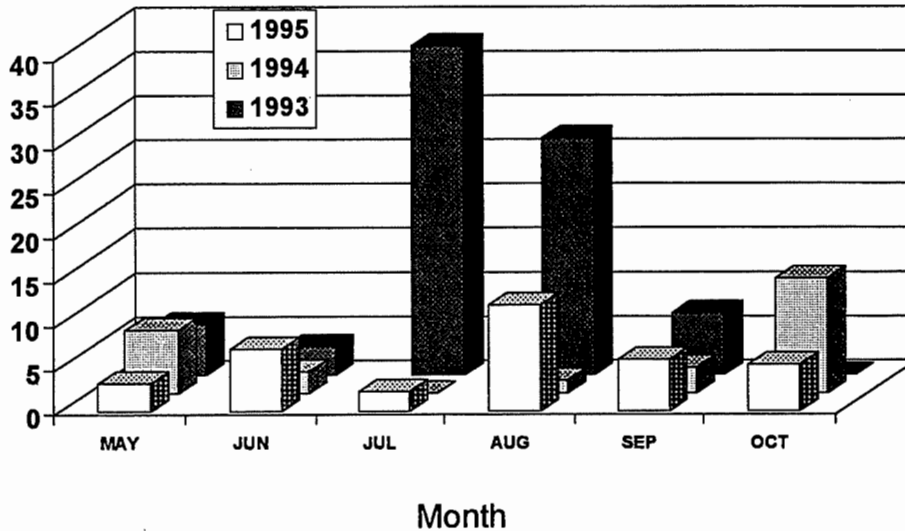


Figure 11. Oregon ocean recreational salmon angler trips by catch area and by month, 1993-95.

FISH (thousands)

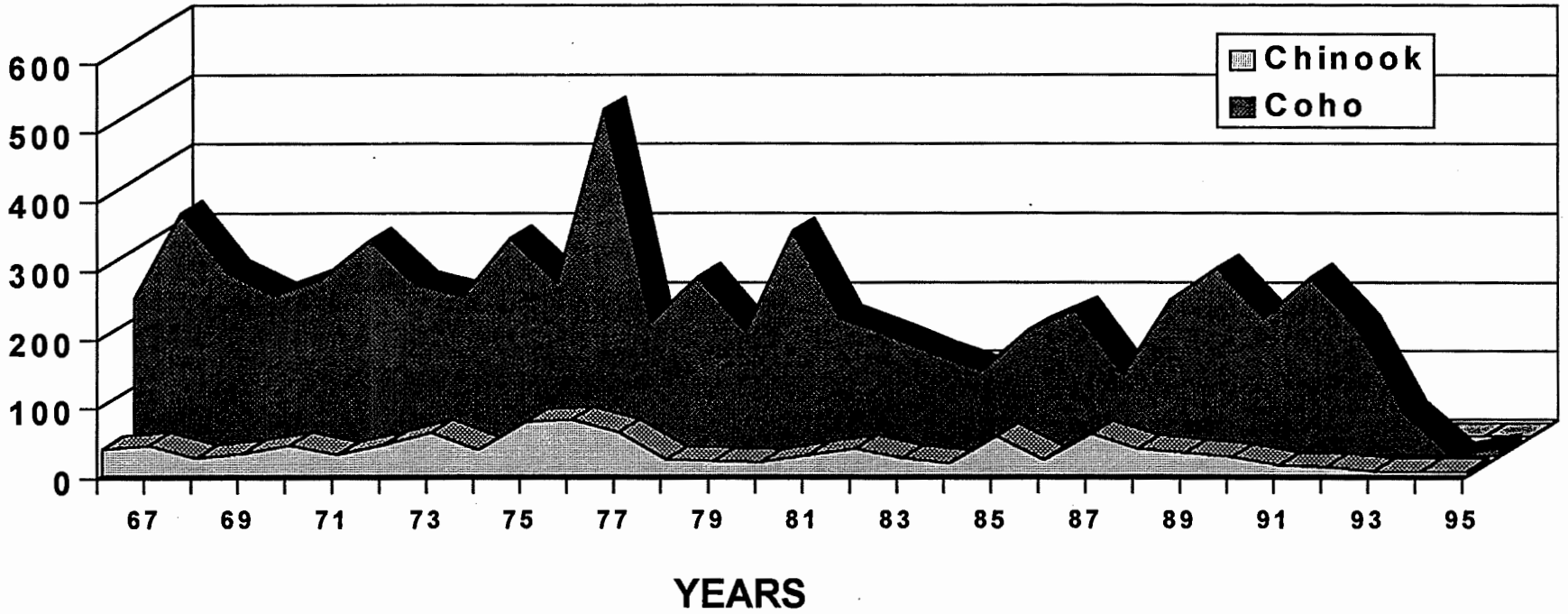
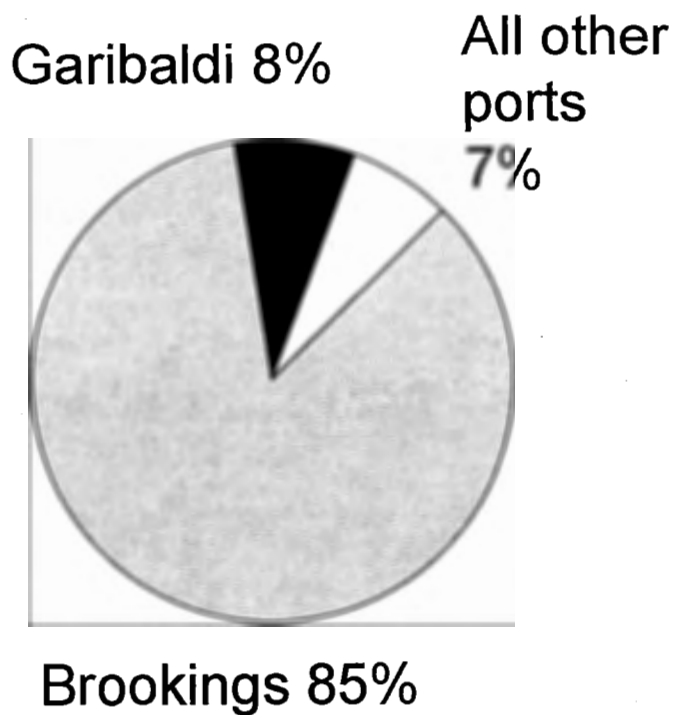


Figure 12. Trends in Oregon's recreational ocean salmon catch, 1966-95.

Chinook



Coho

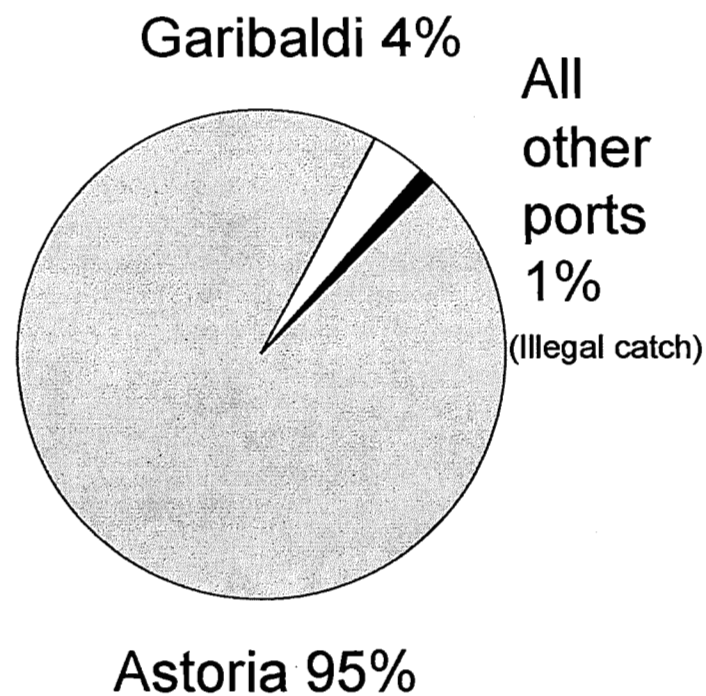


Figure 13. Oregon ocean recreational chinook and coho catch by port, 1995.

Thirty-six percent of the catch was landed in August while 27% was taken in June. Brookings predominated in all months, especially June and August (Table 8 and Figure 14). Historical catch patterns are shown in Appendix Tables 12, 13, and 14.

Coho: The recreational harvest of 11,913 coho in 1995 represents the lowest annual landing on record not including 1994 when no coho retention seasons were authorized. While this landing is the lowest on record, only the Columbia River catch area was open to recreational coho angling in 1995. Catches in this area accounted for 11,776 (99%) of the total coho landings. Some of these fish (437) were caught in the Columbia River catch area and landed back into Garibaldi. The remaining 137 coho that were landed in 1995 were illegal catches (Fig. 15, Table 9 and Appendix Table 15).

CHARTER/PRIVATE BOAT FISHERIES

Background

Approximately 93 charter boats actively participated in Oregon ocean fisheries in 1995, compared to 82 vessels in 1994. Exact estimates of actively participating vessels is difficult due to no logbook requirements and the fact that not all licensed vessels actively participate in the fishery. Some "river guides" also participate in the ocean fishery, but are not included in the charter boat estimates. Since 1983, we have monitored charter boat participation in Oregon. Active vessels have ranged from 158 boats in 1988 to 93 boats this year (Appendix Table 17). Salmon is the primary pursuit in all ports when available, but bottomfishing is also important to charter fleets.

No estimate is available on the number of individual private boats that fished in the ocean. Estimates of total boat trips are calculated for private boats, but the number of individual vessels that fished is unknown.

Charter angler effort: The 1995 charter boat effort was estimated at 4,609 salmon angler trips, up 70% from 1994 effort levels, but only 10% of the 1979-94 average of 46,804 angler trips. Charter anglers made up 13% of the total ocean salmon trips in 1995, compared to 5% in 1994 and the 1979-94 average of 21%. When bottomfishing trips are added in; charters in 1995 accounted for 40% of the total angler trips compared to 39% in 1994 (Tables 10 and 11, and Figure 16).

Charter boats operate at most major Oregon ports, but boat and fleet sizes vary. Astoria with 30 boats had the largest charter fleet on the coast and fished almost exclusively for salmon. Newport with 20 boats had the most bottom fishing effort of any port with 14,190 bottomfish angler trips, closely followed by Depoe Bay (20 boats)

Table 8. Oregon ocean recreational chinook catch by port by month^a, 1995.

Port	Month							Total
	May	June	July	Aug.	Sept.	Oct.	Nov.	
Astoria	-	-	12	94	3	0	0	109
Garibaldi	65	0	4	0	117	269	84	539
Pacific City	2	1	-	-	0	0	0	3
Depoe Bay	1	3	-	-	0	0	0	4
Newport	16	23	-	-	37	28	0	104
Florence	4	74	-	-	0	0	0	78
Coos Bay	0	113	-	-	45	7	0	165
Brookings	212	1,615	-	2,308	767	829	0	5,731
Statewide Total	300	1,829	16	2,402	969	1,133	84	6,733

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

Table 9. Oregon ocean recreational coho catch by port by month^a, 1995.

Port	Month							Total
	May	June	July	Aug.	Sept.	Oct.	Nov.	
Astoria	0	0	1,874	8,709	756	-	-	11,339
Garibaldi	0	0	102 ^b	315 ^b	20 ^b	-	-	437 ^b
Pacific City	-	-	-	-	-	-	-	-
Depoe Bay	-	-	-	-	-	-	-	-
Newport	-	-	-	-	7 ^c	-	-	7 ^c
Florence	-	-	-	-	-	-	-	-
Coos Bay	-	-	-	-	-	-	-	-
Brookings	-	38 ^c	-	54 ^c	35 ^c	3 ^c	-	130 ^c
Statewide Total	0	38	1,976	9,078	818	3	-	11,913

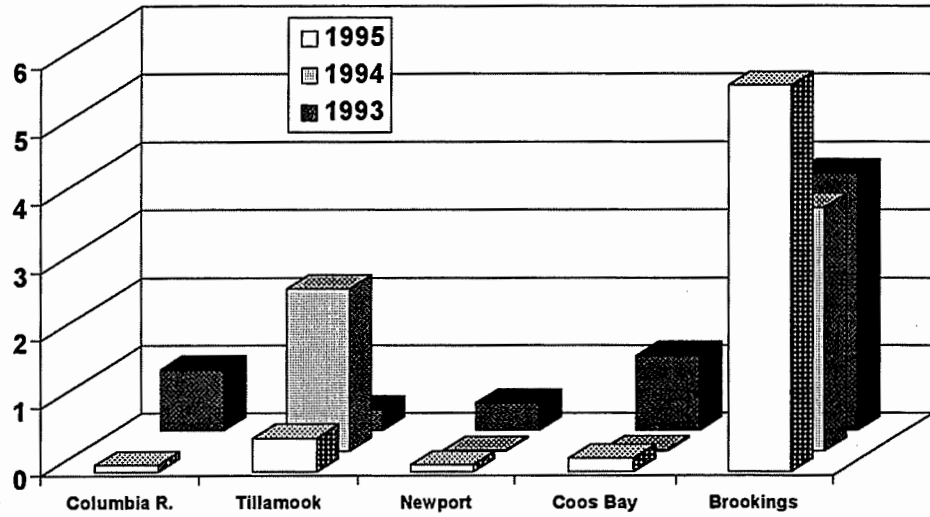
^a Monthly totals are the sum of statistical weeks estimates with closest fit to calendar month.

^b Coho caught north of Cape Falcon and landed into Garibaldi.

^c Illegal landings.

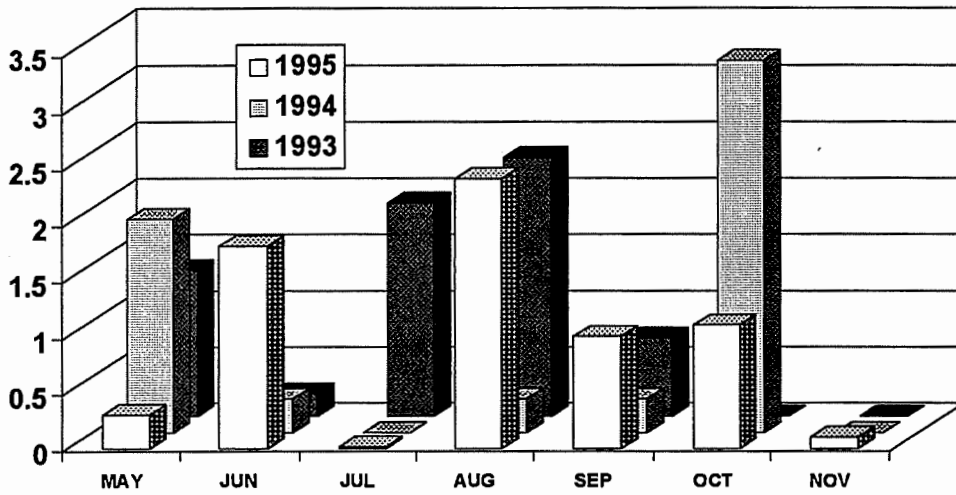
Chinook

FISH (thousands)



Area of Catch

FISH (thousands)



Month

Figure 14. Oregon ocean recreational chinook catch by catch area and by month, 1993-95.

with 9,849 bottomfish angler trips. Garibaldi (15 boats) ranked third with 8,200 bottomfish angler trips. Astoria led the coast with 2,460 salmon angler trips.

Severe restrictions on salmon fishing again in 1995 resulted in a high percentage of charter anglers that went bottomfishing. Eighty-nine percent or 37,481 charter anglers coastwide targeted on bottomfish during the salmon season. The comparable value for 1994 was 96%. An additional 1,110 angler trips were taken on combination trips that fished for both salmon and bottomfish. The high interest in bottomfishing reflected both the tight restrictions on salmon fishing and an increasing interest in halibut fishing. It is important to remember that some additional bottomfishing effort takes place before and after the salmon season, and is not estimated by this report.

Charter angler catch: The catch of 4,376 salmon by charter anglers was an increase of nearly 900% over the 1994 catch of 493 salmon. This reflects an open coho season north of Cape Falcon that was closed in 1994. The charter fleet landed 23% of the total recreational salmon catch in 1995, compared to 8% in 1994 and the 1979-94 average of 29% (Tables 10 and 11, and Figure 16).

The Astoria charter fleet took 3,838 fish or 88% of the charter caught salmon. Garibaldi charters took 269 salmon or 6% and Brookings caught 187 salmon or 4%. Salmon per angler averages ranged from 1.56 in Astoria to 0.09 salmon per angler in Depoe Bay. In 1995 the state-wide charter average of 0.95 salmon/angler was up from the 1994 level of 0.35 salmon/angler.

Private boat angler effort: The 1995 salmon effort from private boats was estimated at 31,241 angler trips or 87% of the total salmon effort. This is 18% more than observed in 1994, but still 81% below the 1979-94 average of 165,406 angler trips (Tables 10, 11 and Figure 16).

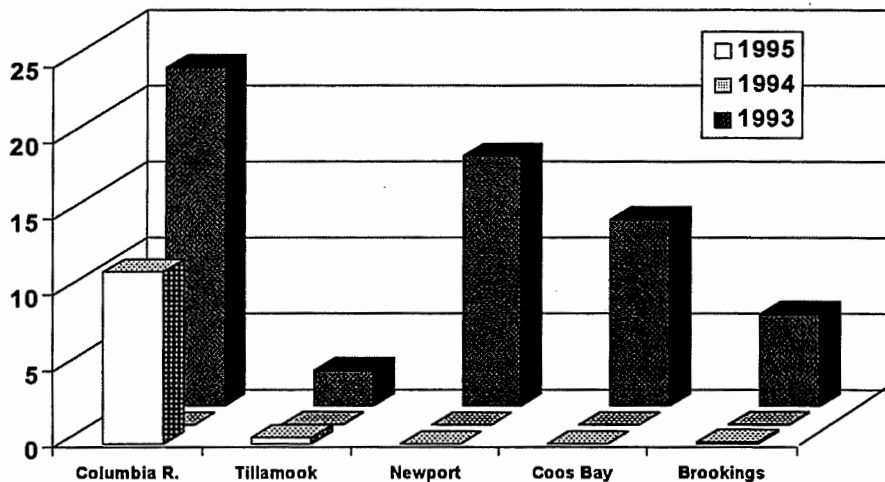
Brookings and Astoria recorded the most private boat effort for salmon in 1995. Brookings had 19,101 salmon angler trips or 61% of the private boat total, followed by Astoria with 7,189 trips (23%).

Some private boats fish only for bottomfish even during the salmon season. Trip type (salmon or bottomfish) ratios were calculated from angler interviews, and applied to the total effort. In years with full salmon seasons, that figure has been less than 10%. In the restricted 1995 season, 31,854 angler trips or 50% of the private trips targeted on bottomfish, compared to 32,324 angler trips or 56% in 1994. Brookings had the most private bottomfish anglers with 12,128, followed by Newport with 6,742, and Coos Bay with 4,334 angler trips.

Private boat angler catch: Anglers from private boats landed 6,409 chinook and 7,867 coho in 1995. The total catch of 14,276 salmon was almost three times the 1994 catch but only 10% of the 1979-94 average of 146,881 fish. Private boat anglers

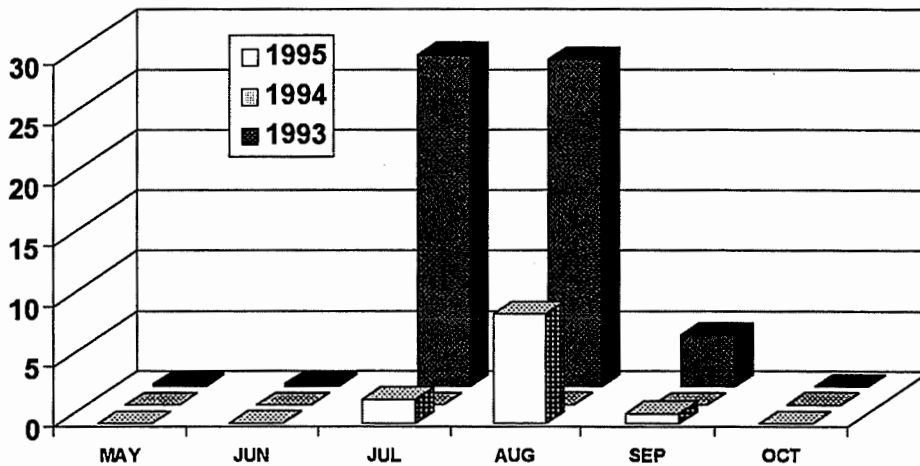
Coho

FISH (thousands)



Area of Catch

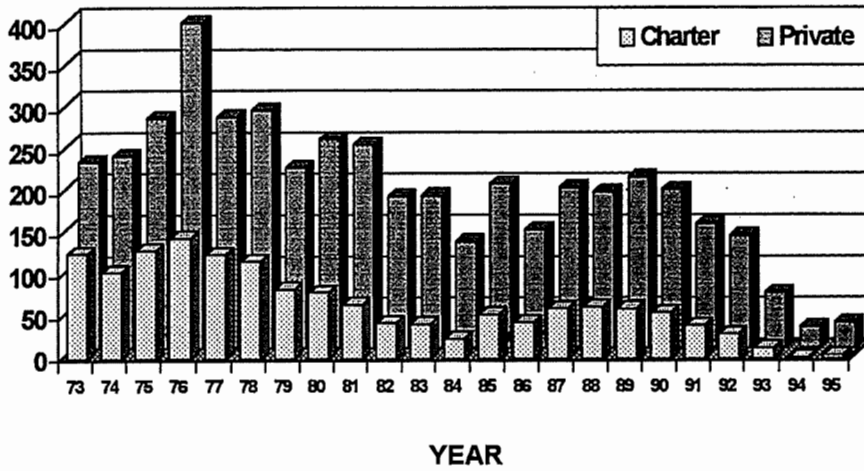
FISH (thousands)



Month

Figure 15. Oregon ocean recreational coho catch by catch area and by month, 1993-95.

ANGLER TRIPS (thousands)



SALMON (Thousands of fish)

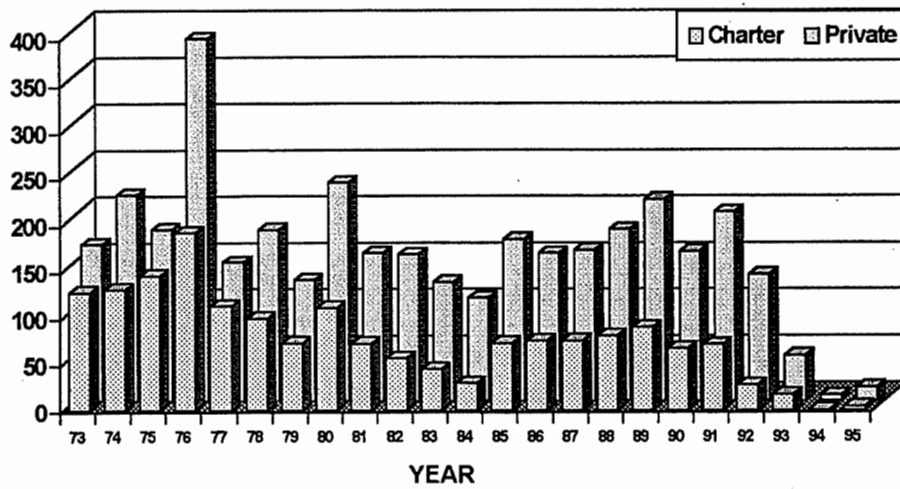


Figure 16. A comparison of effort and catch by Oregon ocean salmon charter and private anglers, 1973-95.

Table 10. Oregon ocean recreational salmon effort and catch by boat type, 1995.

Port	Salmon Charter Boats ^a					Salmon Private Boats				
	Boat Trips	Angler Trips	Salmon Catch			Boat Trips	Angler Trips	Salmon Catch		
			Chinook	Coho	Pink			Chinook	Coho	Pink
Astoria	316	2,460	2	3,836	0	2,514	7,189	107	7,503	0
Garibaldi	151	1,248	53	210	6	1,577	3,825	486	227	0
Pacific City	0	0	0	0	0	17	46	3	0	0
Depoe Bay	5	44	4	0	0	2	3	0	0	0
Newport	90	522	72	0	0	159	374	32	7 ^b	0
Florence	0	0	0	0	0	110	226	78	0	0
Coos Bay	3	14	6	0	0	216	477	159	0	0
Brookings	61	321	187	0	0	8,672	19,101	5,544	130 ^b	0
Total	626	4,609	324	4,046	6	13,267	31,241	6,409	7,867	0
Combined totals for all Oregon craft		35,850	6,733	11,913	6					

^a Includes combination salmon & bottomfish trips.

^b Illegal coho landings.

Table 11. Oregon ocean recreational salmon and bottomfish effort and catch by boat and trip type^a, 1995.

Port	Charter							Private						
	Boat Trips			Angler Trips			Total Catch		Boat Trips		Angler Trips		Total Catch	
	Salmon	Combination	Bottom	Salmon	Combination	Bottom	Salmon ^b	Bottom ^c	Salmon	Bottom	Salmon	Bottom	Salmon ^b	Bottom ^c
Astoria	316	0	0	2,460	0	0	3,838	84	2,514	31	7,189	104	7,610	971
Garibaldi	76	75	741	504	744	8,200	269	55,735	1,577	1,644	3,825	4,174	713	17,333
Pacific City	0	0	0	0	0	0	0	0	17	994	46	3,038	3	12,311
Depoe Bay	0	5	1,138	0	44	9,849	4	48,990	2	483	3	1,312	0	5,131
Newport	47	43	1,610	200	322	14,190	72	104,709	159	2,545	374	6,742	39	19,764
Florence	0	0	0	0	0	0	0	0	110	11	226	22	78	311
Coos Bay	3	0	293	14	0	3,102	6	29,215	216	1,779	477	4,334	159	25,585
Brookings	61	0	319	321	0	2,140	187	21,870	8,672	5,146	19,101	12,128	5,674	70,034
Total	503	123	4,101	3,499	1,110	37,481	4,376	260,603	13,267	12,633	31,241	31,854	14,276	151,440

^a Trip types are separated by trips that target salmon, bottomfish, or combination trips. For private boats, combination trips are included as salmon trips.

^b Includes: coho, chinook and pink salmon.

^c Bottomfish includes: rockfish, lingcod, flatfish, and miscellaneous species.

caught 77% of the total recreational salmon landed in 1995, compared to 92% in 1994, and the 1979-94 average of 72% (Tables 10, 11 and Figure 16).

