

TOGIAK HERRING FISHERY RE-CAP
FOR NO. PACIFIC COUNCIL SSC MEETING

(1) Harvest

- (a) Accum. sac roe harvest thru 5/18 is 8,402 tons, with peak catch made on May 11-13.
- (b) Accum. kelp harvest thru 5/16 is 364,000 lbs, with peak harvest made on 5/10.
- (c) Daily and accumulative harvest (to nearest tons/lbs.):

	<u>Herring (tons)</u>		<u>Kelp (lbs.)</u>	
	<u>Daily</u>	<u>Accum.</u>	<u>Daily</u>	<u>Accum.</u>
5/1	6	6		
2	132	138		
3	126	264		
4	526	787	2,600	2,600
5	492	1,278	11,500	14,100
6	708	1,986	0	14,100
7	427	2,413	20,000	34,200
8	526	2,939	45,900	80,100
9	419	3,358	48,600	128,700
10	620	4,000	131,800	260,500
11	1,123	5,098	30,700	291,100
12	361	5,459	3,800	294,900
13	999	6,458	33,600	328,500
14	446	6,904	36,700	365,300
15	215	7,119	1,800	367,000
16	186	7,305	0	367,000
17	420	7,736	8,600	375,600
18	666	8,402	300	375,900
19	353	8,755	0	375,900
20	38	8,793		

- (d) Company catch reporting of the daily catch going well with only 2 of 32 companies giving us trouble.
- (e) Roe recovery variable, running 7-14%, with average of perhaps 9½%. Up thru 5/10 roe recovery going 10+%, and since 5/10, 8-9%.
- (f) Area of catch - most fish coming from between Kulukak Bay & Togiak Bay, a few tons from further west.

(g) Catch by gear type - no tally yet, but it appears that gill net gear has harvested about 37% of the total harvest to date.

(2) Effort catch thru 5/18, up considerably from 10% in 78.

(a) thru 5/17, 32 companies have registered on grounds for herring sac roe, and 16 companies for kelp. Pre-season indications were for approximately 37 sac roe processor, and up to one dozen helping companies.

(b) Fishing effort levels were derived from 3 sources:

(1) Pre-season telephone survey, which indicated approximately 173 seiners and over 300 gill net boats would be involved.

(2) Pre-Season fishing vessel registration required by Ak Statute shows the following "paper" registration thru 5/19/79:

<u>187</u>	purse seiners
<u>416</u>	gill net boats
<u>68</u>	both (P/S & G/N)
<u>671</u>	Total

(3) Aerial survey vessel count on 5/16/79:

166	Seine boats
250-300+	gill net boats

(c) No count made of company tenders/processors/trampers/support vessels, but 250 vessels of this type wouldn't be far off.

(3) Summary Survey Results:

(a) Summary of herring aerial observations in the Togiak herring fishing district:

Date	Cons. Flight No.	Survey Index Rating	Census Areas* Surveyed	Sm.	Number Herring Schools Observed			Herring Spawn	
					Med.	Lg.	Total	No.	Miles
4/30	1	Poor	T2-T6	0	4	33	37	2	2.5
5/2	2	Fair/Poor	T1-6	41	103	13	157	21	8.3
5/3	3	Fair/Poor	T1-6	1	26	7	34	14	5.0
5/4	4	Very Good	T1-6	36	152	58	246	8	3.1
5/5	5	Good	T1-6	96	157	65	318	1	1.3
5/7	6	Fair/Poor	T1-11	13	223	34	270	3	0.6
5/9	7	Poor	T1-6	1	10	2	13	2	0.4
5/10	8	Very Good	T0-6	37	72	69	178	0	0
5/12	9	Poor	T0-9	29	18	1	48	0	0
5/14	10	Good/Exc.	T1-13	80	138	36	254	0	0
5/16	11	Poor	T1-7	1	3	17	21	0	0
5/17	12	Fair/Good	T1-13	24	5	12	41	9	0.7
5/17	12	Fair/Good	Sec Cove	27	1	1	29	3	1.1
5/17	12	Fair/Good	Goodnews	4	0	2	6	0	0

* T1-6 (Nush. Peninsula to Togiak Bay).
 T7-10 (Togiak Bay to Hagemeister Strait).
 T11-13 (Hag. Strait to Cape Newenham)

- (b) Estimate 1979 herring biomass as strong or stronger than 1978. In 1978 I estimated the biomass at 100-200,000 tons, while this season I'd estimate the total at 150-250,000, with 150,000 tons being my personal pt. estimate
- (c) From survey results it is pretty clear to me that this years herring run timing was about 10-14 days in advance of 1978. The peak of spawning took place from 4/30-5/4, whereas in 1978, peak spawning was from 5/11 to 5/18. It's very likely that significant spawning was taking place prior to 4/30, the first aerial survey observation.
- (4) Age composition: analysis from samples taken from 5/1 thru 5/12 show heavy dominance of 5 & 6 year old fish (80 to 90% overall), while the 4 year old age class has not shown to any significant extent in 79; totaling only about 10-12% of the harvest. (*Last year mostly 4 & 5*)
- (5) Miscellaneous:
- (a) the early show of fish and lack of processing and fishing effort early in May was a significant factor in holding down catches early in May when roe recovery was running better than 10-11%. Even though the season did not open until May 1, only 2 companies were on hand to begin this season, and by May 5, the peak of spawning activity, only 12 companies of 38 potential operators were on hand, and several of their companies, although registered, were not yet ready to receive fish.
- (b) Although pre-season surveys indicated better than 40 aircraft in support of the herring fleet, and increased air traffic, no serious problems or injuries have resulted to date.

