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Large-Mesh Bottom Trawl Survey of Crab and Groundfish: Kodiak, Chignik, South Peninsula, and Eastern Aleutian Management Districts, 2017

by

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and

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Alaska Department of Fish and Game **Divisions of Sport Fish and Commercial Fisheries**

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Weights and measures (metric)

centimeter	cm
deciliter	dL
gram	g
hectare	ha
kilogram	kg
kilometer	km
liter	L
meter	m
milliliter	mL
millimeter	mm

Weights and measures (English)

cubic feet per second	ft^3/s
foot	ft
gallon	gal
inch	in
mile	mi
nautical mile	nmi
ounce	oz
pound	lb
quart	qt
yard	yd

Time and temperature

day	d
degrees Celsius	°C
degrees Fahrenheit	°F
degrees kelvin	K
hour	h
minute	min
second	s

Physics and chemistry

all atomic symbols	
alternating current	AC
ampere	A
calorie	cal
direct current	DC
hertz	Hz
horsepower	hp
hydrogen ion activity (negative log of)	pH
parts per million	ppm
parts per thousand	ppt, ‰
volts	V
watts	W

General

Alaska Administrative Code	AAC
all commonly accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.
all commonly accepted professional titles	e.g., Dr., Ph.D., R.N., etc.
at	@
compass directions:	
east	E
north	N
south	S
west	W
copyright	©
corporate suffixes:	
Company	Co.
Corporation	Corp.
Incorporated	Inc.
Limited	Ltd.
District of Columbia	D.C.
et alii (and others)	et al.
et cetera (and so forth)	etc.
exempli gratia (for example)	e.g.
Federal Information Code	FIC
id est (that is)	i.e.
latitude or longitude	lat or long
monetary symbols (U.S.)	$, ¢
months (tables and figures): first three letters	Jan,...,Dec
registered trademark	®
trademark	™
United States (adjective)	U.S.
United States of America (noun)	USA
U.S.C.	United States Code
U.S. state	use two-letter abbreviations (e.g., AK, WA)

Mathematics, statistics

all standard mathematical signs, symbols and abbreviations	
alternate hypothesis	H_A
base of natural logarithm	*e*
catch per unit effort	CPUE
coefficient of variation	CV
common test statistics	(F, t, χ^2, etc.)
confidence interval	CI
correlation coefficient (multiple)	R
correlation coefficient (simple)	r
covariance	cov
degree (angular)	°
degrees of freedom	df
expected value	*E*
greater than	>
greater than or equal to	≥
harvest per unit effort	HPUE
less than	<
less than or equal to	≤
logarithm (natural)	ln
logarithm (base 10)	log
logarithm (specify base)	$\log_2$, etc.
minute (angular)	'
not significant	NS
null hypothesis	H_O
percent	%
probability	P
probability of a type I error (rejection of the null hypothesis when true)	α
probability of a type II error (acceptance of the null hypothesis when false)	β
second (angular)	"
standard deviation	SD
standard error	SE
variance	
population	Var
sample	var

FISHERY MANAGEMENT REPORT NO. 18-15

LARGE-MESH BOTTOM TRAWL SURVEY OF CRAB AND GROUNDFISH: KODIAK, CHIGNIK, SOUTH PENINSULA, AND EASTERN ALEUTIAN MANAGEMENT DISTRICTS, 2017

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ABSTRACT

This report summarizes the June through September 2017 large-mesh bottom trawl survey to assess crab and groundfish resources in the Kodiak, Chignik, South Peninsula, and Eastern Aleutian Tanner crab *Chionoecetes bairdi* management districts. A total of 363 trawl hauls were conducted to assess relative abundance and condition of commercially important crabs, and spatial distribution, species composition, size frequency, and catch per unit effort of commercially important groundfish. Survey estimates of mature and legal male Tanner crab abundance allowed for a commercial fishery in 2 sections of the Kodiak District and 1 section of the Eastern Aleutian District. Red king crab *Paralithodes camtschaticus* abundance estimates in each of the surveyed management areas remain too low to consider opening a red king crab commercial fishery. Flathead sole *Hippoglossoides elassodon*, arrowtooth flounder *Atheresthes stomias*, yellowfin sole *Limanda aspera*, and walleye pollock *Gadus chalcogrammus*, were the dominant groundfish captured during the survey.

Key words: crab, groundfish, *Chionoecetes bairdi*, *Paralithodes camtschaticus*, trawl survey, Kodiak, South Peninsula, Chignik, Eastern Aleutian, *Hippoglossoides elassodon*, *Atheresthes stomias*, *Limanda aspera*, *Gadus chalcogrammus*

INTRODUCTION

The Alaska Department of Fish and Game (ADF&G) conducted a large-mesh bottom trawl survey during 2017 around Kodiak Island, along the Alaska Peninsula from Cape Douglas to False Pass, and in the Eastern Aleutian Islands from Akutan Island to Unalaska Island (Figure 1). The survey area corresponds to the Kodiak, Chignik, South Peninsula, and Eastern Aleutian districts of the Registration Area J (Westward) for Tanner crab *Chionoecetes bairdi* (AAC 35.505[1](a)(b)(c) and (f)); the Kodiak and Alaska Peninsula king crab registration areas, and the Dutch Harbor District of the Aleutian Islands king crab Registration Area (5 AAC 34.400[2], 34.500[3], and 34.604[4](1)); and the Kodiak, Chignik, and South Alaska Peninsula groundfish registration areas, and Aleutian Islands District of the Bering Sea–Aleutian Islands groundfish Registration Area (5 AAC 28.400[5], 28.500[6], 28.550[7], and 28.605[8](a)) (Figure 2). Tanner crab management units are districts; king crab and groundfish management units are areas. This report summarizes survey data by district or area accordingly.

ADF&G began conducting bottom trawl surveys around Kodiak Island in 1963. Early surveys focused on red king crab *Paralithodes camtschaticus* and targeted Long Island Bank (Reynolds and Powell 1964), Marmot Flats (McMullen 1967a), Portlock Bank (McMullen 1967b), Albatross Bank (McMullen 1968), and Alitak and Kaguyak bays (Kingsbury and James 1971; Figure 3). From 1973 to 1986 ADF&G conducted pot surveys targeting king crab; Tanner crab were assessed as a secondary species (Colgate and Hicks 1983). A bottom trawl survey to assess Tanner crab in the North Shelikof Strait of the Kodiak District began in 1980 (Colgate and Hicks 1982; Figure 3). Large-mesh trawl surveys were expanded to other areas of the Kodiak and Chignik districts in 1981 (Colgate and Hicks 1983) and to Pavlof Bay in the South Peninsula District in 1984 (Colgate 1984). The first comprehensive large-mesh trawl survey of the Kodiak District was conducted in 1987 (Jackson 1990) and in 1988 became the standard Tanner crab

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1 Alaska Administrative Code: *Description of* [Tanner crab] *Registration Area J Districts* [Westward]
2 Alaska Administrative Code: *Description of* [king crab] *Registration Area K* [Kodiak]
3 Alaska Administrative Code: *Description of* [king crab] *Registration Area M* [Alaska Peninsula]
4 Alaska Administrative Code: *Description of red king crab* [Registration Area O (Aleutian Islands)] *districts*
5 Alaska Administrative Code: *Description of Kodiak Area* [for groundfish]
6 Alaska Administrative Code: *Description of Chignik Area* [for groundfish]
7 Alaska Administrative Code: *Description of South Alaska Peninsula Area* [for groundfish]
8 Alaska Administrative Code: *Description of Bering Sea–Aleutian Islands Area districts* [for groundfish]

stock assessment tool in the Kodiak, Chignik, and South Peninsula districts (Urban and Vining 1999; Spalinger 2015b). The Eastern Aleutian District large-mesh bottom trawl survey was added to the regionwide survey program in 1990 and generally continued on a triennial basis until 2003. Beginning in 2004, selected locations of the Eastern Aleutian District have been annually surveyed. Since 1988, between 287 and 410 successful hauls have been completed annually (Table 1).

In 1999, ADF&G developed Tanner crab harvest strategies for the above districts (5 AAC 35.507[9], 34.509[10]; Urban et al. 1999) that use annual trawl survey abundance estimates to determine if abundance thresholds are met and to set fishery guideline harvest levels (GHLs; Urban and Vining 1999). When abundance thresholds are met, Tanner crab GHLs are primarily determined by estimating the number of molting mature male crab (Appendix A1) in a district or section and applying a harvest rate based on composition of the male population.

Low Tanner crab abundance, as estimated by the trawl survey, has required fishery closures in multiple years (Spalinger and Phillips 2017). The Kodiak District was closed from 1994 to 2000 and from 2014 to 2017. The South Peninsula District was closed from 1990 to 2000, from 2002 to 2004, and from 2014 to 2017. The Chignik District was closed from 1990 to 2004, from 2007 to 2009, and from 2012 to 2017. The Eastern Aleutian District was closed from 1995 to 2002, in 2014, and in 2017.

Primary objectives of the 2017 crab and groundfish large-mesh bottom trawl survey were to 1) estimate the relative abundance and condition of Tanner and red king crabs and 2) determine spatial distribution, species composition, length frequency distributions, and CPUE of commercially important groundfish species.

Secondary objectives of the survey were to determine 3) size frequency distribution of weathervane scallops *Patinopectin caurinus*; 4) sex composition of skate species (*Raja* spp. and *Bathyraja* spp.); and 5) chela (claw) height of male Tanner crab in Northeast, Eastside, and Westside sections of the Kodiak District (Spalinger 2015b). Collections of chela height of male Tanner crab in the Eastside, Westside, and Northeast sections of the Kodiak District are ongoing ADF&G research projects; results are not presented here.

Additionally, the following special projects were conducted in 2017 (Knutson and Spalinger 2017):

1. A study in the Northeast and Eastside sections of the Kodiak District was continued using the ADF&G research vessel (R/V) *Solstice* and the R/V *Resolution* to determine if fishing power correction factors are necessary to compare catch data from one vessel to the other (Spalinger 2015c).
2. Small-mesh survey hauls were conducted in Pavlof and Chiniak bays upon completion of large-mesh bottom trawl survey hauls. Data were incorporated into the small-mesh trawl survey time-series. Information on the small-mesh survey can be obtained by contacting the ADF&G shellfish management office in Kodiak.
3. Sea stars were monitored throughout the survey for signs of sea star wasting syndrome.

[9] Alaska Administrative Code: *Kodiak, Chignik, and South Peninsula Districts* C. bairdi *Tanner crab harvest strategies*

[10] Alaska Administrative Code: *Eastern Aleutian District Tanner crab harvest strategy*

METHODS

SURVEY DESIGN

The 2017 large-mesh bottom trawl survey was conducted in known Tanner crab habitat, using a fixed-grid station design. Survey station area totals approximately 15,500 km^2 at depths greater than 20 fathoms. Station size variation results from irregular coastline topography and bathymetry. Offshore stations average approximately 74.4 km^2 each and inshore stations average approximately 21.7 km^2 each (Appendix B2; Spalinger 2015b).

VESSEL AND FISHING GEAR

The R/V *Resolution* (27.7 m) has been used to conduct the large-mesh bottom trawl survey since 1988. The R/V *Resolution* is a house-forward stern trawler equipped with an aft net reel, telescoping deck crane, and paired hydraulic trawl winches. In 2017, skipper Denis Cox, Jr. made 1 successful bottom trawl haul in each of 363 stations (Figure 1, Appendix C).

The trawl survey net is a 400-mesh eastern otter trawl designed to sweep a 12.2 m path. The net mouth is constructed with 10.2 cm stretch mesh, the net body with 8.9 cm stretch mesh, and the codend with a 3.2 cm stretch mesh liner. The net has a 21.3 m headrope with 18 floats 20.3 cm in diameter. The footrope is 29.0 m long with a 1.0 cm diameter chain attached every 25.4 cm to ensure the footrope contacts bottom. The dandylines are 45.7 m long, each consisting of a 1.5 cm diameter cable that is 18.3 m long and a pair of 1.3 cm diameter cables that are each 27.4 m long; one attached to the top and the other to the bottom of each net wing (Spalinger 2015b). Astoria "V" type doors weighing 340 kg and measuring 1.5 m x 2.1 m are used to spread the net.

Within each station, the trawl net was towed on bottom at an average speed of 5.1 km/h for a target distance of 1.85 km (1 nmi) to provide a representative sample of fishery resources without exceeding weight limitations of vessel equipment. Haul distance was determined by Global Positioning System as the distance traveled by the vessel from when the footrope contacted bottom until the footrope left bottom. Irregular bottom type, net hang ups, or exceptionally large catches often caused haul distance to differ from 1.85 km. The vessel captain estimated corrections in distance for hauls that were not straight. Haul locations were limited to trawlable substrate as determined from nautical charts and bottom mapping systems on the vessel. All hauls were made during daylight hours. Haul location, distance, time, and depth were recorded on ADF&G skipper trawl record forms. Quality of net performance was rated and a haul was discarded and repeated when the skipper and cruise leader determined the net did not adequately sample the bottom (Spalinger 2015b). A temperature-depth data logger was attached to the net's headrope and was approximately 2 m above the sea floor when fishing. Water temperature and depth were recorded in one-minute intervals for each haul. Only temperatures recorded when the footrope was on bottom were used to determine average water temperature during the haul.

CATCH SAMPLING PROCEDURES

Total catch weight from each haul was determined by weighing the full trawl codend with an electronic crane scale (MSI 9300; Measurement Systems International, Seattle, USA[11]; ±1.0 kg), emptying the codend into on-deck sorting bins, and subtracting the empty codend weight from

[11] Product names used in this publication are intended for scientific completeness and do not indicate product endorsement.

the full codend weight. Prior to emptying the trawl catch from the codend, a 1.5 m^2 subsampling net was tied into the on-deck sorting bin. After emptying the entire catch into the on-deck sorting bin, species selected for sampling from the entire haul (whole-haul) were weighed using a motion compensated electronic scale (Marel 1500, Gardabaer, Iceland[10]; ±0.01 kg), counted, and measured (±1.0 cm) when applicable. The following species were whole-haul sampled: sablefish *Anoplopoma fimbria*, Pacific cod *Gadus macrocephalus*, walleye pollock *Gadus chalcogrammus*, Pacific halibut *Hippoglossus stenolepis*, all rockfish *Sebastes* spp. and *Sebastolobus* spp., lingcod *Ophiodon elongatus*, Atka mackerel *Pleurogrammus monopteryguis*, giant Pacific octopus *Octopus dofleini*, squid *Berryteuthis magister*, Pacific herring *Clupea harengus*, salmon *Onchorhynchus* spp., weathervane scallop, red sea cucumber *Parastichopus californicus*, Bering skate *Bathyraja interrupta*, Aleutian skate *B. aleutica*, Alaska skate *B. parmifera*, longnose skate *Raja rhina*, big skate *R. binoculata*, Dungeness crab *Metacarcinus magister*, Tanner crab, red king crab, snow crab *Chionoecetes opilio*, hair crab *Erimacrus isenbeckii*, box crab *Lopholithodes foraminatus*, spiny dogfish *Squalus acanthius*, Pacific sleeper shark *Somniosus pacificus*, salmon shark *Lamna ditropis*, wolf-eel *Anarrichthys ocellatus*, and giant wrymouth *Cryptacanthodes giganteus*. As whole-haul species were removed from the on-deck sorting bin for sampling, the subsampling net was lifted by crane through remaining catch and the resulting subsample was placed on the sorting table for species composition sampling. All species on the sorting table were identified and weighed. Data recorded for subsampled organisms was used post survey to expand results to the entire haul catch. Human-made products, kelp, empty shells, regurgitated fish, rocks, etc. in the subsample were classified as "debris" and weighed.

Length or width measurements were taken from selected shellfish species. Crabs were categorized by shell condition and measurements were electronically recorded using digital calipers linked to a shellfish measurement database. Tanner crab carapace width (CW) was measured perpendicular to the carapace midline, between the lateral margin spines; however, legal status (meets minimum size requirement to retain in a fishery) was determined including lateral margin spines. King crab were measured for carapace length (CL) from the right eye socket to the medial-posterior edge of the carapace whereas legal status was determined by measuring perpendicular to the carapace midline including lateral margin spines. An explanation of the terms used to characterize Tanner and king crabs is presented in Appendix A. Dungeness crab were measured for CW and checked for legal status across the carapace immediately anterior to the tenth anterolateral spine (Spalinger 2015b).

Tanner, king, and Dungeness crabs were subsampled when each species/sex exceeded 200 individuals per haul. Chela height measurements (the greatest height, excluding spines, on the right chela) from up to 50 Tanner crab per haul were taken from male crab >60 mm CW in the Northeast, Eastside, and Westside sections of the Kodiak District. Clutch fullness of mature female Tanner, king, and Dungeness crabs was estimated by examining egg clutch and assigning a fractional clutch size relative to the size of the abdominal flap (Spalinger 2015b). Embryo development was noted by the presence or absence of eyed eggs. External signs of bitter crab disease, black mat, nemertean worms, and parasitic barnacles were recorded for all measured crabs. When available, shell height measurements for 20 weathervane scallops per haul were collected following methods detailed in Spalinger (2015b).

Length measurements were taken from selected finfish species. Target sample size was 30 to 50 measurements per species per haul. Measurements were entered directly into a fish measurement

database using a magnetic fish measuring board. Commercial finfish species were measured from snout to mid-point of the caudal fin. Sharks were measured from snout to tip of caudal fin. Skates were measured along the dorsal surface from the snout to the anterior notch of the pectoral fin. All sharks and skates were measured and sex determined by the presence or absence of claspers (Spalinger 2015b).

CPUE, DENSITY, AND ABUNDANCE INDICES

Survey catch data were converted to density estimates for each haul by dividing the number or weight of animals caught in the haul by the area swept with the trawl during the tow. The area swept is the product of the assumed net width of 12.2 m and the haul distance:

$$density = \frac{number\ or\ weight\ of animals}{net\ width * haul\ distance}.$$

Relative abundance indices for Tanner and king crabs were derived from trawl survey data using the area swept technique (Alverson and Pereyra 1969). Density estimates were multiplied by the station area (Appendix B2) to estimate station abundance:

$$station\ abundance = density * station\ area.$$

The sum of abundances from stations in a geographic area provides a total abundance index for the area: $total\ district\ or\ section\ abundance = \sum station\ abundance$.

In addition to crab relative abundance indices, a commonly used measure in this report is CPUE, which is standardized to kg or number caught per km towed, allowing for comparisons between hauls:

$$CPUE = \frac{number\ or\ weight\ of animals}{distance\ towed}.$$

RESULTS AND DISCUSSION

Detailed haul data are in Appendix B1 and include date, station, start position, heading, average depth, distance towed, and bottom temperature.

KODIAK

In the Northeast, Eastside, Southeast, and Southwest sections of the Kodiak Tanner crab District 143 hauls were successfully completed between June 8 and July 5 (haul numbers 1–145). Two hauls were unsuccessful because the net was damaged while towing. Additionally, in the Northeast Section 3 hauls were completed on May 31 in coordination with the fishing power correction factor study (haul numbers 1–3; Spalinger 2015c), and 4 hauls were completed on August 24 (haul numbers 306–309). Haul locations are shown in Appendices C1–C7. In the Westside and North Mainland sections of the Kodiak Tanner crab District, 54 hauls were successfully completed between August 25 and September 1 (haul numbers 310–364). One haul was unsuccessful because the net hung up on the bottom. The total area of the surveyed sections used to determine abundance estimates for the Kodiak District in 2017 was 7,570.3 km^2 (Appendix B2).

Tanner Crab

The 2017 survey captured 26,173 male Tanner crab in the Kodiak District, with a mean size of 81.4 mm CW, and 17,836 female Tanner crab, with a mean size of 58.6 mm CW. No dominant size group was observed in either male or female populations (Figure 4). The majority of males had a CW less than 75 mm. Most females were between 25 mm CW and 85 mm CW. Tanner crab were caught in 98% of all hauls, with catches ranging from 0 to 2,163 crab per haul. The highest Tanner crab CPUE was 1,168 crab per km towed at station CHF in Chiniak Bay within the Northeast Section (Figure 5). Soft/new pliable shell and new shell crab comprised 87% (22,649) of the total male Tanner crab captured in the Kodiak District survey (Table 2). In the Northeast, Southeast, Westside, and North Mainland sections the majority of male crab were less than 100 mm and in new shell condition. The Eastside and Southwest sections had a greater proportion of male crab that were greater than 100 mm, in various shell conditions (Figures 6 and 7).

Tanner crab abundance estimates for each station were summed by management section (Appendix D1). The total 2017 Kodiak District surveyed Tanner crab abundance was estimated at 69.2 million crab, an increase from 57.7 million crab estimated in 2016 (Table 3). The largest increases were observed among sublegal males <70 mm CW and juvenile females. Decreases in abundance relative to the 2016 estimates were seen in sublegal males >91 mm CW, and mature females (Table 3; Figure 8).

The 2017 estimated abundance of legal-sized male Tanner crab in the Kodiak District was 2.1 million crab, double the 2016 estimate of 1.0 million, and the highest legal-sized male abundance estimate since 2012 (Table 3). In 2017, the abundance estimate of 1.0 million legal-sized male crab in the Eastside Section was the largest in the Kodiak District, while the Westside and Northeast sections had the smallest estimated abundances of legal males. Based on the Tanner crab harvest strategy (5 AAC 35.507), trawl survey results indicated that the Eastside and Southwest sections were above the mature male abundance threshold and satisfied the minimum GHL criteria, while the Northeast, Southeast, Westside, and North Mainland sections were below thresholds required to consider opening a commercial Tanner crab fishery (Table 4). Therefore, the Eastside and Southwest sections of the Kodiak District opened to commercial Tanner crab fishing in 2018.

Egg clutches of 4,278 mature female Tanner crab from the Kodiak District were examined (Figure 9); 76.5% (3,273) were multiparous, similar to 78.1% in 2016 (Spalinger 2017). Mature female egg clutches were more than half full in 73.4% (3,141) of samples. This was similar to 2016 when 73.1% of mature females sampled had egg clutches that were more than half full (Spalinger 2017).

Red King Crab

Red king crab were caught in 14.2% of Kodiak Area hauls totaling 319 males and 85 females. King crab catch ranged from 0 to 118 crab per haul, with 75.5% of king crab caught inside Alitak Bay and 11.1% caught on Alitak Flats (Figure 10). Mean king crab size was 157.6 mm CL for males and 133.2 mm CL for females. The majority of female king crab were mature and the majority of males were legal. During the 2017 Kodiak Area survey, 68.0% (58) of all mature females examined had an egg clutch that was more than half full (Figure 9), similar to 2016 (63.0%; Spalinger 2017).

Red king crab abundance estimates were derived for 4 districts of the Kodiak Registration Area by size and sex categories (Table 5). The 2017 Kodiak red king crab abundance was estimated at 266,430 crab, less than half of the estimated 581,677 crab in 2016. Relatively few male king crab are captured by the trawl survey each year (319 in 2017 and 470 in 2016; Spalinger 2017). The largest decreases in 2017 were observed among juvenile females and prerecruit males <113 mm CL (Table 5, Figure 11). The total estimated abundance of legal males decreased from 197,523 crab in 2016 to 139,975 crab in 2017 and represented 64.9% of the total male abundance. Large changes in annual abundance estimates are most likely due to low crab density and uneven distribution within the survey area.

Groundfish

The CPUE of all species from sample hauls in the Kodiak groundfish Area was 418 kg/km towed, with groundfish species comprising 82.4% of the total animal catch by weight. During the 2017 survey, flathead sole *Hippoglossoides elassodon* was the dominant species caught by weight (24.5%), followed by arrowtooth flounder *Atheresthes stomias* (19.0%), walleye pollock (7.8%), Tanner crab (6.2%), and yellowfin sole *Limanda aspera* (5.6%; Table 6). Arrowtooth flounder, flathead sole, and walleye pollock were the 3 most abundant species captured by weight in previous years (2013–2016; Figure 12), with the exception of 2016 when walleye pollock was the 6th most abundant by weight.

During the 2017 Kodiak Area bottom trawl survey, 27,272 fish representing 42 species were measured for length. Arrowtooth flounder and flathead sole were present in almost every haul, although flathead sole were most abundant inside bays (Figure 13). Yellowfin sole were primarily found inside bays, with greater numbers along the north end of Kodiak Island. Northern rock sole and southern rock sole were found in small numbers around Kodiak Island though northern rock sole were more common (Figure 13). Pacific cod and walleye pollock were seen throughout the survey with the highest concentrations of pollock nearshore along the east and south sides of Kodiak Island. Sablefish were captured around Kodiak Island although concentrations along the south and west sides of the island were lower. Rougheye rockfish *Sebastes aleutianus* concentrations were largest in Barnabas Gully (Figure 14).

SOUTH PENINSULA AND CHIGNIK

In the South Peninsula and Chignik Tanner crab districts, 138 hauls were successfully completed from July 14 through August 11: 93 hauls in the South Peninsula District (haul numbers 192–263 and 285–305; Appendices C8–C11) and 45 hauls in the Chignik District (haul numbers 146–191; Appendices C11–C12). One haul in the Chignik District was unsuccessful because of excessive mud in the net. The total area used to determine abundance estimates in 2017 was 2,931.7 km^2 in the South Peninsula District and 1,353.3 km^2 in the Chignik District (Appendix B2).

Tanner Crab

The 2017 trawl survey of the South Peninsula District caught 5,059 Tanner crab. The number per haul ranged from 0 to 457 Tanner crab, with the highest CPUE of 247 crab per km towed in the Eastern Section, near West Nagai Strait, station 334 (Figure 15). The mean CW of Tanner crab in the South Peninsula District was 73.3 mm for males and 52.5 mm for females. The dominant size class mode for both males and females was at 25 mm CW (Figure 4). Sublegal male crab <70 mm CW accounted for 52.7% (1,528) of the total male Tanner crab captured in the South

Peninsula District survey with most of those found in West Nagai Strait (Table 2; Figures 16 and 17).

Tanner crab abundance estimates for each station in the South Peninsula District were summed by surveyed locale and management section (Appendix D2). Tanner crab abundance in the surveyed portion of the South Peninsula District was estimated at 9.7 million crab, a decrease from 14.9 million crab in 2016 (Table 7). In 2017 decreases in Tanner crab abundance were seen among all groups of crab except juvenile females and sublegal males <70 mm CW (Figure 18). Estimated abundance of legal-sized male Tanner crab decreased to 0.1 million crab in 2017 from 0.8 million crab in 2016. Tanner crab abundance estimates from the 2017 survey did not meet regulatory requirements to open a commercial fishery in the Eastern or Western sections of the South Peninsula District in 2018 (5 AAC 35.507; Table 4).

The 2017 Chignik District bottom trawl survey captured 5,900 Tanner crab with catches ranging from 2 to 650 Tanner crab per haul. Mitrofania Island showed the highest CPUE of Tanner crab at 351 crab per km towed from Station 4066B (Figure 15). The mean Tanner crab CW in the Chignik District was 49.5 mm for males and 46.8 mm for females. Similar to the South Peninsula District, in Chignik the dominant size class mode for both males and females was 25 mm CW (Figure 4). Juvenile males with soft/new pliable or new shell conditions accounted for 87.3% (2,645) of the total male Tanner crab captured in the Chignik survey (Table 2), compared to 44.1% in 2016 (Spalinger 2017). Mitrofania had the highest number of new shell male crab, while Chignik Bay had the highest number of old and very old shell male crab in the Chignik District (Figures 19 and 20).

Abundance estimates for Tanner crab in each station of the Chignik District were summed by surveyed locale (Appendix D3). The 2017 Chignik District Tanner crab abundance was estimated at 9.0 million crab, an increase from 2.0 million crab in 2016 and the 5th lowest abundance estimate in survey history (Table 7). Juvenile female crab and male crab <70 mm CW showed the largest increases from the prior year (Figure 21). The estimated abundance of legal-sized male Tanner crab in 2017 increased slightly to 73,537 crab in 2017 from the survey low of 56,509 crab in 2016 (Table 7). Mature male abundance estimates from the 2017 survey did not meet regulatory requirements to open commercial Tanner crab fishing in the Chignik District in 2018 (5 AAC 35.507; Table 4).

In 2017 the estimated number of mature female Tanner crab decreased by 5.0 million crab from the 2016 estimate in the South Peninsula District and increased by 0.3 million crab in the Chignik District (Table 7). Egg clutches that were more than half full were found in 86.4% (559) of the 647 mature female Tanner crab examined in the South Peninsula District and in 81.6% (473) of the 580 mature females in the Chignik District (Figure 22). Multiparous females in the South Peninsula District accounted for 92.7% (600) of mature female Tanner crab examined in 2017 compared to 78.5% in 2016 (Spalinger 2017). In the Chignik District, 84.0% (487) of mature females examined during the 2017 survey were multiparous, similar to 2016 (82.7%; Spalinger 2017).

Red King Crab

The Alaska Peninsula king crab management area consists of waters west of Cape Kumlik and east of Scotch Cap Light (5 AAC 34.500), approximately corresponding to the South Peninsula and Chignik Tanner crab management district boundaries. The 2017 abundance estimate was 208,080 crab, similar to 208,789 crab estimated in 2016 (Table 5). A total of 166 male and 91

female red king crab were captured in the Alaska Peninsula Area, most of which were from Pavlof and Volcano bays (Figure 10). Male king crab mean carapace length was 160.2 mm and female red king crab mean carapace length was 131.4 mm. The majority (69.7%; 88 crab) of female king crab examined were mature. The patchy distribution of king crab in the sampling areas contributes to large changes in abundance estimates that may not be reflective of a changing population.

Groundfish

The CPUE of all species from sample hauls in the South Alaska Peninsula and Chignik groundfish registration areas was 539 kg/km towed, with groundfish species comprising 86.7% of the total animal catch. Flathead sole (30.9%), arrowtooth flounder (17.1%), and yellowfin sole (13.2%) were the dominant species by weight captured in the survey followed by walleye pollock (6.7%) and Pacific halibut (3.8%; Table 8). These species have been among the top 10 species in recent surveys (Spalinger 2013, 2014, 2015a, 2016, 2017; Figure 12).

Length measurements were taken from 17,701 fish representing 37 groundfish species in the South Alaska Peninsula and Chignik areas. Arrowtooth flounder and flathead sole were found area-wide (Figure 23). The largest concentrations of northern rock sole were west of Kupreanof Point, as were the highest concentrations of yellowfin sole (Figure 23). Sablefish were found in small numbers along the Alaska Peninsula (Figure 24). Rougheye rockfish were more abundant east of Kupreanof Point, while Pacific cod were abundant throughout the survey area. Walleye pollock were found along the Alaska Peninsula, in greatest numbers west of Kupreanof Point (Figure 24).

EASTERN ALEUTIAN

In the Eastern Aleutian Tanner crab District, 21 hauls (haul numbers 264–284) were completed from August 1 to August 6 (Appendices C13–C14). The total area used to determine abundance estimates was 455.6 km^2 (Appendix B2).

Tanner Crab

The 2017 Eastern Aleutian District survey captured 3,500 male and 7,425 female Tanner crab. Tanner crab catch ranged from 0 to 4,389 animals per haul, with the highest CPUE of 2,370 crab per km towed in Akutan Bay at Station AKD (Figure 25). Mean CW was 76.1 mm for males and 72.7 mm for females. Size frequencies of male Tanner crab in the Eastern Aleutian District showed a mode at 45 mm CW (Figure 4). Females had a predominant size mode of larger crab at 80 mm CW, and also a smaller mode between 45 mm CW and 50 mm CW. Of the 679 mature female Tanner crab sampled, 79.7% (541) had an egg clutch greater than half full (Figure 22).

Tanner crab abundance estimates for each station were summed by management section (Appendix D4). The Tanner crab abundance estimate for the Eastern Aleutian District in 2017 was 10.1 million crab, an increase from 2.7 million crab in 2016 (Table 9). The 2017 legal-sized male Tanner crab abundance was estimated to be 128,867 crab, an increase from 40,852 legal males in 2016, with Makushin Bay having the largest abundance of legal-sized male crab. Based on the Tanner crab harvest strategy (5 AAC 35.509), only the Makushin/Skan Bay Section was above the mature male abundance threshold, and satisfied the minimum GHL criteria to open a fishery (Table 4). The 2018 Eastern Aleutian District Tanner crab fishery opened to commercial fishing in the Makushin/Skan Bay Section.

Red King Crab

Red king crab abundance in the surveyed areas around Akutan and Unalaska islands remains at historic low levels. A total of 1 male red king crab and 1 female red king crab were captured during the 2017 trawl survey in Makushin Bay.

Groundfish

The 2017 trawl survey stations in the Eastern Aleutian Tanner crab District are within the Aleutian Islands District of the Bering Sea-Aleutian Islands groundfish Registration Area. The CPUE of all species from sample hauls was 569 kg/km towed, with groundfish species comprising 86.6% of the animal catch. Arrowtooth flounder was the dominant species by weight (35.5%), followed by walleye pollock (22.7%), flathead sole (11.8%), Tanner crab (7.8%), and Pacific cod (4.6%; Table 10, Figure 12).

Length measurements were taken from 3,031 fish representing 24 species during the 2017 eastern Aleutian survey. Arrowtooth flounder, flathead sole, Pacific cod, and walleye pollock were common around Unalaska and Akutan islands (Figures 26 and 27). Most northern and southern rock sole were found around Unalaska and Akutan bays (Figure 26). Yellowfin sole were not observed in Akutan or Makushin bays (Figure 26). Sablefish were found in small numbers around Akutan and Unalaska islands, while rougheye rockfish were only found in Unalaska Bay (Figure 27).

WEATHERVANE SCALLOPS

Weathervane scallop shell height measurements were collected during the 2017 survey. Ninety-one percent of all weathervane scallops caught were located in the Kodiak Area (Figure 28). The 3,808 scallops caught averaged 136.4 mm in shell height (Figure 29). This was a decrease from 149.8 mm in 2016 and the smallest average height since scallop measurements were first collected in 1999 (Figure 30).

SKATES

Skate species, sex, and length were determined for each skate caught during the 2017 trawl survey. A total of 2,520 skates were captured and measured from all districts surveyed. Bering skates comprised 37.4% (943) of the total number of skates caught and averaged 28.4 cm from snout to anterior notch of the pectoral fin (Figure 31). Longnose skates made up 29.1% (733) of the total number of skates caught and averaged 43.3 cm in length. Big skates accounted for 24.6% (621) of the number of skates caught and had an average length of 55.9 cm. Aleutian skates accounted for 6.8% (172) of all skates caught and averaged 59.6 cm, whereas Alaska skates made up 1.9% (49) and averaged 49.6 cm (Figure 31). There were also 2 mud skates *B. taranetzi* captured in 2017 with an average length of 33.5 cm and composing 0.1% of skates caught. Larger skate species, big and Aleutian skates, were mostly female (big skates: 79.4% (493) female; Aleutian skates: 70.4% (121) female), whereas the smaller species (mud, Bering, longnose, and Alaska skates) were composed of 50.0 % (1), 49.5% (467), 47.5% (348), and 34.7% (17) females respectively. Although Bering skates were the most abundant skate species encountered during the survey, they accounted for only 10.2% (1,419 kg) of the total skate catch by weight. Big skates accounted for 50.1% (6,983 kg) of the total skate catch by weight.

Skates were captured throughout the survey area, although species abundance varied by area. Bering skates were most abundant around Kodiak and Unalaska islands but were absent from

bays along the Alaska Peninsula west of Kupreanof Point (Figure 32). Aleutian and Alaska skates were found throughout the survey area with higher catches of Aleutian skates east of Kupreanof Point (Figure 32). Most longnose skates were captured east of Kupreanof Point (Figure 33). Big skates were common throughout the survey area east of Akutan Island (Figure 33).

WATER TEMPERATURE

Near-bottom water temperatures (~2 m above sea floor) ranged from 2.13°C (Deadman Bay, station ALQ) to 10.95°C (Terror Bay, Station KUYB), with an average of 6.10°C (Appendix B1). Deadman Bay, sampled during late June at an average depth of 146 m, had the coolest average near-bottom temperature (2.16° C). Kukak Bay, sampled during late August at an average depth of 94 m, had the warmest average temperature (8.89°C; Figure 34).

The average near-bottom survey temperature in 2017 was 1.19°C lower than 2016. Average temperatures increased from 2012 to 2016, but declined in 2017. The 2017 average is the lowest since 2013 (Table 11).

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TABLES AND FIGURES

Table 1.–Number of large-mesh bottom trawl survey hauls used to determine king and Tanner crab abundance, by Tanner crab management district, 1988–2017.

Year	Kodiak	Chignik	South Peninsula	Eastern Aleutian	Total
1988	213	0	106	0	319
1989	215	34	108	0	357
1990	208	37	120	45	410
1991	223	32	115	37	407
1992	204	29	114	0	347
1993	223	35	111	0	369
1994	200	34	121	44	399
1995	218	31	0	38	287
1996	222	27	122	0	371
1997	218	34	115	0	367
1998	217	35	93	0	345
1999	230	36	93	39	398
2000	220	35	94	36	385
2001	222	36	94	0	352
2002	225	47	93	0	365
2003	211	45	93	39	388
2004	211	45	94	24	374
2005	217	46	92	23	378
2006	207	46	89	28	370
2007	211	45	92	23	371
2008	215	44	89	23	371
2009	215	46	93	28	382
2010	213	45	90	23	371
2011	207	46	91	23	367
2012	209	46	91	28	374
2013	208	45	93	23	369
2014	211	45	92	23	371
2015	211	46	90	26	373
2016	209	46	93	21	369
2017	204	45	93	21	363

Note: All hauls occurring in Chignik and South Peninsula Tanner crab districts are within the Alaska Peninsula king crab area.

Table 2.–Number of male red king and male Tanner crabs by management unit, crab cohort, and shell condition captured in the 2017 large-mesh bottom trawl survey.

		SHELL CONDITION				
Cohort	Definition	Soft/ New pliable	New	Old	Very old/ Very very old	Total
Kodiak Area red king crab						
Prerecruit IV	< 95 mm CL	0	3	0	0	3
Prerecruit III	95–112 mm CL	0	7	0	0	7
Prerecruit II	113–130 mm CL	0	61	0	0	61
Prerecruit I	>130 mm CL and sublegal	0	37	0	0	37
Recruit	<164 mm CL and legal soft/new	0	24	–	–	24
Postrecruit	≥164 mm CL or legal and not soft/new	1	57	38	91	187
Total		1	189	38	91	319
Alaska Peninsula Area red king crab						
Prerecruit IV	<79 mm CL	0	0	0	0	0
Prerecruit III	79–95 mm CL	0	1	0	0	1
Prerecruit II	96–115 mm CL	0	8	0	0	8
Prerecruit I	>115 mm CL and sublegal	0	17	1	0	18
Recruit	<152 mm CL and legal soft/new	0	22	–	–	22
Postrecruit	≥152 mm CL or legal and not soft/new	2	71	20	24	117
Total		2	119	21	24	166
Kodiak District Tanner crab						
Prerecruit IV	<70 mm CW	2,221	10,246	20	8	12,495
Prerecruit III	70–91 mm CW	183	1,950	70	53	2,256
Prerecruit II	92–114 mm CW	158	1,551	531	431	2,671
Prerecruit I	≥115 mm CW and sublegal	921	3,273	1,301	695	6,190
Recruit	<165 mm CW and legal soft/new	796	1,335	–	–	2,131
Postrecruit	≥165 mm CW or legal and not soft/new	0	15	208	207	430
Total		4,279	18,370	2,130	1,394	26,173
Mature only	≥115 mm CW	1,717	4,623	1,509	902	8,751
Chignik District Tanner crab						
Prerecruit IV	<70 mm CW	490	1,906	0	0	2,396
Prerecruit III	70–91 mm CW	38	116	9	2	165
Prerecruit II	92–114 mm CW	32	63	28	52	175
Prerecruit I	≥115 mm CW and sublegal	6	93	42	82	223
Recruit	<165 mm CW and legal soft/new	2	63	–	–	65
Postrecruit	≥165 mm CW or legal and not soft/new	0	0	2	4	6
Total		568	2,241	81	140	3,030
Mature only	≥115 mm CW	8	156	44	86	294

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Table 2.–Page 2 of 2.

Cohort	Definition	SHELL CONDITION: Soft/ New pliable	New	Old	Very old/ Very very old	Total
South Peninsula District Tanner crab						
Prerecruit IV	<70 mm CW	308	1,219	1	0	1,528
Prerecruit III	70–91 mm CW	17	97	3	4	121
Prerecruit II	92–114 mm CW	12	182	45	99	338
Prerecruit I	≥115 mm CW and sublegal	4	492	78	199	773
Recruit	<165 mm CW and legal soft/new	0	97	–	–	97
Postrecruit	≥165 mm CW or legal and not soft/new	0	0	11	33	44
Total		341	2,087	138	335	2,901
Mature only	≥115 mm CW	4	589	89	232	914
Eastern Aleutian District Tanner crab						
Prerecruit IV	<70 mm CW	199	1,575	2	0	1,776
Prerecruit III	70–91 mm CW	1	365	67	67	500
Prerecruit II	92–114 mm CW	3	284	169	186	642
Prerecruit I	≥115 mm CW and sublegal	0	87	204	132	423
Recruit	<165 mm CW and legal soft/new	2	12	–	–	14
Postrecruit	≥165 mm CW or legal and not soft/new	0	0	92	50	142
Total		205	2,323	534	435	3,497
Mature only	≥115 mm CW	2	99	296	182	579

Note: En dashes indicate not applicable.

Table 3.–Tanner crab abundance estimates from large-mesh bottom trawl surveys in the Kodiak District, 1988–2017.

	Females			Number sublegal males by size (CW)				Recruit	Postrecruit males (CW)		Legal	Total	Total
Year	Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
Northeast Section													
1988	1,630,762	234,651	1,865,410	1,521,941	292,778	271,513	330,972	189,767	15,536	13,807	219,110	2,636,315	4,501,727
1989	4,102,889	3,120,366	7,223,255	3,921,034	1,221,125	1,346,371	1,124,565	602,640	86,462	114,652	803,756	8,416,850	15,640,105
1990	1,328,388	2,056,603	3,384,991	1,097,187	1,090,554	755,329	608,856	256,700	59,039	54,797	370,534	3,922,466	7,307,458
1991	3,427,808	1,894,924	5,322,734	2,837,563	1,227,405	1,202,318	1,043,081	428,157	23,871	52,116	504,147	6,814,517	12,137,248
1992	1,686,845	1,278,938	2,965,784	1,329,572	1,172,958	890,239	776,334	207,279	14,039	7,070	228,386	4,397,483	7,363,270
1993	1,432,940	1,039,391	2,472,334	1,333,380	340,021	525,424	592,685	264,729	31,637	16,787	313,153	3,104,662	5,576,997
1994	440,533	1,161,521	1,602,053	149,768	239,864	434,372	96,667	91,792	2,401	625,232	190,860	1,464,446	3,066,499
1995	3,752,250	1,214,569	4,966,819	3,675,881	878,260	269,577	335,922	9,039	124,138	0	133,177	5,292,815	10,259,633
1996	1,912,715	2,302,910	4,215,629	1,514,878	2,332,954	1,096,662	398,858	29,473	51,094	1,604	82,171	5,425,523	9,641,149
1997	379,433	935,783	1,315,214	436,913	869,379	1,007,484	560,733	44,203	22,402	0	68,883	2,943,396	4,258,613
1998	1,383,819	2,325,285	3,709,105	1,025,277	2,159,050	1,803,166	1,408,517	222,130	40,589	11,255	273,975	6,669,986	10,379,086
1999	1,553,845	851,680	2,405,526	1,767,972	255,346	558,088	715,093	168,115	98,924	1,904	268,945	3,565,446	5,970,974
2000	5,704,136	1,475,947	7,180,080	5,594,824	1,147,652	703,341	811,750	293,880	227,555	12,238	533,675	8,791,241	15,971,322
2001	14,094,656	4,872,780	18,967,439	13,622,529	5,042,356	2,846,411	1,495,486	157,690	257,606	2,963	418,258	23,425,036	42,392,477
2002	3,524,427	2,385,993	5,910,419	3,775,736	2,432,295	2,361,790	1,639,344	186,216	45,329	0	231,546	10,440,705	16,351,124
2003	1,409,466	2,615,606	4,025,071	1,540,636	1,689,696	2,938,869	2,673,429	356,077	133,550	6,148	495,777	9,338,398	13,363,472
2004	2,651,777	4,260,341	6,912,119	2,360,296	1,221,360	2,052,940	2,953,781	875,891	129,813	12,533	1,018,239	9,606,617	16,518,733
2005	3,631,110	3,094,318	6,725,425	3,933,422	1,439,686	1,419,878	2,802,277	790,716	264,016	4,905	1,059,636	10,654,890	17,380,317
2006	8,340,276	1,733,887	10,074,165	7,453,502	2,228,019	914,781	912,671	122,964	112,171	7,489	242,624	11,751,595	21,825,756
2007	5,606,114	2,014,429	7,620,552	4,038,766	2,282,508	2,270,599	1,951,415	173,364	188,475	0	361,837	10,905,123	18,525,668
2008	6,085,883	3,010,942	9,096,823	5,529,663	1,822,588	2,531,748	1,744,042	214,053	97,536	3,697	315,285	11,943,325	21,040,150
2009	3,171,509	1,906,897	5,078,409	2,634,387	2,907,862	3,087,715	2,716,467	666,825	29,301	0	696,127	12,042,551	17,120,959
2010	2,576,574	3,940,024	6,516,600	2,379,450	1,610,640	1,058,419	2,159,621	499,837	292,814	13,066	805,717	8,013,844	14,530,442
2011	1,184,358	951,698	2,136,057	1,245,659	204,063	376,750	873,125	86,136	182,328	2,363	281,693	2,981,284	5,117,339
2012	4,155,939	605,221	4,761,158	4,055,429	164,548	205,760	574,211	38,415	170,673	0	209,087	5,209,037	9,970,194
2013	25,030,918	938,563	25,969,480	24,684,698	1,490,903	415,811	228,588	34,034	67,800	0	106,454	26,926,455	52,895,931
2014	5,720,166	3,931,225	9,651,389	4,659,105	2,721,889	1,440,196	346,277	11,901	122,229	6,218	140,348	9,307,818	18,959,208
2015	435,407	1,543,857	1,979,265	439,703	820,670	567,931	194,394	21,733	29,200	0	50,932	2,073,635	4,052,897
2016	759,351	1,268,993	2,028,343	652,806	352,283	436,626	229,991	16,261	39,221	0	55,482	1,727,188	3,755,531
2017	2,695,084	1,603,646	4,298,733	3,150,077	315,008	504,640	360,623	27,072	23,631	477	51,179	4,381,522	8,680,255
Eastside Section													
1988	2,061,299	762,131	2,823,428	1,599,121	434,581	610,398	689,188	279,635	97,689	1,914	379,236	3,712,512	6,535,935
1989	2,315,842	3,430,969	5,746,810	1,979,980	1,228,590	1,375,295	1,265,912	803,733	265,072	29,979	1,098,782	6,948,552	12,695,354

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Table 3.–Page 2 of 7.

	Females			Number sublegal males by size (CW)				Recruit	Postrecruit males (CW)		Legal	Total	Total
Year	Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
1990	1,472,521	9,452,524	10,925,041	1,248,275	667,516	1,940,947	3,844,980	751,361	134,360	57,684	943,405	8,645,116	19,570,158
1991	1,498,865	3,671,541	5,170,399	1,204,036	305,078	661,606	2,677,115	2,997,741	494,675	38,636	3,531,054	8,378,878	13,549,275
1992	1,494,597	1,955,463	3,450,056	1,613,212	331,773	502,134	1,594,419	525,304	267,165	75,584	868,053	4,909,577	8,359,627
1993	1,719,650	1,500,333	3,219,977	1,357,111	252,168	402,736	989,366	115,839	348,460	14,328	478,628	3,479,992	6,699,967
1994	1,767,160	566,400	2,333,558	705,158	462,351	568,095	47,946	120,912	2,837	739,790	171,694	3,217,166	5,550,722
1995	3,792,461	505,129	4,297,586	3,321,664	594,245	456,053	410,938	28,656	84,036	2,394	115,085	4,897,976	9,195,561
1996	2,070,985	916,541	2,987,523	2,159,913	704,721	609,763	848,358	107,362	179,489	14,539	301,388	4,624,138	7,611,664
1997	800,291	652,062	1,452,355	771,288	677,803	724,276	707,297	117,305	103,542	15,558	236,405	3,117,062	4,569,415
1998	4,390,229	2,431,287	6,821,511	3,854,716	1,767,292	2,715,320	2,215,788	288,234	397,429	74,273	759,934	11,313,050	18,134,560
1999	6,267,399	1,468,370	7,735,763	5,090,059	394,774	1,033,098	1,941,389	368,285	568,053	87,803	1,024,143	9,483,445	17,219,206
2000	5,345,242	3,360,682	8,705,921	5,136,356	1,536,289	683,544	1,706,929	486,668	769,101	69,842	1,325,611	10,388,716	19,094,636
2001	28,271,214	3,092,285	31,363,498	22,768,490	3,233,656	1,454,585	1,159,217	72,143	984,133	78,208	1,134,484	29,750,428	61,113,925
2002	14,180,072	4,646,177	18,826,250	4,110,650	8,122,154	2,836,534	1,409,594	275,211	665,910	36,365	977,484	17,456,408	36,282,658
2003	2,520,605	8,553,327	11,073,935	2,649,111	2,922,961	10,092,328	5,074,824	215,854	358,600	19,061	593,514	21,332,730	32,406,665
2004	4,249,060	2,426,488	6,675,551	3,825,810	1,107,990	3,296,833	8,524,404	1,236,288	203,839	12,760	1,452,887	18,207,923	24,883,473
2005	1,553,368	3,316,472	4,869,840	1,768,248	131,919	1,258,057	6,796,866	3,034,483	535,098	51,861	3,621,441	13,576,526	18,446,367
2006	31,187,557	559,421	31,746,977	27,974,217	510,696	575,638	4,639,044	756,712	1,900,603	23,263	2,680,581	36,380,161	68,127,135
2007	41,718,044	2,376,973	44,095,012	21,272,982	25,931,589	1,599,981	3,770,602	206,871	1,427,355	18,357	1,652,582	54,227,724	98,322,733
2008	9,145,867	14,169,105	23,314,969	6,721,840	4,619,632	12,189,763	2,611,890	96,559	991,192	31,642	1,119,393	27,262,511	50,577,476
2009	2,968,693	8,962,999	11,931,690	708,414	3,452,835	5,043,296	12,248,939	2,136,073	251,967	34,437	2,422,474	23,875,940	35,807,628
2010	2,270,143	6,443,397	8,713,543	1,984,618	271,378	2,203,722	10,027,463	3,508,602	1,058,224	103,388	4,670,212	19,157,376	27,870,920
2011	5,202,385	2,592,195	7,794,580	5,097,964	103,753	550,828	4,158,718	1,066,462	1,253,650	55,022	2,375,133	12,286,383	20,080,961
2012	2,580,888	523,392	3,104,280	2,551,539	114,171	439,367	3,764,517	551,200	1,970,519	133,426	2,655,144	9,524,728	12,629,005
2013	30,969,141	540,183	31,509,324	29,649,164	1,407,170	427,549	1,094,291	13,854	608,505	28,115	650,473	33,228,639	64,737,959
2014	20,997,829	1,677,985	22,675,817	14,308,109	6,813,026	1,302,105	589,386	13,148	275,957	1,128	290,233	23,302,864	45,978,679
2015	1,445,145	3,578,999	5,024,143	1,228,244	2,565,413	3,424,944	638,483	78,122	65,453	13,843	157,417	8,014,492	13,038,638
2016	1,180,484	8,881,760	10,062,242	1,137,607	1,906,346	6,641,137	5,290,295	309,345	176,073	4,052	489,469	15,464,847	25,527,085
2017	8,011,302	3,886,433	11,897,736	6,692,487	939,577	2,014,575	4,161,036	763,285	230,021	10,133	1,003,438	14,811,106	26,708,842
Southeast Section													
1988	205,391	306,388	511,777	160,392	160,858	426,837	1,077,533	746,692	123,661	49,324	919,676	2,745,287	3,257,067
1989	903,462	492,317	1,395,778	688,803	93,443	180,551	522,388	184,966	75,168	12,642	272,775	1,757,954	3,153,725
1990	1,122,473	731,106	1,853,577	1,057,451	107,489	225,073	525,876	289,966	101,413	4,420	395,799	2,311,677	4,165,252
1991	4,643,290	916,448	5,559,736	4,419,715	420,967	263,630	345,159	176,786	35,702	7,382	219,871	5,669,332	11,229,066
1992	2,150,176	1,294,433	3,444,604	1,640,451	692,489	446,230	573,374	32,883	142,802	10,199	185,885	3,538,424	6,983,021

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Table 3.–Page 3 of 7.

	Females			Number sublegal males by size (CW)				Recruit	Postrecruit males (CW)		Legal	Total	Total
Year	Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
1993	3,920,738	597,730	4,518,463	3,647,473	249,339	433,304	414,432	27,357	116,327	8,769	152,453	4,896,999	9,415,458
1994	112,458	221,331	333,789	28,664	86,943	473,013	107,893	54,496	4,252	639,654	166,638	841,253	1,175,042
1995	2,670,117	107,497	2,777,610	2,375,567	15,058	28,423	82,247	76,922	46,938	2,370	126,229	2,627,521	5,405,129
1996	2,547,755	141,637	2,689,389	2,269,696	484,343	110,861	124,290	55,489	68,127	7,990	131,605	3,120,786	5,810,171
1997	457,206	140,330	597,536	360,968	200,785	114,901	45,486	3,133	44,726	1,337	49,197	771,332	1,368,867
1998	1,974,011	127,986	2,101,998	2,218,753	47,419	92,558	227,904	28,851	26,243	866	55,960	2,642,594	4,744,588
1999	3,919,534	158,773	4,078,305	4,019,039	98,997	95,849	193,398	127,663	65,506	8,583	201,751	4,609,036	8,687,340
2000	3,420,858	363,129	3,783,985	3,743,637	301,838	76,008	186,518	19,080	126,209	253	145,543	4,453,533	8,237,516
2001	9,448,017	2,945,931	12,393,951	9,541,603	2,255,870	344,924	321,770	48,095	222,346	13,686	284,129	12,748,291	25,142,241
2002	2,618,992	1,403,060	4,022,051	2,901,813	4,190,180	2,507,979	381,296	21,057	336,139	4,949	362,146	10,343,409	14,365,454
2003	481,349	479,053	960,400	628,937	1,557,932	1,715,093	976,621	51,970	91,267	0	143,239	5,021,814	5,982,213
2004	4,553,549	359,686	4,913,231	4,316,869	418,750	566,065	1,636,243	250,829	60,525	0	311,351	7,249,275	12,162,505
2005	3,968,071	539,475	4,507,545	3,759,906	373,861	476,640	1,483,977	102,187	210,177	1,411	313,777	6,408,150	10,915,692
2006	14,162,611	1,405,607	15,568,219	14,443,798	991,870	552,530	1,063,339	7,675	298,219	0	305,893	17,357,428	32,925,645
2007	11,124,842	4,009,477	15,134,318	8,110,713	8,461,823	2,078,980	1,129,380	10,109	295,360	0	305,470	20,086,357	35,220,673
2008	1,246,835	1,767,652	3,014,487	1,080,046	1,680,529	3,417,448	1,306,242	28,029	125,176	0	153,204	7,637,464	10,651,945
2009	460,373	945,857	1,406,231	574,423	561,598	1,239,465	3,226,378	685,687	41,942	5,463	733,094	6,334,953	7,741,181
2010	2,752,975	1,196,211	3,949,185	2,139,892	289,842	1,179,268	4,470,858	1,046,634	541,587	7,263	1,595,485	9,675,335	13,624,521
2011	1,676,276	390,308	2,066,583	1,789,232	72,952	272,548	1,958,277	349,066	1,418,778	42,854	1,810,697	5,903,698	7,970,276
2012	2,633,029	114,102	2,747,131	2,285,865	1,058,632	318,322	1,253,661	13,636	870,264	26,035	909,934	5,826,407	8,573,538
2013	14,727,401	323,947	15,051,345	12,916,858	738,190	175,543	501,856	32,203	431,622	13,474	477,300	14,809,743	29,861,087
2014	7,391,645	3,226,075	10,617,721	4,998,984	3,780,780	1,456,946	821,934	5,949	1,188,137	32,668	1,226,755	12,285,401	22,903,125
2015	496,492	791,280	1,287,772	379,009	707,633	1,307,676	688,125	50,492	30,988	990	82,470	3,164,907	4,452,675
2016	2,610,131	840,270	3,450,400	2,561,952	57,970	276,964	1,074,156	49,106	135,266	0	184,372	4,155,412	7,605,809
2017	8,411,559	712,059	9,123,617	8,900,592	2,230,451	480,018	476,787	84,920	104,725	1,458	191,103	12,278,940	21,402,556
Southwest Section													
1988	170,503	163,010	333,513	147,327	13,145	45,652	467,408	899,130	47,264	42,716	989,111	1,662,646	1,996,158
1989	2,190,500	167,659	2,358,160	2,008,642	117,696	146,712	409,792	188,979	103,330	57,677	349,988	3,032,831	5,390,992
1990	2,386,223	618,601	3,004,822	1,910,951	845,766	478,801	509,858	43,360	48,813	8,851	101,025	3,846,402	6,851,221
1991	1,263,826	222,587	1,486,415	1,022,587	223,786	347,511	643,845	128,605	74,613	6,090	209,309	2,447,040	3,933,450
1992	455,592	197,142	652,735	450,611	152,337	318,610	234,215	264,484	66,834	4,972	343,096	1,498,868	2,151,600
1993	6,635,495	244,706	6,880,201	6,153,372	504,018	181,474	391,160	250,347	69,727	13,352	333,425	7,563,455	14,443,652
1994	205,248	120,527	325,777	70,316	60,386	145,272	128,502	23,030	7,394	304,198	158,927	566,414	892,191
1995	150,726	91,130	241,856	136,754	56,965	109,373	123,865	33,632	48,012	0	81,642	508,600	750,456

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Table 3.–Page 4 of 7.

