

Fishery Management Report No. 22-02

**Large-Mesh Bottom Trawl Survey of Crab and
Groundfish: Kodiak, Chignik, South Peninsula, and
Eastern Aleutian Management Districts, 2021**

by

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and

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May 2022

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



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Weights and measures (metric)		General		Mathematics, statistics	
centimeter	cm	Alaska Administrative Code	AAC	<i>all standard mathematical signs, symbols and abbreviations</i>	
deciliter	dL	all commonly accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.	alternate hypothesis	H_A
gram	g			base of natural logarithm	e
hectare	ha			catch per unit effort	CPUE
kilogram	kg	all commonly accepted professional titles	e.g., Dr., Ph.D., R.N., etc.	coefficient of variation	CV
kilometer	km			common test statistics	(F, t, χ^2 , etc.)
liter	L	at	@	confidence interval	CI
meter	m	compass directions:		correlation coefficient	
milliliter	mL	east	E	(multiple)	R
millimeter	mm	north	N	correlation coefficient	
		south	S	(simple)	r
		west	W	covariance	cov
Weights and measures (English)		copyright	©	degree (angular)	°
cubic feet per second	ft ³ /s	corporate suffixes:		degrees of freedom	df
foot	ft	Company	Co.	expected value	E
gallon	gal	Corporation	Corp.	greater than	>
inch	in	Incorporated	Inc.	greater than or equal to	≥
mile	mi	Limited	Ltd.	harvest per unit effort	HPUE
nautical mile	nmi	District of Columbia	D.C.	less than	<
ounce	oz	et alii (and others)	et al.	less than or equal to	≤
pound	lb	et cetera (and so forth)	etc.	logarithm (natural)	ln
quart	qt	exempli gratia		logarithm (base 10)	log
yard	yd	(for example)	e.g.	logarithm (specify base)	log ₂ , etc.
		Federal Information Code	FIC	minute (angular)	'
		id est (that is)	i.e.	not significant	NS
Time and temperature		latitude or longitude	lat or long	null hypothesis	H_0
day	d	monetary symbols		percent	%
degrees Celsius	°C	(U.S.)	\$, ¢	probability	P
degrees Fahrenheit	°F	months (tables and figures): first three letters	Jan, ..., Dec	probability of a type I error (rejection of the null hypothesis when true)	α
degrees kelvin	K	registered trademark	®	probability of a type II error (acceptance of the null hypothesis when false)	β
hour	h	trademark	™	second (angular)	"
minute	min	United States (adjective)	U.S.	standard deviation	SD
second	s	United States of America (noun)	USA	standard error	SE
		U.S.C.	United States Code	variance	
Physics and chemistry		U.S. state	use two-letter abbreviations (e.g., AK, WA)	population sample	Var var
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				

FISHERY MANAGEMENT REPORT NO. 22-02

**LARGE-MESH BOTTOM TRAWL SURVEY OF CRAB AND
GROUNDFISH: KODIAK, CHIGNIK, SOUTH PENINSULA, AND
EASTERN ALEUTIAN MANAGEMENT DISTRICTS, 2021**

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May 2022

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ABSTRACT

This report summarizes results from the large-mesh bottom trawl survey that took place June through September 2021 to assess crab and groundfish resources in the Kodiak, Chignik, South Peninsula, and Eastern Aleutian Tanner crab *Chionoecetes bairdi* management Districts. A total of 337 trawl hauls were conducted to assess relative abundance and condition of commercially important crabs, as well as spatial distribution, species composition, size frequency, and catch per unit effort of commercially important groundfish. Survey estimates indicated that mature and legal male Tanner crab abundances were sufficient to support commercial fisheries in 3 sections of the Kodiak District, the Chignik District, and both sections of the South Peninsula 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. Arrowtooth flounder *Atheresthes stomias*, flathead sole *Hippoglossoides elassodon*, walleye pollock *Gadus chalcogrammus*, and yellowfin sole *Limanda aspera*, were the dominant groundfish captured during the survey.

Keywords: 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 2021 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 Registration Area J (Westward) for Tanner crab *Chionoecetes bairdi* (5 AAC 35.505¹(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 34.400², and 34.500³, and 34.604⁴(1)); the Kodiak, Alaska Peninsula, and Dutch Harbor scallop registration areas (5 AAC 38.076⁵(b)(5)(6) and (7)); and the Kodiak, Chignik, and South Alaska Peninsula groundfish registration areas, and Aleutian Islands District of the Bering Sea–Aleutian Islands (BSAI) groundfish Registration Area (5 AAC 28.400⁶, 28.500⁷, 28.550⁸, and 28.605⁹(a)) (Figure 2). Tanner crab management units are districts; king crab, weathervane scallops *Patinopecten caurinus*, and groundfish management units are areas. This report summarizes survey data by district or area, accordingly.

ADF&G began conducting trawl surveys focused on red king crab *Paralithodes camtschaticus* around Kodiak Island in 1963. Early trawl surveys were limited to localized areas known to have concentrations of red king crab (Reynolds and Powell 1964; McMullen 1967a–b; McMullen 1968; Kingsbury and James 1971; Figure 3). Beginning in 1980, bottom trawl surveys to assess Tanner crab were initiated in the North Shelikof Strait of the Kodiak District (Colgate and Hicks 1982); These surveys were not used as the primary crab stock assessment tool. Rather, ADF&G conducted pot surveys from 1973 to 1986 as the primary method to determine crab stock abundance. Pot surveys targeted red king crab; Tanner crab were assessed as a secondary species (Colgate and

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: *Alaska Scallop Fishery Management Plan*

⁶ Alaska Administrative Code: *Description of Kodiak Area [for groundfish]*

⁷ Alaska Administrative Code: *Description of Chignik Area [for groundfish]*

⁸ Alaska Administrative Code: *Description of South Alaska Peninsula Area [for groundfish]*

⁹ Alaska Administrative Code: *Description of Bering Sea–Aleutian Islands Area Districts [for groundfish]*

Hicks 1983). From 1981 through 1986, trawl survey development was focused on Tanner crab assessment and expansion to more locations in the Kodiak, Chignik, and South Peninsula Districts (Colgate and Hicks 1983; Colgate 1984). The first comprehensive large-mesh trawl survey of the Kodiak District occurred in 1987 (Jackson 1990). In 1988, following the collapse of the red king crab stocks, large-mesh trawl surveys replaced pot surveys as the standard Tanner crab stock assessment tool in the Kodiak, Chignik, and South Peninsula Districts (Urban and Vining 1999; Knutson and Spalinger 2021). The Eastern Aleutian District large-mesh bottom trawl survey was added to the regionwide survey program in 1990 and generally continued triennially until 2003. Beginning in 2004, selected locations of the Eastern Aleutian District have been surveyed annually, with the exception of 2020 due to scheduling changes associated with the COVID-19 pandemic. Since 1988, between 287 and 410 successful hauls have been completed annually in the Kodiak, Chignik, South Peninsula, and Eastern Aleutian Districts (Table 1).

Annual trawl survey results have been used since 1999 to determine if Tanner crab abundance is above regulatory thresholds allowing for commercial fisheries (5 AAC 35.507¹⁰; Urban et al. 1999; Table 2). When survey results indicate that abundance thresholds are met, Tanner crab guideline harvest levels (GHLs) are primarily determined by estimating the number of molting mature male crab (Appendix A1) as determined by the trawl survey in a district or section and applying a harvest rate based on composition of the male population. Details on the Tanner crab harvest strategy, survey results directly affecting Tanner crab fisheries, and recent fishery information are published annually by ADF&G (Bevaart and Phillips 2021).

Primary objectives of the 2021 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, and catch per unit effort (CPUE) of commercially important groundfish species.

Secondary objectives of the survey were to (1) determine size frequency of weathervane scallops; (2) determine sex composition of skate species (*Raja* spp. and *Bathyraja* spp.); and (3) measure chela height of male Tanner crab in the Kodiak and South Peninsula Districts (Knutson and Spalinger 2021).

Additionally, the following special projects were conducted in 2021 (Knutson 2021):

1. Eyestalks were collected from Tanner crab exhibiting signs of black eye syndrome.
2. Genetic tissues were collected from Dungeness crab *Cancer magister*.

Because of unexpected personnel issues and scheduling considerations, the North Mainland Section of the Kodiak District was not sampled.

METHODS

SURVEY DESIGN

The 2021 large-mesh bottom trawl survey was conducted in known Tanner crab habitat using a fixed-grid station design developed in 1988. Survey station area totals approximately 15,500 km² at depths greater than 20 fathoms. Station size variation results from irregular coastline topography and bathymetry. Offshore stations average approximately 74.4 km² each, and inshore stations

¹⁰ Alaska Administrative Code: Kodiak, Chignik, and South Peninsula Districts C. bairdi Tanner crab harvest strategies

average approximately 21.7 km² each (Appendix B2; Knutson and Spalinger 2021). In 2021, 337 successful bottom trawl hauls were conducted in 333 stations (Figure 1, Appendix C).

VESSEL AND FISHING GEAR

The R/V *Resolution* (28.9 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.

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, each 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 (Knutson and Spalinger 2021). Astoria “V” type doors weighing 340 kg and measuring 1.5 m × 2.1 m are used to spread the net.

Within each station, the trawl net was towed on bottom at an average speed of 5.0 km/h for a target distance of 1.85 km (1 nmi). 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. The vessel captain estimated corrections in distance for hauls that were not straight or when irregular bottom type, net hang ups, or exceptionally large catches caused haul distance to differ from 1.85 km. 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 (Knutson and Spalinger 2021). 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 1-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; ±1.0 kg), emptying the codend into on-deck sorting bins, and subtracting the empty codend weight from the full codend weight. Prior to emptying the trawl catch from the codend, a 1.5 m² 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; ±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 *Sebastobus* spp., lingcod *Ophiodon elongatus*, Atka mackerel *Pleurogrammus monopterygius*, giant Pacific octopus *Enteroctopus 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 were 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 sex and 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 by 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 are presented in Appendix A. Dungeness crab were measured for CW and checked for legal status across the carapace immediately anterior to the 10th anterolateral spine (Knutson and Spalinger 2021).

Tanner, king, and Dungeness crabs were subsampled when each species/sex exceeded 200 individuals per haul. 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 (Knutson and Spalinger 2021). 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 (Knutson and Spalinger 2021).

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 midpoint 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 (Knutson and Spalinger 2021).

