

ALASKA DEPARTMENT OF FISH AND GAME  
DIVISION OF COMMERCIAL FISHERIES  
PRINCE WILLIAM SOUND AREA

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Annual Management Report  
1974

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## PREFACE

This is the fifteenth annual management report since the State assumed control of the fisheries in 1960. The 1974 data is preliminary and will be finalized and corrected in subsequent reports. Data presented here supercedes information presented in previous management reports.

Persons desiring additional information should direct a specific request to the area office in Cordova.

### CORDOVA COMMERCIAL FISHERIES MANAGEMENT AREA

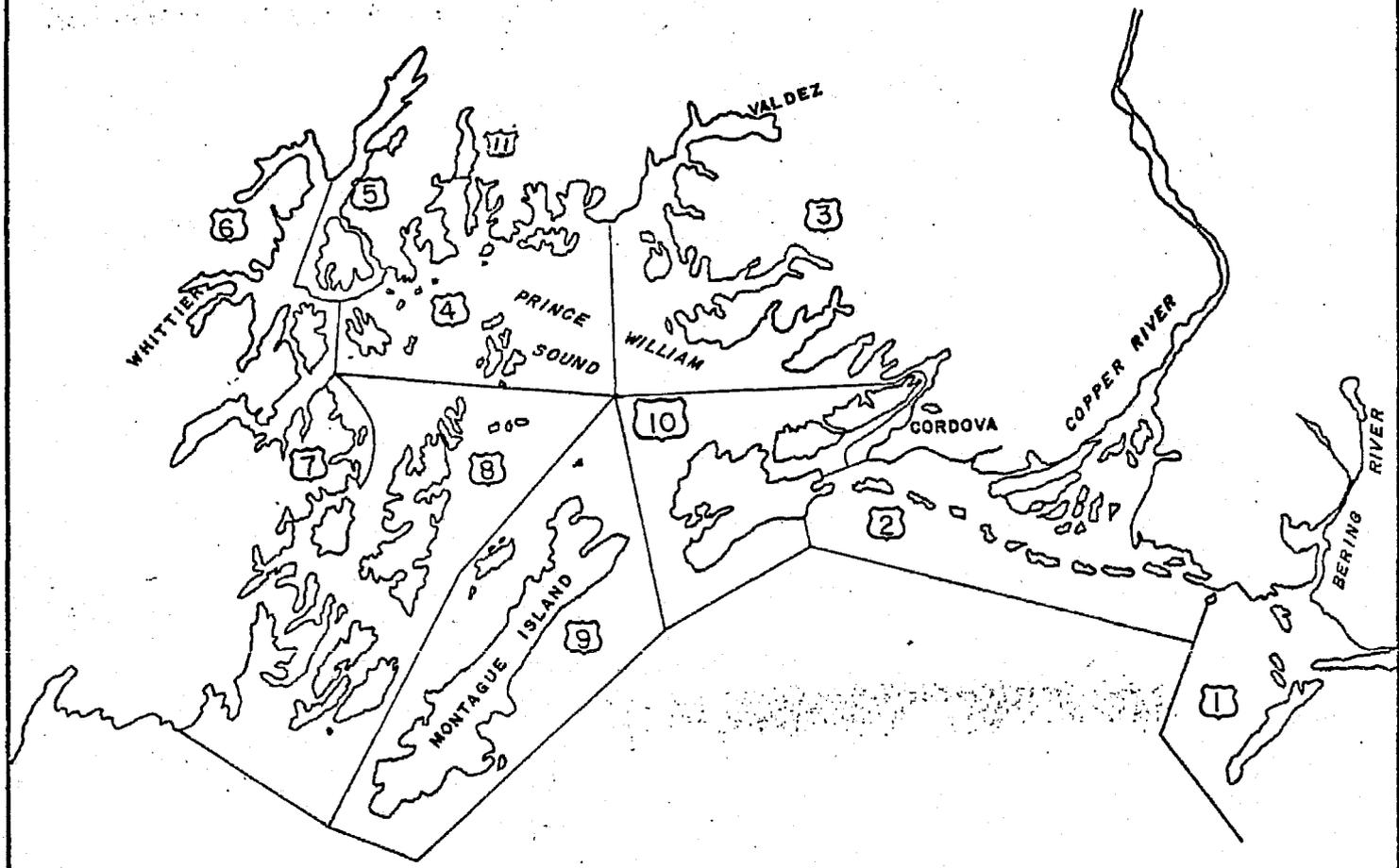


Figure 1: FISHING DISTRICTS

- |                 |                  |
|-----------------|------------------|
| 1. Bering River | 6. Northwestern  |
| 2. Copper River | 7. Eshamy        |
| 3. Eastern      | 8. Southwestern  |
| 4. Northern     | 9. Montague      |
| 5. Coghill      | 10. Southeastern |
|                 | 11. Unakwik      |

## INTRODUCTION

This is the fifteenth annual commercial fisheries management report since the State assumed control of the fisheries in 1960.

The report gives a brief description of the 1974 fishery and summarizes historical catch, escapement and related data on each species harvested by the commercial fishery. The report is compiled primarily for use as a reference source for management purposes.

The Prince William Sound Area comprises all of the drainages entering the Gulf of Alaska between Cape Suckling and Cape Fairfield. The area includes Controller Bay (Bering River), Copper River, Prince William Sound and several small rivers and streams entering the Copper River delta and the Gulf of Alaska (Figure 1).

The economy of the Prince William Sound communities depends primarily on the commercial fishery and related activities. However, the Trans-Alaska oil pipeline terminus and related work provided a considerable impact to the Valdez area economy in 1974 and will continue to provide a basic income to the community for many years.

The base of the major fishery activity is Cordova, and to a lesser extent, Valdez and Whittier.

Fisheries of the area harvest five species of salmon, three species of crab, herring, herring eggs on kelp, halibut, razor clams, shrimp and miscellaneous bottom fish. Salmon is the most important fishery resource harvested and in 1974 contributed 59.8 percent of the total fishery value to fishermen (Figure 2). The average annual wholesale value of all fishery products from the Prince William Sound Area is approximately \$10,726,000. The value to fishermen of fish and shellfish caught in the area in 1974 was \$9,600,000.

Three types of salmon net gear are used to harvest salmon from the area. Drift gill nets are the most numerous and are used in the Bering River, Copper River, Eshamy, Coghill and Unakwik management districts. Purse seines are second in abundance and are fished in all districts of Prince William Sound except Eshamy. A small number of set gill nets are fished in the Eshamy district. Salmon troll gear was removed from the legal gear for the Prince William Sound Area on March 9, 1974.

The crab species and some large shrimp are caught in pot gear. Some bottom fish and shrimp are taken with trawls. Long lines are used to catch halibut.

In 1974 four major canneries and eight smaller operations processed salmon in the area. Three of the major operations custom canned or processed salmon for five other operations. Five major operators processed king, tanner and Dungeness crab. Seven operators processed herring and twelve processed herring roe on kelp. Table 1 lists fishery operators for the Prince William Sound Area.

A staff of six biologists, one technician and approximately 25 seasonal aides conduct the research and management programs of the Prince William Sound Area.

Table 1. Fishery operators, Prince William Sound Area, 1974.

Name, Executive, Address, Location of Operation	Size of Cans Lines of Machinery	Type of Product
Alaska Packers Association I/ Merle Wickett, Superintendent P. O. Box 3326 Bellevue, WA 98009	1/2 lb. 1 lb.	Salmon, Salmon Eggs, Tanner Crab
B & B Fisheries, Inc. Jerry Nebel, Superintendent P. O. Box 667 Valdez, AK 99686		Halibut, Herring, Dungeness Crab, King Crab, Tanner Crab, Shrimp
Bayside Cold Storage Fred Pettingill, Supt. P. O. Box 636 Cordova, AK		Salmon, Halibut, Herring
Bergit Fishing Company Stanley Samuelson, Supt. P. O. Box 936 Cordova, AK		Herring Roe on Kelp
Bilderback Enterprises Dan Bilderback, Buyer P. O. Box 723 Cordova, AK		Salmon, Herring Roe on Kelp
Blakes Canning Margaret Blake, Supt. P. O. Box 94 Cordova, AK	Hand Pack 6 1/2 oz.	Salmon
Cordova Kelp Company J. Michael Noonan, Supt. P. O. Box 666 Cordova, AK		Herring Roe on Kelp
Jack Distad 31 Yankovich Road Fairbanks, Ak 99701		Salmon, Salmon Eggs
Driftwood S. A. Callaway, Co-Owner P. O. Box 1128 Eagle River, AK 99577		King Crab
Fairmount Island Seafoods 2/ 10th & M Lockers 1020 M Street Anchorage, AK 99501		Dungeness Crab, King Crab, Tanner Crab

Table 1, cont. Fishery operators, Prince William Sound Area, 1974.

Name, Executive, Address, Location of Operation	Size of Cans Lines of Machinery	Type of Product
Fairweather Supply Company Wayne J. Plumley, Owner P. O. Box 351 Petersburg, AK 99833		Herring
Glacier Packing Company Percy Conrad, Supt. P. O. 176 Big Point via Cordova	One - 7 1/2 oz.	Salmon, Razor Clams
Marion D. Hall P. O. Box 404 Cordova, AK		Herring Roe on Kelp
Kenneth Kirkman P. O. Box 962 Cordova, AK		Herring Roe on Kelp
Laddie Enterprises Richard Williamson, Owner P. O. Box 1029 Cordova, AK		King Crab
MSP Company C. Ross Mullins, Partner P. O. Box 436 Cordova, AK		Herring Roe on Kelp
MacLeod/Cora B Whitney Fidaigo, buyers P. O. Box 995 Cordova, AK		Herring Roe on Kelp
Mokuhana Fisheries Ivar Reiten, Supt. 2360 West Commodore Way Seattle, WA 98199		Herring Roe on Kelp
Morpac, Inc. Jack N. Miller, Manager P. O. Box 683 Cordova, AK	One - 1/2 lb. One - 1 lb.	Salmon, Salmon Eggs, Herring, Dungeness Crab, Tanner Crab, Razor Clams & Bottome Fish (bait)
Richard Newby 2510 Aspen Anchorage, AK 99503		Herring Roe on Kelp

Table 1, cont. Fishery operators, Prince William Sound Area, 1974.

Name, Executive, Address Location of Operation	Size of Cans Lines of Machinery	Type of Product
New England Fish Company James E. Forsell, Supt. P. O. Box 120 Cordova, AK	Two - 1/2 lb. Two - 1 lb.	Salmon, Salmon Eggs, Tanner Crab
North Coast Seafood Processors Tracy Jones, Jr., Supt. P. O. Box 645 Homer, AK 99603		Herring Roe on Kelp
North Pacific Processors Ken Roemhildd, Supt. P. O. Box 1040 Cordova, AK	One - 1/4 lb. One - 6 1/2 oz. One - 1/2 lb. One - 1 lb.	Salmon, Salmon Eggs, Halibut, Herring, King Crab, Dungeness Crab, Tanner Crab, Razor Clams and Bottom Fish (bait)
Odiak Smokeries Jean Dettinger, Supt. P. O. Box 153 Cordova, AK	Hand Pack 3 1/4 oz. 6 1/2 oz.	Salmon
Peter Pan Seafoods, Inc. 3/ Les Maxwell, Local Rep. 1220 Dexter Horton Bldg. Seattle, WA 98104	1/4 lb. 1 lb.	Salmon
Arnold R. Phillips P. O. Box 411 Seward, AK 99664		Herring Roe on Kelp
St. Elias Ocean Products James Poor, Supt. P. O. Box 548 Cordova, AK	One - 1/4 lb. Two - 1/2 lb. One - 4 lb.	Salmon, Salmon Eggs, King Crab, Dungeness Crab, Tanner Crab, Razor Clams and Bottom Fish (bait)
Sea Alaska Products, Inc. George A. Yuth, Supt. 1818 Westlake Ave. North Seattle, WA 98109		Herring
Seward Fisheries 2/ T. R. Bertosen, Supt. P. O. Box 516 Seward, AK 99664		Salmon, Salmon Eggs, Halibut, Herring, Herring Roe on Kelp, Tanner Crab
Connie Taylor P. O. Box 969 Cordova, AK		Shrimp, Sole, Bottom Fish (bait)

Table 1, cont. Fishery operators, Prince William Sound Area, 1974.

Name, Executive, Address, Location of Operation	Size of Cans Lines of Machinery	Type of Product
Whitney Fidalgo 2360 W Commodore Way P. O. Box 99009 Seattle, WA 98199 Anchorage & Whittier Plants		Salmon, Herring Sac Roe
YMS Gregory York, Supt. 534 North 23rd Seattle, WA 98103		Herring Roe on Kelp
Daniel York 6553 6th N. W. Seattle, WA 98117		Herring Roe on Kelp

1/ Custom pack by Morpac, Inc. and New England Fish Company, Cordova.

2/ No annual report received for Prince William Sound Area.

3/ Custom pack by Engstrom Bros., Yakutat and North Pacific Processors, Cordova.

## ECONOMIC CONDITIONS

The communities of the Prince William Sound Area depend primarily on the fisheries of the area, and the economy, especially of Cordova, fluctuates almost directly with the fishing success.

Recent increases in salmon, shellfish, herring and herring spawn on kelp prices paid to fishermen have resulted in substantial benefits to the fishing communities. Prices for king salmon increased from 50¢ per pound in 1973 to 73.5¢ per pound in 1974. Pink salmon increased from 34.25¢ to 41¢, and chum salmon from 36¢ to 46¢ per pound. Prices of sockeye and coho remained the same as the previous year at 70¢ and 65¢ per pound respectively. The ex-vessel price of herring for sac roe jumped dramatically from about \$160 per ton in 1973 to about \$180 per ton in 1974. Figure 2 shows the percentage value distribution of fish and shellfish paid to fishermen in 1974.

A fair to good economic condition exists at the present time as indicated by the gradual upgrading of the fishing fleet and the recent addition of several new vessels to the fishing fleet. The fishing fleet is continuing to diversify by engaging in salmon, crab and herring fishing which contributes to economic stability. Higher prices generally reflect the inflationary trend and has resulted in a shift from canned products to frozen products which require less labor and demand higher prices. Table 2 shows the salmon product by species for 1974.

Table 3 shows comparative catch value per fisherman by district for the years 1970 to 1974. Average catch per fisherman shows a general decrease in each district for most species from the previous year except pink salmon in the Eshamy district and sockeye in the Copper River district. The general decrease in catch is reflected in a decrease in value to fishermen in each district except Copper River which shows a substantial gain over the previous year.

A summary of salmon gear operated in the Prince William Sound Area from 1960 to 1974 is presented in Table 4. Significant changes in effort is shown in the purse seine fishery because the general purse seine fishery was closed and the only effort occurred in the Coghill-Unakwik and Eshamy drift gill net fisheries as a result of the general purse seine closure and partly because of lucrative prices and good catches of pink salmon in these district. The effort decrease in the Copper River and Bering River coho fishery is the result of price negotiations which were never settled. The inability to arrive at a price settlement resulted in a limited number of fishermen negotiating a custom canning operation through the Cordova Aquatic Marketing Association.

The decreased effort during the Bering River sockeye fishery was caused by the decreased number of salmon available. The early sockeye runs escaped the fishery and the later runs were poor which resulted in a minimum sockeye catch.

The 1974 wholesale value of fishery products from the Prince William Sound Area is presented in Table 47.

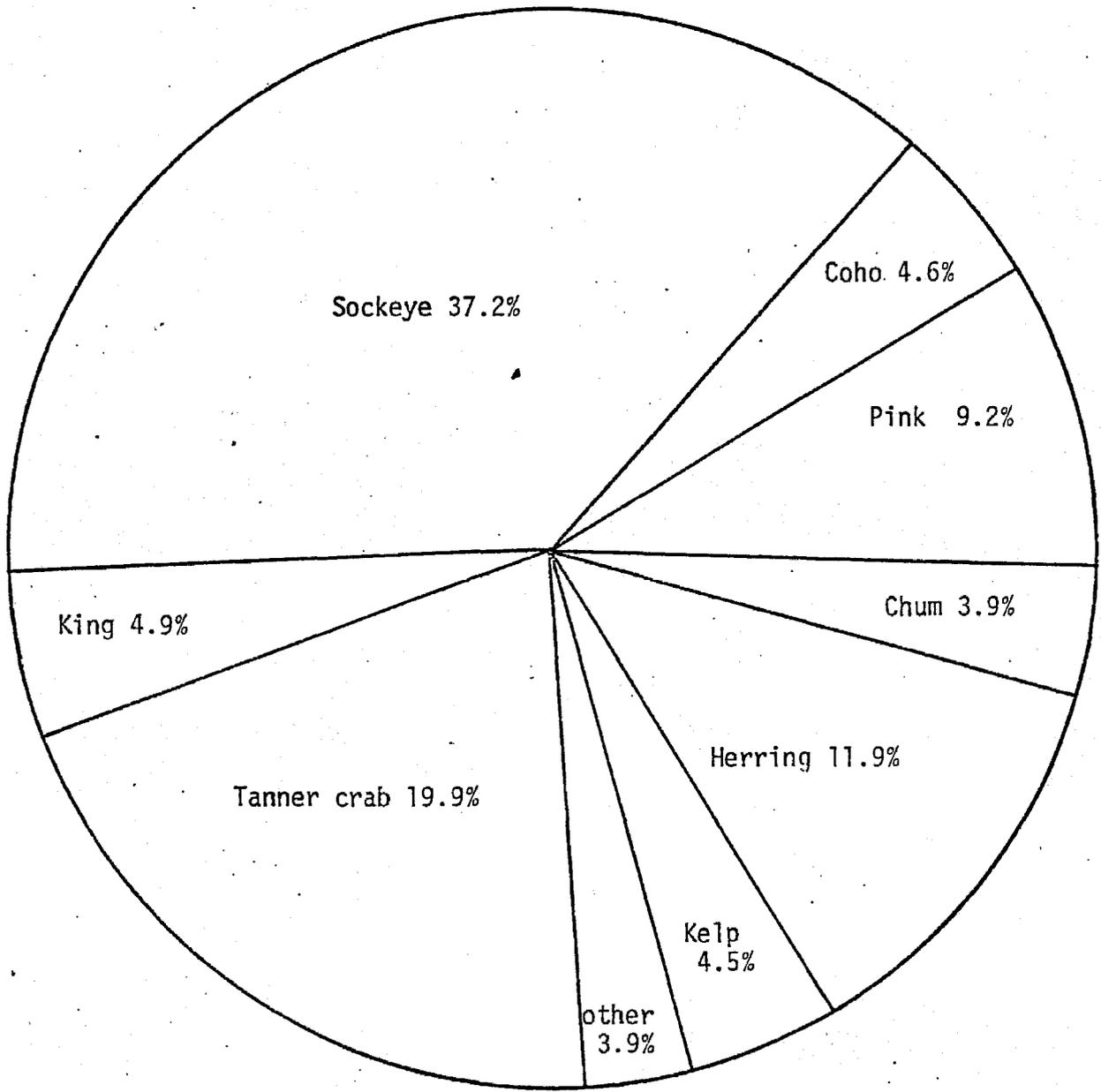


FIGURE 2. Percentage value to fishermen of fish and shellfish harvested from the Prince William Sound Area, 1974.

Table 2. Prince William Sound Area case pack and pounds of frozen salmon, by species, by week, 1974. <sup>1/</sup>

Week	<u>Kings</u>		<u>Sockeye</u>		<u>Cohos</u>		<u>Pinks</u>		<u>Chums</u>	
	Pounds Frozen	Cases	Pounds Frozen	Cases	Pounds Frozen	Cases	Pounds Frozen	Cases	Pounds Frozen	Cases
21	85087	60	3035	9393						26
22	88194	818	2142	7809						29
23	103661	162	36529	11077						22
24	52312	233	5697	8343						45
25	25497	181	15322	8531				15	1179	448
26	33540	1		4782				774	8	1388
27	7850	18		4198		13		2316		1468
28	5982			4697		49		4445		2034
29	2223	29		4098		115		12118		2461
30	3175			2910		93		5037		1027
31	724			1286		256		3406		1136
32	99	5		812		232		2131		719
33	106			41		242		54		7
34	212			75		442		33		111
35				29		814		6		4
36					2620	8779				
37						3092				
TOTAL	408662	1507	62725	68576	2620	14127		30335	1187	10925

<sup>1/</sup> From reports of processors. Frozen salmon reported in raw weight and cases on the basis of 48 one pound cans.

Table 3. Average salmon catch and catch value per fisherman, 1970 - 1974.

Year	Average Value 1/ Per Fisherman	Average Catch					District
		King	Sockeye	Coho	Pink	Chum	
1970	\$1,834	7	174	37	10,917	856	Prince William Sound <u>2/</u>
1971	2,827	3	111	82	22,973	1,610	
1972		CLOSED TO PURSE SEINES					
1973	5,349	*	11	1	2,324	731	
1974		CLOSED TO PURSE SEINES					
1970	970	*	266	2	640	105	Coghill - Unakwik <u>3/</u>
1971	1,022	4	483	4	1,079	706	
1972	2,323	*	742	1	48	98	
1973	3,844	*	383	*	1,766	1,123	
1974	3,363	1	334	*	495	181	
1970	2,499	*	689	23	1,773	225	Eshamy <u>4/</u>
1971		CLOSED TO PURSE SEINES					
1972	2,399	*	588	13	504	290	
1973	4,145	1	351	3	458	586	
1974	3,888	*	97	*	1,449	147	
1970	7,179	48	2,772	623	*	*	Copper River
1971	5,756	37	1,415	474	4	11	
1972	5,776	53	1,725	426	5	2	
1973	6,946	47	773	494	*	*	
1974	8,281	42	1,357	104	22	1	
1970	3,441	*	521	885			Bering River
1971	4,497	2	634	1,530			
1972	1,810	1	543	320	*	*	
1973	7,751	2	325	1,037	*	*	
1974	3,906	*	86	584	*	*	

\* Less than one fish.

