# REVIEW OF 1988 ALASKA COMMERCIAL FISHERIES

Prepared for the United States Section International North Pacific Fisheries Commission September 29, 1988

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#### INTRODUCTION

The ex-vessel value of Alaska's commercial fisheries in 1987 was 1.1 billion dollars, (Table 1, Figure 1). This was the first year that ex-vessel value has exceeded a billion dollars, and is due to continued healthy finfish stock status, increased prices paid to fishermen, and continued development of the domestic groundfish fishery. The escalation of the value of Alaska's Commercial fisheries continues in 1988. The value of the 1988 salmon catch was 705 million dollars, a substantial increase from the 1987 ex-vessel value of 473 million dollars.

# REVIEW OF THE 1988 ALASKA COMMERCIAL SALMON FISHERY

The 1988 commercial salmon catch is estimated to have produced a harvest of 94.6 million fish (Table 2) weighing a total of over 500 million pounds.

This is only the second time in nine years that the Alaska commercial harvests have fallen below the 100 million fish level (Figure 2). The 1987 catch was the only other year that this occurred, with an estimated catch of 95.5 million.

The ex-vessel value for this season is estimated to have set a new record, surpassing last year's old record of \$473 million, with a total value of \$704.8 million dollars. As more precise price information becomes available, this figure may be even higher.

The 1988 salmon harvest was considerably less than the preseason catch projection of 101.6 million fish. Sockeye inshore forecasts in Bristol bay of 26.5 million did not materialize, as the entire inshore return reached 23.1 million. This was the smallest sockeye run since 1982 and was far below the 1978-87 average sockeye run of 35.4 million fish. Pink salmon returns to both southeast Alaska and the Prince William Sound area were also far below the preseason forecasts. Total catch for Southeast pinks was approximately 10.5 million, while projections were for 42.1 million fish. In PWS the catch (including hatchery cost recovery and brood stock needs) was approximately 11.6 million fish, while the preseason projection was for 16.4 million.

# Southeast Region

The 1988 southeast Alaska catch for all species was approximately 15.4 million fish, valued at about 95.6 million dollars to the fishermen.

The pink salmon harvest totaled approximately 10.5 million fish, well below the 42.1 million fish preseason projection. Early run pink salmon in southern Southeast appeared to be late when timing indicators were examined. However, the run did not materialize. Middle and late runs similarly failed to appear in anticipated numbers. While seiners feared that this weak return would limit catches of other species, their catch of sockeye, especially in District 4, was excellent. This season seiners took about 655,000 sockeye, compared to only 311,000 last season. The 1960-86 average is approximately 421,000 fish. They also met the 1960-86 average for chum salmon with a catch of 1.3 million. Catches of coho salmon at 142,887, were better than last season's 132,000, but fell well below the average catch of 295,393. Pink salmon catch totaled about 8.89 million, far below the 14.99 million average, but better than the 1987 catch of 7.1 million.

The overall sockeye catch this year was 1.45 million, which is considered good for recent years. This was just slightly under preseason forecast level. The overall chum catch of 2.4 million, while only slightly less than the 1987 catch of 2.7 million, is greater than the 1960-86 average of 1.8 million. More recent year catches have been nearer 3.5 million however.

The coho return this season was very weak, and resulted in several troll closures for conservation measures. The troll catch of 455,000 accounted for about 56% of the harvest. Total catch for all gears was about 810,000, or only about 60% of the 1960-86 average. This is the lowest reported catch since 1975, and far below the forecasted harvest of 2.5 million.

The commercial harvest of chinook salmon totaled about 261,000 fish. This includes the a catch of about 231,000 in the troll fisheries (including the winter troll catch form October 1, 1987, through April 14, 1988). The 1988 summer troll season for chinook lasted 12 days, from July 1 through July 12, the shortest on record. This is down from last year's 23 day season.