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:

$$density = \frac{\text{number or weight of animals}}{\text{net width} * \text{haul distance}}. \quad (1)$$

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:

$$\text{station abundance} = \text{density} * \text{station area.} \quad (2)$$

The sum of abundances from stations in a geographic area provides a total abundance index for the area:

$$\text{total district or section abundance} = \sum \text{station abundance.} \quad (3)$$

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:

$$\text{CPUE} = \frac{\text{number or weight of animals}}{\text{distance towed}}. \quad (4)$$

RESULTS AND DISCUSSION

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

KODIAK

In the Northeast, Eastside, Southeast, and Southwest Sections of the Kodiak Tanner crab District, 150 hauls were successfully completed between June 18 and July 15 (haul numbers 1–150). Haul locations are shown in Appendices C1–C7. In the Westside Section, 33 hauls were successfully completed between September 11 and September 17 (haul numbers 305–337). The total area of the surveyed sections used to determine abundance estimates for the district in 2021 was 6,178.2 km² (Appendix B2).

Throughout the Kodiak District, 133 species were identified and weighed. A total of 26,511 size measurements were collected from 4 invertebrate species and 23,139 length measurements were collected from 38 fish species.

Catch Composition

The CPUE of all species from Kodiak sample hauls was 602 kg per km towed. Arrowtooth flounder *Atheresthes stomias* was the dominant species caught by weight (21.7%), followed by flathead sole *Hippoglossoides elassodon* (17.0%), Tanner crab (13.6%), walleye pollock (9.1%), and starry flounder *Platichthys stellatus* (4.4%; Table 3). Arrowtooth flounder, flathead sole, walleye pollock, and Tanner crab were the 4 most abundant species captured by weight in previous years (Spalinger 2017; Spalinger and Knutson 2018–2021; Figure 4).

Tanner Crab

The 2021 Kodiak District survey captured 44,594 male Tanner crab and 16,249 female Tanner crab. Tanner crab were caught in 93% of all hauls, with catches ranging from 0 to 10,484 crab per km towed, with the highest CPUE at station 486A in Upper Barnabas Gully within the Eastside Section (Figure 5). Total Tanner crab CPUE was 201 crab per km towed.

Tanner crab abundance estimates for each station were summed by management section (Appendix D1). The total 2021 Kodiak District surveyed Tanner crab abundance was estimated at 78.7 million crab, a decrease from 108.3 million crab estimated in 2020, and the 12th largest estimate in survey record. Abundance estimates for sublegal males >114 mm CW were the largest in survey record. The largest decreases were observed among males 70–91 mm CW, males 92–114 mm CW, and mature females (Table 4).

The 2021 estimated abundance of legal-sized male Tanner crab was 3.3 million crab, an increase from the 2020 estimate of 1.2 million (Table 4). In 2021, the abundance estimate of 1.5 million legal-sized male crab in the Eastside Section was the largest in the district, while the Northeast Section had the smallest estimated abundance of legal males (0.35 million).

Trawl survey results indicated that mature male Tanner crab abundance in the Eastside, Southeast, and Southwest Sections met minimum regulatory thresholds for consideration of a commercial fishery in 2022; regulatory harvest level requirements were met, and the fisheries were opened for the 2022 season. Mature male Tanner crab abundance estimates for the Northeast and Westside Sections were below thresholds needed for commercial seasons (Table 2).

Male Tanner crab had a mean size of 113.8 mm CW and females had a mean size of 83.6 mm CW. A large proportion of male crab were between 95 mm CW and 145 mm CW, while female crab were between 70 mm CW and 100 mm CW (Figure 6). The percent of male crab that were considered mature was 57.5%, up from 23.3% in 2020 (Figure 7, Table 5). In the Eastside, Southeast, and Southwest Sections most male crab were greater than 100 mm CW. Male crab in the Northeast and Westside Sections were less abundant and composed of a larger proportion of crab less than 100 mm CW (Figures 8 and 9). Soft/new pliable shell and new shell crab composed 89.6% (39,958 crab) of the total male Tanner crab captured in the Kodiak District (Table 5).

Mature female Tanner crab had a mean size of 87.0 mm CW. A total of 5,703 mature female crab were measured and clutch information was determined. Multiparous crab accounted for 93.2% (5,313 crab) of mature females, up from 44.8% in 2020 (Spalinger and Knutson 2021). Only 29 mature females examined did not produce an egg clutch and 93.7% (5,345 crab) of mature females had an egg clutch greater than half full (Figure 10). This was greater than 2020 when 71.9% of mature females sampled had egg clutches that were more than half full (Spalinger and Knutson 2020). Average clutch fullness in 2021 increased from 2020 (Figure 11).

Red King Crab

Red king crab were caught in 13.0% of Kodiak Area hauls totaling 179 males and 220 females. King crab catch ranged from 0 to 170 crab per haul, with 74.5% of king crab caught inside Alitak Bay and 22.0% caught inside Ugak Bay (Figure 12).

Red king crab abundance estimates were derived for 4 districts of the Kodiak Registration Area by size and sex categories (Table 6). The 2021 Kodiak red king crab abundance was estimated at 255,185 crab, which was more than the estimated 121,284 crab in 2020. The largest increases were observed among females and prerecruit IV males, while legal male abundance declined (Table 6). The total estimated abundance of legal males decreased from 94,164 crab in 2020 to 45,930 crab in 2021 and represented 37.7% of the total male abundance.

Mean king crab size was 129.0 mm CL for males and 117.1 mm CL for females (Figures 13 and 14). Just over half of female king crab were juvenile and the majority of males were sublegal (Table 6). During the 2021 Kodiak Area survey, 53.4% (55) of all mature females examined had

an egg clutch that was more than half full (Figure 15), lower than 2020 (64.0%; Spalinger and Knutson 2021).

CHIGNIK

In the Chignik Tanner crab District, 45 hauls were successfully completed from July 26 through August 1 (haul numbers 151–195; Appendices C8–C9). The total area used to determine abundance estimates for the district in 2020 was 1,323.8 km² (Appendix B2).

Throughout the Chignik District, 87 species were identified and weighed. A total of 9,722 size measurements were collected from 4 invertebrate species and 4,912 length measurements were collected from 30 fish species.

Catch Composition

The CPUE of all species from Chignik sample hauls was 399 kg per km towed. Arrowtooth flounder (34.4%), flathead sole (19.3%), and Tanner crab (10.9%) were the dominant species caught by weight, followed by walleye pollock (9.1%) and Pacific halibut (7.2%; Table 7). With the exception of Tanner crab in 2017, these species have been among the top 10 species in recent surveys (Spalinger 2017; Spalinger and Knutson 2018–2021; Figure 4).

Tanner Crab

The 2021 Chignik District bottom trawl survey captured 7,302 male Tanner crab and 4,169 female Tanner crab. Tanner crab were caught in 98% of all hauls, with catches ranging from 0 to 726 crab per km towed. Station 4312 in Castle Bay had the highest CPUE of Tanner crab (Figure 16). Total Tanner crab CPUE was 141 crab per km towed.

Abundance estimates for Tanner crab in each station were summed by surveyed locale (Appendix D2). The total 2021 Chignik District Tanner crab abundance was estimated at 13.6 million crab, a decrease from 17.1 million crab in 2020, and the 12th highest abundance estimate in survey history (Table 8). Male crab 70–91 mm CW, males 92–114 mm CW, and mature females showed the largest decreases from recent years while estimates of sublegal males >114 mm increased. The estimated abundance of legal-sized male Tanner crab in 2021 increased to 507,609 crab from 86,880 crab in 2020 (Table 8, Figure 17). Estimated mature male abundance was above the threshold needed for consideration of a commercial fishery in 2022 (Table 2); regulatory harvest level requirements were met, so the fishery opened for the 2022 season.

The mean Chignik District Tanner crab CW was 97.5 mm for males and 72.2 mm for females. A large proportion of male crab were between 95 mm CW and 145 mm CW, while female crab were between 70 mm CW and 105 mm CW (Figure 6). Juvenile males with soft/new pliable or new shell conditions accounted for 49.0% (3,586 crab) of all male Tanner crab captured in the district (Table 5) compared to 75.0% in 2020 (Spalinger and Knutson 2021), and the percentage of mature males increased to 46.6% overall. Mitrofanina had the highest number of new shell male crab, which were predominantly >95 mm CW (Figures 18 and 19).

Mature female Tanner crab had a mean size of 91.9 mm CW. A total of 1,158 mature females were measured and clutch information recorded. Multiparous females accounted for 86.6% (1,003 crab) of mature female Tanner crab examined in 2021 compared to 49.3 % in 2020 (Spalinger and Knutson 2021). Egg clutches that were more than half full were found in 91.8% (1,063 crab) of mature females examined (Figure 20). Average clutch fullness in 2021 increased from 2020 (Figure 21).

SOUTH PENINSULA

In the South Peninsula Tanner crab District, 84 hauls were successfully completed from August 2 through August 23 (haul numbers 196–226 and 252–304; Appendices C9–C12). The total area used to determine abundance estimates for the district in 2021 was 2,437.1 km² (Appendix B2).

Throughout the South Peninsula District, 107 species were identified and weighed. A total of 13,186 size measurements were collected from 4 invertebrate species and 10,125 length measurements were collected from 33 fish species.

Catch Composition

The CPUE of all species from South Peninsula sample hauls was 796 kg per km towed. Arrowtooth flounder (32.1%), flathead sole (19.9%), walleye pollock (17.1%), and Tanner crab (10.7%) were the dominant species caught by weight, followed by yellowfin sole (10.1%) and starry flounder (2.8%; Table 9). These species, with the exception of starry flounder, have been among the top 10 species in recent surveys (Spalinger 2017; Spalinger and Knutson 2018–2021; Figure 4).

Tanner Crab

The 2021 South Peninsula District survey caught 20,850 male Tanner crab and 4,850 female Tanner crab. Tanner crab were caught in 95% of all hauls, with catches ranging from 0 to 1,182 crab per km towed, with the highest CPUE at station 156A outside of Belkofski Bay, in the Western Section (Figure 16). Total Tanner crab CPUE was 189 crab per km towed.

Tanner crab abundance estimates for each station were summed by surveyed locale and management section (Appendix D3). The total 2021 Tanner crab abundance in the surveyed portion of the South Peninsula District was estimated at 30.3 million crab, a decrease from 64.8 million crab in 2020, and the 10th highest estimate in survey history (Table 10). In 2021, the largest decreases in Tanner crab abundance were observed among mature and juvenile females, males 70–91 mm CW, and males 92–114 mm CW. Male crab >114 mm CW showed the largest increases from recent years (Table 10, Figure 22). Estimated abundance of legal-sized male Tanner crab increased to 1.7 million crab in 2021 from 0.2 million crab in 2020. Trawl survey results indicated that estimated mature male abundance was above thresholds needed for consideration of a commercial fishery in both the Eastern and Western Sections in 2022 (Table 2); regulatory harvest level requirements were met, so the fisheries were opened for the 2022 season.