Brookings private boat anglers averaged 0.30 salmon per angler and landed 5,674 salmon (40%) of the total private boat angler catch. Astoria private boat anglers had landings of 7,610 salmon with an average success rate of 1.06 salmon per angler. These two ports accounted for 93% of the total private boat angler catch. The coastwide angler success rate was 0.46 salmon per angler, compared to 0.20 in 1994 and the 1979-94 average of 0.90 salmon per angler.

ESTIMATES OF RELEASED SALMON

Background

The number of salmon released ("shakers") in the recreational fishery is estimated each year from interview data collected during the ocean sampling survey. The data depends on anglers correctly recalling the number and species of salmon released and varies with the expertise and attitude of the angler. This information, while not exact, is valuable to assess trends in released fish by time and catch area. In 1993, we discovered a programming error in the computer program that tallies this data. The error resulted in an underestimate of salmon released, especially chinook, for the years 1987 through 1992. The corrected information is published in this annual report. This data is not used in active management, but can be used as a rough estimate to evaluate shaker mortality or other regulation impacts (Appendix Table 22).

South of Cape Falcon

The 1995 information on released chinook showed Astoria with the highest (97%) release rate on chinook due to being open for all species except chinook (Tables 12 and 13). Brookings had the lowest release rate on chinook, but also caught the majority of the fish. Brookings' one salmon regulation also resulted in increased handling of fish.

RECREATIONAL OCEAN SALMON CODED WIRE TAG SAMPLING

Recreational samplers from the OSMP working at nine Oregon coastal ports examined 36% of the chinook and 33% of the coho landed for fin clips indicating the presence of a coded wire tag during the 1995 ocean recreational season.

Chinook

Samplers examined 2,406 of the 6,733 estimated chinook landed in 1995, and found 80 (3.3%) that had adipose fin clips (Table 14). Department staff found readable tags in

66 of the 80 chinook heads for an 83% recovery rate. Most of the observed CWTs were released by ODFW (41%), California Dept. of Fish and Game (39%); and the U.S. Fish and Wildlife Service (18%) (Figure 17).

Coho

Samplers examined 3,935 of the 11,913 coho landed in 1995, and found 140 (3.6%) that had adipose fin clips. Staff found readable tags in 122 of the 140 coho heads for an 87% recovery rate. Most of the observed CWTs were released by ODFW (36%) and the Clatsop Economic Development Council (23%) (Table 15 and Figure 17).

NOTE: The above CWT data does not represent stock contribution rates since tagging is not representative of all stocks and most stocks of wild fish have no tagging program associated with them.

SPECIAL FISHERIES AND STUDIES

Coho Weight/Length Relationship

Weight/length data from coho salmon has been collected by OSMP sporadically since 1983 (also in 1947 and 1948) to gauge the relative condition factors for coho. Historically this data has been collected from commercial coho landings because of the ready availability of adequate samples, and the uniform method of dressing the fish. In 1995, the samples were collected from recreational landings of coho, due to no open commercial coho seasons off Oregon. Samples were collected in Astoria/Warrenton by OSMP permanent staff. Fork lengths were taken in millimeters using a measuring board, and dressed weights (head-on, viscera and gills removed) were recorded to the nearest eighth pound using a Chatillon hand scale.

A total of 319 coho were sampled for weight/length at Astoria/Warrenton over an eight week period (statistical weeks 31 - 38) (Table 16). Many of the fish sampled were dressed by OSMP staff in order to maintain uniformity with commercially dressed fish.

A comparison of coho salmon average weight/length ratios, in the Astoria/Warrenton area, for years when sample data for the same weeks is available, is compared to 1995 data (Figure 18). The coho in this area in 1995 showed an approximately average weight/length ratio when compared to the prior years data, and showed a much better condition than those observed during the disastrous 1983 El Niño (Figure 18).

Columbia River Buoy 10 Estuary Fishery

The Columbia River opened upstream from Buoy 10 on August 1 for salmon fishing seven days a week, without quotas or a weekly bag limit. This fishery is intended to target surplus Columbia River hatchery coho. The Oregon/Washington combined effort was 25,186 angler trips with a catch of 853 chinook and 5,026 coho (Table 17).

Table 12. Chinook and coho salmon released by Oregon ocean recreational anglers in the Columbia River area, 1979-95.

Year	Number Retained		Number Released		Percent Released	
	Chinook	Coho	Chinook	Coho	Chinook	Coho
1979	7,072	37,894	8,719	4,905	55	12
1980	5,503	55,647	7,891	1,905	59	3
1981	11,516	54,294	21,664	1,643	65	3
1982	8,235	35,476	6,949	2,082	46	6
1983	3,440	37,245	3,671	8,318	52	18
1984	26 ^a	10,874	1,410	654	98	6
1985	3,565	31,010	5,235	1,275	59	4
1986	2,056	39,063	2,449	2,253	55	6
1987	4,063	25,647	2,500	2,162	38	8
1988	481	9,845	289	481	38	5
1989	1,464	34,304	524	1,778	26	7
1990	3,319	36,110	3,099	2,110	39	5
1991	983	39,363	1,115	2,412	26	6
1992	508	22,280	445	2,952	46	12
1993	836	21,176	209	786	20	3
1994	no sampling or season					
1979-93 Ave.	3,789 ^b	32,682	4,626 ^b	2,381	55 ^b	7
1995	109	11,339	3,572	4,717	97	29

^a Illegal or taken south of Cape Falcon.

^b Excluding 1984 & 1994.

Table 13. Chinook and coho salmon released by Oregon ocean recreational anglers by port, 1995.

Port	Number Retained		Number Released		Percent Released	
	Chinook	Coho	Chinook	Coho	Chinook	Coho
Astoria	109	11,339	3,572	4,717	97	29
Garibaldi	539	437	331	148	38	25
Pacific City	3	0	4	4	57	100
Depoe Bay	4	0	0	0	0	0
Newport	104	7 ^a	110	48	51	87
Florence	78	0	0	12	0	100
Coos Bay	165	0	84	54	34	100
Brookings	5,731	130 ^a	363	942	6	88
Statewide Total	6,733	11,913	4,464	5,925	40	33

^a Illegal landings of coho.

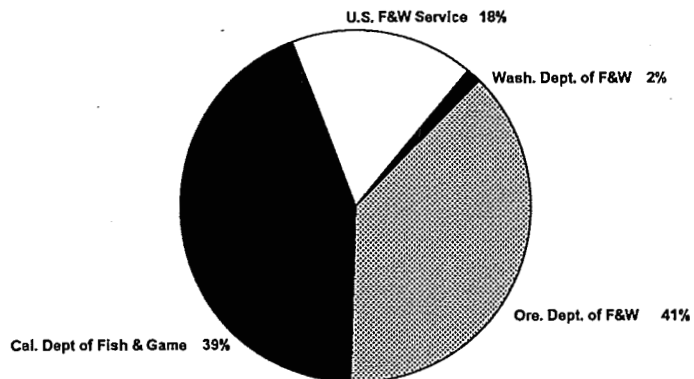
Table 14. Chinook coded-wire tag sampling from the ocean recreational fishery, by port and month, 1995.

Port	May	June	July	August	September	October	November	Total
<u>Astoria</u>								
No. Examined	-	-	4	28	1	-	-	33
No. Landed	-	-	12	94	3	-	-	109
% Examined	-	-	33	30	33	-	-	30
No. Marks	-	-	0	2	0	-	-	2
<u>Garibaldi</u>								
No. Examined	19	-	1	-	61	87	9	177
No. Landed	65	-	4	-	117	269	84	539
% Examined	29	-	25	-	52	32	11	33
No. Marks	3	-	0	-	3	3	0	9
<u>Pacific City</u>								
No. Examined	2	1	-	-	-	-	-	3
No. Landed	2	1	-	-	-	-	-	3
% Examined	100	100	-	-	-	-	-	100
No. Marks	0	0	-	-	-	-	-	0
<u>Depoe Bay</u>								
No. Examined	1	2	-	-	-	-	-	3
No. Landed	1	3	-	-	-	-	-	4
% Examined	100	67	-	-	-	-	-	75
No. Marks	0	0	-	-	-	-	-	0
<u>Newport</u>								
No. Examined	6	15	-	-	18	15	-	54
No. Landed	16	23	-	-	37	28	-	104
% Examined	38	65	-	-	49	54	-	52
No. Marks	0	1	-	-	0	1	-	2
<u>Florence</u>								
No. Examined	2	29	-	-	-	-	-	31
No. Landed	4	74	-	-	-	-	-	78
% Examined	50	39	-	-	-	-	-	40
No. Marks	0	0	-	-	-	-	-	0
<u>Coos Bay</u>								
No. Examined	-	22	-	-	23	1	-	46
No. Landed	-	113	-	-	45	7	-	165
% Examined	-	19	-	-	51	14	-	28
No. Marks	-	3	-	-	3	0	-	6
<u>Brookings</u>								
No. Examined	52	602	-	919	202	284	-	2,059
No. Landed	212	1,615	-	2,308	767	829	-	5,731
% Examined	25	37	-	40	26	34	-	36
No. Marks	0	16	-	23	3	19	-	61
<u>Total</u>								
No. Examined	82	671	5	947	305	387	9	2,406
No. Landed	300	1,829	16	2,402	969	1,133	84	6,733
% Examined	27	37	31	39	31	34	11	36
No. Marks	3	20	0	25	9	23	0	80

Chinook

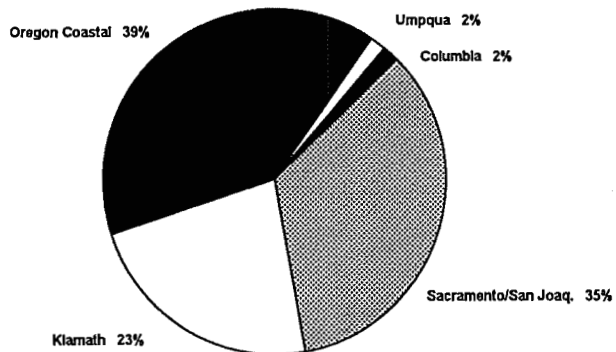
RELEASE AGENCY

N=66



BASIN OF RELEASE

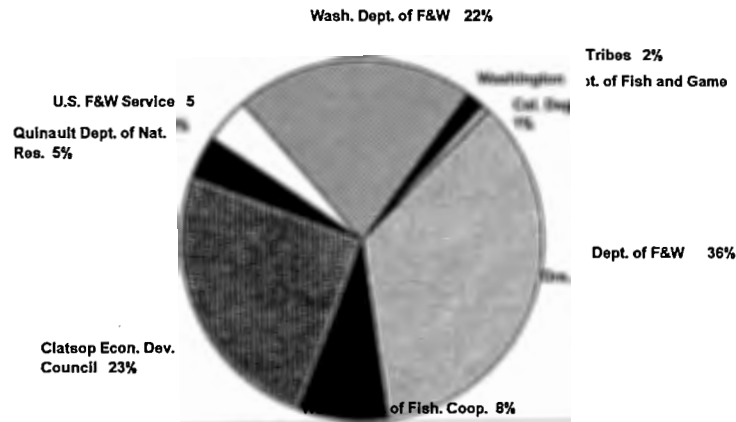
N=66



Coho

RELEASE AGENCY

N=122



BASIN OF RELEASE

N=122

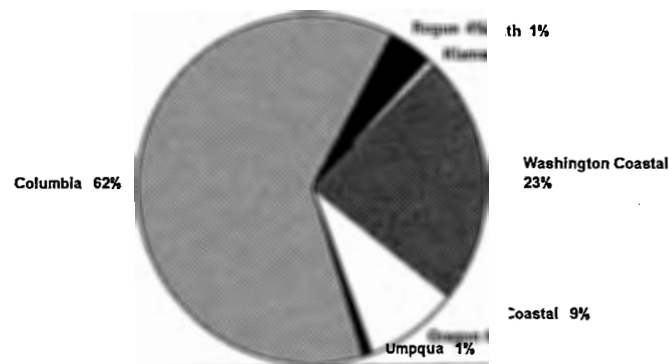


Figure 17. Recoveries of chinook and coho coded wire tags, by release agency and by basin of release from Oregon's ocean recreational catch, 1995. Note: Does not represent stock contribution rates since tagging is not representative of all stocks.

Table 15. Coho coded-wire tag sampling data from the ocean recreational fishery, by port and month, 1995.

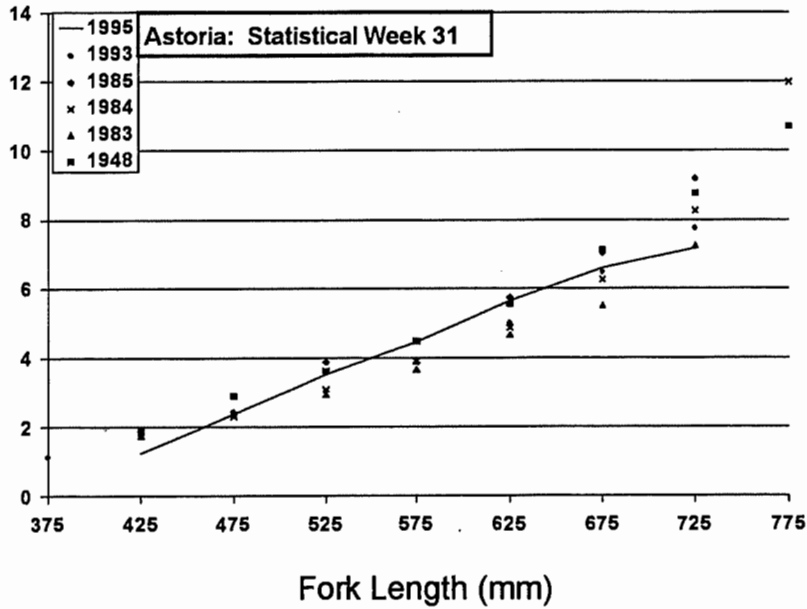
Port	June	July	August	September	October	Total
<u>Astoria</u>						
No. Examined	-	647	2,694	318	-	3,659
No. Landed	-	1,874	8,709	756	-	11,339
% Examined	-	35	31	42	-	32
No. Marks	-	21	96	10	-	127
<u>Garibaldi</u>						
No. Examined	-	42	181	8	-	231
No. Landed	-	102	315	20	-	437
% Sampled	-	41	57	40	-	53
No. Marks	-	2	5	0	-	7
<u>Pacific City</u>						
No. Examined	-	-	-	-	-	-
No. Landed	-	-	-	-	-	-
% Examined	-	-	-	-	-	-
No. Marks	-	-	-	-	-	-
<u>Depoe Bay</u>						
No. Examined	-	-	-	-	-	-
No. Landed	-	-	-	-	-	-
% Examined	-	-	-	-	-	-
No. Marks	-	-	-	-	-	-
<u>Newport</u>						
No. Examined	-	-	-	1	-	1
No. Landed	-	-	-	7	-	7
% Examined	-	-	-	14	-	14
No. Marks	-	-	-	0	-	0
<u>Florence</u>						
No. Examined	-	-	-	-	-	-
No. Landed	-	-	-	-	-	-
% Examined	-	-	-	-	-	-
No. Marks	-	-	-	-	-	-
<u>Coos Bay</u>						
No. Examined	-	-	-	-	-	-
No. Landed	-	-	-	-	-	-
% Examined	-	-	-	-	-	-
No. Marks	-	-	-	-	-	-
<u>Brookings</u>						
No. Examined	13	-	22	8	1	44
No. Landed	38	-	54	35	3	130
% Examined	34	-	41	23	33	34
No. Marks	2	-	3	1	0	6
<u>Total</u>						
No. Examined	13	689	2,897	335	1	3,935
No. Landed	38	1,976	9,078	818	3	11,913
% Examined	34	35	32	41	33	33
No. Marks	2	23	104	11	0	140

Table 16. Coho salmon fork length to dressed weight sample summary at Astoria, Oregon, 1995 by statistical week. Number of samples by length unit and average weight (lbs) of samples at length are displayed.

Length (mm)	Week 31		Week 32		Week 33		Week 34		Week 35	
	n	Avg	n	Avg	n	Avg	n	Avg	n	Avg
		Wt		Wt		Wt		Wt		Wt
400-449	1	1.25	2	1.63	2	1.75	-	-	0	-
450-499	1	2.38	0	-	1	2.50	-	-	0	-
500-549	7	3.52	5	3.33	7	3.39	-	-	0	-
550-599	18	4.45	12	4.19	12	4.34	-	-	2	4.19
600-649	17	5.65	13	5.39	22	5.51	-	-	10	5.61
650-699	20	6.60	11	6.43	28	6.68	-	-	23	6.81
700-749	3	7.17	3	7.58	7	8.73	-	-	20	8.16
750-799	0	-	0	-	0	-	-	-	5	10.38
Total	67	5.34	46	5.08	79	5.62	-	-	60	7.27

Length (mm)	Week 36		Week 37		Week 38		Total	
	n	Avg	n	Avg	n	Avg	n	Avg
		Wt		Wt		Wt		Wt
400-449	1	2.25	-	-	1	2.00	7	1.75
450-499	0	-	-	-	0	-	2	2.44
500-549	3	3.21	-	-	0	-	22	3.39
550-599	7	4.39	-	-	1	3.50	52	4.33
600-649	13	5.45	-	-	1	7.50	76	5.55
650-699	21	7.08	-	-	1	6.75	104	6.75
700-749	15	9.03	-	-	3	9.04	51	8.45
750-799	-	-	-	-	-	-	5	10.38
Total	60	6.63	-	-	7	6.70	319	6.03

Dressed Weight (lbs)



Dressed Weight (lbs)

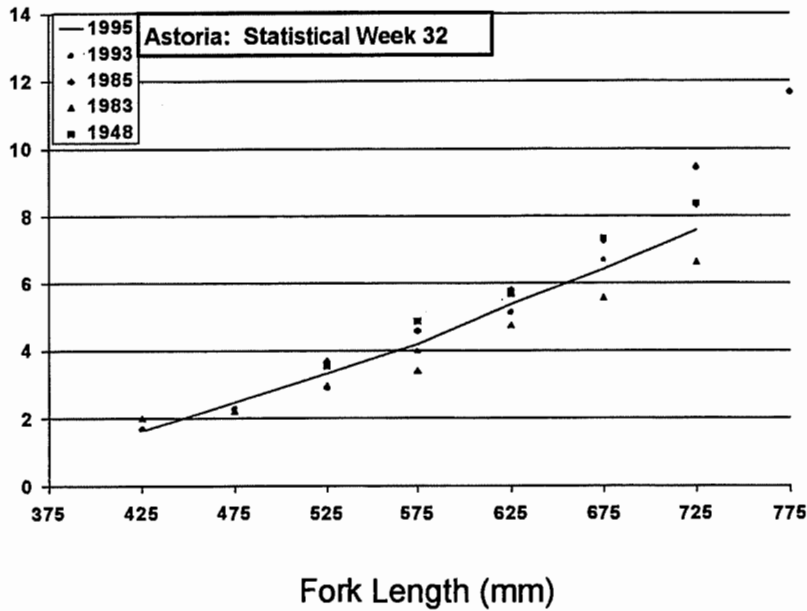


Figure 18. Coho fork length to weight (head-on, viscera and gills removed) relationship from ocean recreational landings into Astoria and Warrenton, 1995. Data from prior years (except 1993) are from commercial troll salmon landings.

Table 17. Buoy 10 Columbia River estuary season. Total salmon angler trips and catch, 1995, and totals for 1982-1993, Oregon and Washington combined data.

Year	Angler Trips	Catch		Catch/ Trip	Chinook/ Angler	Coho/ Angler
		Chinook	Coho			
1982	17,336	723	18,857	1.13	0.04	1.09
1983	7,128	604	3,574	0.59	0.08	0.50
1984	67,365	12,177	74,370	1.28	0.18	1.10
1985	32,156	2,655	25,387	0.87	0.08	0.79
1986	102,190	15,600	120,422	1.33	0.15	1.18
1987	124,594	42,100	47,170	0.72	0.34	0.38
1988	186,051	30,770	143,417	0.94	0.17	0.77
1989	144,848	15,900	78,720	0.65	0.11	0.54
1990	76,411	5,149	18,435	0.31	0.07	0.24
1991	168,921	11,549	207,527	1.30	0.07	1.23
1992 ^a	115,481	10,655	43,082	0.47	0.09	0.37
1993	75,774	5,288	20,932	0.35	0.07	0.28
1994	-	-	-	-	-	-
1995 Total	25,186	853	5,026	0.23	0.03	0.20
OR Boat	8,854	152	1,430	0.18	0.02	0.16
OR Bank	2,538	0	560	0.22	na	0.22
WA Boat	13,482	701	2,962	0.27	0.05	0.22
WA Bank	312	0	74	0.24	na	0.24

^a Includes all fishery types (boat, bank, jetty) for 1982-92.

September-November Chinook Fishery off Tillamook Bay

The fall chinook state waters (0-3 miles) recreational fishery off Tillamook Bay was open from Twin Rocks south to Pyramid Rock from September 16 through November 15, 1996. This fishery, commonly referred to as the "Tillamook bubble", targets fall chinook returning to tributary streams of Tillamook Bay, and coincides with the very popular and larger fishery that takes place within Tillamook Bay and its tributaries. Most anglers fish within a mile of the jetties, and many troll back and forth over the bar.

A total of 3,110 angler trips were taken in the 1995 Tillamook state waters fishery (Table 20). Effort dropped off substantially in mid-October due to rough weather, effort picked up again during the last week of October, but then rough weather hit again in November and no trips were taken during the final two weeks of the season.

Anglers landed a total of 470 chinook in the Tillamook bubble, with over half (244) caught in the last two weeks of October. Three illegal coho were landed by anglers fishing the bubble, and another 100 coho were reported released by anglers. Over

Table 18. Tillamook Bay recreational fishery, 1995. Effort and catch by statistical week and area.

Lower Bay (Garibaldi Boat Basin entrance to mouth)

Statistical Week	Boat Trips	Angler Trips	Landed Chinook	Landed Coho	Released Chinook	Released Coho	Chinook/Angler	Coho/Chinook
37 Sept. 4-10	114	232	15	1	0	39	0.06	2.67
38 Sept. 11-17	231	452	31	2	0	14	0.07	0.52
39 Sept. 18-24	274	651	50	0	0	3	0.08	0.06
40 Sept. 25-Oct. 1	591	1,277	95	0	0	0	0.07	NA
41 Oct. 2-8	1,243	3,000	299	0	0	69	0.10	0.23
42 Oct. 9-15	961	2,469	185	0	0	9	0.07	0.05
43 Oct. 16-22	604	1,524	111	0	0	6	0.07	0.05
44 Oct. 23-29	284	653	72	0	0	0	0.11	NA
45 Oct. 30-Nov. 5	143	367	27	0	0	0	0.07	NA
46 Nov. 6-12	30	69	0	0	0	0	0.00	NA
47 Nov. 13-19	5	8	2	0	0	0	0.25	NA
Totals	4,480	10,702	887	3	0	140	0.08	0.16

Mid Bay (Bay City Flats to Garibaldi Boat Basin)

Statistical Week	Boat Trips	Angler Trips	Landed Chinook	Landed Coho	Released Chinook	Released Coho	Chinook/Angler	Coho/Chinook
37 Sept. 4-10	141	286	15	1	0	31	0.05	2.13
38 Sept. 11-17	214	404	29	4	0	13	0.07	0.59
39 Sept. 18-24	255	975	103	0	0	24	0.11	0.23
40 Sept. 25-Oct. 1	617	1,343	86	0	0	18	0.06	0.21
41 Oct. 2-8	934	2,230	325	0	0	0	0.15	NA
42 Oct. 9-15	1,162	2,804	170	0	0	0	0.06	NA
43 Oct. 16-22	763	1,862	169	0	0	0	0.09	NA
44 Oct. 23-29	604	1,334	142	0	0	0	0.11	NA
45 Oct. 30-Nov. 5	334	735	118	0	0	0	0.16	NA
46 Nov. 6-12	75	164	21	0	0	0	0.13	NA
47 Nov. 13-19	14	28	0	0	0	0	0.00	NA
Totals	5,113	12,165	1,178	5	0	86	0.10	0.08

Upper Bay (Confluence of Trask and Tillamook Rivers to Bay City Flats)

Statistical Week	Boat Trips	Angler Trips	Landed Chinook	Landed Coho	Released Chinook	Released Coho	Chinook/Angler	Coho/Chinook
37 Sept. 4-10	69	131	6	0	1	12	0.05	1.71
38 Sept. 11-17	131	268	16	0	1	0	0.06	NA
39 Sept. 18-24	329	810	144	0	0	82	0.18	0.57
40 Sept. 25-Oct. 1	572	1,464	156	0	0	23	0.11	0.15
41 Oct. 2-8	867	2,087	429	0	0	11	0.21	0.03
42 Oct. 9-15	878	2,347	238	0	0	2	0.10	0.01
43 Oct. 16-22	463	1,223	165	0	0	2	0.13	0.01
44 Oct. 23-29	453	1,169	171	0	0	0	0.15	NA
45 Oct. 30-Nov. 5	82	157	25	0	0	0	0.16	NA
Totals	3,844	9,656	1,350	0	2	132	0.14	0.10

All Areas Combined

Statistical Week	Boat Trips	Angler Trips	Landed Chinook	Landed Coho	Released Chinook	Released Coho	Chinook/Angler	Coho/Chinook
37 Sept. 4-10	447	649	36	2	1	82	0.06	2.27
38 Sept. 11-17	576	1,124	76	6	1	27	0.07	0.43
39 Sept. 18-24	858	2,436	297	0	0	109	0.12	0.37
40 Sept. 25-Oct. 1	1,780	4,084	337	0	0	41	0.08	0.13
41 Oct. 2-8	3,044	7,317	1,053	0	0	80	0.14	0.08
42 Oct. 9-15	3,001	7,620	593	0	0	11	0.08	0.02
43 Oct. 16-22	1,830	4,609	445	0	0	8	0.10	0.02
44 Oct. 23-29	1,341	3,156	385	0	0	0	0.12	NA
45 Oct. 30-Nov. 5	559	1,259	170	0	0	0	0.14	NA
46 Nov. 6-12	105	233	21	0	0	0	0.09	NA
47 Nov. 13-19	19	36	2	0	0	0	0.06	NA
Totals	13,560	32,523	3,415	8	2	358	0.11	0.11

Table 19. Salmon gear usage and catch success in the 1995 Tillamook Bay fall recreational salmon fishery. Data collected as part of the angler creel survey.