### Central Region

Prince William Sound. The Prince William Sound Area (PWS) combined commercial salmon harvest for 1988 was 12.6 million fish. This is far below last season's record catch of 33.1 million, and below preseason projections of 16.4 million. However, the value to the fishermen was about \$65.5 Million, only \$2.0 million less than the 1987 record, due to record prices. Wild production was only about 10% of that seen in the past seven, even year averages, the lowest return on record. This season's pink salmon harvest of 9.95 million fish came almost entirely from near terminal hatchery areas, catching those pinks that were excess to hatchery needs. While even the hatcheries had returns at only 25% of anticipated levels, record prices at \$1.28 per pound allowed cost recovery needs to be easily met.

Table 1. Exvessel value (in millions of dollars) of Alaska's commercial fisheries.

Species	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Salmon	119.7	176.4	241.2	346.8	254.1	397.3	309.7	320.2	343.1	389	414	473	705
Shellfish	97.3	153.2	230.6	239	265.3	196.9	211.7	146.6	102.1	106.3	182	213.5	N/A
Halibut	20.5	17.6	23.4	32.9	13.5	19.3	24.9	35.3	24.9	40.3	79.4	60.9	N/A
Herring	2.5	2.7	7.2	32.7	12.2	18.6	20.2	28.9	19.8	38	38.5	42.7	51.4
Groundfish	1.1	1.6	3.3	6.3	8.9	24	40.9	78	107.2	137.5	197.9	330.5	N/A
Total	241.1	351.5	505.7	657.7	554	656.1	607.4	609	597.1	711.1	911.8	1120.6	N/A

a/ Compiled September 21, 1988.

b/ The estimates for 1985 - 1988 are preliminary.

c/ The groundfish estimates for 1983 - 1987 include JV and DAP landings both within and outside Alaska.

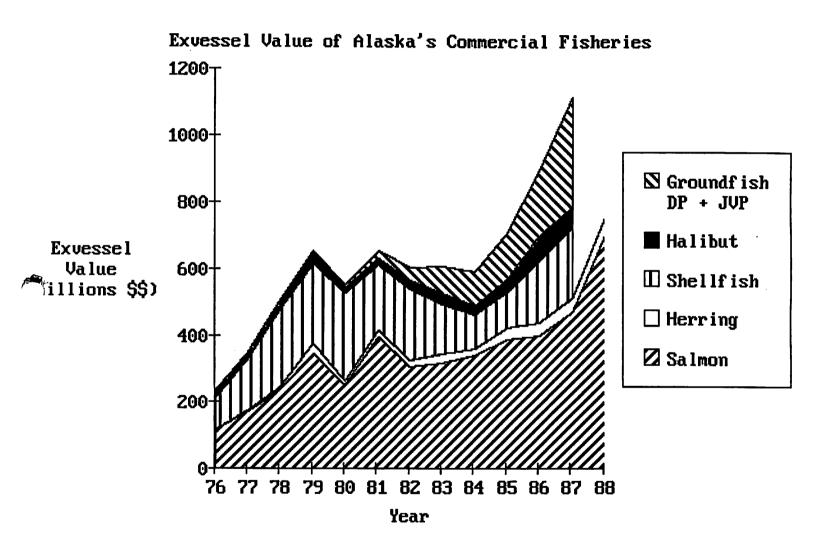


Table 2. Preliminary (through 9/16/88) 1988 catch, 1988 projected harvest, and recent ten-year average catch, and ex-vessel value for Alaska salmon fishery, by salmon species and fishery unit.

