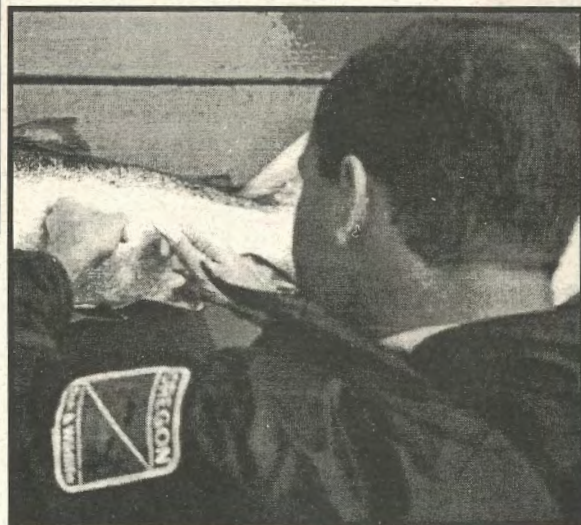
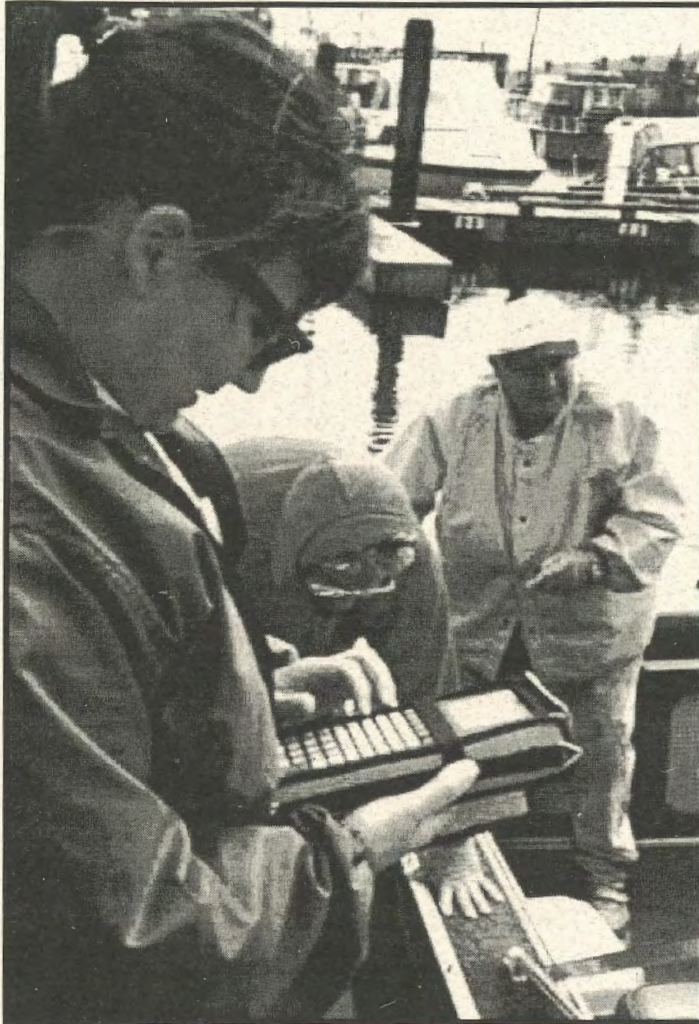


# Oregon Ocean Salmon Fisheries: Annual Status Report, 1996



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### Cover Photos:

Left: Port sampler, Rachel Lippert, conducting interview with returning anglers at Garibaldi and entering information into handheld data entry unit, 1995.

Top Right: Raising of the boundary marker for the Tillamook control zone, 1995.

Bottom Right: Port sampler, Ty Wyatt, removing chinook salmon scales for age composition analysis, 1995.



OREGON OCEAN SALMON FISHERIES:

Annual Status Report, 1996

by  
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## CONTENTS

	<u>Page</u>
INTRODUCTION .....	1
THE 1996 OCEAN TROLL SALMON FISHERY .....	3
SAMPLING METHODOLOGY.....	6
REGULATIONS.....	8
EFFORT AND CATCH STATISTICS.....	10
AVERAGE WEIGHT DATA .....	13
THE DOLLAR VALUE OF OCEAN SALMON LANDINGS.....	13
CODED WIRE TAG SAMPLING .....	16
SPECIAL FISHERIES AND STUDIES .....	16
Elk River State Waters Chinook Fishery .....	16
Rogue River Fall Chinook Genetic Stock Identification Study.....	16
Chetco River State Waters Chinook Fishery .....	23
THE 1996 RECREATIONAL OCEAN SALMON FISHERY .....	25
SAMPLING METHODOLOGY.....	25
REGULATIONS.....	28
General Seasons .....	28
Late Season, State Waters Fisheries.....	30
EFFORT AND CATCH STATISTICS.....	30
CHARTER/PRIVATE BOAT FISHERIES .....	40
ESTIMATES OF RELEASED SALMON.....	44
RECREATIONAL OCEAN SALMON CODED-WIRE TAG SAMPLING .....	45
SPECIAL FISHERIES AND STUDIES .....	51
Columbia River Buoy 10 Estuary Fishery.....	51
September-November Chinook Fishery off Tillamook Bay.....	51
Tillamook Bay Fall Creel .....	52
October-November Fishery off Port Orford .....	55
October Fishery off Brookings.....	55
ACKNOWLEDGMENTS .....	56
REFERENCES .....	57
APPENDIX .....	59

## FIGURES

<u>Number</u>		<u>Page</u>
F1.	Historical Oregon troll salmon landings in numbers of fish (1952-96), and in pounds dressed, head on viscera removed, (1925-96).....	5
F2.	Ocean commercial salmon troll seasons off Oregon, 1996 .....	7
F3.	Oregon ocean salmon fishery catch areas and major ports where commercial troll salmon are landed .....	11
F4.	Oregon commercial ocean troll salmon effort in boat days by area of catch and by month, 1994-96 .....	12
F5.	Oregon commercial ocean troll chinook landings by area of catch and by month, 1994-96.....	14
F6.	Observed recoveries of chinook coded wire tags from Oregon commercial troll salmon landings by release agency and basin of release, 1996...	19
F7.	Estimated Oregon chinook stock composition from special troll test fisheries off the Rogue River, 1994-96. Estimates are based on genetic stock composition tissue samples.....	21
F8.	Ocean recreational salmon seasons off Oregon, 1996.....	29
F9.	Oregon ocean angler trips by target species during the 1996 salmon season.....	33
F10.	Recreational ocean salmon angler trips by port, 1996.....	33
F11.	Oregon ocean recreational salmon angler trips by catch area and by month, 1994-96.....	34
F12.	Trends in Oregon's recreational ocean salmon catch, 1966-96.....	35
F13.	Oregon ocean recreational chinook and coho catch by port, 1996.....	36
F14.	Oregon ocean recreational chinook catch by catch area and by month, 1994-96.....	37
F15.	Oregon ocean recreational coho catch by area and month, 1994-96..	39
F16.	A comparison of effort and catch by Oregon ocean salmon charter and private anglers, 1973-96 .....	43
F17.	Recoveries of chinook and coho coded wire tags, by agency and basin of release, from Oregon's ocean recreational catch, 1996. ....	50
F18.	Map of Tillamook Bay areas showing bay zones and primary and secondary chinook fishing activity.....	54



## TABLES

<u>Number</u>		<u>Page</u>
T1.	Oregon commercial troll salmon effort (deliveries and boat days) and landings in (number of fish and pounds dressed), 1952-96. Includes effort and catches made off California, Washington and Alaska and landed into Oregon. ....	4
T2.	Oregon troll chinook salmon landings in pounds dressed, by calendar month, and port of landing, 1996 .....	13
T3.	Observed average dressed weight and calculated number of chinook landed in the Oregon troll chinook fishery by calendar month and area of catch, 1996 .....	15
T4.	Oregon ocean troll chinook mark sampling by statistical month and port of landing, 1996 .....	17
T5.	Summary of Oregon commercial troll terminal ocean fisheries, 1996..	18
T6.	Estimated chinook stock contribution rates from special target troll fisheries off Rogue River, Oregon 1994-96. Estimates based on Genetic Stock Identification (GSI) tissue samples. ....	22
T7.	Oregon ocean recreational salmon catch and effort for 1966-96.....	26
T8.	Oregon ocean recreational effort in angler trips by port, month, and trip type, 1996 .....	32
T9.	Oregon ocean recreational chinook catch by port and month, 1996 ...	38
T10.	Oregon ocean recreational coho catch by port and month, 1996 .....	38
T11.	Oregon ocean recreational salmon effort and catch by boat type, 1996	41
T12.	Oregon ocean recreational salmon and bottomfish effort and catch by boat and trip type, 1996.....	42
T13.	Chinook salmon released by Oregon ocean recreational anglers by port and month, 1996.....	46
T14.	Coho salmon released by Oregon ocean recreational anglers by port and month, 1996.....	47
T15.	Chinook coded-wire tag sampling from the ocean recreational fishery, by port and month, 1996 .....	48
T16.	Coho coded-wire tag sampling data from the ocean recreational fishery, by port and month, 1996 .....	49

**TABLES (continued)**

<u>Number</u>		<u>Page</u>
T17.	Buoy 10 Columbia River estuary season. Total salmon angler trips and catch, 1996 and totals for 1982-95, Oregon and Washington combined data. ....	51
T18.	Summary of Oregon's recreational terminal ocean fisheries, 1996. ....	52
T19.	Tillamook Bay recreational fishery 1996. Effort and catch by statistical week and by area. ....	53

## APPENDIX FIGURES

<u>Number</u>		<u>Page</u>
AF1.	Diagram of the control zone off Tillamook Bay with a diagram of the ODFW marker.....	61

## APPENDIX TABLES

<u>Number</u>		<u>Page</u>
A1.	Seasonal field port sampling personnel hired by the ODFW Ocean Salmon Management Program, 1996. ....	62
A2.	Ocean troll fishery mark sampling rates by port, year, and species, 1987-96 .....	63
A3.	History of actual Oregon ocean commercial troll fishery regulations, 1948-96 .....	64
A4.	Oregon commercial troll landings of chinook and coho salmon (numbers of fish) by month, and by year, 1979-96 .....	74
A5.	Oregon ocean commercial troll effort (boat days) by month of landing, catch area, and year, 1979-96 .....	79
A6.	Oregon commercial troll salmon chinook catch, in number of fish, by statistical week, and area of catch, 1996.....	84
A7.	Estimates of nominal ex-vessel value for Oregon ocean troll salmon landings and average price per pound, 1971-96.....	85
A8.	Recreational ocean salmon sampling rates at Oregon ports, 1987-96.....	86
A9.	Summary of Oregon's recreational ocean salmon regulations, 1946-96.....	87
A10.	Oregon ocean recreational salmon angler effort, by port and statistical week, 1996.....	93
A11.	Oregon recreational effort in salmon angler trips by area and month, 1979-96.....	94
A12.	Summary of Oregon recreational ocean salmon effort and catch by area, 1976-96 .....	96
A13.	Oregon ocean recreational chinook catch (number of fish) by area and month, 1979-96.....	97
A14.	Oregon ocean recreational chinook catch, by port and statistical week, 1996.....	99
A15.	Oregon ocean recreational coho catch (number of fish) by catch area and month, 1979-96 .....	100
A16.	Oregon ocean recreational coho catch, by port and statistical week, 1996 .....	102
A17.	The number of Oregon charter boats active during the ocean salmon fishery by port and year, 1986-96.....	103

**APPENDIX TABLES (continued)**

<u>Number</u>		<u>Page</u>
A18.	Oregon ocean recreational salmon effort and catch by boat type, 1979-96 and 1979-95 average, in thousands. ....	103
A19.	Oregon ocean recreational salmon effort and catch, by boat type and port, 1979-96. ....	104
A20.	Statistical week calendar for 1996. ....	108
A21.	Oregon coastal freshwater and estuary recreational coho salmon fisheries, 1996. ....	109
A22.	Chinook and coho salmon released by Oregon ocean recreational anglers from 1987-1996, by port and year.....	110



## 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 river's investigations for the Oregon Department of Fish and Wildlife (ODFW). The program uses data from these and other sources to develop management strategies to effectively manage 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 1996 ocean season. In 1996, 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 1996, we conducted an extensive creel of the Tillamook Bay coastal estuary and nearshore ocean fall chinook fisheries. We 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 two seasonal sampling coordinators; one each at Tillamook and Charleston. The sampling coordinators serve as liaison between field samplers, fishery participants, and program staff at Newport; deliver data and coded wire tags to Newport; and also provide additional sampling when needed.

The Oregon Coast has twelve substantial ocean ports or access points to the ocean salmon fishery. In 1996, we sampled nine of the primary Oregon coastal ports, utilizing seventeen seasonal samplers: four were commercial troll samplers, seven were recreational samplers, and six were "combination" commercial-recreational samplers. Several additional 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 process field sampling data under the direction of OSMP's Data Management Project.





## 1996 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 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), along 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. The Oregon legislature lowered the troll permit ceiling to 1,800 vessels in 1993. Following recommendations of an industry panel that reviewed the troll permit limited entry status, the 1995 legislature lowered the permit cap further to 1,200. In 1996, the number of renewed troll permits declined to 1,377. Of the permitted vessels, only 456 recorded landings of salmon in 1996. Ocean troll coho salmon fishing was prohibited in 1996. All commercial troll salmon fishing was closed completely in Oregon waters north of Cape Falcon due to

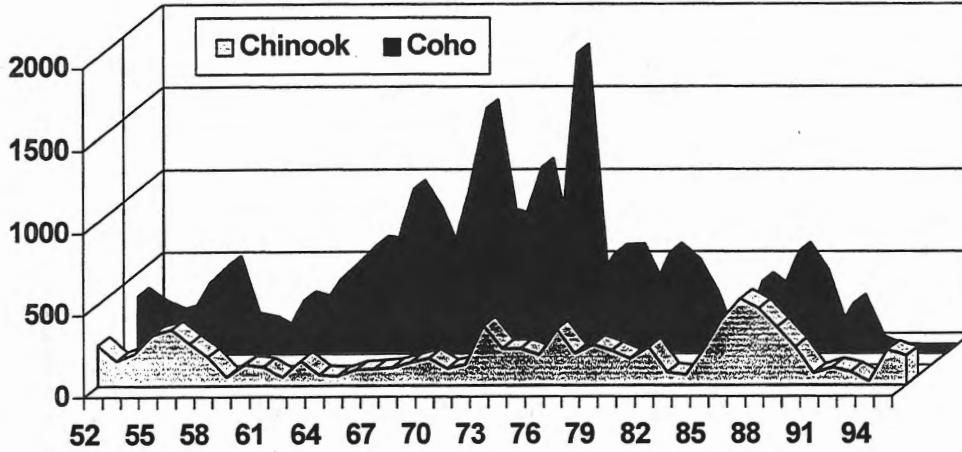
Table 1. Oregon commercial troll salmon effort (deliveries and boat days) and landings (number of fish and pounds dressed), 1952-96. Includes effort and catches made off California, Washington, and Alaska and landed in Oregon.

Year	Effort		Chinook		Coho		Pink	
	Del.	Bt. Days	No.	Lbs. Dr.	No.	Lbs. Dr.	No. <sup>a</sup>	Lbs. Dr. <sup>b</sup>
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	43,598	49,028	246,153	1,259,676	697,430	4,586,255	20,111	106,248
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	7,922	214,947	1,940,603	0	0	129	364
1996	5,103	8,486	177,170	1,925,065	0	0	0	0

<sup>a</sup> 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).

<sup>b</sup> 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.

FISH (thousands)



POUNDS DRESSED (thousands)

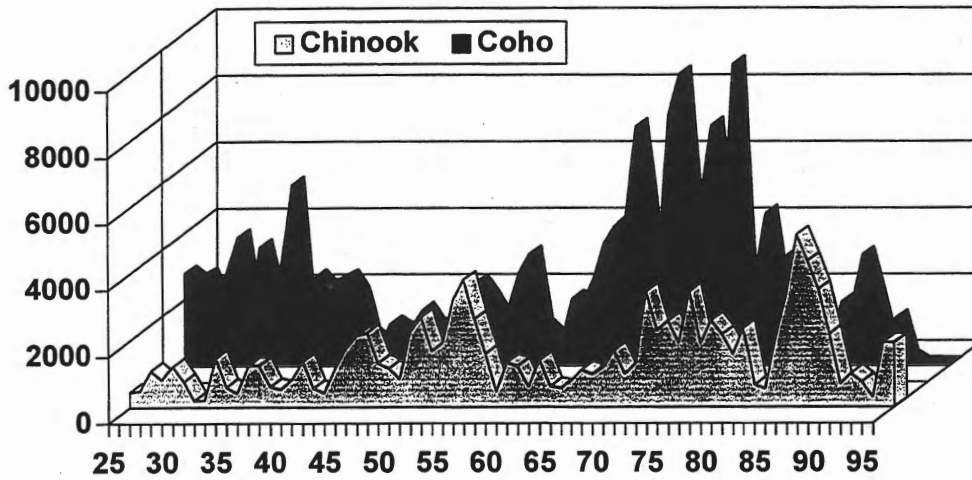


Figure 1. Historical Oregon troll salmon landings in numbers of fish (1952-96), and in pounds dressed, head on viscera removed (1925-96).

concerns for regional wild coho stocks and for chinook stocks listed under the Endangered Species Act. July was closed in the area from Cape Falcon to Humbug Mountain to reduce incidental hooking mortality impacts on wild coho salmon. The area south of Humbug Mountain saw limited troll chinook salmon opportunities in 1996 (Figure 2).

## **SAMPLING METHODOLOGY**

### **Sampling Areas and Staffing**

For 1996, a seasonal staff of four troll salmon samplers and six 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, 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 in the field on handheld data entry computers with software designed for the collection of the necessary field data. Handheld data is then transferred weekly to the Newport office and downloaded to a computer for summarization and analysis. 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**

The PFMC area ocean salmon harvests 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 contribution and distribution, anticipated ocean harvest patterns, impacts on critical stocks, and spawning escapement goals.

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

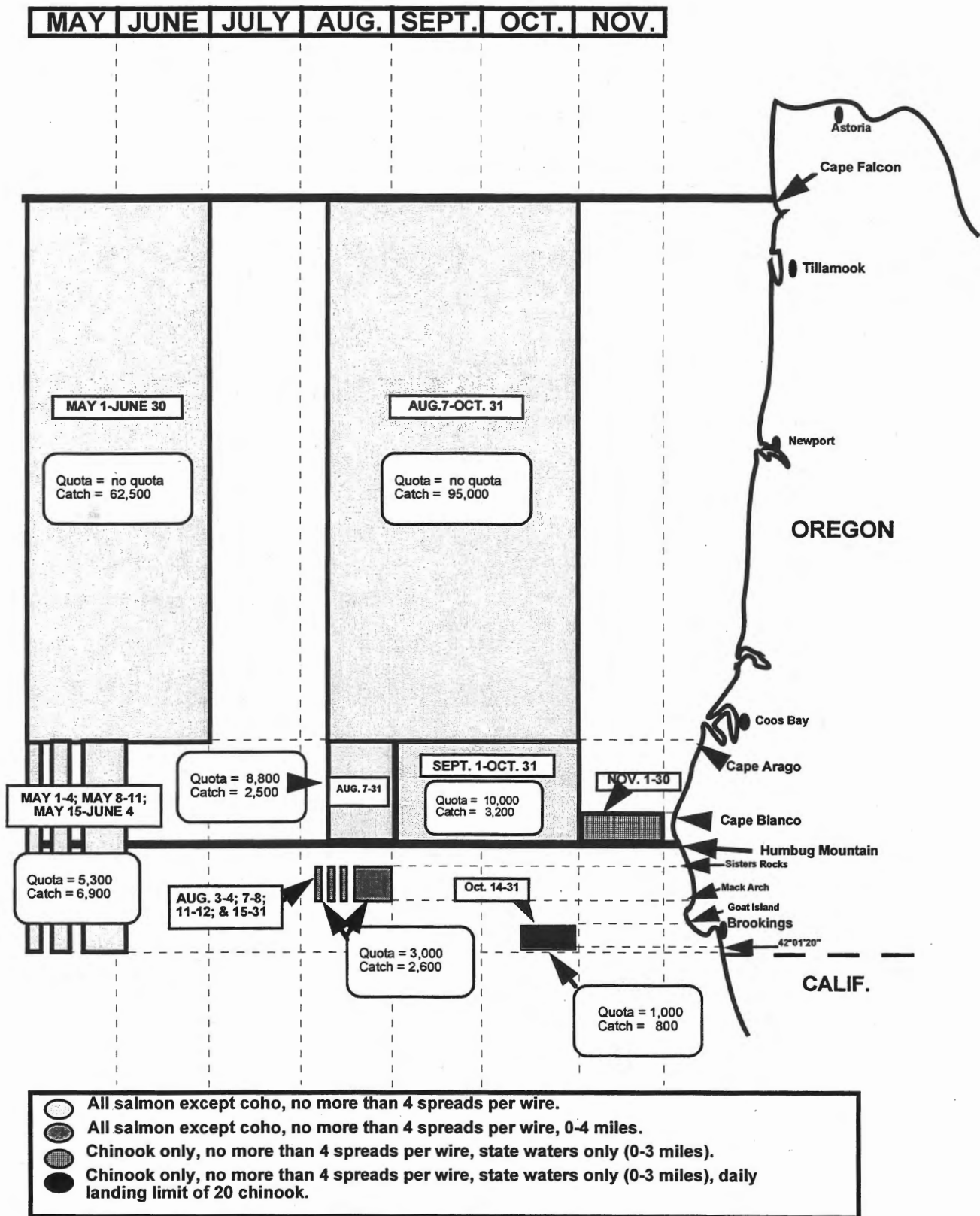


Figure 2. Commercial ocean troll seasons off Oregon, 1996.

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 under quota managed fisheries. 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 (OFWC) within the ocean salmon harvest impact guidelines established by the PFMC. Special all-species-except-coho fisheries are set by the OFWC for state waters within 3 miles of shore.

All 1996, Oregon and PFMC area ocean troll salmon fisheries were restricted to gear containing 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 Arago**

The all-salmon-except-coho fishery from Cape Falcon to Cape Arago was open from May 1 through June 30 and August 7 through October 31 (147 fishing days). There were no chinook quota restrictions in this area. 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 August 7 through September 15 to reduce incidental hooking mortality on coho (Appendix Figure 1).

### **Cape Arago to Oregon - California Border**

The all-salmon-except-coho season from Cape Arago to the Oregon - California border was open May 1 through earlier of June 30 or 5,300 chinook quota. Season was scheduled to follow a cycle of 4 days open/3 days closed. The season followed the 4 day open/3 day closed cycle until May 18 when it opened to seven days per week and then closed at noon on June 4 due to attainment of the quota (29 fishing days). Note that a communication problem between fishers and the Coast Guard and National Marine Fisheries Service (NMFS) resulted in several boats continuing to fish after the closure. NMFS failed to broadcast the "Notice to Mariners" closure notification until 4:33 PM on June 5.

### **Cape Arago to Humbug Mountain**

The all-salmon-except-coho season from Cape Arago to Humbug Mountain was open August 7 through August 31, and September 1 through October 31 (86 fishing days). Subarea chinook quotas were adopted for both time periods: the first quota for the period August 7 through August 31 allowed a catch of 8,800 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 with no inseason adjustments.

An all-salmon-except-coho season was authorized by the OFWC for state waters (0-3 miles) for the area off the Elk River, from Cape Blanco to Humbug Mountain. This fishery was scheduled for November 1 - 30 with no chinook quota. The season opened November 1 and continued through it's scheduled closing date of November 30 (30 fishing days). All chinook were required to be landed into Port Orford.

### **Humbug Mountain to Horse Mountain**

An all-salmon-except-coho season opened August 3 through the earlier of August 31 or 3,000 chinook quota for waters from Sisters Rock to Mack Arch (0-4 miles). This fishery was scheduled on a cycle of two days open and two days closed but opened to 7 days per week on August 15. The season was open August 3-4, 7-8, 11-12, 15-31. Vessels were required to land and deliver their fish at either Port Orford, Gold Beach or Brookings within 24 hours of each closure (23 fishing days).

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 14 and continue through October 31 or the quota of 1,000 chinook. A single daily landing limit of 20 fish was in effect to keep the fishery manageable. The season opened October 14 and continued through October 31. All chinook were required to be landed into Brookings (18 fishing days).

## EFFORT AND CATCH STATISTICS

Landed poundage, 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 1996 totaled 8,500 boat days. This is 6% higher than the 1995 effort of 7,900 boat days, but only 31% of the 1979-95 average of 26,800 boat days. The 1996 effort was only 16% of the record 51,100 days observed in 1988 (Table 1). The increase in troll effort in 1996 was due to a number of factors including: good chinook catches especially in the Newport ocean catch area, and an increase from 1995 in days open for fishing from Cape Falcon to Cape Arago.

Most 1996 effort (57%) occurred within the Newport catch area, but effort was up in all fishery areas, except the Columbia River catch area due to a complete troll salmon fishery closure (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 1996 troll effort occurred in June and August, and coincided with the chinook openings from Cape Falcon to Humbug Mountain.

### Landings

**Chinook:** The 1996 troll chinook landings totaled 177,200 fish including 2,000 chinook caught in California and landed in Oregon. The landings declined 18% from the 1995 catch of 214,900 chinook, and equaled 81% of the 1979-95 average of 217,900 chinook (Table 1; and Appendix Tables 4 and 6). Total landings in pounds of dressed chinook (head on, gills and viscera removed) was 1,925,000 lbs, and was within 1% of the 1995 chinook landings.