	Females			Number sublegal males by size (CW)				Recruit	Postrecruit males (CW)		Legal	Total	Total
Year	Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
1996	346,288	44,723	391,011	324,729	98,278	161,973	239,780	35,951	74,200	1,536	111,689	936,445	1,327,459
1997	263,210	66,061	329,271	253,919	101,323	81,930	185,074	123,659	88,079	3,169	215,927	838,174	1,167,446
1998	237,613	36,579	274,194	230,680	59,605	54,531	62,803	22,385	85,742	2,193	110,323	517,941	792,136
1999	815,403	29,802	845,202	843,294	56,048	44,878	175,884	33,257	119,806	4,314	157,380	1,277,483	2,122,687
2000	3,003,937	67,880	3,071,814	2,949,004	184,394	113,293	166,972	54,803	104,346	714	159,863	3,573,527	6,645,340
2001	9,655,357	316,117	9,971,472	7,043,577	3,524,938	295,460	216,927	116,958	74,560	1,972	193,493	11,274,392	21,245,865
2002	2,502,575	972,134	3,474,706	1,587,174	1,796,456	1,770,050	423,125	84,294	73,974	1,974	160,243	5,737,043	9,211,752
2003	88,071	305,947	394,017	72,936	332,445	777,843	1,292,737	112,745	88,748	8,694	210,189	2,686,145	3,080,161
2004	336,728	307,894	644,621	304,927	64,562	315,710	940,544	1,195,138	130,481	16,236	1,341,858	2,967,599	3,612,221
2005	590,697	224,679	815,379	562,877	43,825	158,240	588,829	336,600	462,240	22,916	821,757	2,175,520	2,990,901
2006	6,038,059	597,821	6,635,882	7,028,088	242,323	133,434	468,416	106,125	597,805	23,463	727,392	8,599,651	15,235,534
2007	10,357,207	1,416,520	11,773,729	8,392,449	3,209,991	509,710	611,578	135,558	1,051,549	28,927	1,216,033	13,939,761	25,713,488
2008	5,802,830	3,572,935	9,375,768	2,263,701	5,936,109	4,572,867	697,450	129,245	243,032	9,409	381,686	13,851,815	23,227,580
2009	365,497	2,243,247	2,608,743	183,276	529,868	2,472,641	3,308,319	233,605	133,317	8,020	374,943	6,869,046	9,477,794
2010	40,940	3,096,850	3,137,790	24,411	87,825	1,403,646	4,587,459	1,023,856	185,042	6,293	1,215,191	7,318,531	10,456,321
2011	346,439	661,146	1,007,584	335,528	9,500	57,849	756,206	327,979	412,326	12,563	753,228	1,912,307	2,919,897
2012	645,852	699,003	1,344,856	686,600	29,533	42,217	563,026	29,029	522,949	10,290	562,267	1,883,644	3,228,498
2013	19,146,831	231,581	19,378,412	18,627,853	525,916	138,220	404,822	1,202	300,250	5,767	307,221	20,004,032	39,382,443
2014	5,392,720	363,227	5,755,945	5,534,731	2,709,259	715,540	456,448	14,231	112,298	0	126,530	9,542,510	15,298,456
2015	1,344,303	1,080,845	2,425,147	669,631	1,967,846	1,303,993	427,224	73,158	79,021	2,407	154,586	4,523,284	6,948,431
2016	55,651	1,322,224	1,377,871	41,337	391,928	1,306,211	933,779	57,200	30,240	0	87,439	2,760,695	4,138,564
2017	457,304	332,188	789,492	508,877	94,070	165,039	948,065	561,611	71,725	0	633,336	2,349,389	3,138,881
Westside Section													
1988	974,322	578,548	1,552,871	749,615	52,332	208,397	279,051	143,332	18,421	14,242	175,995	1,465,387	3,018,255
1989	3,495,983	559,026	4,055,009	2,778,136	504,497	267,684	293,592	122,759	19,472	5,872	148,103	3,992,007	8,047,020
1990	756,450	2,182,208	2,938,662	352,843	689,731	401,179	472,666	104,971	57,647	16,606	179,222	2,095,641	5,034,302
1991	192,204	582,097	774,301	130,432	146,658	494,811	454,902	37,066	22,320	4,950	64,336	1,291,138	2,065,439
1992	168,907	420,383	589,291	129,030	171,208	217,488	309,164	118,442	46,407	5,616	170,465	997,358	1,586,646
1993	397,675	575,892	973,569	266,120	161,061	150,062	273,655	49,604	95,847	7,188	152,638	1,003,542	1,977,111
1994	158,913	248,765	407,678	113,242	74,756	90,261	31,732	42,413	0	164,406	74,149	460,938	868,623
1995	168,930	403,189	572,120	108,065	164,086	159,438	136,282	14,443	88,979	2,203	105,625	673,497	1,245,621
1996	221,984	406,957	628,942	104,838	263,795	293,384	226,222	36,715	99,629	469	136,815	1,025,059	1,654,001
1997	221,626	676,562	898,189	83,886	292,487	419,574	305,346	68,319	62,405	2,605	133,329	1,234,624	2,132,814
1998	784,298	640,054	1,424,353	693,960	170,752	290,665	228,482	30,694	53,771	3,008	87,475	1,471,336	2,895,685

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Table 3.–Page 5 of 7.

	Females			Number sublegal males by size (CW)				Recruit	Postrecruit males (CW)		Legal	Total	Total
Year	Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
1999	786,633	303,891	1,090,528	495,747	389,828	252,141	208,931	43,439	102,079	8,631	154,151	1,500,799	2,591,322
2000	857,983	673,744	1,531,726	529,492	452,760	470,344	245,893	88,067	73,382	11,132	172,580	1,871,072	3,402,796
2001	1,838,858	867,797	2,706,655	1,454,818	690,480	406,475	419,781	61,894	74,190	9,850	145,933	3,117,483	5,824,141
2002	527,722	793,616	1,321,340	314,807	576,533	490,709	314,587	97,176	71,244	9,680	178,098	1,874,738	3,196,077
2003	571,353	1,595,583	2,166,935	527,990	305,060	850,071	549,657	114,971	113,968	10,548	239,486	2,472,262	4,639,203
2004	348,491	536,566	885,057	318,080	123,002	164,582	183,539	105,808	75,246	6,710	187,762	976,964	1,862,027
2005	1,277,045	612,264	1,889,310	1,010,851	367,489	312,238	187,999	58,631	114,705	6,418	179,753	2,058,329	3,947,639
2006	2,743,480	1,978,839	4,722,322	2,050,866	1,069,393	739,258	422,756	61,494	242,097	26,030	329,622	4,611,892	9,334,218
2007	728,050	1,229,735	1,957,783	346,342	1,001,330	638,751	366,951	55,293	203,496	12,441	271,233	2,624,613	4,582,398
2008	1,512,322	1,677,824	3,190,145	1,337,898	816,546	1,306,246	1,483,097	216,263	28,473	18,447	263,184	5,206,972	8,397,115
2009	1,035,614	1,624,414	2,660,033	801,669	518,633	566,992	682,822	329,135	53,427	10,634	393,196	2,963,312	5,623,343
2010	487,127	1,154,821	1,641,949	449,979	262,351	403,098	397,571	137,521	140,056	15,631	293,211	1,806,207	3,448,153
2011	796,025	593,136	1,389,159	916,487	63,828	96,545	199,071	42,043	101,665	20,900	164,608	1,440,538	2,829,697
2012	1,230,971	597,219	1,828,189	1,210,838	694,666	197,830	142,793	48,115	69,367	20,940	138,422	2,384,545	4,212,734
2013	1,845,911	747,783	2,593,693	1,486,423	945,497	484,694	171,860	34,055	49,742	3,942	87,740	3,176,216	5,769,909
2014	487,317	1,304,339	1,791,657	201,481	647,794	727,617	549,343	66,180	35,895	3,573	105,649	2,231,879	4,023,534
2015	777,276	421,494	1,198,774	653,892	130,508	204,181	171,388	35,964	22,643	1,588	60,195	1,220,160	2,418,936
2016	1,234,892	1,170,363	2,405,251	860,496	268,734	246,642	159,084	16,797	47,240	929	64,969	1,599,927	4,005,178
2017	1,443,291	1,200,162	2,643,450	976,148	327,705	304,674	237,615	19,259	50,051	1,718	71,028	1,917,171	4,560,623
North Mainland Section													
1988	3,770,435	864,800	4,635,231	3,407,068	168,134	464,878	1,240,542	851,431	82,195	27,343	960,966	6,241,575	10,876,804
1989	4,234,103	1,436,881	5,670,976	4,215,321	298,495	356,842	1,179,243	261,796	109,856	67,482	439,132	6,489,012	12,159,983
1990	6,881,983	3,259,191	10,141,174	5,821,303	2,244,924	787,769	1,459,181	134,091	114,695	27,645	276,431	10,589,593	20,730,758
1991	755,813	1,115,191	1,871,000	607,003	606,410	539,754	947,200	75,300	110,321	4,747	190,368	2,890,728	4,761,725
1992	2,383,311	905,602	3,288,908	2,277,873	225,884	400,297	804,671	157,864	74,715	33,492	266,071	3,974,780	7,263,685
1993	3,807,153	1,019,025	4,826,179	3,209,923	150,131	417,918	820,507	155,196	146,326	35,684	337,205	4,935,673	9,761,850
1994	3,022,644	533,484	3,556,121	543,821	232,749	359,494	140,534	116,067	55,865	671,960	312,462	3,675,553	7,231,673
1995	626,009	246,199	872,207	675,064	133,785	61,102	150,469	35,975	48,814	17,201	101,990	1,122,398	1,994,600
1996	4,440,016	390,196	4,830,209	4,282,003	340,013	215,819	339,923	32,850	163,695	21,209	217,753	5,395,498	10,225,703
1997	2,395,756	263,515	2,659,267	2,343,813	505,071	343,635	654,020	56,050	182,961	7,777	246,786	4,093,315	6,752,581
1998	3,767,207	228,193	3,995,396	3,525,948	316,549	274,439	293,764	7,596	121,618	15,531	144,741	4,555,435	8,550,824
1999	3,977,498	247,625	4,225,118	4,094,535	513,789	193,283	548,157	44,446	102,687	0	147,133	5,496,889	9,722,006
2000	4,422,651	534,343	4,956,992	4,540,113	1,372,986	537,002	339,548	64,048	57,500	2,032	123,579	6,913,215	11,870,201
2001	5,569,122	580,559	6,149,675	5,956,896	493,796	449,462	397,510	20,879	170,905	5,420	197,203	7,494,856	13,644,528

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Table 3.–Page 6 of 7.

	Females			Number sublegal males by size (CW)				Recruit	Postrecruit males (CW)		Legal	Total	Total
Year	Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
2002	7,040,189	638,105	7,678,291	7,239,051	2,443,246	927,375	219,352	9,268	26,922	339	36,528	10,865,543	18,543,832
2003	1,574,882	1,005,193	2,580,071	3,087,322	585,984	252,125	227,455	23,124	52,247	4,137	79,507	4,232,383	6,812,450
2004	4,807,839	269,078	5,076,916	4,052,391	281,654	390,045	410,836	28,132	52,195	5,075	85,402	5,220,316	10,297,226
2005	5,973,092	600,095	6,573,183	5,450,323	570,215	185,935	249,567	62,867	23,541	2,023	88,432	6,544,457	13,117,630
2006	5,752,649	1,905,998	7,658,643	6,277,192	1,549,452	804,595	164,764	123,714	38,778	14,924	177,417	8,973,417	16,632,058
2007	1,151,379	271,686	1,423,066	1,333,229	79,153	169,301	207,441	32,010	76,206	24,684	132,900	1,922,012	3,345,073
2008	2,000,053	163,905	2,163,956	2,074,605	27,948	75,192	224,046	10,840	113,232	22,375	146,447	2,548,229	4,712,180
2009	2,273,385	182,881	2,456,260	1,990,119	67,569	179,329	383,513	0	157,056	25,575	182,632	2,803,160	5,259,416
2010	2,059,073	286,257	2,345,324	2,100,884	214,402	379,884	312,629	40,634	38,751	7,318	86,702	3,094,492	5,439,809
2011	7,339,266	156,406	7,495,670	7,303,300	174,503	275,325	463,036	65,350	9,494	13,460	88,304	8,304,464	15,800,131
2012	2,375,150	58,384	2,433,534	2,411,334	30,386	75,425	196,019	252,242	15,832	18,701	286,775	2,999,937	5,433,472
2013	3,512,861	427,671	3,940,531	3,706,269	270,532	171,682	134,031	53,508	74,304	32,391	160,203	4,442,712	8,383,239
2014	1,778,897	59,311	1,838,205	1,533,746	50,266	99,133	128,835	44,522	9,231	19,338	73,091	1,885,067	3,723,269
2015	3,404,007	307,368	3,711,375	3,365,754	557,307	378,629	243,383	175,976	132,322	10,270	318,568	4,863,632	8,575,005
2016	5,810,449	755,204	6,660,589	4,745,625	460,148	404,148	354,950	48,276	42,722	1,146	92,144	6,057,010	12,717,601
2017	2,020,394	94,061	2,114,452	2,099,893	80,540	101,672	176,330	119,927	15,508	1,558	136,992	2,595,425	4,709,876
KODIAK DISTRICT TOTALS													
1988	8,812,712	2,909,528	11,722,230	7,585,464	1,121,828	2,027,675	4,084,694	3,109,987	384,766	149,346	3,644,094	18,463,722	30,185,946
1989	17,242,779	9,207,218	26,449,988	15,591,916	3,463,846	3,673,455	4,795,492	2,164,873	659,360	288,304	3,112,536	30,637,206	57,087,179
1990	13,948,038	18,300,233	32,248,267	11,488,010	5,645,980	4,589,098	7,421,417	1,580,449	515,967	170,003	2,266,416	31,410,895	63,659,149
1991	11,781,806	8,402,788	20,184,585	10,221,336	2,930,304	3,509,630	6,111,302	3,843,655	761,502	113,921	4,719,085	27,491,633	47,676,203
1992	8,339,428	6,051,961	14,391,378	7,440,749	2,746,649	2,774,998	4,292,177	1,306,256	611,962	136,933	2,061,956	19,316,490	33,707,849
1993	17,913,651	4,977,077	22,890,723	15,967,379	1,656,738	2,110,918	3,481,805	863,072	808,324	96,108	1,767,502	24,984,323	47,875,035
1994	5,706,956	2,852,028	8,558,976	1,610,969	1,157,049	2,070,507	553,274	448,710	72,749	3,145,240	1,074,730	10,225,770	18,784,750
1995	11,160,493	2,567,713	13,728,198	10,292,995	1,842,399	1,083,966	1,239,723	198,667	440,917	24,168	663,748	15,122,807	28,851,000
1996	11,539,743	4,202,964	15,742,703	10,656,057	4,224,104	2,488,462	2,177,431	297,840	636,234	47,347	981,421	20,527,449	36,270,147
1997	4,517,522	2,734,313	7,251,832	4,250,787	2,646,848	2,691,800	2,457,956	412,669	504,115	30,446	950,527	12,997,903	20,249,736
1998	12,537,177	5,789,384	18,326,557	11,549,334	4,520,667	5,230,679	4,437,258	599,890	725,392	107,126	1,432,408	27,170,342	45,496,879
1999	17,320,312	3,060,141	20,380,442	16,310,646	1,708,782	2,177,337	3,782,852	785,205	1,057,055	111,235	1,953,503	25,933,098	46,313,535
2000	22,754,807	6,475,725	29,230,518	22,493,426	4,995,919	2,583,532	3,457,610	1,006,546	1,358,093	96,211	2,460,851	35,991,304	65,221,811
2001	68,877,224	12,675,469	81,552,690	60,387,913	15,241,096	5,797,317	4,010,691	477,659	1,783,740	112,099	2,373,500	87,810,486	169,363,177
2002	30,393,977	10,839,085	41,233,057	19,929,231	19,560,864	10,894,437	4,387,298	673,222	1,219,518	53,307	1,946,045	56,717,846	97,950,897
2003	6,645,726	14,554,709	21,200,429	8,506,932	7,394,078	16,626,329	10,794,723	874,741	838,380	48,588	1,761,712	45,083,732	66,284,164
2004	16,947,444	8,160,053	25,107,495	15,178,373	3,217,318	6,786,175	14,649,347	3,692,086	652,099	53,314	4,397,499	44,228,694	69,336,185

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Table 3.–Page 7 of 7.

	Females			Number sublegal males by size (CW)				Recruit	Postrecruit males (CW)		Legal	Total	Total
Year	Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
2005	16,993,383	8,387,303	25,380,682	16,485,627	2,926,995	3,810,988	12,109,515	4,385,484	1,609,777	89,534	6,084,796	41,417,872	66,798,546
2006	68,224,632	8,181,573	76,406,208	65,227,663	6,591,753	3,720,236	7,670,990	1,178,684	3,189,673	95,169	4,463,529	87,674,144	164,080,346
2007	70,685,636	11,318,820	82,004,460	43,494,481	40,966,394	7,267,322	8,037,367	613,205	3,242,441	84,409	3,940,055	103,705,590	185,710,033
2008	25,793,790	24,362,363	50,156,148	19,007,753	14,903,352	24,093,264	8,066,767	694,989	1,598,641	85,570	2,379,199	68,450,316	118,606,446
2009	10,275,071	15,866,295	26,141,366	6,892,288	8,038,365	12,589,438	22,566,438	4,051,325	667,010	84,129	4,802,466	54,888,962	81,030,321
2010	10,186,832	16,117,560	26,304,391	9,079,234	2,736,438	6,628,037	21,955,601	6,257,084	2,256,474	152,959	8,666,518	49,065,785	75,370,166
2011	16,544,749	5,344,889	21,889,633	16,688,170	628,599	1,629,845	8,408,433	1,937,036	3,378,241	147,162	5,473,663	32,828,674	54,718,301
2012	13,621,829	2,597,321	16,219,148	13,201,605	2,091,936	1,278,921	6,494,227	932,637	3,619,604	209,392	4,761,629	27,828,298	44,047,441
2013	95,233,063	3,209,728	98,442,785	91,071,265	5,378,208	1,813,499	2,535,448	168,856	1,532,223	83,689	1,789,391	102,587,797	201,030,568
2014	41,768,574	10,562,162	52,330,734	31,236,156	16,723,014	5,741,537	2,892,223	155,931	1,743,747	62,925	1,962,606	58,555,539	110,886,271
2015	7,902,630	7,723,843	15,626,476	6,736,233	6,749,377	7,187,354	2,362,997	435,445	359,627	29,098	824,168	23,860,110	39,486,582
2016	11,650,958	14,238,814	25,984,696	9,999,823	3,437,409	9,311,728	8,042,255	496,985	470,762	6,127	973,875	31,765,079	57,749,768
2017	23,038,934	7,828,549	30,867,480	22,328,074	3,987,351	3,570,618	6,360,456	1,576,074	495,661	15,344	2,087,076	38,333,553	69,201,033

Table 4.–Tanner crab mature male abundance threshold levels from regulatory harvest strategies, estimates of number of mature male crab by survey year from large-mesh bottom trawl surveys, and fishery guideline harvest levels (GHLs), 2013–2017.

	Threshold (number of mature males >114 mm CW)	Number of mature males (>114 mm CW)				
		2013	2014	2015	2016	2017
Kodiak District						
Northeast Section	1,123,000	330,422	486,625	245,327	285,473	411,803
Eastside Section	1,552,000	1,744,765[a]	879,619	795,901	5,779,765[a]	5,164,475[a]
Southeast Section	733,000	979,155[a]	2,048,688[a]	770,595[a]	1,258,528[a]	667,890
Southwest Section	1,236,000	712,041	582,977	581,810	1,021,219	1,581,401[a]
Westside Section	764,000	259,599	654,991	231,583	224,050	308,643
North Mainland Section	1,469,000	294,234	201,926	561,951	447,094	313,323
Chignik District	973,000	1,572,001[a]	1,803,796[a]	1,043,633[a]	610,875	319,501
South Peninsula District						
Eastern Section	2,015,000	701,972	799,794	1,194,423	1,370,094	436,361
Western Section	1,250,000	929,823	2,299,520[a]	1,733,879[a]	3,420,640[a]	733,065
Eastern Aleutian District						
Akutan Section	200,000	85,229	467,082[a]	13,017	74,855	106,962
Unalaska/Kalekta Bay Section	65,000	155,397[a]	196,112[a]	175,550[a]	14,865	65,317[a]
Makushin/Skan Bay Section	45,000	179,530[a]	272,424[a]	203,114[a]	150,737[a]	292,866[a]
	Minimum GHL (pounds)	GHL for following Tanner season (pounds)				
		2013	2014	2015	2016	2017
Kodiak District						
Northeast Section	100,000	below threshold	below threshold	below threshold	below threshold	below threshold
Eastside Section	100,000	– [b]	below threshold	below threshold	– [b]	260,000
Southeast Section	100,000	– [b]	– [b]	– [b]	– [b]	below threshold
Southwest Section	100,000	below threshold	below threshold	below threshold	below threshold	140,000
Westside Section	100,000	below threshold	below threshold	below threshold	below threshold	below threshold
North Mainland Section	100,000	below threshold	below threshold	below threshold	below threshold	below threshold
Chignik District	200,000	– [b]	– [b]	– [b]	below threshold	below threshold
South Peninsula District						
Eastern Section	200,000	below threshold	below threshold	below threshold	below threshold	below threshold
Western Section	200,000	below threshold	– [c]	– [c]	– [c]	below threshold
Eastern Aleutian District						
Akutan Section	35,000	below threshold	– [c]	below threshold	below threshold	below threshold
Unalaska/Kalekta Bay Section	35,000	– [b]	– [b]	– [b]	below threshold	– [b]
Makushin/Skan Bay Section	35,000	– [b]	35,000	35,000	– [b]	35,000

[a] Above mature male harvest strategy threshold.

[b] The calculated fishery GHL did not meet minimum GHL requirements.

[c] GHL requirements were met but, due to uncertainty in survey estimates and conservation concerns, the fishery was not opened.

Table 5.–Red king crab abundance estimates from large-mesh bottom trawl surveys in the Kodiak and Alaska Peninsula areas, 2008–2017.

	Females			Prerecruit males				Recruit	Postrecruit	Legal	Total	Total
Year	Juvenile	Mature	Total	IV	III	II	I	males	males	males	males	crab
KODIAK AREA												
Northeast District												
2008	0	369	369	0	0	0	0	0	1,098	1,098	1,098	1,467
2009	635	270	905	270	1,080	270	0	270	0	270	1,890	2,795
2010	0	0	0	0	347	0	0	0	0	0	347	347
2011	0	0	0	0	0	1,419	0	0	0	0	1,419	1,419
2012	0	0	0	0	0	0	0	0	0	0	0	0
2013	1,519	1,182	2,701	270	0	0	0	0	0	0	270	2,971
2014	365	0	365	0	0	0	0	0	0	0	0	365
2015	0	0	0	0	0	0	0	0	365	365	365	365
2016	0	7,154	7,154	0	0	0	0	0	365	365	365	7,519
2017	0	3,281	3,281	0	0	0	2,187	3,990	3,625	7,617	9,804	13,085
Southeast District												
2008	0	0	0	513	0	0	0	0	0	0	513	513
2009	0	0	0	0	0	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0	0	0	0	0	0
2011	0	0	0	0	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0	0	0	0	0
2013	0	0	0	4,232	0	0	0	0	0	0	4,232	4,232
2014	0	0	0	0	0	0	0	0	0	0	0	0
2015	0	0	0	0	0	0	0	0	0	0	0	0
2016	0	0	0	0	1,234	0	851	0	0	0	2,085	2,085
2017	0	2,336	2,336	0	0	0	0	851	2,970	3,821	3,821	6,157
Southwest District												
2008	8,655	6,477	15,133	6,295	787	0	2,471	4,421	21,462	25,883	35,435	50,567
2009	152	3,727	3,879	4,166	0	0	0	1,831	14,181	16,013	20,179	24,058
2010	26,655	22,075	48,730	22,907	22,658	10,572	787	3,211	23,842	27,054	83,978	132,708
2011	140,454	48,314	188,769	74,180	25,982	5,640	4,302	1,124	12,134	13,257	123,362	312,131
2012	45,939	36,492	82,431	2,074	49,552	43,670	5,559	5,917	10,772	16,689	117,543	199,974
2013	19,763	135,960	155,724	1,551	12,884	50,872	30,011	8,948	12,101	21,050	116,369	272,092
2014	5,297	160,757	166,054	4,367	3,798	17,750	48,305	145,759	59,583	205,343	279,560	445,613
2015	9,080	164,249	173,329	3,245	6,933	7,450	22,922	114,777	224,867	339,646	380,197	553,526
2016	124,312	80,131	204,444	66,445	86,292	10,107	2,881	11,825	185,336	197,158	362,882	567,326
2017	1,241	41,734	42,975	1,074	5,046	44,872	21,099	9,404	117,291	126,696	198,785	241,760

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Table 5.–Page 2 of 5.

	Females			Prerecruit males				Recruit	Postrecruit	Legal	Total	Total
Year	Juvenile	Mature	Total	IV	III	II	I	males	males	males	males	crab
Shelikof District												
2008	0	0	0	1,387	0	0	0	0	17,943	17,943	19,330	19,330
2009	1,081	0	1,081	0	0	0	0	120	203	323	323	1,404
2010	0	0	0	0	0	0	0	0	0	0	0	0
2011	0	334	334	0	0	0	0	0	334	334	334	668
2012	0	446	446	0	446	446	0	446	0	446	1,337	1,782
2013	226	0	226	750	226	0	0	0	0	0	976	1,202
2014	120	0	120	612	0	0	0	0	0	0	612	732
2015	774	0	774	0	0	149	0	0	297	297	446	1,220
2016	4,747	0	4,747	0	0	0	0	0	0	0	0	4,747
2017	614	1,605	2,219	922	0	447	0	0	1,841	1,841	3,210	5,428
KODIAK AREA TOTAL												
2008	8,655	6,846	15,502	8,195	787	0	2,471	4,421	40,503	44,924	56,376	71,877
2009	1,868	3,997	5,865	4,436	1,080	270	0	2,221	14,384	16,606	22,392	28,257
2010	26,655	22,075	48,730	22,907	23,005	10,572	787	3,211	23,842	27,054	84,325	133,055
2011	140,454	48,648	189,103	74,180	25,982	7,059	4,302	1,124	12,468	13,591	125,115	314,218
2012	45,939	36,938	82,877	2,074	49,998	44,116	5,559	6,363	10,772	17,135	118,880	201,756
2013	21,508	137,142	158,651	6,803	13,110	50,872	30,011	8,948	12,101	21,050	121,847	280,497
2014	5,782	160,757	166,539	4,979	3,798	17,750	48,305	145,759	59,583	205,343	280,172	446,710
2015	9,854	164,249	174,103	3,245	6,933	7,599	22,922	114,777	225,529	340,308	381,008	555,111
2016	129,059	87,285	216,345	66,445	87,526	10,107	3,732	11,825	185,701	197,523	365,332	581,677
2017	1,855	48,956	50,811	1,996	5,046	45,319	23,286	14,245	125,727	139,975	215,620	266,430
ALASKA PENINSULA AREA												
Morzhovoi Bay												
2008	0	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0	0	0
2010	0	2,517	2,517	0	0	0	0	0	0	0	0	2,517
2011	0	0	0	0	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0	0	0	0	0
2013	0	0	0	0	0	0	0	892	24,095	24,988	24,988	24,988
2014	0	0	0	0	0	0	793	0	34,110	34,110	34,903	34,903
2015	5,696	57,912	63,608	949	8,544	5,696	5,696	4,747	33,228	37,975	58,861	122,469
2016	0	949	949	0	0	0	0	0	1,663	1,663	1,663	2,613
2017	0	0	0	0	0	0	0	0	0	0	0	0

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Table 5.–Page 3 of 5.

Year	Females			Prerecruit males				Recruit males	Postrecruit males	Legal males	Total males	Total crab
	Juvenile	Mature	Total	IV	III	II	I					
Cold Bay/Belkofski Bay												
2008	0	2,771	2,771	0	0	0	1,170	0	1,659	1,659	2,829	5,599
2009	0	483	483	0	161	161	0	0	0	0	322	805
2010	1,073	28,206	29,280	1,516	537	537	358	0	1,045	1,045	3,992	33,272
2011	433	836	1,269	433	866	433	433	1,299	5,052	6,351	8,515	9,784
2012	8,279	23,754	32,033	1,352	1,484	4,418	1,173	1,195	25,606	26,801	35,228	67,262
2013	1,154	230	1,384	2,678	0	0	0	0	0	0	2,678	4,063
2014	4,909	5,902	10,811	4,456	0	0	0	230	0	230	4,686	15,497
2015	18,714	2,696	21,410	10,917	10,493	1,560	0	1,136	1,560	2,696	25,665	47,075
2016	49,586	24,851	74,437	2,216	39,894	32,575	4,433	2,216	7,897	10,114	89,232	163,667
2017	0	1,007	1,007	0	0	161	0	0	161	161	322	1,329
Pavlof Bay/Volcano Bay												
2008	0	1,899	1,899	0	0	0	949	0	8,544	8,544	9,494	11,393
2009	0	946	946	0	0	0	0	0	12,580	12,580	12,580	13,526
2010	6,192	23,939	30,131	828	1,208	5,658	4,071	0	1,656	1,656	13,420	43,552
2011	396,062	426,614	822,676	46,000	334,662	605,503	265,585	82,260	65,898	148,158	1,399,908	2,222,584
2012	0	0	0	0	0	0	0	0	5,733	5,733	5,733	5,733
2013	10,653	85,740	96,393	6,038	4,830	37,436	72,456	37,436	28,437	65,873	186,633	283,026
2014	16,906	83,486	100,392	7,246	7,246	0	5,685	0	9,344	9,344	29,519	129,912
2015	0	1,489	1,489	3,798	0	0	1,786	3,275	5,713	8,988	14,572	16,061
2016	4,028	11,005	15,033	0	1,689	2,501	0	1,440	11,372	12,813	17,002	32,034
2017	1,988	20,453	22,441	0	0	3,129	782	11,083	76,426	87,509	91,420	113,861
Beaver Bay/Balboa Bay/Unga Strait												
2008	0	0	0	747	0	0	0	0	2,989	2,989	3,737	3,737
2009	0	0	0	0	0	0	0	0	564	564	564	564
2010	773	0	773	747	0	0	0	0	3,553	3,553	4,301	5,074
2011	0	0	0	0	0	0	921	0	1,709	1,709	2,630	2,630
2012	0	0	0	0	0	0	0	0	3,163	3,163	3,163	3,163
2013	0	0	0	0	0	0	0	0	2,242	2,242	2,242	2,242
2014	0	0	0	0	618	0	0	0	1,955	1,955	2,573	2,573
2015	0	0	0	0	0	0	0	0	564	564	564	564
2016	0	0	0	0	0	0	0	0	0	0	0	0
2017	0	18,292	18,292	0	0	1,495	747	6,163	0	6,163	8,405	26,697

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Table 5.–Page 4 of 5.

Year	Females			Prerecruit males				Recruit males	Postrecruit males	Legal males	Total males	Total crab
	Juvenile	Mature	Total	IV	III	II	I					
West Nagai Strait												
2008	0	0	0	1,135	0	0	0	0	0	0	1,135	1,135
2009	0	0	0	0	0	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0	0	0	0	0	0
2011	0	0	0	0	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0	0	0	0	0
2013	5,546	0	5,546	0	0	0	0	1,849	0	1,849	1,849	7,394
2014	0	0	0	0	0	0	0	0	0	0	0	0
2015	0	0	0	0	0	0	0	0	0	0	0	0
2016	0	0	0	0	0	0	0	0	0	0	0	0
2017	0	0	0	0	0	0	0	0	0	0	0	0
Ivanof Bay												
2008	0	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	246	246	246	246
2010	0	0	0	0	0	0	0	0	0	0	0	0
2011	1,166	1,166	2,332	0	0	0	2,332	2,332	1,166	3,497	5,829	8,161
2012	0	0	0	0	0	0	0	0	0	0	0	0
2013	0	0	0	933	0	0	0	933	3,805	4,737	5,670	5,670
2014	0	615	615	0	0	0	0	0	0	0	0	615
2015	0	6,015	6,015	0	0	273	820	0	0	0	1,094	7,109
2016	246	3,364	3,610	0	0	0	0	0	0	0	0	3,610
2017	0	2,752	2,752	0	0	738	699	2,953	984	3,937	5,621	8,373
Mitrofania Island												
2008	0	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0	0	2,532	2,532	2,532	2,532
2011	0	0	0	0	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0	0	0	0	0
2013	0	0	0	0	0	0	0	0	0	0	0	0
2014	1,282	0	1,282	0	0	0	0	0	0	0	0	1,282
2015	0	0	0	0	0	0	0	0	0	0	0	0
2016	0	0	0	0	0	0	0	0	0	0	0	0
2017	0	0	0	0	0	0	0	0	0	0	0	0

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Table 5.–Page 5 of 5.

Year	Females			Prerecruit males				Recruit males	Postrecruit males	Legal males	Total males	Total crab
	Juvenile	Mature	Total	IV	III	II	I					
Chignik Bay/Castle Bay												
2008	0	0	0	0	0	0	586	0	3,942	3,942	4,528	4,528
2009	586	586	1,173	586	0	880	1,597	586	2,607	3,193	6,255	7,428
2010	10,554	29,646	40,200	0	5,277	8,795	8,795	0	7,659	7,659	30,526	70,726
2011	0	892	892	0	0	0	1,422	0	892	892	2,313	3,205
2012	892	0	892	0	0	0	1,316	0	0	0	1,316	2,207
2013	1,466	0	1,466	1,759	0	0	1,115	0	0	0	2,874	4,340
2014	0	0	0	0	0	0	0	0	0	0	0	0
2015	0	0	0	0	0	0	0	0	0	0	0	0
2016	0	3,091	3,091	0	0	0	366	0	3,408	3,408	3,774	6,865
2017	1,747	38,431	40,178	0	2,620	4,367	2,620	3,494	2,757	6,251	16,732	56,909
Kujulik Bay												
2008	0	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0	0	0	0	0	0
2011	0	0	0	0	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0	0	0	0	0
2013	0	0	0	0	0	0	0	0	0	0	0	0
2014	3,190	456	3,646	456	0	0	456	0	0	0	911	4,557
2015	28,299	208,639	236,939	0	13,671	53,532	13,671	13,671	57,418	71,089	151,963	388,902
2016	0	0	0	0	0	0	0	0	0	0	0	0
2017	0	0	0	0	456	0	0	456	0	456	911	911
ALASKA PENINSULA AREA TOTAL												
2008	0	4,670	4,670	1,882	0	0	2,705	0	17,134	17,134	21,723	26,392
2009	586	2,015	2,602	586	161	1,041	1,597	586	15,997	16,583	19,967	22,569
2010	18,592	84,308	102,901	3,091	7,022	14,990	13,224	0	16,445	16,445	54,771	157,673
2011	397,661	429,508	827,169	46,433	335,528	605,936	270,693	85,891	74,717	160,607	1,419,195	2,246,364
2012	9,171	23,754	32,925	1,352	1,484	4,418	2,489	1,195	34,502	35,697	45,440	78,365
2013	18,819	85,970	104,789	11,408	4,830	37,436	73,571	41,110	58,579	99,689	226,934	331,723
2014	26,287	90,459	116,746	12,158	7,864	0	6,934	230	45,409	45,639	72,592	189,339
2015	52,709	276,751	329,461	15,664	32,708	61,061	21,973	22,829	98,483	121,312	252,719	582,180
2016	53,860	43,260	97,120	2,216	41,583	35,076	4,799	3,656	24,340	27,998	111,671	208,789
2017	3,735	80,935	84,670	0	3,076	9,890	4,848	24,149	80,328	104,477	123,411	208,080

Note: Definitions of categories used to distinguish juvenile and mature females; prerecruit IV, III, II, and I; recruit; and postrecruit males are found in Appendix A1 and differ by management area.

Table 6.–Dominant species by weight in the Kodiak Tanner crab District large-mesh bottom trawl survey, 2017.

Common name	Species name	% of catch by weight
Flathead sole	*Hippoglossoides elassodon*	24.5
Arrowtooth flounder	*Atheresthes stomias*	19.0
Walleye pollock	*Gadus chalcogrammus*	7.8
Tanner crab	*Chionoecetes bairdi*	6.2
Yellowfin sole	*Limanda aspera*	5.6
Pacific halibut	*Hippoglossus stenolepis*	4.5
Big skate	*Raja binoculata*	3.0
Starry flounder	*Platichthys stellatus*	2.8
Longnose skate	*Raja rhina*	2.3
Sunflower seastar	*Pycnopodia helianthoides*	2.1
Anemone	Order: Actinaria	1.9
Alaska plaice	*Pleuronectes quadrituberculatus*	1.7
Pacific cod	*Gadus macrocephalus*	1.6
Spiny dogfish shark	*Squalus acanthius*	1.6
Northern rock sole	*Lepidopsetta polyxystra*	1.5
Pacific ocean perch	*Sebastes alutus*	1.1
English sole	*Parophrys vetulus*	1.0
Red king crab	*Paralithodes camtschaticus*	0.8
Bering skate	*Bathyraja interrupta*	0.8
Aleutian skate	*Bathyraja aleutica*	0.7
All others	(136 species)	9.6
		100.0

Table 7.–Tanner crab abundance estimates from large-mesh bottom trawl surveys in the South Peninsula and Chignik districts, 1988–2017.

	Females			Number sublegal males by size (CW)				Recruit	Postrecruit males (CW)		Legal	Total	Total
Year	Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
SOUTH PENINSULA DISTRICT													
Sanak Island													
1989	1,071,609	116,990	1,188,600	1,159,768	23,925	31,519	64,965	6,836	0	0	6,836	1,287,012	2,475,613
1990	613,067	104,693	717,759	461,082	84,247	54,276	24,945	0	0	0	0	624,549	1,342,308
1991	502,735	30,289	533,023	515,060	33,734	40,658	0	0	0	0	0	589,451	1,122,475
1992	381,604	45,334	426,937	298,381	51,667	50,678	3,798	0	0	0	0	404,521	831,457
1993	302,560	16,822	319,381	238,482	28,992	33,299	9,219	0	0	0	0	309,991	629,373
1994	85,510	68,744	154,252	107,676	12,903	17,781	19,824	0	0	0	0	158,182	312,433
1996	554,162	132,998	687,160	416,751	52,698	28,959	35,079	0	0	0	0	533,484	1,220,643
1997	103,036	51,367	154,402	76,797	72,743	36,437	16,669	0	0	0	0	202,643	357,045
1998	279,450	401,219	680,667	377,230	81,490	124,402	63,941	0	0	0	0	647,062	1,327,728
1999	82,986	93,707	176,693	52,687	5,043	42,386	20,007	0	0	0	0	120,124	296,816
2000	578,289	183,975	762,263	546,298	59,137	93,362	32,780	0	2,522	0	2,522	734,097	1,496,358
2001	888,599	128,542	1,017,141	770,478	56,029	82,059	114,930	5,043	0	0	5,043	1,028,539	2,045,680
2002	723,329	1,012,098	1,735,427	714,685	270,913	220,391	103,390	0	10,807	0	10,807	1,320,184	3,055,610
2003	217,862	303,284	521,146	196,526	71,366	179,502	109,312	0	10,086	0	10,086	566,789	1,087,935
2004	710,374	200,465	910,838	648,112	100,068	55,619	6,674	0	0	0	0	810,472	1,721,310
2005	254,560	129,049	383,608	215,626	85,685	59,375	0	0	0	0	0	360,682	744,290
2006	3,111,150	64,327	3,175,478	2,873,714	58,344	80,351	16,974	0	0	0	0	3,029,384	6,204,859
2007	4,365,126	1,944,147	6,309,274	3,667,269	664,268	240,298	96,673	0	0	0	0	4,668,506	10,977,780
2008	191,878	1,816,432	2,008,310	843,242	1,791,588	322,364	33,687	0	0	0	0	2,990,878	4,999,188
2009	77,006	660,484	737,491	96,353	193,365	216,737	56,270	16,437	1,925	0	18,363	581,087	1,318,575
2010	172,832	561,273	734,104	187,437	15,876	160,098	574,126	1,007,317	65,331	74,563	1,147,211	2,084,748	2,818,852
2011	142,197	471,130	613,326	161,882	8,613	43,719	260,977	5,767	293,117	5,776	304,659	779,850	1,393,176
2012	94,342	9,249	103,591	100,182	8,578	7,003	75,273	0	166,084	9,349	175,433	366,468	470,059
2013	641,635	17,463	659,097	599,843	27,665	12,646	14,748	0	22,781	0	22,781	677,684	1,336,780
2014	447,199	78,897	526,095	483,930	37,251	24,502	46,007	0	61,810	6,304	68,114	659,807	1,185,900
2015	529,811	4,883	534,693	470,804	57,119	28,273	1,631	0	816	0	816	558,643	1,093,336
2016	58,960	4,747	63,707	79,260	22,547	0	0	0	0	0	0	101,807	165,512
2017	593,898	6,197	600,096	612,080	39,912	39,602	0	0	0	0	0	691,595	1,291,690
Morzhovoi Bay													
1988	409,897	373,352	783,248	229,314	232,693	204,292	197,863	79,615	29,271	15,048	123,933	988,096	1,771,346
1989	3,184,336	1,093,829	4,278,163	2,702,511	1,125,103	371,020	114,369	33,216	4,861	0	38,077	4,351,079	8,629,242

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Table 7.–Page 2 of 14.

	Females			Number sublegal males by size (CW)				Recruit	Postrecruit males (CW)		Legal	Total	Total
Year	Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
1990	1,825,523	1,000,174	2,825,698	1,261,202	602,744	539,452	192,870	25,710	24,592	1,005	51,307	2,647,577	5,473,273
1991	1,503,176	458,024	1,961,200	1,149,352	404,094	204,716	56,095	15,480	4,121	0	19,603	1,833,858	3,795,061
1992	330,947	811,312	1,142,255	169,738	434,799	264,319	190,288	31,963	20,925	949	53,838	1,112,981	2,255,238
1993	64,447	534,492	598,939	16,593	144,036	367,988	351,708	59,906	63,845	949	124,702	1,005,026	1,603,964
1994	35,472	239,257	274,730	8,051	52,802	114,581	187,395	6,269	47,754	0	54,023	416,851	691,582
1996	149,154	103,708	252,861	133,883	21,463	13,718	49,694	5,697	29,549	0	35,246	254,007	506,868
1997	135,531	85,958	221,489	85,565	77,864	61,176	35,202	6,646	8,986	0	15,631	275,433	496,922
1998	801,130	1,648,105	2,449,234	281,054	1,104,366	1,336,666	303,150	38,244	68,354	0	106,599	3,131,833	5,581,064
1999	147,187	461,834	609,021	39,215	280,881	526,371	723,052	59,664	55,341	1,899	116,902	1,686,425	2,295,445
2000	691,473	735,207	1,426,680	608,437	146,561	363,693	691,467	429,284	97,765	0	527,050	2,337,207	3,763,887
2001	888,809	282,222	1,171,029	555,947	788,464	192,929	215,208	175,234	103,956	10,266	289,455	2,042,008	3,213,036
2002	1,706,361	640,182	2,346,540	1,093,086	1,161,008	666,086	277,467	39,274	139,943	2,423	181,638	3,379,282	5,725,822
2003	508,542	1,568,783	2,077,324	100,921	1,119,089	772,766	394,283	38,984	98,142	0	137,125	2,524,183	4,601,510
2004	309,174	1,572,685	1,881,858	263,681	180,798	1,478,776	2,264,690	255,452	159,866	6,288	421,605	4,609,548	6,491,405
2005	511,238	3,645,114	4,156,354	344,821	153,399	357,585	1,241,173	460,860	198,447	2,649	661,954	2,758,935	6,915,289
2006	14,045,100	2,039,553	16,084,652	13,491,620	500,516	278,232	1,011,102	258,921	251,185	19,419	529,526	15,810,992	31,895,646
2007	10,741,143	1,910,757	12,651,903	7,091,636	6,311,806	1,713,752	2,143,262	509,078	221,335	11,256	741,667	18,002,121	30,654,022
2008	3,363,627	11,140,938	14,504,566	890,854	5,459,669	12,255,108	1,912,027	760,809	199,538	40,534	1,000,882	21,518,542	36,023,109
2009	255,207	2,393,371	2,648,577	147,145	504,198	3,876,175	7,574,448	354,957	12,940	9,482	377,378	12,479,339	15,127,914
2010	52,060	2,514,695	2,566,755	45,727	18,140	286,327	2,365,728	4,889,596	119,065	193,356	5,202,016	7,917,939	10,484,695
2011	224,511	1,278,220	1,502,731	236,648	6,168	77,932	789,609	1,320,172	1,650,445	292,204	3,262,821	4,373,179	5,875,908
2012	262,344	750,606	1,012,950	229,707	28,624	19,775	360,755	73,213	1,141,286	118,631	1,333,131	1,971,993	2,984,942
2013	4,510,100	133,707	4,643,805	4,925,601	223,248	41,649	90,394	1,938	511,446	45,837	559,222	5,840,115	10,483,923
2014	2,588,017	1,654,282	4,242,299	1,267,183	884,565	843,167	819,933	0	1,097,764	105,886	1,203,650	5,018,493	9,260,791
2015	1,360,711	2,089,562	3,450,271	203,591	2,006,779	3,167,943	1,132,512	150,722	128,453	0	279,175	6,790,000	10,240,272
2016	103,453	2,566,147	2,669,598	57,679	118,099	1,178,683	2,248,926	103,907	335,478	0	439,386	4,042,773	6,712,372
2017	88,766	359,371	448,136	82,453	5,418	153,359	559,556	44,088	37,336	0	81,424	882,209	1,330,346
Cold Bay/Belkofski Bay													
1988	245,167	309,528	554,695	127,353	203,631	219,435	203,005	84,389	30,011	7,297	121,696	875,123	1,429,818
1989	465,271	55,255	520,527	408,307	54,811	29,721	16,589	3,880	488	0	4,368	513,797	1,034,326
1990	1,789,574	711,980	2,501,555	1,512,009	512,876	278,441	230,633	87,253	50,625	3,646	141,524	2,675,483	5,177,042
1991	597,704	642,244	1,239,950	663,094	132,800	247,214	494,517	77,978	152,806	161	230,945	1,768,575	3,008,525
1992	174,989	181,042	356,030	93,914	109,326	97,878	147,230	40,120	40,307	1,533	81,960	530,308	886,340

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Table 7.–Page 3 of 14.

	Females			Number sublegal males by size (CW)				Recruit	Postrecruit males (CW)		Legal	Total	Total
Year	Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
1993	97,181	277,803	374,984	66,301	85,424	159,343	145,875	36,567	22,350	434	59,353	516,296	891,280
1994	94,378	227,473	321,850	27,661	53,390	64,265	78,255	27,578	10,601	1,217	39,396	262,973	584,824
1996	332,658	15,587	348,245	260,751	59,794	38,484	31,147	24,510	2,998	201	27,708	417,885	766,129
1997	117,322	12,418	129,739	43,725	58,863	90,892	81,128	37,535	895	483	38,913	313,523	443,263
1998	384,971	154,913	539,885	113,976	289,247	352,476	183,679	49,039	20,425	5,616	75,081	1,014,461	1,554,346
1999	111,950	80,923	192,872	61,658	59,354	262,551	295,349	64,490	25,925	869	91,284	770,196	963,069
2000	455,889	221,576	677,465	552,078	107,735	284,006	327,963	198,168	16,388	2,811	217,368	1,489,154	2,166,619
2001	980,805	68,623	1,049,429	859,293	153,479	160,451	166,002	100,176	16,350	3,544	120,067	1,459,294	2,508,722
2002	951,056	273,703	1,224,761	503,854	464,269	321,094	218,041	60,958	101,511	3,459	165,929	1,673,188	2,897,949
2003	490,580	254,238	744,818	260,122	311,125	265,983	77,062	0	9,000	1,136	10,137	924,431	1,669,250
2004	624,983	134,040	759,025	427,022	330,725	398,480	192,333	22,874	2,530	0	25,404	1,373,964	2,132,988
2005	993,349	218,680	1,212,028	710,843	296,625	278,635	179,919	22,573	16,203	0	38,777	1,504,799	2,716,828
2006	2,649,095	420,921	3,070,019	2,061,411	466,727	562,538	233,997	27,671	13,589	0	41,260	3,365,936	6,435,951
2007	3,845,750	1,360,194	5,205,945	895,383	1,862,983	740,394	364,088	39,920	869	0	40,789	3,903,637	9,109,583
2008	1,008,163	3,859,739	4,867,902	185,717	2,091,796	3,978,114	1,144,869	95,258	85,637	838	181,733	7,582,227	12,450,130
2009	763,777	1,306,811	2,070,589	420,802	263,321	788,004	3,184,682	348,427	28,011	15,097	391,535	5,048,342	7,118,932
2010	268,615	2,653,858	2,922,473	230,437	77,077	369,308	1,525,762	1,370,575	283,412	79,516	1,737,224	3,939,809	6,862,281
2011	483,852	945,795	1,429,646	437,424	59,300	82,409	449,026	69,629	757,606	40,712	867,946	1,896,107	3,325,748
2012	343,992	171,847	515,840	396,404	85,500	160,419	177,454	19,925	189,934	6,096	215,957	1,035,735	1,551,575
2013	3,188,264	43,765	3,232,028	3,065,365	198,476	35,674	94,159	70,338	75,700	2,482	148,521	3,542,198	6,774,225
2014	839,972	109,296	949,268	800,002	456,297	195,357	82,194	3,471	71,226	4,925	79,622	1,613,472	2,562,743
2015	385,008	372,631	757,641	110,585	412,098	496,241	246,185	15,327	55,506	2,727	73,559	1,338,670	2,096,311
2016	31,558	678,225	709,782	35,537	79,011	502,975	634,623	10,191	86,490	1,025	97,707	1,349,851	2,059,635
2017	21,176	44,903	66,079	27,761	10,329	39,474	71,536	16,703	3,363	483	20,549	169,651	235,731
Pavlof Bay/Volcano Bay													
1988	396,472	851,305	1,247,775	318,791	191,839	433,431	389,404	180,138	72,587	65,785	318,510	1,651,978	2,899,757
1989	982,971	1,637,332	2,620,303	706,565	378,690	263,715	309,107	82,124	48,809	13,946	144,876	1,802,956	4,423,261
1990	1,018,705	2,014,133	3,032,842	800,548	465,497	483,365	275,354	55,929	101,325	12,666	169,922	2,194,681	5,227,522
1991	476,479	465,867	942,344	442,307	75,625	215,027	198,812	39,934	69,645	4,066	113,645	1,045,424	1,987,767
1992	164,080	251,898	415,976	59,319	134,197	93,527	116,929	31,944	19,546	0	51,490	455,465	871,441
1993	110,998	168,533	279,530	64,214	149,790	472,724	213,751	37,839	24,032	1,897	63,767	964,243	1,243,772
1994	38,811	116,548	155,358	20,940	46,340	87,314	137,635	53,632	27,775	0	81,407	373,644	529,000
1996	264,721	51,767	316,490	250,154	39,274	24,090	48,745	14,698	9,285	980	24,963	387,224	703,715

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Table 7.–Page 4 of 14.

	Females			Number sublegal males by size (CW)				Recruit	Postrecruit males (CW)		Legal	Total	Total
Year	Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
1997	68,954	78,820	147,775	30,166	47,190	80,373	52,489	5,258	27,733	899	33,892	244,109	391,886
1998	123,170	169,886	293,061	33,550	186,768	335,468	415,570	8,543	57,097	0	65,640	1,036,992	1,330,056
1999	49,852	75,922	125,775	40,396	36,843	105,371	112,343	79,080	9,463	0	88,543	383,495	509,269
2000	1,221,546	228,967	1,450,514	1,063,815	233,699	150,334	245,502	92,698	28,660	0	121,359	1,814,714	3,265,227
2001	637,329	215,340	852,666	373,939	337,514	233,508	146,893	42,698	29,816	0	72,515	1,164,371	2,017,035
2002	1,159,412	398,152	1,557,562	1,098,831	373,111	549,662	417,058	45,913	43,795	1,225	90,931	2,529,594	4,087,161
2003	178,350	256,728	435,078	126,539	191,038	315,547	333,959	43,396	79,968	921	124,285	1,091,364	1,526,446
2004	287,514	348,252	635,767	258,804	103,412	541,662	404,760	104,231	115,029	2,200	221,459	1,530,097	2,165,865
2005	1,055,173	324,835	1,380,008	970,752	333,608	300,213	411,649	30,762	75,552	0	106,314	2,122,531	3,502,541
2006	3,246,754	318,555	3,565,310	3,178,826	686,965	364,771	230,246	27,704	54,757	980	83,440	4,544,244	8,109,557
2007	1,548,059	762,851	2,310,909	1,077,933	1,389,596	974,621	561,630	68,849	65,665	0	134,515	4,138,295	6,449,209
2008	1,931,401	2,097,108	4,028,508	525,205	3,182,635	2,614,265	1,632,032	318,556	21,924	5,903	346,385	8,300,523	12,329,032
2009	1,293,221	2,549,622	3,842,843	925,474	895,247	3,169,920	5,004,365	1,268,465	154,235	23,190	1,445,890	11,440,894	15,283,734
2010	607,426	1,328,668	1,936,096	473,284	391,314	632,226	2,297,122	1,733,023	575,843	32,630	2,341,496	6,135,439	8,071,537
2011	362,099	540,193	902,292	367,149	183,018	180,370	754,032	180,001	1,079,596	36,927	1,296,524	2,781,094	3,683,388
2012	508,923	327,194	836,116	534,012	54,792	220,016	429,445	37,012	532,755	11,533	581,300	1,819,560	2,655,678
2013	5,637,544	268,354	5,905,895	6,225,497	791,887	125,654	174,459	46,554	113,140	1,625	161,319	7,478,814	13,384,708
2014	1,365,620	330,174	1,695,797	989,167	1,130,832	682,128	248,994	28,744	172,619	3,270	204,635	3,255,754	4,951,552
2015	145,059	376,317	521,376	101,332	520,361	1,266,755	709,676	36,775	38,769	1,035	76,578	2,674,698	3,196,075
2016	195,563	191,559	387,124	230,534	50,091	421,593	630,419	57,449	128,726	7,650	193,823	1,526,458	1,913,582
2017	227,905	123,336	351,241	201,263	52,346	79,884	128,983	20,659	13,656	0	34,316	496,788	848,030
Beaver Bay/Balboa Bay/Unga Strait													
1988	123,494	76,882	200,375	106,208	66,273	51,249	23,019	5,483	11,617	0	17,100	263,850	464,227
1989	197,155	257,804	454,960	187,673	58,696	50,884	34,037	0	6,059	0	6,059	337,346	792,308
1990	482,504	480,919	963,421	469,880	39,607	159,200	93,314	20,133	6,616	0	26,748	788,754	1,752,177
1991	369,956	192,356	562,312	343,662	40,332	59,938	51,441	5,013	3,073	0	8,086	503,457	1,065,769
1992	135,820	137,943	273,760	144,580	31,465	47,470	20,585	2,510	2,027	0	4,537	248,638	522,398
1993	26,384	43,104	69,488	41,382	9,532	31,285	33,351	3,164	4,362	0	7,526	123,073	192,560
1994	10,057	31,137	41,195	10,846	4,362	11,236	24,651	2,254	5,846	0	8,100	59,196	100,389
1996	821,170	5,040	826,210	859,655	15,533	10,707	10,287	715	368	0	1,083	897,260	1,723,470
1997	121,975	40,476	162,451	99,343	73,182	18,189	6,765	0	1,946	0	1,946	199,424	361,877
1998	126,979	81,698	208,680	93,259	39,343	56,277	4,983	0	0	0	0	193,862	402,541
1999	34,815	72,130	106,944	81,508	10,811	41,261	31,839	860	0	0	860	166,280	273,223

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Table 7.–Page 5 of 14.

	Females			Number sublegal males by size (CW)				Recruit	Postrecruit males (CW)		Legal	Total	Total
Year	Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
2000	447,950	37,324	485,274	432,550	6,817	23,244	22,112	1,356	1,356	0	2,713	487,435	972,710
2001	993,788	80,794	1,074,583	1,032,812	91,142	32,641	16,685	0	0	0	0	1,173,278	2,247,861
2002	647,596	316,783	964,379	570,708	679,101	354,635	36,224	0	13,518	0	13,518	1,654,187	2,618,564
2003	83,251	252,020	335,273	38,328	121,196	246,506	135,914	7,972	9,654	0	17,625	559,565	894,837
2004	314,553	203,840	518,391	324,495	108,694	181,829	145,100	37,897	3,666	860	42,421	802,536	1,320,928
2005	2,052,393	151,547	2,203,940	2,610,558	88,385	50,775	64,770	12,484	0	0	12,484	2,826,970	5,030,907
2006	3,800,591	1,083,098	4,883,687	2,631,953	2,261,312	980,256	401,123	8,703	42,734	0	51,437	6,326,082	11,209,765
2007	631,937	1,393,871	2,025,810	565,420	1,747,627	1,405,074	476,954	25,175	2,880	1,148	29,202	4,224,279	6,250,086
2008	794,200	2,652,921	3,447,121	420,984	1,934,846	2,289,198	1,200,370	144,915	3,583	2,154	150,651	5,996,051	9,443,172
2009	414,125	2,090,678	2,504,802	286,953	546,197	1,117,426	1,391,497	752,534	103,165	949	856,649	4,198,722	6,703,528
2010	84,384	814,393	898,778	49,936	67,410	240,531	415,764	104,717	132,100	1,731	238,548	1,012,186	1,910,964
2011	135,533	328,382	463,914	121,776	19,910	80,312	294,279	21,795	157,643	0	179,438	695,712	1,159,627
2012	126,130	132,348	258,476	157,309	1,634	44,081	394,934	8,372	259,847	0	268,219	866,177	1,124,653
2013	1,870,044	112,798	1,982,841	1,710,549	57,369	23,486	47,765	0	12,589	0	12,589	1,851,756	3,834,596
2014	439,348	95,103	534,452	256,515	452,473	165,787	100,688	0	48,515	894	49,409	1,024,875	1,559,324
2015	82,817	256,949	339,762	83,471	126,344	299,302	143,032	0	49,262	0	49,262	701,410	1,041,173
2016	58,376	99,710	158,086	68,857	12,822	65,334	33,343	5,150	1,550	0	6,701	187,058	345,143
2017	210,858	26,021	236,878	234,594	17,149	22,173	22,888	1,513	949	0	2,462	299,265	536,142
West Nagai Strait													
1989	250,282	193,216	443,498	291,460	134,656	68,629	23,042	1,859	5,185	0	7,044	524,830	968,328
1990	221,904	36,745	258,648	227,456	16,930	17,328	5,672	0	908	0	908	268,294	526,945
1991	209,317	22,391	231,706	232,608	5,312	5,312	15,936	3,813	0	0	3,813	262,982	494,688
1992	24,424	31,724	56,149	13,307	8,214	18,230	7,954	0	3,165	0	3,165	50,869	107,019
1993	19,404	4,835	24,239	15,942	9,600	74,295	14,798	908	0	0	908	115,543	139,783
1994	20,348	24,860	45,209	8,271	24,514	29,969	27,083	8,469	0	0	8,469	98,302	143,511
1996	48,279	4,706	52,985	38,902	7,431	16,596	20,149	0	908	0	908	83,987	136,973
1997	333,029	263,583	596,610	180,060	292,165	173,199	25,182	0	4,706	0	4,706	675,310	1,271,918
1998	84,815	122,946	207,760	35,756	106,723	175,190	58,732	3,564	908	0	4,473	380,874	588,635
1999	58,649	24,684	83,333	45,436	34,194	28,481	46,396	5,615	0	0	5,615	160,121	243,452
2000	320,957	23,673	344,630	363,106	5,425	5,696	18,988	5,615	1,899	0	7,513	400,728	745,355
2001	499,829	68,360	568,187	340,805	124,643	65,414	32,390	908	0	0	908	564,160	1,132,347
2002	180,556	126,619	307,175	82,437	89,360	287,060	100,976	4,747	0	0	4,747	564,577	871,751
2003	39,253	57,642	96,894	7,611	59,635	37,323	11,146	3,798	0	0	3,798	119,511	216,403

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Table 7.–Page 6 of 14.

	Females			Number sublegal males by size (CW)				Recruit	Postrecruit males (CW)		Legal	Total	Total
Year	Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
2004	36,564	92,054	128,616	32,796	11,393	59,786	46,150	12,301	1,899	0	14,199	164,324	292,939
2005	408,940	46,500	455,439	470,143	14,241	38,507	70,970	11,106	0	0	11,106	604,965	1,060,404
2006	1,141,989	123,506	1,265,496	850,316	605,915	157,389	115,801	908	2,725	0	3,633	1,733,056	2,998,552
2007	1,114,056	2,408,980	3,523,033	402,145	1,710,559	1,254,230	435,630	27,634	41,115	0	68,749	3,871,309	7,394,343
2008	814,607	6,810,600	7,625,208	287,211	1,808,034	2,620,888	1,177,024	58,937	42,677	0	101,615	5,994,769	13,619,975
2009	317,524	9,700,974	10,018,498	95,226	1,300,764	2,953,848	3,184,350	542,834	87,282	11,779	641,896	8,176,082	18,194,579
2010	191,030	3,321,173	3,512,202	147,975	164,797	1,003,031	2,061,674	1,302,037	188,142	26,083	1,516,261	4,893,740	8,405,943
2011	30,611	578,793	609,403	61,776	21,573	239,696	708,342	73,083	179,640	9,513	262,232	1,293,619	1,903,020
2012	66,031	190,882	256,912	133,765	9,128	55,834	524,154	39,306	583,933	17,486	640,724	1,363,604	1,620,515
2013	1,668,899	78,948	1,747,847	1,539,235	79,494	54,809	202,169	3,798	99,873	0	103,671	1,979,370	3,727,216
2014	697,452	204,010	901,461	257,672	450,736	158,082	142,954	0	47,241	0	47,241	1,056,685	1,958,145
2015	131,991	174,763	306,751	36,968	184,382	486,886	201,491	7,331	6,122	0	13,453	923,179	1,229,930
2016	13,831	2,697,909	2,711,740	0	47,031	465,316	476,733	5,219	23,855	0	29,075	1,018,152	3,729,891
2017	1,882,711	714,523	2,597,235	1,913,960	43,271	129,983	236,985	10,728	0	0	10,728	2,334,927	4,932,162
Stepovak Bay													
1989	267,791	114,335	382,127	245,657	14,727	13,898	0	0	0	0	0	274,280	656,409
1990	680,510	128,590	809,103	793,942	6,962	23,206	14,727	3,883	6,158	0	10,041	848,878	1,657,978
1991	170,885	19,489	190,373	216,341	4,071	25,759	12,640	0	6,158	0	6,158	264,969	455,342
1992	209,362	15,530	224,892	183,775	6,204	27,937	6,985	0	0	0	0	224,900	449,791
1993	8,906	3,883	12,789	9,296	0	3,079	0	0	3,079	0	3,079	15,454	28,243
1994	30,446	0	30,446	30,290	0	0	0	0	0	0	0	30,290	60,736
1996	35,568	0	35,568	32,004	0	0	0	0	0	0	0	32,004	67,572
1997	9,643	0	9,643	23,048	0	0	0	0	0	0	0	23,048	32,692
1998	36,665	0	36,665	43,862	0	0	0	0	0	0	0	43,862	80,527
1999	34,025	0	34,025	53,839	0	0	0	0	0	0	0	53,839	87,865
2000	168,177	0	168,177	179,301	0	0	0	0	0	0	0	179,301	347,480
2001	276,563	0	276,563	278,539	3,415	0	0	0	0	0	0	281,955	558,518
2002	28,474	11,159	39,633	46,174	11,639	2,480	0	0	0	0	0	60,293	99,926
2003	33,770	0	33,770	37,037	0	0	930	0	0	0	0	37,967	71,738
2004	62,485	992	63,477	81,486	688	992	0	0	0	0	0	83,166	146,643
2005	358,179	930	359,108	466,461	4,969	992	0	0	0	0	0	472,422	831,530
2006	938,817	8,397	947,214	1,254,409	34,902	5,761	0	0	0	0	0	1,295,072	2,242,286
2007	341,670	24,047	365,717	406,983	63,342	15,853	0	0	0	0	0	486,177	851,895

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Table 7.–Page 7 of 14.

