

Informational Leaflet 19

KING CRAB (Paralithodes camtschatica) RECOVERIES IN 1962 FROM ALITAK BAY TAGGING

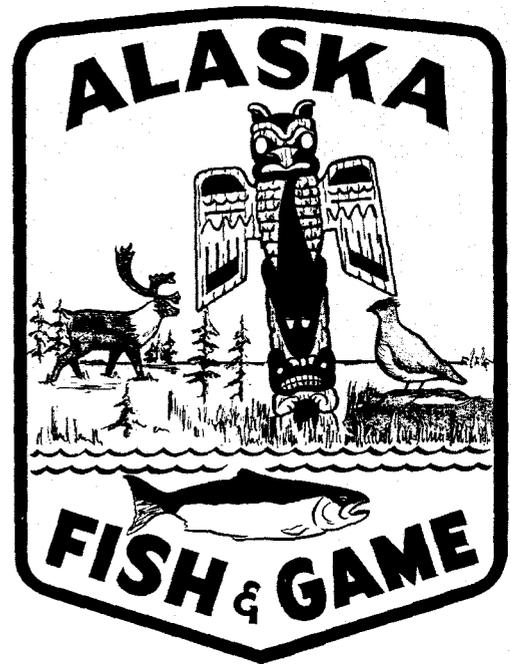
By:

Guy C. Powell
Division of Biological Research
Kodiak, Alaska

September 28, 1962

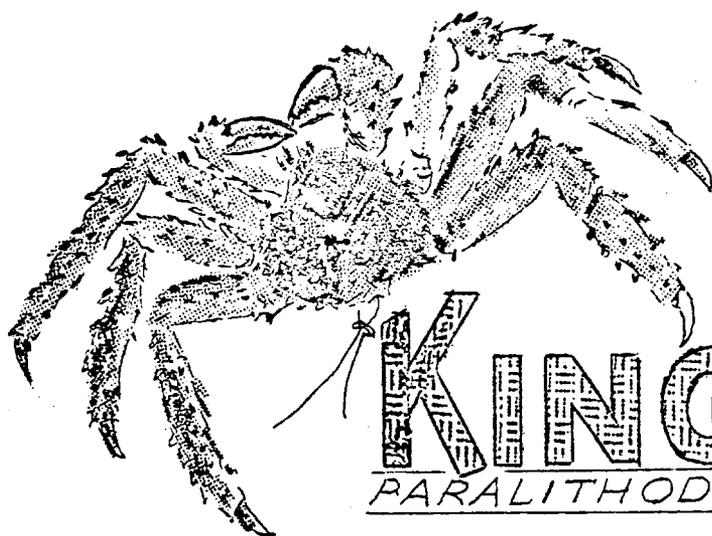
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Informational Leaflet

ALASKA DEPARTMENT OF FISH AND GAME
WILLIAM A. EGAN, GOVERNOR — WALTER KIRKNESS, COMMISSIONER



KING CRAB
PARALITHODES CAMTSCHATICA

RECOVERIES IN 1962
FROM
ALITAK BAY TAGGING

Guy C. Powell
FISHERY RESEARCH BIOLOGIST
DIVISION OF BIOLOGICAL RESEARCH

SEPTEMBER 28, 1962

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The purpose of this preliminary report is to make available some of the current tag recovery data resulting from the offshore Alitak Bay tagging of August 1961, when 5,976 adult male king crabs were tagged.

During the month of July 1962, eleven months after initial release, commercial king crab fishermen fishing in the vicinity of Alitak Bay, Kodiak Island, captured 517 tagged king crabs. Since a total of 5,976 were tagged in August 1961, the July 1962 recovery of 517 represents an 8 percent harvest of the total crabs released. Tag recovery has been heavy during previous months as well as during July, and as a result, approximately 2,500 crabs (42%) have been captured since release. These figures are approximate because all recovery data has been placed in IBM forms and machine processing will not be completed until the beginning of September.

The 5,976 crabs were liberated in nine different areas (364-365-373-382-383-384-389-390 and 391) which are outlined in black (Figure 1). The numbers underlined signify the number of crabs released in each area. Table 1 shows the percent of crabs recovered for each area of release. Rate of recovery was uniform for each release area, excluding 364-384-365 and 389 due to the small numbers involved, and ranged from a low of 7% for area 390 to a high of 10% for areas 383 and 384.

Table 1. Number and percent of tagged crabs recaptured during July 1962 from each of the nine release areas for the August 1961 offshore Alitak Bay tagging program.