Most chinook were caught in the Newport catch area (72%), although total landings in this area declined 26% from the 1995 catch. Catches were up from 1995 in the Tillamook and Brookings catch areas, but down in all other catch areas. The increase in chinook catch in the Brookings catch area was a result of more time and area fishing



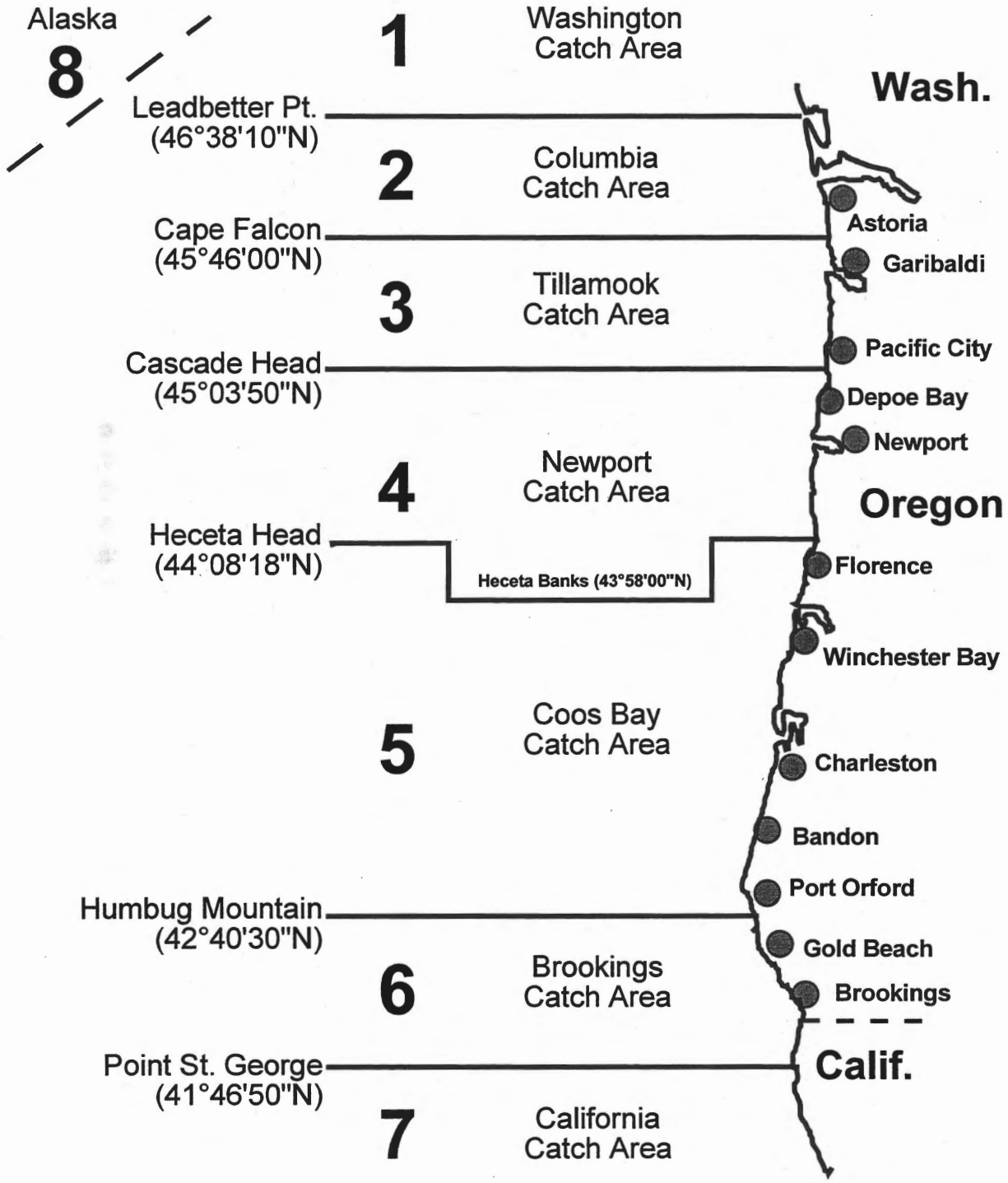
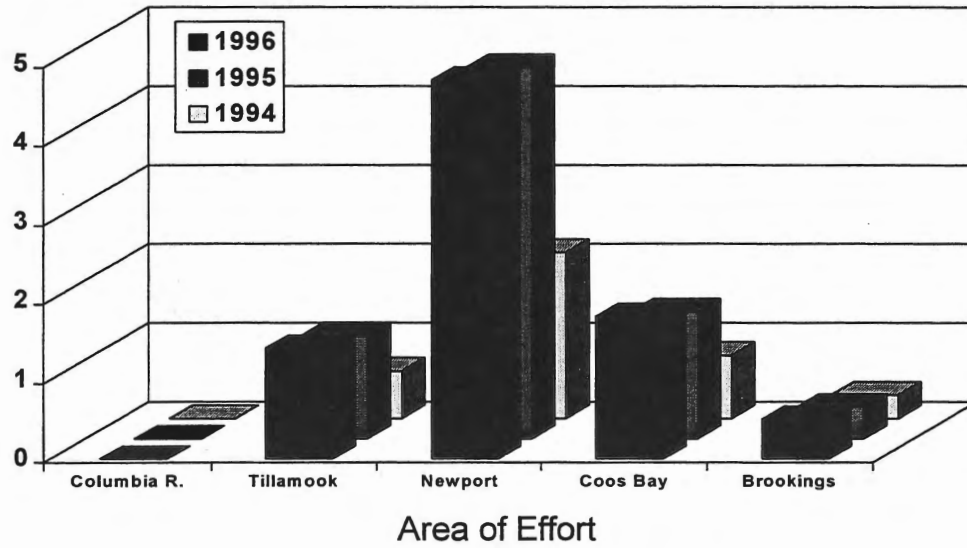


Figure 3. Oregon salmon catch areas and major ports of landing.

# Effort

BOAT DAYS (thousands)



BOAT DAYS (thousands)

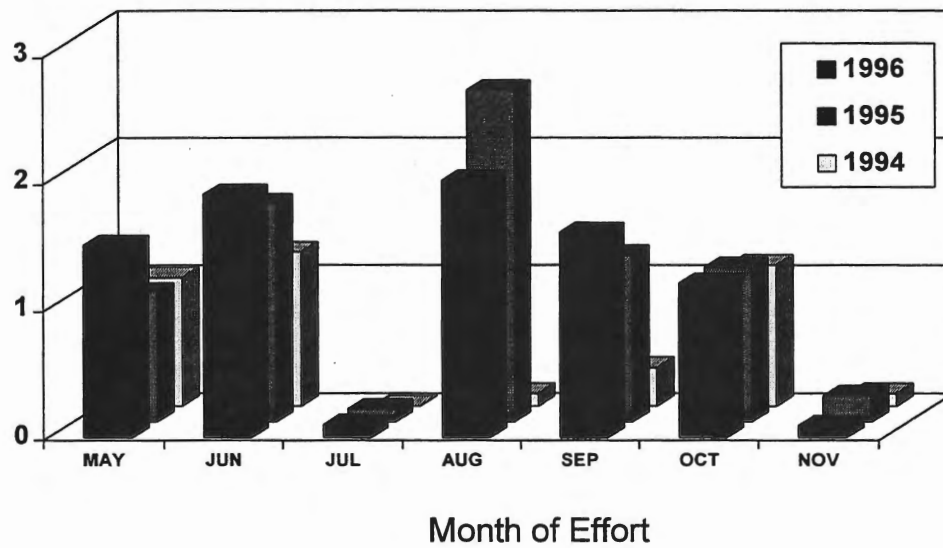


Figure 4. Oregon commercial ocean troll salmon effort in boat days by area of catch and by month, 1994-96.

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 35%, June 26%, September 17% and May 12% of the chinook catch (Table 3).

Table 2. Oregon commercial troll chinook salmon landings in pounds dressed, by calendar month, and port of landing, 1996.

Month	May	June	July	Aug	Sept.	Oct.	Nov.	Total
<b>Chinook</b>								
Astoria	0	7,377	13,241	224	114	0	463	21,419
Nehalem Bay	0	0	0	130	119	0	0	249
Garibaldi	3,650	63,814	79	8,589	34,112	12,695	0	122,939
Netarts	0	70	0	0	0	0	0	70
Pacific City	0	101	0	634	1,251	234	0	2,220
Depoe Bay	4,471	4,287	333	1,173	716	366	0	11,346
Newport	167,280	279,230	18,989	473,050	179,605	79,209	10,577	1,207,940
Florence	3,254	13,030	279	35,107	23,538	5,930	0	81,138
Winchester	4,192	25,269	1,414	22,502	8,282	488	0	62,147
Charleston	10,025	80,477	4,300	115,843	49,535	2,028	104	262,312
Bandon	1,639	1,214	1,220	3,574	3,449	104	0	11,200
Port Orford	0	121	0	3,535	3,692	15,946	13,376	36,670
Gold Beach	758	0	0	277	0	0	0	1,035
Brookings	15,185	36,199	0	24,518	16,218	11,701	559	104,380
<b>Total</b>	<b>210,454</b>	<b>511,189</b>	<b>39,855</b>	<b>689,156</b>	<b>320,631</b>	<b>128,701</b>	<b>25,079</b>	<b>1,925,065</b>

### AVERAGE WEIGHT DATA

Average ocean troll salmon weight data is collected from most ports by OSMP port samplers and allows for conversion of fish ticket poundage information to numbers of fish. The 1996 seasonal average dressed weight (head on, viscera removed) for chinook was 10.9 pounds (Table 3). This was 20% higher than the 1995 average weight of 9.0 pounds. The 1996 average weights were higher in every month when compared to the 1995 weights.

### THE DOLLAR VALUE OF OCEAN SALMON LANDINGS

The 1996 Oregon troll chinook landings had an ex-vessel value of \$3,007,000. This was almost 9% lower than the ex-vessel value in 1995, and was only 68% of the 1971-95 average of \$4,452,000. The average price of \$1.56 per pound was down 8% from the 1995 average price of \$1.69 per pound and was the lowest price paid since 1975 (dollar values are not adjusted for inflation) (Appendix Table 7).

# Chinook

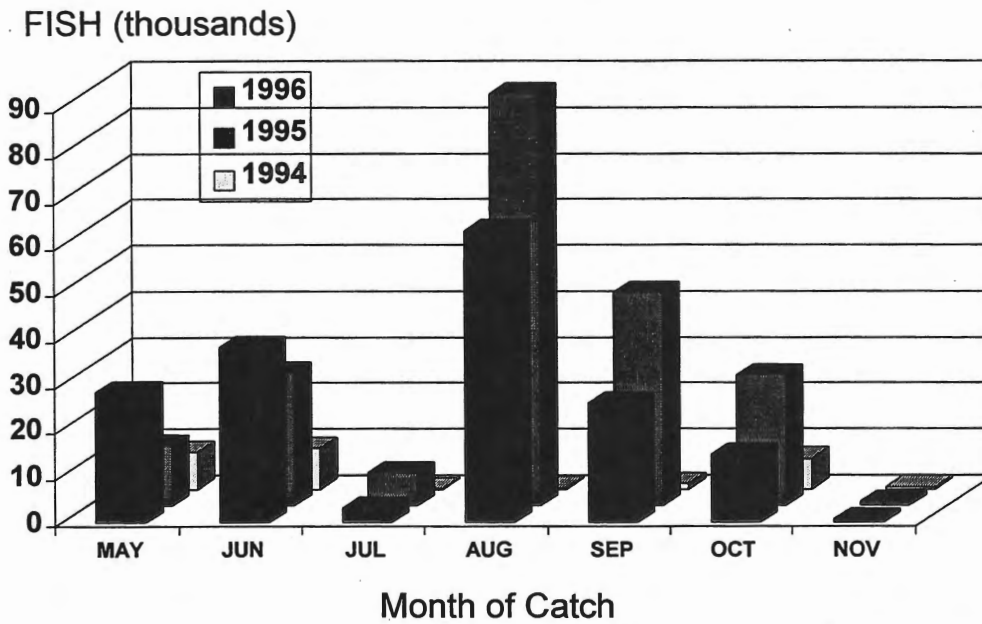
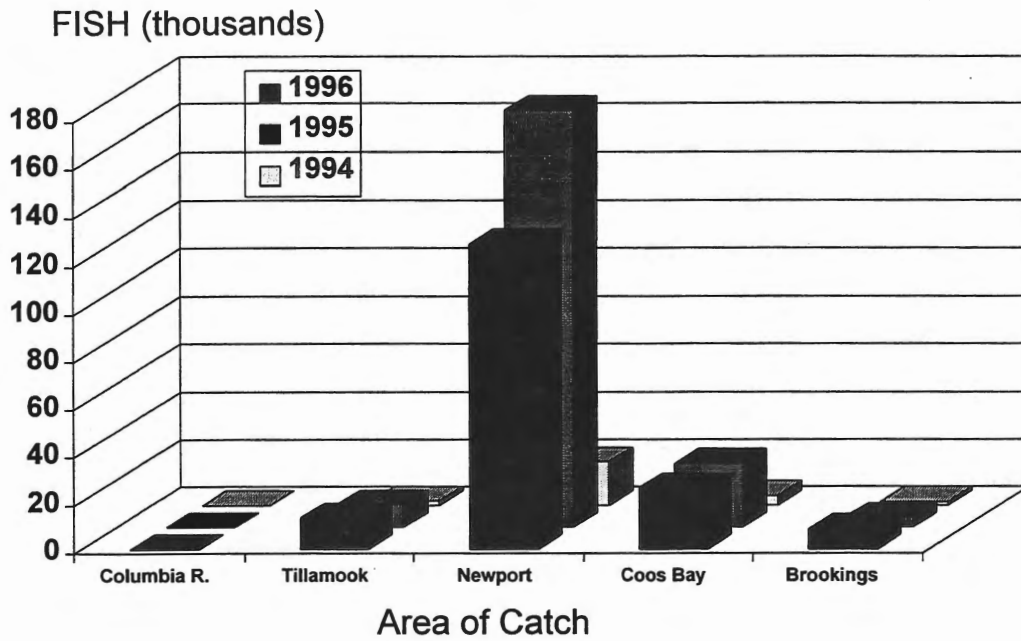


Figure 5. Oregon commercial ocean troll chinook landings by area of and by month, 1994-96.

Table 3. Observed average dressed weight and calculated number of chinook landed in the Oregon ocean commercial troll fishery by calendar month and area of catch, 1996.

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	364	7,916	1,004	986	2,200	663	0	13,133
Pounds	3,611	91,419	13,320	10,990	35,483	11,772	0	166,595
Ave. wt.	9.9	11.6	13.3	11.2	16.1	17.8	0	12.7
<u>Newport (4)</u>								
Numbers	18,161	23,810	1,284	51,450	22,383	9,519	1,295	127,902
Pounds	176,182	279,541	16,524	586,968	227,227	84,308	11,847	1,382,597
Ave. wt.	9.7	11.7	12.9	11.4	10.2	8.9	9.2	10.8
<u>Coos Bay (5)</u>								
Numbers	1,416	9,974	948	6,046	4,583	1,743	924	25,634
Pounds	15,120	103,909	10,011	58,699	41,712	20,920	12,673	263,044
Ave. wt.	10.7	10.4	10.6	9.7	9.1	12.0	13.7	10.3
<u>Brookings (6)</u>								
Numbers	1,457	3,653	-	2,636	-	756	32	8,534
Pounds	15,541	36,320	-	27,119	-	11,701	559	91,240
Ave. wt.	10.7	9.9	-	10.3	-	15.5	17.5	10.7
<u>Oregon Subtotal</u>								
Numbers	21,398	45,353	3,236	61,118	29,166	12,681	2,251	175,203
Pounds	210,454	511,189	39,855	683,776	304,422	128,701	25,079	1,903,476
Ave. Wt.	9.8	11.3	12.3	11.2	10.4	10.2	11.1	10.9
<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	-	-	-	553	1,414	-	-	1,967
Pounds	-	-	-	5,380	16,209	-	-	21,589
Ave. Wt.	-	-	-	9.7	11.5	-	-	11.0
<u>Total</u>								
Numbers	21,398	45,353	3,236	61,671	30,580	12,681	2,251	177,170
Pounds	210,454	511,189	39,855	689,156	320,631	128,701	25,079	1,925,065
Ave. Wt.	9.8	11.3	12.3	11.2	10.5	10.2	11.1	10.9

## **CODED WIRE TAG SAMPLING**

In 1996, the troll sampling program examined 63,548 of all landed chinook (36%) for CWTs (Table 4), of which 5.5% or 3,474 chinook were marked (adipose fin clipped). Technicians recovered readable tags from 2,981 snouts (86%). Most of the CWTs recovered were released by California Department of Fish and Game (40%), and ODFW (44%). Most of the recovered CWTs were released in California's Sacramento/ San Joaquin Basin (45%), Oregon coastal streams (35%), the Klamath River Basin in California (3%), and the Columbia Basin (9%) (Figure 6). It should be noted that 615 of the CWTs (21%) were recovered from the terminal area fishery off the Elk River in October and November (see next section), and that these recoveries account for 46% of the total ODFW tags and 58% of the Oregon coastal stream CWT recoveries although they only account for 2% of the chinook sampled and 1% of the Oregon troll chinook landed.

## **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 1-30 within state waters (0-3 miles) in the area between Cape Blanco and Humbug Mountain. This fishery immediately followed the general ocean season, but in recent years the Port Orford troll fleet has almost exclusively limited themselves to fishing the same area as the terminal fishery during the month of October.

A total of 997 chinook were landed during the month of November averaging 13.4 pounds. In the October portion of the general season just prior to the state waters fishery, an additional 1,158 chinook were landed. During the October thru November fishery, there were 663 snouts collected from the 1,299 chinook that were examined for fin clips (51% mark rate). There were a total of 615 readable tags. A total of 609 (99%) of the CWTs were from Elk River chinook releases. Of the Elk River CWTs recovered, 324 were three year olds (1993 brood), 239 four year olds (1992 brood), 44 five year olds (1991 brood), and 2 were six year olds (1990 brood). The CWTs from non-Elk River releases included: One four year old Hunter Cr. fall chinook release that was reared at Elk River Hatchery, one four year old Pistol River fall chinook release that was reared at Elk River Hatchery, two three year old Sacramento River (California) fall chinook, one three year old Klamath River (California) fall chinook, and one four year old Deschutes River spring chinook.

### **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 on the southern Oregon Coast. This fishery was designed to test whether a nearshore troll fishery could target returning Rogue River fall

Table 4. Oregon ocean commercial troll chinook mark sampling by statistical month and port of landing, 1996.

Area of Landing	Month							Total
	May	June	July	Aug.	Sept.	Oct.	Nov.	
<u>Astoria</u>								
No. Examined	0	0	0	0	0	0	0	0
No. Landed	0	607	996	26	10	17	0	1,656
% Examined	0	0	0	0	0	0	0	0
No. Marks	0	0	0	0	0	0	0	0
<u>Nehalem Bay</u>								
No. Examined	0	0	0	0	0	0	0	0
No. Landed	0	0	0	8	7	0	0	15
% Examined	0	0	0	0	0	0	0	0
No. Marks	0	0	0	0	0	0	0	0
<u>Garibaldi</u>								
No. Examined	49	958	0	96	699	194	0	1,996
No. Landed	725	5,327	8	850	1,939	767	0	9,616
% Examined	7	18	0	11	36	25	0	21
No. Marks	2	35	0	1	37	8	0	83
<u>Netarts</u>								
No. Examined	0	0	0	0	0	0	0	0
No. Landed	0	7	0	0	0	0	0	7
% Examined	0	0	0	0	0	0	0	0
No. Marks	0	0	0	0	0	0	0	0
<u>Pacific City</u>								
No. Examined	0	0	0	0	0	0	0	0
No. Landed	0	5	0	57	83	13	0	158
% Examined	0	0	0	0	0	0	0	0
No. Marks	0	0	0	0	0	0	0	0
<u>Depoe Bay</u>								
No. Examined	0	0	0	0	0	0	0	0
No. Landed	644	145	18	128	61	41	0	1,037
% Examined	0	0	0	0	0	0	0	0
No. Marks	0	0	0	0	0	0	0	0
<u>Newport</u>								
No. Examined	10,077	8,155	528	17,514	7,418	4,419	0	48,111
No. Landed	21,548	19,452	1,493	43,578	15,406	10,947	0	112,424
% Examined	47	42	35	40	48	40	0	43
No. Marks	450	278	15	789	391	201	0	2,124
<u>Florence</u>								
No. Examined	164	477	27	0	0	0	0	668
No. Landed	274	1,075	28	3,282	2,179	634	0	7,472
% Examined	60	44	100	0	0	0	0	9
No. Marks	2	18	1	0	0	0	0	21
<u>Winchester Bay</u>								
No. Examined	43	599	98	748	235	0	0	1,723
No. Landed	370	2,288	153	2,110	1,033	55	0	6,009
% Examined	12	22	64	35	23	0	0	29
No. Marks	3	31	7	38	13	0	0	92

Table 4 (cont.). Oregon ocean commercial troll chinook mark sampling by statistical month and port of landing, 1996.

Area of Landing	Month							Total
	May	June	July	Aug.	Sept.	Oct.	Nov.	
<b>Charleston</b>								
No. Examined	391	2,321	123	3,237	774	76	0	6,922
No. Landed	1,863	7,008	430	10,872	4,513	313	0	24,999
% Examined	21	33	29	30	18	24	0	28
No. Marks	19	118	4	190	37	5	0	373
<b>Bandon</b>								
No. Examined	0	0	0	0	0	0	0	0
No. Landed	177	97	110	395	300	13	0	1,092
% Examined	0	0	0	0	0	0	0	0
No. Marks	0	0	0	0	0	0	0	0
<b>Port Orford</b>								
No. Examined	12	0	0	153	0	763	536	1,464
No. Landed	12	0	0	379	428	1,310	845	2,974
% Examined	100	0	0	40	0	58	63	49
No. Marks	0	0	0	6	0	383	280	669
<b>Gold Beach</b>								
No. Examined	65	0	0	26	0	0	0	91
No. Landed	59	0	0	26	0	0	0	85
% Examined	100	0	0	100	0	0	0	100
No. Marks	4	0	0	0	0	0	0	4
<b>Brookings</b>								
No. Examined	228	1,151	0	717	0	477	0	2,573
No. Landed	2,835	2,233	0	2,355	1,415	788	0	9,626
% Examined	8	52	0	30	0	61	0	27
No. Marks	6	53	0	20	0	29	0	108
<b>Total</b>								
No. Examined	11,029	13,661	776	22,491	9,126	5,929	536	63,548
No. Landed	28,507	38,244	3,236	64,066	27,374	14,898	845	177,170
% Examined	39	35	24	35	33	40	63	36
No. Marks	486	533	27	1,044	478	626	280	3,474

Table 5. Summary of Oregon ocean commercial troll terminal ocean fisheries, 1996

**Brookings: Chetco Terminal Ocean Commercial Troll Chinook Fishery**

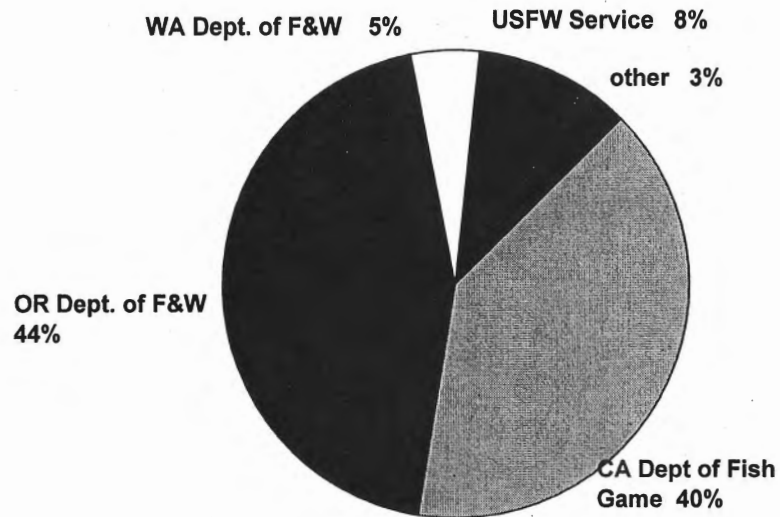
Statistical Week	Number of Tickets	Number Landed	Pounds Landed	Number Sampled	Number Marked	Percent Sampled	No tag	Coded Wire Tags by Basin				
								Elk R.	Hunter Cr.	Pistol R.	Chetco	Winchuck R.
42	61	305	4,925	210	14	69		1	2	4	4	2
43	42	196	2,900	118	7	60	1				1	2
44	39	287	4,435	149	8	52	2				6	
Totals	142	788	12,260	477	29	61	3	1	2	4	11	4

**Port Orford: Elk River Terminal Ocean Commercial Troll Chinook Fishery**

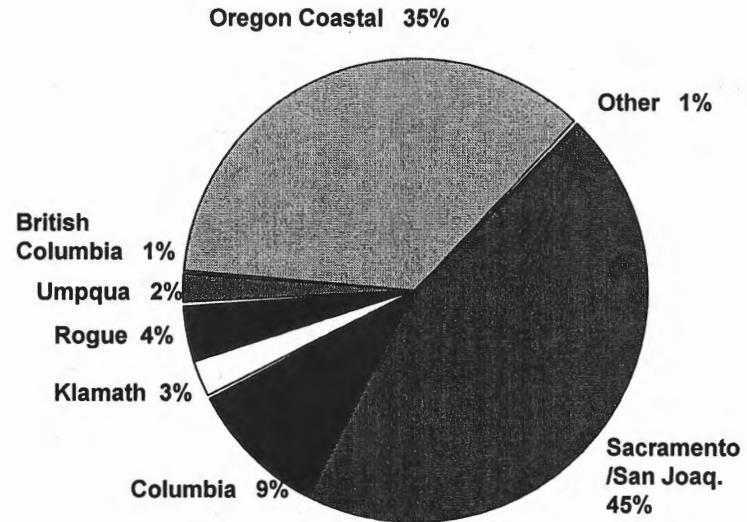
Statistical Week	Number of Tickets	Number Landed	Pounds Landed	Number Sampled	Number Marked	Percent Sampled	No tag	Coded Wire Tags by Basin	
								Columbia R.	Elk River
44	48	249	4,395	129	69	52	2		67
45	39	345	4,957	232	116	67	10		106
46	29	367	4,803	221	128	60	12		116
47	1	2	22	0	0	0			
48	17	131	1,818	83	36	63	2	1	33
Totals	134	1,094	15,995	665	349	242	26	1	322



## Release Agency



## Basin of Release



Note: Does not represent stock contribution rates since tagging is not representative of all stocks.

Figure 6. Observed recoveries of chinook coded wire tags from Oregon commercial ocean troll salmon landings by release agency and by basin of release, 1996. N=2,981

chinook and reduce harvest impacts 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 1996 study was made possible through federal NW salmon disaster relief funding.

The GSI process relies on genetic differences between stocks or stock groups of salmon that can be measured using starch gel electrophoretic techniques. The test fishery was scheduled to open August 3 and continue through the earlier of August 31 or the 3,000 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. Pre-registration was required for the fishery in 1996 and only 118 vessel landings occurred during the fishery.

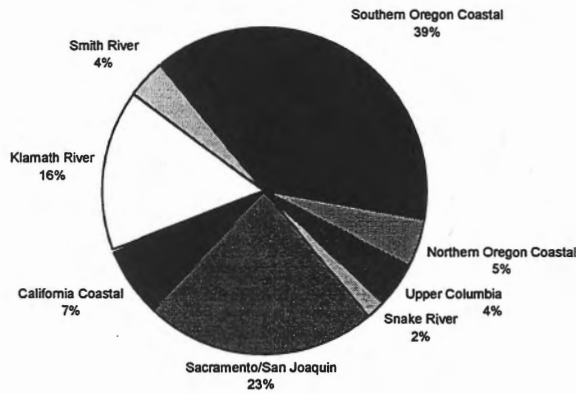
**Results:** A total of 2,636 chinook were landed in the GSI test fishery by participating trollers. The ODFW staff collected GSI tissue samples from 626 of the landed chinook. The sampling goal was met and samples analyzed by a contract laboratory. Results are presented in Figure 7 and Table 6.

Most of the chinook sampled came from California stocks (92%). The Sacramento/San Joaquin system showed as the highest contributing stock group at 69%, the Klamath River made up 18%, and the southern Oregon/Rogue River stocks making up only 2% of the chinook sampled. The remainder was made up of California coastal/Eel River, upper Columbia and Snake River fall, Smith River, northern Oregon coast, and lower Columbia fall chinook stocks.

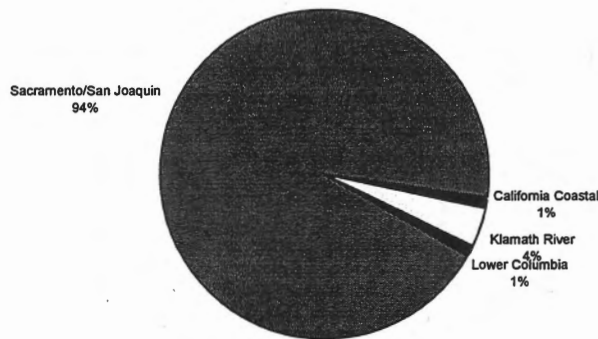
Twenty-five chinook recovered for analysis had adipose fin clips that indicated a presence of CWTs. Thirteen of the chinook CWTs were from Sacramento fall chinook, three were Klamath, three were Rogue, two were Columbia, and the remaining four had no tags present.

**Discussion and conclusion:** This fishery demonstrated little potential to target on returning Rogue River fall chinook in 1996. Only in 1994, during an earlier test fishery, were there any indications that the fishery was able to catch Rogue chinook at a higher rate than a general season in the area. The fishery may improve its ability to target Rogue chinook with a restructuring of the open times and/or areas to better match the run return timing of the Rogue River fall chinook.