1/ Rounded to nearest dollar.

2/ Catch is average catch per boat. Value per fisherman based on an average of 3 fishermen per boat (one share to the boat).

3/ Includes both purse seines and drift gill nets.

4/ Includes both drift gill net and set gill net.

Table 4. Summary of salmon gear operated, 1960 - 1974 1/

Year	Prince William Sound		Copper River Drift Gill Nets 2/		Bering River Drift Gill Nets 2/	
	Purse Seines	Gill Nets 2/	Red Season	Coho Season	Red Season	Coho Season
1960	223	CLOSED	59,400	34,050	9,900	8,400
1961	102	3,750 Coghill	50,550	25,650	6,450	4,650
1962	237	4,200 Eshamy 3/ 8,550 Coghill	59,100	27,450	9,900	4,500
1963	281	3,750 Eshamy 3/ 3,450 Coghill	61,650	37,950	8,250	8,250
1964	154	8,850 Coghill	43,350	30,900	4,800	6,300
1965	208	3,900 Coghill	50,100	26,850	1,950	9,300
1966	181	6,150 Eshamy 3/ 8,850 Coghill & Unakwik	52,200	30,300	3,600	6,750
1967	207	2,700 Eshamy 3/ 18,000 Coghill & Unakwik	59,100	30,600	6,000	8,250
1968	242	21,750 Coghill & Unakwik	76,650	28,800	4,650	4,650
1969	248	14,250 Coghill & Unakwik	53,400	22,350	4,950	9,900
1970	245	4,350 Eshamy 3/ 19,800 Coghill & Unakwik	60,450	38,850	7,350	13,650
1971	245 *	3,750 Eshamy 3/ 19,350 Coghill & Unakwik	65,400	26,250	8,700	9,450
1972	CLOSED	29,250 Coghill & Unakwik	63,300	36,300	14,100	9,300
1973	211 *	13,500 Eshamy 40,650 Coghill & Unakwik	64,650	40,350	7,200	9,450
1974	44**	7,050 Eshamy 3/ 47,700 Coghill & Unakwik 24,150 Eshamy 3/	62,850	15,450	2,550	5,250

1/ Peak effort.  
 2/ Fathoms of gear, weekly effort. Basis of 150 fathoms per fisherman.  
 3/ Includes set and drift gill nets.  
 \* Actual count. Other years include some duplicates.  
 \*\* Peak effort, Coghill and Unakwik districts only.

## PRICE OF FISH AND SHELLFISH

Negotiations for prices of salmon were still underway when the Copper River drift gill net salmon season opened on May 15, and price disagreements kept the fishermen on the beach until May 19. Average prices paid for salmon during the season were as follows: king salmon, all areas, \$0.6991 per pound; sockeye salmon, Copper River - Bering River, \$0.734, and Prince William Sound, \$0.397; coho salmon, Copper River - Bering River, \$0.515 to \$0.60, and Prince William Sound, \$0.16; pink and chum salmon, Prince William Sound, \$0.398 and \$0.423 per pound respectively.

Prevailing prices paid for shellfish per pound in 1974 were: tanner crab, \$0.20; Dungeness crab, \$0.45; king crab, \$0.45; and razor clams, \$0.60.

Herring prices ranged from \$120 to \$226 per ton, and averaged about \$164.

Prices of herring roe on kelp ranged from \$0.60 to \$0.75 per pound, and averaged about \$0.658.

## AVERAGE WEIGHT AND NUMBER OF SALMON PER CASE

The average weight of salmon by major fishery and species is shown in Table 5, and the number of salmon per case is given in Tables 6 and 7. Average weights as depicted in Table 5 were calculated from numbers and weights recorded on fish tickets.

The number of salmon per case was obtained from the annual report of New England Fish Company and North Pacific Processors.

## TIME OPEN TO FISHING AND CALENDAR WEEKS

Time open to fishing for salmon is expressed by month, day, gear and regulatory area in Table 8. Fishing time is shown in hours per day with the blanks denoting days closed to commercial fishing.

The calendar weeks shown in Table 9 were used in compiling catch statistics from 1974 landings.

Table 5. Comparative average weights of salmon by area in pounds from catch.

Area	Year	King	Sockeye	Coho	Pink	Chum	
Prince William Sound	1970	14.75	6.98	7.91	3.98	8.33	
	1971	9.54	7.02	7.77	3.55	7.24	
	1972	SEASON CLOSED					
	1973	--	7.50	7.00	4.01	9.50	
	1974	10.83	7.40	8.41	4.73	7.11	
Copper River	1970	30.79	5.97	9.48	4.30	7.12	
	1971	27.37	6.53	9.13	3.82	5.41	
	1972	30.10	6.10	8.40	4.20	6.70	
	1973	32.23	6.87	9.35			
	1974	33.40	6.84	9.18	4.71	7.91	
Bering River	1970	37.00	5.92	9.62			
	1971	24.39	6.76	9.81	3.50		
	1972	30.80	6.08	8.60	4.30		
	1973	36.92	7.10	9.39			
	1974	32.35	6.09	9.11	4.43	5.50	
Averages all areas	1970	30.72	6.04	9.40	3.98	8.32	
	1971	26.18	6.58	8.65	3.55	7.22	
	1972	30.70	6.69	8.50	4.20	8.85	
	1973	32.35	6.89	9.35	4.01	9.59	
	1974	32.97	6.93	9.15	4.73	7.12	

TABLE 6. Number of salmon per case, 1954 to present.

<u>Prince William Sound</u>				
Year	Sockeye	Coho	Pink	Chum
1954	9.5	9.7	16.5 <u>1/</u>	
1955	9.6	9.4	15.0	8.7
1956 <u>2/</u>				
1957	9.8	10.5	17.4	8.5
1958 <u>2/</u>				
1959		CLOSED SEASON		
1960	13.0	13.2	24.4	9.8
1961	10.4	9.0	17.0	9.3
1962	10.93	12.29	24.14	10.71
1963	9.53	7.23	22.89	9.14
1964 <u>4/</u>	13.52 <u>3/</u>	6.89	22.39	8.23
1965 <u>4/</u>	12.69 <u>3/</u>	10.31 <u>5/</u>	25.43 <u>5/</u>	10.23 <u>5/</u>
1966 <u>4/</u>	10.94	8.94	19.57	10.65
1967 <u>6/</u>	11.07	9.21	19.02	9.43
1968 <u>6/</u>	10.72	8.85	21.59	8.68
1969 <u>6/</u>	11.19	8.11	20.86	8.36
1970 <u>6/</u>	11.19	8.11	21.36	9.60
1971 <u>6/</u>	9.90	12.72	21.32	11.36
1972 <u>6/</u>	10.93	8.30	16.15	9.53
1973 <u>6/</u>	9.76	7.52	20.55	8.14
1974 <u>6/</u>	9.34	10.00 <u>7/</u>	16.73	11.35

- 1/ Estimated number of salmon per case taken from the average of other years.
- 2/ The number of salmon per case not separated by area.
- 3/ Combined pack figure from both Copper River and Prince William Sound.
- 4/ Data from Parks Canning Company, except in 1965 the pinks are averaged for all canneries.
- 5/ New England Fish Company reported fish per case as follows: Coho 9.20, pink 24.59, and chum 10.02.
- 6/ Data from New England Fish Company.
- 7/ Data from North Pacific Processors.

TABLE 7. Number of salmon per case, 1951 to present.

Copper and Bering Rivers

Year	King	Sockeye	Coho	Pink	Chum
1951 <u>1/</u>	3.4	11.6	8.1	18.1	9.1
1952	3.4	11.6	8.1	18.1	9.1
1953 <u>2/</u>	3.4	11.1	7.0	16.5	9.1
1954	3.2	11.7	7.5	--	--
1955	3.5	11.5	8.6	--	--
1956 <u>2/</u>	3.6	11.2	8.3	26.0	10.2
1957	3.8	11.6	--	--	--
1958 <u>2/</u>	3.0	11.5	8.3	17.0	9.1
1959	3.2	12.9	8.6	--	--
1960	3.6	13.4	9.3	--	--
1961	3.82	12.0	9.24	17.0	9.3
1962	3.26	11.04	10.92	18.27	11.16
1963	3.08	12.21	7.9	--	--
1964 <u>3/</u>	2.86	13.52	6.89	22.39	8.23
1965 <u>3/</u>	3.17	12.69 <u>4/</u>	10.31 <u>4/</u>	--	--
1966 <u>5/</u>	2.82	11.01	7.60	19.81	10.62
1967 <u>6/</u>	2.71	10.87	10.64	17.55	8.40
1968 <u>6/</u>	2.70	12.20	7.80	21.59	8.68
1969 <u>6/</u>	2.71	11.53	8.17	--	--
1970 <u>6/</u>	2.35	11.95	7.68	21.69	10.05
1971 <u>6/</u>	3.00	10.64	10.83	19.81	15.25
1972 <u>6/</u>		10.93	8.30	16.15	9.53
1973 <u>6/</u>	2.11	10.31	5.96	20.40	8.62
1974 <u>6/</u>	--	10.17	9.14	16.80	10.22

1/ Estimated number of salmon per case taken from the average of other years.

2/ The number of salmon per case not separated by area.

3/ Figures from Parks Canning Company combined for both Copper River and Prince William Sound.

4/ Includes some reds and coho from Prince William Sound.

5/ Data from Parks Canning Company.

6/ Data from New England Fish Company.

7/ Data from North Pacific Processors

Table 8. Time open to salmon fishing by month, day, gear and regulatory area, 1974. 1/

DAY	M A Y		J U N E		J U L Y		AUGUST	SEPTEMBER
	Copper River	Copper-Bering River	Coghil1-Unakwik	Copper-Bering River	Coghil1-Unakwik		Copper-Bering River	Copper-Bering River
1		6		18	18		6	
2				24	24	24	24	18
3		18		6	24	24	6	24
4		24		6	24	24		24
5		6		24	21	21	18	24
6		6		6			24	24
7		24					6	6
8		6		18	18	18	24	
9				24	24	24	24	18
10		18		6	24	24	6	24
11		24		6	24	24		24
12		6		24	21	21	18	24
13		6		6			24	18
14		24					24	
15		6		18	18	18	24	
16	6			24	24	24	24	
17	24	18*		6	24	24	6	
18	6	24	18	6	24	24		
19		6	24	24	21	21	18	
20	18	6	24	6			24	
21	24	24	21				24	
22	6	6		18		18	24	
23	6			24		24	24	
24	24	18	18	6		24	6	
25	6	24	24	6		24		
26		6	24	24		21	18	
27	18	6	24	6			24	
28	24	24	21				24	
29	6	6		18		18	24	
30	6			24		24	24	
31	24			6		21	6	

Total open hours  
by month & gear

Drift Gill Net	198	342	198	384	333		480	228
Set Gill Net						489		
Purse Seine**			198		333			

1/ Time open to fishing expressed in hours per day. Blanks denote days closed to fishing.

\* Bering River did not open until June 17. \*\* General purse seine season closed.

Table 9. Calendar weeks, 1974 1/

<u>Weeks</u>	<u>From</u>	<u>Thru</u>	<u>Weeks</u>	<u>From</u>	<u>Thru</u>
1	Jan. 1	Jan. 5	28	July 7	July 13
2	Jan. 6	Jan. 12	29	July 14	July 20
3	Jan. 13	Jan. 19	30	July 21	July 27
4	Jan. 20	Jan. 26	31	July 28	Aug. 3
5	Jan. 27	Feb. 2	32	Aug. 4	Aug. 10
6	Feb. 3	Feb. 9	33	Aug. 11	Aug. 17
7	Feb. 10	Feb. 16	34	Aug. 18	Aug. 24
8	Feb. 17	Feb. 23	35	Aug. 25	Aug. 31
9	Feb. 24	Mar. 2	36	Sept 1	Sept 7
10	Mar. 3	Mar. 9	37	Sept 8	Sept 14
11	Mar. 10	Mar. 16	38	Sept 15	Sept 21
12	Mar. 17	Mar. 23	39	Sept 22	Sept 28
13	Mar. 24	Mar. 30	40	Sept 29	Oct. 5
14	Mar. 31	Apr. 6	41	Oct. 6	Oct. 12
15	Apr. 7	Apr. 13	42	Oct. 13	Oct. 19
16	Apr. 14	Apr. 20	43	Oct. 20	Oct. 26
17	Apr. 21	Apr. 27	44	Oct. 27	Nov. 2
18	Apr. 28	May 4	45	Nov. 3	Nov. 9
19	May 5	May 11	46	Nov. 10	Nov. 16
20	May 12	May 18	47	Nov. 17	Nov. 23
21	May 19	May 25	48	Nov. 24	Nov. 30
22	May 26	June 1	49	Dec. 1	Dec. 7
23	June 2	June 8	50	Dec. 8	Dec. 14
24	June 9	June 15	51	Dec. 15	Dec. 21
25	June 16	June 22	52	Dec. 22	Dec. 28
26	June 23	June 29	53	Dec. 29	Dec. 31
27	June 30	July 6			

1/ Used for 1974 catch statistics.

## BERING RIVER DISTRICT

### INTRODUCTION

The Bering River district is located between Cape Martin and Cape Suckling. Salmon harvested in this area normally spawn in streams and rivers emptying into Controller Bay. The Bering River - Bering Lake system is the main salmon producing area of the district. Sockeye and coho are the primary species harvested.

Weekly fishing periods for sockeye salmon are divided into two fishing periods and two closed periods which total three and one-half days each. Fishing during the coho salmon season is allowed five days per week.

#### Sockeye Salmon

The Bering River commercial drift gill net fishery opened on June 17 at 6:00 a.m. The catch for the first weekly period was a disappointing 2,848. Catches during the remainder of the season did not improve, and a season total of 4,208 sockeye salmon set an all time low, TABLE 10 and 13.

The sockeye salmon catch for this fishery was not indicative of the total run strength. Records from aerial surveys flown three days prior to the opening of the fishery noted sockeye salmon entering Bering Lake in moderate numbers, and all evidence compiled indicated an above average catch for the opening period. However, for two days prior to the opening of the fishery heavy rainfall initiated a strong freshet from Bering Lake into Bering River which prompted all milling fish in the fishery to enter the river and escape the commercial fishery.

#### Coho Salmon

Very little interest for coho salmon was shown by fish processors during 1974. Price negotiations were attempted, but a price per pound agreement acceptable to the fishermen was not reached.

The season officially opened on August 7, but the fishermen-processor negotiations lasted into the first week of September. In an attempt to salvage something from the season the fishermen's marketing association voted to have their catch custom packed by a local processor with individual fishermen to be paid for their catch when the case pack was sold at a later date.

Fishing commenced during the first week of September and remained open for two weeks and was closed by emergency order when catches remained below average. The total season catch of 28,615 coho salmon is one of the lowest recorded catches for the area, TABLE 12 and 13, and FIGURE 3.

#### Escapement

The comparable sockeye salmon spawning escapement of 42,175 is above the past two seasons and is slightly below the average for the seven years shown in TABLE 14. A delayed opening of the Bering River fishery has been in effect since 1967 to increase spawning escapements in an attempt to rebuild the runs to former historical levels. The 1974 spawning escapement of sockeye is classified as good.

Coho salmon escapement surveys were conducted as weather allowed with resulting minimal counts. Comparisons with surveys of past years cannot be made due to the irregularity of good survey weather.

Table 10. Bering River sockeye salmon weekly catch, 1974. 1/

Week No.	Total Catch	Total Pounds	Average Wt./Fish	Number Boats <u>2/</u>	Average No. Fish/Boat
25	2,848	18,068	6.34	17	168
26	636	3,792	5.96	7	91
27	285	1,490	5.23	1	285
28	258	1,325	5.14	1	258
29	181	945	5.22	1	181
TOTAL	4,208	25,620	6.09		

Table 11. Bering River king salmon weekly catch, 1974. 1/

Week No.	Total Catch	Total Pounds	Average Wt./Fish	Number Boats <u>2/</u>	Average No. Fish/Boat
25	22	775	35.2	17	1
26	8	303	37.9	7	1
27	1	40	40.0	1	
28	-	--		1	
29	1	10	10.0	1	
TOTAL	32	1,128	35.3		

Table 12. Bering River coho salmon weekly catch, 1974 1/

Week No.	Total Catch	Total Pounds	Average Wt./Fish	Number Boats <u>2/</u>	Average No. Fish/Boat
36	13,542	121,826	8.99	25	541
37	15,073	138,896	9.21	35	430
TOTAL	28,615	260,722	9.11		

1/ In addition a total of 7 pinks and 1 chum salmon were taken.

2/ 150 fathoms drift gill net per boat.

Table 13. Bering River drift gill net salmon catch, 1955 - 1974.

<u>Year</u>	<u>King</u>	<u>Sockeye</u>	<u>Coho</u>	<u>Pink</u>	<u>Chum</u>
1955	125	34,121	70,100	50	2
1956	147	41,437	53,484	46	5
1957	71	29,142	27,441	27	22
1958	72	23,947	21,202	32	1
1959	77	27,384	58,560	6	0
1960	63	32,890	68,255	101	5
1961	29	55,084	50,883	30	1
1962	246	72,230	55,502	0	2
1963	172	21,525	87,507	56	0
1964	44	16,911	77,360	0	0
1965	7	13,536	52,162	7	164
1966	36	24,894	49,580	0	0
1967	13	11,464	46,135	3	2
1968	10	26,136	67,130	0	0
1969	44	38,093	4,033	0	0
1970	26	23,539	79,264	0	0
1971	105	36,776	88,231	4	0
1972	107	51,445	19,825	3	1
1973	285	15,426	65,348	2	5
1974	32	4,208	28,615	7	1
<hr/> <b>TOTAL</b>	<b>1,711</b>	<b>600,188</b>	<b>1,070,797</b>	<b>374</b>	<b>211</b>
<hr/> <b>AVERAGE</b>	<b>85</b>	<b>30,009</b>	<b>53,540</b>	<b>18</b>	<b>10</b>

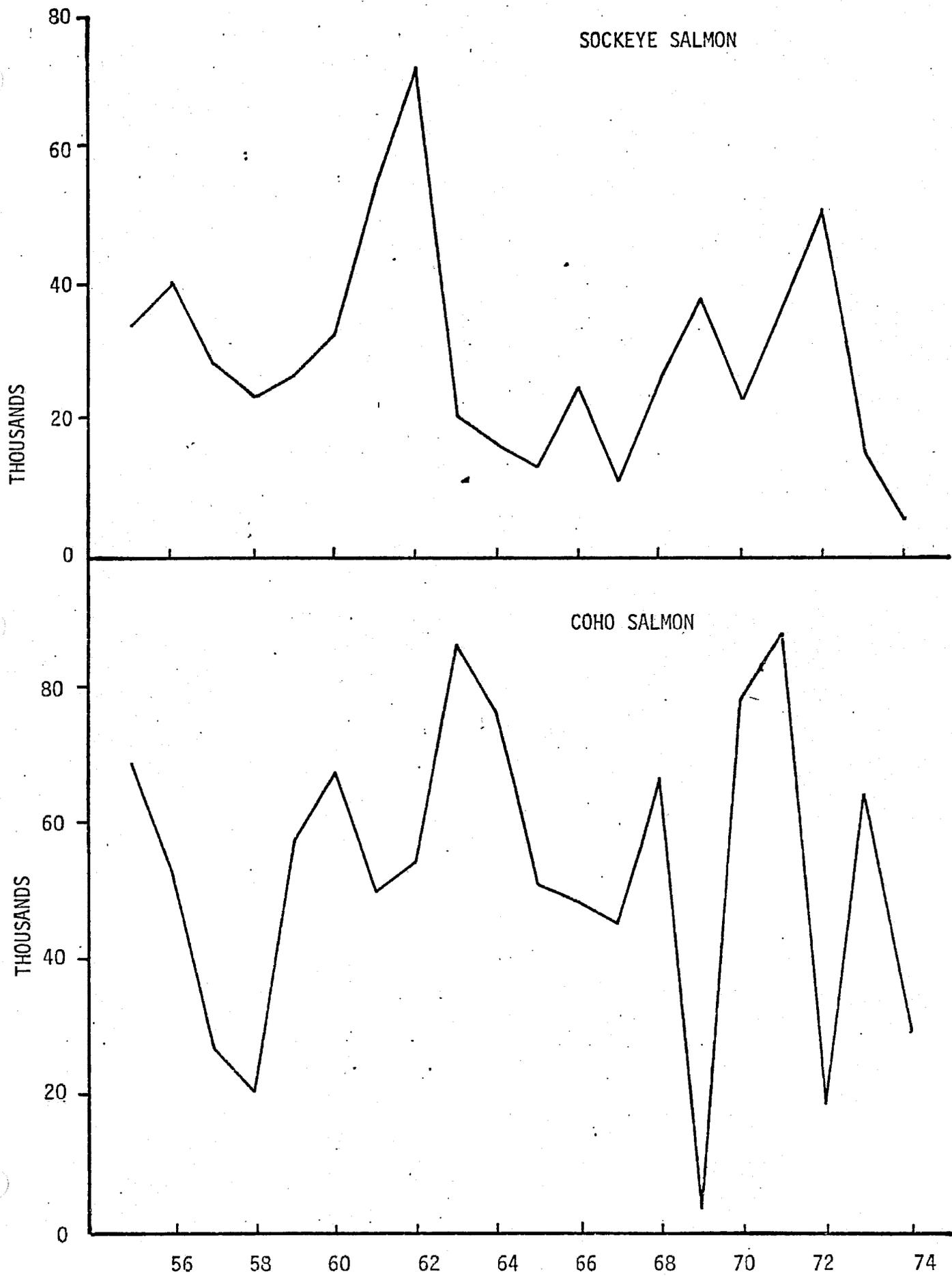


Figure 3. Commercial catch of sockeye and coho salmon from the Bering River district, 1955 to 1974.

