

MANAGEMENT OF THE TROLL SALMON FISHERY

ANNUAL REPORT
July 1, 1974 to June 30, 1975

**Paul H. Reed, Robert K. McQueen
and Malcolm H. Zirges**

**Fish Commission of Oregon
Division of Management and Research**

**National Marine Fisheries Service
National Oceanic and Atmospheric Administration
United States Department of Commerce
Anadromous Fisheries Act
Project Number AFC-69, Segment 2
Contract Number 04-5-208-6**

July 1975

CONTENTS

	Page No.
INTRODUCTION	1
PROGRAM PERSONNEL	1
REPORTS	2
THE 1974 TROLL SALMON SEASON	3
<u>Troll Fisher and Catch Statistics</u>	3
<u>1974 Troll Chinook Age Composition</u>	6
<u>Troll Salmon Mark Sampling</u>	8
<u>Average Weight Data</u>	16
<u>Extended Troll Season</u>	18
SALMON LENGTH-FREQUENCY	18
OCEAN SALMON TAGGING	18

TABLES

<u>Table No.</u>		<u>Page No.</u>
1	Organization of Ocean Salmon Personnel	1
2	Personnel Employed During FY 1975	2
3	Oregon Troll Chinook Catch Statistics for 1974 by Area and Month	3
4	Oregon Troll Coho Catch Statistics for 1974 by Area and Month	4
5	Number of Individual Salmon Landings in Oregon for 1974 by Area and Month	4
6	Log of 1974 Troll Chinook Random Scale Samples	6
7	Oregon Troll Chinook Mark Sampling, 1974	8
8	Oregon Troll Coho Mark Sampling, 1974	9
9	Summary of Chinook Marks Recovered from the Oregon Troll Fishery, 1974	10
10	Summary of Coho Marks Recovered from the Oregon Troll Fishery, 1974	14
11	Observed Average Dressed Weight and Calculated Numbers of Troll Chinook by Month and Area, 1974	16
12	Observed Average Dressed Weight and Calculated Numbers of Troll Coho by Month and Area, 1974	17

FIGURES

<u>Figure No.</u>		
1	Oregon Ocean Troll Salmon Production, 1929-74	5
2	Age Composition for Chinook in the Oregon Troll Fishery, 1965-74	7

MANAGEMENT OF THE TROLL SALMON FISHERY

INTRODUCTION

The Troll Salmon Management Program was established in 1967 as a joint state-federal activity and has been funded through the provisions of the Anadromous Fish Act (PL 89-304) since that time. Information obtained from this program is used to develop appropriate management options designed to achieve the wisest use of the ocean salmon resource.

Activities pursued during FY 1975 involved troll fishery sampling including the collection and compilation of catch statistics, chinook age composition, and mark and coded-wire tag recovery data. Short-term work was conducted on a summary of salmon length frequency data, analysis of past ocean salmon tagging studies for migration information, and evaluation of a troll season extension off southern Oregon.

PROGRAM PERSONNEL

Permanent personnel assigned to the program included one Aquatic Biologist 2, one Aquatic Biologist 3, and one Aquatic Biologist 4 (Table 1). Twelve seasonal aides and two Comprehensive Employment Training Act (CETA) personnel were hired for salmon management work during this period (Table 2).

Table 1. Organization of Ocean Salmon Personnel

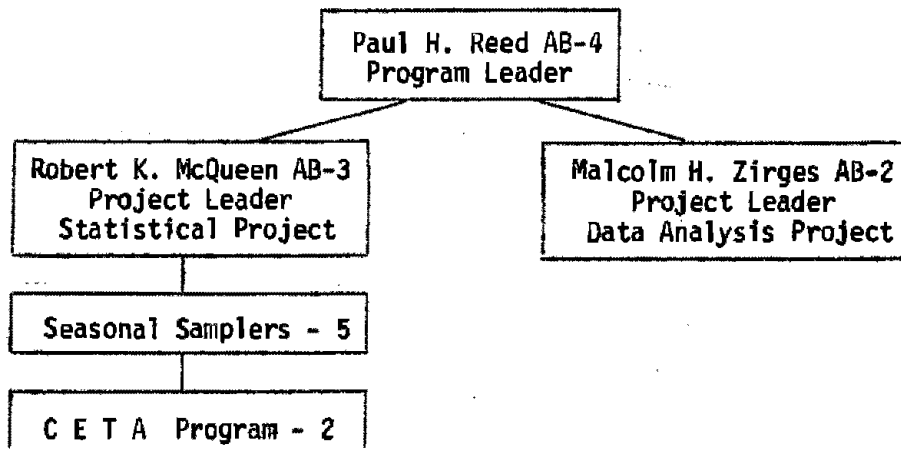


Table 2. Personnel Employed During Fiscal Year 1974

Name	Title	Starting Date	Termination Date
Terry Wyatt	Sampler	June 11, 1974	September 13, 1974
Jessica Romm	Sampler	June 12, 1974	September 20, 1974
Kris York	Sampler	June 12, 1974	September 20, 1974
Warren Shaul	Sampler	June 13, 1974	September 10, 1974
Judy Rahausser	Sampler	June 13, 1974	September 23, 1974
Brian Lynch	Sampler	June 14, 1974	September 11, 1974
Kathy Riley	Sampler	September 21, 1974	October 31, 1974
Jeff Zakel	EBA-1	February 18, 1975	Still employed
Kim Baxter	EBA-1	February 19, 1975	Still employed
Kathy Riley	Sampler	April 15, 1975	Still employed
Dave Douglas	Sampler	April 15, 1975	Still employed
Jean McCrae	Sampler	June 12, 1975	Still employed
Terry Wyatt	Sampler	June 14, 1975	Still employed
Polly Davis	Sampler	June 15, 1975	Still employed