	Females			Number sublegal males by size (CW)				Recruit	Postrecruit males (CW)		Legal	Total	Total
Year	Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
2008	149,567	11,295	160,863	126,217	71,453	28,082	6,639	992	0	0	992	233,383	394,245
2009	44,951	4,151	49,101	56,933	7,515	25,021	4,681	0	835	0	835	94,988	144,089
2010	29,109	860	29,969	29,977	4,603	17,862	33,745	12,236	0	0	12,236	98,422	128,391
2011	96,677	3,720	100,396	109,749	2,324	1,240	3,534	0	2,480	0	2,480	119,326	219,721
2012	59,065	3,664	62,729	57,083	992	4,433	8,319	0	992	0	992	71,818	134,547
2013	270,287	992	271,279	299,751	1,162	688	0	0	0	0	0	301,602	572,880
2014	45,249	1,984	47,233	33,618	5,121	1,523	4,352	0	688	835	1,523	46,138	93,371
2015	41,084	0	41,084	49,459	3,842	688	930	0	0	0	0	54,919	96,003
2016	8,783	0	8,783	12,963	0	1,600	0	0	0	0	0	14,564	23,347
2017	256,095	2,480	258,575	278,265	2,168	2,090	0	0	0	0	0	282,524	541,099
WESTERN SECTION TOTALS[a]													
1988	655,064	682,880	1,337,943	356,667	436,324	423,727	400,868	164,004	59,282	22,345	245,629	1,863,217	3,201,164
1989	4,721,216	1,266,074	5,987,290	4,270,586	1,203,839	432,260	195,923	43,932	5,349	0	49,281	6,151,889	12,139,181
1990	4,228,164	1,816,847	6,045,012	3,234,293	1,199,867	872,169	448,448	112,963	75,217	4,651	192,831	5,947,608	11,992,623
1991	2,603,615	1,130,557	3,734,173	2,327,506	570,628	492,588	550,612	93,458	156,927	161	250,548	4,191,880	7,926,061
1992	887,540	1,037,688	1,925,222	562,033	595,792	412,875	341,316	72,083	61,232	2,482	135,798	2,047,813	3,973,035
1993	464,188	829,117	1,293,304	321,376	258,452	560,630	506,802	96,473	86,195	1,383	184,055	1,831,311	3,124,617
1994	215,360	535,474	750,832	143,388	119,095	196,627	285,474	33,847	58,355	1,217	93,419	838,003	1,588,839
1996	1,035,974	252,293	1,288,266	811,385	133,955	81,161	115,920	30,207	32,547	201	62,954	1,205,376	2,493,640
1997	355,889	149,743	505,630	206,087	209,470	188,505	132,999	44,181	9,881	483	54,544	791,599	1,297,230
1998	1,465,551	2,204,237	3,669,786	772,260	1,475,103	1,813,544	550,770	87,283	88,779	5,616	181,680	4,793,356	8,463,138
1999	342,123	636,464	978,586	153,560	345,278	831,308	1,038,408	124,154	81,266	2,768	208,186	2,576,745	3,555,330
2000	1,725,651	1,140,758	2,866,408	1,706,813	313,433	741,061	1,052,210	627,452	116,675	2,811	746,940	4,560,458	7,426,864
2001	2,758,213	479,387	3,237,599	2,185,718	997,972	435,439	496,140	280,453	120,306	13,810	414,565	4,529,841	7,767,438
2002	3,380,746	1,925,983	5,306,728	2,311,625	1,896,190	1,207,571	598,898	100,232	252,261	5,882	358,374	6,372,654	11,679,381
2003	1,216,984	2,126,305	3,343,288	557,569	1,501,580	1,218,251	580,657	38,984	117,228	1,136	157,348	4,015,403	7,358,695
2004	1,644,531	1,907,190	3,551,721	1,338,815	611,591	1,932,875	2,463,697	278,326	162,396	6,288	447,009	6,793,984	10,345,703
2005	1,759,147	3,992,843	5,751,990	1,271,290	535,709	695,595	1,421,092	483,433	214,650	2,649	700,731	4,624,416	10,376,407
2006	19,805,345	2,524,801	22,330,149	18,426,745	1,025,587	921,121	1,262,073	286,592	264,774	19,419	570,786	22,206,312	44,536,456
2007	18,952,019	5,215,098	24,167,122	11,654,288	8,839,057	2,694,444	2,604,023	548,998	222,204	11,256	782,456	26,574,264	50,741,385
2008	4,563,668	16,817,109	21,380,778	1,919,813	9,343,053	16,555,586	3,090,583	856,067	285,175	41,372	1,182,615	32,091,647	53,472,427
2009	1,095,990	4,360,666	5,456,657	664,300	960,884	4,880,916	10,815,400	719,821	42,876	24,579	787,276	18,108,768	23,565,421
2010	493,507	5,729,826	6,223,332	463,601	111,093	815,733	4,465,616	7,267,488	467,808	347,435	8,086,451	13,942,496	20,165,828

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Table 7.–Page 8 of 14.

	Females			Number sublegal males by size (CW)				Recruit	Postrecruit males (CW)		Legal	Total	Total
Year	Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
2011	850,560	2,695,145	3,545,703	835,954	74,081	204,060	1,499,612	1,395,568	2,701,168	338,692	4,435,426	7,049,136	10,594,832
2012	700,678	931,702	1,632,381	726,293	122,702	187,197	613,482	93,138	1,497,304	134,076	1,724,521	3,374,196	5,006,576
2013	8,339,999	194,935	8,534,930	8,590,809	449,389	89,969	199,301	72,276	609,927	48,319	730,524	10,059,997	18,594,928
2014	3,875,188	1,842,475	5,717,662	2,551,115	1,378,113	1,063,026	948,134	3,471	1,230,800	117,115	1,351,386	7,291,772	13,009,434
2015	2,275,530	2,467,076	4,742,605	784,980	2,475,996	3,692,457	1,380,328	166,049	184,775	2,727	353,550	8,687,313	13,429,919
2016	193,971	3,249,119	3,443,087	172,476	219,657	1,681,658	2,883,549	114,098	421,968	1,025	537,093	5,494,431	8,937,519
2017	703,840	410,471	1,114,311	722,294	55,659	232,435	631,092	60,791	40,699	483	101,973	1,743,455	2,857,767
EASTERN SECTION TOTALS[b]													
1988	519,966	928,187	1,448,150	424,999	258,112	484,680	412,423	185,621	84,204	65,785	335,610	1,915,828	3,363,984
1989	1,698,199	2,202,687	3,900,888	1,431,355	586,769	397,126	366,186	83,983	60,053	13,946	157,979	2,939,412	6,840,306
1990	2,403,623	2,660,387	5,064,014	2,291,826	528,996	683,099	389,067	79,945	115,007	12,666	207,619	4,100,607	9,164,622
1991	1,226,637	700,103	1,926,735	1,234,918	125,340	306,036	278,829	48,760	78,876	4,066	131,702	2,076,832	4,003,566
1992	533,686	437,095	970,777	400,981	180,080	187,164	152,453	34,454	24,738	0	59,192	979,872	1,950,649
1993	165,692	220,355	386,046	130,834	168,922	581,383	261,900	41,911	31,473	1,897	75,280	1,218,313	1,604,358
1994	99,662	172,545	272,208	70,347	75,216	128,519	189,369	64,355	33,621	0	97,976	561,432	833,636
1996	1,169,738	61,513	1,231,253	1,180,715	62,238	51,393	79,181	15,413	10,561	980	26,954	1,400,475	2,631,730
1997	533,601	382,879	916,479	332,617	412,537	271,761	84,436	5,258	34,385	899	40,544	1,141,891	2,058,373
1998	371,629	374,530	746,166	206,427	332,834	566,935	479,285	12,107	58,005	0	70,113	1,655,590	2,401,759
1999	177,341	172,736	350,077	221,179	81,848	175,113	190,578	85,555	9,463	0	95,018	763,735	1,113,809
2000	2,158,630	289,964	2,448,595	2,038,772	245,941	179,274	286,602	99,669	31,915	0	131,585	2,882,178	5,330,772
2001	2,407,509	364,494	2,771,999	2,026,095	556,714	331,563	195,968	43,606	29,816	0	73,423	3,183,764	5,955,761
2002	2,016,038	852,713	2,868,749	1,798,150	1,153,211	1,193,837	554,258	50,660	57,313	1,225	109,196	4,808,651	7,677,402
2003	334,624	566,390	901,015	209,515	371,869	599,376	481,949	55,166	89,622	921	145,708	1,808,407	2,709,424
2004	701,116	645,138	1,346,251	697,581	224,187	784,269	596,010	154,429	120,594	3,060	278,079	2,580,123	3,926,375
2005	3,874,685	523,812	4,398,495	4,517,914	441,203	390,487	547,389	54,352	75,552	0	129,904	6,026,888	10,425,382
2006	9,128,151	1,533,556	10,661,707	7,915,504	3,589,094	1,508,177	747,170	37,315	100,216	980	138,510	13,898,454	24,560,160
2007	3,635,722	4,589,749	8,225,469	2,452,481	4,911,124	3,649,778	1,474,214	121,658	109,660	1,148	232,466	12,720,060	20,945,533
2008	3,689,775	11,571,924	15,261,700	1,359,617	6,996,968	7,552,433	4,016,065	523,400	68,184	8,057	599,643	20,524,726	35,786,424
2009	2,069,821	14,345,425	16,415,244	1,364,586	2,749,723	7,266,215	9,584,893	2,563,833	345,517	35,918	2,945,270	23,910,686	40,325,930
2010	911,949	5,465,094	6,377,045	701,172	628,124	1,893,650	4,808,305	3,152,013	896,085	60,444	4,108,541	12,139,787	18,516,835
2011	624,920	1,451,088	2,076,005	660,450	226,825	501,618	1,760,187	274,879	1,419,359	46,440	1,740,674	4,889,751	6,965,756
2012	760,149	654,088	1,414,233	882,169	66,546	324,364	1,356,852	84,690	1,377,527	29,019	1,491,235	4,121,159	5,535,393
2013	9,446,774	461,092	9,907,862	9,775,032	929,912	204,637	424,393	50,352	225,602	1,625	277,579	11,611,542	21,519,400

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Table 7.–Page 9 of 14.

	Females			Number sublegal males by size (CW)				Recruit	Postrecruit males (CW)		Legal	Total	Total
Year	Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
2014	2,547,669	631,271	3,178,943	1,536,972	2,039,162	1,007,520	496,988	28,744	269,063	4,999	302,808	5,383,452	8,562,392
2015	400,951	808,029	1,208,973	271,230	834,929	2,053,631	1,055,129	44,106	94,153	1,035	139,293	4,354,206	5,563,181
2016	276,553	2,989,178	3,265,733	312,354	109,944	953,843	1,140,495	67,818	154,131	7,650	229,599	2,746,232	6,011,963
2017	2,577,569	866,360	3,443,929	2,628,082	114,934	234,130	388,856	32,900	14,605	0	47,506	3,413,504	6,857,433
SOUTH PENINSULA DISTRICT TOTALS													
1988	1,175,030	1,611,067	2,786,093	781,666	694,436	908,407	813,291	349,625	143,486	88,130	581,239	3,779,047	6,565,148
1989	6,419,415	3,468,761	9,888,178	5,701,941	1,790,608	829,386	562,109	127,915	65,402	13,946	207,260	9,091,300	18,979,487
1990	6,631,787	4,477,234	11,109,026	5,526,119	1,728,863	1,555,268	837,515	192,908	190,224	17,317	400,450	10,048,216	21,157,245
1991	3,830,252	1,830,660	5,660,908	3,562,424	695,968	798,624	829,441	142,218	235,803	4,227	382,250	6,268,716	11,929,627
1992	1,421,226	1,474,783	2,895,999	963,014	775,872	600,039	493,769	106,537	85,970	2,482	194,990	3,027,682	5,923,684
1993	629,880	1,049,472	1,679,350	452,210	427,374	1,142,013	768,702	138,384	117,668	3,280	259,335	3,049,626	4,728,975
1994	315,022	708,019	1,023,040	213,735	194,311	325,146	474,843	98,202	91,976	1,217	191,395	1,399,438	2,422,475
1996	2,205,712	313,806	2,519,519	1,992,100	196,193	132,554	195,101	45,620	43,108	1,181	89,908	2,605,851	5,125,370
1997	889,490	532,622	1,422,109	538,704	622,007	460,266	217,435	49,439	44,266	1,382	95,088	1,933,490	3,355,603
1998	1,837,180	2,578,767	4,415,952	978,687	1,807,937	2,380,479	1,030,055	99,390	146,784	5,616	251,793	6,448,946	10,864,897
1999	519,464	809,200	1,328,663	374,739	427,126	1,006,421	1,228,986	209,709	90,729	2,768	303,204	3,340,480	4,669,139
2000	3,884,281	1,430,722	5,315,003	3,745,585	559,374	920,335	1,338,812	727,121	148,590	2,811	878,525	7,442,636	12,757,636
2001	5,165,722	843,881	6,009,598	4,211,813	1,554,686	767,002	692,108	324,059	150,122	13,810	487,988	7,713,605	13,723,199
2002	5,396,784	2,778,696	8,175,477	4,109,775	3,049,401	2,401,408	1,153,156	150,892	309,574	7,107	467,570	11,181,305	19,356,783
2003	1,551,608	2,692,695	4,244,303	767,084	1,873,449	1,817,627	1,062,606	94,150	206,850	2,057	303,056	5,823,810	10,068,119
2004	2,345,647	2,552,328	4,897,972	2,036,396	835,778	2,717,144	3,059,707	432,755	282,990	9,348	725,088	9,374,107	14,272,078
2005	5,633,832	4,516,655	10,150,485	5,789,204	976,912	1,086,082	1,968,481	537,785	290,202	2,649	830,635	10,651,304	20,801,789
2006	28,933,496	4,058,357	32,991,856	26,342,249	4,614,681	2,429,298	2,009,243	323,907	364,990	20,399	709,296	36,104,766	69,096,616
2007	22,587,741	9,804,847	32,392,591	14,106,769	13,750,181	6,344,222	4,078,237	670,656	331,864	12,404	1,014,922	39,294,324	71,686,918
2008	8,253,443	28,389,033	36,642,478	3,279,430	16,340,021	24,108,019	7,106,648	1,379,467	353,359	49,429	1,782,258	52,616,373	89,258,851
2009	3,165,811	18,706,091	21,871,901	2,028,886	3,710,607	12,147,131	20,400,293	3,283,654	388,393	60,497	3,732,546	42,019,454	63,891,351
2010	1,405,456	11,194,920	12,600,377	1,164,773	739,217	2,709,383	9,273,921	10,419,501	1,363,893	407,879	12,194,992	26,082,283	38,682,663
2011	1,475,480	4,146,233	5,621,708	1,496,404	300,906	705,678	3,259,799	1,670,447	4,120,527	385,132	6,176,100	11,938,887	17,560,588
2012	1,460,827	1,585,790	3,046,614	1,608,462	189,248	511,561	1,970,334	177,828	2,874,831	163,095	3,215,756	7,495,355	10,541,969
2013	17,786,773	656,027	18,442,792	18,365,841	1,379,301	294,606	623,694	122,628	835,529	49,944	1,008,103	21,671,539	40,114,328
2014	6,422,857	2,473,746	8,896,605	4,088,087	3,417,275	2,070,546	1,445,122	32,215	1,499,863	122,114	1,654,194	12,675,224	21,571,826
2015	2,676,481	3,275,105	5,951,578	1,056,210	3,310,925	5,746,088	2,435,457	210,155	278,928	3,762	492,843	13,041,519	18,993,100
2016	470,524	6,238,297	6,708,820	484,830	329,601	2,635,501	4,024,044	181,916	576,099	8,675	766,692	8,240,663	14,949,482
2017	3,281,409	1,276,831	4,558,240	3,350,376	170,593	466,565	1,019,948	93,691	55,304	483	149,479	5,156,959	9,715,200

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Table 7.–Page 10 of 14.

Year	Females			Number sublegal males by size (CW)				Recruit	Postrecruit males (CW)		Legal	Total	Total
	Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
CHIGNIK DISTRICT													
Ivanof Bay													
1989	267,850	164,754	432,603	213,734	83,220	471,604	445,292	204,617	7,396	7,396	219,409	1,433,259	1,865,862
1990	617,894	19,342	637,235	719,143	10,379	67,805	150,805	64,921	0	0	64,921	1,013,052	1,650,287
1991	275,037	1,476	276,513	302,532	0	0	1,723	7,136	0	738	7,874	312,129	588,643
1992	26,693	2,215	28,907	30,505	1,969	984	5,028	4,100	1,889	738	6,727	45,214	74,119
1993	47,617	1,929	49,546	26,775	41,776	9,880	3,055	0	699	0	699	82,185	131,732
1994	22,819	12,095	34,914	6,775	22,612	12,866	3,833	984	246	0	1,230	47,315	82,229
1995	40,024	3,833	43,857	46,548	2,848	492	2,461	2,707	492	0	3,199	55,548	99,405
1996	63,771	699	64,470	65,883	41,649	6,890	7,872	8,754	0	0	8,754	131,049	195,518
1997	22,655	4,675	27,330	29,632	3,619	7,770	4,183	3,691	492	246	4,429	49,634	76,964
1998	22,035	1,191	23,226	21,497	1,864	246	1,230	1,723	0	0	1,723	26,559	49,785
1999	42,136	3,652	45,786	44,603	492	1,476	9,907	10,089	945	0	11,034	67,511	113,299
2000	457,297	15,177	472,475	503,823	37,727	25,900	15,503	10,089	945	246	11,280	594,234	1,066,709
2001	570,000	85,642	655,640	403,999	296,452	64,697	41,587	2,848	15,299	0	18,147	824,884	1,480,524
2002	263,139	45,073	308,212	93,656	335,981	326,874	94,638	3,514	9,228	0	12,742	863,893	1,172,105
2003	25,198	240,133	265,331	3,168	41,275	91,790	106,904	25,048	7,990	0	33,039	276,173	541,506
2004	22,388	447,395	469,782	28,951	19,736	179,096	280,796	69,766	31,471	5,378	106,614	615,192	1,084,975
2005	339,705	898,151	1,237,856	495,062	40,357	83,921	218,668	56,910	50,474	1,182	108,565	946,573	2,184,429
2006	5,260,959	308,560	5,569,520	6,611,859	1,126,263	82,239	184,384	53,504	112,773	46,687	212,964	8,217,712	13,787,229
2007	2,404,530	177,375	2,581,906	2,320,990	1,640,663	300,377	64,073	16,935	25,403	3,629	45,967	4,372,070	6,953,976
2008	892,396	754,346	1,646,742	372,457	1,213,676	851,003	189,965	12,249	12,249	4,083	28,581	2,655,680	4,302,422
2009	37,251	982,209	1,019,460	46,515	290,602	1,099,892	1,011,168	46,640	31,497	2,515	80,653	2,528,831	3,548,291
2010	9,536	379,026	388,562	14,281	10,052	180,469	847,469	307,864	174,285	4,995	487,146	1,539,416	1,927,979
2011	99,210	137,350	236,559	119,793	0	28,130	313,172	228,662	219,550	30,771	478,981	940,075	1,176,634
2012	120,616	36,960	157,577	151,571	3,231	7,300	53,249	6,836	22,716	0	29,551	244,904	402,480
2013	1,578,022	124,172	1,702,194	1,844,152	16,434	12,578	429,087	0	419,719	19,189	438,908	2,741,162	4,443,354
2014	162,697	63,151	225,849	106,269	161,705	201,522	682,703	0	715,271	19,016	734,288	1,886,488	2,112,336
2015	687,142	1,251,420	1,938,562	276,204	539,085	450,958	460,557	21,702	217,000	3,709	242,411	1,969,214	3,907,774
2016	15,949	19,148	35,098	5,791	20,743	314,860	270,305	24,332	628	0	24,960	636,659	671,756
2017	270,628	328,653	599,281	268,460	30,591	45,622	87,637	43,064	7,455	0	50,519	482,829	1,082,109
Mitrofania Island													
1989	238,524	510,311	748,835	295,652	155,511	637,889	315,908	42,526	17,719	21,263	81,508	1,486,468	2,235,303

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Table 7.–Page 11 of 14.

	Females			Number sublegal males by size (CW)				Recruit	Postrecruit males (CW)		Legal	Total	Total
Year	Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
1990	276,450	29,572	306,022	249,270	91,148	111,575	143,930	50,314	15,682	4,005	70,001	665,923	971,947
1991	369,923	30,210	400,133	319,748	66,937	43,973	35,851	32,084	3,591	1,557	37,232	503,742	903,877
1992	243,032	6,463	249,495	193,452	27,819	5,476	9,745	11,779	0	1,557	13,336	249,825	499,323
1993	99,118	15,182	114,300	63,361	48,606	28,121	12,889	12,846	9,048	653	22,547	175,522	289,822
1994	54,918	5,815	60,733	31,317	14,244	11,469	4,019	8,468	1,795	0	10,264	71,313	132,044
1995	173,519	28,205	201,724	203,549	10,550	29,769	20,644	17,563	0	1,557	19,120	283,630	485,350
1997	421,234	90,723	511,956	303,776	522,670	262,434	65,822	5,358	17,955	6,228	29,541	1,184,241	1,696,197
1998	192,756	202,589	395,345	158,484	113,257	160,133	65,394	17,920	21,756	0	39,676	536,944	932,289
1999	151,136	55,605	206,741	143,630	60,475	44,745	68,493	14,229	2,244	2,244	18,717	336,059	542,801
2000	1,120,703	93,687	1,214,390	1,289,872	74,232	58,562	54,854	58,667	9,801	41,948	110,417	1,587,934	2,802,325
2001	569,255	235,543	804,800	566,154	191,559	211,857	85,869	30,476	26,738	5,985	63,201	1,118,638	1,923,440
2002	821,007	387,781	1,208,787	868,750	1,887,372	1,093,803	286,266	40,844	6,855	1,929	49,629	4,185,820	5,394,608
2003	214,546	204,351	418,895	138,961	530,487	629,309	349,100	20,746	36,137	5,386	62,270	1,710,127	2,129,024
2004	899,469	252,600	1,152,070	921,342	206,230	1,090,695	1,022,954	291,234	29,722	3,591	324,547	3,565,764	4,717,835
2005	2,121,311	133,652	2,254,962	2,169,033	293,170	163,586	242,054	76,711	20,903	3,863	101,477	2,969,320	5,224,282
2006	6,270,837	305,972	6,576,810	6,370,972	808,999	275,366	284,210	23,279	66,215	0	89,493	7,829,040	14,405,849
2007	2,128,167	633,729	2,761,894	2,022,632	1,922,607	646,695	112,305	4,295	24,789	2,335	31,420	4,735,660	7,497,554
2008	2,669,345	842,375	3,511,717	1,934,506	4,368,293	3,101,719	690,953	47,360	11,970	3,474	62,804	10,158,276	13,669,995
2009	643,087	2,351,404	2,994,491	522,959	3,983,619	5,834,258	2,186,701	245,837	6,481	0	252,317	12,779,855	15,774,344
2010	166,039	1,217,108	1,383,145	108,925	211,792	2,465,593	4,302,694	1,514,241	136,391	14,731	1,665,364	8,754,358	10,137,502
2011	263,572	609,510	873,082	208,349	18,044	191,281	1,793,296	1,136,115	474,682	43,029	1,653,826	3,864,796	4,737,877
2012	352,164	127,225	479,389	364,292	15,717	56,097	536,787	95,357	392,931	12,275	500,563	1,473,460	1,952,850
2013	4,582,853	15,290	4,598,144	5,324,038	108,729	37,516	332,606	8,831	199,580	13,574	221,985	6,024,875	10,623,019
2014	1,061,109	93,941	1,155,048	828,743	349,985	242,579	239,854	2,684	100,632	0	103,317	1,764,475	2,919,523
2015	582,641	301,636	884,275	529,680	218,752	248,879	234,632	17,223	45,643	3,947	66,814	1,298,754	2,183,030
2016	36,723	58,550	95,274	15,743	11,540	48,672	69,473	12,744	1,795	1,557	16,097	161,526	256,799
2017	2,831,079	106,535	2,937,615	3,012,086	116,257	51,287	45,245	8,676	0	0	8,676	3,233,552	6,171,166
Chignik Bay													
1989	667,856	444,176	1,112,032	655,157	88,786	81,131	172,141	40,153	13,174	0	53,330	1,050,540	2,162,572
1990	1,634,371	419,126	2,053,495	1,318,505	111,187	132,241	441,451	83,208	77,808	1,387	162,403	2,165,784	4,219,280
1991	1,110,229	479,825	1,590,054	1,056,644	98,077	48,537	131,065	67,099	66,093	0	133,192	1,467,514	3,057,570
1992	1,147,424	321,989	1,469,413	1,305,273	91,362	69,122	34,071	0	14,828	0	14,828	1,514,657	2,984,069
1993	819,309	215,111	1,034,419	788,593	464,122	305,588	185,738	21,972	60,687	3,286	85,945	1,829,984	2,864,402

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Table 7.–Page 12 of 14.

	Females			Number sublegal males by size (CW)				Recruit	Postrecruit males (CW)		Legal	Total	Total
Year	Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
1994	235,113	135,207	370,319	71,972	520,571	513,603	142,813	28,348	32,261	949	61,558	1,310,519	1,680,837
1995	172,122	93,531	265,653	204,920	3,191	52,923	174,170	82,082	14,528	0	96,610	531,814	797,467
1996	1,000,292	128,230	1,128,523	987,387	34,907	44,492	248,261	263,750	72,372	0	336,121	1,651,168	2,779,693
1997	1,121,412	333,004	1,454,416	1,017,334	268,500	165,228	234,175	148,418	75,513	5,298	229,229	1,914,462	3,368,879
1998	422,380	623,095	1,045,474	287,692	185,898	240,857	226,854	45,157	90,408	1,213	136,778	1,078,078	2,123,552
1999	624,036	145,490	769,531	467,811	307,462	351,337	428,710	143,757	163,065	0	306,820	1,862,137	2,631,665
2000	3,090,772	427,123	3,517,893	2,763,801	1,617,601	782,373	540,226	223,265	182,296	10,387	415,948	6,119,947	9,637,837
2001	2,225,223	482,766	2,707,989	919,915	2,814,170	838,299	414,732	216,631	48,359	2,513	267,503	5,254,619	7,962,611
2002	271,896	688,327	960,222	111,742	433,585	998,933	635,794	85,528	357,576	7,812	450,917	2,630,971	3,591,196
2003	134,167	492,743	626,910	114,283	120,204	343,810	463,268	70,010	130,985	7,402	208,396	1,249,959	1,876,869
2004	932,885	567,187	1,500,070	839,542	359,307	264,081	554,113	286,164	165,744	7,441	459,350	2,476,397	3,976,466
2005	1,009,683	431,973	1,441,654	1,030,864	374,323	636,603	508,778	111,884	82,407	1,585	195,876	2,746,444	4,188,095
2006	1,945,379	424,701	2,370,078	2,652,227	186,324	236,129	368,214	70,281	92,667	2,654	165,601	3,608,496	5,978,572
2007	767,565	760,170	1,527,735	765,008	436,765	583,634	465,569	105,576	38,934	1,898	146,411	2,397,383	3,925,119
2008	1,418,598	427,979	1,846,577	1,097,440	877,101	923,069	680,855	140,365	43,512	2,569	186,447	3,764,909	5,611,487
2009	1,554,631	596,338	2,150,969	958,198	1,048,445	1,090,671	1,012,322	328,686	43,099	9,522	381,307	4,490,943	6,641,914
2010	336,408	592,910	929,319	356,471	345,048	817,926	1,424,161	760,963	698,171	31,756	1,490,888	4,434,497	5,363,815
2011	778,503	130,101	908,606	938,675	16,858	160,026	588,728	135,980	480,223	47,254	663,458	2,367,745	3,276,348
2012	969,320	125,870	1,095,190	1,111,301	15,110	36,033	198,015	57,890	179,953	5,303	243,146	1,603,607	2,698,797
2013	4,806,728	64,133	4,870,860	6,511,779	110,030	30,560	65,009	1,941	72,021	0	73,962	6,791,337	11,662,200
2014	1,961,756	124,532	2,086,286	2,216,449	421,835	141,608	22,945	0	16,088	442	16,530	2,819,366	4,905,652
2015	635,702	283,190	918,891	318,926	538,037	234,591	70,634	0	8,909	677	9,586	1,171,775	2,090,666
2016	122,988	255,346	378,332	147,021	25,076	305,086	214,133	10,445	5,007	0	15,452	706,767	1,085,103
2017	536,697	228,825	765,524	528,287	86,568	108,657	111,259	12,401	1,941	0	14,342	849,113	1,614,637
Kujulik Bay													
1989	80,263	11,838	92,101	76,292	747	8,136	10,284	807	0	0	807	96,265	188,365
1990	315,664	77,427	393,090	317,588	1,567	7,586	7,047	1,519	0	0	1,519	335,304	728,394
1991	7,612	948	8,560	13,539	0	0	0	0	0	0	0	13,539	22,098
1992	107,864	18,988	126,852	129,191	760	760	3,038	0	1,519	0	1,519	135,267	262,119
1993	106,845	15,935	122,780	99,092	80,941	29,651	1,367	0	0	0	0	211,050	333,830
1994	7,561	3,190	10,751	8,976	7,258	4,943	6,463	0	2,279	0	2,279	29,917	40,667
1995	842	28,612	29,453	2,771	0	911	456	0	0	0	0	4,138	33,591
1996	227,174	7,595	234,769	184,465	0	0	0	0	0	0	0	184,465	419,234

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Table 7.–Page 13 of 14.

	Females			Number sublegal males by size (CW)				Recruit	Postrecruit males (CW)		Legal	Total	Total
Year	Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
1997	47,555	61,288	108,844	60,483	456	3,711	14,105	0	5,425	0	5,425	84,179	193,022
1998	38,310	15,190	53,500	37,074	0	2,279	3,798	0	760	0	760	43,910	97,411
1999	90,546	0	90,546	85,961	456	0	0	0	456	0	456	86,873	177,416
2000	212,544	949	213,494	253,014	1,298	0	0	0	0	0	0	254,312	467,805
2001	180,902	0	180,902	205,835	760	2,515	0	807	0	0	807	209,915	390,819
2002	15,600	844	16,444	16,059	6,049	7,556	3,376	844	0	0	844	33,881	50,325
2003	370,806	0	370,806	447,147	948	0	0	0	0	0	0	448,095	818,901
2004	294,155	0	294,155	341,301	9,538	2,279	949	0	0	0	0	354,068	648,222
2005	148,861	0	148,861	141,273	4,084	2,069	0	0	0	0	0	147,427	296,287
2006	514,996	948	515,944	802,688	1,801	842	0	0	0	0	0	805,330	1,321,275
2007	132,133	0	132,133	156,794	2,139	0	0	0	0	0	0	158,933	291,067
2008	397,500	3,086	400,585	420,056	9,358	8,233	26,431	9,606	0	456	10,062	474,139	874,725
2009	263,457	182,222	445,679	157,036	190,351	225,422	87,856	9,183	0	0	9,183	669,844	1,115,524
2010	44,191	120,885	165,076	29,488	82,910	287,031	304,547	31,862	1,519	0	33,381	737,357	902,434
2011	89,733	12,445	102,179	86,889	456	8,811	35,859	6,195	10,763	0	16,957	148,970	251,147
2012	164,365	32,264	196,630	195,609	3,038	7,374	25,146	0	9,114	0	9,114	240,279	436,909
2013	550,287	15,048	565,334	720,217	32,736	6,916	6,646	0	3,798	0	3,798	770,312	1,335,642
2014	298,364	4,297	302,659	246,207	15,054	4,342	2,642	0	1,519	0	1,519	269,764	572,423
2015	15,151	911	16,062	11,284	10,528	10,960	0	0	0	0	0	32,773	48,834
2016	0	3,646	3,646	1,790	911	1,367	456	0	0	0	0	4,524	8,170
2017	66,508	0	66,508	92,823	456	911	1,823	0	0	0	0	96,013	162,521
CHIGNIK DISTRICT TOTALS													
1989	1,254,493	1,131,079	2,385,571	1,240,835	328,264	1,198,760	943,625	288,103	38,289	28,659	355,054	4,066,532	6,452,102
1990	2,844,379	545,467	3,389,842	2,604,506	214,281	319,207	743,233	199,962	93,490	5,392	298,844	4,180,063	7,569,908
1991	1,762,801	512,459	2,275,260	1,692,463	165,014	92,510	168,639	106,319	69,684	2,295	178,298	2,296,924	4,572,188
1992	1,525,013	349,655	1,874,667	1,658,421	121,910	76,342	51,882	15,879	18,236	2,295	36,410	1,944,963	3,819,630
1993	1,072,889	248,157	1,321,045	977,821	635,445	373,240	203,049	34,818	70,434	3,939	109,191	2,298,741	3,619,786
1994	320,411	156,307	476,717	119,040	564,685	542,881	157,128	37,800	36,581	949	75,331	1,459,064	1,935,777
1995	386,507	154,181	540,687	457,788	16,589	84,095	197,731	102,352	15,020	1,557	118,929	875,130	1,415,813
1996	1,291,237	136,524	1,427,762	1,237,735	76,556	51,382	256,133	272,504	72,372	0	344,875	1,966,682	3,394,445
1997	1,612,856	489,690	2,102,546	1,411,225	795,245	439,143	318,285	157,467	99,385	11,772	268,624	3,232,516	5,335,062
1998	675,481	842,065	1,517,545	504,747	301,019	403,515	297,276	64,800	112,924	1,213	178,937	1,685,491	3,203,037
1999	907,854	204,747	1,112,604	742,005	368,885	397,558	507,110	168,075	166,710	2,244	337,027	2,352,580	3,465,181

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Table 7.–Page 14 of 14.

	Females			Number sublegal males by size (CW)				Recruit	Postrecruit males (CW)		Legal	Total	Total
Year	Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
2000	4,881,316	536,936	5,418,252	4,810,510	1,730,858	866,835	610,583	292,021	193,042	52,581	537,645	8,556,427	13,974,676
2001	3,545,380	803,951	4,349,331	2,095,903	3,302,941	1,117,368	542,188	250,762	90,396	8,498	349,658	7,408,056	11,757,394
2002	1,371,642	1,122,025	2,493,665	1,090,207	2,662,987	2,427,166	1,020,074	130,730	373,659	9,741	514,132	7,714,565	10,208,234
2003	744,717	937,227	1,681,942	703,559	692,914	1,064,909	919,272	115,804	175,112	12,788	303,705	3,684,354	5,366,300
2004	2,148,897	1,267,182	3,416,077	2,131,136	594,811	1,536,151	1,858,812	647,164	226,937	16,410	890,511	7,011,421	10,427,498
2005	3,619,560	1,463,776	5,083,333	3,836,232	711,934	886,179	969,500	245,505	153,784	6,630	405,918	6,809,764	11,893,093
2006	13,992,171	1,040,181	15,032,352	16,437,746	2,123,387	594,576	836,808	147,064	271,655	49,341	468,058	20,460,578	35,492,925
2007	5,432,395	1,571,274	7,003,668	5,265,424	4,002,174	1,530,706	641,947	126,806	89,126	7,862	223,798	11,664,046	18,667,716
2008	5,377,839	2,027,786	7,405,621	3,824,459	6,468,428	4,884,024	1,588,204	209,580	67,731	10,582	287,894	17,053,004	24,458,629
2009	2,498,426	4,112,173	6,610,599	1,684,708	5,513,017	8,250,243	4,298,047	630,346	81,077	12,037	723,460	20,469,473	27,080,073
2010	556,174	2,309,929	2,866,102	509,165	649,802	3,751,019	6,878,871	2,614,930	1,010,366	51,482	3,676,779	15,465,628	18,331,730
2011	1,231,018	889,406	2,120,426	1,353,706	35,358	388,248	2,731,055	1,506,952	1,185,218	121,054	2,813,222	7,321,586	9,442,006
2012	1,606,465	322,319	1,928,786	1,822,773	37,096	106,804	813,197	160,083	604,714	17,578	782,374	3,562,250	5,491,036
2013	11,517,890	218,643	11,736,532	14,400,186	267,929	87,570	833,348	10,772	695,118	32,763	738,653	16,327,686	28,064,215
2014	3,483,926	285,921	3,769,842	3,397,668	948,579	590,051	948,144	2,684	833,510	19,458	855,654	6,740,093	10,509,934
2015	1,920,636	1,837,157	3,757,790	1,136,094	1,306,402	945,388	765,823	38,925	271,552	8,333	318,811	4,472,516	8,230,304
2016	175,660	336,690	512,350	170,345	58,270	669,985	554,367	47,521	7,430	1,557	56,509	1,509,476	2,021,828
2017	3,704,912	664,013	4,368,928	3,901,656	233,872	206,477	245,964	64,141	9,396	0	73,537	4,661,507	9,030,433

[a] Western Section of the South Peninsula District includes Sanak Island, Morzhovoi Bay, and Cold Bay/Belkofski Bay.

[b] Eastern Section of the South Peninsula District includes Pavlof Bay/Volcano Bay, Beaver Bay/Balboa Bay/Unga Strait, West Nagai Strait, and Stepovak Bay.

Table 8.–Dominant species by weight in the South Peninsula and Chignik Tanner crab districts large-mesh bottom trawl survey, 2017.

Common name	Species name	% of catch by weight
Flathead sole	*Hippoglossoides elassodon*	30.9
Arrowtooth flounder	*Atheresthes stomias*	17.0
Yellowfin sole	*Limanda aspera*	13.3
Walleye pollock	*Gadus chalcogrammus*	6.8
Pacific halibut	*Hippoglossus stenolepis*	3.8
Sunflower seastar	*Pycnopodia helianthoides*	3.2
Anemone	Order: Actinaria	3.1
Starry flounder	*Platichthys stellatus*	2.9
Pacific cod	*Gadus macrocephalus*	2.7
Alaska plaice	*Pleuronectes quadrituberculatus*	2.5
Big skate	*Raja binoculata*	1.9
Northern rock sole	*Lepidopsetta polyxystra*	1.4
Tanner crab	*Chionoecetes bairdi*	1.1
Oregon triton	*Fusitriton oregonensis*	1.0
Mussel	Family: Mytilidae	0.9
Dungeness crab	*Metacarcinus magister*	0.8
Yellow Irish lord	*Hemilepidotus jordani*	0.8
Great sculpin	*Myoxocephalus polyacanthocephalus*	0.7
Hermit crab	Family: Paguridae	0.6
Red king crab	*Paralithodes camtschaticus*	0.6
All others	(107 species)	3.9
		100.0

Table 9.–Tanner crab abundance estimates from large-mesh bottom trawl surveys in the Eastern Aleutian District, 1990–2017.

	Females			Number sublegal males by size (CW)				Recruit	Postrecruit Males (CW)		Legal	Total	Total
Year	Juvenile	Mature	Total	<70 mm	70-91 mm	92-114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
AKUTAN BAY SECTION													
1990	460,092	771,965	1,232,057	614,180	912,058	447,122	146,025	15,190	0	0	15,190	2,134,574	3,366,629
1991	745,088	578,259	1,323,344	812,184	351,737	523,188	371,614	13,291	13,291	0	26,583	2,085,307	3,408,651
1994	949	2,893	3,843	2,893	7,641	15,418	33,911	2,848	949	0	3,798	63,662	67,505
1995	19,077	5,696	24,774	12,477	8,206	31,785	98,796	949	8,727	0	9,676	160,938	185,712
1999	121,515	677,297	798,812	19,867	143,040	701,089	1,030,550	210,330	4,363	0	214,692	2,109,239	2,908,051
2000	9,075	243,581	252,656	8,028	12,224	166,337	323,573	86,368	17,064	0	103,431	613,593	866,248
2003	56,558	675,379	731,937	37,957	139,174	413,879	121,041	21,013	71,664	4,151	96,828	808,878	1,540,816
2004	132,417	988,764	1,121,181	73,039	227,615	290,497	223,425	10,328	23,213	1,990	35,530	850,108	1,971,288
2005	127,291	501,657	628,948	84,899	196,246	188,560	270,776	50,446	9,752	1,187	61,384	801,864	1,430,812
2006	60,197	202,302	262,498	55,313	104,266	256,803	338,154	7,754	89,730	0	97,484	852,019	1,114,519
2007	131,796	353,409	485,203	108,103	216,470	332,576	316,383	9,721	4,975	0	14,696	988,226	1,473,430
2008	13,220	149,953	163,173	5,875	32,024	121,009	217,775	33,493	42,206	0	75,699	452,382	615,555
2009	39,211	915,000	954,210	13,675	32,400	137,412	372,548	62,948	62,610	1,957	127,514	683,550	1,637,760
2010	168,557	228,100	396,657	84,701	77,073	128,810	309,505	30,008	65,134	0	95,142	695,234	1,091,891
2011	19,187	288,006	307,193	20,498	16,328	65,460	188,518	3,798	15,072	0	18,870	309,673	616,866
2012	27,138	379,431	406,568	34,685	36,764	119,177	123,230	14,286	7,960	0	22,246	336,104	742,672
2013	409,654	69,112	478,767	381,318	100,839	125,669	68,880	3,705	12,644	0	16,350	693,054	1,171,822
2014	340,816	1,644,330	1,985,146	255,599	171,315	274,810	408,723	16,674	41,685	0	58,359	1,168,806	3,153,952
2015	187,696	193,663	381,360	209,008	62,030	13,202	13,017	0	0	0	0	297,258	678,616
2016	56,251	414,309	470,559	28,842	180,149	294,404	73,860	0	995	0	995	578,250	1,048,807
2017	179,563	3,888,787	4,068,350	127,266	187,266	285,861	98,239	0	8,723	0	8,723	707,353	4,775,704
UNALASKA/KALEKTA BAY SECTION													
1990	1,120,173	359,538	1,479,709	664,933	59,141	78,357	42,847	11,544	793	2,002	14,339	859,617	2,339,327
1991	981,240	137,467	1,118,707	920,709	167,932	41,207	25,026	8,906	0	1,001	9,907	1,164,780	2,283,487
1994	17,484	1,465	18,950	17,485	949	0	1,982	949	1,549	0	2,498	22,914	41,867
1995	23,706	7,595	31,300	17,863	3,387	10,847	1,899	1,309	0	0	1,309	35,306	66,607
1999	230,687	194,469	425,157	141,403	95,640	253,997	313,785	123,839	43,171	1,356	168,366	973,189	1,398,346
2000	248,548	952,496	1,201,044	31,132	195,166	243,495	148,668	35,059	12,573	738	48,370	666,834	1,867,878
2003	72,717	7,654	80,371	82,917	6,985	55,771	390,915	99,369	175,774	6,561	281,704	818,293	898,664
2004	347,648	136,331	483,979	338,119	127,521	52,962	26,311	68,737	5,855	8,008	82,600	627,510	1,111,488
2005	854,570	212,211	1,066,782	652,400	241,781	90,170	47,959	20,182	6,616	2,730	29,529	1,061,843	2,128,625
2006	152,412	372,418	524,829	133,520	262,003	138,544	185,052	42,346	460,626	35,311	538,282	1,257,405	1,782,234

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Table 9.–Page 2 of 5.

	Females			Number sublegal males by size (CW)				Recruit	Postrecruit Males (CW)		Legal	Total	Total
Year	Juvenile	Mature	Total	<70 mm	70-91 mm	92-114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
2007	436,607	1,997,302	2,433,907	255,144	109,448	308,033	304,795	104,411	211,536	17,922	333,869	1,311,287	3,745,195
2008	324,108	1,990,322	2,314,430	210,497	217,649	246,376	554,496	98,765	64,243	1,254	164,262	1,393,282	3,707,714
2009	176,340	1,306,064	1,482,403	80,051	54,218	122,947	284,196	108,250	105,576	2,988	216,814	758,229	2,240,631
2010	200,948	386,350	587,298	131,427	27,375	30,870	7,382	1,973	1,187	0	3,160	200,215	787,512
2011	25,900	253,899	279,797	29,250	24,995	64,648	40,142	2,167	6,223	1,112	9,502	168,538	448,334
2012	170,447	503,998	674,443	123,914	64,170	169,249	380,611	20,623	215,056	9,546	245,225	983,166	1,657,610
2013	1,295,974	690,495	1,986,468	660,240	225,539	149,244	128,209	6,738	20,450	0	27,188	1,190,420	3,176,887
2014	290,482	157,233	447,717	313,882	771,861	718,719	186,156	8,170	1,786	0	9,955	2,000,573	2,448,288
2015	408,740	94,026	502,766	308,172	117,455	140,342	156,817	18,733	0	0	18,733	741,522	1,244,287
2016	33,078	8,843	41,922	23,949	9,495	51,148	13,270	1,595	0	0	1,595	99,458	141,378
2017	314,108	56,016	370,124	215,568	5,086	16,914	52,304	12,012	1,001	0	13,013	302,887	673,011
MAKUSHIN/SKAN BAY SECTION													
1990	436,275	312,831	749,107	364,641	81,416	75,879	124,445	6,890	22,707	0	29,597	675,979	1,425,087
1991	88,736	148,942	237,678	75,775	84,849	51,819	70,174	5,911	29,119	2,576	37,607	320,225	557,904
1994	147,313	155,633	302,945	126,475	19,046	94,473	105,286	34,931	1,581	0	36,512	381,793	684,740
1995	124,369	84,783	209,153	91,971	24,957	37,454	49,905	2,748	8,366	0	11,114	215,403	424,557
1999	533,823	78,127	611,953	482,041	37,346	49,059	39,597	4,719	9,194	0	13,914	621,957	1,233,910
2000	550,513	151,362	701,878	437,255	120,829	42,435	17,909	2,334	0	0	2,334	620,762	1,322,639
2003	65,930	1,142,007	1,207,935	47,632	80,167	265,981	477,210	190,192	74,237	1,159	265,590	1,136,578	2,344,513
2004	156,453	683,603	840,058	160,706	51,556	218,704	365,270	357,930	50,813	7,787	416,529	1,212,765	2,052,824
2005	315,191	227,137	542,327	340,307	23,280	34,802	306,036	158,760	208,820	6,667	374,247	1,078,670	1,620,999
2006	607,078	137,178	744,256	557,140	37,877	33,140	100,740	22,650	115,266	6,759	144,675	873,574	1,617,831
2007	3,301,201	994,288	4,295,493	1,667,147	762,538	427,116	137,992	9,453	163,912	1,734	175,099	3,169,894	7,465,386
2008	399,175	1,384,630	1,783,806	284,038	312,862	322,728	165,870	3,359	155,220	4,591	163,169	1,248,668	3,032,473
2009	266,405	1,754,159	2,020,562	216,307	166,619	477,432	208,790	7,698	33,556	0	41,255	1,110,405	3,130,968
2010	158,522	165,485	324,008	114,236	21,102	83,603	208,500	49,236	16,968	0	66,207	493,648	817,656
2011	192,552	251,856	444,409	129,393	28,940	65,061	220,388	25,163	58,782	0	83,945	527,729	972,136
2012	177,070	293,261	470,330	119,538	96,849	57,403	100,816	7,599	20,165	2,316	30,080	404,690	875,020
2013	436,106	779,459	1,215,565	313,584	44,298	125,020	129,427	10,117	37,061	2,925	50,103	662,434	1,877,998
2014	287,464	690,641	978,102	146,459	162,857	167,488	185,768	11,774	72,882	2,000	86,656	749,232	1,727,334
2015	314,241	454,918	769,160	291,192	72,972	145,617	143,173	38,162	21,779	0	59,941	712,900	1,482,059
2016	171,647	1,002,700	1,174,348	89,723	49,441	60,260	112,474	4,676	32,768	819	38,262	350,163	1,524,511
2017	1,791,483	660,675	2,452,158	1,481,760	210,669	200,709	185,735	1,376	105,755	0	107,131	2,186,005	4,638,162

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Table 9.–Page 3 of 5.

	Females			Number sublegal males by size (CW)				Recruit	Postrecruit Males (CW)		Legal	Total	Total
Year	Juvenile	Mature	Total	<70 mm	70-91 mm	92-114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
Beaver Inlet													
1990	943,425	190,116	1,133,540	931,192	229,362	97,860	27,006	3,088	767	0	3,855	1,289,273	2,422,812
1991	468,593	135,739	604,330	445,942	177,808	72,225	21,813	2,114	0	0	2,114	719,903	1,324,235
1994	38,944	51,504	90,449	33,987	6,696	41,015	47,599	17,014	767	0	17,781	147,078	237,528
1995	702,632	28,569	731,200	555,875	15,770	6,518	8,459	3,681	0	0	3,681	590,303	1,321,504
1999	159,645	14,596	174,242	145,888	7,207	5,851	1,534	0	1,534	0	1,534	162,014	336,256
2000	249,885	19,436	269,322	215,525	19,500	11,892	2,577	0	0	0	0	249,491	518,813
2003	70,873	94,779	165,650	135,143	109,191	51,213	5,409	0	0	0	0	300,956	466,607
2006	369,585	62,136	431,720	323,375	19,289	31,636	13,844	829	0	0	829	388,974	820,694
2009	228,442	69,778	298,220	207,989	35,479	87,445	14,992	1,003	0	0	1,003	346,907	645,128
2012	334,008	11,153	345,161	304,359	2,508	6,042	8,550	0	1,161	0	1,161	322,619	667,781
2015	30,257	65,922	96,178	27,473	17,206	32,770	7,702	0	0	0	0	85,151	181,330
Usof Bay													
1990	97,777	24,414	122,190	97,607	96,108	28,041	1,957	541	0	0	541	224,252	346,442
1991	84,679	69,979	154,658	219,357	245,549	63,800	26,863	4,396	2,625	0	7,021	562,591	717,249
1994	15,007	3,500	18,507	13,151	8,412	5,957	7,601	875	0	0	875	35,995	54,501
1995	32,329	3,301	35,630	40,438	9,693	6,681	4,375	0	2,625	0	2,625	63,812	99,442
1999	76,557	10,787	87,344	67,910	12,590	2,405	0	0	0	0	0	82,905	170,250
2000	50,848	7,689	58,537	47,161	4,465	4,465	0	0	0	0	0	56,089	114,626
2003	29,595	67,884	97,479	32,895	85,721	148,258	29,458	0	873	0	873	297,204	394,683
Akun Bay													
1990	1,991	1,063	3,055	0	0	0	0	0	0	0	0	0	3,055
1991	0	0	0	928	0	0	0	0	0	0	0	928	928
1994	0	0	0	0	0	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0	0	0	0	0	0
1999	4,253	1,063	5,317	0	4,253	4,253	0	0	0	0	0	8,506	13,823
2000	3,158	5,317	8,474	6,348	3,190	0	0	0	0	0	0	9,537	18,012
2003	0	3,055	3,055	0	1,063	2,127	0	0	0	0	0	3,190	6,245
Pumicestone Bay													
1990	48,373	0	48,373	48,114	668	0	0	0	0	0	0	48,783	97,156
1991	23,621	228	23,849	18,668	5,696	1,139	0	0	228	0	228	25,732	49,580
1994	6,350	896	7,246	5,635	5,225	5,149	668	0	0	0	0	16,678	23,924
1995	10,055	3,493	13,550	9,289	3,903	3,698	1,337	0	0	0	0	18,228	31,777
1999	12,836	0	12,836	8,408	1,153	0	1,485	743	743	0	1,485	12,531	25,367

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Table 9.–Page 4 of 5.

	Females			Number sublegal males by size (CW)				Recruit	Postrecruit Males (CW)		Legal	Total	Total
Year	Juvenile	Mature	Total	<70 mm	70-91 mm	92-114 mm	>114 mm	males	<165 mm	≥165 mm	males	males	crab
2000	3,253	1,485	4,738	342	743	0	2,970	743	0	0	743	4,798	9,536
2003	225,266	20,529	245,795	276,451	76,811	25,134	2,673	668	0	0	668	381,738	627,533
2004	49,246	873	50,120	31,511	1,747	2,673	668	0	0	0	0	36,601	86,719
2005	45,475	19,382	64,857	41,520	19,382	48,790	7,352	1,337	668	0	2,005	119,050	183,907
2006	35,646	10,532	46,178	51,545	17,266	17,393	6,912	0	456	0	456	93,571	139,748
2007	230,825	2,570	233,394	224,319	29,987	2,570	0	0	0	0	0	256,876	490,270
2008	42,835	4,466	47,301	67,083	128,050	32,195	1,936	0	0	0	0	229,263	276,565
2009	10,273	1,181	11,453	9,137	5,026	9,347	1,437	0	0	0	0	24,948	36,401
2010	17,943	4,614	22,557	20,896	11,032	11,431	5,526	0	0	0	0	48,883	71,441
2011	251,840	513	252,353	231,496	2,563	0	0	1,376	0	0	1,376	235,436	487,789
2012	97,844	9,741	107,585	87,508	13,586	3,076	769	256	0	0	256	105,194	212,779
2013	59,780	15,525	75,305	33,502	14,468	8,780	2,021	1,352	0	0	1,352	60,122	135,427
2014	17,919	655	18,575	13,589	2,877	655	655	0	0	0	0	17,777	36,352
Cape Idak													
1990	3,255	3,662	6,917	0	2,713	0	2,713	0	3,255	0	3,255	8,680	15,597
1991	119,622	2,848	122,470	122,470	3,797	949	1,898	0	0	0	0	129,114	251,585
1994	0	949	949	2,848	5,697	0	0	0	0	0	0	8,545	9,494
1995	0	0	0	0	1,898	0	0	0	0	0	0	1,898	1,898
1999	949	2,848	3,798	3,798	3,798	1,898	0	0	0	0	0	9,494	13,292
2000	12,342	5,697	18,039	18,038	19,937	9,493	949	0	0	0	0	48,419	66,456
2003	0	6,646	6,646	1,898	9,493	18,038	0	0	0	0	0	29,431	36,076
Inanudak Bay													
1990	4,462	0	4,462	0	0	2,936	949	0	0	0	0	3,885	8,347
1994	2,904	0	2,904	1,452	0	0	0	0	0	0	0	1,452	4,356
EASTERN ALEUTIAN DISTRICT TOTALS													
1990	3,115,823	1,663,589	4,779,410	2,720,667	1,381,466	730,195	345,942	37,253	27,522	2,002	66,777	5,245,043	10,024,452
1991	2,511,579	1,073,462	3,585,036	2,616,033	1,037,368	754,327	517,388	34,618	45,263	3,577	83,460	5,008,580	8,593,619
1994	228,951	216,840	445,793	203,926	53,666	162,012	197,047	56,617	4,846	0	61,464	678,117	1,123,915
1995	912,168	133,437	1,045,607	727,913	67,814	96,983	164,771	8,687	19,718	0	28,405	1,085,888	2,131,497
1999	1,140,265	979,187	2,119,459	869,315	305,027	1,018,552	1,386,951	339,631	59,005	1,356	399,991	3,979,835	6,099,295
2000	1,127,622	1,387,063	2,514,688	763,829	376,054	478,117	496,646	124,504	29,637	738	154,878	2,269,523	4,784,208
2003	520,939	2,017,933	2,538,868	614,893	508,605	980,401	1,026,706	311,242	322,548	11,871	645,663	3,776,268	6,315,137
2004	685,764	1,809,571	2,495,338	603,375	408,439	564,836	615,674	436,995	79,881	17,785	534,659	2,726,984	5,222,319

-continued-

Table 9.–Page 5 of 5.

Year	Females			Number sublegal males by size (CW)				Recruit males	Postrecruit Males (CW)		Legal males	Total males	Total crab
	Juvenile	Mature	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	≥165 mm			
EASTERN ALEUTIAN DISTRICT TOTALS (continued)													
2005	1,342,527	960,387	2,302,914	1,119,126	480,689	362,322	632,123	230,725	225,856	10,584	467,165	3,061,427	5,364,343
2006	1,224,918	784,566	2,009,481	1,120,893	440,701	477,516	644,702	73,579	666,078	42,070	781,726	3,465,543	5,475,026
2007	4,100,429	3,347,569	7,447,997	2,254,713	1,118,443	1,070,295	759,170	123,585	380,423	19,656	523,664	5,726,283	13,174,281
2008	779,338	3,529,371	4,308,710	567,493	690,585	722,308	940,077	135,617	261,669	5,845	403,130	3,323,595	7,632,307
2009	720,671	4,046,182	4,766,848	527,159	293,742	834,583	881,963	179,899	201,742	4,945	386,586	2,924,039	7,690,888
2010	545,970	784,549	1,330,520	351,260	136,582	254,714	530,913	81,217	83,289	0	164,509	1,437,980	2,768,500
2011	489,479	794,274	1,283,752	410,637	72,826	195,169	449,048	32,504	80,077	1,112	113,693	1,241,376	2,525,125
2012	806,507	1,197,584	2,004,087	670,004	213,877	354,947	613,976	42,764	244,342	11,862	298,968	2,151,773	4,155,862
2013	2,201,514	1,554,591	3,756,105	1,388,644	385,144	408,713	328,537	21,912	70,155	2,925	94,993	2,606,030	6,362,134
2014	936,681	2,492,859	3,429,540	729,529	1,108,910	1,161,672	781,302	36,618	116,353	2,000	154,970	3,936,388	7,365,926
2015	940,934	808,529	1,749,464	835,845	269,663	331,931	320,709	56,895	21,779	0	78,674	1,836,831	3,586,292
2016	260,976	1,425,852	1,686,829	142,514	239,085	405,812	199,604	6,271	33,763	819	40,852	1,027,871	2,714,696
2017	2,285,154	4,605,478	6,890,632	1,824,594	403,021	503,484	336,278	13,388	115,479	0	128,867	3,196,245	10,086,877

Note: Beaver Inlet, Usof Bay, Akun Bay, Pumicestone Bay, Cape Idak, and Inanudak Bay are part of the General Section of the Eastern Aleutian Tanner crab District. There are no mature male abundance threshold levels or minimum fishery GHLs established for the General Section.

Table 10.–Dominant species by weight in the Eastern Aleutian Tanner crab District large-mesh bottom trawl survey, 2017.

Common name	Species name	% of catch by weight
Arrowtooth flounder	*Atheresthes stomias*	35.5
Walleye pollock	*Gadus chalcogrammus*	22.7
Flathead sole	*Hippoglossoides elassodon*	11.8
Tanner crab	*Chionoecetes bairdi*	7.8
Pacific cod	*Gadus macrocephalus*	4.6
Pacific halibut	*Hippoglossus stenolepis*	3.2
Rex sole	*Glyptocephalus zachirus*	2.4
Pacific ocean perch	*Sebastes alutus*	1.3
Sunflower seastar	*Pycnopodia helianthoides*	1.0
Yellow Irish lord	*Hemilepidotus jordani*	1.0
Sea Urchin	*Strongylocentrotus* spp.	0.9
Anemone	Order: Actinaria	0.8
Southern rock sole	*Lepidopsetta bilineata*	0.8
Northern rock sole	*Lepidopsetta polyxystra*	0.7
Rougheye rockfish	*Sebastes aleutianus*	0.6
Basket star	*Gorgonocephalus* sp.	0.5
Bering skate	*Bathyraja interrupta*	0.5
Oregon triton	*Fusitriton oregonensis*	0.4
Sponge	Phylum: Porifera	0.3
Hermit crab	Family: Paguridae	0.3
All others	(87 species)	3.1
		100.0

Table 11.–Near-bottom water temperature (°C) for warmest and coldest bays during the 2017 large-mesh bottom trawl survey and the average water temperature in those bays from 2008–2017 surveys.