Area of Release	Number Released	Number Recaptured	Percent Recaptured
364	116	8	7
365	214	28	13
373	1,438	117	8
382	264	25	9
383	1,911	194	10
384	99	10	10
389	220	8	4
390	711	49	7
391	1,003	78	8
	5,976	517	8

Locations of the fishing vessels during the latter part of July is illustrated in Figure 2. Most of the fishing intensity was centered in four areas during early July: 374-375-384 and 385. The fleet has been moving gradually seaward and since the fleets position is only plotted for later July, some of the areas where tagged crabs have been captured do not show presence of boats.

The migratory pattern displayed by these offshore stocks is best described as a gradual shoreward movement to the east beginning in October and continuing until February at which time many tagged crabs were recovered in water as shallow as 10 fathoms. In March and continuing through August, crabs are gradually migrating seaward again. Locations of capture during July (Figure 3)

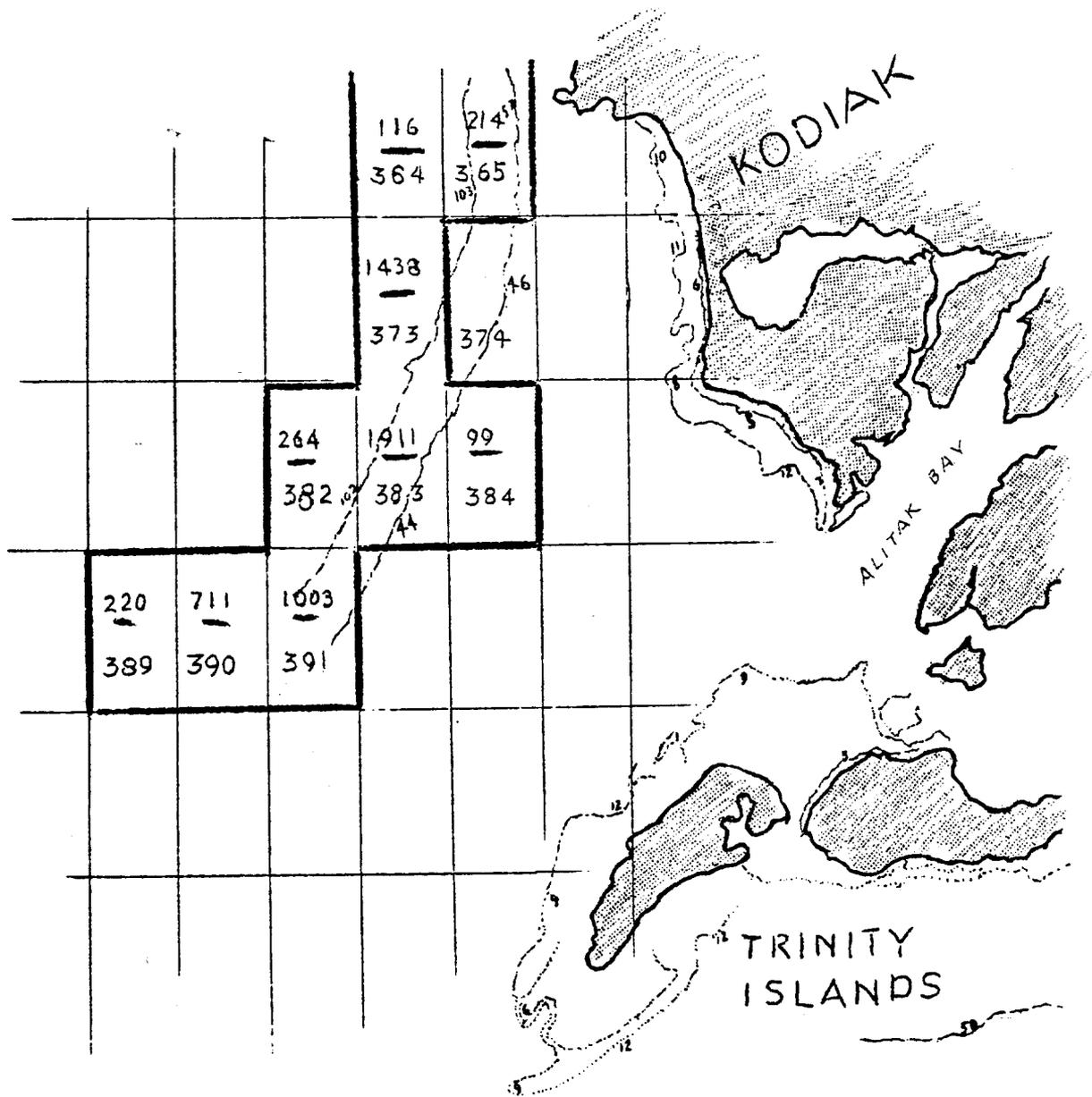


Figure 1. Chart of Alitak offshore area showing total number of adult male king crabs tagged and released in each of the nine areas during August 1961.