- (c) ADF&G has affected 3 emergency orders closing several beach areas to kelping:

EO#1 closed 3 small beaches in Metervik Bay in May 2 prior to commencement of the kelping effort. These 3 beach areas were established as ADF&G study control areas.

EO#2 Closed Metervik Bay to kelping on May 11 until further notice when the kelp harvest approached 42% of the entire Bay biomass.

EO Closure #3 was affected on May 18 when the kelp harvest on the westside of Kulukak Bay was estimated to have amounted to 45% of the available biomass.

- (d) Prices: Herring: Concensus seems to indicate about a \$500-600 price per ton average. Harvest thru 5/18 is 8,402 ton x \$550 average per ton = \$4.6 million ex-vessel value thru 5/18.

Kelp: 65¢ lb. average x 364,000 lbs = \$240,000 ex-vessel value thru 5/16.

Agenda #4
May 1979

GROUNDFISH
BERING SEA/ALEUTIAN ISLANDS
1979 CUMULATIVE DOMESTIC LANDINGS

Reporting Period: Feb. 1979 - Dec. 1979
Landings Thru April 30, 1979

<u>Species</u>	<u>Pounds</u>	<u>Landings</u> <u>Metric Tons</u>
Pacific Cod	1,104,450	501.1
Yellowfin Sole	0	
Other Flounders	0	
Pollock	0	
Pacific Ocean Perch	0	
Sablefish	0	
Other	0	
Unspecified	54,890	24.9

Alaska Department of Fish and Game
Division of Commercial Fisheries
Juneau, Alaska 99801
21 May 1979

GROUND FISH
GULF OF ALASKA
1979 CUMULATIVE DOMESTIC LANDINGS

Reporting Period: Dec. 1978 - Nov. 1979

Landings Thru April 30, 1979

<u>Species</u>	<u>DAH</u>	<u>Pounds</u>	<u>Landings</u> <u>Metric Tons</u>
Pollock	(14,200 mt)	3,453,448	1,566.9
Flounder	(7,200 mt)	1,082,604	491.2
Cod	(15,500 mt)	1,693,554	768.4
Pacific Ocean Perch			
Rockfish	(3,100 mt)	180,067	81.7
Sablefish	(4,000 mt)	447,632	203.1
Atka Mackerel	0	0	0
Squid	0	0	0
Other	(500 mt)	94,992	43.1
Unspecified		423,829	192.3

Alaska Department of Fish and Game
Division of Commercial Fisheries
Juneau, Alaska 99801
21 May 79

ALASKA TANNER CRAB
1979 CUMULATIVE DOMESTIC LANDINGS
PRELIMINARY

Reporting Period: Dec. 1978 - Nov. 1979

<u>Management Area</u>	<u>DAH</u>	<u>Pounds</u>	<u>Landings</u>	<u>Metric Tons</u>
Southeast - Yakutat	(2,495 mt)	2,750,100	<u>1/</u>	1,248
Prince William Sound	(3,175 mt)	5,962,000	<u>1/</u>	2,705
Cook Inlet	(2,404 mt)	5,105,000	<u>1/</u>	2,316
Kodiak	(15,876 mt)	29,129,800	<u>2/</u>	13,216
South Peninsula	(13,608 mt)	10,645,500	<u>2/</u>	4,830
Aleutian	(907 mt)	1,426,300	<u>2/</u>	647
Bering Sea				
<u>C. Bairdi</u>	(40,381 mt)	38,134,800	<u>2/</u>	17,303
<u>C. Opilio</u>	(12,268 mt)	12,894,500	<u>2/</u>	5,850

1/ Landings reported as of April 30.
2/ Landings reported as of May 13.

Alaska Department of Fish and Game
Division of Commercial Fisheries
Juneau, Alaska 99801
21 May 79

STATUS REPORT OF THE
1978/79 DOMESTIC TANNER CRAB FISHERY
IN THE BERING SEA

by

Marton F. Eaton
Westward Regional Shellfish Biologist
Alaska Dept. of Fish & Game

May 25, 1979

The season for Tanner crab in the Bering Sea District opened on November 1, 1978. A catch of 105,680 pounds was landed by 15 vessels during the months of November and December. The landings made in November and December were mainly made as incidental catches by vessels targeting on blue king crab.

The Tanner crab catches in January and February were 1,283,913 pounds compared to 9,844,972 pounds landed in January and February of 1978. The large difference in poundage between the two years can be attributed to a price dispute during January and February which lasted until the 15th of March.

On March 15th a price settlement of 52 cents per pound for C. bairdi was reached between fishermen and processors and 30 cents per pound for C. opilio.

Three days after the strike was settled 1.1 million pounds was landed and for the month of March 113 vessels landed 12,637,696 million pounds in 2 weeks which compares to the month of March in 1978 when 68 vessels landed 15,837,934 million pounds.

The weekly catches in March of 1979 were 6.2 and 5.2 million

pounds respectively, while for the same period in 1978 the catches were 3.9 and 5.0 million pounds.

In the month of April 135 vessels made 337 landings for a catch of 20,891,688 pounds which compares in April of 1978 to 102 vessels making 234 landings for a catch of 21,178,996 pounds. In April of 1979 with an increase of 33 vessels and 103 landings the monthly catch was 287,308 pounds less in 1979 than 1978.