		Boats with Chinook		Boats with Coho		Total Boats
		Number	Percent	Number	Percent	
Lower Bay						
Bait ^a	Large (> 6")	185	17.0%	37	3.4%	1,089
	Small (< 6")	10	15.2%	4	6.1%	66
	Total	195	16.9%	41	3.5%	1,155
Spinners ^b		3	11.1%	0	0.0%	27
Plugs ^c	Large (> 6")	1	33.3%	0	0.0%	3
	Small (< 6")	0	na	0	na	0
	Total	1	33.3%	0	0.0%	3
Middle Bay						
Bait ^a	Large (> 6")	292	18.1%	36	2.2%	1,617
	Small (< 6")	12	12.2%	3	3.1%	98
	Total	304	17.7%	39	2.3%	1,715
Spinners ^b		23	37.7%	6	9.8%	61
Plugs ^c	Large (> 6")	1	33.3%	0	0.0%	3
	Small (< 6")	0	na	0	na	0
	Total	1	33.3%	0	0.0%	3
Upper Bay						
Bait ^a	Large (> 6")	73	30.8%	1	0.4%	237
	Small (< 6")	4	28.6%	0	0.0%	14
	Total	81	32.3%	1	0.4%	251
Spinners ^b		266	25.2%	59	5.6%	1,055
Plugs ^c	Large (> 6")	6	23.1%	1	3.8%	26
	Small (< 6")	1	100.0%	0	0.0%	1
	Total	7	25.9%	1	3.7%	27
All Areas Total						
Bait ^a	Large (> 6")	550	18.7%	74	2.5%	2,943
	Small (< 6")	26	14.6%	7	3.9%	178
	Total	576	18.5%	81	2.6%	3,121
Spinners ^b		292	25.5%	65	5.7%	1,143
Plugs ^c	Large (> 6")	8	25.0%	1	3.1%	32
	Small (< 6")	1	100.0%	0	0.0%	1
	Total	9	27.3%	1	3.0%	33

^a Bait defined as baitfish only (eg. herring). Roe, sandshrimp, etc. not included.

^b Spinners defined as all spinners, spoons, and metal or hardware type lures.

^c Plugs defined as all full-bodied lures including traditional salmon plugs, hotshots, flatfish, etc.

Table 20. Summary of Oregon recreational terminal ocean fisheries, 1995.

Tillamook State Waters Chinook Fishery 1995

Statistical Week	CHARTER					PLEASURE					TOTAL						
	Angler Trips	Caught		Released		Angler Trips	Caught		Released		Angler Trips	Caught		Released		Chin./ Ang.	Coho/ Chin
		Chin.	Coho	Chin.	Coho		Chin.	Coho	Chin.	Coho		Chin.	Coho	Chin.	Coho		
38	132	4	0	0	6	326	26	3	3	16	458	30	3	3	22	0.07	0.76
39	77	6	0	4	2	336	18	0	2	30	413	24	0	6	32	0.07	1.07
40	74	9	0	2	3	369	54	0	3	23	443	63	0	5	26	0.15	0.38
41	28	10	0	0	1	503	88	0	0	14	531	98	0	0	15	0.18	0.15
42	30	6	0	0	1	90	5	0	0	0	120	11	0	0	1	0.09	0.09
43	9	0	0	0	0	3	0	0	0	0	12	0	0	0	0	0.00	NA
44	17	0	0	0	0	328	160	0	0	4	345	160	0	0	4	0.46	0.03
45	16	2	0	0	0	772	82	0	0	0	788	84	0	0	0	0.11	0.00
46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NA	NA
47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NA	NA
TOTALS	383	37	0	6	13	2,727	433	3	8	87	3,110	470	3	14	100	0.16	0.21

Yaquina State Waters Chinook Fishery 1995

Statistical Week	CHARTER					PLEASURE					TOTAL						
	Angler Trips	Caught		Released		Angler Trips	Caught		Released		Angler Trips	Caught		Released		Chin./ Ang.	Coho/ Chin
		Chin.	Coho	Chin.	Coho		Chin.	Coho	Chin.	Coho		Chin.	Coho	Chin.	Coho		
38	96	7	0	0	1	105	1	0	0	0	201	18	0	0	1	0.09	0.06
39	97	11	0	0	14	103	7	7	0	0	200	18	7	0	14	0.09	1.17
40	26	1	0	0	4	0	0	0	0	0	28	1	0	0	4	0.04	4.00
41	63	14	0	0	9	0	0	0	0	0	63	14	0	0	9	0.22	0.64
42	12	3	0	6	3	14	7	0	0	0	28	10	0	6	3	0.62	0.19
43	2	2	0	0	0	0	0	0	0	0	2	2	0	0	0	1.00	0.00
44	26	2	0	0	0	0	0	0	0	0	26	2	0	0	0	0.08	0.00
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NA	NA
TOTALS	322	40	0	6	31	222	25	7	0	0	544	65	7	6	31	0.13	0.54

Coos Bay State Waters Chinook Fishery 1995

Statistical Week	CHARTER					PLEASURE					TOTAL						
	Angler Trips	Caught		Released		Angler Trips	Caught		Released		Angler Trips	Caught		Released		Chin./ Ang.	Coho/ Chin
		Chin.	Coho	Chin.	Coho		Chin.	Coho	Chin.	Coho		Chin.	Coho	Chin.	Coho		
38	6	6	0	0	2	51	9	0	0	9	57	15	0	0	11	0.26	0.73
39	0	0	0	0	0	67	11	0	0	0	67	11	0	0	0	0.16	0.00
40	0	0	0	0	0	14	19	0	0	22	14	19	0	0	22	1.36	1.16
41	0	0	0	0	2	21	7	0	0	0	21	7	0	0	2	0.33	0.29
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NA	NA
TOTALS	6	6	0	0	4	153	46	0	0	31	159	52	0	0	35	0.33	0.67

Chetco Terminal Ocean Chinook Fishery 1995

Statistical Week	CHARTER					PLEASURE					TOTAL						
	Angler Trips	Caught		Released		Angler Trips	Caught		Released		Angler Trips	Caught		Released		Chin./ Ang.	Coho/ Chin
		Chin.	Coho	Chin.	Coho		Chin.	Coho	Chin.	Coho		Chin.	Coho	Chin.	Coho		
42	41	15	0	0	1	2,708	721	3	42	97	2,749	736	3	42	98	0.28	0.13
43	13	4	0	0	0	648	89	0	6	8	661	93	0	6	8	0.15	0.08
TOTALS	54	19	0	0	1	3,356	810	3	48	105	3,410	829	3	48	106	0.26	0.12

SUMMARY OF TERMINAL FISHERIES ^a

Terminal and "Bubble" Fisheries	CHARTER					PLEASURE					TOTAL						
	Angler Trips	Caught		Released		Angler Trips	Caught		Released		Angler Trips	Caught		Released		Chin./ Ang.	Coho/ Chin
		Chin.	Coho	Chin.	Coho		Chin.	Coho	Chin.	Coho		Chin.	Coho	Chin.	Coho		
Tillamook	383	37	0	6	13	2,727	433	3	8	87	3,110	470	3	14	100	0.16	0.21
Yaquina	322	40	0	6	31	222	25	7	0	0	544	65	7	6	31	0.13	0.54
Coos Bay	6	6	0	0	4	153	46	0	0	31	159	52	0	0	35	0.33	0.67
Chetco	54	19	0	0	1	3,356	810	3	48	105	3,410	829	3	48	106	0.26	0.12
TOTALS	765	102	0	12	49	6,458	1314	13	56	223	7,223	1416	13	68	272	0.21	0.19

^a Includes Tillamook "Bubble" fishery.

95% of the coho were caught during the first four weeks of the fishery (Table 20). Angler success averaged 0.16 chinook per angler, as compared to the 0.11 chinook per angler average from the bay fishery for the same time period.

Five readable CWTs were recovered from the six fin-clipped chinook observed in this season. Four of the tags were from local Trask River releases, and the other one was from Rock Creek on the North Umpqua River.

Tillamook Bay Fall Creel

Beginning in 1994, the OSMP has conducted an intensive statistical creel survey in Tillamook Bay with the use of PSC funds. The fall creel project began on September 4 and continued through the end of October (sampling in the mid and lower bay zones continued at a reduced rate through November 15). The bay fishery is divided into three sampling/fishing zones: The lower bay zone (mouth of Tillamook Bay upstream to the Garibaldi boat basin entrance), the mid bay zone (Garibaldi boat basin entrance upstream to the Bay City flats), and the upper bay zone (Bay City flats to the confluence of the Trask and Tillamook Rivers) (Figure 19). The creel is designed to estimate the amount of angling effort, salmon catch by species, angler success rates, and the number of salmon released by species; recover CWTs; and examine the relationship between different types and sizes of baits and lures and the salmon caught with them. This creel only estimates catch by boat anglers in Tillamook Bay, and does not provide estimates of effort or catch by either bank anglers (a minor component in the bay) or river trips upstream from the estuary study area.

Boat counts are made for each area at two hour intervals, stratified by weekday and weekend categories, and Area Under the Curve (AUC) methodology is used to calculate boat hours by area each week. Boat hours are then converted to boat trips by dividing the boat hours for each area by the average hours fished per boat in those areas. The 1995 effort totaled 32,523 angler trips. Effort was split relatively evenly throughout the three areas, although the mid bay zone did have the highest level of effort and accounted for 37% of the angler trips. Effort peaked during the first two weeks of October (Table 18).

Catches in the bay totaled 3,415 chinook and 8 coho (illegal). An additional 2 chinook and 362 coho were reported released by anglers. The upper bay accounted for 40% of the chinook catch and had the highest average catch rate at 0.14 chinook per angler trip. The mid bay area accounted for 34% of the chinook catch with a catch rate of 0.10 chinook per angler trip. The highest catch rate was observed during the week of October 2 through 8 in the upper bay area where anglers averaged 0.21 chinook per trip.

Oregon Coastal Natural (OCN) coho numbers have dropped coastwide to very depressed levels in recent years. The OCN coho in the Tillamook system have shown an even greater decline, and harvest regulations have been adopted to lower harvest

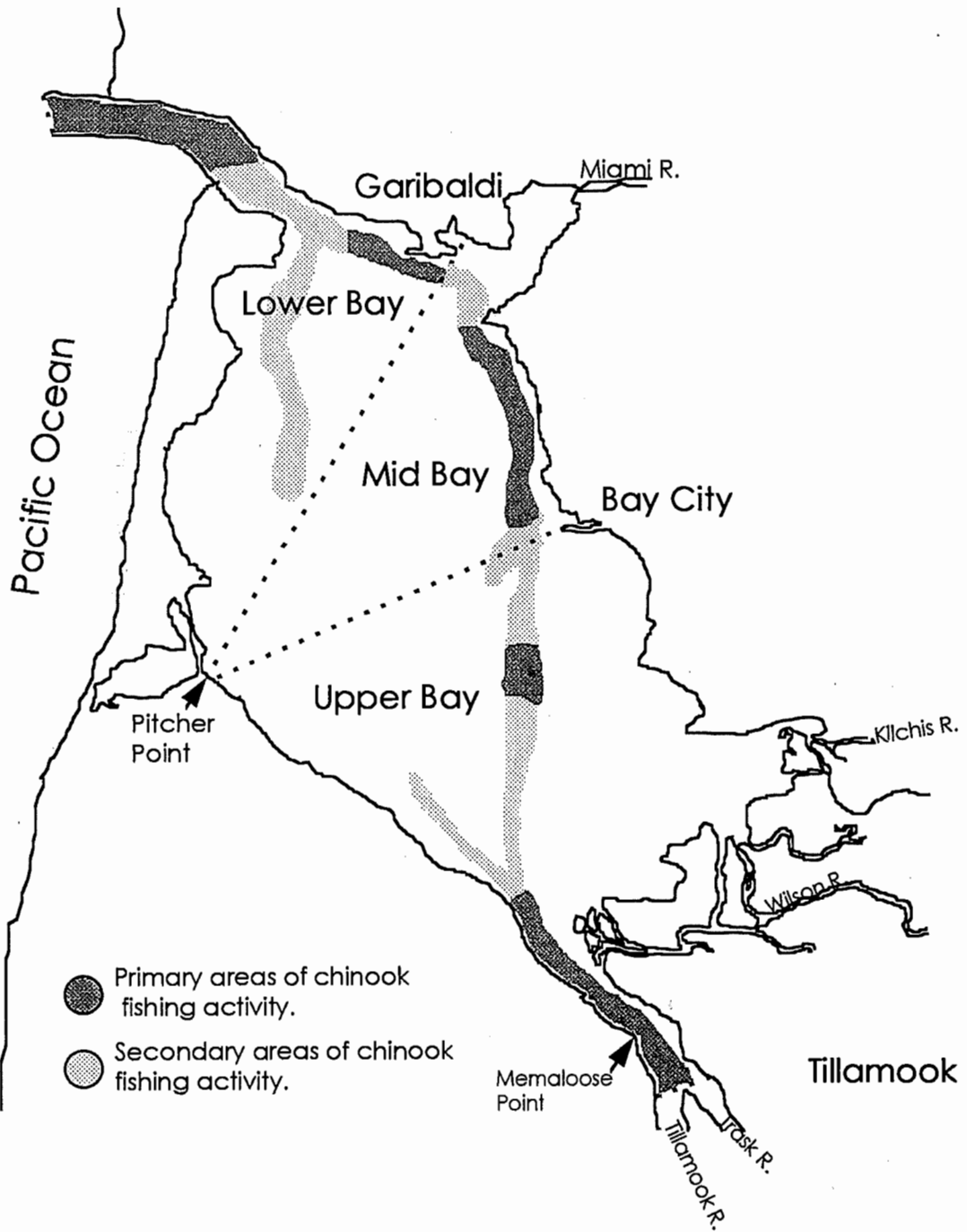


Figure 19. Map of Tillamook Bay, Oregon showing the boundaries for the bay zones used in the 1995 recreational creel survey, and areas of primary and secondary fishing a

related impacts. In addition to wild OCN coho returning to the Tillamook system, Trask hatchery also releases coho into the Tillamook Bay system. Hatchery coho are intercepted along with the OCN coho in the bay. Coho interception rates were highest in the lower bay at an average of 0.16 coho per chinook, and lowest in the mid bay area with 0.08 coho per chinook. Most of the coho were encountered by October 1 (73%), and no coho were observed or reported released after October 22.

A gear use and success survey was added to the general creel survey in the 1994 and 1995 fisheries. Table 19 indicates that the majority of fishermen chose bait (almost entirely frozen herring) as their gear of choice with 7% of these using small bait (less than 6" long). The majority of fishermen in the lower and mid bay zones used bait, while in the upper bay fishermen tended to prefer spinners and bait. Table 19 shows that in the 1995 fishery with all three gear types, an angler is more likely to catch a chinook than a coho; however, use of spinners increases the chances of hooking coho, similar to the 1994 results.

September/October Ocean Fisheries off Yaquina and Coos Bays

With continued closures and heavy restrictions on coho fishing, charter and recreational fishing interests have been working with the ODFW to create new opportunities to fish for chinook in the ocean. In 1995, two state waters (0-3 miles) recreational test fisheries were adopted to explore fishery options for targetting returning fall chinook off Yaquina and Coos bays. The Yaquina fishery included the area from Cape Foulweather to Seal Rock; while the Coos fishery included the area from a point 3 miles north of the Coos Bay North Jetty to Cape Arago. Both seasons ran from September 16 to October 31, and were not limited by quota. The gear restrictions that had been in effect during the spring season (i.e. six inch or larger plugs or whole bait, no flashers or attractors, and no colored divers) remained in effect for these seasons to reduce the incidental catch of coho while targetting chinook.

Anglers made 544 trips off Yaquina Bay for salmon during the fall chinook test fishery, and 401 of the trips (74%) were made during the first two weeks of the season (Table 20). Rough weather resulted in no trips being taken during the final week of the season. Fifty-nine percent of the effort was on charter boats, and this was the only ocean salmon season in 1995 where the charter effort exceeded the private boat effort. Salmon catches in the Yaquina fishery totaled 65 chinook and 7 coho (illegal) landed, and 31 coho released. Angler catch rate for the season averaged 0.13 chinook per angler, with an average ratio of 0.53 coho encountered per chinook landed. No readable CWTs were recovered in this fishery, but there are no chinook currently tagged in the Yaquina basin.

In the Coos Bay test fishery, anglers made 159 trips, with 124 (78%) of them taken during the first two weeks of the season (Table 20). Rough weather impacted the Coos Bay fishery even more than the Yaquina season and no trips were taken during the final three weeks of the season. Trips on private boats made up 96% of the total effort

for this fishery. Catches totaled 52 chinook landed and an additional 35 coho were reported released. This resulted in a very good catch rate of 0.33 chinook per angler. The coho to chinook ratio of 0.67 was higher than any of the other 1995 chinook state waters fisheries, but is likely to be a function of the more abundant Coos basin coho. Three CWTs were recovered from this fishery: two were from the Sacramento River and one was from Elk River.

During these two fisheries, samplers were instructed to record the maturity of all chinook sampled at the dock using a visual maturity index. This index simply uses visual cues such as kipe formation and color of the fish to indicate whether a fish was mature and returning to freshwater or if it was an immature feeder chinook. A fish could fall into one of three categories: Mature, immature, or unknown. A small portion of the fish that were classified as immature may have actually been mature fish that were not showing external signs of maturity. In the Yaquina fishery, 16 chinook were classed as mature, 16 as immature, and 2 were listed as unknown. In the Coos Bay fishery, our samplers noted 10 mature, 6 immature, and 2 chinook of unknown maturity.

In the Yaquina fishery, our samplers made ride along observer trips on board charters. Samplers made a total of nine observer trips during the season. These trips accounted for 49 angler trips (approximately 15% of the charter angler trips), and resulted in a catch of 6 chinook (2 mature and 4 immature), and 6 coho which were released. These trips were characterized by highly variable catch rates with a third of the chinook catch and half the coho catch coming on one trip, and four of the trips had no catch at all.

These seasons were experimental in nature, and were an attempt to immitate the successful state waters fishery off of Tillamook Bay. Catch rates were similar to or better than the Tillamook fishery in 1995, but these fisheries may be targetting more feeder chinook than mature returning fish. After the season was under way, charter operators at Newport expressed their concern that they were prohibited from fishing an offshore area known as the "rockpile" (a concentration area for feeder chinook that is approximately 12 miles offshore), and most trips did not stay close to the mouth of Yaquina Bay. On the other hand, most trips out of Coos Bay were made close to shore, and anglers appeared to be fishing in areas where returning fall chinook would concentrate.

October/November Fishery off Port Orford

We did not sample the recreational portion of this fishery in 1995 but concentrated on the commercial landings. The sport catch in this fishery has been nonexistent or minimal (<50 fish) in all years.

September/October Fishery off Brookings

The fall state waters (0-3 miles) recreational fishery off Brookings is designed to target on fall chinook returning to the Chetco River. This fishery extended from Goat Island

south to the latitude of 42° 01' 20" N. The season was open from Oct. 10 through 15 and October 21 and 22. Effort for this fishery was higher than any other terminal fishery off the Oregon Coast totaling 3,410 angler trips (Table 20). Private boats made up 98% of the total effort for this fishery. The chinook catch totaled 829 fish. Angler success averaged 0.26 chinook per angler. Three coho were illegally kept while 106 were released. An average ratio of 0.12 coho per chinook was observed during the season. Seventeen readable chinook CWT's were recovered in this fishery. These tags were from the Chetco River (9), Winchuck River (6), Pistol River (1) and Salmon River (1).

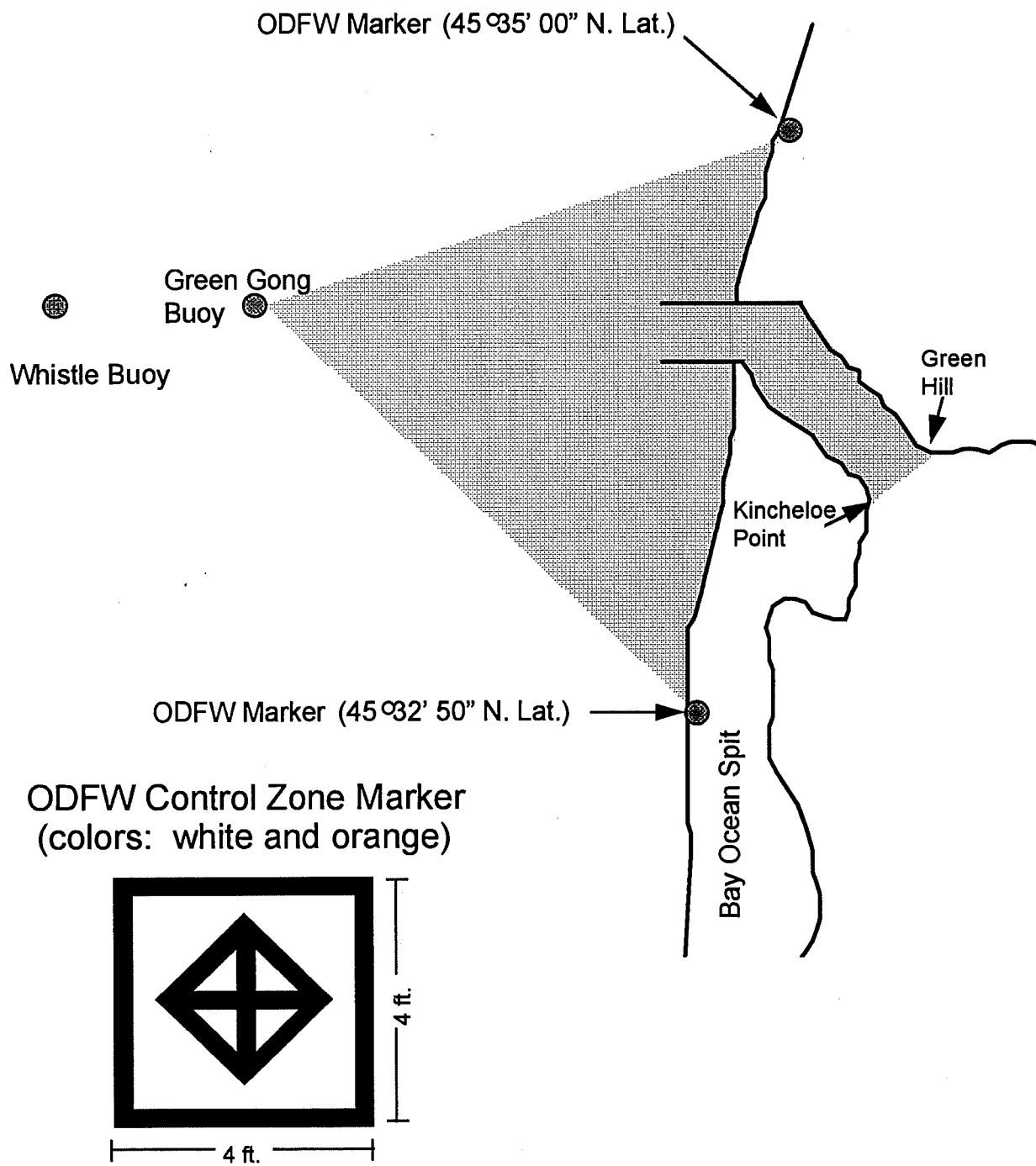
ACKNOWLEDGMENTS

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APPENDIX



Appendix Figure 1. Diagram of the control zone off Tillamook Bay with diagram of ODFW marker.

Appendix Table 1. Seasonal field port sampling personnel hired by the ODFW Ocean Salmon Management Program, 1995.

Port	Troll		Recreational	
	Sampler	Dates	Sampler	Dates
Astoria			Lori Spencer Geoff Whistler	July 16 - Sept. 30 July 16 - Sept. 30
Garibaldi	Anna Elz	May 1 - Oct. 31	Rachel Lippert Lynda Lynch Brent Crowe	May 1 - Oct. 31 May 1 - Oct. 15 Sept. 4 - Nov. 15
Pacific City			Brent Crowe	May 1 - Sept. 3
Depoe Bay			Martin Marchand	May 1 - Oct. 24
Newport	Erin Coffey Bret Morgan	May 1 - June 16 June 19 - Oct. 31	Bill Barnes Wade Smith Leslie Ortiz	May 1 - 31 June 5 - Oct. 18 May 9 - Aug. 25
Florence	Shawn Rapp ¹	May 1-June 22		
Coos Bay	Peter Heltzel	May 1 - Oct. 31	Richard Weis Debbie Feichtinger	May 1 - June 23 July 14 - Oct. 31
Port Orford	Ken Fliszar ²	Oct. 15-Nov. 7		
Brookings			Rod Black ¹ Lynn Dunbar ¹	May 1 - Oct. 31 May 1 - Oct. 31

¹ Combination troll/recreational sampler.

² On loan from Elk River Fall Chinook Indicator Stock Study.

Appendix Table 2. Ocean troll fishery mark sampling rates by port, year, and species, 1986-1995.

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
CHINOOK										
Astoria	46	75	24	36	25	11	52	2	0	0
Gearhart	0	0	-	27	12	8	0	0	-	-
Cannon Beach	0	0	16	0	0	0	0	0	-	-
Garibaldi	29	34	20	10	22	7	39	13	31	30
Netarts	-	-	0	0	0	0	0	-	0	-
Pacific City	20	32	15	19	27	19	2	0	0	0
Salmon River	-	-	-	0	0	-	-	-	0	0
Depoe Bay	3	73	38	0	0	0	0	0	0	0
Newport	34	59	28	21	34	29	32	30	18	31
Waldport	0	-	-	-	0	0	-	-	-	-
Florence	0	67	30	15	30	52	38	9	26	7
Winchester Bay	42	39	29	18	35	15	0	0	0	0
Coos Bay	32	31	24	14	26	21	0	20	26	23
Bandon	0	2	0	0	0	0	0	0	0	0
Port Orford	88	74	59	61	24	0	92	45	61	47
Gold Beach	12	1	10	10	0	0	0	-	100	52
Brookings	58	66	71	62	65	58	0	0	54	46
Total	35	44	30	21	27	24	29	24	23	27
COHO										
Astoria	81	35	6	34	34	24	14	8	-	-
Gearhart	0	0	-	22	8	40	0	0	-	-
Cannon Beach	0	0	0	6	0	2	0	0	-	-
Garibaldi	39	35	32	28	25	21	45	0	-	-
Netarts	-	-	0	0	0	0	0	-	-	-
Pacific City	14	44	21	32	32	30	18	0	-	-
Salmon River	-	-	-	0	0	-	-	-	-	-
Depoe Bay	8	80	63	0	0	2	0	-	-	-
Newport	19	57	27	22	41	29	32	0	-	-
Waldport	-	-	-	-	-	0	-	-	-	-
Florence	0	73	28	13	39	47	49	-	-	-
Winchester Bay	51	34	35	16	40	28	0	-	-	-
Coos Bay	31	28	31	16	28	27	0	0	-	-
Bandon	0	3	0	0	0	0	0	-	-	-
Port Orford	84	73	66	70	10	0	-	-	-	-
Gold Beach	1	3	0	-	0	-	-	-	-	-
Brookings	34	41	49	41	44	1	-	-	-	-
Total	24	43	30	22	29	28	30	5	NA	NA
# Samplers	8	10	14	9^b	8^b	10^a	6^a	4^a	2^b	4^b

^a Two additional employees sampled the troll fishery on a part-time basis.

