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COMMERCIAL KING AND TANNER CRAB FISHERIES IN KODIAK AND ALASKA
PENINSULA AREAS

A REPORT TO THE ALASKA BOARD OF FISHERIES

By

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TABLE OF CONTENTS

	<u>Page</u>
LIST OF TABLES	i
LIST OF FIGURES	ii
RED KING CRAB FISHERY	1
BROWN KING CRAB FISHERY	3
TANNER CRAB FISHERY	3
DEEPWATER TANNER CRAB FISHERY	5
TABLES	6
FIGURES	13

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. Historic commercial red king crab catch and effort within the Kodiak Registration Area `K`	6
2. Catch and effort statistics for red king crab in the Alaska Peninsula, Area M	7
3. Historic commercial brown king crab <i>Lithodes aequispinus</i> catch and effort for the Kodiak Registration Area `K`, 1983-1995.....	8
4. Commercial catch and effort for the Tanner crab <i>Chionoecetes bairdi</i> , Kodiak Management District, 1967-1995.....	9
5. Chignik District Tanner crab, <i>Chionoecetes bairdi</i> , catch and effort statistics since 1968	10
6. Tanner crab <i>Chionoecetes bairdi</i> catch and effort statistics for South Peninsula District since 1967.....	11
7. Commercial catch and effort for the grooved Tanner crab <i>Chionoecetes tanneri</i> , South Peninsula District, 1994-1995	12

LIST OF FIGURES

<u>Figure</u>		<u>Page</u>
1.	Kodiak and Alaska Peninsula King Crab Management Areas.....	13
2.	Commercial red king crab harvest from the Kodiak Management Area, 1950-1995	14
3.	Commercial harvest of red king crab from the Alaska Peninsula Management Area, 1947-1995.....	15
4.	Kodiak, Chignik, and South Peninsula Tanner Crab Management Districts.....	16
5.	Tanner crab, <i>Chionoecetes bairdi</i> , harvest from the South Peninsula, Chignik, and Kodiak Districts, 1967-1995.....	17
6.	South Peninsula District commercial <i>C. tanneri</i> width frequencies, 1995	18

RED KING CRAB FISHERY

The Alaska Peninsula Management Area includes those waters of the Pacific Ocean west of the longitude of Cape Kumlik and east of the longitude of Scotch Cap Light. The Kodiak Management Area includes those waters of the Pacific Ocean south of the latitude of Cape Douglas and east of the longitude of Cape Kumlik (Figure 1.).

The Kodiak red king crab fishery was pioneered by salmon fishermen. Beginning in 1936 small amounts of red king crab were landed, but catches were not officially recorded until 1950. This period in the history of the fishery was exploratory in nature. Fishermen were locating crab, determining abundance and testing gear types. Markets were developed to sell the product. During the exploratory period, The federal Bureau of Commercial Fisheries, now National Marine Fisheries Service was the management agency. Regulations in effect during this period provided for retaining only males with a minimum width of 5 1/2 inches. In 1949, the size limit was increased to 6 1/2 inches.

Sixty thousand pounds of king crab were landed in Kodiak during 1950 and the fishery was on its way to becoming a major force in the economy of Alaska fishermen (Table 1, Figure 2). Tangle nets were the most popular gear to catch king crab during the early days of fishery. Vessels were small beach seine skiffs that could handle the large mesh sunken gill net. Tangle net fishing was prohibited by 1955 as the difficulty of removing female and undersized male crabs became apparent. By 1953 small otter trawls were the main type of gear used in the taking of king crabs and remained the dominant gear until 1956.

Pots gradually replaced trawls as fishermen developed better methods of construction and improved pot efficiency. Large male crab could be targeted without handling the small crab and fish caught in trawls. The Kodiak king crab catch increased to 21 million pounds by 1959. Pots and ring nets were classified as the only legal gear and a pot limit of 30 pots per vessel was established for Kodiak. As Alaska gained statehood, management authority was transferred to the Alaska Department of Fish and Game.

The size limit was increased to 7 inches in 1963 based on Kodiak area growth studies. This would allow male king crab at least one year to breed before becoming available to the fishery. The early sixties saw continued fishery development. Even with the Good Friday earthquake which disrupted production, the 1964 harvest totaled 37 million pounds. The 30 pot limit was dropped in 1965. The development period which began in 1950, peaked in 1966 when 175 vessels delivered 94 million pounds of king crab to 32 processors in a ten-month fishing season. The Department issued its first emergency order to protect mating and molting crab in 1966 and added its first shellfish management position.

The fishery expanded to offshore areas from 1967 to 1970 in an attempt to maintain the catch levels of previous years. The department started research fishing program in 1967 to locate concentrations of prerecruit crab and to estimate future years production. Results predicted a continuing decline of legal sized crab. The catch dropped to 43 million pounds during the 1967/68 season and 18 million pounds the following year. Test fishing by the department

determined that in areas with an intensive commercial harvest, there was a higher incidence of barren females.

Pot limits were again instituted by the Board of Fisheries in 1970 and set at 60 pot per vessel. A policy was established with two main goals:

- To develop and establish an stable fishery, with the objective of eliminating fluctuating harvests,
- To develop and maintain a broad base of various age classes in order to insure breeding success.

The Board of Fisheries increased the pot limit to 75 in 1971. By 1972 the decline had been reversed and harvests started increasing. The pot limit was raised to 100 in 1979 and to 150 in 1981. The 1981/82 season catch was the highest of the previous 14 years at 24 million pounds. This was followed by a harvest of 8.7 million pounds, the lowest in 24 years. The value of the 1982/83 fishery was the second highest ever worth \$32.7 million. A record number 309 vessels had participated.

The 1983 red king crab fishery was not opened by the Department of Fish and Game due to poor stock condition. Recruitment of legal sized animals had been lacking for 2 years and was not forecast to improve during the next 3 years. The Kodiak red king crab stocks have not experienced any notable recruitment since that time and the fishery has remained closed.

A management plan was developed in 1986 to address rebuilding of this depressed populations. A threshold value in number of fertilized female king crabs necessary to maintain reproductive potential was established. Commercial fisheries would not occur below that value. The threshold value for the Kodiak Management Area is 5.1 million fertilized female red king crab.

The red king crab fishery in the Alaska Peninsula Management Area has followed a similar pattern to Kodiak. The first harvest was recorded in 1947 at 141,000 pounds (Table 2, Figure 3). Initial exploitation was with trawl gear that gave way to pots by the late 1950's. The harvest peaked in 1966 at 22.6 million pounds. Strong recruitment in the late 1970's led to a 5 million pound catch in the 1980/81 season, the highest since 1968. Subsequently recruitment failure has caused this stock to collapse and no fisheries have been allowed since 1983.