**August 8-31, 1994**



**July 24-25, 1995**



**August 3-31, 1996**

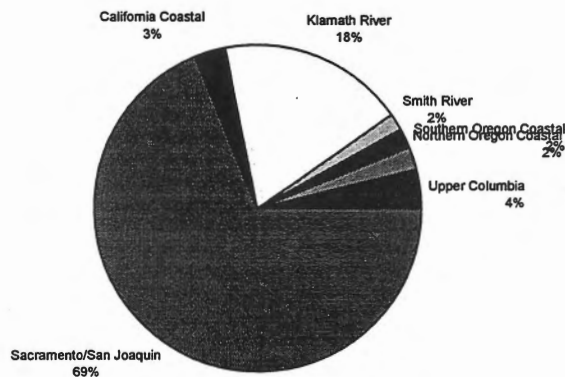


Figure 7. Estimated Oregon chinook stock composition from special troll test fishery off the Rogue River, 1994-96. Estimates are based on genetic stock composition tissue samples (1994, n=220; 1995, n=446; 1996, n=626).

Table 6. Estimated chinook stock contribution rates and standard deviations (SD) from the Oregon troll fishery off the Rogue River August 8-31, 1994, July 24-25, 1995, and August 3-31, 1996. Estimates based on genetic stock identification (GSI) tissue sample analysis. <sup>a b c</sup>

Stock Grouping	1994		1995		1996	
	Stock Contribution Rate	SD	Stock Contribution Rate	SD	Stock Contribution Rate	SD
Sacramento Basin (ChS+ChF+ChW)	0.23	0.04	0.94	0.02	0.69	0.03
California Coastal/Eel River (ChF)	0.07	0.06	0.01	0.01	0.03	0.02
Klamath River (ChS+ChF)	0.16	0.05	0.04	0.02	0.18	0.02
Smith River (ChF)	0.04	0.09			0.02	0.02
Southern Oregon Coastal (ChS+ChF) <sup>a</sup>	0.39	0.08			0.02	0.02
Northern Oregon Coastal (ChS+ChF) <sup>b</sup>	0.05	0.04			0.02	0.02
Upper Columbia (ChSu/ChF) & Snake River (ChF)	0.04	0.04			0.04	0.02
Snake River (ChSu+ChS)	0.02	0.01				
Lower Columbia (ChSu+ChF)			0.01	0.01		
	N=220		N=446		N=626	

<sup>a</sup> 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.

<sup>b</sup> Northern Oregon Coastal includes all Oregon Coastal stocks from the Elk River north.

<sup>c</sup> ChS = Spring chinook  
 ChSu = Summer chinook  
 ChF = Fall chinook  
 ChW = Winter chinook

## **Chetco River State Waters Chinook Fishery**

A late season ocean terminal troll fishery designed to target on returning Chetco River fall chinook opened on October 14 and continued through October 31, 1996. 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 788 chinook were landed averaging 15.6 pounds (Table 5). There were 29 snouts taken from adipose fin-clipped chinook of which 26 readable CWTs were recovered (90%). Chetco River releases accounted for 11 of the CWTs; 4 were from the Winchuck River; 4 from Pistol River; 2 from Hunter Creek, 1 from Elk River, and 4 from the Sacramento Basin in California. Of the Chetco River CWTs, 3 were three year olds (1993 brood), 7 were four year olds (1992 brood), and 1 was a five year old (1991 brood). This information does not represent stock composition percentages as CWT marking rates and fishery sampling rates are not accounted for.

1

# THE 1996 OCEAN RECREATIONAL SALMON FISHERY

## BACKGROUND

Oregon's ocean recreational salmon fishery originated with boats fishing in the bays on mature salmon 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 April 10 to December 31. In 1996, the seasons and catch quotas were very limited; and resulted in an ocean catch of 11,210 chinook and 7,176 coho from 43,962 salmon angler trips (Table 7). Oregon's ocean recreational fishery has generally been limited to chinook salmon beginning with the 1994 ocean season when most ocean coho salmon fishing was prohibited.

## SAMPLING METHODOLOGY

### Sampling areas and staffing

Fourteen seasonal employees sampled the ocean recreational fishery at nine coastal ports in 1996 (Appendix Table 1). In Astoria/Warrenton we transferred other samplers on temporary assignment to sample the fishery.

Limited sampling began in May in most ports. Some of the early sampling was supported by other funds such as ocean sport halibut license 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 (Appendix Table 8).

### Sampling Design

A statistical recreational creel survey using a modified random sampling design has been used in all recent years. Ocean anglers are interviewed at boat ramps, moorages,

Table 7. Oregon ocean recreational salmon catch and effort for 1966-96<sup>a</sup>.

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	.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
1995	35,850	105,185	11,913	6,733	6	0.52
1979-95 average	206,147	249,399	173,573	25,339	1,394 <sup>b</sup>	0.97
1996	43,962	109,810	7,176	11,210	0	0.42

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

<sup>b</sup> Odd year average.



charter docks to determine average number of anglers per boat, trip type, average length of trip, and catch rate by species. 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 1996, all OSMP ocean recreational sampling data was collected with hand held data collection computers. Data was collected weekly and transported to the Newport ODFW office for error checking and analysis.

Estimates of private boat effort is primarily obtained through boat counts by ODFW samplers, but Coast Guard bar crossing counts are used in Florence and occasionally at other locations. In Astoria, Newport, Winchester Bay, Coos Bay, and Brookings ODFW boat counters monitor bar crossings beginning at dawn (usually starting at 5:00 AM) and continuing until 10:00 AM, and then sample for the remainder of their shift. An expansion factor based on full boat counts from several previous years is applied by OSM staff to account for boats going out after 10:00 AM. Similar bar crossing counts are made at Garibaldi, but these counts are made from dawn until 11:00 AM to account for the often later rush of boats at the turn of the tide in Garibaldi. In Pacific City and Depoe Bay, total effort is estimated from a combination of boat trailer and moorage slip counts and a tally of outgoing vessels during the sampling period (usually 8:00 AM until 4:00 PM). Counts are averaged using adjacent days of the same type (i.e. weekday vs weekend/holiday) with similar weather/ocean conditions for days when no bar crossing counts were available.

Although charter vessels are counted separately in the bar crossings by the samplers, these counts are typically only used for charter effort at Astoria/Warrenton. In all other ports, charter effort estimates are made by contacting individual charter offices to determine the number of charter boat trips by trip type (i.e. salmon, bottomfish, combination salmon/bottomfish, halibut, or tuna) for each day.

### **Quota Assessment**

Catch and effort data are error-checked and then processed on the Department's Unisys computer (Portland) by Newport OSMP data staff. Angler interviews are stratified by charter and private boat angler to provide average catch rates by species for each boat type (i.e. charter and private). 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 fishery catch quotas.

Department samplers checked 6,593 salmon in 1996 compared to 6,341 in 1995. Catch sampling rates in 1996 ranged from a high of 72% at Depoe Bay, to a low of 33% at Brookings. Samplers checked 36% of the total salmon catch from all ports in 1996 compared to 34% in 1995 (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 1996 regulations (Figure 8) were adopted by the PFMC and signed into law by the Secretary of Commerce. The OFWC adopted the regulations as written by the PFMC for state waters (0-3 miles) and adopted three additional special seasons in state waters. Appendix Table 9 summarizes the history of Oregon's recreational ocean salmon regulations.

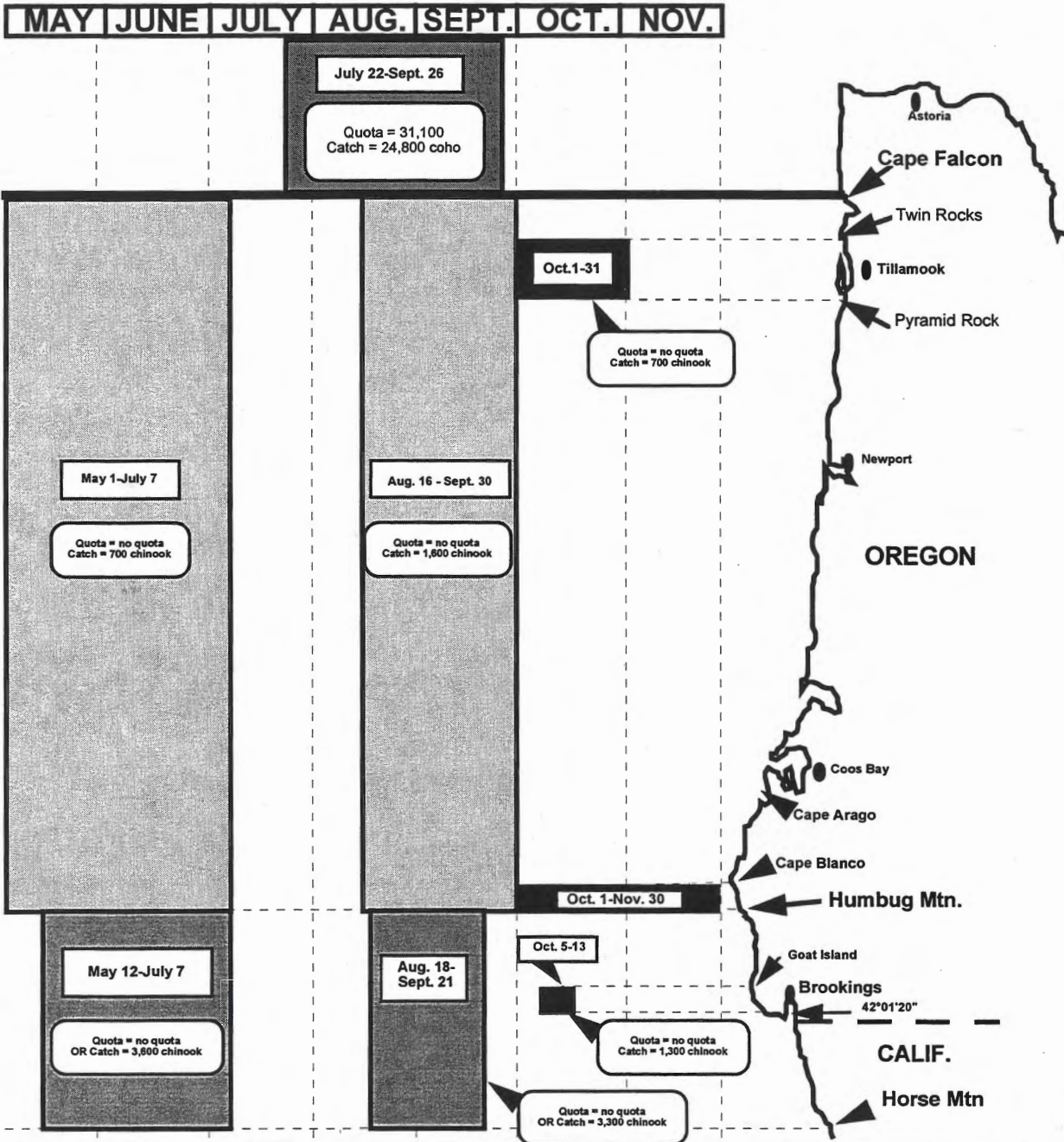
### North of Cape Falcon

An all-salmon-except-chinook season was adopted for the area from Leadbetter Point, Washington to Cape Falcon, Oregon to open July 22 and continue through September 26 or the quota of 28,100 coho. The season opened on July 22 and continued through September 26. This season was closed within 3 miles of shore to the north of the Columbia River, and open 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 28,100 coho was set. Three thousand coho were added in season to this quota due to savings in the Washington coastal fisheries, and brought the total quota to 31,100 coho. 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 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 flashers or divers were allowed. The general season was open May 1 through July 7 and August 16 through September 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 through September 15 to reduce the impact on local spring chinook and coho.



- All salmon except chinook, 2 per day, not more than 4 in 7 days. Sun - Thurs only.
- All salmon except coho, 2 per day, not more than 6 in 7 days. Special gear restrictions.
- Chinook salmon only, 2 per day, no more than 4 in 7 days, or 10 per season. Open in state waters (0-3 miles). Special gear restrictions.
- All salmon except coho, 1 per day, no more than 4 in 7 days.
- Chinook salmon only, 1 per day, not more than 4 in 7 days. Open in state waters (0-3 miles).

Figure 8. Ocean recreational salmon seasons off Oregon, 1996.

## **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 12 through July 7. This area is referred to as the Klamath Management Zone (KMZ). This fishery was 7 days per week with a bag limit of 1 salmon per day no more than 4 in 7 consecutive days.

The next season was open from August 18 through September 21. This fishery was open 7 days per week with a bag limit of 1 salmon per day no more than 4 in 7 consecutive days.

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. No more than 2 single point, single shank, barbless hooks were allowed.

### **Late season, state waters fisheries**

**October 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 October 1 through 31. 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 flashers or divers. 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.

**October/November Fishery off Port Orford:** This state waters (0-3 miles) all-salmon-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 30. A bag limit of one salmon per day and no more than four in seven days was in effect. 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 open October 5 through 13 without a chinook quota. 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 this is not the case for ports from Coos Bay north where recent chinook-only seasons have generated only mild interest in the fishing community, and bottomfishing trips tend to predominate throughout the season in most areas.

The sharp drop in effort caused by limited salmon seasons in recent years has not been buffered by a comparable increase in bottomfishing effort. A total of 67,500 bottomfishing trips were taken in 1996, a 4% decrease from the 70,400 trips in the 1995 season. The total combined 1996 salmon and bottomfishing effort of 109,810 angler trips was up 4% from the 105,200 trips in 1995, but remained 56% below the 1971-95 average of 249,399 angler trips. (Table 7).

In 1996, 43,962 trips (40%) targeted salmon coastwide, and 67,534 (60%) trips fished for bottomfish during the salmon season for a total of 109,810 angler trips (Note: the sum of the salmon and bottomfish trips does not equal the total due to a small number of combination charter trips). Salmon angler trips in 1996 were up 23% over 1995's trip total, but were 79% below the 1979-95 average.

August was the peak month for salmon effort with 13,936 salmon angler trips or 32% of the total. August was also the top month for bottomfishing effort with 19,444 trips or 29% of the total (Table 8, 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. Variable closure periods and reduced fishing seasons have obscured this trend in recent years (Appendix Table 11).

Total effort increased from 1995 levels in all ports except Astoria and Pacific City which decreased and Newport and Brookings which stayed the same. Brookings had the highest salmon fishing effort in 1996 with 23,342 angler trips or 53% of the state's total. The Garibaldi and Astoria areas followed with 8,641 and 5,278 angler trips, respectively (Figure 11). It should be noted that 3,255 (62%) 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 20,712 trips. Depoe Bay, Garibaldi, and Brookings followed with 16,292, 11,612 and 10,101 bottomfishing trips each, respectively (Table 8). 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 1996 ocean salmon catch by species, except for minor landings from some unsurveyed ports and time periods. Fish landed at minor ports historically have represented less than two percent of the total catch.

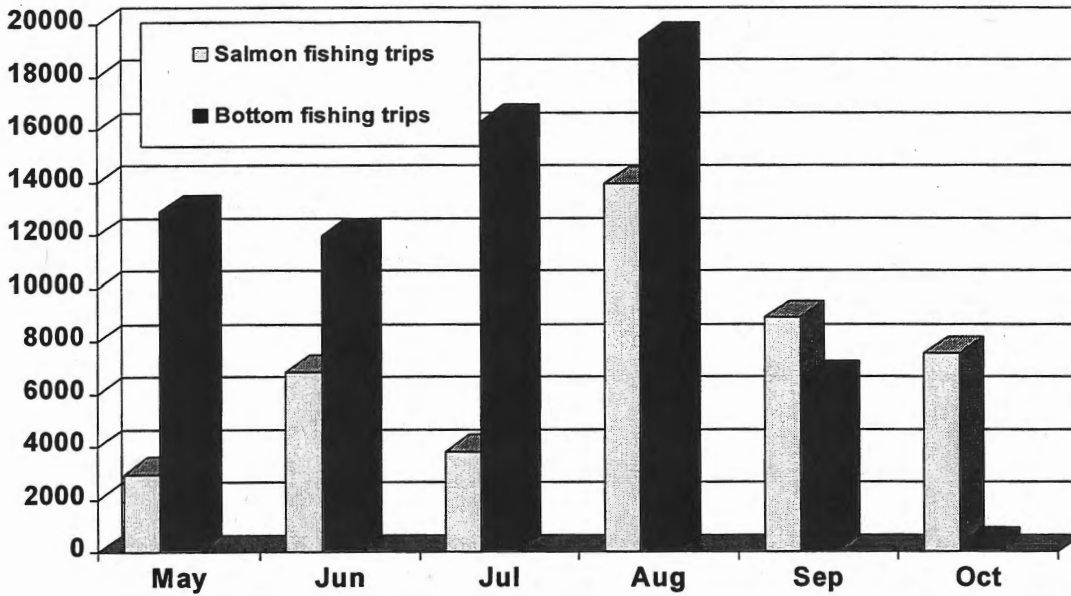
Table 8. Oregon ocean recreational effort in angler trips by port, by statistical month, and by trip type, 1996<sup>a</sup>.

Port/Trip Type	Month						Total <sup>b</sup>
	May	June	July	Aug.	Sept.	Oct.	
Astoria	0	0	920	3,578	794	0	5,292
Salmon	0	0	920	3,564	794	0	5,278
Bottomfish	0	0	0	14	0	0	14
Garibaldi	3,270	2,359	2,612	3,872	4,488	3,279	19,880
Salmon	762	114	78	682	3,750	3,255	8,641
Bottomfish	2,508	2,245	2,567	3,416	786	90	11,612
Pacific City	85	288	916	56	0	0	1,345
Salmon	0	4	9	0	0	0	13
Bottomfish	85	284	907	56	0	0	1,332
Depoe Bay	2,669	3,070	3,692	5,282	1,908	0	16,621
Salmon	39	6	0	339	156	0	540
Bottomfish	2,656	3,064	3,692	5,068	1,812	0	16,292
Newport	5,447	3,746	4,249	6,409	2,051	16	21,918
Salmon	273	182	22	1,450	303	1	2,231
Bottomfish	5,328	3,695	4,234	5,565	1,874	16	20,712
Florence	55	172	130	0	0	0	357
Salmon	41	163	124	0	0	0	328
Bottomfish	14	9	6	0	0	0	29
Winchester Bay	109	243	296	1,200	472	0	2,320
Salmon	101	239	282	1,086	457	0	2,165
Bottomfish	8	4	14	114	15	0	155
Coos Bay	1,659	1,148	1,569	3,156	1,114	0	8,646
Salmon	55	209	171	795	194	0	1,424
Bottomfish	1,604	1,004	1,398	2,361	920	0	7,287
Brookings	2,376	7,586	5,713	8,866	4,417	4,473	33,431
Salmon	1,687	5,922	2,205	6,020	3,226	4,282	23,342
Bottomfish	692	1,669	3,508	2,850	1,191	191	10,101
State Total	15,670	18,612	20,097	32,419	15,244	7,768	109,810
Salmon	2,958	6,839	3,811	13,936	8,880	7,538	43,962
Bottomfish	12,895	11,974	16,326	19,444	6,598	297	67,534

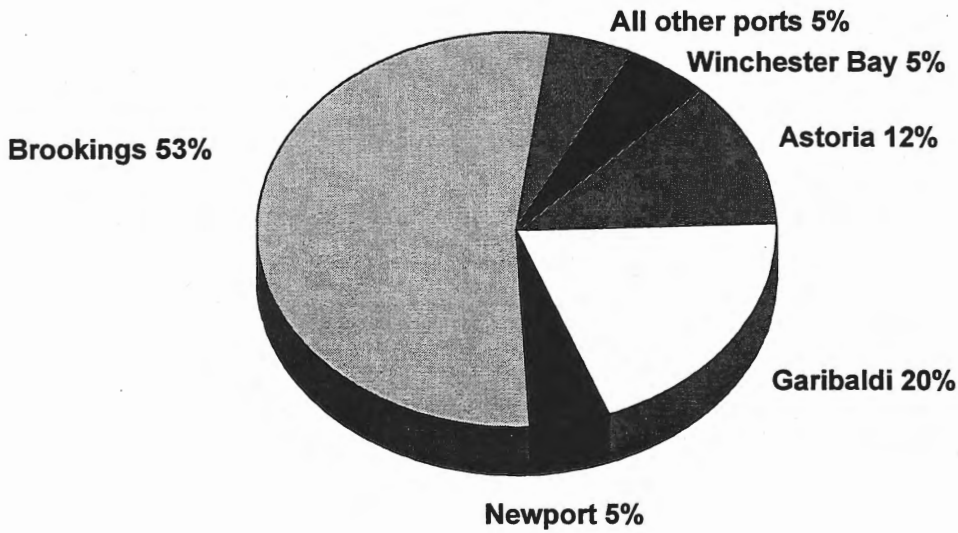
<sup>a</sup> Bottomfish effort is estimated only for those time periods when port sampling occurred.

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

**ANGLER TRIPS**



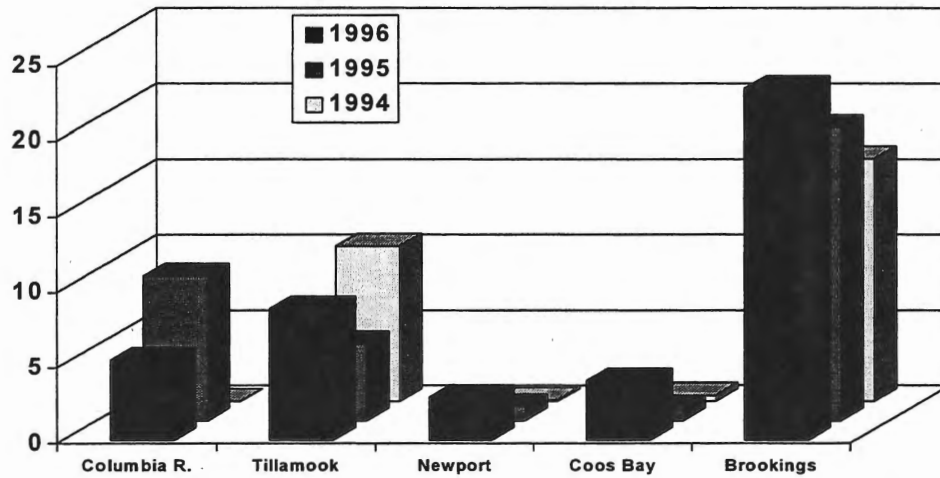
**Figure 9. Oregon ocean angler trips by target species during the 1996 salmon season.**



**Figure 10. Recreational ocean salmon angler trips by port, 1996.**

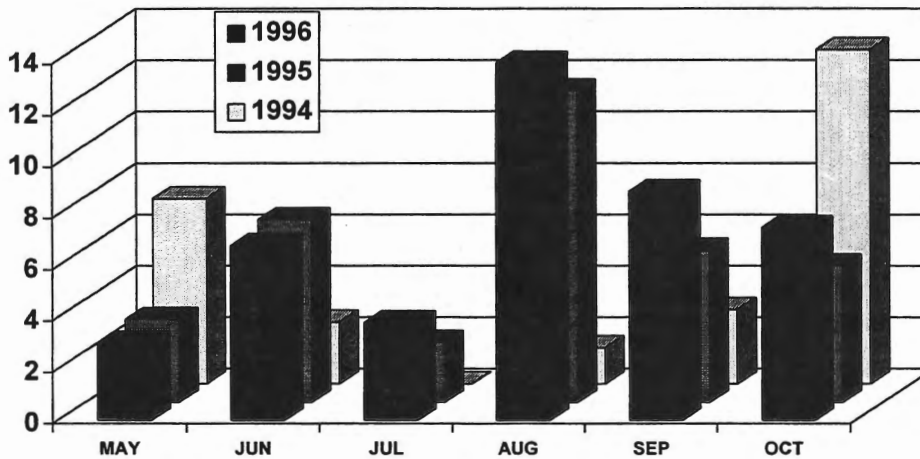
# Effort

ANGLER TRIPS (thousands)



Area of Effort

ANGLER TRIPS (thousands)



Month of Effort

Figure 11. Oregon ocean recreational salmon angler trips by catch area and by month, 1994-96.



**Chinook:** The 1996 Oregon ocean recreational chinook salmon catch was estimated at 11,210 fish, 66% higher than the 1995 landings. Catches continue to be well below the record catch of 79,300 fish taken in 1976 and the 1979-95 average of 25,300 chinook (Table 7 and Figure 12). Brookings predominated in all months except September, especially in June and August with season total landings of 8,200 chinook or 73% of the coastwide total (Table 9 and Figure 13). Historical catch patterns are shown in Appendix Tables 12, 13, and 14.

**Coho:** The recreational harvest of 7,176 coho in 1996 represents the lowest annual landing on record, excluding 1994 when coho fishing was prohibited. While this landing is the lowest on record, only the Columbia River catch area was open to recreational coho angling in 1996. Catches in this area accounted for 7,035 (98%) of the total coho landings. Some of these fish (220) were caught in the Columbia River catch area and landed back into Garibaldi. The remaining 141 coho that were landed in 1996 were illegal catches (Figure 15, Table 10, and Appendix Table 15).

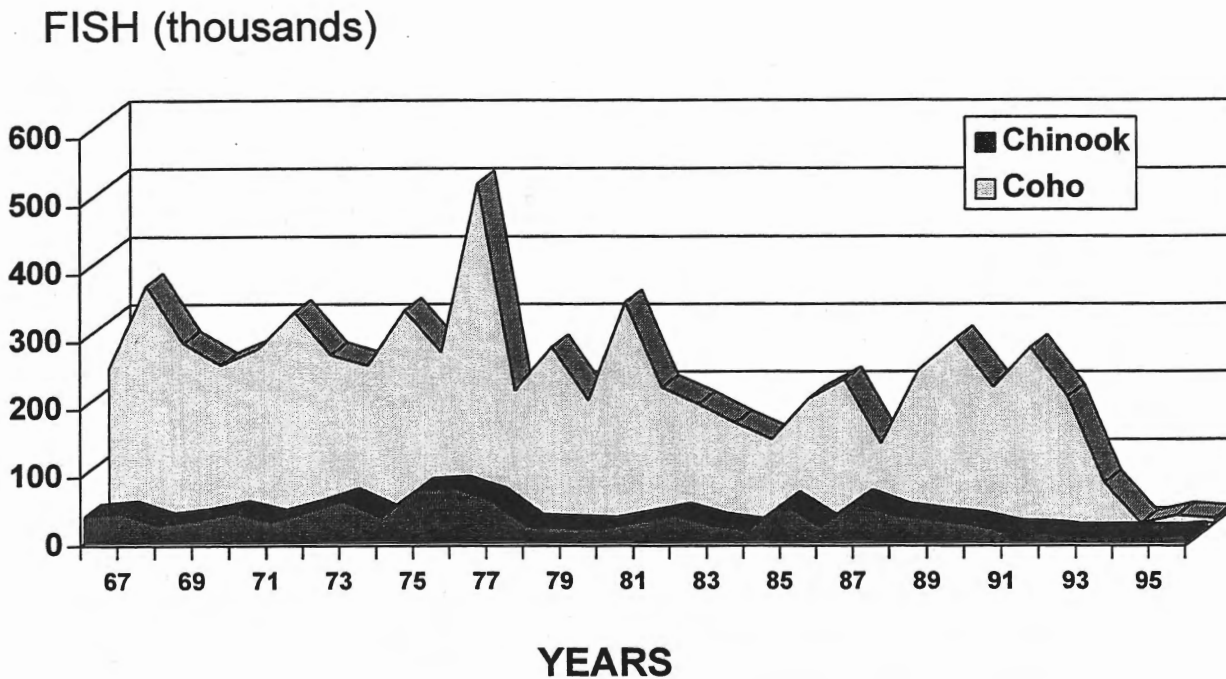
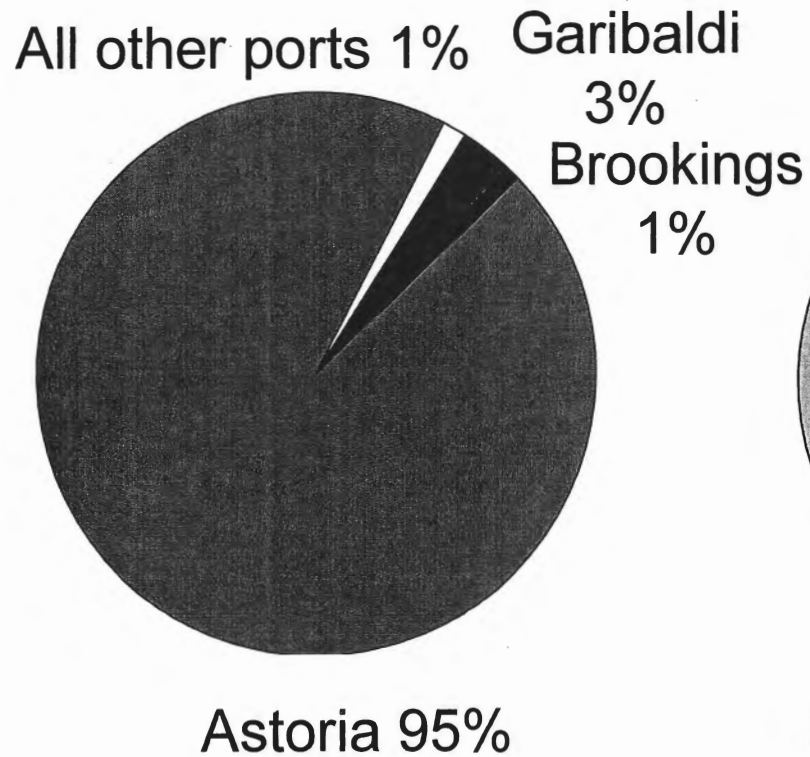


Figure 12. Trends in Oregon's recreational ocean salmon catch, 1966-96.

