BERING SEA AND ALEUTIAN ISLANDS KING AND TANNER CRAB MANAGEMENT;

HISTORIC OVERVIEW AND PRELIMINARY SUMMARY OF 1995/96 FISHERIES

Prepared for the joint meeting of the Alaska Board of Fisheries and The North Pacific Fishery Management Council

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DUTCH HARBOR BROWN KING CRAB

Introduction

Dutch Harbor Statistical Area O has as its northern boundary the latitude of Cape Sarichef (54° 36' North latitude), as its eastern boundary the longitude of Scotch Cap Light (164°44' West longitude), and as its western boundary 171° West longitude (Figure 1).

Historic Background

Historically, Dutch Harbor brown king crab have been taken incidental to the red king crab fishery. Incidental catches of brown king crab were small and landings of red king crab included some brown king crab prior to the 1981/82 season. The poundage was not recorded separately.

During the 1981/82 season, six vessels landed over 115,000 pounds during the red king crab season. Only one landing occurred during January 1982 (Table 1). The season closed along with the area red king crab season on January 15 (Table 2).

Interest in the fishery grew and during the 1982/83 season 49 vessels landed over 1.1 million pounds in the area's first directed brown king crab fishery. As red king crab stocks declined, effort and interest in brown king crab continued into the 1983/84 season, when 1.8 million pounds were landed by 47 vessels (Table 1).

In 1984 the Board of Fisheries adopted staff proposals to lower the brown king crab size limit from 6.5 inches to 6.0 inches, and established the area as a permit fishery to allow the fishery to expand into other areas outside the historical fishing grounds. During the 1984 permit season, prices and effort dropped. Thirteen (13) vessels landed 1.5 million pounds of brown king crab. Since implementation of the permit system the catch has averaged over 1.6 million pounds per year. All landings were taken from historical grounds developed during the 1982/83 season. During the 1988 Spring shellfish meetings the Board of Fisheries adopted a staff proposal removing the permit fishery designation and set a season opening date of September 1.

While the number of vessels participating in this fishery has remained somewhat consistent, the total number of pot pulls increased dramatically in 1994. During the 1993/94 fishery a total of 22,490 pots were pulled compared to 67,537 in the 1994 fishery (Table 1). As a result, the season length went from 212 days in 1993/94 to 57 days in a season which opened on September 1 and closed on October 28, 1994 (Table 2).

Intensification of effort in this fishery, and the lack of survey data or abundance estimates for this area, resulted in the Board of Fisheries implementing regulations requiring 100% observer coverage on all vessels in the Dutch Harbor brown king crab fishery beginning with the September 1 opening of the 1995 season. Observer coverage was considered necessary to begin collecting information which could be used to estimate population abundance. Survey information is not available, and brown king crab and other deep water species do not lend themselves to standard trawl survey techniques. Also, catcher processors, which have been required to carry observers since 1988 in all Bering Sea king and Tanner crab fisheries, seldom participate in this fishery.

1995 Fishery

The 1995 Dutch Harbor brown king crab fishery opened by regulation on September 1. A total of 17 vessels obtained observers and participated. This is comparable to the 14 vessels which participated during the 1994 season.

A total of 1,993,980 pounds were landed in 42 deliveries during the 1995 season which closed by emergency order on October 9, 1995. At 38 days, the 1995 season was the shortest on record. Fleetwide performance for the 1995 fishery was six crab per pot, identical to the prior season but lower than any other year on record (Tables 1 and 2).

Average weight for this season was once again 4.6 pounds, the same as last year's fishery, which was higher than the average for the last five years but below the historic high of 5.5 pounds recorded for the 1983/84 fishery (Table 1). A total of 65,000 pots were pulled during the 1995 fishery, down slightly from the 67,537 pot pulls recorded in 1994 (Table 2). The majority of the 1995 catch was harvested during September from the western half of the Management Area (Tables 3 and 4).

Ex-vessel value for the 1995 season was \$2.60 per pound, a dramatic decline from the \$4.00 paid in 1994, which was the highest on record. Total value of the 1995 Dutch Harbor brown crab fishery was \$5.0 million, down from the \$6.9 million estimated value of last season's fishery. Reductions in exvessel prices paid for Dutch Harbor brown king crab are likely a result of a surplus of Russian king crab currently on the market.

During the course of the 1995 fishery onboard observers sampled the contents of 2,436 pots on catcher-only vessels and 76 pots on the one catcher processor which participated in this year's fishery.

Stock Status

The brown or golden king crab, *Lithodes aequispinus*, fishery in the Aleutian Islands is the fourth largest shellfish fishery in Alaska. The federal Fishery Management Plan for the Aleutian golden king crab fishery requires that recruitment over-fishing not occur and that fishing mortality not exceed 0.3 (a 25% exploitation rate) annually. However, prior to 1991, no systematic survey of brown king crabs had been conducted in Alaska. The results from a study of a brown king crab survey initiated in 1991 was published in October 1994; Regional Information Report No. 4K94-35, FINDINGS FROM THE 1991 GOLDEN KING CRAB SURVEY IN THE DUTCH HARBOR AND ADAK MANAGEMENT AREAS INCLUDING ANALYSIS OF RECOVERED TAGGED CRABS. This report is available to the public from the Commercial Fisheries Management and Development Division, 211 Mission Road, Kodiak, AK 99615.

With implementation of 100% observer coverage, area specific information is now being collected on size, number and distribution of all crab and fish species captured.

KING CRAB AREAS

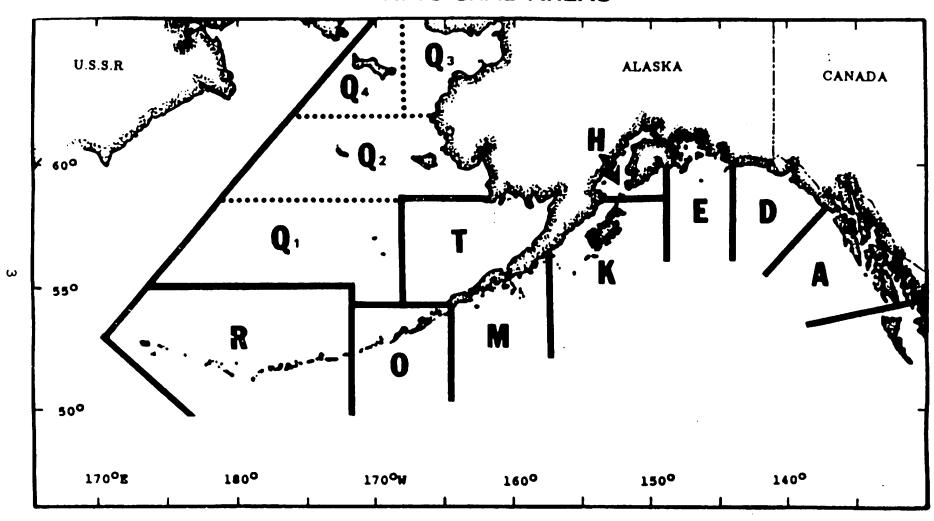


Figure 1. Dutch Harbor, Area O, king crab area.

Table 1. Historic Dutch Harbor, Area O, brown king crab catch, 1981/82-1995.

	N	umber of			Pots		Percent	Aver	age	:
Season	Vessels	Landings	s Crab	Harvest*.b	Pulled	CPUE	Oldshell	Weight ^b	Length⁴	Deadloss
1981/82	6	16	22,666	115,715	2,906	8	3.8	5.1	158.1	8,752
1982/83	49	136	227,471	1,184,971	29,369	8	3.9	5.21	58.1	47,479
1983/84	47	132	328,353	1,810,973	29,595	11	NA	5.5	NA	45,268
1984°	13	67	327,440	1,521,142	24,044	14	NA	4.6	161.2	70,362
1985	13	67	410,977	1,968,213	34,287	12	16.0	4.7	155.7	38,663
1986	17	71	400,389	1,869,180	37,585	11	_	4.7	NA	9,510
1987	22	77	299,734	1,383,198	43,017	7	25.0	4.6	149.6	24,210
1988 ^t	21	57	323,695	1,545,113	40,869	8	23.0	4.8	154.3	22,960
1989/90	13	70	424,067	1,852,249	43,345	10	30.0	4.4	150.9	17,421
1990/91	16	68	395,502	1,718,848	54,618	7	3.0	4.3	147.5	42,800
1991/92	11	50	335,647	1,447,732	40,604	8	4.0	4.3	147.9	45,100
1992/93	10	44	330,159	1,357,048	37,718	9	4.0	4.3	147.8	37,200
1993/94	4	14	217,788	915,460	22,490	10	NA	4.2	NA	7,324
1994	14	45	384,353	1,750,267	67,537	6	NA	4.6	NA	29,908
1995	17	42	431,867	1,993,980	65,030	6	NA	4.6	NA	14,676

^aDeadloss included.

^bIn pounds.

^cDefined as catch per pot pull.
^dIn millimeters.

^eSix inch permit season opened July 1.

^fSeptember 1 established as season opening date.

Table 2. Historic Dutch Harbor brown king crab economic performance, 1981/82-1995.

		Season	Num	ber of	Number o	f Pots	Valı		Seas	on Length
Year	GHL°	Total	Vessels	Landings	Registered	Pulled	Exvessel	Total°	(Days)	Dates
1981/82	N/A	0.1	6	16	-0- ^d	2,906	\$ 2.05	\$ 0.2	(75)	11/01-1/15
1982/83	N/A	1.1	49	136	-0- ^d	29,369	\$ 3.00	\$ 3.3	(105)	11/1-2/15
1983/84	N/A	1.8	47	132	4,514	29,595	\$ 3.05	\$ 5.5	(105)	11/01-2/15
1984/85	N/A	1.5	13	67	1,394	24,044	\$ 1.35	\$ 2.0	(229)	07/01-2/15
1985	N/A	1.9	13	67	1,479	34,287	\$ 2.00	\$ 3.8	(121)	07/1-10/3
1986	N/A	1.8	17	71	1,575	37,585	\$ 2.85	\$ 5.1	(182)	07/1-12/3
1987	N/A	1.4	22	77	3,591	43,017	\$ 2.85	\$ 4.0	(62)	07/01-9/02
1988	N/A	1.5	21	57	4,215	40,869	\$ 3.00	\$ 4.5	(93)	09/01-12/
1989	N/A	1.8	13	70	5,635	43,345	\$ 3.50	\$ 6.3	(104)	09/1-12/1
1990	N/A	1.7	16	68	5,225	54,618	\$ 3.00	\$ 5.1	(68)	9/01-11/0
1991	N/A	1.4	11	50	3,760	40,604	\$ 2.00	\$ 2.8	(74)	9/01-11/1
1992	N/A	1.3	10	44	4,222	37,718	\$ 2.50	\$ 3.3	(76)	9/01-11/1
1993/94	N/A	. 9	5	14	2,334	22,490	\$ 2.15	\$ 1.9	(212)	09/1-03/3
1994	N/A	1.8	14	45	7,378	67,537	\$ 4.00	\$ 6.9	(57)	9/1-10/2
1995	N/A	1.9	17	42	10,325	65,030	\$ 2.60	\$ 5.0	(38)	9/1-10/9

^aGuideline Harvest Levels based on historic catches.

Ç

^bMillions of pounds, deadloss not included.

^cMillions of dollars.

^dIncidental catches to red king crab fishery.

Table 3. 1995 Dutch Harbor brown king crab catch by month.

Month		Number s Land	of lings Crab	Harvest ^{a,b}	Pots Lifted	Average Weight ^b	CPUE	Deadloss
Sept.	16 10	28 14	380,079 81,788	1,607,730 386,250	49,858 15,172	4.6	7 5	51,246 15,781
Season Total	17	42	431,867	1,993,980	65,030	4.6	6	67,027

^aDeadloss included.

bIn pounds.
Coefined as catch per unit effort.

Table 4. 1995 Dutch Harbor Brown King Crab by Statistical Area.

Dead-		Average	Pots			Number	Stat.
loss	CPUE	Weight	Pulled	Harvest ^{a.b}	Crab*	Landings	Area
54	3	5.0	772	12,024	2,390	5	685303
164	. 2	4.8	4,884	45,346	9,366	10	685304
2,089	6	4.6	4,502	128,272	28,010	8	695232
5,037	6	4.5	7,191	197,920	43,708	17	695301
847	6	4.6	1,714	49,747	10,722	6	695302
15,733	6	4.5	13,647	366,676	80,995	13	705200
29,330	9	4.6	19,394	825,660	177,837	25	705232
1,300	9	4.5	1,083	45,821	10,092	6	705233
6,790	7	4.6	8,026	245,633	53,267	13	705300
5,659	4	4.9	3,817	76,208	15,480	12	Others
67,027	7	4.6	65,030	1,993,980	431,867	42	TOTAL

^aDeadloss included.

^bIn Pounds.

^cDefined as catch per pot pull.

KING CRAB STATISTICAL AREA Q BERING SEA

Description

The Bering Sea king crab registration area, Statistical Area Q, includes all waters north of Cape Sarichef, south of Point Hope, and east of the U.S.-Russian Convention Line of 1867; it excludes those waters of Bristol Bay, and south of 55°30' North Latitude and west of 171° West Longitude. Area Q is separated into the Pribilof and Northern Districts. The Pribilof District includes the waters south of Cape Newenham. The Northern District incorporates all of the waters north of Cape Newenham, and is further divided into three sections. The Saint Matthew Island Section includes the waters north of Cape Newenham and south of Cape Romanzof. Norton Sound Section includes all waters north of Cape Romanzof, south of Cape Prince of Wales, and east of 168° West Longitude. The Saint Lawrence Island Section encompasses all remaining waters of the district (Figure 1).

Historic Background

The king crab fishery in the Pribilof Islands started in 1973 when vessels targeted blue king crab in the vicinity of St. George and St. Paul Islands. The first reported catch was 1.2 million pounds taken by eight vessels between July and October. Crab averaged 7.3 pounds, and catch per unit effort (CPUE) was 26 crabs per pot. Average weight remained relatively constant through to the 1987/88 season. The CPUE of 26 crabs per pot has never again been attained by the fleet; an average of 17 crabs per pot for the following three seasons dropped to less than eight crabs per pot for the 1977/78 through 1982/83 seasons. Three crabs or less per pot were observed for the 1983/84 season and the five subsequent seasons. Due to low population estimates in this district, the blue king crab fishery was closed beginning with the 1988/89 season (Table 1). The 1993 National Marine Fisheries summer trawl survey indicated a marked increase in the abundance of red king crab, normally rare relative to blue king crab. While no threshold level was established for Pribilof red king crab, survey results indicated a harvestable surplus did exist. For the first time a red king crab fishery was opened in the Pribilof district in September of 1993 with a guideline harvest level of 3.4 million pounds.

At their Spring 1993 meeting, the Alaska Board of Fisheries adopted regulations which changed the opening date of the St. Matthew king crab fishery from September 1 to September 15, concurrent to the king crab fishery in the Pribilof District. This action was taken to improve fleet distribution between the Pribilof and St. Matthew fisheries, thereby reducing the number of vessels participating in each fishery. Also at this meeting the Board of Fisheries passed regulations which set pot limits on all vessels fishing king crab in the Bering Sea based on overall vessel length. In the Northern district, which includes the St. Matthew Island section, vessels over 125 feet were limited to 75 pots while those equal to or less than 125 feet were allowed a maximum of 60 pots. In the Pribilof district pot limits were established at 50 and 40 for vessels greater than 125 feet and less than 125 feet in length overall respectively.

1995 Fishery - Pribilof District

For the first time since 1987 the Pribilof District was open to blue king crab harvest during the 1995 season. Results from the National Marine Fisheries Service trawl survey of the Bering Sea conducted in June and July of this year indicated a harvestable surplus of 5.0 million pounds of red king crab and 3.64 million pounds of blue king crab in the Pribilof area. A high degree of variance in the survey estimate for the Pribilof area prompted the department to reduce the harvestable surplus for both the red and blue king crab to a level more reflective of prior year's surveys and fishery performance. As a result a harvest guideline of 2.5 million pounds for red and blue king crab combined was established.

A total of 129 catcher vessels and one catcher-processor purchased buoy tags from ADF&G offices in Dutch Harbor and Kodiak for the 1995 Pribilof red and blue king crab season. Three of these vessels failed to obtain a tank inspection and did not participate. Tank inspections were conducted, beginning at 12:00 noon on September 14 by ADF&G personnel stationed in Akutan, Dutch Harbor and St. Paul. Due to favorable weather in the Pribilof Islands, a total of 102 vessels elected to obtain tank inspections in the St. Paul Island harbor. Only one vessel was inspected at Akutan. As in past years, no shellfish staff were assigned to the port of King Cove, however, salmon management staff stationed in Cold Bay agreed to stand by to conduct inspections at King Cove or Cold Bay on an as-needed basis. No vessels requested a tank inspection in either of those locations. The number of vessels in this year's Pribilof fishery increased from 104in 1994. The majority of this increase in effort was comprised of salmon limit seine vessels, 58 feet in length, from the Sand Point and King Cove area. This year a total of 5,400 pots were registered for the Pribilof area compared to 4,675 pots in 1994 (Table 2).

The 1995 Pribilof red and blue king crab fishery opened concurrent to the St. Matthew blue king crab fishery on September 15 at 12:00 noon. Unlike the 1994 season, which was managed on prior year's fishery performance, management of the 1995 fishery was based on daily in-season vessel catch reports. As a result of the large number of vessels registered, a total of 61 vessels signed up to report via single side band radio (SSB) and marine satellite communications (MCI). Projections, based on inseason reports, indicated a total of 2.5 million pounds of red and blue king crab combined would be harvested by 12:00 noon on September 22. These projections showed a split between the catch of red and blue king crab to be somewhat even, 1.3 and 1.2 million pounds respectively. Based on these projections, the fishery was closed after 7 days of fishing at 12:00 noon on September 22. The actual harvest of 0.9 million pounds of red king crab and 1.2 million pounds of blue king crab, a combined harvest of 2.1 million pounds, was below the 2.5 million pound harvest guideline (Tables 1 and 2).

This year's catch, from approximately 35,000 pot lifts (both red and blue king crab combined), came predominately from the seven statistical areas directly surrounding the Pribilof Islands, similar to the 1993 and 1994 seasons (Tables 3 and 4).

A total of eight shore based processors, and 2 floating processors purchased crab during the 1995 Pribilof area king crab fishery. One independent buyer purchased Pribilof red king crab exclusively. The 1995 ex-vessel price of \$3.37 for red king crab and \$2.92 for blue king crab was the lowest paid in 10 years. The total value of the 1995 Pribilof red king crab fishery came to \$3 million compared to \$8 million in 1994 and \$13 million in 1993 (Table 2).

A total of 151 landings made up the 0.9 million pound harvest of red king crab. Average weight of red king crab harvested in 1995 was 8.1 pounds, similar to last year's average of 8.0 pounds. The CPUE for red king crab was down from 6 in 1994 to 3.2 in 1995.

A total of 152 landings made up the 1.3 million pound harvest of blue king crab. Average weight of blue king crab was 7.3 pounds, similar to the 7.4 average caught during the last Pribilof blue king crab fishery in 1988 and 2.5 pounds larger, on average, than blue king crab harvested from the 1995 St. Matthew fishery (Tables 1 and 5)... A catch per unit effort (CPUE) of 4.8 was a marked improvement over the 1988 season CPUE of 2.0, when this species was last targeted in the Pribilof area. The 1995 ex-vessel price of Pribilof blue king crab was \$2.92 per pound, \$.60 higher than the price paid for St. Matthew blue king crab, likely due to the larger average size of the Pribilof species (Tables 2 and 7). The total value of the 1995 Pribilof blue king crab fishery was \$3.6 million.

Weather conditions during the 1995 fishery were unseasonably mild. Despite favorable weather, a number of vessels bound for King Cove failed to reach their delivery location in the 24 hours following the fishery closure as allowed by regulation. These vessels were met at the dock in King Cove by officers of the Division of Fish and Wildlife Protection and cited for late delivery.

Stock Status

Blue king crab stocks in the Pribilof District appear to be above the established threshold and stable. Red king crab stocks currently have no established threshold in the Pribilof District. Confidence in the population estimate derived from the NMFS summer trawl survey of the area around the Pribilof Islands is low due to the apparent clumped distribution of crab in that area as evidenced by a large number of the legal crabs caught at a single sampling station. Both red and blue king crab in this area should be managed conservatively.

1995 Fishery - St. Matthew Island District

Based on the 1995 NMFS summer trawl survey of the Bering Sea a guideline harvest level (GHL) for St. Matthew blue king crab was set at 2.4 million pounds (Table 7). A total of 90 vessels, including one catcher-processor, purchased buoy tags from ADF&G offices in Dutch Harbor and Kodiak. All 90 vessels received tank inspections by ADF&G personnel stationed in Akutan, Dutch Harbor and St. Paul. This compares to a total of 87 vessels which registered and received tank inspections for the 1994 fishery. The number of vessels registered for the last three seasons has remained well below the 174 vessels which registered for the 1992 fishery. A total of 5,970 pots were registered for the 1995 St. Matthew fishery compared to 5,685 pots in 1994 and 5,895 pots in 1993 (Table 7).

The 1995 fishery opened at 12:00 noon on September 15, concurrent to the Pribilof district king crab fishery. Unlike the 1994 season, which was managed on prior year's fishery performance, the 1995 fishery was managed on daily in-season vessel catch reports. A total of 54 vessels signed up to report via single side band radio (SSB) and marine satellite communications (MCI). Catch projections, based on radio report data, indicated the harvest would reach 3.4 million pounds by 12:00 noon on

September 20. As a result, the fishery was closed after 5 days of fishing at 12:00 noon on September 20. The 1995 harvest of 3.2 million pounds, from 111 landings, exceeded the 2.4 million pound pre-season harvest guideline (Table 10).

This year's catch, which resulted from approximately 48,500 pot lifts, came predominately from two statistical areas south of St. Matthew Island, similar to the location of the 1992, 1993, and 1994 harvests (Table 8). All information regarding the 1995 catcher-processor effort is confidential since less than three catcher processors participated in the 1995 St. Matthew fishery (Table 9).

Average weight of St. Matthew blue king crab for the 1995 season was 4.8 pounds. This is the same average weight recorded in 1993, up from the 1994 average of 4.6 pounds. The 1995 catch per unit of effort (CPUE) was in excess of 13 crabs per pot compared to 13,11, 10 and 20 crab per pot averages for the prior four seasons (Tables 5 and 8).

A total of six shore based processors, and four floating processors purchased crab during the 1995 St. Matthew fishery. The 1995 ex-vessel price for St. Matthew blue king crab was \$2.32 per pound, the lowest price paid since 1985 when the fishermen were given \$1.60 per pound (Tables 6 and 7). The value of the 1995 St. Matthew blue king crab fishery was \$7.1 million. This is less than half the \$15 million value of the 1994 fishery (Table 7).

Stock Status

Blue king crab stocks in the St. Matthew Island area appear to be above established thresholds. Based on the 1995 National Marine fishery summer survey, legal male abundance decreased from 2.5 million in 1994 to 2.4 million in 1995. This stock remains below historic levels and continues to be managed as a depressed fishery.

Figure 1. Bering Sea, Area Q, king crab registration area, with districts and sections.

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Table 1. Bering Sea, Area Q, Pribilof District historic king crab catch statistics, 1973/74-1995.