		1988				
	1988	Projected	1978-1987	Avg.	Avg.	Ex-Vessel
	Catch	Harvest	Average	Weight	Price	Value
Fishery Unit	(thous.)	(thous.)	(thous.)	(lbs)	(\$\$/lb)	(millions \$\$)
Southeast						
Chinook	261	305	294	15.7	\$4.10	\$16.78
Sockeye	1,448	1,500	1,278	6.09	\$2.89	\$25.49
Coho	810	2,500	1,887	7.2	\$3.30	\$19.25
Pink	10,489	42,100	25,958	3.3	\$0.70	\$24.23
Chum	2,432	3,900	1,997	9.3	\$1.10	\$24.88
Totals	15,439	50,305	31,414	41.59	\$12.09	\$110.63
Bristol Bay						
Chinook	45	89	158	19.64	\$1.29	\$1.14
Sockeye	14,010	18,567	21,405	6.18	\$2.00	\$173.17
Coho	187	302	286	5.97	\$1.05	\$1.17
Pink	922		1,297	3.25	\$0.32	\$0.96
Chum	1,475	1,200	1,316	6.3	\$0.40	\$3.72
Totals	16,639	20,158	24,462	41.34	\$5.06	\$180.16
Cook Inlet						
Chinook	30	35	22	25.3	\$1.30	\$0.98
Sockeye	6,989	5,570	3,700	6.2	\$2.47	\$107.04
Coho	542	520	502	6.9	\$1.20	\$4.49
Pink	1,336	2,632	1,917	3.2	\$0.37	\$1.58
Chum	1,003	685	937	8.5	\$0.76	\$6.48
Totals	9,900	9,442	7,078	50.1	\$6.10	\$120.57
Cordova Area						
Chinook	32	35	35	28.2	\$3.00	\$2.71
Sockeye	708	913	1,056	6.2	\$3.00	\$13.18
Coho	404	450	454	9.8	\$2.25	\$8.91
Pink	9,946	16,420	17,498	3.4	\$0.85	\$28.74
Chum	1,511	1,073	1,175	8.8	\$0.90	\$11.97
Totals	12,601	18,891	20,218	56.4	\$10.00	\$65.51
Kuskokwim						
Chinook	74	70	67	13.6	\$1.30	\$1.32
Sockeye	150	121	90	7.2	\$1.42	\$1.53
Coho	612	445	435	7.2	\$1.25	\$5.51
Pink	36	8	15	3.4	\$0.15	\$0.02
Chum	1,442	391	390	6.9	\$0.40	\$3.98
Totals	2,314	1,035	997	38.3	\$4.52	\$12.36

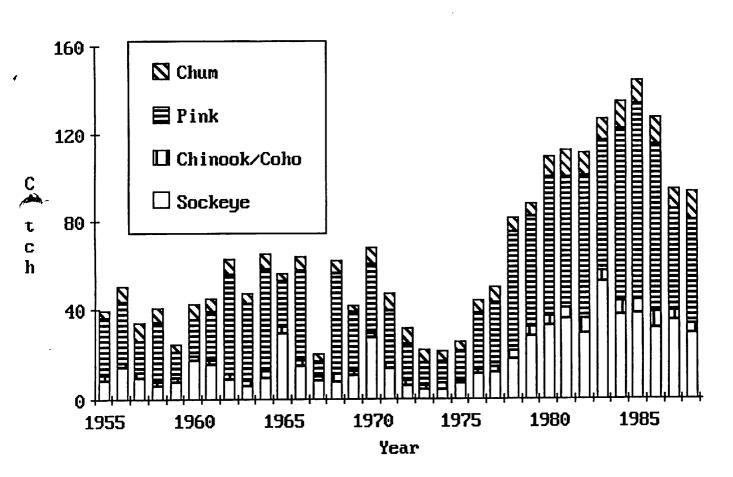
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		1988				
	1988	Projected	1978-1987	Avg.	Avg.	Ex-Vessel
	Catch	Harvest	Average	Weight	Price	Value
Fishery Unit	(thous.)	(thous.)	(thous.)	(lbs)	(\$\$/lb)	(millions \$\$)
Yukon						
Chinook	100	85	126	19.6	\$2.97	\$5.80
Sockeye						
Coho	67	25	31	7.3	\$1.38	\$0.68
Pink	1			2.99		
Chum	1,212	830	963	7.1	\$0.70	\$6.02
Totals	1,380	940	1,120	36.99	\$5.05	\$12.51
Norton Sound						
Chinook	4	8	9	16.3	\$1.29	\$0.09
Sockeye	1			6.9	\$1.13	\$0.01
Coho	37	60	39	7.5	\$1.15	\$0.32
Pink	75	40	141	3	\$0.23	\$0.05
Chum	108	180	171	7.1	\$0.38	\$0.29
Totals	225	288	360	40.8	\$4.18	\$0.76
Kotzebue						
Chinook	0			14.5	\$1.98	\$0.01
Sockeye						
Coho						
Pink						
Chum	353	275	310	8.6	\$0.85	\$2.58
Totals	353	275	310	23.1	\$2.83	\$2.59
Kodiak						
Chinook	22	4	3	13.96	\$1.25	\$0.38
Sockeye	2,802	1,800	1,485	5.70	\$2.55	\$40.73
Coho	221	150	183	7.80	\$1.40	\$2.41
Pink	14,631	15,250	10,169	3.80	\$0.70	\$38.92
Chum	1,362	1,000	883	9.00	\$1.00	\$12.25
Totals	19,037	18,204	12,723	40.26	\$6.90	\$94.70
Chignik						
Chinook	8	3	3	16.6	\$2.00	
Sockeye	779	1,570	1,580	7.2	\$2.73	
Coho	351	125	123	7.6	\$1.45	
Pink	2,849	1,800	783	3.6	\$0.75	
Chum	270	400	208	8.3	\$1.04	\$2.33
Totals	4,256	3,898	2,697	43.3	\$7.97	\$29.47