## Coho



## Chinook

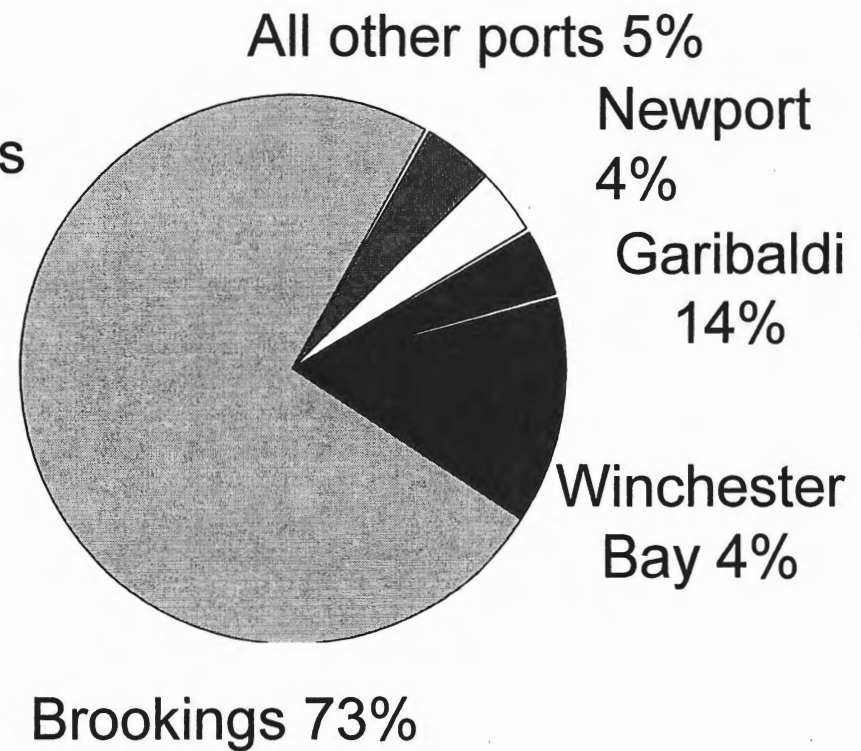
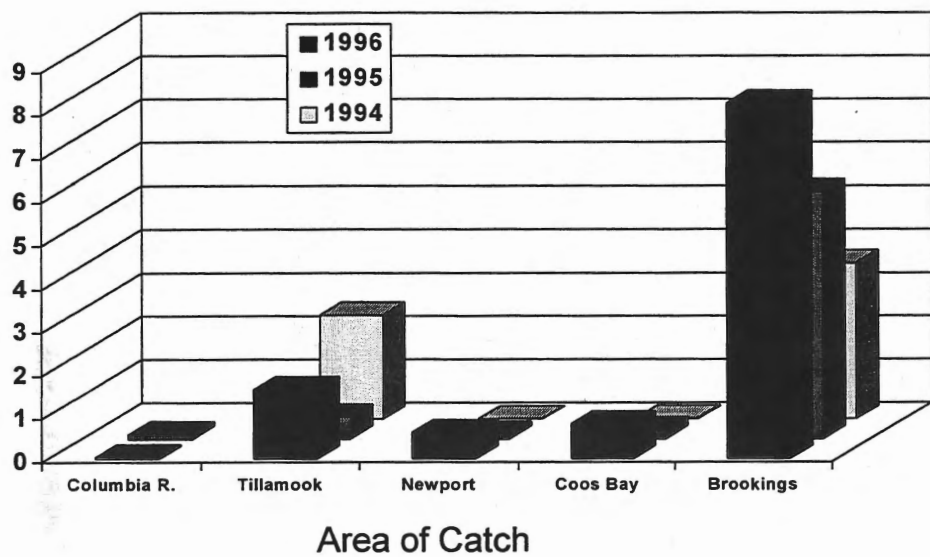


Figure 13. Oregon ocean recreational chinook and coho catch by port, 1996.

# Chinook

FISH (thousands)



FISH (thousands)

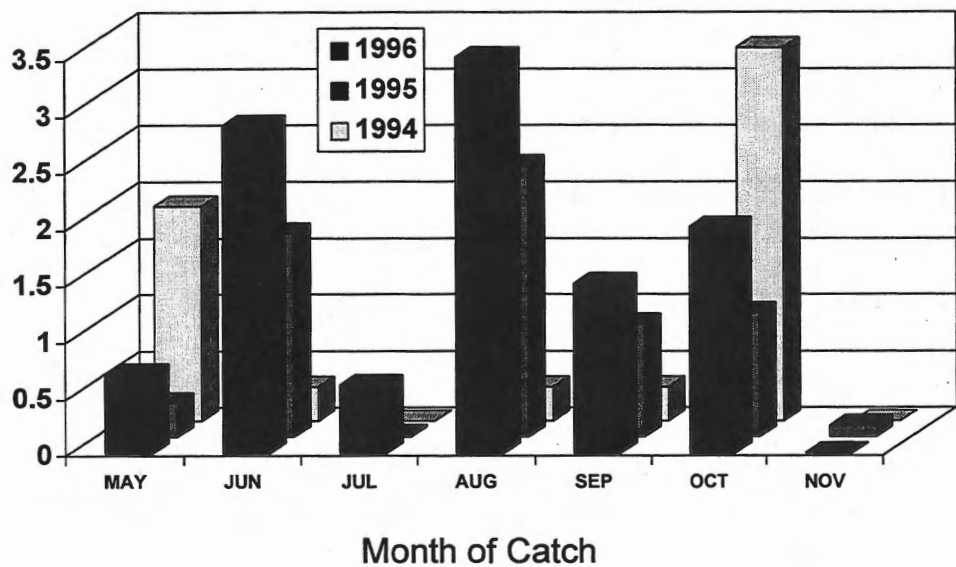


Figure 14. Oregon ocean recreational chinook catch by catch area and by month, 1994-96.

Table 9. Oregon ocean recreational chinook catch by port by month, 1996<sup>a</sup>.

Port	Month						Total
	May	June	July	Aug.	Sept.	Oct.	
Astoria	0	0	5	13	10	0	28
Garibaldi	115	5	11	56	670	733	1,590
Pacific City	0	0	0	0	0	0	0
Depoe Bay	1	2	0	95	8	0	106
Newport	40	35	7	301	65	0	448
Florence	0	36	68	0	0	0	104
Winchester Bay	2	53	115	168	110	0	448
Coos Bay	5	58	106	82	38	0	289
Brookings	549	2,719	314	2,776	558	1,281	8,197
Statewide Total	712	2,908	626	3,491	1,459	2,014	11,210

<sup>a</sup> Monthly totals are the sum of statistical weeks estimates with closest fit to calendar month.

Table 10. Oregon ocean recreational coho catch by port by month, 1996<sup>a</sup>.

Port	Month						Total
	May	June	July	Aug.	Sept.	Oct.	
Astoria	0	0	1,418	4,520	877	0	6,815
Garibaldi	0	0	11	152	63	1	227
Pacific City	0	0	0	0	0	0	0
Depoe Bay	0	0	0	0	0	0	0
Newport	0	0	0	11	0	0	11
Florence	0	0	0	0	0	0	0
Winchester Bay	0	0	0	10	1	0	11
Coos Bay	0	0	0	4	2	0	6
Brookings	0	10	34	26	25	11	106
Statewide Total	0	10	1,463	4,723	968	12	7,176

<sup>a</sup> Monthly totals are the sum of statistical weeks estimates with closest fit to calendar month.

# Coho

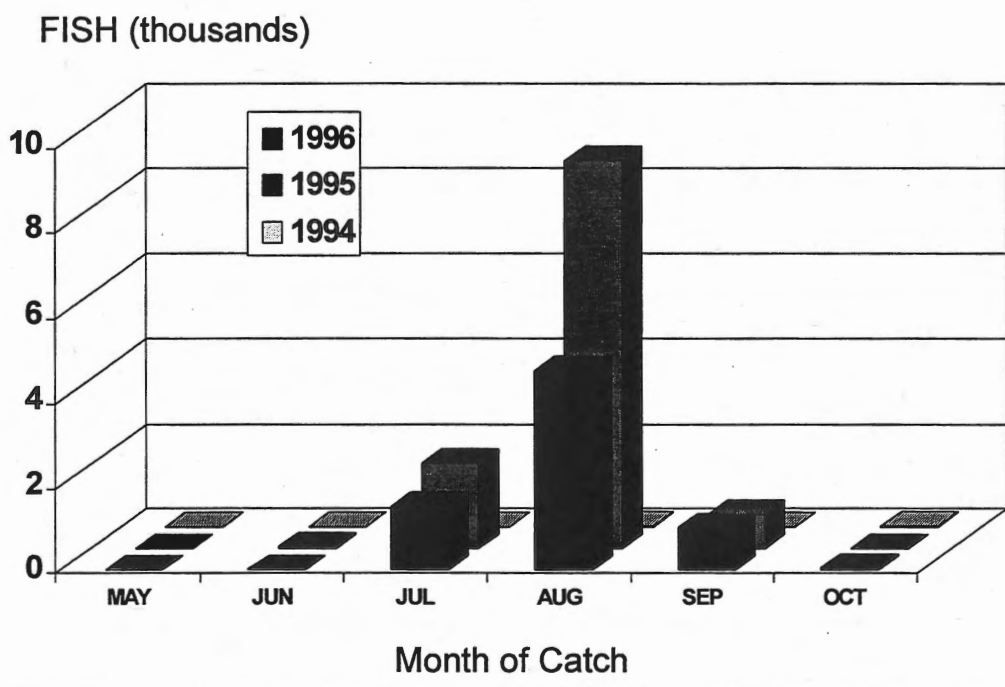
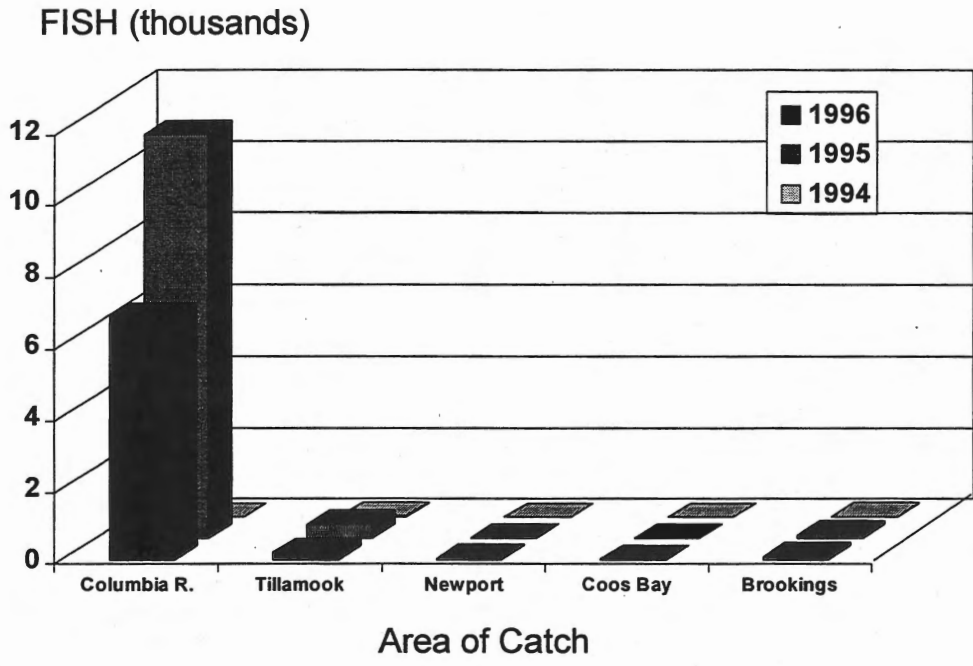


Figure 15. Oregon ocean recreational coho catch by catch area and by month, 1994-96.

## CHARTER/PRIVATE BOAT FISHERIES

### Background

Approximately 102 charter boats actively participated in Oregon ocean fisheries in 1996, compared to 93 vessels in 1995. Exact estimates of active 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 81 boats in 1994 (Appendix Table 17). Salmon is the primary pursuit in all ports when coho are allowed to be retained, but bottomfishing is also important to charter fleets and has become their primary target in recent years.

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 1996 charter boat effort was estimated at 5,631 salmon angler trips, up 22% from 1995 effort levels, but only 13% of the 1979-95 average of 44,300 angler trips. Charter anglers made up 13% of the total ocean salmon trips in 1996 similar to that seen in 1995 and the 1979-95 average of 22%. When bottomfishing trips are added in; charters in 1996 accounted for 44% of the total angler trips compared to 40% in 1995 (Tables 11 and 12, and Figure 16).

Charter boats operate at most major Oregon ports, but boat and fleet sizes vary. Astoria with 25 boats fished almost exclusively for salmon, and led the coast with 1,723 salmon angler trips. Newport, with the largest charter fleet on the coast of 34 boats, had the second highest bottomfishing effort of any port with 14,235 bottomfish angler trips. Depoe Bay (20 boats) had the highest bottomfishing effort with 14,380 bottomfish angler trips. Garibaldi (14 boats) ranked third with 8,108 bottomfish angler trips.

Restrictions on salmon fishing again in 1995 resulted in a high percentage of charter anglers that went bottomfishing. Eighty-eight percent or 42,877 charter anglers coastwide targeted on bottomfish during the salmon season. The comparable value for 1995 was 89%. An additional 1,686 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 4,142 salmon by charter anglers was a slight decrease from the 1995 catch of 4,376 salmon. This primarily reflects a decrease in effort and catch rates in the open coho season north of Cape Falcon. The charter fleet landed 23% of the total recreational salmon catch in 1996, similar to that seen in 1995, but below the 1979-95 average of 29% (Tables 11 and 12, and Figure 16).

Table 11. Oregon ocean recreational salmon effort and catch by boat type, 1996.

Boats Port	Salmon Charter Boats <sup>a</sup>					Salmon Private				
	Boat Trips	Angler Trips	Salmon Catch			Boat Trips	Angler Trips	Salmon Catch		
			Chinook	Coho	Pink			Chinook	Coho	Pink
Astoria	245	1,723	3	2,872	0	1,242	3,555	25	3,943	0
Garibaldi	157	1,008	213	119	0	3,296	7,633	1,377	108	0
Pacific City	0	0	0	0	0	4	13	0	0	0
Depoe Bay	81	517	104	0	0	9	23	2	0	0
Newport	206	1,620	413	0	0	261	611	35	11 <sup>b</sup>	0
Florence	0	0	0	0	0	168	328	104	0	0
Winchester Bay	0	0	0	0	0	1,010	2,165	448	11 <sup>b</sup>	0
Coos Bay	21	132	40	0	0	597	1,292	249	6 <sup>b</sup>	0
Brookings	123	631	378	0	0	10,100	22,711	7,819	106 <sup>b</sup>	0
Total	833	5,631	1,151	2,991	0	16,687	38,331	10,059	4,185	0
Combined totals for all Oregon craft	17,520	43,962	11,210	7,176	0					

<sup>a</sup> Includes combination salmon & bottomfish trips.

<sup>b</sup> Illegal coho landings.

Table 12. Oregon ocean recreational salmon and bottomfish effort and catch by boat and trip type, 1996<sup>a</sup>.

Port	Charter						Private							
	Boat Trips			Angler Trips			Total Catch		Boat Trips		Angler Trips		Total Catch	
	Salmon	Combination	Bottom	Salmon	Combination	Bottom	Salmon <sup>b</sup>	Bottom <sup>c</sup>	Salmon	Bottom	Salmon	Bottom	Salmon <sup>b</sup>	Bottom <sup>c</sup>
Astoria	245	0	0	1,723	0	0	2,875	0	1,242	5	3,555	14	3,968	116
Garibaldi	117	40	741	635	373	8,108	332	65,317	3,296	1,151	7,633	3,131	1,485	10,749
Pacific City	0	0	0	0	0	0	0	0	4	439	13	1,332	0	6,297
Depoe Bay	51	30	1,615	306	211	14,380	104	95,505	9	662	23	1,701	2	6,321
Newport	109	97	1,419	595	1,025	14,235	413	107,716	261	2,036	611	5,452	46	15,492
Florence	0	0	0	0	0	0	0	0	168	14	328	29	104	97
Winchester Bay	0	0	0	0	0	0	0	0	1,010	64	2,165	155	459	490
Coos Bay	16	5	336	67	65	3,816	40	33,531	597	1,429	1,292	3,406	255	19,699
Brookings	120	3	277	619	12	2,338	378	23,209	10,100	3,119	22,711	7,751	7,925	39,308
<b>Total</b>	<b>658</b>	<b>175</b>	<b>4,388</b>	<b>3,945</b>	<b>1,686</b>	<b>42,877</b>	<b>4,142</b>	<b>325,278</b>	<b>16,687</b>	<b>8,919</b>	<b>38,331</b>	<b>22,971</b>	<b>14,244</b>	<b>98,569</b>

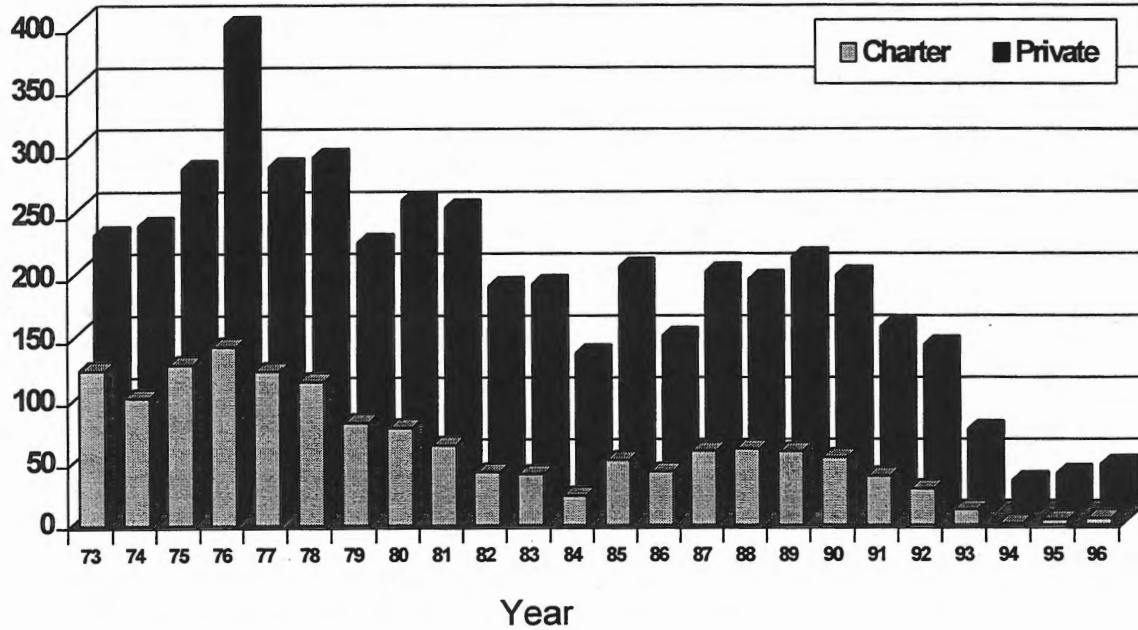
<sup>a</sup> Trip types are separated by trips that target salmon, bottomfish, or combination trips. For private boats, combination trips are included as salmon trips.

<sup>b</sup> Includes: coho, chinook, and pink salmon.

<sup>c</sup> Bottomfish includes: rockfish, lingcod, flatfish, and all other marine finfish species.



Angler Trips (thousands)



Salmon (thousands)

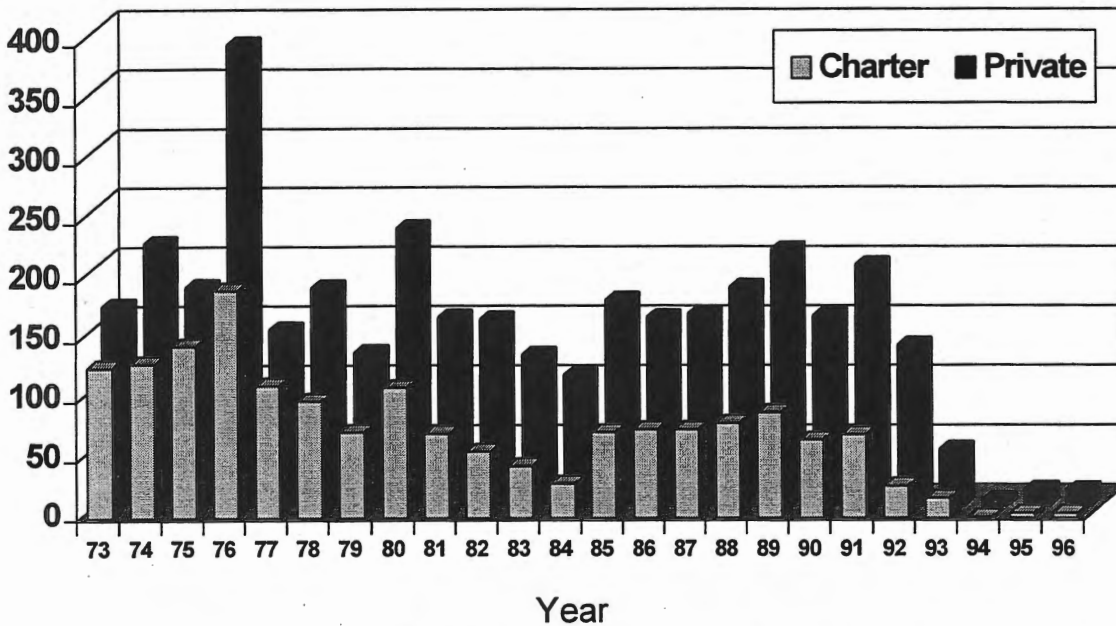


Figure 16. A comparison of effort and catch by Oregon ocean salmon charter and private anglers, 1973-96.

The Astoria charter fleet took 2,875 fish or 69% of the charter caught salmon. Newport charters took 413 salmon or 10%; Brookings caught 378 salmon or 9%; and Garibaldi charters took 332 salmon or 8%. Salmon per angler averages ranged from 1.67 in Astoria to 0.20 salmon per angler in Depoe Bay. In 1996 the state-wide charter average of 0.74 salmon/angler was down from the 1995 level of 0.95 salmon/angler.

**Private boat angler effort:** The 1996 salmon effort from private boats was estimated at 38,331 angler trips or 87% of the total salmon effort the same as that observed in 1995, but still 76% below the 1979-95 average of 157,514 angler trips (Tables 11, 12, and Figure 16).

Brookings and Garibaldi recorded the most private boat effort for salmon in 1996. Brookings had 22,711 salmon angler trips or 59% of the private boat total, followed by Garibaldi with 7,633 trips (20%).

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 1996 season; 22,971 angler trips or 37% of the private trips targeted on bottomfish, compared to 31,854 angler trips or 50% in 1995. Brookings had the most private bottomfish anglers with 7,751; followed by Newport with 5,452; and Coos Bay with 3,406 angler trips.

**Private boat angler catch:** Anglers from private boats landed 10,059 chinook and 4,185 coho in 1996. The total catch of 14,244 salmon was slightly less than the 1995 catch but only 10% of the 1979-95 average of 139,080 fish. Private boat anglers caught 77% of the total recreational salmon landed in 1996 the same as in 1995, and higher than the 1979-95 average of 71% (Appendix Table 18 and Figure 16).

Brookings private boat anglers averaged 0.35 salmon per angler and landed 7,925 salmon (56%) of the total private boat angler catch. Astoria private boat anglers had landings of 3,968 salmon with an average success rate of 1.12 salmon per angler. These two ports accounted for 83% of the total private boat salmon angler catch. The coastwide angler success rate was 0.37 salmon per angler, compared to 0.46 in 1995 and the 1979-95 average of 0.88 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. This data is variable and depends on anglers correctly recalling the number and species of salmon released and varies with the cooperation and expertise of the angler. This information, while not

exact, is valuable to assess trends in released fish by time and catch area. This data is not used in active management, but is a rough estimate that can help evaluate shaker mortality and fishing regulations (Tables 13, 14, and Appendix Table 22).

### **Chinook**

Most chinook (78%) were retained by anglers during the 1996 season. An exception to this trend occurred to the north of Cape Falcon (Columbia River Management Area) where anglers released 97% of the chinook caught, because the take of chinook was prohibited in this area in 1996. In most ports, the rate of released chinook per retained chinook peaked in September and coincides with the annual recruitment of age two chinook to the fishery (Table 13). Brookings with the highest chinook fishing effort and catch, also had the most released chinook with 1,893 (61%).

### **Coho**

Since coho were prohibited in all areas south of Cape Falcon, release rates on coho exceeded 90% in almost all port and month strata (Table 14). In the Columbia River Area, an average of 10% of the coho caught were released. Brookings had the most released coho with 2,303 (48% of all released coho). August accounted for 54% of the released coho statewide, and August made up 93% of the coho released at Newport.

## **RECREATIONAL OCEAN SALMON CODED WIRE TAG SAMPLING**

Recreational samplers from the OSMP working at nine Oregon coastal ports examined 35% of the chinook and 38% of the coho landed for fin clips indicating the presence of a coded wire tag during the 1996 ocean recreational season.

### **Chinook**

Samplers examined 3,884 of the 11,210 chinook landed in 1996, and found 155 (4.0%) that had adipose fin clips (Table 15). Department staff found readable tags in 129 of the 155 chinook heads for an 83% recovery rate. Most of the observed CWTs were released by California Dept. of Fish and Game (46%); ODFW (38%), and the U.S. Fish and Wildlife Service (9%). By basin, most of the tagged fish were released in California's Sacramento/San Joaquin Basin (46%) and Oregon's Coastal streams (33%) (Figure 17).