Table 14. Comparable estimated sockeye salmon spawning escapements on selected systems, Copper River - Bering River districts, 1968-1974, 1/

System	1968	1969	1970	1971	1972	1973	1974*
Eyak Lake	1,360	21,000 <sup>2/</sup>	28,366 <sup>2/</sup>	5,800	12,275	6,000	4,625
McKinley Lake	0	500	5,000	1,700	600	1,800	2,000
39 Mile Creek	2,000	3,000	5,997	8,270	14,910	5,511	2,400
Lake Tokun	3,500	700	19,764	23,000	1,850	3,455	1,468 <sup>4/</sup>
Little Martin Lake	0	400	0	3,000	3,000	1,500	1,500
Martin Lake	1,000	1,500	600	4,500	6,500 <sup>3/</sup>	2,000	1,500
Martin River Slough	3,500	4,000	4,450	5,000	5,000	1,990	5,000
Copper Delta Subtotal	11,360	31,100	64,177	51,270	44,135	14,456	18,493
Bering Lake	9,400	47,000	20,000	21,675	2,000	23,000	20,575
Dick Creek	19,000	15,000	13,500	30,000	16,000	9,600	6,600
Shepherd Creek	5,000	6,000	6,000	10,200	6,000	3,000	15,000
Bering River Subtotal	33,400	68,000	39,500	61,875	24,000	35,600	42,175
Mentasta Lake	765	3,318	4,958	3,195	1,450	6,196	700
Gulkana River	200	1,682	3,700	2,000	1,280		15,780
St. Anne Creek	3,455	4,300	18,300	29,903	1,900	7,400	2,100
Mahlo River	2,930	750	8,631	14,481	1,525	4,500	500
Mendeltna Creek	3,723	6,805	4,700	870	2,404	2,868	332
Upper Copper River Subtotal	11,073	16,855	40,289	50,449	8,559	20,964	19,412
TOTALS	55,833	115,955	143,966	163,594	76,694	71,020	80,080

1/ Peak count estimates from aerial and ground counts unless otherwise noted.

2/ From sonar count.

3/ Includes 1500 at mouth of Martin River.

4/ Weir count

\* Preliminary

# COPPER RIVER DISTRICT

## INTRODUCTION

The Copper River district includes all waters of Hinchinbrook Island between Hook Point and Boswell Rock including Boswell Bay waters south of a line from Boswell Rock to the radio tower at Whitshed Village, and waters between Whitshed Village and Point Martin.

The commercial fishing season for sockeye salmon begins May 15 each year, except when May 15 falls on a closed weekly period the seasons opens the next following open period, and is regulated by a series of equal open and closed fishing periods. Prior to August 7 fishing is permitted for three and one-half days each week. After August 7 commercial fishing is allowed five days per week. Each boat registered to fish the Prince William Sound area is allowed a maximum of 150 fathoms of drift gill net.

The major commercial fishery is for sockeye and coho salmon, but king, chum and pink salmon are taken incidently.

### Sockeye Salmon

The Copper River district drift gill net fishery officially opened on May 15, but due to fishermen - processor negotiations, actual fishing did not commence until May 19. The overall season was characterized by extremely good weather allowing excellent fishing conditions.

Although 550 fishermen were registered to fish the area fishing effort during any period did not exceed 419 boats.

The peak catch occurred during the week of June 2 - 8 when 150,917 sockeye salmon were harvested. The total seasonal catch of 607,766 sockeye salmon in 1974 compared to the 15 year average of 669,925.

Table 15 presents the 1974 sockeye salmon catch data. Figure 4 shows catches from 1955.

### King Salmon

The king salmon are taken incidental to the sockeye fishery. The harvest of king salmon coincides with the sockeye harvest and very little effort is directed toward a 'kings only' catch. Standard sockeye salmon gill nets of 5 3/8" mesh size are normally fished.

The total season catch of 18,980 king salmon compares to the 15 year average catch of 14,505. The fish were large with a seasonal average of 33.4 pounds each.

Catch data for 1974 is shown in Table 16 and Figure 4.

## Coho Salmon

Very little interest for coho salmon was shown by fish processors during 1974. Price negotiations were attempted, but a price per pound agreement acceptable to the fishermen was not reached.

The season officially opened on August 7, but the fishermen - processor negotiations lasted into the first week of September.

In an attempt to salvage some monetary gain from the already long delayed season the fishermen's union voted to have their catch custom packed by a local processor with individual fishermen paid for their catch when the pack was sold at a later date.

When the fishermen commenced fishing during the first week of September only 32,182 cohos were harvested. The season was allowed to remain open one more week during which 10,622 cohos were caught. The season closed by emergency order at 6:00 p.m. September 13.

Coho catches for 1974 are shown in Table 17 and Figure 4.

## Subsistence Fishery

A limited salmon subsistence fishery with dip nets and fishwheels is allowed on the upper Copper River and on the Copper River delta with drift gill nets. In 1974 the upper river catch totaled 22,800 sockeye and 1,141 kings. On the Copper River flats catches of four sockeye, five kings and two coho were reported. Table 13 presents the subsistence catch data for 1974.

## Escapement

Sockeye escapement in delta stream systems in 1974, Table 14, were slightly improved over 1973, but were generally considered poor. Upper Copper River sockeye escapements were down slightly from 1973 and varied from good in the Gulkana River to poor or fair in the other streams, Table 20.

King salmon escapement estimates were generally improved and considered excellent in the Gulkana River system.

Coho salmon streams were surveyed periodically as weather permitted. Escapement was considered poor.

## Age Data

Age data for sockeye salmon from the commercial fishery is shown in Table 21 for 1974. Age structure of the sampled catch is similar to previous years with 71.6% being in the 1.3 year class.

Age data for king salmon is given in Table 22 which shows the dominant age class to be 1.4 year olds which made up 71.2% of the sample.

Table 15. Copper River sockeye salmon weekly catch, 1974.

Week No.	Total Catch	Total Pounds	Average Wt./Fish	Number Boats <sup>1/</sup>	Average No. Fish/Boat
21	117,299	810,036	6.90	403	291
22	84,494	579,347	6.86	416	203
23	150,917	1,035,245	6.86	420	359
24	101,629	690,251	6.79	413	246
25	76,662	518,362	6.76	283	271
26	19,547	132,329	6.77	159	123
27	14,951	99,504	6.82	112	130
28	15,985	111,815	6.99	101	158
29	13,247	92,947	7.02	94	141
30	8,981	60,354	6.72	94	96
31	3,347	22,552	6.74	86	39
32	1,067	7,211	6.76	42	25
<b>TOTAL</b>	<b>607,766</b>	<b>4,159,953</b>	<b>6.84</b>		

Table 16. Copper River king salmon weekly catch, 1974

Week No.	Total Catch	Total Pounds	Average Wt./Fish	Number Boats <sup>1/</sup>	Average No. Fish/Boat
21	4,231	137,233	32.44	403	10
22	4,605	150,328	32.64	416	11
23	5,928	200,010	33.74	420	14
24	2,768	94,484	34.13	413	6
25	1,122	40,459	36.06	283	4
26	224	7,896	35.25	159	1
27	59	2,195	37.20	112	*
28	21	812	38.67	101	*
29	11	347	31.55	94	*
30	6	112	18.67	94	*
31	5	95	19.00	86	*
<b>TOTAL</b>	<b>18,980</b>	<b>633,971</b>	<b>33.40</b>		

<sup>1/</sup> 150 fathoms of drift gill net gear per boat.

\* Less than one fish per boat.

Table 17. Copper River coho salmon weekly catch, 1974.

Week No.	Total Catch	Total Pounds	Average Wt./Fish	Number Boats <u>1/</u>	Average No. Fish/Boat
21	2	10	5.00	403	*
23	1	10	10.00	420	*
24	5	32	6.40	413	*
25	19	136	7.16	283	*
28	7	45	6.43	101	*
29	39	273	7.00	94	*
30	494	3,010	6.09	94	5
31	1,589	11,056	6.96	86	18
32	1,655	11,916	7.20	42	39
36	32,182	298,417	9.27	93	346
37	10,622	103,096	9.71	103	103
<b>TOTAL</b>	<b>46,625</b>	<b>428,003</b>	<b>9.18</b>		

1/ 150 fathoms of drift gill net gear per boat.

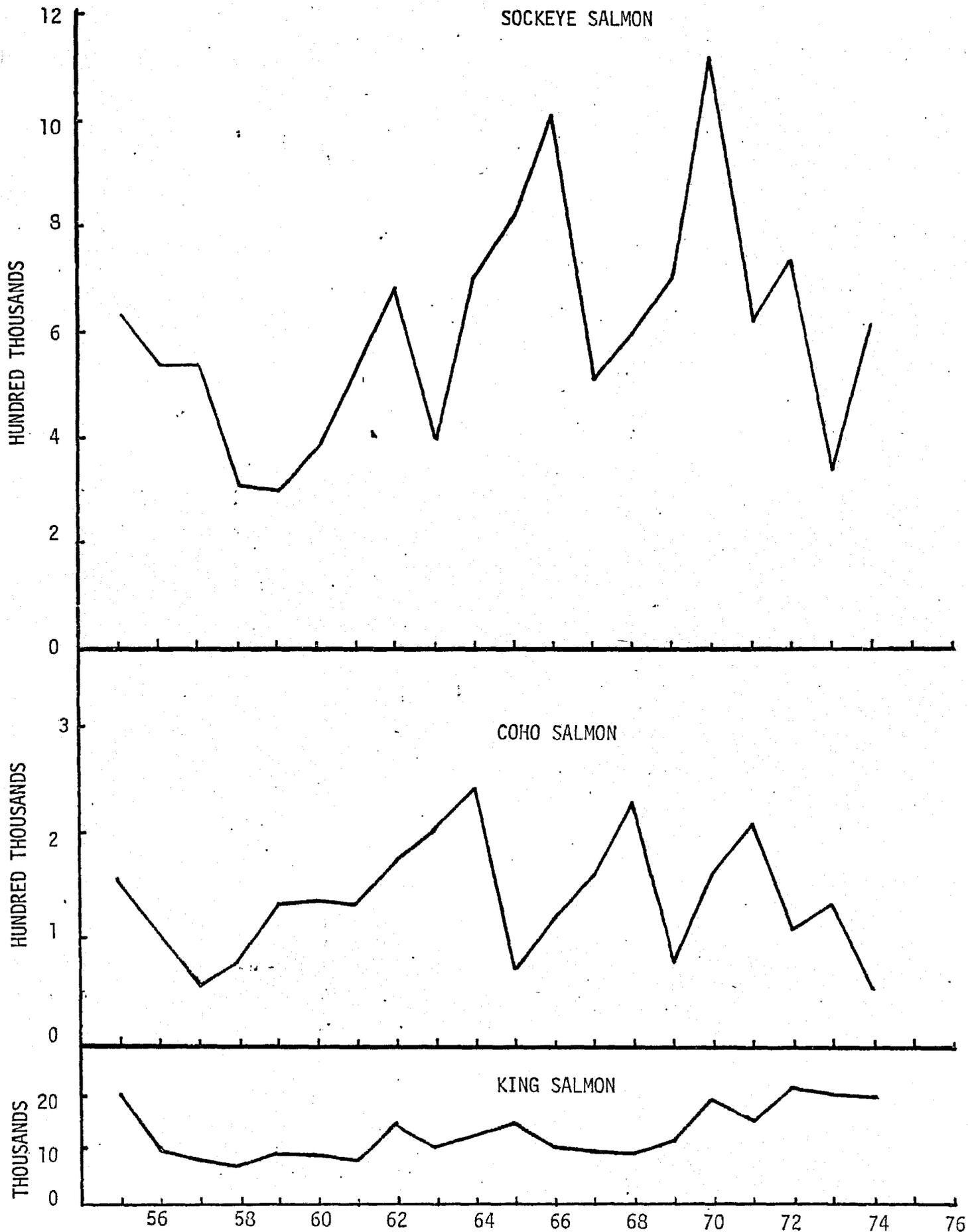


FIGURE 4. Commercial catches of sockeye, coho and king salmon from the Copper River District from 1955 to 1974.

Table 18. Prince William Sound Area subsistence fishery, 1974.

Area	Number Permits Issued	Number Permits Returned	Type of Gear	Catch				
				Sockeye	Kings	Cohos	Other <u>2/</u>	
Upper Copper River	293	222 <u>1/</u>	Fishwheel	7,657	324	4	32	
Upper Copper River	3,305	2,887 <u>1/</u>	Dip Net	15,143	817	159	1	
Copper River Flats	9	5	Gill Net	4	5	2	0	
Prince William Sound	3	2	Gill Net	0	0	0	0	
Eyak & McKinley Lakes <u>3/</u>	1	1	Gill Net	0	0	0	0	
TOTAL	3,606	3,117		22,804	1,146	165	33	

1/ Compiled from reports received through June 27, 1975.

2/ Includes whitefish, steelhead, cutthroat, dolly varden, lamprey and lingcod.

3/ Whitefish permits.

Table 19. Estimated sockeye salmon spawning escapements, Copper River delta, 1972, 1973, and 1974.

System	Estimated Escapement		
	1972	1973	1974
Eyak Lake	12,275	6,000	4,625
Hatchery Creek	403	687	322
McKinley Lake	600	1,800	2,000
Salmon Creek	7,204	2,000	600
25.6 Mile Creek	600	600	
27 Mile Creek	900	600	250
39 Mile Creek	14,910	5,511	2,400
Goat Mountain Creek	5,500	2,100	150
Pleasant Creek	550	132	0
Deadwood Creek		0	0
Tokun Lake	1,850	3,455	1,468 <sup>1/</sup>
Martin Lake	6,500*	2,000	1,500
Little Martin Lake	3,000	1,500	1,500
Pothole Lake	1,500	0	6
Ragged Point Lake	5,000	5,300	2,000
Martin River Sloughs	5,000	1,990	5,000
Martin Creeks	13,000	5,000	1,500
<b>TOTAL</b>	<b>78,792</b>	<b>38,675</b>	<b>23,321</b>

\* Includes 1500 at mouth of Martin River  
<sup>1/</sup>Weir count.

Table 20. Estimated spawning escapement of sockeye, king and coho salmon to upper Copper River, 1974. 1/

Location	Sockeye	King	Coho
Bremner River			
Peninsula Lake	0		
Salmon Creek	400		
Steam Boat Lake	300		
Tiekel River Lake	2		
Swan Lake	25		
Tonsina River			
Lower Tonsina Creek	0		0
Little Tonsina River	0	65	92 <u>2/</u>
Tonsina Lake <u>3/</u>	200	0	0
Grayling Creek	0	49	0
Klutina River	3,000		
Manker Creek		29	
Mahlo Creek	500	3	
Hallet Slough	200		
Curtis Creek	0	0	
St. Anne Creek	2,100	32	
Tazlina River			
Tazlina Lake	0	0	
Kiana Creek	100	55	
Mendeltna Creek	332	15	
Gulkana River		1,287 <u>4/</u>	
West Fork	127	1 <u>4/</u>	
Moose Creek	0	0	
Keg Creek	190		
Middle Fork	350	22	
Dickey Lake	33		
Swede Lake	15		
Hungry Hollow Creek		2	
East Fork to Paxson Lake	1,000	5 <u>4/</u>	
Paxson Lake	0	0	
Paxson Lake Inlet	3,700		
Paxson Lake to Mud Creek	3,270		
Mud Creek	332		
Mud Creek to Summit Lake	3,879		
Fish Lake	2,862		
Summit Lake	0	0	
Gunn Creek	22		
Chistochina River			
East Fork		137	
Eagle Creek		1	
Mankomen Lake	0	0	
Slana River	100		
Mentasta Lake	700		
Fish Creek	450		
Bad Crossing #1	150		
Bad Crossing #2	500		
Bone Creek	3		
Suslota Lake	400		

Table 20, continued. Estimated spawning escapement of sockeye, king and coho salmon to upper Copper River, 1974. 1/

Location	Sockeye	King	Coho
Indian River		4	
Porcupine Creek	0	0	
Sinona Creek	0	0	
Ahtel Creek		6	
Tanada Creek	300		
Tanada Lake	2,800		
Copper Creek	0	0	
Copper Lake	30		
Lakina River			
Long Lake	750		
Nizina River			
Spruce Point Creek	0		0
Clear Creek	0		
Tana River			
Tana River Clear Channels	410		
Tana Lake Inlet	60		
West Fork (Clear Channels)	50		

1/ Escapement refers to peak survey.

2/ Personal communication, Dean Wilson, January 17, 1975.

3/ Personal communication, Fred Williams, Sport Fish Division, king salmon only, August 10, 1974.

4/ Total weir count for coho salmon ending September 30, 1974/



Table 22. Age analysis of Copper River king salmon, 1974.

WEEK		Age Class						TOTAL		
		1.2		1.3		1.4		2.4	M	F
		M	F	M	F	M	F	M	F	
22	No.			3	4	8	5		11	9
5/26-6/1	%			15.0	20.0	40.0	25.0		55.0	45.0
23	No.	1		1		5	8	1	8	8
6/2-8	%	6.3		6.3		31.3	50.6	6.3	50.0	50.0
24	No.		2	2	3	5	11		7	16
6/9-15	%		8.7	8.7	13.3	21.7	47.8		30.4	69.6
TOTAL NO.		3		13		42		1	26	33
TOTAL %		5.1		22.0		71.2		1.7	44.1	55.9

## PRINCE WILLIAM SOUND DISTRICTS

### INTRODUCTION

The Prince William Sound Area is divided into six major districts principally for the management of a purse seine fishery for pink and chum salmon. The Sound is further divided into three smaller districts for the management of small, red salmon runs which are taken by set gill nets, drift gill nets and purse seines, Figure 1.

Fishing seasons are varied for each fishery and timed to intercept the various stocks. The Coghill-Unakwik district fishery for sockeye salmon is the earliest, beginning in late June and ending about mid-July for drift gill nets. Purse seine fishing in these districts coincides with drift gill net fishing, but is extended past the mid-July gill net closing date in order to harvest later runs of pink and chum salmon. Fishing in the Eshamy district is conducted by both drift and set gill nets. The season for this late sockeye salmon run usually begins in early July and extends into September. Purse seines fishing in the Southwestern district in July and August catch about 30 percent of the Eshamy sockeye before they enter the gill net fishery. The purse seine fishery is conducted in all Prince William Sound districts, except Eshamy. Purse seining usually begins in early or mid-July (late July in some years), depending upon the strength of early pink salmon runs, and usually extends into the first or second week of August.

For several years the weekly fishing time had been five days per week, 6:00 a.m. Monday until 6:00 a.m. Saturday, but in 1970 the weekly fishing time was changed to 6:00 a.m. Monday until 9:00 p.m. Friday.

A summary of Prince William Sound fishing seasons from 1955 to 1974 is shown in Table 23.

Commercial catches of pink, chum and sockeye salmon from 1920 to 1974 is shown in Figure 5.

#### General Districts, Purse Seine Fishery

The general purse seine season was closed in 1974 because of the forecast of a poor returning run of pink salmon. The small returning runs of both pink and chum salmon did not warrant an emergency opening so the general purse seine season remained closed in 1974.

#### 1974 Prince William Sound Pink and Chum Salmon Forecast

The returning estimated run of 1,330,321 pink salmon, from catch and escapement, to Prince William Sound in 1974 was 33.5 percent below the mean estimated forecast of 2.0 million, and falls within the lower range of the forecast.

The chum salmon forecast of 294,000 is 3.4 percent above the returning run of 284,221 estimated from the commercial catch and from aerial and ground spawning stream surveys.

Comparable forecast data is shown in Table 24.

## Escapement

Weekly aerial spawning escapement counts and periodic ground surveys were made on selected streams to determine the progress of escapements and to provide estimates for calculating season escapements for sockeye, pinks and chums. Surveys were conducted weekly from early July until late September including a total of 105 streams. Estimated escapement by species, by district is summarized in Table 25.

For pink salmon the Eastern, Montague, Southeastern and Northwestern - Coghill districts had less than the desired minimum escapement. However, the northern half of the Eastern district and the Northwestern - Coghill districts had fair to adequate escapement to most of the streams. Pink Salmon escapement to both Montague and Southeastern districts was poor. The total escapement estimate of 871,620 pinks is about 70 percent of the desired minimum escapement level.

The major chum salmon producing areas had good to excellent spawning escapements. These include the Eastern, Northern, Northwestern - Coghill districts. The remaining districts had poor chum escapements. The estimated total chum escapement of 194,860 is about 97 percent of the desired minimum escapement level.

Escapement of sockeye salmon in Prince William Sound streams in 1974 was poor.

Figure 6 shows pink, chum and red salmon estimated spawning escapements in Prince William Sound streams from 1927 to 1974.

Table 23. Prince William Sound summary of fishing season, 1955 - 1974.

Year	GENERAL AREAS		DISTRICT OPENINGS AND CLOSURES					
	Opening Date	Closing Date	Season Extensions	Special Closures	Weekly Closures	Eshamy Open	Coghill Open	Unakwik Closed
1955		CLOSED			48 hrs.	8/22		None
1956	0600	7/10 0600	None	None	48 hrs.	8/22		None
1957	0600	7/10 0600	None	8/5 - 10	48 hrs.	8/22		None
1958	0600	7/10 0600	None <u>1/</u>	8/6 - 9	48 hrs.	CLOSED		None
1959		CLOSED				CLOSED		None
1960	1201	7/11 1300	None	7/4 - 10 <u>2/</u>	72 hrs.	CLOSED	6/12	None
1961	Eastern	Southeastern <u>3/</u>				7/1		7/14
	0600	8/1 1300						
	Montague	<u>3/</u>						
	0600	8/8 1300						
1962	General <u>4/</u>							
	0600	7/9 2400			119 hrs. <u>5/</u>	7/2	8/15	7/14
1963	C500	7/1 1900	8/16 - 21		48 hrs.	CLOSED	6/18	7/14
1964	0600	7/13 0600			48 hrs.	CLOSED	6/18	7/14
1965	0600	7/5 1800	None		48 hrs.	CLOSED <u>5/</u>	6/21	7/17
1966	0600	7/18 1300	None		48 hrs.	7/4	6/20	7/16
1967	0600	7/24 1800	None		48 hrs.	CLOSED	6/20	7/22
1968	0600	7/11 1800	<u>5/</u>		<u>5/</u>	CLOSED	6/20	7/16
1969	0600	7/14 1800	None		48 hrs.	7/7	6/20	7/12
1970	0600	7/13 2100	None		57 hrs.	7/7	6/22	7/17
1971	0600	7/12 1200	None		57 hrs.	CLOSED	6/21	7/16
1972		CLOSED			57 hrs.	7/5	6/19	7/19
1973	0600	7/23 2100	8/3 - 8		57 hrs.	7/2	6/18	7/20
1974		CLOSED			57 hrs.	7/2	6/18	7/19

1/ Season closure by time table released to allow all gear to fish until closure 8/6.