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		1988				
Fishery Unit	1988 Catch (thous.)	Projected Harvest (thous.)	1978-1987 Average (thous.)	Avg. Weight (lbs)	Avg. Price (\$\$/lb)	Ex-Vessel Value (millions \$\$)
Alaska Peninsula Ale	utian		<u>.                                    </u>			
Chinook	28	22	32	15.8	\$1.25	\$0.55
Sockeye	2,909	2,992	5,306	6.1	\$2.18	\$38.69
Coho	679	375	495	7.8	\$1.35	<b>\$7.1</b> 5
Pink	6,562	6,150	7,168	3.9	\$0.70	\$17.91
Chum	2,272	2,000	2,037	7.4	\$0.67	\$11.26
Totals	12,449	11,539	15,038	41	\$6.15	\$75.57
Alaska						
Chinook	604	656	747			\$30.04
Sockeye	29,797	33,033	34,342			\$415.15
Coho	3,909	4,952	4,312			<b>\$53.7</b> 5
Pink	46,845	84,400	64,166			\$120.11
Chum	13,440	11,934	10,180			\$85.78
Total Salmon	94,595	134,975	113,747			\$704.82

# Alaska Commercial Salmon Harvest (millions of salmon)



The catch is still well below the 1976-85 average of 14.3 million.

Sockeye harvest amounted to about 709,000 fish. This is below the 1976-85 average of 985,000, and well below the past 4 year average of 1.3 million sockeye.

Coho catches were slightly under the 1978-87 average, and also slightly under preseason projections. Total catch was approximately 404,000 fish.

Upper Cook Inlet. The 1988 commercial salmon fishery harvested nearly 8.4 million fish, due in large part to the sockeye catch of 6.67 million. The sockeye catch is the second largest on record, exceed only by last years catch of 9.5 million fish. ex-vessel value was \$118.9 million, shattering last year's record of \$95 million. Sockeye accounted for 91% of the value to the The return to the Kenai River dominated the fishery. The Susitna River return, as expected, was relatively poor and the Kasilof River return was at or slightly below expectations. The intense East side fishery kept the Kasilof River escapement count close to the minimum of 150,000 but subsequent weir counts and stream surveys of tributaries indicate that a substantial number of fish entered the system prior to sonar counter installation and the actual escapement was probably in excess of 200,000.

The harvest of 686,950 chum salmon was slightly above the long term average and accounted for 3.2% of the ex-vessel value to the fishery.

The harvest of 418,820 pink salmon represents the smallest even year harvest ever recorded for Upper Cook Inlet and accounted for less than 0.5% of the overall ex-vessel value. The autumn floods of 1986 appear to be the primary factor for the dismal return with the Susitna River return being nearly nonexistent and the Kenai River return being well below average. Escapement of pink salmon is not directly measured, but is considered to be exceptionally poor in the Susitna and fair in the Kenai.