Male Tanner crab in the South Peninsula District had a mean size of 113.6 mm CW and females had a mean size of 81.6 mm CW. A large proportion of male crab were between 95 mm CW and 145 mm CW, while female crab were between 75 mm CW and 105 mm CW (Figure 6). Soft/new pliable shell and new shell crab composed 85.9% (17,919 crab) of the total male Tanner crab captured in the District with most of those found around Morzhovoi Bay, Cold Bay/Belkofski Bay, and Pavlof Bay/Volcano Bay (Table 5, Figures 23 and 24).

Mature female Tanner crab had a mean size of 91.7 mm CW. A total of 1,804 mature female Tanner crab were measured and clutch information determined. Multiparous females in the South Peninsula District accounted for 62.9% (1,135 crab) of mature female Tanner crab examined in 2021 compared to 32.5% in 2020 (Spalinger and Knutson 2021). Egg clutches that were more than half full were found in 78.4% (1,415 crab) of mature female Tanner crab examined (Figure 25). Average clutch fullness in 2021 increased from 2020 (Figure 26).

Red King Crab

The Alaska Peninsula king crab management area consists of waters west of Cape Kumlik and east of Scotch Cap Light, approximately corresponding to the South Peninsula and Chignik Tanner crab management district boundaries (Figure 2). The 2021 abundance estimate was 254,681 crab, an increase from 198,405 crab estimated in 2020 (Table 6). A total of 285 male and 4 female red king crab were captured in the Alaska Peninsula Area, most of which were from Pavlof Bay (Figure 12). Male king crab mean carapace length averaged 169.0 mm and female red king crab mean carapace length averaged 125.1 mm. Of the 4 female king crab caught, 3 were mature. The patchy catches of king crab in the sampling areas may not accurately reflect changing abundance.

EASTERN ALEUTIAN

In the Eastern Aleutian Tanner crab District, 25 hauls were successfully completed from August 8 through August 14 (haul numbers 227–251; Appendices C13–C14). The total area used to determine abundance estimates for the district in 2021 was 522.2 km² (Appendix B2).

Throughout the Eastern Aleutian District, 94 species were identified and weighed. A total of 4,955 size measurements were collected from 4 invertebrate species and 3,118 length measurements were collected from 26 fish species.

Catch Composition

The CPUE of all species from Eastern Aleutian sample hauls was 432 kg per km towed. Arrowtooth flounder was the dominant species by weight (42.3%), followed by flathead sole (12.1%), Tanner crab (8.8%), walleye pollock (8.4%), and rex sole *Glyptocephalus zachirus* (6.5%; Table 11). These species have been among the top 10 species in recent surveys (Spalinger 2017; Spalinger and Knutson 2018–2020; Figure 4).

Tanner Crab

The 2021 Eastern Aleutian survey caught 5,704 male Tanner crab and 4,657 female Tanner crab. Tanner crab were caught in all hauls, with catches ranging from 2 to 1,677 crab per km towed, with the highest CPUE at station MKB in Makushin Bay (Figure 27). Total Tanner crab CPUE was 260 crab per km towed.

Tanner crab abundance estimates for each station were summed by surveyed locale and management section (Appendix D4). The total 2021 Tanner crab abundance in the surveyed portion of the Eastern Aleutian District was estimated at 9.6 million crab, an increase from 5.8 million crab in 2019, and the 4th highest estimate in survey history. In 2021, the largest increases in Tanner crab abundance were observed among male crab <70 mm CW, male crab 70–91 mm CW, and juvenile females (Table 12). Estimated abundance of legal-sized male Tanner crab increased to 0.7 million crab in 2021 from 0.2 million crab in 2019. The abundance estimates of mature male Tanner crab in the Akutan and Unalaska/Kalekta Sections were below thresholds needed for a commercial season in 2022. Estimated mature male abundance was above the threshold needed for consideration of a commercial fishery in the Makushin/Skan Section in 2022 (Table 2); however, because of concerns that the harvest rate would be higher than is generally recommended, the fishery remained closed for the 2022 season.

Male Tanner crab in the Eastern Aleutian District had a mean size of 75.5 mm CW and females had a mean size of 65.9 mm CW. A large proportion of male and female crab were between

30 mm CW and 100 mm CW (Figure 6). Soft/new pliable shell and new shell crab composed 91.0% (5,190 crab) of the total male Tanner crab captured in the District (Table 5).

Mature female Tanner crab had a mean size of 82.8 mm CW. A total of 1,025 mature female Tanner crab were measured and clutch information determined. Multiparous females in the Eastern Aleutian District accounted for 66.7% (683 crab) of mature female Tanner crab examined in 2021. Egg clutches that were more than half full were found in 71.4% (732 crab) of mature female Tanner crab examined (Figure 28). Average clutch fullness in 2021 decreased from 2019 (Figure 29).

Red King Crab

Red king crab abundance in the surveyed areas around Akutan and Unalaska Islands remains at historical low levels. A total of 2 mature female red king crab were captured during the 2021 trawl survey at a single station in Makushin Bay.

WEATHERVANE SCALLOPS

Weathervane scallops accounted for 0.4% of total animal weight from all areas surveyed in 2021. Total CPUE was 2.4 kg per km towed, which is similar to the 1988–2020 CPUE of 2.6 kg per km towed (Figure 30). The highest catch of 142.7 kg per km towed was at station 683B on Alitak Flats, and overall, the Kodiak Area had the highest total weathervane scallop CPUE at 3.8 kg per km towed. Eighty-nine percent of all weathervane scallops caught were located in the Kodiak Area (Figure 31).

A total of 4,027 scallops were caught in 2021 and averaged 141.3 mm in shell height (Figure 32). This was larger than the 2020 average height of 138.1 mm, and smaller than the 2001–2020 average height of 146.2 mm (Figure 33).

ARROWTOOTH FLOUNDER

Arrowtooth flounder accounted for 24.4% of total animal weight from all areas surveyed in 2021. Total CPUE was 148.3 kg per km towed, which is below the 1988–2020 CPUE of 162.9 kg per km towed (Figure 34). The highest catch of 2,811.5 kg per km towed was at station 354 in West Nagai Strait, and overall, the South Peninsula Area had the highest total CPUE at 184.1 kg per km towed (Figure 35).

A total of 125,050 arrowtooth flounder were caught in 2021, and averaged 38.3 cm in length (Figure 36). This was larger than the 2020 average length of 35.9 cm, and larger than the 2001–2020 average length of 36.7 cm (Figure 37).

FLATHEAD SOLE

Of all species captured in 2021, flathead sole accounted for 17.9% of animal weight. Total CPUE was 108.7 kg per km towed, which is below the 1988–2020 CPUE of 133.5 kg per km towed (Figure 38). The highest catch of 905.5 kg per km was at station PMA in Paramanof Bay in the Kodiak Area, but overall, the South Peninsula Area had the highest total CPUE at 158.0 kg per km towed (Figure 39).

A total of 247,870 flathead sole were caught in 2021 and averaged 28.3 cm in length (Figure 40), which was smaller than the 2020 average length of 28.6 cm, and smaller than the 2001–2020 average length of 29.4 cm (Figure 41).

WALLEYE POLLOCK

Walleye pollock accounted for 11.6% of total animal weight from all areas surveyed in 2021. Total CPUE was 70.5 kg per km towed, which is below the 1988–2020 CPUE of 104.4 kg per km towed (Figure 42). The highest catch of 886.2 kg per km towed was at station 278 in Beaver Bay, and overall, the South Alaska Peninsula Area had the highest total CPUE at 135.9 kg per km towed (Figure 43).

A total of 50,749 walleye pollock were caught in 2021, and averaged 44.4 cm in length (Figure 44). This was smaller than the 2020 average length of 46.7 cm, and smaller than the 2001–2020 average length of 49.1 cm (Figure 45).

PACIFIC HALIBUT

Pacific halibut accounted for 2.5% of total animal weight from all areas surveyed in 2021. Total CPUE was 15.1 kg per km towed, which is lower than the 1988–2020 CPUE of 20.9 kg per km towed (Figure 46). The highest catch of 114.8 kg per km towed was at station KLE in Kiliuda Bay in the Kodiak Area, but overall, the South Peninsula Area had the highest total CPUE of 17.9 kg per km towed (Figure 47).

A total of 1,986 Pacific halibut were caught in 2021. They averaged 65.9 cm in length (Figure 48), which was similar to the 2020 average length of 66.1 cm, and smaller than the 2001–2020 average length of 68.9 cm (Figure 49).

PACIFIC COD

Pacific cod accounted for 1.5% of total animal weight from all areas surveyed in 2021. Total CPUE was 9.0 kg per km towed, which is less than half of the overall CPUE of 22.1 kg per km towed from 1988–2020 (Figure 50). The highest catch of 88.5 kg per km towed was at station 511B in Upper Barnabas Gully in the Kodiak Area, but overall, the South Peninsula Area had the highest total Pacific cod CPUE of 13.8 kg per km towed (Figure 51).

A total of 2,006 Pacific cod were caught in 2021. They averaged 57.6 cm in length (Figure 52), which was smaller than the 2020 average length of 58.8 cm, and larger than the 2001–2020 average length of 54.7 cm (Figure 53).

YELLOWFIN SOLE

Yellowfin sole accounted for 5.3% of total animal weight from all areas surveyed in 2021. Total CPUE was 32.0 kg per km towed, which is below the 1988–2020 CPUE of 44.7 kg per km towed (Figure 54). The highest catch of 812.0 kg per km towed was at station COB in Cold Bay and the South Alaska Peninsula Area had the highest total yellowfin sole CPUE at 80.2 kg per km towed (Figure 55).

A total of 45,354 yellowfin sole were caught in 2021, averaging 30.7 cm in length (Figure 56). This was similar to the 2020 average length of 30.4 cm, and smaller than the 2001–2020 average length of 31.6 cm (Figure 57).

SABLEFISH

Sablefish accounted for 1.1% of total animal weight from all areas surveyed in 2021. Total CPUE was 6.9 kg per km towed, which is more than 3 times the 1988–2020 CPUE of 2.0 kg per km towed (Figure 58). The highest catch of 309.2 kg per km towed was at station 621 in Outer

Barnabas Gully, and the Kodiak Area had the highest total sablefish CPUE at 11.6 kg per km towed (Figure 59).

A total of 3,570 sablefish were caught in 2021. They averaged 46.5 cm in length (Figure 60), which was similar to the 2020 average length of 46.0 cm, and larger than the 2001–2020 average length of 44.6 cm (Figure 61).