2/ Fishing days by gear time table during season. On 8/2 - 3 fishing allowed 12 hour day. Fishing closed 1300, 8/3.

3/ Twelve hour fishing day.

4/ Fourteen hour fishing day.

5/ Refer to special regulatory changes by field announcement. For fishing seasons prior to 1955 refer to 1964 Annual Management Report.

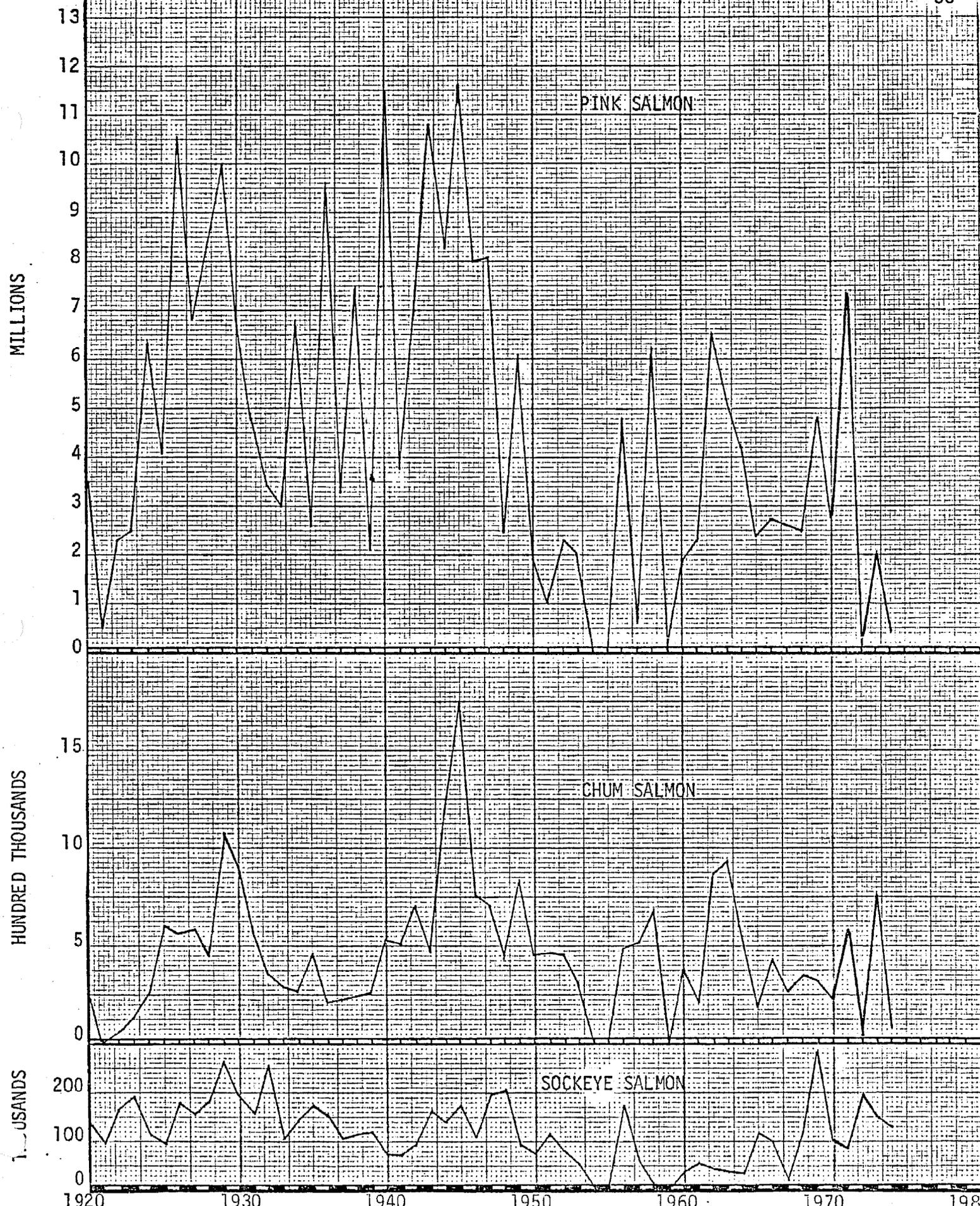


FIGURE 5. Commercial catches of pink, chum and red salmon in Prince William Sound from 1920 to 1974. Catches in years 1921, 1954, 1955, 1959 and 1972 are not indicative of abundance due to restrictions of economic or regulatory nature.

Table 24. Comparison of Prince William Sound pink, chum and sockeye salmon run forecasts showing the percent of error, 1962 - 1974.

Year	Pink			Chum			Sockeye		
	Mean Forecast	Return	Percent Error	Mean Forecast	Return	Percent Error	Mean Forecast	Return	Percent Error
1962	8.9	8.7	+ 1.1						
1963	5.0 <u>1/</u>	6.6	-21.2						
1964	6.1	6.0	+ 1.1	1.00	0.92	+ 8.8			
1965	4.2	3.4	+19.4	0.73	0.39	+46.6			
1966	6.3	4.0	+36.5	0.58	0.65	-10.7			
1967	3.3	3.8	-13.2	0.44 <u>2/</u>	0.45	- 2.2			
1968	3.1	3.5	-11.4	0.68	0.55	+19.1			
1969	5.8	5.9	- 1.1	0.44	0.48	- 8.3	0.19	0.18	+ 4.12
1970	4.4	3.8	+13.64	0.34	0.33	+ 3.0	0.09	0.04	+56.00 *
1971	6.2	9.5	-34.57	0.76	0.74	+ 2.2			
1972	1.7	0.9	+43.03	0.80	.47	+41.25			
1973	2.7	3.3	-17.85	0.64	1.28	-49.85			
1974	2.0	1.3	+33.49	0.29	0.28	+ 3.4			

1/ Weighted fry densities to include upstream production indicated 5.8 million, or an error of -13.2 percent.

2/ Using expanded estimate of 4 year return to total.

\* Estimated.

Table 25. Prince William Sound pink, chum and sockeye salmon total estimated spawning escapement by district, 1974. <sup>1/</sup>

District	Number of Streams Surveyed	Pinks	Chums	Sockeye
Eastern	53	229,370	92,840	5,000
Northern-Unakwik	19	186,130	53,830	1,100
Coghill	5	25,860	31,500	22,730
Northwestern	24	174,660	13,510	500
Eshamy	5	6,330		630
Southwestern	25	148,300	190	4,250
Montague	33	11,800	80	0
Southeastern	31	89,170	2,910	0
<b>TOTAL</b>	<b>195</b>	<b>871,620</b>	<b>194,860</b>	<b>34,210</b>

<sup>1/</sup> Number of salmon rounded to nearest 10.

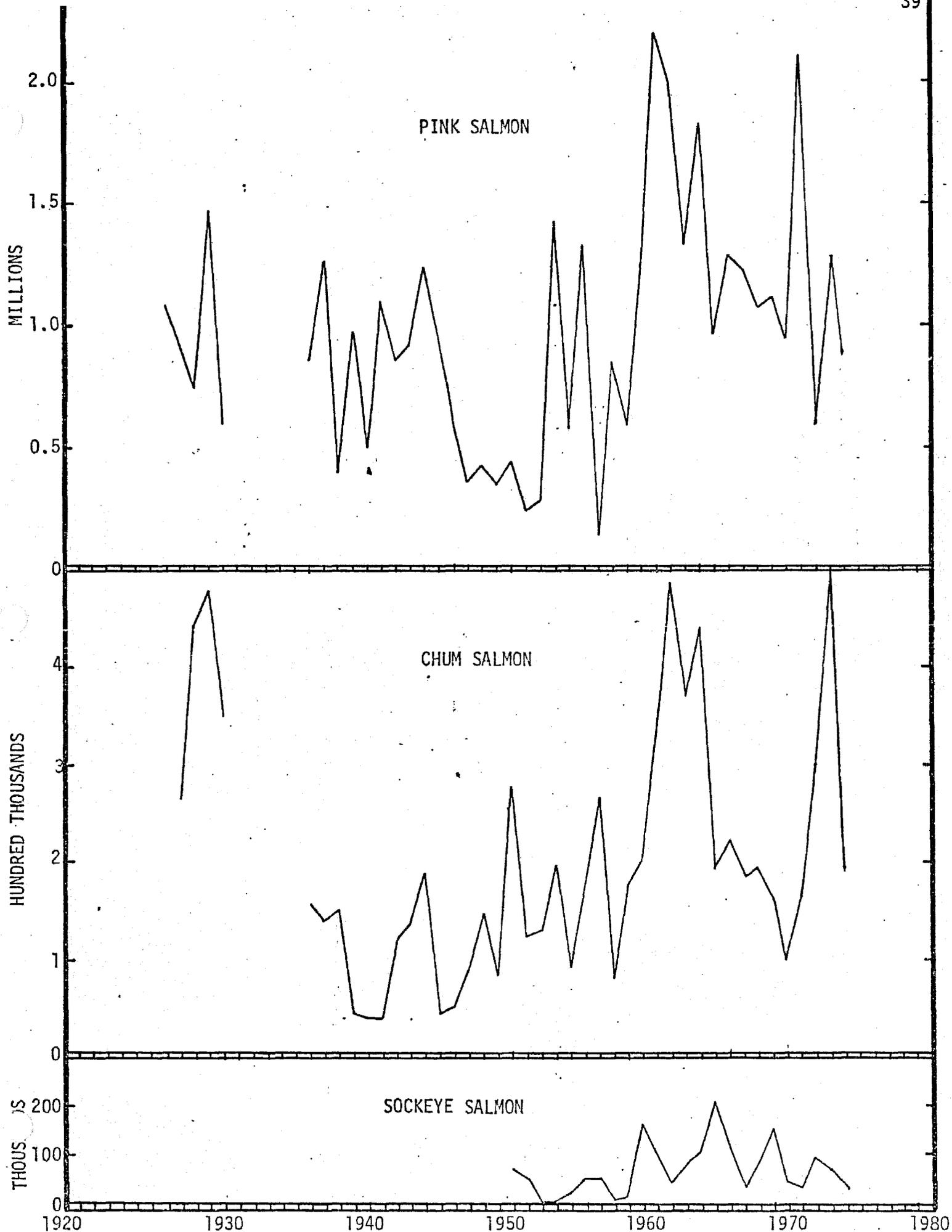


FIGURE 6. Annual estimated salmon spawning escapement in Prince William Sound, 1927 - 1974

## ESHAMY DISTRICT

Commercial Fishery

The Eshamy district was opened as scheduled in the regulations on July 2 and continued without interruption until closed by emergency order on July 31 when it was apparent that the necessary escapement was not being obtained. Both set and drift gill net fishermen participated in the fishery to harvest 22 king, 19,034 sockeye, 125 coho, 285,441 pink and 28,896 chum salmon, Table 25.

The season catch of 19,034 sockeye is approximately 15,000 below the 17 year average, Table 26. The escapement of 633 through August 26 was the lowest recorded during the 15 year period, Table 27 and 23. The harvest of both pink and chum salmon was far above average, Table 26. The abundance of these species in the Eshamy district is due primarily to the closed purse seine season.

General weather and Eshamy River water level data is presented in Table 29.

Table 25. Eshamy district drift gill net and set gill net weekly catch, 1974.

<u>Drift Gill Net</u>						
Week	Kings	Sockeye	Cohos	Pinks	Chums	Units of Gear
27	3	2,070	10	11,222	2,793	31
28		2,307	14	31,958	4,190	68
29	12	3,255	40	60,586	8,013	114
30	2	2,941	25	67,471	5,203	146
31	1	2,067	25	45,904	3,289	98
<hr/>						
Sub-total	18	12,640	114	217,141	23,438	
<hr/>						
<u>Set Gill Net</u>						
27		830	2	4,050	663	10
28		1,179	2	14,487	1,405	12
29	4	1,452	7	17,274	1,664	14
30		1,329		17,551	786	13
31		1,604		14,938	890	14
<hr/>						
Sub-total	4	6,394	11	68,300	5,408	
<hr/>						
TOTAL	22	19,034	125	285,441	28,896	
<hr/>						

Table 26. Eshamy district salmon catch, 1950 - 1974.

Year	Kings	Sockeye	Pinks	Chums	Cohos	Total
1950		26,772	23,289	3,976	780	54,817
1951		78,360	62,790	9,552	1,580	152,282
1952		43,128	11,025	2,872	720	57,745
1953		15,828	52,815	9,152	1,070	78,865
1954		7,848	15,666	5,560	560	29,634
1955		12,919	26,857	4,806	595	45,177
1956		75,355	32,101	14,439	788	122,683
1957		33,665	22,672	12,183	738	69,253
1958			S E A S O N	C L O S E D		
1959			S E A S O N	C L O S E D		
1960			S E A S O N	C L O S E D		
1961		55,133	113,326	22,918	1,324	192,701
1962		23,857	76,345	39,909	3,895	144,006
1963			S E A S O N	C L O S E D		
1964			S E A S O N	C L O S E D		
1965		15,456	550	649	71	16,726
1966		20,826	36,584	7,896	745	66,051
1967			S E A S O N	C L O S E D		
1968			S E A S O N	C L O S E D		
1969	16	61,728	25,273	8,021	46	95,084
1970	2	17,292	44,381	5,632	579	67,886
1971			S E A S O N	C L O S E D		
1972	82	52,888	45,378	26,008	1,146	125,499
1973	69	16,439	21,501	27,546	149	65,704
1974	22	19,034	285,441	28,896	125	333,513
TOTAL	191	576,528	895,991	230,015	14,911	1,717,636
AVERAGE <sup>1/</sup>	11	33,913	52,705	13,530	877	101,037

<sup>1/</sup> Average of years fished.

Table 27. Eshamy River daily weir count, 1974.

Date	Sockeye Salmon Daily Count		Daily Total	Weekly Total	Cummulative Total
	Adult	Jack			
6/19	Weir	Installed			
6/28*	6	7	13		13
6/29	1	5	6	19	19
6/30			0		19
7/1	36	8	44		63
7/2	18	3	21		84
7/3		3	3		87
7/4		3	3		90
7/5		2	2		92
7/6			0	73	92
7/7		1	1		93
7/8			0		93
7/9			0		93
7/10	1		1		94
7/11	14		14		108
7/12		1	1		109
7/13		1	1	18	110
7/14			0		110
7/15			0		110
7/16	1		1		111
7/17			0		111
7/18			0		111
7/19			0		111
7/20			0	1	111
7/21	43	4	47		158
7/22	10	1	11		169
7/23	31	2	33		202
7/24	2		2		204
7/25	3		3		207
7/26	2		2		209
7/27	1		1	99	210
7/28	4		4		214
7/29			0		214
7/30	16		16		230
7/31	23		23		253
8/1	16	2	18		271
8/2	5		5		276
8/3	1		1	67	277
8/4			0		277
8/5	1		1		278
8/6	6		6		284
8/7	1		1		285
8/8	27		27		312

Table 27, continued. Eshamy River daily weir count, 1974.

Date	Sockeye Salmon Daily Count		Daily Total	Weekly Total	Cummulative Total
	Adult	Jack			
8/9	3		3		315
8/10	8		8	46	323
8/11	6	2	8		331
8/12	5		5		336
8/13	37		37		373
8/14	39		39		412
8/15	20		20		432
8/16	1		1		433
8/17			0	110	433
8/18			0		433
8/19	22		22		455
8/20	24		24		479
8/21			0		479
8/22	7		7		486
8/23			0		486
8/24	1		1	54	487
8/25	6		6		493
8/26	140		140	146	633
8/27	Weir removed				
<b>TOTAL</b>					<b>633</b>

\* First salmon through the weir.

TABLE 28. Eshamy River red salmon weekly cumulative weir counts, 1960 - 1974.

Date Ending	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
6/30	52	2,183	1,096	0	8	0	16	26	363	47	64	0	0	0	19
7/7	1,308	3,421	1,441	116	28	0	49	846	639	347	172	0	2,625	20	93
7/14	3,220	4,317	1,768	168	1,948	885	784	858	1,362	1,151	240	0	4,863	43	110
7/21	4,633	5,381	1,877	195	3,379	1,553	1,181	875	1,948	1,220	341	55	6,664	67	158
7/28	6,214	6,209	2,024	211	5,336	5,110	2,795	896	2,012	1,224	932	585	6,881	171	214
8/4	7,316	7,438	2,132	222	6,706	8,271	5,281	1,195	6,503	2,712	1,632	731	7,756	366	277
8/11	8,252	21,412	3,704	546	8,657	11,252	10,670	3,208	10,925	4,755	2,046	799	11,088	807	331
8/18	10,509	31,580	5,538	716	17,604	28,568	13,912	3,871	23,806	5,599	7,204	811	22,822	1,626	433
8/25	12,209	38,474	7,450	2,063	45,994	41,965	25,471	9,031	66,113	7,059	9,675	934	25,159	4,658	493
9/2	13,217	45,072	8,720	2,588	65,672	51,150	26,375	10,746	67,766	10,935	11,065	944	26,931	5,354	633
9/9		46,400	9,297	3,064	67,730	53,053	26,572	10,821	68,048	24,722	11,431	951	28,472	9,127	
9/16		47,275	9,390	3,092		90,438	26,593		61,185	11,460	954	954	28,683	10,202	
9/23						108,934			61,196						
TOTAL	13,217	47,275	9,390	3,092	67,730	108,934	26,593	10,821	68,048	61,196	11,460	954*	28,683	10,202	633

\* Probably inaccurate because of holes in weir. Actual escapement is estimated to be at least 3,000.

Table 29. Eshamy River weir station weather data, 1974. 1/2/

Date	Temp. Max.	Air Min.	Water Temp.	Water Level	General Weather
6/17				.48	3 Broken overcast
6/18	52	43		.50	4 Overcast-rain
6/19	58	46		.49	2 Partly Cloudy
6/20	63	44		.46	1 Clear
6/21	56	43		.46	4 Overcast, Tr.
6/22	66	47		.45	1 Clear
6/23	66	51		.45	2 Partly Cloudy
6/24	56	52		.46	4 Overcast-rain
6/25	59	52	48	.58	4 Overcast-rain
6/26	62	52	50	.56	3 Broken overcast, Tr.
6/27	70	53	53	.50	2 Partly Cloudy
6/28	62	53	51	.48	3 Broken overcast
6/29	65	56	54	.45	2 Partly Cloudy
6/30	62	52	54	.42	2 Partly Cloudy
7/1	72	58	55	.39	2 Partly Cloudy
7/2	62	53	56	.37	4 Overcast
7/3	64	56	56	.33	3 Broken Overcast
7/4	62	56	57	.30	4 Overcast
7/5	59	56	57	.27	4 Overcast
7/6	60	55	57	.23	4 Overcast
7/7	62	56	58	.20	4 Overcast, Tr.
7/8	64	55	57	.18	2 Partly Cloudy
7/9	63	57	57	.17	3 Broken Overcast, Tr.
7/10	62	55	58	.16	3 Broken Overcast, Tr.
7/11	61	54	58	.16	3 Broken, rain
7/12	61	53	58	.13	4 Overcast-rain
7/13	61	55	60	.10	2 Partly Cloudy, Tr.
7/14	67	53	59	.09	3 Broken Overcast
7/15	62	53	60	.07	3 Broken Overcast
7/16	64	53	60	.05	3 Broken Overcast
7/17	74	52	60	.04	2 Partly Cloudy
7/18	64	57	60	.03	4 Overcast
7/19	61	57	60	.01	4 Overcast, Tr.
7/20	58	55	59	.03	4 Overcast-rain
7/21	56	54	56	.28	4 Overcast-rain
7/22	60	54	56	.33	4 Overcast, Tr.
7/23	60	54	56	.32	3 Broken Overcast
7/24	60	54	57	.28	3 Broken Overcast
7/25	63	56	57	.24	3 Broken Overcast
7/26	72	54	59	.21	2 Partly Cloudy
7/27	70	53	59	.18	2 Partly Cloudy
7/28	62	56	60	.14	4 Overcast, Tr.
7/29	62	58	60	.11	4 Overcast
7/30	68	56	60	.10	3 Broken Overcast
7/31	63	54	60	.06	3 Broken Overcast.

Table 29, cont. Eshamy River weir station weather data, 1974. 1/ 2/

Date	Temp. Max.	Air Min.	Water Temp.	Water Level	General Weather
8/1	65	56	60	.04	3 Broken Overcast
8/2	62	57	60	.01	4 Overcast-rain
8/3	63	57	60	-.01	4 Overcast, Tr.
8/4	68	56	61	-.04	3 Broken Overcast
8/5	63	56	61	-.06	4 Overcast, Tr.
8/6	62	56	61	-.06	4 Overcast, Tr.
8/7	59	57	60	-.08	4 Overcast-rain
8/8	62	56	61	-.10	3 Broken Overcast
8/9	61	55	60	-.10	4 Overcast
8/10	68	52	61	-.11	2 Partly Cloudy
8/11	68	57	60	-.13	1 Clear
8/12	68	55	61	-.14	1 Clear
8/13	70	55	62	-.16	2 Partly Cloudy
8/14	72	58	63	-.16	1 Clear
8/15	72	58	63	-.16	1 Clear
8/16	70	58	64	-.16	1 Clear
8/17	77	60	66	-.17	1 Clear
8/18	73	60	66	-.18	1 Clear
8/19	72	57	64	-.18	2 Partly Cloudy
8/20	72	55	62	-.18	1 Clear
8/21	67	54	62	-.19	2 Partly Cloudy
8/22	63	53	62	-.20	2 Partly Cloudy
8/23	62	56	61	-.20	2 Partly Cloudy
8/24	56	47	61	-.21	4 Overcast-rain
8/25	56	46	60	-.21	4 Overcast-rain
8/26	59	50	60	-.20	4 Overcast, Tr.