REPORTS

The following reports were completed by the staff during the 1975 fiscal year:

- McQueen, Robert K. 1974. Oregon troll salmon status report for the Pacific Marine Fisheries Commission annual meeting. 7 p.
- Reed, Paul H., Robert K. McQueen and Malcolm H. Zirges. 1974. Management of the troll salmon fishery. Completion Report. Fish Commission of Oregon. 17 p.
- Reed, Paul H. 1975. Status of Oregon coho salmon stocks with respect to current troll fishery regulations. Fish Commission of Oregon. Information Report 75-1. 10 p.
- Zirges, Malcolm H. 1974. Length frequency distribution of chinook and coho salmon captured by commercial troll gear off Oregon, 1948-1968. Information Report 74-2.

THE 1974 TROLL SALMON SEASON

Troll Fishery and Catch Statistics

The 1974 chinook troll season opened on April 15th. The season closed over most of Oregon on October 31st, but was extended through December 31st for two small southern Oregon areas. The 1974 coho troll season opened on June 15th and closed over most of the state on October 31st. The south coast season extension also applied to coho salmon but few fish of this species were available to the fishery after October 31st.

Final 1974 Oregon troll fishery landings are summarized in Tables 3 and 4 for chinook and coho respectively. The number of individual Oregon salmon landings made during 1974 was tabulated as a measure of fishing effort (Table 5). Landings from April 15th to June 15th were exclusively chinook; landings during November and December were nearly all chinook.

The 1974 troll chinook landings were 2,634,000 pounds round weight and were down from the exceptional 3,981,000 pounds landed in 1973 (Figure 1). The 1974 landings were 1,167,000 pounds above the 1964-73 average.

Table 3. Oregon Troll Chinook Catch Statistics for 1974 by Area and Month

Category and Month	Columbia River	Newport	Coos Bay	Brookings	Total
<u>No. of Lbs Round</u>					
April	3,780	877	199	431	5,287
May	129,746	3,088	3,195	2,412	138,441
June	16,723	90,405	165,404	17,389	289,921
July	31,786	280,619	360,408	49,291	722,104
August	40,687	125,725	736,827	23,668	926,907
September	13,419	55,046	309,481	31,451	409,397
October	2,729	2,998	84,002	17,323	107,052
November	0	0	16,246	15,607	31,853
December	0	0	404	2,599	3,003
Total	238,870	558,758	1,676,166	160,171	2,633,965
<u>No. of Fish</u>					
April	370	64	20	42	496
May	12,703	264	203	224	13,394
June	1,439	6,749	12,948	1,503	22,639
July	2,928	20,178	30,322	4,624	58,052
August	3,582	8,848	64,739	2,251	79,420
September	1,299	3,913	29,646	2,794	37,652
October	253	211	9,007	1,090	10,561
November	0	0	986	781	1,767
December	0	0	21	108	129
Total	22,574	40,227	147,892	13,417	224,110

Table 4. Oregon Troll Coho Catch Statistics for 1974 by Area and Month

Category and Month	Columbia River	Newport	Coos Bay	Brookings	Total
<u>No. of Lbs Round</u>					
June	32,014	301,967	621,291	29,814	985,086
July	400,252	1,967,103	2,179,652	201,450	4,748,457
August	214,248	1,176,942	745,864	40,072	2,177,126
September	60,314	225,020	92,777	14,860	392,971
October	2,188	1,642	7,631	285	11,746
November	0	0	0	24	24
December	0	0	0	0	0
Total	709,016	3,672,674	3,647,215	286,505	8,315,410
<u>No. of Fish</u>					
June	6,301	55,681	110,534	4,801	177,317
July	58,200	284,975	288,949	26,688	658,812
August	25,967	135,993	88,437	5,109	255,506
September	7,325	25,289	9,618	1,816	44,048
October	302	205	960	40	1,507
November	0	0	0	3	3
December	0	0	0	0	0
Total	98,095	502,143	498,498	38,457	1,137,193

Table 5. Number of Individual Salmon Landings in Oregon for 1974 by Area and Month

Category and Month	Columbia River	Newport	Coos Bay	Brookings	Total
April	36	30	13	18	97
May	265	56	83	31	435
June	293	1,909	2,462	223	4,887
July	1,139	9,831	8,710	894	20,574
August	1,422	8,268	6,432	537	16,659
September	461	2,965	2,518	323	6,267
October	34	131	988	431	1,584
November	0	0	138	360	498
December	0	0	4	53	57
Total	3,650	23,190	21,348	2,870	51,058