Substantial reductions in the catch due to the drift restrictions this season still allowed a harvest of 537,210 coho salmon. This was well above the 1954-86 average of 289,003 fish and accounted for 3.2% of the overall ex-vessel value. The drift restrictions appeared to be very effective in moving large numbers of coho salmon through into the Northern District and into northern streams.

The catch of 28,140 chinook salmon was well above average but substantially below the 1987 catch due to a major reduction in the reported catch from the Upper subdistrict set net fishery

(12,169, down from 21,379) and the drift fishery (2,163, down from 4,552). The reduction in the set net catch can be partially attributed to increased efforts to release live chinook, but some under-reporting also appeared to have occurred. A reduction in the closed waters at the mouth of the Kenai River to control Kenai River sockeye salmon escapement led to a substantial increase in the daily chinook salmon catch in the drift fishery, although a significant portion of the catch is presumed to have remained unreported.

Lower Cook Inlet. The 1988 commercial salmon harvest in Lower Cook Inlet (LCI) totaled 1.56 million fish. The present catch ranks sixth highest in LCI history and is expected to rank fourth by the time all fish tickets have been tabulated. The sockeye harvest of 318,500 is a record, exceeding the 1987 harvest by 15 percent and the chum salmon harvest of 316,370 ranks second to the 1981 record of 336,000.

F.R.E.D. hatchery and lake stocking returns accounted for a major portion of the LCI production this year. The commercial harvest of approximately 830,000 pink salmon from Tutka Hatchery releases was the second highest on record and accounted for 90% of the LCI pink salmon harvest of 917,000 fish. The pink salmon harvest was 15% above average for the past 30 years. The ex-vessel value is presently estimated at \$7.7 million, which is a new record, and should easily exceed \$8.0 million by the time retroactive settlements are made on pink and chum salmon prices. F.R.E.D. salmon production accounted for \$4.167 million, or 54% of the total ex-vessel value in 1988.

The set gillnet catch presently stands at 43,100 fish, which is 13% below average, but the sockeye harvest of 14,500 fish is the lowest on record since 1970. Upper Cook Inlet sockeye did not appear to swing into Kachemak Bay and contributed to the low set gillnet harvest. Weather patterns and late snow melt-off causing colder water temperatures were most probably the reason UCI fish moved up the middle of the inlet.

Sockeye returns to LCI were generally strong as evidenced by the record harvest of 318,500 fish. The Mikfik Lake return at McNeil River was not as strong as hoped for and the 14,800 fish harvest was below the previous three year's harvests which ranged from 21,400-67,000. The two primary sockeye returns were to F.R.E.D. division lake enhancement projects at Chenik and Leisure Lakes.

Strong chum salmon returns occurred to virtually all streams in LCI. Two thirds of the 316,370 fish harvest came from the Kamishak District, which represented a new record harvest exceeding the 1983 harvest by 44%. The majority of all chum harvests were comprised of five year old fish and the four year old return appears weak. Several chum salmon areas were fished

for the first time since the late 1970's and the harvest of 24,7000 fish in Resurrection Bay was a record and was 78% above the 1987 harvest. McNeil River produced the most significant return.

Bristol Bay. The 1988 Bristol Bay salmon runs were strong in some districts and noticeably weak in others. The inshore sockeye run totaled 23.1 million fish compared to the preseason forecast of 26,5 million. This was the smallest sockeye run since 1982 and was far below the 1978-87 average sockeye run of 35.4 million fish. The commercial chinook salmon harvest totaled approximately 45,000 fish, the smallest catch recorded since 1975 and way below the 1978-87 average of 158,000 chinook. The chum salmon harvest to date stands at 1,474,680 fish, stronger than the 1978-87 average catch of 1,277,000 chums. The coho salmon harvest totaled 186,770. This is greater than the last two years, but still below average, largely due to poor returns to the Nushagak and Togiak Districts. The Nushagak normally produces over 51% of the Bay's coho. The Naknek-Kvichak coho harvest of the second highest on record.

The total salmon harvest this season stands at 16.6 million fish. The total value is estimated at 178.8 million to fishermen, exceeding the previous record ex-vessel value of \$141.9 million set in 1986.