### **Coho**

Samplers examined 2,709 of the 7,176 coho landed in 1996, and found 117 (4.3%) that had adipose fin clips. Staff found readable tags in 106 of the 118 coho heads for a 90% recovery rate. Most of the observed CWTs were released by Washington Dept. of Fish and Wildlife (55%) and ODFW (27%) (Figure 17). Most of the tagged fish were from the Columbia Basin (41%) and Washington coastal streams (27%) (Figure 17).

Table 13. Chinook salmon released by Oregon ocean recreational anglers by port and by month, 1996.

Port of Landing		Month						Total
		May	June	July	Aug.	Sept.	Oct.	
Astoria	No. Released	-	-	260	558	148	-	966
	No. Retained	-	-	5	13	10	-	28
	% Released	-	-	98	98	94	-	97
Garibaldi (NOF) <sup>a</sup>	No. Released	-	-	2	15	0	-	17
	No. Retained	-	-	0	0	0	-	0
	% Released	-	-	100	100	-	-	100
Garibaldi (SOF) <sup>a</sup>	No. Released	0	0	0	6	18	2	26
	No. Retained	115	5	11	56	670	733	1,590
	% Released	-	-	-	10	3	0	2
Pacific City	No. Released	0	0	0	-	-	-	0
	No. Retained	0	0	0	-	-	-	0
	% Released	-	-	-	-	-	-	-
Depoe Bay	No. Released	6	2	5	7	11	-	31
	No. Retained	1	2	0	95	8	-	106
	% Released	86	50	100	7	58	-	23
Newport	No. Released	4	0	0	30	29	-	63
	No. Retained	40	35	7	301	65	-	448
	% Released	9	-	-	9	31	-	12
Florence	No. Released	0	3	1	-	-	-	4
	No. Retained	0	36	68	-	-	-	104
	% Released	-	8	1	-	-	-	4
Winchester Bay	No. Released	0	15	14	3	23	-	55
	No. Retained	2	53	115	168	110	-	448
	% Released	-	22	11	2	17	-	11
Charleston	No. Released	0	9	28	2	20	-	59
	No. Retained	5	58	106	82	38	-	289
	% Released	-	16	21	2	34	-	17
Brookings	No. Released	29	1,002	36	331	300	195	1,893
	No. Retained	549	2,719	314	2,776	558	1,281	8,197
	% Released	5	27	10	11	35	13	19
Total	No. Released	39	1,031	346	952	549	197	3,114
	No. Retained	712	2,908	626	3,491	1,459	2,014	11,200
	% Released	5	26	36	21	27	9	22

<sup>a</sup> (NOF) refers to the Columbia River catch area defined as the area between Cape Falcon, Oregon and Leadbetter Point, Washington. References catches landed in Garibaldi that were either made north of Cape Falcon (NOF), or south of Cape Falcon (SOF).

Table 14. Coho salmon released by Oregon ocean recreational anglers by port and by month, 1996.

Port of Landing		Month						Total
		May	June	July	Aug.	Sept.	Oct.	
Astoria	No. Released	-	-	115	501	150	-	766
	No. Retained	-	-	1,418	4,520	877	-	6,815
	% Released	-	-	8	10	15	-	10
Garibaldi (NOF) <sup>a</sup>	No. Released	-	-	0	13	8	-	21
	No. Retained	-	-	11	150	59	-	220
	% Released	-	-	-	86	12	-	9
Garibaldi (SOF) <sup>a</sup>	No. Released	0	0	0	27	77	44	148
	No. Retained	0	0	0	2	4	1	7
	% Released	-	-	-	93	95	98	95
Pacific City	No. Released	0	0	0	-	-	-	0
	No. Retained	0	0	0	-	-	-	0
	% Released	-	-	-	-	-	-	-
Depoe Bay	No. Released	0	4	0	74	29	-	107
	No. Retained	0	0	0	0	0	-	0
	% Released	-	100	-	100	100	-	100
Newport	No. Released	0	0	0	852	68	-	920
	No. Retained	0	0	0	7	4	-	11
	% Released	-	-	-	99	94	-	99
Florence	No. Released	0	10	98	-	-	-	108
	No. Retained	0	0	0	-	-	-	0
	% Released	-	100	100	-	-	-	100
Winchester Bay	No. Released	0	20	57	39	135	-	251
	No. Retained	0	0	0	10	1	-	11
	% Released	-	100	100	80	99	-	96
Charleston	No. Released	0	38	28	55	23	-	144
	No. Retained	0	0	0	4	2	-	6
	% Released	-	100	100	93	92	-	96
Brookings	No. Released	33	232	426	1,008	267	337	2,303
	No. Retained	0	10	34	26	25	11	106
	% Released	100	96	93	97	91	97	96
Total	No. Released	33	304	724	2,569	757	381	4,768
	No. Retained	0	10	1,463	4,719	972	12	7,176
	% Released	100	97	33	35	44	97	40

<sup>a</sup> (NOF) refers to the Columbia River catch area defined as the area between Cape Falcon, Oregon and Leadbetter Point, Washington. References catches landed in Garibaldi that were either made north of Cape Falcon (NOF), or south of Cape Falcon (SOF).

Table 15. Chinook coded-wire tag sampling from the ocean recreational fishery, by port and month, 1996. NS=no sampling

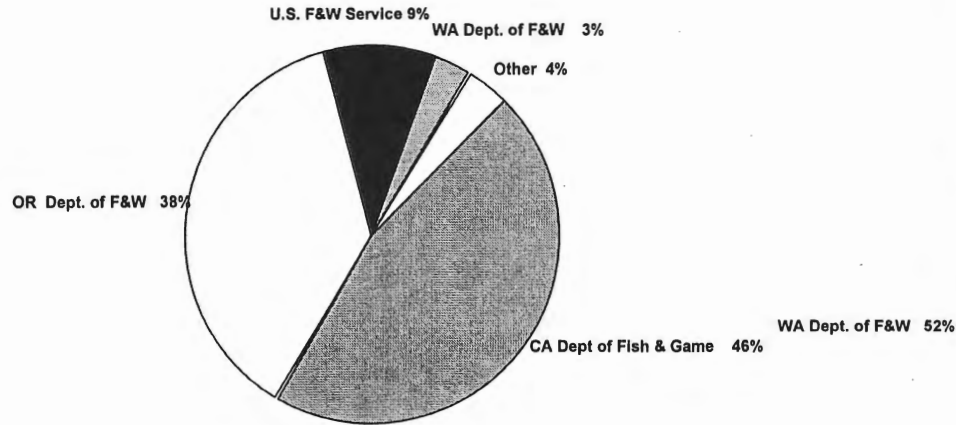
Port	May	June	July	Aug.	Sept.	Oct.	Total
<u>Astoria</u>							
No. Examined	NS	NS	2	5	4	NS	11
No. Landed	0	0	5	13	10	0	28
% Examined	0	0	40	38	40	0	39
No. Marks	0	0	2	0	1	0	3
<u>Garibaldi</u>							
No. Examined	22	3	4	22	170	271	492
No. Landed	115	5	11	56	670	733	1,590
% Examined	19	60	37	39	26	38	32
No. Marks	5	0	0	0	4	16	25
<u>Pacific City</u>							
No. Examined	0	0	0	0	0	NS	0
No. Landed	0	0	0	0	0	0	0
% Examined	0	0	0	0	0	0	0
No. Marks	0	0	0	0	0	0	0
<u>Depoe Bay</u>							
No. Examined	1	1	0	69	5	NS	76
No. Landed	1	2	0	95	8	0	106
% Examined	100	50	0	73	63	0	72
No. Marks	0	0	0	2	0	0	2
<u>Newport</u>							
No. Examined	18	20	3	151	17	NS	209
No. Landed	40	35	7	301	65	0	448
% Examined	45	57	43	50	26	0	47
No. Marks	0	0	0	7	0	0	7
<u>Florence</u>							
No. Examined	0	25	42	NS	NS	NS	67
No. Landed	0	36	68	0	0	0	104
% Examined	0	69	62	0	0	0	64
No. Marks	0	3	0	0	0	0	3
<u>Winchester Bay</u>							
No. Examined	1	20	48	74	47	NS	190
No. Landed	2	53	115	168	110	0	448
% Examined	50	38	42	44	43	0	42
No. Marks	0	1	2	4	2	0	9
<u>Coos Bay</u>							
No. Examined	2	27	41	38	16	NS	124
No. Landed	5	58	106	82	38	0	289
% Examined	40	47	39	46	42	0	43
No. Marks	0	0	4	3	1	0	8
<u>Brookings</u>							
No. Examined	249	894	114	789	215	454	2,715
No. Landed	549	2,719	314	2,776	558	1,281	8,197
% Examined	45	33	36	28	39	35	33
No. Marks	11	32	6	17	8	24	98
<u>Total</u>							
No. Examined	293	990	254	1,148	474	725	3,884
No. Landed	712	2,908	645	3,491	1,459	2,014	11,210
% Examined	41	34	40	33	33	36	35
No. Marks	16	36	14	33	16	40	155

Table 16. Coho coded-wire tag sampling data from the ocean recreational fishery, by port and month, 1996.  
 NS = no sampling.

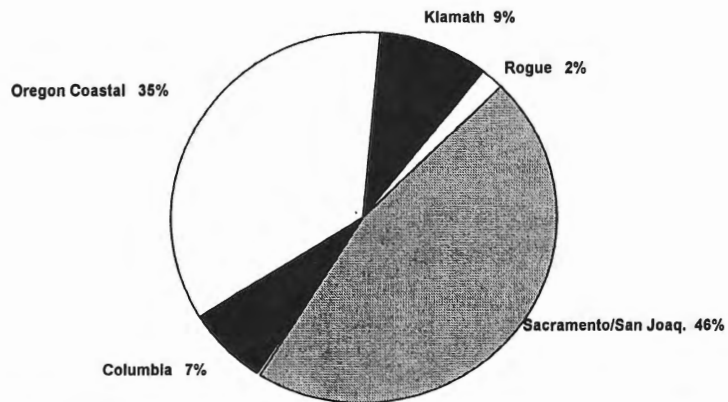
Port	May	June	July	Aug.	Sept.	Oct.	Total
<u>Astoria</u>							
No. Examined	NS	NS	574	1,645	324	NS	2,543
No. Landed	-	-	1,418	4,520	877	-	6,815
% Examined	-	-	40	36	37	-	37
No. Marks	-	-	25	62	20	-	107
<u>Garibaldi</u>							
No. Examined	0	0	7	86	26	1	120
No. Landed	0	0	11	152	63	1	227
% Examined	0	0	64	57	41	100	53
No. Marks	0	0	0	0	4	0	4
<u>Pacific City</u>							
No. Examined	0	0	0	0	NS	NS	0
No. Landed	0	0	0	0	0	-	0
% Examined	0	0	0	0	0	-	0
No. Marks	0	0	0	0	0	-	0
<u>Depoe Bay</u>							
No. Examined	0	0	0	0	0	NS	0
No. Landed	0	0	0	0	0	-	0
% Examined	0	0	0	0	0	-	0
No. Marks	0	0	0	0	0	-	0
<u>Newport</u>							
No. Examined	0	0	0	3	0	NS	3
No. Landed	0	0	0	11	0	-	11
% Examined	0	0	0	27	0	-	27
No. Marks	0	0	0	0	0	-	0
<u>Florence</u>							
No. Examined	0	0	0	NS	NS	NS	0
No. Landed	0	0	0	0	0	-	0
% Examined	0	0	0	0	0	-	0
No. Marks	0	0	0	0	0	-	0
<u>Winchester Bay</u>							
No. Examined	0	0	0	4	1	NS	5
No. Landed	0	0	0	10	1	-	11
% Examined	0	0	0	40	100	-	45
No. Marks	0	0	0	1	1	-	2
<u>Coos Bay</u>							
No. Examined	0	0	0	2	1	NS	3
No. Landed	0	0	0	4	2	-	6
% Examined	0	0	0	50	50	-	50
No. Marks	0	0	0	0	0	-	0
<u>Brookings</u>							
No. Examined	0	3	11	8	9	4	35
No. Landed	0	10	34	26	25	11	106
% Examined	0	30	32	31	36	36	33
No. Marks	0	1	0	1	1	1	4
<u>Total</u>							
No. Examined	0	3	592	1,748	361	5	2,709
No. Landed	0	10	1,463	4,723	968	12	7,176
% Examined	0	30	40	37	37	42	38
No. Marks	0	1	25	65	25	1	117

# Chinook

## RELEASE AGENCY

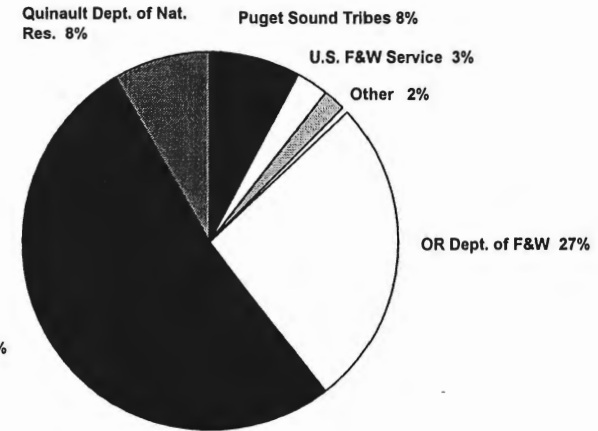


## BASIN OF RELEASE



# Coho

## RELEASE AGENCY



## BASIN OF RELEASE

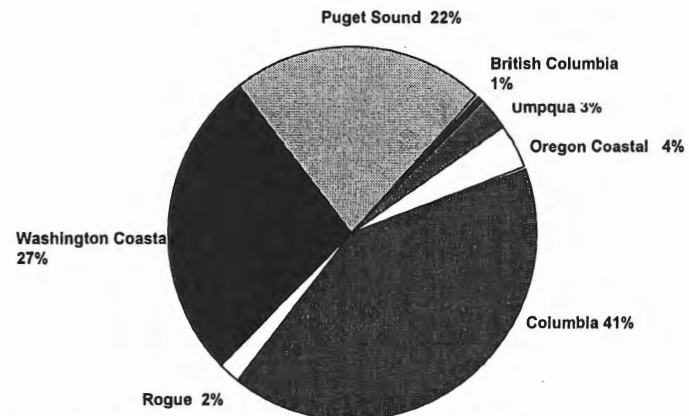


Figure 17. Recoveries of chinook (N=129) and coho (N=106) coded wire tags, by release agency and by basin of release from Oregon's ocean recreational catch, 1996. Note: Does not represent stock contribution rates since tagging is not representative of all stocks.



## SPECIAL FISHERIES AND STUDIES

### Columbia River Buoy 10 Estuary Fishery

The Columbia River estuary 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 17. Buoy 10 Columbia River estuary season. Total salmon angler trips and catch, 1996, and totals for 1982-95, Oregon and Washington combined data.

Year	Angler Trips	Catch		Salmon/ Angler	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	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	25,186	853	5,026	0.23	0.03	0.20
1996 Total	18,034	1,409	4,537	0.33	0.08	0.25
OR Boat	6,301	478	1,427	0.30	0.08	0.23
OR Bank	2,285	0	532	0.23	0	0.23
WA Boat	9,449	931	2,578	0.37	0.10	0.27

### 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 August 16 through October 31, 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 3,255 angler trips were taken in the 1996 Tillamook state waters fishery (Table 18). Effort dropped off substantially in mid-October due to rough weather, but picked up again during the last week of October.

Table 18. Summary of Oregon ocean recreational terminal ocean fisheries by boat type, 1996.

**Tillamook: Terminal Recreational Ocean Chinook Fishery**

Statistical Week	CHARTER					PRIVATE					TOTAL				
	Angler Trips	Landed		Released		Angler Trips	Landed		Released		Angler Trips	Landed		Released	
		Chin.	Coho	Chin.	Coho		Chin.	Coho	Chin.	Coho		Chin.	Coho	Chin.	Coho
40	143	59	0	0	0	1,145	273	0	2	19	1,288	332	0	2	19
41	246	54	0	0	15	1,313	231	0	0	9	1,559	285	0	0	24
42	81	4	0	0	0	46	4	0	0	0	127	8	0	0	0
43	24	3	0	0	0	71	18	1	0	1	95	21	1	0	1
44	52	36	0	0	0	134	51	0	0	0	186	87	0	0	0
Totals	546	156	0	0	15	2,709	577	1	2	29	3,255	733	1	2	34

**Brookings: Chetco River Area Terminal Recreational Ocean Chinook Fishery**

Statistical Week	CHARTER					PRIVATE					TOTAL				
	Angler Trips	Landed		Released		Angler Trips	Landed		Released		Angler Trips	Landed		Released	
		Chin.	Coho	Chin.	Coho		Chin.	Coho	Chin.	Coho		Chin.	Coho	Chin.	Coho
40	13	11	0	0	2	1,161	684	8	45	121	1,174	695	8	45	123
41	78	12	0	3	8	3,030	574	3	147	206	3,108	586	3	150	214
Totals	91	23	0	3	10	4,191	1,258	11	192	327	4,282	1,281	11	195	337

**Summary: All Oregon Terminal Ocean Recreational Fisheries**

Terminal Fisheries	CHARTER					PRIVATE					TOTAL				
	Angler Trips	Landed		Released		Angler Trips	Landed		Released		Angler Trips	Landed		Released	
		Chin.	Coho	Chin.	Coho		Chin.	Coho	Chin.	Coho		Chin.	Coho	Chin.	Coho
Tillamook	546	156	0	0	15	2,709	577	1	2	29	3,255	733	1	2	34
Chetco	91	23	0	3	10	4,191	1,258	11	192	327	4,282	1,281	11	195	337
Totals	637	179	0	3	25	6,900	1,835	12	194	356	7,537	2,014	12	197	371

Anglers landed a total of 733 chinook in the Tillamook bubble, with 617 chinook (84%) caught in the first two weeks of October. One illegal coho was landed by anglers fishing the bubble, and another 34 coho were reported released by anglers (Table 18). Angler success averaged 0.23 chinook per angler, as compared to the 0.15 chinook per angler average from the bay fishery (Table 19).

Fourteen readable CWTs were recovered from the sixteen fin-clipped chinook observed in this season, all from Oregon stocks. Eleven tags were from local Trask River releases, two were from Salmon River, and one was from the Nestucca River.

**Tillamook Bay Fall Creel**

Beginning in 1994, the OSMP has conducted an intensive statistical creel survey in Tillamook Bay. The fall creel project began on September 2 and continued through the end of October. 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 18). The creel is designed to estimate the amount of angling effort, salmon

Table 19. Tillamook Bay recreational fishery creel 1996; effort and catch estimates by statistical week and by zone.<sup>a</sup>

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
36 Sept. 2-8	164	326	35	0	2	0	0.11	0
37 Sept. 9-15	265	573	69	1	1	4	0.12	0.07
38 Sept. 16-22	838	1,956	333	4	0	22	0.17	0.08
39 Sept. 23-29	626	1,472	147	0	0	20	0.10	0.14
40 Sept. 30-Oct. 6	805	1,939	245	0	7	23	0.13	0.09
41 Oct. 7-13	855	2,127	159	0	6	12	0.07	0.07
42 Oct. 14-20	426	998	86	0	0	6	0.09	0.07
43 Oct. 21-27	412	1,079	230	0	0	12	0.21	0.05
44 Oct. 28-Nov. 3	256	536	161	0	1	1	0.30	0.01
<b>Totals</b>	<b>4,647</b>	<b>11,006</b>	<b>1,465</b>	<b>5</b>	<b>17</b>	<b>100</b>	<b>0.13</b>	<b>0.07</b>

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
36 Sept. 2-8	52	97	4	0	0	0	0.04	0.00
37 Sept. 9-15	132	307	43	0	0	9	0.14	0.21
38 Sept. 16-22	292	640	55	0	0	8	0.09	0.15
39 Sept. 23-29	406	940	125	0	0	0	0.13	0.00
40 Sept. 30-Oct. 6	677	1,572	123	0	0	0	0.08	0.00
41 Oct. 7-13	817	2,005	145	0	0	2	0.07	0.01
42 Oct. 14-20	781	1,919	306	0	0	12	0.16	0.04
43 Oct. 21-27	708	1,766	361	0	0	3	0.20	0.01
44 Oct. 28-Nov. 3	347	680	194	0	0	5	0.29	0.03
<b>Totals</b>	<b>4,212</b>	<b>9,926</b>	<b>1,356</b>	<b>0</b>	<b>0</b>	<b>39</b>	<b>0.14</b>	<b>0.03</b>

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
36 Sept. 2-8	40	84	4	1	1	1	0.05	0.40
37 Sept. 9-15	72	159	26	0	1	3	0.16	0.11
38 Sept. 16-22	294	725	132	3	2	5	0.18	0.06
39 Sept. 23-29	701	1,726	480	0	4	38	0.28	0.08
40 Sept. 30-Oct. 6	597	1,522	261	5	10	10	0.17	0.06
41 Oct. 7-13	797	2,144	353	2	32	4	0.16	0.02
42 Oct. 14-20	285	788	68	1	1	1	0.09	0.03
43 Oct. 21-27	96	231	23	0	0	0	0.10	0.00
44 Oct. 28-Nov. 3	59	118	6	0	0	0	0.05	0.00
<b>Totals</b>	<b>2,941</b>	<b>7,497</b>	<b>1,353</b>	<b>12</b>	<b>51</b>	<b>62</b>	<b>0.18</b>	<b>0.05</b>

All Areas Combined

Statistical Week	Boat Trips	Angler Trips	Landed Chinook	Landed Coho	Released Chinook	Released Coho	Chinook/Angler	Coho/Chinook
36 Sept. 2-8	256	507	43	1	3	1	0.08	0.04
37 Sept. 9-15	469	1,039	138	1	2	16	0.13	0.12
38 Sept. 16-22	1,424	3,321	520	7	2	35	0.16	0.08
39 Sept. 23-29	1,733	4,138	752	0	4	58	0.18	0.08
40 Sept. 30-Oct. 6	2,079	5,033	629	5	17	33	0.12	0.06
41 Oct. 7-13	2,469	6,276	657	2	38	18	0.10	0.03
42 Oct. 14-20	1,492	3,705	460	1	1	19	0.12	0.04
43 Oct. 21-27	1,216	3,076	614	0	0	15	0.20	0.02
44 Oct. 28-Nov. 3	662	1,334	361	0	1	6	0.27	0.02
<b>Totals</b>	<b>11,800</b>	<b>28,429</b>	<b>4,174</b>	<b>17</b>	<b>68</b>	<b>201</b>	<b>0.15</b>	<b>0.05</b>

<sup>a</sup> Refer to Figure 18 for fishery zone designations.

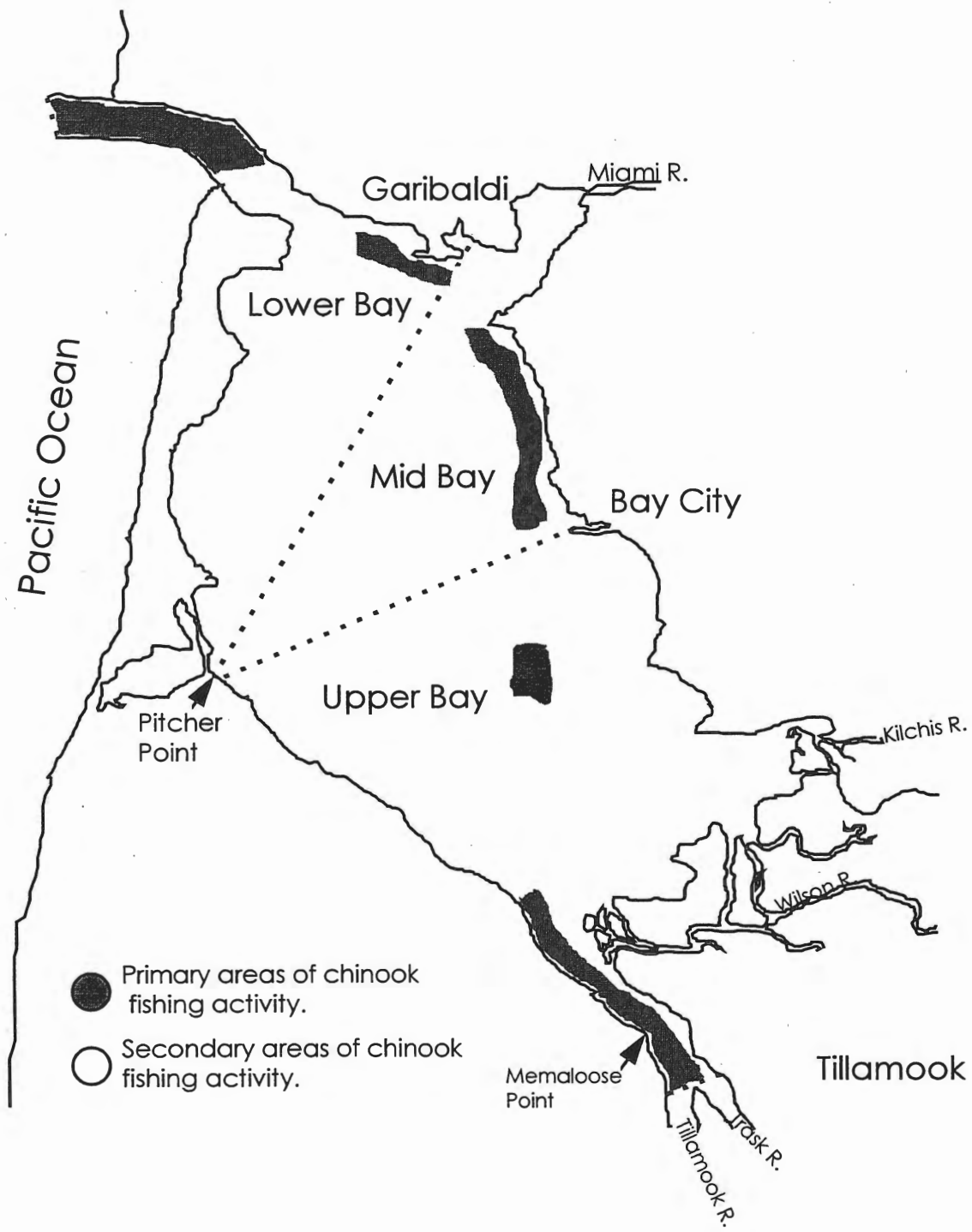


Figure 18. Tillamook Bay, Oregon showing the boundaries for the bay zones used in the 1996 recreational creel survey, and areas of primary and secondary fishing activity.

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 (Figure 18).

Boat counts were made for each area at two hour intervals, stratified by weekday and weekend categories, and Area Under the Curve (AUC) methodology was used to calculate boat hours by area each week. Boat hours were then converted to boat trips by dividing the boat hours for each area by the average hours fished per boat in those areas. The 1996 effort totaled 28,429 angler trips. Effort was split relatively evenly throughout the three areas, although the lower bay zone did have the highest level of effort and accounted for 39% of the angler trips. Effort peaked during the first two weeks of October (Table 19).

Catches in the bay totaled 4,174 chinook and 17 coho (illegal). An additional 68 chinook and 201 coho were reported released by anglers. The lower bay accounted for 35% of the chinook catch but had the lowest average catch rate at 0.13 chinook per angler trip. The mid bay area accounted for 32% of the chinook catch with a catch rate of 0.14 chinook per angler 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 angling regulations have been adopted to lower harvest related impacts. In addition to wild OCN coho returning to the Tillamook system. The Trask River 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 and upper bay areas at an average of 0.010 coho per angler, and lowest in the mid bay area with 0.004 coho per angler.

### **October-November Fishery off Port Orford**

We did not sample the recreational portion of this fishery in 1996 but concentrated on the commercial landings. The sport catch in this fishery has been nonexistent or minimal (<50 fish) in all years.