The Department currently utilizes a trawl survey to assess crab populations in the Alaska Peninsula and Kodiak areas. Red king crab stocks remain at historically low levels. The 1995 population estimate in Kodiak is 27,000 crabs of which only 9,300 are legal-sized males. The mature female population is estimated to be 13,100 crabs. This population level is less than 2% of that seen in the early 80's. Population estimates should be viewed cautiously, especially in regard to smaller animals. Nearshore habitat was not well sampled due to survey design and conflicts with commercial Dungeness crab pots. There are small concentrations of king crab reported by divers and fishermen that are not encountered by the trawl survey.

King crab populations in the Alaska Peninsula area are similarly depressed. Crab captured during the most recent survey in 1994 totaled only 96 red king crabs out of 155 trawl hauls. Red king

crab stocks are not expected to rebound to commercial levels until oceanographic conditions change.

BROWN KING CRAB FISHERY

Interest in harvesting brown king crab grew with the collapse of the red king crab stocks. Brown kings were occasionally landed with red king crab in prior years, but the first recorded landings occurred in 1983. Twelve vessels explored around Kodiak finding limited resources. The catch totaled 111,398 pounds from 36 landings (Table 3). The largest harvest in this fishery occurred in 1986 at 146,000 pounds. Since 1988 there have been either 1 or 2 boats with confidential landings or no activity at all. Two vessels made landing in 1995 from the Kodiak area. Vessels have sporadically registered for the Alaska Peninsula but no commercial quantities of resource have been located to date.

TANNER CRAB FISHERY

Tanner crab stocks in the Kodiak and Alaska Peninsula areas are managed by three districts. The Kodiak District includes Pacific Ocean waters south of the latitude of Cape Douglas and east of the longitude of Cape Kumlik. The Chignik District includes waters west of the longitude of Cape Kumlik and east of a line from Kupreanof Point to Castle Rock and east of a line extending 135° from Castle Rock. The South Peninsula District includes waters west of the Chignik District and east of the longitude of Scotch Cap Light (Figure 4).

The domestic Tanner crab, *Chionoecetes bairdi*, fishery in Kodiak and waters south of the Alaska Peninsula began in 1967 when nearly 200,000 pounds were landed. As red king crab stocks declined in the late 60's interest increased in the Tanner crab fishery. Market conditions had improved by the 1972/73 season and Tanner crab had established itself as the dominant winter and spring fishery with a harvest 34.3 million pounds. The majority of that came from the Kodiak District (Tables 4, 5 & 6 and Figure 5).

The Department initiated assessment work on Tanner crabs in 1973. Pot surveys were conducted to estimate the annual relative abundance of crab and predict recruitment trends. These estimates would allow the department to establish annual harvest levels. The Alaska Board of Fisheries in 1974 set the first harvest levels on Tanner crab at 35 to 55 million pounds for Kodiak, Chignik and South Peninsula. An April 30th closure date was adopted to protect crab at the onset of mating. The Board established a 5 1/2 inch minimum size limit in 1976 to allow males one breeding season before becoming available for harvest.

The commercial fishery peaked during the 1977/78 season when over 45 million pounds were harvested. A Fishery Management Plan was established by the North Pacific Fisheries Management Council in 1978 for Tanner crab in the Exclusive Economic Zone from 3 to 200 miles off Alaska. The commercial catch began to decline in the late 70's. The Board of Fisheries adopted a 250 pot limit in an attempt to reduce effort in the fishery. The demand for Tanner crab

increased and the exvessel value climbed from 65 cents per pound to \$1.65. Vessel participation increased in spite of declining catches. The South Peninsula and Chignik Districts were designated a super-exclusive area in 1983 and the Kodiak pot limit was reduced to 200.

he joint state-federal Fishery Management Plan was still in effect although there was considerable confusion over the enforcement and effective dates of regulation. A federal judge issued a restraining order in 1984 restricting the State of Alaska from enforcing the Chignik South Peninsula super-exclusive status and the 200 pot limit in Kodiak outside of three miles. The F.M.P. was amended nine times in six years, however it still could not provide management based on the best available scientific information or produce timely coordination with the state. It was repealed at the request of the North Pacific Fisheries Management Council in 1987. The state of Alaska once again had sole responsibility for the Tanner crab fishery in the Gulf of Alaska. The commercial harvest had declined to near 5 million pounds by this time.

The Board of Fisheries adopted a sliding scale pot limit in 1990 for Kodiak. The limit ranged from 75 to 150 pots depending on the pre-season harvest projection. As crab stocks decreased the pot limit reduced the amount of gear on the fishing grounds and made in-season management decisions possible. A single pot limit of 75 pots per vessel in Kodiak was adopted in 1993 while a sliding scale of 40 to 75 pots was enacted for the Chignik and South Peninsula Districts. The last fishery allowed in the Chignik and South Peninsula Districts was in 1989. The harvest totaled 1.4 million pounds. The most recent fishery in Kodiak was 1994 with a catch of 1.3 million pounds.

Trawl surveys were conducted in the region as early as 1963. Because trawling allows faster surveying and also captures smaller age classes of crabs, it has gradually replaced the crab pot as the preferred gear for crab stock assessment. The last pot survey was conducted in 1987. The Department of Fish and Game conducted a summer trawl survey in 1995 to assess Kodiak red king and Tanner crab populations. Two hundred and eighteen tows were completed around the island. Tanner crab populations nearly doubled from the previous year increasing from an estimate of 19.3 million crabs to 35.6 million crabs. The increase was largely based on a recruitment event which occurred in the Northeast District. These were small crab, however, three to four years from maturity and it is likely that only a small proportion of them will survive to reach legal size. The legal-sized estimate of 655,000 crabs was down 40% from the previous year despite not having a commercial fishery. Both the number of legal males and the number of crabs one molt from entering the fishery were by far the lowest numbers since the inception of the trawl survey.

Tanner crab populations in the Chignik and South Peninsula districts are similarly depressed. The most recent complete survey occurred in 1994. The total Tanner crab population was estimated to be 4.6 million crabs, a 36% decline from the previous year. Legal male Tanner crab estimates remain well below the levels of the late 1980's when the commercial fishery closed. Total numbers of male and female crabs observed have declined to the lowest level observed since trawl surveys were instituted in those areas.

DEEPWATER TANNER CRAB FISHERY

Kodiak and the Alaska Peninsula were initially explored for deepwater Tanner crabs, *Chionoecetes tanneri* and *C. angulatus* in 1994. The fishery was permitted under the terms of 5 AAC 35.082. Vessels were required to use single line pot gear and carry ADF&G approved observers. A minimum carapace width of 5.0 inches for *C. tanneri* and 4.5 inches for *C. angulatus* was stipulated. Two vessels explored the Kodiak, Chignik and South Peninsula Districts and their harvest remains confidential.

Interest in deepwater Tanner crabs increased in 1995. Eight vessels fished in the South Peninsula District, however only 6 made landings totaling 947,014 pounds (Table 7). Some activity occurred in every month except January. Most of the fishing has occurred on the band of continental shelf ranging from 250 to 400 fathoms in depth. The average catch per pot for the entire fishery was 84 crabs with an average weight of 1.6 pounds per crab. Average size of crab delivered to shoreside processors was 131 mm in carapace width (Figure 6).