The pink salmon harvest was over 922,000 fish, with catches greater than normal in the Naknek-Kvichak and Togiak Districts, and weaker than normal in the Nushagak district.

#### Arctic-Yukon-Kuskokwim Region

Lower Yukon. Total chum catch for the area was over 1.1 million salmon. This season a record 1,087,335 summer chum were harvested, along with over 94,000 chinook. Fall chum catch was low at 79,500 fish, and coho harvest reached 72,630 fish, the second highest on record. The chinook catch exceeded preseason projections, but fell under the 1978-87 average of 126,000. The total area catch was valued at a record \$11.7 million. The commercial season closed on August 31.

<u>Upper Yukon.</u> During the 1988 season over 96,000 chum salmon were harvested along with chinook harvests totaling 5,600 fish. Total value was estimated at nearly \$800,000.

<u>Kuskokwim.</u> The fishing season produced an accumulated catch of 2.3 million fish. This is the first time in recorded history that the catch has exceeded 2.0 million fish. The record chum

run of over 1.44 million fish contributed to about 63% of the total harvest. This accounted for about \$3.98 million to fishermen in the area, almost all local residents. The projected chum salmon harvest was only expected to be 391,000 fish. Chinook salmon catches reached 74,400 fish, with 149,610 sockeye, 612,080 coho, and 35,980 pink salmon bringing the total ex-vessel value to \$12.36 million. Chinook, sockeye and coho fell under preseason projections, while pink salmon exceeded projections by over four times.

Norton Sound. The 1988 Norton Sound commercial fishery produced a total catch of 255,160 fish. Chum salmon are the primary commercial species throughout the Sound with a catch of 107,960 This is the second largest catch on record, exceeded only by the 1983 catch of 319,437. It was still well below the projected harvest of 180,000 fish however. The 1988 chum catch was valued at \$290,000. Total value of the commercial fishery is estimated at \$760,000, below the 1981-86 average of \$865,800. This is partially because the chinook catch of 4,090 fish was the lowest on record since 1976, and well below the five year average of 10,415 fish. It also fell far below the forecast of 800,000 Chinook prices averaged about \$1.29 per pound, and the average chinook weighed 16.3 pounds. While the coho catch of 37,240 was higher than the past ten year average of 34,207, it was well below the past five year average of 52,566 fish. prices averaged \$1.15 per pound. Pink salmon exceeded the preseason forecast of 40,000 fish with a catch of 74,600.

Kotzebue. The chum salmon catch of 352,910 far surpassed last year's poor catch of only 110,000 fish, and was just below the 1980-86 average of 391,158. It far exceeded the preseason forecast of 275,000 fish. Chum salmon averaged \$0.85 per pound. With a value of \$2.81 million, it was the second highest exvessel value on record, surpassed only by the 1981 value of \$3.2 million. That year 677,239 fish were harvested, compared to this season's total of 353,060.

# Westward Region

Kodiak. The 1988 total harvest was 19.04 million fish. The catch was comprised of about 22,000 chinook, 2.8 million sockeye, 221,500 coho, 14.63 million pinks, and 1.36 million chum salmon. Escapement goals were achieved for all major sockeye systems for both early and late runs. Overall, pink and chum escapements were good to excellent. Chinook salmon escapements into Karluk and Red Rivers were some of the highest on record. Coho escapements are fair to good with at least minimum escapement goals met in major systems. Preliminary harvest

estimates indicate all pre-season harvest estimates were met or exceeded resulting in a near record harvest for all species combined. Because of the excellent prices fishermen received for all species, the estimated ex-vessel value of \$95 million is twice the previous record for dollar value to the fishermen. Approximately 330 purse seiners, 175 set net and 20 beach seine permit holders participated in this year's fishery. Sixteen different processors/buyers were active in the Kodiak management area this year.