		Number o			Pots		Aver		
Year*	Vessels	Landings	Crab⁵	Harvest ^{b.c}	Pulled	CPUE⁴	Weight	Length*	Deadloss
1973/74	8	13	174,420	1,276,533	6,814	26	7.3	N/A	; o
1974/75	70	101	908,072	7,107,294	45,518	20	7.8	157.8	0
1975/76	20	54	314,931	2,433,714	16,297	19	7.7	159.1	0
1976/77	47	113	855,505	6,611,084	71,738	12	7.7	158.1	0
1977/78	34	104	807,092	6,456,738	106,983	8	7.9	158.9	159,269
1978/79	58	154	797,364	6,395,512	101,117	8	8.1	159.3	63,140
1979/80	46	115	815,557	5,995,231	83,527	9	7.7	155.9	284,555
1980/81	110	258	1,497,101	10,970,346	167,684	9	7.3	155.7	287,285
1981/82	99	312	1,202,499	9,080,729	176,168	7	7.6	158.2	250,699
1982/83	122	281	587,908	4,405,353	127,728	5	7.5	159.8	51,703
1983/84	126	221	276,364	2,193,395	86,428	3	7.9	159.9	4,562
1984/85	16	25	40,427	306,699	15,147	3	7.6	155.5	0
1985/86	26	49	77,607	532,735	23,483	3	6.9	146.5	7,500
1986/87	16	25	36,988	258,939	15,800	2	7.0	N/A	5,450
1987/88	38	68	95,131	701,337	40,507	2	7.4	152.7	9,910
1988/89			·		SON CLOSED				·
1989/90				SEA	SON CLOSED				
1990/91					SON CLOSED				
1991/92'				SEA	SON CLOSED				
1992/93					SON CLOSED				
1993°	112	135	380,217	2,607,634	35,942	11	6.9	154.4	0
19949	104 117	121 151	167,520 107,521	1,338,953 871,173	28,976 33,531	6 3.2	8.0 8.1	162.1 162.5	2,929 15,316
1995° 1995°	117	151 152	172,987	1,267,454	34,721	4.8	7.3	102.3	46,263

^aBlue king crab, 1973 - 1988.

^bDeadloss included.

^cIn pounds.

^dDefined as catch per pot pull.

^eIn millimeters.

f10,869 pounds illegal red king crab.

⁸Red king crab.

^hBlue king crab.

Table 2. Historic Bering Sea, Pribilof District king crab economic performance, 1980/81-1995.

		Season		ber of	Number_c		Va Exvessel	lue Total	Seaso (Days)	n Length Dates
Year*	GHL ^b	Total	Vessels	Landings	Registered	Pulled	Exvessei	TOLAI	(Days)	Dates
1980/81	5.0-8.0	10.7	110	258	31,636	167,684	\$.90	\$ 9.6	(60)	9/15-11/15
1981/82	5.0-8.0	9.1	99	312	25,408	176,168	\$ 1.50	\$13.6	(47)	9/10-10/28
1982/83	5.0-8.0	4.4	122	281	34,429	127,728	\$ 3.05	\$13.4	(15)	9/10-9/25
1983/84	4.0	2.2	126	221	36,439	86,428	\$ 3.00	\$ 6.6	(10)	9/01-09/11
1984/85	0.5-1.0	0.3	16	25	3,122	15,147	\$ 2.50	\$ 0.1	(15)	9/01-09/16
19985/86	0.3-0.8	0.5	26	49	6,038	23,483	\$ 2.90	\$ 1.4	(26)	9/25-10/21
1986/87	0.3-0.8	0.3	16	25	4,376	15,800	\$ 4.05	\$ 1.2	(55)	9/25-11/20
1987/88	0.3-1.7	0.7	38	68	9,594	40,507	\$ 4.00	\$ 2.8	(86)	9/25-12/20
1988/89				NO C	OMMERCI	AL FI	SHERY			
1989/90				NO C	OMMERCI	AL FI	SHERY			
1990/91				NO C	OMMERCI	A L F I	SHERY			
1991/92				NO C	OMMERCI	AL FI	SHERY			
1992/93				NO C	OMMERCI	AL FI	SHERY			
1993 ^t	3.4	2.6	112	135	4,860	35,942	\$ 4.98	\$13.0	(6)	9/15-09/21
1994'	2.0	1.3	104	121	4,675	28,976	\$ 6.00	\$ 8.0	(6)	9/15-09/21
1995'	2.5	0.9	117	151	5,400°	33,531	\$ 3.37	\$ 2.9	(7)	9/15-09/22
1995 ^h	2.5	1.2	119	152	5,400°	34,721	\$ 2.92	\$ 3.6	(7)	9/15-09/22

^aBlue king crab, 1980 - 1988. ^bGuideline Harvest Level.

^cMillions of pounds, deadloss not included. ^dMillions of dollars.

^eSet not to exceed.

fRed king crab.

⁸Red and blue king crab combined.

^hBlue king crab.

Table 3. 1995 Pribilof District red king crab catch by statistical area.

Stat		er of		Pots	Average	_	Dead-
Area	Landings	Crab*	Harvest*.b	Pulled	Weight	CPUE ^c	loss°
			•				
685700	13	3,244	25,393	1,737	7.8	1.9	604
685730	3	216	2,026	605	9.4	. 4	84
695631	30	20,775	164,595	4,562	7.9	4.6	983
695700	69	37,366	303,108	14,326	8.1	2.6	11,315
695730	4	1,754	15,517	1,230	8.8	1.4	146
705630	21	10,776	89,438	2,085	8.3	5.2	555
705701	29	12,105	102,667	4,156	8.5	2.9	851
705702	25	14,847	119,721	2,956	8.1	5.0	467
Other ^d	5	6,438	48,708	1,874	7.6	3.4	311
TOTALS	151	107,521	871,173	33,531	8.1	3.2	15,316

^aDeadloss included.
^bIn pounds.
^cDefined as catch per pot pull.
^dIncludes 5 statistical areas.

Table 4. 1995 Pribilof District blue king crab catch by statistical area.

Stat	. Numb	er of		Pots	Average		Dead-
Area	Landings	Crab*	Harvest*.b	Pulled	Weight ^b	CPUE°	loss ^b
		_					
685700	19	27,223	203,702	3,783	7.5	7.2	5,134
685730	4	8,118	59,051	960	7.3	8.5	5,180
695631	27	25,262	189,496	4,854	7.5	5.2	7,169
695700	68	75,032	539,700	14,536	7.2	5.2	23,270
695730	5	5,782	42,451	1,396	7.3	4.1	843
705630	17	3,206	22,407	1,789	7.0	1.8	233
705701	25	11,754	88,536	3,387	7.5	3.5	3,254
705702	26	10,469	76,126	2,335	7.3	4.5	723
Other ^d	5	6,141	45,985	1,679	7.5	3.7	457
TOTALS	1,152	172,987	1,267,454	34,721	7.3	5.0	46,263

^aDeadloss included.

bIn pounds.
cDefined as catch per pot pull.
dIncludes 4 statistical areas.

Table 5. Historic blue king crab catch in the St. Matthew portion of statistical Area Q, 1977-1995.

		Number o	f		Pots		Percent	Av	erage	
Season	Vessels	Landings		Harvest*.b	Pulled	CPUE°	Recruits	Weight ^b	Length	Deadloss
.977	10	24	281,665	1,202,066	17,370	16	7.0	4.3	130.4	129,148
.978	22	70	436,126	1,984,251	43,754	9	N/A	4.5	132.2	116,037
.979	18	25	52,966	210,819	9,877	5	80.8	4.0	128.8	128.8
.980					Confidenti	.al				
.981	31	119	1,045,619	4,627,761	58,550	18	N/A	4.4	N/A	53,355
.982	96	269	1,935,886	8,844,789	165,618	12	19.6	4.6	135.1	142,973
.983	164	235	1,931,990	9,454,323	133,944	14	26.7	4.8	137.2	828,994
.984	90	169	841,017	3,764,592	73,320	11	34.0	4.5	135.5	31,983
.985	79	103	484,836	2,427,110	51,606	9	9.0	5.0	139.0	2,613
.986	38	43	219,548	1,003,162	22,093	10	10.0	4.6	134.3	32,560
.987	61	62	234,521	1,075,179	28,440	8	5.0	4.6	134.13	400
.988	46	46	302,053	1,325,185	10,160	13	65.0	4.4	133.29	22,358
.989	69	69	247,641	1,166,258	30,853	8	9.0	4.7	134.55	3,754
.990	31	38	391,405	1,725,349	26,264	15	4.0	4.4	134.28	17,416
.991	68	69	726,519	3,372,066	37,104	20	12.0	4.6	134.1	216,459
.992	174	179	544,956	2,474,080	56,630	10	9.0	4.6	134.1	C
.993	92	136	629,874	2,999,921	58,647	11	6.0	4.8	135.4	(
.994	87	133	827,015	3,764,262	60,860	13	60.0	4.6	133.3	46,699
.995	90	111	666,905	3,166,093	48,560	13		4.8	135.0	90,191

^aDeadloss included.

bIn pounds.
Coefined as catch per pot pull.
In millimeters.

Table 6. Northern District, Area Q, king crab harvest composition by fishing season, 1977-1995.

	Dat				Minimum	Price
Season	Opened	Closed	Species	Harvest*	Size	per Pound
1977	June 7	Aug. 16	Blue Red	1,202,066 543,041	5 1/2 5	\$ 1.00
1978	July 15 July 15	Sept. 3 Aug. 16	Blue Red	1,984,251 2,007,910	5 1/2 4 3/4	\$ 0.95
1979	July 15 July 15	Aug. 24 Aug. 16	Blue Red	210,819 3,024,228		\$ 0.70
1980	July 15 July 15	Sept. 3 July 31	Blue Red°	353,683	4 3/4	\$ 0.75
1981	July 15 July 15	Aug. 21 Sept. 3	Blue Red°	4,627,761 63,983		\$ 0.90
1982	Aug. 1 Aug. 1 May 1	Aug. 16 Aug. 16 Aug. 1	Blue Red ^c Brown	8,844,789 3,690 193,507	5 1/2	\$ 2.00 \$ 2.00 \$ 2.00
1983°	Aug. 20 Aug. 20 May 1	Sept. 6 Sept. 6 Aug. 1	Blue Red Brown	9,506,880° 1,635	5 1/2 4 3/4 5 1/2	\$ 3.00 \$ 2.50 -
1984	Aug. 1 Aug. 1 May 1	Sept. 8 Sept. 8 Dec. 31	Blue Red ^c Brown ^d	3,764,592 - -	5 1/2 4 3/4 5 1/2	\$ 1.75 - -
1985	Sept. 1 Aug. 1 Jan. 1	Sept. 6 Sept. 6 Dec. 31		2,427,110 REPORTED REPORTED	5 1/2 4 3/4 5 1/2	\$ 1.60 - -
1986	Sept. 1 Aug. 1	Sept. 6 Sept. 6		1,003,162 REPORTED	5 1/2 4 3/4	\$ 3.20 -
1987	Jan. 1 Sept. 1 Aug. 1 Jan. 1	Dec. 31 Sept. 5 Sept. 5 Dec. 31	Blue	REPORTED 1,075,179 REPORTED 424,394	5 1/2 5 1/2 4 3/4 5 1/2	\$ 2.85 - \$ 2.60

- Continued -

Table 6. (page 2 of 2)

	Da	te			Minimum	Price
Season	Opened	Closed	Species	Harvest*	Sizeb	per Pound
1988	Sept. 1	Sept. 5	Blue	1,325,185	5 1/2	\$ 3.10
	Aug. 1	Sept. 5	NO CATCH		4 3/4	
	Jan. 1	Dec. 31	Brown	160,441	5 1/2	\$ 3.10
1989	Sept. 1	Sept. 4	Blue	1,166,258		\$ 2.90
			Blue	0'	5 1/2	NA
	Aug. 1	Sept. 4	Red ^c	4,518		NA
	Jan. 1	Dec. 31	Brown	4,407	5 1/2	NA
1990	Sept. 1	Sept. 7	Blue	1,725,349	5 1/2	\$ 3.35
1991	Sept. 16	Sept. 20	Blue	3,372,066	5 1/2	\$ 2.80
1992	Sept. 4	Sept. 7	Blue	2,474,080	5 1/2	\$ 3.00
1993	Sept. 15	Sept. 21	Blue	2,999,921	5 1/2	\$ 3.23
1994	Sept. 15	Sept. 22	Blue	3,764,262	5 1/2	\$ 4.00
1995	Sept. 15	Sept. 22	Blue	3,166,093	5 1/2	\$ 2.32

^aIn pounds, deadloss included. ^bCarapace width in inches.

^cDoes not include Norton Sound.

^dSome of Northern District open until September 20. ^eSt. Lawrence Island harvest included, 1977 - 1983. ^fCombined with red king crab to total 4,518 pounds.

Table 7. Economic performance of the blue king crab fishery in the St. Matthew Island section of the Northern district of the Bering Sea, 1981-1995.

		Season	Nun	nber of	Numbe	r of Pots	v	alue	Seas	on Length
Year	GHL ^{a, b}	Total	Vessels	Landings	Registered	Pulled	Exvessel	Total	(Days)	Dates
1981	1.5-3.0	4.6	31	119	2,960	58,550	\$ 0.90	\$ 4.1	(38)	7/15-8/21
1982	5.6	8.7	96	269	21,894	165,618	\$ 2.00	\$ 17.4	(15)	8/01-8/16
1983	8.0	8.6	164	235	38,000	133,944	\$ 3.00	\$ 25.8	(17)	8/20-9/06
1984	2.0-4.0	3.7	90	169	14,800	73,320	\$ 1.75	\$ 6.5	(7)	9/01-9/08
1985	0.9-1.9	2.4	79	103	13,000	51,606	\$ 1.60	\$ 3.8	(5)	9/01-9/06
1986	0.2-0.5	1.0	38	43	5,600	22,093	\$ 3.20	\$ 3.2	(5)	9/01-9/06
1987	0.6-1.3	1.1	61	62	9,370	28,440	\$ 2.85	\$ 3.1	(4)	9/01-9/05
1988	0.7-1.5	1.3	46	46	7,780	10,160	\$ 3.10	\$ 4.0	(4)	9/01-9/05
1989	1.7	1.2	69	69	11,983	30,853	\$ 2.90	\$ 3.5	(3) ^d	9/01-9/04
1990	1.9	1.7	31	38	6,000	26,264	\$ 3.35	\$ 5.7	(6)	9/01-9/07
1991	3.2	3.2	68	69	13,100	37,104	\$ 2.80	\$ 9.0	(4)	9/16-9/20
1992	3.1	2.5	174	179	17,400	56,630	\$ 3.00	\$ 7.4	(3) ^d	9/04-9/07
1993	4.4	3.0	92	136	5,895	58,647	\$ 3.23	\$ 9.7	(6)	9/15-9/2
1994	3.0	3.7	87	133	5,685	60,860	\$ 4.00	\$ 15.0	(7)	9/15-9/22
1995	2.4	3.1	90	111	5,970	48,560	\$ 2.32	\$ 7.1	(5)	9/15-9/20

^aGuideline Harvest Level.

^bMillions of pounds, deadloss not included.

^cMillions of dollars.

^dActual length - 60 hours.

Table 8. Blue king crab catch by statistical area for the St. Matthew Island section of the Northern district of the Bering Sea, 1995

Stat Area	<u>Numbe</u> Landings	r of Crab	Harvest*.b	Pots Pulled	Average Weight ^b	CPUE°	Dead- loss
726001	80	422,860	2,025,814	30,926	4.8	14	57,673
726002	12	61,962	293,773	5,359	4.7	12	8,998
736001	35	160,463	741,395	11,109	4.6	14	22,103
Other ^d	5	21,620	105,111	1,166	4.8	18	1,417
Total	111	666,905	3,166,093	48,560	4.8	13	90,191

^aDeadloss included.

^bIn Pounds.

^cDefined as catch per pot pull. ^dIncludes 3 statistical areas.

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Table 9. St. Matthew Blue King crab comparative average catches of catcher-processor vs. catcher-only vessels, 1990-1995.

			SEASON			
	1995	1994	1993	1992	1991	1990
Number of Catcher- Processor Vessels	Confidential	6	3	8	9	: 7
Number of Catcher-only Vessels	89	87	89	166	59	24
Pounds of Catcher- Processor Harvest,	Confidential	352,069	165,625	191,801	740,687	447,320
Percent of Catcher- Processor Harvest	Confidential	10.7	5.5	7.7	22.0	25.9
Average Catcher- Processor Harvest	Confidential	58,678	55,208	23,975	82,298	63,903
Average Catcher- Only Harvest	34,964	39,221	31,846	13,749	44,600	53,251
Catcher-Processor Average CPUE	Confidential	14	14	16	26	15
Catcher-Only Average CPUE	14	14	11	9	18	15
Total Harvest	3,166,093	3,764,262	2,999,921	2,474,080	3,372,066	1,725,349
Average # Pots Pulled Catcher-Processor	Confidential	926	811	327	682	983
Average # Pots Pulled Catcher-Only	541	636	632	325	525	807
Catcher-Processor Harvest Range	Confidential	37,947- 104,451	45,060- 63,914	5,573- 51,943	41,812- 129,038	27,403- 111,507

Table 9B. St. Matthew Blue King crab comparative average catches of catcher-processor vs. catcher-only vessels, 1990-1995. The 1995 catcher-processor information in this table is CONFIDENTIAL

			SEASON			
	1995	1994	1993	1992	1991	1990
Number of Catcher- Processor Vessels	1	6	3	8	9	7
Number of Catcher-only Vessels	89	87	89	166	59	24
Pounds of Catcher- Processor Harvest	54,270	352,069	165,625	191,801	740,687	447,320
Percent of Catcher- Processor Harvest	2.0	10.7	5.5	7.7	22.0	25.9
Average Catcher- Processor Harvest	54,270	58,678	55,208	23,975	82,298	63,903
Average Catcher- Only Harvest	34,964	39,221	31,846	13,749	44,600	53,251
Catcher-Processor Average CPUE	27	14	14	16	26	15
Catcher-Only Average CPUE	14	14	11	9	18	19
Total Harvest	3,166,093	3,764,262	2,999,921	2,474,080	3,372,066	1,725,349
Average # Pots Pulled Catcher-Processor	411	926	811	327	682	98:
Average # Pots Pulled Catcher-Only	541	636	632	325	525	80
Catcher-Processor Harvest Range	54,270	37,947- 104,451	45,060- 63,914	5,573- 51,943	41,812- 129,038	27,403 111,50

Table 10. Comparitive mid-point estimates, emergecy order projections and actual harvests for the St. Matthew blue king crab fishery, 1983-1995.

Year	Guideline Harvest Levels	GHL Mid-Point	Actual Harvest	Projected Harvest
1983	8.0	_	9.5	8.0
1984	2.0 - 4.0	3.00	3.8	4.0
1985	0.9 - 1.9	1.40	2.4	2.0
1986	0.2 - 0.5	0.30	1.0	1.0
1987	0.6 - 1.3	. 95	1.1	1.3
1988	0.7 - 1.5	-	1.3	1.5
1989	1.7	-	1.2	1.7
1990	1.9	-	1.7	1.9
1991	3.2	-	3.4	3.2
1992	3.1	-	2.5	3.1
1993	4.4	-	3.0	4.4
1994	3.0	_	3.8	3.0
1995	2.4	_	3.2	2.4

^aMillions of pounds.

^bDeadloss included.

ADAK RED KING CRAB

Introduction

Adak, Area R, is comprised of all continental shelf waters west of 171° West longitude, south of 55° 30' North latitude and east of the U.S. - Russian Convention Line of 1867 (Figure 1).

Historic Background

The Adak red king crab fishery began in 1961 when four vessels harvested two million pounds. As the fleet exploited previously un-fished areas, catches increased rapidly to a peak of 21 million pounds by the 1964/65 season (Table 1). For a short time the expanding Dutch Harbor king crab fishery diverted effort, and Area R catches dropped to 6 million pounds by the 1966/67 season.

From 1967/68 to the 1972/73 seasons, catches were relatively stable at 14 million to 19 million pounds (Table 1). The large catches were maintained by several years of strong recruitment and by the exploitation of populations discovered east of Adak Island. In addition to the eastward exploration, some vessels moved into the waters of the Petrel Banks, Amchitka Islands and other westward islands creating the separate Western Aleutians, Area S, fishery in 1967/68. The catch in Area S was not large, and in 1978 management was simplified by eliminating Area S to form the Petrel Bank and Western Aleutian Districts of Area R (Figure 2).

The harvest declined sharply after the 1972/73 season (Table 1). At the Alaska Board of Fisheries recommendation the department closed the fishery prior to the 1976/77 season. Since that time indications of recovery have been slight. ADF&G surveys conducted in 1975, 1976, and 1977 concluded that several years of poor recruitment to legal size was the cause of the decline. A shell disease and an unusually high natural mortality in the North Amlia District was also blamed for the decreased populations.

The harvest guideline for this fishery was set after the 1976/77 season at 1.0 to 1.5 million pounds. By regulation the season extends to February 15 unless closed earlier by emergency order. Three of the past 10 seasons have been closed prior to the February 15 regulatory closure (Table 2).

Historically the character of this fishery has been one of intermittent participation of low intensity. The majority of participants move into this fishery for short periods, normally prior to or following other major fisheries such as Bristol Bay red king crab or Bering Sea Tanner crab.

Onboard fisheries observers are currently only required on processing vessels (catcher processors and floating processors). Since imposition of these requirements in 1988 the number of processing vessels participating in this fishery have dropped from 11 vessels in 1988/89 to one vessel in the 1993/94

fishery (Table 2). As a result, very little information is available on fishery bycatch or in-season catch reports from the fishing grounds.

1994/95 Fishery

The Adak Area R red king crab fishery opened on November 1. The Adak brown king crab, Western Aleutians C. bairdi Tanner crab and the Bering Sea C. bairdi Tanner crab fisheries opened on November 1 also. The red king crab fishery in Bristol Bay, which normally opens on November 1, remained closed for the 1994 season due to insufficient female crab abundance. In the absence of a red king crab fishery in Bristol Bay and reductions in the amount of C. bairdi Tanner crab available for harvest in the Bering Sea, effort in the Adak king crab fisheries was expected to increase dramatically for the 1994/95 season.

As a result of this anticipated increase in effort, vessels intending to fish in the Adak king crab fishery (red or brown) were required to pre-register with the Alaska Department of Fish and Game no later than 4:30 p.m. October 14, 1994.

A total 93 vessels pre-registered to participate in the Adak red king crab fishery. Of these, 70 also pre-registered for the Adak brown king crab fishery. Pre-registration was required for all vessels intending to participate at anytime throughout the course of either the red or brown king crab fishery. Consequently, many vessels which did not intend to fish for king crab in the Adak area until after the Bering Sea *C. bairdi* fishery, also pre-registered.

A total of 29 vessels, including two catcher processors, received tank inspections for the red king crab fishery beginning 72 hours prior to the November 1 start of the fishery. Of these, 22 were also registered to harvest brown king crab. As in past years, tank inspections were available in Dutch Harbor only.

The department solicited volunteers for daily catch reporting in order to track in season harvest. This season's fishery was expected to progress quickly due to the relatively large number of participants. A total of 20 catcher vessels volunteered to report via single sideband radio or marine satellite (MARSAT) telex on a daily basis. In addition, the observers on board the two catcher processors were required to report daily.