Information on the biological of deepwater Tanner crab is limited. Data still needs to be collected on the range and abundance of the stock. Other questions include handling mortality rates, size at maturity, growth and injury rates, reproductive seasons and molt timing. Fishery based observer studies are the only cost effective means to address these issues.

Table 1. Historic commercial red king crab catch and effort within the Kodiak Registration Area 'K'.

Fishing Year ^a	Vessels	Landings	No. of Crab	No. of Pounds	Pots Lifted	CPUE	Average	
							Lbs. Per Crab	Dollars Per #
1950			7,592	64,882			8.5	
1951/52			39,238				8.5	
1952/53			58,021	579,707			10.0	
1953/54			280,881	2,531,120			9.0	
1954/55			320,059	2,491,536			7.8	
1955/56			390,258	3,717,145			9.5	
1956/57			699,281	7,015,988			10.0	
1957/58			496,298	5,070,638			10.2	
1958/59			695,782	7,137,529			10.3	
1959/60			1,416,944	14348,110			10.1	
1960/61	143	-	2,116,375	21,064,871	-	-	10.0	\$.085
1961/62	148	-	3,181,554	28,962,900	-	-	9.1	.95
1962/63	195	-	4,146,143	37,626,703	-	-	9.1	.10
1963/64	181	-	4,158,988	37,716,223	-	-	9.1	.10
1964/65	189	-	4,923,309	41,596,518	95,951	51	8.4	.10
1965/66	175	-	11,061,709	94,431,026	173,083	64	8.5	.13
1966/67 ^b	213	-	8,476,299	73,817,779	223,174	38	8.7	.11
1967/68	227	3,847	5,147,321	43,448,492	207,392	25	8.4	.26
1968/69	178	1,839	2,348,950	18,211,485	119,146	20	7.8	.26
1969/70 ^c	136	978	1,606,181	12,200,571	96,841	17	7.6	.28
1970/71	100	830	1,561,318	11,719,970	119,192	13	7.5	.30
1971/72	89	507	1,539,157	10,884,152	66,166	23	7.1	.39
1972/73	88	683	2,029,670	15,479,916	70,806	29	7.6	.55
1973/74	129	837	1,847,679	14,397,287	77,826	24	7.8	.45
1974/75	158	1,195	2,910,201	23,582,720	110,297	26	8.1	.45
1975/76	169	1,569	2,976,909	24,061,651	113,795	26	8.1	.66
1976/77	195	1,165	2,177,956	17,966,846	130,777	17	8.2	1.37
1977/78	179	1,186	1,590,477	13,503,666	145,867	11	8.5	1.34
1978/79	194	1,077	1,464,021	12,021,850	177,261	8	8.2	1.60
1979/80	247	1,346	1,979,394	14,608,900	207,991	9	7.3	.95
1980/81	164	1,175	2,787,199	20,448,654	201,531	14	7.3	1.05
1981/82	246	2,214	3,035,674	24,237,601	388,751	8	8.0	2.00
1982/83	309	1,373	1,011,109	8,729,761	283,795	4	8.6	3.75
1983/84			NO FISHERY - SEASON CLOSED					
1984/85			NO FISHERY - SEASON CLOSED					
1985/86			NO FISHERY - SEASON CLOSED					
1986/87			NO FISHERY - SEASON CLOSED					
1987/88			NO FISHERY - SEASON CLOSED					
1988/89			NO FISHERY - SEASON CLOSED					
1989/90			NO FISHERY - SEASON CLOSED					
1990/91			NO FISHERY - SEASON CLOSED					
1991/92			NO FISHERY - SEASON CLOSED					
1992/93			NO FISHERY - SEASON CLOSED					
1993/94			NO FISHERY - SEASON CLOSED					
1994/95			NO FISHERY - SEASON CLOSED					
1995/96			NO FISHERY - SEASON CLOSED					

^aFishing year defined as May 1 - April 30.

^bJuly 1 - April 30 season established.

^cAugust 15-January 15 season established.

^dAverage includes only years with open fishing season.

Table 2. Catch and effort statistics for red king crab in the Alaska Peninsula, Area M.

Year	No. Vssls	No. Lndgs	No. Crab	No. Pounds	Pots Lifted	CPUE	Avg. Wt.	Price Per Lb.
1947	NA	NA	18,800	141,000	NA	NA	7.5	NA
1948	NA	NA	518,500	3,363,000	NA	NA	6.5	NA
1949	NA	NA	205,500	3,476,000	NA	NA	12.0	NA
1950	NA	NA	270,000	2,124,000	NA	NA	7.9	NA
1951	NA	NA	86,500	599,000	NA	NA	6.9	NA
1952	NA	NA	32,400	298,000	NA	NA	7.6	NA
1953	NA	NA	38,400	380,000	NA	NA	10.0	NA
1954	NA	NA	31,666	316,660	NA	NA	10.0	NA
1955	NA	NA	164,069	1,640,688	NA	NA	10.0	NA
1956	NA	NA	421,651	4,221,496	NA	NA	10.0	NA
1957	NA	NA	668,709	6,687,092	NA	NA	10.0	NA
1958	NA	NA	724,595	7,245,947	NA	NA	10.0	NA
1959	NA	NA	568,303	6,166,974	NA	NA	10.0	NA
1960	NA	1,496	677,100	6,700,000	NA	NA	9.9	NA
1961	NA	959	419,354	3,900,000	NA	NA	9.3	NA
1962	NA	657	287,624	2,273,013	NA	NA	7.9	NA
1963	27	1,037	970,739	6,539,129	NA	NA	6.7	.09
1964	40	1,297	1,906,018	14,354,060	NA	NA	7.5	.10
1965	36	1,081	1,813,728	14,713,501	NA	NA	8.1	.10
1966	37	1,255	2,494,949	22,577,587	NA	NA	9.0	.10
1967	39	1,062	1,943,463	17,252,307	NA	NA	8.9	.19
1968/69	34	885	1,273,567	10,944,472	NA	NA	8.6	.34
1969/70	33	415	558,800	4,137,000	51,300	11	7.7	.25
1970/71	25	339	446,042	3,425,760	38,995	11	7.7	.25
1971/72	26	364	597,394	4,123,130	41,759	14	6.9	.28
1972/73	29	301	610,300	4,069,362	34,408	18	6.7	NA
1973/74	36	389	658,632	4,260,674	53,642	12	6.9	.72
1974/75	36	318	644,054	4,572,101	44,951	14	7.1	.43
1975/76	37	248	367,221	2,605,310	35,104	11	7.2	.41
1976/77	26	122	125,778	958,069 ^a	17,748	7	7.7	.61
1977/78	15	73	119,641	726,382	10,551	11	6.1	1.00
1978/79	33	226	520,168	3,093,859	31,142	17	5.9	1.27
1979/80	68	288	738,859	4,453,557	41,753	18	6.0	.92
1980/81	51	358	821,071	5,080,632 ^a	54,114	15	6.2	.96
1981/82	56	341	515,882	3,168,689	51,776	10	6.1	1.40
1982/83	63	157	271,237	1,683,654	30,894	9	6.2	3.20
1983/84	NO FISHERY							
1984/85	NO FISHERY							
1985/86	NO FISHERY							
1986/87	NO FISHERY							
1987/88	NO FISHERY							
1988/89	NO FISHERY							
1989/90	NO FISHERY							
1990/91	NO FISHERY							
1991/92	NO FISHERY							
1992/93	NO FISHERY							
1993/94	NO FISHERY							
1994/95	NO FISHERY							

NA = Not Available

^aCombined 6 1/2 inch and 7 1/2 inch seasons.