^b Three additional employees sampled the troll fishery on a part-time basis.

Appendix Table 3. History of actual Oregon ocean commercial troll fishery regulations, 1948-95.

AREA AND SEASON	SPECIES	SIZE, GEAR, AND OTHER RESTRICTIONS
Prior to 1948	No restrictions	
1948 <u>Oregon Coast</u> 1/1 - 12/31 7/1 - 11/15	All except coho All salmon	size limit: chinook - 27", no gear restrictions. chinook - 27", coho - none.
1949-55 <u>Oregon Coast</u> 3/15 - 10/31 6/15 - 10/31	All except coho All salmon	Chin. 26". Chin. 26".
1956-75 <u>Oregon Coast</u> 4/15 - 10/31 6/15 - 10/31	All except coho All salmon	Chin. 26". Chin. 26"; coho 15" beginning in 1965.
1974-75 <u>Elk & Chetco River areas</u> 11/1 - 12/31	All except coho	Chin. 26" - state waters only.
1976 <u>North of Tillamook Head</u> 5/1 - 6/14 7/1 - 9/15	All except coho All salmon	Chin. 28"; until 6/6; then 26". Chin. 26"; coho, 16".
<u>South of Tillamook Head</u> 5/1 - 6/14 6/15 - 10/31	All except coho All salmon	Chin. 26"; barbless hooks, except on whole bait or plugs. Chin. 26"; coho, 16".
<u>Elk & Chetco River areas</u> 11/1 - 11/30	All except coho	Chin. 26" - state waters only.
1977 as above	as above	Chin. 28" N. of Tillamook Head; 26" S. of Tillamook Head. Coho 16". Gear restrictions as above.
1978 Area boundary moved from Tillamook Head to Cape Falcon	as above	
1979 <u>North of Cape Falcon</u> 5/1 - 5/31 7/1 - 24; 8/4 - 31	All except coho All salmon	Chin. 28"; barbless hooks, except on whole bait or plugs. Chin. 28"; coho 16".
<u>South of Cape Falcon</u> 5/1 - 5/31 7/1 - 9/3 9/4 - 10/31	All except coho All salmon All except coho	Chin. 26"; barbless hooks except on whole bait or plugs. Chin. 26"; coho 16". Chin. 26".
<u>Elk & Chetco River areas</u> 11/1 - 11/30	All except coho	Chin. 26". State waters only.
1980 <u>North of Cape Falcon</u> 5/1 - 5/31 7/15 - 9/8	All except coho All salmon	Chin. 28"; barbless hooks, except on whole bait or plugs. Chin. 28"; coho 16".
<u>South of Cape Falcon</u> 5/1 - 5/31	All except coho	Chin. 26"; barbless hooks, except on whole bait or plugs.
<u>Cape Falcon to Cape Blanco</u> 6/16 - 6/30	All except coho	Chin. 26"; whole bait, or plugs 6" or longer.
<u>South of Cape Falcon</u> 7/15 - 9/8 9/9 - 10/31	All salmon All except coho	Chin. 26"; coho 16". Chin. 26".
<u>Elk & Chetco River areas</u> 11/1 - 11/30	All except coho	Chin. 26". State waters only.
1981 <u>North of Cape Falcon</u> 5/1 - 5/31 7/15 - 8/21 8/22 - 8/24	All except coho All salmon All salmon	Chin. 28", barbless hooks, except on whole bait or plugs. Chin. 28"; coho 16". Chin. 28"; coho 16". State waters only.
<u>South of Cape Falcon</u> 5/1 - 5/31 7/1 - 8/21 8/22 - 8/24	All except coho All salmon All salmon	Chin. 26"; barbless hooks, except on whole bait or plugs. Chin. 26"; coho 16". Chin. 26"; coho 16". State waters only.
<u>C. Falcon to Cape Sebastian</u> 8/22 - 8/24 08/25 - 9/8	All except coho All except coho	Chin. 26"; whole bait, or plugs 5" or larger. Chin. 26"; whole bait, or plugs 5" or larger. State waters only.

Appendix Table 3 continued.

AREA AND SEASON	SPECIES	SIZE, GEAR, AND OTHER RESTRICTIONS
(1981 continued)		
<u>South of Cape Falcon</u> 9/9 - 10/31	All except coho	Chin. 26".
<u>Elk & Chetco River areas</u> 11/1 - 11/30	All except coho	Chin. 26". State waters only.
1982 <u>North of Cape Falcon</u> 5/1 - 5/31 7/1 - 7/8	All except coho All salmon	Chin. 28"; barbless hooks, except on whole bait or plugs. Chin. 28"; coho 16".
<u>South of Cape Falcon</u> 5/1 - 5/31 6/1 - 6/15 7/1 - 7/12 7/13 - 9/5 9/6 - 10/31	All except coho All except coho All salmon All except coho All except coho	Chin. 26"; barbless hooks, except on whole bait. Chin. 26"; whole bait, or plugs not less than 5" long. Chin. 26"; coho 16". Chin. 26"; whole bait, or plugs not less than 5" long. Chin. 26"; barbless hooks, except on whole bait or plugs.
<u>South of Cape Blanco</u> 5/1 - 6/8	All except coho	Chin. 26"; whole bait, or plugs not less than 5" long.
<u>Elk & Chetco River areas</u> 11/1 - 11/30	All except coho	Chin. 26". State waters only.
1983 <u>North of Cape Falcon</u> 5/1 - 5/31 7/1 - 7/31	All except coho All salmon	Chin. 28"; barbless hooks, except on plugs not less than 5". Chin. 28"; coho, 16"; only plugs not less than 6". Must land 2 chin. for each coho retained.
<u>Columbia River S. Jetty to Cape Falcon</u> 8/10 - 9/8	All salmon	Chin. 28"; coho 16"; open out to 10 miles only.
<u>Cape Falcon to Cape Blanco</u> 5/1 - 5/31 6/1 - 6/15 9/5 - 10/31	All except coho All except coho All except coho	Chin. 26"; barbless hooks, except on whole bait or plugs (not less than 5"). Chin. 26"; whole bait, or plugs not less than 5" long. Chin. 26".
<u>Cape Falcon to Cape Kiwanda</u> 8/1 - 9/4	All salmon	Chin. 26"; coho 16".
<u>Cape Kiwanda to Heceta Head</u> 7/1 - 7/25; 8/1 - 9/4	All salmon	Chin. 26"; coho 16".
<u>Cape Perpetua to Cape Blanco</u> 7/26 - 7/31	All except coho	Chin. 26"; whole bait or plugs not less than 5".
<u>Heceta Head to Cape Blanco</u> 7/1 - 25 8/1 - 9/9	All All except coho	Chin. 26"; coho 16". Chin. 26"; whole bait, or plugs not less than 5".
<u>Cape Blanco to OR/CA border</u> 5/16 - 5/31 6/1 - 6/15 7/1 - 7/25 7/26 - 8/31 9/1 - 9/15 10/1 - 10/31 <u>Cape Blanco to Humbug Mtn.</u> 11/1 - 11/30	All except coho All except coho All salmon All except coho All except coho All except coho All except coho	Chin. 26"; barbless hooks only, not more than 6 troll lines. Chin. 26"; whole bait, or plugs not less than 5" long. Chin. 26"; coho 16". Chin. 26"; whole bait, or plugs not less than 5" long. Chin. 26". Open area is 12 x 24 mile rectangle around mouth of Rogue River. Chin. 26".
1984 <u>North of Cape Falcon</u> 5/1 - 5/7	All except coho	Chin. 28"; barbless hooks. Columbia River Mouth Conservation Zone closed.
<u>Columbia River S. Jetty to Cape Falcon</u> 8/4 - 8/6	All salmon	Chin. 28"; coho 16"; barbless hooks.
<u>Cape Falcon to Cape Blanco</u> 5/1 - 6/15; 7/1 - 8/31 9/1 - 9/21	All except coho All except coho	Chin. 26"; barbless hooks. Chin. 26"; state waters only. Contravention of fed. regulation.

Appendix Table 3 continued.

AREA AND SEASON	SPECIES	SIZE, GEAR, AND OTHER RESTRICTIONS
(1984 continued)		
<u>Manhattan Beach to Pyramid Rock (Tillamook)</u> 10/1 - 10/31	All except coho	Chin. 26"; barbless hooks. State waters only.
<u>Cape Blanco to OR/CA border</u> 5/16 - 6/6; 7/16 - 8/22	All except coho	Chin. 26"; barbless hooks.
<u>Cape Blanco to Humbug Mtn.</u> 10/1 - 11/30	All except coho	Chin. 26"; state waters only; barbless hooks.
1985		
<u>North of Cape Falcon</u> 5/1 - 5/14; 5/21 - 5/31	All except coho	Chin. 28"; barbless hooks, except on whole bait or plugs. Columbia River Mouth Conservation Zone closed.
<u>Columbia River S. Jetty to Cape Falcon</u> 8/21	All salmon	Chin. 28"; coho 16"; barbless hooks, except on whole bait or plugs.
<u>Cape Falcon to Cape Blanco</u> 5/1 - 6/30 7/1 - 7/26 7/27 - 10/31	All except coho All salmon All except coho	Chin. 26"; barbless hooks, except on whole bait or plugs. Chin. 26"; coho 16"; barbless hooks. One more coho than chinook may be kept, provided at least 1 chinook is kept. Chin. 26"; barbless hooks.
<u>Tower Rock to Cape Blanco</u> 11/1 - 11/30	All except coho	Chin. 26"; barbless hooks. State waters only.
<u>Cape Blanco to Humbug Mtn.</u> 10/1 - 11/30	All except coho	Chin. 26"; barbless hooks. State waters only.
1986		
<u>North of Cape Falcon</u> 5/1-10; 5/14-17; 5/24-27; 5/30-31 8/2-3; 8/7-9	All except coho All salmon	Chin. 28"; barbless hooks. Columbia River Mouth Conservation Zone closed. Chin. 28"; Coho 16". Barbless hooks.
<u>Cape Falcon to Cape Perpetua</u> 5/1 - 6/30 7/1-20; 7/23-24 7/25 - 10/31	All except coho All salmon All except coho	Chin. 26"; barbless hooks. Chin. 26"; coho 16"; barbless hooks. Single daily landing or possession of up to 50 coho. No additional coho can be landed or possessed unless chinook are also landed at a ratio of at least 1 chinook for every 2 coho. Chin. 26"; barbless hooks.
<u>Twin Rocks to Pyramid Rock (Tillamook)</u> 11/1 - 15	All except coho	Chin. 26"; barbless hooks. State waters only.
<u>Cape Perpetua to Cape Blanco</u> 5/1 - 6/30 7/1 - 20 7/23 - 24 7/25 - 10/31	All except coho All salmon All salmon All except coho	Chin. 26"; barbless hooks. Chin. 26"; Coho 16"; barbless hooks. No coho could be landed without landing chinook at a ratio of at least 1 chinook for each 2 coho. Same regulations as in Cape Falcon to Cape Perpetua (for 7/1-24 see above). Chin. 26"; barbless hooks.
<u>Sisters Rocks to Chetco Point</u> 5/1 - 6/6	All except coho	Chin. 26"; barbless hooks. Open only within 6 nautical miles of shore.
<u>Cape Blanco to OR/CA border</u> 6/16 - 19; 6/23 - 26 6/30 - 7/5; 7/17-24 7/25 - 8/26	All salmon All except coho	Chin. 26"; Coho 22"; barbless hooks. At least one chinook must be possessed or landed for each 2 coho possessed or landed. Chin. 26"; barbless hooks.
<u>Sisters Rock to Mack Arch</u> 8/29	All except coho	Chin. 26"; barbless hooks. Open only within 6 nautical miles of shore.
<u>Cape Blanco to Humbug Mtn.</u> 10/1 - 11/26	All except coho	Chin. 26"; barbless hooks. State waters only.

Appendix Table 3 continued.

AREA AND SEASON	SPECIES	SIZE, GEAR, AND OTHER RESTRICTIONS
1987 <u>North of Cape Falcon</u> 5/1-10; 5/14-15	All except coho	Chin. 28"; barbless hooks. Columbia River Mouth Conservation Zone closed. Chinook harvested in this fishery must be landed north of Cape Falcon unless reported to the U.S. Coast Guard.
7/25-26	All salmon	Chin. 28"; coho 16"; barbless hooks. Landing restrictions as above. Columbia River Mouth Conservation Zone closed; nearshore area closure 0 to 3 miles from Tillamook Head to Red Buoy Line and 0 to 10 miles between Red Buoy Line and Queets River.
<u>Cape Falcon to Cape Perpetua</u> 5/1 - 7/14 7/15-28; 8/1-28	All except coho All salmon	Chin. 26"; barbless hooks. Chin. 26"; coho 16"; barbless hooks. Single daily possession or landing of up to 100 coho/vessel. At least 1 chinook required for each 2 coho over 100.
<u>Cape Falcon to Cape Blanco</u> 8/29 - 9/15	All salmon	Chin. 26"; coho 16"; barbless hooks. 200 coho may be possessed or landed without chinook restrictions. Over 200 coho, at least 1 chinook must be possessed or landed for each 2 coho possessed or landed.
9/16 - 10/31	All except coho	Chin. 26"; barbless hooks. All commercial salmon fishing closed 9/16-18 from Cape Arago to Cape Blanco.
<u>Cape Perpetua to Cape Blanco</u> 5/1 - 6/30 7/1-28; 8/1-28	All except coho All salmon	Chin. 26"; barbless hooks. Chin. 26"; coho, 16"; barbless hooks. At least 1 chinook must be possessed or landed for each 2 coho possessed or landed except that 1 coho may be possessed or landed without having a chinook.
<u>Sisters Rocks to Chetco Point</u> 5/1-14	All except coho	Chin. 26"; barbless hooks.
<u>Cape Blanco to OR/CA border</u> 6/1-3; 6/7-10; 6/14-25	All salmon	Chin. 26"; coho 22"; barbless hooks. At least 1 chinook must be possessed or landed for each 1 coho except that 1 coho may be possessed or landed without having a chinook.
<u>Cape Blanco to Humbug Mtn.</u> 10/1 - 11/30	All except coho	Chin. 26"; barbless hooks. State waters fishery.
1988 <u>North of Cape Falcon</u> 5/1 - 6/14	All except coho	Chin. 28"; barbless hooks. Columbia River Mouth Conservation Zone closed.
<u>Cape Falcon to Orford Reef Red Buoy</u> 5/1 - 6/30	All except coho	Chin. 26"; barbless hooks.
<u>Cape Falcon to Cascade Head</u> 7/1 - 8/19	All salmon	Chin. 26"; coho 16"; barbless hooks. From 7/1-13 mixed loads of chinook and coho or coho only loads could not be landed between Cascade Head and Cape Arago unless the load met the possession and landing ratios for that area.
8/20 - 10/31	All except coho	Chin. 26"; barbless hooks.
<u>Cascade Head to Cape Arago</u> 7/1 - 13	All salmon	Chin. 26"; coho 16"; barbless hooks. At least 1 chinook must be possessed or landed for each 2 coho possessed or landed except there was a single daily possession or landing per vessel of 2 coho w/o the ratio requirement. Mixed loads of chinook and coho or coho only loads must be delivered in the sub-area.
7/16 - 8/19	All salmon	As above but no ratio requirement.
8/20 - 10/31	All except coho	Chin. 26"; barbless hooks.
<u>Cape Arago to Orford Reef Red Buoy</u> 7/16 - 8/19	All salmon	Chin. 26"; coho 16"; barbless hooks. No ratio requirement.
8/20 - 31; 9/16 - 10/31	All except coho	Chin. 26"; barbless hooks.
<u>Sisters Rocks to Chetco Point</u> 5/1 - 4	All except coho	Chin. 26"; barbless hooks. From shore out to 6 miles only.

Appendix Table 3 continued.

AREA AND SEASON	SPECIES	SIZE, GEAR, AND OTHER RESTRICTIONS
(1988 continued)		
<u>Humbug Mtn. to Punta Gorda</u> 6/5 - 7	All salmon	Chin. 26"; coho 22"; barbless hooks. Sun. through Wed. only.
<u>Sisters Rocks to Mack Arch</u> 9/1 - 14	All except coho	Chin. 26"; barbless hooks.
<u>Orford Reef Red Buoy to Humbug Mountain</u> 10/1 - 31	All except coho	Chin. 26"; barbless hooks. State waters only.
<u>Cape Blanco to Humbug Mtn.</u> 11/1 - 30	All except coho	As above.
1989 <u>North of Cape Falcon</u> 5/1 - 6/8; 6/13 - 15	All except coho	Chin. 28"; barbless hooks. Columbia River Mouth Conservation Zone closed.
8/21; 8/24 - 9/10	All salmon	Chin. 28"; coho 16"; barbless hooks. Columbia River Mouth Conservation Zone closed. Open south of Columbia River 8/21; and extended north to Leadbetter Point from 8/24. Daily landing limit of 40 coho and 4 chinook in effect through 8/27; daily landing of 40 coho and 8 chinook from 8/28 through 9/10. All salmon must be landed within this area.
<u>Cape Falcon to Cascade Head</u> 5/1 - 7/11; 8/18 - 10/31 7/12 - 7/14	All except coho All salmon	Chin. 26"; barbless hooks. Chin. 26"; coho 16"; barbless hooks. Mixed loads of coho and chinook, or coho only must be landed in this area.
7/18 - 8/17	All salmon	Chin. 26"; coho 16"; barbless hooks. A daily landing limit of 50 coho through 8/13; from 8/14 through 17 at least 1 chinook must be possessed or landed for each 2 coho possessed or landed; except that if no chinook were possessed, a single daily landing of 2 coho was permitted. Mixed loads of coho and chinook, or coho only must be landed in this area.
<u>Cascade Head to Orford Reef Red Buoy</u> 5/1 - 6/23; 8/18 - 10/31	All except coho	Chin. 26"; barbless hooks. The subarea from Cape Arago to Port Orford Reef Red Buoy was closed 8/18 - 31.
7/1 - 14	All salmon	Chin. 26"; coho 16"; barbless hooks. A daily landing limit of 50 coho, plus 3 coho for each chinook landed. Mixed loads of chinook and coho, or coho only must be landed in this area. All chinook must be delivered with the coho.
7/18 - 8/17	All salmon	Chin. 26"; coho 16"; barbless hooks. At least 1 chinook must be landed for each 2 coho, except that a single daily landing of 2 coho without any chinook is permitted. Mixed loads of coho & chinook, or coho only loads must be landed in this area. All chinook must be delivered with the coho.
<u>Orford Reef Red Buoy to Humbug Mountain</u> 10/1 - 31	All except coho	Chin. 26"; barbless hooks. State waters only.
<u>Cape Blanco to Humbug Mountain</u> 11/1 - 30	All except coho	As above.
<u>Sisters Rocks to House Rock</u> 5/1 - 2	All except coho	Chin. 26"; barbless hooks. Open from 0-6 nautical miles only.
<u>Sisters Rocks to Mack Arch</u> 9/1 - 14	All except coho	As above.
<u>Humbug Mountain to OR/CA Border</u> 6/5 - 8	All salmon	Chin. 26"; coho 22"; barbless hooks. A single daily landing of 20 chinook per day. All salmon must be delivered in this area.
8/18 - 20; 8/22 - 31	All except coho	As above.
1990 <u>US-Canada Border to Cape Falcon</u> 5/1 - 5/14; 5/18 - 5/27; 5/31 - 6/2; 6/8 - 6/11; 6/14	All except coho	Chin. 28"; barbless hooks. Columbia River Mouth Conservation Zone closed.

Appendix Table 3 continued.

AREA AND SEASON	SPECIES	SIZE, GEAR, AND OTHER RESTRICTIONS
(1990 continued) 8/18 - 21; 8/25 - 26	All	Chin. 28"; coho 16"; barbless hooks. Columbia River Mouth Conservation Zone closed. Open period restriction of 20 chinook & 200 coho per vessel. All fish must be landed and delivered in the area.
<u>Leadbetter Point to Cape Falcon</u> 8/30-9/14; 9/18-19; 9/22-10/15	All	Chin. 28"; coho 16"; barbless hooks. Columbia River Mouth Conservation Zone closed. Single daily landing of 50 coho, with one additional coho for each chinook landed. From 9/22 - 10/15 daily landing increased to 100 coho. All salmon must be landed in the area.
<u>Cape Falcon to Humbug Mtn.</u> 5/1 - 6/25; 9/1 - 10/31	All except coho	Chin. 26"; barbless hooks.
<u>Cape Falcon to Cascade Head</u> 7/4 - 7/15 7/16 - 8/31	All except coho All	Chin. 26"; barbless hooks. Chin. 26"; coho 16"; barbless hooks. Single daily landing of 50 coho plus 1 coho for each chinook. All coho must be landed in area or in adjacent closed areas.
<u>Cascade Head to Humbug Mtn.</u> 7/4 - 31 (Cape Arago to Humbug Mtn. closed 7/10-17 & 7/24-31)	All	Chin. 26"; coho 16"; barbless hooks. At least one chinook must be landed for each coho, except a landing of 1 coho and no chinook is permitted. Loads with coho must be delivered in this area.
8/1 - 31 (Cape Arago to Humbug Mtn. closed 8/7-14)	All except coho	Chin. 26"; barbless hooks.
<u>Sisters Rocks to House Rock</u> 5/1 - 24	All except coho	Chin. 26"; barbless hooks. Open 0-6 miles from shore. All salmon must be landed in this area.
<u>Sisters Rocks to Punta Gorda</u> 8/1 - 6; 8/8 - 31	All except coho	Chin. 26"; barbless hooks. All salmon must be landed in this area.
<u>Sisters Rocks to Mack Arch</u> 9/3 - 16	All except coho	Chin. 26"; barbless hooks. All salmon must be landed in this area.
<u>43°30'00"N to Cape Arago</u> 11/1 - 14	All	Chin. 26"; coho 16"; barbless hooks. Open 0-3 miles from shore. Experimental fishery 10 vessels selected through drawing. All salmon must be landed into Coos Bay.
1991 <u>US-Canada Border to Cape Falcon</u> 5/1 - 6/15	All except coho	Chin. 28"; barbless hooks. Columbia River Mouth Conservation Zone closed.
<u>Leadbetter Point to Cape Falcon</u> 8/10 - 11	All	Chin. 28"; coho 16"; barbless hooks. Columbia River Mouth Conservation Zone closed. Open period landing restriction of 100 coho per vessel.
<u>Copalis Head to Cape Falcon</u> 9/1 - 2	All	Chin. 28"; coho 16"; barbless hooks. Columbia River Mouth Conservation Zone closed. Open period landing restriction of 75 coho per vessel. All salmon must be landed North of Cape Falcon.
<u>Cape Falcon to Cascade Head</u> 5/1 - 6/30 7/1 - 14 7/15 - 23; 8/1 - 10/31	All except coho All All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per line. Chin. 26"; coho 16"; barbless hooks. Chin. 26"; barbless hooks.
<u>Cascade Head to Florence S. Jetty</u> 5/1 - 6/23 6/24 - 7/11 7/12 - 23; 8/1 - 10/31	All except coho All All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per line. Chin. 26"; coho 16"; barbless hooks. Chin. 26"; barbless hooks.
<u>Florence S. Jetty to Cape Arago</u> 6/24 - 7/11 7/12 - 14; Aug. 1 - 9	All All except coho	Chin. 26"; coho 16"; barbless hooks. Chin. 26"; barbless hooks.
<u>Florence S. Jetty to Humbug Mtn.</u> 9/1 - 10/31	All except coho	Chin. 26"; barbless hooks.

Appendix Table 3 continued.

AREA AND SEASON	SPECIES	SIZE, GEAR, AND OTHER RESTRICTIONS
(1991 continued)		
<u>Sisters Rocks to Mack Arch</u> 9/1 - 15	All except coho	Chin. 26"; barbless hooks. Open 0-6 miles from shore. All salmon must be landed in this area.
1992 <u>US-Canada Border to Cape Falcon</u> 5/1 - 6/15	All except coho	Chin. 28"; barbless hooks. Columbia River Mouth Conservation Zone closed.
7/20 - 21	All	Chin. 28"; coho 16"; barbless hooks. Columbia River Mouth Conservation Zone closed. No more than 4 spreads per line, 6 inch or larger plugs only. Open period landing restriction of 30 coho per vessel. All salmon must be delivered in this area or adjacent closed areas within 24 hours of closure.
7/25 - 27; 7/31 - 8/2; 8/6 - 8; 8/12 - 14; 8/20 - 22	All	Chin. 28"; coho 16"; barbless hooks. Columbia River Mouth Conservation Zone closed. No more than 4 spreads per line, 6 inch or larger plugs only. Open period landing restriction of 44 coho per vessel. All salmon must be delivered in this area or adjacent closed areas within 24 hours of each closure.
<u>Cape Falcon to Florence S. Jetty</u> 5/1 - 31	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per line.
<u>Cape Falcon to Cascade Head</u> 7/22 - 8/21	All	Chin. 26"; coho 16"; barbless hooks. At least one chinook must be landed for each two coho. All loads with coho must be delivered in this area or in adjacent closed areas north of Cascade Head.
8/22 - 31	All	Chin. 26"; coho 16"; barbless hooks. Single daily landing limit of 25 coho plus 2 coho for each chinook. All loads with coho must be delivered in this area or in adjacent closed areas north of Cascade Head.
9/1 - 10/31	All except coho	Chin. 26"; barbless hooks.
<u>Cascade Head to Florence S. Jetty</u> 7/22 - 8/7	All	Chin. 26"; coho 16"; barbless hooks. At least one chinook must be landed for each two coho. All loads with coho must be delivered in this area or in adjacent closed areas south of Cascade Head.
8/8 - 10/31	All except coho	Chin. 26"; barbless hooks.
<u>Cape Blanco to Humbug Mtn.</u> 10/24 - 26	All except coho	Chin. 26"; barbless hooks. State waters fishery.
1993 <u>US-Canada Border to Cape Falcon</u> 5/1 - 6/15	All except coho	Chin. 28"; barbless hooks. Columbia River Mouth Control Zone closed.
7/14 - 17, 7/21 - 24 7/28 - 31, 8/4 - 6	All	Chin. 28"; coho 16"; barbless hooks. Columbia River Mouth Control Zone closed. No more than 4 spreads per line. Gear restricted to plugs and/or whole bait 6 inches or larger. Open period landing restriction at 50 coho per opening. All salmon must be delivered in this area or adjacent closed area within 24 hours of each closure.
<u>Queets River to Cape Falcon</u> 8/27 - 28	All	Chin. 28"; coho 16"; barbless hooks. Columbia River Mouth Control Zone closed. Open period landing restriction of 35 coho per opening. All salmon must be delivered in this area or adjacent closed area within 24 hours of each closure.
9/1 - 4; 9/9 - 12; 9/16 - 19	All	Chin. 28"; coho 16"; barbless hooks. Columbia River Mouth Control Zone closed. Open period landing restriction of 70 coho per opening. All salmon must be delivered in this area or in adjacent closed area within 24 hours of each closure.
<u>Cape Falcon to Florence S. Jetty</u> 5/1 - 10/31	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per line.
<u>Florence S. Jetty to Cape Arago</u> 5/1 - 6/30; 9/1 - 10/31	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per line.
<u>Cape Arago to Humbug Mtn.</u> 5/1 - 31; 9/1 - 10/31	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per line.
<u>Cape Blanco to Humbug Mtn.</u> 11/1 - 30	All except coho	Chin. 26"; barbless hooks. State waters fishery.
1994 <u>US-Canada border to Cape Falcon</u>	All salmon	Closed to all salmon trolling.
<u>Cape Falcon to Humbug Mtn</u> 5/1 - 6/30	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire.