Fishery performance for the first two weeks of the 1994/95 season averaged less than 1 crab per pot. This compares to an average catch in excess of 16 crab per pot for the first two weeks of the 1992/93 and 1993/94 seasons. Based on continued poor fishery performance, the fishery was closed after less than four weeks on November 28. At 27 days the 1994/95 season was the shortest on record (Table 2).

Total harvest for the 1994/95 season was 196,967 pounds, a dramatic decrease from the 698,077 pounds harvested during the 1993/94 season and well below the 1.5 million pound harvest guideline. A total of 20 vessels made 31 landings during the 1994/95 fishery, an increase over the 21 landings made by the 12 vessels which participated in the 1993/94 fishery (Table 1).

Daily observer radio reports indicated performance of the 1994/95 fishery at critically low levels. However, due to limited and inconsistent daily catch reporting on the part of volunteer catcher vessels (less than 25% of volunteer vessels reported daily), information sufficient to fully assess the performance of the fishery was not available until the third week of the season. This information was obtained from onboard observers, who reported daily, and processor's weekly catch reports.

The ex-vessel price of the 1994/95 fishery was \$5.50 per pound, up from the prior season value of \$3.87 per pound and the highest ex-vessel price on record for Adak red king crab. Total ex-vessel value for the 1994/95 fishery was 1.1 million dollars, approximately 41% of the value of the 1993/94 fishery (Table 2). The high ex-vessel price for the 1994/95 fishery is largely attributed to the absence of a red king crab fishery in Bristol Bay for the 1994/95 season.

Catches once again came exclusively from the Petrel Bank District around Semisopochnoi Island (Figure 2). Average weight of crab harvested during the 1994/95 fishery was 6.5 pounds; considerable higher than the prior season average of 5.8 pounds. The 1994/95 season average weight is the highest average weight since the 1984/85 season and may reflect a relative decline in recruit crab abundance (Table 1).

1995/96 Fishery

The 1995/96 Adak red king crab fishery opened on November 1. A total of 10 vessels obtained observers and received tank inspections. This fishery, which has a regulatory closure date of February 15, is on-going at this time. To date a total of 36,344 pounds have been landed in 11 deliveries. Catches have averaged approximately 2 crab per pot, similar to the low catches observed in the 1994/95 season (Table 1).

Weekly observer reports indicate very little effort is being directed at red king crab. At this time all vessels registered for this fishery are also registered for, and targeting on, Adak brown king crab. To date observers have collected pot samples on 62 pots directed at red king crab and approximately 4,000 directed at brown king crab.

To provide observers an opportunity to collect additional information on red king crab in the Adak area, the season may remain open until the regulatory closure on February 15, 1996.

Stock Status

Adak king crab stocks have not been surveyed since 1977. Observer coverage on all processing vessels on the fishing grounds since 1988 has provided some biological information on these stocks. However, the number of observers onboard catcher processors has declined since 1988 (Table 2). Consequently, in recent years little biological information has been available on Adak red king crab. With implementation of observer coverage on all vessels, beginning with the 1995/96 season, information necessary to properly assess and manage Adak red king crab can be collected.

Compared to historic levels, the population appears to be severely depressed. For the past several years the catch has come almost exclusively from the area around Semisopochnoi Island in the Petrel Banks District (Figure 2 and Table 3).

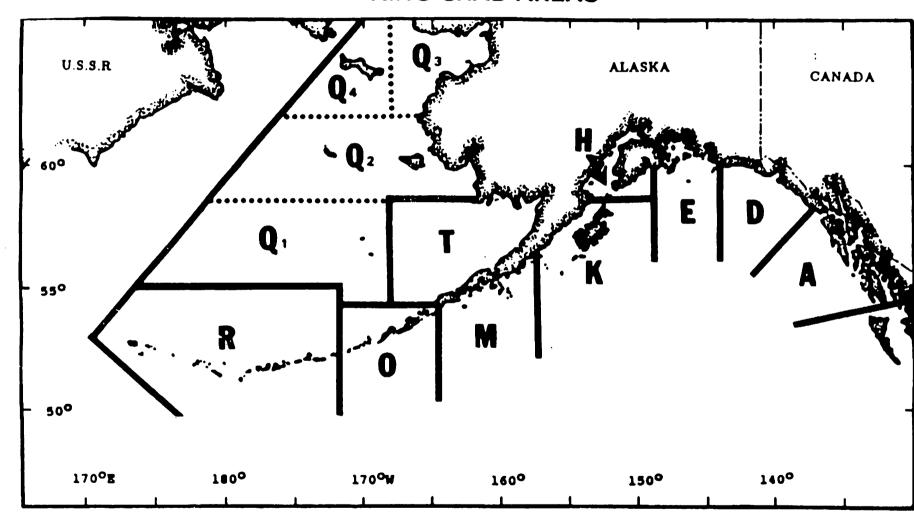


Figure 1. Adak, Area R, king crab area.

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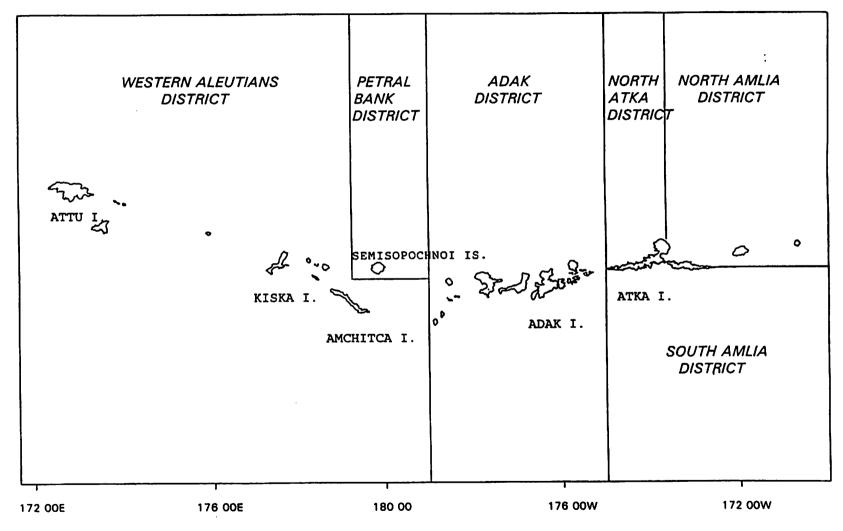


Figure 2. Adak, Area R, king crab districts.

Table 1. Adak, Area R, historic red king crab catch statistics, 1960/61-1995/96.

	Numbe		of		Pots		Percent	Avo	rage	
Season ————	Vessels	Landing	s Crab	Harvest*'	Pulled	CPUE°	Recruits	Weight ^b	Length ^d	Deadloss
1960/61	4	41	NA	2,074,000	NA	9	NA	NA NA	NA.	NA NA
1961/62	8	218	NA	6,114,000	NA	NA	NA	NA	NA	NA NA
1962/63	9	248	NA	8,006,000	NA	NA	NA	NA	NA	NA.
1963/64	11	527	NA	17,904,000	NA	NA	NA	NA	NA	NA
1964/65	18	442	NA	21,193,000	NA	NA	NA	NA	NA	NA
1965/66	10	431	NA	12,915,000	NA	NA	NA	NA	NA	NA
1966/67	10	90	NA	5,883,000	NA	NA	NA	NA	NA.	NA
1967/68	22	505	NA	14,131,000	NA	NA	NA	NA	NA	NA NA
1968/69	30		NA	16,100,000	NA	NA	NA	NA	NA	NA NA
1969/70	33	435	NA	18,016,000	115,929	NA	NA	6.5	NA	NA NA
1970/71	35	378	NA	16,057,000	124,235	NA	NA	NA	NA	NA NA
1971/72	40	166	NA	15,475,924	46,011	NA	NA	NA	NA	NA NA
1972/73	43	313	3,461,025	18,724,144	81,133	43	50.9	5.4	NA	NA NA
1973/74	41	239	1,844,974	9,741,464	70,059	26	48.5	5.3	148.6	NA NA
1974/75	36	97	532,298	2,774,963	32,620	16	48.6	5.2	148.6	NA NA
L975/76	20	25	79,977	411,583	8,331	10	67.5	5.2	147.2	NA NA
1976/77				C 1	osed					MA
L977/78	12	18	160,343	905,527	7,269	22	43.9	5.7	152.2	NA
1978/79	13	27	149,491	807,195	13,948	11	56.7	5.4	NA	1,170
.979/80	18	23	82,250	467,229	9,757	8	42.8	5.7	152.0	24,850
980/81	17	52	254,390	1,419,513	20,914	12	65.2	5.6	149.0	54,360
.981/82	46	106	291,311	1,648,926	40,697	7	55.5	5.7	148.3	8,759

-Continued-

Table 1. (page 2 of 2)

Deadloss	rage : Length	Ave	Percent Recruits	CPUE°	Pots Pulled	Harvest ^{a,b}	Crab*	Number of Landings	Vessels	Season
			<u> </u>							
7,855	150.8	6.0	49.9	4	66,893	1,701,818	284,787	191	72	1982/83
3,833	157.3	6.6	30.4	5	60,840	1,981,579	298,948	248	106	1983/84
0	155.1	6.6	31.4	4	50,685	1,367,672	206,751	113	64	1984/85
6,120	152.2	5.6	40.0	5	32,478	906,293	162,271	89	35	1985/86
500	NA	5.6	NA	4	29,189	712,243	126,146	69	33	1986/87
6,900	148.5	5.7	65.3	5	43,433	1,213,933	211,712	109	71	1987/88
557	153.1	5.9	39.0	4	64,374	1,567,314	266,053	156	73	1988/89
759	NA	5.7	NA	4	54,513	1,118,566	196,070	123	56	1989/90
0	NA	5.6	NA	14	10,674	828,105	146,903	34	7	1990/91
0	NA	5.7	NA	10	16,636	951,278	165,356	35	10	1991/92
5,000	NA	6.0	NA	13	16,129	1,286,424	218,049	30	12	1992/93
7,402	NA	5.8	NA	9	13,575	698,077	119,330	21	12	1993/94
1,430	NA	6.5	NA	2	18,146	196,967	30,337	31	20	1994/95
213	NA	7.1	NA	2	NA	36,344	NA	11	10	1995/96°

^{*}Includes deadloss.

bIn pounds.
Defined as catch per pot pull.
In millimeters.

Preliminary data, fishery ongoing.

Table 2. Historic Adak red king crab economic performance, 1980/81-1995/96

	Season	Number			Number o		Valu		<u>Season Length</u>	
Year ————	Total*	Vessels	CP'S	Landings	Registered	Pulled	Exvessel	Total	(Days)	Dates
1980/81	1.4	17	N/A	52	2,471	20,914	\$ 0.92	\$ 1.3	(72)	01/15-03/2
1981/82	1.6	46	N/A	106	8,698	40,697	\$ 2.01	\$ 3.2	(107)	11/01-02/1
1982/83	1.7	72	N/A	191	13,111	66,893	\$ 3.44	\$ 5.9	(76)	11/01-01/1
1983/84	2.0	106	N/A	248	19,407	60,840	\$ 3.43	\$ 6.9	(340)	01/10-12/1
1984/85	1.4	64	N/A	113	8,876	50,685	\$ 2.10	\$ 2.9	(97)	11/10-02/1
1985/86	. 9	35	N/A	89	8,274	32,478	\$ 2.15	\$ 1.9	(107)	11/01-02/1
1986/87	.7	33	N/A	69	12,958	29,189	\$ 3.85	\$ 2.7	(107)	11/01-02/1
1987/88	1.2	71	N/A	109	17,720	43,433	\$ 4.00	\$ 4.8	(107)	11/01-02/1
1988/89	1.6	73	11	156	23,927	64,374	\$ 5.00	\$ 8.0	(34)	11/01-12/0
1989/90	1.1	56	10	123	19,363	54,513	\$ 4.20	\$ 4.6	(107)	11/01-02/1
1990/91	.7	7	4	34	8,500	10,674	\$ 4.00	\$ 2.8	(107)	11/01-02/1
1991/92	. 9	10	3	35	2,305	16,636	\$ 3.00	\$ 2.9	(107)	11/01-02/1
1992/93	1.3	12	2	30	2,716 ^d	16,129	\$ 5.05	\$ 6.5	(76)	11/01-01/1
1993/94	.7	12	1	21	3,948	13,575	\$ 3.87	\$ 2.7	(107)	11/01-02/1
1994/95	. 2	20	2	31	4,065	18,146	\$ 5.50	\$ 1.1	(27)	11/01-11/2
1995/96	t	10	1	11	NA	NA	\$ 2.70	\$ 0.1		11/01-

^{*}Millions of pounds.

b Includes catcher-processors.

^{&#}x27;Millions of dollars.

^dIncludes gear of vessels landing both red and brown king crab.

Preliminary data, fishery ongoing.

¹36,344 pounds.

Table 3. 1994/95 Adak red king crab catch by statistical area.

Stat Area	Numbe	cr of Crab	Harvest*.b	Pots Pulled	Average Weight ^b	CPUE°	Dead- loss
795200	19	11,985	79,831	6,489	6.7	2	442
805131	6	4,257	28,042	1,067	6.6	4	121
805132	4	1,727	11,288	330	6.5	5	71
805201	24	10,133	63,571	7,711	6.3	1	727
815131	3	607	4,158	232	6.9	3	ϵ
815202	3	168	1,138	200	6.8	1	ϵ
Other	14	1,460	8,939	2,117	6.1	1	57
Total	31	30,337	196,967	18,146	6.5	2	1,430

^{*}Deadloss included.

bIn pounds.
Consider the policy of the polic

Table 4. 1994/95 Adak red king crab catch statistics by month.

Month	Vessels	Number o		Harvest ^{a.b}	Pots Pulled	Average Weight ^b	CPUE	Dead- loss
Nov	20	31	30,337	196,967	18,146	6.5	2	1,430
Total	20	31	30,337	196,967	18,146	6.5	2	1,430

^{*}Deadloss included.

^bIn pounds.
^cDefined as catch per pot pull.

Table 5.Adak Area 'R' red king crab harvest composition by fishing season, 1960/61-1995/96.2

		son	Harvest	Size	Price
Season	Opened	Closed	In Pounds ^b	Limit [°]	Per Lb
1960/61	01/01	12/31	2,074,000	<u>-</u>	N/A
1961/62	01/01	12/31	6,114,000	-	N/A
1962/63	01/01	12/31	8,006,000	-	N/A
1963/64	01/01	12/31	17,904,000	-	N/A
1964/65	01/01	12/31	21,193,000	-	N/A
1965/66	01/01	12/31	12,915,000	6.5"	N/A
1966/67	01/01	12/31	5,883,000	6.5"	N/A
1967/68 ⁴	01/01	12/31	14,131,000	6.5"	N/A
1968/69	·	03/15	16,100,000	7.0"	N/A
1969/70	09/15	01/15	18,016,000	7.0"	N/A
1970/71	11/01	03/31	6,057,000	7.0"	N/A
1971/72	11/01	12/16	15,475,924	6.5"	N/A
1972/73°	11/01	02/17	18,724,144	6.5"	N/A
1973/74	11/01	02/26	9,741,464	6.5"	N/A
1974/75	01/10	03/05	2,774,963	6.5"	.35
1975/76	11/01	12/18	411,583	6.5"	.38
1976/77		•	OSED		
1977/78	02/20	03/20	905,527	6.5"	1.36
1978/79	02/21	03/29	807,195	6.5"	1.23
1979/80	01/15	04/01	467,229	6.5"	. 68
1980/81	01/15	03/28	1,419,513	6.5"	. 92
1981/82	11/01	02/15	1,648,926	6.5"	2.01
1982/83	11/01	01/15	1,701,818	6.5"	3.44
1983/84	11/10	12/16	1,981,579	6.5"	3.43
1984/85	11/10	02/15	1,367,672	6.5"	2.10
1985/86	11/01	02/15	906,293	6.5"	2.15
1986/87	11/01	02/15	712,243	6.5"	3.85
1987/88	11/01	02/15	1,213,933	6.5"	4.00
1988/89	11/01	12/04	1,567,314	6.5"	5.00
1989/90	11/01	02/15	1,118,566	6.5"	4.20
1990/91	11/01	02/15	828,105	6.5"	4.00
1991/92	11/01	02/15	951,278	6.5"	3.00
1992/93	11/01	01/15	1,286,424	6.5"	5.05
1993/94	11/01	02/15	698,077	6.5"	NA.
1994/95	11/01	11/28	196,965	6.5"	5.50
1995/96°	11/01	NA	36,344	6.5"	2.70

^{*}Includes catch from former Area 'S' now Western Aleutian District Area 'R'.

^bIncludes deadloss.

^cCarapace width in inches.

^dArea 'S' fishery began.

^cArea 'S' continued until June.

^{&#}x27;Area 'S' eliminated - added to Area 'R'.

⁸Preliminary data, fishery ongoing.

ADAK BROWN KING CRAB

Introduction

Adak, Area R, has as its eastern boundary 171° West longitude, as its western boundary the U.S./Russian Convention Line of 1867, and as its northern boundary 55°30' North latitude (Figure 1).

Historic Background

The Adak brown king crab fishery began during the 1975/76 season when one vessel made one delivery containing this species. Occurring incidentally to the red king crab fishery, catches of brown crab were low during the 1975/76 to 1980/81 seasons (Table 1).

Fishermen began to target on brown king crab for the first time during the 1981/82 season when 14 vessels made 76 landings totaling 1.2 million pounds (Table 1). When this fishery began, most of the catch came from the North Amlia and Petrel Bank Districts. Recently the Western Aleutian District has become a significant producer as well (Figure 2). The other three districts in Area R produce much lower catches. This is due to the lack of large inter-island passes where brown king crab are most numerous. In July 1985, the minimum legal size was reduced from 6.5 to 6.0 inches across the carapace (Table 2).

1994/95 Fishery

The 1994/95 Adak brown king crab fishery opened on November 1, concurrent with red king and Tanner crab fisheries in that area. As outlined in the section on Adak red king crab, pre-season registration for the Area R brown king crab fishery was required for the 1994/95 season due to anticipated high levels of participation.

A total of 88 vessels pre-registered to fish for Adak brown king crab. Of those, 27 catcher and 2 catcher processor vessels received tank inspections and entered the fishery on November 1. Of the 29 vessels receiving tank inspections for Adak brown crab, 22 were also registered to participate in the Adak red king crab fishery. One floating processor registered and processed both red and brown crab on the grounds during the season.

A total of 34 vessels registered to fish Adak brown king crab during the 1994/95 season, similar to the 21 vessels registered for the prior year's fishery. A total of 247 landings were made in 1994/95 for a total harvest of 6.4 million pounds. This compares to 147 landings and a harvest of 4.6 million pounds recorded during the 1993/94 fishery (Table 1).

Average weight of crab harvested during the 1994/95 season was 4.1 pounds. This is similar to the 4.2 pound average seen in the 1993/94 fishery. For the second consecutive year there was a significant

increase in the number of pots pulled; 165,503 in 1992/93, 212,164 in 1993/94, and 319,006 in 1994/95. Catch per pot during the 1994/95 season was at a record low of 5 crabs per pot (Table 1).

Average price paid for Adak brown king crab for the 1994/95 season was \$3.33 per pound. This is higher than the \$2.50 average price paid during the 1993/94 season. Total fishery value for the 1994/95 season was 20.3 million, approximately \$10 million greater than the prior year (Table 3).

Although effort occurred throughout the entire registration area during the 1994/95 fishery (Table 4), the majority of the catch came from the Amukta and Seguam Pass areas in the eastern portion of the registration area. Additional harvest was reported from the western portion of the registration area in the Petrel Bank, around Semisopochnoi Island, in waters between Kiska and Attu Islands, and as far west as the Stalemate Bank northwest of Attu (Figure 2). The majority of effort for the 1994/95 season took place during April through August 15 (Table 5). Unlike previous years, a greater effort was seen throughout November to January than in previous years due to the closure of the Bristol Bay red king crab fishery that usually opens November 1.

1995/96 Fishery

The 1995/96 Adak brown king crab fishery opened on November 1. A total of 11 vessels obtained observers and received tank inspections. This fishery, which has a regulatory closure date of August 15, is on-going at this time. To date a total of 928,848 pounds have been landed in 28 deliveries. Catches have averaged approximately 4 crab per pot, slightly lower than the 5 crab per pot average observed in the 1994/95 fishery (Table 1).

Weekly observer reports indicate most vessels ceased operation for the holiday season. A significant portion of the effort in this fishery is expected to shift into the snow crab fishery in the Bering Sea, which opens on January 15. A major shift of effort back to the Adak brown king crab fishery is expected at the close of the snow crab fishery in late February or early March. To date observers, assigned to all vessels participating in this fishery, have examined the contents of approximately 4,000 pots directed at brown king crab.

Status of Stocks

The Adak brown king crab stocks were surveyed in a small portion of this area in 1991. No population estimates are available for this area as a result of stock assessment surveys. The fishery is managed based on size, sex and season. No harvest guideline is in effect for this fishery at this time.

Limited additional information has being collected through onboard fisheries observers, required on all processing vessels in this area since 1988. However, the number of catcher processors participating in this fishery has steadily declined (Table 3). As a result of this reduction in the number of vessels carrying observers in recent years, and the corresponding lack of biological information being collected from this area which is not regularly surveyed, the Board of Fisheries implemented regulation requiring observers on all vessels beginning with the November 1 start up of the 1995/96 Adak brown king crab fishery. Information on the size, sex and species composition of both the retained and non-retained

catch will yield area-specific information which can be used to estimate population abundance and development management measures necessary to maintain the long term health of this stock.

Figure 1. Adak, Area R, king crab area.

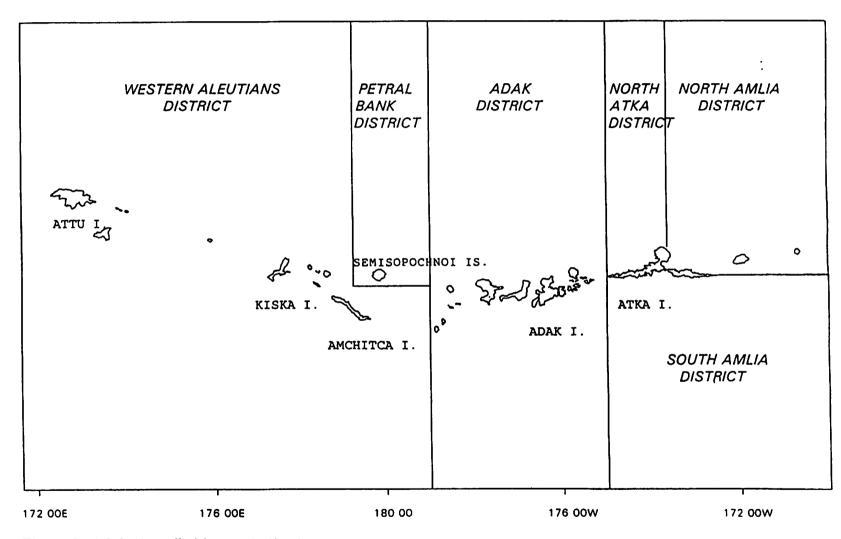


Figure 2. Adak, Area R, king crab districts.

Table 1. Adak, Area R, historic brown king crab catch statistics, 1975/76-1995/96.