Table 3. Historic commercial brown king crab *Lithodes aequispinus* catch and effort for the Kodiak Registration Area 'K', 1983-1995.

Fishing Year	Landings	Vessels	No. of Crabs	No. of Pounds	Pots Lifted	Average			Exvessel Value (Millions)
						Crab Per Pot	Wt. Per Crab	Price Per Pound	
1983	36	12	16,349	111,398	8,490	2	6.8	3.00	.
1984	8	6	3,513	22,066	1,950	2	6.3	2.50	.
1985	19	4	10,005	63,641	2,693	4	6.4	1.95	.
1986	31	4	21,862	146,478	5,463	4	6.7	3.00	.
1987	38	5	9,484	67,191	3,187	3	7.1	3.44	.
1988					Confidential ^a				
1989					Confidential ^a				
1990	6	3	1,214	7,314	1,090	1	6.02	3.00	.0
1991	0	0	0	0	0				
1992					Confidential ^a				
1993					Confidential ^a				
1994	0	0	0	0	0				
1995					Confidential ^a				

^aRecords remain confidential where less than three vessels participated.

Table 4. Commercial catch and effort for the Tanner crab *Chionoecetes bairdi*, Kodiak Management District, 1967-1995.

Year	Vssls	Lndngs	Number of crabs ^a	Number of lbs. ^a	Pots Lifted	CPUE	Avg. Wt.	Price Per #
1967	-	83	-	110,961	-	-	-	\$.07
1968	-	817	-	2,560,687	-	-	-	.10
1969	85	955	-	6,827,312	72,748	43	-	.11
1969/70	67	833	3,237,244	8,416,782	78,266	42	2.6	.11
1970/71	82	453	2,686,067	6,744,163	60,967	44	2.5	.11
1971/72	46	505	3,878,618	9,475,902	65,907	59	2.4	.13
1972/73	105	1,466	13,609,688	30,699,777	188,158	67	2.3	.17
1973/74	123	1,741	11,857,573	29,820,899	217,523	59	2.5	.20
1974/75	74	471	5,459,940	13,649,966	73,826	83	2.5	.17
1975/76	104	1,168	10,748,958	27,336,909	199,304	64	2.5	.20
1976/77	102	998	7,830,727	20,720,079	164,213	48	2.6	.33
1977/78	148	1,483	12,401,243	33,281,472	251,621	49	2.6	.43
1978/79	218	1,225	10,702,829	29,173,807	275,455	38	2.7	.55
1979/80	211	1,385	6,813,128	18,623,875	282,946	24	2.7	.55
1980/81	188	771	4,398,631	11,748,629	174,351	25	2.7	.65
1981/82	221	950	5,413,467	13,756,159	230,403	24	2.5	1.65
1982/83	348	1,439	7,744,812	18,927,061	377,562	21	2.4	1.25
1983/84	303	1,229	5,891,968	14,478,066	303,764	10	2.5	1.20
1984/85	214	710	4,567,037	12,024,553	176,830	26	2.6	1.50
1985/86	233	601	3,457,930	8,996,151	160,808	21	2.6	1.90
1986/87	189	503	1,830,365	4,833,473	110,963	16	2.6	2.62
1987/88	176	557	1,614,874	3,888,906	101,488	16	2.4	2.40
1988/89	171	567	2,106,320	5,208,999	86,556	24	2.5	3.05
1989/90	233	548	1,435,477	3,456,314	97,333	15	2.4	2.40
1990/91	137	448	764,107	1,917,713	54,110	14	2.5	1.59
1991/92	143	434	982,391	2,400,213	47,384	20	2.4	2.22
1992/93	140	353	518,982	1,318,446	43,528	12	2.5	2.10
1993/94	129	378	510,681	1,252,342	41,527	12	2.5	2.25
1994/95	NO FISHERY							
1995/96	NO FISHERY							
TOTAL	-	-	130,463,057	341,469,616	3,937,541	-	-	-
AVERAGE	162	827	5,218,522	12,195,343	140,626	31	2.6	-

^aData Source: Alaska Department of Fish and Game annual Board of Fish and Game Reports and annual Kodiak Area Management Report.

Table 5. Chignik District Tanner crab, *Chionoecetes bairdi*, catch and effort statistics since 1968.

Year	Vssls	No. Lndgs	No Crab ^a	No Pounds ^a	Pots Lifted	Avg Wt	CPUE	Price Pound ^b	Percent Recruits ^c	
1968	-	-	-	21,100	-	.-	-	.-	.-	
1969	-	-	-	38,100	-	.-	-	.-	.-	
1970	-	-	-	2,800	-	.-	-	.-	.-	
1971	-	-	-	152,300	-	.-	-	.-	.-	
1972				Harvest Confidential ^d						
1973	15	56	297,363	747,788	8,080	2.5	51	.16	.-	
1974	25	115	1,586,560	4,054,873	28,083	2.6	57	.20	.-	
1974/75	25	91	1,438,508	3,649,444	22,675	2.5	63	.14	.-	
1975/76	35	288	2,724,509	6,926,161	52,381	2.5	52	.185	.-	
1976/77	21	141	2,098,226	5,672,919	40,604	2.7	52	.33	.-	
1977/78	32	140	1,725,042	4,693,830	38,414	2.8	45	.42	.-	
1978/79	39	126	926,253	2,536,105	28,378	2.7	33	.55	.-	
1979/80	42	155	2,340,004	3,517,920	54,627	2.6	25	.54	.-	
1980/81	24	112	1,534,847	3,653,723	44,022	2.4	35	.64	65.6	
1981/82	45	174	1,343,500	3,240,576	47,830	2.4	28	1.21	64.7	
1983	48	136	1,432,029	3,497,370	60,210	2.4	24	1.12	65.1	
1984	17	41	269,724	659,043	14,665	2.4	18	1.09	33.5	
1985	15	27	162,448	375,476	15,708	2.3	10	1.42	51.2	
1986	6	12	85,697	188,162	7,435	2.2	12	1.97	85.3	
1987	10	20	89,329	195,060	7,052	2.2	13	2.28	90.1	
1988	6	11	87,148	183,111	6,544	2.1	13	2.33	91.3	
1989	6	34	142,470	323,120	9,845	2.3	15	3.05	95.0	
1990					NO OPEN SEASON					
1991					NO OPEN SEASON					
1992					NO OPEN SEASON					
1993					NO OPEN SEASON					
1994					NO OPEN SEASON					
1995					NO OPEN SEASON					
1996					NO OPEN SEASON					

^aIncludes deadloss.