Appendix Table 3 continued.

AREA AND SEASON	SPECIES	SIZE, GEAR, AND OTHER RESTRICTIONS
(1994 continued)		
<u>Cape Falcon to Cascade Head</u> 10/1 - 31	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire.
<u>Twin Rocks to Pyramid Rock</u> 11/1 - 15	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire.
<u>Cascade Head to Humbug Mtn.</u> 9/1 - 10/31	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire. State waters only (0-3 miles).
<u>Cape Blanco to Humbug Mtn.</u> 11/1 - 7	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire. State waters only (0-3 miles). Salmon must be landed in Port Orford.
<u>Sisters Rock to House Rock</u> 5/1 - 2; 5/5 - 6; 5/10 - 11; 5/14 - 15; 5/18 - 31.	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire. (0-6 miles). All salmon must be landed at Gold Beach, Port Orford, or Brookings within 24 hours of each closure.
<u>Sisters Rock to Mack Arch</u> 8/8 - 9	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire. (0-6 miles). Special registration fishery. Daily landing limit of 20 fish. All salmon must be landed at Gold Beach, Port Orford, or Brookings. Trip length limited to 3 days (72 hours).
8/10 - 31	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire. (0-6 miles). Special registration fishery. Daily landing limit of 60 fish. All Trip length limited to 3 days (72 hours).
<u>Goat Island to Red Point</u> 10/10 - 25; 10/30 - 31	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire. State waters only (0-3 miles). Salmon must be landed in Brookings.
1995 <u>Cape Falcon to Cape Lookout</u> 5/1-6/30	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire. Control zone at the mouth of Tillamook Bay closed in June.
8/1-31	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire. Control zone at the mouth of Tillamook Bay closed.
9/1-30	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire. State waters only (0-3 miles). Control zone at the mouth of Tillamook Bay closed.
10/1-31	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire.
<u>Cape Lookout to Florence south jetty</u> 5/1-6/30	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire.
8/1-10/31	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire.
<u>Florence south jetty to Cape Arago</u> 5/1-6/30	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire.
8/1-31	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire.
9/1-10/31	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire.
<u>Cape Arago to Humbug Mountain</u> 5/1-6/30	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire.
9/1-10/31	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire.
<u>Cape Blanco to Humbug Mountain</u> 11/1-7	Chin. only	Chin. 26"; barbless hooks. No more than 4 spreads per wire. State waters only (0-3 miles). Chinook must be landed into Port Orford.
<u>Sisters Rock to Mack Arch</u> 7/24-25	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire. (0-4 miles). All salmon caught in the area must be delivered in Gold Beach, Port Orford or Brookings within 24 hours of each closure.

Appendix Table 3 continued.

AREA AND SEASON	SPECIES	SIZE, GEAR, AND OTHER RESTRICTIONS
(1995 continued) <u>Sisters Rock to House Rock</u> 5/1-2; 5/5-6; 5/10-11; 5/14-15; 5/18-31.	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire. (0-6 miles). All salmon caught in the area must be delivered in Gold Beach, Port Orford or Brookings within 24 hours of each closure.
<u>Goat Island to 42° 01' 20"</u> 10/10-20	Chin. only	Chin. 26"; barbless hooks. No more than 4 spreads per wire. State waters only (0-3 miles). Daily landing limit of 20 chinook. Salmon must be delivered into Brookings.

Appendix Table 4. Oregon commercial troll landings of chinook and coho salmon (numbers of fish) by month and by year, 1979-95.

Columbia River Catch Area (2)

CHINOOK

Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	Data unavailable							
1980	3,000	<50	900	900	100	<50	0	4,900
1981	6,600	0	1,000	500	0	<50	0	8,100
1982	6,500	0	1,200	0	0	0	0	7,700
1983	3,700	700	200	0	100	0	0	4,700
1984	1,000	0	<50	300	0	0	0	1,300
1985	4,400	0	0	500	0	<50	0	4,900
1986	4,500	100	0	1,600	0	0	0	6,200
1987	2,300	0	2,200	0	0	0	0	4,500
1988	1,000	0	0	0	0	0	0	1,000
1989	700	400	0	1,000	800	0	0	2,900
1990	500	100	0	500	1,100	100	0	2,300
1991	300	<50	0	400	100	0	0	800
1992	400	900	100	100	0	0	0	1,500
1993	300	<50	<50	<50	100	0	0	400
1994	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0

COHO

Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	Data unavailable							
1980	0	0	15,000	10,100	600	0	0	25,600
1981	0	0	32,600	13,200	0	0	0	45,800
1982	0	0	23,800	0	0	0	0	23,800
1983	0	0	100	2,600	2,300	0	0	5,000
1984	0	0	0	13,600	0	0	0	13,600
1985	0	0	0	18,200	0	0	0	18,200
1986	0	0	<50	46,100	0	0	0	46,100
1987	0	0	7,400	0	0	0	0	7,400
1988	0	0	0	0	0	0	0	0
1989	0	0	0	11,200	9,900	0	0	21,100
1990	0	0	0	4,400	6,200	300	0	10,900
1991	0	0	0	16,600	10,100	0	0	26,700
1992	0	0	600	800	0	0	0	1,400
1993	0	0	200	600	800	0	0	1,600
1994	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0

Tillamook Catch Area (3)

CHINOOK

Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	Data unavailable							
1980	900	500	1,400	3,800	500	<100	0	7,300
1981	4,100	200	5,300	2,400	200	200	0	12,400
1982	2,900	700	3,000	800	400	200	0	8,000
1983	400	300	1,500	1,200	300	500	0	4,200
1984	300	100	200	1,100	100	100	0	1,900
1985	<50	200	1,700	800	400	100	<50	3,200
1986	200	100	2,700	3,100	6,500	1,500	<50	14,100
1987	1,800	1,800	15,100	12,800	7,400	2,600	0	41,500
1988	900	6,100	9,100	9,100	4,400	3,100	0	32,700
1989	5,800	7,700	6,900	3,700	4,900	1,600	0	30,600
1990	400	600	5,700	2,700	1,800	1,200	0	12,400
1991	200	200	3,100	2,000	2,200	1,800	0	9,500
1992	400	0	300	2,500	1,900	2,200	0	7,300
1993	500	200	800	600	2,600	1,600	0	6,300
1994	100	300	0	0	0	1,300	<50	1,700
1995	400	800	0	6,600	1,100	700	<50	9,700

COHO

Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	Data unavailable							
1980	0	0	36,400	41,000	1,400	0	0	78,800
1981	0	0	117,100	42,000	0	0	0	159,100
1982	0	0	113,600	0	0	0	0	113,600
1983	0	0	43,200	18,800	1,200	0	0	63,200
1984	0	0	0	0	0	0	0	0
1985	0	0	1,500	<50	0	0	0	1,500
1986	0	0	96,700	0	0	0	0	96,700
1987	0	0	46,400	23,100	5,300	0	0	74,800
1988	0	0	124,200	48,100	0	0	0	172,300
1989	0	0	118,500	17,800	0	0	0	136,300
1990	0	0	25,700	27,500	<50	0	0	53,200
1991	0	0	90,200	0	0	0	0	90,200
1992	0	0	500	7,300	<50	<50	0	7,800
1993	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0

Appendix Table 4 (cont.). Oregon commercial troll landings of chinook and coho salmon, 1979-95.

Newport Catch Area (4)

CHINOOK								
Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	Data unavailable							
1980	9,200	8,700	8,300	12,100	3,100	6,000	0	47,400
1981	9,300	300	9,900	7,200	300	400	0	27,400
1982	5,500	4,500	10,800	1,600	2,300	3,300	0	28,000
1983	2,000	900	10,700	6,300	1,100	2,300	100	23,400
1984	100	1,500	11,300	5,900	100	0	0	18,900
1985	13,700	4,900	15,700	5,500	1,000	1,000	0	41,800
1986	10,200	13,000	29,800	5,500	7,000	22,400	0	87,900
1987	10,500	7,700	23,800	24,200	14,300	7,000	<50	87,500
1988	8,500	18,800	42,900	34,100	8,400	16,200	0	128,900
1989	18,700	12,800	20,900	9,200	3,600	5,100	300	70,600
1990	2,500	16,600	15,100	3,700	700	800	0	39,400
1991	2,900	7,400	2,900	6,300	7,700	6,300	0	33,500
1992	19,000	600	23,700	26,700	10,100	14,600	0	94,700
1993	17,100	13,600	11,900	9,400	8,600	3,500	0	64,100
1994	7,200	7,000	100	0	900	2,900	<50	18,100
1995	8,600	27,800	0	79,300	33,300	23,400	1,600	174,000

COHO								
Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	Data unavailable							
1980	0	0	87,000	45,100	5,300	0	0	137,400
1981	0	0	74,200	119,200	0	0	0	193,400
1982	0	0	116,100	0	0	0	0	116,100
1983	0	0	99,100	15,500	2,900	0	0	117,500
1984	0	0	0	0	0	0	0	0
1985	<50	0	11,900	0	0	0	0	11,900
1986	0	0	<50	192,300	0	0	0	192,300
1987	0	0	59,200	19,000	4,900	0	0	83,100
1988	0	0	146,300	106,200	0	0	0	252,500
1989	0	0	130,000	7,700	0	0	0	137,700
1990	0	100	13,700	<50	0	0	0	13,800
1991	0	58,300	30,400	0	0	0	0	88,700
1992	0	0	14,000	21,000	0	0	0	35,000
1993	0	0	0	<50	0	0	0	0
1994	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0

Coos Bay Catch Area (5)

CHINOOK								
Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	Data unavailable							
1980	2,100	16,200	27,300	18,200	6,800	6,300	<50	76,800
1981	2,400	100	8,700	10,700	1,200	1,200	<50	24,300
1982	4,700	5,800	75,000	16,900	5,700	1,000	<50	109,100
1983	1,700	3,800	12,700	1,400	300	200	0	20,100
1984	100	900	4,400	9,400	600	0	0	15,400
1985	14,500	15,100	40,100	56,700	19,700	2,500	<50	148,600
1986	17,700	22,600	92,100	85,400	21,000	1,300	<50	240,100
1987	17,800	17,700	221,000	50,500	39,000	4,400	0	350,400
1988	43,000	51,600	46,400	89,600	13,700	24,300	<50	268,600
1989	70,300	39,800	43,400	57,400	9,400	9,300	2,700	232,300
1990	11,800	15,800	85,000	55,700	5,400	2,100	<50	175,800
1991	100	5,100	5,300	7,400	9,200	3,400	0	30,500
1992	600	100	2,300	2,400	300	600	0	6,300
1993	2,700	900	200	400	4,400	1,300	700	10,600
1994	400	1,500	<50	0	200	1,500	400	4,000
1995	1,600	7,200	0	12,000	4,100	1,600	300	26,800

COHO								
Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	Data unavailable							
1980	0	0	76,500	24,200	4,600	0	0	105,300
1981	0	0	96,600	62,000	0	0	0	158,600
1982	0	0	1,237,800	0	0	0	0	1,237,800
1983	0	0	108,700	<50	<50	0	0	108,700
1984	0	0	0	0	0	0	0	0
1985	0	0	29,400	0	0	0	0	29,400
1986	0	<50	86,200	0	0	0	0	86,200
1987	0	<50	145,700	21,700	9,600	0	0	177,000
1988	0	<50	117,100	79,300	0	0	0	196,400
1989	0	0	126,300	33,300	0	0	0	159,600
1990	0	<50	43,100	300	0	0	0	43,400
1991	0	32,800	68,200	<50	0	0	0	101,000
1992	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	<50	0	<50
1994	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0

Appendix Table 4. Oregon commercial troll landings of chinook and coho salmon, 1979-95.

Brookings Catch Area (6)

CHINOOK								
Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	Data unavailable							
1980	6,900	2,100	11,300	27,500	14,300	3,600	1,000	66,700
1981	4,300	<50	8,700	44,600	13,200	11,300	1,200	83,300
1982	2,300	500	26,500	31,800	3,200	2,900	1,400	68,600
1983	1,600	8,200	8,900	1,300	200	1,800	700	22,700
1984	900	<50	4,100	17,700	<50	1,100	700	24,500
1985	300	100	1,800	6,900	3,300	700	1,000	14,100
1986	3,500	16,900	9,400	22,100	0	900	800	53,600
1987	8,800	28,000	0	0	0	1,100	1,900	39,800
1988	8,200	20,700	0	0	100	900	1,700	31,600
1989	4,600	1,900	0	3,900	6,400	<50	200	17,000
1990	100	0	0	2,100	100	0	0	2,300
1991	0	0	0	0	200	0	0	200
1992	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0
1994	200	0	0	200	0	1,000	0	1,400
1995	200	<100	1,700	0	0	1,500	<50	3,400

COHO								
Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	Data unavailable							
1980	0	0	14,500	14,900	3,400	0	0	32,800
1981	0	0	17,900	35,600	0	0	0	53,500
1982	0	0	20,400	0	0	0	0	20,400
1983	0	0	24,000	0	0	0	0	24,000
1984	0	0	0	0	0	0	0	0
1985	0	0	1,000	0	0	0	0	1,000
1986	0	12,100	7,100	0	0	0	0	19,200
1987	0	4,100	0	0	0	0	0	4,100
1988	0	1,300	0	0	0	0	0	1,300
1989	0	1,000	0	0	0	0	0	1,000
1990	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0

Washington Catch Area (1)

CHINOOK								
Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	Data unavailable							
1980	3,100	300	300	1,200	<50	0	0	4,900
1981	100	0	700	100	0	0	0	900
1982	2,200	400	3,800	<50	0	<50	0	6,400
1983	1,700	200	<50	200	0	0	0	2,100
1984	2,000	0	0	<50	0	0	0	2,000
1985	1,600	<50	2,000	<50	0	0	0	3,600
1986	400	0	0	<50	0	0	0	400
1987	2,100	0	1,600	0	0	0	0	3,700
1988	900	500	0	0	0	0	0	1,400
1989	200	0	0	0	0	0	0	200
1990	300	0	0	<50	0	0	0	300
1991	<50	<50	0	<50	<50	0	0	0
1992	100	700	0	<50	0	0	0	800
1993	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0

COHO								
Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	Data unavailable							
1980	0	0	5,000	5,800	500	0	0	11,300
1981	0	0	11,000	600	0	0	0	11,600
1982	0	0	13,900	100	0	0	0	14,000
1983	0	0	<50	<50	0	0	0	0
1984	0	0	0	100	0	0	0	100
1985	0	0	22,100	0	0	0	0	22,100
1986	0	0	0	0	0	0	0	0
1987	0	0	7,500	0	0	0	0	7,500
1988	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0
1990	0	0	0	900	0	0	0	900
1991	0	0	0	<50	300	0	0	300
1992	0	0	0	100	0	0	0	100
1993	0	0	<50	0	0	0	0	0
1994	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0

Appendix Table 4. Oregon commercial troll landings of chinook and coho salmon, 1979-95.

California Catch Area (7)

CHINOOK								
Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	Data unavailable							
1980	800	0	<100	<50	0	<50	0	800
1981	800	200	500	700	2,000	0	0	4,200
1982	600	700	1,100	900	400	0	0	3,700
1983	<50	200	200	1,600	<50	0	0	2,000
1984	<50	<50	200	100	0	0	0	300
1985	<50	<50	100	500	<50	0	0	600
1986	0	0	<50	400	<50	0	0	400
1987	0	1,300	500	0	<50	0	0	1,800
1988	100	1,900	1,500	1,100	<50	0	0	4,600
1989	<50	<50	<50	<50	<50	0	0	0
1990	<50	0	<50	0	0	0	0	0
1991	0	<50	0	<50	100	0	0	100
1992	0	0	0	0	0	0	0	0
1993	0	<50	0	0	<50	0	0	0
1994	0	0	100	<50	0	0	0	100
1995	0	700	<100	0	0	0	0	800

COHO								
Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	Data unavailable							
1980	0	0	<50	<50	0	0	0	<100
1981	0	0	300	200	0	0	0	500
1982	0	<50	1,400	0	0	0	0	1,400
1983	0	<50	100	1,100	0	0	0	1,200
1984	0	0	0	0	0	0	0	0
1985	0	0	<50	0	0	0	0	0
1986	0	0	0	0	0	0	0	0
1987	0	300	100	0	<50	0	0	400
1988	0	300	300	200	0	0	0	800
1989	0	<50	<50	0	0	0	0	0
1990	0	0	<50	0	0	0	0	0
1991	0	0	0	0	100	0	0	100
1992	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0

Alaska Catch Area (8)

CHINOOK								
Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	Data unavailable							
1980	0	0	0	0	200	0	0	200
1981	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0
1983	0	400	0	0	0	0	0	400
1984	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0
1988	0	0	500	0	0	0	0	500
1989	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0

COHO								
Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	Data unavailable							
1980	0	0	0	0	1,700	0	0	1,700
1981	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0
1988	0	0	<50	0	0	0	0	0
1989	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0

Appendix Table 4. Oregon commercial troll landings of chinook and coho salmon, 1979-95.

Totals for Oregon Catch Areas

CHINOOK								
Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	Data unavailable							
1980	22,100	27,500	49,200	62,400	24,900	16,000	1,000	203,100
1981	26,700	600	33,600	65,400	14,900	13,100	1,200	155,500
1982	21,900	12,100	116,500	51,100	11,600	7,400	1,400	222,000
1983	9,400	13,900	34,000	10,400	2,000	4,800	800	75,300
1984	2,400	2,500	20,000	34,400	800	1,200	700	62,000
1985	32,900	20,400	59,300	70,400	24,400	4,300	1,000	212,700
1986	36,100	52,700	134,000	117,700	34,500	26,100	800	401,900
1987	41,200	55,200	262,100	87,500	60,700	15,100	1,900	523,700
1988	61,600	97,800	98,400	132,800	26,600	44,500	1,700	463,400
1989	100,100	62,600	71,200	75,200	25,100	16,000	3,200	353,400
1990	15,300	33,100	105,800	64,700	9,100	4,200	0	232,200
1991	3,500	12,700	11,300	16,100	19,400	11,500	0	74,500
1992	20,400	1,600	26,400	31,700	12,300	17,400	0	109,800
1993	20,600	14,700	12,900	10,400	15,700	6,400	700	81,400
1994	7,900	8,800	100	200	1,100	6,700	400	25,200
1995	10,800	35,900	1,700	97,900	38,500	27,200	1,900	214,000

COHO								
Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	Data unavailable							
1980	0	0	229,400	135,300	15,300	0	0	379,900
1981	0	0	338,400	272,000	0	0	0	610,400
1982	0	0	1,511,700	0	0	0	0	1,511,700
1983	0	0	275,100	36,900	6,400	0	0	318,400
1984	0	0	0	13,600	0	0	0	13,600
1985	0	0	43,800	18,200	0	0	0	62,000
1986	0	12,100	190,000	238,400	0	0	0	440,500
1987	0	4,100	258,700	63,800	19,800	0	0	346,400
1988	0	1,300	387,600	233,600	0	0	0	622,500
1989	0	1,000	374,800	70,000	9,900	0	0	455,700
1990	0	100	82,500	32,200	6,200	300	0	121,300
1991	0	91,100	188,800	16,600	10,100	0	0	306,600
1992	0	0	15,100	29,100	0	0	0	44,200
1993	0	0	200	600	800	0	0	1,600
1994	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0

Totals For All Oregon Landings

CHINOOK								
Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	Data unavailable							
1980	26,000	27,800	49,500	63,600	25,100	16,000	1,000	209,000
1981	27,600	800	34,800	66,200	16,900	13,100	1,200	160,600
1982	24,700	13,200	121,400	52,000	12,000	7,400	1,400	232,100
1983	11,100	14,700	34,200	12,200	2,000	4,800	800	79,800
1984	4,400	2,500	20,200	34,500	800	1,200	700	64,300
1985	34,500	20,400	61,400	70,900	24,400	4,300	1,000	216,900
1986	36,500	52,700	134,000	118,100	34,500	26,100	800	402,700
1987	43,300	56,500	264,200	87,500	60,700	15,100	1,900	529,200
1988	62,600	100,200	100,400	133,900	26,600	44,500	1,700	469,900
1989	100,300	62,600	71,200	75,200	25,100	16,000	3,200	353,600
1990	15,600	33,100	105,800	64,700	9,100	4,200	0	232,500
1991	3,500	12,700	11,300	16,100	19,500	11,500	0	74,600
1992	20,500	2,300	26,400	31,700	12,300	17,400	0	110,600
1993	20,600	14,700	12,900	10,400	15,700	6,400	700	81,400
1994	7,900	8,800	200	200	1,100	6,700	400	25,300
1995	10,800	36,700	1,800	97,900	38,500	27,200	1,900	214,800

COHO								
Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	Data unavailable							
1980	0	0	234,400	141,100	17,500	0	0	392,900
1981	0	0	349,700	272,800	0	0	0	622,500
1982	0	0	1,527,000	100	0	0	0	1,527,100
1983	0	0	275,200	38,000	6,400	0	0	319,600
1984	0	0	0	13,700	0	0	0	13,700
1985	0	0	65,900	18,200	0	0	0	84,100
1986	0	12,100	190,000	238,400	0	0	0	440,500
1987	0	4,400	266,300	63,800	19,800	0	0	354,300
1988	0	1,600	387,900	233,800	0	0	0	623,300
1989	0	1,000	374,800	70,000	9,900	0	0	455,700
1990	0	100	82,500	33,100	6,200	300	0	122,200
1991	0	91,100	188,800	16,600	10,500	0	0	307,000
1992	0	0	15,100	29,200	0	0	0	44,300
1993	0	0	200	600	800	0	0	1,600
1994	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0

Appendix Table 5. Oregon ocean troll effort (in boat days) by month of landing, area of catch, and by year, 1979-95.

Columbia Area (2)

	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	TOTALS
1979	Data unavailable							
1980	200	<50	600	700	<100	<50	0	1,600
1981	500	0	1,100	800	0	<50	0	2,400
1982	400	<100	400	0	0	0	0	900
1983	500	100	<50	200	200	0	0	1,000
1984	<100	0	0	400	0	0	0	500
1985	400	0	0	300	0	<50	0	700
1986	300	<50	100	700	0	0	0	1,200
1987	100	0	200	0	0	0	0	300
1988	100	<100	0	0	0	0	0	200
1989	<100	<50	0	600	200	0	0	900
1990	<100	<50	0	300	300	<50	0	700
1991	<100	<50	0	400	200	0	0	700
1992	<100	100	<50	<50	0	0	0	300
1993	<50	<50	<100	<100	<100	0	0	200
1994	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0

Tillamook Area (3)

	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	TOTALS
1979	Data unavailable							
1980	<100	100	2,000	3,100	400	<50	0	5,700
1981	200	<50	5,600	2,700	<100	<100	0	8,700
1982	200	100	2,800	300	200	<100	0	3,600
1983	<100	<100	1,000	1,300	300	200	<50	2,900
1984	<50	<50	<100	300	<50	<50	<50	500
1985	<50	<100	600	500	100	<100	0	1,400
1986	<50	<50	2,700	300	500	200	<50	3,700
1987	<100	300	2,600	2,100	1,200	900	0	7,300
1988	200	1,100	4,000	2,900	1,500	900	<50	10,500
1989	500	700	3,200	1,500	1,300	600	<50	7,800
1990	100	<100	1,600	2,300	600	500	<50	5,100
1991	<100	<100	1,700	400	500	700	0	3,500
1992	<100	0	200	800	700	700	0	2,600
1993	100	<100	200	200	800	500	0	1,800
1994	<50	<100	0	0	<100	400	<50	500
1995	200	100	0	600	300	200	<50	1,300

Appendix Table 5 (cont.). Oregon ocean troll effort (in boat days), 1979-95.

Newport Area (4)

	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	TOTALS
1979	Data unavailable							
1980	600	1,100	3,500	3,900	900	600	0	10,600
1981	1,200	<50	5,100	4,700	<100	<100	0	11,200
1982	500	700	3,500	300	300	400	0	5,800
1983	200	600	3,500	1,800	500	300	<50	7,000
1984	<100	200	900	800	<50	0	0	1,900
1985	900	400	1,600	900	100	200	0	4,100
1986	900	800	5,500	400	300	700	0	8,600
1987	1,000	900	3,100	1,600	1,200	800	<50	8,700
1988	900	1,700	4,200	4,000	900	800	<100	12,500
1989	900	1,800	4,100	1,400	600	400	<100	9,300
1990	500	1,400	1,600	600	200	100	<50	4,300
1991	600	1,800	900	600	500	400	0	5,100
1992	1,400	<50	1,100	1,700	700	900	0	5,800
1993	1,400	1,100	1,500	800	700	400	<50	5,900
1994	800	800	0	0	200	300	<50	2,100
1995	700	900	0	1,600	800	600	<100	4,700

Charleston Area (5)

	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	TOTALS
1979	Data unavailable							
1980	400	2,000	4,700	3,600	1,200	700	<50	12,500
1981	600	<50	7,400	5,100	200	200	0	13,400
1982	800	900	8,400	2,000	1,200	200	<50	13,500
1983	500	1,700	4,300	200	100	<100	<50	6,900
1984	<100	200	700	1,200	100	0	0	2,300
1985	1,700	1,500	3,900	4,600	1,500	400	0	13,700
1986	2,100	2,400	5,600	4,200	1,200	300	0	15,800
1987	1,700	1,700	10,300	3,500	3,100	700	0	21,000
1988	3,200	6,000	6,000	7,100	1,900	2,000	<100	26,300
1989	4,500	4,200	6,400	4,900	1,100	1,200	700	22,900
1990	2,200	2,200	5,200	4,800	700	400	<50	15,600
1991	<50	1,800	1,500	1,000	800	500	0	5,600
1992	<50	<50	100	200	<50	<100	0	400
1993	600	200	<50	<50	400	300	100	1,600
1994	<100	300	0	0	<100	300	<100	800
1995	300	400	0	500	200	200	<100	1,600

Appendix Table 5 (cont.). Oregon ocean troll effort (in boat days), 1979-95.