SKATES

Skate species accounted for 3.6% of total animal weight from all areas surveyed in 2021. Total skate CPUE was 21.7 kg per km towed, which is just above the 1988–2020 CPUE of 20.8 kg per km towed (Figure 62). The highest catch of a single skate species in 2021 was 102.7 kg per km towed of big skates at station PMA in Paramanof Bay in the Kodiak Area. Overall, the South Peninsula Area had the highest total big skate CPUE at 9.6 kg per km towed (Figure 63). The Kodiak Area had the highest total CPUE of longnose skate (11.9 kg per km) and Bering skate (2.8 kg per km). The Aleutian Islands District of the Bering Sea/Aleutian Islands Area had the highest total CPUE of Aleutian skate (8.4 kg per km) and Alaska skate (2.8 kg per km; Figure 64).

Species, sex, and length were determined for each skate caught during the 2021 trawl survey. A total of 1,190 skates were captured and measured from all districts surveyed. Although big skates accounted for the largest proportion of skate weight (40.1%), longnose skates, which accounted for 36.2% of total skate weight, were the most abundant (Table 13). Longnose skates composed 36.2% of the total number of skates caught and averaged 48.1 cm from snout to anterior notch of the pectoral fin (Figure 65). Bering skates made up 33.5% of the total number of skates caught and averaged 29.3 cm in length. Big skates accounted for 17.4% of the number of skates caught and had an average length of 61.0 cm. Aleutian skates accounted for 10.2% of all skates caught and averaged 53.5 cm, and Alaska skates made up 2.7% and averaged 47.1 cm (Figure 65). Larger skate species, big and Aleutian skates, were mostly female (big skates: 83.0% female; Aleutian skates: 64.0% female), whereas the smaller species (longnose, Bering, and Alaska skates) were composed of 49.9%, 46.2%, and 43.4% females, respectively.

WATER TEMPERATURE

Near-bottom water temperatures (~2 m above sea floor) in 2021 ranged from 2.87°C (Deadman Bay, Station ALP) to 11.24°C (Balboa Bay, Station BAA; Figure 66; Appendix B1). Stations with the lowest average temperatures were in Deadman Bay, sampled in early July at an average depth of 83 m (2.92°C). The warmest stations, on average, were in Cold Bay, sampled during mid-August at an average depth of 36 m (10.19°C; Figures 66 and 67). Average near-bottom water temperature across the sampled survey area was 6.11°C, which was 0.26°C higher than the survey average in 2020 (Appendix B1, Figure 67). Average survey temperature since 1997 has been within 2.03°C from a low of 5.27°C in 2007 to a high of 7.30°C in 2016. The average 2021 survey temperature is in between, at 6.11°C (Figure 67).

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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, 1988–2021.

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
2018	210	46	86	26	368
2019	210	44	93	20	367
2020	210	45	93	0	348
2021	183	45	84	25	337

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

Table 2.—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, 2017–2021.

	Fishery threshold (number of mature males >114 mm CW)	Survey estimated number of mature males (>114 mm CW)				
		2017	2018	2019	2020	2021
Kodiak District						
Northeast Section	1,123,000	411,803	530,533	964,771	647,927	279,902
Eastside Section	1,552,000	5,164,475 ^a	6,207,284 ^a	3,377,273 ^a	7,266,442 ^a	22,730,216 ^a
Southeast Section	733,000	667,890	1,945,812 ^a	3,863,863 ^a	4,966,423 ^a	6,117,900 ^a
Southwest Section	1,236,000	1,581,401 ^a	829,358	454,256	1,393,340 ^a	4,240,951 ^a
Westside Section	764,000	308,643	637,127	387,567	456,525	220,316
North Mainland Section	1,469,000	313,323	613,235	592,594	316,984	no survey
Chignik District	973,000	319,501	777,204	1,149,541 ^a	2,217,566 ^a	4,915,284 ^a
South Peninsula District						
Eastern Section	2,015,000	436,361	421,580	722,459	1,875,762	4,270,494 ^a
Western Section	1,250,000	733,065	899,185	1,213,950	3,058,249 ^a	9,426,450 ^a
Eastern Aleutian District						
Akutan Section	200,000	106,962	40,697	6,530	no survey	27,404
Unalaska/Kalekta Bay Section	65,000	65,317 ^a	253,449 ^a	46,523	no survey	7,150
Makushin/Skan Bay Section	45,000	292,866 ^a	250,735 ^a	120,773 ^a	no survey	407,888 ^a

^a Above mature male harvest strategy threshold.

Table 3.—Predominant species by weight in the Kodiak Tanner crab District large-mesh bottom trawl survey, 2021.

Common name	Species name	% of catch by weight
Arrowtooth flounder	<i>Atheresthes stomias</i>	21.7
Flathead sole	<i>Hippoglossoides elassodon</i>	17.0
Tanner crab	<i>Chionoecetes bairdi</i>	13.6
Walleye pollock	<i>Gadus chalcogrammus</i>	9.1
Starry flounder	<i>Platichthys stellatus</i>	4.4
Yellowfin sole	<i>Limanda aspera</i>	3.4
English sole	<i>Parophrys vetulus</i>	3.0
Pacific ocean perch	<i>Sebastes alutus</i>	2.7
Northern rock sole	<i>Lepidopsetta polyxystra</i>	2.6
Pacific halibut	<i>Hippoglossus stenolepis</i>	2.2
Longnose skate	<i>Raja rhina</i>	2.0
Sablefish	<i>Anoplopoma fimbria</i>	1.9
Big skate	<i>Raja binoculata</i>	1.5
Dover sole	<i>Microstomus pacificus</i>	1.4
Rex sole	<i>Glyptocephalus zachirus</i>	1.3
Pacific cod	<i>Gadus macrocephalus</i>	1.3
Sunflower seastar	<i>Pycnopodia helianthoides</i>	1.2
Anemone	Order: Actinaria	1.2
Butter sole	<i>Isopsetta isolepis</i>	0.9
Weathervane scallop	<i>Patinopecten caurinus</i>	0.6
All others	(113 species)	6.8
Total		100.0

Table 4.—Tanner crab abundance estimates from large-mesh bottom trawl surveys in the Kodiak District, 1988–2021.

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			
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	449,581	149,768	239,864	434,372	96,667	91,792	2,401	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
2018	5,937,942	2,223,179	8,161,121	5,385,100	1,838,496	1,048,602	443,603	30,848	55,102	983	86,932	8,802,730	16,963,851
2019	4,453,789	4,395,623	8,849,411	4,289,583	2,033,576	1,435,957	885,255	58,537	20,980	0	79,517	8,723,890	17,573,301
2020	1,085,233	1,804,391	2,889,622	1,017,387	419,740	530,414	584,253	60,332	3,342	0	63,674	2,615,463	5,505,088
2021	340,561	394,325	734,885	366,210	38,016	130,598	245,069	8,210	26,620	0	34,830	814,722	1,549,608

-continued-

Table 4.–Page 2 of 7.

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			
Eastside Section													
1988	2,059,069	762,131	2,821,198	1,596,891	432,351	610,398	689,188	279,635	97,689	1,914	379,236	3,708,052	6,529,245
1989	2,300,872	3,397,521	5,698,392	1,975,520	1,228,590	1,360,965	1,253,172	803,733	262,842	29,979	1,096,552	6,914,792	12,613,175
1990	1,459,142	7,376,957	8,836,095	1,244,278	663,056	1,832,608	3,555,094	742,441	127,670	57,684	927,796	8,222,825	17,058,920
1991	1,492,507	3,640,680	5,133,182	1,195,835	304,126	651,831	2,623,994	2,885,963	493,723	37,684	3,417,371	8,193,145	13,326,324
1992	1,494,597	1,955,463	3,450,056	1,612,897	331,773	502,134	1,594,419	525,304	267,165	75,584	868,053	4,909,262	8,359,312
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	1,309,878	705,158	462,351	568,095	47,946	120,912	2,837	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	31,131,608	559,421	31,691,028	27,974,217	510,696	575,638	4,639,044	756,712	1,900,603	23,263	2,680,581	36,380,161	68,071,187
2007	41,718,044	2,376,973	44,095,012	21,192,893	25,732,069	1,595,766	3,760,767	206,871	1,427,355	18,357	1,652,582	53,934,064	98,029,072
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	11,901,533	6,744,456	887,606	1,911,830	4,263,782	763,285	230,021	10,133	1,003,438	14,811,106	26,712,640
2018	46,635,134	5,856,344	52,491,477	44,877,962	2,846,062	1,803,810	4,230,303	1,102,534	866,409	8,039	1,976,984	55,735,111	108,226,590
2019	39,447,651	18,676,439	58,124,087	20,342,481	34,318,819	7,441,047	2,853,737	52,037	464,999	6,505	523,539	65,511,932	123,636,020
2020	3,064,689	28,496,323	31,561,013	2,301,329	7,850,668	20,554,710	7,129,627	109,300	26,804	713	136,817	37,973,148	69,534,158
2021	693,146	17,003,953	17,697,098	826,249	1,558,504	10,719,785	21,272,660	1,282,526	170,288	4,747	1,457,559	35,834,750	53,531,841

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Table 4.–Page 3 of 7.

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			
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
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	85,997	28,664	86,943	473,013	107,893	54,496	4,252	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	10,368,456	3,626,613	13,995,068	8,110,713	8,461,823	2,078,980	1,129,380	10,109	295,360	0	305,470	20,086,357	34,081,423
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
2018	27,652,635	4,920,944	32,573,582	26,243,837	10,575,036	3,377,034	1,602,252	0	343,560	0	343,560	42,141,714	74,715,292
2019	7,881,208	10,135,271	18,016,481	6,862,120	9,620,689	6,633,771	3,698,300	94,944	77,513	0	172,458	26,987,331	45,003,810
2020	1,650,164	5,171,968	6,822,137	1,910,203	2,189,252	4,206,241	4,445,752	490,617	30,055	0	520,672	13,272,117	20,094,251
2021	1,665,262	1,482,615	3,147,879	1,781,518	485,549	2,124,408	4,935,280	1,060,542	122,082	0	1,182,623	10,509,369	13,657,248

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Table 4.–Page 4 of 7.