1/ Temperature in degrees Fahrenheit.

2/ Water level measured in tenths of feet.

## COGHILL AND UNAKWIK DISTRICTS

### Commercial Fishery

The salmon season opened as scheduled on June 18 and continued without interruption until closed by emergency order on July 19.

This fishery was one of the two areas of Prince William Sound open to fishing in 1974, and the only area in which purse seines were allowed to be fished.

During the season the peak effort by drift gill net fishermen occurred during week 27 and purse seines during week 29. A sockeye salmon catch of 110,332 was the third highest catch recorded since 1961, Figure 7. In addition, 353 king, 128 coho, 163,328 pink and 59,648 chum salmon were taken, Table 30. Table 31 shows the catch by species by gill nets since 1961.

### Escapement

During the spring of 1974, department personnel installed a permanent weir in Coghill River which allowed a total count of sockeye salmon to be made. During the time the weir was in operation, Table 32, a total of 22,334 sockeye salmon were counted. Comparative escapement estimates and weir counts are shown in Table 34. Good escapements of both pink and chum salmon were estimated by aerial census. Figure 8 graphically presents aerial spawning escapement estimates of sockeye, pink and chum salmon from 1960 to 1974.

General weather data is presented in Table 33.

Table 30. Coghill and Unakwik district purse seine and drift gill net weekly catch, 1974. 1/

<u>Purse Seine</u>						
Week	King	Sockeye	Coho	Pink	Chum	Units of Gear <u>2/</u>
25		2				1
26	17	209		118	56	4
27	4	549	2	959	222	9
28	22	1,249	4	15,263	1,413	29
29	149	2,264	16	37,928	6,029	45
Sub-total	192	4,273	22	54,268	7,720	
<u>Drift Gill Net</u>						
25	22	11,696	10	1,759	6,372	126
26	25	38,534	5	11,769	13,020	271
27	25	26,791	30	24,227	11,383	321
28	47	17,553	32	45,197	13,069	262
29	42	5,485	29	26,108	8,084	144
Sub-total	161	106,059	106	109,060	51,928	
TOTAL	353	110,332	128	163,328	59,648	

1/ The west side of Port Wells was also open to fishing during the Coghill fishery and the catch is included here.

2/ Includes some duplicates of vessels that fished in more than one area during some weeks.

Table 31. Coghill and Unakwik district gill net comparative effort and catch, 1961 - 1974.

Year	Sockeye	Pinks	Chums	Cohos	Average Units of Gear	Sockeye Catch/ Unit of Gear
1961 <u>1/</u>	12,961	10,019	2,412	13	25	518
1962 <u>2/</u>	13,846	2,241	4,817	15	41	338
1963 <u>3/</u>	16,965	2,689	5,265	20	19	893
1964 <u>3/</u>	28,864	5,790	4,494	2	44	656
1965 *	22,855	1,905	4,363	18	19	1,203
1966 *	30,924	995	1,684	6	24	1,289
1967 *	24,565	37,854	18,607	45	73	337
1968 *	47,323	19,326	16,870	114	91	520
1969 *	79,442	1,142	8,153	9	55	1,444
1970 *	27,916	8,503	5,765	62	82	340
1971 *	31,332	4,117	11,365	54	176	178
1972 *	144,638	9,406	19,247	96	189	918
1973 *	98,499	80,945	81,919	245	271	364
1974*	106,059	109,060	51,928	106	225	471
TOTAL	686,189	292,992	236,889	1,005		
AVERAGE	49,014	20,928	16,921	72		

1/ The first season for drift gill net fishing in the Coghill district.

2/ The first season for drift gill net fishing in the Unakwik district.

3/ No drift gill net catches were reported from the Unakwik district.

\* Purse seines also fished these years.

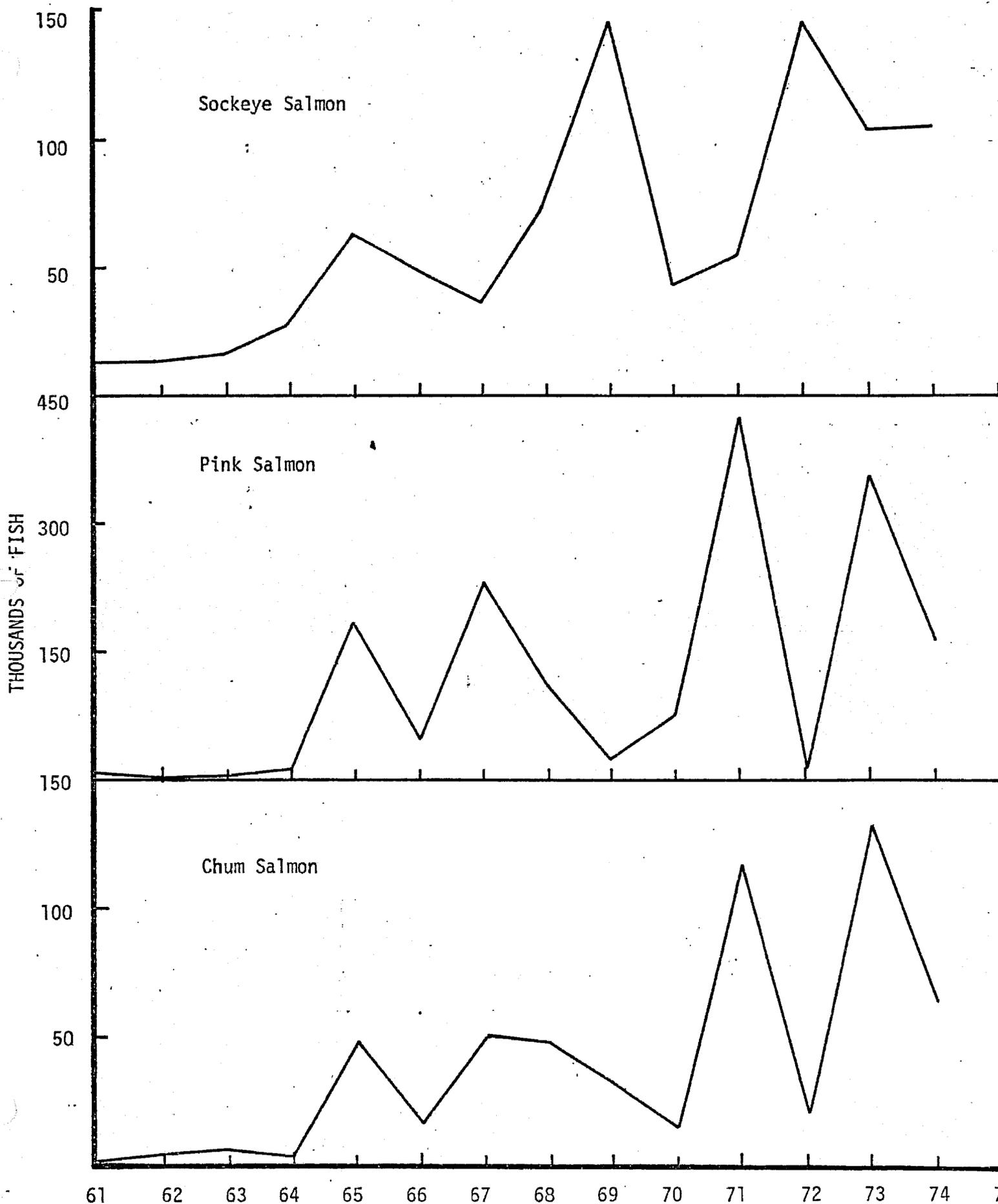


Figure 7. Coghill and Unakwik District commercial salmon catches, 1961 - 1974.

Table 32. Coghill River daily weir count, 1974.

Date	Sockeye Counts			Daily Total	Cummulative Total
	Male	Female	Jack <sup>3/</sup>		
6/10	Weir installed <sup>1/</sup>				0
6/11					0
6/12					0
6/13					0
6/14					0
6/15					0
6/16					0
6/17					0
6/18					0
6/19	First sockeye observed				0
6/20	2	0	0	2	2
6/21	1	0	0	1	3
6/22	1	1	0	2	5
6/23	4	0	1	5	10
6/24	4	4	4	12	22
6/25	2	1	1	4	26
6/26	2	2	1	5	31
6/27				56	87
6/28	4	2	1	7	94
6/29	5	2	4	11	105
6/30	4	0	6	10	115
7/1	3	0	6	9	124
7/2	3	4	14	21	145
7/3	3	3	5	11,575	11,720
7/4				6,313	18,033
7/5	9	2	33	90	18,123
7/6	47	100		184	18,307
7/7	18	14		88	18,395
7/8	51	40		104	18,499
7/9	52	38		132	18,631
7/10	20	17		307	18,938
7/11	17	17		133	19,071
7/12	96	59		174	19,245
7/13	0	7		58	19,303
7/14	16	7		336	19,639
7/15	58	30		890	20,529
7/16	7	7		410	20,939
7/17	21	18		91	21,030
7/18	17	24		393	21,423
7/19	9	7		150	21,573
7/20	7	9		155	21,728
7/21				139	21,867
7/22				206	22,073
7/23				261	22,334
TOTAL	479 <sup>2/</sup>	415 <sup>2/</sup>	76		

<sup>1/</sup> New standard weir constructed of wooden A-frames and conduit pickets.

<sup>2/</sup> Sample counts from external characteristics.

<sup>3/</sup> Sockeye less than 24 inches from tip of nose to fork of tail.

Table 33. Coghill River weir station weather data, 1974. 1/

Date	Temp. Max.	Air Min.	Water Temp.	General Weather Conditions	Precipitation
6/12			44	4 Overcast	T
6/13			44	4 Overcast	
6/14			44	3 Broken Overcast	
6/15			44	4 Overcast	R
6/16		44	44	4 Overcast	R
6/17	57	42	45	3 Broken Overcast	T
6/18	50	38	45	4 Overcast	R
6/19	60	40	45	4 Broken Overcast	
6/20	67	34	47	2 Partly Cloudy	
6/21	66	34	47	4 Overcast	
6/22	70	40	47	1 Clear	
6/23	57	40	50	3 Broken Overcast	R
6/24	68	42	50	1 Clear	
6/25	59	44	50	4 Overcast	T
6/26	64	44	48	1 Clear	
6/27	67	44	49	2 Partly Cloudy	
6/28	65	46	50	2 Partly Cloudy	
6/29	66	36	52	2 Partly Cloudy	
6/30	64	40	51	1 Clear	
7/1	72	46	51	1 Clear	
7/2	67	46	51	1 Clear	
7/3	66	50	50	4 Overcast	T
7/4	60	50	52	4 Overcast	T
7/5	56	48	52	4 Overcast	T
7/6	58	46	52	4 Overcast	T
7/7	55	45	52	4 Overcast	T
7/8	67	46	52	3 Broken Overcast	T
7/9	68	46	53	3 Broken Overcast	T
7/10	65	49	53	3 Broken Overcast	T
7/11	67	42	53	3 Broken Overcast	T
7/12	62	42	54	3 Broken Overcast	T
7/13	67	43	54	4 Overcast	R
7/14	68	39	55	1 Clear	
7/15	61	42	55	4 Overcast	R
7/16	65	39	55	3 Broken Overcast	
7/17	74	36	55	1 Clear	
7/18	65	39	55	4 Overcast	T
7/19	58	48	56	4 Overcast	R
7/20	59	46	56	4 Overcast	R
7/21	55	46	55	4 Overcast	R
7/22	60	45	55	4 Overcast	T
7/23	62	44	53	3 Broken Overcast	T
7/24	59	44	52	4 Overcast	
7/25	60	45	52	1 Clear	
7/26	69	35	55	1 Clear	
7/27		38		2 Partly Cloudy	

1/ Temperature in degrees Fahrenheit.

Table 34. Comparative Coghill River spawning escapement estimates, 1960 - 1974.

Year	WEIR - TOWER ESTIMATES 1/				AERIAL - GROUND SURVEY ESTIMATES 2/			
	Sockeye	Chums	Pinks	Coho	Sockeye	Chums	Pinks	Coho
1960					129,000	24,012	2,340	
1961	54,792	1,160	183,661		40,000	49,324	195,600	
1962	26,866		114		12,000	27,000	3,520	
1963	63,934				75,000	63,400	57,930	280
1964					22,200	37,640	9,720	
1965	40,000				85,000	13,200	62,000	
1966	80,000				85,000	10,360	6,260	
1967	11,800 *	7,960	187,224		33,000	6,600	139,300	3/
1968 4/					11,800	12,640	2,650	
1969 5/	10,142 *				81,000	34,600	72,000	
1970 5/	9,658				35,200	3,080	18,530	
1971	no weir count				15,000	10,200	500,000	
1972	16,392				51,000	11,700	7,770	
1973	13,281				55,000	73,600	543,150	
1974	22,333**				21,000	31,500	20,680	

1/ Above weir.

2/ Entire system.

3/ Estimated from stream counts. Aerial estimates of schooled pink salmon in Coghill Lake indicated an escapement in excess of 500,000.

4/ Aerial estimate of sockeye salmon escapement only as sockeye migration preceded weir installation.

5/ The weir was removed prior to the upstream migration of pinks and chums.

\* Unexpanded counts.

\*\* Total weir count.

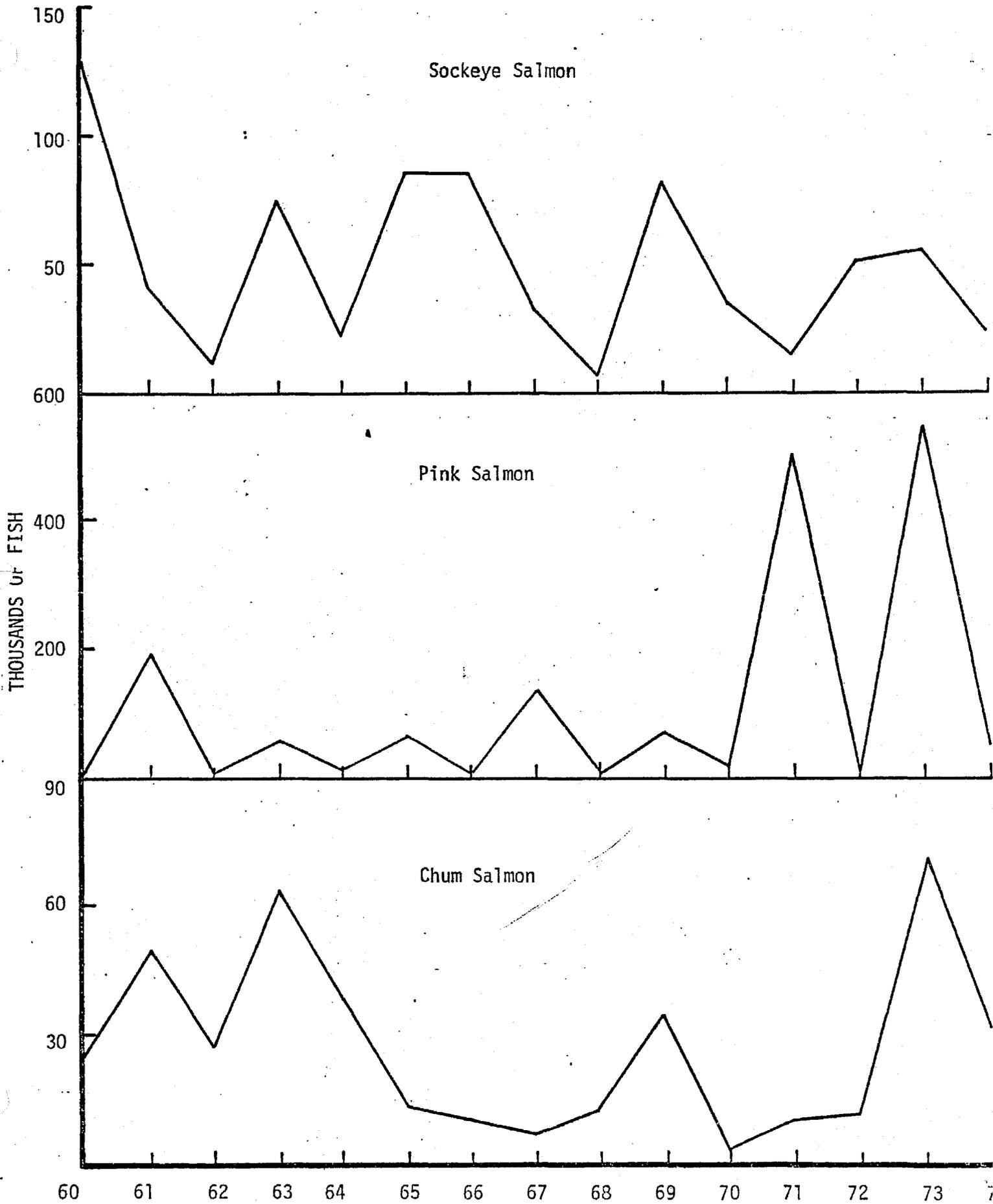


Figure 8. Coghill River aerial salmon spawning escapements, 1960 - 1974.

## CRAB FISHERY

### Dungeness Crab

The Dungeness crab catch of 559,164 pounds showed a decrease of about 250,000 pounds from 1973, Figure 9. The decrease is judged to be a result of availability of crabs since the effort increased from 45 boats in 1973 to 50 in 1974, Table 35a. The increase in boats in the fishery in 1974 is probably due to the fact that the Prince William Sound salmon purse seine season was closed.

Seasonal catches of Dungeness crab for 1974 are shown in Table 35. Table 35a gives the Dungeness crab fishing effort and catch from 1960 to 1974. Figure 9 depicts graphically the commercial catch landed since the inception of the fishery.

### King Crab

The king crab catch by month and stat area is shown in Table 36. A catch of 85,379 pounds compares to a catch of 207,916 pounds in 1973 and is the lowest recorded catch since 1969. Both effort and price were high and the only explanation for the reduced catch appears to be availability of crab.

### Tanner Crab

Table 37 shows the 1975 catch of tanner crab by-month from the Prince William Sound "Inside" and "Outside" area. The catch of 9,615,456 did not approach the quota of 15.5 million pounds and was below the 12.7 million pounds taken in 1973. The reduced catch in 1974 was due in part to a reduced fishing effort because of price negotiations which lasted until February 19, and to a fewer number of boats fishing.

In 1974 the commercial landings of tanner crab were periodically sampled for lengths and widths to determine the trend of the fishery and size distribution being utilized. Table 38 and 39 show length and width samples collected in 1972, 1973 and 1974. Samples from the three years show no significant changes in the size range of tanner crab taken in the commercial fishery, Figure 10. A higher percentage of larger size male tanners entered the fishery in 1974, probably as a result of fishermen prospecting and fishing virgin areas not fished previously.

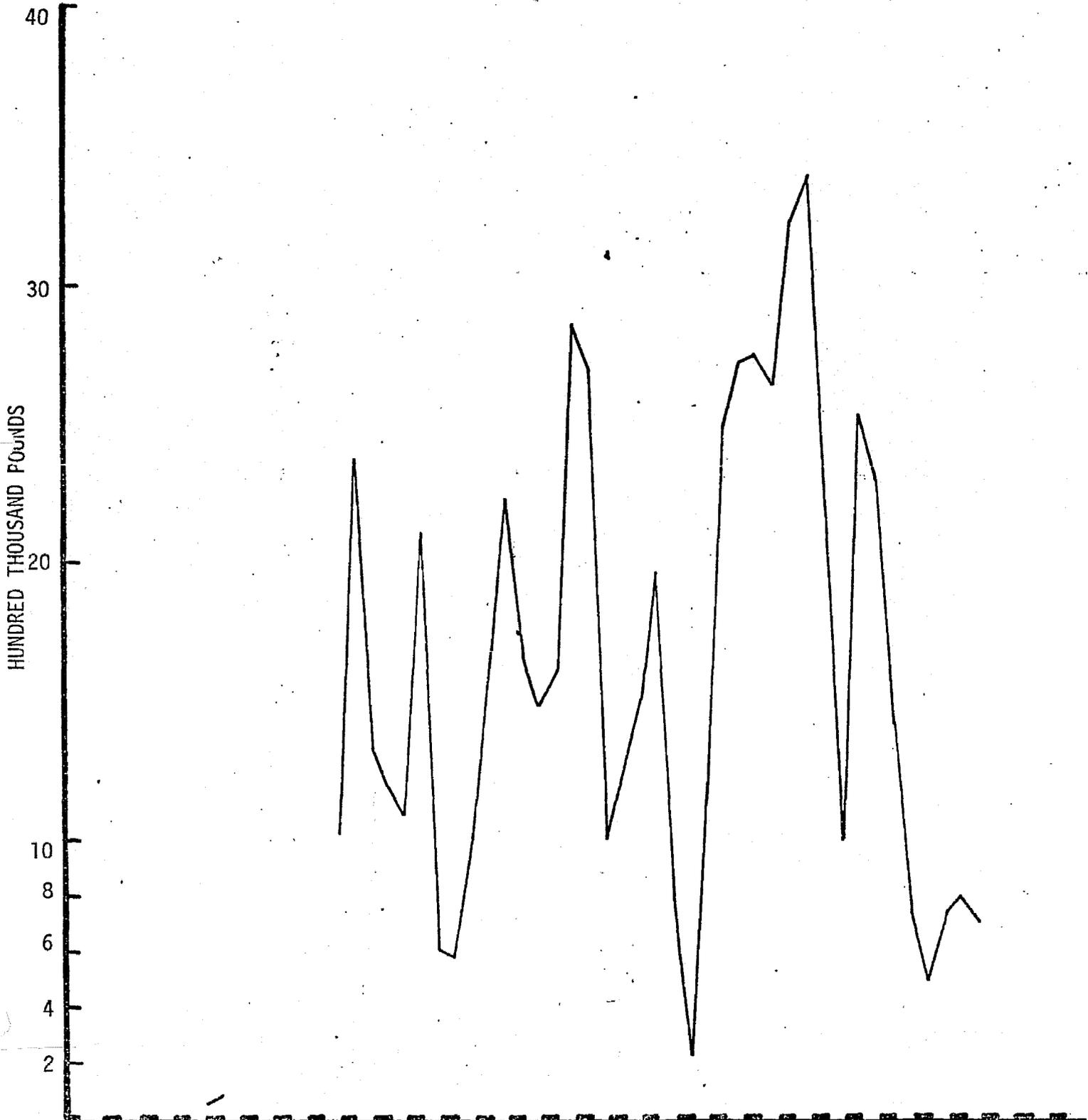


Figure 9.. Commercial catch of Dungeness crab landed at Cordova since the inception of

Table 35. Dungeness crab catch in pounds by statistical area, by month, from the Prince William Sound Area, 1974.