Brookings Area (6)

	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	TOTALS
1979	Data unavailable							
1980	800	200	1,300	2,300	1,900	1,100	500	8,000
1981	600	<50	1,800	3,500	1,100	1,600	500	9,100
1982	300	200	2,900	2,900	1,000	900	600	8,800
1983	200	900	1,500	300	<100	600	100	3,700
1984	200	<50	400	1,600	<50	200	200	2,600
1985	<50	<50	<100	200	100	200	200	900
1986	500	700	600	1,100	0	200	100	3,200
1987	500	900	0	0	0	300	300	2,000
1988	300	600	0	0	<100	100	300	1,400
1989	200	300	0	400	300	<50	<50	1,300
1990	<50	0	0	400	<50	0	0	400
1991	0	0	0	<50	<50	0	0	<50
1992	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0
1994	<50	<50	0	<50	<50	200	<50	300
1995	<50	0	<50	0	0	200	<50	300

Totals For Oregon

	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	TOTALS
1979	Data unavailable							
1980	2,000	3,400	12,100	13,600	4,400	2,300	500	38,400
1981	3,200	<100	21,100	16,800	1,400	1,800	500	44,800
1982	2,200	2,000	18,000	5,600	2,700	1,500	600	32,600
1983	1,400	3,500	10,400	3,800	1,100	1,100	100	21,500
1984	400	400	2,100	4,300	200	300	200	7,800
1985	3,000	2,000	6,100	6,500	1,900	900	200	20,700
1986	3,900	4,000	14,400	6,700	2,000	1,300	100	32,500
1987	3,500	3,900	16,200	7,300	5,500	2,700	300	39,300
1988	4,600	9,500	14,100	14,100	4,300	3,800	400	50,800
1989	6,200	7,100	13,600	8,800	3,500	2,100	800	42,300
1990	2,800	3,700	8,400	8,300	1,800	1,000	<100	26,200
1991	800	4,000	4,100	2,400	2,000	1,600	0	14,900
1992	1,600	200	1,500	2,700	1,500	1,700	0	9,200
1993	2,100	1,300	1,800	1,000	2,000	1,200	200	9,500
1994	1,000	1,200	0	<100	300	1,100	<100	3,800
1995	1,200	1,400	<50	2,600	1,300	1,200	200	7,900

Appendix Table 5 (cont.). Oregon ocean troll effort (in boat days), 1979-95.

Alaska Area (8)

	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	TOTALS
1979	Data unavailable							
1980	0	0	0	0	<100	0	0	<100
1981	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0
1983	0	<50	0	0	0	0	0	<50
1984	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0
1988	0	0	<50	0	0	0	0	<50
1989	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0

Washington Area (1)

	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	TOTALS
1979	Data unavailable							
1980	<100	<50	100	900	<100	0	0	1,200
1981	<50	0	200	<50	0	0	0	200
1982	<100	<50	600	0	0	0	0	700
1983	100	<50	<50	<50	0	0	0	200
1984	<100	0	0	<50	0	0	0	<100
1985	100	0	200	<50	0	0	0	300
1986	<50	0	<50	0	0	0	0	<50
1987	<100	0	<50	0	0	0	0	100
1988	<100	<50	0	0	0	0	0	100
1989	<50	<50	0	0	0	0	0	<50
1990	<50	0	0	<50	0	0	0	<100
1991	<50	<50	0	<50	<50	0	0	<50
1992	<50	<100	0	<50	0	0	0	<100
1993	0	0	<50	0	0	0	0	<50
1994	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0

Appendix Table 5 (cont.). Oregon ocean troll effort (in boat days), 1979-95.

California Area (7)

	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	TOTALS
1979	Data unavailable							
1980	<50	0	<50	<50	0	<50	0	<50
1981	<100	<50	<50	<50	100	<50	0	300
1982	<50	<100	200	<100	<100	0	0	400
1983	<50	<50	<50	200	<50	0	0	300
1984	<50	<50	<50	<50	0	0	0	<50
1985	<50	<50	<50	<50	<50	0	0	<50
1986	0	0	<50	<50	<50	0	0	<50
1987	0	<50	<50	0	<50	0	0	<50
1988	0	<50	<50	<100	<50	0	0	100
1989	<50	<50	<50	<50	<50	0	0	<50
1990	<50	0	<50	0	0	0	0	<50
1991	0	<50	0	<50	<50	0	0	<50
1992	0	0	0	0	0	0	0	0
1993	0	<50	0	0	<50	0	0	<50
1994	0	0	<50	<50	0	0	0	0
1995	0	<50	<50	0	0	0	0	0

Coastwide Totals

	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	TOTALS
1979	Data unavailable							
1980	2,100	3,400	12,300	14,600	4,600	2,300	500	39,700
1981	3,200	<100	21,300	16,900	1,500	1,800	500	45,300
1982	2,300	2,100	18,800	5,600	2,800	1,500	600	33,700
1983	1,500	3,600	10,400	4,100	1,200	1,100	100	22,100
1984	500	400	2,100	4,300	200	300	200	7,900
1985	3,100	2,000	6,300	6,600	1,900	900	200	21,000
1986	3,900	4,000	14,400	6,700	2,000	1,300	100	32,500
1987	3,600	3,900	16,300	7,300	5,500	2,700	300	39,500
1988	4,700	9,500	14,200	14,100	4,300	3,800	400	50,800
1989	6,300	7,100	13,600	8,800	3,500	2,100	800	42,300
1990	2,900	3,700	8,400	8,300	1,800	1,000	<100	26,200
1991	800	4,000	4,100	2,400	2,000	1,600	0	14,900
1992	1,600	200	1,500	2,700	1,500	1,700	0	9,200
1993	2,100	1,300	1,800	1,000	2,000	1,200	200	9,500
1994	1,000	1,200	<50	<100	300	1,100	<100	3,800
1995	1,200	1,400	<100	2,600	1,300	1,200	200	7,900

Appendix Table 6. Oregon commercial ocean troll salmon chinook catch, in number of fish, by statistical week^a and area of catch, 1995.

Stat. Week	Area of Catch									Total
	Col. R. 2	Tillamook 3	Newport 4	Coos Bay 5	Brookings 6	OR Subtotal	Alaska 8	Wash. 1	Calif. 7	
18	-	0	0	0	0	0	0	0	0	0
19	-	52	3,546	502	84	4,184	0	0	0	4,184
20	-	56	3,220	423	58	3,757	0	0	0	3,757
21	-	152	402	278	38	870	0	0	0	870
22	-	104	1,442	424	60	2,030	0	0	0	2,030
23	-	375	2,445	324	65	3,209	0	0	0	3,209
24	-	93	4,054	888	0	5,035	0	0	0	5,035
25	-	59	4,194	909	0	5,162	0	0	501	5,663
26	-	178	5,837	2,938	0	8,953	0	0	228	9,181
27	-	137	11,277	2,159	0	13,573	0	0	0	13,573
28	-	-	-	-	-	-	0	0	0	0
29	-	-	-	-	-	-	0	0	0	0
30	-	-	-	-	-	-	0	0	75	75
31	-	-	-	-	1,682	1,682	0	0	0	1,682
32	-	2,111	2,148	158	0	4,417	0	0	0	4,417
33	-	2,057	18,521	1,246	0	21,824	0	0	0	21,824
34	-	975	28,152	3,145	0	32,272	0	0	0	32,272
35	-	698	15,801	5,160	0	21,659	0	0	2	21,659
36	-	754	14,714	2,244	0	17,712	0	0	0	17,712
37	-	631	11,230	1,566	0	13,427	0	0	0	13,427
38	-	146	5,946	726	0	6,818	0	0	0	6,818
39	-	218	8,757	1,121	0	10,096	0	0	0	10,096
40	-	135	7,367	703	0	8,205	0	0	0	8,205
41	-	241	12,035	498	0	12,774	0	0	0	12,774
42	-	193	7,995	354	725	9,267	0	0	0	9,267
43	-	154	1,281	119	731	2,285	0	0	0	2,285
44	-	104	2,125	635	0	2,864	0	0	0	2,864
45	-	33	1,550	320	0	1,903	0	0	0	1,903
46	-	0	0	0	4	4	0	0	0	4
47	-	0	0	0	0	0	0	0	0	0
Total	0	9,656	174,039	26,840	3,447	213,982	0	0	804	214,786

^a Refer to Appendix Table 20 for 1995 statistical week calendar.
^b Refer to Figure 3 for catch areas.

Appendix Table 7. Estimates of nominal ex-vessel value^a for Oregon ocean troll salmon landings and average price per pound, 1971-95.

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	1,514,000	2.75	118,000	1.67	1,632,000
1985	5,045,000	2.48	729,000	1.51	5,773,000
1986	5,978,000	1.77	1,979,000	1.03	7,958,000
1987	13,324,000	2.57	3,264,000	1.70	16,588,000
1988	13,931,000	3.17	7,614,000	2.28	21,544,000
1989	7,830,000	2.21	2,131,000	1.06	9,961,000
1990	5,454,000	2.50	1,009,000	1.59	6,462,000
1991	1,704,000	2.45	1,395,000	0.98	3,099,000
1992	2,490,000	2.45	222,000	1.07	2,712,000
1993	1,661,000	2.18	10,000	1.13	1,671,000
1994	689,000	2.40	0	NA	689,000
1995	3,294,000	1.69	0	NA	3,294,000

^a Dressed weight value

Appendix Table 8. Recreational ocean salmon sampling rates at Oregon ports, 1987-95.

Port	Percent of Catch Sampled ^a								
	1987	1988	1989	1990	1991	1992	1993	1994	1995
Astoria	39	49	44	42	50	44	42	-	32
Garibaldi	40	32	37	46	34	37	52	24	42
Pacific City	75	79	70	72	69	72	84	^c	100
Depoe Bay	57	50	56	45	48	46	74	40	75
Newport	33	39	35	35	28	36	36	^c	50
Florence	38	46	51	46	33	34	40	33	40
Winchester Bay	31	36	44	42	26	25	45	40	-
Coos Bay	54	46	46	41	30	39	38	^c	28
Gold Beach	64	-	-	-	-	-	-	-	-
Brookings	57	51	65	47	34	34	58	28	36
Coastwide percentage	44	43	43	42	35	37	43	26	34
Number of samplers	23	20	20	22	21	21	24 ^b	12	13
Sampler months	79	79	70	80	62	64	69 ^b	47	56

- ^a Percentage of total catch observed by samplers = number of salmon observed/estimated catch of salmon.
^b Includes 4 samplers (8 sampler months) participating in the Columbia River Control Zone test fishery.
^c No salmon observed in the sampling.

Appendix Table 9. Summary of Oregon's recreational ocean salmon regulations, 1946-95.

Year	Open Area	Season	Open Days	Catch Limits			Size Limits (in.)			Gear Restrictions	Misc Regulations
				Daily	7 Day	Annual	Chin.	Coho	Pink		
1946	Statewide	All year	All	3	NA	NA	none	none	none	None	Possession limit of 9 salmon.
1947	Statewide	All year	All	2	NA	NA	none	none	none	None	Possession limit of 6 salmon.
1948-54	Statewide	All year	All	2	NA	20	none	none	none	None	Possession limit of 4 salmon.
1955-57	Statewide	All year	All	2	NA	20	20	20	20	None	Possession limit of 4 salmon.
1958-64	North of Tillamook Head	1/1-6/30; 11/1-12/31	All	2	NA	20	20	20	20	None	Possession limit of 4 salmon.
	North of Tillamook Head	7/1-10/31	All	2	NA	20	22	22	22	None	Possession limit of 4 salmon.
	South of Tillamook Head	All year	All	2	NA	20	20	20	20	None	Possession limit of 4 salmon.
1965-69	Statewide	All year	All	3	NA	20	20	20	20	None	Possession limit of 6 salmon.
1970-75	North of Tillamook Head	All year	All	3	NA	40	20	20	20	None	
	South of Tillamook Head	All year	All	3	NA	40	none	none	none	None	
1976	North of Tillamook Head	4/10-12/31	All	3	NA	40	24	16	none	None	
	South of Tillamook Head	4/10-12/31	All	3	NA	40	none	none	none	None	
1977	North of Tillamook Head	4/30-10/31	All	3	NA	40	24	16	none	None	
	South of Tillamook Head	4/30-10/31	All	3	NA	40	none	none	none	None	
	State waters off Elk and Chetco Rivers	11/1-30	All	3	NA	40	none	NA	NA	None	Chinook only fishery.
1978	North of Cape Falcon	4/29-10/31	All	3	NA	40	24	16	none	None	
	South of Cape Falcon	4/30-10/31	All	3	NA	40	22	16	none	None	
	State waters off Elk and Chetco Rivers	11/1-30	All	3	NA	40	22	NA	NA	None	Chinook only fishery.
1979	North of Cape Falcon	5/12-9/16	All	3	NA	40	24	16	none	None	Only 2 can be chinook or coho.
	South of Cape Falcon	5/12-9/2	All	2	NA	40	22	16	none	None	
	South of Cape Falcon	9/3-16	All	2	NA	40	22	NA	none	None	Closed to coho.
	State waters off Elk River	11/1-30	All	2	NA	40	22	NA	NA	None	Chinook only fishery.
	State waters off Chetco River	9/17-11/30	All	2	NA	40	22	NA	NA	None	Chinook only fishery.

Appendix Table 9. Summary of Oregon's recreational ocean salmon regulations, 1946-95.

Year	Open Area	Season	Open Days	Catch Limits			Size Limits (in.)			Gear Restrictions	Misc Regulations
				Daily	7 Day	Annual	Chin.	Coho	Pink		
1980	North of Cape Falcon	5/10-7/15	All	3	NA	40	24	16	none	None	
	North of Cape Falcon	7/16-8/31	All	2	NA	40	24	16	none	None	
	North of Cape Falcon (0-3 miles)	9/1-14	All	2	NA	40	24	16	none	None	
	South of Cape Falcon	5/10-7/15	All	3	NA	40	22	16	none	None	
	South of Cape Falcon	7/16-8/31	All	2	NA	40	22	16	none	None	
	South of Cape Falcon (0-3 miles)	9/1-14	All	2	NA	40	22	16	none	None	
	South of Cape Falcon (0-3 miles)	9/15-10/31	All	2	NA	40	22	NA	NA	None	Chinook only fishery.
	State waters off Elk and Chetco Rivers	11/1-30	All	2	NA	40	22	NA	NA	None	Chinook only fishery.
1981	North of Cape Falcon	5/23-8/25	All	2	NA	40	24	16	none	None	
	North of Cape Falcon (0-3 miles)	8/26-9/7	All	2	NA	40	24	16	none	None	
	South of Cape Falcon	5/15-8/13	All	2	NA	40	22	16	none	None	
	South of Cape Falcon	8/14-25	All	3	NA	40	22	16	none	None	
	South of Cape Falcon (0-3 miles)	8/26-9/20	All	3	NA	40	22	16	none	None	
	South of Cape Blanco	9/21-10/31	All	2	NA	40	22	NA	NA	None	Chinook only fishery.
	State waters off Elk and Chetco Rivers	11/1-30	All	2	NA	40	22	NA	NA	None	Chinook only fishery.
	1982	North of Cape Falcon	6/12-7/21	All	2	NA	40	24	16	none	None
North of Cape Falcon (0-3 miles)		7/22-7/25	All	2	NA	40	24	16	none	None	
North of Cape Falcon (0-3 miles)		7/26-8/1	All	2	NA	40	24	16	none	Barbless hooks	Only 1 coho.
Cape Falcon to Cape Blanco		5/29-6/11	All	2	NA	40	none	NA	NA	Barbless hooks	First 2 chinook only.
Cape Falcon to Cape Blanco		6/12-7/25	All	2	NA	40	none	none	none	None	First 2 salmon only.
Cape Falcon to Cape Blanco (0-3 miles)		7/26-8/1	All	2	NA	40	none	none	none	None	First 2 salmon only.
South of Cape Blanco		5/29-8/1	All	2	NA	40	none	none	none	None	First 2 salmon only.
South of Cape Blanco		8/2-10/31	All	2	NA	40	none	NA	NA	None	First 2 chinook only.
State waters off Elk and Chetco Rivers		11/1-30	All	2	NA	40	22	NA	NA	None	Chinook only fishery.
1983		Columbia R. S. Jetty to 46°06'00" (0-3 miles)	6/18-7/29	All	2	NA	40	24	16	none	None
	46°06'00" to Cape Falcon (0-6 miles)	6/18-7/29	All	2	NA	40	24	16	none	None	
	North of Cape Falcon	7/30-8/15	All	2	NA	40	24	16	none	None	
	Columbia R. S. Jetty to Cape Falcon (0-10 miles)	8/16-9/11	All	2	NA	40	24	16	none	None	
	Cape Falcon to Cape Blanco	6/18-9/18	All	2	NA	40	none	none	none	None	First 2 salmon only.
	Twin Rocks to Pyramid Rock (inside of whistle buoy)	9/19-10/31	All	2	NA	40	none	NA	NA	None	First 2 chinook only.
	South of Cape Blanco	5/28-9/18	All	2	NA	40	none	none	none	None	First 2 salmon only.
	South of Cape Blanco	9/19-10/31	All	2	NA	40	none	NA	NA	None	First 2 salmon, except closed to coho.
	State waters off Elk River	11/1-30	All	2	NA	40	none	NA	NA	None	First 2 chinook only.

Appendix Table 9. Summary of Oregon's recreational ocean salmon regulations, 1946-95.

Year	Open Area	Season	Open Days	Catch Limits			Size Limits (in.)			Gear Restrictions	Misc Regulations
				Daily	7 Day	Annual	Chin.	Coho	Pink		
1984	Columbia R. S. Jetty to Cape Falcon (0-10 miles)	7/28-8/8	All	2	NA	40	NA	16	none	Barbless hooks	Closed to chinook.
	South of Cape Falcon	7/9-8/7	All	2	NA	40	20	20	none	Barbless hooks	
	Cape Falcon to Cape Blanco (0-3 miles)	8/25-9/3	All	1	NA	40	20	20	none	Barbless hooks	
	Manhattan Beach to Pyramid Rock (0-3 miles)	9/15-21	All	2	NA	40	20	NA	none	Barbless hooks	Closed to coho.
	South of Cape Blanco	8/8-24	All	2	NA	40	20	NA	none	Barbless hooks	Closed to coho.
	South of Cape Blanco (0-3 miles)	8/25-9/3	All	2	NA	40	20	20	none	Barbless hooks	Only 1 coho.
	South of Cape Blanco	9/4-10/31	All	2	NA	40	20	NA	none	Barbless hooks	Closed to coho.
Cape Blanco to Humbug Mtn. (0-3 miles)	11/1-30	All	2	NA	40	20	NA	NA	Barbless hooks	Chinook only.	
1985	North of Cape Falcon	6/30-8/22	Sun-Thurs	2	NA	40	24	16	none	Barbless hooks	CRCZ a/ closed.
	Cape Falcon to Cape Blanco	7/1-9/2	All	2	6	40	none	none	none	None	First 2 salmon.
	Twin Rocks to Pyramid Rock (0-3 miles)	9/15-10/31	All	2	6	40	none	NA	none	None	First 2 salmon, closed to coho.
	South of Cape Blanco	5/25-9/2	All	2	6	40	none	none	none	None	First 2 salmon.
	South of Cape Blanco	9/3-10/31	All	2	6	40	none	NA	none	None	First 2 salmon, closed to coho.
	Tower Rock to Humbug Mtn. (0-3 miles)	10/1-11/30	All	2	6	40	none	NA	none	None	First 2 salmon, closed to coho.
1986	North of Cape Falcon	6/29-8/19	Sun-Thurs	2	NA	40	24	16	none	Barbless hooks	CRCZ a/ closed.
	Cape Falcon to Cape Blanco	5/24-26; 6/28-7/26	All	2	6	40	none	none	none	None	First 2 salmon.
	Cape Falcon to Cape Blanco	7/27-28	Tues-Sat	2	6	40	none	none	none	None	First 2 salmon.
	Cape Falcon to Cape Blanco	7/29-8/13	Tues-Sat	2	2	40	none	none	none	None	First 2 salmon.
	Twin Rocks to Pyramid Rock (0-3 miles)	9/15-11/15	All	2	6	40	none	NA	none	None	First 2 salmon, closed to coho.
	South of Cape Blanco	5/24-6/22	All	2	6	40	20	20	none	Barbless hooks	Limit of 1 coho and 1 chinook.
	South of Cape Blanco	6/23-9/7	All	2	6	40	20	20	none	Barbless hooks	
	Cape Blanco to Humbug Mtn. (0-3 miles)	10/1-11/26	All	2	6	40	20	NA	none	Barbless hooks	Closed to the take of coho.
Goat Island to OR/CA Border (east of 124°20'00")	10/1-31	All	2	6	40	20	NA	none	Barbless hooks	Closed to the take of coho.	
1987	North of Cape Falcon	6/28-7/18	Sun-Thurs	2	NA	40	24	16	none	Barbless hooks	CRCZ a/ closed.
	North of Cape Falcon (3-200 miles)	7/19-8/8	Sun-Thurs	2	NA	40	24	16	none	Barbless hooks	CRCZ a/ closed.
	North of Cape Falcon	8/9-19	Sun-Thurs	2	NA	40	24	16	none	Barbless hooks	CRCZ a/ closed.
	Cape Falcon to Cape Blanco	6/13-9/13	All	2	6	40	none	none	none	None	
	Twin Rocks to Pyramid Rock (0-3 miles)	9/14-10/31	All	2	6	40	none	NA	none	None	First 2 salmon, closed to coho.
	South of Cape Blanco	5/23-9/13	All	2	6	40	20	20	none	Barbless hooks	
	Cape Blanco to Humbug Mtn. (0-3 miles)	10/1-11/30	All	2	6	40	20	NA	none	Barbless hooks	Closed to the take of coho.
Goat Island to OR/CA Border (east of 124°20'00")	10/1-31	All	2	6	40	20	NA	none	Barbless hooks	Closed to the take of coho.	

Appendix Table 9. Summary of Oregon's recreational ocean salmon regulations, 1946-95.

Year	Open Area	Season	Open Days	Catch Limits			Size Limits (in.)			Gear Restrictions	Misc Regulations
				Daily	7 Day	Annual	Chin.	Coho	Pink		
1988	North of Cape Falcon (0-3 miles)	7/11-24	Sun-Thurs	2	NA	40	24	16	none	Barbless hooks	Only 1 chinook daily. CRCZ a/ closed
	Cape Falcon to Orford Reef Buoy (0-27 fathoms)	5/1-27	All	2	6	40	20	16	none	Barbless hooks	First 2 salmon.
	Cape Falcon to Orford Reef Buoy	5/28-9/11	All	2	6	40	20	16	none	Barbless hooks	First 2 salmon.
	Twin Rocks to Pyramid Rock (0-3 miles)	9/12-10/31	All	2	6	40	none	NA	none	None	Closed to the take of coho.
	South of the Orford Reef Buoy	5/28-7/9	All	2	6	40	20	20	none	Barbless hooks	
	South of the Orford Reef Buoy	7/10-9/11	All	1	6	40	20	20	none	Barbless hooks	
	Orford Reef Red Buoy to Humbug Mtn. (0-3 miles)	10/1-31	All	2	6	40	none	NA	none	Barbless hooks	Closed to the take of coho.
	Cape Blanco to Humbug Mtn. (0-3 miles)	11/1-30	All	2	6	40	none	NA	none	Barbless hooks	Closed to the take of coho.
1989	North of Cape Falcon (0-6 miles)	5/28-6/12	Sun-Mon	2	NA	40	24	NA	none	Barbless hooks	Closed to coho. CRCZ a/ closed.
	North of Cape Falcon	6/26-6/17	Sun-Thurs	2	NA	40	24	16	none	Barbless hooks	CRCZ a/ closed.
	Cape Falcon to Orford Reef Buoy (0-27 fathoms)	5/1-26	All	2	6	40	20	16	none	Barbless hooks	
	Cape Falcon to Orford Reef Buoy	5/27-7/27	All	2	6	40	20	16	none	Barbless hooks	
	Cape Falcon to Orford Reef Buoy	7/28-8/20	Sun-Thurs	2	6	40	20	16	none	Barbless hooks	
	Cape Falcon to Orford Reef Buoy	9/2-4	All	2	6	40	20	16	none	Barbless hooks	
	Twin Rocks to Pyramid Rock (0-3 miles)	9/16-10/31	All	2	6	40	none	NA	none	None	Closed to the take of coho.
	South of the Orford Reef Buoy	5/1-9/30	All	2	6	40	20	20	none	Barbless hooks	
1990	Cape Blanco to Humbug Mtn. (0-3 miles)	10/1-11/30	All	2	6	40	none	NA	none	Barbless hooks	Closed to the take of coho.
	North of Cape Falcon	6/24-8/30; 9/8-9	Sun-Thurs	2	NA	40	24	16	none	Barbless hooks	CRCZ a/ closed.
	Cape Falcon to Humbug Mtn. (0-27 fathoms)	5/1-27	All	2	6	40	20	16	none	Barbless hooks	
	Cape Falcon to Humbug Mtn.	5/28-6/22	All	2	6	40	20	16	none	Barbless hooks	
	Cape Falcon to Humbug Mtn.	6/30-7/31	All	2	6	40	20	16	none	Barbless hooks	
	Cape Falcon to Humbug Mtn.	8/8-9/16	All	2	6	40	20	16	none	Barbless hooks	
	Twin Rocks to Pyramid Rock (0-3 miles)	9/17-10/31	All	2	6	40	none	NA	none	None	Closed to the take of coho.
	South of Humbug Mtn.	5/1-6/29	All	2	6	40	20	20	none	Barbless hooks	
1991	South of Humbug Mtn.	6/30-8/15	All	2	6	40	20	20	none	Barbless hooks	Not more than 1 chinook daily.
	South of Humbug Mtn.	8/16-9/9	All	2	6	40	20	20	none	Barbless hooks	
	North of Cape Falcon	6/24-8/12	Sun-Thurs	2	NA	40	24	16	none	Barbless hooks	CRCZ a/ closed.
	North of Cape Falcon	9/15-18; 9/26	All	2	NA	40	24	16	none	Barbless hooks	CRCZ a/ closed.
	Cape Falcon to Humbug Mtn. (0-27 fathoms)	5/1-26	All	2	6	40	20	16	none	Barbless hooks	
	Cape Falcon to Humbug Mtn.	5/27-7/28	All	2	6	40	20	16	none	Barbless hooks	
	Twin Rocks to Pyramid Rock (0-3 miles)	9/16-10/31	All	2	6	40	none	NA	none	None	Closed to the take of coho.
	South of Humbug Mtn.	5/25-7/28	Thurs-Mon	2	6	40	20	20	none	Barbless hooks	Not more than 1 chinook daily.
South of Humbug Mtn.	7/23-28	Fri-Sun	2	6	40	20	20	none	Barbless hooks	Not more than 1 chinook daily.	
South of Humbug Mtn.	8/31-9/2	All	2	6	40	20	20	none	Barbless hooks	Not more than 1 chinook daily.	
South of Humbug Mtn.	9/6-29	Fri-Sun	2	6	40	20	20	none	Barbless hooks	Not more than 1 chinook daily.	