^bComputed only for live poundage where price information was available.

^cRecruits = newshell male crab from 137 to 163 mm carapace width.

^dRecords remain confidential where less than three vessels participated.

Table 6. Tanner crab *Chionoecetes bairdi* catch and effort statistics for South Peninsula District since 1967.

Year	Number Vssls.	Number Lndgs	No. Crab ^a	No. Pounds ^a	Pots Lifted	Avg. Wt.	CPUE	Dollars Per Pound ^b	Percent Recruits
1967				3,100					
1968		155	36,835	110,610		3.0			
1969		173	221,946	606,178		2.7			
1970				2,093,600					
1971	17	242	813,610	2,140,585		2.6		.10	
1972				3,618,900					
1973	36	390	2,213,006	5,615,563	53,573	2.5	41		
1974	44	386	3,504,668	8,300,578	58,444	2.4	60		
1974/75	44	131	2,053,530	5,195,800	38,153	2.5	54	.14	
1975/76	36	288	2,724,509	6,926,161	52,381	2.5	52	.20	
1976/77	28	389	2,524,565	6,773,838	63,143	2.7	40	.32	
1977/78	36	374	2,847,948	7,446,270	70,587	2.6	40	.40	
1978/79	48	332	3,267,122	8,684,408	82,374	2.7	40	.51	65.8
1979/80	61	363	2,581,544	6,961,251	96,989	2.7	27	.54	39.5
1980/81	43	268	1,274,539	3,294,106	59,560	2.6	21	.58	34.7
1981/82	72	365	1,815,060	4,589,042	81,008	2.5	22	1.05	50.2
1983	82	230	1,144,096	2,863,798	70,524	2.5	16	1.20	55.4
1984	61	207	775,472	1,789,883	50,726	2.3	15	1.04	29.6
1985	52	184	1,097,182	2,549,686	47,465	2.3	23	1.42	73.0
1986	74	187	1,589,759	3,781,950	65,078	2.4	24	1.72	72.9
1987	54	106	950,300	2,400,784	37,511	2.5	25	2.03	56.1
1988	73	148	1,359,371	3,328,809	52,516	2.4	26	2.20	78.6
1989	65 ^c	87	433,112	1,055,082	27,958	2.4	15	2.70	52.9
1990					NO FISHERY				
1991					NO FISHERY				
1992					NO FISHERY				
1993					NO FISHERY				
1994					NO FISHERY				
1995					NO FISHERY				
1996					NO FISHERY				

^aIncludes deadloss

^bComputed for live crab only

^cOne additional vessel was registered but did not fish in the District.

Table 7. Commercial catch and effort for the grooved Tanner crab *Chionoecetes tanneri*, South Peninsula District, 1994 - 1995.

Year	Vessels	Landings	No. Crab ^a	No. Pounds ^a	No. of Pot Lifts	CPUE	Average Weight	Price Per Lb.	Dead-loss
1994				Confidential ^b					
1995	6	34	600,984	947,014	7,143	84	1.6	\$1.40	24,473

^aDeadloss included.

^bRecords remain confidential where less than three vessels participated.

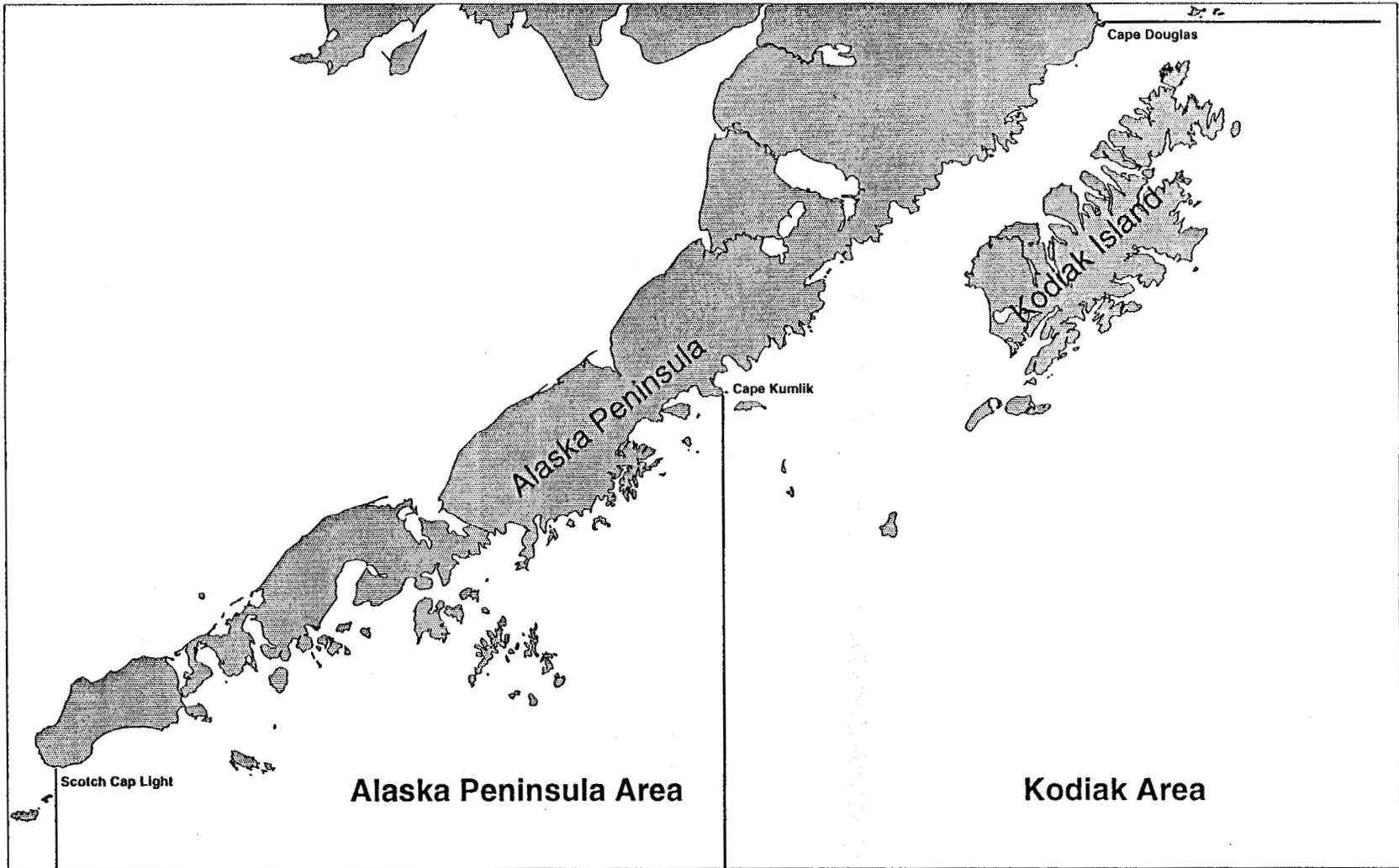


Figure 1. Kodiak and Alaska Peninsula King Crab Management Areas.