Chignik. The 1988 commercial salmon harvest for the Chignik area was 4.26 million fish. Pink salmon comprised about 67% of this total, with a record catch of 2.85 million fish. This was an unusual year for the Chignik Management Area. Total economic value of the fisheries may be record setting at \$26.66 million, however the fisheries were focused on outside districts rather than the traditional Chignik Lagoon waters. The fishery opened on June 30, later than normal for this area. Escapement goals for the month of June were finally met for Black Lake, justifying this opening for surplus early run sockeye. The second run was late, and resulted in Lagoon closures. The pre-season projected harvest was for about 1.57 million sockeye. The total sockeye harvest was estimated at 778,690 fish, less than half that seen in 1987, and the lowest seen since 1975.

Coho salmon harvest was record setting at 350,500 fish, surpassing the old record set in 1982 by nearly 47,000 fish. With ex-vessel prices at \$1.45, the value of this fishery was also a record at \$3.37 million.

Alaska Peninsula and Aleutians. The South Unimak and Shumagin Islands (False Pass) June fishery produced a total harvest of 759,500 sockeye and 513,000 chum salmon. High chum to sockeye ratios plagued the fisheries' ability to harvest its sockeye allocation, and the South Unimak fishery fell almost 800,000 fish short. The fishery terminated on June 27 when the 500,000 chum cap was reached. The chum percentage at South Unimak approximated that of sockeye for the entire month. Total sockeye catch reached 2.9 million fish. Had the chum cap not been in place during the June fishery, the additional catch of sockeye would have placed it at the previous 10 year average of 3.75 million. The total chum salmon catch of 2.27 million exceeded the 1978-87 average of 1.89 million fish.

The 1988 Alaska Peninsula-Aleutian Island chinook salmon catch of 28,000 was within the 10 year average.

The pink salmon catch was 6.56 million as compared to the previous 10 year average of 6.4 million.

Escapements of all species was good to excellent in the majority of the Peninsula/Aleutian salmon systems. The South Peninsula indexed total pink salmon escapement of 2.9 million is the second best since 1962.

REVIEW OF THE 1987-1988 ALASKA COMMERCIAL SHELLFISH FISHERIES

#### Southeast Region.

The areas and seasons for King, Tanner, and Dungeness crab in Southeastern Alaska and Yakutat (areas A and D). Note these areas have exclusive registration and a 40-100 pot limit in Inside waters.

Red King Crab. With a fishery, November 1 is the scheduled opening. However, fishery remained closed for the 1987/88 season based upon red king crab stock index of abundance research surveys. No change in stock status, with pre-recruit males continuing to be depressed.

Brown King Crab. The 1987 fishery opened by emergency order on February 24, 1987 and closed December 29, 1987. total harvest was 316,059 lbs from 95 landings. The 1988 fishery opened by regulation, simultaneously with the tanner crab season on January 15, 1988. As of March 24, 1988 total landings were 643,073 lbs. Ex-vessel price was as high as \$3.60 per pound, and total value was approximately \$2.3 million. It is likely an additional 200,000 pounds will be landed from the traditional fishery by the end of the season.

Blue King Crab. This fishery is incidental to the directed red king, brown king, and tanner crab fishery. Fishing opportunities provided by emergency order on January 15, 1988 in portions of districts 11, 14, and 15. The season closed simultaneously with the Tanner crab fishery on February 16, 1988. Total catch was 1,506 lbs.

Tanner Crab. The fishery opened January 15, 1988 and closed February 16, 1988. This was the second shortest season on record, and reflects the increased effectiveness of both the participants and their gear. Catch for Southeast and Yakutat was 1.306 million pounds. Ex-vessel prices opened at \$2.20 per pound and rose to \$2.45. This fishery was worth slightly more than \$3.0 million to the fishermen.

Dungeness Crab. The 1987/88 season was divided by regulation into two segments. The first was from June 15, 1987 through August 15, 1987. The second started on October 1, 1987 and ended February 28, 1988. Approximately 3.3 million pounds were landed.

With an average value of about \$1.11 per pound, this catch was worth about \$3.68 million.

<u>Shrimp.</u> For the beam trawl fishery the harvest totaled 1.75 million pounds through February 14, 1987. For the otter trawl fishery, effort and resulting harvest were at historic low levels. Total for the combined trawl fishery was 10,448 pounds. The pot fisheries harvest, in 1987, totaled 314,578 pounds.