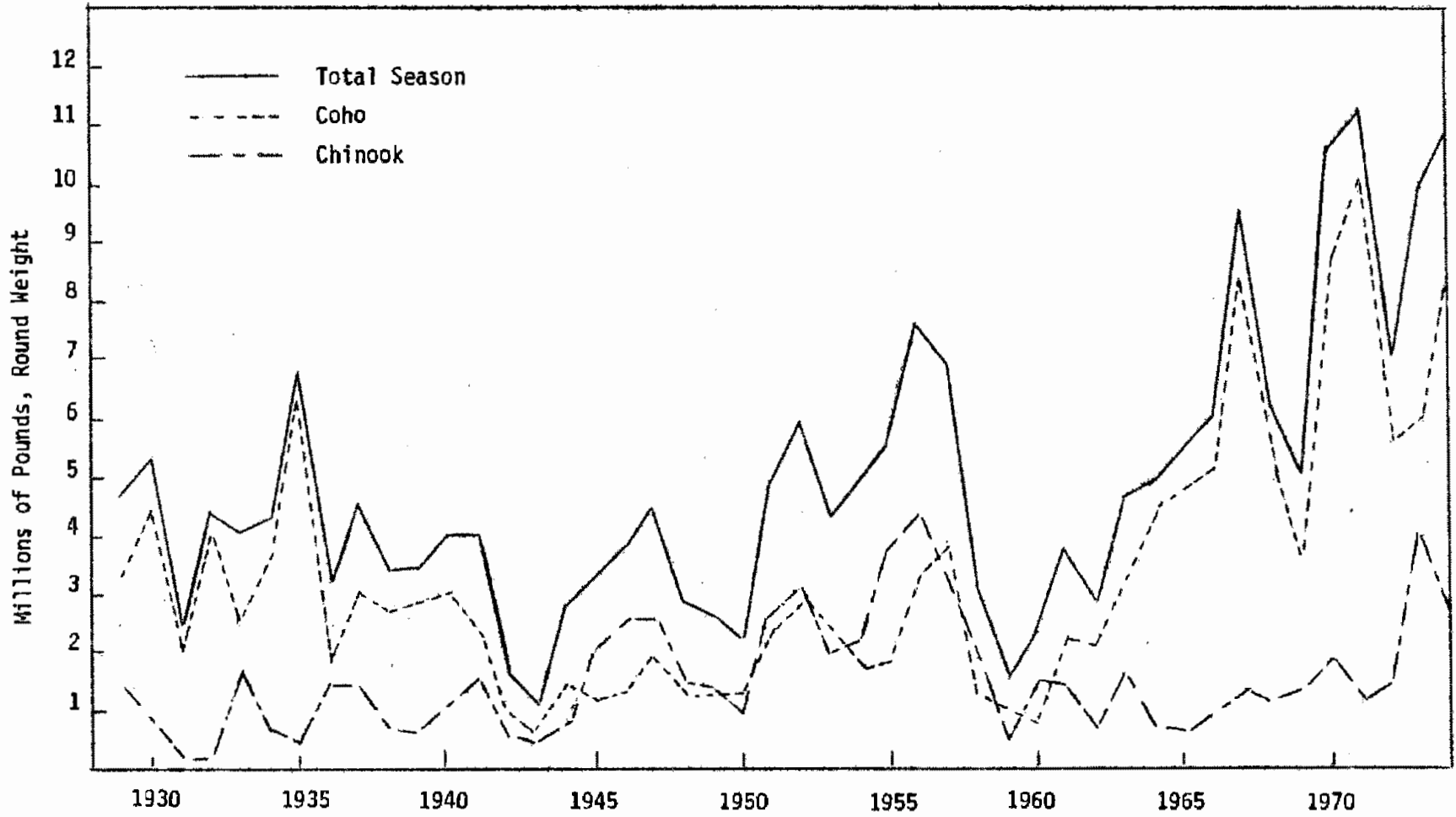


Figure 1. Oregon Ocean Troll Salmon Production, 1929-74

Chinook landings were good in the Columbia River area; May figures were the best in at least 23 years. Newport area landings were good during June, July and August. Coos Bay area landings were good during July and August; record landings were recorded for September. Brookings had a poor season with fair landings noted during August and September.

The 1974 troll coho landings were 8,315,000 pounds round compared to 5,908,000 pounds landed in 1973 (Figure 1). The 1974 figure was 2,169,000 pounds over the 1964-73 average.

Coho landings in the Columbia River area were good particularly in July. Newport area landings were a record high in July and were good during August. Coos Bay area landings were good with dominant July and August landings. Brookings landings were poor except during September.

1974 Troll Chinook Age Composition

We obtained 571 chinook scale samples or 6,632 scales from all areas during the 1974 season (Table 6). This level and distribution of sampling was considered adequate for estimating age composition of the landings. Plastic impressions were prepared from these scales and ages were determined by an ocean salmon biologist.