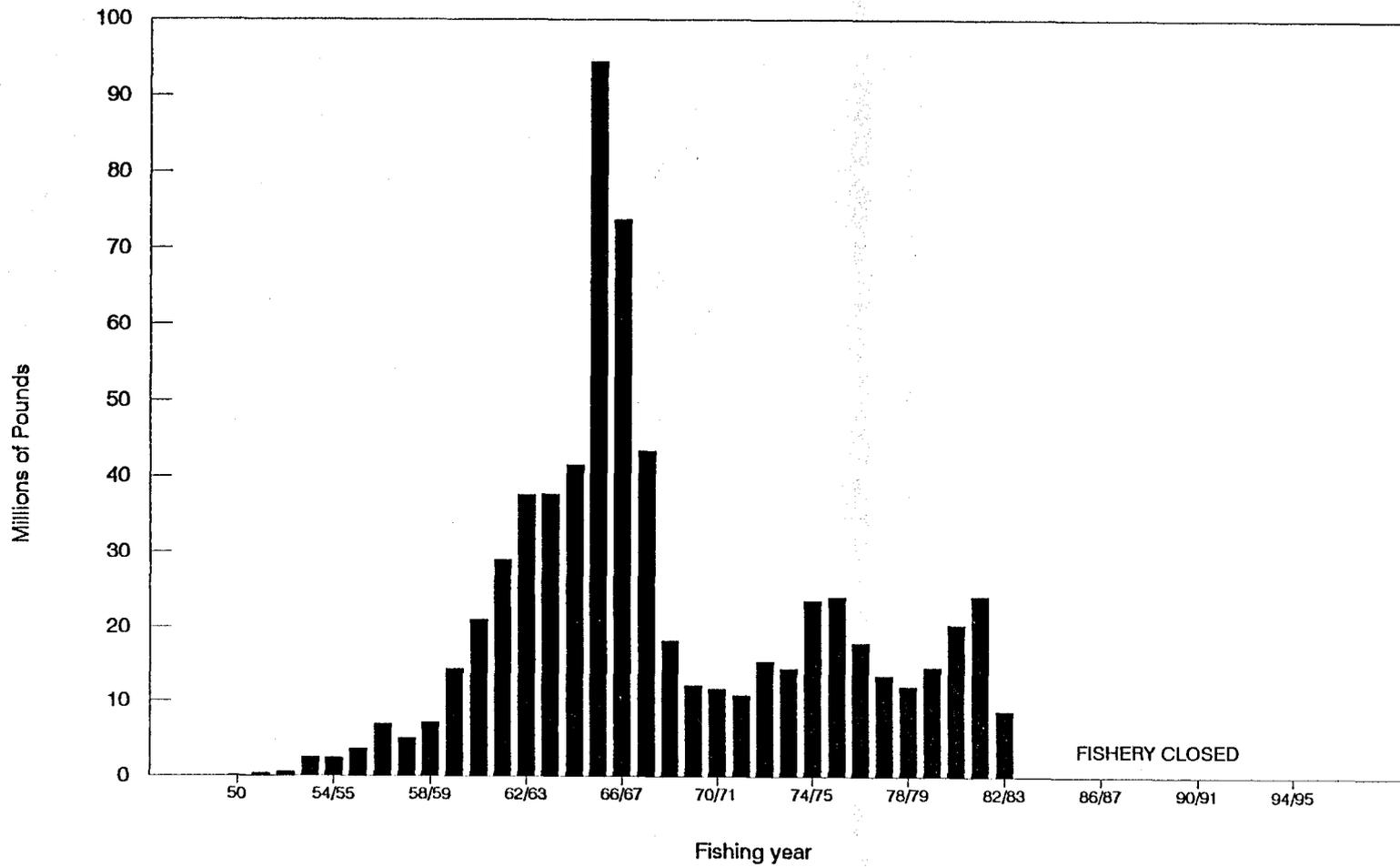


Figure 2. Commercial red king crab harvest from the Kodiak Management Area, 1950-1995.