		Number of			Pots	Average		
Season	Vessels	Landings	Crab ^a	Harvest ^{a,b}	Pulled	Weight ^b	CPUE ^c	Deadlossb
1975/76			CON	FIDENT	IAL			
1976/77			CON	F I D E N T	IAL			
1977/78			CON	F I D E N T	IAL			
1978/79			NO REI	PORTED	САТСН			
1979/80			CON	F I D E N T	I A L			
1980/81	4	4	11,523	58,914	700	5.1	17	5,000
1981/82	14	76	217,700	1,194,046	24,627	5.5	9	22,06
1982/83	99	501	1,509,001	8,006,274	150,103	5.3	10	220,743
1983/84	157	1,002	1,534,909	8,128,029	226,798	5.3	7	171,02
1984/85	38	85	643,597	3,180,095	64,777	4.9	10	125,07
1985/86°	49	386	2,052,048	11,124,759	202,401	4.5	12	5,30
1986/87	62	525	2,923,947	12,798,004	392,185	4.4	7	276,73
1987/88	46	386	1,908,989	8,001,177	267,705	4.2	7	165,419
1988/89	74	455	2,165,508	9,080,196	280,732	4.2	8	122,25
1989/90	64	505	2,520,786	10,162,400	324,153	4.0	8	100,72
1990/91°	13	167	1,312,116	5,250,687	160,960	4.0	8	176,583
1991/92	16	206	1,511,751	6,254,409	192,949	4.1	8	96,848
1992/93	18	130	1,198,169	4,916,149	165,503	4.1	7	104,21
1993/94	21	147	1,393,742	4,635,683	212,164	4.2	6	165,35
1994/95	34	247	1,539,866	6,378,030	319,006	4.1	5	242,06
1995/96 ^f	11	28		928,848		4.4	4	

^aDeadloss included.

^bIn pounds.

^cDefined as catch per pot pull.
^dSize limit reduced from 6.5 to 6 inches.

^ePartial closure August 7. ^fPreliminary data, fishery ongoing.

Table 2. Adak brown king crab harvest composition by fishing seasons, 1975/76-1994/95.

	Seas	on		Percent	Average	Minimum
Season	··Opened	Closed	Harvest ^{a,b}	New Shell	Length ^c	Size ^d
1975/76	11/01	12/18	25,490	NA	NA	6.5
1976/77	01/07	04/15	2,285	NA	NA	6.5
1977/78	02/20	03/20	47,445	NA	NA	6.5
1978/79	02/21	10/01	0	NA	NA	6.5
1979/80	01/15	04/01	23,485	NA	NA	6.5
1980/81	01/15	03/28	58,914	97.6	158.4	6.5
1981/82	11/01	06/15	1,194,046	90.5	159.6	6.5
1982/83	11/01	04/15	8,006,274	92.4	158.2	6.5
1983/84	11/10	04/15	8,128,029	87.8	NA	6.5
1984/85	11/10	07/08	3,180,095	87.5	156.7	6.5
1985/86	11/01	08/15	11,124,759	86.3	151.3	6.0
1986/87	11/01	08/15	12,798,004	69.1	149.5	6.0
1987/88	11/01	08/15	8,001,177	91.7	146.9	6.0
1988/89	11/01	08/15	9,080,196	91.2	149.1	6.0
1989/90	11/01	08/15	10,162,400	95.3	148.5	6.0
1990/91°	11/01	08/15	5,250,687	91.5	144.5	6.0
1991/92	11/01	08/15	6,254,409	94.4	144.7	6.0
1992/93	11/01	08/15	4,916,149	93.5	147.0	6.0
1993/94	11/01	08/15	4,635,683	95.4	147.8	6.0
1994/95	11/01	08/15	6,378,030	92.9	149.5	6.0

^aDeadloss included.

^bIn pounds.

^cIn millimeters.

^dCarapace width in inches.

Partial closure August 7.

Table 3. Historic Adak brown king crab economic performance, 1980/81-1995/96

	Season		Numb	er of	Number	of Pots	v	alue	Season Length
Year	Total ^a	Vessels ^b	CP's	Landings	Registered	Pulled	Exvessel	Total ^d	(Days) Dates
1980/81	0.05	4	N/A	4	581	700	\$ 0.90	\$ 0.05	(72) 01/15-3/28
1981/82	1.2	14	N/A	76	2,647	24,627	\$ 2.06	\$ 2.5	(227) 11/01-6/15
1982/83	7.8	99	N/A	501	13,111	150,103	\$ 3.01	\$23.5	(166) 11/01-4/15
1983/84	8.0	157	N/A	1,002	17,406	226,798	\$ 2.92	\$23.4	(157) 11/10-4/15
1984/85	3.1	38	N/A	85	5,270	64,777	\$ 2.00	\$ 6.2	(240) 11/10-7/08
1985/86	11.1	49	N/A	386	7,057	202,401	\$ 2.50	\$27.8	(288) 11/01-8/15
1986/87	12.5	62 .	N/A	325	12,958	392,185	\$ 3.00	\$37.5	(288) 11/01-8/15
1987/88	7.8	46	N/A	386	10,687	267,705	\$ 3.00	\$23.4	(289) 11/01-8/15
1988/89	9.0	74	13	455	23,627	280,732	\$ 3.20	\$28.8	(288) 11/01-8/15
1989/90	10.1	64	15	505	14,724	324,153	\$ 3.00	\$30.3	(288) 11/01-8/15
1990/91	5.3	13	6	167	7,380	160,960	\$ 3.00	\$15.9	(288) 11/01-8/15
1991/92	6.1	16	7	206	7,635°	192,949	\$ 2.50	\$15.2	(289) 11/01-8/15
1992/93	4.9	18	4	130	8,236	165,503	\$ 2.05	\$10.1	(288) 11/01-8/15
1993/94	4.6	21	1	147	11,970	212,164	\$ 2.50	\$11.2	(288) 11/01-8/15
1994/95	6.1	34	2	247	15,604	319,006	\$ 3.33	\$20.3	(288) 11/01-8/15
1995/96 ^f	. 9	11	2	28		NA	\$ 1.98	\$ 1.8	11/01-Present

^aMillions of pounds, deadloss not included. ^bIncludes catcher-processors. ^cNo separate registration from red king crab.

^dMillions of dollars.

Gear directed fishing on brown king crab. Preliminary data, fishery ongoing.

Table 4. 1994/95 Adak brown king crab catch by statistical area.

Dead-		Average	Pots	a h	of	Number	Stat.
loss	CPUE	Weight	Pulled	Harvest*.b	Crab*	Landings	Area
3,347	11	3.8	2,328	97,712	25,363	4	715130
950	8	3.8	940	27,139	7,148	3	715201
32,162	8	4.0	17,192	573,124	143,269	30	715202
24,754	8 -	4.0	23,341	724,930	182,894	34	715231
11,381	5	4.0	5,240	111,462	27,522	8	715232
971	6	4.7	2,256	62,848	13,331	4	725130
19,871	6	4.1	20,046	507,346	123,022	27	725201
206	3	4.4	7,700	106,477	24,435	6	725203
14,554	5	4.0	21,324	454,620	115,912	19	725230
4,717	4	4.0	4,962	79,416	19,569	9	735201
5,902	3	4.0	11,459	155,391	39,224	15	735230
2,739	3	4.8	5,531	77,186	16,072	8	745131
517	6	4.3	588	16,282	3,751	3	745206
440	5	4.4	2,898	57,672	13,143	3	765100
27	4	4.5	273	5,184	1,160	3	765203
355	1	4.1	1,566	5,406	1,335	4	775131
1,155	5	4.4	1,507	30,754	6,961	5	775133
849	5	4.4	622	13,581	3,106	3	775134
1,012	4	4.2	1,477	22,164	5,223	6	775135
914	6	4.2	637	15,117	3,591	4	775136
156	6	4.1	545	12,542	3,046	3	785101
760	3	4.0	5,165	70,633	17,179	16	785102
1,064	5	4.4	1,465	33,083	7,549	7	785103
14,616	2	4.4	19,587	192,724	44,089	24	785131
1,727	5	4.3	2,999	64,275	15,110	13	785135
728	6	4.1	502	12`827	3,108	3	795101
2,786	3	4.0	2,492	31,167	7,797	9	795102
728	4	4.0	1,925	33,776	7,959	8	795131
11,327	7	4.0	8,933	234,078	57,792	16	795132
380	4	4.0	4,106	76,216	17,395	28	795200
212	5	4.3	2,019	43,428	9,967	15	795230
938	9	4.2	2,080	76,099	18,111	25	805103
133	13	4.1	377	20,701	5,069	8	805131
72:	9	4.0	8,363	313,901	74,930	29	805132

(Continued)

Table 4. (Page 2 of 2)

Stat.	Numbe	r of		Pots	Average		Dead-
Area	Landings	Crab*	Harvest*.b	Pulled	Weight	CPUE°	loss
805201	 32	30,312	126,562	4,664	4.0	7	6,152
805400	6	18,918	72,747	6,906	4.0	3	4,930
815100	11	4,631	19,566	621	4.0	8	29
815131	20	19,133	78,710	2,270	4.1	8	41
825132	10	5,149	24,925	2,525	4.8	2	667
825201	15	24,634	114,405	6,389	4.6	4	2,291
825202	4	5,873	26,107	1,381	4.5	4	1,600
835130	15	16,101	74,377	5,655	4.6	3	1,911
835200	28	64,385	299,460	19,699	4.7	3	13,842
845130	13	21,331	93,320	7,531	4.4	3	13,788
845202	25	65,083	271,780	19,410	4.2	3	11,248
855200	13	40,578	162,503	11,484	4.0	4	5,954
855231	4	18,938	68,709	3,376	4.0	6	3,452
865203	7	16,099	62,434	2,560	3.9	6	2,513
865231	3	8,568	33,928	1,114	4.0	8	804
875232	5	23,964	109,518	8,102	5.0	3	2,781
Others ^d	39	65,752	280,059	15,302	4.3	4	9,499
TOTAL	247	1,539,866	6,378,030	319,006	4.1	5	242,065

^aDeadloss included.
^bIn Pounds.
^cDefined as catch per pot pull.
^d 28 statistical areas.

Table 5. 1994/95 Adak brown king crab catch statistics by month.

		Number of	: 		Pots	Average	_	Dead-
Month	Vessels	Landings	Crab	Harvest ^{a.b}	Pulled	Weight ^b	CPUE	loss°
	19	24	101,434	440,611	21,81	1 4.3	4.5	16,575
Nov Dec	17	28	170,463	719,877	28,69		5.5	48,329
Jan	9	15	105,248	424,267	15,07	7 4.0	7.0	4,330
Feb	5	8	67,158	291,542	11,37	B 4.3	5.5	48,329
Mar	9	11	83,571	339,387	13,55	5 4.0	6.0	13,267
Apr	18	31	170,332	709,260	49,29	8 4.2	3.5	17,979
May	23	41	261,873	1,066,258	51,27	0 4.1	4.9	43,197
Jun	20	31	214,877	878,772	44,34	2 4.1	4.8	30,290
Jul	18	37	242,615	997,643	54,06	6 4.1	4.4	33,607
Aug	15	21	122,359	510,413	29,71	7 4.2	4.0	15,791
TOTAL	34	247	1,539,866	6,378,038	319,00	6 4.1	4.7	242,065

^aDeadloss included. ^bIn pounds. ^cDefinéd as catch per pot pull.

BERING SEA DISTRICT TANNER CRAB

Introduction

The Bering Sea District of Statistical Area J includes all waters of the Bering Sea north of the latitude of Cape Sarichef and east of the U.S.-Russian Convention Line of 1867. This district is divided into the Eastern and Western Subdistricts, east and west of 173° West Longitude, respectively (Figure 1). The Eastern Subdistrict is further divided into the Norton Sound and General Sections. Two Tanner crab species, *Chionoecetes bairdi* and *C. opilio*, are commercially harvested in the Bering Sea District.

C. bairdi Tanner crab

Historic Background

The first reported Tanner crab catches were made in 1968 incidental to the king crab fishery. In 1974 a directed *C. bairdi* crab fishery began. During the fall Board of Fisheries meeting in 1978, the National Marine Fisheries Service (NMFS) estimated as much as a 50% decline in *C. bairdi* stocks could be expected during the 1978/79 fishing season, and that the stock would continue to decline for several years. As predicted, the *C. bairdi* stocks showed a sharp decline. Catches decreased from 29.7 million pounds 1981, to 5.3 million pounds in 1983, to a total closure of the *C. bairdi* fishery in 1986 (Table 1).

Although prices have remained high for *C. bairdi*, fishing effort has decreased as the stock abundance decreased. The harvest of *C. bairdi* has been primarily from the Southeastern Subdistrict (now the Eastern Subdistrict). The historic catch of *C. bairdi*, by subdistrict and season, is summarized in Table 4.

During their Spring 1992 meeting, the Alaska Board of Fisheries passed regulations which set a 250 pot limit on all vessels fishing king and Tanner crab in the Bering Sea. The pot limits, which were to be applied through a buoy sticker program, were implemented to assist in-season management of the fisheries and to reduce the potential for pot loss.

On November 10, 1992 buoy sticker requirements were suspended due to a high failure rate of the stickers adhering properly to buoys. Despite suspension of the buoy sticker requirement, the 250 pot limit remained in effect until repealed by the National Marine Fisheries Service (NMFS) on November 30. This action by NMFS was due to perceived inconsistencies with provisions of the Bering Sea/Aleutian Island king and Tanner crab Federal Management Plan (FMP) which mandated application of pot limits in a nondiscriminatory manner.

During the Spring 1993 Board of Fisheries meeting regulations were adopted which opened and closed that portion of the Bering Sea east of 168° West longitude to fishing for *C. bairdi* Tanner crab concurrent to the regulatory opening and emergency order closure of Area T red king crab. The Board of Fisheries also mandated a reopening of the Bering Sea between 163° and 173° West longitude for

the C. Bairdi fishery 10 days following the closure of Area T king crab. This action by the Board of Fisheries was based on observer bycatch data and historic harvest patterns which indicated the majority of female king crab bycatch in the Bering Sea king and Tanner crab fisheries came from waters east of 163° West longitude.

In an attempt to reduce the number of pots, thereby slowing the harvest rate to allow sufficient time for in-season management, the board also passed regulations which set pot limits on all vessels fishing king and Tanner crab in the Bering Sea based on vessel overall length. Vessels in excess of 125 feet are limited to 250 pots and vessels 125 feet or less are limited to 200 pots.

The Bristol Bay red king crab fishery failed to open for the 1994 season, the first such closure since 1983. As a result, *C. bairdi* fishermen were limited to a harvest guideline of 7.5 million pounds in that portion of the Eastern Bering Sea west of 163° West Longitude.

1995 Fishery

The 1995 Bering Sea C. Bairdi Tanner crab fishery opened by regulation at 12:00 noon, November 1. For the second consecutive year the red king crab fishery in the Bristol Bay portion of the Bering Sea failed to open. As a result, only that portion of the Eastern Subdistrict west of 163° West longitude was open fishing for C. bairdi Tanner crab. The guideline harvest level (GHL) for the area open to fishing was 5.5 million pounds.

Tank inspections began on October 31, in Dutch Harbor, Akutan, King Cove, and St. Paul. A total of 196 vessels, including 11 catcher-processors, registered for the fishery. One floating processor also registered for on-the-grounds processing. This compares to a total of 183 vessels (including 9 catcher processors) which registered and participated in last year's fishery, which was also limited to that portion of the Eastern Subdistrict west of 163° West longitude.

Despite ideal weather conditions throughout the course of the 1995 fishery, fishermen managed to harvest only 4.2 million pounds of the 5.5 million pound GHL in a 16 day season which was closed by emergency order at 12:00 noon on November 16. A total of 256 landings were made to processors in the Pribilof Islands, Akutan, Dutch Harbor, King Cove and to the one floating processor operating in Akutan Bay. Included in the total landings were 25 vessels which checked out of the Bering Sea and delivered to processors in Kodiak at the close of the season.

Daily in-season catch reports received from 61 volunteer catcher vessels and all 11 catcher processors indicated the fleet-wide catch declined from 10 crab per pot in the opening days of the fishery to less than 6 crabs per pot on November 13, when the fishery closure was announced. Overall fleet-wide performance for the 1995 fishery was 8 crab per pot. This compares to a 13 crab per pot average for the prior 3 seasons (Table 1).

Average weight of *C. bairdi* Tanner crab harvested during the 1995 season was 2.3 pounds, identical to the prior three seasons (Table 2). The ex-vessel price paid for *C.* bairdi in 1995 was \$2.80 per pound for a total fishery value of \$11.7 million. This compares to an ex-vessel value of \$3.75 per pound and a total fishery value of \$28.5 million for the 1994 season (Table 3).

The majority of the 1995 harvest of *C. bairdi* came from the southwest portion of the Eastern Subdistrict immediately west of 163° West Longitude. A less significant portion of the catch came from waters southwest of the Pribilof Islands (Table 6).

Stock Status

The 1995 NMFS survey indicated the estimated total abundance of large C. bairdi crabs has continued to decline. According to NMFS this decrease is expected to continue and is a result of senescence of the crabs which constituted strong year classes hatched in 1983 and 1984. At this time there is no evidence that significant recruitment to this stock will take place in the near future.

C. opilio Tanner crab

Historic Background

The first reported landings of *C. opilio* Tanner crab were made during the 1977/78 season incidental to *C. bairdi*. A reduction in *C. bairdi* stocks resulted in declines in the commercial harvests from 29.7 million pounds 1981, to 5.3 million pounds in 1983, to a total closure of the *C. bairdi* fishery in 1986 (Table 1). As a result the harvest of *C. opilio* increased from 52.7 million pounds in 1981 to 97.9 million pounds in 1986 to a high of 328.6 million pounds in 1991 (Table 7).

1995 Fishery

The 1995 Bering Sea *C. opilio* fishery opened by regulation at 12:00 noon on January 15. A total of 253 vessels made 869 deliveries for a season harvest of 75.3 million pounds. A total of 506,802 pots were reported pulled throughout the course of the fishery (Table 7 and 8).

The pre-season guideline harvest level (GHL) for the 1995 season was 55.7 million pounds, based on male crab 4 inches and larger (carapace width). This was a 47% decrease from last season. This year's GHL was divided between the Eastern and Western Subdistricts; 25.0 and 30.7 million pounds, respectively. The 1994 GHL mid-point of 105.8 million pounds was divided between the Eastern and Western Subdistricts; 51.6 and 54.2 million pounds respectively.

For the 1995 season tank inspections were conducted by ADF&G staff at St. Paul, King Cove, Akutan, and Dutch Harbor beginning at 12:00 noon on January 14. The majority of vessels received inspections in St. Paul (148 vessels), followed by Dutch Harbor (80 vessels), Akutan (18 vessels) and King Cove (9 vessels). A total 255 vessels, including 19 catcher processors, registered and given tank inspections. An additional 15 floating processor vessels were also registered for on-the-grounds processing. In 1994 273 vessels registered and received tank inspections for the *C. opilio* fishery in the Bering Sea.

The large number of vessels receiving inspections at St. Paul and high winds, which forced a closure of the harbor for approximately ten hours, caused the inspection process in that location to be protracted over several days. Also contributing to this delay was a large number of vessels which were not in compliance with pot buoy tag and 3" tunnel restriction regulations at the time of the tank inspection.

These delays prompted some vessels to set gear prior to receiving a tank inspection. Several of these vessels were cited by Fish and Wildlife Protection. While last year's tank inspections in St. Paul took approximately the same length of time as this year, due to south west winds which closed the harbor for several days, a fisherman's strike eliminated pressure on the fleet to be on the fishing grounds at the season opening.

The fishery officially opened at noon on January 15, however much of the fleet did not begin setting gear until the following day due to strong northerly winds and extreme sea spray icing. These conditions claimed one vessel and all six members of the crew shortly after the noon opening. Strong sub-freezing winds from the north continued through the first week of February, pushing the ice pack approximately 15 south of St. Paul Island by the February 3rd. This was the most southerly progression of ice, for this time period, in the last 39 years according to the NOAH weather station in Anchorage.

As sea ice moved steadily south and west across the Bering Sea, vessels fishing in the Western Subdistrict and, to a lessor extent, the northern portions of the Eastern Subdistrict were forced to continually move their gear south. This effectively reduced available fishing area, concentrating vessels in the southern portion of both the Eastern and Western Subdistricts. In the Eastern Subdistrict catch per unit of effort (number of crab per pot) fell from 206 during the first week of the fishery to 77 by the end of the third week. Similarly, in the west catch per unit of effort (CPUE) dropped from 152 to 61. Fishery performance in the Eastern subdistrict peaked during the second week of the fishery at 149 crab per pot. In the Western Subdistrict fishery performance peaked in the third week of the fishery at 203 crab per pot.

By the end of the third week of the fishery catch in the Eastern Subdistrict totaled 25.5 million pounds from 338 landings. In the Western Subdistrict the catch from 194 landings totaled 22.7 million pounds for a total harvest of 48.2 million pounds. On February 7 a harvest projection, based on fishery performance up to that time, indicated the harvest guideline midpoint of 55.7 million pounds would be met or exceeded with 10 additional days of fishing. At this time the long term weather forecast predicted winds to shift from north to southwest and push sea ice north. This was expected to open up additional fishing area in both subdistricts. As a result, a closure of the entire Bering Sea District was announced for noon February 17.

At 33 days, the 1995 fishery was the shortest on record. This years harvest of 75.2 million pounds exceeded the pre-season GHL midpoint of 55.7 million by 35% (Table 9). Total harvest from the Eastern and Western Subdistricts was 39.7 and 35.5 million pounds respectively (Tables 10 and 11). Catches in the Eastern Subdistrict came predominantly from the southwest portion of the subdistrict in areas immediately west of the Pribilof Islands. Catches from the Western Subdistrict were distributed throughout the southern portion of the area between the ice edge and the 100 fathom contour (Table 13). This years closure occurred approximately 2 weeks earlier than the 1994 season closure on March 1, and almost a month earlier than the March 15 closure of the 1993 season.

Overall CPUE (in crabs per pot pull) in the 1995 fishery averaged 102 in the Eastern Subdistrict and 142 in the Western Subdistrict. This is a reduction from the 149 and 173 observed for these same two areas respectively during the 1994 fishery (Tables 10 and 11). Fishery CPUE for the entire Bering Sea District for the 1995 fishery was 117. This compares to a district average of 160 in 1994 and 175 in 1993 (Tables 7 and 8). Reductions in performance of the 1995 fishery are believed to be a result of

reduced stock abundance and a reduction in fishing area available due to the progressively southward encroachment of sea ice.

Crabs averaged 1.2 pounds in this year's fishery compared to 1.3 pounds in 1994 and 1.4 pounds in 1993 (Table 12). Reduced average weights are thought to be caused by a larger percentage of sub 4" crab retained during the 1995 fishery. Based on length frequency data collected dockside, 17% of legal *C. opilio* crab landed were under 4" in carapace width. In 1994 sub 4" crab made up approximately 12% of the harvest.

Despite a smaller harvest in 1995, approximately one half that landed in 1994, the exvessel value of the 1995 fishery was \$186.1 million, only a 3.3% decrease from the 1994 fishery value of \$192.4 million. This was due to an exvessel value of \$2.43 per pound in 1995, the highest on record. The exvessel valued paid to fishermen in 1994 was \$1.30 per pound compared to \$0.75 per pound in 1993 (Table 9).