Beginning in mid April vessels began landing C. opilio in conjunction with C. bairdi. Prior to April 15th CPUE figures were calculated from all vessels making deliveries, but on April 22 CPUE figures declined from 48 to 39 and it appeared C. bairdi catches were indicating that a closure would be necessary. However, after examining all deliveries it was noted that over 50 percent of the fleet was delivering both Tanner crab species and that was the primary reason that CPUE took a drastic decrease. (Table 1)(Figure 1). When the CPUE was calculated for vessels delivering only C. bairdi the CPUE increased from 39 to 47 indicating an almost stable catch when comparing it to the prior week of April 15th with a CPUE of 48. At this point it was decided CPUE information would be calculated from only vessels delivering C. bairdi because of the difficulty in determining the target species.

The abundance of C. opilio and the decrease of C. bairdi on traditional C. bairdi grounds allowed vessels to catch both species in the same spot.

The C. bairdi catch in May has continued to decrease from the week of May 6 when 2.4 million pounds were landed to the

week of May 13 when 1.6 million pounds were delivered. (Figure 2). The trend of decreasing C. bairdi catches will not reverse itself as the number of vessels exclusively fishing for C. bairdi is diminishing. It is expected by May 20 that all vessels will be fishing the more abundant C. opilio.

The Department of Fish & Game recommended on May 15th to the Regional Director that the C. bairdi fishery in the Bering Sea District be closed to commercial fishing on May 24 based on the following information.

- (1) Declining CPUE on C. bairdi and declining weekly catch rate.
- (2) The known concentrations of C. bairdi have been fished by more vessels and gear in 1979 than 1978, yet the total catch is lower indicating a low abundance of crab.
- (3) The 1978 NMFS trawl surveys indicated a 50 percent reduction in number of legals for 1979 compared to 1978. The current CPUE and catch rate seems to validate the survey results.
- (4) And finally, evidence of grasping pairs has been reported by fishermen indicating that the molting condition is eminent necessitating a closure to protect mating Tanner crab.

On May 15th the announcement was made closing the Bering Sea C. bairdi fishery on May 24th.

Summary

The 1979 Tanner fishery began on March 15th after price

settlement with approximately 130 vessels fishing an average of 400 pots per vessel. After 4 weeks of intense effort it became apparent that the 1979 Tanner catch would fall short of the 1978 harvest, validating the 1978 trawl survey.

As of May 13th the 1979 Tanner fleet has pulled 351,763 pots landing 38.1 million pounds of C. bairdi and 12.9 million pounds of C. opilio. The value to the fishermen for both species is 23.6 million dollars. It is projected that the final C. bairdi catch will be 40 million pounds and C. opilio will reach 25 million pounds.

In 1978, 508,766 pots were pulled for 66.2 million pounds of C. bairdi valued at 25 million dollars and 1.7 million pounds of C. opilio worth 500,000 dollars.

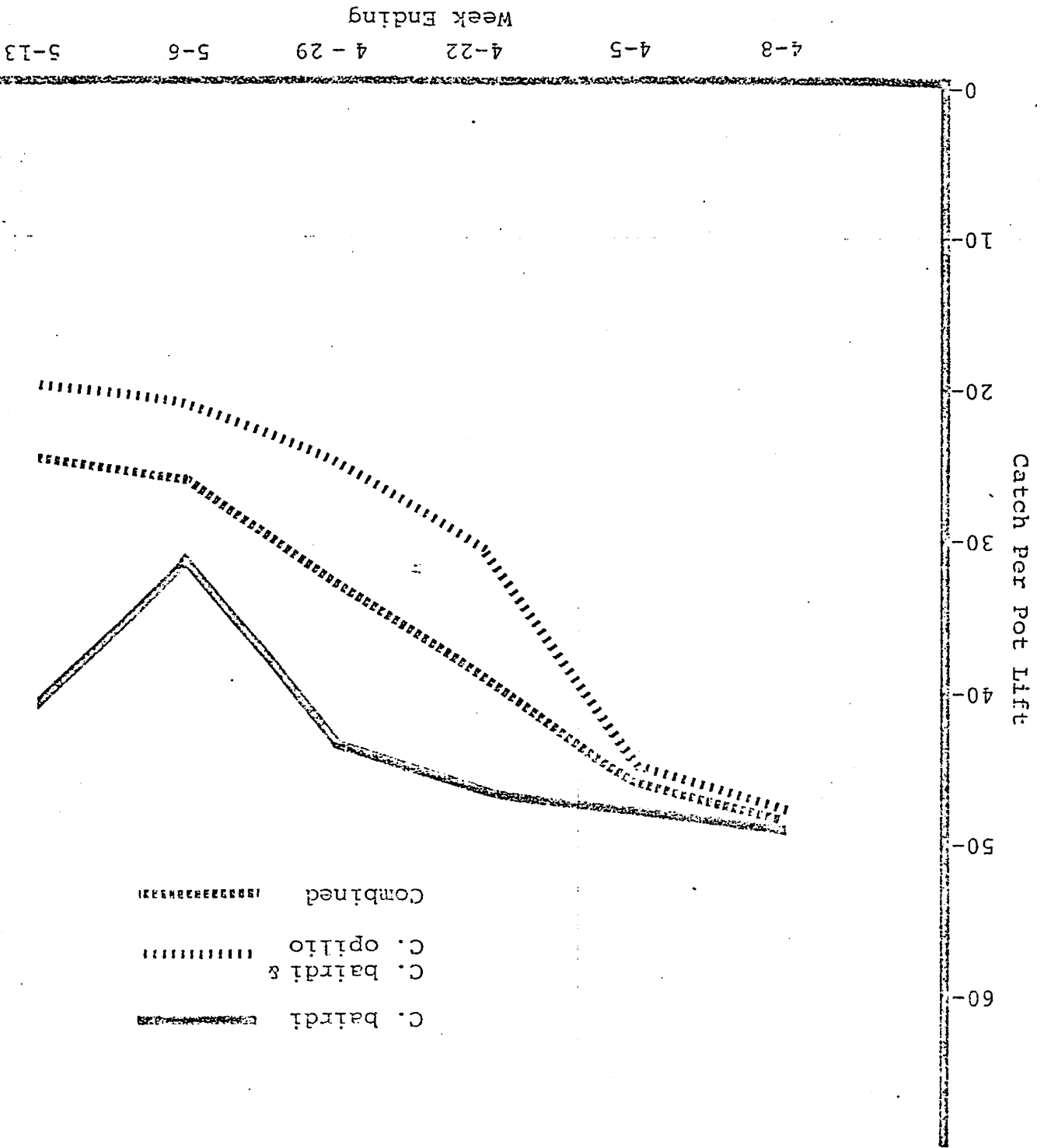
Table I. 1979 Bering Sea CPUE Data April 8 Through May 13