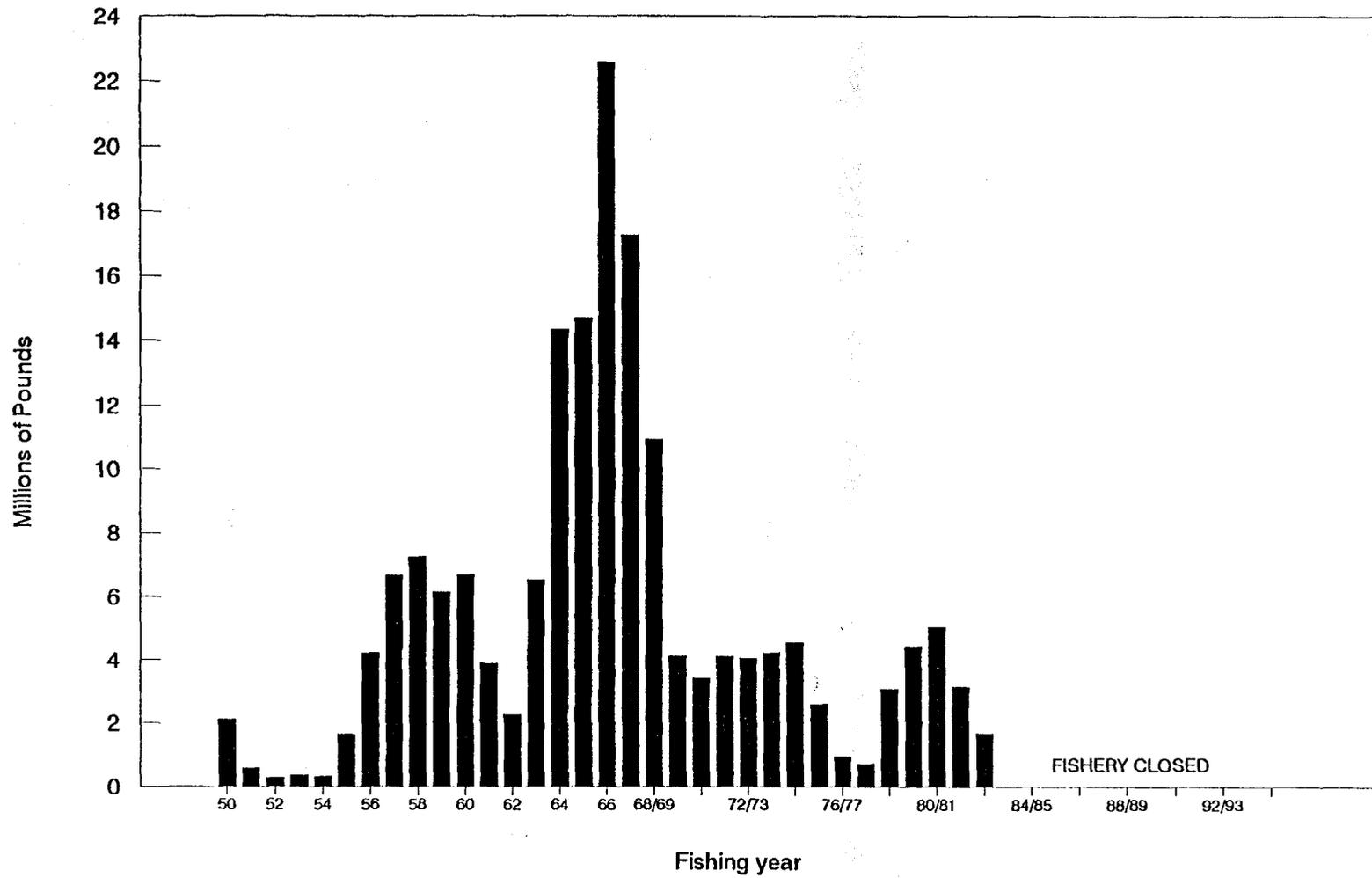


Figure 3. Commercial harvest of red king crab from the Alaska Peninsula Management Area, 1947-1995.

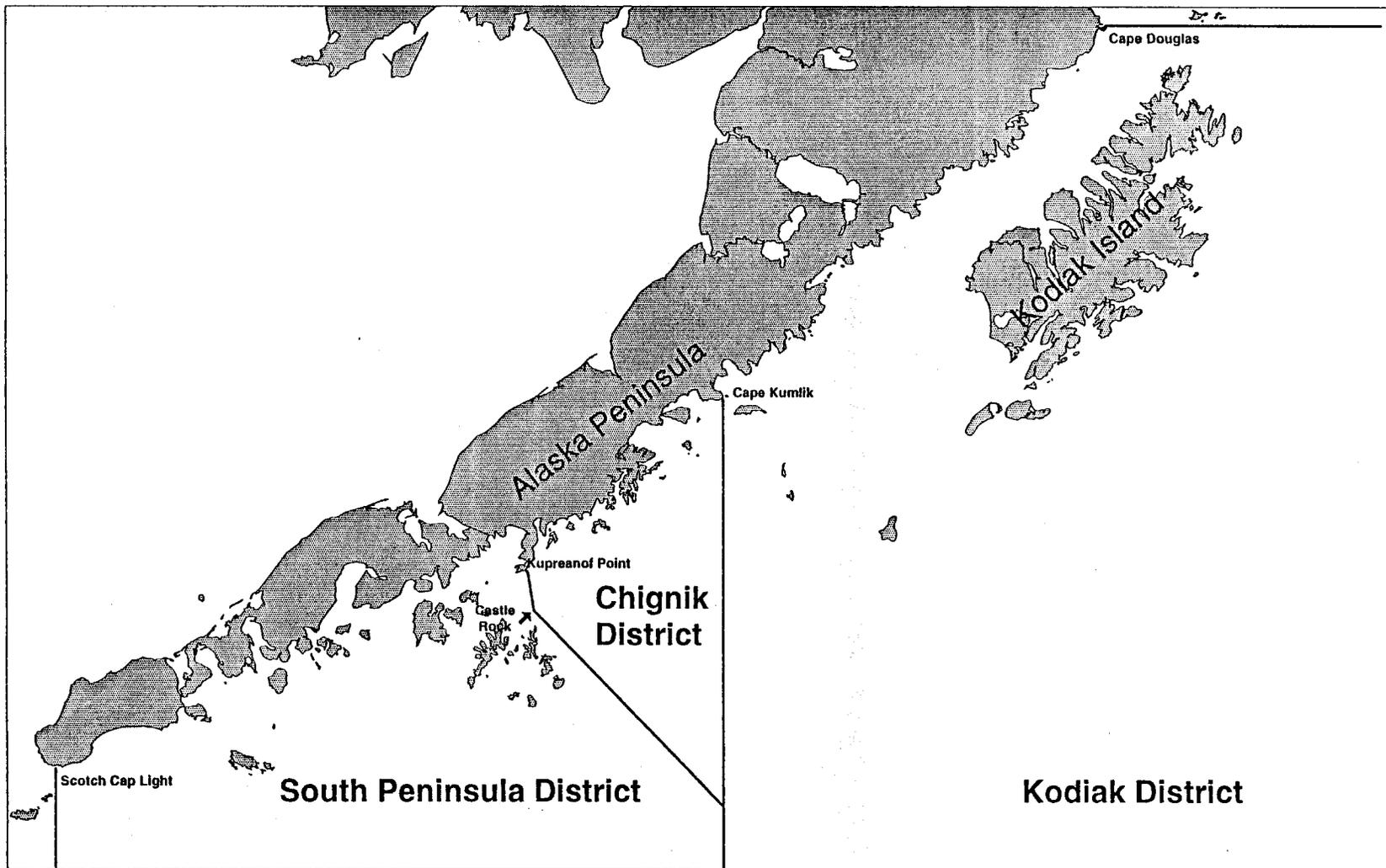


Figure 4. Kodiak, Chignik, and South Peninsula Tanner Crab Management Districts.