# Prince William Sound.

Brown King Crab. The fishery opened October 1, 1987 and closed December 20, 1987. The harvest was 68,270 pounds. Prices were \$3.35 per pound, and the total ex-vessel value was \$222,000.

Red King Crab. The fishery was closed for 1987/1988 and no fishery is anticipated for 88/89.

Blue King Crab. The fishery was closed for 1987/1988 season-Closed.

<u>Dungeness Crab.</u> The 1987 catch of crab was 893,174 pounds. Exvessel price ranged from \$0.80-\$1.05 and total value was \$850,000.

Pot Shrimp. The traditional harvest area opened March 15 and closed May 1, 1987. The total harvest was 225,160 pounds (whole shrimp weight). Prices ranged from \$3.50-\$8.00, depending on size. A midpoint estimate for average price places total harvest value at \$735,000.

Trawl Shrimp. The season was March 1 through November 30, 1987. Landings totaled 95,718 pounds, with sidestripe accounting for 99% of the harvest. Average prices was \$1.26 per pound, with total ex-vessel value at \$120,000.

Projections for 1988 indicate effort and landings at or above 1987 level.

Razor Clam. The total harvest was 40,954 pounds. Bait clams sold for \$1.00 per pound, while food clams sold for \$0.85. Fishery valued at \$39,000.

# Cook Inlet.

Red King Crab. Fishery was closed due to extreme low abundance. No commercial fishery for 1987/88.

Brown King Crab. Fishery was open, but no harvest occurred due to lack of effort at low stock sizes.

<u>Dungeness Crab.</u> The total catch for the entire area was 783,176 pounds. Prices ranged from \$1.15-\$1.30, with total ex-vessel value \$980,000.

Tanner Crab. The season opened by regulation on January 15, 1988. Guideline harvest range was 1.4-2.45 million pounds, with the season catch at 1,522,168 pounds as of 3/24/88. Ex-vessel prices started at \$2.25 per pound, but increased to \$2.40. Total ex-vessel value was approximately \$3.6 million.

<u>Shrimp Trawl.</u> Although the summer season opened June 1, 1987, the first delivery did not occur until early February, 1988. The season total harvest was 22,231 pounds, valued at \$8,900. Pink shrimp made up the bulk of the catch.

Pot Shrimp. Season opened June 1, 2987 and closed March 31, 1988, with three sub-seasons occurring. Harvest of pot shrimp for the season totaled 30,295 pounds of coonstripe and 1,337 pounds of spots, for a total of 31,632 pounds valued at \$48,000.

<u>Scallops.</u> The only deliveries occurred in July, 1987. The harvest was 1,128 pounds of meat. At an estimated value of \$6.00 per pound, the ex-vessel value for the fishery was \$8,900.

Miscellaneous Shellfish. The razor clam fishery occurred between May and August, with a total harvest of 312,349 pounds, worth approximately \$155,000. The hard-shell clam harvest was 14,869 pounds (whole weight), worth estimated \$19,250. The species breakdown of the hard-shell clam harvest was: pacific little necks (12,214 pounds, 82%), butter clams (pounds, 1%), cockles (2,347 pounds, 16%), and blue mussels (102 pounds, 1%).

# Westward Region and Western Alaska.

The seasons, 88/89 projected harvests, and 87/88 harvests for various species and areas in westward region and western Alaska are as follows:

AREA	SPECIES	SEASON	88/89 PROJECTION	87/88 HARVEST
Kodiak	Red Brown	Closed Permit	0 . 0 7	0
Ak Peninsula	Red	Closed	0	0
Dutch Harbor	Red Brown	Closed Sept.1	0 1.0	0 1.4
Adak	Red Brown	Nov.1-Feb.15 Nov.1-Aug.15		1.2 7.2
Bristol Bay	Red	Sept.25	7.5	12.3
Bering Sea Pribilof St. Matt St. Matt Norton Snd	Blue Blue Brown Red	Closed Sept.1 Permit Aug.1	0 1.1 -	0.7 1.1 1.1 .33