Appendix Table 9. Summary of Oregon's recreational ocean salmon regulations, 1946-95.

Year	Open Area	Season	Open Days	Catch Limits			Size Limits (in.)			Gear Restrictions	Misc Regulations
				Daily	7 Day	Annual	Chin.	Coho	Pink		
1992	North of Cape Falcon (0-3 miles)	6/29-7/30	Sun-Thurs	2	4	40	24	16	none	Barbless hooks	CRCZ a/ closed.
	North of Cape Falcon	8/2-6; 9/16-17; 9/27	Sun-Thurs	2	4	40	24	16	none	Barbless hooks	CRCZ a/ closed.
	Cape Falcon to Humbug Mtn. (0-27 fathoms)	5/3-6/11	Sun-Thurs	2	4	20	20	16	none	Barbless hooks	
	Cape Falcon to Florence S. Jetty	6/14-9/10	Sun-Thurs	2	4	20	20	16	none	Barbless hooks	
	Twin Rocks to Pyramid Rock (0-3 miles)	9/16-10/31	All	2	6	40	none	NA	none	None	Closed to the take of coho.
	Florence S. Jetty to Humbug Mtn.	6/14-7/2	Sun-Thurs	2	4	20	20	16	none	Barbless hooks	
	Florence S. Jetty to Humbug Mtn.	7/5-8/31	Sun-Thurs	2	4	20	NA	16	none	Barbless hooks	Closed to the take of chinook.
	Florence S. Jetty to Humbug Mtn.	9/1-10	Sun-Thurs	2	4	20	20	16	none	Barbless hooks	
	Cape Blanco to Humbug Mtn. (0-3 miles)	10/24-26	All	1	6	40	20	NA	none	Barbless hooks	Closed to the take of coho.
	South of Humbug Mtn.	7/6-20	Mon-Wed	1	6	40	20	20	none	Barbless hooks	
	South of Humbug Mtn.	9/1-7	All	1	6	40	20	20	none	Barbless hooks	
Goat Island to Red Point (0-3 miles)	10/15-26	All	1	6	40	20	NA	none	Barbless hooks	Closed to the take of coho	
1993	North of Cape Falcon	7/5-9/9	Sun-Thurs	2	4	40	24	16	none	Barbless hooks	CRCZ a/ closed.
	North of Cape Falcon	9/12-23	All	2	4	40	24	16	none	Barbless hooks	CRCZ a/ closed.
	Cape Falcon to Humbug Mtn. (0-27 fathoms)	5/1-6/6	All	2	2	10	20	16	none	Barbless hooks	
	Cape Falcon to Humbug Mtn.	7/13-8/10	Sun-Tues	2	2	10	20	16	none	Barbless hooks	
	Twin Rocks to Pyramid Rock (0-3 miles)	9/16-10/31	All	2	6	40	none	NA	none	None	Closed to the take of coho.
	Cape Blanco to Humbug Mtn. (0-3 miles)	10/1-11/30	All	2	6	40	20	NA	none	Barbless hooks	Closed to the take of coho.
	South of Humbug Mtn.	5/5-6/19	Wed-Sat	1	6	40	20	20	none	Barbless hooks	
	South of Humbug Mtn.	7/14-8/28	Wed-Sat	1	6	40	20	20	none	Barbless hooks	
South of Humbug Mtn.	9/1-6	All	1	6	40	20	20	none	Barbless hooks		
1994	Cape Falcon to Humbug Mtn. (0-27 fathom)	5/1-6/5	All	2	2	10	20	NA	none	Barbless hooks	Closed to the take of coho
	Twin Rocks to Pyramid Rock (0-27 fathom)	6/6-19	All	2	2	10	20	NA	none	Barbless hooks	Closed to the take of coho
	Twin Rocks to Pyramid Rock (0-3 miles)	10/1-11/15	All	2	6	40	none	NA	none	Barbless hooks	Closed to the take of coho
	Cape Blanco to Humbug Mtn. (0-3 miles)	10/1-11/7	All	1	4	40	20	NA	none	Barbless hooks	Closed to the take of coho
	South of Humbug Mtn.	5/1-6/7	All	2	6	40	none	NA	none	Barbless hooks	Closed to the take of coho
	South of Humbug Mtn.	8/27-9/5	All	2	6	40	none	NA	none	Barbless hooks	Closed to the take of coho
	Goat Island to Red Point (0-3 miles)	10/10-25	All	1	4	40	20	NA	none	Barbless hooks	Closed to the take of coho
1995	North of Cape Falcon	7/24-9/5; 9/10-17	Sun-Thurs	2	4	40	NA	16	none	Barbless hooks	Open for all salmon except chinook
	Cape Falcon to Humbug Mtn.	5/1-6/30	All	2	6	10	20	NA	none	Artificial plugs or bait > 6"; no attractors such as flashers or colored divers (by regulation uncolored divers are not considered attractors); no more than 2 barbless hooks.	Open for all salmon except coho

Appendix Table 9. Summary of Oregon's recreational ocean salmon regulations, 1946-95.

Year	Open Area	Season	Open Days	Catch Limits			Size Limits (in.)			Gear Restrictions	Misc Regulations
				Daily	7 Day	Annual	Chin.	Coho	Pink		
1995 (cont)	Twin Rocks to Pyramid Rock (0-3 miles)	9/16-11/15	All	2	6	40	20	NA	none	Artificial plugs or bait > 6"; no attractors such as flashers or colored divers (by regulation uncolored divers are not considered attractors); no more than 2 barbless hooks.	Open for all salmon except coho
	Yaquina Head to Seal Rock (0-3 miles)	9/16-10/31	All	2	6	40	20	NA	none	Artificial plugs or bait > 6"; no attractors such as flashers or colored divers (by regulation uncolored divers are not considered attractors); no more than 2 barbless hooks	Open for all salmon except coho
	3 miles north of Coos Bay North Jetty to Cape Arago (0-3 miles)	9/16-10/31	All	2	6	40	20	NA	none	Artificial plugs or bait > 6"; no attractors such as flashers or colored divers (by regulation uncolored divers are not considered attractors); no more than 2 barbless hooks	Open for all salmon except coho
	Cape Blanco to Humbug Mtn.	10/1-11/7	All	2	6	40	20	NA	none	Artificial plugs or bait > 6"; no attractors such as flashers or colored divers (by regulation uncolored divers are not considered attractors); no more than 2 barbless hooks	Open for all salmon except coho
	Humbug Mtn. to Horse Mtn.	5/17-7/1	Wed-Sat.	1	4	40	20	NA	none	Barbless hooks	Open for all salmon except coho
	Humbug Mtn. to Horse Mtn.	8/16-18	Wed-Sat.	1	4	40	20	NA	none	Barbless hooks	Open for all salmon except coho
	Humbug Mtn. to Horse Mtn. Goat Island to 42° 01' 20"	9/1-9 10/10-15; 10/21-22	All All	1 1	6 4	40 40	20 20	NA NA	none none	Barbless hooks Barbless hooks	Open for all salmon except coho Open for all salmon except coho

a/ CRCZ = Columbia River Conservation Zone. This fishery management area has changed in size during a number of years, but in general has been the area off the Columbia River between North Head, Washington and the red buoy line on the Oregon side. The name was changed to Columbia River Control Zone in 1992.

Appendix Table 10. Oregon ocean recreational salmon angler effort (in angler trips), by port and statistical week^a for 1995.

Stat. Week	Astoria	Garibaldi	Pacific City	Depoe Bay	Newport	Florence	Coos Bay	Brookings	Total
18	-	0	0	0	0	0	0	0	0
19	-	52	4	2	33	2	0	0	93
20	-	24	0	21	36	0	20	0	101
21	-	93	16	0	15	8	0	1,340	1,472
22	-	447	8	0	32	24	10	996	1,517
23	-	6	6	0	37	19	6	469	543
24	-	28	0	14	0	26	0	1,153	1,221
25	-	2	0	9	21	0	0	1,081	1,113
26	-	14	11	1	129	147	164	1,844	2,310
27	-	8	1	0	49	0	132	1,674	1,864
28	-	-	-	-	-	0	0	-	-
29	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-
31	1,668	607	-	-	-	-	-	-	2,275
32	1,076	196	-	-	-	-	-	-	1,272
33	1,014	197	-	-	-	-	-	-	1,211
34	1,288	96	-	-	-	-	-	1,977	3,361
35	1,698	80	-	-	-	-	-	0	1,778
36	1,923	88	-	-	-	-	-	2,450	4,461
37	724	25	-	-	-	-	-	3,028	3,777
38	258	458	-	-	201	-	57	0	974
39	0	413	-	-	200	-	67	0	680
40	0	443	-	-	26	-	14	0	483
41	0	531	-	-	63	-	21	0	615
42	0	120	-	-	26	-	0	2,749	2,895
43	0	12	-	-	2	-	0	661	675
44	0	345	-	-	26	-	0	0	371
45	0	788	-	-	0	-	0	0	788
46	0	-	-	-	-	-	0	0	0
Total	9,649	5,073	46	47	896	226	491	19,422	35,850

^a Refer to Appendix Table 20 for 1995 statistical week calendar.

Appendix Table 11. Oregon recreational effort in salmon angler trips by area and month for 1979-95.^a

Area	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
1986	-	700	12,100	7,700	-	-	-	20,600
1987	-	600	8,500	8,000	-	-	-	17,100
1988	-	-	5,700	-	-	-	-	5,700
1989	100	1,200	9,200	9,200	-	-	-	19,800
1990	-	1,900	8,900	13,200	1,400	-	-	25,500
1991	-	1,500	9,000	9,400	1,800	-	-	21,700
1992	-	-	9,800	1,800	1,300	-	-	12,900
1993	-	-	6,000	8,200	4,300	-	-	18,500
1994	-	-	-	-	-	-	-	0
1995	-	-	2,300	7,700	1,000	-	-	11,000
<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 ^c	-	38,600
1986	<50	1,900	13,000	3,100	-	-	-	17,900
1987	-	1,800	12,400	10,900	3,800	-	-	29,100
1988	300	2,100	9,600	13,800	7,400	-	-	33,300
1989	300	3,000	15,400	12,300	300	-	-	31,300
1990	100	1,200	9,900	16,300	6,000	-	-	33,500
1991	400	4,000	16,600	-	-	-	-	21,000
1992	1,200	3,400	11,700	7,100	2,800	-	-	26,100
1993	800	200	3,100	1,500	-	-	-	5,600
1994	600	900	-	-	-	9,100	0	10,700
1995	600	<100	-	-	1,300	1,000	800	3,800
<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
1986	1,400	3,900	38,900	8,000	-	-	-	51,900
1987	-	5,200	40,000	23,200	8,600	-	-	76,900
1988	1,000	7,100	37,900	34,200	9,400	-	-	89,600
1989	900	17,200	37,500	26,300	800	-	-	82,800
1990	700	5,500	32,800	28,300	4,100	-	-	71,400
1991	800	11,800	40,600	-	-	-	-	53,300
1992	1,100	7,100	27,900	14,600	2,400	-	-	53,000
1993	300	100	11,600	5,100	-	-	-	17,100
1994	100	<50	-	-	-	-	-	100
1995	100	300	0	-	400	100	-	900

Appendix Table 11 continued.

Area	May	June	July	August	Sept.	Oct.	Nov.	Season ^b
Coos Bay								
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
1986	800	4,900	33,600	4,300	-	-	-	43,600
1987	-	3,900	40,600	12,800	5,200	-	-	62,500
1988	1,300	9,900	33,100	21,000	3,700	-	-	69,000
1989	800	16,200	33,900	15,600	100	-	-	66,600
1990	600	8,800	24,300	24,900	6,400	-	-	65,000
1991	1,000	17,300	39,400	-	-	-	-	57,700
1992	1,400	9,400	28,600	12,800	3,300	-	-	55,600
1993	900	300	10,100	4,000	-	-	-	15,300
1994	200	200	-	-	-	-	-	400
1995	<100	500	0	0	100	<50	-	700
Brookings								
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
1986	3,600	10,400	20,100	13,000	600	5,000	-	52,700
1987	2,300	10,000	29,000	15,200	7,100	5,900	--	69,400
1988	800	14,200	25,200	11,300	1,600	-	-	53,100
1989	3,100	15,700	26,600	16,300	4,100	-	-	65,800
1990	1,400	14,500	22,800	11,500	800	-	-	51,100
1991	1,100	11,600	17,800	1,900	4,000	-	-	36,400
1992	-	-	8,900	-	4,900	3,900	-	17,600
1993	3,700	2,700	6,500	8,100	2,800	-	-	23,800
1994	6,300	1,300	-	1,400	2,900	4,200	-	6,200
1995	2,300	6,200	0	4,400	3,000	3,400	-	19,400
All Areas								
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
1986	5,700	21,900	117,700	36,000	600	5,000	-	187,000
1987	2,300	21,500	130,500	70,200	24,700	5,900	-	255,100
1988	3,500	33,200	111,500	80,400	22,100	-	-	250,700
1989	5,300	53,400	122,600	79,700	5,300	-	-	266,300
1990	2,800	32,000	98,700	94,300	18,800	-	-	246,600
1991	3,400	46,200	123,400	11,300	5,800	-	-	190,100
1992	3,700	19,900	86,900	36,300	14,700	3,900	-	165,300
1993	5,800	3,300	37,300	26,900	7,100	-	-	80,300
1994	7,200	2,400	-	1,400	2,900	13,300	0	27,300
1995	3,200	7,100	2,300	12,100	5,900	4,600	800	35,900

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

^c Only 600 were ocean only trips. Most were combination bay-ocean trips.

Appendix Table 12. Summary of Oregon recreational ocean salmon effort and catch by area, 1976-95.

Year	Area ^a					Total
	Columbia R.	Tillamook	Newport	Coos Bay	Brookings	
EFFORT (Salmon Angler Trips)^b						
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
1986	20,600	17,900	52,200	43,600	52,700	187,000
1987	17,100	29,100	76,900	62,500	69,400	255,100
1988	5,700	33,300	89,600	69,000	53,100	250,700
1989	19,800	31,300	82,800	66,600	65,800	266,300
1990	25,500	33,500	71,400	65,000	51,100	246,600
1991	21,700	21,000	53,300	57,700	36,400	190,100
1992	12,900	26,100	53,000	55,600	17,600	165,300
1993	18,500	5,600	17,100	15,300	23,800	80,300
1994	0	10,700	100	400	6,200	27,300
1995 ^c	9,600	5,100	900	700	19,400	35,900
Chinook						
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
1986	1,900	500	2,300	6,100	12,000	22,800
1987	4,100	3,500	6,400	19,000	26,400	59,400
1988	500	2,700	5,300	8,100	21,700	38,300
1989	1,500	900	1,800	6,700	21,200	32,000
1990	3,300	1,200	2,700	6,600	12,700	26,500
1991	1,000	700	900	5,100	6,800	14,400
1992	500	1,500	4,100	3,800	2,700	12,600
1993	900	300	400	1,100	3,800	6,500
1994	0	2,400	<50	<50	3,600	6,000
1995 ^c	100	500	100	200	5,700	6,700
Coho						
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	61,800	51,200	7,400	182,400
1986	39,100	24,300	80,400	63,200	12,000	218,900
1987	25,600	16,400	65,300	54,100	19,000	180,500
1988	9,800	29,900	100,800	71,200	15,000	226,900
1989	34,300	30,300	102,500	73,100	33,000	273,300
1990	36,100	22,900	64,100	62,200	15,300	200,600
1991	39,400	25,600	81,100	90,800	22,200	259,100
1992	22,300	20,800	63,500	76,000	3,300	185,800
1993	22,300	2,300 ^d	16,400	12,200	6,000 ^d	59,300 ^d
1994	0	<50 ^d	0 ^d	0	<50 ^d	<50 ^d
1995 ^c	11,300	400	<50 ^d	0	100 ^d	11,900

^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 1976-1978 effort includes a small number of bottomfishing trips.

^c Preliminary.

^d Represents illegal coho landings.

Appendix Table 13. Oregon ocean recreational chinook catch (number of fish) by catch area and month, 1979-95.

Area ^a	Chinook							Season ^b
	May	June	July	August	Sept.	Oct.	Nov.	
<u>Columbia River</u>								
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	-	-	-	-	-	-	-	0
1985	-	100	1,300	2,200	-	-	-	3,600
1986	-	100	1,200	700	-	-	-	1,900
1987	-	200	2,000	1,900	-	-	-	4,100
1988	-	-	500	-	-	-	-	500
1989	<50	200	200	1,100	-	-	-	1,500
1990	-	100	900	2,200	100	-	-	3,300
1991	-	100	300	500	<50	-	-	1,000
1992	-	-	300	200	<50	-	-	500
1993	-	-	300	400	200	-	-	900
1994	-	-	-	-	-	-	-	0
1995	-	-	<50	<100	<50	-	-	100
<u>Tillamook^e</u>								
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 ^c
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
1986	0	<50	200	200	-	-	-	500
1987	-	100	800	2,000	600	-	-	3,500
1988	<50	100	300	1,300	1,000	-	-	2,700
1989	<50	100	300	400	<50	-	-	900
1990	0	100	500	400	300	100	-	1,200
1991	<50	300	400	-	-	-	-	700
1992	100	300	600	300	200	-	-	1,500
1993	100	<50	200	<50	-	-	-	300
1994	100	100	-	-	-	2,200	0	2,400
1995	<100	<50	<50	0	100	300	<100	500
<u>Newport</u>								
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 ^d
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
1986	100	100	1,900	100	-	-	-	2,300
1987	-	200	2,400	2,100	1,700	-	-	6,400
1988	100	800	2,200	1,700	500	-	-	5,300
1989	100	700	500	400	<50	-	-	1,800
1990	<50	300	1,400	800	200	-	-	2,700
1991	100	400	400	-	-	-	-	900
1992	100	300	2,800	900	100	-	-	4,100
1993	<50	0	300	100	-	-	-	400
1994	<50	0	-	-	-	-	-	<50
1995	<50	<50	0	0	<50	<50	-	100
<u>Coos Bay</u>								
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

Appendix Table 13 continued.

Area ^a	Chinook							Season ^b
	May	June	July	August	Sept.	Oct.	Nov.	
<u>Coos Bay cont.</u>								
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
1986	<50	1,000	4,500	500	-	-	-	6,100
1987	-	900	10,700	4,600	2,800	-	-	19,000
1988	200	1,700	2,800	3,100	200	-	-	8,100
1989	100	1,800	4,300	600	<50	-	-	6,700
1990	<50	600	2,800	2,300	800	-	-	6,600
1991	<50	2,100	2,900	-	-	-	-	5,100
1992	100	2,000	1,000	300	400	-	-	3,800
1993	100	<50	600	400	-	-	-	1,100
1994	<50	<50	-	-	-	-	-	<50
1995	<50	200	0	0	<50	<50	-	200
<u>Brookings</u>								
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
1986	1,100	2,800	3,500	3,900	<50	600	-	12,000
1987	100	3,800	9,800	5,600	5,900	1,100	-	26,400
1988	100	12,400	6,500	2,600	100	-	-	21,700
1989	400	3,600	9,400	6,800	1,000	-	-	21,200
1990	400	4,600	6,500	1,200	<50	-	-	12,700
1991	<50	4,100	2,300	100	300	-	-	6,800
1992	-	-	1,500	-	400	700	-	2,700
1993	1,100	200	600	1,300	500	-	-	3,800
1994	1,900	100	-	300	300	1,100	-	3,600
1995	200	1,600	0	2,300	800	800	-	5,700
<u>All Areas</u>								
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
1986	1,200	4,100	11,400	5,400	<50	600	-	22,800
1987	100	5,300	25,800	16,100	11,000	1,100	-	59,400
1988	400	15,000	12,400	8,700	1,900	-	-	38,300
1989	600	6,400	14,700	9,300	1,100	-	-	32,000
1990	400	5,700	12,100	6,900	1,400	100	-	26,500
1991	200	7,000	6,300	600	300	-	-	14,400
1992	200	2,500	6,200	1,700	1,200	700	-	12,600
1993	1,300	200	1,900	2,300	700	-	-	6,400
1994	1,900	300	0	300	300	3,300	-	6,000
1995	300	1,800	<50	2,400	1,000	1,100	<100	6,700

- ^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 from 1979 through 1987.
- ^b Individual monthly catches may not equal totals due to rounding. "All Areas" summary includes unidentified data.
- ^c Includes landings at Nehalem Bay.
- ^d Includes landings at Salmon and Siletz Rivers and Alsea Bay.
- ^e Catch estimates for the fall state waters fishery off the mouth of Tillamook Bay, are not included for 1983, 1984, 1986-89, or 1991-93.

Appendix Table 14. Oregon ocean recreational chinook catch, by port and statistical week^a for 1995.

Stat. Week	Astoria	Garibaldi	Pacific City	Depoe Bay	Newport	Florence	Coos Bay	Brookings	Total
18	-	0	0	0	0	0	0	0	0
19	-	28	0	0	11	0	0	0	39
20	-	3	0	1	5	0	0	0	9
21	-	16	1	0	0	2	0	166	185
22	-	18	1	0	0	2	0	46	67
23	-	0	0	0	0	0	0	73	73
24	-	-	0	2	0	4	0	278	284
25	-	-	0	1	10	0	0	491	502
26	-	-	1	0	6	70	104	369	550
27	-	-	0	0	7	0	9	404	420
28	-	-	-	-	-	-	-	0	-
29	-	-	-	-	-	-	-	0	-
30	-	-	-	-	-	-	-	0	-
31	12	4	-	-	-	-	-	0	16
32	18	-	-	-	-	-	-	0	18
33	10	-	-	-	-	-	-	0	10
34	18	-	-	-	-	-	-	472	490
35	10	-	-	-	-	-	-	0	10
36	38	-	-	-	-	-	-	1,836	1,874
37	0	-	-	-	-	-	-	767	767
38	3	30	-	-	18	-	15	0	66
39	0	24	-	-	18	-	11	0	53
40	-	63	-	-	1	-	19	0	83
41	-	98	-	-	14	-	7	0	119
42	-	11	-	-	10	-	0	736	757
43	-	0	-	-	2	-	0	93	95
44	-	160	-	-	2	-	0	0	162
45	-	84	-	-	0	-	0	0	84
46	-	0	-	-	0	-	0	0	0
Total	109	539	3	4	104	78	165	5,731	6,733

^a Refer to Appendix Table 20 for 1995 statistical week calendar.

Appendix Table 15. Oregon ocean recreational coho catch (number of fish) by catch area and month, 1979-95.

Area ^a	Coho						Season ^b
	May	June	July	August	Sept.	Oct.	
<u>Columbia R.</u>							
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
1986	-	1,700	23,300	14,100	-	-	39,100
1987	-	900	12,500	12,300	-	-	25,600
1988	-	-	9,800	-	-	-	9,800
1989	-	1,600	17,500	15,200	-	-	34,300
1990	-	3,500	14,700	16,600	1,300	-	36,100
1991	-	2,400	16,400	17,200	3,400	-	39,400
1992	-	-	17,900	3,000	1,400	-	22,300
1993	-	-	7,600	10,900	3,800	-	22,300
1994	-	-	-	-	-	-	0
1995	0	0	1,900	8,700	800	0	11,300
<u>Tillamook</u>							
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
1986	0	3,400	15,800	5,100	-	-	24,300
1987	-	600	10,200	4,900	700	-	16,400
1988	100	1,800	8,200	14,200	5,700	-	29,900
1989	<50	3,400	19,700	7,000	100	-	30,100
1990	0	900	8,800	12,400	800	-	22,900
1991	<50	2,500	23,100	-	-	-	25,600
1992	100	1,800	11,300	6,100	1,400	-	20,800
1993	<50	<50	900	1,400	-	-	2,300
1994	-	-	-	-	-	<50 ^e	<50 ^e
1995	0	0	100	300	<50	0	400
<u>Newport</u>							
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	45,600	1,400	-	61,800
1986	1,500	7,600	57,400	13,900	-	-	80,400
1987	-	1,300	43,100	14,500	6,300	-	65,300
1988	200	6,400	45,800	42,800	5,600	-	100,800
1989	800	24,200	47,400	29,600	600	-	102,500
1990	200	5,800	37,900	19,000	1,200	-	64,100
1991	100	15,200	65,800	-	-	-	81,100
1992	<50	9,700	34,700	16,900	2,200	-	63,500
1993	<50	<50	9,400	7,000	-	-	16,400
1994	-	-	-	-	-	-	0
1995	0	0	0	0	<50	0	<50 ^e
<u>Coos Bay</u>							
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

Appendix Table 15 continued.

Area ^a	May	June	July	Coho August	Sept.	Oct.	Season ^b
<u>Coos Bay cont.</u>							
1984	-	-	19,600	19,700	100	-	39,400
1985	-	-	30,900	19,700	500	-	51,200
1986	1,100	8,000	48,000	6,100	-	-	63,200
1987	-	1,000	44,600	6,400	2,100	-	54,100
1988	100	10,700	42,200	17,200	1,000	-	71,200
1989	700	22,300	38,500	11,600	<50	-	73,100
1990	<50	12,400	23,500	23,200	3,100	-	62,200
1991	800	23,400	66,500	-	-	-	90,800
1992	500	13,100	43,800	15,800	2,700	-	76,000
1993	100	100	7,600	4,400	-	-	12,200
1994	-	-	-	-	-	-	0
1995	0	0	0	0	0	0	0
<u>Brookings</u>							
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
1986	1,500	2,600	5,700	2,100	0	<50	12,000
1987	<50	500	14,000	3,100	1,400	<50	19,000
1988	<50	1,000	12,100	1,800	100	-	15,000
1989	200	4,200	20,300	7,500	800	-	33,000
1990	100	8,400	5,000	1,800	<50	-	15,300
1991	0	10,200	10,600	500	900	-	22,200
1992	-	-	2,800	-	400	-	3,300
1993	100	100	1,900	3,400	500	-	6,000
1994	-	-	-	<50 ^e	<50 ^e	-	<50 ^e
1995	0	<50 ^e	0	<100 ^e	<50 ^e	<50 ^e	100 ^e
<u>All Areas</u>							
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	108,200	2,300	-	182,400
1986	4,100	23,300	150,100	41,300	-	<50	218,900
1987	<50	4,300	124,400	41,200	10,500	<50	180,500
1988	300	20,000	118,200	76,100	12,300	-	226,900
1989	1,600	55,900	143,400	70,900	1,500	-	273,300
1990	300	31,000	89,800	73,000	6,500	-	200,600
1991	900	53,800	182,400	17,700	4,300	-	259,100
1992	600	24,700	110,600	41,700	8,200	-	185,800
1993	200	200	27,500	27,100	4,300	-	59,300
1994	0	0	0	<50 ^e	<50 ^e	<50 ^e	<50 ^e
1995	0	<50 ^e	2,000	9,100	800	<50 ^e	11,900

^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, "All Areas" summary includes unidentified data.