Vessels Delivering <u>C. bairdi</u>				
Week Ending	Landings	Crab	Pot Lifts	<u>C. bairdi</u> CPUE
April 8	67	1,939,540	39,308	49
15	42	1,266,626	26,523	48
22	36	984,588	20,980	47
29	28	819,991	18,564	44
May 6	30	543,223	16,875	32
13	13	222,097	5,451	41
Subtotal	216	5,848,055	127,701	48
Vessels Delivering <u>C. bairdi</u> and <u>C. opilio</u>				
Week Ending	Landings	Crab	Pot Lifts	CPUE ¹
April 8	15	443,581	9,270	43
15	27	670,950	14,837	45
22	38	596,284	19,170	31
29	15	319,174	15,666	25
May 6	41	378,257	17,910	21
13	40	320,953	15,856	20
Subtotal	176	2,729,199	92,709	29
All Vessel Deliveries				
Week Ending	Landings	Crab	Pot Lifts	CPUE
April 8	82	2,383,121	48,578	49
15	69	1,937,576	41,360	47
22	74	1,580,872	40,150	39
29	43	1,139,165	34,230	33
May 6	71	921,480	34,785	26
13	53	543,050	21,307	25
TOTAL	392	8,505,264	220,410	39

¹

Does not include C. Opilio crab

Figure 1. A comparison of CPUE for those vessels fishing only C. bairdi and for those vessels fishing C. bairdi and C. opilio in the Bering Sea District, 1979.