Age composition estimates based on total landings were made. As in most years, fish in their third year of life were dominant (Figure 2). In 1974, third year fish represented 51% and fourth year fish 42% of the total catch. The 1964-73 average was 68% for third year fish and 29% for fourth year fish.

Table 6. Log of the 1974 Troll Chinook Random Scale Samples

Month	No. of Cards	Number of Scales											
		Columbia River			Newport			Coos Bay			Brookings		
		S	M	L	S	M	L	S	M	L	S	M	L
April	0	0	0	0	0	0	0	0	0	0	0	0	0
May	32	86	95	91	0	0	0	28	47	37	0	0	0
June	79	46	44	40	78	85	97	129	155	153	9	34	26
July	167	122	94	105	168	195	240	229	223	232	130	179	161
August	158	155	134	124	109	149	179	208	219	218	127	166	158
September	75	41	41	43	39	59	50	141	129	123	47	65	46
October	31	0	0	0	0	0	0	144	118	49	0	0	0
November ^{1/}	26	0	0	0	0	0	0	0	0	0	4	44	125
December ^{1/}	3	0	0	0	0	0	0	0	0	0	1	0	19
Total	571	450	408	403	394	488	566	879	891	812	318	488	535

^{1/} Extended season

S - small
M - medium
L - large

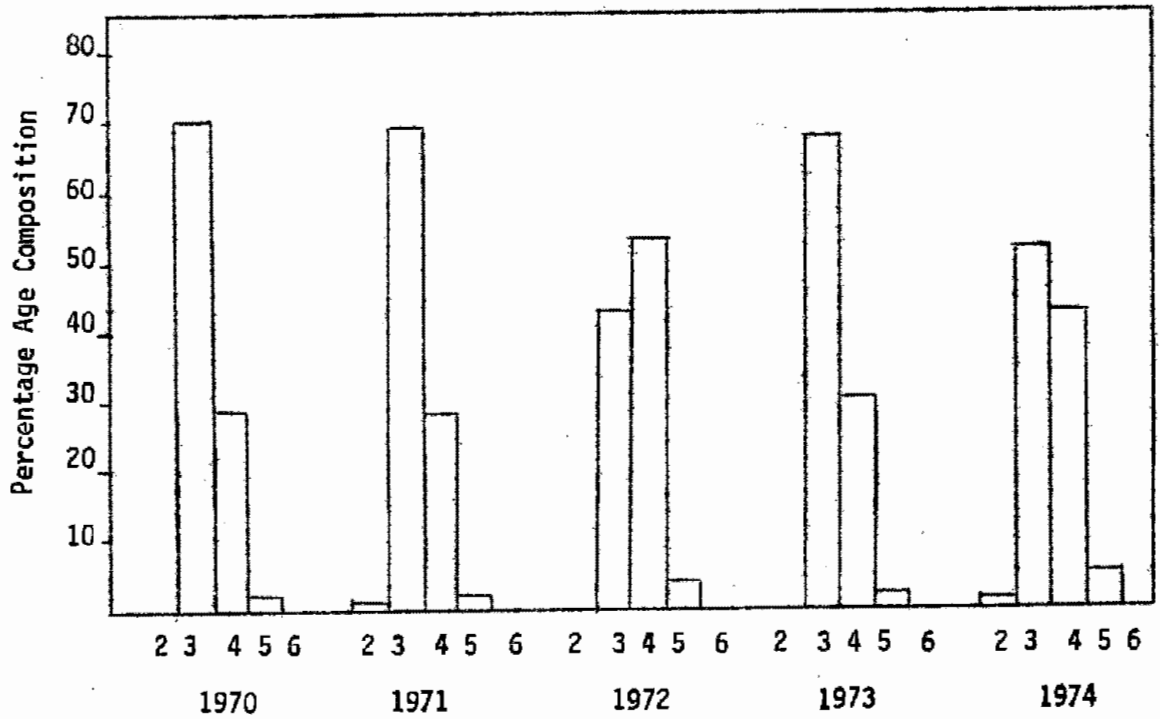
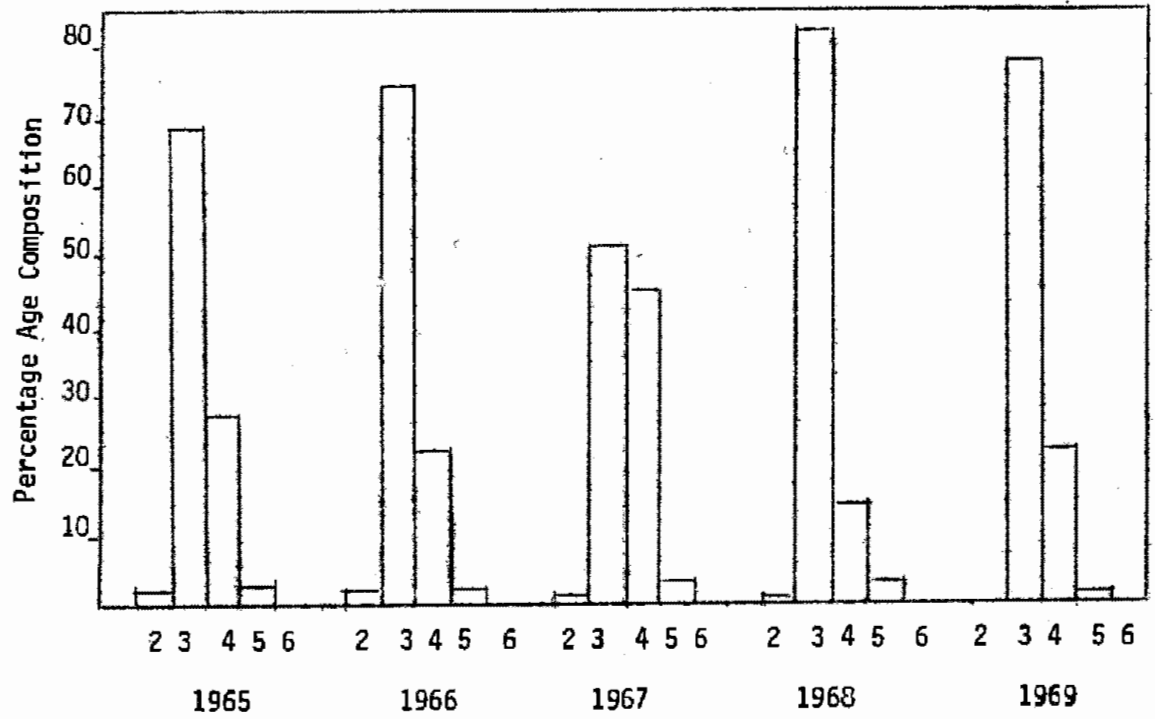