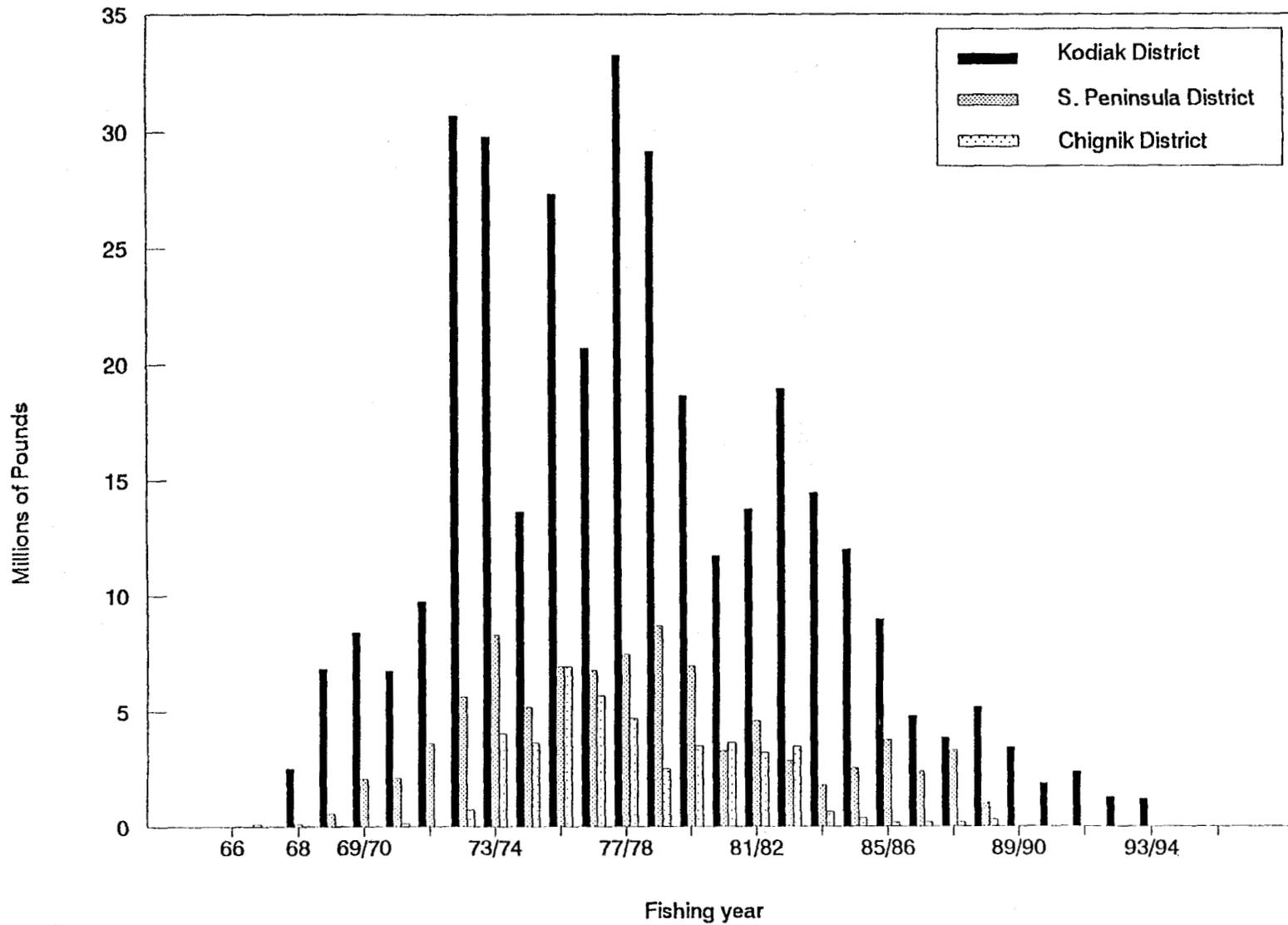


Figure 5. Tanner crab, *Chionoecetes bairdi*, harvest from the South Peninsula, Chignik, and Kodiak Districts, 1967-1995.

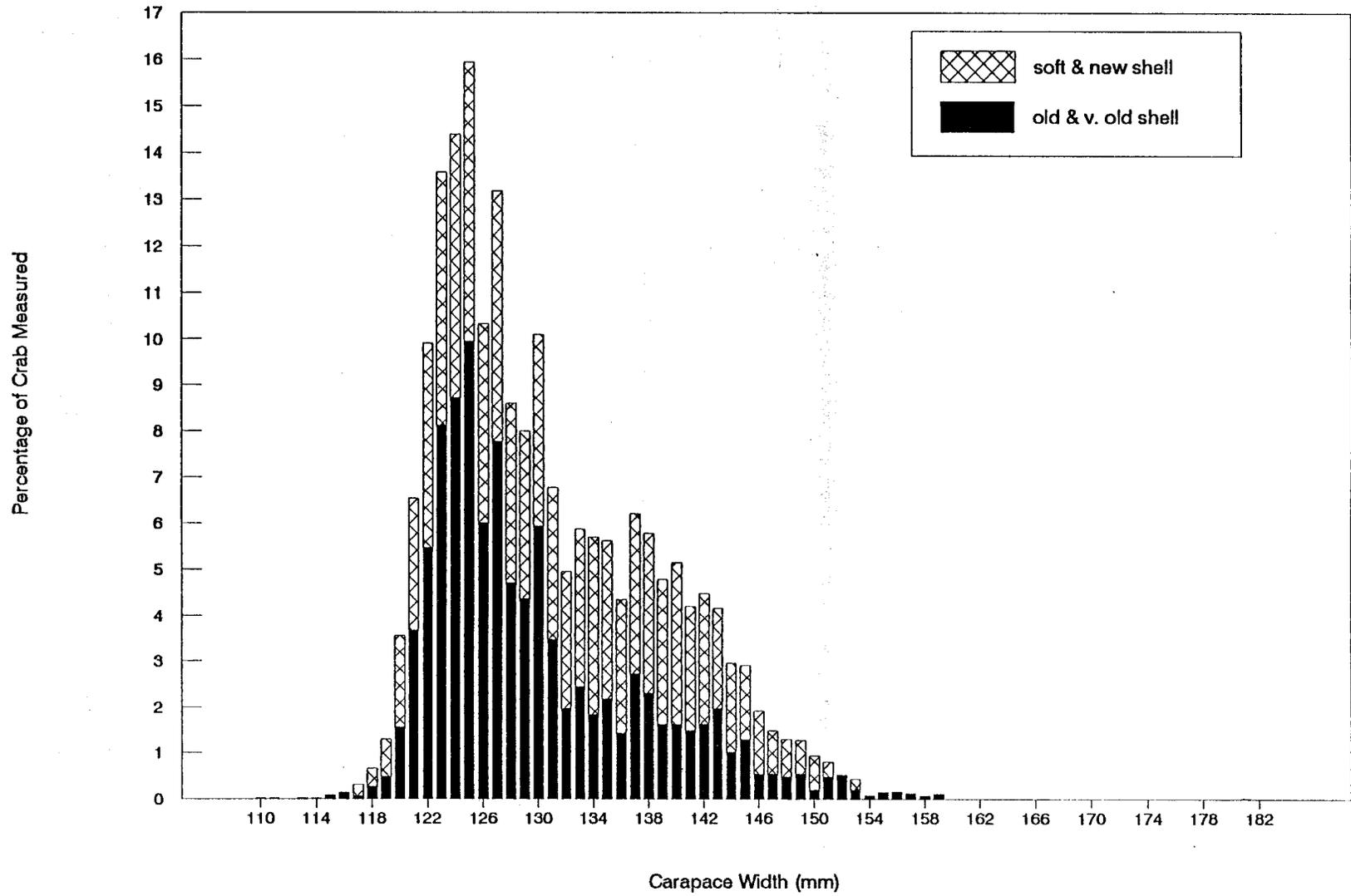


Figure 6. South Peninsula District commercial *C.tanneri* width frequencies, 1995.

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