C. opilio Stock Status

Data from the 1994 NMFS Bering Sea trawl survey, presented in the NMFS Alaska Fisheries Science Center Processed Report 94-07, indicated total abundance of large males (over 4 inches CW) was 71.6 million crabs, a 47% decrease from the 1993 assessment survey. According to survey results 45% of large males were located in the Eastern Subdistrict and sublegal males decreased by 24% since 1993. However, abundance of juvenile males was similar to 1993 estimates. No significant change in abundance of large and small females was apparent. While the number of small male crab showed a 24% decrease, total abundance in this size category is still relatively high. It is unknown at this time if these small male crab, located mostly in the northern part of the district, will migrate south and continue to grow. Based on the uncertainty of these crab recruiting into the fishery NMFS forecasts a continued decline in the fishable stock in the near future.

TANNER CRAB AREAS

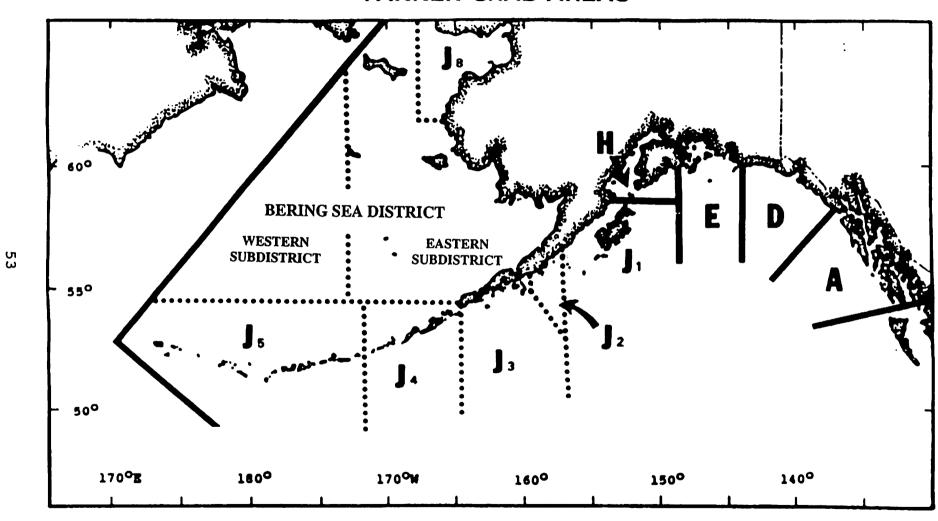


Figure 1. Bering Sea Tanner crab district and subdistricts.

Table 1. Historic Bering Sea C. bairdi catch statistics by season, 1968-1995.

		Number	of		Pots	Average % N				٠.	
Year	Vessels	Landings		Harvest ^{a,b}	Pulled	CPUEC	Weight ^b	Widthd		Deadloss ^l	
		-					•				
1968	NA	7	6,400	17,900	1,400	5	2.8	-	-	N2	
1969	NA	131	353,300	1,008,900	29,800	12	2.9	-	-	N2	
1970	NA	66	482,300	1,014,700	16,400	29	2.1	_	-	N	
1971	NA	22	61,300	166,100	7,300	8	2.7	-	-	N	
1972	NA	14	42,061	107,761	4,260	10	2.6	_	-	N	
1973	NA	44	93,595	231,668	15,730	6	2.5	_	-	N	
1974	NA	69	2,531,825	5,044,197	22,014	115	2.0	-	-	N	
1974/75	28	80	2,773,770	7,028,378	38,462	72	2.5	-	-	N	
1975/76	66	304	8,956,036	22,358,107	141,206	63	2.5	-	_	N	
1976/77	83	541	20,251,508	51,455,221	297,471	68	2.5	-	-	N	
1977/78	120	861	26,350,688	66,648,954	516,350	51	2.5	152.8	88.0	218,09	
1978/79	144	817	16,726,518	42,547,174	402,697	42	2.5	152.7	95.0	76,00	
1979/80	152	804	14,685,611	36,614,315	488,434	30	2.5	151.4	90.0	56,44	
1981	165	761	11,845,958	29,630,492	559,626	21	2.5	149.4	86.6	101,59	
1982	125	791	4,830,980	11,008,779	490,099	10	2.3	148.8	85.4	138,15	
1983	108	448	2,286,756	5,273,881	282,006	8	2.3	148.8	70.5	60,02	
1984	41	134	516,877	1,208,223	61,357	8	2.3	146.5	40.0	5,02	
1985	44	166	1,283,474	3,151,498	104,707	12	2.4	150.0	65.0	14,09	
1986			-,,		ASON CI					•	
1987					ASON CI						
1988	98	248	897,059	2,210,394	112,334	8	2.5	143.5	70.2	10,72	
1989	109	359	2,907,021	7,012,965	184,892	16	2.4	149.4	80.8		
1990	179	1,032	10,717,924	24,549,299	711,137	15	2.3	148.1	96.5		
1990/91	255	1,756	16,608,625	40,081,555	883,391	19	2.4	149.7	95.3		
1991/92	285	2,339	12,924,034	31,796,381	1,244,633	10	2.5	150.4	93.2		
1992/93	294	2,084	15,265,880	35,130,866	1,200,885	13	2.3	148.0	90.5	•	
1993/94	296	862	7,235,498	16,891,320	576,464	13	2.3	150.7	93.9		
1994	183	349	3,351,639	7,766,886	249,536	13	2.3	150.0	92.5		
1995	196	256	1,877,303	4,233,061	247,853	8	2.3			44,50	

aDeadloss included.
bIn Pounds.
cDefined as catch per pot pull.
dCarapace width in millimeters.

Table 2. Historic Bering Sea C. bairdi Tanner crab seasons, 1968-1995.

	··	ate	Number of		Averag	е	Price/
Season	Opened	Closed	Vessels	Harvest*.b	Weight ^b	CPUE	Pound
1968 ⁴			NA .	17.9	2.8	5	NA
1969°			NA	1,008.9	2.9	12	NA
1970 ^d			NA	1,014.7	2.1	29	NA
1971°			NA	166.1	2.7	8	NA
1972°			NA	108.8	2.6	10	NA
1973°			NA	231.7	2.5	6	NA
1974°			NA	5,044.2	2.0	115	NA
1974/75	07-29	06-15	28	7,027.4	2.5	72	\$ 0.20
1975/76	08-01	07-15	66	22,358.1	2.5	63	\$ 0.19
1976/77	08-01	07-07	83	51,455.2	2.5	68	\$ 0.30
1977/78	09-15	06-15	120	66,649.0	2.5	51	\$ 0.38
1978/79	11-10	05-24	144	42,547.2	2.5	42	\$ 0.52
1979/80	11-10	05-11	152	36,614.3	2.5	30	\$ 0.52
1981	01-15	04-15	165	29,630.5	2.5	21	\$ 0.58
1982	02-15	06-15	125	11,008.8	2.3	10	\$ 1.06
1983°	02-15	05-22	108	5,273.9	2.3	8	\$ 1.20
1703		06-15					•
1984	02-15	06-15	41 ' '	1,208.2	2.3	8	\$ 0.95
1985	01-15	06-15	44	3,151.5	2.4	12	\$ 1.40
1986	VI 15		EASON	CLOSE			•
1987			EASON	CLOSE			
1988	01-15	04-20	98	2,210.4	2.5	8	\$ 2.17
1989	01-15	05-07	109	7,013.0	2.4	16	\$ 2.90
1990	01-15	04-09		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			•
1000	01 15	04-24	179	24,549.3	2.3	15	\$ 1.85
1990/91	11-20	03-25	255	40,081.6	2.4	19	\$ 1.12
1991/92	11-15	03-31	285	31,796.4	2.5	10	\$ 1.50
1992/93	11-15	03-31	294	35,130.9	2.3	13	\$ 1.69
1993/94	11-01	11-10 ^h	283	4,114.9	2.4	7	\$ 1.90
1733/74	11-20	01-01	261	12,776.4	2.3	17	\$ 1.90
1994	11-20	11-21	183	7,766.9	2.3	13	\$ 3.75
1995	11-01	11-21	196	4,233.1	2.3	8	\$ 2.80
TEE	11-01	11-10	170	7,2JJ.I	2.5	J	7 2.00

^aFigures given in thousands - deadloss included.

^bIn pounds.

^cDefined as catch per pot pull.

^dIncidental to the king crab fishery.

^ePartial Bering Sea closure.

^fEast of 165° West longitude.

⁸West of 165° West longitude.

^hEast of 168° West longitude.

ⁱ163° -173° West longitude.

Table 3. Historic Bering Sea C. bairdi Tanner crab economic performance, 1979/80-1995.

		Season	Nu	umber of	Number	of Pots	Va	lue	Season Length
Year	GHL ^{•.} •	Total	Vessels	Landings	Registered	Pulled	Exvessel	Total°	(Days) Dates
1979/80	28-36	36.5	152	804	40,273	488,434	\$ 0.52	\$ 19.0	(189) 11/01-05/14
1981	28-36	29.6	165	761	42,910	559,626	\$ 0.58	\$ 17.2	(88) 01/15-04/18
1982	12-16	10.9	125	791	36,396	490,099	\$ 1.06	\$ 11.5	(118) 02/15-06/15
1983	5.6	5.2	108	448	15,255	282,006	\$ 1.20	\$ 6.2	(118) 02/15-06/15
1984	7.1	1.2	41	134	9,851	61,357	\$ 0.95	\$ 1.1	(118) 02/15-06/15
1985	3.0	3.1	44	166	15,325	104,707	\$ 1.40	\$ 4.3	(149) 01/15-06/15
1986				ио со	MMERCIA	AL FIS	HERY		
1987	,			ио со	MMERCIA	AL FIS	HERY		
1988	5.6	2.2	98	248	38,765	112,334	\$ 2.17	\$ 4.8	(93) 01/15-04/20
1989	13.5	7.0	109	359	43,607	184,892	\$ 2.90	\$ 20.3	(110) 01/15-05/07
1990 ⁴	29.5	24.5	179	1,032	46,440	711,137	\$ 1.85	\$ 45.3	(89) 01/15-04/24
1990/91	42.8	39.7	255	1,756	75,356	883,391	\$ 1.12	\$ 44.5	(126) 11/20-03/25
1991/92	32.8	31.5	285	2,339	85,401	1,244,633	\$ 1.50	\$ 47.3	(137) 11/15-03/31
1992/93	39.2	35.1	294	2,084	71,481	1,200,885	\$ 1.69	\$ 58.8	(137) 11/15-03/31
1993 °	10.7	4.1	283	347	62,302	250,501	\$ 1.90	\$ 7.6	(10) 11/01-11/10
1993/94	9.1	12.8	261	515	53,737	325,963	\$ 1.90	\$ 24.0	(42) 11/20-01/01
1994°	7.5	7.6	183	349	38,670	249,536	\$ 3.75	\$ 28.5	(20) 11/01-11/21
1995	5.5	4.2	196	256	40,827	247.853	\$ 2.80	\$ 11.7	(15) 11/01-11/16

^aGuideline Harvest Level

^bMillions of pounds, deadloss not included.

^cMillions of dollars.

^dWinter fishery.

East of 168° West longitude. f163° -173° West longitude.

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Table 4. Historic Bering Sea C. bairdi catch by subdistrict, 1974/75-1995

ason	Subdistrict		Number			Pots			:
	Subdistrict	Vessels	Landin	gs Crab*	Harvest*.b	Pulled	Averaq Weight	CPUE ^c	Deadloss
74/75	Southeastern Pribilofs		72 8	2,526,687 247,083	6,504,984 523,394	32,275 3,923	2.6	78 63	0
	TOTAL	28	80	2,773,770	7,028,378	38,462	2.5	72	0
75/76	Southeastern Pribilofs		230 74	6,682,232 2,273,804	16,643,194 5,714,913	106,445 34,761	2.5	63 65	0
	TOTAL	66	304	8,956,036	22,358,107	141,206	2.5	63	0
76/77	Southeastern Pribilofs		437 104	16,089,057 4,162,451	41,007,736 10,447,485	233,667 63,804	2.6	69 65	0
	TOTAL	83	541	20,251,508	51,455,221	297,471	2.5	68	0
7/78	Southeastern Pribilofs TOTAL		706 155	21,055,527 5,210,170	53,278,012 13,152,843	408,437 107,913	2.5 2.5	52 48	0
	101AL	120	861	26,350,688	66,648,954	516,350	2.5	51	218,099
8/79	Southeastern Pribilofs		758 59	15,601,891 1,124,627	39,694,205 2,852,969	356,594 46,103	2.5	44 24	75,400 600
	TOTAL	144	817	16,726,518	42,547,174	402,697	2.5	42	76,000

(n

Table 4. (page 2 of 4)

Season	Subdistrict	Vessels	Number Landing		Harvest ^{a,b}	Pots Pulled	Averag Weight ^b		: Deadloss
1979/80	Southeastern Pribilofs		789 15	14,329,889 355,722	35,724,003 890,312	476,410 12,024	2.5 2.5	30 30	56,446 0
	TOTAL	152	804	14,685,611	36,614,315	488,434	2.5	30	56,446
1981	Southeastern Pribilofs		674 . 87	10,532,007 1,313,951	26,684,956 2,945,536	496,751 62,875	2.5	21 21	97,398 4,196
	TOTAL	165	761	11,845,958	29,630,492	559,626	2.5	21	101,594
1982	Southeastern Pribilofs 68,330		539 252	3,825,433 1,005,547	8,812,302 2,196,477	322,634 167,465	2.3	12 6	69,829
	TOTAL	125	791	4,830,980	11,008,779	490,099	2.3	10	138,159
1983	Northern Southeastern Pribilofs		10 287 151	29,478 1,984,673 272,505	48,454 4,633,354 592,073	5,950 192,538 83,528	1.7 2.3 2.2	5 10 3	167 52,879 6,983
	TOTAL	108	448	2,286,756	5,273,881	282,006	2.3	- 8	60,029
1984	Southeastern Pribilofs		91 43	470,181 46,759	1,099,142 109,081	44,546 16,811	2.3	11 3	4,688 337
	TOTAL	41	134	516,877	1,208,223	61,357	2.3	8	5,025

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Table 4. (page 3 of 4)

•	ge _	Averag	Pots		<u> </u>	Number of			
Deadloss	CPUE ^c	Weight	Pulled	Harvest ^{*.b}	Crab*	Landings	Vessels	Subdistrict	Season
14,096 0	13 1	2.4 2.3	96,976 7,731	3,139,041 12,457	1,278,109 5,365	143 23	38 15	Southeastern Pribilofs	1985
14,096	12	2.4	104,707	3,151,498	1,283,474	166	44	TOTAL	
				SEASON CLOSED	,				1986
				SEASON CLOSED					1987
10,724 0	8		112,334 0	2,210,394	897,059 0	248	98 0	Eastern Western	1988
10,724	8	2.5	112,334	2,210,394	897,059	248	98	TOTAL	
34,664 0	16 0		184,892 0	7,012,965	2,907,021	359 0	109 0	Eastern Western	1989
34,664	16	2.4	184,892	7,012,965	2,907,021	359	109	TOTAL	
87,475 0	15 <1		701,92 4 9,213	24,529,165 20,134	10,708,996 8,928	1,105 3 17	1	Eastern Western	1990
87,475	15	2.3	711,137	24,549,299	10,717,924	1,032	179 1	TOTAL	

Table 4. (page 4 of 4)

Season	Subdistrict	Vessel	Numbe: .s Landi		Harvest ^{e.b}	Pots in Pulled	Average Weight ^b	CPUE°	: Deadloss
1990/91	Eastern Western	255 0	1,756 0	16,608,625 0	40,081,555	883,391 0	2.4	19 0	210,769
	TOTAL	255	1,756	16,608,625	40,081,555	883,391	2.4	19	210,769
1991/92	Eastern	285	2,339	12,924,034	31,796,381	1,244,633	2.5	10	279,741
1992/93	Eastern Western	293 70	2,011 96	15,074,084 191,796	34,821,043 309,823	1,150,834 50,051		13 4	340,955 3,000
	TOTAL	294	2,084	15,265,880	35,130,866	1,200,885	2.3	13	343,955
1993/94	East of 168° 163° to 173°	283 261	347 515	1,696,430 5,539,068	4,114,949 12,776,371	250,501 325,963		7 17	103,715 154,674
	TOTAL	296	862	7,235,498	16,891,320	576,464	2.3	13	258,389
1994	163° to 173°	183	349	3,351,639	7,766,886	249,536	2.3	13	132,780
1995	163° to 173°	196	256	1,877,303	4,233,061	247,853	2.3	8	44,508

^aDeadloss included.

beadoss included.

bIn pounds.

cDefined as catch per pot pull.

dNovember 1 - November 10, 1993.

cNovember 20, 1993 - January 1, 1994.

Table 5. 1995 Bering Sea C. bairdi catch statistics by month.

Month	Vessels	Number Landing		Harvest ^{a,b}	Pots Pulled	Average Weight	CPUE°	Dead- loss
Nov	196	256	1,877,303	4,233,061	247,853	2.3	8	44,508
TOTAL	296	862	7,235,498	16,891,320	576,464	2.3	13	258,389

^aDeadloss included.

bIn pounds.
Coefined as catch per pot pull.

Table 6. 1995 Bering Sea C. bairdi Tanner crab catch by statistical area.

		Average	Pots		er of	Numb	
Deadloss	CPUE	Weight ^b	Pulled	Harvest*.b	Crab	Landings	Area
005	18						
905		1.7	4,345	133,014	76,795	17	635504
3,554	8	2.3	20,487	384,092	164,798	39	635530
7,493	8	2.3	38,017	722,888	311661	63	635600
712	8	2.2	3,007	56,839	25,333	5	635700
4,833	7	2.3	24,799	383,239	165,520	40	645530
5,156	8	2.3	21,026	361,674	158,488	35	645600
2,964	8	2.3	12,959	235,070	102,868	22	645630
1,451	6	2.3	5,904	78,262	33,819	11	655500
242	8	2.3	1,484	26,738	11,571	6	655530
990	7	2.3	7,357	117,170	50,800	20	655600
102	5	2.2	1,656	19,675	9,016	4	655630
473	5	2.3	3664	43,267	19,253	7	665600
61	6	2.0	2,350	28,464	13,608	3	665630
1,963	8	2.2	9,021	162,732	73,179	10	675600
37	2	2.2	630	2,293	1,037	4	695600
237	4	2.3	2,640	21,152	9,358	6	695631
270	5	2.2	2,502	25,927	11,896	7	705600
2,062	5	2.2	17,620	206,350	92,637	31	705630
42	8	2.2	926	15,310	7,007	4	705701
635	8	2.2	7,801	132,014	59,630	13	Other
44,508	8	2.3	247,853	4,233,061	1,877,303	256	TOTAL

^aDeadloss included.
^bIn pounds.
^cDefined as catch per pot pull.
^dIncludes 9 statistical areas.

Table 7. Historic Bering Sea C. opilio catch statistics by season, 1977/78-1995.

••	*******	Number o	Crab ^a	Harvest*.b	Pots Pulled	CPUE ^c	% New Shell	Avera Weight ^c		Deadloss
Year ———	Vessels	Landings	Crab	naivest	Pulled	CPUE	SileTI	weight	WIGGII	
1977/78	15	38	1,267,546	1,716,124	13,247	96	NA	1.4	NA	0
1978/79	102	490	22,118,498	32,187,039	190,746	116	83.0	1.5	113.1	759,137
1979/80	134	597	25,286,777	39,572,668	255,102	99	90.0	1.6	118.1	228,345
1981	153	867	34,415,322	52,750,034	435,742	79	79.2	1.5	117.0	2,269,979
1982	122	803	24,089,562	29,355,374	469,091	51	78.0	1.2	109.4	1,092,655
1983	109	461	23,853,647	26,128,410	287,127	83	NA	1.1	NA	1,324,466
1984°	52	367	24,009,935	26,813,074	173,591	138	78.0	1.1	105.4	798,795
1985'	75	718	52,903,246	65,998,875	372,045	142	80.0	1.3	108.0	1,064,184
1986°	88	992	76,499,123	97,984,539	543,744	141	73.7	1.3	109.5	1,378,533
1987	103	1,038	81,307,659	101,903,388	616,113	132	84.0	1.2	108.9	978,449
1988	171	1,285	105,716,337	134,030,185	776,907	136	71.2	1.3	109.5	3,260,020
1989	168	1,341	112,618,881	149,455,848	663,442	170	85.2	1.3	111.2	1,844,682
1990	189	1,565	128,977,638	161,821,350	911,613	141	97.4	1.3	109.1	1,796,664
1991	220	2,788	265,123,960	328,647,269	1,391,583	191	95.1	1.2	110.2	3,464,036
1992	250	2,763	227,376,582	315,302,034	1,281,796	177	97.6	1.4	111.7	2,325,852
1993	254	1,836	169,558,842	230,787,000	971,046	175	92.5	1.4	111.6	1,573,952
1994	273	1,293	114,779,014	149,775,765	716,524	160	92.5	1.3	111.6	1,799,323
1995	253	869	60,611,411	75,252,677	506,802	117	NA	1.2	NA	1,287,169

^aDeadloss included.

^bIn pounds.

^cDefined as catch per pot pull. dCarapace width in millimeters.

North of 58° reopened until 12/31.

West of 164° opened through 12/31.

^gOpen only west of 164° West longitude.

^hEastern and Western Districts combined.

Table 8. Historic Bering Sea C. opilio Tanner crab seasons, 1977/78-1995.

	Dat	:e	Number of		Average		Price/
Season	Opened	Closed	Vessels	Harvest*.b	Weight ^b	CPUE	Pound
1977/78	09-15-77	09-23-78	15	1,716,124	1.4	96	\$ 0.38
1978/79	11-01-78	09-03-79	102	32,187,039	1.5	116	\$ 0.30
1979/80	11-01-79	08-15-80 09-03-80	134	39,572,668	1.6	99	\$ 0.21
1981	01-15-81	08-01-81	153	52,750,034	1.5	79	\$ 0.26
		09-01-814					
1982	02-15-82	08-01-82	122	29,355,374	1.2	51	\$ 0.73
1983	02-15-83	05-22-83	109	26,128,410	1.1	83	\$ 0.35
		06 - 15-83					
1984	02-15-84	08-01-84	52	23,940,984	1.1	147	\$ 0.30
	08-01-84	12-31-84°		2,872,090	1.1	125	
1985	01-15-85	09-22-85	75	57,446,554	1.3	142	\$ 0.30
	10-09-85	12-31-85°		8,552,321			
1986	01-15-86	09-24 - 86 ^h	88	97,984,539	1.3	141	\$ 0.60
1987	01-15-87	06-22-87	103	101,903,388	1.2	132	\$ 0.75
1988	01-15-88	03-29-88	162	75,781,258	1.3	139	\$ 0.75
	05-15-88	06-30-88	<u>151</u> 171	<u>58.278.927</u> 134,060,185	1.3 1.3	<u>137</u> 136	\$ 0.80 \$ 0.77
1989	01-15-89	03-26-89 05-07-89	168	149,455,848	1.3	170	\$ 0.75
1990	01-15-90	04-24-90 ^h 06-12-90	177 <u>152</u> 189	94,831,897 66,989,453 161,821,350	1.2 1.3 1.3	148 <u>130</u> 141	\$ 0.64
1991	01-15-91	05-05-91 06-23-91	218 <u>186</u> 220	240,090,666 88,556,603 328,647,269	1.3 1.2 1.2	206 <u>153</u> 191	\$ 0.50
1992	01-15-92	04-22-92	250	315,302,034	1.4	177	\$ 0.50
1993	01-15-93	03-15-93	254	230,787,000	1.4	175	\$ 0.75
1994	01-15-94	03-01-94	273	149,775,765	1.3	160	\$ 1.30
1995	01-15-95	02-17-95	253	75,252,677	1.3	117	\$ 2.43

^aDeadloss included.