		Year									
District	Location	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
KODIAK											
	Kukak Bay[a]	8.14	8.61	8.28	8.19	7.65	8.08	9.40	9.23	9.87	8.89
	Deadman Bay[b]	1.59	1.72	2.49	2.71	0.43	2.62	3.37	4.35	4.96	2.16
District Average		5.48	5.35	6.17	5.81	5.30	5.49	6.44	6.59	7.46	6.27
CHIGNIK											
	Kujulik Bay[c]	5.56	6.63	7.26	5.90	6.92	6.13	7.63	7.94	8.30	7.37
	Kuiukta Bay[d]	5.23	5.66	5.11	4.37	3.86	4.76	5.26	5.74	6.40	4.12
District Average		5.67	5.41	6.58	5.26	6.11	5.18	7.08	6.94	7.18	6.07
SOUTH PENINSULA											
	Cold Bay[a]	7.98	9.01	8.45	7.99	8.12	9.35	10.57	10.61	10.38	8.83
	Sanak Island[e]	4.59	4.06	5.14	4.97	3.98	4.97	4.91	5.94	6.47	4.28
District Average		5.21	5.52	6.12	5.42	5.38	5.82	6.66	7.17	7.13	5.8
EASTERN ALEUTIAN											
	Kalekta Bay[f]	5.96	5.47	6.42	6.42	5.90	8.35	7.92	7.32	8.50	7.37
	Makushin Bay[b]	4.35	4.31	4.57	4.71	4.13	4.72	4.92	5.44	5.75	5.04
District Average		4.90	5.06	5.34	5.17	5.06	5.83	6.03	6.57	6.64	5.84
Survey Average		5.40	5.38	6.16	5.61	5.40	5.56	6.55	6.78	7.30	6.1

Note: Temperatures presented are the average temperature of all hauls within the area of interest (bay, district, or entire survey).

[a] Kukak Bay and Cold Bay had the warmest average haul temperatures in their respective districts, 2008–2017.

[b] Deadman Bay and Makushin Bay had the coolest average haul temperatures in their respective districts, 2008–2017.

[c] Kujulik Bay had the warmest average haul temperatures in the Chignik District only in 2011, 2013, 2016, and 2017.

[d] Kuiukta Bay had the coolest average haul temperatures in the Chignik District except in 2009 and 2013.

[e] Sanak Island had the coolest average haul temperatures in the South Peninsula District except in 2008, 2009, 2011, 2013, and 2016.

[f] Kalekta Bay had the warmest average haul temperatures in the Eastern Aleutian District except in 2009 and 2015.

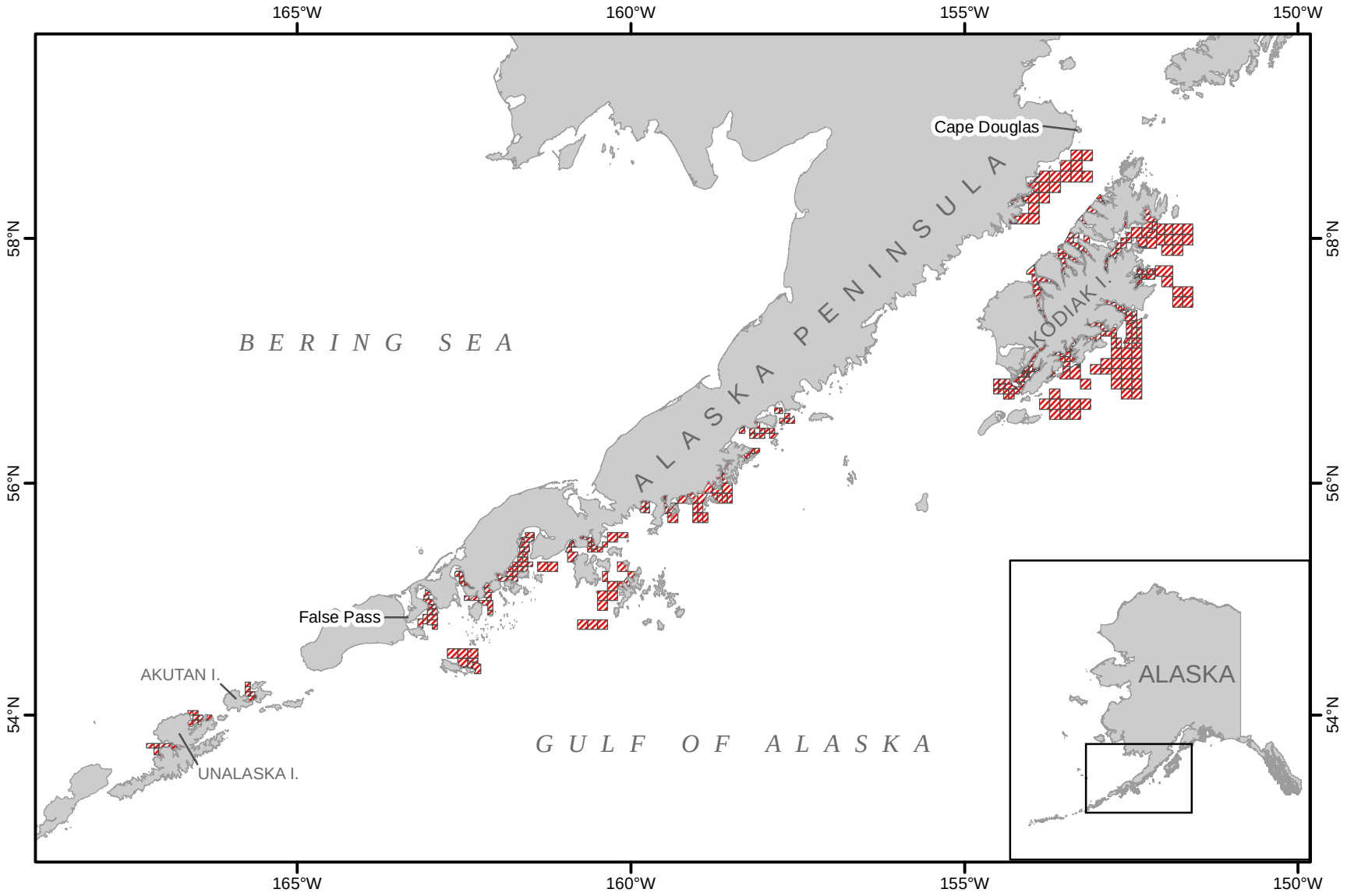

Figure 1.–Large-mesh bottom trawl survey stations, 2017.

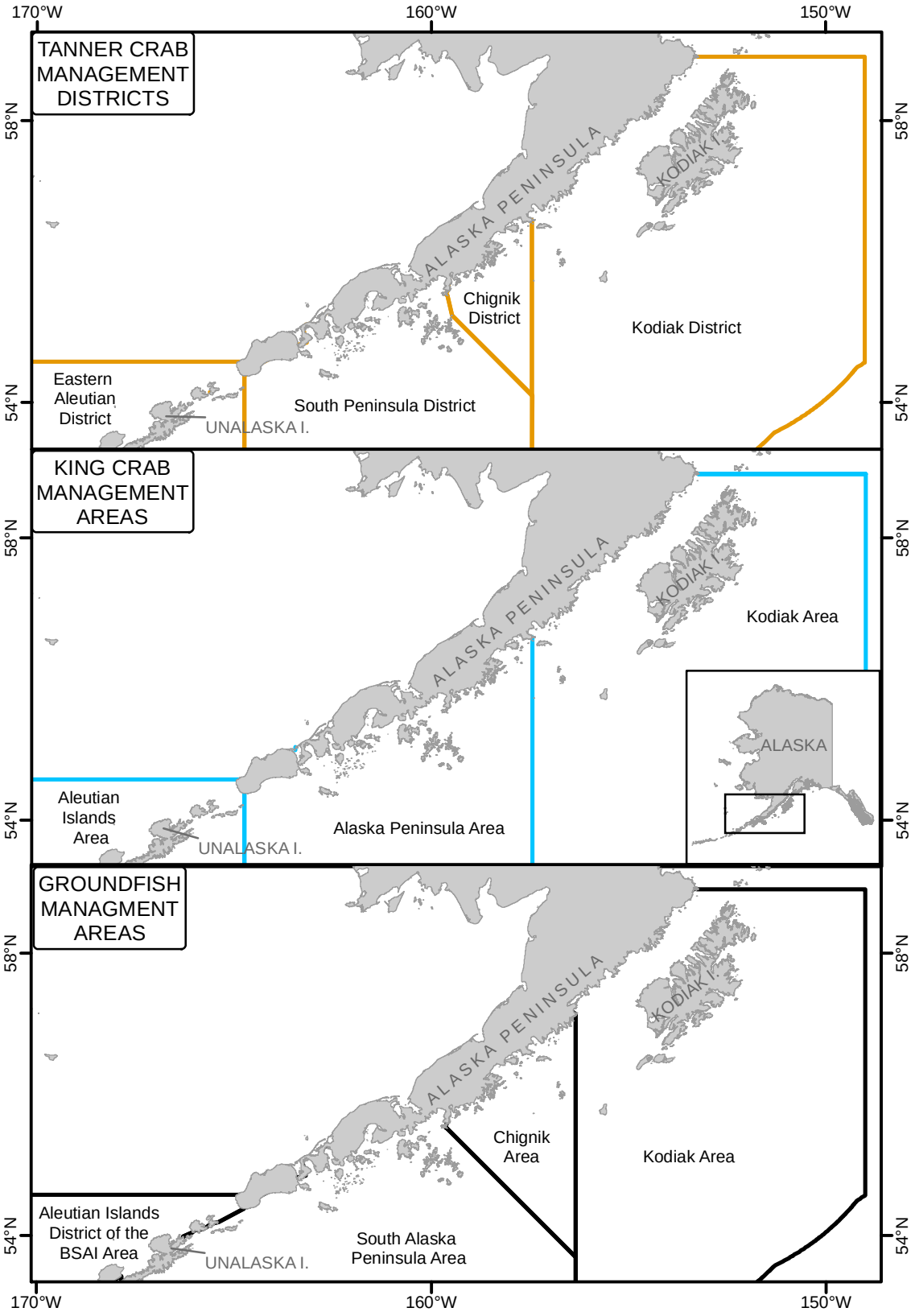

Figure 2.–Tanner crab, king crab, and groundfish management units in the bottom trawl survey area.

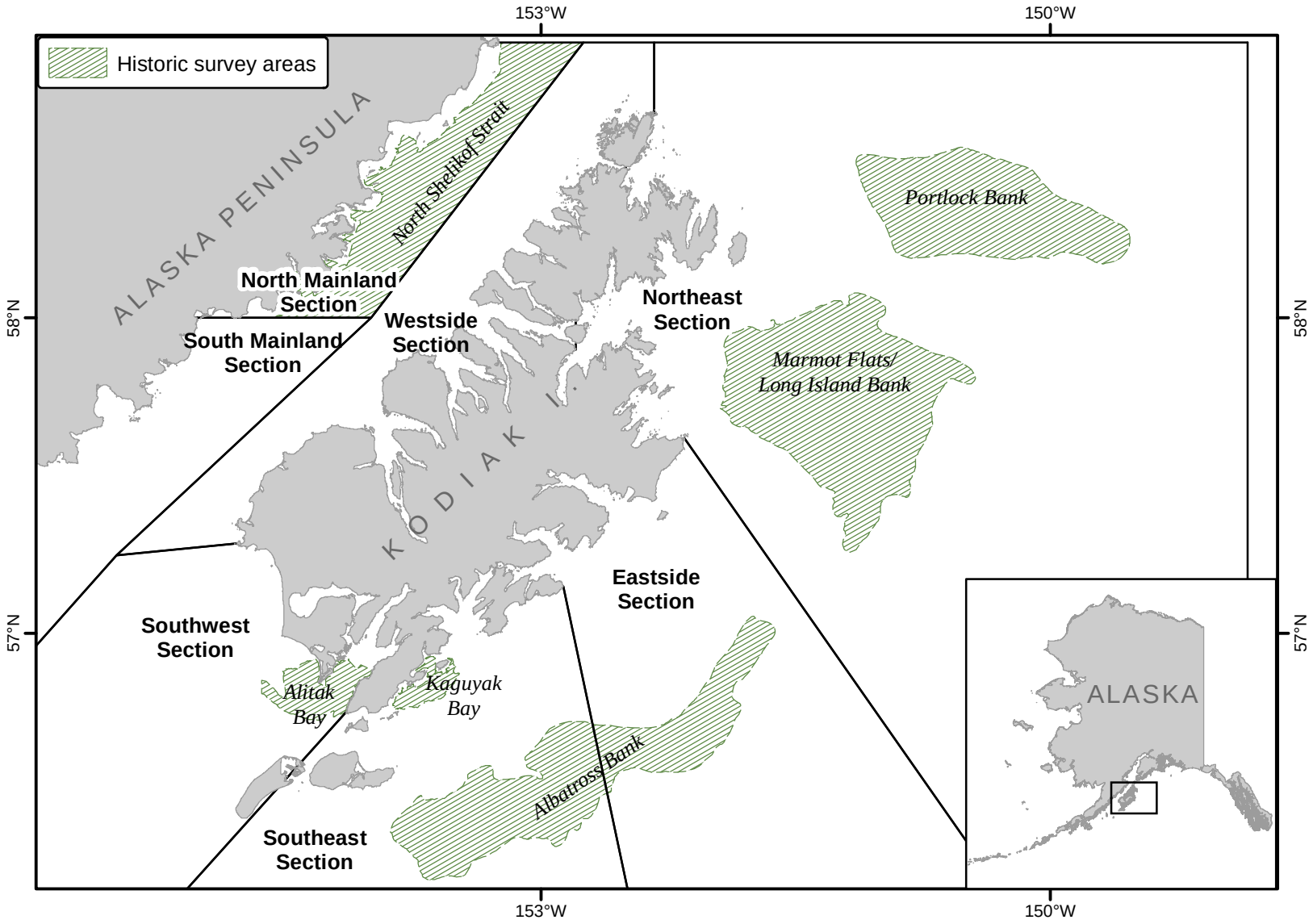

Figure 3.–Historic trawl survey areas and current Tanner crab management sections in the Kodiak District.

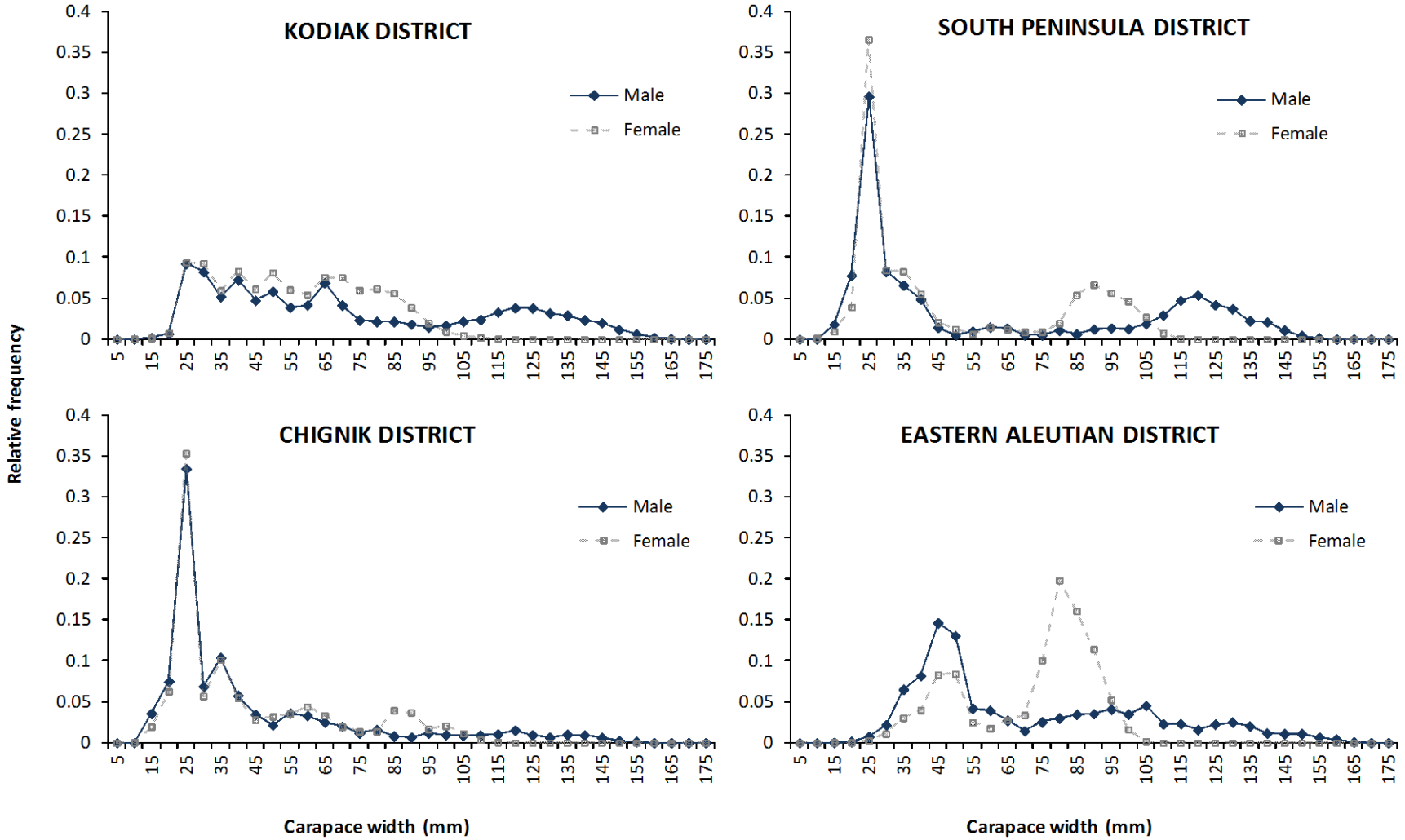

Figure 4.–Tanner crab relative size frequency by sex and district from the 2017 large-mesh bottom trawl survey.

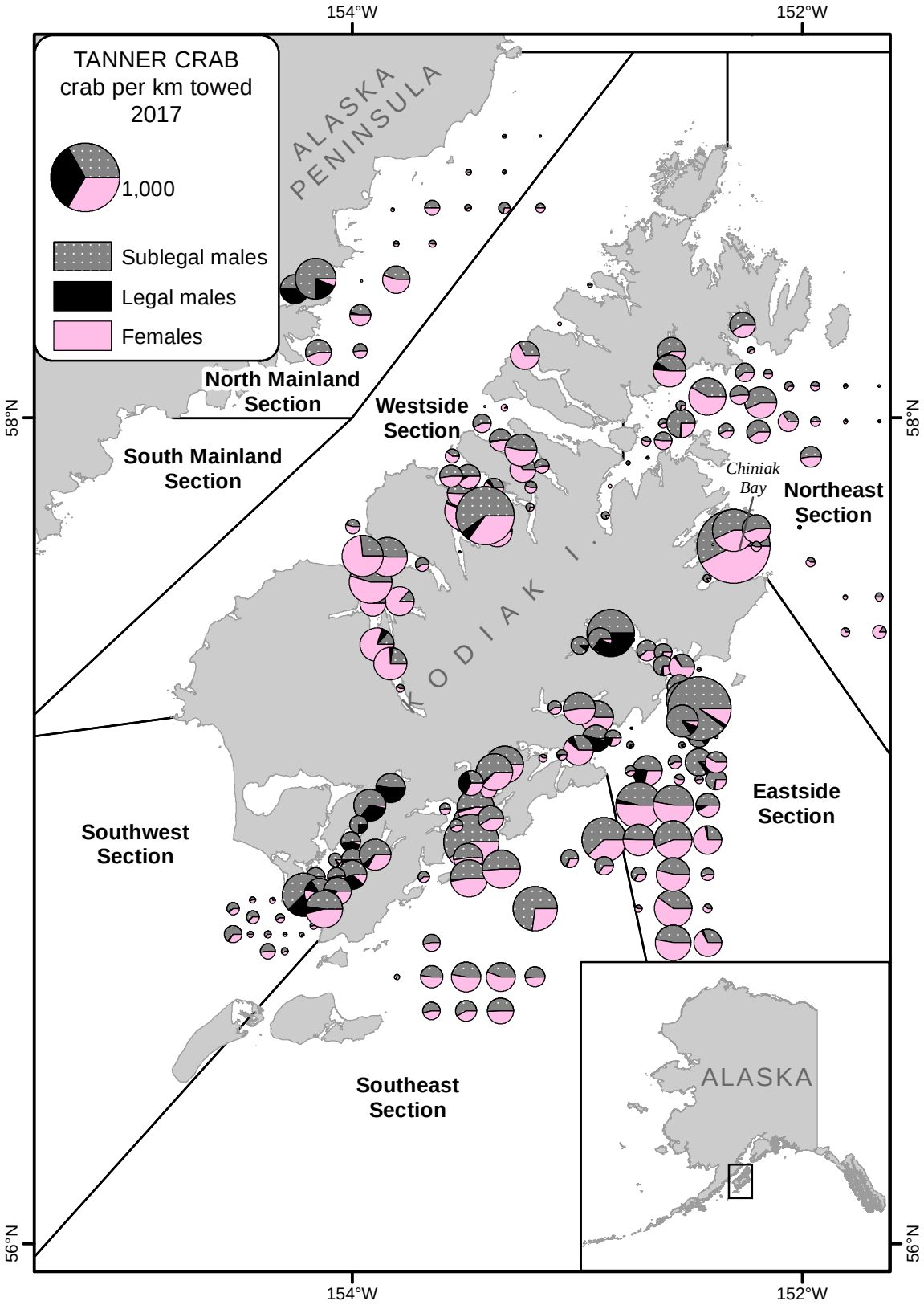

Figure 5.–Number of Tanner crab per kilometer towed in the 2017 Kodiak District large-mesh bottom trawl survey.

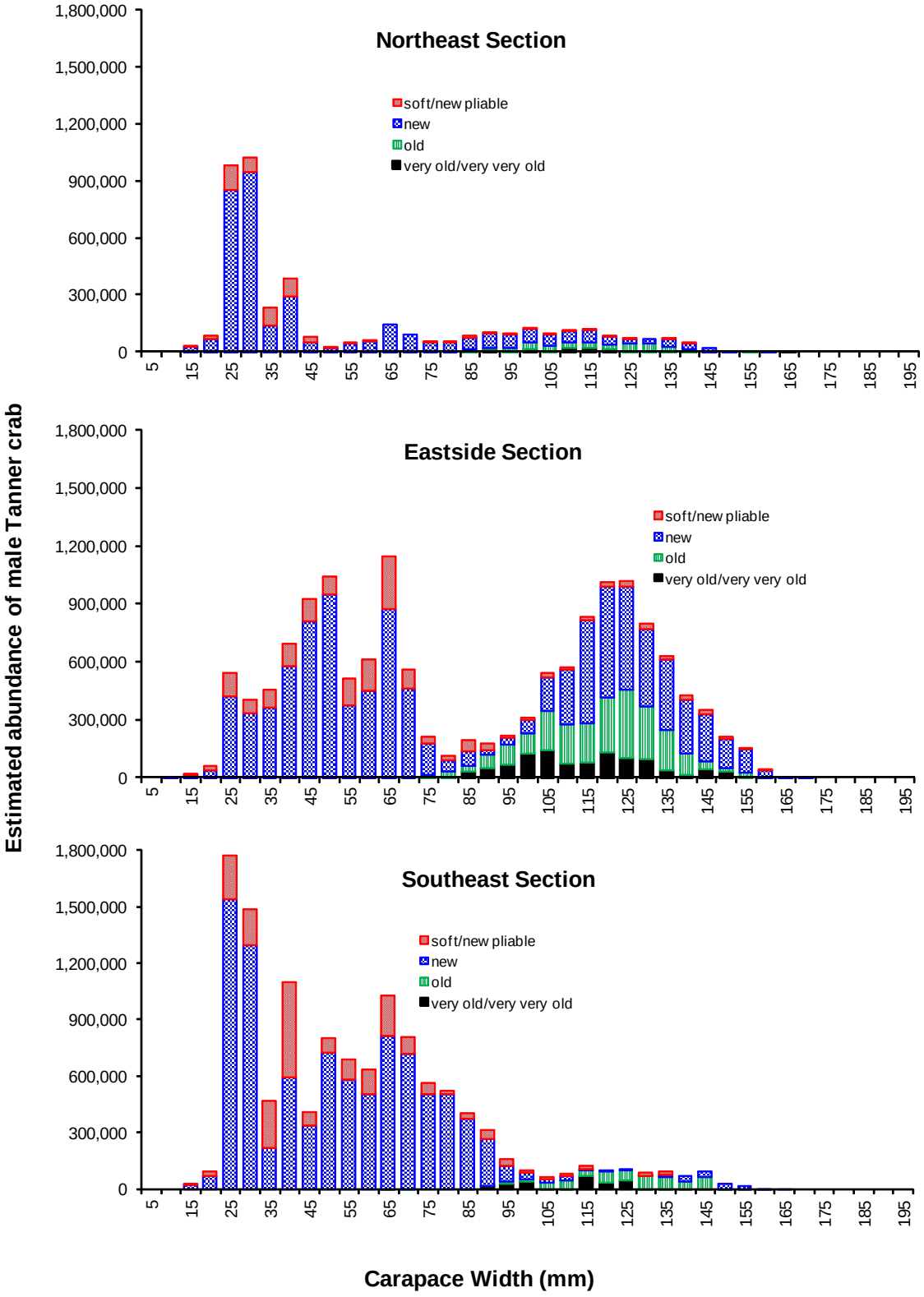

Figure 6.–Tanner crab male abundance estimate by carapace width and shell condition from the Northeast, Eastside, and Southeast sections of the 2017 Kodiak District large-mesh bottom trawl survey.

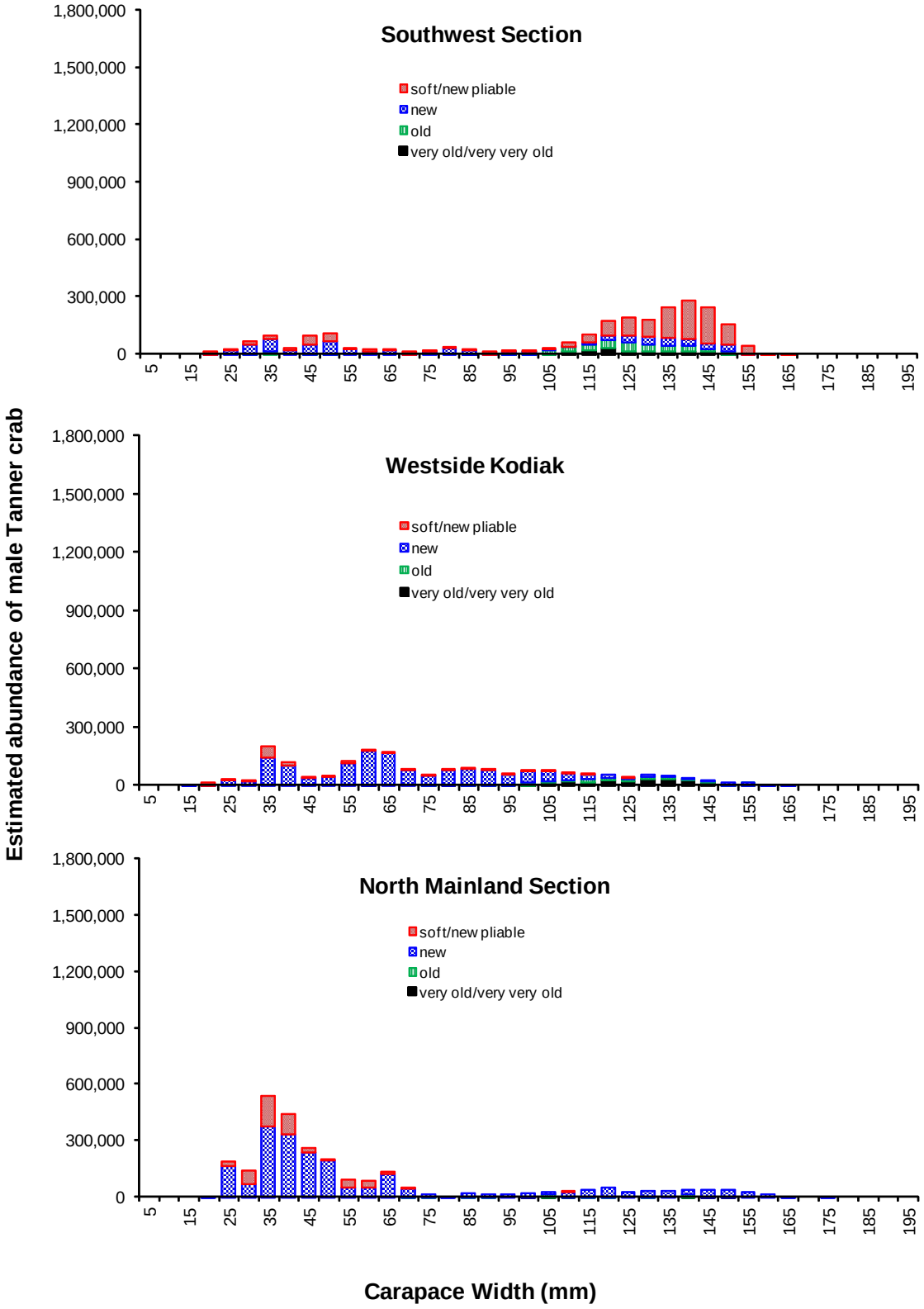

Figure 7.–Tanner crab male abundance estimate by carapace width and shell condition from the Southwest, Westside, and North Mainland sections of the 2017 Kodiak District large-mesh bottom trawl survey.

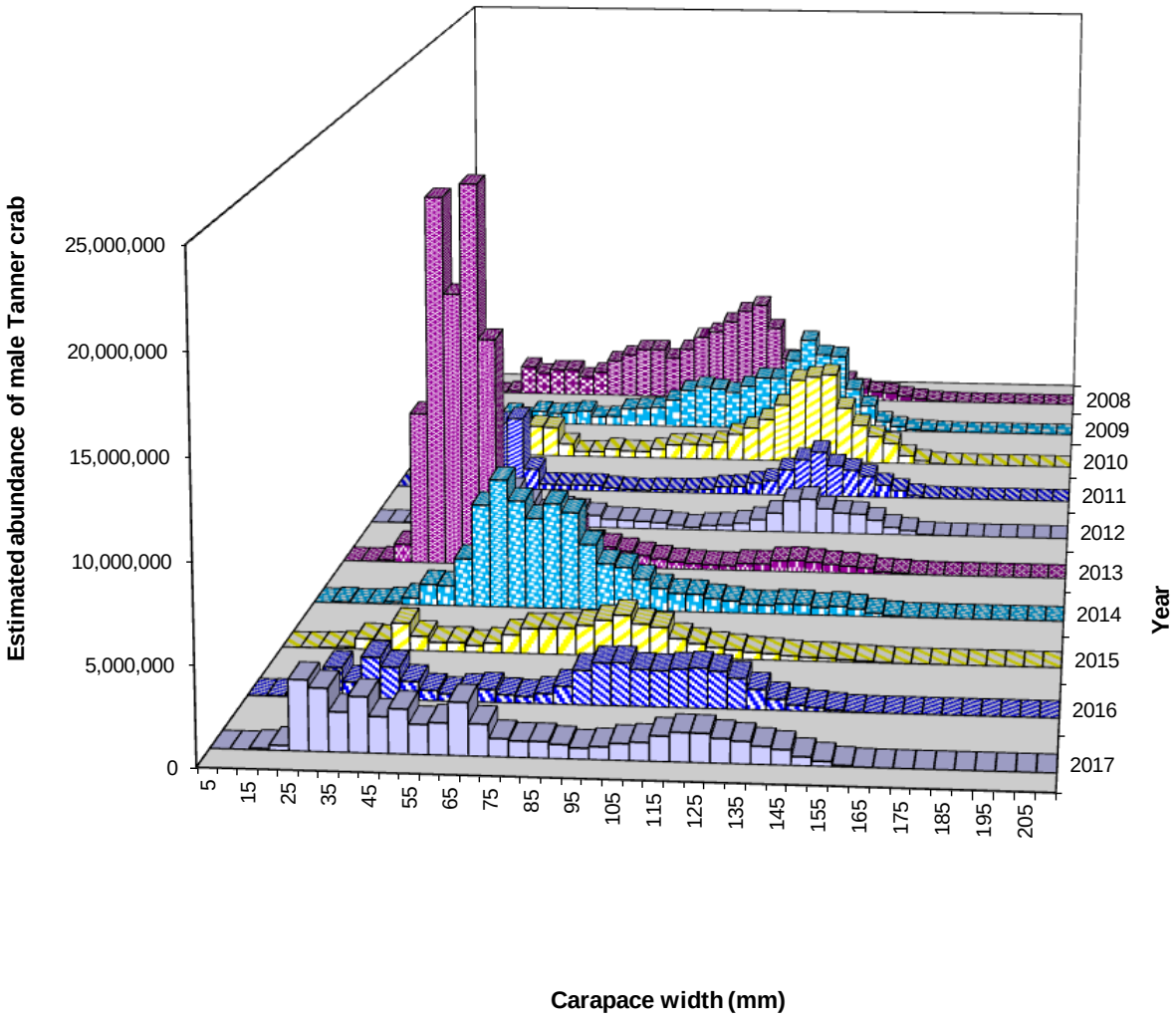

Figure 8.–Tanner crab male abundance estimate by carapace width in the Kodiak District large-mesh bottom trawl surveys, 2008–2017.

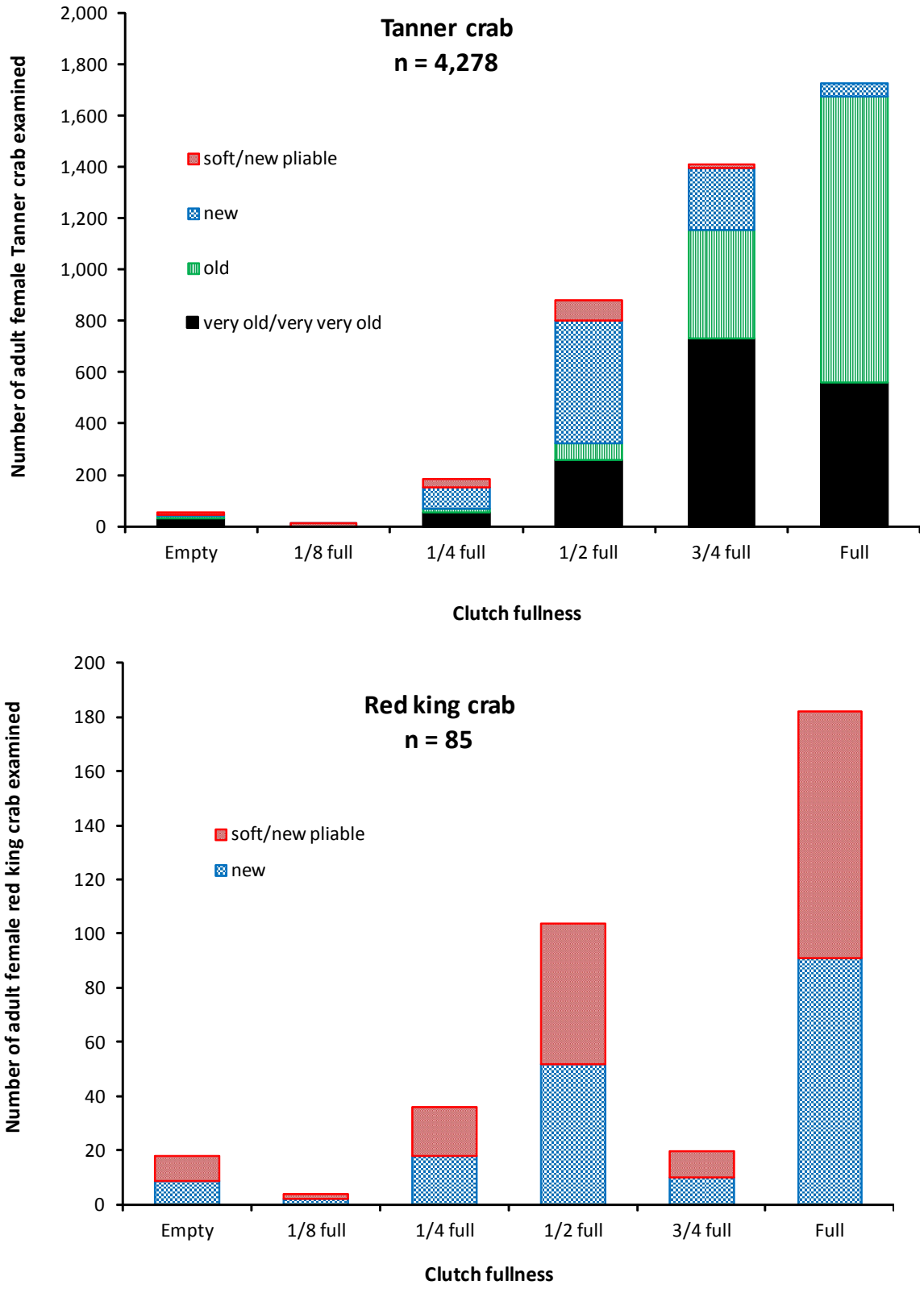

Figure 9.–Tanner crab and red king crab mature female egg clutch fullness by shell condition in the Kodiak District large-mesh bottom trawl survey, 2017.

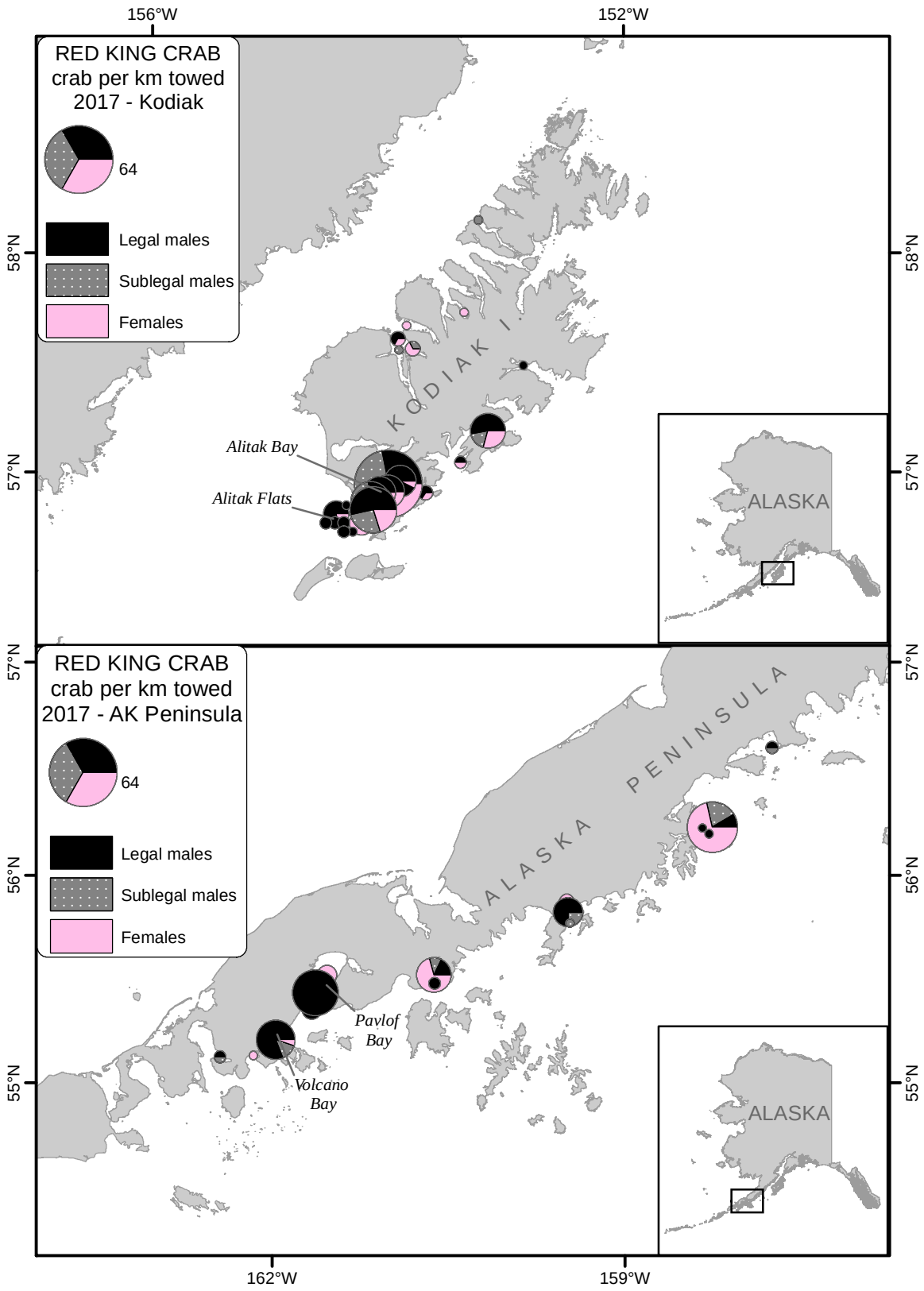

Figure 10.–Number of red king crab per kilometer towed in the 2017 Kodiak (upper) and Alaska Peninsula (lower) areas large-mesh bottom trawl survey.

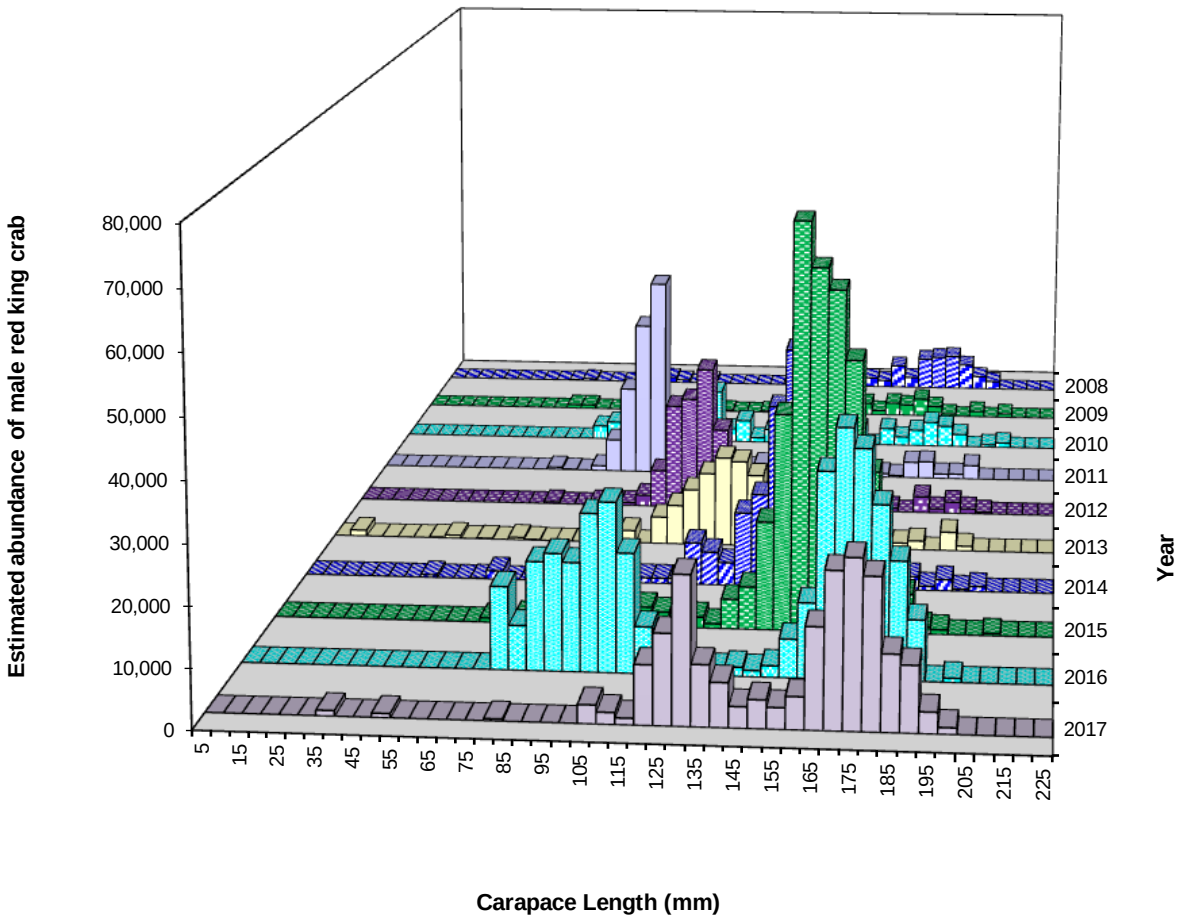

Figure 11.–Red king crab male abundance estimate by carapace length in the Kodiak Area large-mesh bottom trawl surveys, 2008–2017.

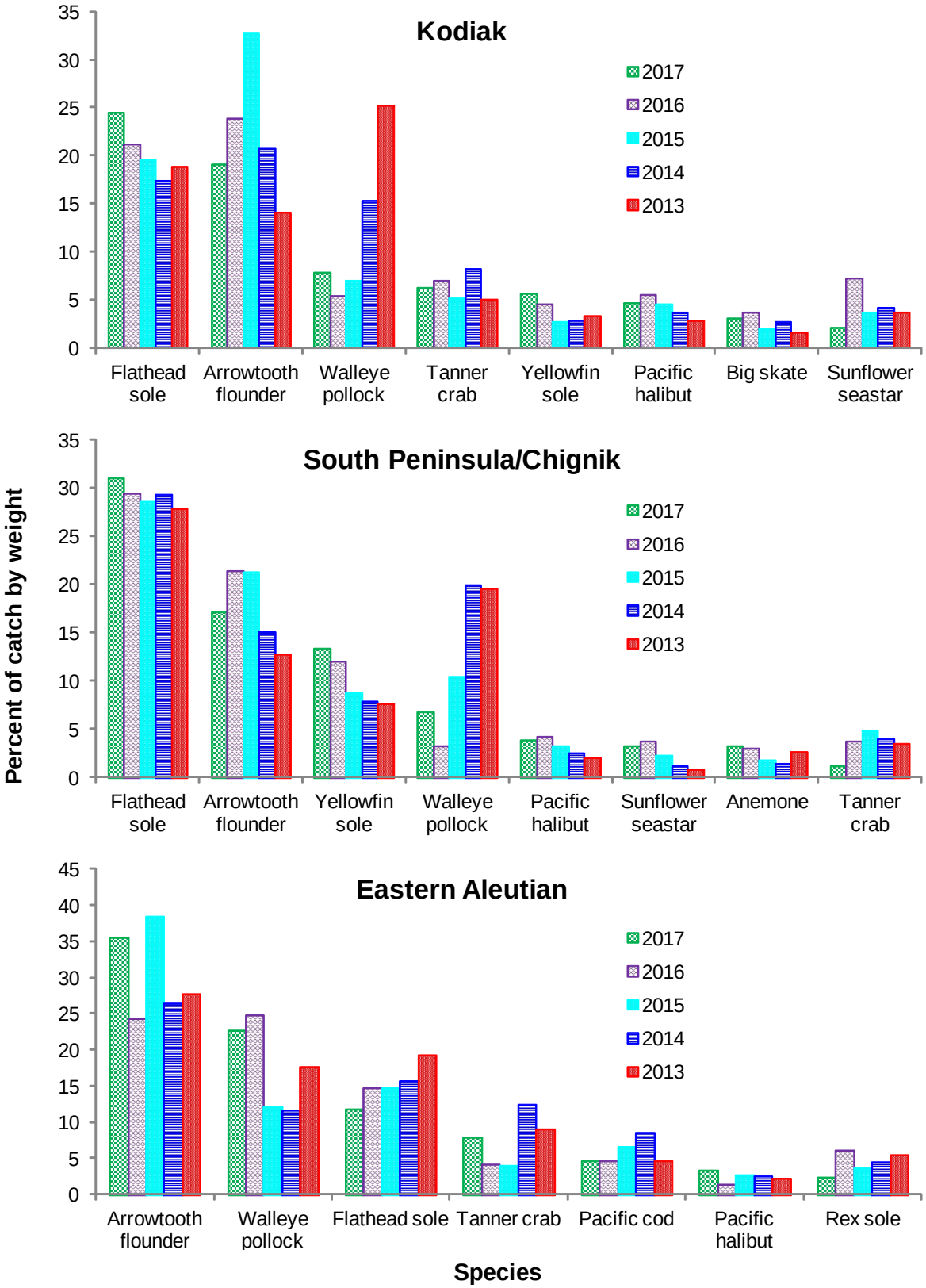

Figure 12.–Top species caught by weight in the large-mesh bottom trawl surveys by district, 2013–2017.

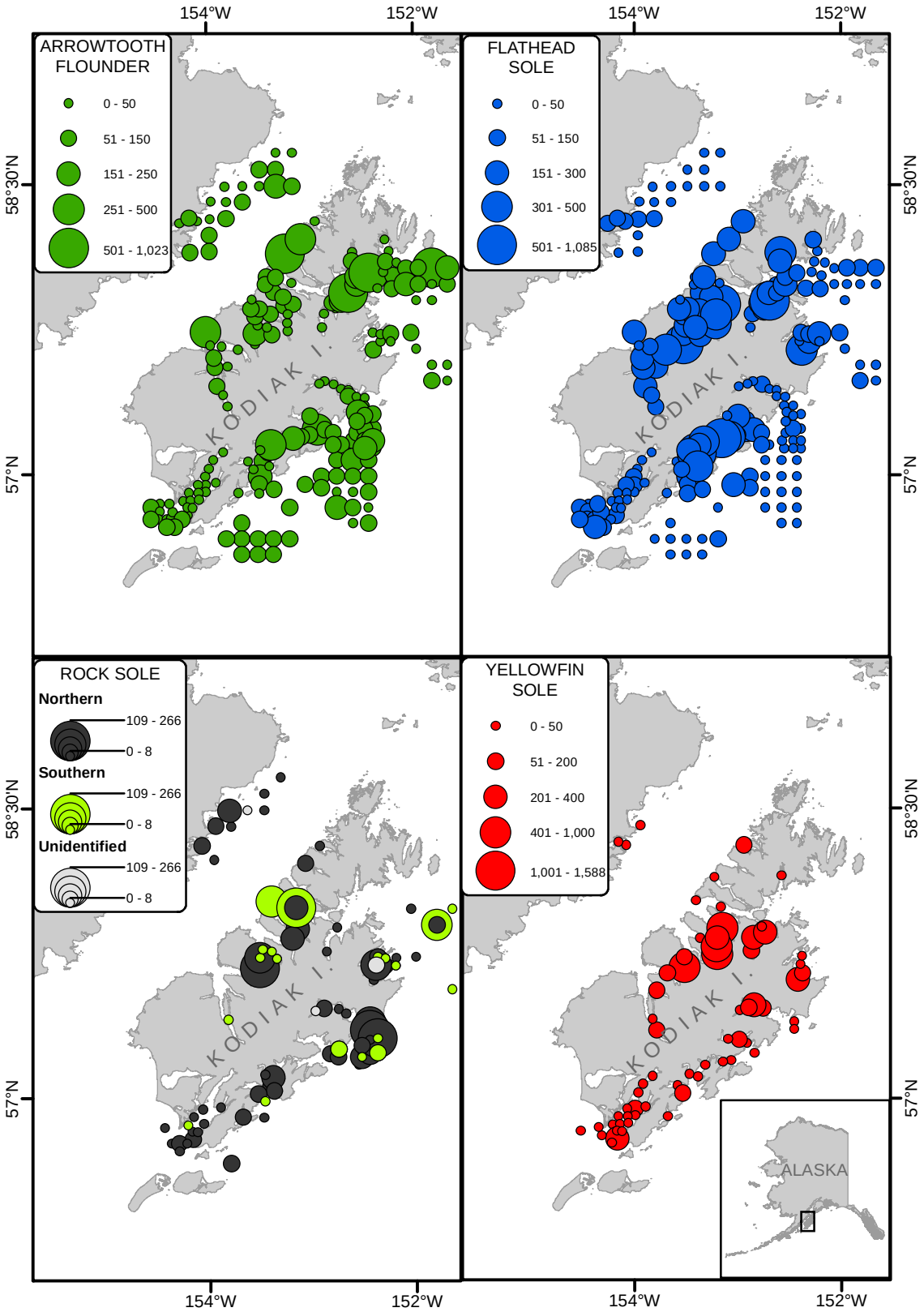

Figure 13.–Arrowtooth flounder, flathead sole, rock sole, and yellowfin sole catch in kilograms per kilometer towed from the 2017 Kodiak Area large-mesh bottom trawl survey.

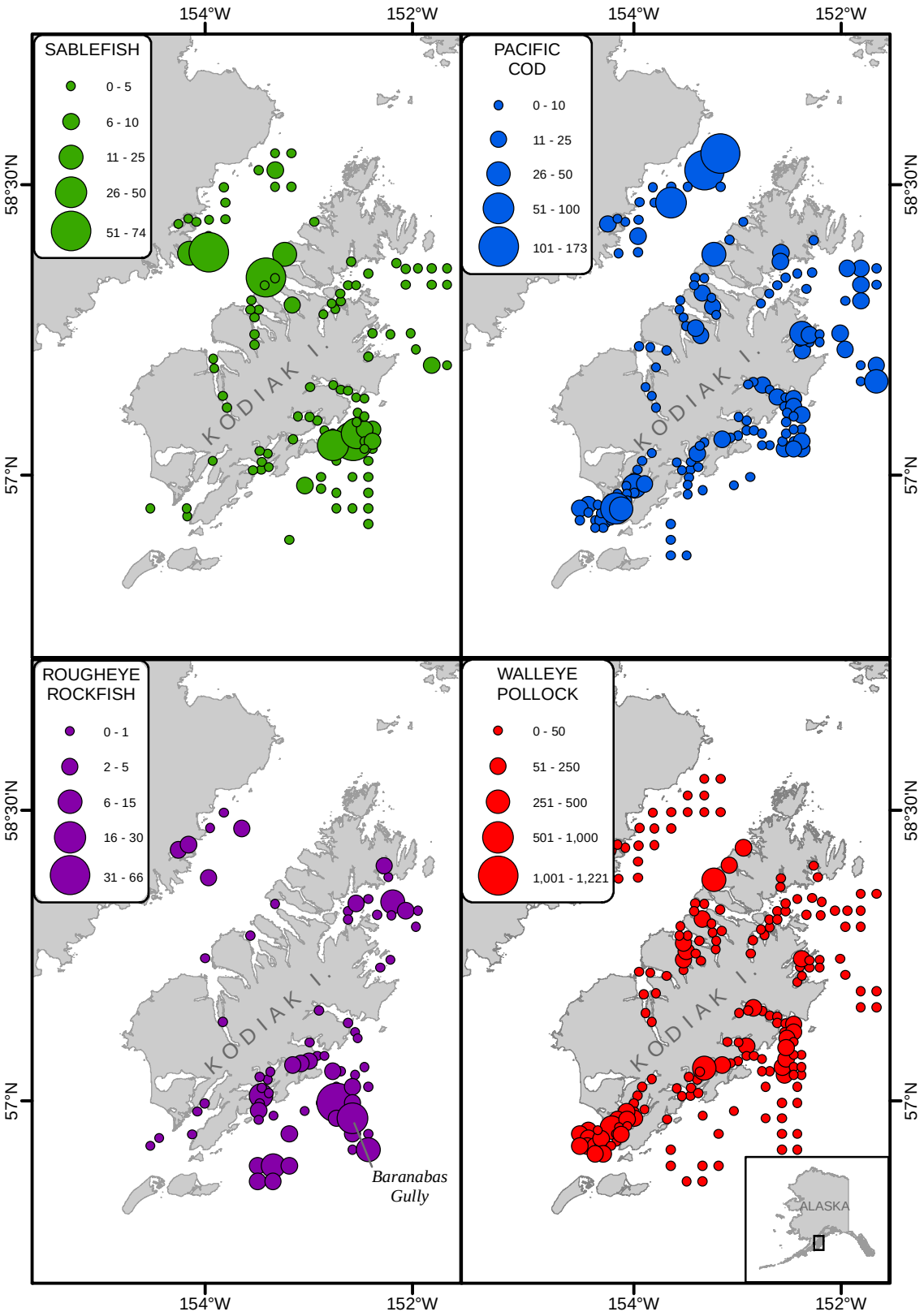

Figure 14.–Sablefish, Pacific cod, rougheye rockfish, and walleye pollock catch in kilograms per kilometer towed from the 2017 Kodiak Area large-mesh bottom trawl survey.

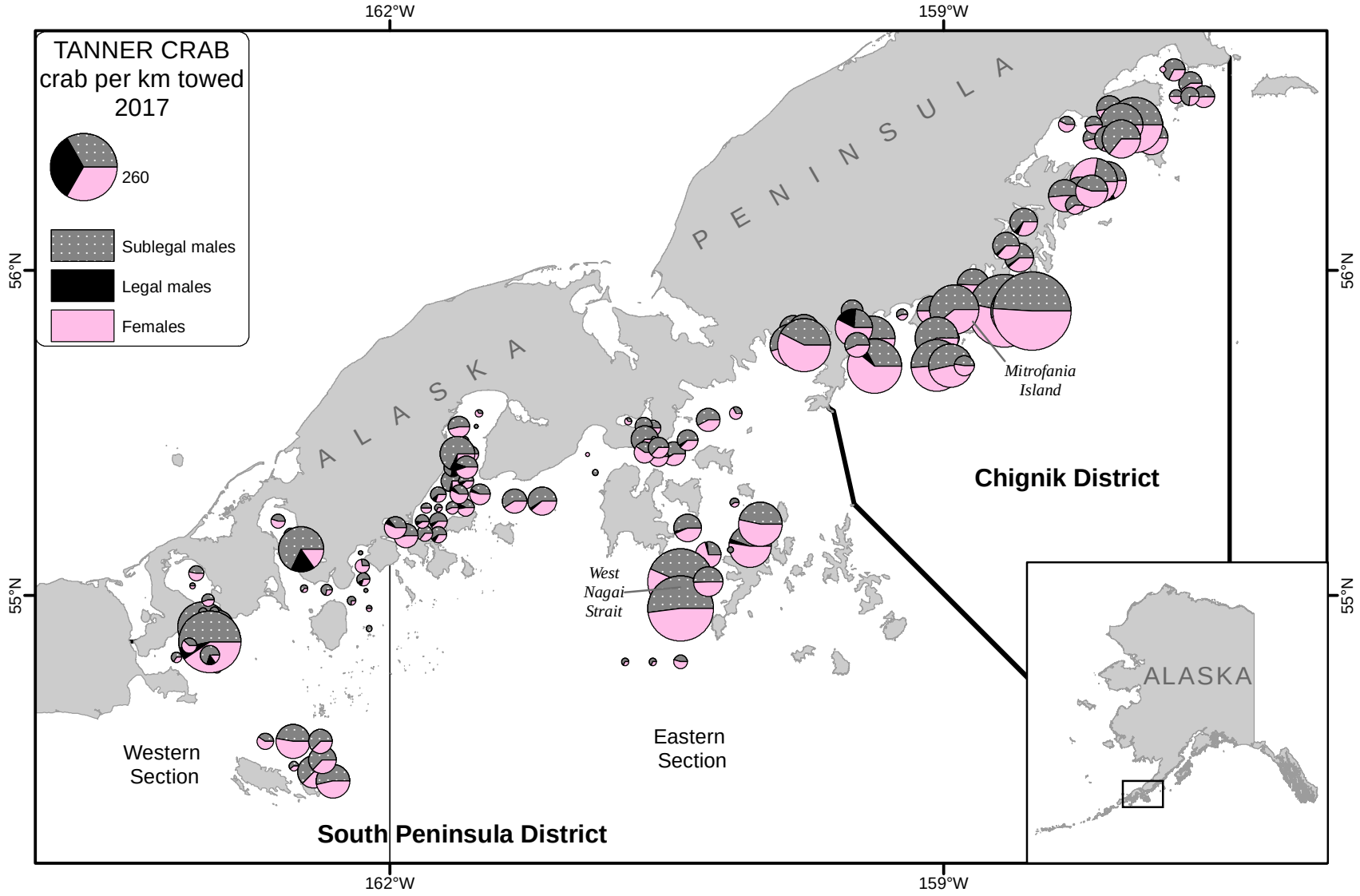

Figure 15.–Number of Tanner crab per kilometer towed in the 2017 South Peninsula and Chignik districts large-mesh bottom trawl survey.