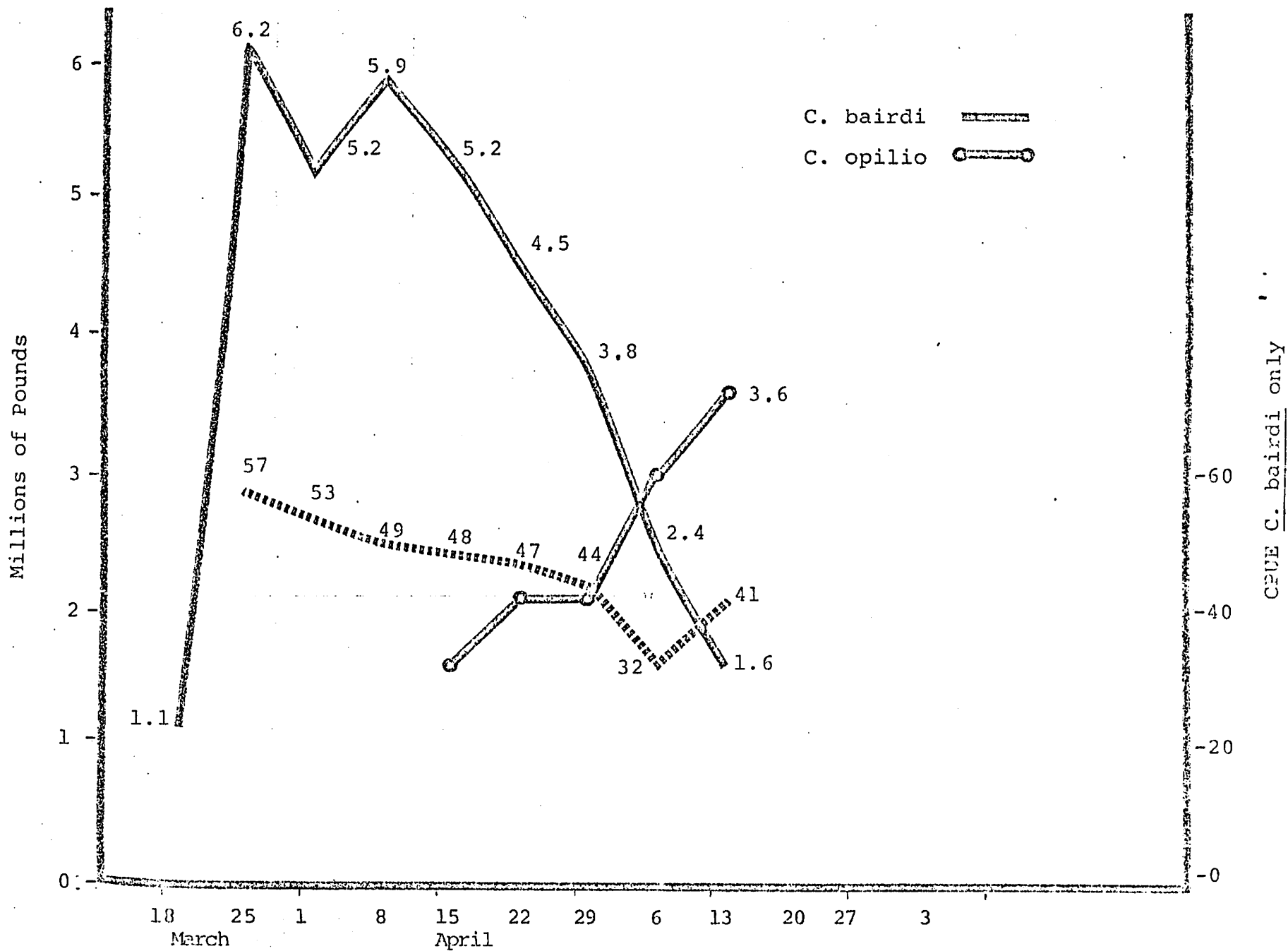


Figure 2. C. bairdi catch per week, Bering Sea 1979.

1978-79 Rering Sea District
 C. Bairdi Catch Through May 13
 Preliminary

Stat. Area	Indgs.	Crab	Pounds	Pot Lifts	CPUE	Avg. Weight
311-10	2	44,545	114,127	695	64	2.5
311-20	43	967,276	2,521,332	12,215	79	2.6
311-31	9	152,556	381,112	3,680	41	2.5
311-32	1	7,370	18,225	111	66	2.5
311-41	12	263,541	646,441	5,401	49	2.5
311-51	23	531,749	1,343,443	12,287	43	2.5
312-10	2	64,163	171,640	825	78	2.7
350-11	1	2,440	6,100	180	14	2.5
350-14	1	6,677	17,706	175	38	2.7
350-15	3	111,453	284,274	2,015	55	2.6
350-16	2	26,500	67,422	669	40	2.5
350-21	2	7,933	20,094	372	21	2.5
350-22	4	35,221	85,488	1,102	32	2.4
350-23	3	106,857	278,706	1,847	58	2.6
350-24	8	200,263	529,121	4,895	41	2.6
350-25	40	1,303,690	3,523,259	24,861	52	2.7
350-31	23	346,660	855,116	11,840	29	2.5
350-32	31	591,815	1,469,648	17,886	33	2.5
350-33	14	257,469	670,869	7,027	37	2.6
350-34	40	1,204,921	3,143,770	26,730	45	2.6
350-35	20	542,511	1,430,467	11,787	46	2.6
350-41	14	258,562	629,709	8,410	31	2.4
350-42	116	2,166,376	5,331,050	55,097	39	2.5
350-43	101	2,821,280	7,116,353	54,353	52	2.5
350-44	17	350,593	909,316	8,656	42	2.5
350-51	16	183,004	453,511	5,397	34	2.5
350-52	74	1,291,681	3,166,640	29,569	44	2.5
350-61	2	10,525	24,255	210	50	2.3
351-21	3	26,853	64,773	700	38	2.4
351-31	1	15,916	39,575	720	22	2.5
351-41	2	25,099	60,140	488	51	2.4
351-51	1	897	2,152	110	8	2.4
Sub-total	631	13,936,401	35,385,934	310,310	45	2.5
Pribilofs						
351-14	1	5,813	13,917	250	23	2.4