Figure 2. Age Composition for Chinook in the Oregon Troll Fishery, 1965-74

Troll Salmon Mark Sampling

Two samplers each were assigned to both Astoria and Charleston; Newport and Brookings were assigned one sampler each. This sampling effort resulted in 18% of all chinook and 15% of all coho being examined for marks. Detailed sampling information is presented in Tables 7 and 8 for chinook and coho, respectively.

Table 7. Oregon Troll Chinook Mark Sampling, 1974

Area of Landing	April	May	June	July	Aug.	Sept.	Oct.	Nov.- Dec.	Total
<u>Columbia River</u>									
No. Examined	34	2,750	176	817	671	367	0	0	4,815
No. Landed	370	12,703	1,439	2,928	3,582	1,299	253	0	22,574
% Examined	9	22	12	28	19	28	0	0	21
<u>Newport</u>									
No. Examined	2	3	1,798	2,831	782	276	0	0	5,692
No. Landed	64	264	6,749	20,178	8,848	3,913	211	0	40,277
% Examined	3	1	27	14	8	9	0	0	14
<u>Coos Bay</u>									
No. Examined	0	181	2,181	5,081	10,135	3,180	1,719	338	22,815
No. Landed	20	203	12,948	30,322	64,739	29,646	9,007	1,007	147,892
% Examined	0	89	17	17	16	11	19	34	15
<u>Brookings</u>									
No. Examined	0	9	587	2,270	1,811	797	432	576	6,482
No. Landed	42	224	1,503	4,624	2,251	2,794	1,090	889	13,417
% Examined	0	4	39	49	80	29	40	65	48
<u>Total</u>									
No. Examined	36	2,943	4,742	10,999	13,399	4,620	2,151	914	39,804
No. Landed	496	13,394	22,639	58,052	79,420	37,652	10,561	1,896	224,110
% Examined	7	22	21	19	17	12	20	48	18

Table 8. Oregon Troll Coho Mark Sampling, 1974

Area of Landing	June	July	Aug.	Sept.	Nov. -		Total
					Oct.	Dec.	
<u>Columbia River</u>							
No. Examined	975	11,032	5,298	2,871	0	0	20,176
No. Landed	6,301	58,200	25,967	7,325	302	0	98,095
% Examined	15	19	20	39	0	0	21
<u>Newport</u>							
No. Examined	21,514	41,862	13,320	2,178	3	0	78,877
No. Landed	55,681	284,975	135,993	25,289	205	0	502,143
% Examined	39	15	10	9	1	0	16
<u>Coos Bay</u>							
No. Examined	15,702	22,968	9,313	1,064	105	0	49,152
No. Landed	110,534	288,949	88,437	9,618	960	0	498,498
% Examined	14	8	11	11	11	0	10
<u>Brookings</u>							
No. Examined	1,974	15,126	3,558	1,164	0	2	21,824
No. Landed	4,801	26,688	5,109	1,816	40	3	38,457
% Examined	41	57	70	64	0	67	57
<u>Total</u>							
No. Examined	40,165	90,988	31,489	7,277	108	2	170,029
No. Landed	177,317	658,812	255,506	44,048	1,507	3	1,137,193
% Examined	23	14	12	17	7	67	15

Samplers observed 1,943 fin-clipped chinook in the landings (Table 9). Approximately 26% of the total mark recoveries were from the Chetco River, 12% were from the Elk River, 6% were from the Umpqua River and 5% were from the Sacramento River system.