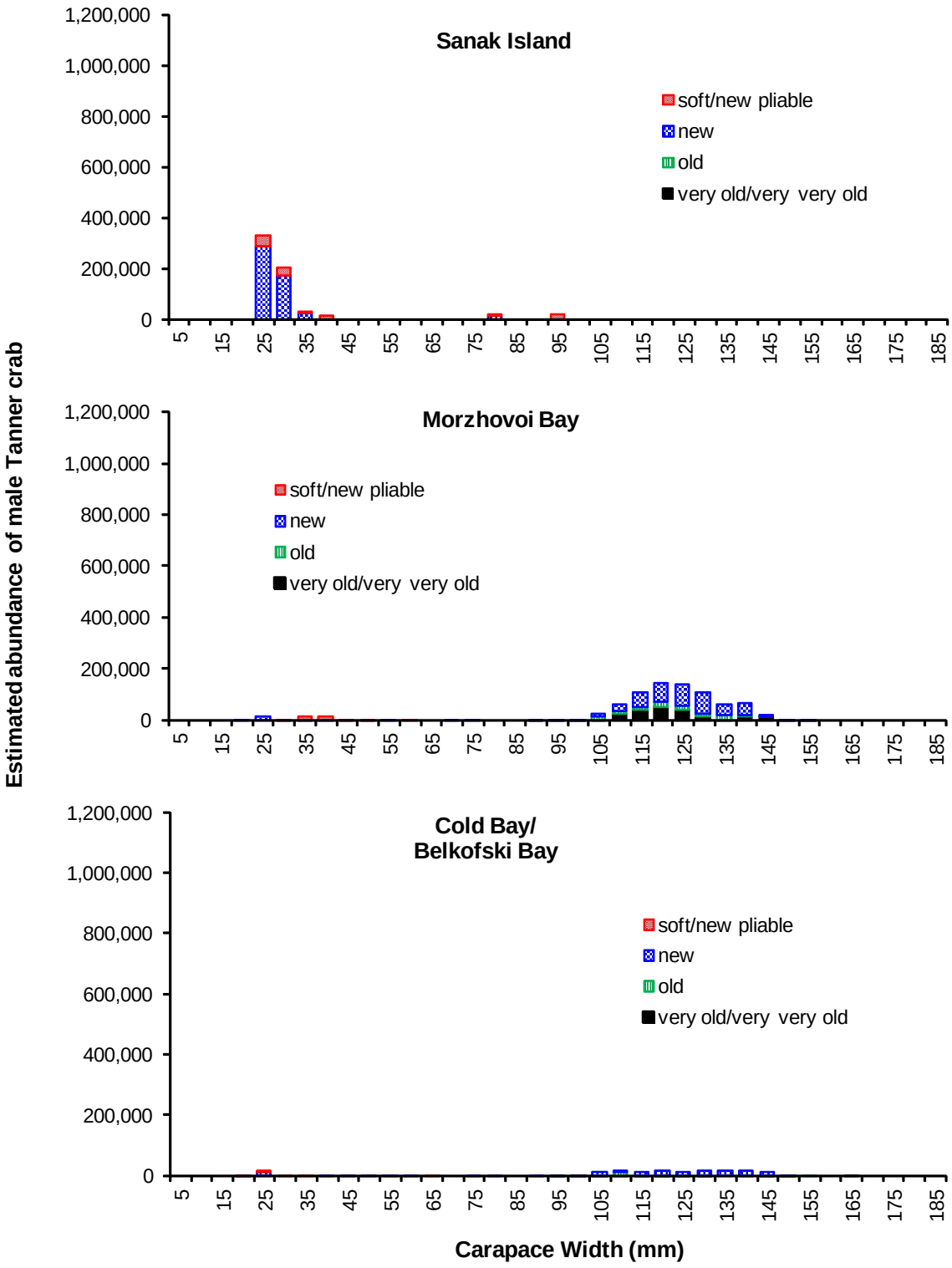

Figure 16.–Tanner crab male abundance estimate by carapace width and shell condition from Sanak Island, Morzhovoi Bay, and Cold Bay/Belkofski Bay in the Western Section of the 2017 South Peninsula District large-mesh bottom trawl survey.

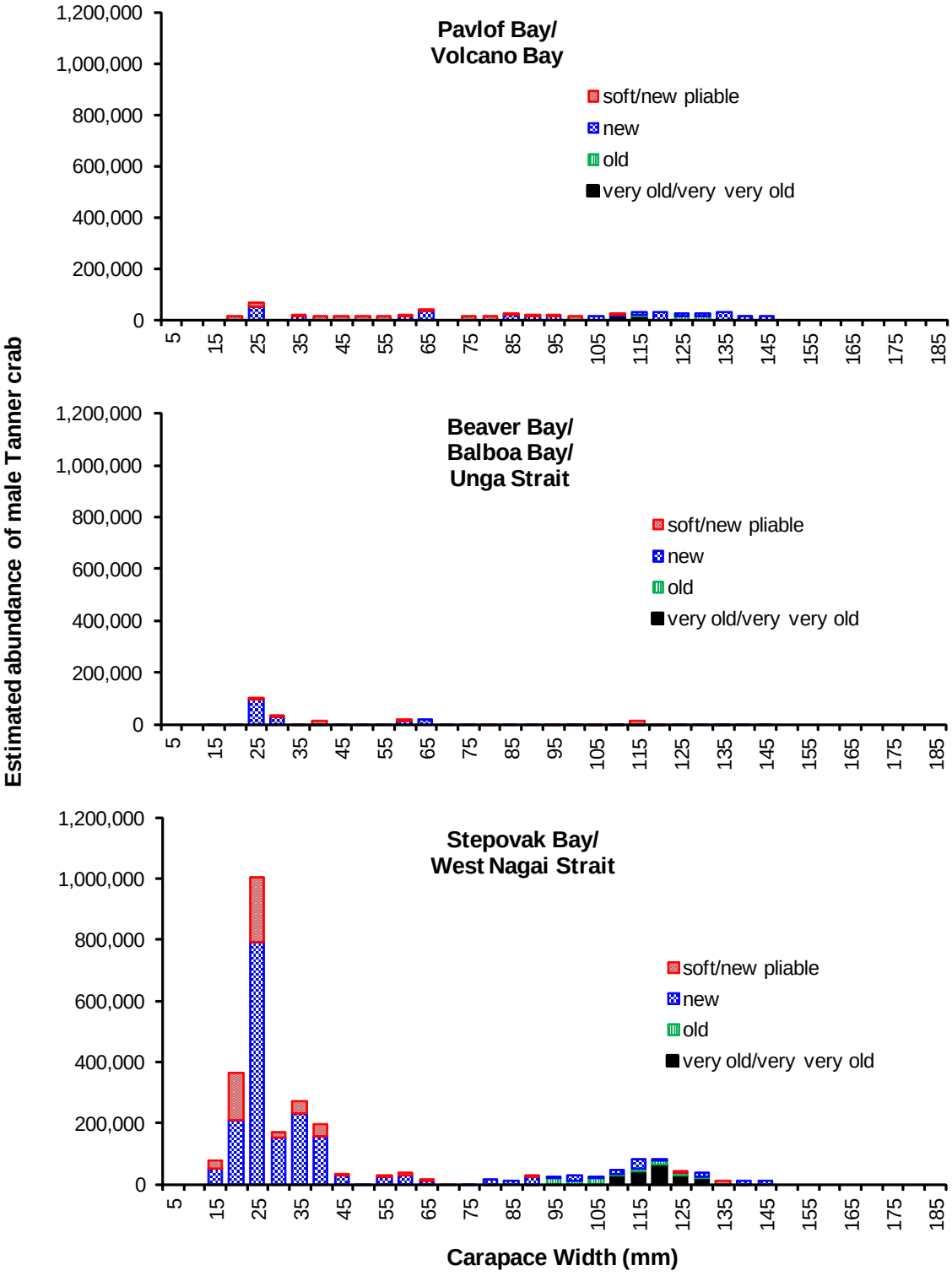

Figure 17.–Tanner crab male abundance estimate by carapace width and shell condition from Pavlof Bay/Volcano Bay, Beaver Bay/Balboa Bay/Unga Strait, and Stepovak Bay/West Nagai Strait in the Eastern Section of the 2017 South Peninsula District large-mesh bottom trawl survey.

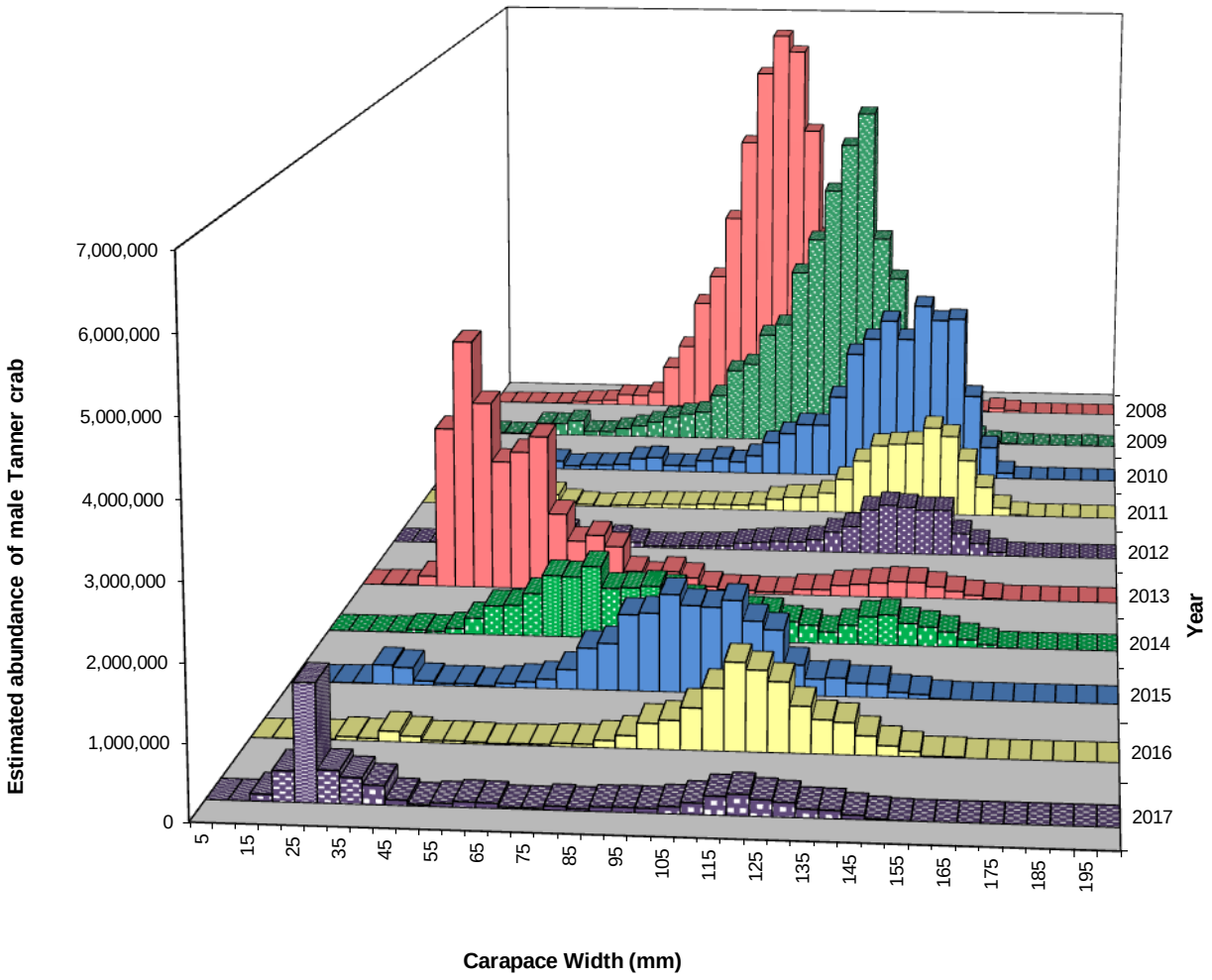

Figure 18.–Tanner crab male abundance estimate by carapace width in the South Peninsula District large-mesh bottom trawl surveys, 2008–2017.

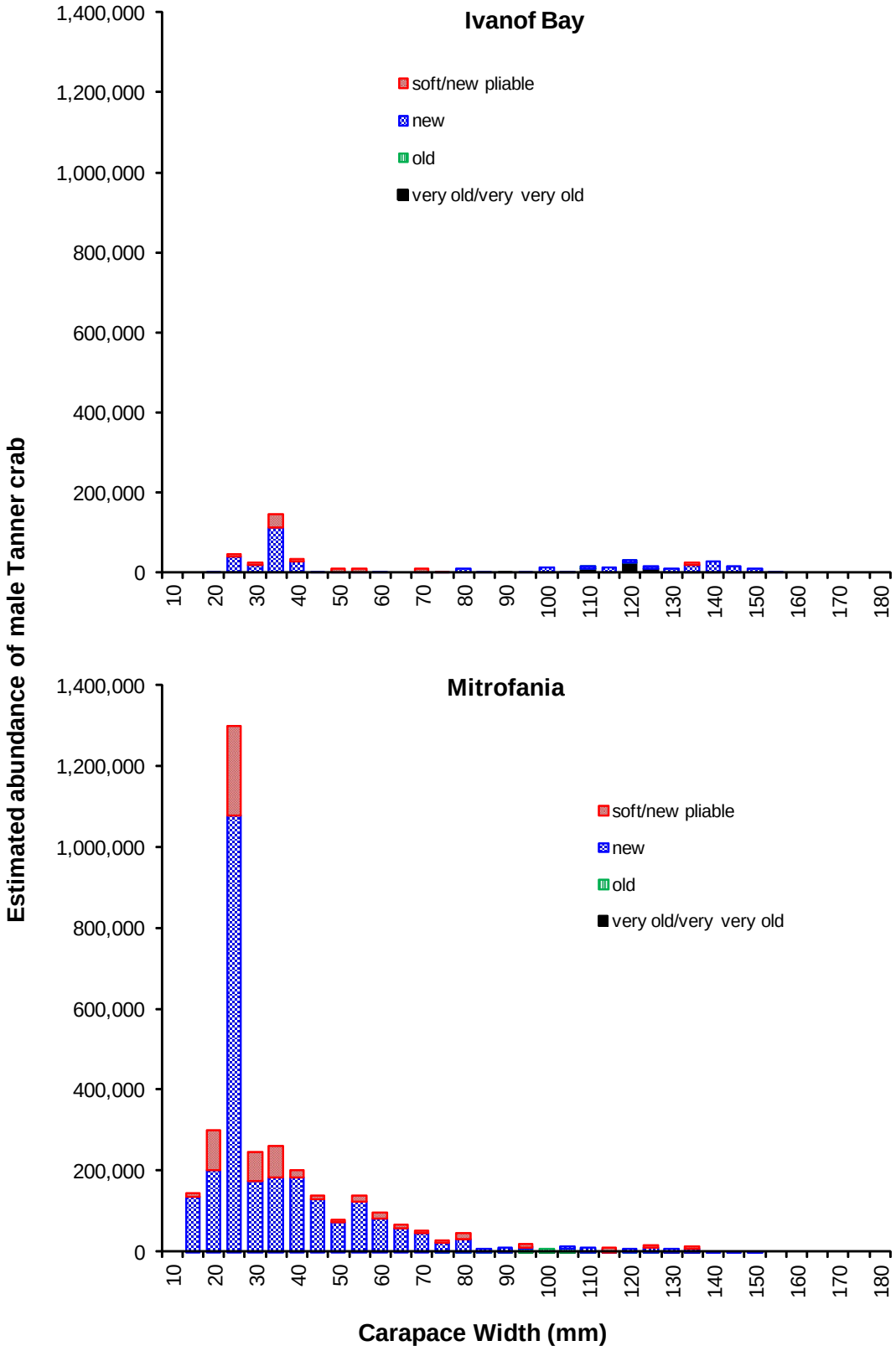

Figure 19.–Tanner crab male abundance estimate by carapace width and shell condition from Ivanof Bay and Mitrofania in the 2017 Chignik District large-mesh bottom trawl survey.

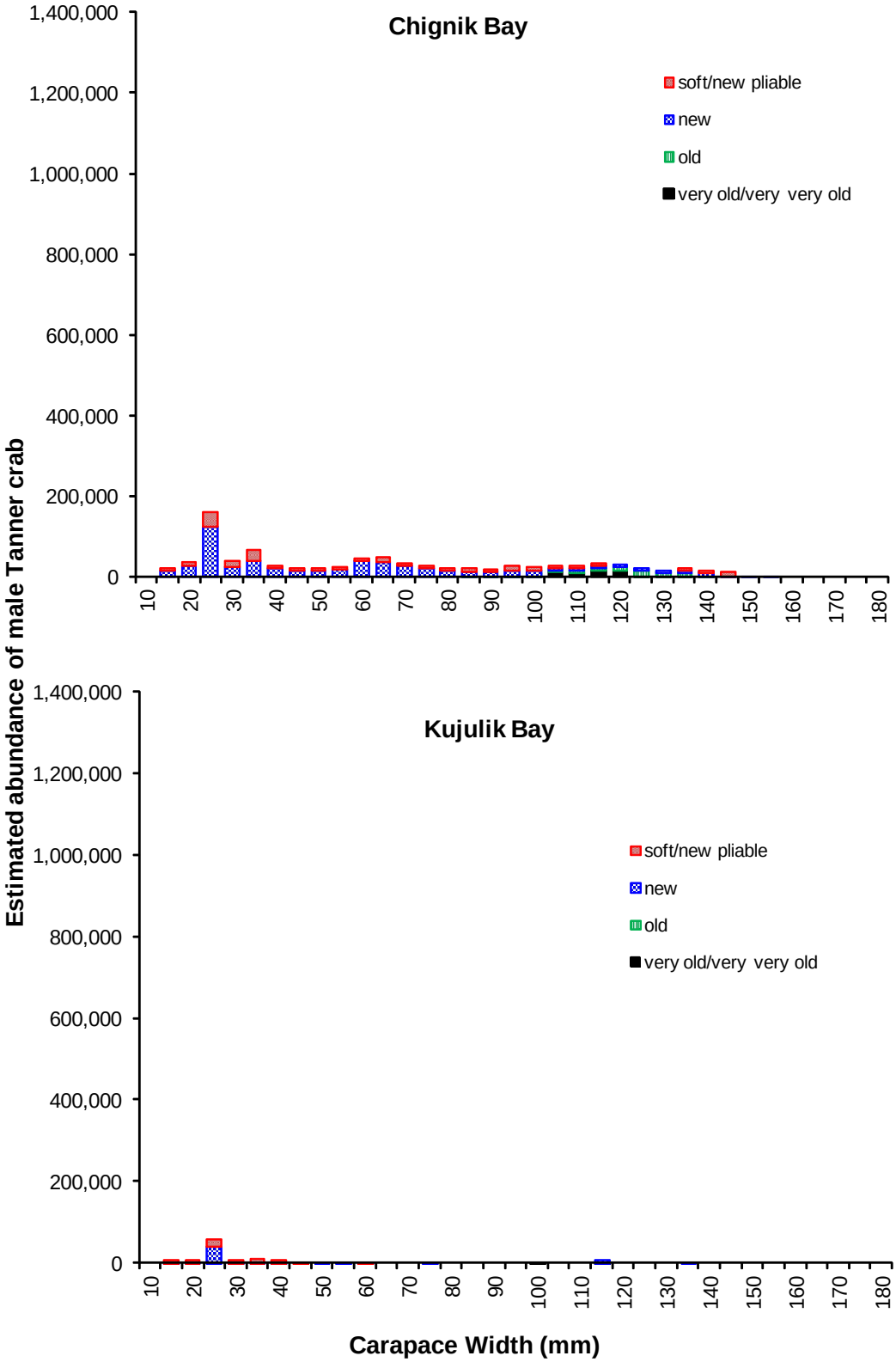

Figure 20.–Tanner crab male abundance estimate by carapace width and shell condition from Chignik Bay and Kujulik Bay in the 2017 Chignik District large-mesh bottom trawl survey.

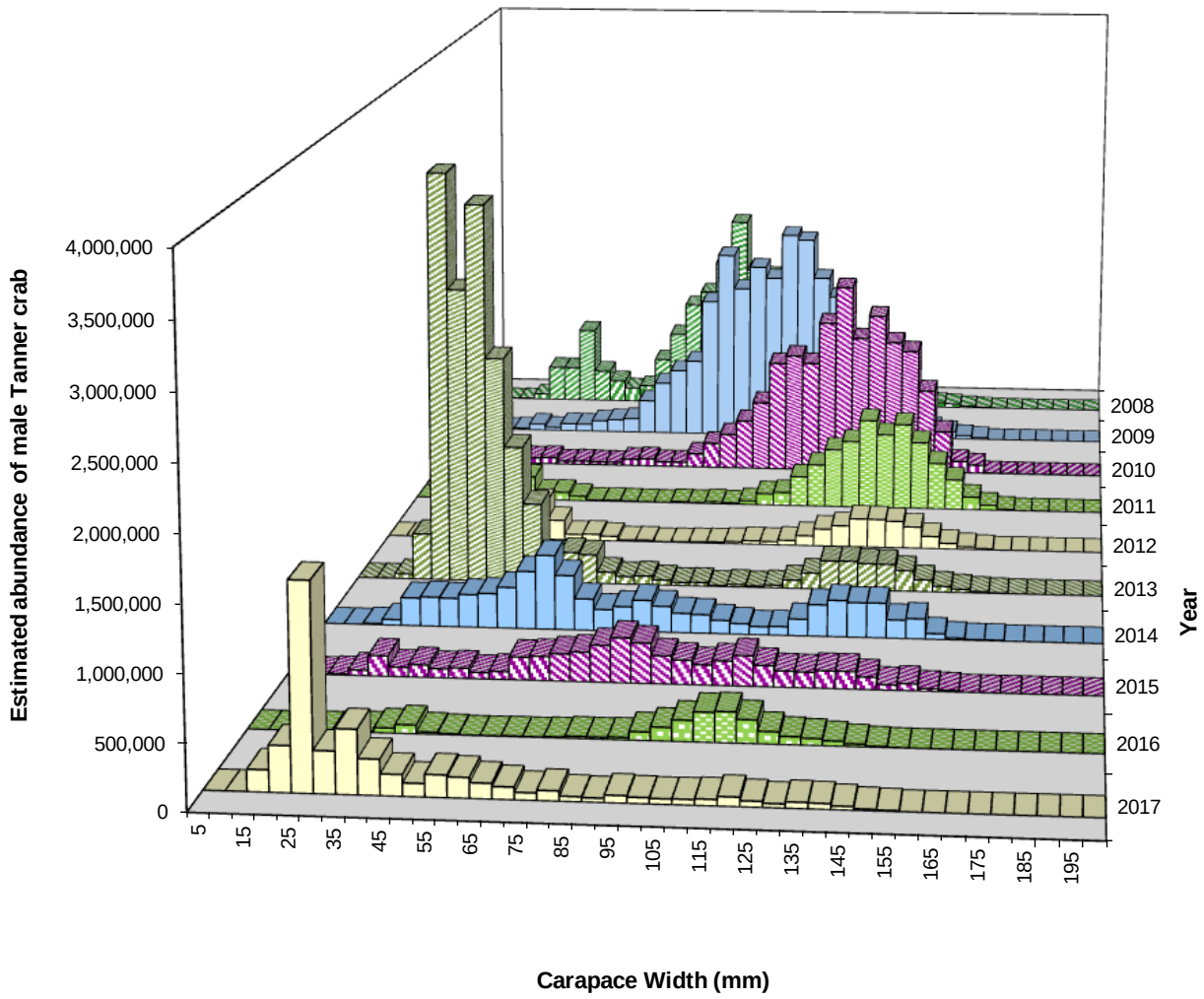

Figure 21.–Tanner crab male abundance estimate by carapace width in the Chignik District large-mesh bottom trawl surveys, 2008–2017.

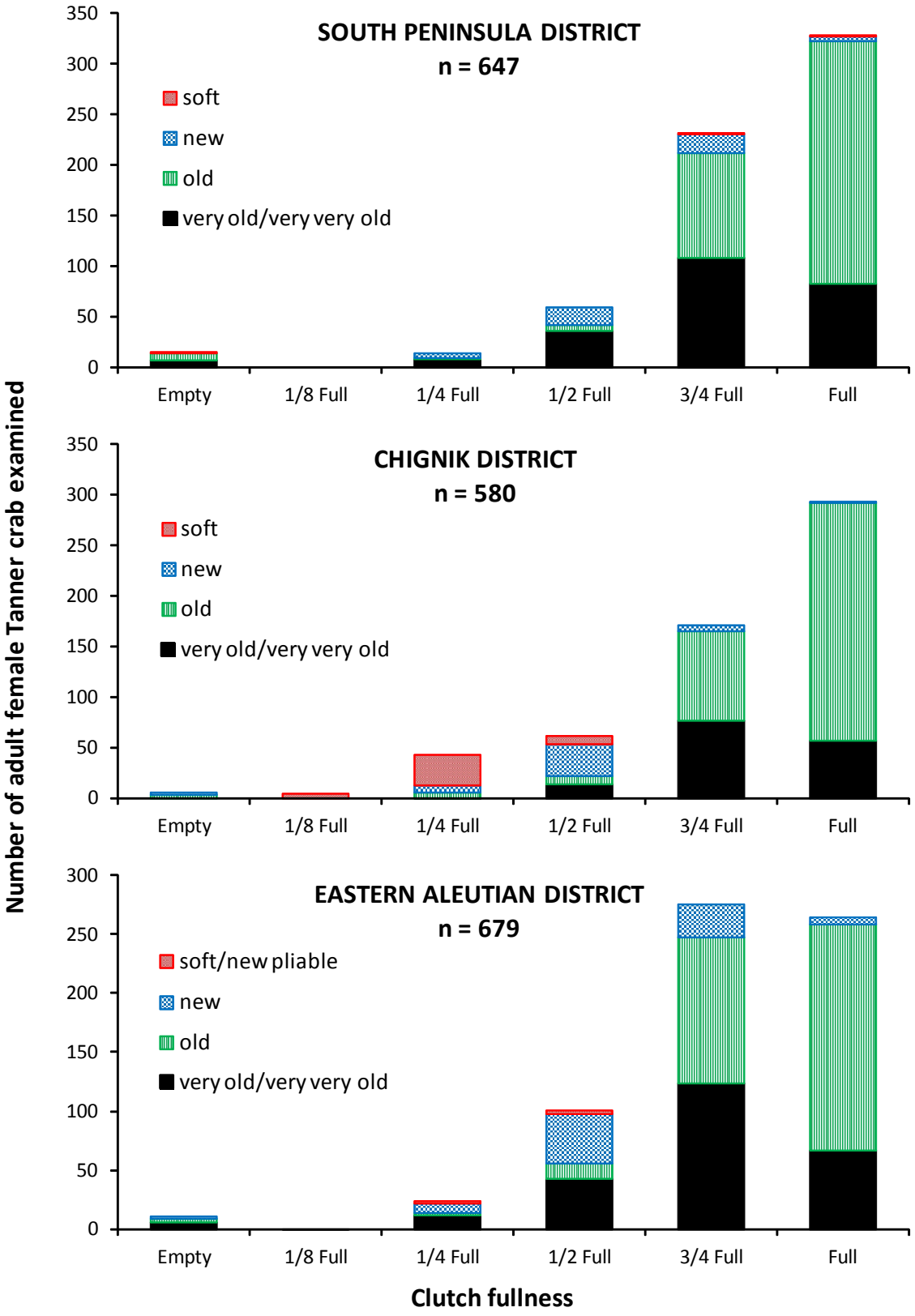

Figure 22.–Tanner crab mature female egg clutch fullness by shell condition in the South Peninsula, Chignik, and Eastern Aleutian districts large-mesh bottom trawl survey, 2017.

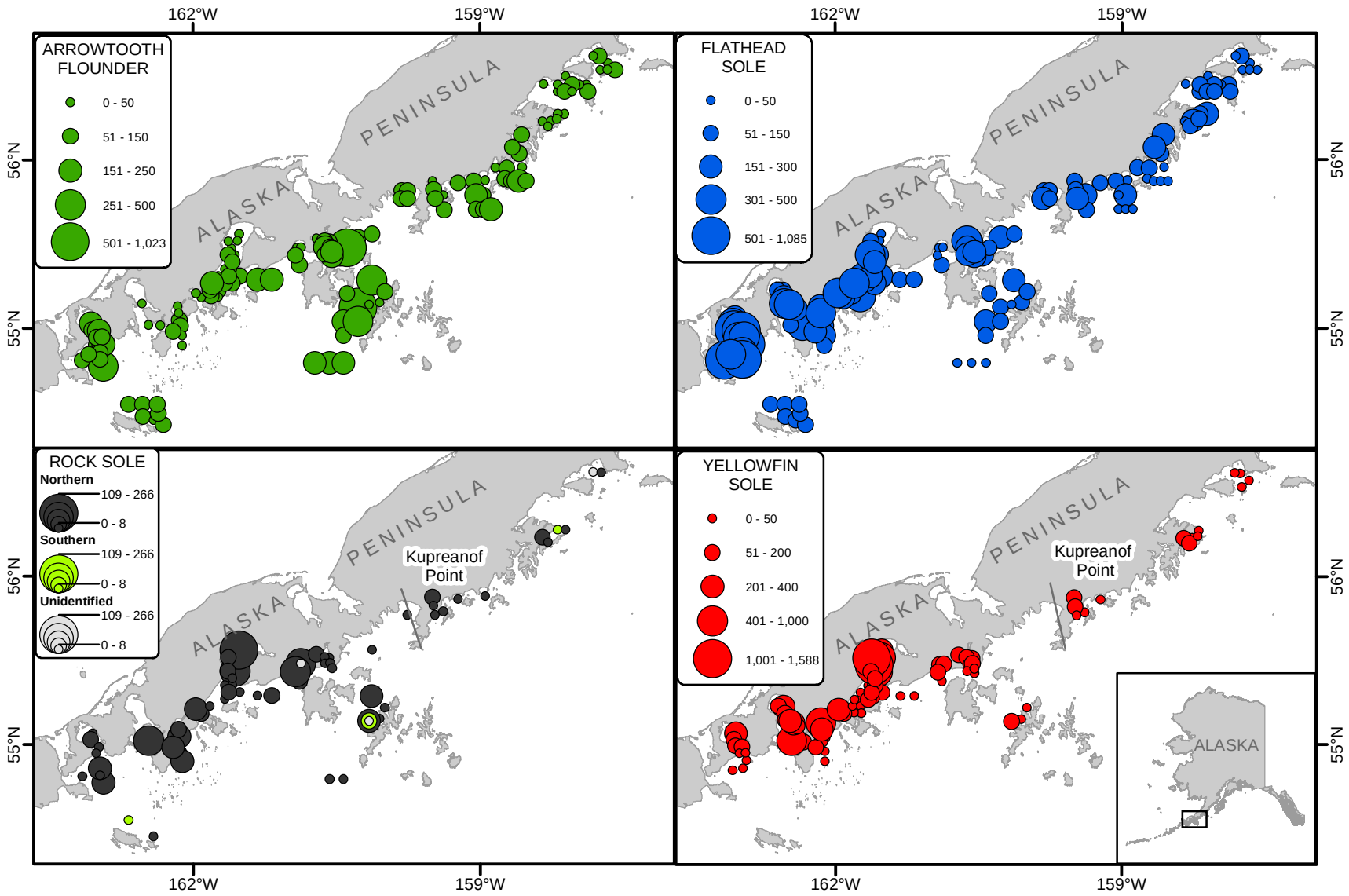

Figure 23.–Arrowtooth flounder, flathead sole, rock sole, and yellowfin sole catch in kilograms per kilometer towed from the 2017 Chignik and South Alaska Peninsula areas large-mesh bottom trawl survey.

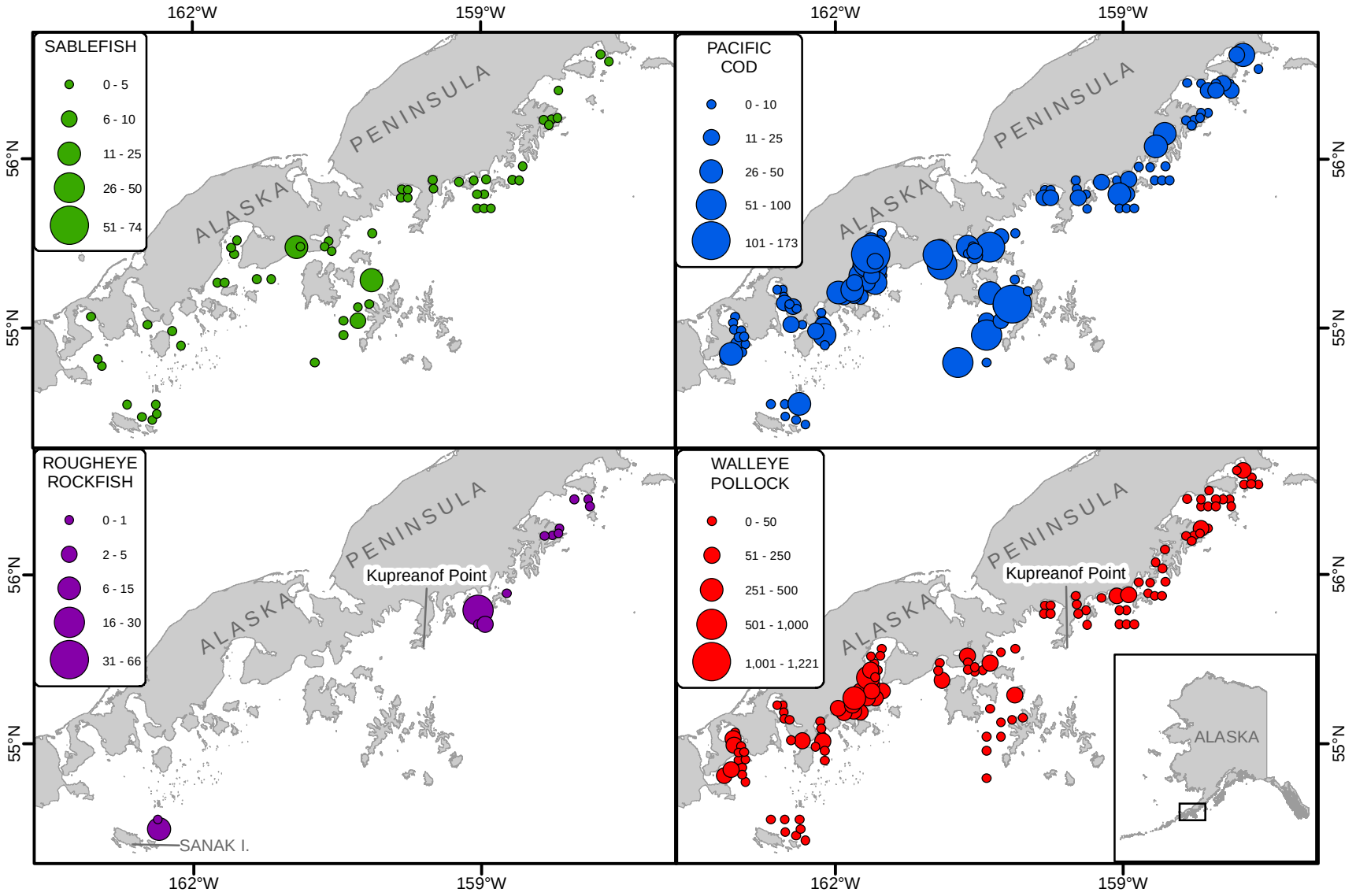

Figure 24.–Sablefish, Pacific cod, rougheye rockfish, and walleye pollock catch in kilograms per kilometer towed from the 2017 Chignik and South Alaska Peninsula areas large-mesh bottom trawl survey.

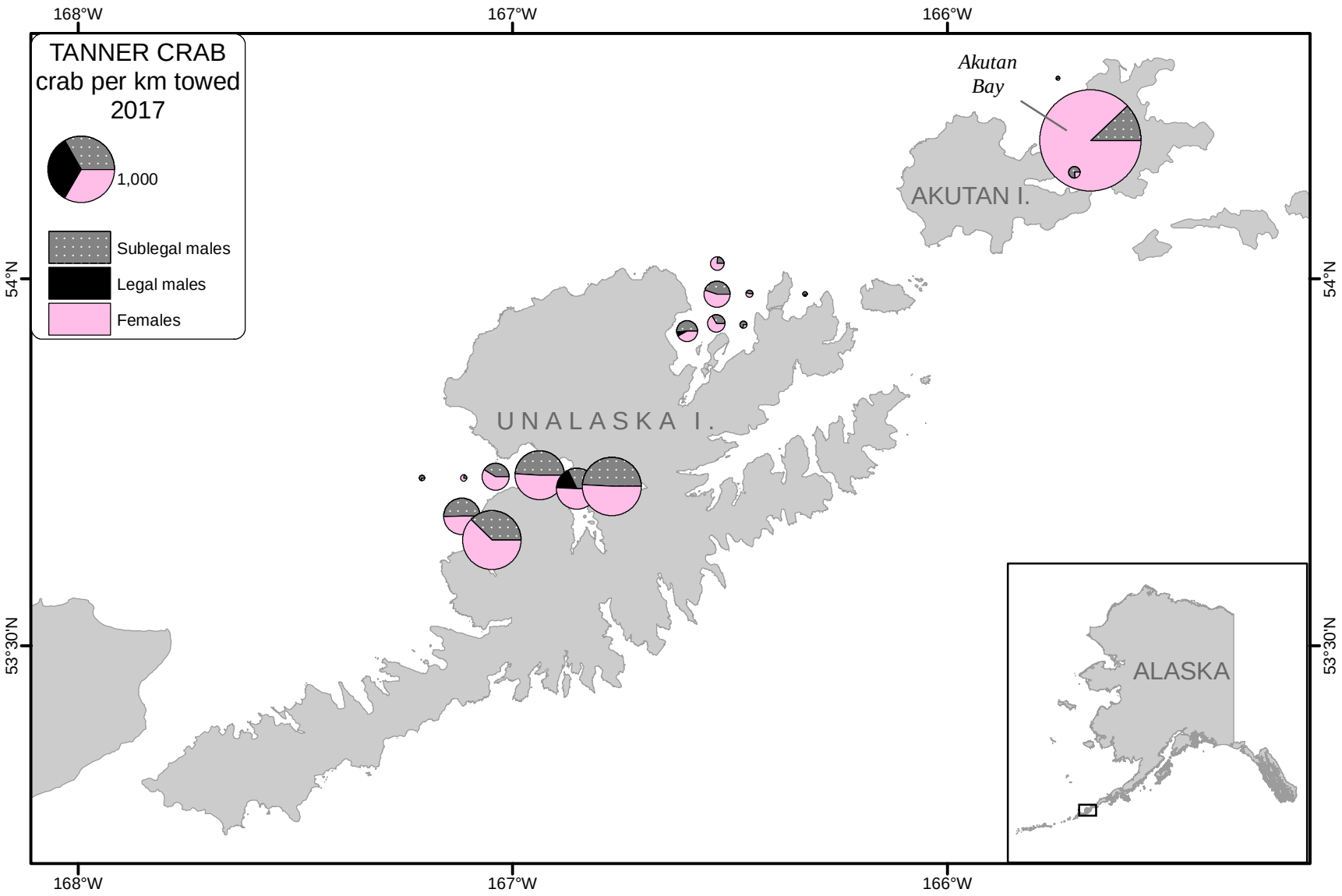

Figure 25.–Number of Tanner crab per kilometer towed in the 2017 Eastern Aleutian District large-mesh bottom trawl survey.

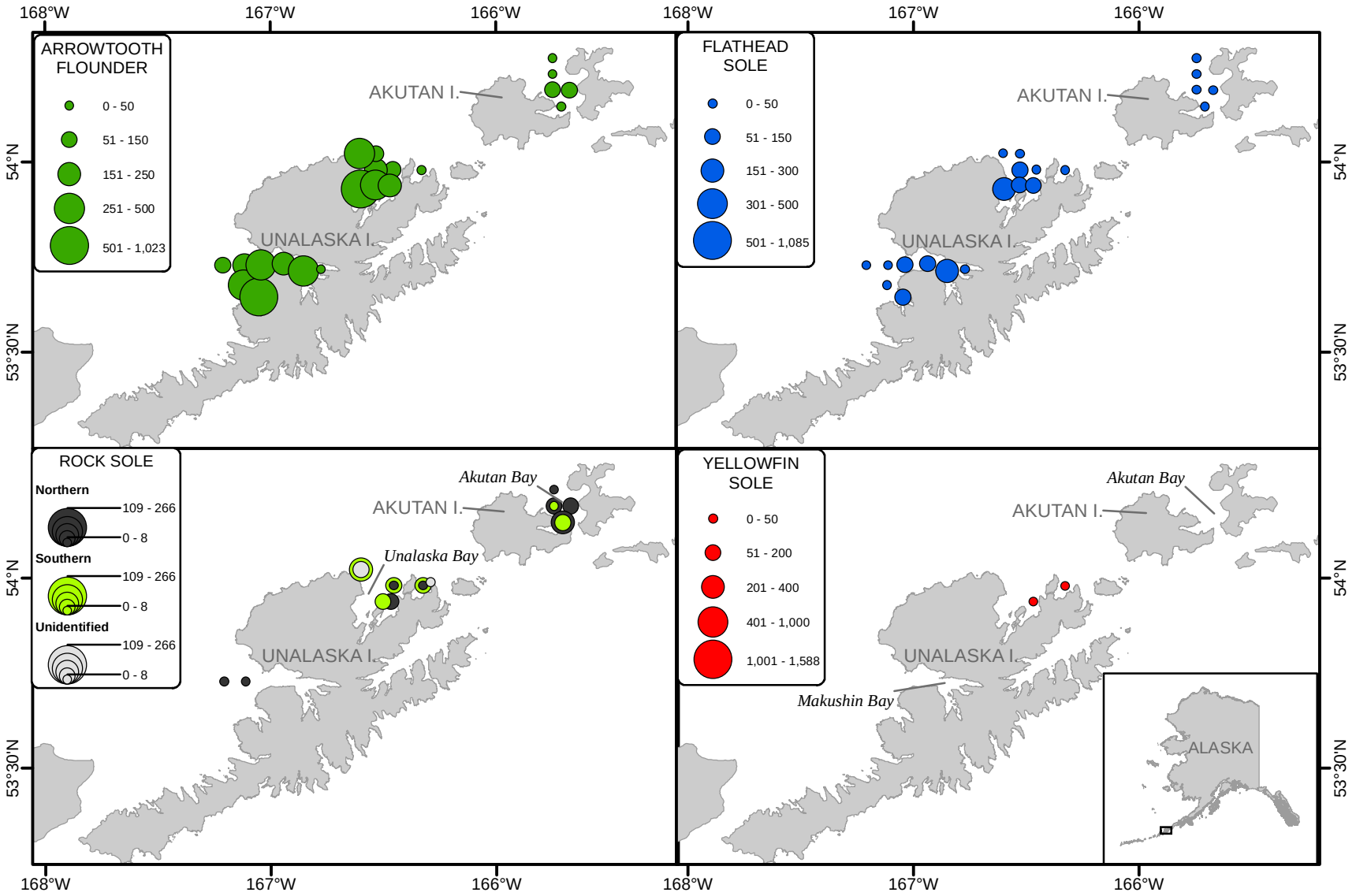

Figure 26.–Arrowtooth flounder, flathead sole, rock sole, and yellowfin sole catch in kilograms per kilometer towed from the 2017 Aleutian Islands District large-mesh bottom trawl survey.

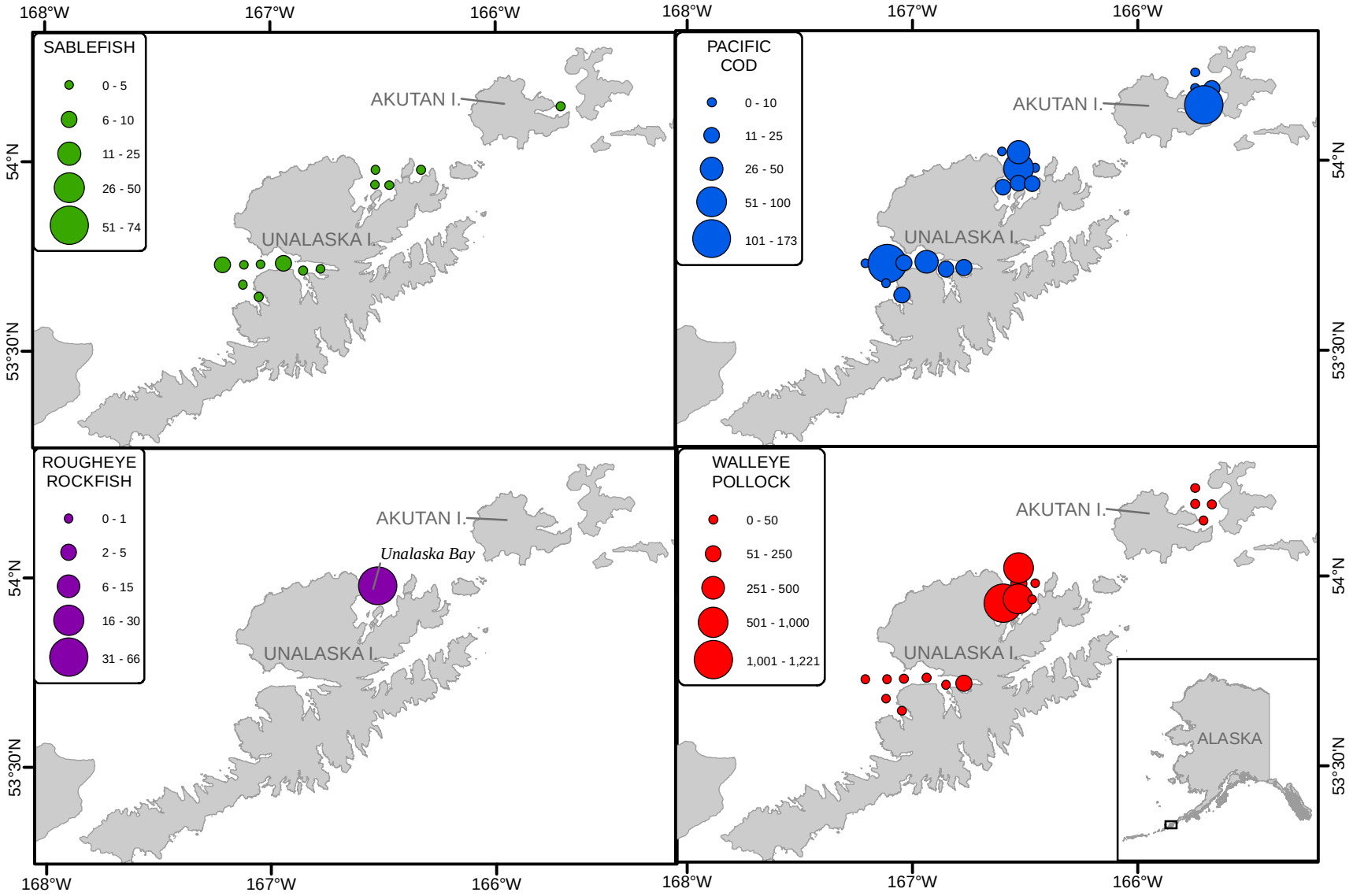

Figure 27.–Sablefish, Pacific cod, rougheye rockfish, and walleye pollock catch in kilograms per kilometer towed from the 2017 Aleutian Islands District large-mesh bottom trawl survey.

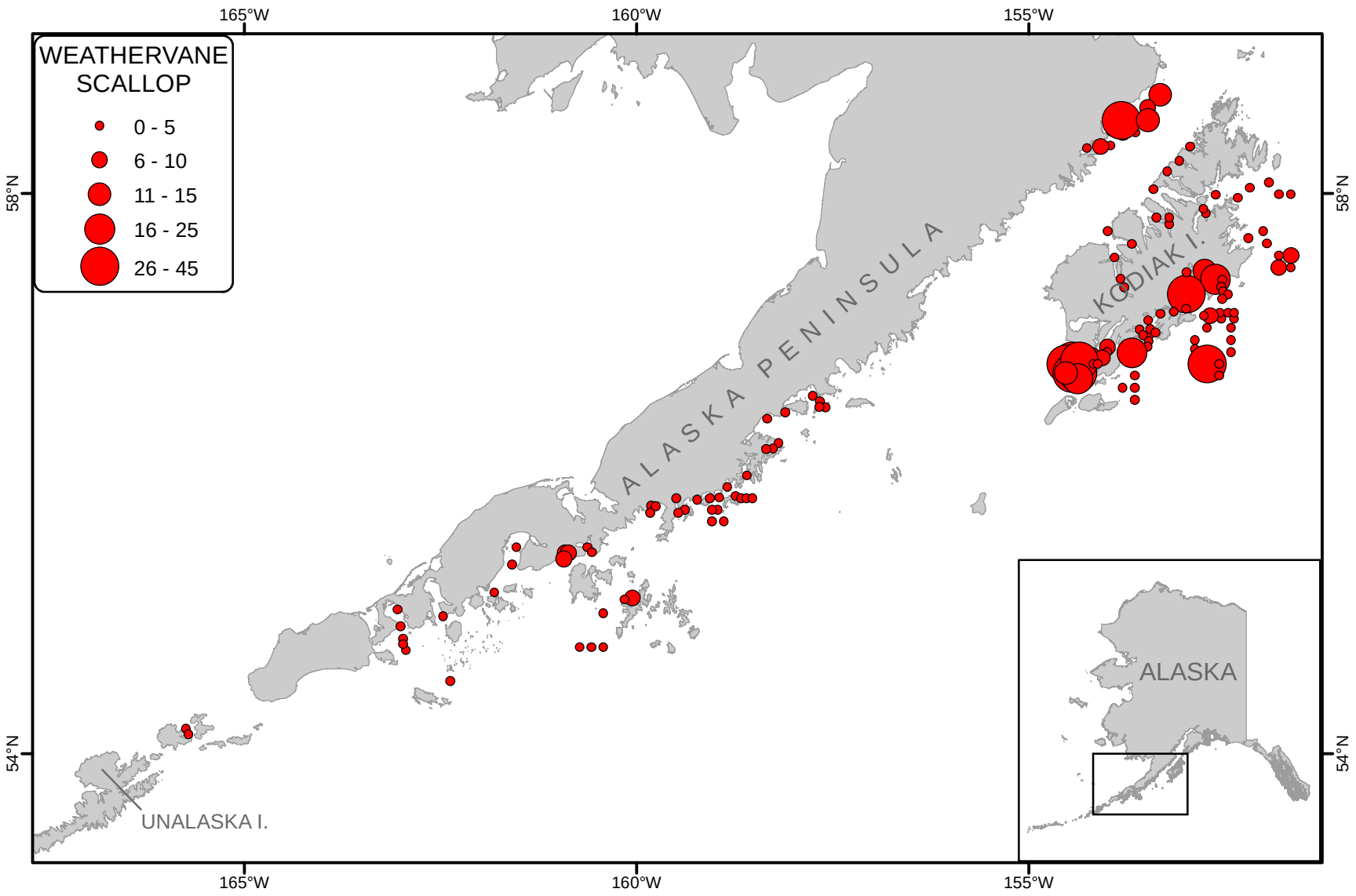

Figure 28.–Weathervane scallop catch in kilograms per kilometer towed from the 2017 large-mesh bottom trawl survey.

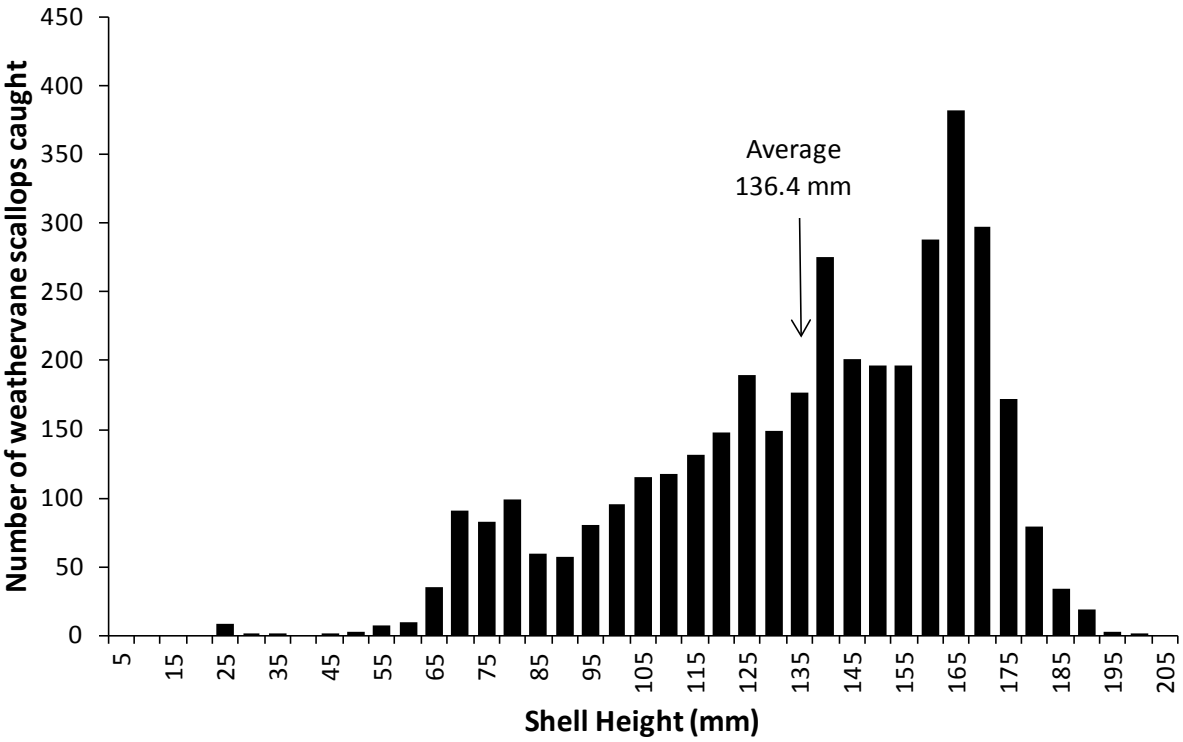

Figure 29.–Weathervane scallop shell height frequency from the 2017 large-mesh bottom trawl survey.

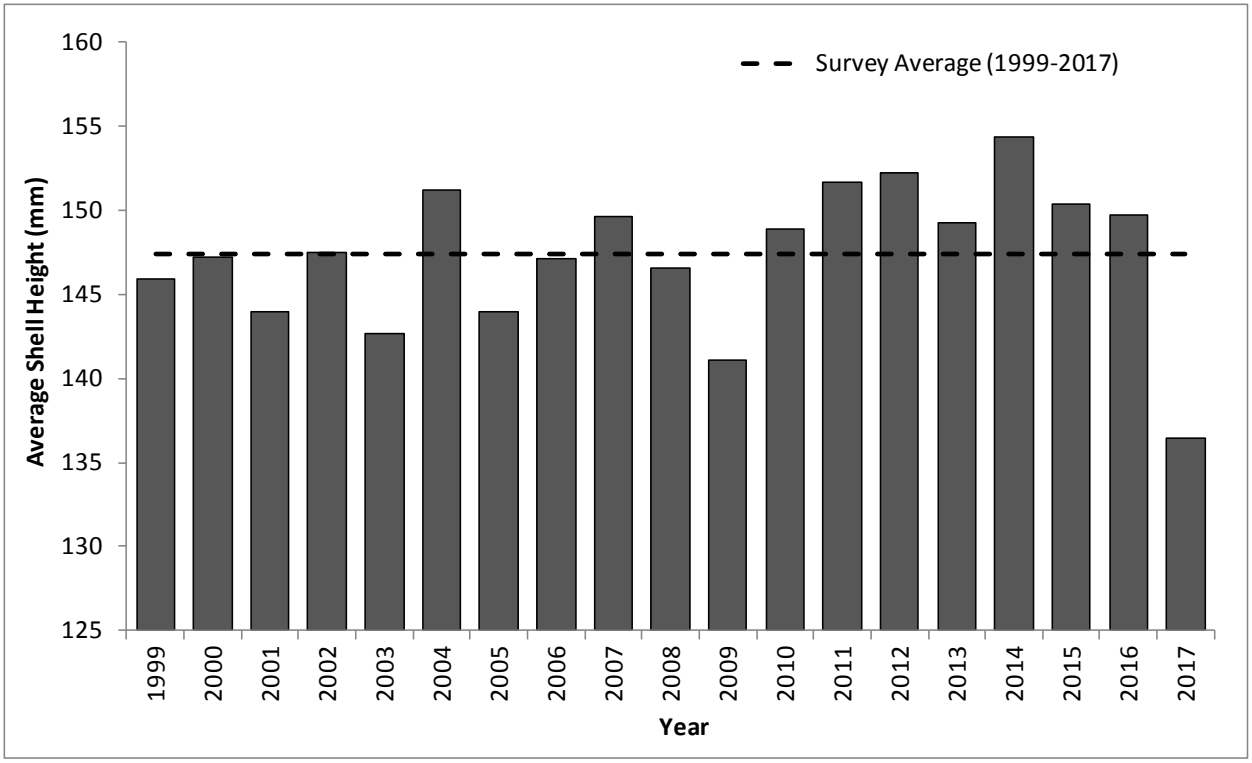

Figure 30.–Average weathervane scallop shell height from scallops caught on the large-mesh bottom trawl surveys, 1999–2017.

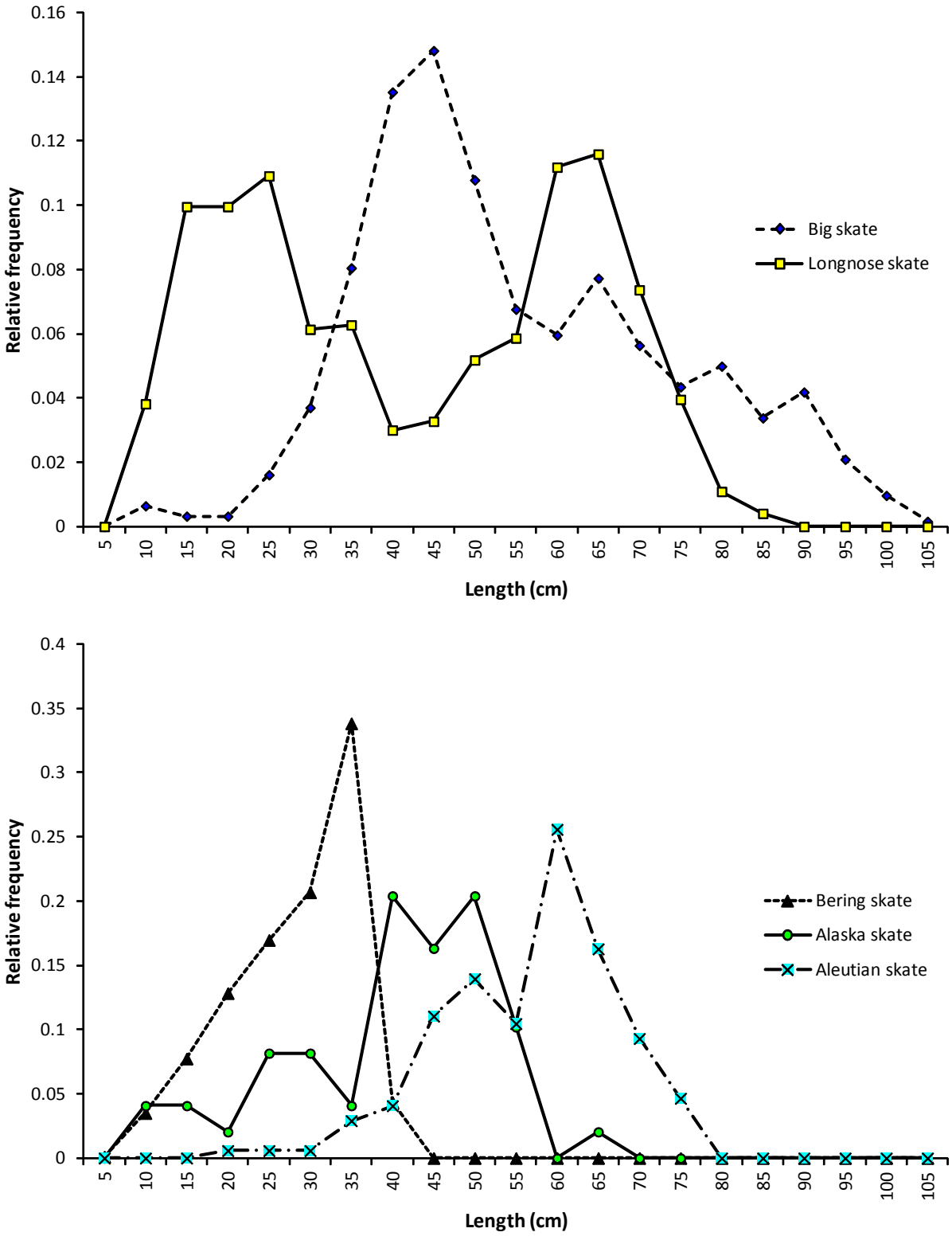

Figure 31.–Big, longnose, Bering, Alaska, and Aleutian skate relative size frequencies (snout to anterior notch of pectoral fin) from the 2017 large-mesh bottom trawl survey.