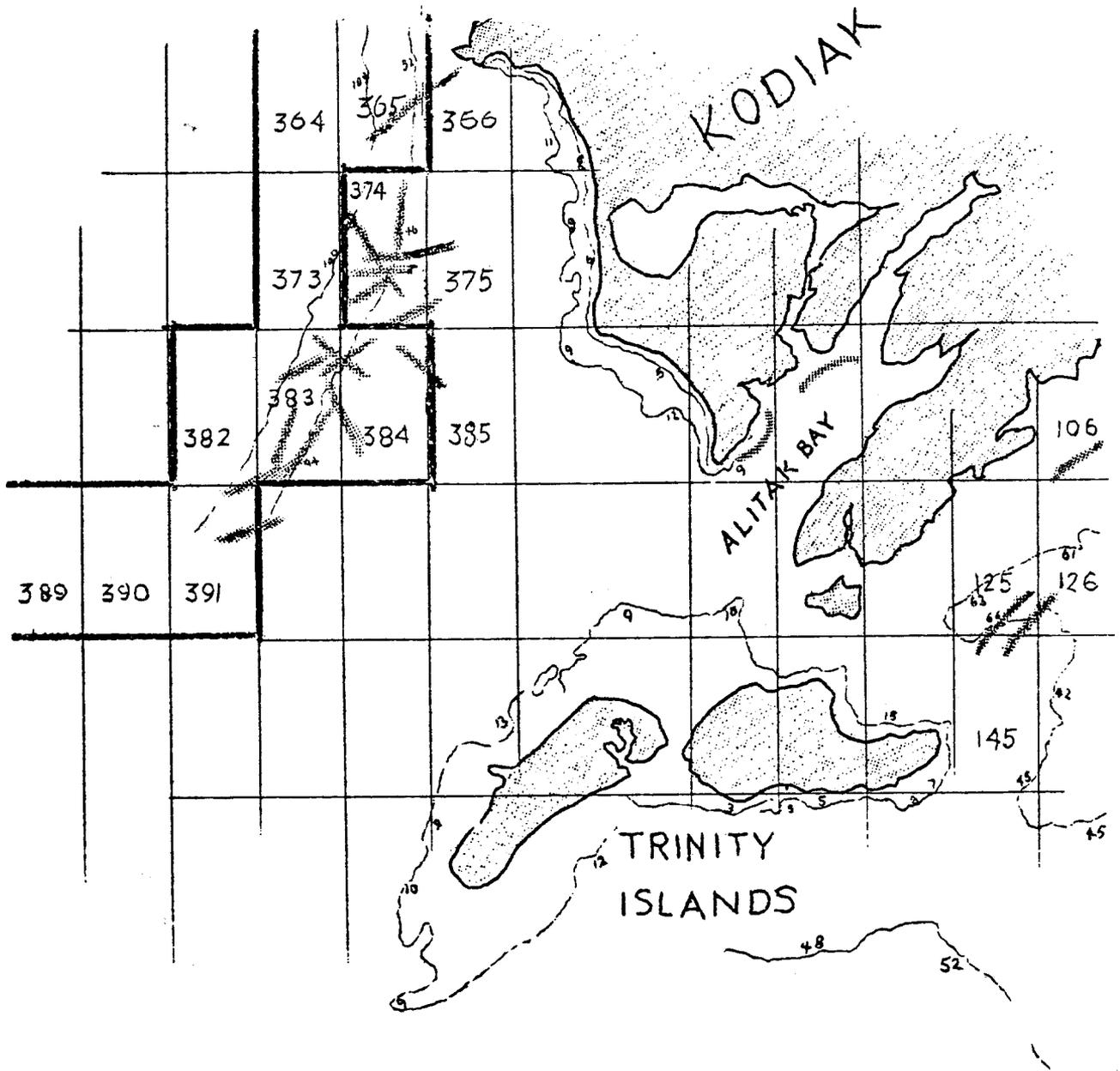


Figure 2. Chart of Alitak Bay offshore area showing approximate fishing locations (string of pots) for each of the 22 vessels operating during July 1962.