We collected 87 chinook heads for coded wire tag recovery. Technicians found tags in 55 or 63% of these heads. The main contributors were the Kalama River with 16 tags, Ringold Pond with 15 tags, the Cowlitz River with 11 tags, and Puget Sound with 8 tags.

Samplers found 5,949 marked coho in the troll fishery (Table 10). Most of the marks were either duplicated or unassignable. Approximately 20% of the total mark recoveries were from the Alsea River.

Table 9. Continued

Mark	Brood	Apr.		May		June		July		August		September		October		Nov.		Dec.		Total
		CR	CR	CB	CR	Npt	CB	Brk	CR	Npt	CB	Brk	CR	Npt	CB	PO	Brk	PO	Brk	
An-RP	1970					1	1	1	3	3	1	8	9							28
An-RP	1971										1	1								1
An-RP	Unk.						1													1
An-RP-RM	1970																			1
An-RP-RM	1971																			1
An-RP-RM	1970																			1
An-LM	1970																			1
An-LM	1968																			1
LV	1968																			1
LV	1969																			1
LV	1970																			1
LV	1971																			1
LV	1972																			1
LV	Unk.																			1
LV-RV	1969																			1
LV-RV	1970																			1
LV-RV	1971																			1
LV-RV	Unk.																			1
LV-RV	1970																			1
LV-RV	1971																			1
LV-RV-LM	1970																			1
LV-RV-LM	1970																			1
LV-LH	1971																			1
LV-LH	1970																			1
LV-LH	1971																			1
LV-LH	1970																			1
LV-RM	1971																			1
RV	1969																			1
RV	1970																			1
RV	1971																			1
RV	Unk.																			1
RV-LP	1969																			1
RV-LP	1970																			1
RV-LP	1971																			1
RV-LP	1970																			1
RV-LH	1970																			1
RV-LH	1971																			1
RV-LH	1969																			1
RV-RM	1970																			1
RV-RM	1971																			1
RV-RM	1970																			1
LP	1969																			1
LP	1970																			1
																				6

Table 9. Continued

Mark	Brood	Apr.		May		June			July			August			September			October			Nov.		Dec.	Total				
		CR	CR	CB	CR	Npt	CB	Brk	CR	Npt	CB	Brk	CR	Npt	CB	Brk	CR	CB	PO	Brk	PO	Brk	Brk					
LP	1971			1																				11				
LP-RP	1971																							1				
LP-RM	1970																							1				
LP-RM	1971																							1				
LP-RM	1969																							1				
RP	1970																							2				
RP	1971																							11				
RP	Unk.																							20				
RP-LH	1970			1																				2				
RP-RM	1970																							2				
RP-RM	1971																							7				
				1																				1				
				78	6	7	50	52	18	26	95	146	25	30	29	250	12	14	6	124	13	31	366	126	53	168	17	1,943

Table 10. Summary of Coho Marks Recovered from the Oregon Troll Fishery, 1974

Origin	Mark	Brood	June				July				August				September				Oct.	Total
			CR	Npt	CB	Brk	CR	Npt	CB	Brk	CR	Npt	CB	Brk	CR	Npt	CB	Brk	CB	
Cowlitz Hatch.	D	1971	1	9	10	3	21	64	10	7	12	21	10	2	6	2	1		179	
Alesea River	D-Ad	1971		2	14		10	42	59	62	6	39	91	39	11	10	3	12	400	
Not Assigned	D-Ad	1972									1				1			2		
Not Assigned	D-Ad-RV	1971					1											1		
Not Assigned	D-Ad-LP	1971						1	1		1	2		1			2	8		
Not Assigned	D-Ad-LP-RP	1971							1									1		
Not Assigned	D-Ad-RP	1971						1	2	1		1	1					6		
Not Assigned	D-Ad-RM	1971										1						1		
Duplicated	D-LV	1971		1	1	2	1	11	6	8	3	9	7	4	3	2	1	59		
Duplicated	D-RV	1971		1	3	2	2	5	5	16	4	1	6	5	2	3	1	56		
Not Assigned	D-RV-LP	1971							1									1		
Not Assigned	D-RV-RP	1971						1		1								2		
Not Assigned	D-LP	1971		1				2		1		1						5		
Not Assigned	D-RP	1971					1	1	1	2			1	1				7		
Not Assigned	D-LM	1971						1	1				1					3		
Not Assigned	D-RM	1971					1	2						1				4		
Duplicated	Ad	1971	11	111	104	3	112	442	141	52	48	119	58	13	38	26	6	3	1,287	
Duplicated	Ad	1972									3	2		1				6		
Not Assigned	Ad-An	1971			1				1	1								3		
Duplicated	Ad-LV	1971		3	3		1	6	6	1		3	5		1			29		
Not Assigned	Ad-LV-RV	1971			1			1	1			3			1			7		
Not Assigned	Ad-LV-RP	1971							1									1		
Youngs Bay	Ad-RV	1971		1	4		2	15	18	7	6	15	6	1	5	3	1	84		
Not Assigned	Ad-RV-LP	1971							1		1	1						3		
Not Assigned	Ad-RV-RP	1971							1								1	2		
Alesea River	Ad-LP	1971		4	26	8	15	42	71	62	11	35	52	49	9	15	17	22	438	
S. Santiam R.	Ad-LP	1972										1						1		
Not Assigned	Ad-LP-RP	1971		4	1		1	4	9	6	2	5	11	10			3	1	57	
Not Assigned	Ad-LP-RM	1971			1			2										3		
Alesea River	Ad-RP	1971		12	25	6	8	43	60	47	9	52	51	20	4	13	9	11	370	
Not Assigned	Ad-RP-RM	1971							2								2	4		
Willamette River	Ad-LM	1971		3	3	2		3	6	14		3	4		1			39		
Not Assigned	Ad-LM-RM	1971							1									1		
Cascade Hatch.	Ad-RM	1971		14	20	5	12	67	35	10	12	17	10		1		1	204		
Wynoochee R. Dam	An	1971			2			2				1	1					6		