^bIn pounds.

Defined as catch per pot pull.

dVaried according to size.
Partial Bering Sea closure.

^fNorth of 58° only.

⁸West of 164° opened through 12-31-85.

^hOpen only west of 164° West longitude.

Table 9. Historic Bering Sea C. opilio Tanner crab economic performance, 1979/80-1995.

		Season	Nun	nber of	Number of	f Pots	Valu	e .	Season
Year	GHL ^a	Total ^a	Vessels	Landings	Registered ^b	Pulled	Exvessel	Total ^c	Length
1979/80	N/A	39.3	134	597	35,503	255,022	\$ 0.21	\$ 83.0	307
1981	•	50.5	153	867	39,789	435,742	\$ 0.26	\$ 13.1	229
1982	£	28.3	112	803	35,522	469,091	\$ 0.73	\$ 20.7	167
1983	15.8	24.8	109	462	15,39	287,127	\$ 0.35	\$ 8.7	120
1984°	49.0	26.0	52	367	12,493	173,591	\$ 0.30	\$ 7.8	320
1985°	98.0	64.9	75	718	15,325	372,045	\$ 0.30	\$ 19.5	333
1986°	57.0	96.6	88	992	13,750	543,744	\$ 0.60	\$ 60.0	252
1987	56.4	100.9	103	1,038	19,386	616,113	\$ 0.75	\$ 75.7	158
1988	110.7	130.8	171	1,285	38,765	776,907	\$ 0.77	\$100.7	120
1989	132.0	147.6	168	1,341	43,607	663,442	\$ 0.75	\$110.7	112
1990	139.8	160.0	189	1,565	46,440	911,613	\$ 0.64	\$102.3	148
1991	315.0	325.2	220	2,788	76,056	1,391,583	\$ 0.50	\$162.6	159
1992	333.0	313.0	250	2,763	77,858 ^h	1,281,796	\$ 0.50	\$156.5	97
1993	207.2	229.2	254	1,836	65,081 ^h	971,046	\$ 0.75	\$171.9	59
1994	105.8	148.0	273	1,293	54,837 ^h	716,524	\$ 1.30	\$192.4	45
1995	55.7	74.0	253	869	53,707 ^h	506,802	\$ 2.43	\$180.0	33

^aMillions of pounds, deadloss not included. ^bSame gear as *C. bairdi* fishery.

^cMillions of dollars.

^dIn days.

Published range 39.5-91.0.

^fPublished range 16.0-22.0

⁸Partial closures only.

^hGear of *C. opilio* vessels only.

S S

Table 10 Historic Bering Sea C. opilio catch by season and subdistrict, 1977/78-1995.

Season	Subdistrict	Vessels	Number of Landings	Crab Harvest	Pots	Average Weight CPU	2 °	Deadloss
1977/78	Southeastern Pribilof		33 5	1,063,872 203,674	1,439,959 276,165	11,560 1.4 1,687 1.4	0 121	0
	TOTAL	15	38	1,267,546	1,716,124	13,247 1.4	96	0
1978/79	Southeastern Pribilof	101 10	476 14	21,279,794 838,704	31,102,832 1,084,039	184,491 1.5 6,225 1.5	115 135	659,137 100,000
	TOTAL	102	490	22,118,498	32,187,039	190,746 1.5	116	759,137
1979/80	Southeastern Pribilof	133 19	561 36	23,199,446 2,087,331	36,406,391 3,166,777	237,375 1.6 17,727 1.5	98 118	187,945 40,400
	TOTAL	134	597	25,286,777	39,572,668	255,102 1.6	99	228,345
1981	Southeastern Pribilof		624 243	24,498,642 9,916,617	37,866,229 14,886,705	309,304 1.6 126,438 1.5	79 78	1,475,078 794,901
	TOTAL	153	867	34,415,322	52,750,034	435,742 1.5	79	2,269,979
1982	Southeastern Pribilof		468 335	10,207,174 13,882,388	13,079,583 16,276,421	257,193 1.3 211,898 1.2	40 66	422,979 669,676
	TOTAL	122	803	24,089,562	29,355,374	469,091 1.2	51	1,092,655

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			Number o	f		Pots	Averaç		
Season	Subdistrict	Vessels	Landings	Crab°	Harvest*,b	Pulled	Weight	CPUE	Deadloss
1983	Southeastern Pribilof		153 239		553,281 ,076,553	4,197,304 20,514,000	94,470 1 153,458 1		165,298 1,078,643
	Northern 80,525		69	1,223,813	1,417,10			31	
	TOTAL	109	461	23	,853,647	26,128,410	287,127	1.1 83	1,324,466
1984	Southeastern		76		534,370	3,990,621	,	1.1 107	
	Pribilof Northern		230 61		,909,096 566, 4 69	19,727,493 3,094,960	112,078 2 28,422	l.1 160 l.2 90	708,706 35,411
	TOTAL	52	367	24	,009,935	26,813,074	173,591	1.1 138	798,795
1985	Southeastern	55	301	21	,963,882	27,373,232	158,819		
	Pribilof Northern	60 24	301 116		,089,526 849,838	29,804,093 8,821,550	142,937 1 70,289 1	1.2 168 1.3 97	505,146 98,037
	TOTAL	75	718	52	,903,246	65,998,875	372,045	1.3 142	1,064,184
1986	Southeastern	47	112		491,694	10,957,578		1.3 133	
	Pribilof Northern	80 67	508 372		,851,767 ,155,662	50,525,150 36,501,811	281,337 1 198,518 1		
	TOTAL	88	992	76	,499,123	97,984,539	543,744	1.3 141	1,378,533
1987	Southeastern	28	64		116,778	5,106,473	,	1.2 167	
	Pribilof Northern	94 99	458 516		,604,802 ,586,079	47,676,734 49,120,181	261,337 : 330,157 :		
	TOTAL	103	1,038	81	,307,659	101,903,388	616,113	1.2 132	978,449

Table 10 (page 3 of 4)

Season	Subdistrict	Vessels	Number of Landings	Crab* Harvest*.b	Pots Pulled	Average Weight ^b CPUE ^c	:	Deadloss
1988	Eastern Western	162 151	770 515	59,811,702 45,904,635	75,781,258 58,278,927	431,310 1.3 335,597 1.3	139 137	775,104 2,484,916
	TOTAL	171	1,285	105,716,337	134,060,185	776,907 1.3	136	3,260,020
1989	Eastern Western	163 127	871 470	77,698,698 34,920,183	104,399,693 45,056,155	391,451 1.3 271,991 1.3	198 128	1,128,971 715,711
	TOTAL	168	1,341	112,618,881	149,455,848	663,442 1.3	170	1,844,682
1990	Eastern Western	177 152	956 659	76,331,829 52,645,809	94,831,897 66,989,453	512,259 1.2 399,354 1.3	149 132	1,010,755 785,909
	TOTAL	189	1,565	128,977,638	161,821,350	911,613 1.3	141	1,796,664
1991	Eastern Western	218 186	2,013 867	190,139,612 74,984,348	240,090,666 88,556,603	912,751 1.3 478,832 1.2		1,593,021 1,871,015
	TOTAL 191	220 3,4	2,788 64,036	265,123,960	328,647,269	1,391,583	1.2	
1992	Eastern 177	250 2,2	N/A 68,467	217,375,564	302,363,005		1.4	
	Western	55	N/A	10,001,018	12,939,029	53,516 1.3	187	57,385
	TOTAL 177	250 2,3	2,763 25,852	227,376,582	315,302,034	1,281,796	1.4	

Table 10. (page 4 of 4)

			Number of			Pots	Avera	ge	•
Season	Subdistrict	Vessels	Landings	Crab*	Harvest*.b	Pulled	Weight ^b	CPUE	Deadloss
1993	Eastern Western	251 185	•		,760,099 798,7 4 3	151,328,721 79,458,279	675,996 295,050		4 1,108,520 7 465,432
	TOTAL	254	1,836	169	,558,842	230,787,000	971,046	1.4 17	5 1,573,952
1994	Eastern Western	220 171			012,017 766,997	72,008,424 77,767,341	375,928 340,596		•
	TOTAL	273	1,293	114	,779,014	149,775,765	716,524	1.3 16	0 1,799,323
1995	Eastern Western	217 153			630,348 981,063	39,736,986 35,515,691	313,910 192,892		
	TOTAL	253	869	60,	611,411	75,252,677	506,802	1.2 11	7 1,287,169

^aDeadloss included.
^bIn pounds.
^cDefined as catch per pot pull.

Table 11. Bering Sea C. opilio catch by subdistrict and month, 1995.

Subdistrict	Number of				Pots	Average		
	Vessels	Landings	Crab*	Harvest ^{a.b}	Pulled	Weight ^b	CPUE	Deadloss ^b
January								242 224
Eastern Western	181 104	287 164	18,838,182 15,372,627	23,028,021 19,484,798	148,657 89,094	1.2	125 170	312,984 313,317
Total	239	410	34,210,809	42,512,819	237,751	1.2	142	626,301
February							20	244 067
Eastern Western	191 129	340 193	13,792,166 12,608,436	16,708,965 16,030,892	165,253 103,798	1.2	82 119	344,067 316,801
Total	237	459	26,400,602	32,739,858	269,051	1.2	96	660,868
Subdistrict '	Total							
Eastern Western	217 153	627 357	32,630,348 27,981,063	39,736,986 35,515,691	313,910 192,892	1.2	102 142	657,051 630,118
Season Total	253	869	60,611,411	75,252,677	506,802	1.2	117	1,287,169

^aDeadloss included.

bIn pounds.
Coefined as catch per pot pull.

Table 12. 1995 Bering Sea C. opilio catch statistics by month.

Month	Numb Vessels Lan	er of dings Crab	Harvest ^{a,b}	Pots Pulled	Average Weight ^b		Dead- loss
Jan	239 41	0 34,210,809	42,512,819	237,751	1.2	142	626,301
Feb	237 45	9 26,400,602	32,739,858	269,051	1.2	96	660,868
TOTAL	253 86	9 60,611,411	75,252,677	506,802	1.2	1171	,287,169

^aDeadloss included.

bIn pounds.
Coefined as catch per pot pull.

Table 13. Bering Sea C. opilio catch by statistical area, 1995.

	Nu	mber of		Pots	Average		Dead-
Area	Landings	Crab*	Harvest ^{a.b}	Pulled	Weight ^b	CPUE	loss
665500		106,524	158,380	1,195	1.5	89	3,450
665530	0 3	78,933	103,914	495	1.3	162	250
675530	0 24	986,281	1,184,003	15,011	1.2	66	17,36
675600	0 27	991,895	1,241,753	12,148	1.3	82	38,365
675630	0 10	301,348	338,956	2,873	1.1	105	11,61
685530		193,206	235,225	2,042	1.2	95	11,526
68560		1,609,246	1,972,990	15,631	1.2	103	14,645
685630		835,360	1,028,883	9,819	1.2	85	14,01
695600		268,530	338,790	1,987	1.3	135	1,463
70560		493,088	610,887	4,940	1.2	100	9,470
705630		169,621	212,000	2,307	1.3	74	1,950
70570:		15,045	20,346	341	1.4	44	50
71560		427,813	525,221	5,298	1.2	81	7,300
71563		6,350,716	7,755,436	65,750	1.2	97	139,040
71570		4,078,175	5,022,810	39,319	1.2	104	70,51
71573		530,598	616,550	5,055	1.2	105	6,57
72560		113,788	140,648	1,030	1.2	111	15
72563		4,465,269	5,527,438	42,601	1.2	105	62,72
72570		5,579,504	6,602,329	49,514	1.2	113	112,53
72573		3,816,550	4,573,954	26,069	1.2	146	130,49
72580		720,419	929,891	5,566	1.3	129 121	7,57 5,53
73563		326,937	408,305	2,707	1.3		
73570		1,975,204	2,458,383	18,123	1.3	109 140	34,90 167,90
73573		7,019,426	8,828,540	50,330	1.3 1.3	140	88,92
73580		50,001,270	6,523,529	35,778	-	141	18,73
73583		839,930	1,311,069	5,942	1.6 1.3	141	72,20
74580		2,770,774	3,724,682	19,287	1.1	189	121,73
74583		5,760,383	6,544,541	30,406	1.5	101	53
75580		53,408	77,392	531	1.3	145	56,61
75583		3,203,677	4,249,947	22,032 2,588	1.3	108	4,36
76583		280,384	378,304	2,386 497	1.4	244	40,85
76590		121,076	167,233 113,004	825	1.4	92	40,65
77593		75,912	1,327,344	14,765	1.3	71	22,74
Other	29	1,050,121	1,321,344	14,700	1.3	11	22,14
Total	869	60,611,411	75,252,677	506,802	1.3	117	1,287,16

^aDeadloss included. ^bIn pounds.

^cDefined as catch per pot pull.

BERING SEA CHIONOECETES TANNERI

Historic Background

First reported landings of *Chionoecetes tanneri* Tanner crab from the Bering Sea occurred in 1988 after the Alaska Board of Fisheries established a special permit season for deep water Tanner crab during their spring meeting. Two vessels, both catcher processors, fished at depths of 400 to 700 fathoms in the Eastern Subdistrict. Prior to this no market existed for *C. tanneri* and few, if any, were sold commercially. No commercial landings were reported from 1989 through 1992.

Starting in May of 1993, one vessel targeted on *C. tanneri* in the Bering Sea, and as commercial interest increased, five additional vessels entered the fishery. Differential pot limits based on vessel size, enacted by the Board of Fisheries in the Spring of 1993, were not applied to vessels fishing for deep water Tanner crab in the Bering Sea until 1994. Also in 1993, the Department of Fish and Game restricted the harvest to males *C. tanneri* 5 inches or greater in carapace width.

To obtain biological information on *C. tanneri* crab the department implemented 100% observer coverage in 1994, as allowed by the permit provisions provided in 5 AAC 35.082. Vessel participation and landings decreased during 1994 when Tanner crab pot limits for the Bering Sea were applied to vessels fishing for deep water Tanner crab.

1995 Fishery

A total of eight vessels made 47 landings for a harvest of 966,846 pounds of C. tanneri through December 24. The average weight of crab retained in 1995 was 2.1 pounds per crab with an overall catch per unit of effort (CPUE) of 8 crabs per pot. This compares to 1994 when four vessels made 12 landings for a total of 332,454 pounds. In 1994 average weight of C. tanner landed was of 2.0 pounds the CPUE was 11 crabs per pot (Table 1).

Preliminary information indicates vessels fished an average of 368 pots and made 55,901 pot pulls during 1995 season. The 1995 exvessel price for *C. tanneri* was \$1.40 per pound for a total value in excess of \$1.26 million (Table 2).

During the March 1995 Board of Fisheries meeting, the board determined pot limits established for the Bering Sea Tanner crab fisheries (*C. bairdi* and *C. opilio*) were not intended to apply to deep water Tanner crab species (*C. tanneri* and *C. angulatus*) in the Westward Region. A news release issued April 28, announced the removal of pot limits effective as of May 12, 1995. All vessels which fished during 1995 were again required to obtain shellfish observers as 100% coverage was mandatory.

Limited effort for the 1995 season began in July and remained low throughout the season. The maximum number of vessels which fished in this area at the same time during 1995 was three. Fishing effort was spread between 15 statistical areas in the Bering Sea. The majority of the crab retained came from the area below the Pribilof Islands.

Status of Stocks

No stock assessment surveys are conducted for *C. tanneri* Tanner crab. Consequently no population estimates are available. Onboard observers have been required on all vessels targeting *C. tanneri*, beginning in 1994. This program has provided information on the size, sex and species composition of the non-retained catch, necessary to manage these stocks in the absence of traditional abundance index surveys.

Table 1. Bering Sea C. tanneri Tanner crab catch, effort and performance, 1993-1995.

Year	N Vessels	umber d Landir		Harvest*.b	Pots Lifted	Average Weight ^b	CPUE°	Deadloss
1993	6	18	342,095	658,796	35,650	1.9	9	71,000
1994	4	12	165,365	332,454	13,739	2.0	11	30,585
1995	8	47	456,857	966,846	55,901	2.1	8	66,829

^aDeadloss included.

 $^{^{\}rm b}$ In pounds.

^cDefined as catch per unit effort.

Table 2. Bering Sea C. tanneri Tanner crab economic performance, 1993-1995.

Year	Season Total		er of Landings	<u>Number of</u> Registered	Pots Pulled	Val Exvessel	le Total ^b	<u>Seaso</u> (Days)	n Length Dates
1993	587,796	6	18	2700	35,650	\$0.94	\$0.6	365	01/1-12/31
1994	301,869	4	12	732	13,739	\$1.20	\$0.4	365	01/1-12/31
1995	900,017	8	47	NA	55,901	\$1.40	\$1.3	365	01/1-12/31

^aDeadloss not included.

^bMillions of dollars.

EASTERN ALEUTIAN CHIONOECETES TANNERI

Historic Background

In the early 1980s *Chionoecetes tanneri* Tanner crab were occasionally landed in the Eastern Aleutian Tanner crab management area incidental to the developing brown king crab fishery around the Dutch Harbor area. Until 1993 however, no steady market existed for *C. tanneri* and few, if any, were sold commercially.

During 1993, interest in *C. tanneri* increased and commercial landings were made from the Eastern Aleutian District. Fishing effort in this district was from July through December, and only one vessel participated during the entire season. In 1993, the department restricted the harvest to males five inches or greater in carapace width.

To collect biological information on *C. tanneri* crab the department implemented 100% observer coverage in 1994, as allowed by the permit provisions provided in 5 AAC 35.082. Effort in the fishery increased from one to three vessels in 1994. Vessels started fishing for *C. tanneri* in March after the closure of the *C. opilio* fishery and continued through December.

1995 Fishery

A total of seven vessels obtained observers and participated in a directed *C. tanneri* fishery in the Eastern Aleutian district in 1995. Landings totalled 850,427 pounds from 51 deliveries. Catch per pot pull (CPUE) for the *C. tanneri* fishery in this area was 6 crab per pot with an average weight of 1.7 pounds per crab (Table 1). Average exvessel price was \$1.57 per pound for a fishery value of approximately \$1.3 million. This compares to 1994 when 27 landings were made for a harvest of 759,239 pounds. During the 1994 season, CPUE was 11 crab per pot and the average weight of crab harvested was 1.8 pounds (Table 1).

Deliveries in 1995 averaged 16,675 pounds. In 1994 the average delivery was 28,120 pounds. Several deliveries of *C. tanneri* in 1995 occurred as bycatch in the Dutch Harbor brown king crab fishery and by vessels targeting on *C. angulatus*.

In 1995 vessels fished an average of 598 pots and made 75,259 pot pulls. Effort began in May and continued throughout the year. Vessels fished in nineteen statistical areas both north and south of Umnak and Unalaska Islands.

Status of Stocks

No stock assessment surveys are conducted for *C. tanneri* Tanner crab, and consequently no population estimates are available. Onboard observers have been required on all vessels targeting *C. tanneri*, beginning in 1994. This program has yielded information on size, sex and species composition of the non-retained catch necessary to manage these stocks.

Table 1. Eastern Aleutian Chionoecetes tanneri Tanner crab catch, effort and performance, 1993-1995.

Year		Number of Landings		Harvest*.b	Pots Lifted	Average Weight	CPUE°	Deadloss ^b
1993			CON	FIDENT	TAL			
1994	3	27	426,230	759,239	38,106	1.8	11	19,474
1995	7	51	494,522	850,427	75,259	1.7	6	28,338

^aDeadloss included.

bIn pounds.
Coefined as catch per unit effort.

Table 2. Eastern Aleutian C. tanneri Tanner crab economic performance, 1993-1995.

Year	Season Total		per of Landings	Re	Number o	f Pots Pulled	Val Exvessel	ue Total ^b	<u>Seaso</u> (Days)	: <u>n Length</u> Dates
1993				и о	REPO	RTED	САТСН	-		
1994	739,765	3	27		1770	38,106	\$1.20	\$.9	365	01/1-12/31
1995	822,089	7	51		NA	75,259	\$1.57	\$1.3	365	01/1-12/31

^aDeadloss not included.

^bMillions of dollars.

WESTERN ALEUTIAN CHIONOECETES TANNERI

Historic Background

The first reported landings of *Chionoecetes tanneri* Tanner crab from the Western Aleutian Islands Tanner crab Management Area occurred in the late 1970s incidental to the developing brown king crab fishery in the Adak king crab Management Area. Until 1993 no market existed for *C. tanneri* and few, if any, were sold commercially. No effort was recorded from the Western Aleutian District in 1993. Also in 1993, the department restricted the harvest to males five inches or greater in carapace width.

To collect biological information on *C. tanneri* crab the department implemented 100% observer coverage in 1994, as allowed by the permit provisions provided in 5 AAC 35.082. During that year six vessels registered to fish, however only two made deliveries. One vessel obtained an observer and made one trip with directed effort for *C. tanneri* crab, the other made deliveries incidental to the Adak brown king crab fishery.

1995 Fishery

Preliminary catch records indicate a total of six vessels made 16 landings for a harvest of 144,721 pounds of *C. tanneri* in 1995. The average weight of crab retained in 1995 was 1.9 pounds per crab with an overall catch per unit effort (CPUE) of 4 crab per pot

Directed fishing effort for *C. tanneri* crab, by a total of three vessels, occurred from April through June. The remaining effort was as bycatch in the Adak brown king crab fishery. Fishing effort in the directed fishery for *C. tanneri* was spread out over the Western Aleutian District from Amukta Pass to the Petrel Banks. Crab were harvested from 26 statistical areas. Vessels fished an average of 498 pots and made 16,699 pot pulls during 1995. The average exvessel price for *C. tanneri* in 1995 was \$1.52 per pound for a total fishery value in excess of \$194,000.

Status of Stocks

No stock assessment surveys are conducted for *C. tanneri* Tanner crab, consequently no population estimates are available. Onboard observers have been required on all vessels targeting *C. tanneri*, beginning in 1994. This program has yielded information on size, sex and species composition of the non-retained catch necessary to manage these stocks.

Table 1. Western Aleutian C. tanneri Tanner crab catch, effort and performance, 1993-1995.

Year	Vessels	umber Landi	of ngs Crab	Harvest*,b	Pots Lifted	Average Weight ^b	CPUE	Deadloss
1993			NO RE	EPORTE	D CAT	СН		
1994			C O	N F I D E N	TIAL			
1995	6	16	76,339	144,721	16,699	1.9	4	16,964

^aDeadloss included.

^bIn pounds.

^cDefined as catch per unit effort.

Table 2. Western Aleutian C. tanneri Tanner crab economic performance, 1993-1995.

Year	Season Total		er of Landings	<u>Number o</u> Registered		Va Exvessel	lue Total ^b	<u>Seaso</u> (Days)	: on Length Dates
1993				NO REP	ORTED	САТСН			
1994				CONF	IDENT	AL			
1995	127,757	6	16	NA	16,699	\$1.52	\$0.2	365	01/1-12/31

^aDeadloss not included.