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			
Southwest Section													
1988	163,327	100,814	264,141	143,739	12,490	41,724	437,947	802,236	37,444	36,169	875,850	1,511,753	1,775,893
1989	2,141,921	148,673	2,290,595	1,962,970	114,750	120,197	242,885	184,069	84,671	54,731	323,473	2,764,276	5,054,872
1990	2,316,114	515,965	2,832,078	1,864,020	835,002	448,108	325,391	35,504	29,853	6,232	71,590	3,544,111	6,376,187
1991	1,134,740	159,551	1,294,293	913,796	210,692	309,301	446,336	93,252	33,393	3,471	130,117	2,010,245	3,304,534
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	131,512	70,316	60,386	145,272	128,502	23,030	7,394	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
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
2018	27,069,155	144,170	27,213,324	25,392,195	763,824	98,580	372,514	316,870	134,346	5,626	456,843	27,083,956	54,297,282
2019	8,308,435	3,015,496	11,323,928	5,085,417	7,103,044	2,054,004	359,462	54,119	39,490	1,185	94,794	14,696,723	26,020,653
2020	581,864	1,761,097	2,342,959	106,206	1,905,140	2,745,364	1,093,628	89,773	207,574	2,363	299,711	6,150,051	8,493,007
2021	22,313	1,177,379	1,199,691	23,430	115,781	2,206,652	3,701,165	443,093	96,695	0	539,785	6,586,814	7,786,507

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Table 4.–Page 5 of 7.

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			
Westside Section													
1988	976,851	580,023	1,556,875	750,879	54,229	214,931	285,373	146,494	18,632	14,453	179,578	1,484,988	3,041,860
1989	3,507,063	573,719	4,080,782	2,781,749	510,278	280,932	309,249	140,101	24,289	8,521	172,913	4,055,115	8,135,901
1990	760,384	2,199,069	2,959,457	352,843	692,260	416,072	478,005	111,716	57,928	19,135	188,776	2,127,958	5,087,413
1991	192,204	591,876	784,080	130,432	147,332	497,846	460,635	37,404	22,320	5,288	65,010	1,301,255	2,085,335
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	108,532	113,242	74,756	90,261	31,732	42,413	0	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	222,218	677,984	900,203	83,886	292,487	419,930	305,820	68,556	62,405	2,605	133,566	1,235,690	2,135,894
1998	788,563	655,693	1,444,258	697,278	171,700	301,684	234,999	30,931	54,363	3,008	88,304	1,493,966	2,938,221
1999	824,547	306,261	1,130,812	538,993	433,666	260,434	209,523	43,439	102,079	8,631	154,151	1,596,770	2,727,577
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	2,644,450	985,541	318,312	303,028	239,262	20,367	50,051	611	71,028	1,917,171	4,561,622
2018	1,253,977	1,872,681	3,126,657	710,184	834,244	966,842	545,507	55,479	36,141	0	91,618	3,148,400	6,275,059
2019	199,451	1,822,059	2,021,509	113,886	261,866	658,112	341,201	29,541	16,824	0	46,364	1,421,428	3,442,938
2020	212,028	1,191,475	1,403,500	198,432	111,343	359,539	380,337	59,891	16,296	0	76,187	1,125,839	2,529,342
2021	533,100	487,641	1,020,740	420,407	333,422	136,881	180,008	18,491	21,399	416	40,307	1,111,024	2,131,762

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Table 4.–Page 6 of 7.

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			
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	4,256,888	1,467,261	5,724,141	4,241,904	298,495	364,437	1,198,231	261,796	117,451	67,482	446,727	6,549,772	12,273,908
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	2,227,039	543,821	232,749	359,494	140,534	116,067	55,865	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	4,464,424	541,938	5,006,360	4,612,266	1,391,974	552,192	343,346	64,048	57,500	2,032	123,579	7,023,343	12,029,696
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
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
2018	3,414,280	953,522	4,367,799	5,169,925	752,631	320,741	328,619	184,307	95,995	4,319	284,620	6,856,524	11,224,319
2019	2,402,956	644,282	3,047,238	2,305,136	954,054	787,952	385,778	141,639	50,461	14,715	206,816	4,639,734	7,686,974
2020	377,439	261,595	639,032	458,050	219,104	490,410	251,650	10,860	47,469	7,005	65,334	1,484,546	2,123,577
2021	no survey												

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Table 4.–Page 7 of 7.

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			
KODIAK DISTRICT TOTALS													
1988	8,805,835	2,848,807	11,654,632	7,580,910	1,120,840	2,030,281	4,061,555	3,016,255	375,157	143,010	3,534,416	18,327,970	29,982,596
1989	17,213,095	9,199,857	26,412,943	15,571,980	3,466,681	3,653,453	4,650,490	2,177,305	650,883	288,007	3,116,196	30,458,759	56,871,686
1990	13,868,484	16,138,891	30,007,372	11,437,082	5,633,285	4,464,959	6,952,403	1,570,418	490,598	169,913	2,230,926	30,718,630	60,725,988
1991	11,646,362	8,318,670	19,965,025	10,104,344	2,916,932	3,464,680	5,866,405	3,696,862	719,330	110,688	4,526,884	26,879,222	46,844,232
1992	8,339,428	6,051,961	14,391,378	7,440,434	2,746,649	2,774,998	4,292,177	1,306,256	611,962	136,933	2,061,956	19,316,175	33,707,534
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	4,312,539	1,610,969	1,157,049	2,070,507	553,274	448,710	72,749	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	4,518,114	2,735,735	7,253,846	4,250,787	2,646,848	2,692,156	2,458,430	412,906	504,115	30,446	950,764	12,998,969	20,252,816
1998	12,541,442	5,805,023	18,346,462	11,552,652	4,521,615	5,241,698	4,443,775	600,127	725,984	107,126	1,433,237	27,192,972	45,539,415
1999	17,358,226	3,062,511	20,420,726	16,353,892	1,752,620	2,185,630	3,783,444	785,205	1,057,055	111,235	1,953,503	26,029,069	46,449,790
2000	22,796,580	6,483,320	29,279,886	22,565,579	5,014,907	2,598,722	3,461,408	1,006,546	1,358,093	96,211	2,460,851	36,101,432	65,381,306
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
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	68,168,683	8,181,573	76,350,259	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	164,024,398
2007	69,929,250	10,935,956	80,865,210	43,414,392	40,766,874	7,263,107	8,027,532	613,205	3,242,441	84,409	3,940,055	103,411,930	184,277,122
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	30,872,277	22,389,436	3,925,987	3,466,227	6,464,849	1,577,182	495,661	14,237	2,087,076	38,333,553	69,205,830
2018	111,963,123	15,970,840	127,933,960	107,779,203	17,610,293	7,615,609	7,522,798	1,690,038	1,531,553	18,967	3,240,557	143,768,435	271,702,393
2019	62,693,490	38,689,170	101,382,654	38,998,623	54,292,048	19,010,843	8,523,733	430,817	670,267	22,405	1,123,488	121,981,038	223,363,696
2020	6,971,417	38,686,849	45,658,263	5,991,607	12,695,247	28,886,678	13,885,247	820,773	331,540	10,081	1,162,395	62,621,164	108,279,423
2021	3,254,382	20,545,913	23,800,293	3,417,814	2,531,272	15,318,324	30,334,182	2,812,862	437,084	5,163	3,255,104	54,856,679	78,656,966

Table 5.—Number of male red king and male Tanner crabs by management unit, crab cohort, and shell condition captured in the 2021 large-mesh bottom trawl survey.

Cohort	Definition	Shell Condition				Total
		Soft/New pliable	New	Old	Very old/ Very very old	
Kodiak Area red king crab						
Prerecruit IV	<95 mm CL	3	50	0	0	53
Prerecruit III	95–112 mm CL	0	24	0	0	24
Prerecruit II	113–130 mm CL	0	23	0	0	23
Prerecruit I	>130 mm CL and sublegal	0	10	2	0	12
Recruit	<164 mm CL and legal soft/new	0	4	–	–	4
Postrecruit	≥164 mm CL or legal and not soft/new	0	20	29	14	63
Total		3	131	31	14	179
Alaska Peninsula Area red king crab						
Prerecruit IV	<79 mm CL	0	1	0	0	1
Prerecruit III	79–95 mm CL	1	2	0	0	3
Prerecruit II	96–115 mm CL	0	4	0	0	4
Prerecruit I	>115 mm CL and sublegal	0	1	0	0	1
Recruit	<152 mm CL and legal soft/new	0	9	–	–	9
Postrecruit	≥152 mm CL or legal and not soft/new	0	64	83	120	267
Total		1	81	83	120	285
Kodiak District Tanner crab						
Prerecruit IV	<70 mm CW	195	1,503	6	0	1,704
Prerecruit III	70–91 mm CW	65	2,216	145	93	2,519
Prerecruit II	92–114 mm CW	344	12,657	1,379	329	14,709
Prerecruit I	>114 mm CW and sublegal	1,174	19,772	1,981	343	23,270
Recruit	<165 mm CW and legal soft/new	323	1,708	–	–	2,031
Postrecruit	≥165 mm CW or legal and not soft/new	0	1	270	90	361
Total		2,101	37,857	3,781	855	44,594
Mature only	>114 mm CW	1,497	21,481	2,251	433	25,662
Chignik District Tanner crab						
Prerecruit IV	<70 mm CW	468	1,470	2	0	1,940
Prerecruit III	70–91 mm CW	48	537	19	16	620
Prerecruit II	92–114 mm CW	2	1,061	211	68	1,342
Prerecruit I	>114 mm CW and sublegal	16	2,416	388	137	2,957
Recruit	<165 mm CW and legal soft/new	1	364	–	–	365
Postrecruit	≥165 mm CW or legal and not soft/new	0	1	57	20	78
Total		535	5,849	677	241	7,302
Mature only	>114 mm CW	17	2,781	445	157	3,400

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Table 5.–Page 2 of 2.

Cohort	Definition	Shell Condition				Total
		Soft/New pliable	New	Old	Very old/ Very very old	
South Peninsula District Tanner crab						
Prerecruit IV	<70 mm CW	117	901	7	2	1,027
Prerecruit III	70–91 mm CW	23	1,599	71	107	1,800
Prerecruit II	92–114 mm CW	44	4,554	513	896	6,007
Prerecruit I	>114 mm CW and sublegal	25	9,297	575	649	10,546
Recruit	<165 mm CW and legal soft/new	0	1,359	–	–	1,359
Postrecruit	≥165 mm CW or legal and not soft/new	0	0	61	50	111
Total		209	17,710	1,227	1,704	20,850
Mature only	>114 mm CW	25	10,656	636	699	12,016
Eastern Aleutian District Tanner crab						
Prerecruit IV	<70 mm CW	217	2,231	0	0	2,448
Prerecruit III	70–91 mm CW	11	1,754	27	1	1,793
Prerecruit II	92–114 mm CW	27	690	108	71	896
Prerecruit I	>114 mm CW and sublegal	6	220	182	68	476
Recruit	<165 mm CW and legal soft/new	0	34	–	–	34
Postrecruit	≥165 mm CW or legal and not soft/new	0	0	27	31	58
Total		261	4,929	344	171	5,705
Mature only	>114 mm CW	6	254	209	99	568

Note: En dashes indicate not applicable.