### **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. 5 through Oct. 13. Effort for this fishery totaled 4,282 angler trips (Table 18). Private boats made up 98% of the total effort for this fishery. The chinook catch totaled 1,281 fish. Angler success averaged 0.30 chinook per angler. Eleven coho were illegally kept while 337 were released. An average

ratio of 0.08 coho per angler was observed during the season. Twenty readable chinook CWT's were recovered in this fishery. These tags were from the Chetco River (9), Hunter Creek (4), Pistol River (4), Winchuck River (1), Klamath River (1), and Elk River (1). One coho illegally retained was adipose clipped in this fishery and it was a Rogue River release.

### **ACKNOWLEDGMENTS**

Almost everyone in the Ocean Salmon Management Program at one time or another provided assistance to the ocean sampling program. However, we especially appreciate the help of sampling coordinators Cheryl Roosendaal and Erick Van Dyke and all seasonal samplers. Special recognition is due the Data Management Project Leader Phil Flanders, Administrative Specialist Donna Lamb, and Justine Benson for their help in processing the data, training, and general assistance throughout the year.

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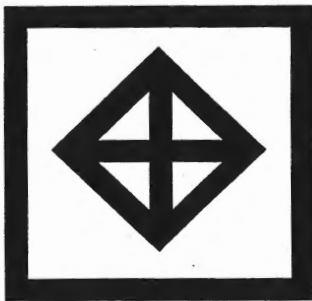
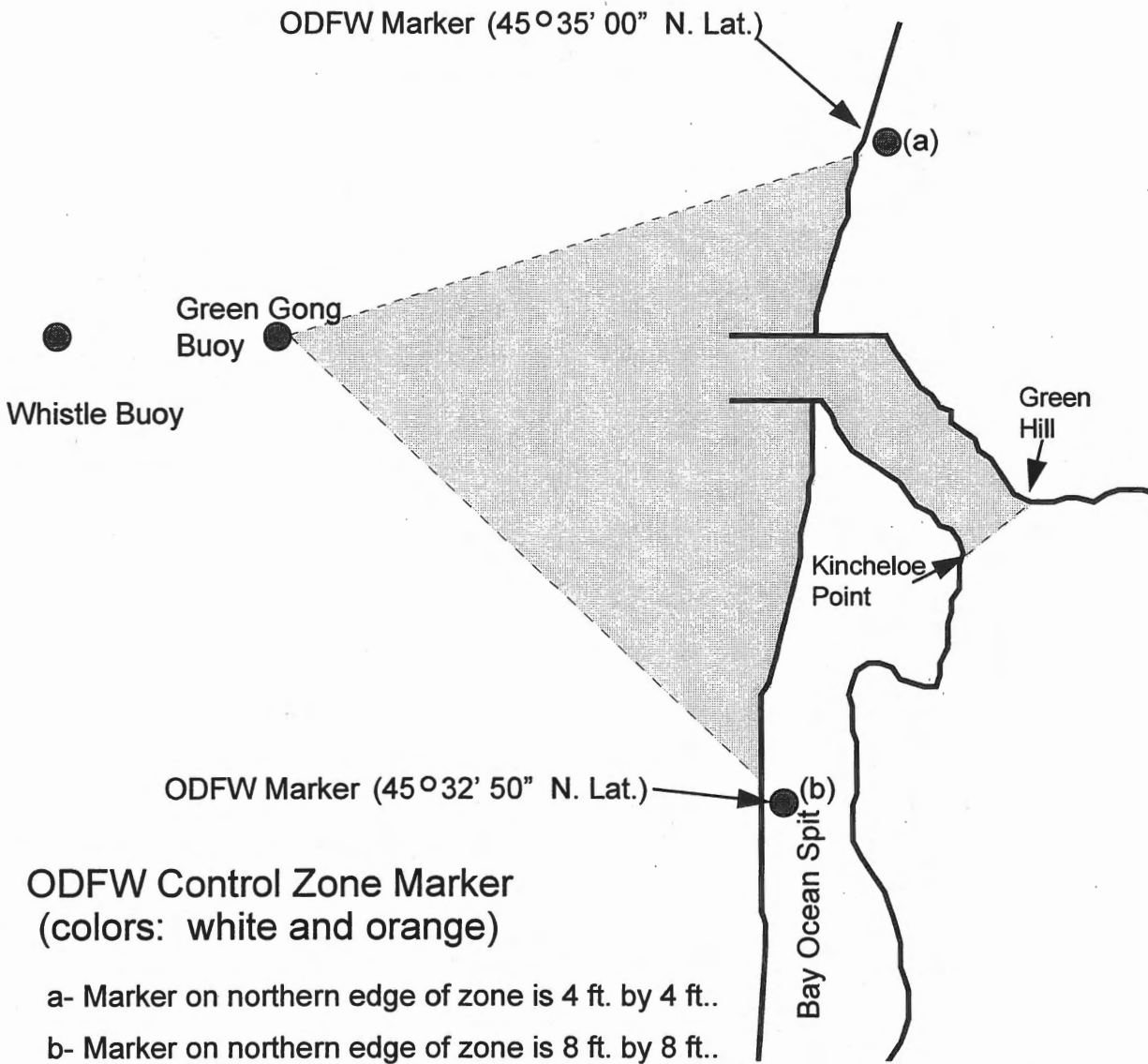
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## APPENDIX





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

Appendix Table 1. Seasonal field sampling personnel hired by the ODFW Ocean Salmon Management Program, 1996.

Port	Troll		Recreational	
	Sampler	Dates	Sampler	Dates
Astoria			Jessica Townsend Adrienne Hunter <sup>1</sup>	July 23 - Sept. 2 Sept. 11 - 26
Garibaldi	Bruce Lambert	Sept. 6 - Oct. 31	Michelle Stevens Lynda Lynch <sup>2</sup> Erica Palmer	June 10 - Oct. 31 May 1 - Oct. 31 Sept. 11 - Oct. 31
Pacific City			Jeffry Johnson Jessica Townsend	May 21 - 25 Jun. 15 - July 22; Aug. 2 - 3
Depoe Bay			Margaret Ledford	May 1 - Sept. 30
Newport	Bret Morgan Martin Marchand	May 1 - Oct. 31 June 1 - Sept. 30	Chris Spaulding Koren Jarvis Justine Benson <sup>3</sup>	May 1 - Sept. 23 May 8 - Sept. 6 May 17 - Sept. 29
Florence			Lynne Larson <sup>2</sup>	May 1 - July 19
Winchester Bay			Ken Koblas <sup>2</sup> Jason Fredrickson <sup>2</sup>	Jun. 17 - Sept. 15 May 1 - Sept. 30
Coos Bay	Peter Cooley	May 1 - Oct. 31	Danette Ehlers	May 1 - Sept. 25
Port Orford	Danette Ehlers <sup>4</sup> Bret Morgan <sup>4</sup>	Oct. 10 - Nov. 30 Nov. 1 - Nov. 30		
Brookings			Darryl Clinton <sup>2</sup> Jeffry Johnson <sup>2</sup> Rod Black <sup>2</sup>	May 1 - 28 May 26 - Oct. 31 May 1 - Oct. 31

North Coast Sampling Coordinator

Cheryl Roosendaal April 15 - Oct. 31

South Coast Sampling Coordinator

Erick Van Dyke May 1 - Sept. 30

<sup>1</sup> Effort counts only.

<sup>2</sup> Combination troll/recreational sampler.

<sup>3</sup> Half time sampler.

<sup>4</sup> On loan from Elk River Fall Chinook Indicator Stock Study.

Appendix Table 2. Ocean troll fishery mark sampling rates by port, year, and species, 1987-96.

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
<b>CHINOOK</b>										
Astoria	75	24	36	25	11	52	2	0	0	0
Gearhart	0	-	27	12	8	0	0	-	-	0
Cannon Beach	0	16	0	0	0	0	0	-	-	0
Nehalem	-	0	-	-	-	-	-	-	-	0
Garibaldi	34	20	10	22	7	39	13	31	30	21
Netarts	-	0	0	0	0	0	-	0	-	0
Pacific City	32	15	19	27	19	2	0	0	0	0
Salmon River	-	-	0	0	-	-	-	0	0	0
Depoe Bay	73	38	0	0	0	0	0	0	0	0
Newport	59	28	21	34	29	32	30	18	31	43
Waldport	-	-	-	0	0	-	-	-	-	0
Florence	67	30	15	30	52	38	9	26	8	9
Winchester Bay	39	29	18	35	15	0	0	0	0	29
Coos Bay	31	24	14	26	21	0	20	26	23	28
Bandon	2	0	0	0	0	0	0	0	0	0
Port Orford	74	59	61	24	0	92	45	61	63	49
Gold Beach	1	10	10	0	0	0	-	100	52	100
Brookings	66	71	62	65	58	0	0	54	46	27
<b>Total</b>	<b>44</b>	<b>30</b>	<b>21</b>	<b>27</b>	<b>24</b>	<b>29</b>	<b>24</b>	<b>23</b>	<b>27</b>	<b>36</b>
<b>COHO</b>										
Astoria	35	6	34	34	24	14	8	-	-	-
Gearhart	0	-	22	8	40	0	0	-	-	-
Cannon Beach	0	0	6	0	2	0	0	-	-	-
Nehalem	-	-	-	-	-	-	-	-	-	-
Garibaldi	35	32	28	25	21	45	0	-	-	-
Netarts	-	0	0	0	0	0	-	-	-	-
Pacific City	44	21	32	32	30	18	0	-	-	-
Salmon River	-	-	0	0	-	-	-	-	-	-
Depoe Bay	80	63	0	0	2	0	-	-	-	-
Newport	57	27	22	41	29	32	0	-	-	-
Waldport	-	-	-	-	0	-	-	-	-	-
Florence	73	28	13	39	47	49	-	-	-	-
Winchester Bay	34	35	16	40	28	0	-	-	-	-
Coos Bay	28	31	16	28	27	0	0	-	-	-
Bandon	3	0	0	0	0	0	-	-	-	-
Port Orford	73	66	70	10	0	-	-	-	-	-
Gold Beach	3	0	-	0	-	-	-	-	-	-
Brookings	41	49	41	44	1	-	-	-	-	-
<b>Total</b>	<b>43</b>	<b>30</b>	<b>22</b>	<b>29</b>	<b>28</b>	<b>30</b>	<b>5</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
<b># Samplers</b>	<b>8</b>	<b>10</b>	<b>14</b>	<b>9<sup>b</sup></b>	<b>8<sup>b</sup></b>	<b>10<sup>a</sup></b>	<b>6<sup>a</sup></b>	<b>4<sup>a</sup></b>	<b>3<sup>b</sup></b>	<b>4<sup>c</sup></b>

<sup>a</sup> Two additional employees sampled the troll fishery on a part-time basis.

<sup>b</sup> Three additional employees sampled the troll fishery on a part-time basis.

<sup>c</sup> Six additional employees sampled the troll fishery on a part time basis.

Appendix Table 3. History of actual Oregon ocean commercial troll fishery regulations, 1948-96.

AREA AND SEASON	SPECIES	SIZE, GEAR, AND OTHER RESTRICTIONS
Prior to 1948	No restrictions	
1948 <u>Oregon Coast</u> 1/1 - 12/31	All except coho	Chin. 27".
7/1 - 11/15	All salmon	Chin. 27".
1949-55 <u>Oregon Coast</u> 3/15 - 10/31	All except coho	Chin. 26".
6/15 - 10/31	All salmon	Chin. 26".
1956-75 <u>Oregon Coast</u> 4/15 - 10/31	All except coho	Chin. 26".
6/15 - 10/31	All salmon	Chin. 26"; coho 15" beginning in 1965.
1974-75 <u>Elk &amp; 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	All except coho	Chin. 28"; until 6/6; then 26".
7/1 - 9/15	All salmon	Chin. 26"; coho, 16".
<u>South of Tillamook Head</u> 5/1 - 6/14	All except coho	Chin. 26"; barbless hooks, except on whole bait or plugs.
6/15 - 10/31	All salmon	Chin. 26"; coho 16".
<u>Elk &amp; Chetco River areas</u> 11/1-30	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> 5/1-31	All except coho	Chin. 28"; barbless hooks, except on whole bait or plugs.
7/1-24; 8/4-31	All salmon	Chin. 28"; coho 16".
<u>South of Cape Falcon</u> 5/1-31	All except coho	Chin. 26"; barbless hooks except on whole bait or plugs.
7/1 - 9/3	All salmon	Chin. 26"; coho 16".
9/4 - 10/31	All except coho	Chin. 26".
<u>Elk &amp; Chetco River areas</u> 11/1-30	All except coho	Chin. 26". State waters only.
1980 <u>North of Cape Falcon</u> 5/1-31	All except coho	Chin. 28"; barbless hooks, except on whole bait or plugs.
7/15 - 9/8	All salmon	Chin. 28"; coho 16".
<u>South of Cape Falcon</u> 5/1-31	All except coho	Chin. 26"; barbless hooks, except on whole bait or plugs.
<u>Cape Falcon to Cape Blanco</u> 6/16-30	All except coho	Chin. 26"; whole bait, or plugs 6" or longer.
<u>South of Cape Falcon</u> 7/15 - 9/8	All salmon	Chin. 26"; coho 16".
9/9 - 10/31	All except coho	Chin. 26".
<u>Elk &amp; Chetco River areas</u> 11/1-30	All except coho	Chin. 26". State waters only.

Appendix Table 3 (cont). History of actual Oregon ocean commercial troll fishery regulations, 1948-96.

AREA AND SEASON	SPECIES	SIZE, GEAR, AND OTHER RESTRICTIONS
1981 <u>North of Cape Falcon</u> 5/1-31	All except coho	Chin. 28", barbless hooks, except on whole bait or plugs.
7/15 - 8/21	All salmon	Chin. 28"; coho 16".
8/22-24	All salmon	Chin. 28"; coho 16". State waters only.
<u>South of Cape Falcon</u> 5/1-31	All except coho	Chin. 26"; barbless hooks, except on whole bait or plugs.
7/1 - 8/21	All salmon	Chin. 26"; coho 16".
8/22-24	All salmon	Chin. 26"; coho 16". State waters only.
<u>C. Falcon to Cape Sebastian</u> 8/22-24	All except coho	Chin. 26"; whole bait, or plugs 5" or larger.
8/25 - 9/8	All except coho	Chin. 26"; whole bait, or plugs 5" or larger. State waters only.
<u>South of Cape Falcon</u> 9/9 - 10/31	All except coho	Chin. 26".
<u>Elk &amp; Chetco River areas</u> 11/1-30	All except coho	Chin. 26". State waters only.
1982 <u>North of Cape Falcon</u> 5/1-31	All except coho	Chin. 28"; barbless hooks, except on whole bait or plugs.
7/1-8	All salmon	Chin. 28"; coho 16".
<u>South of Cape Falcon</u> 5/1-31	All except coho	Chin. 26"; barbless hooks, except on whole bait.
6/1-15	All except coho	Chin. 26"; whole bait, or plugs not less than 5" long.
7/1-12	All salmon	Chin. 26"; coho 16".
7/13 - 9/5	All except coho	Chin. 26"; whole bait, or plugs not less than 5" long.
9/6 - 10/31	All except coho	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 &amp; Chetco River areas</u> 11/1-30	All except coho	Chin. 26". State waters only.
1983 <u>North of Cape Falcon</u> 5/1-31	All except coho	Chin. 28"; barbless hooks, except on plugs not less than 5".
7/1-31	All salmon	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> 5/1-31	All except coho	Chin. 26"; barbless hooks, except on whole bait or plugs (not less than 5").
6/1-15	All except coho	Chin. 26"; whole bait, or plugs not less than 5" long.
9/5 - 10/31	All except coho	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> 7/1-25; 8/1 - 9/4	All salmon	Chin. 26"; coho 16".
<u>Cape Perpetua to Cape Blanco</u> 7/26-31	All except coho	Chin. 26"; whole bait or plugs not less than 5".

Appendix Table 3 (cont). History of actual Oregon ocean commercial troll fishery regulations, 1948-96.

AREA AND SEASON	SPECIES	SIZE, GEAR, AND OTHER RESTRICTIONS	
1983 (cont.)	<u>Heceta Head to Cape Blanco</u> 7/1-25	All	Chin. 26", coho 16".
	8/1 - 9/9	All except coho	Chin. 26"; whole bait, or plugs not less than 5".
	<u>Cape Blanco to OR/CA border</u> 5/16-31	All except coho	Chin. 26"; barbless hooks only, not more than 6 troll lines.
	6/1-15	All except coho	Chin. 26"; whole bait, or plugs not less than 5" long.
	7/1-25	All salmon	Chin. 26", coho 16".
	7/26 - 8/31	All except coho	Chin. 26"; whole bait, or plugs not less than 5" long.
	9/1-15	All except coho	Chin. 26". Open area is 12 x 24 mile rectangle around mouth of Rogue River.
	10/1-31	All except coho	Chin. 26".
	<u>Cape Blanco to Humbug Mtn.</u> 11/1-/30	All except coho	Chin. 26". State waters only.
1984	<u>North of Cape Falcon</u> 5/1-7	All except coho	Chin. 28"; barbless hooks. Columbia River Mouth Conservation Zone closed.
	<u>Columbia River S. Jetty to Cape Falcon</u> 8/4-6	All salmon	Chin. 28"; coho 16"; barbless hooks.
	<u>Cape Falcon to Cape Blanco</u> 5/1 - 6/15; 7/1 - 8/31	All except coho	Chin. 26"; barbless hooks.
	9/1-21	All except coho	Chin. 26"; state waters only. Contravention of fed. regulation.
	<u>Manhattan Beach to Pyramid Rock (Tillamook)</u> 10/1-31	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> 5/1-14; 5/21-31	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	All except coho	Chin. 26"; barbless hooks, except on whole bait or plugs.
	7/1-26	All salmon	Chin. 26", coho 16"; barbless hooks. One more coho than chinook may be kept, provided at least 1 chinook is kept.
	7/27 - 10/31	All except coho	Chin. 26"; barbless hooks.
	<u>Tower Rock to Cape Blanco</u> 11/1-30	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	All except coho	Chin. 28"; barbless hooks. Columbia River Mouth Conservation Zone closed.
	8/2-3; 8/7-9	All salmon	Chin. 28"; Coho 16". Barbless hooks.



Appendix Table 3 (cont). History of actual Oregon ocean commercial troll fishery regulations, 1948-96.

AREA AND SEASON	SPECIES	SIZE, GEAR, AND OTHER RESTRICTIONS
1986 (cont.)		
<u>Cape Falcon to Cape Perpetua</u> 5/1 - 6/30	All except coho	Chin. 26"; barbless hooks.
7/1-20; 7/23-24	All salmon	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.
7/25 -10/31	All except coho	Chin. 26"; barbless hooks.
<u>Twin Rocks to Pyramid Rock</u> (Tillamook) 11/1-15	All except coho	Chin. 26"; barbless hooks. State waters only.
<u>Cape Perpetua to Cape Blanco</u> 5/1 - 6/30	All except coho	Chin. 26"; barbless hooks.
7/1-20	All salmon	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.
7/23-24	All salmon	Same regulations as in Cape Falcon to Cape Perpetua (for 7/1-24 see above).
7/25 - 10/31	All except coho	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	All salmon	Chin. 26"; Coho 22"; barbless hooks. At least one chinook must be possessed or landed for each 2 coho possessed or landed.
7/25 - 8/26	All except coho	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.
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	All except coho	Chin. 26"; barbless hooks.
7/15-28; 8/1-28	All salmon	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.

Appendix Table 3 (cont). History of actual Oregon ocean commercial troll fishery regulations, 1948-96.

AREA AND SEASON	SPECIES	SIZE, GEAR, AND OTHER RESTRICTIONS
1987 (cont.)		
<u>Cape Perpetua to Cape Blanco</u> 5/1 - 6/30	All except coho	Chin. 26"; barbless hooks.
7/1-28; 8/1-28	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 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.
<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.

Appendix Table 3 (cont). History of actual Oregon ocean commercial troll fishery regulations, 1948-96.

AREA AND SEASON	SPECIES	SIZE, GEAR, AND OTHER RESTRICTIONS
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	All except coho	Chin. 26"; barbless hooks.
7/12-14	All salmon	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> 5/1-14; 5/18-27; 5/31 - 6/2; 6/8-11; 6/14	All except coho	Chin. 28"; barbless hooks. Columbia River Mouth Conservation Zone closed.
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.

Appendix Table 3 (cont). History of actual Oregon ocean commercial troll fishery regulations, 1948-96.

AREA AND SEASON	SPECIES	SIZE, GEAR, AND OTHER RESTRICTIONS
1990 (cont.) <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> 7/4-15	All except coho	Chin. 26"; barbless hooks.
7/16 - 8/31	All	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	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per line.
7/1-14	All	Chin. 26"; coho 16"; barbless hooks.
7/15-23; 8/1 - 10/31	All except coho	Chin. 26"; barbless hooks.
<u>Cascade Head to Florence S. Jetty</u> 5/1 - 6/23	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per line.
6/24 - 7/11	All	Chin. 26"; coho 16"; barbless hooks.
7/12-23; 8/1 - 10/31	All except coho	Chin. 26"; barbless hooks.

Appendix Table 3 (cont). History of actual Oregon ocean commercial troll fishery regulations, 1948-96.

AREA AND SEASON	SPECIES	SIZE, GEAR, AND OTHER RESTRICTIONS
1991 (cont.)	<u>Florence S. Jetty to Cape Arago</u> 6/24 - 7/11	All Chin. 26"; coho 16"; barbless hooks.
	7/12-14; Aug. 1-9	All except coho Chin. 26"; barbless hooks.
	<u>Florence S. Jetty to Humbug Mtn.</u> 9/1 - 10/31	All except coho Chin. 26"; barbless hooks.
	<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.

Appendix Table 3 (cont). History of actual Oregon ocean commercial troll fishery regulations, 1948-96.

AREA AND SEASON	SPECIES	SIZE, GEAR, AND OTHER RESTRICTIONS
1993 (cont.)	<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>Cape Falcon to Humbug Mtn</u> 5/1 - 6/30	All except coho Chin. 26"; barbless hooks. No more than 4 spreads per wire.
	<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
	<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).
	<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).
1995	<u>Cape Falcon to Cape Lookout</u> 8/1-31; 10/1-31	All except coho Chin. 26"; barbless hooks. No more than 4 spreads per wire.
	9/1-30	All except coho Chin. 26"; barbless hooks. No more than 4 spreads per wire. State waters only (0-3 miles).
	<u>Cape Falcon to Florence South Jetty</u> 8/1 - 10/31	All except coho Chin. 26"; barbless hooks. No more than 4 spreads per wire. Closed in Control Zone 2 ( mouth of Tillamook Bay in August and September). Open only (0-3 miles) north of Cape Lookout in September.
	<u>Florence South Jetty to Cape Arago</u> 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.

Appendix Table 3 (cont). History of actual Oregon ocean commercial troll fishery regulations, 1948-96.

AREA AND SEASON	SPECIES	SIZE, GEAR, AND OTHER RESTRICTIONS
1995 (cont.) <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).
<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.
<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" N. Lat.</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.
1996 <u>Cape Falcon to Cape Arago</u> 5/1 - 6/30; 8/7 - 10/31	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire. Closed at the mouth of Tillamook Bay June 1 to September 15.
<u>Cape Arago to the OR/CA border</u> 5/1-4; 5/8-11; 5/15 - 6/4	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire.
<u>Cape Arago to Humbug Mtn.</u> 8/7-31 and 9/1 - 10/31	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire.
<u>Cape Blanco to Humbug Mtn.</u> 11/1-30	Chin. only	Chin. 26", barbless hooks. No more than 4 spreads per wire. State waters only (0-3 miles). Landings restricted to Port Orford.
<u>Sisters Rock to Mack Arch</u> 8/3-4; 8/7-8; 8/11-12; 8/15-31	All except coho	Chin. 26"; barbless hooks. No more than 4 spreads per wire. Open from 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. Season to follow a 2 day open/2 day closed cycle. Closed within 1 mile of the Rogue River Mouth.
<u>Goat Island to 42° 01' 20' N. Lat.</u> 10/14-31	Chin. only	Chin. 26"; barbless hooks. No more than 4 soreads per wire. State waters only (0-3 miles). Salmon must be delivered into Brookings. Single day landing limit of 20 chinook.

Appendix Table 4. Oregon commercial troll landings of chinook and coho salmon (numbers of fish) by month and by year, 1979-96.

**Columbia River Catch Area (2)**

CHINOOK									COHO								
Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals	Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	800	<50	1,800	3,000	200	0	<50	5,800	1979	0	<50	31,300	12,300	1,000	0	0	44,600
1980	3,000	<50	900	900	100	<50	0	4,900	1980	0	0	15,000	10,100	600	0	0	25,600
1981	6,600	0	1,000	500	0	<50	0	8,100	1981	0	0	32,600	13,200	0	0	0	45,800
1982	6,500	0	1,200	0	0	0	0	7,700	1982	0	0	23,800	0	0	0	0	23,800
1983	3,700	700	200	0	100	0	0	4,700	1983	0	0	100	2,600	2,300	0	0	5,000
1984	1,000	0	<50	300	0	0	0	1,300	1984	0	0	0	13,600	0	0	0	13,600
1985	4,400	0	0	500	0	<50	0	4,900	1985	0	0	0	18,200	0	0	0	18,200
1986	4,500	100	0	1,600	0	0	0	6,200	1986	0	0	<50	46,100	0	0	0	46,100
1987	2,300	0	2,200	0	0	0	0	4,500	1987	0	0	7,400	0	0	0	0	7,400
1988	1,000	0	0	0	0	0	0	1,000	1988	0	0	0	0	0	0	0	0
1989	700	400	0	1,000	800	0	0	2,900	1989	0	0	0	11,200	9,900	0	0	21,100
1990	500	100	0	500	1,100	100	0	2,300	1990	0	0	0	4,400	6,200	300	0	10,900
1991	300	<50	0	400	100	0	0	800	1991	0	0	0	16,600	10,100	0	0	26,700
1992	400	900	100	100	0	0	0	1,500	1992	0	0	600	800	0	0	0	1,400
1993	300	<50	<50	<50	100	0	0	400	1993	0	0	200	600	800	0	0	1,600
1994	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	1995	0	0	0	0	0	0	0	0
1996	0	0	0	0	0	0	0	0	1996	0	0	0	0	0	0	0	0

**Tillamook Catch Area (3)**

CHINOOK									COHO								
Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals	Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	100	200	1,100	2,200	<50	200	<50	3,900	1979	0	300	52,200	23,600	<50	0	0	76,100
1980	900	500	1,400	3,800	500	100	0	7,300	1980	0	0	36,400	41,000	1,400	0	0	78,800
1981	4,100	200	5,300	2,400	200	200	0	12,400	1981	0	0	117,100	42,000	0	0	0	159,100
1982	2,900	700	3,000	800	400	200	0	8,000	1982	0	0	113,600	0	0	0	0	113,600
1983	400	300	1,500	1,200	300	500	0	4,200	1983	0	0	43,200	18,800	1,200	0	0	63,200
1984	300	100	200	1,100	100	100	0	1,900	1984	0	0	0	0	0	0	0	0
1985	<50	200	1,700	800	400	100	<50	3,200	1985	0	0	1,500	<50	0	0	0	1,500
1986	200	100	2,700	3,100	6,500	1,500	<50	14,100	1986	0	0	96,700	0	0	0	0	96,700
1987	1,800	1,800	15,100	12,800	7,400	2,600	0	41,500	1987	0	0	46,400	23,100	5,300	0	0	74,800
1988	900	6,100	9,100	9,100	4,400	3,100	0	32,700	1988	0	0	124,200	48,100	0	0	0	172,300
1989	5,800	7,700	6,900	3,700	4,900	1,600	0	30,600	1989	0	0	118,500	17,800	0	0	0	136,300
1990	400	600	5,700	2,700	1,800	1,200	0	12,400	1990	0	0	25,700	27,500	<50	0	0	53,200
1991	200	200	3,100	2,000	2,200	1,800	0	9,500	1991	0	0	90,200	0	0	0	0	90,200
1992	400	0	300	2,500	1,900	2,200	0	7,300	1992	0	0	500	7,300	<50	<50	0	7,800
1993	500	200	800	600	2,600	1,600	0	6,300	1993	0	0	0	0	0	0	0	0
1994	100	300	0	0	0	1,300	<50	1,700	1994	0	0	0	0	0	0	0	0
1995	400	800	0	6,600	1,100	700	<50	9,700	1995	0	0	0	0	0	0	0	0
1996	400	7,900	1,000	1,000	2,200	700	0	13,100	1996	0	0	0	0	0	0	0	0

Appendix Table 4 (cont.). Oregon commercial troll landings of chinook and coho salmon (numbers of fish) by month and by year, 1979-96.