351-15	5	137,853	345,965	4,271	32	2.5
351-24	37	540,889	1,405,597	28,213	19	2.6
351-25	9	316,204	781,949	8,719	36	2.5
Sub-total	52	1,000,759	2,547,428	41,453	24	2.5
TOTAL	683	14,937,160	37,933,262	351,763	42	2.5

1978-79 Bering Sea District
 C. Opilio Catch Through May 13, 1979
 Preliminary

Stat. Area	Ldgs.	Crab	Pounds	POT Hfts	CPUE	Avg. Weight
311-20	1	26,267	45,539	550	48	1.7
311-31	2	112,459	177,677	1,149	98	1.6
311-41	1	60,021	96,955	400	150	1.6
311-51	4	91,563	142,140	1,750	52	1.6
350-15	1	12,031	19,250	900	13	1.6
350-21	2	128,976	197,836	497	260	1.5
350-22	2	95,159	148,217	581	166	1.5
350-24	1	39,440	68,003	400	99	1.7
350-31	25	1,077,017	1,648,181	12,368	87	1.5
350-32	20	777,872	1,185,807	9,285	84	1.5
350-33	6	154,847	226,655	3,635	43	1.5
350-34	3	94,793	141,154	1,357	70	1.5
350-35	2	95,125	156,717	718	134	1.6
350-41	16	592,383	865,661	7,294	81	1.5
350-42	86	3,353,916	5,022,899	34,110	98	1.5
350-43	12	299,911	450,498	5,973	50	1.5
350-44	1	3,900	5,255	120	33	1.3
350-51	16	385,021	545,514	5,124	75	1.5
350-52	27	590,045	881,169	7,143	83	1.5
350-61	1	12,000	17,930	140	85	1.5
351-21	4	228,540	337,225	1,250	182	1.5
351-31	2	107,092	137,533	697	154	1.3
351-41	3	133,800	192,975	588	227	1.4
Sub-total	238	8,474,178	12,730,845	96,029	88	1.5
Pribilofs						
351-14	1	682	888	250	3	1.3
351-15	1	682	887	250	3	1.3
351-24	1	112,098	155,123	1,050	107	1.4
351-25	1	3,130	4,777	350	9	1.5
351-35	1	1,200	1,970	40	30	1.6
Sub-total	5	117,792	163,645	1,940	61	1.4
TOTAL	243	8,591,970	12,894,490	97,969	88	1.5