^bMillions of dollars.

LIST OF ORAL PRESENTATION OVERHEAD FIGURES

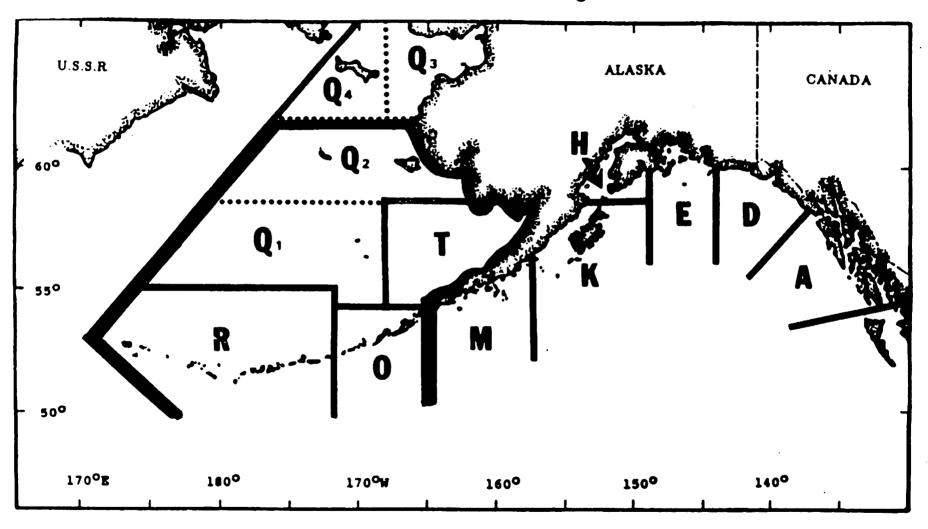
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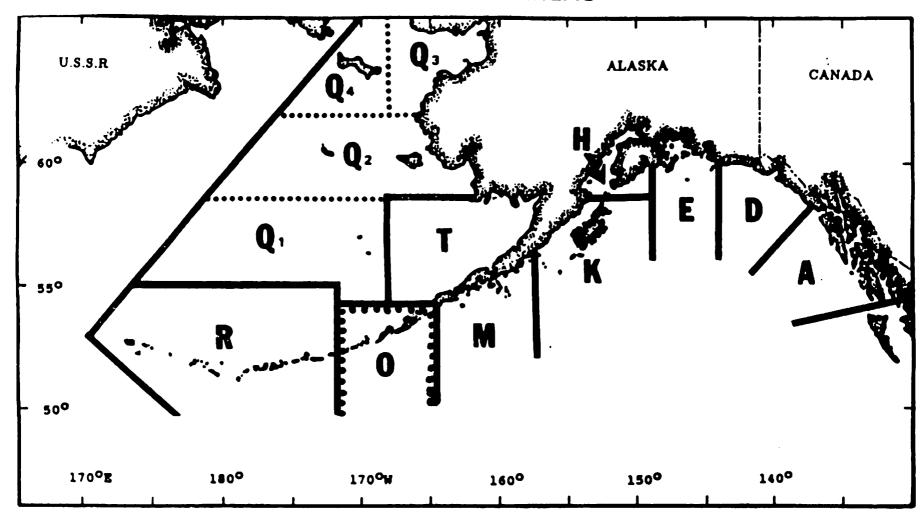
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Bering Sea Aleutian Islands Crab Management Areas

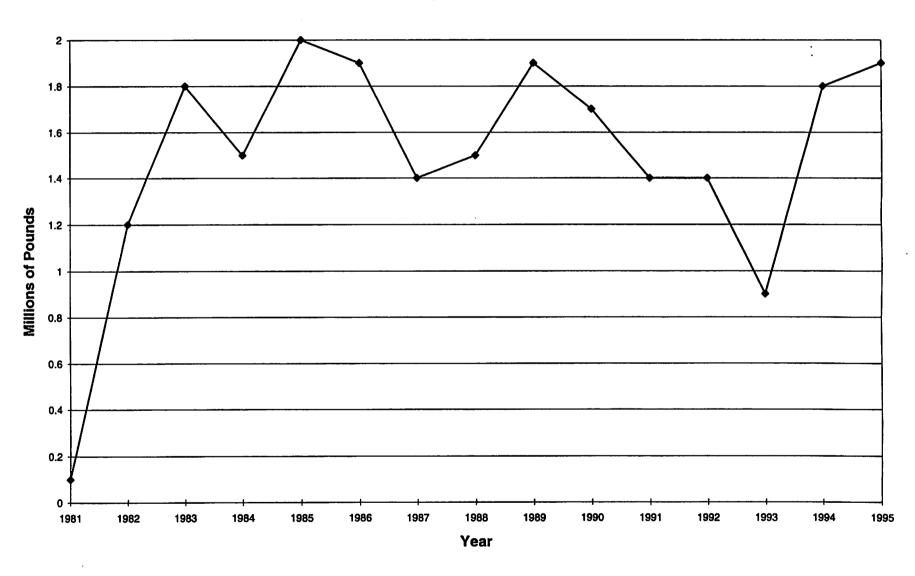


KING CRAB AREAS



Dutch Harbor Management Area "O"

Dutch Harbor Brown King Crab Catch 1981/82 - 1995/96



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Dutch Harbor brown king crab catch and effort 1981/82 - 1995/96.

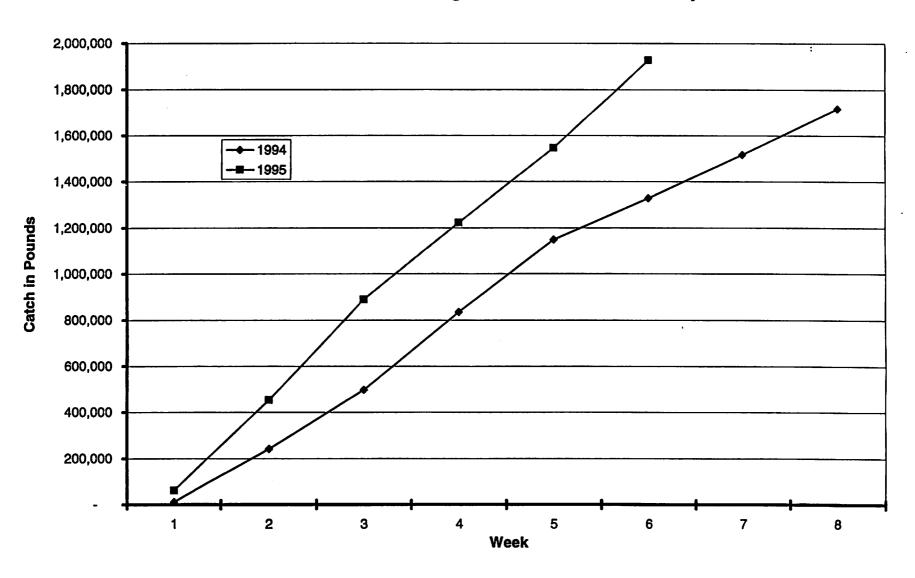
		NUN	MBER	NUMBER O	F POTS	
YEAR	HARVEST ^a	VESSELS	LANDINGS	REGISTERED	PULLED	: CPUE
1981/82	.1	6	16	-0-	2,906	8
1982/83	1.2	49	136	-0-	29,369	8
1983/84	1.8	47	132	4,514	29,595	11
1984	1.5	13	67	1,394	24,044	14
1985	2.0	13	67	1,479	34,287	12
1986	1.9	17	71	1,575	37,585	11
1987	1.4	22	77	3,591	43,017	7
1988 ^b	1.5	21	57	4,215	40,869	8
1989/90	1.9	13	70	5,635	43,345	10
1990/91	1.7	16	68	5,225	54,618	7
1991/92	1.4	11	50	3,760	40,604	8
1992/93	1.4	10	44	4,222	37,718	9
1993/94	.9	4	14	2,334	22,490	10
1994/95	1.8	14	45	7,378	67,537	6
1995/96 ^d	1.9	14	40	10,330	65,030	6

^a Millions of pounds, deadloss included.

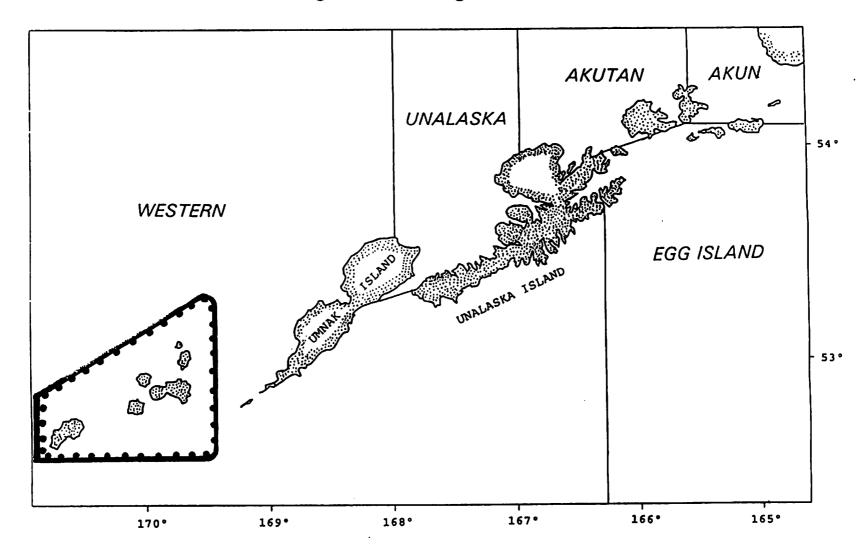
^bSeptember 1 established as season opening date.

^cPreliminary information.

1994 & 1995 Dutch Harbor Brown King Crab Accumulative Harvest By Week



Dutch Harbor King Crab Management Districts



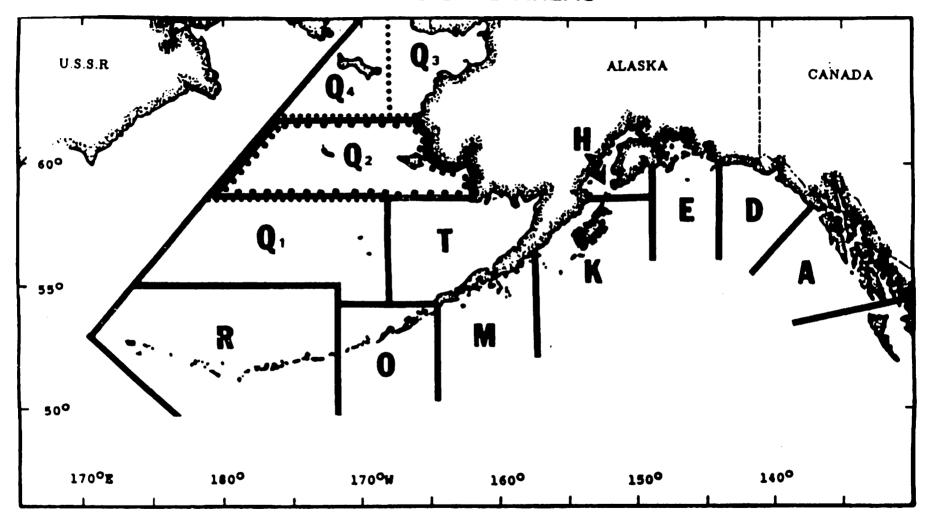
Dutch Harbor brown king crab catch and value, by season, 1986 - 1995.

SEASON YEAR TOTAL ^a		NUM VESSELS	MBER LANDINGS	VAL EXVESSEL		•	SEASON LENGTH DAYS DATES		
IEAR	IUIAL	V ESSELS	LANDINGS	EA VESSEL	TOTAL	DAIS	DATES		
1986	1.8	17	71	\$2.85	\$5.1	182	07/01-12/31		
1987	1.4	22	77	\$2.85	\$4.0	62	07/01-09/02		
1988	1.5	21	57	\$3.00	\$4.5	93	09/01-12/04		
1989	1.8	13	70	\$3.50	\$6.3	104	09/01-12/15		
1990	1.7	16	68	\$3.00	\$5.1	68	09/01-11/09		
1991	1.4	11	50	\$2.00	\$2.8	74	09/01-11/15		
1992	1.3	10	44	\$2.50	\$3.3	76	09/01-11/17		
1993/94	.9	5	14	\$2.15	\$1.9	212	09/01-03/31		
1994	1.8	14	45	\$4.00	\$6.9	57	09/01-10/28		
1995°	1.9	14	40	\$2.55	\$4.9	39	09/01-10/09		

^aMillions of pounds, deadloss not included. ^bMillions of dollars.

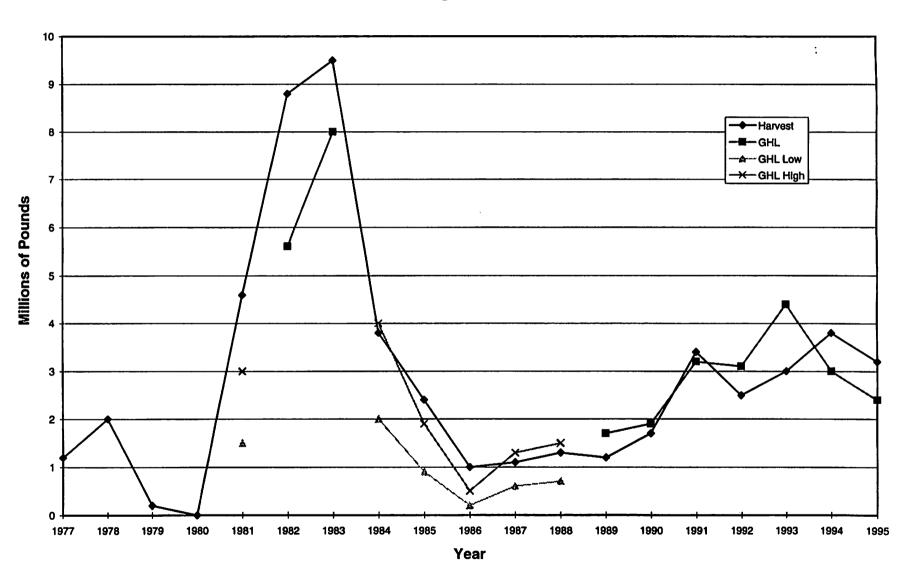
^cPreliminary information.

KING CRAB AREAS



St. Matthew Island Section of the Northern District of the Bering Sea King Crab Management Area.

St. Matthew Blue King Crab Catch 1977 - 1995



Blue king crab catch and value, for the ST. Matthew Section of the Northern District of the Bering Sea, 1986 - 1995.

		SEASON	NUMBER	POTS	VALU	E	SEASON
YEAR	GHL ^a	TOTAL ^b	VESSELS	REGISTERED	EXVESSEL	TOTAL°	DAYS
					40.00		_
1986	0.2-0.5	1.0	38	5,600	\$3.20	\$3.2	5
1987	0.6-1.3	1.1	61	9,370	\$2.85	\$3.1	4
1988	0.7-1.5	1.3	46	7,780	\$3.10	\$4.0	4
1989	1.7	1.2	69	11,983	\$2.90	\$3.5	3^d
1990	1.9	1.7	31	6,000	\$3.35	\$5.7	6
1991	3.2	3.2	68	13,100	\$2.80	\$9.0	4
1992	3.1	2.5	174	17,400	\$3.00	\$7.4	3^d
1993	4.4	3.0	92	5,895	\$3.23	\$9.7	6
1994	3.0	3.7	87	5,685	\$4.00	\$15.0	7
1995	2.4	3.1	90	5,970	\$2.32	\$7.1	5

^aGuideline Harvest Level.

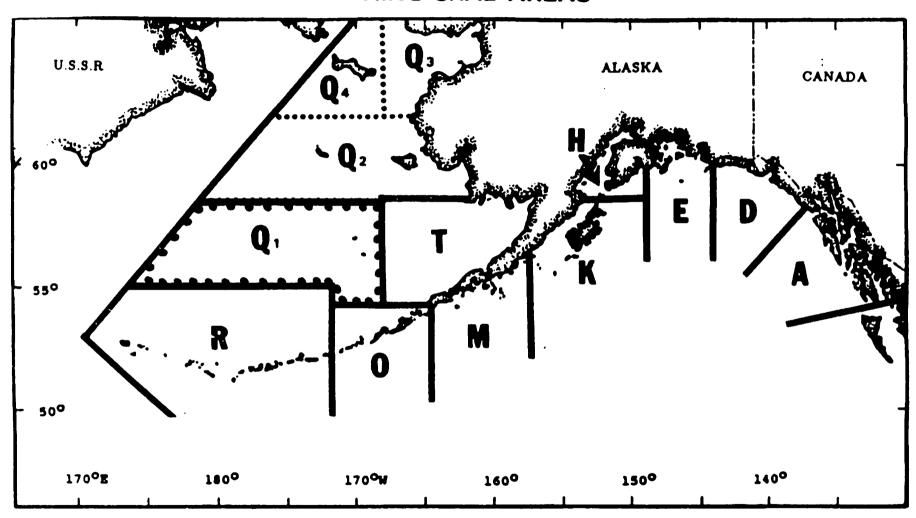
^dActual length - 60 hours.



^bMillions of pounds, deadloss not included.

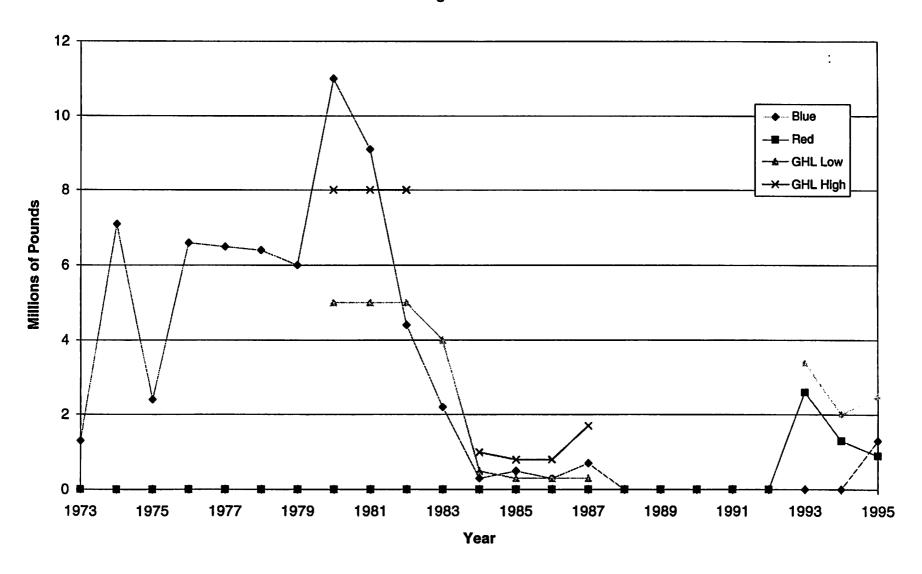
^cMillions of dollars.

KING CRAB AREAS



Pribilof District of the Bering Sea King Crab Management Area.

Pribiliof District King Crab Catch 1973/74 - 1995



Overhead # 11

King crab catch and effort, by season, for the Pribilof District of

the Bering Sea, 1973/74 - 1995.

the bering			NUMBER	POTS	
YEAR	GHL ^{b,c}	HARVEST	VESSELS	REGISTERE	O CPUE ^d
1973/74ª		1.3	8	NA	26
1974/75°		7.1	70	NA	20
1975/76 ^a		2.4	20	NA	19
1976/77ª		6.6	47	NA	12
1977/78 ^a		6.5	34	NA	8
1978/79ª		6.4	58	NA	8
1979/80 ^a		6.0	46	NA	9
1980/81ª	5.0-8.0	11.0	110	31,636	9
1981/82 ^a	5.0-8.0	9.1	99	25,408	7
1982/83 ^a	5.0-8.0	4.4	122	34,429	5
1983/84ª	4.0	2.2	126	36,439	3
1984/85°	0.5-1.0	0.3	16	3,122	3
1985/86ª	0.3-0.8	0.5	26	6,038	3
1986/87ª	0.3-0.8	0.3	16	4,376	2
1987/88ª	0.3-1.7	0.7	38	9,594	2
1988/89	N	O COMMER	CIAL FISH	ERY	
1989/90	N	O COMMER	CIAL FISH	ERY	
1990/91	N	O COMMER	CIAL FISH	ERY	
1991/92	N	O COMMER	CIAL FISH	ERY	
1992/93	N	O COMMER	CIAL FISH	ERY	
1993 ^e	3.4	2.6	112	4,860	11
1994 ^e	2.0	1.3	104	4,675	6
1995 ^e	$2.5^{a,e}$.9	117	5,400	3
1995 ^a	$2.5^{a,e}$	1.3	119	5,400	5

^a Blue king crab. ^b Guideline Harvest Level.

^c Millions of pounds, deadloss included.

^d Defined as catch per pot pull.

e Red king crab.

King crab catch and value, by season, for the Pribilof District of the Bering Sea, 1986/87 - 1995.

	SEASON	NUN	MBER	VALI	UE	SEASON LENGTH		
YEAR	TOTAL ^b	VESSELS	LANDINGS	EXVESSEL	TOTAL°	DAYS	DATES	
1986/87ª	0.3	16	25	\$4.05	\$1.2	55	9/25-11/20	
1987/88ª	0.7	38	68	\$4.00	\$2.8	86	9/25-12/20	
1988/89		1	NO COMMER	CIAL FISHER	Υ			
1989/90	NO COMMERCIAL FISHERY							
1990/91		Ŋ	NO COMMER	CIAL FISHER	Y			
1991/92		N	NO COMMER	CIAL FISHER	.Y			
1992/93		Ŋ	NO COMMER	CIAL FISHER	Υ		•	
1993 ^d	2.6	112	135	\$4.98	\$13.0	6	9/16-09/21	
1994 ^d	1.3	104	121	\$6.00	\$8.0	6	9/15-09/21	
1995 ^d	.9	117	151	\$3.37	\$3.0	7	9/15-09/22	
1995 ^a	1.2	119	152	\$2.92	\$3.6	7	9/15-09/22	

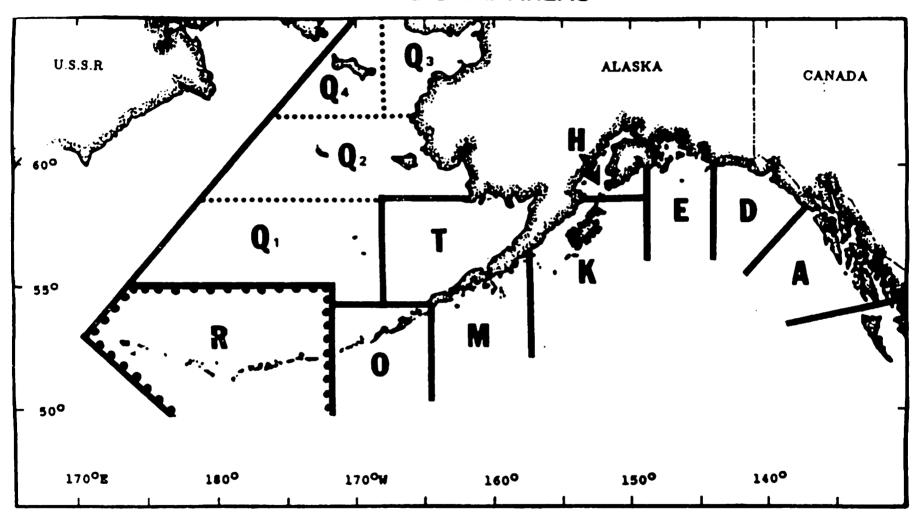
^aBlue king crab.