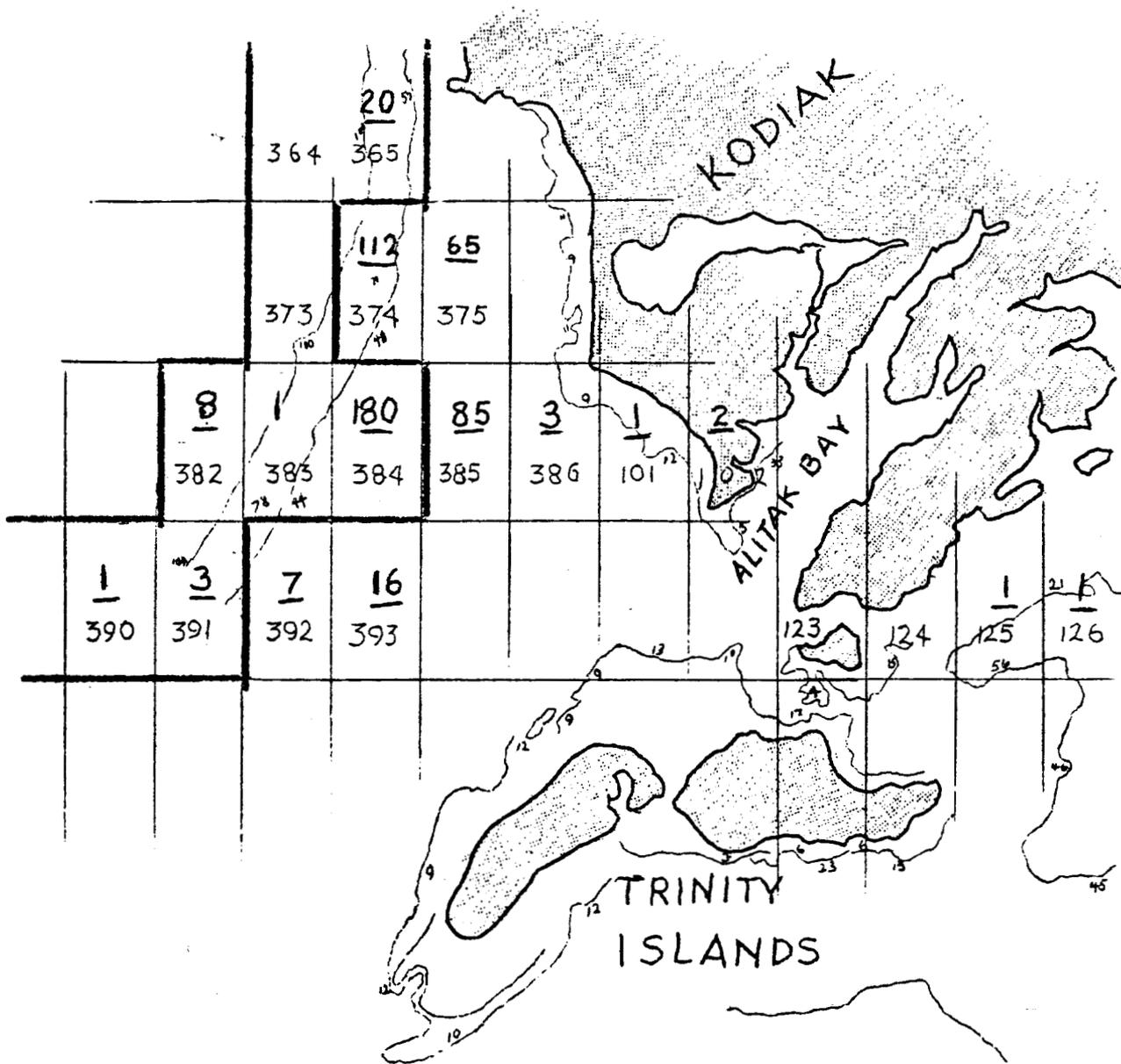


Figure 3. Chart of Alitak Bay showing number of tagged crabs recaptured by area during July, 1962.

show that the main body of crabs which had moved shoreward had returned to that area from which they were tagged a year earlier, completing their annual migratory cycle. Actual numbers of tagged crabs captured by area are underlined in Figure 3.

Newly molted crabs were first recaptured in early April, similar to data found for other areas, indicating that the months of April and May are the time for ecdysis and reproduction for the Alitak stocks as well as for the other bay stocks of Kodiak Island.

Eighty percent of the 517 tagged crabs recaptured in July were new shells, indicating recent molting the previous spring. Growth analysis and more detailed analyses of factors such as migrations, population size, etc. is not practical before machine processing, and will not be attempted until a later date.

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