Month	Statistical Area												Total	No. Boats	
	201-00	201-07	201-08	201-14	201-15	201-20	201-22	203-10	203-15	203-18	203-20	203-96			203-99
1									18					18	1
2									105					105	1
3											1135	630		1765	3
4	3140			1435										4575	2
5	3345			1575		2565								7485	3
6				15222		48494								63716	4
7				9894	35642	57442								102978	3
8					13334	62137								75471	3
9	83372	10300	32730			20659	770					117634		265465	46
10	9680	1095	735			14240	1079	4430				6354		37586	19
TOTAL	99537	11395	33465	28126	48976	154478	51059	1849	4430	123	1135	630	123988	559164	50 1/

1/ Total season effort.

Table 35a. Dungeness crab fishing effort and total catch landed in the Prince William Sound Area, 1960 to 1974.

<u>Year</u>	<u>No. Landings</u>	<u>No. Vessels</u>	<u>Total Catch in Pounds</u>
1960		63	2,722,470 *
1961		65	2,756,194 *
1962	1,306	63	2,643,775 *
1963	1,231	64	3,234,383 *
1964	1,485	40	3,393,171 *
1965	1,345	20	2,174,287 *
1966	520	29	986,949
1967		24	862,286
1968		29	980,500
1969	667	41	1,413,900
1970	408	38	738,600
1971	422	26	509,800
1972	515	61	724,700
1973	593	45	806,377
1974	466	50	559,164

\* Includes crab taken from the Icy Bay area.

Table 36. King crab catch in pounds by statistical area, by month, from the Prince William Sound Area, 1974.

Month	Statistical Area										Total	No. Boats	
	203-04	203-05	203-09	203-11	203-15	203-18	203-86	203-89	203-96	203-98			203-99
1	600		250		1,732							2,582	4
2	2,565				160	5,302	400	260	380	30		9,097	12
3	2,863			510				45		30		3,448	6
8	605											605	1
9	365			17,154				65			1,240	18,824	5
10	23,893	6,990		6,437	5,969					70		43,359	7
11				5,892	1,572							7,464	4
TOTAL	30,891	6,990	250	29,993	7,701	7,034	400	370	380	60	1,310	85,379	21 1/2

1/ Total season effort.

Table 37. Tanner crab catch in pounds, by month, from the Prince William Sound Area, 1973 - 74 Season.

<u>Month</u>	<u>Inside Area Pounds</u>	<u>Outside Area Pounds</u>	<u>Boats</u>	<u>Total Pounds</u>
Nov.	4865		1	4865
Dec.		12833	2	12833
Jan.	13385	214727	10	228112
Feb.	271558	803992	31	1075550
Mar.	886936	2692568	50	3579504
Apr.	242322	2669301	50	2911623
May	84710	1718259	39	1802969
<b>TOTAL</b>	<b>1503776</b>	<b>8111680</b>	<b>57 <u>1/</u></b>	<b>9615456</b>

1/ Total season effort.

Table 38. Tanner crab length\* frequencies from the commercial catch, 2/29/72 - 7/5/72, 12/8/72 - 3/15/73, and 1/30/74 - 5/20/74.

(mm)	1972		1973		1974	
	No.	%	No.	%	No.	%
70 - 74	1	0.03	14	0.50	2	0.06
75 - 79	3	0.08	39	1.39	11	0.30
80 - 84	26	0.67	78	2.78	41	1.10
85 - 89	69	1.79	188	6.70	109	2.93
90 - 94	198	5.12	309	11.01	171	4.60
95 - 99	405	10.48	528	18.81	252	6.78
100 - 104	643	16.64	542	19.31	474	12.76
105 - 109	804	20.80	485	17.28	588	15.82
110 - 114	783	20.26	338	12.04	800	21.53
115 - 119	545	14.10	197	7.02	627	16.87
120 - 124	288	7.45	69	2.46	355	9.55
125 - 129	78	2.01	18	0.64	120	3.23
130 - 134	19	0.49	1	0.03	161	4.33
135 - 139	2	0.05	1	0.03	3	0.08
140 - 144	1	0.03			1	0.03
145 - 149					1	0.03
TOTAL	3,865	100	2,807	100	3,716	100

\* Measured from eye notch to posterior center of carapace.

Table 39. Tanner crab width\* frequencies from the commercial catch, 2/29/72 - 7/5/72 - 12/8/72, and 1/30/74 - 5/20/74.

(mm)	1972		1973		1974	
	No.	%	No.	%	No.	%
75 - 79						
80 - 84						
85 - 89						
90 - 94					1	0.05
95 - 99						
100 - 104	1	0.09	1	0.16	8	0.36
105 - 109	1	0.09	4	0.64	17	0.77
110 - 114	12	1.11	7	1.12	52	2.34
115 - 119	14	1.29	14	2.24	106	4.77
120 - 124	25	2.31	26	4.16	259	11.65
125 - 129	62	5.73	26	4.16	319	14.35
130 - 134	111	10.25	57	9.12	340	15.29
135 - 139	162	14.96	88	14.08	299	13.45
140 - 144	210	19.39	107	17.12	277	12.46
145 - 149	103	9.51	83	13.28	214	9.63
150 - 154	188	17.36	98	15.63	155	6.97
155 - 159	99	9.14	58	9.28	90	4.05
160 - 164	48	4.43	42	6.72	54	2.43
165 - 169	33	3.05	11	1.76	27	1.21
170 - 174	12	1.11	3	0.48	4	0.18
175 - 179	1	0.09			1	0.04
180 - 184	1	0.09				
<hr/>						
TOTAL	1,083	100	625	100	2,223	100

\* Greatest width of shell including spines, at the approximate mid-point.

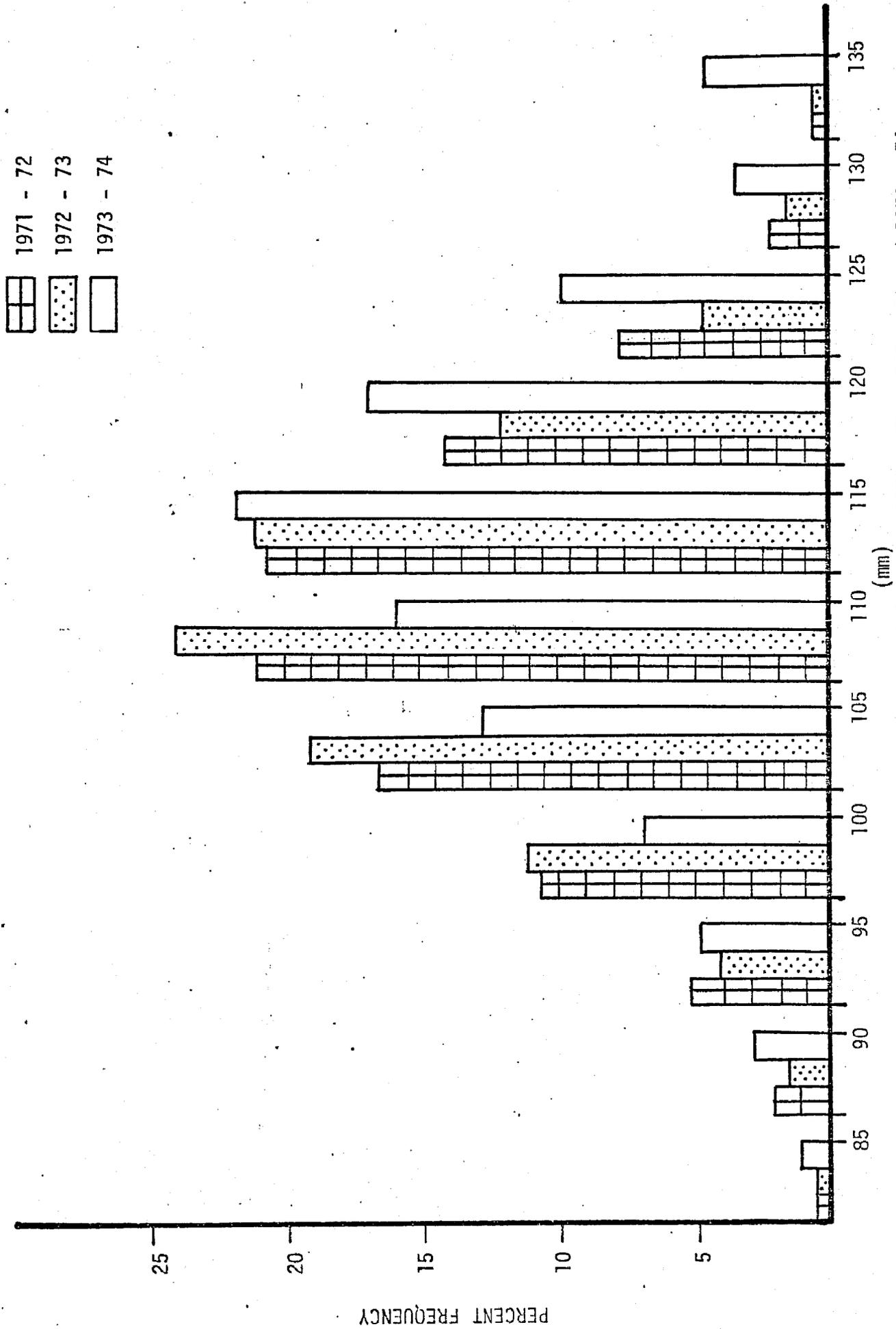


Figure 10. Tanner crab length frequencies from commercial catch, 1971 - 72, 1972 - 73 and 1973 - 74 landed in Cordova

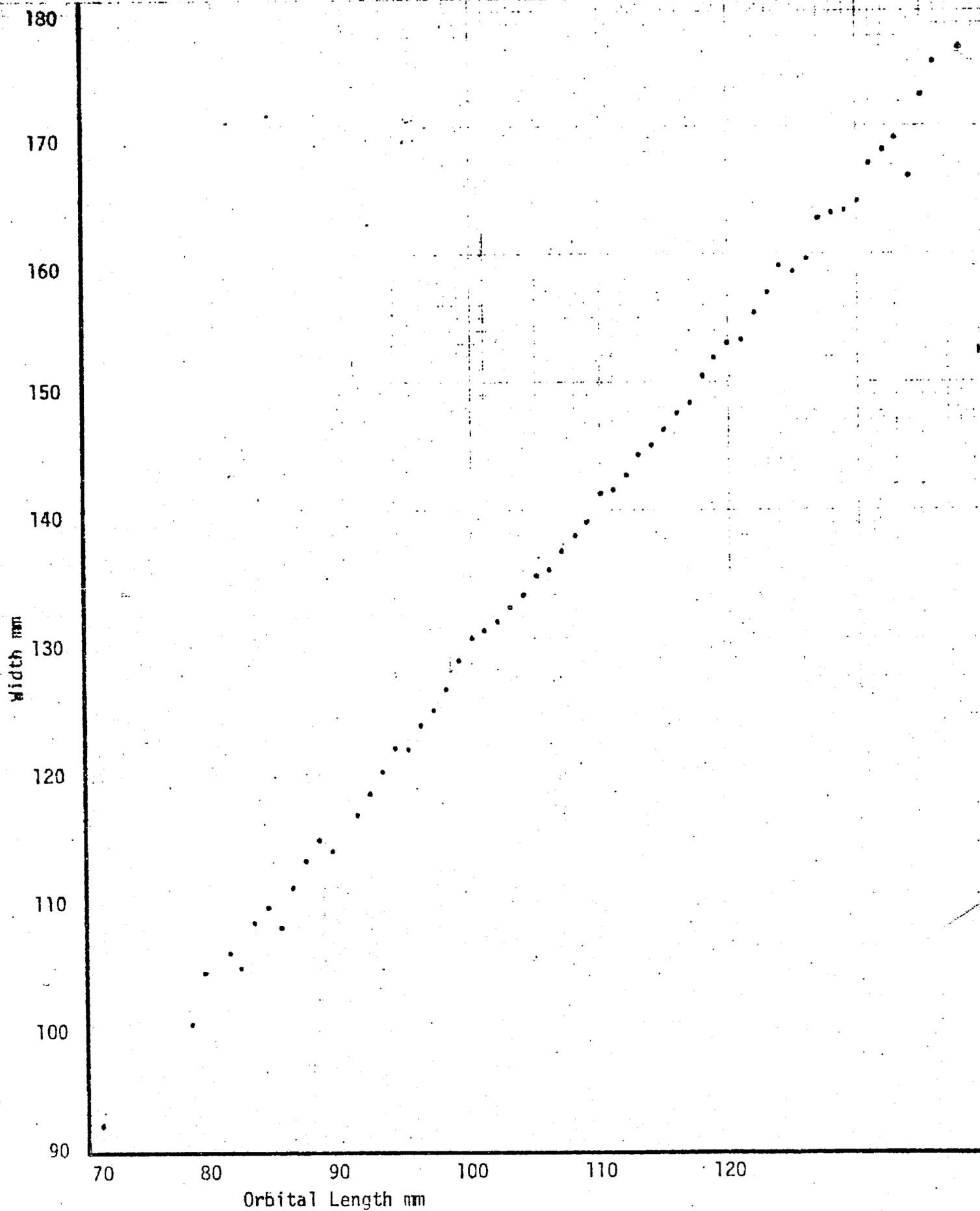


Figure 11. 1972-74 Tanner Crab Width-Length Scatter Diagram.

## HERRING AND HERRING SPAWN ON KELP FISHERY

### INTRODUCTION

An apparent unlimited market for herring roe plus a large increase in price for herring resulted in a catch of 12,741,914 pounds (6,371 tons) reported by operators in 1974, Table 40. Lucrative foreign quotas and high prices resulted in a herring spawn on kelp harvest totaling 580,588 pounds, Table 41.

#### Herring Fishery

The 1974 fishery began in a manner similar to the past two seasons with the purse seine fleet prospecting for herring in the Columbia Bay area and adjacent waters of Glacier Island outside the Eastern district closed area.

Vessels prospecting in the Columbia Bay area discovered herring on April 10, and by the morning of April 11 all the available tenders were loaded with herring, and processors were dispatching other tenders to the area. Herring were showing in Columbia Bay about one week earlier than the previous year, and apparently the processors were not ready to handle the catch. Fishermen were crying for tenders and none were available. Capacity of available tenders on the fishing grounds was about 450 tons when fishing commenced. Estimates of the herring catch on April 10 - 11 obtained from processors was 545 tons. Recovery of roe was reported by processors to be ranging from nine to thirteen percent.

Aerial surveys were commenced on April 12 and revealed large concentrations of herring in most of the known spawning areas and in the Columbia Bay area.

More tenders began arriving on the fishing grounds on April 12, and fishing continued until the Columbia Bay area was closed by emergency order at noon on April 14 after an estimated 3,000 tons were taken. After the emergency closure in the Columbia Bay area most of the vessels dispersed to other areas of Prince William Sound in search of other spawning populations of herring.

Aerial surveys of herring populations in northeast Prince William Sound were continued on a daily basis (when weather permitted), and a build-up of large herring schools was noted in the Tatitlek Narrows - Bligh Island area on April 17. The first spawning was noted on the south and west shores of Busby Island at the north entrance to Tatitlek Narrows on April 17. Spawning in the Tatitlek Narrows area was observed daily, reaching a peak on April 20 and 21 and continuing each day through April 29. Figure 12 shows the herring spawning areas of Tatitlek Narrows utilized in 1974.

On the morning of April 17 a report from Seward Fisheries was received that suitable herring (roe recovery of about 6 - 8 percent) were located at Green Island on the evening of April 16. Seward Fisheries indicated their catches in the neighborhood of about 1,200 tons. Subsequent telephone calls to other operators indicated all the operators had herring being delivered aboard tenders. On the basis of the reports an emergency order was adopted closing the herring fishery effective at 6:00 p.m. on April 18. An air charter was obtained and an aerial check of the fishery revealed that every

tender was taking herring aboard and about 20 boats were awaiting delivery with seines full of herring. The Cordova Alaska Department of Fish and Game office was contacted by radio to change the closure date effective at 6:00 p.m. on April 17, and the announcement was made immediately.

Unsuccessful attempts were made throughout the remainder of the day on April 17 to obtain an estimate of the catch. On the morning of April 18 another check of the fishery revealed that fishermen were still delivering herring to tenders. Reports received from operators, tender captains and from Pete Fridgen, who was aboard one of the fishing boats, disclosed that several fishermen dumped herring from their seines due to the lack of tender service. Many of the herring dumped from seines were assumed to be dead because of the long holding period. Delivery to tenders of herring being held in seines was completed on April 18.

Beginning on April 17 aerial surveys were conducted daily to observe the Green Island and northern Montague Island areas for spawning herring. Subsequent to the fishery at Green Island large schools of herring were observed scattered all around but closely adjacent to the Island. The first observed spawning occurred in one small area on the south shore of Green Island on April 22 which was about two weeks prior to the previous year. Spawning continued to occur each day in limited areas and appeared to peak about April 29. Figure 13 shows the Green Island areas utilized by spawning herring in 1974.

On April 19 attempts to obtain estimates of herring catches from the Green Island area were not entirely successful, but estimates received indicated the 5,000 ton Prince William Sound quota would be filled and probably exceeded. Estimates obtained on April 19 indicated a catch from the Green Island area exceeding 3,000 tons. Efforts to obtain catch data was aggravated due to the lack of weighing equipment aboard many of the tenders. Fish tickets were slow coming into the Fish and Game office also because of weighing problems. One operator withheld fish tickets until the herring were boxed, frozen and shipped to Seattle. Poor communications with operators also slowed receipt of fish tickets and final estimates of catch data. Some herring fish tickets were still outstanding for many weeks. Both the Kodiak and Homer (Seward) Fish and Game offices cooperated in attempting to obtain Prince William Sound herring catch data and fish tickets from operators based in their respective areas.

Samples of herring were obtained on the fishing grounds and from cannery deliveries for scales, sex and other biological data. Figure 14 shows the age percent frequency of commercially caught herring from northeastern Prince William Sound in 1974. The majority or 64.7 percent were four year old herring as compared to predominantly five and six year olds in 1973. Figure 15 shows the age percent frequency of herring from Green Island - Rocky Bay in 1974. The catch was almost entirely made up of four year old herring compared to three year olds the previous year.

Following this year's intensive herring fishery it is apparent that a more effective control of the fishery is necessary if we are to keep the catch within a certain quota limit. The following problems were apparent this year.

1. Lack of communication with some operators.
2. Operators working in the herring fishery without filing an "Intent to Operate" for herring in Prince William Sound.
3. Fishermen have the capability of huge catches within a relatively short period of time if herring are available.

4. Lack of weighing equipment on tenders delays catch estimates and catch reporting on fish tickets.
5. Lack of tender service may cause wastage when herring are dumped.
6. Lack of control of opening may result in herring being taken before the roe is prime, resulting in loss of money to fishermen and processors.
7. Fishery in progress several hours or a day before management biologist is notified.

### Herring Spawn on Kelp Fishery

The fishery was opened by emergency order on April 22 after five successive days of spawning in the Tatitlek Narrows area of Prince William Sound. Deposition of herring eggs was found to be excellent in several areas especially in Virgin Bay (Ellamar) and on the north end of Bligh Island.

Competition between buyers on the fishing grounds was keen and the price paid fishermen was reported to vary between 60¢ and 75¢ per pound. In addition, very little grading of kelp was being done and the quality of kelp accepted this year was very poor in some cases. Fishermen reported that buyers were accepting everything that was delivered. Seive kelp (*Agarum cribrosum*) and hair kelp (*Desmarestia intermedia*) were accepted in small amounts.

The harvest of 580,588 pounds compares to the 1973 harvest of 306,358 pounds.

Figure 16 shows graphically the herring catch from the inception of the fishery.

Figure 17 shows the average weekly water temperatures from a thermograph at Tatitlek Village dock and herring spawning in relation to water temperature. Spawning in 1974 was first observed when water temperatures were near 40° F as compared to 39° F in 1973.

The forecast for the future indicates a continued large market for herring sac roe and a local interest for approximately 700 - 1,000 tons of bait herring. The market for herring spawn on kelp is expected to be good although the quality control may be in effect again next year once the present harvest reaches the market.

The spawning stocks appear to be in a healthy condition and present in numbers equal or exceeding last year.

Table 40. Herring catch in pounds and effort, by week, by statistical area, 1974.