**Newport Catch Area (4)**

CHINOOK								COHO									
Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals	Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	4,500	<50	11,400	14,700	4,700	3,000	<50	38,400	1979	0	<50	129,600	64,100	500	0	0	194,250
1980	9,200	8,700	8,300	12,100	3,100	6,000	0	47,400	1980	0	0	87,000	45,100	5,300	0	0	137,400
1981	9,300	300	9,900	7,200	300	400	0	27,400	1981	0	0	74,200	119,200	0	0	0	193,400
1982	5,500	4,500	10,800	1,600	2,300	3,300	0	28,000	1982	0	0	116,100	0	0	0	0	116,100
1983	2,000	900	10,700	6,300	1,100	2,300	100	23,400	1983	0	0	99,100	15,500	2,900	0	0	117,500
1984	100	1,500	11,300	5,900	100	0	0	18,900	1984	0	0	0	0	0	0	0	0
1985	13,700	4,900	15,700	5,500	1,000	1,000	0	41,800	1985	<50	0	11,900	0	0	0	0	11,900
1986	10,200	13,000	29,800	5,500	7,000	22,400	0	87,900	1986	0	0	<50	192,300	0	0	0	192,300
1987	10,500	7,700	23,800	24,200	14,300	7,000	<50	87,500	1987	0	0	59,200	19,000	4,900	0	0	83,100
1988	8,500	18,800	42,900	34,100	8,400	16,200	0	128,900	1988	0	0	146,300	106,200	0	0	0	252,500
1989	18,700	12,800	20,900	9,200	3,600	5,100	300	70,600	1989	0	0	130,000	7,700	0	0	0	137,700
1990	2,500	16,600	15,100	3,700	700	800	0	39,400	1990	0	100	13,700	<50	0	0	0	13,800
1991	2,900	7,400	2,900	6,300	7,700	6,300	0	33,500	1991	0	58,300	30,400	0	0	0	0	88,700
1992	19,000	600	23,700	26,700	10,100	14,600	0	94,700	1992	0	0	14,000	21,000	0	0	0	35,000
1993	17,100	13,600	11,900	9,400	8,600	3,500	0	64,100	1993	0	0	0	<50	0	0	0	<50
1994	7,200	7,000	100	0	900	2,900	<50	18,100	1994	0	0	0	0	0	0	0	0
1995	8,600	27,800	0	79,300	33,300	23,400	1,600	174,000	1995	0	0	0	0	0	0	0	0
1996	18,200	23,800	1,300	51,500	22,400	9,500	1,300	127,900	1996	0	0	0	0	0	0	0	0

**Coos Bay Catch Area (5)**

CHINOOK								COHO									
Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals	Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	3,300	300	20,600	37,400	3,500	6,600	200	71,900	1979	0	6,500	214,200	45,300	<50	0	0	266,000
1980	2,100	16,200	27,300	18,200	6,800	6,300	<50	76,800	1980	0	0	76,500	24,200	4,600	0	0	105,300
1981	2,400	100	8,700	10,700	1,200	1,200	<50	24,300	1981	0	0	96,600	62,000	0	0	0	158,600
1982	4,700	5,800	75,000	16,900	5,700	1,000	<50	109,100	1982	0	0	229,000	0	0	0	0	229,000
1983	1,700	3,800	12,700	1,400	300	200	0	20,100	1983	0	0	108,700	<50	<50	0	0	108,700
1984	100	900	4,400	9,400	600	0	0	15,400	1984	0	0	0	0	0	0	0	0
1985	14,500	15,100	40,100	56,700	19,700	2,500	<50	148,600	1985	0	0	29,400	0	0	0	0	29,400
1986	17,700	22,600	92,100	85,400	21,000	1,300	<50	240,100	1986	0	<50	86,200	0	0	0	0	86,200
1987	17,800	17,700	221,000	50,500	39,000	4,400	0	350,400	1987	0	<50	145,700	21,700	9,600	0	0	177,000
1988	43,000	51,600	46,400	89,600	13,700	24,300	<50	268,600	1988	0	<50	117,100	79,300	0	0	0	196,400
1989	70,300	39,800	43,400	57,400	9,400	9,300	2,700	232,300	1989	0	0	126,300	33,300	0	0	0	159,600
1990	11,800	15,800	85,000	55,700	5,400	2,100	<50	175,800	1990	0	<50	43,100	300	0	0	0	43,400
1991	100	5,100	5,300	7,400	9,200	3,400	0	30,500	1991	0	32,800	68,200	<50	0	0	0	101,000
1992	600	100	2,300	2,400	300	600	0	6,300	1992	0	0	0	0	0	0	0	0
1993	2,700	900	200	400	4,400	1,300	700	10,600	1993	0	0	0	0	0	<50	0	<50
1994	400	1,500	<50	0	200	1,500	400	4,000	1994	0	0	0	0	0	0	0	0
1995	1,600	7,200	0	12,000	4,100	1,600	300	26,800	1995	0	0	0	0	0	0	0	0
1996	1,400	10,000	1,000	6,000	4,600	1,700	900	25,600	1996	0	<50	0	0	0	0	0	<50

Appendix Table 4 (cont.). Oregon commercial troll landings of chinook and coho salmon (numbers of fish) by month and by year, 1979-96.

### Brookings Catch Area (6)

CHINOOK									COHO								
Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals	Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	200	1,300	35,800	61,100	5,500	15,200	2,400	121,500	1979	0	1,900	84,200	12,300	<50	0	0	98,400
1980	6,900	2,100	11,300	27,500	14,300	3,600	1,000	66,700	1980	0	0	14,500	14,900	3,400	0	0	32,800
1981	4,300	<50	8,700	44,600	13,200	11,300	1,200	83,300	1981	0	0	17,900	35,600	0	0	0	53,500
1982	2,300	500	26,500	31,800	3,200	2,900	1,400	68,600	1982	0	0	20,400	0	0	0	0	20,400
1983	1,600	8,200	8,900	1,300	200	1,800	700	22,700	1983	0	0	24,000	0	0	0	0	24,000
1984	900	<50	4,100	17,700	<50	1,100	700	24,500	1984	0	0	0	0	0	0	0	0
1985	300	100	1,800	6,900	3,300	700	1,000	14,100	1985	0	0	1,000	0	0	0	0	1,000
1986	3,500	16,900	9,400	22,100	0	900	800	53,600	1986	0	12,100	7,100	0	0	0	0	19,200
1987	8,800	28,000	0	0	0	1,100	1,900	39,800	1987	0	4,100	0	0	0	0	0	4,100
1988	8,200	20,700	0	0	100	900	1,700	31,600	1988	0	1,300	0	0	0	0	0	1,300
1989	4,600	1,900	0	3,900	6,400	<50	200	17,000	1989	0	1,000	0	0	0	0	0	1,000
1990	100	0	0	2,100	100	0	0	2,300	1990	0	0	0	0	0	0	0	0
1991	0	0	0	0	200	0	0	200	1991	0	0	0	0	0	0	0	0
1992	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	1993	0	0	0	0	0	0	0	0
1994	200	0	0	200	0	1,000	0	1,400	1994	0	0	0	0	0	0	0	0
1995	200	100	1,700	0	0	1,500	<50	3,500	1995	0	0	0	0	0	0	0	0
1996	1,500	3,700	0	2,600	0	800	<50	8,500	1996	0	0	0	0	0	0	0	0

### Washington Catch Area (1)

CHINOOK									COHO								
Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals	Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	1,900	0	400	1,700	0	0	0	4,000	1979	0	6,300	11,500	0	0	0	0	17,800
1980	3,100	300	300	1,200	<50	0	0	4,900	1980	0	0	5,000	5,800	500	0	0	11,300
1981	100	0	700	100	0	0	0	900	1981	0	0	11,000	600	0	0	0	11,600
1982	2,200	400	3,800	<50	0	<50	0	6,400	1982	0	0	13,900	100	0	0	0	14,000
1983	1,700	200	<50	200	0	0	0	2,100	1983	0	0	<50	<50	0	0	0	0
1984	2,000	0	0	<50	0	0	0	2,000	1984	0	0	0	100	0	0	0	100
1985	1,600	<50	2,000	<50	0	0	0	3,600	1985	0	0	22,100	0	0	0	0	22,100
1986	400	0	0	<50	0	0	0	400	1986	0	0	0	0	0	0	0	0
1987	2,100	0	1,600	0	0	0	0	3,700	1987	0	0	7,500	0	0	0	0	7,500
1988	900	500	0	0	0	0	0	1,400	1988	0	0	0	0	0	0	0	0
1989	200	0	0	0	0	0	0	200	1989	0	0	0	0	0	0	0	0
1990	300	0	0	<50	0	0	0	300	1990	0	0	0	900	0	0	0	900
1991	<50	<50	0	<50	<50	0	0	<50	1991	0	0	0	<50	300	0	0	300
1992	100	700	0	<50	0	0	0	800	1992	0	0	0	100	0	0	0	100
1993	0	0	0	0	0	0	0	0	1993	0	0	<50	0	0	0	0	<50
1994	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	1995	0	0	0	0	0	0	0	0
1996	0	0	0	0	0	0	0	0	1996	0	0	0	0	0	0	0	0

Appendix Table 4 (cont.). Oregon commercial troll landings of chinook and coho salmon (numbers of fish) by month and by year, 1979-96.

### California Catch Area (7)

#### CHINOOK

#### COHO

Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals	Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	100	100	100	400	0	0	0	700	1979	0	100	100	100	0	0	0	400
1980	800	0	100	<50	0	<50	0	800	1980	0	0	<50	<50	0	0	0	100
1981	800	200	500	700	2,000	0	0	4,200	1981	0	0	300	200	0	0	0	500
1982	600	700	1,100	900	400	0	0	3,700	1982	0	<50	1,400	0	0	0	0	1,400
1983	<50	200	200	1,600	<50	0	0	2,000	1983	0	<50	100	1,100	0	0	0	1,200
1984	<50	<50	200	100	0	0	0	300	1984	0	0	0	0	0	0	0	0
1985	<50	<50	100	500	<50	0	0	600	1985	0	0	<50	0	0	0	0	<50
1986	0	0	<50	400	<50	0	0	400	1986	0	0	0	0	0	0	0	0
1987	0	1,300	500	0	<50	0	0	1,800	1987	0	300	100	0	<50	0	0	400
1988	100	1,900	1,500	1,100	<50	0	0	4,600	1988	0	300	300	200	0	0	0	800
1989	<50	<50	<50	<50	<50	0	0	<50	1989	0	<50	<50	0	0	0	0	<50
1990	<50	0	<50	0	0	0	0	<50	1990	0	0	<50	0	0	0	0	<50
1991	0	<50	0	<50	100	0	0	100	1991	0	0	0	0	100	0	0	100
1992	0	0	0	0	0	0	0	0	1992	0	0	0	0	0	0	0	0
1993	0	<50	0	0	<50	0	0	<50	1993	0	0	0	0	0	0	0	0
1994	0	0	100	<50	0	0	0	100	1994	0	0	0	0	0	0	0	0
1995	0	700	100	0	0	0	0	800	1995	0	0	0	0	0	0	0	0
1996	0	0	0	600	1,400	0	0	2,000	1996	0	0	0	0	0	0	0	0

### Alaska Catch Area (8)

#### CHINOOK

#### COHO

Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals	Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	0	0	0	0	0	0	0	0	1979	0	0	0	0	0	0	0	0
1980	0	0	0	0	200	0	0	200	1980	0	0	0	0	1,700	0	0	1,700
1981	0	0	0	0	0	0	0	0	1981	0	0	0	0	0	0	0	0
1982	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	1983	0	0	0	0	0	0	0	0
1984	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	1985	0	0	0	0	0	0	0	0
1986	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	1987	0	0	0	0	0	0	0	0
1988	0	0	500	0	0	0	0	500	1988	0	0	<50	0	0	0	0	<50
1989	0	0	0	0	0	0	0	0	1989	0	0	0	0	0	0	0	0
1990	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	1991	0	0	0	0	0	0	0	0
1992	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	1993	0	0	0	0	0	0	0	0
1994	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	1995	0	0	0	0	0	0	0	0
1996	0	0	0	0	0	0	0	0	1996	0	0	0	0	0	0	0	0

Appendix Table 4 (cont.). Oregon commercial troll landings of chinook and coho salmon (numbers of fish) by month and by year, 1979-96.

**Totals for Oregon Catch Areas**

CHINOOK									COHO								
Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals	Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	9,000	1,800	70,800	118,500	13,900	25,000	2,600	241,500	1979	0	8,700	511,400	157,700	1,600	0	0	679,300
1980	22,100	27,500	49,200	62,400	24,900	16,000	1,000	203,100	1980	0	0	229,400	135,300	15,300	0	0	379,900
1981	26,700	600	33,600	65,400	14,900	13,100	1,200	155,500	1981	0	0	338,400	272,000	0	0	0	610,400
1982	21,900	12,100	116,500	51,100	11,600	7,400	1,400	222,000	1982	0	0	502,900	0	0	0	0	502,900
1983	9,400	13,900	34,000	10,400	2,000	4,800	800	75,300	1983	0	0	275,100	36,900	6,400	0	0	318,400
1984	2,400	2,500	20,000	34,400	800	1,200	700	62,000	1984	0	0	0	13,600	0	0	0	13,600
1985	32,900	20,400	59,300	70,400	24,400	4,300	1,000	212,700	1985	0	0	43,800	18,200	0	0	0	62,000
1986	36,100	52,700	134,000	117,700	34,500	26,100	800	401,900	1986	0	12,100	190,000	238,400	0	0	0	440,500
1987	41,200	55,200	262,100	87,500	60,700	15,100	1,900	523,700	1987	0	4,100	258,700	63,800	19,800	0	0	346,400
1988	61,600	97,800	98,400	132,800	26,600	44,500	1,700	463,400	1988	0	1,300	387,600	233,600	0	0	0	622,500
1989	100,100	62,600	71,200	75,200	25,100	16,000	3,200	353,400	1989	0	1,000	374,800	70,000	9,900	0	0	455,700
1990	15,300	33,100	105,800	64,700	9,100	4,200	0	232,200	1990	0	100	82,500	32,200	6,200	300	0	121,300
1991	3,500	12,700	11,300	16,100	19,400	11,500	0	74,500	1991	0	91,100	188,800	16,600	10,100	0	0	306,600
1992	20,400	1,600	26,400	31,700	12,300	17,400	0	109,800	1992	0	0	15,100	29,100	0	0	0	44,200
1993	20,600	14,700	12,900	10,400	15,700	6,400	700	81,400	1993	0	0	200	600	800	0	0	1,600
1994	7,900	8,800	100	200	1,100	6,700	400	25,200	1994	0	0	0	0	0	0	0	0
1995	10,800	35,900	1,700	97,900	38,500	27,200	1,900	214,000	1995	0	0	0	0	0	0	0	0
1996	21,400	45,400	3,200	61,600	29,200	12,700	2,300	175,200	1996	0	<50	0	0	0	0	0	<50

**Totals for All Oregon Landings**

CHINOOK									COHO								
Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals	Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	11,000	1,800	71,300	120,500	13,900	25,000	2,600	246,200	1979	0	8,800	517,800	169,300	1,600	0	0	697,430
1980	26,000	27,800	49,500	63,600	25,100	16,000	1,000	209,000	1980	0	0	234,400	141,100	17,500	0	0	392,900
1981	27,600	800	34,800	66,200	16,900	13,100	1,200	160,600	1981	0	0	349,700	272,800	0	0	0	622,500
1982	24,700	13,200	121,400	52,000	12,000	7,400	1,400	232,100	1982	0	0	518,400	0	0	0	0	518,400
1983	11,100	14,700	34,200	12,200	2,000	4,800	800	79,800	1983	0	0	275,200	38,000	6,400	0	0	319,600
1984	4,400	2,500	20,200	34,500	800	1,200	700	64,300	1984	0	0	0	13,700	0	0	0	13,700
1985	34,500	20,400	61,400	70,900	24,400	4,300	1,000	216,900	1985	0	0	65,900	18,200	0	0	0	84,100
1986	36,500	52,700	134,000	118,100	34,500	26,100	800	402,700	1986	0	12,100	190,000	238,400	0	0	0	440,500
1987	43,300	56,500	264,200	87,500	60,700	15,100	1,900	529,200	1987	0	4,400	266,300	63,800	19,800	0	0	354,300
1988	62,600	100,200	100,400	133,900	26,600	44,500	1,700	469,900	1988	0	1,600	387,900	233,800	0	0	0	623,300
1989	100,300	62,600	71,200	75,200	25,100	16,000	3,200	353,600	1989	0	1,000	374,800	70,000	9,900	0	0	455,700
1990	15,600	33,100	105,800	64,700	9,100	4,200	0	232,500	1990	0	100	82,500	33,100	6,200	300	0	122,200
1991	3,500	12,700	11,300	16,100	19,500	11,500	0	74,600	1991	0	91,100	188,800	16,600	10,500	0	0	307,000
1992	20,500	2,300	26,400	31,700	12,300	17,400	0	110,600	1992	0	0	15,100	29,200	0	0	0	44,300
1993	20,600	14,700	12,900	10,400	15,700	6,400	700	81,400	1993	0	0	200	600	800	0	0	1,600
1994	7,900	8,800	200	200	1,100	6,700	400	25,300	1994	0	0	0	0	0	0	0	0
1995	10,800	36,700	1,800	97,900	38,500	27,200	1,900	214,800	1995	0	0	0	0	0	0	0	0
1996	21,400	45,400	3,200	61,700	30,600	12,700	2,300	177,200	1996	0	<50	0	0	0	0	0	<50

Appendix Table 5. Oregon ocean troll effort (boat days) by month of landing, area of catch, and year, 1979-96.

**Columbia Area (2)**

	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	<50	<50	700	1,200	<50	0	<50	2,000
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
1996	0	0	0	0	0	0	0	0

**Tillamook Area (3)**

	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	<50	<50	3,000	3,100	<50	<50	<50	6,200
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
1996	100	300	<50	200	500	300	0	1,400

Appendix Table 5 (cont.). Oregon ocean troll effort (boat days) by month of landing, area of catch, and year, 1979-96.

**Newport Area (4)**

	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	300	<50	5,900	6,200	200	200	<50	12,800
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
1996	1,000	1,100	100	1,300	800	500	0	4,800

**Charleston Area (5)**

	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	700	200	8,300	6,800	400	500	<50	16,800
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
1996	300	500	<50	300	400	300	100	1,800

Appendix Table 5 (cont.). Oregon ocean troll effort (boat days) by month of landing, area of catch, and year, 1979-96.

**Brookings Area (6)**

	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	<50	100	3,100	3,800	700	1,300	800	9,700
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
1996	100	<50	0	200	0	200	0	500

**Subtotal for Oregon Catch Areas**

	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	1,100	300	21,000	21,100	1,300	2,000	800	47,600
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
1996	1,500	1,900	100	2,000	1,600	1,200	100	8,400

Appendix Table 5 (cont.). Oregon ocean troll effort (boat days) by month of landing, area of catch, and year, 1979-96.

**Alaska Area (8)**

	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	0	0	0	0	0	0	0	0
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
1996	0	0	0	0	0	0	0	0

**Washington Area (1)**

	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	200	0	200	1,000	0	0	0	1,400
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
1996	0	0	0	0	0	0	0	0



Appendix Table 5 (cont.). Oregon ocean troll effort (boat days) by month of landing, area of catch, and year, 1979-96.

**California Area (7)**

	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	<50	<50	<50	<50	0	0	0	100
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
1996	0	0	0	<50	100	0	0	100

**Total for all landings in Oregon**

	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
1979	1,300	300	21,200	22,100	1,300	2,000	800	49,000
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
1996	1,500	1,900	100	2,000	1,700	1,200	100	8,500

Appendix Table 6. Oregon commercial ocean troll salmon chinook catch, in number of fish, by statistical week, and area of catch, 1996<sup>a</sup>.

Stat. Week	Area of Catch					OR Subtotal	Alaska	Wash.	Calif.	Total
	Col. R.	Tillamook	Newport	Coos Bay	Brookings					
	2	3	4	5	6		8	1	7	
18	-	7	4,245	202	50	4,504	0	0	0	4,504
19	-	15	6,215	333	46	6,609	0	0	0	6,609
20	-	86	5,673	432	106	6,297	0	0	0	6,297
21	-	58	982	110	386	1,536	0	0	0	1,536
22	-	553	5,575	1,144	2,289	9,561	0	0	0	9,561
23	-	911	5,949	2,033	2,233	11,126	0	0	0	11,126
24	-	3,353	4,407	620	-	8,380	0	0	0	8,380
25	-	2,365	4,216	697	-	7,278	0	0	0	7,278
26	-	932	4,709	5,819	-	11,460	0	0	0	11,460
27	-	1,004	1,284	948	-	3,236	0	0	0	3,236
28	-	-	-	-	-	0	0	0	0	0
29	-	-	-	-	-	0	0	0	0	0
30	-	-	-	-	-	0	0	0	0	0
31	-	-	-	-	151	151	0	0	0	151
32	-	153	4,577	781	304	5,815	0	0	486	6,301
33	-	218	19,600	880	261	20,959	0	0	67	21,026
34	-	316	18,140	3,219	707	22,382	0	0	0	22,382
35	-	398	11,402	1,193	1,213	14,206	0	0	0	14,206
36	-	466	2,434	1,757	-	4,657	0	0	369	5,026
37	-	382	5,314	1,214	-	6,910	0	0	1,045	7,955
38	-	672	5,396	794	-	6,862	0	0	0	6,862
39	-	542	6,250	739	-	7,531	0	0	0	7,531
40	-	308	2,347	253	-	2,908	0	0	0	2,908
41	-	195	5,824	529	-	6,548	0	0	0	6,548
42	-	62	443	390	305	1,200	0	0	0	1,200
43	-	63	230	324	196	813	0	0	0	813
44	-	74	2,690	378	287	3,429	0	0	0	3,429
45	-	-	-	345	-	345	0	0	0	345
46	-	-	-	367	-	367	0	0	0	367
47	-	-	-	2	-	2	0	0	0	2
48	-	-	-	131	-	131	0	0	0	131
Total	0	13,133	127,902	25,634	8,534	175,203	0	0	1,967	177,170

<sup>a</sup> Refer to Appendix Table 20 for 1996 statistical week calendar.

Appendix Table 7. Estimates of nominal ex-vessel value for Oregon ocean commercial troll salmon landings and average price per pound, 1971-96. Note that dollars are in real value for the year of landing and are not adjusted for inflation.

Year	Chinook <sup>a</sup>		Coho <sup>a</sup>		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	6,645,000	2.57	10,353,000	2.25	16,998,000
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
1996	3,007,000	1.56	0	NA	3,007,000

<sup>a</sup> Dressed weight value.

Appendix Table 8. Recreational ocean salmon sampling rates at Oregon ports, 1987-96 (NF=No Fishery, NS= No Sampling).

Port	Percent of Catch Sampled <sup>a</sup>									
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Astoria	39	49	44	42	50	44	42	NF	32	37
Garibaldi	40	32	37	46	34	37	52	24	42	34
Pacific City	75	79	70	72	69	72	84	- <sup>c</sup>	100	- <sup>c</sup>
Depoe Bay	57	50	56	45	48	46	74	40	75	72
Newport	33	39	35	35	28	36	36	- <sup>c</sup>	50	47
Florence	38	46	51	46	33	34	40	33	40	64
Winchester Bay	31	36	44	42	26	25	45	40	NS	42
Coos Bay	54	46	46	41	30	39	38	- <sup>c</sup>	28	43
Gold Beach	64	NS	NS	NS	NS	NS	NS	NS	NS	NS
Brookings	57	51	65	47	34	34	58	28	36	33
Coastwide percentage	44	43	43	42	35	37	43	26	34	36
Number of samplers	23	20	20	22	21	21	24 <sup>b</sup>	12	13	15
Sampler months	79	79	70	80	62	64	69 <sup>b</sup>	47	56	58

<sup>a</sup> Percentage of total catch observed by samplers = number of salmon observed/estimated catch of salmon.

<sup>b</sup> Includes 4 samplers (8 sampler months) participating in the Columbia River Control Zone test fishery.

<sup>c</sup> No salmon observed in the sampling.

Appendix Table 9. Summary of Oregon's recreational ocean salmon regulations, 1946-96.

Year	Open Area	Open Season	Open Days	Catch Limits			Size Limits (inches)			Gear Restrictions	Misc Regulations
				Daily	7 Day	Year	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.
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.

Appendix Table 9 (cont.). Summary of Oregon's recreational ocean salmon regulations, 1946-96.

Year	Open Area	Open Season	Open Days	Catch Limits			Size Limits (inches)			Gear Restrictions	Misc Regulations
				Daily	7 Day	Year	Chin.	Coho	Pink		
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)	7/22-25	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 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.
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.

Appendix Table 9 (cont.). Summary of Oregon's recreational ocean salmon regulations, 1946-96.

Year	Open Area	Open Season	Open Days	Catch Limits			Size Limits (inches)			Gear Restrictions	Misc Regulations
				Daily	7 Day	Year	Chin.	Coho	Pink		
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.	
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 - 8/17	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	
	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.
1990	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.

Appendix Table 9 (cont.). Summary of Oregon's recreational ocean salmon regulations, 1946-96.

Year	Open Area	Open Season	Open Days	Catch Limits			Size Limits (inches)			Gear Restrictions	Misc Regulations
				Daily	7 Day	Year	Chin.	Coho	Pink		
1990 (cont.)	South of Humbug Mtn.	5/1 - 6/29	All	2	6	40	20	20	none	Barbless hooks	
	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	
1991	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.
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	



Appendix Table 9 (cont.). Summary of Oregon's recreational ocean salmon regulations, 1946-96.