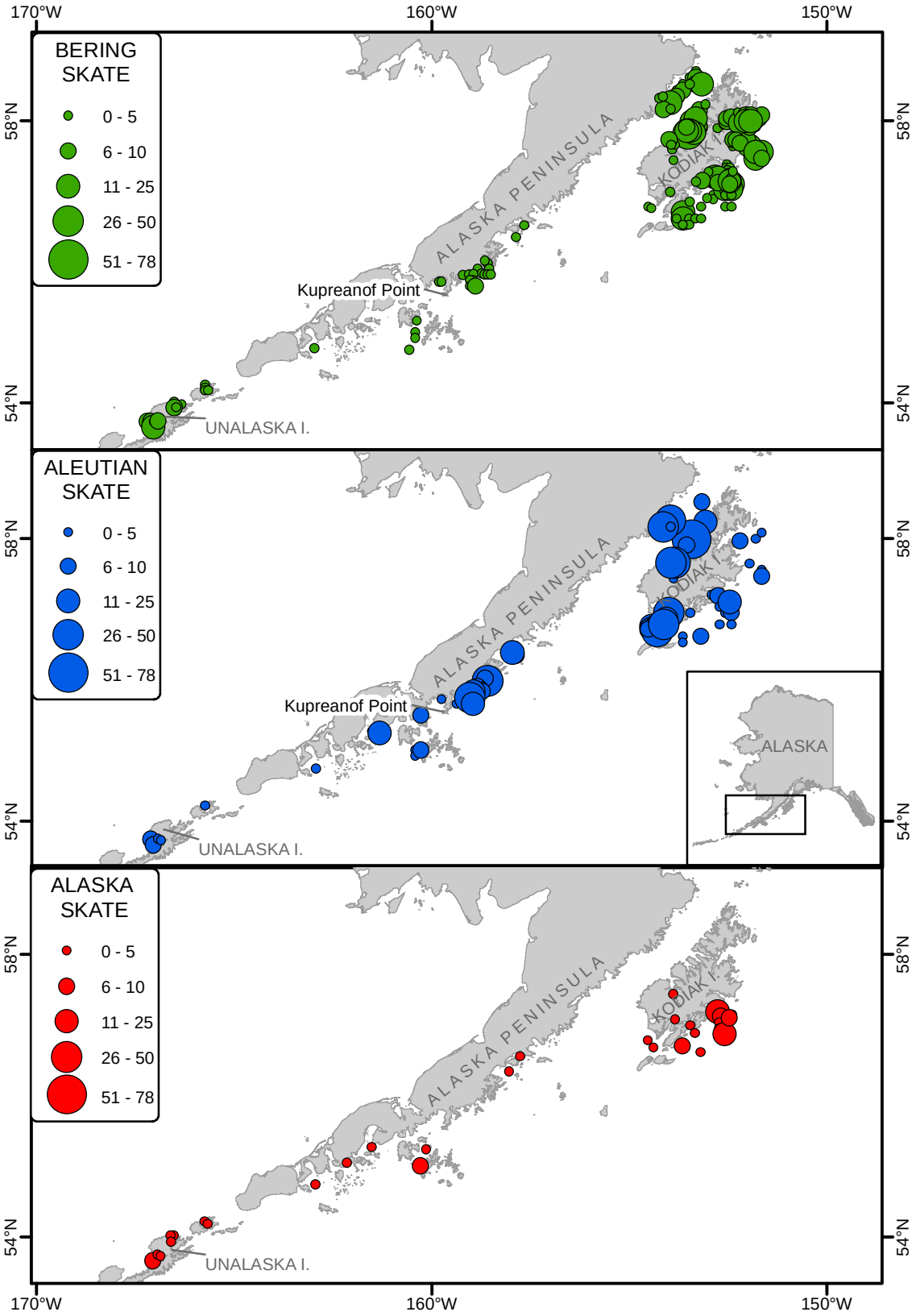

Figure 32.–Bering, Aleutian, and Alaska skate catch in kilograms per kilometer towed from the 2017 large-mesh bottom trawl survey.

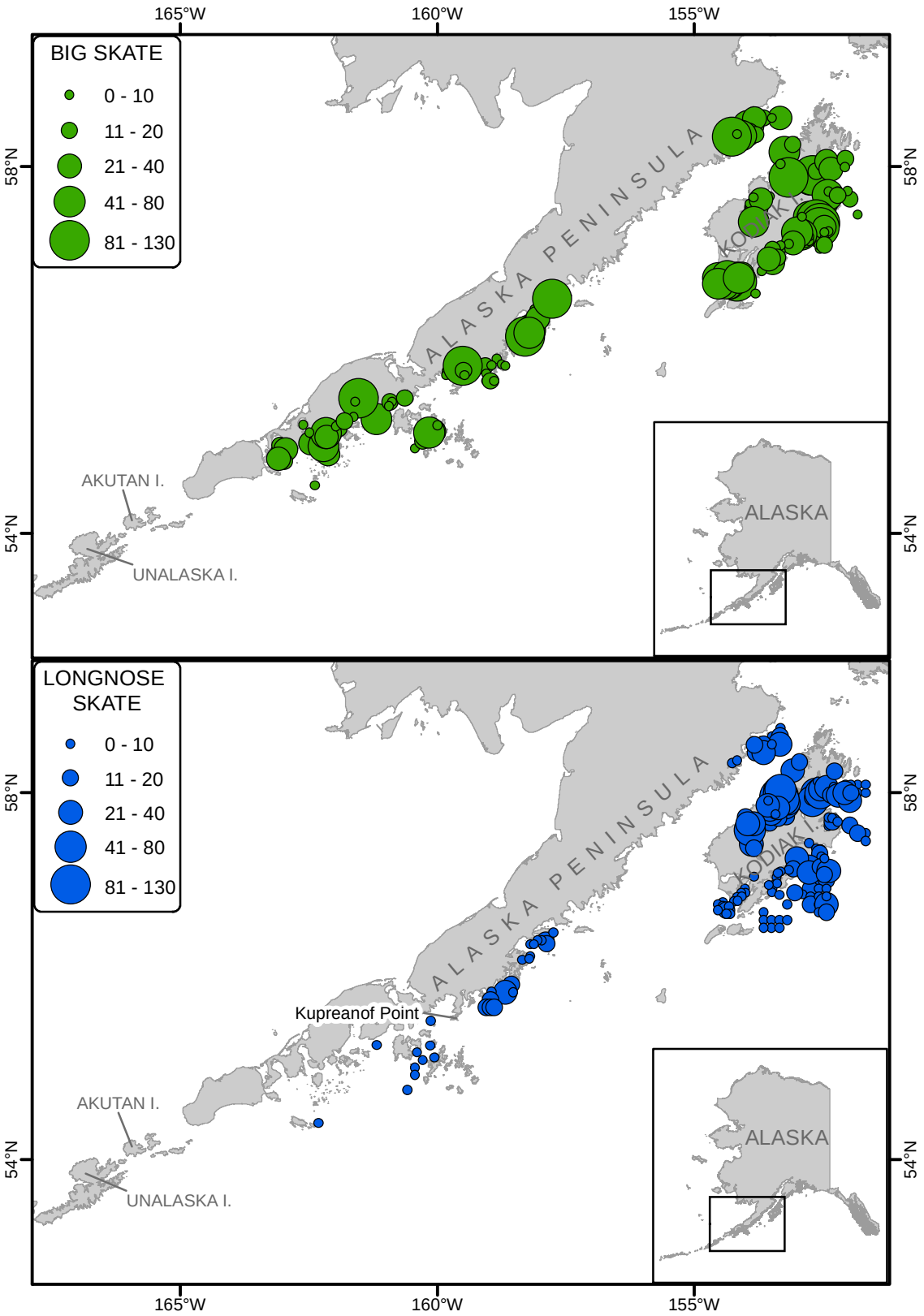

Figure 33.–Big and longnose skate catch in kilograms per kilometer towed from the 2017 large-mesh bottom trawl survey.

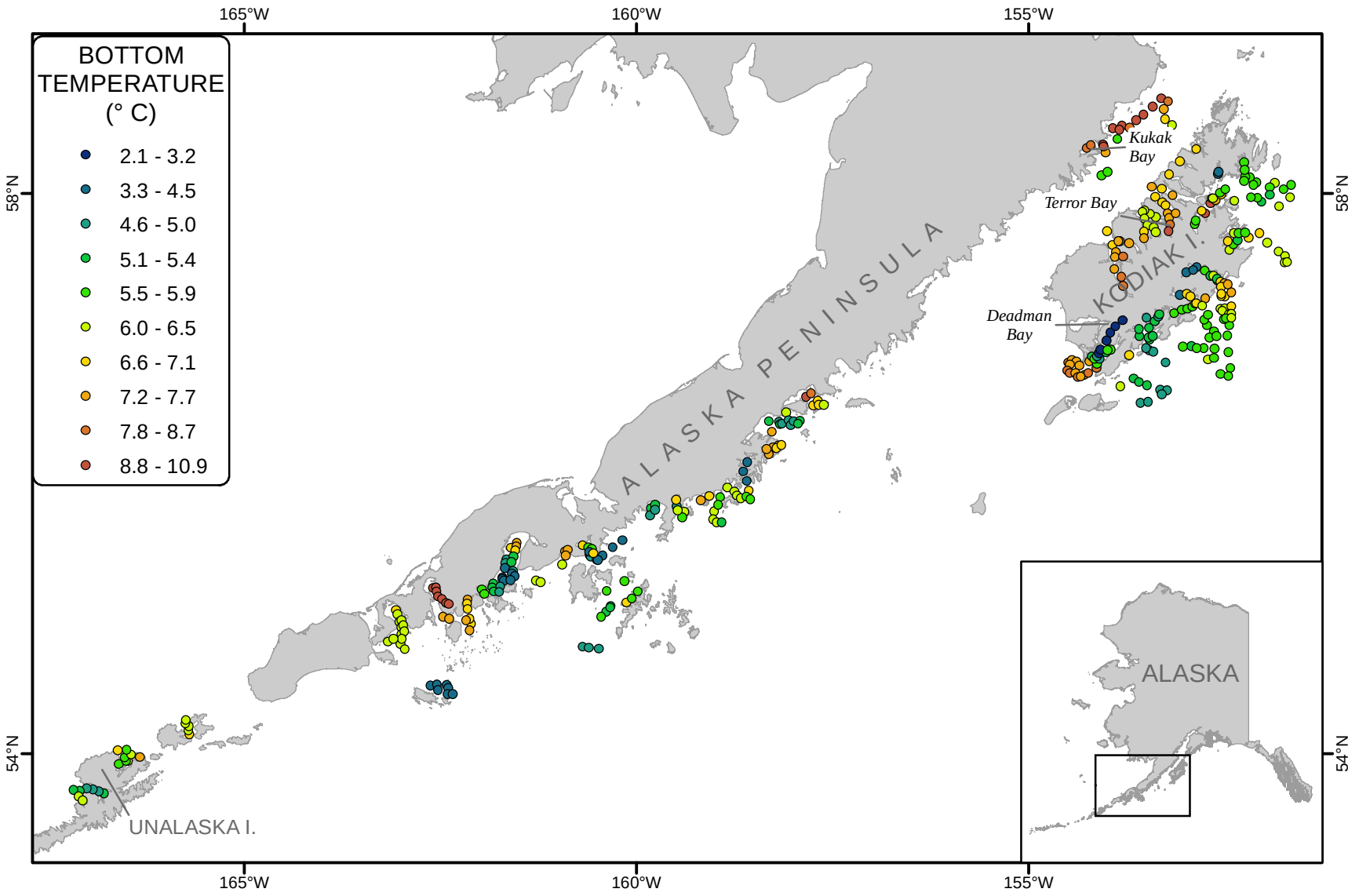

Figure 34.–Near-bottom water temperatures from the 2017 large-mesh bottom trawl survey.

APPENDIX A. GLOSSARY

Appendix A1.–Definition of terms in large-mesh trawl survey report.

Large-mesh trawl survey: Definitions of terms

Crab Terms	
abdominal flap	Crab abdomen folded underneath body. Can be lifted to reveal reproductive appendages. Shape of abdominal flap used to identify crab sex; males have a triangular shaped abdominal flap, and females are more rounded.
anterolateral spines	Spines on the margin of anterior half of carapace.
bitter crab disease	Disease lethal to crabs caused by a parasitic dinoflagellate of the genus *Hematodinium* known to infect *Chionoecetes* spp. crabs. Live crab in later stages of infection have an exaggerated pink carapace or legs and white opaque hemolymph that can be observed if a leg is cracked. Crab infected with this parasite are unmarketable because of an astringent aspirin aftertaste.
black mat	A systemic fungal infection (*Trichomaris invadens*) that forms nondiscrete blotches of a black, tar-like mass on the carapace and legs. Black mat has a fibrous like texture when scraped.
carapace	Main part of crab shell which covers body of crab. It is divided into the gastric, branchial, and cardiac regions.
carapace length	The biological size measurement of all species of king crabs taken as the straight-line distance from the posterior margin of the right eye orbit to the medial-posterior carapace margin.
carapace width	Crab measurement taken as the greatest straight-line distance perpendicular to a line midway between the eyes to the medial-posterior margin. Biological measurements do not include spines.
chela height	Measurement of the right claw of a crab taken at the greatest height, excluding spines.
clutch	Eggs beneath a female abdominal flap.
eyed eggs	Stage of egg development when dark eyespots are present and visible to the human eye.
juvenile	An animal that has not reached sexual maturity.
lateral margin	The outer edge of the crab carapace.
legal size	The minimum size of an animal that may be retained by state regulation. For Tanner crab males in Kodiak, Chignik, South Peninsula, and Eastern Aleutian districts legal size is 5.5 inches (140 mm) carapace width including the lateral margin spines. For king crab males minimum legal size is 7.0 inches (177.8 mm) carapace width in the Kodiak Area and 6.5 inches (165.1 mm) carapace width in the Alaska Peninsula and Aleutian Islands areas, including the lateral margin spines. For Dungness crab the minimum legal size is 6.5 inches (165.1 mm) carapace width, immediately anterior to the tenth anterolateral spine.
mature female	A female animal that has reached sexual maturity. For Tanner crab, mature females have a circular abdominal flap that covers most of the ventral surface of the crab, whereas a juvenile female abdominal flap covers only about ⅔ of the ventral surface. For red king crab, mature females include ovigerous females of any size, all females >115 mm CL in the Kodiak area, and all females >99 mm CL in the Alaska Peninsula and Aleutian Islands areas.

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mature male	A male animal that has reached sexual maturity. For Tanner crab, mature males are considered to be all males that are >114 mm carapace width.
medial-posterior edge	The middle of the back edge of the carapace.
midline	The median plane of the body of an animal. For crabs this is an imaginary line running along the carapace from between the eyes to the medial-posterior edge.
multiparous female	A female crab that has produced more than one clutch of eggs. For Tanner crab they may be identified by the presence of discolored grasping marks on legs.
nemertean worms	Egg parasites in clutch of mature female crab that prey on developing embryos. Worms are small, red in color, often *S*-shaped during early stages of development, and are most obvious in clutch with a high number of dead embryos.
new shell	Carapace and chela are hard and will crack when pressure is applied. Legs are not easily compressed when pinched and will break if bent. Colors are bright. Iridescence, particularly on the chelae, is often visible. Ventral surface can be any variation of white or pink. Spines, chela tips, chela teeth, and dactyl tips are sharp. Abdomen, coxae, and legs have little or no scratches and abrasions. Slight fouling may be present, including but not limited to leech egg cases, small barnacles, and encrusting bryozoans. On Tanner crab females, subtle grasping mark imprints may be present on the first 2 pairs of legs.
old shell	Colors are dull. Iridescence on the chelae may be visible. Ventral surface typically appears yellow to brown. Spines, chela tips, chela teeth, and dactyl tips may show wear. Abdomen, coxae, and legs have few to numerous scratches and abrasions, which may be slightly darker than the shell. Slight fouling may be present, including but not limited to leech egg cases, barnacles, bryozoans, tubeworm casings, and anemones. On Tanner crab females, grasping marks are often present and discolored on the first 2 pairs of legs.
ovigerous	Bearing eggs.
parasitic barnacle	The rhizocephalan barnacle *Briarosaccus callosus* exclusively parasitizes king crab species. The visible externa of the parasite is located in the abdominal flap of both sexes and varies in size from as small as a jellybean to as large as a chicken egg and in color from pale yellow to deep red. It causes castration in infected crabs and is uncommon around Kodiak and along the Alaska Peninsula.
postrecruit male	Male crab that have been legal size for more than 1 year. Tanner crab postrecruit males are 140–164 mm CW and old or very old/very very old shell and all males ≥165 mm CW. Red king crab postrecruit males are all legal-size crab that are old or very old/very very old, all males ≥164 mm CL in the Kodiak area, and all males ≥152 mm CL in the Alaska Peninsula and Aleutian Islands areas.
prerecruit male	Male crab not legal size. Prerecruit crab are often divided into size groups. For red king crab prerecruit IV are crab <95 mm CL in the Kodiak Area and <79 mm CL in the Alaska Peninsula and Aleutian Islands areas. Prerecruit III are crab 95–112 mm CL in the Kodiak Area and 79–95 mm CL in the Alaska Peninsula and Aleutian Islands areas. Prerecruit II are crab 113–130 mm CL in the Kodiak Area and 96–115 mm CL in the Alaska Peninsula and Aleutian Islands areas. Prerecruit I are crab >130 mm CL in the Kodiak Area and >115 mm CL in the Alaska Peninsula and Aleutian Islands areas.

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primiparous female	A female crab that is carrying its first clutch of eggs. For Tanner crab they may be identified by being soft/new pliable or new shell mature females.
recruit male	Male crab that became legal size in the last year. For Tanner crab a recruit is soft/new pliable and new shell, 140–164 mm CW. For red king crab in the Kodiak Area a recruit is legal-size, soft/new pliable, and ≤164 mm CL. For red king crab in the Alaska Peninsula and Aleutian Islands areas a recruit is legal-size, soft/new pliable, and ≤152 mm CL.
shell condition	A description of the appearance of a crab's exoskeleton, and is determined by examining characteristics that show wear with time. The ADF&G trawl survey program recognizes 4 shell condition categories: soft/new pliable, new, old, and very old/very very old.
soft/new pliable shell	1) The exoskeleton is soft, flaccid, similar in texture to skin, and loses shape out of water. No scratches, abrasions, or epibionts are present. OR 2) Carapace and chela are firm, but thin and flexible and can be easily indented with slight thumb pressure. Legs are easily compressed when pinched. Colors are bright. Iridescence is common. Abdominal flap may appear translucent. Spines, chela tips, chela teeth, and dactyl tips are sharp if not pliable. No scratches, abrasions, or epibionts are present.
spines	Pointed processes along the edge of a crab carapace.
very old/very very old shell	1) Colors are dull and often dark on the dorsal surface. Ventral surface typically appears yellow to brown with darker areas. Spines, chela tips, chela teeth, and dactyl tips are heavily worn. Legs are commonly damaged or missing. Abdomen, coxae, and legs have numerous scratches and abrasions, which are typically darker than the shell. Slight to moderate fouling is common, including—but not limited to—leech egg cases, large barnacles, bryozoans, hydroids, tubeworm casings, and anemones. On Tanner crab females, multiple grasping marks are often present and discolored on the first 2 pairs of legs. OR 2) Carapace may be soft and spongy because of decay. Colors are dark overall. Spines, chela tips, chela teeth, and dactyl tips are heavily worn. Legs are commonly damaged or missing. Moderate to extensive fouling is common.

Trawl Net Terms

codend	The trailing end of a tapered trawl net where catch accumulates during towing.
dandylines	Also called bridles. Cables between trawl door and side of trawl net.
doors	Steel boards attached between vessel and trawl net, positioned to create hydrodynamic forces while towing that push them apart and spread the opening of the net.
footrope	The line running along lower mouth of net. Net used during large-mesh trawl survey has footrope weighted with chain to keep it on bottom.
headrope	The line running along upper mouth of net with floats attached to keep the net open.
mesh	An open fabric of line or cord, the intersections of which are looped or knotted into various sized spaces and sewn together to form a net.

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net performance	A rating given by the skipper describing problems encountered with the net during a haul.
sweep	The width net covers when towed over the seafloor.
wing	The portion of the trawl net forward of the main body of the net.
Sampling Terms	
catch	Quantity of animals caught in trawl net. Measured in numbers or weight of animals.
catch weight database	The onboard database used to enter weights of all species identified during the haul. All information is entered upon completion of catch sampling. Data from the shellfish and fish measurement databases are incorporated into the catch weight database after each haul.
cruise leader	Biologist in charge of coordinating biological sampling activities during the survey and responsible for the quality of collected data while on the vessel.
debris	Contents of the trawl net that are not identified or sampled, including rocks, empty shells, seaweed, previously dead organisms, or human made objects.
fish measurement database	The onboard database used to collect fish measurements. Measurements can be entered directly from the magnetic fish measuring board, or entered into the database manually using a networked input program from a network connected device.
haul	From the time trawl net reaches bottom and is towed in an attempt to fish to the time the vessel stops moving and begins retrieving the net.
haul database	The onboard database to store information associated with the fishing process for each haul. Data from skipper trawl record forms are manually entered at the end of each day
onboard databases	Databases in use during the trawl survey include: fish measurement database, shellfish measurement database, catch weight database, and haul database.
on-deck sorting bin	An area located on the back deck of the survey vessel contained by removable boards where the catch from the codend is emptied after every haul, prior to sorting and removal of the subsample.
shellfish measurement database	Onboard database used to enter crab measurements and biological information. Measurements and crab information are entered directly using electronic calipers and the crab keyboard, or by using a standard keyboard.
sorting table	Table located on the forward part of deck where the subsample is sorted for species composition, weighing, and measuring.
species composition sampling	Sorting, identification, and weighing of organisms in the catch to determine proportion and total weight of each species.
station	Survey area sampling unit. Each station is towed once during the annual survey.
subsample	A representative and random subset of the total haul catch.
subsampling net	The net used to obtain the subsample. This net is tied into the on-deck sorting bin and the haul catch is emptied into the bin. The subsampling net is then untied and lifted through the catch to capture a representative subsample that is sorted at the sorting table.

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whole-haul	When 100% of the trawl catch of a specific species is accounted for by weight, count, or measurement, or a combination. In instances when there is a small total catch, when 100% of the total trawl catch is sorted and weighed.
Management Terms	
abundance threshold	Level of mature male Tanner crab abundance described in state regulation that must be met in order to consider opening a commercial fishery.
GHL	Guideline Harvest Level. Catch quota established prior to the beginning of each fishing season. GHLs for Tanner crab are based on large-mesh trawl survey data.
legal male	Crab that may be retained by state regulation; only male crab of specific size are considered legal to retain.
long-term average abundance	Average abundance of mature male Tanner crab from 1967–1998 as determined using a combination of trawl survey data, commercial catch history, and pot survey catches, and used to establish regulatory abundance thresholds.
management district	Regulatory unit to facilitate resource management.
management section	Management districts are divided into sections to facilitate management of the Tanner crab fisheries and are based on local distributions and migration patterns. Each section has a separate GHL.
molting mature male crab	Estimated abundance of 100% newshell and 15% oldshell male Tanner crab that are >114 mm carapace width.
Other Biological Terms	
anterior	Toward the front, near the head, or rostral end of a crab.
caudal fin	The tail of a fish.
claspers	A paired organ of male sharks and skates. Assists transfer of spermatozoa into the body of a female during copulation.
dorsal	The back or part of an organism away from the ground. Refers to the hinge area of a scallop shell.
inclement weather	Severe, rough, harsh, or stormy.
pectoral fin	Either of a pair of fins situated behind the head, one on each side of the body.
posterior	The rear, away from the head.
shell height	The straight-line distance from the umbo the the outer scallop shell margin, perpendicular to the hinge. Scallop shell heights are measured on the left (top) valve.
umbo	Beak-like projections at the dorsal part of a shell; it is the oldest part of a bivalve shell.
valve	One of the 2 parts of a bivalve shell, 2 valves make up one shell.
Data Analysis Terms	
area swept	The sea floor area sampled by the trawl during a haul.
catchability	The relationship between the proportion of a population available to the survey gear and the proportion of the population in the trawl path retained by the survey net.

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density	The number or weight of a species present per unit of area.
distance towed/haul length	Distance the vessel travels between the time the trawl net footrope contacts bottom and the time the center of footrope leaves bottom.
escapement	The act of an organism in the trawl path evading capture by the trawl net.
relative abundance indices	Indices that track change in population size, but do not estimate actual population size.
size selectivity	The consequence of fishing gear capturing organisms of different sizes at different rates.
true abundance	The actual number of animals present in the area of interest.

APPENDIX B. FISHING LOG AND TRAWL STATIONS SAMPLED

Appendix B1.–2017 large-mesh bottom trawl survey fishing log.

Haul	1	1	2	2	3	3	4	5	6	7	8	9	10	11
Location	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.
Month/day/year	5/31/2017	6/8/2017	5/31/2017	6/8/2017	5/31/2017	6/8/2017	6/12/2017	6/12/2017	6/12/2017	6/13/2017	6/13/2017	6/13/2017	6/13/2017	6/13/2017
Station	CHK	CHB	CHL	CHA	CHF	CHE	313	314	285	255A	255B	256	257	284
Longitude start (°W)	152.3262	152.3893	152.2367	152.44	152.3375	152.4552	152.031	151.8053	151.6643	152.0902	151.9253	151.8607	151.653	151.7472
Latitude start (°N)	57.7283	57.6512	57.733	57.6123	57.6828	57.6737	57.9398	57.9102	57.9705	58.0742	58.0387	58.0695	58.0575	58.0267
Heading, degrees	107	44	57	32	42	41	112	347	353	161	309	101	357	201
Average depth (m)	153.6	93.26	188.3	36.57	131.6	18.28	199.3	60.34	102.4	153.6	138.9	137.1	159	138.9
Distance fished (km)	1.85	1.85	1.85	1.85	1.85	1.11	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85
Bottom Temp. (°C)		5.45		6.42		7.04	5.43	6.23	5.95	5.57	5.89	6.13	5.85	5.81

Haul	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Location	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.
Month/day/year	6/13/2017	6/13/2017	6/14/2017	6/14/2017	6/14/2017	6/14/2017	6/14/2017	6/14/2017	6/15/2017	6/15/2017	6/15/2017	6/15/2017	6/15/2017	6/15/2017
Station	283B	283A	MOXA	MOXB	MOPA	MOLA	MOEX	MOGX	MOLB	MOPB	MONX	KZS	KZR	KZO
Longitude start (°W)	151.9283	152.079	152.2497	152.2452	152.2383	152.1755	152.3715	152.164	152.131	152.2527	152.4885	152.582	152.587	152.5603
Latitude start (°N)	57.9887	57.968	58.2095	58.1588	58.1095	58.1065	57.9487	57.9725	58.0565	58.0838	58.0258	58.1463	58.132	58.0015
Heading, degrees	177	62	185	158	227	135	71	47	176	231	11	192	181	35
Average depth (m)	173.7	177.3	164.5	168.2	168.2	201.1	128	175.5	153.6	166.4	195.6	109.7	117	201.1
Distance fished (km)	1.85	1.85	1.85	1.85	1.85	1.85	1.29	1.85	1.85	1.85	1.85	1.48	1.85	1.85
Bottom Temp. (°C)	5.32	5.47	5.73	5.74	5.65	5.61	6.34	5.62	5.6	5.64	5.83	3.98	3.73	5.81

Haul	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Location	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	NE Kod.	E Kod.
Month/day/year	6/16/2017	6/16/2017	6/16/2017	6/16/2017	6/16/2017	6/20/2017	6/20/2017	6/20/2017	6/20/2017	6/20/2017	6/20/2017	6/20/2017	6/20/2017	6/21/2017
Station	KZA	KZB	KZD	KZF	KZJ	CHJ	CHG	369X	395	420	421	444	443	UGAC
Longitude start (°W)	152.8783	152.8643	152.7935	152.6633	152.651	152.3788	152.1958	152.0527	151.957	151.8115	151.7307	151.702	151.7358	152.9903
Latitude start (°N)	57.7905	57.8165	57.88	57.9643	57.966	57.7282	57.6982	57.7302	57.6627	57.6033	57.5705	57.5302	57.5278	57.4605
Heading, degrees	20	22	47	215	62	128	81	350	299	143	123	136	290	50
Average depth (m)	45.71	54.86	98.75	128	131.6	91.43	111.5	115.2	206.6	137.1	133.4	159	146.2	36.57
Distance fished (km)	0.92	0.92	1.66	1.29	1.85	1.85	1.85	1.85	1.85	1.48	1.48	1.48	1.48	1.11
Bottom Temp. (°C)	5.6	5.63	6.66	6.41	6.39	6.3	6.76	6.55	6.28	6.2	6.16	6.14	6.43	4.41

Haul	40	41	42	43	44	46	47	48	49	50	51	52	53	54
Location	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.
Month/day/year	6/21/2017	6/21/2017	6/21/2017	6/21/2017	6/21/2017	6/22/2017	6/22/2017	6/22/2017	6/22/2017	6/22/2017	6/22/2017	6/22/2017	6/22/2017	6/22/2017
Station	UGAD	UGAA	UGB	UGC	UGD	UGE	UGF	UGI	UGG	UGJ	486B	486A	UGM	510D
Longitude start (°W)	152.8987	152.857	152.7547	152.6823	152.6422	152.5988	152.5533	152.5477	152.5043	152.4575	152.412	152.4937	152.5417	152.5383
Latitude start (°N)	57.4758	57.4973	57.4732	57.4387	57.4378	57.4162	57.3968	57.3622	57.3857	57.3775	57.3225	57.2965	57.314	57.3
Heading, degrees	87	129	160	138	124	168	211	337	92	191	164	5	6	184
Average depth (m)	67.66	76.8	91.43	98.75	98.75	95.09	91.43	98.75	67.66	69.49	71.31	100.5	104.2	104.2
Distance fished (km)	1.66	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	3.95	3.85	5.66	5.22	6.34	5.32	6.79	6.56	7.58	7.1	7.21	6.64	6.58	6.56

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Appendix B1.–Page 2 of 7.

Haul	55	56	57	58	59	60	61	62	63	64	65	66	67	68
Location	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.
Month/day/year	6/23/2017	6/23/2017	6/23/2017	6/23/2017	6/23/2017	6/23/2017	6/23/2017	6/23/2017	6/24/2017	6/24/2017	6/24/2017	6/24/2017	6/24/2017	6/24/2017
Station	KLD	510C	511A	511B	535B	535D	535A	534BX	KLL	533B	534DX	535C	561	589
Longitude start (°W)	152.747	152.5543	152.4943	152.4153	152.4147	152.4102	152.4477	152.5307	152.787	152.7135	152.5087	152.48	152.441	152.4647
Latitude start (°N)	57.2798	57.2083	57.2112	57.2257	57.1747	57.1463	57.1695	57.1945	57.2283	57.1675	57.137	57.1428	57.0953	57.0238
Heading, degrees	209	72	83	154	169	192	354	248	121	151	37	134	168	270
Average depth (m)	23.77	93.26	106	78.63	126.1	135.3	137.1	104.2	133.4	142.6	129.8	146.2	151.7	142.6
Distance fished (km)	1.29	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.66	1.85	1.85	1.85
Bottom Temp. (°C)	7.57	6.24	6.38	6.52	6.37	6.33	6.36	6.48	6.39	5.6	5.66	5.69	5.65	5.62
Haul	69	70	72	73	74	75	76	77	78	79	80	81	82	83
Location	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	SE Kod.	SE Kod.	SE Kod.	SE Kod.
Month/day/year	6/24/2017	6/24/2017	6/25/2017	6/25/2017	6/25/2017	6/25/2017	6/25/2017	6/25/2017	6/26/2017	6/26/2017	6/26/2017	6/26/2017	6/26/2017	6/27/2017
Station	588	560	KLA	KLB	KLC	KLI	KLH	KLG	KLF	KLE	THN	THM	THL	THK
Longitude start (°W)	152.6055	152.6337	153.0718	152.9838	152.9403	152.862	152.9105	152.9778	153.0465	153.1418	153.3342	153.3478	153.3912	153.494
Latitude start (°N)	57.0217	57.0503	57.3055	57.311	57.2958	57.2458	57.2225	57.21	57.2017	57.1755	57.1692	57.1535	57.1217	57.1452
Heading, degrees	272	342	90	144	152	129	258	226	250	60	204	219	200	192
Average depth (m)	153.6	153.6	93.26	82.29	93.26	124.3	133.4	122.5	117	115.2	113.3	124.3	126.1	104.2
Distance fished (km)	1.85	1.85	1.11	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.66	1.48	1.66	1.85
Bottom Temp. (°C)	5.62	5.6	3.62	6.62	6.52	6.67	5.85	5.7	5.57	5.92	5.05	4.92	5.01	4.7
Haul	84	85	86	87	88	89	90	91	92	93	94	95	96	97
Location	SE Kod.	SE Kod.	SE Kod.	SE Kod.	SE Kod.	SE Kod.	SW Kod.	SW Kod.	SW Kod.	SW Kod.	SW Kod.	SW Kod.	SW Kod.	SW Kod.
Month/day/year	6/27/2017	6/27/2017	6/27/2017	6/27/2017	6/27/2017	6/27/2017	6/28/2017	6/28/2017	6/28/2017	6/28/2017	6/28/2017	6/28/2017	6/28/2017	6/28/2017
Station	THJ	THI	THFA	THG	THH	THDX	ALD	ALBX	646D	646B	646A	645B	646C	682B
Longitude start (°W)	153.4612	153.5903	153.5823	153.4713	153.4167	153.4587	154.1898	154.2252	154.352	154.3897	154.4502	154.4957	154.4712	154.5052
Latitude start (°N)	57.0748	57.0685	57.0213	57.0085	57.02	56.9968	56.8785	56.8418	56.813	56.8422	56.8522	56.8362	56.8192	56.7777
Heading, degrees	171	109	71	62	353	213	188	115	273	359	252	199	141	197
Average depth (m)	115.2	89.6	76.8	120.6	118.8	128	58.51	40.23	54.86	58.51	65.83	64	65.83	71.31
Distance fished (km)	1.85	0.92	1.48	1.66	1.85	1.85	1.85	1.85	2.03	1.85	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	5.07	5.42	5.3	5.11	5.33	5.08	5.3	7.21	7.34	7.3	7.31	8.15	7.26	8.03
Haul	98	99	100	101	102	103	104	105	106	107	108	109	110	111
Location	SW Kod.	SW Kod.	SW Kod.	SW Kod.	SW Kod.	SW Kod.	SW Kod.	SW Kod.	SW Kod.	SW Kod.	SW Kod.	SW Kod.	SW Kod.	SW Kod.
Month/day/year	6/28/2017	6/28/2017	6/29/2017	6/29/2017	6/29/2017	6/29/2017	6/29/2017	6/29/2017	6/29/2017	6/29/2017	6/30/2017	6/30/2017	6/30/2017	6/30/2017
Station	683A	683B	ALF	ALA	684B	684A	683D	684C	ALCA	ALG	ALR	ALQ	ALP	ALO
Longitude start (°W)	154.4763	154.4018	154.1635	154.1335	154.2353	154.2863	154.3735	154.3358	154.129	154.094	153.8038	153.8925	153.9558	154.0077
Latitude start (°N)	56.7622	56.7623	56.8577	56.797	56.7617	56.7458	56.7327	56.7375	56.8235	56.8608	57.1285	57.0868	57.0443	56.9873
Heading, degrees	84	102	1	218	40	274	117	82	8	54	225	215	209	212
Average depth (m)	65.83	64	54.86	60.34	73.14	62.17	71.31	69.49	67.66	58.51	118.8	175.5	155.4	133.4
Distance fished (km)	1.85	1.85	1.85	1.66	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	7.78	7.48	5.46	8.64	7.94	7.41	7.78	7.34	5.56	4.86	2.17	2.13	2.14	2.15

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Haul	112	113	114	115	116	117	118	119	120	121	122	123	124	125
Location	SW Kod.	SW Kod.	SW Kod.	SW Kod.	SW Kod.	SW Kod.	SE Kod.	SE Kod.	SE Kod.	SE Kod.	SE Kod.	SE Kod.	SE Kod.	SE Kod.
Month/day/year	6/30/2017	6/30/2017	6/30/2017	7/1/2017	7/1/2017	7/1/2017	7/1/2017	7/1/2017	7/1/2017	7/2/2017	7/2/2017	7/2/2017	7/2/2017	7/2/2017
Station	ALL	ALM	ALK	ALJ	ALH	ALI	725	688	726	727	759	760	728	761
Longitude start (°W)	154.0843	153.9958	153.951	154.0127	154.1295	154.1002	153.8282	153.6605	153.5888	153.489	153.569	153.4785	153.3247	153.3027
Latitude start (°N)	56.9253	56.9225	56.9272	56.9098	56.8813	56.901	56.6678	56.7213	56.6967	56.6752	56.5517	56.5608	56.6433	56.612
Heading, degrees	43	50	65	220	38	39	52	101	160	166	204	49	43	93
Average depth (m)	87.77	67.66	69.49	71.31	65.83	82.29	98.75	151.7	155.4	149.9	148.1	131.6	146.2	140.8
Distance fished (km)	1.85	1.85	1.66	1.85	1.85	1.85	1.29	1.85	1.85	1.85	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	2.51	5.45	5.66	5.15	4.75	3.18	6.16	5.26	5.07	5.03	4.93	4.99	4.73	4.84
Haul	126	127	128	129	130	131	132	133	134	135	136	137	138	139
Location	SE Kod.	SE Kod.	SE Kod.	SE Kod.	SE Kod.	SE Kod.	SE Kod.	SE Kod.	SE Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.
Month/day/year	7/2/2017	7/2/2017	7/3/2017	7/3/2017	7/3/2017	7/3/2017	7/3/2017	7/3/2017	7/3/2017	7/3/2017	7/4/2017	7/4/2017	7/4/2017	7/4/2017
Station	729	651	THA	THCX	614	615	585X	586	618A	619	587	620	655	654
Longitude start (°W)	153.2347	153.2487	153.7158	153.4997	153.463	153.4123	153.0322	152.9253	152.857	152.7637	152.6937	152.6298	152.6343	152.7147
Latitude start (°N)	56.6425	56.8337	56.8868	56.9355	56.9225	56.9122	56.947	56.9512	56.9368	56.9355	57.0083	56.9327	56.8647	56.8547
Heading, degrees	23	347	65	359	168	185	78	54	56	116	167	142	106	313
Average depth (m)	144.4	170	51.2	133.4	142.6	144.4	135.3	128	126.1	135.3	148.1	151.7	137.1	98.75
Distance fished (km)	1.85	1.85	1.66	1.85	1.85	1.85	1.85	1.66	1.85	1.85	1.85	1.85	1.85	1.29
Bottom Temp. (°C)	4.71	4.77	6.66	4.94	4.92	4.89	5.79	5.13	5.86	5.77	5.7	5.71	5.76	6.1
Haul	140	141	142	143	144	145	146	147	148	149	150	151	152	153
Location	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	Kujulik	Kujulik	Kujulik	Kujulik	Kujulik	Kujulik	Chignik	Chignik
Month/day/year	7/4/2017	7/4/2017	7/4/2017	7/4/2017	7/5/2017	7/5/2017	7/14/2017	7/14/2017	7/14/2017	7/14/2017	7/14/2017	7/15/2017	7/15/2017	7/15/2017
Station	695	696	656	621	533A	559	4308	4302	4301	4298	4290	4296	4286	4287
Longitude start (°W)	152.5552	152.4533	152.4287	152.4528	152.756	152.7283	157.6132	157.6758	157.6887	157.7482	157.8327	157.772	157.9115	157.9357
Latitude start (°N)	56.754	56.7385	56.7963	56.9083	57.1333	57.0953	56.54	56.5402	56.5667	56.535	56.5958	56.62	56.426	56.403
Heading, degrees	170	138	341	4	121	223	165	124	150	91	315	149	92	62
Average depth (m)	146.2	181	171.8	157.2	146.2	155.4	126.1	98.75	98.75	93.26	29.25	76.8	166.4	192
Distance fished (km)	1.85	1.85	1.66	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.11	1.85	1.85	1.85
Bottom Temp. (°C)	5.72	5.72	5.74	5.73	5.68	5.69	6.4	6.6	6.77	7.02	8.96	8.4	5.28	5.04
Haul	154	155	156	157	158	160	161	162	163	164	165	166	167	168
Location	Chignik	Chignik	Chignik	Chignik	Chignik	Chignik	Chignik	Chignik	Chignik	Chignik	Chignik	Chignik	Chignik	Chignik
Month/day/year	7/15/2017	7/15/2017	7/15/2017	7/15/2017	7/15/2017	7/16/2017	7/16/2017	7/16/2017	7/16/2017	7/16/2017	7/16/2017	7/16/2017	7/17/2017	7/17/2017
Station	4282	4277	4272	4266	4256	4267	4274	4278	4312	4270	4271	4264	4964	4265
Longitude start (°W)	157.9985	158.0578	158.0925	158.1793	158.3072	158.1668	158.1412	158.0345	158.1478	158.1873	158.2135	158.2585	158.341	158.3063
Latitude start (°N)	56.4213	56.4287	56.4868	56.419	56.421	56.4002	56.4052	56.392	56.2553	56.2502	56.2333	56.2363	56.2245	56.1907
Heading, degrees	91	162	152	254	276	302	108	330	87	75	62	203	94	31
Average depth (m)	199.3	181	106	153.6	96.92	122.5	170	192	126.1	98.75	96.92	76.8	71.31	58.51
Distance fished (km)	1.85	1.85	1.66	1.85	1.11	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	4.88	4.87	5.95	4.81	5.31	5.16	4.86	4.69	6.89	7.08	7	7.21	7.57	7.51

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Haul	169	170	171	172	173	174	175	176	177	178	179	180	181	182
Location	Mitro.	Mitro.	Mitro.	Mitro.	Mitro.	Mitro.	Mitro.	Mitro.	Mitro.	Mitro.	Mitro.	Mitro.	Mitro.	Mitro.
Month/day/year	7/17/2017	7/17/2017	7/17/2017	7/17/2017	7/18/2017	7/18/2017	7/18/2017	7/18/2017	7/18/2017	7/18/2017	7/18/2017	7/18/2017	7/19/2017	7/19/2017
Station	4066B	4066A	4050B	4065	4063	4048	4064	4050A	4049	4035	4036	4037	4026	4038A
Longitude start (°W)	158.5473	158.5985	158.6655	158.566	158.5822	158.6338	158.5928	158.7198	158.749	158.8437	158.9317	158.9582	159.0213	158.9753
Latitude start (°N)	55.868	55.8868	55.8745	55.9295	56.1323	56.064	55.9958	55.8948	55.9207	55.9522	55.8828	55.83	55.7238	55.7005
Heading, degrees	352	182	11	4	232	184	344	306	293	115	202	195	219	31
Average depth (m)	118.8	118.8	117	106	153.6	171.8	153.6	138.9	144.4	140.8	129.8	129.8	142.6	146.2
Distance fished (km)	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.66	1.85
Bottom Temp. (°C)	5.84	5.83	6.21	6.61	3.96	3.86	4.27	6.04	5.95	6.1	5.6	5.84	5.94	6.08
Haul	183	184	185	186	187	188	189	190	191	192	193	194	195	196
Location	Mitro.	Ivanof	Ivanof	Ivanof	Ivanof	Ivanof	Ivanof	Ivanof	Ivanof	Stepovak	Stepovak	Stepovak	Stepovak	Beaver
Month/day/year	7/19/2017	7/19/2017	7/19/2017	7/19/2017	7/19/2017	7/20/2017	7/20/2017	7/20/2017	7/20/2017	7/20/2017	7/20/2017	7/20/2017	7/20/2017	7/21/2017
Station	4038B	4025	4024	4915	4007	4900X	4000X	4000Y	4008	STD	STA	STB	STE	368A
Longitude start (°W)	158.912	159.0087	159.0693	159.1797	159.3922	159.4957	159.4878	159.4743	159.4192	159.8255	159.8143	159.7643	159.7657	160.1812
Latitude start (°N)	55.7027	55.7828	55.8913	55.8618	55.778	55.863	55.8192	55.7873	55.7375	55.7533	55.8023	55.8282	55.7915	55.5725
Heading, degrees	209	8	135	223	205	72	163	116	174	17	3	173	192	223
Average depth (m)	149.9	126.1	98.75	64	87.77	38.4	71.31	84.12	104.2	120.6	104.2	111.5	122.5	181
Distance fished (km)	1.66	1.85	1.85	2.03	1.85	0.92	1.85	1.85	1.85	1.48	1.48	1.66	1.48	1.85
Bottom Temp. (°C)	5.12	5.99	6.63	7.31	6.25	6.98	4.95	6.34	5.61	4.77	5.16	5.24	4.57	4.34
Haul	197	198	199	200	201	202	203	204	205	206	207	208	209	210
Location	Beaver	Beaver	Beaver	Beaver	Beaver	Beaver	Beaver	Beaver	Beaver	Beaver	Beaver	W. Nagai	W. Nagai	W. Nagai
Month/day/year	7/21/2017	7/21/2017	7/21/2017	7/21/2017	7/21/2017	7/21/2017	7/21/2017	7/21/2017	7/22/2017	7/22/2017	7/22/2017	7/23/2017	7/23/2017	7/23/2017
Station	348	329B	329C	311C	311B	BAF	BAD	BAA	BAC	BAE	311A	332B	354	334
Longitude start (°W)	160.3013	160.4287	160.4895	160.5032	160.5828	160.553	160.572	160.6828	160.615	160.6015	160.5933	160.375	160.334	160.3862
Latitude start (°N)	55.5225	55.4632	55.429	55.4333	55.4567	55.478	55.51	55.5345	55.519	55.4865	55.4677	55.2047	55.0815	55.053
Heading, degrees	61	45	69	277	94	334	310	305	180	182	182	18	210	230
Average depth (m)	188.3	177.3	131.6	135.3	137.1	84.12	95.09	31.08	98.75	118.8	122.5	184.6	140.8	149.9
Distance fished (km)	1.85	1.85	1.85	1.85	1.85	1.85	1.85	0.92	1.85	1.85	1.85	1.48	1.85	1.85
Bottom Temp. (°C)	3.84	3.92	4.48	4.44	4.7	6.71	5.68	6.87	5.78	4.34	4.26	5.51	5.29	5.27
Haul	211	212	213	214	215	216	217	218	219	220	221	222	223	224
Location	W. Nagai	W. Nagai	W. Nagai	W. Nagai	W. Nagai	W. Nagai	W. Nagai	W. Nagai	W. Nagai	Beaver	Beaver	Beaver	Beaver	Pavlof
Month/day/year	7/23/2017	7/23/2017	7/23/2017	7/23/2017	7/24/2017	7/24/2017	7/24/2017	7/24/2017	7/24/2017	7/25/2017	7/25/2017	7/25/2017	7/25/2017	7/25/2017
Station	335	337	318	301	373A	353	373B	393	371	BVB	BVA	BVC	278	245
Longitude start (°W)	160.4478	160.479	160.6062	160.6877	160.1267	160.3243	160.0563	159.9795	160.1503	160.8742	160.908	160.9002	160.945	161.221
Latitude start (°N)	55.0157	54.7798	54.7863	54.7958	55.1195	55.0938	55.1497	55.1982	55.2773	55.5018	55.4925	55.4628	55.3965	55.2702
Heading, degrees	227	217	292	285	319	221	322	343	310	206	190	209	185	290
Average depth (m)	135.3	109.7	109.7	111.5	27.43	151.7	76.8	76.8	135.3	36.57	45.71	85.94	111.5	82.29
Distance fished (km)	1.85	1.48	1.48	1.48	1.48	1.85	1.85	1.48	1.85	1.85	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	5.64	4.67	4.63	4.56	6.95	5.2	5.52	5.45	5.69	7.54	7.27	7.17	6.15	6.28

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Haul	225	226	227	228	229	230	231	232	233	234	235	236	237	238
Location	Pavlof	Pavlof	Pavlof	Pavlof	Pavlof	Pavlof	Pavlof	Pavlof	Pavlof	Pavlof	Pavlof	Pavlof	Pavlof	Pavlof
Month/day/year	7/25/2017	7/26/2017	7/26/2017	7/26/2017	7/26/2017	7/26/2017	7/26/2017	7/26/2017	7/26/2017	7/26/2017	7/26/2017	7/27/2017	7/27/2017	7/27/2017
Station	228	PAOB	PAH	PAEX	PAIX	PALX	PAP	PARB	PAV	VOBX	VOD	PARA	PAU	VOA
Longitude start (°W)	161.2815	161.6548	161.6028	161.5263	161.529	161.5417	161.5692	161.591	161.5755	161.5847	161.5497	161.6675	161.675	161.7105
Latitude start (°N)	55.2797	55.4337	55.5155	55.552	55.5288	55.4988	55.4563	55.4142	55.3515	55.3332	55.3147	55.4088	55.3708	55.3038
Heading, degrees	108	9	193	72	182	189	242	178	177	171	67	206	187	223
Average depth (m)	82.29	95.09	54.86	29.25	42.06	54.86	74.97	84.12	98.75	98.75	118.8	106	124.3	111.5
Distance fished (km)	1.66	1.85	1.29	1.11	1.85	1.66	1.66	1.85	1.85	1.85	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	6.31	4.77	6.66	7.23	7.17	6.72	5.36	5.1	4.53	4.45	4.28	4.5	4.39	4.37
Haul	239	240	241	242	243	244	245	246	247	248	249	250	251	252
Location	Pavlof	Pavlof	Pavlof	Pavlof	Pavlof	Pavlof	Pavlof	Pavlof	Pavlof	Pavlof	Cold B.	Cold B.	Cold B.	Cold B.
Month/day/year	7/27/2017	7/27/2017	7/27/2017	7/27/2017	7/27/2017	7/27/2017	7/28/2017	7/28/2017	7/28/2017	7/28/2017	7/29/2017	7/29/2017	7/29/2017	7/29/2017
Station	VOG	VOFB	VOH	VOI	VON	VOR	VOLX	VOPX	VOQ	VOM	COB	COC	COE	COF
Longitude start (°W)	161.7073	161.8215	161.6903	161.6093	161.7377	161.7458	161.9718	161.9393	161.82	161.8382	162.5948	162.555	162.5452	162.5253
Latitude start (°N)	55.2927	55.2592	55.2787	55.2823	55.235	55.1967	55.2135	55.1828	55.1987	55.2302	55.2267	55.228	55.1983	55.1617
Heading, degrees	244	41	81	76	241	312	111	34	88	2	153	170	162	127
Average depth (m)	106	96.92	100.5	106	120.6	118.8	76.8	82.29	93.26	87.77	54.86	47.54	67.66	89.6
Distance fished (km)	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.11	1.11	1.11	1.48
Bottom Temp. (°C)	4.34	5.15	4.34	4.34	4.73	4.75	5.6	5.47	5.34	5.11	8.8	8.97	8.7	8.83
Haul	253	254	255	256	257	258	259	260	261	262	263	264	265	266
Location	Cold B.	Cold B.	Cold B.	Cold B.	Sanak I.	Sanak I.	Sanak I.	Sanak I.	Sanak I.	Sanak I.	Sanak I.	Akutan	Akutan	Akutan
Month/day/year	7/29/2017	7/29/2017	7/29/2017	7/29/2017	7/30/2017	7/30/2017	7/30/2017	7/30/2017	7/30/2017	7/30/2017	7/30/2017	8/1/2017	8/1/2017	8/1/2017
Station	COH	COGB	COGA	COM	126	113	125	137	138A	138B	138C	AKA	AKC	AKD
Longitude start (°W)	162.397	162.4275	162.4755	162.463	162.5308	162.6273	162.5418	162.4182	162.3973	162.4087	162.344	165.7002	165.712	165.7048
Latitude start (°N)	55.11	55.1152	55.1438	55.0155	54.4755	54.5085	54.5178	54.512	54.4902	54.4463	54.4472	54.1478	54.177	54.2053
Heading, degrees	287	323	328	118	301	119	119	145	154	300	134	22	355	176
Average depth (m)	45.71	56.69	87.77	78.63	140.8	138.9	146.2	146.2	142.6	149.9	144.4	71.31	91.43	85.94
Distance fished (km)	1.66	1.85	1.66	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.85	1.85
Bottom Temp. (°C)	8.78	8.72	8.93	7.32	4.32	4.19	4.22	4.23	4.35	4.25	4.36	6.48	6.25	6.14
Haul	267	268	269	270	271	272	273	274	275	276	277	278	279	280
Location	Akutan	Akutan	Makush.	Makush.	Makush.	Makush.	Makush.	Makush.	Makush.	Makush.	Unalaska	Unalaska	Unalaska	Unalaska
Month/day/year	8/1/2017	8/1/2017	8/2/2017	8/2/2017	8/2/2017	8/2/2017	8/3/2017	8/3/2017	8/3/2017	8/3/2017	8/3/2017	8/5/2017	8/5/2017	8/5/2017
Station	AKG	AKL	MKK	MKN	MKP	MKJ	MKB	MKC	MKE	MKF	UNI	UNC	UNF	UNJ
Longitude start (°W)	165.7483	165.7432	167.1765	167.1128	167.0635	167.1005	166.785	166.8498	166.9252	167.0122	166.6138	166.603	166.5243	166.4968
Latitude start (°N)	54.226	54.2518	53.7275	53.6767	53.6475	53.7188	53.7005	53.7157	53.731	53.7392	54.0272	53.9185	53.9687	54.0293
Heading, degrees	339	2	134	311	303	96	315	284	272	258	126	351	30	176
Average depth (m)	98.75	102.4	120.6	135.3	142.6	149.9	98.75	173.7	199.3	199.3	95.09	137.1	153.6	164.5
Distance fished (km)	1.85	1.85	1.85	1.85	1.85	1.85	1.66	1.85	1.85	1.85	1.48	1.85	1.85	1.85
Bottom Temp. (°C)	6.11	6.13	5.39	6	6.07	5.06	5.29	4.73	4.82	4.93	6.99	5.66	5.47	5.52

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Appendix B1.–Page 6 of 7.