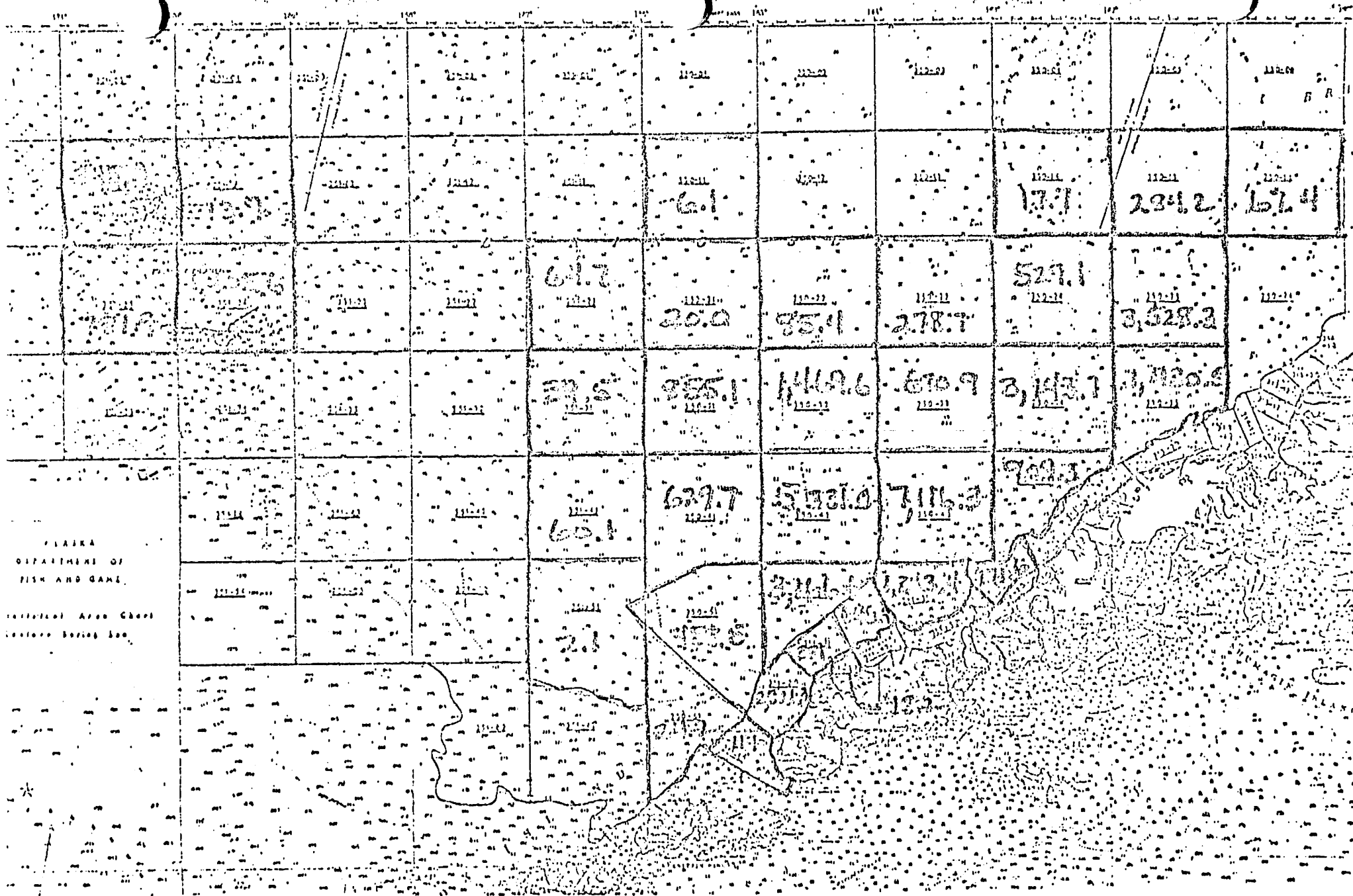
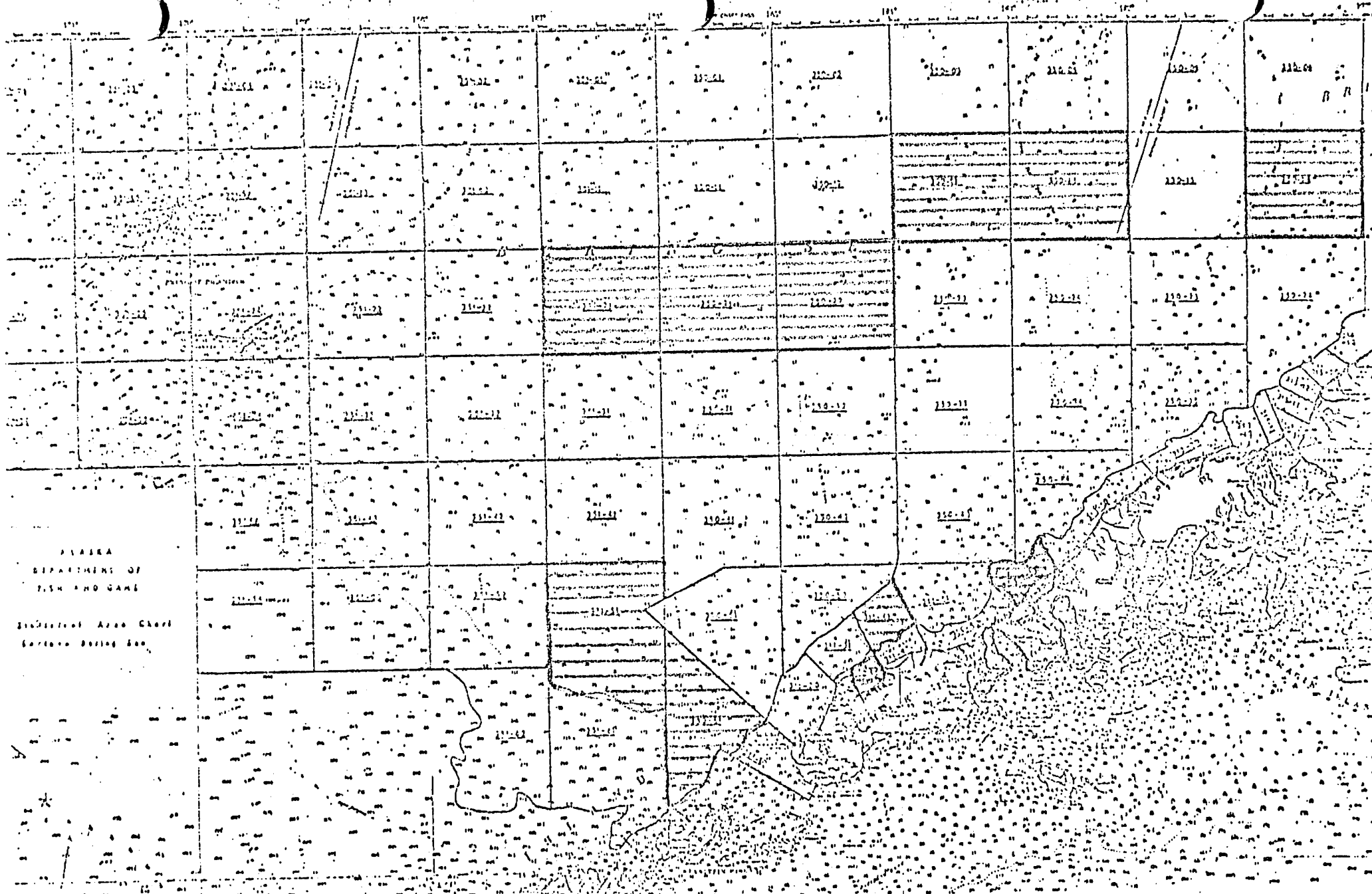