Table 6.—Red king crab abundance estimates from large-mesh bottom trawl surveys in the Kodiak and Alaska Peninsula Areas, 2012–2021.

Year	Females			Prerecruit males				Recruit males	Postrecruit males	Legal males	Total males	Total crab
	Juvenile	Mature	Total	IV	III	II	I					
KODIAK AREA												
Northeast District												
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
2018	196	4,452	4,648	0	775	0	709	709	4,522	5,232	6,716	11,364
2019	0	7,803	7,803	0	709	0	0	0	2,903	2,903	3,612	11,415
2020	2,027	1,549	3,576	0	2,027	0	486	1,549	4,542	6,091	8,604	12,180
2021	8,456	31,950	40,407	709	5,134	10,846	775	775	5,134	5,909	23,372	63,779
Southeast District												
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
2018	1,367	2,734	4,101	0	2,734	0	0	2,734	1,367	4,101	6,836	10,937
2019	0	0	0	0	0	0	0	0	2,392	2,392	2,392	2,392
2020	0	0	0	0	0	0	0	0	0	0	0	0
2021	2,079	1,196	3,275	668	0	0	1,196	0	0	0	1,864	5,140
Southwest District												
2012	45,939	36,492	82,431	2,074	49,416	43,670	5,559	5,917	10,331	16,248	116,966	199,397
2013	19,763	135,960	155,724	1,551	12,884	50,872	30,011	8,948	12,100	21,050	116,370	272,093
2014	5,262	160,532	165,794	4,367	3,798	17,750	48,193	145,167	59,526	204,695	278,800	444,592
2015	8,940	162,793	171,733	3,190	6,863	7,242	22,189	111,896	219,653	331,552	371,037	542,770
2016	124,312	79,933	204,246	66,445	86,292	10,107	2,881	11,770	184,636	196,405	362,129	566,376
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
2018	8,633	178,987	187,619	2,855	11,321	30,806	42,429	17,416	87,096	104,509	191,920	379,541
2019	2,336	106,965	109,302	0	0	1,929	15,719	51,032	105,081	156,112	173,760	283,063
2020	0	16,429	16,429	714	892	0	1,595	18,967	69,104	88,073	91,274	107,703
2021	56,693	32,445	89,138	33,418	11,362	5,631	5,754	2,313	37,708	40,021	96,186	185,324

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Table 6.–Page 2 of 5.

Year	Females			Prerecruit males				Recruit males	Postrecruit males	Legal males	Total males	Total crab
	Juvenile	Mature	Total	IV	III	II	I					
Shelikof District												
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
2018	0	0	0	0	0	0	0	149	0	149	149	149
2019	471	1,413	1,884	769	0	0	0	471	471	942	1,711	3,594
2020	657	0	657	186	186	372	0	0	0	0	744	1,401
2021	471	0	471	471	0	0	0	0	0	0	471	942
KODIAK AREA TOTAL												
2012	45,939	36,938	82,877	2,074	49,862	44,116	5,559	6,363	10,331	16,694	118,303	201,179
2013	21,508	137,142	158,651	6,803	13,110	50,872	30,011	8,948	12,100	21,050	121,848	280,498
2014	5,747	160,532	166,279	4,979	3,798	17,750	48,193	145,167	59,526	204,695	279,412	445,689
2015	9,714	162,793	172,507	3,190	6,863	7,391	22,189	111,896	220,315	332,214	371,848	544,355
2016	129,059	87,087	216,147	66,445	87,526	10,107	3,732	11,770	185,001	196,770	364,579	580,727
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
2018	10,196	186,173	196,368	2,855	14,830	30,806	43,138	21,008	92,985	113,991	205,621	401,991
2019	2,807	116,181	118,989	769	709	1,929	15,719	51,503	110,847	162,349	181,475	300,464
2020	2,684	17,978	20,662	900	3,105	372	2,081	20,516	73,646	94,164	100,622	121,284
2021	67,699	65,591	133,291	35,266	16,496	16,477	7,725	3,088	42,842	45,930	121,893	255,185
ALASKA PENINSULA AREA												
Morzhovoi Bay												
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	4,666	47,441	52,108	778	7,000	4,666	4,666	3,889	27,221	31,109	48,219	100,327
2016	0	884	884	0	0	0	0	0	1,598	1,598	1,598	2,482
2017	0	0	0	0	0	0	0	0	0	0	0	0
2018	0	0	0	0	0	0	0	0	949	949	949	949
2019	0	0	0	0	0	0	0	0	834	834	834	834
2020	0	14,946	14,946	0	0	0	1,172	1,768	884	2,652	3,824	18,769
2021	0	0	0	714	0	714	0	0	2,054	2,054	3,482	3,482

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Table 6.–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												
2012	5,545	16,121	21,665	1,261	918	2,908	1,173	1,195	25,524	26,719	32,979	54,645
2013	714	230	944	2,431	0	0	0	0	0	0	2,431	3,375
2014	4,703	5,815	10,518	4,299	0	0	0	230	0	230	4,529	15,048
2015	17,894	2,627	20,521	10,438	10,083	1,491	0	1,136	1,491	2,627	24,639	45,161
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	957	957	0	0	0	161	0	161	161	322	1,279
2018	0	0	0	0	0	0	0	1,771	0	1,771	1,771	1,771
2019	1,491	0	1,491	0	0	0	0	0	0	0	0	1,491
2020	4,018	6,654	10,672	3,939	1,914	0	0	0	4,557	4,557	10,410	21,083
2021	1,491	904	2,395	0	2,395	1,491	0	0	0	0	3,886	6,282
Pavlof Bay/Volcano Bay												
2012	0	0	0	0	0	0	0	0	4,308	4,308	4,308	4,308
2013	6,258	55,542	61,801	3,911	3,129	24,251	46,937	24,251	19,920	44,170	122,399	184,199
2014	10,952	109,569	120,521	4,694	4,694	0	8,108	0	13,321	13,321	30,816	151,338
2015	0	4,337	4,337	3,530	0	0	5,204	9,541	14,827	24,367	33,102	37,438
2016	3,468	10,412	13,880	0	1,689	2,417	0	2,580	17,026	19,606	23,711	37,590
2017	1,961	20,453	22,414	0	0	1,565	2,347	3,384	84,098	87,482	91,393	113,807
2018	4,630	42,605	47,236	919	0	57,485	553,894	191,627	257,801	449,428	1,061,727	1,108,962
2019	2,765	93,549	96,314	0	0	1,239	8,692	11,346	43,742	55,090	65,021	161,336
2020	1,048	68,598	69,646	0	2,522	2,522	0	5,182	73,014	78,196	83,239	152,885
2021	0	0	0	0	0	845	845	7,601	234,608	242,209	243,898	243,898
Beaver Bay/Balboa Bay/Unga Strait												
2012	0	0	0	0	0	0	0	0	2,977	2,977	2,977	2,977
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	1,863	1,863	2,481	2,481
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
2018	0	8,589	8,589	0	0	0	0	2,989	4,852	7,841	7,841	16,429
2019	0	747	747	0	0	0	0	0	2,989	2,989	2,989	3,737
2020	0	0	0	0	0	0	0	0	0	0	0	0
2021	0	368	368	0	0	0	0	0	0	0	0	368

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Table 6.–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					
Stepovak Bay												
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	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
2018	0	0	0	0	0	0	0	0	0	0	0	0
2019	0	1,033	1,033	0	0	0	0	0	0	0	0	1,033
2020	886	1,495	2,381	0	0	0	0	0	1,311	1,311	1,311	3,692
2021	0	0	0	0	0	0	0	0	0	0	0	0
West Nagai Strait												
2012	0	0	0	0	0	0	0	0	0	0	0	0
2013	3,723	0	3,723	0	0	0	0	1,241	0	1,241	1,241	4,964
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
2018	0	0	0	0	0	0	0	0	0	0	0	0
2019	0	1,009	1,009	0	0	0	0	0	0	0	0	1,009
2020	0	0	0	0	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0	0	0	0	0	0
Ivanof Bay												
2012	0	0	0	0	0	0	0	0	0	0	0	0
2013	0	0	0	917	0	0	0	917	2,813	3,731	4,648	4,648
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	2,388	2,634	0	0	0	0	0	0	0	0	2,634
2017	0	2,752	2,752	0	0	738	699	2,953	984	3,937	5,621	8,373
2018	0	0	0	0	0	246	0	984	1,969	2,953	3,199	3,199
2019	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0	1,650	1,650	1,650	1,650
2021	0	0	0	0	0	0	0	0	0	0	0	0

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Table 6.–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												
2012	873	0	873	0	0	0	1,297	0	0	0	1,297	2,171
2013	1,466	0	1,466	1,759	0	0	1,092	0	0	0	2,851	4,317
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	3,072	3,072	0	0	0	366	0	3,353	3,353	3,719	6,792
2017	1,747	38,431	40,178	0	2,620	4,367	2,620	3,494	2,757	6,251	16,732	56,909
2018	0	3,390	3,390	0	0	0	424	0	0	0	424	3,814
2019	0	2,543	2,543	0	0	0	0	0	758	758	758	3,301
2020	0	326	326	0	0	0	0	0	0	0	0	326
2021	0	0	0	0	0	326	0	0	326	326	651	651
Kujulik Bay												
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	28,287	208,627	236,913	0	13,671	53,520	13,671	13,671	57,418	71,089	151,951	388,864
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
2018	0	0	0	0	0	0	0	0	0	0	0	0
2019	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0	0	0	0	0	0
ALASKA PENINSULA AREA TOTAL												
2012	6,418	16,121	22,538	1,261	918	2,908	2,470	1,195	32,809	34,004	41,561	64,101
2013	12,161	55,772	67,934	9,018	3,129	24,251	48,029	27,301	49,070	76,372	160,800	228,733
2014	22,035	116,911	138,946	9,905	5,312	0	9,813	230	49,294	49,524	74,551	213,499
2015	79,134	477,674	556,807	14,746	44,425	113,470	38,032	41,908	158,939	200,845	411,520	968,327
2016	53,300	41,607	94,907	2,216	41,583	34,992	4,799	4,796	29,874	34,671	118,260	213,165
2017	3,708	80,885	84,593	0	3,532	8,165	6,574	16,906	88,000	104,906	124,295	208,887
2018	4,630	54,584	59,215	919	0	57,731	554,318	197,371	265,571	462,942	1,075,911	1,135,124
2019	4,256	98,881	103,137	0	0	1,239	8,692	11,346	48,323	59,671	69,602	172,741
2020	5,952	92,019	97,971	3,939	4,436	2,522	1,172	6,950	81,416	88,366	100,434	198,405
2021	1,491	1,272	2,763	714	2,395	3,376	845	7,601	236,988	244,589	251,917	254,681

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

Table 7.—Predominant species by weight in the Chignik Tanner crab District large-mesh bottom trawl survey, 2021.