Haul	281	282	283	284	285	286	287	288	289	290	291	292	293	294
Location	Unalaska	Unalaska	Unalaska	Unalaska	Morzhov.	Morzhov.	Morzhov.	Morzhov.	Morzhov.	Morzhov.	Morzhov.	Morzhov.	Morzhov.	Morzhov.
Month/day/year	8/5/2017	8/6/2017	8/6/2017	8/6/2017	8/9/2017	8/9/2017	8/9/2017	8/9/2017	8/9/2017	8/9/2017	8/9/2017	8/9/2017	8/9/2017	8/10/2017
Station	KAA	UNE	UND	UNG	MORX	MOSX	87AX	87D	MOOX	MOK	MOL	MOH	MOF	MOB
Longitude start (°W)	166.33	166.5027	166.4795	166.441	163.1675	163.1005	163.0058	162.9482	162.9873	162.9942	162.9563	162.9967	163.0213	163.0692
Latitude start (°N)	53.972	53.942	53.9433	53.991	54.8317	54.8532	54.815	54.7783	54.8527	54.8872	54.909	54.9393	54.9807	55.0633
Heading, degrees	21	348	13	237	96	49	43	134	355	45	4	333	342	172
Average depth (m)	82.29	107.8	80.46	93.26	91.43	95.09	87.77	91.43	96.92	126.1	128	98.75	82.29	74.97
Distance fished (km)	1.85	1.48	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.29
Bottom Temp. (°C)	7.37	5.86	6.09	6.13	6.17	6.14	6.43	6.19	6.14	6.25	6.07	6.03	6.24	6.58

Haul	295	296	297	298	299	300	301	302	303	304	305	306	307	308
Location	Morzhov.	Morzhov.	Morzhov.	Cold B.	Cold B.	Cold B.	Cold B.	Cold B.	Cold B.	Cold B.	Cold B.	NE Kod.	NE Kod.	NE Kod.
Month/day/year	8/10/2017	8/10/2017	8/10/2017	8/10/2017	8/10/2017	8/11/2017	8/11/2017	8/11/2017	8/11/2017	8/11/2017	8/11/2017	8/24/2017	8/24/2017	8/24/2017
Station	MOD	MOG	MOI	COOX	BEG	157A	156A	BEF	BEE	BEBX	BECX	KZK	KZG	KZE
Longitude start (°W)	163.049	162.9963	162.9682	162.3853	162.1718	162.1228	162.1063	162.124	162.1492	162.1497	162.1598	152.5497	152.6152	152.6787
Latitude start (°N)	55.0333	54.992	54.9538	55.0012	54.9912	54.9183	54.963	55.0013	55.0705	55.1403	55.1122	57.9878	57.952	57.9295
Heading, degrees	168	142	170	96	170	154	359	25	182	205	190	52	290	185
Average depth (m)	87.77	91.43	109.7	104.2	84.12	76.8	87.77	93.26	82.29	67.66	80.46	177.3	128	104.2
Distance fished (km)	1.85	1.85	1.85	1.48	1.48	1.66	1.85	1.85	1.85	1.29	1.85	1.85	1.85	1.29
Bottom Temp. (°C)	6.07	6.03	6.07	7.43	7.2	7.17	6.91	6.88	6.94	7.25	6.85	7.02	7.68	9.13

Haul	309	310	311	312	313	314	315	316	317	319	320	321	322	323
Location	NE Kod.	W Kod.	W Kod.	W Kod.	W Kod.	W Kod.	W Kod.	W Kod.	W Kod.	W Kod.	W Kod.	W Kod.	W Kod.	W Kod.
Month/day/year	8/24/2017	8/25/2017	8/25/2017	8/25/2017	8/25/2017	8/25/2017	8/25/2017	8/25/2017	8/26/2017	8/26/2017	8/26/2017	8/26/2017	8/26/2017	8/26/2017
Station	KZC	KUD	KUF	KUG	KUI	KUS	KUQ	UYBX	UYHX	UYFX	UYEX	UYO	UYKX	UYMX
Longitude start (°W)	152.747	153.1643	153.3027	153.4327	153.3865	153.5462	153.5218	153.9985	153.7193	153.8558	153.9278	153.7967	153.8873	153.8992
Latitude start (°N)	57.8617	57.985	58.0288	58.042	57.9735	57.8728	57.8842	57.7428	57.6618	57.6742	57.6455	57.569	57.6005	57.564
Heading, degrees	42	271	268	178	283	162	323	162	268	283	354	320	311	1
Average depth (m)	69.49	38.4	142.6	74.97	241.3	188.3	188.3	142.6	95.09	162.7	188.3	76.8	155.4	109.7
Distance fished (km)	1.29	0.92	1.85	1.85	1.85	1.85	1.66	1.85	1.85	1.85	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	9.52	7.64	6.92	7.14	6.69	5.93	5.93	6.94	7.68	7.35	6.85	8.15	7.31	7.43

Haul	324	325	326	327	328	329	330	331	332	333	334	335	336	337
Location	W Kod.	W Kod.	W Kod.	W Kod.	W Kod.	W Kod.	W Kod.	W Kod.	W Kod.	W Kod.	W Kod.	W Kod.	W Kod.	W Kod.
Month/day/year	8/26/2017	8/27/2017	8/27/2017	8/27/2017	8/27/2017	8/27/2017	8/28/2017	8/28/2017	8/28/2017	8/28/2017	8/28/2017	8/28/2017	8/28/2017	8/28/2017
Station	UYQX	UYT	UYSS	KUT	KUV	KUW	KUXB	KUXA	KUU	KUP	KUNX	KUYA	KUYB	KULB
Longitude start (°W)	153.9033	153.7962	153.8173	153.5222	153.5292	153.5265	153.3797	153.4067	153.4827	153.4485	153.3792	153.1952	153.2138	153.2073
Latitude start (°N)	57.4835	57.3692	57.4292	57.8268	57.7385	57.6952	57.7365	57.7683	57.7832	57.8577	57.8375	57.7888	57.7413	57.8332
Heading, degrees	339	350	178	189	4	164	352	316	320	290	310	179	24	358
Average depth (m)	153.6	43.88	71.31	182.8	85.94	67.66	106	117	159	157.2	131.6	67.66	21.94	82.29
Distance fished (km)	1.85	1.48	1.85	1.85	1.66	1.48	1.85	1.66	1.85	1.85	1.85	1.29	0.92	1.85
Bottom Temp. (°C)	7.51	8.37	8.15	5.99	6.78	7.32	6.03	5.97	6.02	6.11	6.25	8.58	10.9	7.32

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Haul	338	339	340	341	342	343	344	345	346	347	348	349	350	351
Location	W Kod.	W Kod.	W Kod.	W Kod.	W Kod.	W Kod.	W Kod.	N Main.	N Main.	N Main.	N Main.	N Main.	N Main.	N Main.
Month/day/year	8/29/2017	8/29/2017	8/29/2017	8/29/2017	8/29/2017	8/29/2017	8/30/2017	8/30/2017	8/30/2017	8/30/2017	8/30/2017	8/30/2017	8/30/2017	8/30/2017
Station	KUM	KUK	KULA	KUJ	RAA	MAA	PMA	121	120	91	61	60	90	119
Longitude start (°W)	153.1212	153.2527	153.2233	153.2958	153.2035	153.074	152.8627	153.167	153.2553	153.2752	153.2167	153.3097	153.4197	153.5312
Latitude start (°N)	57.8633	57.9178	57.8618	57.9368	58.1265	58.2165	58.2958	58.4588	58.4978	58.5655	58.6167	58.6352	58.5832	58.5285
Heading, degrees	289	301	320	302	327	277	295	338	321	37	37	228	229	210
Average depth (m)	67.66	144.4	104.2	159	107.8	131.6	98.75	173.7	171.8	171.8	164.5	129.8	122.5	129.8
Distance fished (km)	1.85	1.85	1.66	1.85	1.85	1.85	1.85	1.48	1.48	1.48	1.48	1.85	1.85	1.85
Bottom Temp. (°C)	7.36	6.92	7.31	6.89	6.96	7.06	6.97	6.05	6.8	7.58	8.05	9.03	8.85	8.95

Haul	352	353	354	355	356	357	358	359	360	361	362	363	364
Location	N Main.	N Main.	N Main.	N Main.	N Main.	N Main.	N Main.	N Main.	N Main.	N Main.	N Main.	N Main.	N Main.
Month/day/year	8/30/2017	8/31/2017	8/31/2017	8/31/2017	8/31/2017	8/31/2017	8/31/2017	8/31/2017	8/31/2017	8/31/2017	9/1/2017	9/1/2017	9/1/2017
Station	118	171A	171C	171D	172B	144	145	117	146	173	198	222	223
Longitude start (°W)	153.6308	154.2577	154.2048	154.0537	154.0448	153.9242	153.8375	153.8058	153.7125	153.8668	154.0207	154.07	153.994
Latitude start (°N)	58.4933	58.3033	58.3252	58.3285	58.3145	58.4373	58.428	58.4543	58.443	58.363	58.2743	58.1212	58.1462
Heading, degrees	242	75	74	136	134	72	64	76	174	199	195	21	64
Average depth (m)	133.4	111.5	102.4	69.49	96.92	80.46	98.75	95.09	155.4	237.7	171.8	250.5	215.7
Distance fished (km)	1.85	1.85	1.85	1.85	1.85	1.66	1.48	1.48	1.29	1.48	1.48	1.48	1.48
Bottom Temp. (°C)	9.24	8.05	8.15	10.4	9.8	10	8.99	9.07	8.37	5.52	7.41	5.5	5.48
Performance	0	0	0	0	0	0	2	0	0	0	4	0	0

Appendix B2.–2017 bottom trawl survey locations, stations, and station areas by district and section.

KODIAK DISTRICT

Northeast Section

Chiniak Gully

Station	KM²	NM²
395	85.8	25.0
420	83.3	24.3
421	83.3	24.3
443	83.5	24.3
444	83.5	24.3
369X	142.8	41.6
Total	562.1	163.9

Marmot Bay

Station	KM²	NM²
MOEX	36.2	10.6
MOGX	65.9	19.2
MOLA	28.0	8.2
MOLB	44.8	13.1
MONX	75.5	22.0
MOPA	27.8	8.1
MOPB	19.9	5.8
MOXA	13.0	3.8
MOXB	29.5	8.6
256	82.1	24.0
257	82.1	24.0
284	82.4	24.0
285	82.4	24.0
313	85.8	25.0
314	82.5	24.1
255A	64.4	18.8
255B	63.9	18.6
283A	67.9	19.8
283B	64.0	18.7
Total	1,098.1	281.7

Chiniak Bay

Station	KM²	NM²
CHA	5.5	1.6
CHB	7.9	2.3
CHE	20.6	6.0
CHF	12.7	3.7
CHG	32.8	9.6
CHJ	11.3	3.3
CHK	8.6	2.5
CHL	14.1	4.1
Total	113.4	33.1

Kizhuyak Bay

Station	KM²	NM²
KZA	11.7	3.4
KZB	2.7	0.8
KZC	12.3	3.6
KZD	23.7	6.9
KZE	25.8	7.5
KZF	20.1	5.9
KZG	21.2	6.2
KZJ	21.4	6.3
KZK	21.4	6.3
KZO	21.4	6.3
KZR	10.8	3.1
KZS	3.1	0.9
Total	195.7	57.1

Eastside Section

Ugak Bay

Station	KM²	NM²
UGAA	16.0	4.7
UGAC	3.2	0.9
UGAD	4.4	1.3
UGB	5.8	1.7
UGC	17.5	5.1
UGD	11.0	3.2
UGE	12.7	3.7
UGF	15.8	4.6
UGG	11.0	3.2
UGI	22.3	6.5
UGJ	21.0	6.1
UGM	16.8	4.9
Total	157.4	45.9

Kiliuda Bay

Station	KM²	NM²
KLA	20.9	6.1
KLB	9.3	2.7
KLC	19.6	5.7
KLD	18.2	5.3
KLE	8.2	2.4
KLF	15.1	4.4
KLG	16.5	4.8
KLH	16.8	4.9
KLI	21.4	6.3
KLL	21.4	6.3
Total	167.4	48.8

Barnabas Gully

Station	KM²	NM²
486A	25.0	7.3
486B	29.4	8.6
510C	21.5	6.3
510D	38.0	11.1
511A	42.0	12.3
511B	42.9	12.5
533A	42.9	12.5
533B	42.9	12.5
534BX	20.8	6.1
534DX	29.0	8.5
535A	21.1	6.1
535B	21.4	6.3
535C	21.1	6.1
535D	21.4	6.3
559	85.8	25.0
560	85.8	25.0
561	85.8	25.0
587	85.8	25.0
588	85.8	25.0
589	85.8	25.0
619	85.8	25.0
620	85.8	25.0
621	85.8	25.0
654	85.8	25.0
655	85.8	25.0
656	85.8	25.0
695	85.8	25.0
696	85.8	25.0
Total	1,619.9	472.3

Southeast Section

South Sitkalidak Strait

Station	KM²	NM²
THA	15.1	4.4
THCX	19.6	5.7
THDX	28.6	8.3
THFA	22.3	6.5
THG	21.1	6.2
THH	19.2	5.6
THI	21.6	6.3
THJ	17.8	5.2
THK	16.5	4.8
THL	9.3	2.7
THM	10.6	3.1
THN	5.1	1.5
Total	206.8	60.3

Offshore Twoheaded

Station	KM²	NM²
618A	42.9	12.5
585X	78.8	23.0
614	61.2	17.8
615	99.5	29.0
651	85.8	25.0
Total	368.1	107.3

Horse's Head

Station	KM²	NM²
586	85.8	25.0
688	85.8	25.0
725	85.8	25.0
726	85.8	25.0
727	85.8	25.0
728	85.8	25.0
729	85.8	25.0
759	85.8	25.0
760	85.8	25.0
761	85.8	25.0
Total	857.5	250.0

Southwest Section

Alitak Flats

Station	KM²	NM²
645B	34.3	10.0
646A	27.1	7.9
646B	16.5	4.8
646C	27.9	8.1
646D	37.4	10.9
682B	21.7	6.3
683A	22.2	6.5
683B	20.9	6.1
683D	9.3	2.7
684A	21.7	6.3
684B	10.3	3.0
684C	8.6	2.5
Total	257.9	75.2

Alitak Bay

Station	KM²	NM²
ALA	3.1	0.9
ALBX	12.8	3.7
ALCA	8.1	2.4
ALD	13.0	3.8
ALF	21.4	6.3
ALG	19.9	5.8
ALH	16.1	4.7
ALI	16.6	4.9
ALJ	15.1	4.4
ALK	9.9	2.9
ALL	8.2	2.4
ALM	16.1	4.7
ALO	16.8	4.9
ALP	18.4	5.4
ALQ	14.4	4.2
ALR	13.4	3.9
Total	223.5	65.2

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KODIAK DISTRICT (Continued)

Westside Section

Uganik Bay			Uyak Bay			Kupreanof-Viekoda		
Station	KM²	NM²	Station	KM²	NM²	Station	KM²	NM²
KUNX	10.6	3.1	UYBX	21.5	6.3	KUD	27.1	7.9
KUP	13.3	3.9	UYEX	29.9	8.7	KUF	11.3	3.3
KUQ	20.6	6.0	UYFX	22.1	6.4	KUG	15.4	4.5
KUS	12.1	3.5	UYHX	4.1	1.2	KUI	6.4	1.9
KUT	9.4	2.7	UYKX	13.9	4.0	KUJ	17.0	5.0
KUU	13.7	4.0	UYMX	20.8	6.1	KUK	14.1	4.1
KUV	4.1	1.2	UYO	3.4	1.0	KULB	2.7	0.8
KUW	5.2	1.5	UYQX	7.7	2.2	KULA	2.1	0.6
KUXB	4.1	1.2	UYSS	6.0	1.8	KUM	10.5	3.1
KUXA	5.6	1.6	UYT	2.8	0.8	KUYA	4.1	1.2
Total	98.6	28.8	Total	132.1	38.5	KUYB	2.6	0.8
						Total	113.2	33.0

West Afognak		
Station	KM²	NM²
MAA	10.5	3.1
PMA	15.1	4.4
RAA	6.7	2.0
Total	32.3	9.4

North Mainland Section		
Station	KM²	NM²
60	85.8	25.0
61	85.8	25.0
90	80.3	23.4
91	85.8	25.0
117	97.8	28.5
118	85.8	25.0
119	85.8	25.0
120	85.8	25.0
121	85.8	25.0
144	60.7	17.7
145	85.8	25.0
146	85.8	25.0
171A	11.4	3.3
171C	7.6	2.2
171D	28.6	8.3
172B	79.5	23.2
173	85.8	25.0
198	85.8	25.0
222	103.2	30.1
223	85.8	25.0
Total	1,498.1	436.8

KODIAK DISTRICT TOTALS

	KM²	NM²
Northeast	1,837.3	535.7
Eastside	1,944.7	567.0
Southeast	1,432.4	417.6
Southwest	481.4	140.4
Westside	376.3	109.7
North Mainland	1,498.1	436.8
Kodiak District	7,570.3	2,207.1

CHIGNIK DISTRICT

Chignik Bay			Ivanof Bay			Kujulik Bay		
Station	KM²	NM²	Station	KM²	NM²	Station	KM²	NM²
4256	22.5	6.6	4000Y	15.8	4.6	4290	21.3	6.2
4264	19.7	5.8	4000X	5.6	1.6	4296	10.3	3.0
4265	6.6	1.9	4900X	10.4	3.0	4298	19.0	5.5
4266	19.6	5.7	4007	37.2	10.9	4301	21.4	6.2
4267	21.4	6.3	4008	42.1	12.3	4302	18.2	5.3
4270	17.1	5.0	4915	51.0	14.9	4308	17.2	5.0
4271	10.0	2.9	Total	162.1	47.3	Total	107.3	31.3
4272	15.9	4.6						
4274	21.4	6.3						
4277	21.4	6.3						
4278	21.4	6.3						
4282	21.4	6.3						
4286	21.4	6.3						
4287	28.5	8.3						
4312	21.9	6.4						
4964	9.6	2.8						
Total	300.0	87.5						

CHIGNIK DISTRICT TOTALS

	KM²	NM²
Chignik Bay	300.0	87.5
Ivanof Bay	162.1	47.3
Kujulik Bay	107.3	31.3
Mitrofania Island	783.9	228.5
Chignik District	1,353.3	394.5

Mitrofania Island		
Station	KM²	NM²
4038A	43.7	12.8
4038B	43.7	12.8
4050A	25.9	7.6
4050B	42.9	12.5
4066A	43.6	12.7
4066B	43.6	12.7
4024	57.6	16.8
4025	43.7	12.7
4026	43.7	12.8
4035	59.3	17.3
4036	64.9	18.9
4037	43.7	12.7
4048	14.7	4.3
4049	57.2	16.7
4063	35.2	10.3
4064	40.5	11.8
4065	80.0	23.3
Total	783.9	228.5

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SOUTH PENINSULA DISTRICT

Pavlof/Volcano Bay

Station	KM²	NM²
228	12.8	3.7
245	21.0	6.1
PAEX	38.0	11.1
PAH	14.2	4.1
PAIX	38.3	11.2
PALX	40.4	11.8
PAOB	19.6	5.7
PAP	20.8	6.1
PARA	19.1	5.6
PARB	20.8	6.1
PAU	21.4	6.3
PAV	20.6	6.0
VOA	22.1	6.4
VOBX	43.8	12.8
VOD	20.8	6.1
VOFB	15.5	4.5
VOG	22.1	6.5
VOH	21.7	6.3
VOI	21.2	6.2
VOLX	17.7	5.2
VOM	27.3	8.0
VON	22.1	6.5
VOPX	31.3	9.1
VOQ	15.9	4.6
VOR	21.1	6.2
Total	589.7	171.9

West Nagai Strait

Station	KM²	NM²
332B	42.9	12.5
373A	28.0	8.2
373B	20.5	6.0
301	85.8	25.0
318	85.8	25.0
334	85.8	25.0
335	85.8	25.0
337	85.8	25.0
353	86.1	25.1
354	85.8	25.0
371	76.0	22.2
393	42.0	12.2
Total	810.0	236.2

Beaver/Balboa/Unga

Station	KM²	NM²
278	71.4	20.8
348	85.8	25.0
311A	15.5	4.5
311B	19.4	5.7
311C	16.2	4.7
329B	21.4	6.3
329C	21.4	6.3
BAA	12.0	3.5
BAC	16.9	4.9
BAD	8.3	2.4
BAE	12.7	3.7
BAF	9.4	2.8
BVA	13.5	3.9
BVB	14.0	4.1
BVC	18.9	5.5
368A	43.9	12.8
Total	400.7	116.8

Cold/Belkofski Bay

Station	KM²	NM²
156A	44.2	12.9
157A	21.0	6.1
BEBX	15.9	4.6
BECX	25.7	7.5
BEE	21.4	6.3
BEF	14.5	4.2
BEG	20.3	5.9
COB	20.8	6.1
COC	14.2	4.2
COE	20.2	5.9
COF	11.5	3.4
COGA	9.8	2.9
COGB	3.6	1.1
COH	4.8	1.4
COM	18.5	5.4
COOX	27.7	8.1
Total	294.3	85.8

Stepovak Bay

Station	KM²	NM²
STA	21.0	6.1
STB	18.9	5.5
STD	22.4	6.5
STE	15.5	4.5
Total	77.8	22.7

Morzhovoi Bay

Station	KM²	NM²
87AX	42.9	12.5
87D	22.3	6.5
MOB	18.5	5.4
MOD	16.1	4.7
MOF	20.0	5.82
MOG	17.6	5.12
MOH	15.1	4.41
MOI	16.9	4.94
MOK	21.4	6.25
MOL	21.4	6.25
MOOX	44.7	13.03
MORX	36.5	10.65
MOSX	37.7	11.0
Total	331.2	96.6

Sanak Island

Station	KM²	NM²
138A	34.8	10.1
138B	18.4	5.4
138C	56.9	16.6
113	77.2	22.5
125	77.2	22.5
126	77.8	22.7
137	85.8	25.0
Total	428.0	124.8

S PENINSULA DISTRICT TOTALS

	KM²	NM²
Sanak Island	428.0	124.8
Morzhovoi Bay	331.2	96.6
Cold/Belkofski Bay	294.3	85.8
Pavlof/Volcano Bay	589.7	171.9
West Nagai Strait	810.0	236.2
Beaver/Balboa/Unga	400.7	116.8
Stepovak Bay	77.8	22.7
S Peninsula District	2,931.7	854.7

EASTERN ALEUTIAN DISTRICT

Unalaska/Kalekta Bay Section

Station	KM²	NM²
KAA	19.5	5.7
UNC	22.6	6.6
UND	11.7	3.4
UNE	17.9	5.2
UNF	21.4	6.3
UNG	21.4	6.3
UNI	19.7	5.8
UNJ	21.4	6.3
Total	155.7	45.4

Makushin Bay Section

Station	KM²	NM²
MKB	15.8	4.6
MKC	18.5	5.4
MKE	29.1	8.5
MKF	20.9	6.1
MKJ	22.9	6.7
MKK	35.7	10.4
MKN	26.2	7.6
MKP	11.1	3.2
Total	180.2	52.5

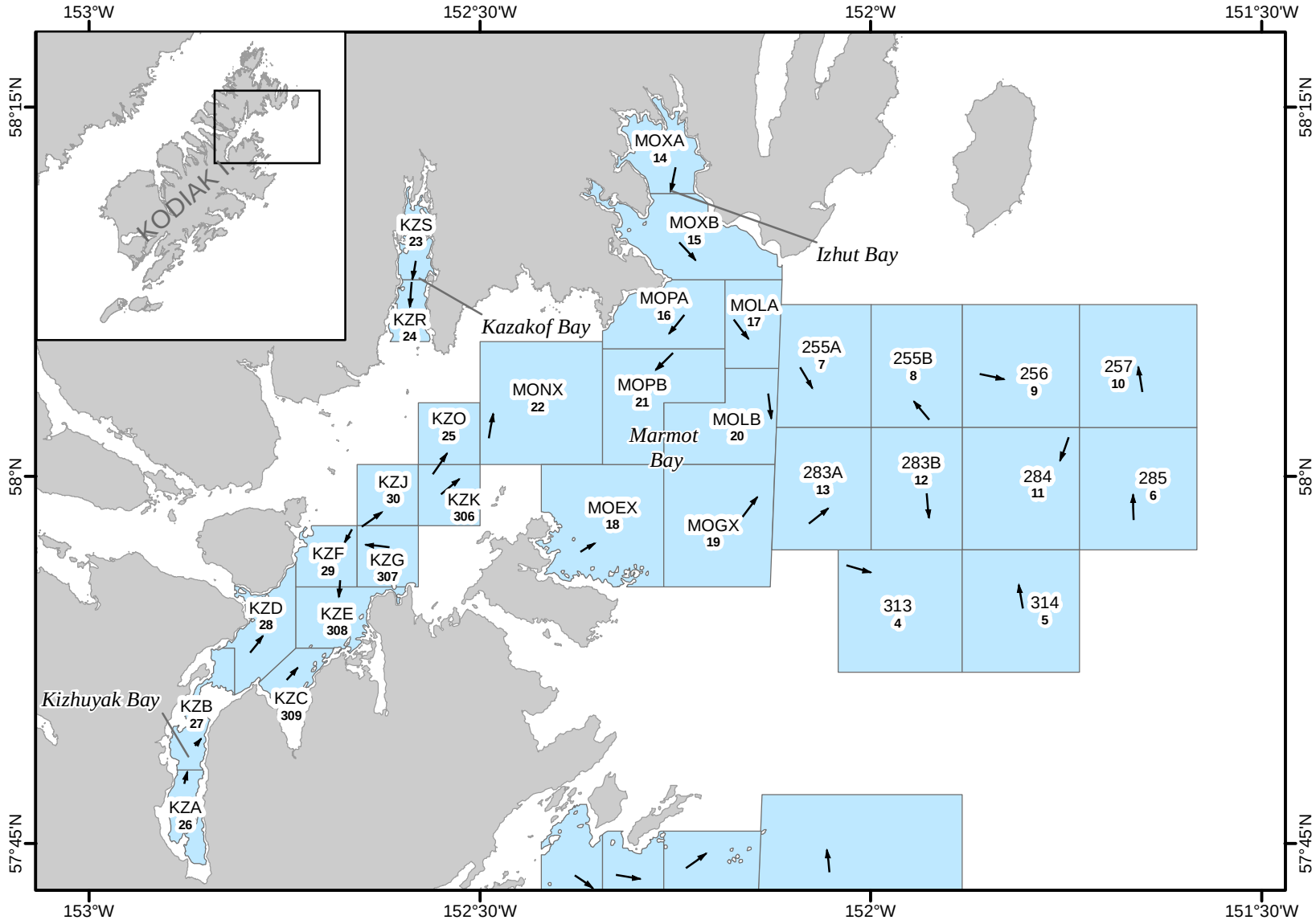
Akutan Bay Section

Station	KM²	NM²
AKA	33.2	9.67
AKC	21.2	6.18
AKD	22.5	6.55
AKG	21.4	6.25
AKL	21.4	6.25
Total	119.7	34.9

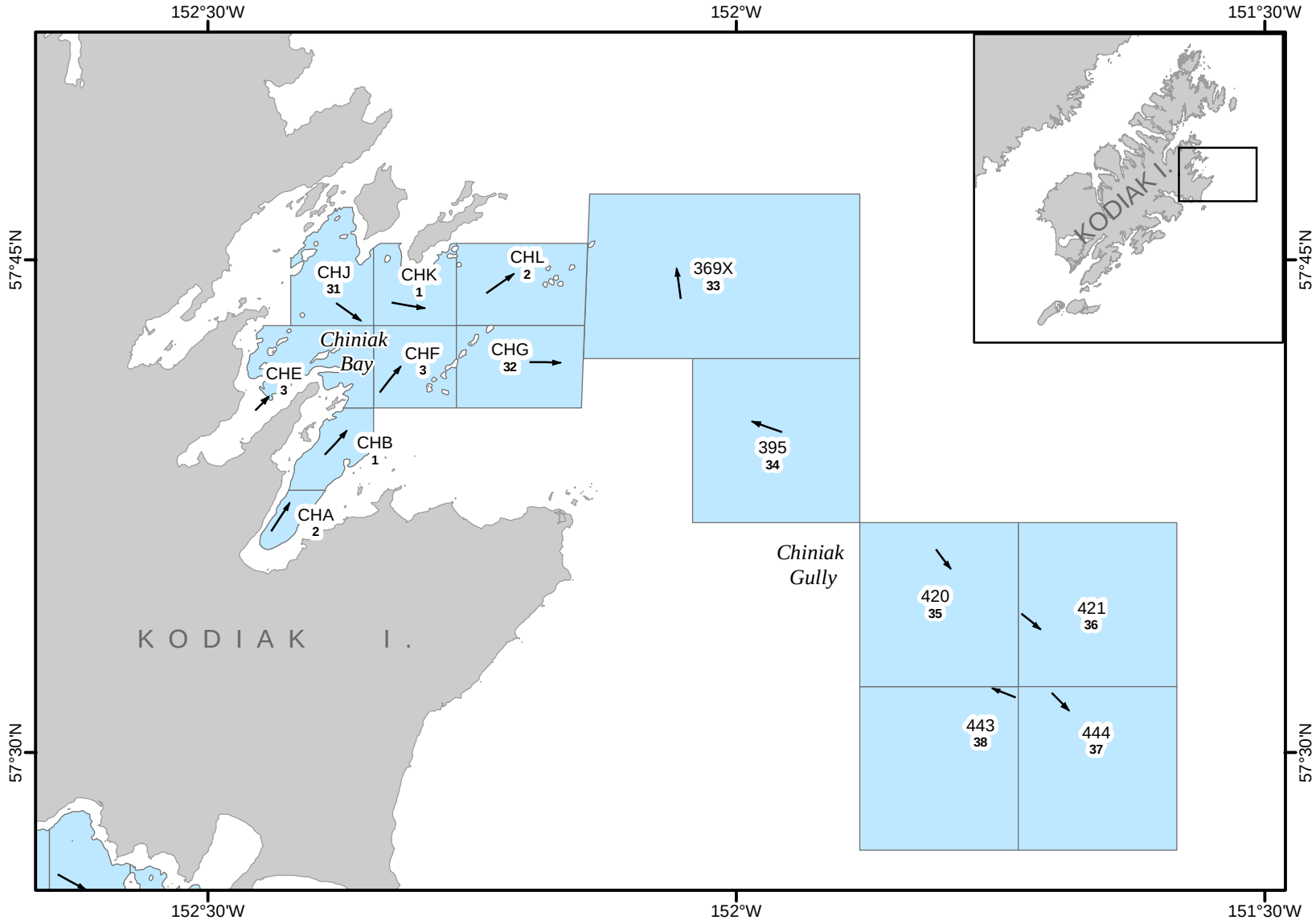
E ALEUTIAN DISTRICT TOTALS

Section	KM²	NM²
Akutan Bay	119.7	34.9
Unalaska/Kalekta	155.7	45.4
Makushin Bay	180.2	52.5
E Aleutian District	455.6	132.8

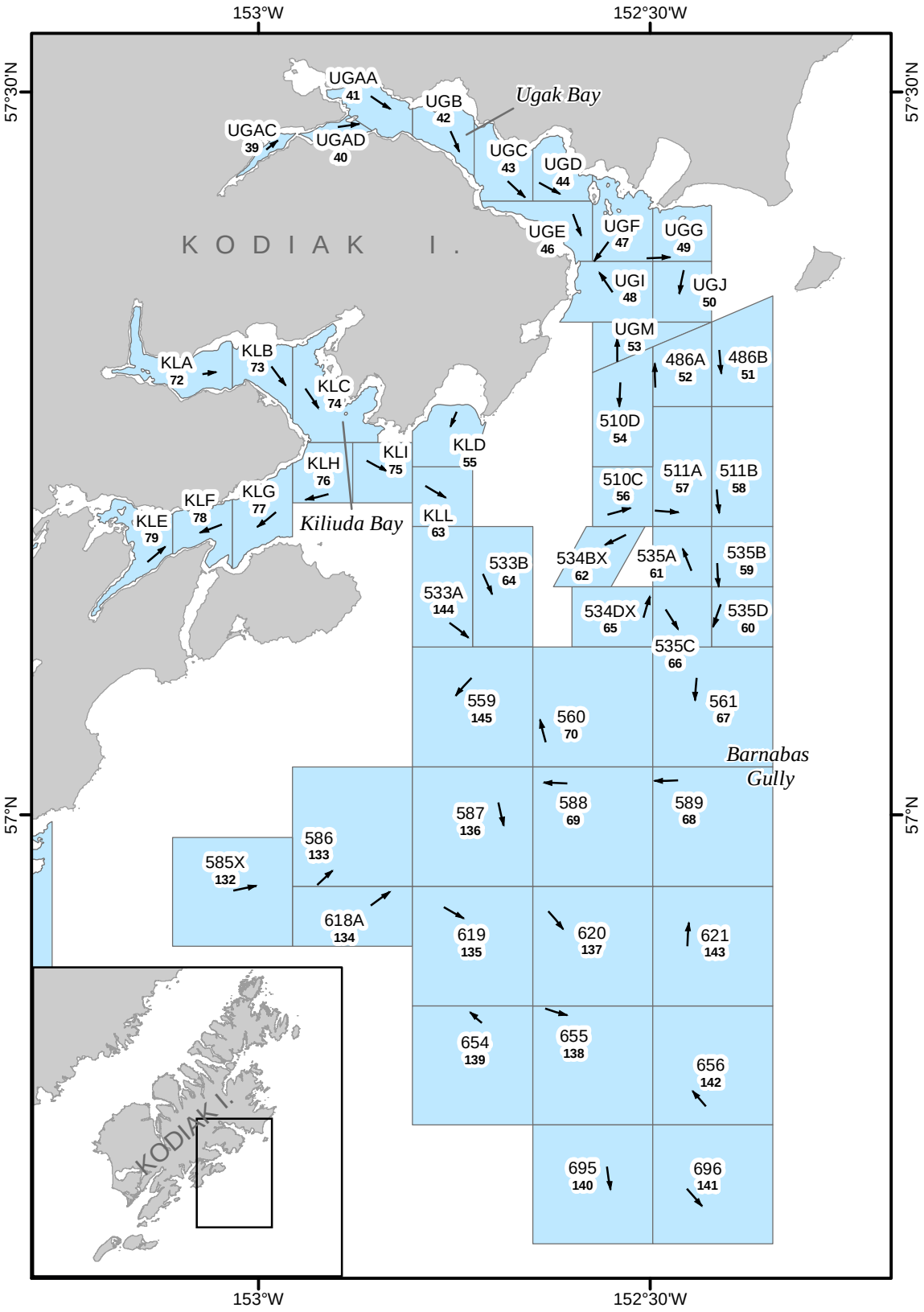
APPENDIX C. TRAWL MAPS



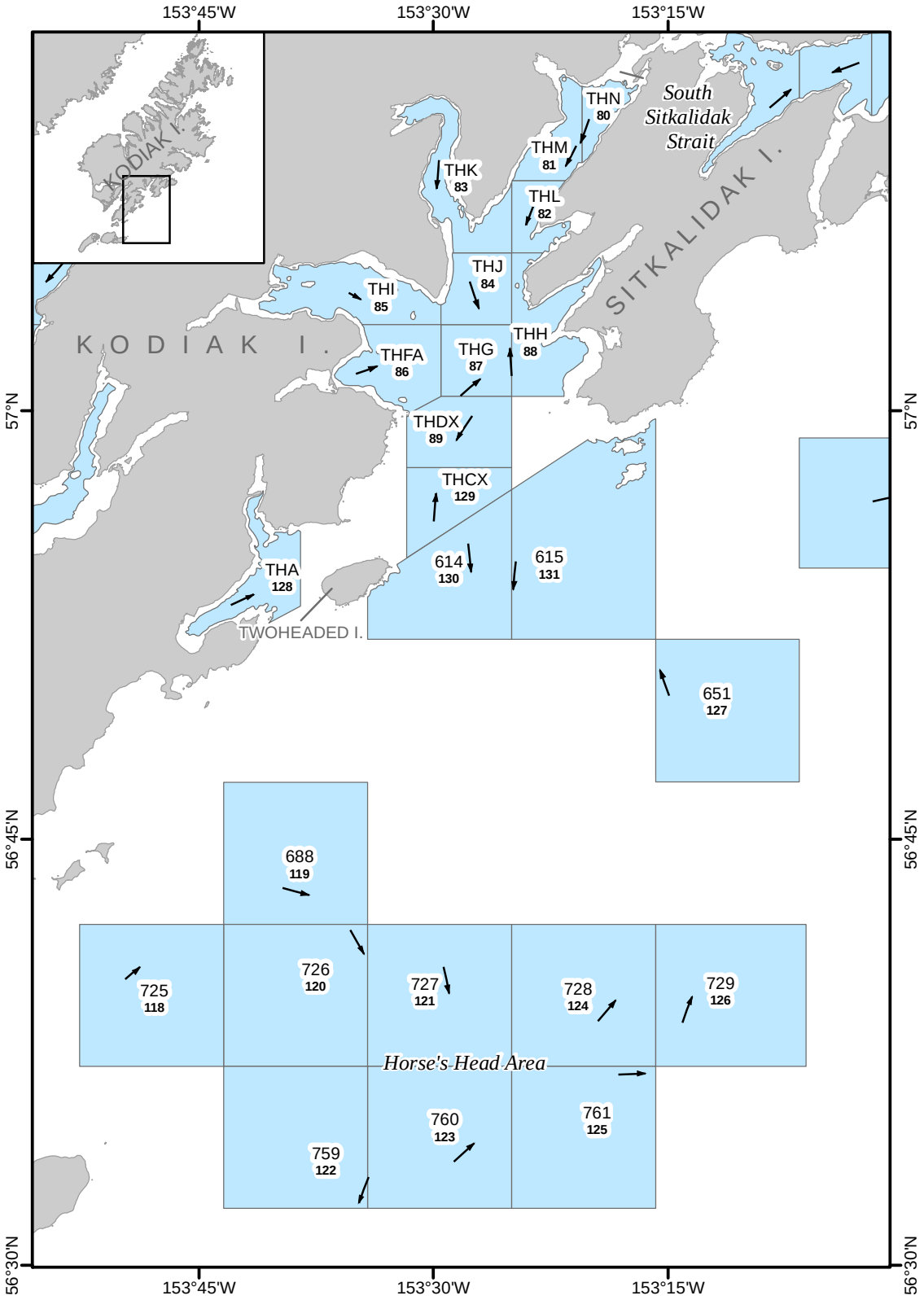
Appendix C1.–Izhut Bay, Kazakof Bay, Kizhuyak Bay, and Marmot Bay station boundaries with station name, trawl haul number (bold), location and direction of haul (arrow), June and August 2017.



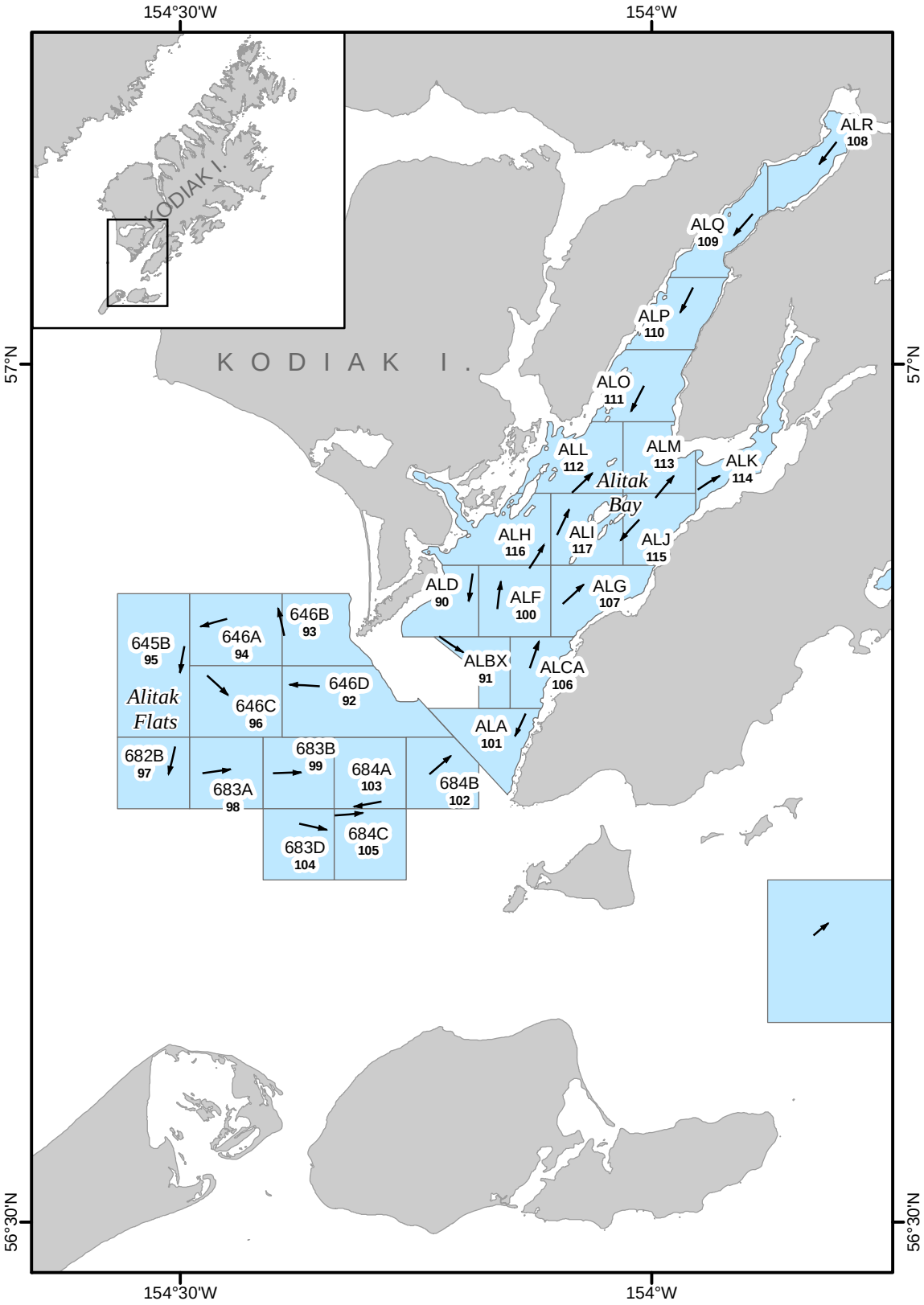
Appendix C2.–Chiniak Bay and Chiniak Gully station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), May and June 2017.



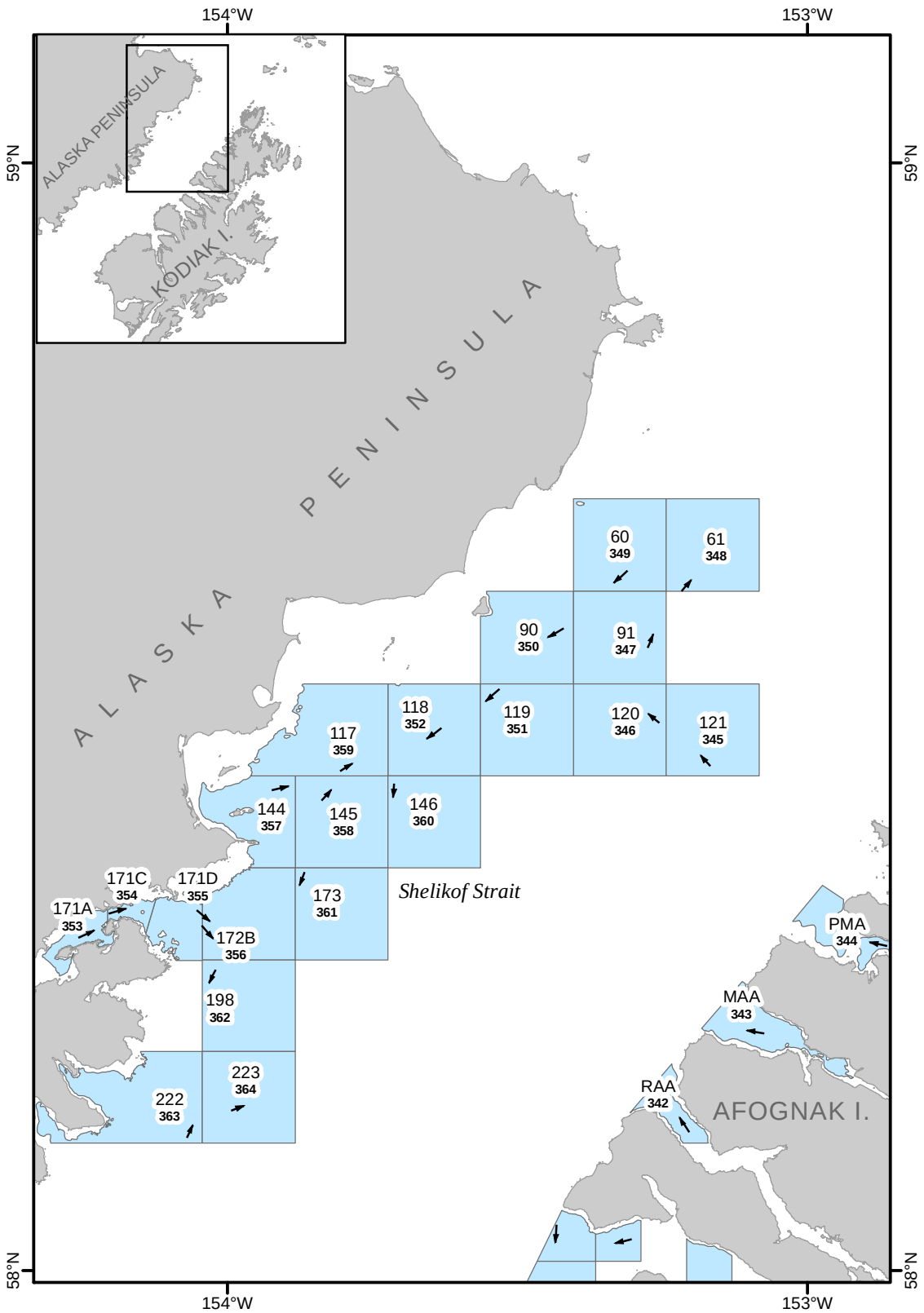
Appendix C3.–Ugak Bay, Kiliuda Bay, and Barnabas Gully station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), June and July 2017.



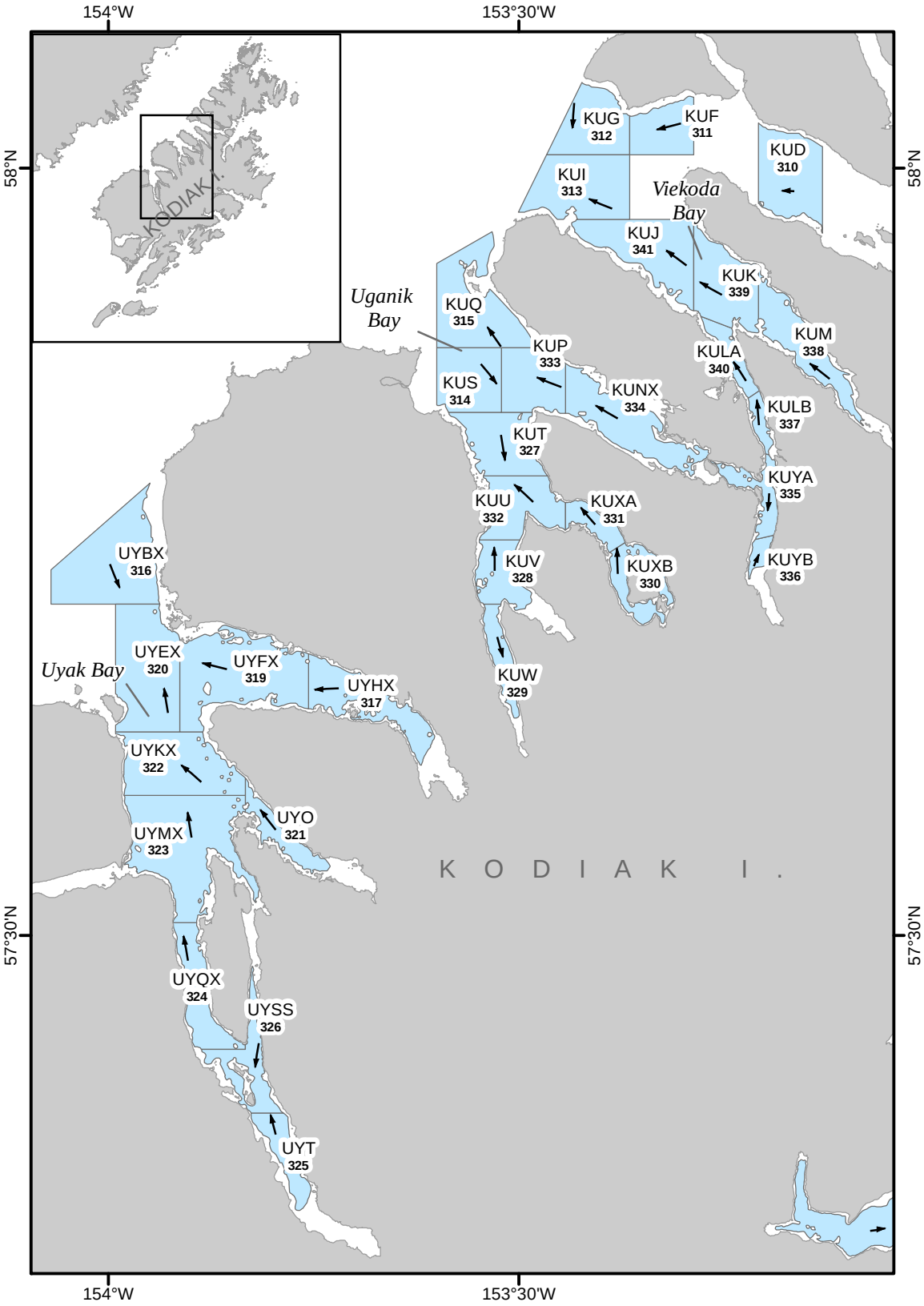
Appendix C4.–South Sitkalidak Strait, Twoheaded Island, and Horse's Head area station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), June and July 2017.



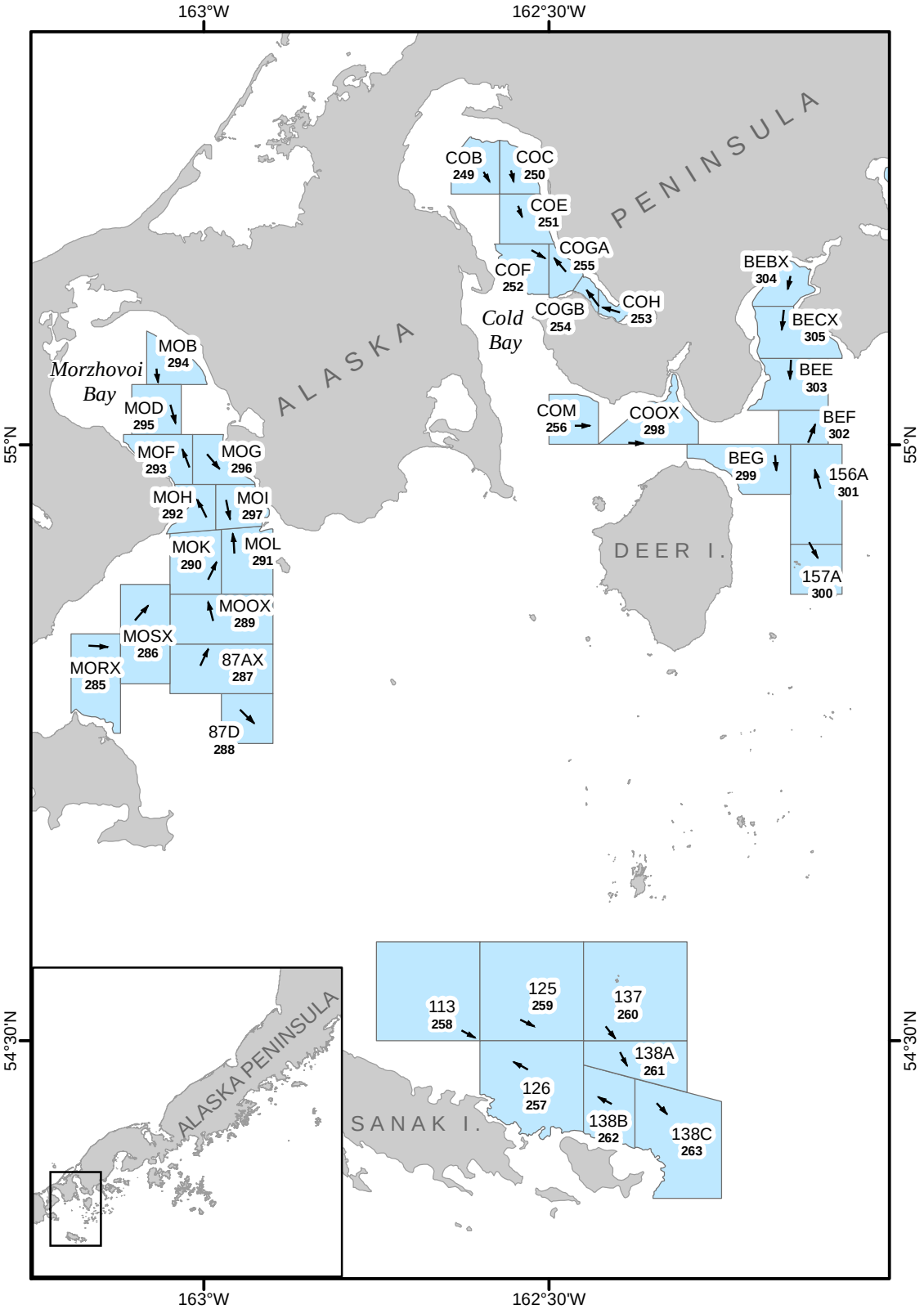
Appendix C5.–Alitak Bay and Alitak Flats station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), June and July 2017.



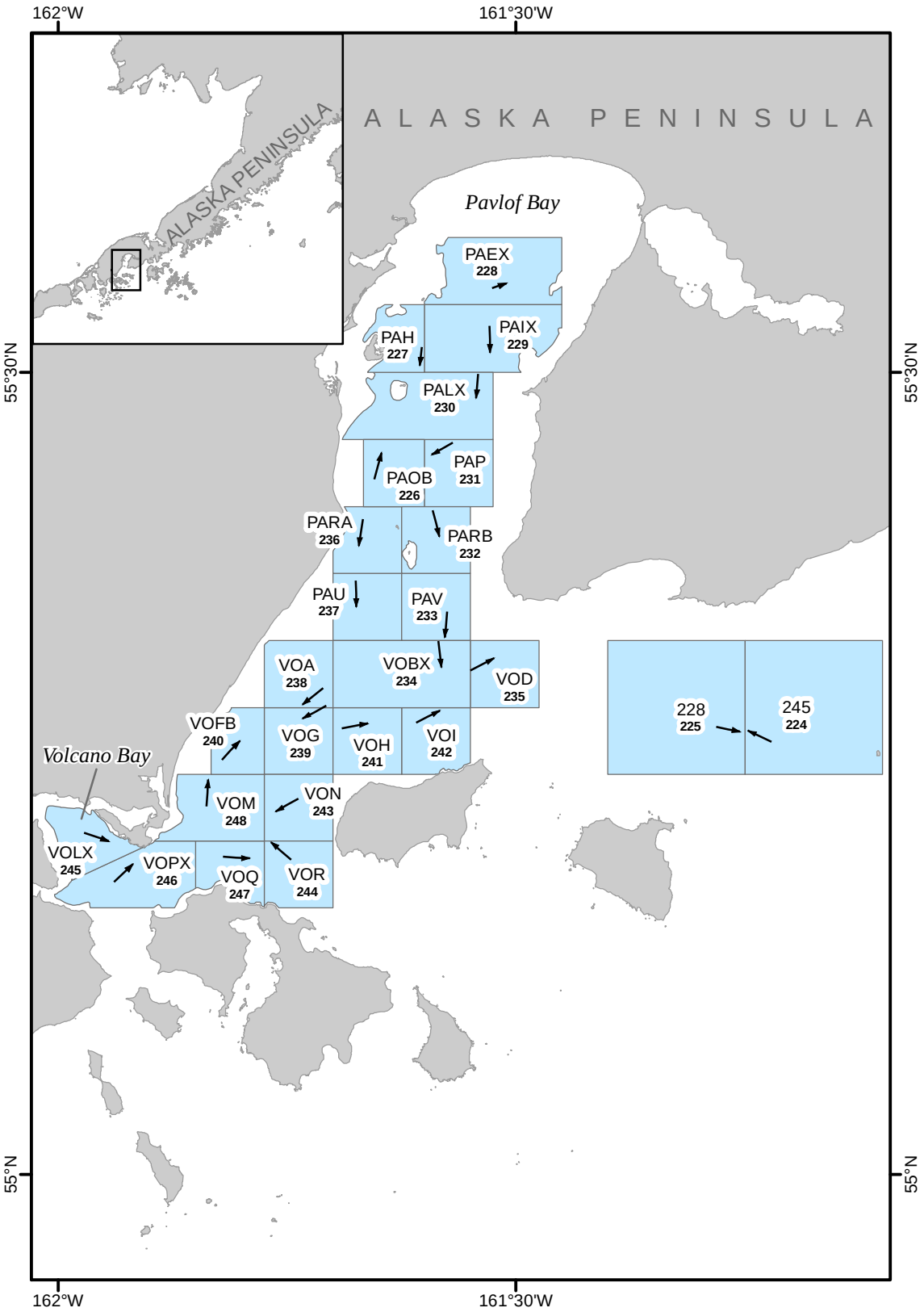
Appendix C6.–Shelikof Strait and Afognak Island station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), August and September 2017.



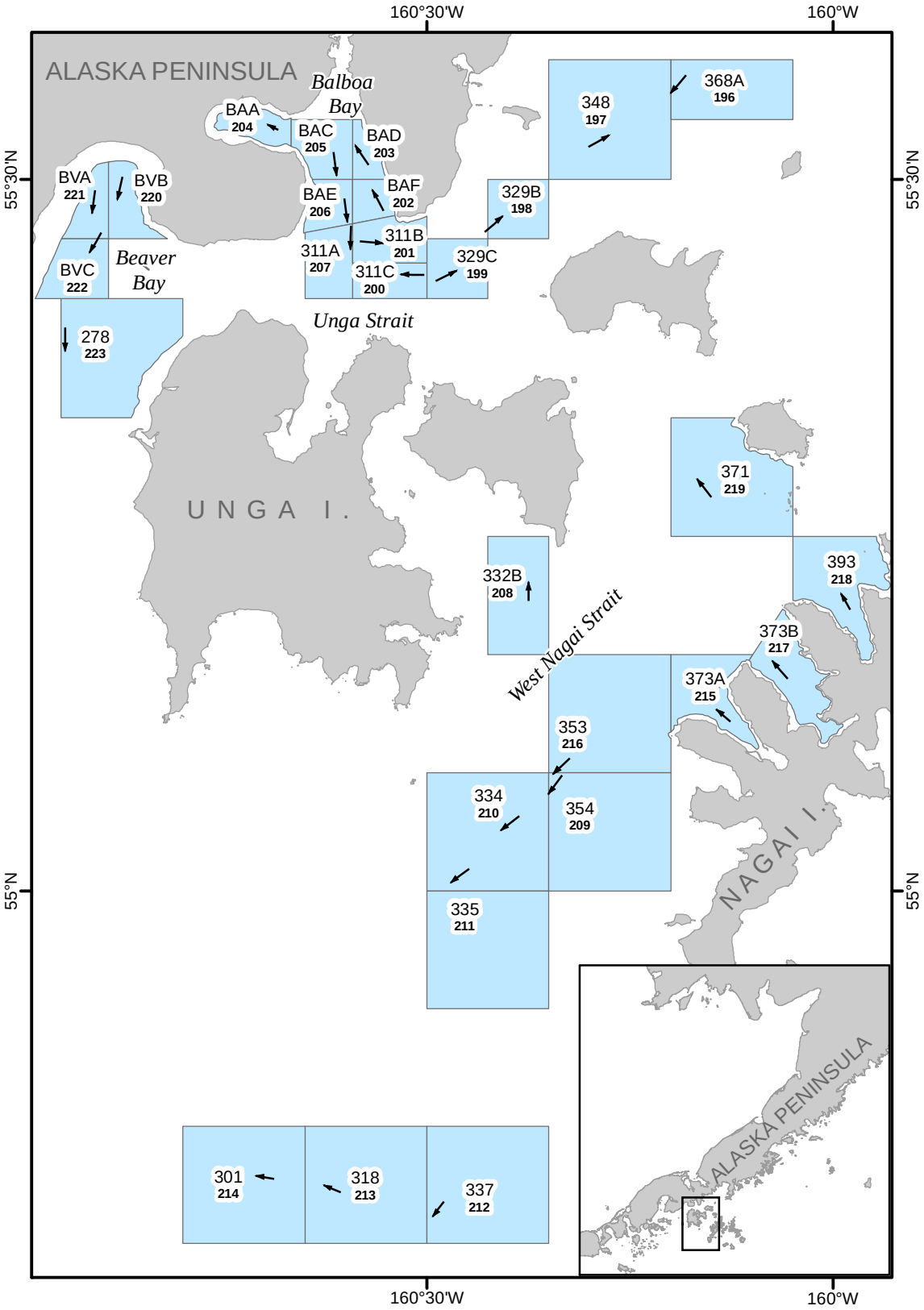
Appendix C7.–Uyak Bay, Uganik Bay, and Viekoda Bay station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), August and 2017.



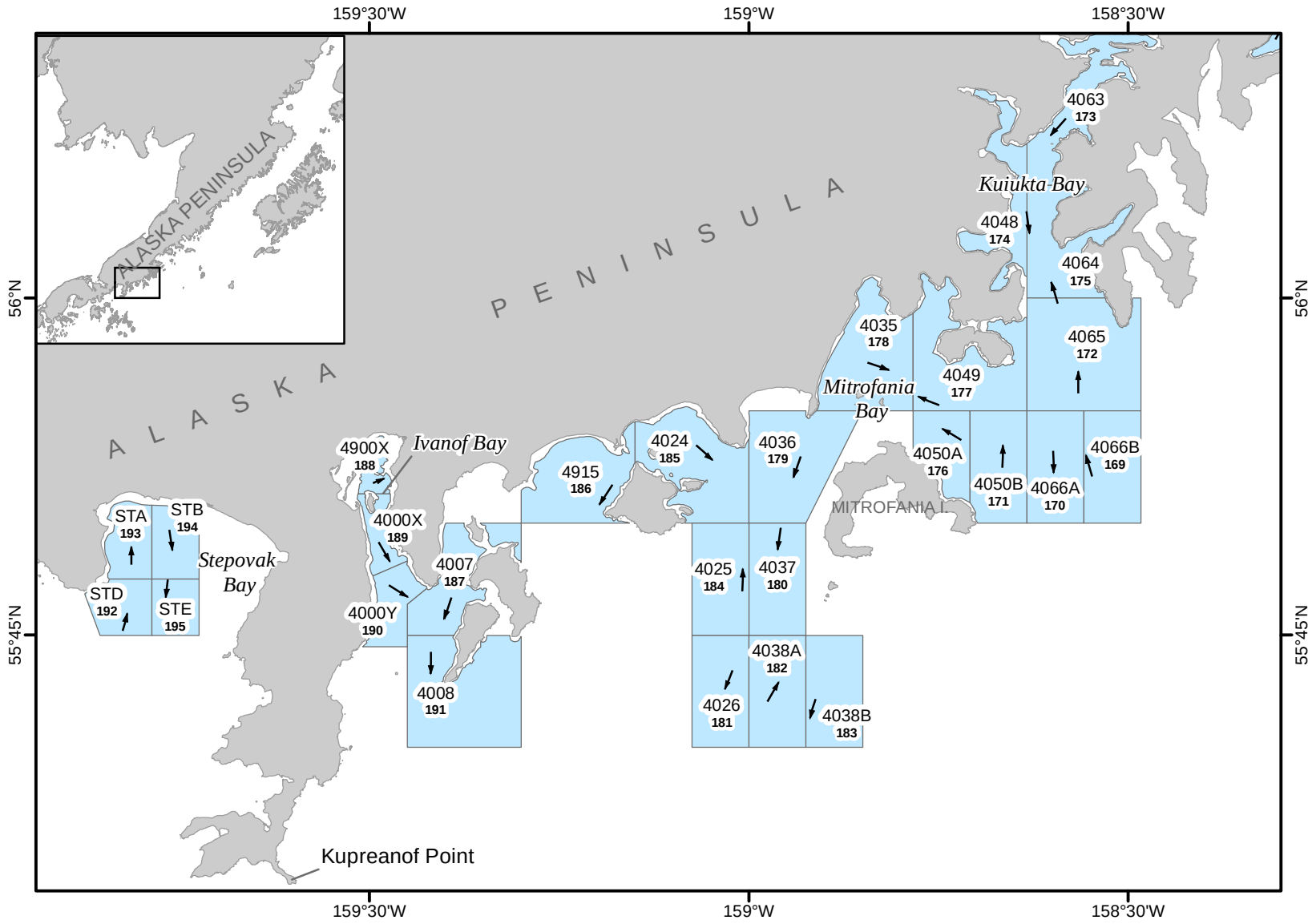
Appendix C8.–Morzhovoi Bay, Cold Bay, Belkofski Bay, Deer Island, and Sanak Island station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), July and August 2017.