^bMillions of pounds, deadloss not included.

^cMillions of dollars.

^dRed king crab.

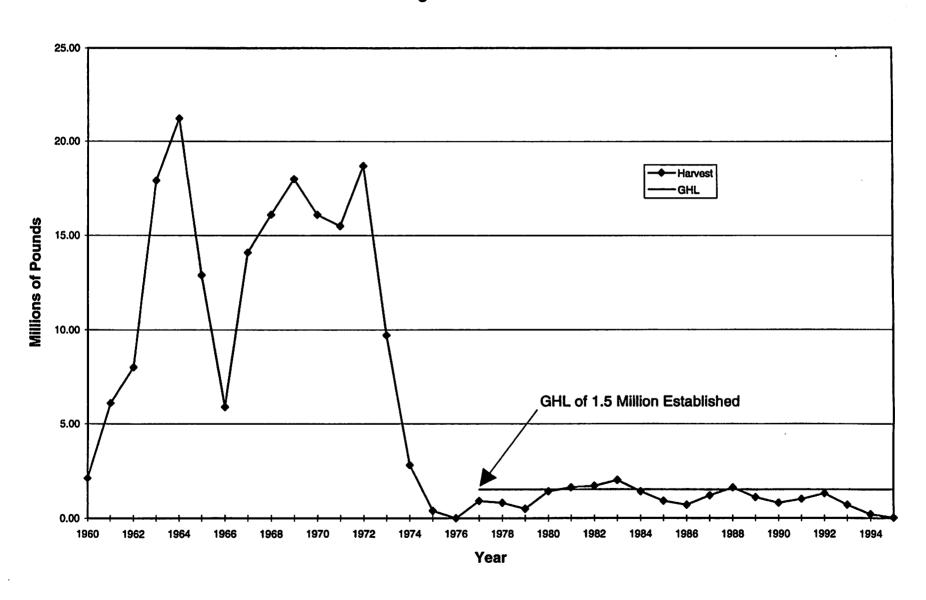
KING CRAB AREAS



Adak King Crab Management Area "R".

Unverticate #

Adak Red King Crab Harvest 1960 - 1995



Adak red king crab catch and effort 1986/87 - 1995/96.

		NU	MBER	NUMBER OF	FPOTS	
YEAR	HARVEST ^a	VESSELS	LANDINGS	REGISTERED	PULLED	:CPUE ^b
1986/87	.7	33	69	12,958	29,189	4
1987/88	1.2	71	109	17,720	43,433	5
1988/89	1.6	73	156	23,927	64,374	4
1989/90	1.1	56	123	19,363	54,513	4
1990/91	.8	7	34	8,500	10,674	14
1991/92	1.0	10	35	2,305	16,636	10
1992/93	1.3	12	30	2,716 ^c	16,129	13
1993/94	.7	12	21	3,948	13,575	9
1994/95	.2	20	31	4,065	18,146	2
1995/96 ^d	.03	11	7	3741		2

^a Millions of pounds, deadloss included.

^b Defined as catch per pot pull.

^c Includes gear of vessels landing both red and brown king crab.

^d Fishery is on going. Preliminary information through December 10, 1995.

Adak red king crab catch and value, by season, 1986/87 - 1995/96.

	SEASON		MBE		VALI		SEASON LENGTH	
YEAR	TOTAL ^a	VESSELS ^o	CP'S	LANDINGS	EXVESSEL	TOTAL	DAYS	DATES
1986/87	.7	33	N/A	69	\$3.85	\$2.7	107	11/01-02/15
1987/88	1.2	71	N/A	109	\$4.00	\$4.8	107	11/01-02/15
1988/89	1.6	73	11	156	\$5.00	\$8.0	34	11/01-12/04
1989/90	1.1	56	10	123	\$4.20	\$4.6	107	11/01-02/15
1990/91	.7	7	4	34	\$4.00	\$2.8	107	11/01-02/15
1991/92	.9	10	3	35	\$3.00	\$2.9	107	11/01-02/15
1992/93	1.3	12	2	30	\$5.05	\$6.5	76	11/01-01/15
1993/94	.7	12	1	21	\$3.87	\$2.7	107	11/01-02/15
1994/95	.2	20	3	31	\$5.50	\$1.1	27	11/01-11/28
1995/96 ^d	.03	11	1	7	\$2.70	\$.09		11/1-Present

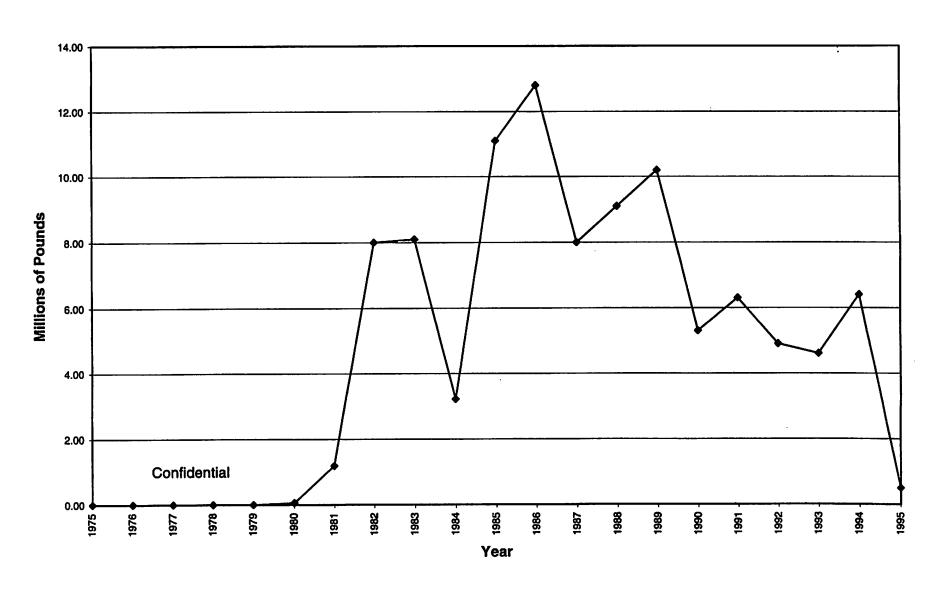
^aMillions of pounds, deadloss not included.

^bIncludes catcher-processors.

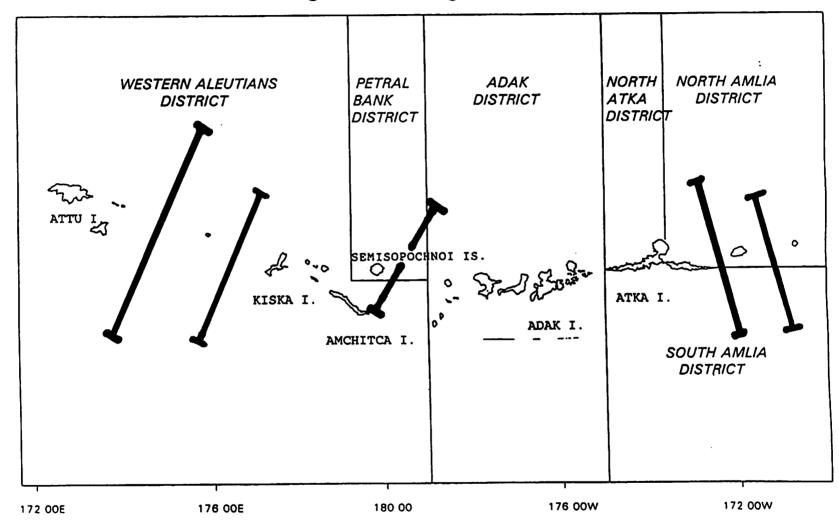
^cMillions of dollars.

^d Fishery is on going. Preliminary information through December 10, 1995.

Adak Brown King Crab Harvest 1975 - 1995



Adak King Crab Management Districts



Adak brown king crab catch and effort 1985/86 - 1995/96.

		<u>NUMBER</u>		NUMBER O	F POTS	
YEAR	HARVEST ^a	VESSELS	LANDINGS	REGISTERED ^b	PULLED	:CPUE ^c
1985/86	11.1	49	386	7,057	202,401	12
1986/87	12.8	62	525	12,958	392,185	7
1987/88	8.0	46	386	10,687	267,705	7
1988/89	9.1	74	455	23,627	280,732	8
1989/90	10.2	64	505	14,724	324,153	8
1990/91	5.3	13	167	7,380	160,960	8
1991/92	6.3	16	206	7,635 ^d	192,949	8
1992/93	4.9	18	130	8,236 ^d	165,503	7
1993/94	4.6	21	147	11,970 ^d	212,164	6
1994/95	6.4	34	247	15,604 ^d	319,006	5
1995/96 ^e	.5	14	13	8,060 ^d		6

^a Millions of pounds, deadloss included.

^b No separate registration from red king crab.

^c Defined as catch per pot pull.

^d Gear directed fishing on brown king crab.

^e Fishery is on going. Preliminary data through December 10, 1995.

Adak brown king crab catch and value, by season, 1985/86 - 1995/96.

	SEASON		NUMBER		VAL	UE	SEASON LENGTH	
YEAR	TOTAL	VESSELS ^b	CP'S	LANDINGS	EXVESSEL	TOTAL	DAYS	DATES
1985/86	11.1	49	N/A	386	\$2.50	\$27.8	288	11/01-8/15
1986/87	12.5	62	N/A	325	\$3.00	\$37.5	288	11/01-8/15
1987/88	7.8	46	N/A	386	\$3.00	\$23.4	289	11/01-8/15
1988/89	9.0	74	13	455	\$3.20	\$28.8	288	11/01-8/15
1989/90	10.1	64	15	505	\$3.00	\$30.3	288	11/01-8/15
1990/91	5.3	13	6	167	\$3.00	\$15.9	288	11/01-8/15
1991/92	6.1	16	7	206	\$2.50	\$15.2	289	11/01-8/15
1992/93	4.9	18	4	130	\$2.05	\$10.1	288	11/01-8/15
1993/94	4.6	21	1	147	\$2.50	\$11.2	288	11/01-8/15
1994/95	6.1	34	2	247	\$3.33	\$20.4	288	11/01-8/15
1995/96 ^d	.5	14	1	13	\$2.17	\$1.0		11/1-Present

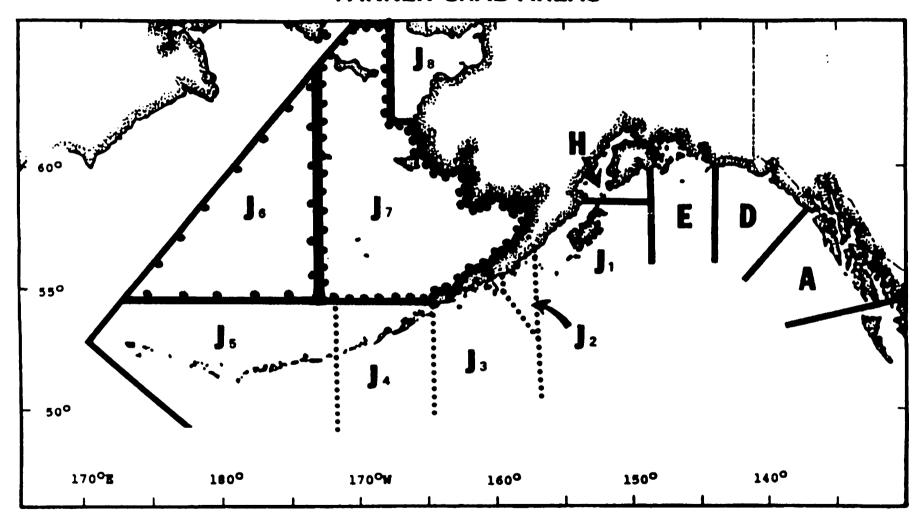
^aMillions of pounds, deadloss not included.

^bIncludes catcher-processors.

^cMillions of dollars.

^dFishery is on going. Preliminary information through December 31, 1995.

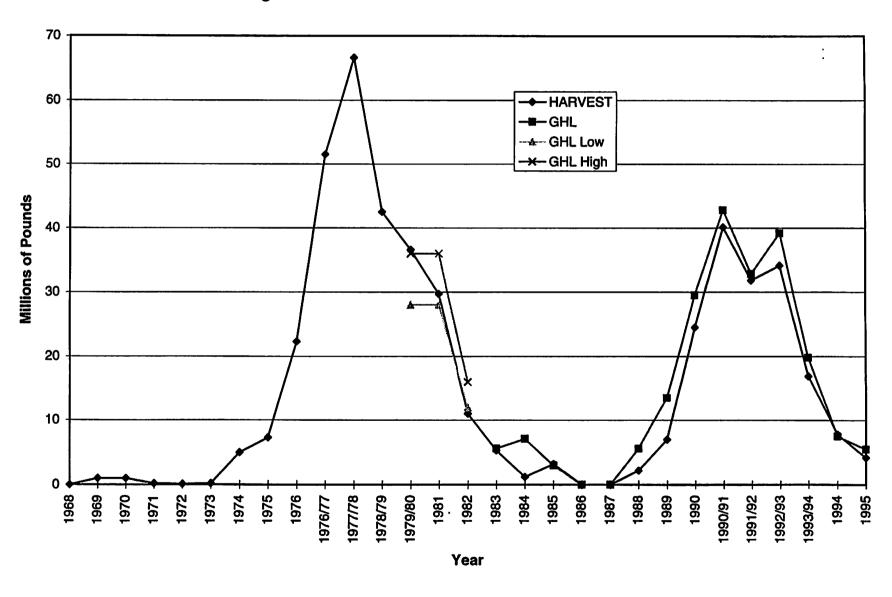
TANNER CRAB AREAS



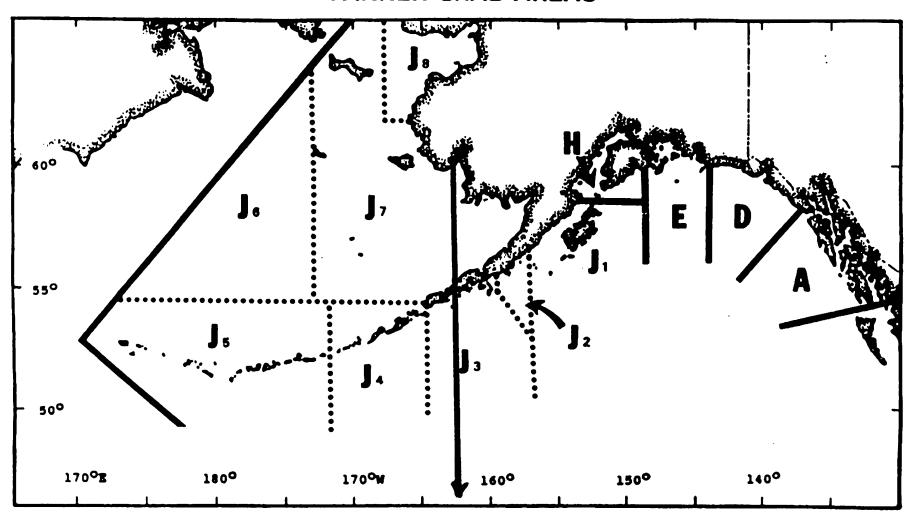
Western Subdistrict of the Bering Sea Tanner Crab Management Area "Q".

Eastern Subdistrict of the Bering Sea Tanner Crab Management Area "Q".

Bering Sea Chionoecetes bairdi Tanner Crab Catch 1960 - 1995



TANNER CRAB AREAS



Eastern Subdistrict of the Bering Sea Tanner Crab Management Area "Q".

That Portion of the Eastern Subdistrict West of 163° West Longitude.

Bering Sea C. bairdi Tanner crab catch and effort 1986 - 1995.

YEAR	GHL ^{a,b}	HARVEST ^b		MBER LANDINGS	NUMBER O	F POTS PULLED	CPUE ^c
1986			NO CON	MMERCIAL	FISHERY		
1987			NO COM	MMERCIAL	FISHERY		
1988	5.6	2.2	98	248	38,765	112,334	8
1989	13.5	7.0	109	359	43,607	184,892	16
1990	29.5	24.5	179	1,032	46,440	711,137	15
1990/91	42.8	40.1	255	1,756	75,356	883,391	19
1991/92	32.8	31.8	285	2,339	85,401	1,244,633	10
1992/93	39.2	35.1	294	2,084	71,481	1,200,885	13
1993/94	19.8	16.9	296	862	69,900	576,464	13
1994	7.5	7.8	183	349	38,670	249,536	13
1995 ^d	5.5	4.2	195	254	41,000		7

^a Guideline Harvest Level.

^b Millions of pounds, deadloss included.

^c Defined as catch per pot pull.

^d Preliminary Data.

Bering sea C. bairdi catch and value, by season, 1986 - 1995.

YEAR	SEASON TOTAL ^a	NUM VESSELS	IBER LANDINGS	VALU EXVESSEL	JE TOTAL ^b	SEASO DAYS	N LENGTH DATES
							·
1986		NO C	OMMERC	IALFISH	ERY		
1987		NO C	OMMERC	IAL FISH	ERY		
1988	2.2	98	248	\$2.17	\$4.8	93	1/15-04/20
1989	7.0	109	359	\$2.90	\$20.3	110	1/15-05/07
1990°	24.5	179	1,032	\$1.85	\$45.3	89	1/15-04/24
1990/91	39.7	255	1,756	\$1.12	\$44.5	126	11/20-3/25
1991/92	31.5	285	2,339	\$1.50	\$47.3	137	11/15-3/31
1992/93	35.1	294	2,084	\$1.69	\$58.8	137	11/15-3/31
1993 ^d	4.1	283	347	\$1.90	\$7.6	10	11/1-11/10
1993/94 ^e	12.8	261	515	\$1.90	\$24.0	42	11/20-01/1
1994 ^e	7.6	183	349	\$3.75	\$28.5	20	11/1-11/21
1995 ^{e,f}	4.2	195	254	\$2.80	\$11.7	15	11/1-11/16

^a Millions of pounds, deadloss not included.

^b Millions of dollars.

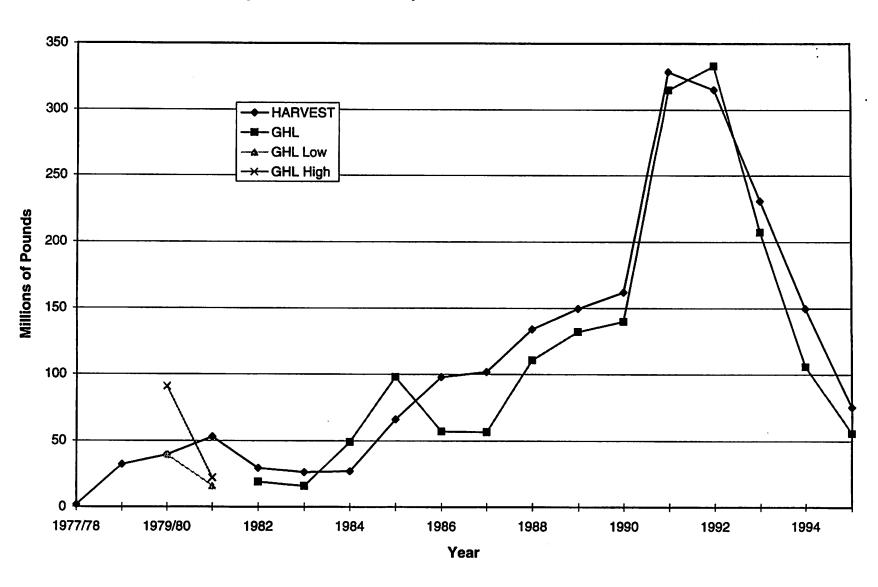
^c Winter fishery.

^d East of 168° West longitude.

e 163°-173° West longitude.

f Preliminary information.

Bering Sea Chionoecetes opilio Tanner Crab Catch 1977/78 - 1995



Overhand # no

Bering Sea C.opilio Tanner crab catch and effort 1986 - 1995.

			NUN	MBER	NUMBER C		
YEAR	GHL ^{a,b}	HARVEST ^b	VESSELS	LANDINGS	REGISTERED ^c	PULLED	CPUE ^d
1986 ^e	57.0	98.0	88	992	13,750	543,744	141
1987	56.4	101.9	103	1,038	19,386	616,113	132
1988	110.7	134.0	171	1,285	38,765	776,907	136
1989	132.0	149.5	168	1,341	43,607	663,442	170
1990	139.8	161.8	189	1,565	46,440	911,613	141
1991	315.0	328.6	220	2,788	76,056	1,391,583	191
1992	333.0	315.3	250	2,763	77,858 ^f	1,281,796	177
1993	207.2	230.8	254	1,836	65,081	971,046	175
1994	105.8	149.8	273	1,293	54,837 ^f	716,524	160
1995	55.7	75.3	253	869	53,707 ^f	506,802	117

^a Guideline Harvest Level.

^b Millions of pounds, deadloss included.

^c Same gear as C. bairdi fishery.

^d Defined as catch per pot pull.

^e Open only west of 164° West longitude.

f Gear for C. opilio vessels only.

Bering sea C.opilio catch and value, by season, 1986 - 1995.

	SEASON		/IBER	VALU		SEASON
YEAR	TOTAL	VESSELS	LANDINGS	EXVESSEL	TOTAL ^b	LENGTH°
1986 ^d	96.6	88	992	\$0.60	\$60.0	252
1987	100.9	103	1,038	\$0.75	\$75.7	158
1988	130.8	171	1,285	\$0.77	\$100.7	120
1989	147.6	168	1,341	\$0.75	\$110.7	112
1990	160.0	189	1,565	\$0.64	\$102.3	148
1991	325.2	220	2,788	\$0.50	\$162.6	159
1992	313.0	250	2,763	\$0.50	\$156.5	97
1993	229.2	254	1,836	\$0.75	\$171.9	59
1994	148.0	273	1,293	\$1.30	\$192.4	45
1995	74.0	253	869	\$2.43	\$179.7	33

^a Millions of pounds, deadloss not included.

Overhead # 28

^b Millions of dollars.

^c In days.

^d Partial closures only.

C. tanneri catch and value, by season, 1991 - 1995.

		SEASON	NUM	NUMBER		Œ	SEASON	
YEAR	AREA	TOTALa	VESSELS	LANDINGS	EXVESSEL	TOTAL ^b	LENGTH°	
		· · · · · · · · · · · · · · · · · · ·	·			<u> </u>		
1993	Bering Sea	587,796	6	18	\$0.94	\$0.6	365	
1994	Bering Sea	301,869	4	12	\$1.20	\$0.4	365	
1995	Bering Sea	900,017	8	47	\$1.40	\$1.3	365	
1993	E. Aleutians		CON	FIDENTIAL			365	
1994	E. Aleutians	739,765	3	27	\$1.20	\$0.9	365	
1995	E. Aleutians	822,089	7	51	\$1.57	\$1.3	365	
1993	W. Aleutians		NO REPORTED CATCH					
1994	W. Aleutians		CON		365			
1995	W. Aleutians	127,757	6	16	\$1.52	\$0.2	365	

^a In pounds, deadloss not included. ^b Millions of dollars.

^c In days.