Common name	Species name	% of catch by weight
Arrowtooth flounder	<i>Atheresthes stomias</i>	34.4
Flathead sole	<i>Hippoglossoides elassodon</i>	19.3
Tanner crab	<i>Chionoecetes bairdi</i>	10.9
Walleye pollock	<i>Gadus chalcogrammus</i>	9.0
Pacific halibut	<i>Hippoglossus stenolepis</i>	4.2
Anemone	Order: Actinaria	3.3
Rex sole	<i>Glyptocephalus zachirus</i>	2.4
Yellowfin sole	<i>Limanda aspera</i>	2.3
Big skate	<i>Raja binoculata</i>	2.3
Dungeness crab	<i>Metacarcinus magister</i>	1.9
Longnose skate	<i>Raja rhina</i>	1.8
Pacific cod	<i>Gadus macrocephalus</i>	1.4
Aleutian skate	<i>Bathyraja aleutica</i>	1.1
English sole	<i>Parophrys vetulus</i>	0.6
Great sculpin	<i>Myoxocephalus polyacanthocephalus</i>	0.5
Jellyfish	Class: Schyphozoa	0.4
Sablefish	<i>Anoplopoma fimbria</i>	0.4
Sunflower seastar	<i>Pycnopodia helianthoides</i>	0.4
Weathervane scallop	<i>Patinoplectin caurinus</i>	0.3
Rougheye rockfish	<i>Sebastes aleutianus</i>	0.3
All others	(67 species)	2.9
Total		100.0

Table 8.—Tanner crab abundance estimates from large-mesh bottom trawl surveys in the Chignik District, 1989–2021.

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			
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
2018	856,623	72,797	929,420	852,945	119,645	36,010	34,081	10,841	3,079	0	13,921	1,056,602	1,986,022
2019	845,485	1,341,067	2,186,552	274,084	1,152,460	564,298	87,182	0	699	0	699	2,078,723	4,265,275
2020	380,045	221,294	601,339	240,343	399,361	771,957	366,073	699	0	0	699	1,778,432	2,379,771
2021	121,099	173,150	294,249	82,805	102,944	181,142	486,607	48,358	23,116	0	71,475	924,973	1,219,223

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Table 8.–Page 2 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			
Mitrofanía 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
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
2018	15,690,726	870,476	16,643,917	16,874,661	4,096,357	1,260,020	206,664	43,889	9,505	0	53,395	22,491,092	39,135,012
2019	4,270,900	2,254,069	6,524,970	3,926,380	9,737,737	2,318,396	489,588	14,424	3,644	0	18,068	16,609,305	23,134,273
2020	448,444	2,438,285	2,886,729	494,757	2,156,729	3,853,677	1,245,558	39,746	11,121	0	50,867	7,801,583	10,688,310
2021	365,721	787,449	1,153,170	314,252	117,918	1,630,934	2,946,291	202,152	24,726	653	227,532	5,236,922	6,390,093

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Table 8.—Page 3 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			
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
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
2018	5,033,386	548,656	5,582,041	4,484,715	711,863	574,551	423,686	35,935	1,941	1,681	39,559	6,234,373	11,816,417
2019	1,170,642	1,623,408	2,794,047	468,891	1,274,672	1,332,413	447,663	72,878	19,167	0	92,045	3,615,679	6,409,728
2020	458,151	1,318,793	1,776,946	516,696	189,937	579,070	511,533	21,434	12,806	0	34,240	1,831,474	3,608,420
2021	1,297,701	1,407,707	2,705,407	1,206,753	256,173	377,044	974,782	163,899	44,703	0	208,602	3,023,355	5,728,760

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Table 8.–Page 4 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			
Kujulik Bay												0	
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
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
2018	1,021,949	0	1,021,949	469,557	790,357	41,287	5,898	0	0	0	0	1,307,099	2,329,047
2019	23,362	0	23,362	27,898	1,298	807	0	0	0	0	0	30,003	53,363
2020	142,146	6,822	148,968	138,690	68,181	24,710	7,521	1,074	0	0	1,074	240,176	389,143
2021	123,435	0	123,435	167,909	3,075	2,058	0	0	0	0	0	173,041	296,474

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Table 8.–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			
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
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
2018	22,602,684	1,491,929	24,177,327	22,681,878	5,718,222	1,911,868	670,329	90,665	14,525	1,681	106,875	31,089,166	55,266,498
2019	6,310,389	5,218,544	11,528,931	4,697,253	12,166,167	4,215,914	1,024,433	87,302	23,510	0	110,812	22,333,710	33,862,639
2020	1,428,786	3,985,194	5,413,982	1,390,486	2,814,208	5,229,414	2,130,685	62,953	23,927	0	86,880	11,651,665	17,065,644
2021	1,907,956	2,368,306	4,276,261	1,771,719	480,110	2,191,178	4,407,680	414,409	92,545	653	507,609	9,358,291	13,634,550

Table 9.—Predominant species by weight in the South Peninsula Tanner crab District large-mesh bottom trawl survey, 2021.

Common name	Species name	% of catch by weight
Arrowtooth flounder	<i>Atheresthes stomias</i>	23.1
Flathead sole	<i>Hippoglossoides elassodon</i>	19.8
Walleye pollock	<i>Gadus chalcogrammus</i>	17.1
Tanner crab	<i>Chionoecetes bairdi</i>	10.7
Yellowfin sole	<i>Limanda aspera</i>	10.1
Starry flounder	<i>Platichthys stellatus</i>	2.8
Pacific halibut	<i>Hippoglossus stenolepis</i>	2.3
Pacific cod	<i>Gadus macrocephalus</i>	1.7
Big skate	<i>Raja binoculata</i>	1.2
Great sculpin	<i>Myoxocephalus polyacanthocephalus</i>	1.2
Red king crab	<i>Paralithodes camtschaticus</i>	1.1
Alaska plaice	<i>Pleuronectes quadrituberculatus</i>	0.9
Plain sculpin	<i>Myoxocephalus jaok</i>	0.8
Sunflower seastar	<i>Pycnopodia helianthoides</i>	0.7
Anemone	Order: Actinaria	0.7
Northern rock sole	<i>Lepidopsetta polyxystra</i>	0.7
Oregon triton	<i>Fusitriton oregonensis</i>	0.5
Dungeness crab	<i>Metacarcinus magister</i>	0.5
Jellyfish	Class: Schyphozoa	0.4
English sole	<i>Parophrys vetulus</i>	0.4
All others	(87 species)	3.2
Total		100.0

Table 10.—Tanner crab abundance estimates from large-mesh bottom trawl surveys in the South Peninsula District, 1988–2021.

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			
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	3,781,814	1,664,525	5,446,340	3,667,269	664,268	240,298	96,673	0	0	0	0	4,668,506	10,114,845
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
2018	2,114,937	107,904	2,222,840	1,652,383	473,954	69,430	34,587	0	0	0	0	2,230,357	4,453,195
2019	1,010,068	220,459	1,230,527	857,223	250,744	152,536	10,583	1,020	0	0	1,020	1,272,106	2,502,633
2020	480,941	120,543	601,483	518,940	291,277	299,541	205,854	0	0	0	0	1,315,611	1,917,093
2021	230,802	6,304	237,106	203,559	37,157	43,001	28,572	4,306	0	0	4,306	316,596	553,701

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Table 10.—Page 2 of 10.

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			
Morzhovoi Bay													
1988	397,556	362,040	759,595	226,229	228,579	203,264	197,863	79,615	29,271	15,048	123,933	979,869	1,739,467
1989	3,179,247	1,093,525	4,272,770	2,697,991	1,125,027	371,020	114,369	33,216	4,861	0	38,077	4,346,484	8,619,255
1990	1,824,688	998,503	2,823,192	1,260,747	602,555	538,504	192,148	25,710	24,554	1,005	51,269	2,645,224	5,468,414
1991	1,496,939	456,656	1,953,595	1,143,760	403,857	204,545	55,914	15,385	4,074	0	19,460	1,827,536	3,781,133
1992	330,263	810,767	1,141,027	169,582	434,432	264,117	190,081	31,879	20,925	949	53,754	1,111,964	2,252,994
1993	64,215	532,058	596,273	16,479	143,885	366,655	348,442	59,792	63,465	949	124,208	999,668	1,595,939
1994	35,472	238,877	274,350	8,051	52,802	113,936	185,344	6,269	47,526	0	53,795	413,927	688,278
1996	149,078	103,585	252,663	133,732	21,463	13,585	49,609	5,697	29,549	0	35,246	253,636	506,298
1997	135,455	85,797	221,252	85,565	77,864	61,129	35,004	6,646	8,901	0	15,546	275,100	496,352
1998	804,875	1,648,765	2,453,639	282,155	1,106,789	1,344,154	308,877	38,464	68,354	0	106,819	3,148,793	5,602,429
1999	147,627	461,834	609,461	39,875	282,203	530,116	727,677	59,884	55,341	1,899	117,122	1,696,997	2,306,458
2000	695,218	735,207	1,430,425	611,300	148,103	365,675	700,497	440,737	97,985	0	538,723	2,364,298	3,794,723
2001	891,012	282,222	1,173,232	559,250	789,124	193,149	218,953	184,925	104,396	10,706	300,027	2,060,509	3,233,740
2002	1,732,792	640,182	2,372,971	1,112,634	1,168,992	669,114	278,844	39,825	139,943	2,423	182,189	3,411,769	5,784,740
2003	522,858	1,582,659	2,105,517	103,124	1,152,568	789,285	396,045	38,984	98,362	0	137,345	2,578,366	4,683,885
2004	310,275	1,604,401	1,914,676	263,681	181,095	1,486,507	2,308,994	261,101	162,840	6,585	430,526	4,670,801	6,585,476
2005	522,691	3,645,334	4,168,027	352,529	155,822	359,567	1,251,966	470,992	198,667	2,649	672,306	2,792,193	6,960,221
2006	14,323,767	2,042,064	16,365,829	13,739,049	503,205	279,128	1,012,895	258,921	252,978	19,419	531,319	16,065,593	32,431,424
2007	10,796,647	1,910,977	12,707,627	7,132,383	6,315,109	1,719,699	2,146,565	509,959	221,335	11,696	742,989	18,056,744	30,764,370
2008	3,406,468	11,254,260	14,660,729	909,472	5,521,110	12,297,310	1,914,510	762,050	199,538	40,534	1,002,123	21,644,527	36,305,256
2009	262,475	2,399,538	2,662,012	153,196	526,886	3,968,441	7,748,392	356,469	12,940	9,482	378,890	12,775,800	15,437,811
2010	52,611	2,515,796	2,568,407	46,002	19,241	291,833	2,396,564	4,905,565	119,065	193,356	5,217,985	7,971,626	10,540,034
2011	227,539	1,278,771	1,506,310	241,053	6,443	77,932	794,014	1,334,213	1,666,689	296,884	3,297,787	4,417,230	5,923,538
2012	263,886	750,826	1,014,712	230,588	28,624	19,775	362,297	73,213	1,143,929	118,631	1,335,774	1,977,059	2,991,770
2013	4,566,777	134,517	4,701,292	4,986,700	223,637	41,649	90,394	1,938	513,392	45,837	561,168	5,903,548	10,604,843
2014	2,590,660	1,654,502	4,245,162	1,269,606	885,666	843,607	820,593	0	1,098,645	106,106	1,204,751	5,024,220	9,269,381
2015	1,361,812	2,089,782	3,451,593	203,591	2,008,982	3,169,705	1,136,257	151,603	128,453	0	280,056	6,798,590	10,250,183
2016	104,922	2,566,147	2,671,067	59,882	118,343	1,178,683	2,248,926	103,907	335,478	0	439,386	4,045,220	6,716,288
2017	91,849	359,371	451,219	84,656	5,418	153,359	559,556	44,088	37,336	0	81,424	884,412	1,335,632
2018	2,759,490	633,828	3,393,319	1,907,094	273,274	338,390	612,292	130,682	45,031	0	175,713	3,306,762	6,700,078
2019	3,209,370	1,025,346	4,234,717	1,318,081	3,169,280	816,229	812,677	10,978	254,657	0	265,634	6,381,907	10,616,623
2020	2,915,898	6,489,756	9,405,656	1,226,128	1,594,625	3,516,674	1,146,978	26,536	34,042	0	60,578	7,544,985	16,950,641
2021	256,659	1,482,005	1,738,663	80,268	247,289	1,414,188	6,420,471	844,703	22,346	0	867,049	9,029,266	10,767,928