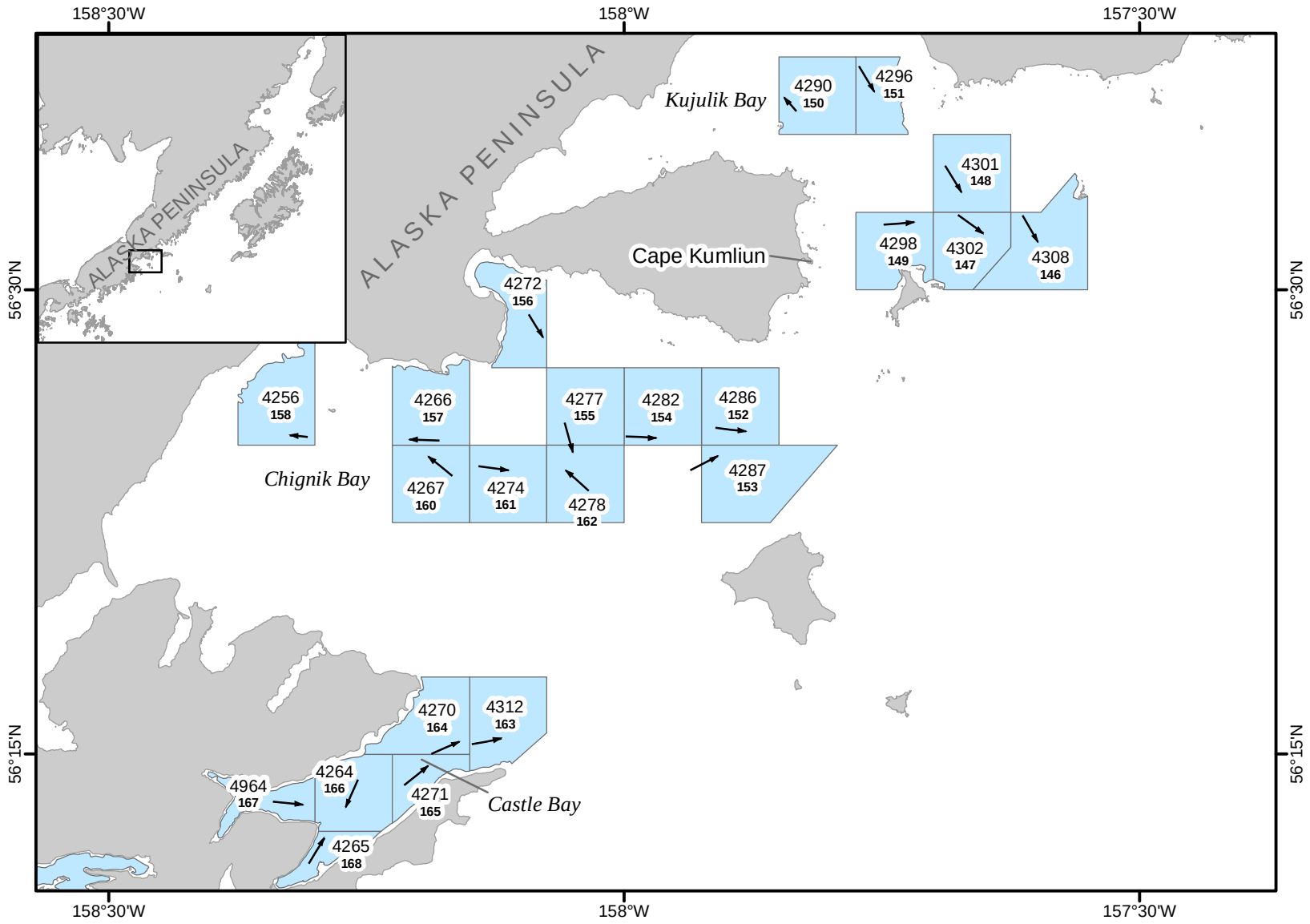
Appendix C9.–Pavlof Bay and Volcano Bay station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), July 2017.



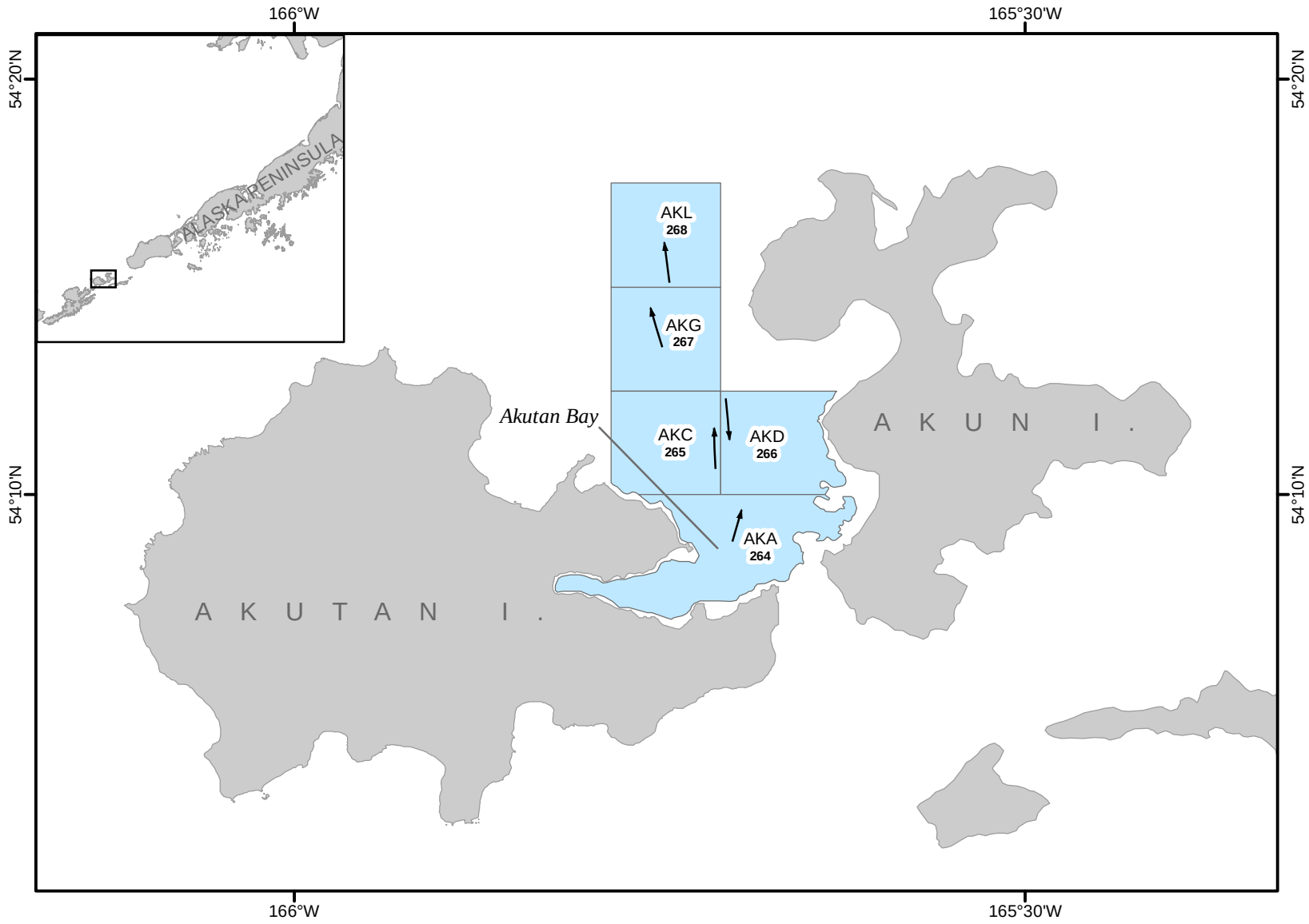
Appendix C10.–Unga Strait, Beaver Bay, Balboa Bay, and West Nagai Strait station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), July 2017.



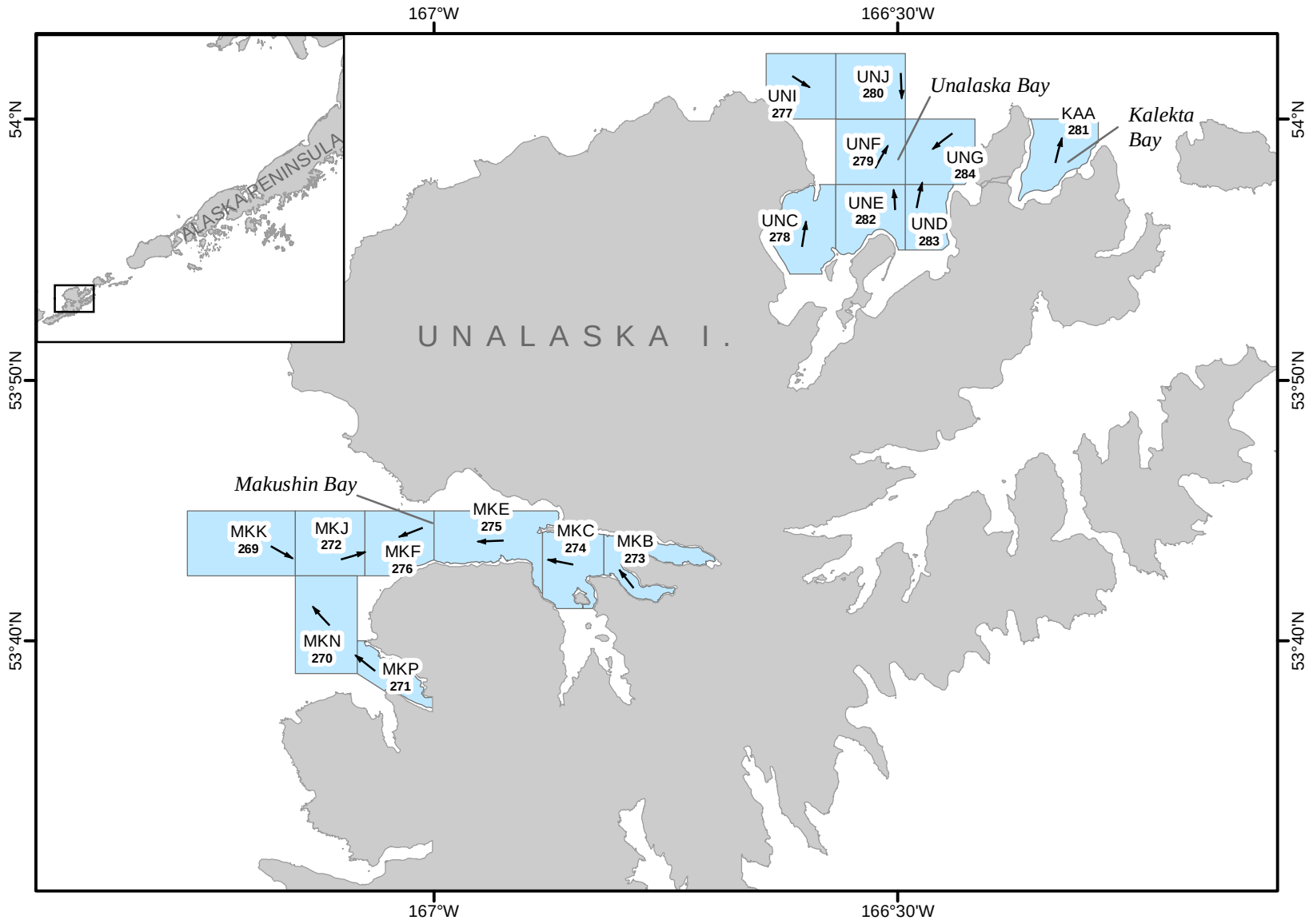
Appendix C11.–Stepovak Bay, Ivanof Bay, Kuiukta Bay, and Mitrofania Bay station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), July 2017.



Appendix C12.–Kujulik Bay, Chignik Bay, and Castle Bay station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), July 2017.



Appendix C13.–Akutan Bay station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), August 2017.



Appendix C14.–Unalaska Bay, Kalekta Bay, and Makushin Bay station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), August 2017.

APPENDIX D. TANNER CRAB ABUNDANCE ESTIMATES BY STATION

Appendix D1.–Tanner crab abundance estimates in the Kodiak District by station and section, 2017.

Station	Haul no.	Females			Number sublegal males by size (CW)				Recruit males	Postrecruit males (CW)		Legal males	Total males	Total crab
		Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm		<165 mm	≥165 mm			
NORTHEAST Section														
255A	7	31,380	5,705	37,085	62,759	0	2,853	0	0	0	0	0	65,612	102,697
255B	8	22,639	31,129	53,768	0	8,490	8,490	25,469	0	0	0	0	42,448	96,216
256	9	10,914	3,638	14,552	3,638	3,638	0	0	0	0	0	0	7,276	21,828
257	10	0	0	0	3,638	0	0	0	0	0	0	0	3,638	3,638
283A	13	147,373	168,427	315,800	117,297	6,015	30,076	18,046	0	0	0	0	171,434	487,234
283B	12	34,032	17,016	51,048	19,852	0	19,852	8,508	0	0	0	0	48,212	99,259
284	11	3,647	14,588	18,236	0	0	7,294	0	0	0	0	0	7,294	25,530
285	6	7,294	0	7,294	7,294	0	0	0	0	0	0	0	7,294	14,588
313	4	296,205	18,988	315,193	326,585	3,798	11,393	7,595	0	0	0	0	349,370	664,563
369X	33	6,325	0	6,325	6,325	6,325	0	0	0	0	0	0	12,650	18,975
395	34	79,748	0	79,748	41,773	3,798	0	0	0	0	0	0	45,570	125,318
420	35	23,051	0	23,051	13,830	0	0	0	0	0	0	0	13,830	36,881
421	36	41,491	4,610	46,102	50,712	0	0	0	0	0	0	0	50,712	96,813
443	38	73,945	9,243	83,188	36,972	0	0	0	0	0	0	0	36,972	120,160
444	37	27,729	198,727	226,456	13,865	23,108	4,622	0	0	0	0	0	41,594	268,050
CHA	2	729	0	729	5,104	0	0	0	0	0	0	0	5,104	5,833
CHB	1	4,891	699	5,590	6,987	699	0	0	0	0	0	0	7,686	13,276
CHE	3	1,519	0	1,519	0	0	0	0	0	0	0	0	0	1,519
CHF	3	465,646	48,611	514,257	649,328	17,362	10,417	20,834	3,472	0	0	3,472	701,413	1,215,671
CHG	32	29,013	0	29,013	24,661	0	0	0	0	0	0	0	24,661	53,674
CHJ	31	1,504	0	1,504	1,003	0	0	0	0	0	0	0	1,003	2,506
CHK	1	81,553	35,790	117,343	142,498	3,893	4,672	3,115	0	0	0	0	154,178	271,521
CHL	2	91,550	0	91,550	110,234	623	0	0	623	0	0	623	111,479	203,030
KZA	26	2,066	0	2,066	1,033	8,263	0	0	0	0	0	0	9,296	11,362
KZB	27	486	243	729	0	0	0	0	0	0	0	0	0	729
KZD	28	1,165	0	1,165	5,823	0	0	0	0	0	0	0	5,823	6,987
KZE	308	1,632	0	1,632	1,632	0	0	0	0	0	0	0	1,632	3,264
KZF	29	17,803	0	17,803	10,173	3,815	1,272	0	0	0	0	0	15,259	33,062
KZG	307	55,475	3,761	59,236	53,595	1,881	0	0	0	0	0	0	55,475	114,712
KZJ	30	14,241	0	14,241	18,988	0	0	0	0	0	0	0	18,988	33,228
KZK	306	42,722	32,279	75,001	86,374	65,077	61,527	21,298	5,916	0	0	5,916	240,192	315,192
KZO	25	8,544	0	8,544	13,291	2,848	5,696	949	0	0	0	0	22,785	31,329
KZR	24	9,315	94,186	103,502	1,431	15,740	37,203	25,279	4,770	11,924	0	16,694	96,347	199,849

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Appendix D1.–Page 2 of 7.

Station	Haul no.	Females			Number sublegal males by size (CW)				Recruit males	Postrecruit males (CW)		Legal males	Total males	Total crab
		Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm		<165 mm	≥165 mm			
KZS	23	9,741	6,323	16,063	2,734	12,133	5,127	4,614	1,709	684	0	2,392	27,000	43,064
MOEX	18	64,163	0	64,163	84,786	0	0	0	0	0	0	0	84,786	148,949
MOGX	19	247,901	5,833	253,734	355,811	0	8,749	2,916	2,916	0	0	2,916	370,393	624,127
MOLA	17	19,856	0	19,856	21,097	0	0	0	0	0	0	0	21,097	40,954
MOLB	20	346,902	0	346,902	445,759	0	2,240	0	0	0	0	0	447,999	794,900
MONX	22	188,310	887,749	1,076,060	141,830	130,330	252,994	237,661	7,666	11,500	0	19,166	781,981	1,858,041
MOPA	16	68,902	0	68,902	103,353	1,230	0	0	0	0	0	0	104,583	173,485
MOPB	21	44,932	13,215	58,147	60,790	881	1,762	881	0	0	0	0	64,314	122,462
MOXA	14	58,299	2,886	61,185	85,429	1,732	0	0	0	0	0	0	87,160	148,346
MOXB	15	10,451	0	10,451	16,982	0	0	0	0	0	0	0	16,982	27,433
Abundance Estimate		2,695,084	1,603,646	4,298,733	3,155,266	321,679	476,239	377,165	27,072	24,108	0	51,179	4,381,522	8,680,255
EASTSIDE Section														
486A	52	0	152,814	152,814	16,554	0	579,402	1,009,815	33,109	0	0	33,109	1,638,879	1,791,694
486B	51	0	0	0	1,300	0	0	0	0	0	0	0	1,300	1,300
510C	56	952	0	952	0	0	2,857	8,572	952	0	0	952	12,381	13,334
510D	54	3,369	38,745	42,114	0	6,504	117,065	461,757	22,763	45,525	0	68,288	653,614	695,728
511A	57	0	0	0	1,861	1,861	46,519	254,926	52,102	0	0	52,102	357,269	357,269
511B	58	1,899	0	1,899	3,798	0	0	0	1,899	0	0	1,899	5,696	7,595
533A	144	28,481	1,899	30,380	34,178	0	0	11,393	1,899	1,899	0	3,798	49,368	79,748
533B	64	191,774	0	191,774	262,844	0	4,823	50,640	161,565	2,411	0	163,976	482,283	674,056
534BX	62	27,661	0	27,661	23,051	922	6,454	7,376	922	0	0	922	38,725	66,386
534DX	65	29,985	0	29,985	18,562	0	4,284	0	0	0	0	0	22,846	52,831
535A	61	13,057	1,865	14,923	12,027	0	10,691	217,826	28,064	0	0	28,064	268,608	283,530
535B	59	99,684	2,848	102,533	58,861	3,798	5,696	4,747	0	0	0	0	73,102	175,634
535C	66	12,125	0	12,125	4,663	0	3,731	5,596	0	0	0	0	13,990	26,115
535D	60	41,773	0	41,773	33,228	18,038	35,127	26,583	2,848	949	0	3,798	116,773	158,546
559	145	803,786	874,709	1,678,495	1,009,237	232,901	108,687	147,504	7,763	69,870	0	77,634	1,575,962	3,254,457
560	70	1,290,776	19,362	1,310,138	1,053,960	64,768	23,552	23,552	0	0	0	0	1,165,832	2,475,970
561	67	330,383	18,988	349,370	197,470	3,798	34,178	189,875	60,760	3,798	3,798	68,355	493,675	843,045
587	136	740,513	30,380	770,893	668,360	45,570	7,595	41,773	0	0	0	0	763,298	1,534,190
588	69	899,248	72,912	972,160	747,884	180,940	132,689	168,877	0	0	0	0	1,230,390	2,202,550
589	68	26,395	862,220	888,615	15,190	18,988	132,913	155,698	0	30,380	0	30,380	353,168	1,241,782

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Appendix D1.–Page 3 of 7.

Station	Haul no.	Females			Number sublegal males by size (CW)				Recruit males	Postrecruit males (CW)		Legal males	Total males	Total crab
		Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm		<165 mm	≥165 mm			
619	135	41,773	68,355	110,128	56,963	30,380	68,355	53,165	0	3,798	0	3,798	212,660	322,788
620	137	845,132	77,661	922,793	645,575	56,963	53,165	18,988	0	7,595	0	7,595	782,285	1,705,078
621	143	94,938	7,595	102,533	83,545	11,393	18,988	22,785	0	0	0	0	136,710	239,243
654	139	43,400	0	43,400	16,275	0	10,850	5,425	0	0	0	0	32,550	75,950
655	138	1,097,478	193,673	1,291,150	640,884	46,687	76,397	97,618	0	4,244	0	4,244	865,830	2,156,980
656	142	59,072	8,439	67,511	37,975	8,439	0	0	0	0	0	0	46,414	113,925
695	140	743,968	296,547	1,040,515	560,587	151,634	101,089	105,684	0	0	0	0	918,995	1,959,510
696	141	56,963	725,323	782,285	3,798	7,595	94,938	250,635	0	22,785	0	22,785	379,750	1,162,035
KLA	72	26,253	1,544	27,798	40,152	0	0	0	0	0	0	0	40,152	67,950
KLB	73	80,385	410	80,796	88,485	0	0	445	0	889	0	889	89,818	170,614
KLC	74	169,525	28,750	198,275	164,508	1,732	0	5,195	0	4,329	0	4,329	175,763	374,039
KLD	55	0	0	0	0	0	1,150	0	0	0	0	0	1,150	1,150
KLE	79	5,468	0	5,468	2,187	0	0	1,094	0	0	0	0	3,281	8,749
KLF	78	9,357	2,005	11,362	11,362	0	668	2,673	3,342	0	0	3,342	18,046	29,408
KLG	77	37,167	121,781	158,948	53,955	729	2,916	22,603	18,228	2,187	0	20,415	100,619	259,567
KLH	76	7,443	1,489	8,932	4,186	1,046	5,232	89,995	103,599	7,325	0	110,924	211,384	220,316
KLI	75	29,431	0	29,431	23,734	0	949	23,734	12,342	8,544	0	20,886	69,304	98,735
KLL	63	1,899	0	1,899	3,798	0	1,899	8,544	1,899	949	0	2,848	17,089	18,988
UGAA	41	1,419	3,547	4,966	0	0	41,176	380,082	205,878	0	6,335	212,212	633,470	638,436
UGAC	39	0	471	471	0	471	1,884	12,714	1,648	0	0	1,648	16,717	17,187
UGAD	40	2,395	0	2,395	1,524	2,177	4,354	20,248	12,193	218	0	12,410	40,714	43,109
UGB	42	1,033	516	1,549	775	0	1,033	0	0	0	0	0	1,808	3,357
UGC	43	49,580	0	49,580	72,046	0	5,423	775	775	0	0	775	79,018	128,599
UGD	44	13,610	486	14,096	13,610	486	6,319	19,443	3,403	0	0	3,403	43,261	57,357
UGE	46	16,299	5,620	21,919	21,919	0	15,175	26,415	5,058	0	0	5,058	68,568	90,487
UGF	47	5,590	111,798	117,388	3,494	4,891	23,757	27,251	3,494	699	0	4,192	63,585	180,974
UGG	49	972	486	1,458	1,458	0	0	0	0	0	0	0	1,458	2,916
UGI	48	26,658	36,532	63,190	28,633	3,949	39,494	75,039	3,949	5,924	0	9,874	156,989	220,179
UGJ	50	0	2,784	2,784	0	0	0	0	0	0	0	0	0	2,784
UGM	53	2,233	113,879	116,112	0	1,426	59,878	206,722	12,831	5,703	0	18,534	286,559	402,672
Abundance Estimate		8,011,302	3,886,433	11,897,736	6,744,456	908,086	1,891,352	4,263,782	763,285	230,021	10,133	1,003,438	14,811,106	26,708,842

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Station	Haul no.	Females			Number sublegal males by size (CW)				Recruit males	Postrecruit males (CW)		Legal males	Total males	Total crab
		Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm		<165 mm	≥165 mm			
SOUTHEAST Section														
THN	80	44,557	506	45,064	79,169	1,632	0	1,224	0	0	0	0	82,026	127,090
THM	81	91,235	589	91,824	133,455	5,528	3,159	10,266	7,107	0	0	7,107	159,514	251,338
THL	82	9,114	19,595	28,709	6,836	0	0	6,380	0	1,823	0	1,823	15,038	43,747
THK	83	17,499	40,831	58,330	20,415	0	1,458	31,352	60,517	8,749	1,458	70,725	123,950	182,280
THJ	84	186,096	9,795	195,890	201,338	1,144	0	20,591	4,576	4,576	0	9,152	232,225	428,115
THI	85	21,053	0	21,053	24,881	0	0	0	0	0	0	0	24,881	45,935
THFA	86	13,576	13,576	27,152	35,791	0	0	1,234	0	0	0	0	37,026	64,178
THG	87	333,149	1,625	334,774	391,230	2,017	0	6,050	0	2,017	0	2,017	401,313	736,087
THH	88	87,616	0	87,616	126,745	0	0	0	0	0	0	0	126,745	214,361
THDX	89	614,949	0	614,949	911,869	0	4,537	13,610	0	0	0	0	930,015	1,544,964
725	118	10,850	0	10,850	27,125	0	0	0	0	0	0	0	27,125	37,975
688	119	197,470	11,393	208,863	220,255	7,595	3,798	3,798	0	0	0	0	235,445	444,308
726	120	353,168	30,380	383,548	337,978	7,595	7,595	0	0	0	0	0	353,168	736,715
727	121	641,778	68,355	710,133	554,435	56,963	18,988	0	0	0	0	0	630,385	1,340,518
759	122	212,660	3,798	216,458	231,648	11,393	3,798	0	0	0	0	0	246,838	463,295
760	123	277,218	3,798	281,015	360,763	3,798	3,798	11,393	0	0	0	0	379,750	660,765
728	124	596,208	106,330	702,538	436,713	79,748	30,380	15,190	0	0	0	0	562,030	1,264,568
761	125	440,510	72,153	512,663	284,813	205,065	37,975	7,595	0	0	0	0	535,448	1,048,110
729	126	296,205	0	296,205	205,065	75,950	11,393	15,190	0	3,798	0	3,798	311,395	607,600
651	127	721,525	98,735	820,260	759,040	1,127,397	167,435	133,948	0	22,325	0	22,325	2,210,145	3,030,405
THA	128	14,110	0	14,110	19,308	1,485	743	0	0	0	0	0	21,536	35,646
THCX	129	123,814	16,451	140,264	139,399	6,927	866	6,927	0	1,732	0	1,732	155,849	296,114
614	130	634,813	69,760	704,573	623,802	94,159	11,770	35,310	0	23,540	0	23,540	788,580	1,493,153
615	131	1,259,859	0	1,259,859	1,250,520	6,652	13,303	39,910	0	19,955	0	19,955	1,330,340	2,590,199
585X	132	94,248	38,397	132,645	139,626	97,739	34,907	34,907	3,491	6,981	0	10,472	317,650	450,295
586	133	1,044,228	90,802	1,135,031	1,365,853	332,234	73,830	83,059	9,229	9,229	0	18,457	1,873,433	3,008,464
618A	134	74,051	15,190	89,241	94,938	34,178	17,089	20,886	0	0	0	0	167,090	256,331
Abundance Estimate		8,411,559	712,059	9,123,617	8,983,010	2,159,199	446,822	498,820	84,920	104,725	1,458	191,103	12,278,940	21,402,556
SOUTHWEST Section														
ALD	90	22,512	14,431	36,942	24,781	0	11,437	230,654	112,468	11,437	0	123,905	390,778	427,720

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Station	Haul no.	Females			Number sublegal males by size (CW)				Recruit males	Postrecruit males (CW)		Legal males	Total males	Total crab
		Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm		<165 mm	≥165 mm			
ALBX	91	0	0	0	567	0	0	567	0	0	0	0	1,133	1,133
646D	92	21,073	0	21,073	27,093	0	1,505	0	0	0	0	0	28,599	49,671
646B	93	6,562	0	6,562	2,916	0	0	0	0	0	0	0	2,916	9,479
646A	94	8,400	0	8,400	9,600	0	0	1,200	0	0	0	0	10,800	19,200
645B	95	34,937	0	34,937	37,975	1,519	3,038	10,633	0	1,519	0	1,519	54,684	89,621
646C	96	30,874	0	30,874	41,988	0	2,470	7,410	0	1,235	0	1,235	53,103	83,976
682B	97	38,522	0	38,522	65,487	0	3,852	3,852	0	963	0	963	74,155	112,676
683A	98	7,874	0	7,874	7,874	0	0	0	0	0	0	0	7,874	15,749
683B	99	6,486	0	6,486	11,119	0	927	0	0	0	0	0	12,046	18,532
ALF	100	36,076	145,254	181,331	34,178	949	13,291	65,507	16,139	23,734	0	39,874	153,799	335,129
ALA	101	1,063	152	1,215	760	0	152	608	0	0	0	0	1,519	2,734
684B	102	911	0	911	2,279	0	0	0	0	0	0	0	2,279	3,190
684A	103	2,889	0	2,889	2,889	0	0	0	0	0	0	0	2,889	5,778
683D	104	18,456	0	18,456	18,046	0	820	410	0	0	0	0	19,276	37,732
684C	105	3,038	0	3,038	3,418	380	0	0	0	0	0	0	3,798	6,836
ALCA	106	6,312	86,568	92,881	2,167	0	15,712	78,020	2,167	10,294	0	12,462	108,361	201,242
ALG	107	80,173	21,144	101,317	103,079	881	1,762	26,431	41,408	1,762	0	43,170	175,323	276,640
ALR	108	0	1,777	1,777	0	1,948	3,896	90,587	106,172	0	0	106,172	202,604	204,381
ALQ	109	4,466	2,552	7,018	2,571	0	19,283	146,550	88,702	0	0	88,702	257,106	264,124
ALP	110	0	0	0	0	0	17,945	62,809	26,102	0	0	26,102	106,857	106,857
ALO	111	1,489	3,722	5,210	4,466	2,977	8,932	45,403	46,892	0	0	46,892	108,669	113,879
ALL	112	2,552	0	2,552	5,468	1,458	3,646	10,572	1,094	365	0	1,458	22,603	25,155
ALM	113	29,271	714	29,985	22,846	7,853	5,711	35,697	37,124	714	0	37,838	109,945	139,930
ALK	114	53,351	2,937	56,287	14,255	62,724	11,404	15,396	10,264	0	0	10,264	114,043	170,331
ALJ	115	24,729	0	24,729	45,114	8,020	8,020	68,173	70,178	1,003	0	71,180	200,508	225,237
ALH	116	5,711	26,415	32,127	7,853	714	15,706	30,699	1,428	14,279	0	15,706	70,679	102,806
ALI	117	9,577	26,522	36,099	11,051	3,684	6,630	25,785	1,473	4,420	0	5,894	53,043	89,143
Abundance Estimate		457,304	332,188	789,492	509,840	93,107	156,139	956,963	561,611	71,725	0	633,336	2,349,389	3,138,881
WESTSIDE Section														
KUF	311	6,997	500	7,496	1,000	0	0	0	0	0	0	0	1,000	8,496
KUG	312	684	0	684	0	0	0	0	0	0	0	0	0	684
KUI	313	13,635	2,556	16,191	20,452	852	284	0	0	0	0	0	21,588	37,779

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Station	Haul no.	Females			Number sublegal males by size (CW)				Recruit males	Postrecruit males (CW)		Legal males	Total males	Total crab
		Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm		<165 mm	≥165 mm			
KUS	314	51,084	0	51,084	55,386	0	538	0	0	0	0	0	55,924	107,007
KUQ	315	37,469	7,089	44,557	25,317	0	2,025	1,013	0	0	0	0	28,355	72,912
UYBX	316	43,741	0	43,741	37,085	0	0	0	0	0	0	0	37,085	80,826
UYHX	317	5,651	182	5,833	5,468	2,552	0	0	0	0	0	0	8,020	13,853
UYFX	319	144,762	176,578	321,340	66,112	43,175	85,002	86,351	0	9,445	0	9,445	290,085	611,425
UYEX	320	286,332	375,193	661,525	116,428	47,630	56,891	17,200	0	0	0	0	238,149	899,673
UYO	321	2,571	41,344	43,914	1,637	3,275	447	1,340	0	149	0	149	6,848	50,762
UYKX	322	234,473	9,770	244,243	173,658	17,761	6,907	2,960	0	0	0	0	201,286	445,529
UYMX	323	70,997	79,295	150,291	62,698	6,454	6,454	11,064	0	2,766	0	2,766	89,437	239,729
UYQX	324	18,017	106,857	124,874	1,032	3,440	7,567	8,943	1,376	8,943	344	10,663	31,644	156,518
UYT	325	1,891	0	1,891	1,418	0	0	0	0	0	0	0	1,418	3,310
UYSS	326	18,473	67,879	86,352	4,278	17,110	2,139	3,208	267	2,139	267	2,673	29,408	115,760
KUT	327	45,366	6,659	52,026	42,037	2,913	4,578	832	0	0	0	0	50,361	102,387
KUV	328	1,013	0	1,013	0	0	0	0	0	0	0	0	0	1,013
KUW	329	0	0	0	287	0	0	0	0	0	0	0	287	287
KUXB	330	22,053	2,892	24,945	21,162	19,088	830	1,037	0	0	0	0	42,117	67,062
KUXA	331	73,872	43,972	117,844	42,079	97,447	46,509	17,718	14,396	3,322	0	17,718	221,470	339,314
KUU	332	123,157	109,599	232,756	79,802	39,901	35,367	24,485	2,721	2,721	0	5,441	184,996	417,752
KUP	333	15,324	41,256	56,580	15,913	12,966	12,966	25,932	0	13,556	0	13,556	81,333	137,913
KUNX	334	2,354	39,555	41,909	2,354	1,413	5,180	13,185	0	5,651	0	5,651	27,783	69,692
KUYA	335	1,291	0	1,291	1,549	1,549	258	0	0	0	0	0	3,357	4,648
KUYB	336	0	0	0	0	0	0	0	0	0	0	0	0	0
KULB	337	3,480	0	3,480	3,000	0	0	0	0	0	0	0	3,000	6,480
KUM	338	17,663	0	17,663	21,381	0	0	0	0	0	0	0	21,381	39,044
KUK	339	123,312	11,833	135,145	116,462	0	0	1,868	0	0	0	0	118,330	253,476
KULA	340	9,060	6,795	15,855	3,603	3,192	1,030	412	103	309	0	412	8,648	24,503
KUJ	341	63,160	5,263	68,423	60,152	1,504	3,008	12,782	1,504	752	0	2,256	79,702	148,125
RAA	342	2,270	63,230	65,499	1,786	5,657	15,482	8,932	0	298	0	298	32,154	97,653
MAA	343	466	1,865	2,332	0	0	0	0	0	0	0	0	0	2,332
PMA	344	2,673	0	2,673	2,005	0	0	0	0	0	0	0	2,005	4,679
Abundance Estimate		1,443,291	1,200,162	2,643,450	985,541	327,879	293,462	239,262	20,367	50,051	611	71,028	1,917,171	4,560,623

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Station	Haul no.	Females			Number sublegal males by size (CW)				Recruit males	Postrecruit males (CW)		Legal males	Total males	Total crab
		Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm		<165 mm	≥165 mm			
NORTH MAINLAND Section														
121	345	52,216	9,494	61,709	66,456	0	0	0	0	0	0	0	66,456	128,166
120	346	47,469	9,494	56,963	147,153	0	0	0	0	0	0	0	147,153	204,116
91	347	0	9,494	9,494	23,734	0	0	0	0	0	0	0	23,734	33,228
61	348	0	0	0	4,747	0	0	0	0	0	0	0	4,747	4,747
60	349	7,595	0	7,595	11,393	0	0	0	0	0	0	0	11,393	18,988
119	351	30,380	0	30,380	45,570	0	0	0	0	0	0	0	45,570	75,950
118	352	163,293	3,798	167,090	144,305	15,190	3,798	0	0	0	0	0	163,293	330,383
171A	353	9,611	2,023	11,634	4,673	3,115	4,673	70,868	72,426	0	1,558	73,983	157,312	168,946
171C	354	10,840	2,710	13,549	2,086	25,027	55,267	87,593	42,754	0	0	42,754	212,727	226,276
171D	355	0	0	0	0	1,267	2,534	0	0	1,267	0	1,267	5,067	5,067
172B	356	3,520	0	3,520	0	0	0	0	0	0	0	0	0	3,520
145	358	23,734	0	23,734	18,988	0	0	0	0	0	0	0	18,988	42,722
117	359	16,234	0	16,234	10,823	0	0	0	0	0	0	0	10,823	27,057
146	360	43,400	0	43,400	37,975	0	0	0	0	0	0	0	37,975	81,375
173	361	626,588	0	626,588	507,916	4,747	0	0	0	0	0	0	512,663	1,139,250
198	362	337,028	0	337,028	289,559	4,747	0	9,494	4,747	14,241	0	18,988	322,788	659,816
222	363	508,487	28,567	537,054	628,467	5,713	28,567	5,713	0	0	0	0	668,461	1,205,514
223	364	118,672	28,481	147,153	137,659	14,241	4,747	4,747	0	0	0	0	161,394	308,547
90	350	21,327	0	21,327	24,881	0	0	0	0	0	0	0	24,881	46,208
Abundance Estimate		2,020,394	94,061	2,114,452	2,106,385	74,047	99,586	178,415	119,927	15,508	1,558	136,992	2,595,425	4,709,876
Kodiak District Total		23,038,934	7,828,549	30,867,480	22,484,498	3,883,997	3,363,600	6,514,407	1,577,182	496,138	13,760	2,087,076	38,333,553	69,201,033

Appendix D2.–Tanner crab abundance estimates in the South Peninsula District by station, sampling locale, and section, 2017.

Station	Haul no.	Females			Number sublegal males by size (CW)				Recruit males	Postrecruit males (CW)		Legal males	Total males	Total crab
		Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm		<165 mm	≥165 mm			
SANAK ISLAND														
113	258	59,811	0	59,811	29,905	0	4,272	0	0	0	0	0	34,178	93,988
125	259	217,882	4,272	222,154	192,248	0	8,544	0	0	0	0	0	200,793	422,947
126	257	12,919	0	12,919	17,225	0	0	0	0	0	0	0	17,225	30,145
137	260	85,444	0	85,444	118,672	14,241	9,494	0	0	0	0	0	142,406	227,850
138A	261	42,357	1,925	44,283	55,835	17,328	3,851	0	0	0	0	0	77,013	121,296
138B	262	33,648	0	33,648	46,903	2,039	7,137	0	0	0	0	0	56,080	89,727
138C	263	141,837	0	141,837	151,292	6,304	6,304	0	0	0	0	0	163,900	305,737
Abundance Estimate		593,898	6,197	600,096	612,080	39,912	39,602	0	0	0	0	0	691,595	1,291,690
MORZHOVOI BAY														
MORX	285	4,475	0	4,475	7,458	0	0	1,492	0	0	0	0	8,950	13,425
MOSX	286	23,393	0	23,393	16,709	0	0	0	0	0	0	0	16,709	40,102
87AX	287	7,595	3,798	11,393	9,494	0	17,089	22,785	1,899	7,595	0	9,494	58,861	70,254
87D	288	3,949	0	3,949	4,937	0	0	0	0	0	0	0	4,937	8,886
MOOX	289	3,876	315,934	319,810	4,640	4,640	81,206	329,463	23,202	27,842	0	51,044	470,993	790,804
MOK	290	21,836	34,178	56,013	18,038	0	26,583	140,508	10,443	1,899	0	12,342	197,470	253,483
MOL	291	1,899	4,747	6,646	0	0	28,481	64,558	8,544	0	0	8,544	101,583	108,229
MOH	292	2,010	0	2,010	2,680	0	0	0	0	0	0	0	2,680	4,689
MOB	294	10,546	0	10,546	9,374	0	0	0	0	0	0	0	9,374	19,921
MOD	295	714	714	1,428	1,428	0	0	0	0	0	0	0	1,428	2,856
MOG	296	6,222	0	6,222	5,444	778	0	0	0	0	0	0	6,222	12,444
MOI	297	2,251	0	2,251	2,251	0	0	750	0	0	0	0	3,002	5,253
Abundance Estimate		88,766	359,371	448,136	82,453	5,418	153,359	559,556	44,088	37,336	0	81,424	882,209	1,330,346
COLD BAY/BELKOFSKI BAY														
156A	301	1,956	0	1,956	1,956	0	0	0	0	0	0	0	1,956	3,913
157A	300	0	0	0	1,035	0	1,035	0	0	0	0	0	2,069	2,069
BEBX	304	0	0	0	1,007	0	0	0	0	0	0	0	1,007	1,007
BECX	305	0	15,907	15,907	2,272	0	2,272	1,136	0	0	0	0	5,681	21,588
BEE	303	1,899	3,798	5,696	2,848	0	949	4,747	0	949	0	949	9,494	15,190

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Station	Haul no.	Females			Number sublegal males by size (CW)				Recruit males	Postrecruit males (CW)		Legal males	Total males	Total crab
		Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm		<165 mm	≥165 mm			
BEF	302	0	0	0	0	0	0	641	0	0	0	0	641	641
BEG	299	1,124	0	1,124	3,372	0	1,124	0	0	0	0	0	4,496	5,620
COB	249	10,757	0	10,757	9,220	0	0	0	0	0	0	0	9,220	19,977
COE	251	2,982	0	2,982	0	7,456	1,491	4,473	0	0	0	0	13,420	16,403
COF	252	1,272	5,089	6,361	0	1,908	5,725	13,358	2,544	0	0	2,544	23,535	29,896
COGA	255	0	14,481	14,481	1,448	965	17,860	43,926	13,998	1,931	483	16,412	80,612	95,093
COGB	254	161	0	161	0	0	322	966	161	483	0	644	1,932	2,093
COH	253	0	0	0	0	0	0	238	0	0	0	0	238	238
COM	256	1,025	1,025	2,051	0	0	1,025	2,051	0	0	0	0	3,076	5,127
COOX	298	0	4,603	4,603	4,603	0	7,671	0	0	0	0	0	12,274	16,876
Abundance Estimate		21,176	44,903	66,079	27,761	10,329	39,474	71,536	16,703	3,363	483	20,549	169,651	235,731
PAVLOF BAY/VOLCANO BAY														
228	225	14,479	0	14,479	18,257	0	630	1,889	0	0	0	0	20,775	35,254
245	224	31,659	0	31,659	36,315	0	2,793	6,518	0	1,862	0	1,862	47,488	79,147
PAEX	228	5,605	0	5,605	0	2,803	0	0	0	0	0	0	2,803	8,408
PAH	227	13,476	0	13,476	13,476	2,695	0	0	0	0	0	0	16,171	29,647
PAIX	229	0	0	0	1,697	0	0	0	0	0	0	0	1,697	1,697
PALX	230	5,965	0	5,965	1,988	0	3,976	0	0	0	0	0	5,965	11,929
PAOB	226	15,612	15,612	31,225	13,878	8,673	18,214	34,694	1,735	3,469	0	5,204	80,663	111,888
PAP	231	2,046	3,068	5,114	2,046	1,023	8,182	6,137	1,023	0	0	1,023	18,410	23,524
PARA	236	4,223	0	4,223	2,534	845	2,534	12,668	2,534	0	0	2,534	21,114	25,337
PARB	232	6,433	16,542	22,975	919	0	7,352	12,866	919	3,676	0	4,595	25,732	48,707
PAU	237	8,544	3,798	12,342	8,544	3,798	7,595	16,139	949	949	0	1,899	37,975	50,317
PAV	233	7,291	1,823	9,114	10,025	0	0	911	911	0	0	911	11,848	20,962
VOA	238	6,837	977	7,814	6,837	1,953	1,953	3,907	0	977	0	977	15,627	23,441
VOBX	234	19,413	21,354	40,767	11,648	0	5,824	5,824	0	1,941	0	1,941	25,237	66,004
VOD	235	8,285	13,808	22,092	8,285	921	1,841	4,603	921	0	0	921	16,569	38,662
VOFB	240	1,376	2,752	4,129	2,064	0	0	688	0	0	0	0	2,752	6,881
VOG	239	1,960	0	1,960	980	0	0	980	0	0	0	0	1,960	3,919
VOH	241	6,741	0	6,741	5,778	1,926	0	963	0	0	0	0	8,667	15,409
VOI	242	9,387	3,755	13,142	3,755	3,755	3,755	939	2,816	0	0	2,816	15,020	28,162
VOLX	245	7,041	15,646	22,686	5,476	1,565	2,347	4,694	1,565	782	0	2,347	16,428	39,114

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Appendix D2.–Page 3 of 4.

Station	Haul no.	Females			Number sublegal males by size (CW)				Recruit males	Postrecruit males (CW)		Legal males	Total males	Total crab
		Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm		<165 mm	≥165 mm			
VOM	248	6,046	2,418	8,464	8,464	0	2,418	0	1,209	0	0	1,209	12,091	20,555
VON	243	11,757	980	12,737	6,858	4,899	1,960	3,919	980	0	0	980	18,615	31,352
VOPX	246	18,029	20,803	38,832	13,868	16,642	1,387	9,708	4,161	0	0	4,161	45,766	84,598
VOQ	247	6,343	0	6,343	6,343	705	3,524	0	0	0	0	0	10,572	16,916
VOR	244	9,357	0	9,357	11,228	1,871	1,871	936	936	0	0	936	16,843	26,200
Abundance Estimate		227,905	123,336	351,241	201,263	54,074	78,156	128,983	20,659	13,656	0	34,316	496,788	848,030
BEAVER BAY/BALBOA BAY/UNGA STRAIT														
278	223	0	0	0	6,328	0	0	6,328	0	0	0	0	12,656	12,656
311A	207	17,812	1,370	19,182	8,221	3,425	0	685	0	0	0	0	12,331	31,513
311B	201	12,896	1,720	14,616	20,634	860	860	0	0	0	0	0	22,354	36,969
311C	200	7,870	5,724	13,594	10,732	2,862	1,431	715	0	0	0	0	15,740	29,333
329B	198	13,291	1,899	15,190	13,291	0	5,696	5,696	0	949	0	949	25,633	40,823
329C	199	18,038	4,747	22,785	24,684	949	1,899	2,848	949	0	0	949	31,329	54,114
348	197	91,140	3,798	94,938	106,330	3,798	7,595	3,798	0	0	0	0	121,520	216,458
368A	196	23,350	0	23,350	11,675	0	0	0	0	0	0	0	11,675	35,025
BAA	204	2,127	0	2,127	1,063	0	0	0	0	0	0	0	1,063	3,190
BAC	205	8,968	0	8,968	11,958	747	747	0	0	0	0	0	13,452	22,420
BAD	203	5,514	0	5,514	4,044	0	0	0	0	0	0	0	4,044	9,558
BAE	206	9,017	6,763	15,779	15,216	4,508	3,945	2,818	564	0	0	564	27,050	42,830
BAF	202	0	0	0	418	0	0	0	0	0	0	0	418	418
BVC	222	835	0	835	0	0	0	0	0	0	0	0	0	835
Abundance Estimate		210,858	26,021	236,878	234,594	17,149	22,173	22,888	1,513	949	0	2,462	299,265	536,142
STEPOVAK BAY														
STA	193	22,079	0	22,079	47,643	0	1,162	0	0	0	0	0	48,805	70,884
STB	194	34,346	0	34,346	44,557	928	928	0	0	0	0	0	46,414	80,760
STD	192	81,832	2,480	84,312	99,191	1,240	0	0	0	0	0	0	100,431	184,743
STE	195	117,838	0	117,838	86,874	0	0	0	0	0	0	0	86,874	204,712
Abundance Estimate		256,095	2,480	258,575	278,265	2,168	2,090	0	0	0	0	0	282,524	541,099

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Appendix D2.–Page 4 of 4.

Station	Haul no.	Females			Number sublegal males by size (CW)				Recruit males	Postrecruit males (CW)		Legal males	Total males	Total crab
		Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm		<165 mm	≥165 mm			
WEST NAGAI STRAIT														
301	214	9,494	0	9,494	9,494	0	4,747	0	0	0	0	0	14,241	23,734
318	213	4,747	0	4,747	4,747	4,747	0	0	0	0	0	0	9,494	14,241
332B	208	66,456	0	66,456	80,697	0	0	2,373	2,373	0	0	2,373	85,444	151,900
334	210	659,542	320,213	979,755	649,373	0	34,178	72,153	0	0	0	0	755,703	1,735,458
335	211	827,855	0	827,855	894,856	0	0	8,949	0	0	0	0	903,805	1,731,660
337	212	42,722	0	42,722	37,975	0	0	0	0	0	0	0	37,975	80,697
353	216	45,752	144,882	190,635	19,063	3,813	19,063	22,876	3,813	0	0	3,813	68,628	259,263
354	209	26,583	144,305	170,888	30,380	3,798	45,570	98,735	0	0	0	0	178,483	349,370
371	219	13,470	0	13,470	6,735	6,735	3,368	0	0	0	0	0	16,838	30,309
373A	215	0	0	0	0	1,551	1,551	0	0	0	0	0	3,103	3,103
373B	217	32,701	56,318	89,019	27,251	6,359	14,534	27,251	4,542	0	0	4,542	79,936	168,955
393	218	153,389	48,805	202,194	153,389	18,593	4,648	4,648	0	0	0	0	181,277	383,472
Abundance Estimate		1,882,711	714,523	2,597,235	1,913,960	45,596	127,659	236,985	10,728	0	0	10,728	2,334,927	4,932,162
Western Section[a]		703,840	410,471	1,114,311	722,294	55,659	232,435	631,092	60,791	40,699	483	101,973	1,743,455	2,857,767
Eastern Section[b]		2,577,569	866,360	3,443,929	2,628,082	118,987	230,078	388,856	32,900	14,605	0	47,506	3,413,504	6,857,433
South Peninsula District Total		3,281,409	1,276,831	4,558,240	3,350,376	174,646	462,513	1,019,948	93,691	55,304	483	149,479	5,156,959	9,715,200

[a] Western Section of the South Peninsula District includes Sanak Island, Morzhovoi Bay, and Cold Bay/Belkofski Bay.

[b] Eastern Section of the South Peninsula District includes Pavlof Bay/Volcano Bay, Beaver Bay/Balboa Bay/Unga Strait, West Nagai Strait, and Stepovak Bay.

Appendix D3.–Tanner crab abundance estimates in the Chignik District by station and sampling locale, 2017.

Station	Haul no.	Females			Number sublegal males by size (CW)				Recruit males	Postrecruit males (CW)		Legal males	Total males	Total crab
		Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm		<165 mm	≥165 mm			
IVANOF BAY														
4000X	189	0	20,917	20,917	492	0	1,476	6,644	6,644	0	0	6,644	15,257	36,173
4000Y	190	18,167	699	18,866	23,757	0	699	699	0	0	0	0	25,155	44,021
4007	187	166,613	18,146	184,759	138,569	11,547	8,248	13,197	6,599	0	0	6,599	178,160	362,919
4008	191	67,097	288,891	355,988	72,689	18,638	33,549	67,097	29,821	7,455	0	37,276	229,249	585,237
4900X	188	6,422	0	6,422	16,515	0	0	0	0	0	0	0	16,515	22,937
4915	186	12,329	0	12,329	16,438	2,055	0	0	0	0	0	0	18,493	30,822
Abundance Estimate		270,628	328,653	599,281	268,460	32,240	43,972	87,637	43,064	7,455	0	50,519	482,829	1,082,109
MITROFANIA ISLAND														
4024	185	109,667	0	109,667	109,667	0	0	0	0	0	0	0	109,667	219,334
4025	184	154,695	1,934	156,629	208,838	7,735	5,801	0	0	0	0	0	222,374	379,003
4026	181	251,774	12,912	264,686	228,103	38,735	6,456	4,304	0	0	0	0	277,597	542,283
4035	178	146,991	0	146,991	136,491	2,625	0	0	0	0	0	0	139,116	286,107
4036	179	287,243	0	287,243	430,864	2,872	2,872	2,872	0	0	0	0	439,482	726,725
4037	180	34,806	0	34,806	23,204	0	1,934	0	0	0	0	0	25,138	59,944
4038A	182	139,444	38,735	178,179	174,305	19,367	7,747	5,810	0	0	0	0	207,230	385,408
4038B	183	40,886	2,152	43,038	32,279	4,304	2,152	0	0	0	0	0	38,735	81,773
4048	174	17,636	0	17,636	25,474	1,306	1,306	1,960	653	0	0	653	30,699	48,335
4049	177	27,854	0	27,854	48,111	0	0	0	0	0	0	0	48,111	75,965
4050A	176	34,405	0	34,405	25,231	0	0	0	0	0	0	0	25,231	59,636
4050B	171	564,831	0	564,831	492,563	0	0	0	0	0	0	0	492,563	1,057,394
4063	173	37,367	3,114	40,481	48,266	0	10,899	20,241	6,228	0	0	6,228	85,634	126,115
4064	175	48,477	12,568	61,046	80,796	0	5,386	7,182	1,795	0	0	1,795	95,159	156,205
4065	172	46,070	0	46,070	49,614	0	0	0	0	0	0	0	49,614	95,683
4066A	170	285,511	0	285,511	326,023	1,929	3,858	0	0	0	0	0	331,810	617,322
4066B	169	603,422	35,120	638,542	572,257	37,384	2,876	2,876	0	0	0	0	615,392	1,253,934
Abundance Estimate		2,831,079	106,535	2,937,615	3,012,086	116,257	51,287	45,245	8,676	0	0	8,676	3,233,552	6,171,166

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Station	Haul no.	Females			Number sublegal males by size (CW)				Recruit males	Postrecruit males (CW)		Legal males	Total males	Total crab
		Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm		<165 mm	≥165 mm			
CHIGNIK BAY														
4256	158	14,924	0	14,924	11,608	0	0	0	0	0	0	0	11,608	26,532
4264	166	40,178	31,443	71,621	31,443	0	1,747	6,114	1,747	0	0	1,747	41,051	112,672
4265	168	4,398	0	4,398	5,863	0	293	0	0	0	0	0	6,157	10,554
4266	157	7,820	5,213	13,033	7,820	869	4,344	0	0	0	0	0	13,033	26,066
4267	160	18,038	949	18,988	21,836	949	0	0	0	0	0	0	22,785	41,773
4270	164	25,771	109,907	135,679	18,192	758	3,790	15,160	758	0	0	758	38,657	174,336
4271	165	20,333	7,072	27,406	19,007	0	884	1,326	0	0	0	0	21,217	48,623
4272	156	23,494	0	23,494	25,060	783	0	0	0	0	0	0	25,843	49,337
4274	161	18,988	1,899	20,886	39,874	1,899	1,899	0	0	0	0	0	43,671	64,558
4277	155	82,596	5,696	88,292	83,545	8,544	4,747	0	0	0	0	0	96,836	185,128
4278	162	49,368	2,848	52,216	43,671	30,380	16,139	5,696	0	0	0	0	95,887	148,103
4282	154	117,723	33,228	150,951	93,988	35,127	22,785	949	0	0	0	0	152,849	303,800
4286	152	37,975	0	37,975	41,773	0	0	0	0	0	0	0	41,773	79,748
4287	153	49,170	6,304	55,474	55,474	10,086	11,347	6,304	5,043	0	0	5,043	88,254	143,728
4312	163	3,883	24,266	28,149	5,824	971	36,884	75,710	4,853	1,941	0	6,794	126,183	154,332
4964	167	22,038	0	22,038	23,309	0	0	0	0	0	0	0	23,309	45,347
Abundance Estimate		536,697	228,825	765,524	528,287	90,366	104,859	111,259	12,401	1,941	0	14,342	849,113	1,614,637
KUJULIK BAY														
4290	150	3,139	0	3,139	0	0	0	0	0	0	0	0	0	3,139
4296	151	7,747	0	7,747	12,304	456	911	1,823	0	0	0	0	15,494	23,241
4298	149	7,574	0	7,574	7,574	0	0	0	0	0	0	0	7,574	15,147
4301	148	21,801	0	21,801	32,227	0	0	0	0	0	0	0	32,227	54,028
4302	147	7,259	0	7,259	20,971	0	0	0	0	0	0	0	20,971	28,231
4308	146	18,988	0	18,988	19,747	0	0	0	0	0	0	0	19,747	38,735
Abundance Estimate		66,508	0	66,508	92,823	456	911	1,823	0	0	0	0	96,013	162,521
Chignik District Total		3,704,912	664,013	4,368,928	3,901,656	239,319	201,029	245,964	64,141	9,396	0	73,537	4,661,507	9,030,433

Appendix D4.–Tanner crab abundance estimates in the Eastern Aleutian District by station and sampling locale, 2017.

Station	Haul no.	Females			Number sublegal males by size (CW)				Recruit males	Postrecruit males (CW)		Legal males	Total males	Total crab
		Juvenile	Mature	Total	<70 mm	70–91 mm	92–114 mm	>114 mm		<165 mm	≥165 mm			
AKUTAN BAY SECTION														
AKA	264	16,525	3,672	20,197	14,689	38,558	11,017	0	0	0	0	0	64,263	84,460
AKC	265	91,997	85,426	177,422	76,977	3,755	14,081	939	0	939	0	939	96,690	274,113
AKD	266	38,763	3,798,740	3,837,503	19,460	147,896	256,871	97,300	0	7,784	0	7,784	529,311	4,366,814
AKG	267	31,329	949	32,279	14,241	0	0	0	0	0	0	0	14,241	46,519
AKL	268	949	0	949	1,899	949	0	0	0	0	0	0	2,848	3,798
Abundance Estimate		179,563	3,888,787	4,068,350	127,266	191,158	281,969	98,239	0	8,723	0	8,723	707,353	4,775,704
UNALASKA/KALEKTA BAY SECTION														
KAA	281	0	1,726	1,726	0	2,588	2,588	0	0	0	0	0	5,177	6,902
UNC	278	74,076	4,004	78,080	48,049	0	6,006	42,043	12,012	1,001	0	13,013	109,111	187,191
UND	283	2,582	0	2,582	3,099	1,549	1,549	516	0	0	0	0	6,714	9,296
UNE	282	47,575	21,805	69,380	26,761	0	2,973	5,947	0	0	0	0	35,681	105,062
UNF	279	151,900	0	151,900	122,469	0	0	0	0	0	0	0	122,469	274,369
UNG	284	9,494	949	10,443	4,747	949	949	0	0	0	0	0	6,646	17,089
UNJ	280	28,481	27,532	56,013	10,443	949	1,899	3,798	0	0	0	0	17,089	73,102
Abundance Estimate		314,108	56,016	370,124	215,568	6,035	15,964	52,304	12,012	1,001	0	13,013	302,887	673,011
MAKUSHIN BAY SECTION														
MKB	273	427,469	93,835	521,304	324,977	114,992	52,496	9,999	0	2,500	0	2,500	504,965	1,026,268
MKC	274	77,891	216,037	293,928	41,288	2,753	28,902	115,606	1,376	99,091	0	100,467	289,016	582,944
MKE	275	667,833	3,274	671,106	648,558	0	0	3,227	0	0	0	0	651,785	1,322,891
MKF	276	168,363	1,850	170,213	113,784	925	925	0	0	0	0	0	115,634	285,847
MKJ	272	13,211	0	13,211	4,065	0	0	0	0	0	0	0	4,065	17,276
MKK	269	4,744	0	4,744	11,069	0	1,581	0	0	0	0	0	12,650	17,394
MKN	270	318,666	8,171	326,837	315,813	12,890	1,611	0	0	0	0	0	330,314	657,151
MKP	271	113,306	337,508	450,815	22,206	81,885	112,418	56,903	0	4,164	0	4,164	277,576	728,391
Abundance Estimate		1,791,483	660,675	2,452,158	1,481,760	213,445	197,933	185,735	1,376	105,755	0	107,131	2,186,005	4,638,162
Eastern Aleutian District Total		2,285,154	4,605,478	6,890,632	1,824,594	410,638	495,866	336,278	13,388	115,479	0	128,867	3,196,245	10,086,877