Table 10. Continued

Origin	Mark	Brood	June				July				August				September				Oct.	Total	
			CR	Npt	CB	Brk	CR	Npt	CB	Brk	CR	Npt	CB	Brk	CR	Npt	CB	Brk	CB		
Not Assigned	An-LV	1971									1									1	
Not Assigned	An-LP	1971																		1	
Duplicated	LV	1971		26	30	1	29	80	96	33	35	55	93	14	34	22	16	9			573
Trask R. Hatch.	LV-RV	1971	1	6	6	5	6	35	36	23	4	18	51	15	2	8	4	6			226
Not Assigned	LV-RV-LP	1971						2								1		1			6
Not Assigned	LV-RV-RP	1971					1	2	1							1					6
Not Assigned	LV-LP	1971		1			1	4	3			1	1								11
Floras Lake	LV-RP	1971		1	2	1	2	7	20	17	2	6	20	19	3	2	7	1			110
Not Assigned	LV-LM	1971						2				1									3
Not Assigned	LV-RM	1971				1															1
Duplicated	RV	1971	1	14	18	7	14	28	45	52	20	52	58	12	20	6	3	2			352
Not Assigned	RV-LP	1971					1	1	1	1											7
Not Assigned	RV-RP	1971																			2
Not Assigned	RV-LM	1971				1		1	1						1						4
Not Assigned	RV-RM	1971									1										1
Wynoochee R. Dam	LP	1971	2	40	54	4	42	137	79	34	23	42	31	5	18	7	5	2			525
Not Assigned	LP	1972													1						1
Not Assigned	LP-RP	1971		6	3			4	7	17	2	8	5		1	2	1	1			57
Not Assigned	LP-RP	1972									1										1
Not Assigned	LP-RP-RM	1971										1									1
Not Assigned	LP-LM	1971								1											2
Not Assigned	LP-RM	1971								1	1										2
Wynoochee R. Dam	RP	1971	1	48	72	8	70	153	92	78	33	97	53	12	29	18	1	3	2		770
Not Assigned	RP-LM	1971						2													2
Not Assigned	RP-LM-RM	1971		1																	1
Not Assigned	RP-RM	1971						2								1					3
Total			17	309	405	59	354	1218	826	555	242	613	630	221	191	147	79	81	2		5,949

CR = Columbia River
 Npt = Newport
 CB = Coos Bay
 Brk = Brookings

We collected 1,232 coho heads for coded wire tag recovery. Technicians found tags in 631 or 51% of these heads. The main contributors were Puget Sound with 229 tags, Big Creek with 201 tags, Soleduck with 157 tags, and British Columbia with 35 tags.

Average Weight Data

Average weight data were collected to convert landings in pounds to numbers of fish. The 1974 average weights are presented in Table 11. The seasonal average weight for chinook was 10.2 pounds dressed weight compared to 9.5 pounds in 1973.

Average weights in the Columbia River, Newport and Coos Bay areas were up from 1973. Brookings average weights were similar to those for 1973. Chinook average weights seldom reflect growth with time because age and stock composition in a given area continually fluctuate.

Table 11. Observed Average Dressed Weight and Calculated Numbers of Troll Chinook by Month and Area, 1974

	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Total
Col. River										
Number	370	12,703	1,439	2,928	3,582	1,299	253	0	0	22,574
Pounds	3,287	112,823	14,541	27,640	35,380	11,669	2,373	0	0	207,713
Ave. Wt.	8.9	8.9	10.1	9.4	9.9	9.0	9.4	0	0	9.2
Newport										
Number	64	264	6,749	20,178	8,848	3,913	211	0	0	40,227
Pounds	763	2,685	78,614	244,016	109,327	47,865	2,607	0	0	485,877
Ave. Wt.	11.9	10.2	11.6	12.1	12.4	12.2	12.4	0	0	12.1
Coos Bay										
Number	20	203	12,948	30,322	64,739	29,646	9,007	986	21	147,892
Pounds	173	2,778	143,830	313,398	640,719	269,114	73,045	14,127	351	1,457,535
Ave. Wt.	8.7	13.7	11.1	10.3	9.9	9.1	8.1	14.3	16.7	9.9
Brookings										
Number	42	224	1,503	4,624	2,251	2,794	1,090	781	108	13,417
Pounds	375	2,097	15,121	42,862	20,581	27,349	15,063	13,571	2,260	139,279
Ave. Wt.	8.9	9.4	10.1	9.3	9.1	9.8	13.8	17.4	20.9	10.4
Total										
Number	496	13,394	22,639	58,052	79,420	37,652	10,561	1,767	129	224,110
Pounds	4,598	120,383	252,106	627,916	806,007	355,997	93,088	27,698	2,611	2,290,404
Ave. Wt.	9.3	9.0	11.1	10.8	10.1	9.5	8.8	15.7	20.2	10.2