^c Includes landings at Nehalem Bay.

^d Includes landings at Salmon and Siletz Rivers and Alsea Bay.

^e Illegal coho landings during closed season.

Appendix Table 16. Oregon ocean recreational coho catch, by port and statistical week^a for 1995.

Stat. Week	Astoria	Garibaldi	Pacific City	Depoe Bay	Newport	Florence	Coos Bay	Brookings	Total
19	-	-	-	-	-	-	-	-	0
20	-	-	-	-	-	-	-	-	0
21	-	-	-	-	-	-	-	-	0
22	-	-	-	-	-	-	-	-	0
23	-	-	-	-	-	-	-	-	0
24	-	-	-	-	-	-	-	-	0
25	-	-	-	-	-	-	-	6 ^b	6 ^b
26	-	-	-	-	-	-	-	-	0
27	-	-	-	-	-	-	-	32 ^b	32 ^b
28	-	-	-	-	-	-	-	-	0
29	-	-	-	-	-	-	-	-	0
30	-	-	-	-	-	-	-	-	0
31	1,874	102	-	-	-	-	-	-	1,976
32	1,219	73	-	-	-	-	-	-	1,292
33	1,267	48	-	-	-	-	-	-	1,315
34	1,408	35	-	-	-	-	-	3 ^b	1,446
35	2,429	131	-	-	-	-	-	-	2,560
36	2,386	28	-	-	-	-	-	51 ^b	2,465
37	616	17	-	-	-	-	-	35 ^b	668
38	140	3	-	-	-	-	-	-	143
39	-	-	-	-	7 ^b	-	-	-	7 ^b
40	-	-	-	-	-	-	-	-	0
41	-	-	-	-	-	-	-	-	0
42	-	-	-	-	-	-	-	3 ^b	3 ^b
43	-	-	-	-	-	-	-	-	0
44	-	-	-	-	-	-	-	-	0
Total	11,339	437	0	0	7^b	0	0	130^b	11,913

^a Refer to Appendix Table 20 for 1995 statistical week calendar.

^b Coho were prohibited in most areas in 1995, these were illegal landings.

Appendix Table 17. The number of Oregon charter boats active during the ocean salmon fishery by port and year, 1985-95.

Port	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Astoria	42	46	50	48	42	41	34	30	24	NA	30
Garibaldi	22	20	20	24	20	18	17	17	13	15	15
Pacific City	4	3	2	3	3	0	0	0	0	0	0
Depoe Bay	17	19	24	24	24	24	23	23	21	20	20
Newport	33	30	32	32	31	33	30	33	30	33	20
Florence	1	1	1	1	1	1	2	1	1	1	0
Winchester Bay	10	12	10	10	8	9	8	8	6	2	0
Coos Bay	7	5	5	5	5	5	4	4	4	4	2
Gold Beach	3	3	2	2	1	1	1	1	1	3	3
Brookings	3	5	5	9	7	9	10	6	4	4	3
Total	142	144	151	158	139	141	129	123	103	82	93

Appendix Table 18. Oregon ocean recreational salmon effort and catch by boat type, 1979-95^a and 1979-94 average, in thousands.

Year	Angler Trips		Chinook Catch		Coho Catch	
	Charter	Private	Charter	Private	Charter	Private
1979	73.7	187.7	5.4	13.3	59.8	101.8
1980	79.0	218.9	5.1	11.9	98.3	207.5
1981	65.4	245.8	6.6	22.5	64.5	135.3
1982	43.3	182.7	8.2	30.6	48.5	126.7
1983	41.9	184.1	4.7	20.0	39.7	107.2
1984	24.3	128.7	2.2	14.8	27.3	96.1
1985	53.4	198.2	9.2	46.6	60.2	122.8
1986	43.7	143.3	4.2	18.7	75.0	143.9
1987	60.9	194.2	14.3	45.1	61.9	118.7
1988	62.5	188.2	7.3	31.0	73.5	153.3
1989	60.2	206.1	4.2	27.9	85.8	187.5
1990	55.3	191.2	5.1	21.5	61.6	139.1
1991	40.3	149.7	1.9	12.5	68.9	190.2
1992	30.0	135.4	2.7	9.9	46.2	139.6
1993	13.4	66.9	0.9	5.6	16.2	43.1
1994	1.4	25.5	0.5	5.6	0.0	0.0
1979-1994	46.8	165.4	5.2	21.1	55.5	125.8
1995	4.6	31.2	0.3	6.4	4.0	7.9

^a Salmon data from surveyed ports only. These include Astoria, Garibaldi, Depoe Bay, Newport, Winchester Bay, Coos Bay and Brookings. Since 1981 Pacific City and Florence have also been included. Gold Beach data are included from 1981-1987. Winchester Bay was not sampled in 1995.

Appendix Table 19. Oregon ocean recreational salmon effort and catch, by boat type and port, 1979-95.

	SALMON ANGLER TRIPS		CATCH			
	Charter	Private	Chinook		Coho	
			Charter	Private	Charter	Private
<u>Columbia River</u>						
1979	18,511	24,267	3,415	3,657	20,124	17,770
1980	26,250	20,065	3,122	2,381	37,666	17,981
1981	15,967	28,728	4,298	7,218	23,679	30,615
1982	11,794	15,442	3,950	4,285	17,184	18,292
1983	12,901	17,950	1,694	1,746	17,661	19,584
1984	2,704	4,406	5	21	4,409	6,465
1985	8,328	11,693	1,469	2,098	14,466	16,543
1986	7,717	12,826	660	1,396	16,429	22,634
1987	8,044	9,086	1,935	2,128	13,423	12,224
1988	2,425	3,243	231	250	4,306	5,539
1989	9,126	10,711	524	940	16,863	17,441
1990	8,497	17,024	1,107	2,212	14,140	21,970
1991	8,102	13,552	334	649	15,501	23,862
1992	4,589	8,336	172	336	8,766	13,514
1993	5,840	12,709	336	575	8,590	13,759
1994	NA	NA	-	-	-	-
1995	2,460	7,189	2	107	3,836	7,503
<u>Garibaldi</u>						
1979	2,786	16,288	47	664	1,246	4,722
1980	3,688	29,347	75	722	3,302	16,105
1981	2,862	30,907	177	1,601	1,936	12,992
1982	1,859	16,588	729	671	16,513	14,159
1983	1,743	21,516	54	543	1,203	6,708
1984	2,356	16,816	147	731	2,855	12,432
1985	4,855	26,824	465	1,710	6,536	17,101
1986	2,856	11,824	110	279	5,245	13,781
1987	5,217	18,986	872	2,205	4,782	7,886
1988	7,065	21,548	604	1,738	9,003	16,181
1989	4,945	21,355	114	564	7,229	16,127
1990	5,470	24,085	209	794	5,979	13,120
1991	2,535	15,269	44	558	4,446	16,316
1992	2,721	17,887	117	1,045	4,089	10,331
1993	476	3,802	18	238	295	925
1994	1,228	9,057	427	1,971	-	29
1995	1,248	3,825	53	486	210	227
<u>Pacific City</u>						
1979	NA	NA	-	-	-	-
1980	NA	NA	-	-	-	-
1981	230	4,012	9	108	110	2,655
1982	210	5,947	5	626	267	6,280
1983	90	1,958	3	92	35	862
1984	142	4,465	2	225	219	4,779
1985	477	6,400	36	399	650	6,696
1986	117	3,134	2	85	205	5,048
1987	238	4,610	27	440	328	3,432
1988	196	4,449	11	366	148	4,563
1989	254	4,743	5	187	383	6,584
1990	0	3,941	0	228	0	3,813
1991	0	3,220	0	84	0	4,888
1992	0	5,527	0	341	0	6,338
1993	0	1,293	0	41	0	1,103
1994	0	1	0	0	0	0
1995	0	46	0	3	0	0

Appendix Table 19 continued.

	SALMON ANGLER TRIPS		CATCH			
	Charter	Private	Chinook		Coho	
			Charter	Private	Charter	Private
<u>Depoe Bay</u>						
1979	14,535	7,511	197	130	8,435	3,867
1980	14,489	10,251	260	160	15,477	8,783
1981	12,423	9,584	382	399	11,376	7,406
1982	7,883	9,762	421	857	8,608	9,803
1983	5,699	7,464	138	244	3,150	3,900
1984	5,335	8,657	305	475	5,572	8,987
1985	11,918	13,069	691	808	13,155	13,580
1986	10,427	7,156	293	170	18,049	10,839
1987	14,669	11,638	1,394	1,115	14,976	10,697
1988	18,732	13,313	793	582	20,801	14,921
1989	15,592	11,342	310	237	21,255	14,413
1990	14,027	9,228	411	300	14,407	8,630
1991	9,018	6,592	147	82	14,937	10,650
1992	7,448	8,448	573	546	10,937	10,934
1993	2,304	2,297	41	65	2,397	2,781
1994	0	21	2	3	-	-
1995	44	3	4	0	0	0
<u>Newport</u>						
1979	12,144	37,848	249	832	5,770	18,055
1980	12,210	46,324	288	1,058	9,261	38,443
1981	13,104	42,231	480	1,151	12,000	31,071
1982	6,754	29,081	517	1,689	5,957	19,679
1983	5,836	23,560	308	918	3,561	11,237
1984	5,793	24,175	436	746	6,904	19,774
1985	11,216	34,351	669	1,924	12,052	23,100
1986	9,529	25,038	486	1,319	17,020	34,462
1987	13,725	36,917	1,600	2,332	13,250	26,343
1988	15,440	42,152	1,097	2,863	20,367	44,761
1989	12,731	43,098	361	925	18,899	47,914
1990	12,583	35,559	706	1,241	14,201	26,872
1991	10,214	27,431	219	432	17,358	38,122
1992	7,345	29,808	1,119	1,899	10,234	31,441
1993	2,431	10,080	80	250	2,903	8,303
1994	0	65	0	0	-	-
1995	522	374	72	32	0	7
<u>Florence</u>						
1979	NA	NA	-	-	-	-
1980	NA	NA	-	-	-	-
1981	13	13,179	0	764	1	7,050
1982	0	8,687	0	1,749	0	6,825
1983	98	7,732	13	564	33	3,003
1984	0	8,673	0	1,370	0	8,118
1985	396	13,350	57	1,460	365	8,968
1986	625	8,270	89	1,175	1,245	11,470
1987	625	12,927	196	3,166	450	9,794
1988	716	14,357	23	1,431	707	15,485
1989	0	12,176	0	1,755	0	10,744
1990	429	15,358	11	980	314	13,852
1991	468	12,048	24	1,008	615	19,195
1992	595	15,177	6	545	836	21,355
1993	173	3,726	5	173	141	2,173
1994	0	137	0	3	-	-
1995	0	226	0	78	0	0

Appendix Table 19 continued.

	SALMON ANGLER TRIPS		CATCH			
	Charter	Private	Chinook		Coho	
			Charter	Private	Charter	Private
<u>Winchester Bay</u>						
1979	14,795	34,133	668	2,089	15,385	28,473
1980	11,405	43,969	731	2,769	17,882	66,514
1981	11,096	33,393	523	2,036	7,767	22,776
1982	7,186	24,923	1,052	3,540	8,008	24,156
1983	8,273	32,654	905	3,212	8,124	27,682
1984	4,253	17,444	508	2,067	4,651	16,790
1985	8,691	25,708	2,249	3,802	8,960	20,571
1986	6,888	16,192	839	1,564	11,926	22,463
1987	10,169	22,087	4,777	6,906	9,518	18,817
1988	11,399	26,882	1,807	3,397	12,781	27,287
1989	9,582	26,219	712	2,659	12,696	29,734
1990	9,113	26,374	1,234	2,634	9,012	27,048
1991	5,553	23,400	380	2,054	9,964	36,714
1992	5,027	21,282	403	1,653	8,295	28,889
1993	1,145	5,483	134	357	1,022	4,277
1994	6	171	1	14	-	-
1995	NA	NA	-	-	-	-
<u>Coos Bay</u>						
1979	7,925	18,788	480	543	8,173	11,502
1980	8,241	21,254	349	861	13,275	28,199
1981	6,481	19,738	319	813	6,803	13,251
1982	4,231	14,328	1,012	2,732	5,203	11,392
1983	3,687	19,184	357	1,532	4,958	18,854
1984	1,647	8,219	152	757	1,934	7,945
1985	3,376	11,980	569	1,319	3,424	8,874
1986	2,129	9,501	469	1,921	3,729	12,408
1987	3,607	13,112	969	2,954	3,521	12,049
1988	3,446	12,213	488	934	4,130	10,860
1989	3,553	15,082	212	1,343	4,691	15,249
1990	2,689	11,066	269	1,479	2,294	9,675
1991	2,374	13,839	102	1,488	4,139	20,153
1992	1,768	11,709	161	995	2,897	13,693
1993	454	4,341	108	307	568	4,010
1994	0	53	0	0	-	-
1995	14	477	6	159	0	0
<u>Gold Beach</u>						
1979	1,515	5,840	154	974	201	625
1980	1,182	2,891	134	285	306	888
1981	1,482	3,131	246	658	247	644
1982	1,993	4,792	469	888	271	839
1983	2,174	6,685	511	1,557	366	1,192
1984	966	4,072	251	661	256	1,330
1985	1,755	4,786	723	1,857	168	539
1986	1,365	3,016	363	812	255	590
1987	1,399	2,709	394	992	446	1,176
1988	377	466	38	69	110	92
1989	NA	NA	-	-	-	-
1990	NA	NA	-	-	-	-
1991	NA	NA	-	-	-	-
1992	NA	NA	-	-	-	-
1993	NA	NA	-	-	-	-
1994	NA	NA	-	-	-	-
1995	NA	NA	-	-	-	-

Appendix Table 19 continued.

	SALMON ANGLER TRIPS		CATCH			
	Charter	Private	Chinook		Coho	
			Charter	Private	Charter	Private
<u>Brookings</u>						
1979	1,507	42,995	160	4,446	497	16,811
1980	1,590	44,783	134	3,686	1,176	30,589
1981	1,753	60,891	216	7,775	595	6,838
1982	1,398	53,171	669	13,502	565	15,234
1983	1,415	45,403	697	9,589	610	14,181
1984	1,132	31,803	424	7,709	468	9,437
1985	2,417	49,993	2,296	31,266	318	6,847
1986	2,004	46,304	847	9,938	864	10,221
1987	3,210	62,099	2,180	22,838	1,171	16,251
1988	2,660	49,572	2,252	19,353	1,178	13,653
1989	4,415	61,336	1,918	19,277	3,796	29,253
1990	2,500	48,612	1,126	11,607	1,236	14,083
1991	2,080	34,367	663	6,148	1,897	20,329
1992	468	17,182	151	2,511	184	3,112
1993	626	23,165	211	3,556	300	5,734
1994	193	15,965	63	3,553	-	17
1995	321	19,101	187	5,544	0	130
<u>S. of Falcon</u>						
1979	55,207	163,403	1,955	9,678	39,707	84,055
1980	52,805	198,822	1,971	9,541	60,679	189,521
1981	49,444	217,066	2,352	15,305	40,835	104,683
1982	31,514	167,279	4,215	26,266	31,267	108,385
1983	29,015	166,156	2,986	18,251	22,040	87,619
1984	21,627	124,324	2,225	14,741	22,859	89,592
1985	45,101	186,461	7,755	44,545	45,701	106,276
1986	35,940	130,488	3,509	17,264	58,544	121,300
1987	52,859	185,085	12,409	42,948	48,442	106,445
1988	60,031	184,952	7,113	30,733	69,225	147,803
1989	51,072	195,351	3,632	26,947	68,949	170,018
1990	46,811	174,223	3,966	19,263	47,443	117,093
1991	32,242	136,166	1,579	11,854	53,356	166,367
1992	25,372	127,020	2,530	9,535	37,472	126,093
1993	7,609	54,187	597	4,987	7,626	29,306
1994	1,427	25,470	495	5,544	0	46
1995	2,149	24,052	322	6,302	210	364
<u>Grand Total</u>						
1979	73,718	187,670	5,370	13,335	59,831	101,825
1980	79,055	218,887	5,093	11,922	98,345	207,502
1981	65,411	245,794	6,650	22,523	64,514	135,298
1982	43,308	182,721	8,165	30,551	48,451	126,677
1983	41,916	184,106	4,680	19,997	39,701	107,203
1984	24,331	128,730	2,230	14,762	27,268	96,057
1985	53,429	198,154	9,224	46,643	60,167	122,819
1986	43,657	143,314	4,169	18,660	74,973	143,934
1987	60,903	194,171	14,344	45,076	61,865	118,669
1988	62,456	188,195	7,344	30,983	73,531	153,342
1989	60,198	206,062	4,156	27,887	85,812	187,459
1990	55,308	191,247	5,073	21,475	61,583	139,063
1991	40,344	149,718	1,913	12,503	68,857	190,229
1992	29,961	135,356	2,702	9,871	46,238	139,607
1993	13,449	66,896	933	5,562	16,216	43,065
1994	1,427	25,470	495	5,544	0	46
1995	4,609	31,241	324	6,409	4,046	7,867

Appendix Table 20. Statistical week calendar for 1995 ocean salmon fisheries.

Stat. Week	Beginning Monday	Ending Sunday	Calendar Month
18	24 April	30 April	April
19	01 May	07 May	May
20	08 May	14 May	
21	15 May	21 May	
22	22 May	28 May	
23	29 May	04 June	June
24	05 June	11 June	
25	12 June	18 June	
26	19 June	25 June	
27	26 June	02 July	
28	03 July	09 July	July
29	10 July	16 July	
30	17 July	23 July	
31	24 July	30 July	
32	31 July	06 August	August
33	07 August	13 August	
34	14 August	20 August	
35	21 August	27 August	
36	28 August	03 September	
37	04 September	10 September	September
38	11 September	17 September	
39	18 September	24 September	
40	25 September	01 October	
41	02 October	08 October	October
42	09 October	15 October	
43	16 October	22 October	
44	23 October	29 October	
45	30 October	05 November	November
46	06 November	12 November	
47	13 November	19 November	
48	20 November	26 November	
49	27 November	03 December	
50	04 December	10 December	December
51	11 December	17 December	
52	18 December	24 December	
53	25 December		

Appendix Table 21. Oregon coastal freshwater and estuary exceptions to the 1995 coho salmon closure in coastal basins for the periods listed below.

Areas Open for Coho Angling	Open Period
North Fork of the Nehalem River from it's confluence with the mainstem Nehalem River upstream to fourth bridge on Hamlet Road near milepost 6.	Sept. 1 - Nov. 14
Yaquina River mainstem (including tidewater) open for fin-clipped coho downstream from the first bridge on Eddyville-Nashville Road (except closed west of Hwy. 101 through August 15).	Aug. 1 - Dec. 31
The mainstem Umpqua River (including tidewater) downstream from the North Umpqua, and the North Umpqua River open for fin-clipped coho.	Sept. 1 - Dec. 31
Eel Lake	Entire year
Isthmus Slough (Coos Bay) from the mouth upstream to the tidegate.	Entire year
Rogue River (upstream from the Illinois River), is open for fin-clipped coho Rogue River is open for fin-clipped coho downstream from the Illinois River (including tidewater).	Sept. 1 - Dec. 31 Sept. 1 - 30

Appendix Table 22. Chinook and coho salmon released by Oregon ocean recreational anglers from 1987-95, by port and year, as estimated from angler interviews.

Astoria:	Year	Number Retained		Number Released		Percent Released	
		Chinook	Coho	Chinook	Coho	Chinook	Coho
	1987	4,063	25,647	2,500	2,162	38%	8%
	1988	481	9,845	289	481	38%	5%
	1989	1,464	34,304	524	1,778	26%	5%
	1990	3,319	36,110	3,099	2,110	48%	6%
	1991	983	39,363	1,115	2,412	53%	6%
	1992	508	22,280	445	2,952	47%	12%
	1993	836	21,176	209	786	20%	4%
	1995	109	11,339	3,572	4,717	97%	29%

Garibaldi:	Year	Number Retained		Number Released		Percent Released	
		Chinook	Coho	Chinook	Coho	Chinook	Coho
	1987	3,077	12,668	0	5	0%	0%
	1988	2,342	25,184	123	333	5%	1%
	1989	678	23,356	0	87	0%	0%
	1990	1,003	19,099	18	85	2%	0%
	1991	602	20,762	14	49	2%	0%
	1992	1,162	14,420	4	185	0%	1%
	1993	256	1,220	6	56	2%	4%
	1994	2,398	29 ^a	25	382	1%	93%
	1995	539	437	331	148	38%	25%

Pacific City:	Year	Number Retained		Number Released		Percent Released	
		Chinook	Coho	Chinook	Coho	Chinook	Coho
	1987	467	3,760	0	0	0%	0%
	1988	377	4,711	3	35	1%	1%
	1989	192	6,967	5	231	3%	3%
	1990	228	3,813	6	18	3%	0%
	1991	84	4,888	2	7	2%	0%
	1992	341	6,338	3	17	1%	0%
	1993	41	1,103	12	32	23%	3%
	1994	0	0	1	79	100%	100%
	1995	3	0	4	4	57%	100%

Depoe Bay:	Year	Number Retained		Number Released		Percent Released	
		Chinook	Coho	Chinook	Coho	Chinook	Coho
	1987	2,509	25,673	0	0	0%	0%
	1988	1,375	35,722	45	743	3%	2%
	1989	547	35,668	20	363	4%	1%
	1990	711	23,037	93	581	12%	2%
	1991	229	25,587	0	44	0%	0%
	1992	1,119	21,871	18	427	2%	2%
	1993	106	5,178	14	177	12%	3%
	1994	5	0	16	160	76%	100%
	1995	4	0	0	0	0%	0%

Appendix Table 22. (cont.)

Newport:	<u>Number Retained</u>		<u>Number Released</u>		<u>Percent Released</u>	
	Year	Chinook	Coho	Chinook	Coho	Chinook
1987	3,932	39,593	0	0	0%	0%
1988	3,960	65,128	145	1,884	4%	3%
1989	1,286	66,813	57	684	4%	1%
1990	1,947	41,073	177	911	8%	2%
1991	651	55,480	46	803	7%	1%
1992	3,018	41,675	164	1,581	5%	4%
1993	330	11,206	126	971	28%	8%
1994	0	0	34	112	100%	100%
1995	104	7 ^a	110	48	51%	87%

Florence:	<u>Number Retained</u>		<u>Number Released</u>		<u>Percent Released</u>	
	Year	Chinook	Coho	Chinook	Coho	Chinook
1987	3,362	10,244	0	0	0%	0%
1988	1,454	16,192	61	780	4%	5%
1989	1,755	10,744	18	290	1%	3%
1990	991	14,166	119	706	11%	5%
1991	1,032	19,810	38	607	4%	3%
1992	551	22,191	731	2,386	57%	10%
1993	178	2,314	12	85	6%	4%
1994	3	0	0	0	0%	0%
1995	78	0	0	12	0%	100%

Winchester Bay:	<u>Number Retained</u>		<u>Number Released</u>		<u>Percent Released</u>	
	Year	Chinook	Coho	Chinook	Coho	Chinook
1987	11,683	28,335	2	27	0%	0%
1988	5,204	40,068	1,100	1,232	17%	3%
1989	3,371	42,430	625	1,485	16%	3%
1990	3,868	36,060	1,665	3,753	30%	9%
1991	2,434	46,678	326	1,907	12%	4%
1992	2,056	37,184	1,515	2,266	42%	6%
1993	491	5,299	39	83	7%	2%
1994	15	0	2	3	12%	100%
1995	No sampling					

Coos Bay:	<u>Number Retained</u>		<u>Number Released</u>		<u>Percent Released</u>	
	Year	Chinook	Coho	Chinook	Coho	Chinook
1987	3,923	15,570	0	0	0%	0%
1988	1,422	14,990	180	182	11%	1%
1989	1,555	19,940	98	491	6%	2%
1990	1,748	11,969	125	322	7%	3%
1991	1,590	24,292	145	668	8%	3%
1992	1,156	16,590	906	2,491	44%	13%
1993	415	4,578	26	113	6%	2%
1994	0	0	16	71	100%	100%
1995	165	0	84	54	34%	100%

Appendix Table 22. (cont.)

Gold Beach:	Number Retained		Number Released		Percent Released	
	Year	Chinook	Coho	Chinook	Coho	Chinook
1987	1,386	1,622	109	110	7%	6%
1988	107	202	1	4	1%	2%

Brookings:	Number Retained		Number Released		Percent Released	
	Year	Chinook	Coho	Chinook	Coho	Chinook
1987	25,018	17,422	7,552	2,676	23%	13%
1988	21,605	14,831	917	418	4%	3%
1989	21,195	33,049	229	2,612	1%	7%
1990	12,733	15,319	1,128	1,508	8%	9%
1991	6,811	22,226	698	1,740	9%	7%
1992	2,662	3,296	908	1,531	25%	32%
1993	3,767	6,034	295	408	7%	6%
1994	3,616	17 ^a	157	442	4%	96%
1995	5,731	130 ^a	363	942	6%	88%

Statewide totals:	Number Retained		Number Released		Percent Released	
	Year	Chinook	Coho	Chinook	Coho	Chinook
1987	59,420	180,534	10,163	4,980	15%	3%
1988	38,327	226,873	2,864	6,092	7%	3%
1989	32,043	273,271	1,576	8,021	5%	3%
1990	26,548	200,646	6,430	9,994	19%	5%
1991	14,416	259,086	2,384	8,237	14%	3%
1992	12,573	185,845	4,694	13,836	27%	7%
1993	6,420	58,108	739	2,711	10%	4%
1994	6,037	46	251	1,249	4%	96%
1995	6,733	11,913	4,464	5,925	40%	33%