Week	Boats	222-10	Boats	227-20	Total Catch
15	52	4,495,250			4,495,250
16	19 <sup>1/</sup>	1,297,947	62	6,948,717	8,246,664
TOTAL		5,793,197		6,948,717	12,741,914

<sup>1/</sup> Three boats used drift gill net gear and caught 7,690 pounds. Other catch by purse seines.

Table 41. Herring spawn on kelp harvest and effort, by week, by statistical area, 1974.

Week	Boats	221-40	Boats	221-50	Boats	227-20	Total
17	119	259,703	24	26,427			286,130
18	102	286,233	21	7,952	1	273	294,458
TOTAL		545,936		34,379		273	580,588



Figure 12. Herring spawning areas of Tatitlek Narrows utilized in 1974.

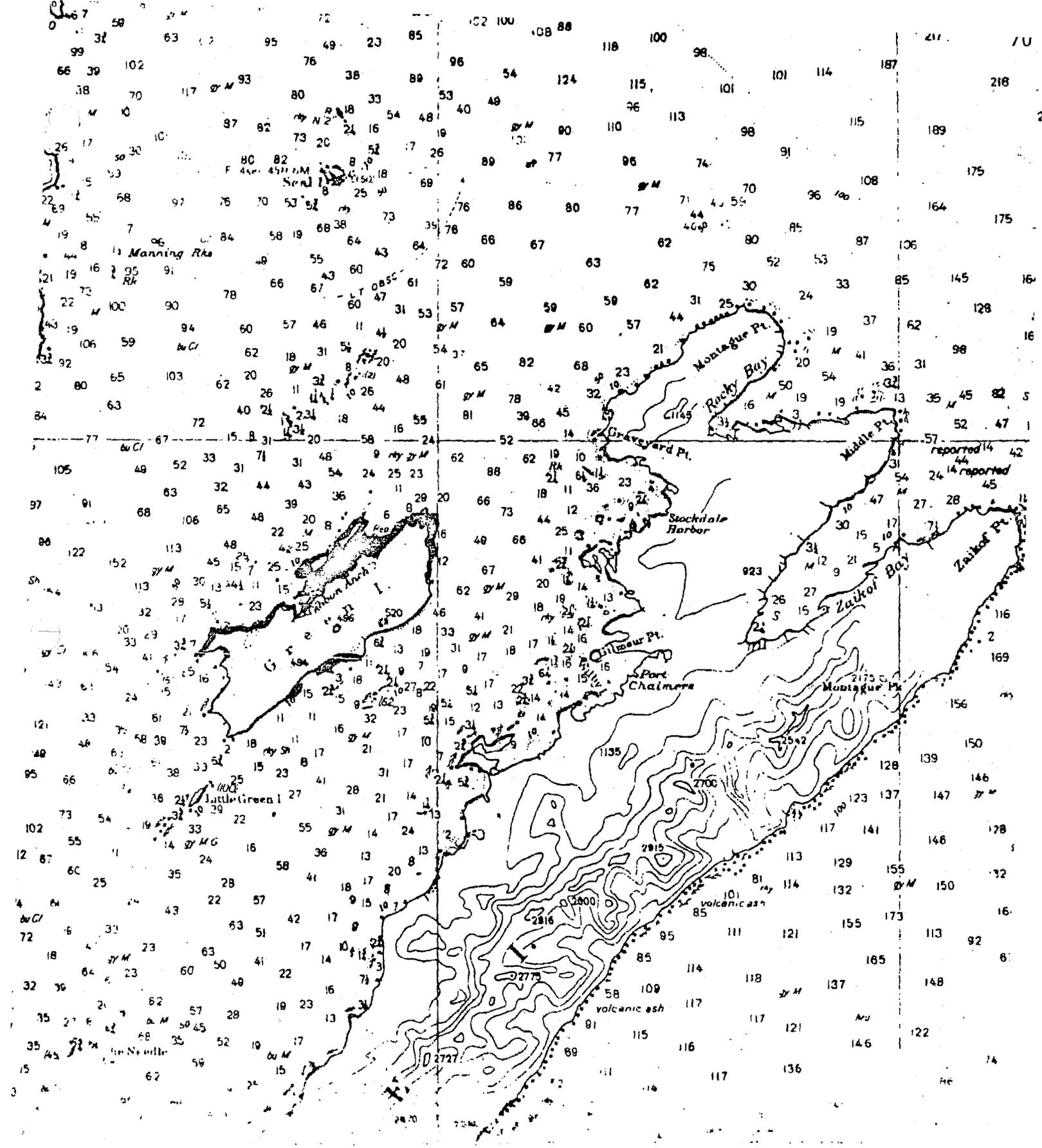


Figure 13. Herring spawning areas of Green Island utilized in 1974.

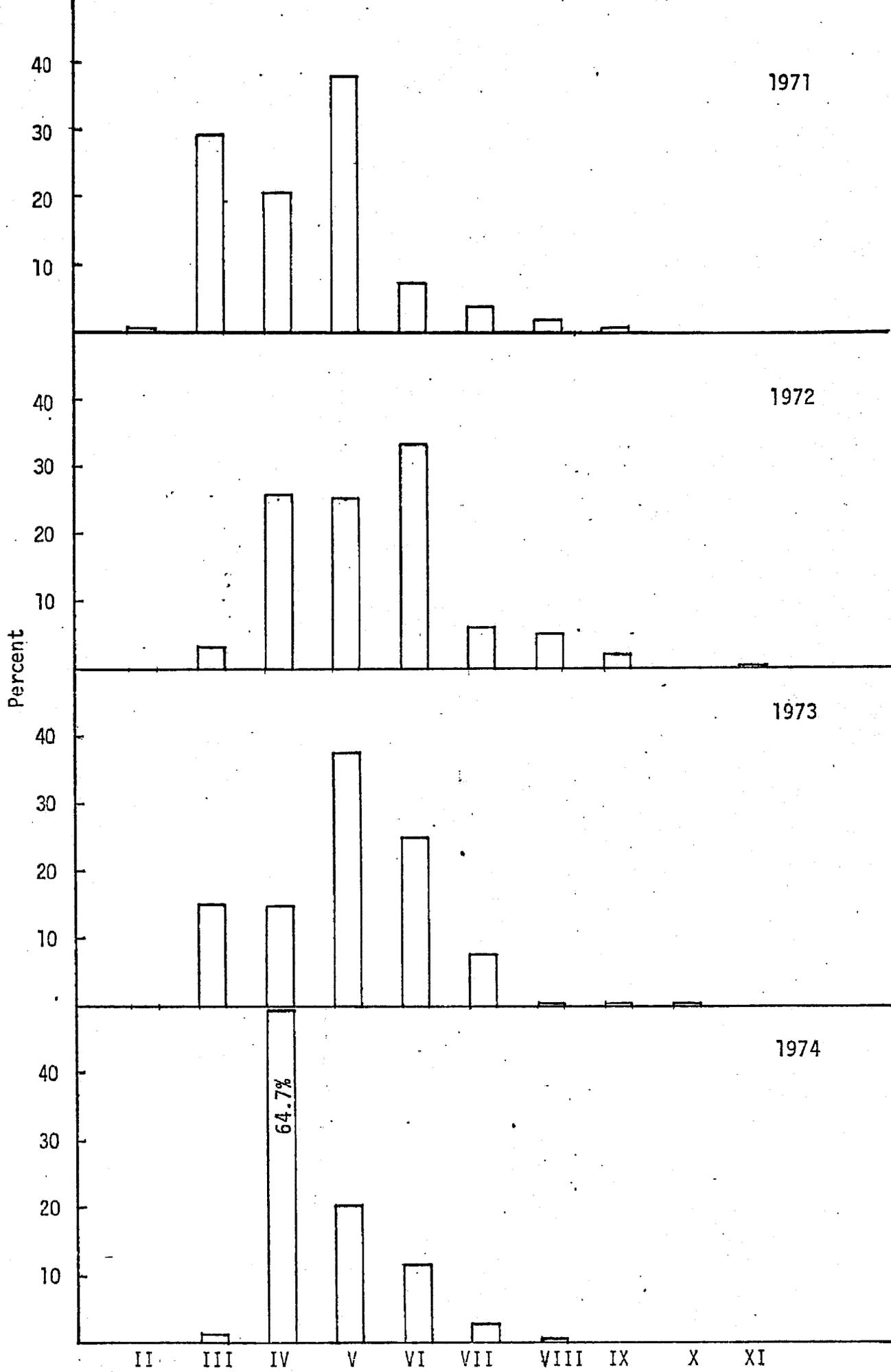


Figure 14. Age percent frequency of commercially caught herring from northeastern

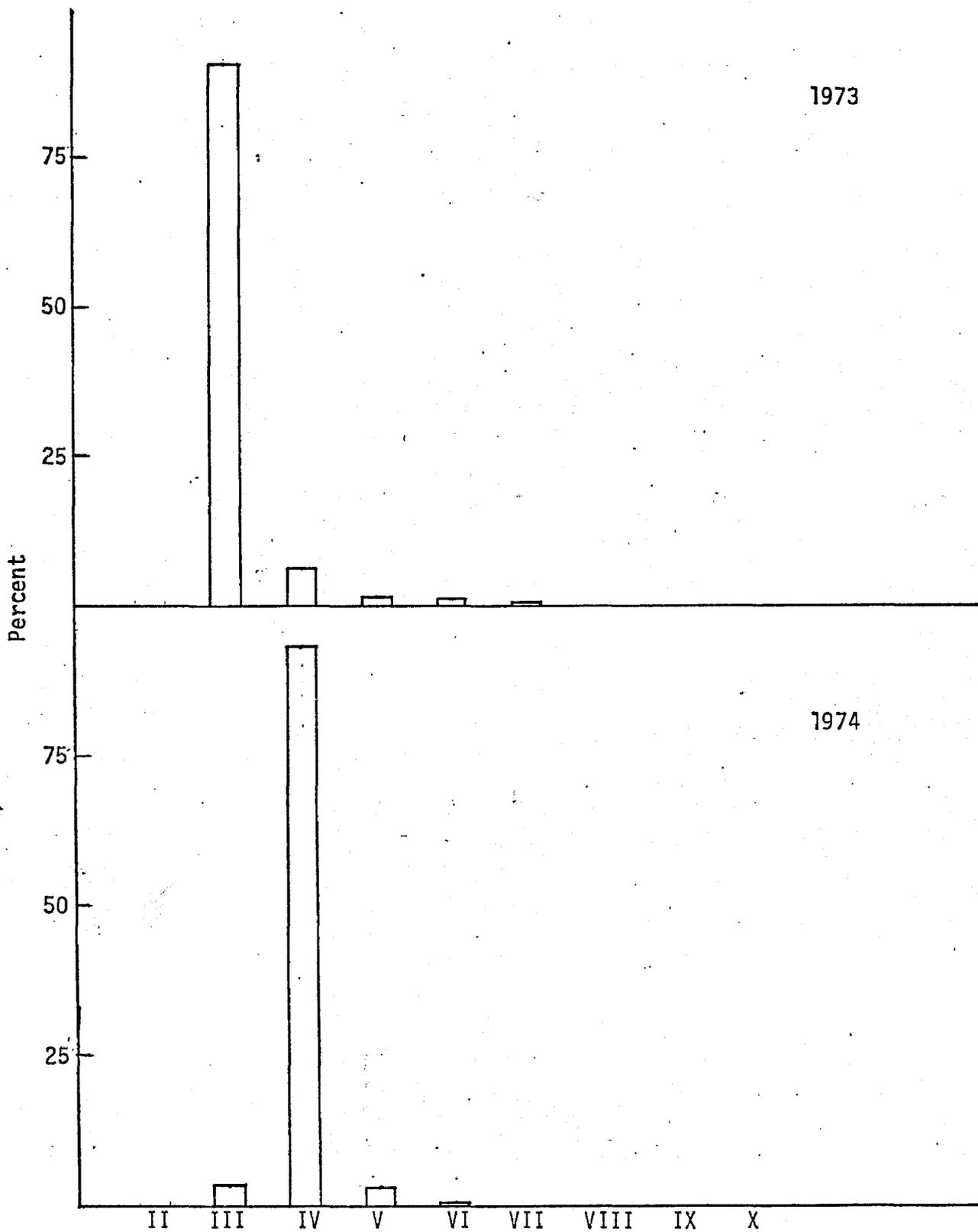


Figure 15. Age percent frequency of commercially caught herring from Green Island - Rocky Bay, Prince William Sound, Alaska, 1973 and 1974.

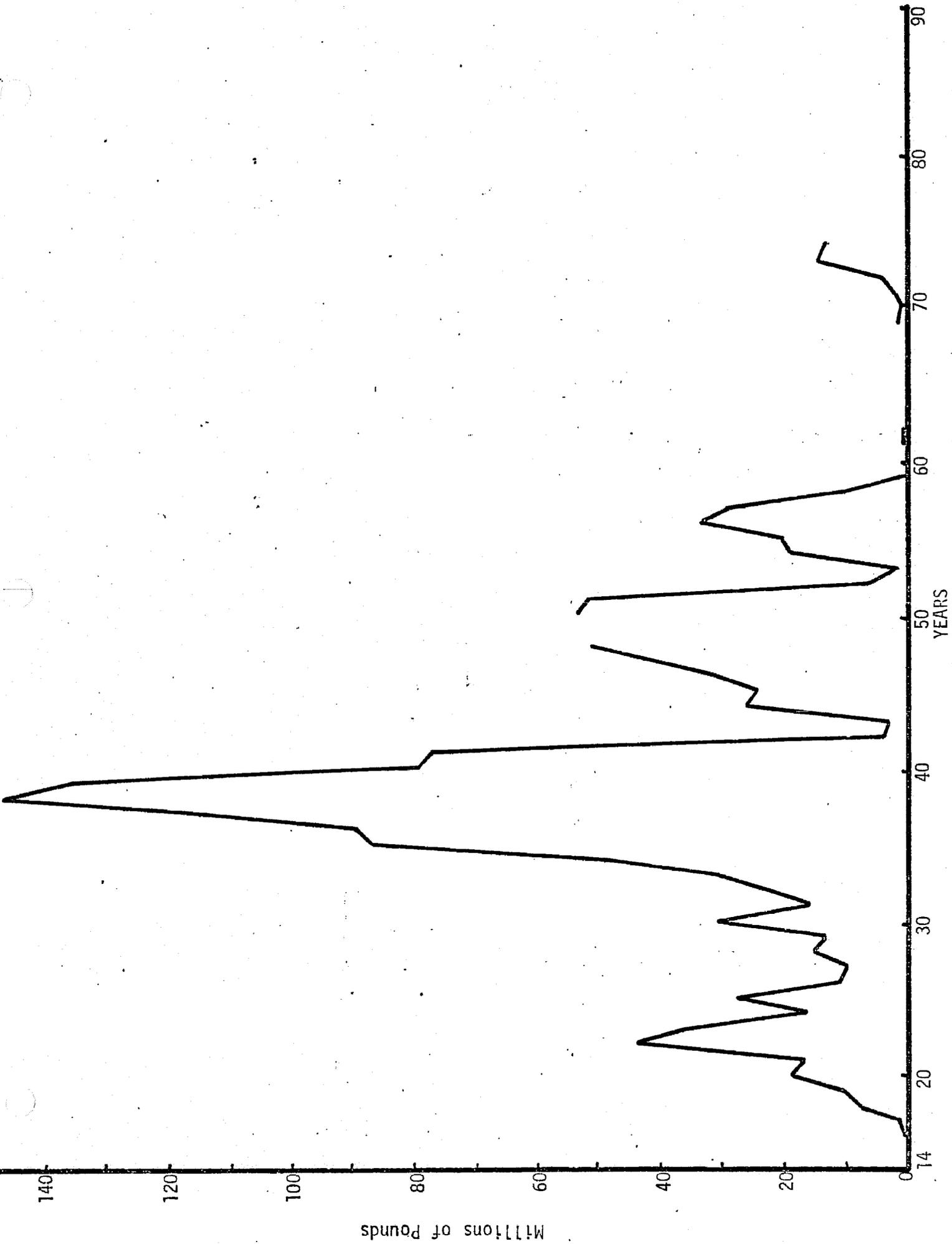


FIGURE 16. Herring catch from Prince William Sound from inception of the fishery to 1974.

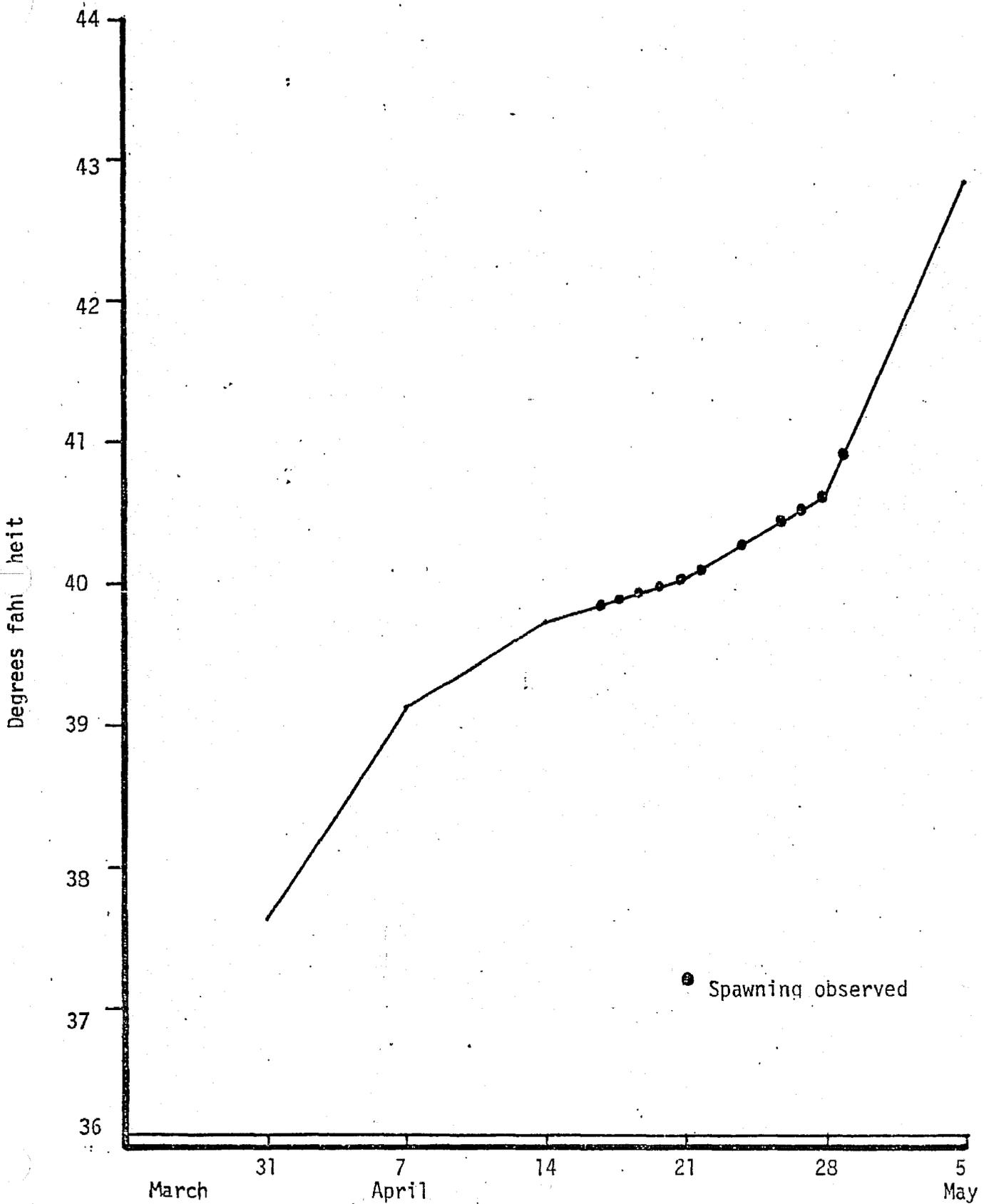


Figure 17. Average weekly water temperatures from a thermograph at the Tatitlek Village dock with herring spawning observations by aerial survey in the Eastern district of Prince William Sound during March, April and May - 1974.

## MISCELLANEOUS FISH AND SHELLFISH

### RAZOR CLAMS

Table 42 shows the razor clam dig by week by stat area for 1974. The majority of the dig of 29,747 pounds was used as crab bait as in recent years. The dig has remained relatively stable at about 30,000 pounds for the last three years.

### SHRIMP

Each year a small shrimp pot fishery operates in northern Prince William Sound for spot shrimp which are sold on local fresh markets. In addition, a small otter trawl fishery operated primarily in Simpson Bay and caught both pink and sidestripe shrimp for local Cordova fresh markets. In 1974 a total of 13,834 pounds were harvested. Table 43 shows the 1974 catch.

### BOTTOM FISH AND OCTOPUS

Bottom fish harvested were reported primarily as rockfish and red snapper. However, trawl bait fishing also included other species including flatfishes. All halibut, some cod and red snapper were used for human consumption, but bottom fish taken by trawl were sold primarily for bait. Also, in 1974, 220 pounds of octopi were reported taken with pots. The disposition of the octopi is not known, but was probably used as bait.

In 1974 a total of 74,260 pounds of miscellaneous bottom fish were taken, and 88,273 pound of halibut, Table 44.

### TROLL FISHERY

Some salmon are taken by troll gear each year for fresh markets. The Prince William Sound Area was closed to trolling in 1974 so the catches reported for this area were probably taken from waters beyond the three mile State jurisdiction. Table 45 shows a catch of 1,225 king salmon, 224 sockeye, 548 coho and 4 pinks.

Table 42. Razor clam dig by statistical area, by week, 1974.