Coho average weights usually show a monthly increase from June through September, and with the exception of the Columbia River area, this was true for 1974 (Table 12). The seasonal average weight was 6.4 pounds dressed weight compared to 6.5 pounds in 1973.

Newport area average weights were down from 1973. Average weights from all the other areas were larger than those for 1973. A contributing factor to the overall larger average size was the good July landings of large fish.

Table 12. Observed Average Dressed Weight and Calculated Numbers of Troll Coho by Month and Area, 1974

	June	July	August	Sept.	Oct.	Nov.	Dec.	Total
Col. River								
Number	6,301	53,200	25,967	7,325	302	0	0	98,095
Pounds	27,916	348,046	186,302	52,447	1,903	0	0	616,614
Ave. Wt.	4.4	6.5	7.2	7.2	6.3	0	0	6.3
Newport								
Number	55,681	284,975	135,993	25,289	205	0	0	502,143
Pounds	262,580	1,710,525	1,023,427	195,670	1,428	0	0	3,193,630
Ave. Wt.	4.7	6.0	7.5	7.7	7.0	0	0	6.2
Coos Bay								
Number	110,534	288,949	88,437	9,618	960	0	0	498,498
Pounds	540,253	1,895,349	648,578	80,676	6,635	0	0	3,171,491
Ave. Wt.	4.9	6.6	7.3	8.4	6.9	0	0	6.4
Brookings								
Number	4,801	26,688	5,109	1,816	40	3	0	38,457
Pounds	25,925	175,174	34,845	12,922	248	21	0	249,135
Ave. Wt.	5.4	6.6	6.8	7.1	6.2	7.0	0	6.5
Total								
Number	177,317	658,812	255,506	44,048	1,507	3	0	1,137,193
Pounds	856,674	4,129,094	1,893,152	341,715	10,214	21	0	7,230,870
Ave. Wt.	4.8	6.3	7.4	7.8	6.8	7.0	0	6.4

Extended Troll Season

The Fish Commission extended the troll salmon season through November and December 1974 in two areas off the southern Oregon coast. The purpose of the extension was to reduce the numbers of surplus chinook anticipated at the Elk and Chetco river stations. The extended fishery was restricted to the following areas:

Elk River Area: Cape Blanco south to Humbug Mountain and offshore to 3 miles.

Chetco River Area: Goat Island south to the California-Oregon border and offshore to 3 miles.

Chinook landings during the extended season were ^{30,300 dr. wt.} ~~34,856~~ pounds round weight or an estimated 1,903 fish (Table 3). Only three coho were landed during the extended season (Table 4). The bulk of the landings (93%) occurred during November. Little fishing effort was expended in December due to adverse weather. Eighty five trollers reported landings during the extended season and it is interesting to note that 28% of these boats made 53% of the deliveries.

An anticipated benefit of the extended season was that a high incidence of mature Elk and Chetco river chinook would be observed in the catch. Most of the marked fish recoveries were actual or probable Elk or Chetco river chinook (Table 9). Seventy five per cent of the sampled Port Orford landings and 32% of the sampled Brookings landings were apparently Elk and Chetco river chinook. The incidence of these marks in our samples suggests that the catch almost entirely originated in the two rivers. Seventy three per cent of the chinook sampled were fish in their fourth year of life or older. During the regular chinook troll season (April 15 to October 31) over 50% of the chinook sampled were fish in their third year of life (Figure 2). This suggests that the proportion of mature chinook in the troll landings was highest during the extended season.

There were no surplus chinook at the Elk or Chetco river stations in 1974. Some programs were reduced or eliminated because of insufficient hatchery chinook returns. Programs affected included fingerling and smolt releases in Pistol River (eliminated), fingerling release in Coos Bay (reduced), smolt release in Alsea River (reduced), and the transplant of adults into the upper Elk River watershed (eliminated). None of these shortages were considered to be critical. Sufficient eggs were obtained for all Elk and Chetco river stocking programs.

The extended troll season reduced the potential return of chinook to both the Elk and Chetco rivers. It is important to note that the sport fishery was also extended through December in the two rivers and that substantial catches of large chinook occurred.

SALMON LENGTH-FREQUENCY

We completed a summary of all length-frequency at-sea sampling from 1948 to the present. This summary, distributed in an information report, provides offshore salmon length-frequency histograms by species, area, and two-week period.

OCEAN SALMON TAGGING

We designed a computer coding form for ocean salmon tagging data and began coding all FCO tagging data on hand.