Year	Open Area	Open Season	Open Days	Catch Limits			Size Limits (inches)			Gear Restrictions	Misc Regulations
				Daily	7 Day	Year	Chin.	Coho	Pink		
1995	North of Cape Falcon	7/24 - 9/5; 9/10-17	Sun-Thurs	2	4	40	NA	16	none	Barbless hooks	Closed to the take of chinook
	Cape Falcon to Humbug Mtn.	5/1 - 6/30	All	2	6	40	20	NA	none	Artificial plugs or bait > 6"; no painted weights or attractors such as flashers or colored divers (by regulation uncolored divers are not considered attractors); no more than 2 single point, single shank barbless hooks.	Closed to the take of coho
	Twin Rocks to Pyramid Rock (0-3 miles)	9/16 - 11/15	All	2	6	10	20	NA	none	Artificial plugs or bait > 6"; no painted weights or attractors such as flashers or colored divers (by regulation uncolored divers are not considered attractors); no more than 2 single point, single shank barbless hooks.	Closed to the take of 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 painted weights or attractors such as flashers or colored divers (by regulation uncolored divers are not considered attractors); no more than 2 single point, single shank barbless hooks.	Closed to the take of coho
	3 mi. north of Coos Bay N. Jetty to Arago (0-3 miles)	9/16 - 10/31	All	2	6	40	20	NA	none	Artificial plugs or bait > 6"; no painted weights or attractors such as flashers or colored divers (by regulation uncolored divers are not considered attractors); no more than 2 single point, single shank barbless hooks.	Closed to the take of coho
	Cape Blanco to Humbug Mtn.	10/1 - 11/7	All	2	6	40	20	NA	none	Artificial plugs or bait > 6"; no painted weights or attractors such as flashers or colored divers (by regulation uncolored divers are not considered attractors); no more than 2 single point, single shank barbless hooks.	Closed to the take of coho
	Humbug Mtn. to Horse Mtn.	5/17 - 7/1	Wed-Sat.	1	4	40	20	NA	none	Barbless hooks	Closed to the take of coho
	Humbug Mtn. to Horse Mtn.	8/16-18	Wed-Sat.	1	4	40	20	NA	none	Barbless hooks	Closed to the take of coho
	Humbug Mtn. to Horse Mtn.	9/1-9	All	1	6	40	20	NA	none	Barbless hooks	Closed to the take of coho
	Goat Island to 42 01' 20" N. Lat.	10/10-15; 10/21-22	All	1	4	40	20	NA	none	Barbless hooks	Closed to the take of coho
1996	North of Cape Falcon	7/22 - 9/26	Sun-Thurs	2	4	40	NA	16	none	Barbless hooks	Closed to the take of chinook
	Cape Falcon to Humbug Mtn.	5/1 - 7/7; 8/16 - 9/30	All	2	6	40	20	NA	none	Artificial lures, plugs, whole or plug cut bait > 6", (excluding hooks and swivels) no more than 2 single point, single shank barbless hooks. Flashers and divers are prohibited.	Closed to the take of coho

Appendix Table 9 (cont.). Summary of Oregon's recreational ocean salmon regulations, 1946-96.

Year	Open Area	Open Season	Open Days	Catch Limits			Size Limits (inches)			Gear Restrictions	Misc Regulations
				Daily	7 Day	Year	Chin.	Coho	Pink		
1996 (cont.)	Twin Rocks to Pyramid Rock (0-3 miles)	10/1-31	All	2	4	10	20	NA	none	Artificial lures, plugs, whole or plug cut bait > 6", (excluding hooks and swivels) no more than 2 single point, single shank barbless hooks. Flashers and divers are prohibited.	Chinook only (0-3 miles)
	Cape Blanco to Humbug Mtn.	10/1 - 11/30	All	1	4	40	20	NA	none	Barbless hooks	Chinook only (0-3 miles)
	Humbug Mtn. to Horse Mtn.	5/12 - 7/7; 8/18 - 9/21	All	1	4	40	20	NA	none	Barbless hooks	Open to all salmon except coho
	Goat Island to 42 01' 20" N. Lat.	10/5-13	All	1	4	40	20	NA	none	Barbless hooks	Chinook only (0-3 miles)

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.

b/ Gear Restrictions: Artificial plugs or whole bait, both 6" or larger. No more than 2 single shank, single point barbless hooks ; no painted weights or attractors such as flashers or colored divers (uncolored divers are not considered attractors).

Appendix Table 10. Oregon ocean recreational salmon angler effort, by port and statistical week, 1996<sup>a</sup>.

Stat. Week	Astoria	Garibaldi	Pacific City	Depoe Bay	Newport	Florence	Winchester Bay	Coos Bay	Brookings	Total
18	-	30	0	14	32	11	17	29	0	133
19	-	226	0	0	39	14	41	6	244	570
20	-	40	0	0	15	0	6	0	65	126
21	-	144	0	22	47	2	0	0	507	722
22	-	322	0	3	140	14	37	20	871	1,407
23	-	7	0	0	49	18	28	49	1,104	1,255
24	-	71	0	0	46	12	20	6	730	885
25	-	13	4	6	31	15	32	24	1,680	1,805
26	-	23	0	0	56	118	159	130	2,408	2,894
27	-	35	9	0	22	124	282	171	2,205	2,848
28	-	-	-	-	-	-	-	-	-	0
29	-	-	-	-	-	-	-	-	-	0
30	920	43	-	0	-	-	-	-	-	963
31	832	77	-	0	-	-	-	-	-	909
32	772	22	-	0	-	-	-	-	-	794
33	677	231	-	143	476	-	446	296	538	2,807
34	640	159	-	119	504	-	363	227	2,951	4,963
35	643	193	-	77	470	-	277	272	2,531	4,463
36	515	249	-	57	175	-	314	92	1,096	2,498
37	243	62	-	20	30	-	105	64	919	1,443
38	24	1,390	-	20	47	-	36	23	1,211	2,751
39	12	2,049	-	59	51	-	2	15	0	2,188
40	-	1,288	-	-	1	-	-	-	1,174	2,463
41	-	1,559	-	-	-	-	-	-	3,108	4,667
42	-	127	-	-	-	-	-	-	-	127
43	-	95	-	-	-	-	-	-	-	95
44	-	186	-	-	-	-	-	-	-	186
<b>Total</b>	<b>5,278</b>	<b>8,641</b>	<b>13</b>	<b>540</b>	<b>2,231</b>	<b>328</b>	<b>2,165</b>	<b>1,424</b>	<b>23,342</b>	<b>43,962</b>

<sup>a</sup> Refer to Appendix Table 20 for 1996 statistical week calendar.

Appendix Table 11. Oregon ocean recreational effort in salmon angler trips, 1979 -96.<sup>a</sup>

Area	May	June	July	Aug.	Sept.	Oct.	Nov.	Season <sup>b</sup>
<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	-	-	1,700	7,000	1,000	-	-	9,600
1996	-	-	1,000	3,800	900	-	-	5,700
<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 <sup>c</sup>	-	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	600	700	1,300	1,800	-	5,100
1996	800	100	<50	500	3,700	3,300	-	8,300
<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	-	-	-	52,200
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
1996	300	200	<50	1,800	500	<50	-	2,800

Appendix Table 11 (cont.). Oregon ocean recreational effort in salmon angler trips, 1979 - 96.<sup>a</sup>

Area	May	June	July	Aug.	Sept.	Oct.	Nov.	Season <sup>b</sup>
<b>Coos Bay</b>								
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
1996	200	600	600	1,900	700	-	-	3,900
<b>Brookings</b>								
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	-	16,100
1995	2,300	6,200	0	4,400	3,000	3,400	-	19,400
1996	1,700	5,900	2,200	6,000	3,200	4,300	-	23,300
<b>All Areas</b>								
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	5,300	-	35,900
1996	3,000	6,800	3,800	13,900	8,900	7,500	-	44,000

<sup>a</sup> 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.

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

<sup>c</sup> 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, 1976-96.

Year	Area <sup>a</sup>					Total
	Columbia R.	Tillamook	Newport	Coos Bay	Brookings	
<b>EFFORT (Salmon Angler Trips)<sup>b</sup></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 <sup>c</sup>	0	10,700	100	400	6,200	27,300
1995	9,600	5,100	900	700	19,400	35,900
1996	5,700	8,300	2,800	3,900	23,300	44,000
<b>Chinook</b>						
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 <sup>c</sup>	0	2,400	<50	<50	3,600	6,000
1995 <sup>c</sup>	100	500	100	200	5,700	6,700
1996	<50	1,600	600	800	8,200	11,200
<b>Coho</b>						
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 <sup>d</sup>	16,400	12,200	6,000 <sup>d</sup>	59,300 <sup>d</sup>
1994 <sup>c</sup>	0	<50 <sup>d</sup>	0 <sup>d</sup>	0	<50 <sup>d</sup>	<50
1995	11,300	400 <sup>d</sup>	<50 <sup>d</sup>	0 <sup>d</sup>	100 <sup>d</sup>	11,900
1996	7,000	<50	<50	<50	100	7,200

<sup>a</sup> 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.

<sup>b</sup> 1976-1978 effort includes a small number of bottomfishing trips.

<sup>c</sup> Preliminary.

<sup>d</sup> Represents illegal coho landings.

Appendix Table 13. Oregon ocean recreational chinook catch (number of fish) by area and month, 1979-96.

Area <sup>a</sup>	Chinook							Season <sup>b</sup>
	May	June	July	Aug	Sept.	Oct.	Nov.	
<b>Columbia River</b>								
1979	600	1,600	2,100	3,100	100	-	-	7,500
1980	100	1,200	1,400	2,500	400	-	-	5,500
1981	<50	400	3,200	6,700	1,200	-	-	11,500
1982	-	2,200	6,000	-	-	-	-	8,200
1983	-	1,000	1,600	500	200	-	-	3,400
1984	-	-	-	-	-	-	-	-
1985	-	100	1,300	2,200	-	-	-	3,600
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
1996	-	-	<50	<50	<50	-	-	<50
<b>Tillamook</b>								
1979	<50	<50	600	300	<50	-	-	1,000 <sup>c</sup>
1980	<50	200	300	800	200	-	-	1,600 <sup>c</sup>
1981	<50	<50	600	900	400	-	-	1,900 <sup>c</sup>
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
1996	100	<50	<50	<100	700	700	-	1,600
<b>Newport</b>								
1979	200	300	500	400	<50	-	-	1,400 <sup>d</sup>
1980	100	600	600	400	200	-	-	1,800 <sup>d</sup>
1981	<50	100	1,100	1,000	200	-	-	2,400 <sup>d</sup>
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
1996	<50	<50	<50	400	<100	-	-	600

Appendix Table 13 (cont.) Oregon ocean recreational chinook catch (number of fish) by area and month, 1979-96.

Area <sup>a</sup>	Chinook							Season <sup>b</sup>
	May	June	July	Aug	Sept.	Oct.	Nov.	
<b>Coos Bay</b>								
1979	200	2,400	1,500	500	<50	-	-	4,500
1980	<50	1,400	2,700	700	200	-	-	5,300
1981	100	400	2,300	1,300	300	-	-	4,500
1982	<50	1,000	9,100	-	-	-	-	10,100
1983	-	1,300	2,400	1,100	1,700	-	-	6,600
1984	-	-	2,200	2,600	100	-	-	4,900
1985	-	-	4,400	4,900	100	-	-	9,500
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
1996	<50	100	300	300	100	-	-	800
<b>Brookings</b>								
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
1996	500	2,700	300	2,800	700	1,300	-	8,200
<b>All Areas</b>								
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
1996	700	2,900	600	3,500	1,500	2,000	-	11,200

<sup>a</sup> 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.

<sup>b</sup> Individual monthly catches may not equal season total due to rounding. Season totals for individual catch areas for 1974-75 data may not equal the sum of combined months due to some effort/landings not identified by port of landing. "All Areas" summary includes unidentified data.

<sup>c</sup> Includes Nehalem Bay.

<sup>d</sup> Includes Salmon and Siletz Rivers and Alsea Bay.

<sup>e</sup> 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, 1996<sup>a</sup>.

Stat. Week	Astoria	Garibaldi	Pacific City	Depoe Bay	Newport	Florence	Winchester Bay	Coos Bay	Brookings	Total
18	-	0	0	0	12	0	0	0	0	12
19	-	37	0	0	0	0	0	0	7	44
20	-	8	0	0	8	0	0	0	9	25
21	-	29	0	1	20	0	0	5	151	206
22	-	41	0	0	0	0	2	0	382	425
23	-	0	0	2	0	0	2	0	517	521
24	-	0	0	0	23	2	0	0	347	372
25	-	5	0	0	2	0	5	0	649	661
26	-	0	0	0	10	34	46	58	1,206	1,354
27	-	11	0	0	7	68	115	106	314	621
28	-	-	-	-	-	-	-	-	-	0
29	-	-	-	-	-	-	-	-	-	0
30	5	-	-	-	-	-	-	-	-	5
31	3	-	-	-	-	-	-	-	-	3
32	5	-	-	-	-	-	-	-	-	5
33	2	19	0	60	107	0	56	21	19	284
34	3	26	0	20	111	0	41	35	1,324	1,560
35	0	11	0	15	83	0	71	26	1,433	1,639
36	10	30	0	4	16	0	71	29	157	317
37	-	8	0	0	1	0	23	0	199	231
38	-	243	0	0	0	0	16	9	202	470
39	-	389	0	4	48	0	0	0	0	441
40	-	332	0	0	0	0	0	0	695	1,027
41	-	285	-	-	-	-	-	-	586	871
42	-	8	-	-	-	-	-	-	-	8
43	-	21	-	-	-	-	-	-	-	21
44	-	87	-	-	-	-	-	-	-	87
Total	28	1,590	0	106	448	104	448	289	8,197	11,210

<sup>a</sup> Refer to Appendix Table 20 for 1996 statistical week calendar.

Appendix Table 15. Oregon ocean recreational coho catch (number of fish) by catch area and month, 1979-96.

Area <sup>a</sup>	Coho						Season <sup>b</sup>
	May	June	July	Aug.	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
1996	-	-	1,400	4,700	900	-	7,000
<u>Tillamook</u>							
1979	100	1,100	2,600	5,600	<50	-	9,400 <sup>c</sup>
1980	100	7,100	10,800	10,300	600	-	28,900 <sup>c</sup>
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 <sup>e</sup>
1994	-	-	-	-	-	<50 <sup>e</sup>	<50 <sup>e</sup>
1995	0	0	100	300	<50	0	400
1996	0	0	<50	<50	<50	<50 <sup>e</sup>	<50
<u>Newport</u>							
1979	200	3,700	18,700	13,600	<50	-	36,300 <sup>d</sup>
1980	200	18,500	41,500	10,800	1,400	-	72,400 <sup>d</sup>
1981	400	6,300	20,700	30,500	4,000	-	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 <sup>e</sup>	0	<50 <sup>e</sup>
1996	0	0	0	<50 <sup>e</sup>	<50 <sup>e</sup>	0	<50 <sup>e</sup>
<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

Appendix Table 15 (cont.). Oregon ocean recreational coho catch (number of fish) by catch area and month, 1979-96.

Area <sup>a</sup>	Coho						Season <sup>b</sup>
	May	June	July	Aug.	Sept.	Oct.	
<b>Coos Bay (cont.)</b>							
1982	-	12,200	43,400	-	-	-	55,600
1983	-	20,700	28,300	9,200	4,500	-	62,700
1984	-	-	19,600	19,700	100	-	39,400
1985	-	-	30,900	19,700	500	-	51,200
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
1996	0	0	0	<50 <sup>e</sup>	<50 <sup>e</sup>	0	<50 <sup>e</sup>
<b>Brookings</b>							
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 <sup>e</sup>	<50 <sup>e</sup>	-	<50 <sup>e</sup>
1995	0	<50 <sup>e</sup>	0	<50 <sup>e</sup>	100 <sup>e</sup>	<50 <sup>e</sup>	100 <sup>e</sup>
1996	0	<50 <sup>e</sup>	<50 <sup>e</sup>	<50 <sup>e</sup>	<50 <sup>e</sup>	<50 <sup>e</sup>	100 <sup>e</sup>
<b>All Areas</b>							
1979	5,700	35,600	85,800	52,200	1,600	-	180,900
1980	6,000	114,200	156,100	45,100	4,400	-	325,800
1981	9,200	26,300	70,800	80,600	12,900	-	199,800
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 <sup>e</sup>	<50 <sup>e</sup>	<50 <sup>e</sup>	<50 <sup>e</sup>
1995	0	<50 <sup>e</sup>	2,000	9,100	800	<50 <sup>e</sup>	11,900
1996	0	<50 <sup>e</sup>	1,500	4,700	1,000	<50 <sup>e</sup>	7,200

<sup>a</sup> 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.

<sup>b</sup> Individual monthly catches may not equal season total due to rounding. Season totals for individual catch areas for 1974-1975 data may not equal the sum of combined months due to some effort/landings not identified by port of landing, "All Areas" summary includes unidentified data.

<sup>c</sup> Includes Nehalem Bay.

<sup>d</sup> Includes Salmon and Siletz Rivers, and Alsea Bay.

<sup>e</sup> Illegal coho landings during closed season.

Appendix Table 16. Oregon ocean recreational coho catch, by port and statistical week, 1996<sup>a</sup>.

Stat. Week	Astoria	Garibaldi	Pacific City	Depoe Bay	Newport	Florence	Winchester Bay	Coos Bay	Brookings	Total
19	-	-	-	-	-	-	-	-	-	0
20	-	-	-	-	-	-	-	-	-	0
21	-	-	-	-	-	-	-	-	-	0
22	-	-	-	-	-	-	-	-	-	0
23	-	-	-	-	-	-	-	-	-	0
24	-	-	-	-	-	-	-	-	-	0
25	-	-	-	-	-	-	-	-	3 <sup>b</sup>	3 <sup>b</sup>
26	-	-	-	-	-	-	-	-	7 <sup>b</sup>	7 <sup>b</sup>
27	-	-	-	-	-	-	-	-	34 <sup>b</sup>	34 <sup>b</sup>
28	-	-	-	-	-	-	-	-	-	0
29	-	-	-	-	-	-	-	-	-	0
30	1,418	11 <sup>c</sup>	-	-	-	-	-	-	-	1,429
31	1,050	27 <sup>c</sup>	-	-	-	-	-	-	-	1,077
32	839	19 <sup>c</sup>	-	-	-	-	-	-	-	858
33	800	40 <sup>c</sup>	-	-	4 <sup>b</sup>	-	3 <sup>b</sup>	2 <sup>b</sup>	8 <sup>b</sup>	858
34	822	29 <sup>c</sup>	-	-	-	-	4 <sup>b</sup>	2 <sup>b</sup>	14 <sup>b</sup>	884
35	1,009	37 <sup>d</sup>	-	-	7 <sup>b</sup>	-	3 <sup>b</sup>	-	4 <sup>b</sup>	1,066
36	607	55	-	-	-	-	-	2 <sup>b</sup>	6 <sup>b</sup>	674
37	249	4	-	-	-	-	1 <sup>b</sup>	-	11 <sup>b</sup>	265
38	4	-	-	-	-	-	-	-	8 <sup>b</sup>	12
39	17	4 <sup>b</sup>	-	-	-	-	-	-	-	21
40	-	-	-	-	-	-	-	-	8 <sup>b</sup>	8
41	-	-	-	-	-	-	-	-	3 <sup>b</sup>	3
42	-	-	-	-	-	-	-	-	-	0
43	-	1 <sup>b</sup>	-	-	-	-	-	-	-	1
44	-	-	-	-	-	-	-	-	-	0
<b>Total</b>	<b>6,815</b>	<b>227</b>	<b>0</b>	<b>0</b>	<b>11<sup>b</sup></b>	<b>0</b>	<b>11<sup>b</sup></b>	<b>6<sup>b</sup></b>	<b>106<sup>b</sup></b>	<b>7,176</b>

<sup>a</sup> Refer to Appendix Table 20 for 1996 statistical week calendar.

<sup>b</sup> Coho were prohibited in most areas in 1996, these were illegal landings.

<sup>c</sup> Coho caught in open season north of Cape Falcon and legally landed into Garibaldi.

<sup>d</sup> All but 2 of these coho were legal catches, from north of Cape Falcon.

Appendix Table 17. The estimated number of Oregon charter boats active during the ocean salmon fishery by port and year, 1986-96.

Port	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Astoria	46	50	48	42	41	34	30	24	NA	30	25
Garibaldi	20	20	24	20	18	17	17	13	15	15	14
Pacific City	3	2	3	3	0	0	0	0	0	0	0
Depoe Bay	19	24	24	24	24	23	23	21	20	20	20
Newport	30	32	32	31	33	30	33	30	33	20	34
Florence	1	1	1	1	1	2	1	1	1	0	0
Winchester Bay	12	10	10	8	9	8	8	6	2	0	0
Coos Bay	5	5	5	5	5	4	4	4	4	2	5
Gold Beach	3	2	2	1	1	1	1	1	3	3	0
Brookings	5	5	9	7	9	10	6	4	4	3	4
<b>Total</b>	<b>144</b>	<b>151</b>	<b>158</b>	<b>139</b>	<b>141</b>	<b>129</b>	<b>123</b>	<b>103</b>	<b>81</b>	<b>93</b>	<b>102</b>

Appendix Table 18. Oregon ocean recreational salmon effort and catch by boat type, 1979-96 and 1979-95 average<sup>a</sup>.

Year	Angler Trips		Chinook Catch		Coho Catch	
	Charter	Private	Charter	Private	Charter	Private
1979	73,700	187,700	5,400	13,300	59,800	101,800
1980	79,000	218,900	5,100	11,900	98,300	207,500
1981	65,400	245,800	6,600	22,500	64,500	135,300
1982	43,300	182,700	8,200	30,600	48,500	126,700
1983	41,900	184,100	4,700	20,000	39,700	107,200
1984	24,300	128,700	2,200	14,800	27,300	96,100
1985	53,400	198,200	9,200	46,600	60,200	122,800
1986	43,700	143,300	4,200	18,700	75,000	143,900
1987	60,900	194,200	14,300	45,100	61,900	118,700
1988	62,500	188,200	7,300	31,000	73,500	153,300
1989	60,200	206,100	4,200	27,900	85,800	187,500
1990	55,300	191,200	5,100	21,500	61,600	139,100
1991	40,300	149,700	1,900	12,500	68,900	190,200
1992	30,000	135,400	2,700	9,900	46,200	139,600
1993	13,400	66,900	900	5,600	16,200	43,100
1994	1,400	25,500	500	5,600	0	0
1995	4,600	31,200	300	6,400	4,000	7,900
1979-1995	44,300	157,500	4,900	20,200	52,400	118,900
1996	5,600	38,300	1,200	10,100	3,000	4,200

<sup>a</sup> 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.

Appendix Table 19. Oregon ocean recreational salmon effort and catch, by boat type and port, 1979-96.

	SALMON ANGLER TRIPS		LANDINGS			
			Chinook		Coho	
	Charter	Private	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
1979-95 avg.	9,578	13,577	1,453	1,875	14,815	16,606
1996	1,723	3,555	3	25	2,872	3,943
<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	0	29
1995	1,248	3,825	53	486	210	227
1979-95 avg.	3,171	17,996	251	972	4,404	10,538
1996	1,008	7,633	213	1,377	119	108
<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
1981-95 avg.	130	3,583	7	215	156	3,803
1996	0	13	0	0	0	0

Appendix Table 19 (cont.). Oregon ocean recreational salmon effort and catch, by boat type and port, 1979-96.

	SALMON ANGLER TRIPS		LANDINGS			
	Charter	Private	Chinook		Coho	
			Charter	Private	Charter	Private
<b>Depoe Bay</b>						
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	0	0
1995	44	3	4	0	0	0
1979-95 avg.	9,679	8,020	374	363	10,796	8,247
1996	517	23	104	2	0	0
<b>Newport</b>						
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	0	0
1995	522	374	72	32	0	7
1979-95 avg.	8,916	28,711	511	1,154	9,985	24,681
1996	1,620	611	413	35	24	11
<b>Florence</b>						
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	0	0
1995	0	226	0	78	0	0
1981-95 avg.	276	9,735	28	1,081	314	9,202
1996	0	328	0	104	0	0

Appendix Table 19 (cont.). Oregon ocean recreational salmon effort and catch, by boat type and port, 1979-96.

	SALMON ANGLER TRIPS		LANDINGS			
			Chinook		Coho	
	Charter	Private	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	0	0
1995	NA	NA	-	-	-	-
1979-95 avg.	7,786	23,770	1,058	2,547	9,124	25,137
1996	0	2,165	0	448	0	11
<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	0	0
1995	14	477	6	159	0	0
1979-95 avg.	3,272	12,052	354	1,185	4,102	11,654
1996	132	1,292	40	249	0	6
<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	-	-	-	-
1979-88 avg.	1,421	3,839	328	875	263	792
1996	NA	NA	-	-	-	-



Appendix Table 19 (cont.). Oregon ocean recreational salmon effort and catch, by boat type and port, 1979-96.

	SALMON ANGLER TRIPS		LANDINGS			
			Chinook		Coho	
			Charter	Private	Charter	Private
<b>Brookings</b>						
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	0	17
1995	321	19,101	187	5,544	0	130
1979-95 avg.	1,746	41,573	835	10,723	874	12,513
1996	631	22,711	378	7,819	0	106
<b>S. of Falcon</b>						
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
1979-95 avg.	35,307	144,736	3,507	18,453	38,491	103,233
1996	3,683	34,645	1,148	10,034	24	141
<b>Grand Total</b>						
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
1979-95 avg.	44,322	157,514	4,874	20,218	52,435	118,862
1996	5,631	38,331	1,151	10,059	3,015	4,185

Appendix Table 20. Statistical week calendar for 1996.

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

Appendix Table 21. Oregon coastal freshwater and estuary recreational coho salmon fisheries, 1996. These fisheries represent limited time and area fishing opportunity where the majority of coho are of hatchery origin.

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
The Trask River open for fin-clipped coho from the Hwy. 101 bridge upstream to the confluence of the North and South forks.	Sept. 16 - Oct. 31
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
Isthmus Slough (Coos Bay) from the mouth upstream to the tidegate.	Entire year
Rogue River -upstream from the Illinois River- open for fin-clipped coho.	Sept. 1 - Dec. 31
Rogue River -downstream from the Illinois River (including tidewater)- open for fin-clipped coho.	Sept. 1 - 30

Appendix Table 22. Chinook and coho salmon released by Oregon ocean recreational anglers from 1987-96, by port and year, as estimated from angler interviews.

<b>Astoria:</b>		Number Retained		Number Released		Percent Released	
Year	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%	
1996	28	6,815	966	766	97%	10%	

<b>Garibaldi:</b>		Number Retained		Number Released		Percent Released	
Year	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	25	382	1%	93%	
1995	539	437	331	148	38%	25%	
1996	1,590	227	43	169	3%	43%	

<b>Pacific City:</b>		Number Retained		Number Released		Percent Released	
Year	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%	
1996	0	0	0	0	0%	0%	

Appendix Table 22 (cont.) Chinook and coho salmon released by Oregon ocean recreational anglers from 1987-96, by port and year, as estimated from angler interviews.

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%
1996	106	0	31	107	23%	100%

Newport: Year	Number Retained		Number Released		Percent Released	
	Chinook	Coho	Chinook	Coho	Chinook	Coho
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 <sup>a</sup>	110	48	51%	87%
1996	448	35	63	920	12%	96%

Florence: Year	Number Retained		Number Released		Percent Released	
	Chinook	Coho	Chinook	Coho	Chinook	Coho
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%
1996	104	0	4	108	4%	100%

Appendix Table 22 (cont.) Chinook and coho salmon released by Oregon ocean recreational anglers from 1987-96, by port and year, as estimated from angler interviews.

Winchester Bay: Year	Number Retained		Number Released		Percent Released	
	Chinook	Coho	Chinook	Coho	Chinook	Coho
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%
1996	448	11	55	251	11%	96%

Coos Bay: Year	Number Retained		Number Released		Percent Released	
	Chinook	Coho	Chinook	Coho	Chinook	Coho
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%
1996	289	6	59	144	17%	96%

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

Brookings: Year	Number Retained		Number Released		Percent Released	
	Chinook	Coho	Chinook	Coho	Chinook	Coho
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	157	442	4%	96%
1995	5,731	130 <sup>a</sup>	363	942	6%	88%
1996	8,197	106	1,893	2,303	19%	96%

Appendix Table 22 (cont.) Chinook and coho salmon released by Oregon ocean recreational anglers from 1987-96, by port and year, as estimated from angler interviews.

Statewide totals: Year	Number Retained		Number Released		Percent Released	
	Chinook	Coho	Chinook	Coho	Chinook	Coho
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%
1996	11,210	7,200	3,114	4,768	22%	40%