Figure - ADF&G statistical sub-areas included in the Bering Sea crab fishery.

1979 Bering Sea Brandy catch in Thousands
 of pounds through May 13



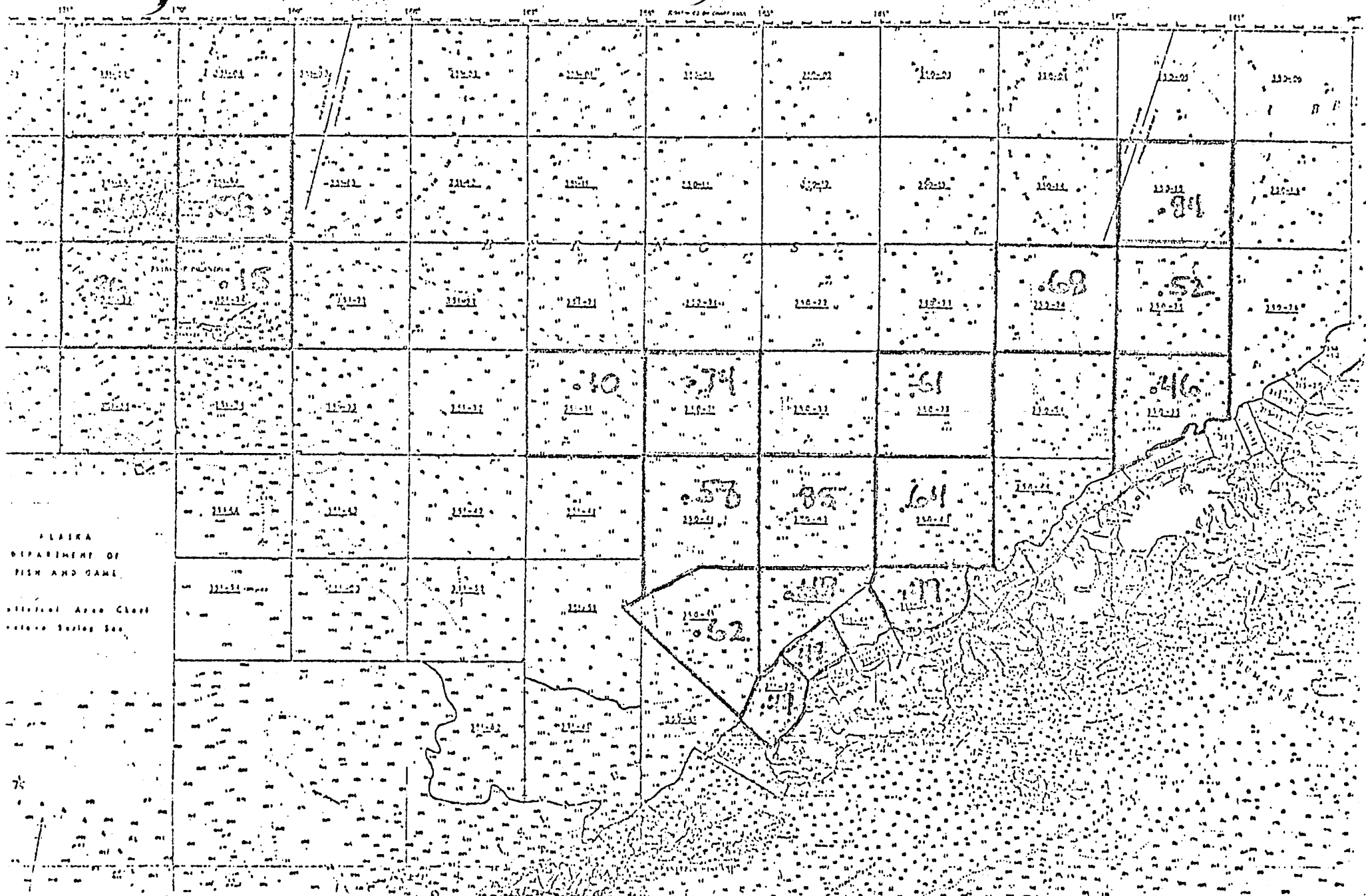
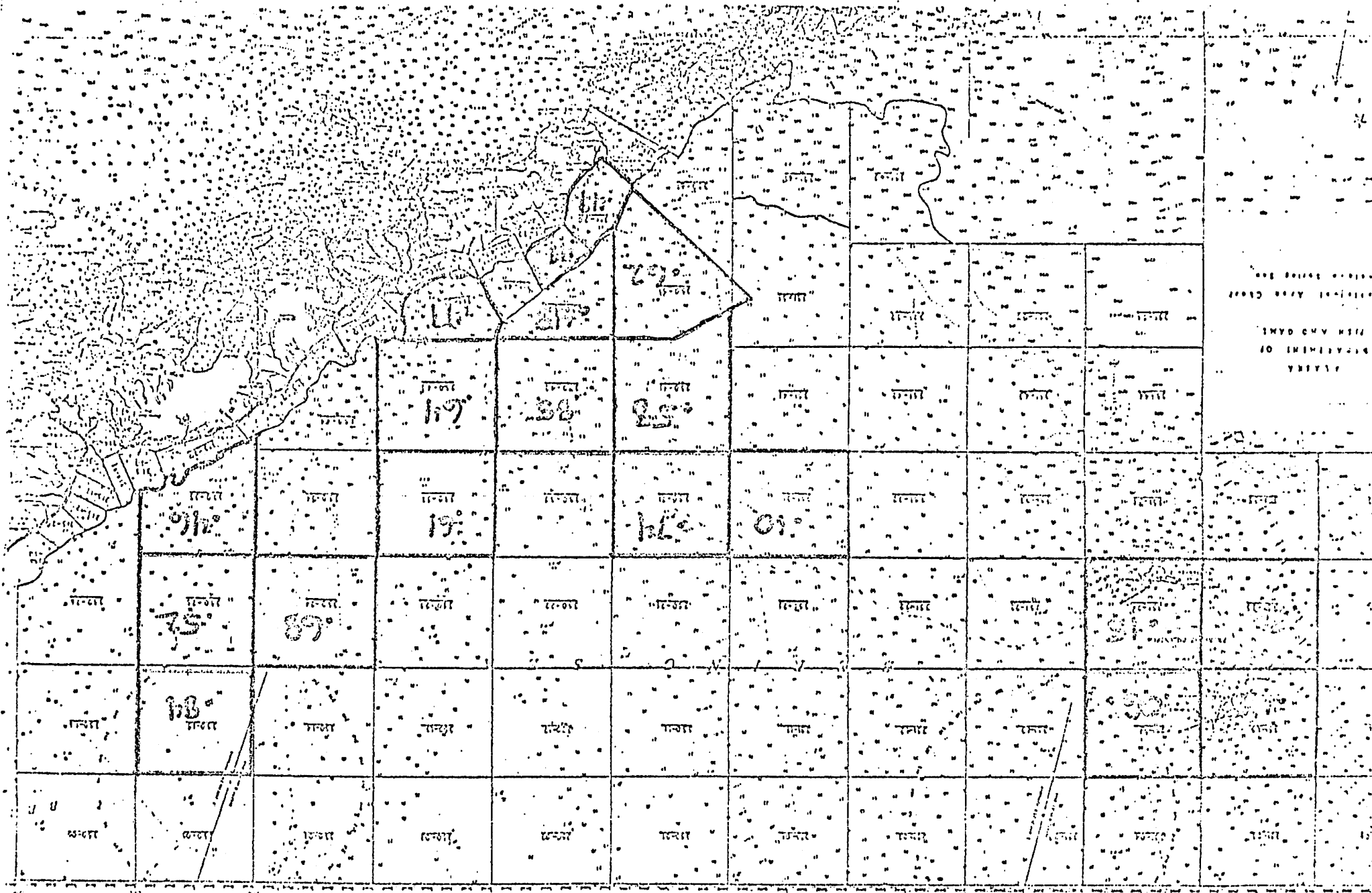


Figure - ADF&G statistical sub-areas included in the Bering Sea crab fishery.
 1979 Catch Through May 13, by Percentage
 as Relationship to the 1978 catch

Figure - ADPFC statistical sub-areas included in the Bering Sea crab fishery. 1977 Catch Through May 13, by Percentage to Total Catch to the 1978 Catch



DEPARTMENT OF COMMERCE
BUREAU OF FISHERIES
WASHINGTON, D. C. 20513