Week	Boats	Area 201-08	Boats	Area 201-18	Pounds
13	1	80			80
14	3	243			243
15	3	182			182
17	4	965			965
18	5	1,003			1,003
19	7	2,383			2,383
20	1	45			45
21	10	1,862	1	1,300	3,156
22	5	1,862	1	495	2,357
23	6	1,775	2	1,515	3,290
24	2	360	6	3,205	3,565
25	8	2,343	2	430	2,773
26	7	1,003	6	2,090	3,093
27	7	984	1	480	1,464
28	6	604			604
29	7	2,061			2,061
30	5	717			717
31	2	227			227
32	1	176			176
33	1	674			674
34	3	689			689
TOTAL		20,232		9,515	29,747

Table 43. Shrimp catches in pounds by area and gear, 1974.

Area	Gear	Pounds
201-00	Otter trawl	65 <u>1/</u>
203-91	Otter trawl	1,280 <u>1/</u>
203-15	Pots	4,180 <u>2/</u>
203-16	Pots	4,525 <u>2/</u>
203-49	Pots	3,784 <u>2/</u>
TOTAL		13,834

1/ Species mostly sidestripe.

2/ Species mostly spots.

Table 44. Bottom fish and octopus catch by long line, otter trawl and pots, 1974.

Area	Gear	Species	Pounds
221 - 20	Long Line	Rockfish - Red Snapper	9,416
221 - 30	Long Line	Rockfish - Red Snapper	2,020
222 - 10	Long Line	Rockfish - Red Snapper	93
222 - 30	Long Line	Rockfish - Red Snapper	5,764
223 - 40	Long Line	Rockfish - Red Snapper	688
224 - 10	Long Line	Rockfish - Red Snapper	1,062
224 - 20	Long Line	Rockfish - Red Snapper	41
224 - 40	Long Line	Rockfish - Red Snapper	1,062
226 - 10	Long Line	Rockfish - Red Snapper	5,168
226 - 40	Long Line	Rockfish - Red Snapper	695
226 - 50	Long Line	Rockfish - Red Snapper	3,246
227 - 10	Long Line	Rockfish - Red Snapper	5,418
227 - 20	Long Line	Rockfish - Red Snapper	4,944
227 - 40	Long Line	Rockfish - Red Snapper	114
228 - 10	Long Line	Rockfish - Red Snapper	85
228 - 30	Long Line	Rockfish - Red Snapper	2,088
222 - 30	Long Line	True Cod	662
226 - 10	Long Line	True Cod	760
Sub-Total			43,416
221 - 20	Otter Trawl	Rockfish - Red Snapper	2,205
221 - 30	Otter Trawl	Rockfish - Red Snapper	29,481 1/
203 - 91	Otter Trawl	Rockfish - Red Snapper	360
Sub-Total			32,046
227 - 40	Pots	Octopus	220
TOTAL			74,260 2/

1/ Trawl catches include unknown amounts of other species, primarily flatfishes.

2/ In addition a total of 88,273 pounds of halibut were landed.

Table 45. Salmon troll catch in numbers by species, by area and date, 1974.

Date	Area-212		Area 228		
	King	Sockeye	King	Coho	Pink
6/5			105		
6/6	10	224			
6/22			215	4	
7/8			240	48	
7/12			188	138	4
7/24			55	27	
8/22			271	285	
9/9			141	46	
<hr/>					
TOTAL	10	224	1,215	543	4

## COMMERCIAL LICENSE SALES

Commercial fishing license sales in 1974 decreased from 1973 in all types except for purse seine gear. Despite the closure of the general purse seine season 279 purse seine gear licenses were purchased, but only 37 seiners participated in the Coghill - Unakwik district salmon fishery. Some of the purse seine licenses were used in the herring fishery. Commercial license sales were down due to the general purse seine fishery closure and fewer participants in the herring eggs on kelp fishery.

Table 45 shows a summary of commercial fishing licenses and receipts for 1974.

Table 45. Summary of commercial fishing licenses and receipts, 1974.

Type of Licenses	No. Licenses Issued		Total Issued	Value		Total Value
	Resident	Nonresident		Resident	Nonresident	
Commercial	973	328	1,301	\$ 9,730.	\$ 9,840.	\$19,570.
Vessel	661	176	837	661.	5,280.	5,941.
Drift Gill Net	451	117	568	6,675.	5,265.	12,030
Purse Seine	234	45	279	11,700.	6,750.	18,450
Set Gill Net	37	8	45	555.	360.	915.
Clam Shovel	134	14	148	670.	210.	880.
Shellfish Pots	132	9	141	3,960.	810.	4,770. <sup>1/</sup>
Troll	3	0	3	45.		45.
Long Line	66	2	68	1,650.	100.	1,750.
Otter & Beam Trawl	8	0	8	400		400.
Transfer Fees		3	3		60.	60.
<b>TOTAL</b>	<b>2,699</b>	<b>702</b>	<b>3,401</b>	<b>\$36,136.</b>	<b>\$28,675.</b>	<b>\$64,811.</b>

<sup>1/</sup> Based on 150 pots per license.

## PERSONNEL

The Commercial Fisheries Division employed nine permanent employees and 19 seasonal employees in 1974. Following is a list of personnel, general duty assignments and dates of employment.

Permanent Employees

Ralph B. Pirtle	Area Management Biologist
Peter J. Fridgen	Assistant Area Management Biologist
Michael McCurdy <u>1/</u>	Research Biologist, Project Leader
Kenneth Roberson	Research Biologist, Project Leader
John D. Solf <u>2/</u>	Research Biologist, Project Leader
John M. Jackson	Fisheries Technician III
Robert Zorich <u>3/</u>	Fisheries Biologist
Jeannette Bailey	Clerk - Stenographer
Janice Shaw	Clerk Typist

Seasonal Employees

<u>Name</u>	<u>Assignment</u>	<u>Dates of Employment</u>
David Adams	* Miles Lake Tagging	5/29 - 8/2
Mark Chihuly	* Incubation Box - Glennallen	9/13 - 10/2
Nancy Crawley	* Subsistence Fishery - Chitina	5/31 - 8/15
Terry Ellison	* Tokun Lake Tagging	5/16 - 10/11
Joan Forshaug	* Subsistence Fishery - Chitina	5/31 - 8/15
Theodore Fortier	* Martin Lake Weir	5/16 - 8/30
Lloyd Hering	Eshamy Weir Station	6/3 - 8/28
Russell Holder	* Gulkana Tower	6/3 - 8/15
Theresa James	Fish Ticket Statistician	4/15 - 9/13
Darrell Keifer	Coghill & Shrode Creek Stations	6/3 - 7/31
Carol King	Fish Scale Sampler - Cordova	5/16 - 8/23
Roxanne Knutson	* Gulkana Tower	7/1 - 8/15
Jan Konigsberg	* Gulkana Tower	6/11 - 8/16
Pauline Lambert	* Gulkana Office	9/23 - 12/31
Roberta McLeod	* Subsistence Fishery - Chitina	5/29 - 7/3
Frank Rosenberg	* Coghill Station	6/17 - 7/13
Linda Speerstra	* Gulkana Office	5/16 - 8/15
Larry Vandergrift	* Incubation Box - Glennallen	6/17 - 9/13
Calvin Ward, Jr.	* Long Lake & Suslota Lake Projects	6/3 - 10/4

1/ Transferred March 15, assuming John Solf's former duties.

2/ Drowned in line of duty January 16.

3/ Temporary status 2/15 - 5/31. Appointed to a permanent position June 1.

\* Glennallen projects under the supervision of Kenneth Roberson.

Table 47. Wholesale value of all fishery products from the Prince William Sound Area, by species, 1974. 1/

Species	Type of Product	Number of Salmon	Number of Pounds	Cases					Wholesale Value					
				48/1#	48/1/4#	48/3/4 oz.	48/6 1/2 oz.	48/15 1/2 oz.		48/3 3/4 oz.				
King Salmon	Canned	3,646	114689	43	771	1888	222		\$ 161,118					
King Salmon	Frozen	16,588	561889					140	632,139					
Sockeye Salmon	Canned	750,198	5109677	33607	18504	236	25431	35198	6,013,296					
Sockeye Salmon	Frozen	8,430	59139						50,515					
Coho Salmon	Canned	60,578	427418	7338	196	473	1087	1560	802,438					
Coho Salmon	Frozen	634	4439						4,848					
Coho Salmon	Salted	263	2630						2,630					
Pink Salmon	Canned	458,001	2128320	22018	7112	994	3721	968	2,019,806					
Chum Salmon	Canned	87,780	752120	4383	7933				816,604					
Dungeness Crab	Frozen	744142	2/					27449	625,049					
Tanner Crab	Canned								637,155					
Tanner Crab	Frozen	3798067							2,957,772					
King Crab	Frozen	23445							27,230					
King Crab	Fresh	2760	3/						2,760					
Shrimp	Fresh	585							1,248					
Shrimp	Tails, frozen	8852							30,982					
Herring	Bait	7690							138					
Herring	Roe	8081113	4/						2,128,707					
Herring	Roe on kelp	532104							1,050,112					
Salmon Eggs	Food, salted	308878							923,332					
Halibut	Frozen, dressed	27887							26,782					
Razor Clams	Canned	2730							4,356					
Razor Clams	Bait	26859							17,521					
Bottom Fish	Bait	2841							711					
Sole	Fresh	14							21					
Fish Oil		1460	gals.						10,950					
TOTAL		227282283	33739	44027	26089	2927	31483	38527	364	10692	27449	140	41854	\$18,948,220
		1386118	1460	gals.										

1/ Data from annual reports of operators. 2/ Net weight. 3/ Live weight. 4/ Includes weights of fresh and salted herring and salted roe.

Table 48. Wholesale value of king salmon from the Prince William Sound Area by company, 1974. 1/

Name of Company	Employees, Peak Number	Type of Product	Number of Fish	Pounds of Fish 2/	Cases			Wholesale Value
					48/ oz.	48/ 7 3/4 oz.	43/ 6 1/2 oz.	
Alaska Packers Association	20	Frozen	2,882	94,404			\$ 88,206	
Bayside Cold Storage	2	Frozen	51	1,911			2,867	
Blake's Canning	5	Canned, Kipperred	115	3,766	43		6,880	
Glacier Packing Company	3	Canned	95	2,836		78	4,368	
Morpac, Inc.	46	Canned	812	28,822			30,840	
		Frozen	2,820	93,214	771		164,056	
New England Fish Company	83	Frozen	2,504	81,752			80,120	
North Pacific Processors	130	Canned	2,338	68,270		1,810	99,550	
		Frozen	2,374	103,500			128,356	
Odiak Smokeries	5	Canned, Kipperred	286	10,995		222	19,980	
Peter Pan Seafoods		Frozen	2,257	66,978			65,219	
St. Elias Ocean Products		Frozen	2,275*	74,234			64,000	
Whitney Fidalgo		Frozen	1,425	45,896			39,315**	
<b>TOTAL</b>			<b>20,234</b>	<b>676,578</b>	<b>43</b>	<b>1,888</b>	<b>\$ 793,757</b>	

1/ Data from annual reports of operators.

2/ Whole weight.

\* Estimated on the basis of 33.4 pounds per fish.

\*\* Estimated on the basis of \$ .8615 per pound.

Table 49. Wholesale value of sockeye salmon from the Prince William Sound Area by company. 1/

Name of Company	Employees, Peak	Type of Product	Number of Fish	Number of Pounds	Cases								Wholesale Value		
					48/1/2#	48/3/4	48/6 1/2	48/7 1/2	48/15 1/2	48/3 3/4	48/4 3/4	48/4#			
Alaska Packers Assoc.	20	Canned	112191	774767	22386										\$ 984,984
Bayside Cold Storage	2	Frozen	2106	14711											19,860
Blake's Canning	5	2/ Canned	380	2741	30										4,800
Glacier Packing Company	3	Canned	158	1090											1,003
Mornac, Inc.	46	Canned	114494	779726											1,275,590
		Frozen	6324	44428											30,655
New England Fish Company	83	Canned	106766	741917											43,795
North Pacific Processors	130	Canned	200094	1337303											1,932,812
Odiak Smokeries	5	3/ Canned	1193	7933											16,360
Peter Pan Seafoods, Inc.	4/	Canned	42287	290684											351,795
St. Elias Ocean Products	75	Canned	112787*	753866											965,000
Whitney Fidalgo Seafoods			59848	419650											537,152

TOTAL 758628 5168816 19504 33607 140 41854 142 35198 25431 1389 236 \$6,063,911

1/ Data from annual reports of operators.  
 2/ Canned, kippered  
 3/ Canned, plain and kippered.  
 \* Estimated.  
 \*\* Estimated on the basis of \$1.28 per pound.

Table 50. Wholesale value of coho salmon from the Prince William Sound Area by company, 1974. 1/

Name of Company	Employees, peak Number	Type of Product	Number of Fish	Number of Pounds	Cases				Wholesale Value			
					48/1# oz.	48/2# oz.	7 3/4 oz.	48/ 12/4#				
Alaska Packers Assoc.	20	Canned	402	2498		130			\$ 5,460			
Bilderback Enterprises		Salted	263	2630					2,630			
Cordova Aquatic Marketing Assoc.		2/	45378 <sup>3/</sup>	317646 <sup>4/</sup>	7338				616,392 <sup>5/</sup>			
Morpac, Inc.	46	Canned	804	5400	33	1560			55,119			
New England Fish Company	83	Canned	287	2026					470			
North Pacific Processors	130	Canned	1713	12456			361		19,494			
Peter Pan Seafoods 2/			105	954	4		46		2,502			
St. Elias Ocean Products	75	Canned	11839 <sup>6/</sup>	86438		66	473	1087	103,000			
Whitney Fidalgo Seafoods		Frozen	1086 <sup>7/</sup>	785					500			
			5264 <sup>7/</sup>	3654					4,348 <sup>7/</sup>			
<b>TOTAL</b>			61475	434487	7338	37	404	1560	407	473	1087	\$ 809,916

1/ Data from annual reports of operators.  
 2/ Custom canned.  
 3/ Estimated on the basis of 6.18 fish per case.  
 4/ Estimated on the basis of 7.0 pounds per fish.  
 5/ Estimated on the basis of \$84 per case.  
 6/ Estimated on the basis of 7.27 pounds per coho from North Pacific Processors, Inc.  
 7/ Estimated on the basis of \$1.19 per pound.

Table 51. Wholesale value of pink salmon from the Prince William Sound Area by company, 1974. 1/

Name of Company	Employees, Peak Number	Type of Product	Number of Fish	Number of Pounds	Cases			Wholesale Value				
					48/ #	48/7½ oz. 3/4 oz.	48/15½ oz.					
Alaska Packers Assoc.	20	Canned	68503	328253	4268			\$ 290,224				
Morpac, Inc.	46	Canned	29161	139972	3721	2546		286,912				
New England Fish Company	83	Canned	67307	322565	4193 <sup>2/</sup>			285,174				
North Pacific Processors	130	Canned	141140	647317	10231	2640		578,529				
Peter Pan Seafoods, Inc.	Custom	Canned	27511	113245	968	610		73,742				
St. Elias Ocean Products	75	Canned	70995 <sup>4/</sup>	325582	7112	2248	994	283,000				
Whitney Fidalgo Seafoods		Canned	53384	251386	3326 <sup>2/</sup>			222,225 <sup>3/</sup>				
TOTAL			458001	2128320	7112	21018	968	3721	5796	2248	994	\$ 2,019,806

1/ Data from annual reports of operators.  
 2/ Estimated on the basis of 16.05 fish per case.  
 3/ Estimated on the basis of \$0.884 per pound from Alaska Packers Association.  
 4/ Estimated on the basis of 4.586 pounds per fish from North Pacific Processors, Inc.

Table 52. Wholesale value of chum salmon from the Prince William Sound Area by company, 1974. 1/

Name of Company	Employees, Peak Number	Type of Product	Number of Fish	Number of Pounds	Cases		Wholesale Value	
					48/1#	48/15 $\frac{1}{2}$ oz. 12/4#		
Alaska Packers Assoc.	20	Canned	14,109	126,873	1,500	206	\$ 103,004	
Jack Distad		Frozen	1,365	9,139			9,139 *	
Morpac, Inc.	46	Canned	6,711	59,336	1,417	2,414	183,939	
New England Fish Co.	83	Canned	14,527	131,448	1,651 <sup>2/</sup>		106,604 <sup>3/</sup>	
North Pacific Processors	130	Canned	21,665	154,023	3,485	860	177,875	
Peter Pan Seafoods	Custom	Canned	6,312	59,526	944	106	36,508	
St. Elias Ocean Products	75	Canned	12,247 <sup>4/</sup>	110,129	1,881	610	117,000	
Whitney Fidalgo Seafoods		Canned	10,844	101,646	1,232 <sup>2/</sup>		82,435 <sup>3/</sup>	
<b>TOTAL</b>			<b>87,780</b>	<b>752,120</b>	<b>4,383</b>	<b>7,933</b>	<b>3,380</b>	<b>\$ 816,604</b>

1/ Data from annual reports of operators.  
 2/ Estimated on the basis of 8.8 fish per 48-1# case from Alaska Packers Association.  
 3/ Estimated on the basis of \$0.811 per pound from Alaska Packers Association.  
 4/ Estimated on the basis of 8.992 pounds per fish from Alaska Packers Association.  
 \* Estimated.

Table 54. Wholesale value of miscellaneous fish products, 1974. 1/

Name of Company	Employees, Peak Number	Type of Product	Pounds Net Weight		Wholesale Value
			Finished Product	Cases 48/7½ oz.	
Alaska Packers Assoc.	20	Salmon eggs, Food	35834		\$ 120,498 <u>2/</u>
B & B Fisheries, Inc.	40	Halibut, Dressed, Frozen	5792		45,792
		Herring, Salted Roe	101870		285,236
		Shrimp, Tails, Frozen	8852		30,982
Bergit Fish Company	3	Herring, Roe on Kelp, Salted	6000		13,500
Bilderback Enterprises		Herring, Roe on Kelp, Salted	2200		5,000
Cordova Kelp Company		Herring, Roe on Kelp, Salted	110000 <u>2/</u>		187,000
Fairweather Supply Co.	4	Herring, Salted Roe	35923		100,584 <u>2/</u>
Glacier Packing Co.	3	Razor Clams, Canned	2730 <u>3/</u>	66	4,356
Marion D. Hall	2	Herring, Roe on Kelp, Salted	30000		67,500 <u>2/</u>
Kenneth K. Kirkman	4	Herring, Roe on Kelp, Salted	20000		32,000
MSP Company	17	Herring, Roe on Kelp, Salted	148000		200,000
MacLeod - Cora B	12	Herring, Roe on Kelp, Salted	61116		110,008
Patrick McNethney	2	Herring, Roe on Kelp, Salted	5400		9,936
Mokuhana Fisheries	12	Herring, Roe on Kelp, Salted	12276		21,986
Morpac, Inc.	46	Salmon Eggs, Food	66539		202,147
		Razor Clams, Bait	9201		5,521
		Bottom Fish, Bait	2081		520
Richard Newby		Herring, Roe on Kelp, Salted	25000		50,000
North Coast Seafoods		Herring, Roe on Kelp, Salted	15000		26,000
New England Fish Co.	83	Salmon Eggs, Food	67987		165,051
		Fish Oil	1460 gals.		10,950
North Pacific Processors	130	Salmon Eggs, Food	99760		305,636
		Halibut, Dressed, Frozen	22095		20,990
		Herring, Bait	7690		138
		Herring, Whole, Fresh, Frozen	1818000		151,934
Arnold Phillips		Herring, Roe on Kelp, Salted	3200		4,000
St. Elias Ocean Products	75	Salmon Eggs, Food	38708		130,000
		Razor Clams, Bait	17658		12,000
Seward Fisheries		Herring, Sac Roe	3807000 <u>3/</u>		913,680 <u>2/</u>
		Herring, Roe on Kelp, Salted	59521		80,413 <u>2/</u>
Sea Alaska Products	60	Herring, Sac Roe	2253630 <u>3/</u>		540,883 <u>2/</u>
Connie Taylor		Shrimp, Fresh	585		1,248
		Sole, Fresh	14		21
		Rockfish, Bait	760		191
Whitney Fidalgo Seafoods	50	Herring, Sac Roe, Salted	64640		136,390
Daniel C. York	3	Herring, Roe on Kelp, Salted	30200		55,769
TOTAL			8995371	1460 gals.	\$ 4,007,860

1/ Data from annual reports of operators.

2/ Estimated.

3/ Whole fish weight.

Table 53. Wholesale value of Dungeness, tanner and king crab from the Prince William Sound Area by company, 1974. 1/

Name of Company	Peak Number Employees	Type of Product	Pounds Net Weight Finished Product	24/2# Cases	Wholesale Value
Alaska Packers Association	20	Tanner, whole, frozen	213,928		\$ 128,357
B & B Fisheries	40	King, sections, cooked, frozen Dungeness, whole, cooked, frozen Tanner, sections, cooked, frozen	405 129,211 510,729		810 129,211 343,740
Driftwood	2	King, fresh (live)	2,760		2,760
Laddie-Enterprises	2	King, sections, cooked	4,200		5,250
Morpac, Inc.	46	Dungeness, whole frozen Dungeness, sections, frozen Tanner, sections, frozen	67,937 164,001 1,001,189		30,572 111,514 241,709
New England Fish Company	25	Tanned, canned Tanner, meat, frozen	640,990*	9,814	196,280 833,287
North Pacific Processors	130	Tanner, Canned King, sections, frozen Dungeness, whole frozen Dungeness, sections, frozen Tanner, sections, frozen Tanner, meat, frozen	700 109,690 27,670 713,347 4,305 570	17,635	440,875 770 109,690 29,054 356,673 7,964 800
St. Elias Ocean Products		King, whole, frozen King, sections, frozen King, meat, frozen Dungeness, whole, frozen Dungeness, sections, frozen Dungeness, meat, frozen Tanner, whole, frozen Tanner, sections, frozen Tanner, meat, frozen	17,165 405 173,054 72,574 5 70 340,160 373,349		18,000 1,600 146,000 69,000 8 42 155,000 891,000

TOTAL 4,568,414 27,449 44,249,966

1/ Data from annual reports of operators.  
\* Raw weight.