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Table 10.—Page 3 of 10.

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			
Cold Bay/Belkofski Bay													
1988	165,667	177,207	342,874	80,977	140,127	145,806	120,141	44,730	19,855	5,099	69,682	556,736	899,609
1989	478,645	55,255	533,901	420,925	55,566	30,044	16,589	4,096	595	0	4,691	527,817	1,061,720
1990	1,794,427	746,923	2,541,351	1,512,872	525,818	307,776	262,987	102,352	60,978	4,078	167,408	2,776,861	5,318,216
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
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	384,884	154,913	539,798	113,932	289,247	352,476	183,679	49,039	20,425	5,616	75,081	1,014,417	1,554,215
1999	111,644	80,923	192,566	61,221	59,310	262,551	295,349	64,490	25,925	869	91,284	769,716	962,283
2000	455,241	221,576	676,817	550,630	107,735	284,006	327,963	198,168	16,388	2,811	217,368	1,487,706	2,164,523
2001	979,407	68,623	1,048,031	857,965	153,479	160,451	166,002	100,176	16,350	3,544	120,067	1,457,966	2,505,997
2002	949,717	273,703	1,223,422	502,631	464,036	321,094	218,041	60,958	101,511	3,459	165,929	1,671,733	2,895,154
2003	490,347	254,238	744,585	259,928	311,125	265,983	77,062	0	9,000	1,136	10,137	924,237	1,668,823
2004	623,516	134,040	757,558	425,450	330,655	398,480	192,333	22,874	2,530	0	25,404	1,372,322	2,129,878
2005	992,894	218,680	1,211,573	710,074	296,590	278,635	179,919	22,573	16,203	0	38,777	1,503,995	2,715,571
2006	2,648,711	420,921	3,069,635	2,061,236	466,727	562,538	233,997	27,671	13,589	0	41,260	3,365,761	6,435,392
2007	3,845,191	1,360,194	5,205,386	894,928	1,862,983	740,359	364,053	39,920	869	0	40,789	3,903,113	9,108,500
2008	1,007,953	3,859,704	4,867,657	185,437	2,091,726	3,977,520	1,144,765	95,258	85,637	838	181,733	7,581,179	12,448,838
2009	763,602	1,306,811	2,070,414	420,557	263,321	788,004	3,184,682	348,427	28,011	15,097	391,535	5,048,097	7,118,513
2010	268,382	2,653,858	2,922,240	229,932	77,077	369,308	1,525,723	1,374,298	283,412	79,516	1,737,224	3,939,265	6,861,504
2011	480,533	945,795	1,426,327	433,755	59,300	82,409	449,026	69,629	757,606	40,712	867,946	1,892,438	3,318,761
2012	343,294	171,847	515,142	395,749	85,500	160,419	177,454	19,925	189,934	6,096	215,957	1,035,080	1,550,221
2013	3,185,469	43,765	3,229,233	3,062,065	198,282	35,674	94,159	70,338	75,700	2,482	148,521	3,538,704	6,767,936
2014	839,928	109,252	949,181	799,958	456,297	195,182	82,194	3,471	71,182	4,925	79,578	1,613,210	2,562,394
2015	384,938	372,631	757,571	110,550	412,098	496,241	246,185	15,327	55,506	2,727	73,559	1,338,635	2,096,207
2016	31,558	678,225	709,782	35,537	79,011	502,975	634,564	10,191	86,490	1,025	97,707	1,349,792	2,059,576
2017	21,176	44,903	66,079	27,711	10,329	39,474	71,536	16,703	3,363	483	20,549	169,601	235,681
2018	8,871,246	51,171	8,922,418	7,418,348	26,523	62,257	63,578	3,204	10,031	0	13,235	7,583,943	16,506,360
2019	8,939,528	4,415,377	13,354,906	4,456,218	4,490,524	991,932	100,237	1,073	22,723	0	23,796	10,062,713	23,417,617
2020	4,632,877	5,076,990	9,709,867	1,439,755	4,205,570	5,341,173	1,643,353	0	1,484	0	1,484	12,631,335	22,341,202
2021	257,122	1,817,599	2,074,723	159,063	466,026	2,820,485	2,060,153	41,713	4,184	0	45,897	5,551,627	7,626,350

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Table 10.—Page 4 of 10.

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			
Pavlof Bay/Volcano Bay													
1988	383,751	850,419	1,234,170	309,261	186,497	428,169	385,018	178,659	72,260	64,227	315,149	1,624,097	2,858,270
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
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	121,882	169,031	290,917	33,563	182,197	331,303	410,737	8,552	56,213	0	64,765	1,022,561	1,313,481
1999	49,386	75,715	125,101	40,258	36,757	103,570	111,380	78,714	9,463	0	88,177	380,141	505,245
2000	1,208,402	228,029	1,436,433	1,052,858	227,837	148,488	243,699	92,281	28,647	0	120,928	1,793,813	3,230,245
2001	633,634	214,598	848,228	372,485	333,557	231,300	146,121	42,688	29,797	0	72,488	1,155,954	2,004,181
2002	1,145,468	397,083	1,542,551	1,086,367	369,825	548,561	416,734	45,909	43,627	1,225	90,759	2,512,249	4,054,802
2003	177,292	256,189	433,482	125,162	189,690	315,450	333,707	43,424	79,977	921	124,322	1,088,325	1,521,810
2004	285,288	346,793	632,082	257,206	102,140	538,602	404,517	104,198	114,956	2,200	221,352	1,523,820	2,155,903
2005	1,049,522	324,604	1,374,125	965,783	331,120	299,427	411,377	30,701	75,657	0	106,358	2,114,062	3,488,192
2006	3,242,499	318,582	3,561,084	3,175,657	685,076	362,259	229,242	27,509	54,757	980	83,245	4,535,478	8,096,564
2007	1,540,602	761,182	2,301,784	1,068,969	1,383,965	972,681	560,761	68,766	65,665	0	134,432	4,120,809	6,422,595
2008	1,923,136	2,095,003	4,018,137	523,358	3,171,995	2,608,034	1,628,469	318,409	21,911	5,912	346,233	8,278,090	12,296,227
2009	1,284,165	2,545,454	3,829,619	921,323	885,710	3,142,115	4,979,100	1,266,476	153,813	23,190	1,443,479	11,371,723	15,201,340
2010	603,453	1,323,815	1,927,269	471,609	386,788	627,223	2,287,168	1,729,591	574,986	32,615	2,337,193	6,109,982	8,037,251
2011	359,194	539,769	898,964	365,824	180,735	179,173	752,979	179,119	1,079,705	36,896	1,295,721	2,774,433	3,673,397
2012	505,467	325,239	830,705	530,227	53,419	216,840	428,060	37,003	532,227	11,533	580,763	1,809,304	2,640,011
2013	5,608,995	268,533	5,877,525	6,186,880	787,493	124,510	173,999	45,117	112,825	661	158,603	7,431,481	13,309,009
2014	1,360,575	329,690	1,690,268	984,614	1,128,253	681,617	248,742	28,556	172,594	3,270	204,421	3,247,643	4,937,911
2015	144,689	375,843	520,531	100,975	520,217	1,266,834	709,502	36,784	38,696	1,035	76,514	2,674,038	3,194,570
2016	195,214	191,069	386,284	230,040	50,025	419,442	628,568	57,157	128,735	7,650	193,540	1,521,610	1,907,894
2017	226,748	122,156	348,904	200,520	51,470	79,737	128,453	20,458	13,643	0	34,102	494,276	843,181
2018	4,770,792	300,943	5,071,737	4,479,357	264,545	265,620	202,492	15,824	21,115	0	36,939	5,248,959	10,320,696
2019	5,351,978	2,198,882	7,550,857	4,700,430	3,916,176	1,331,607	292,585	32,152	16,737	0	48,890	10,289,689	17,840,546
2020	2,925,147	2,969,081	5,894,225	1,587,374	3,986,968	4,023,532	1,202,032	73,791	50,804	0	124,595	10,924,506	16,818,733
2021	768,295	984,480	1,752,777	547,555	1,114,059	2,226,060	3,285,250	640,616	83,532	0	724,145	7,897,071	9,649,844

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Table 10.–Page 5 of 10.

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			
Beaver Bay/Balboa Bay/Unga Strait													
1988	87,250	55,859	143,108	71,357	57,883	39,843	22,621	5,085	11,617	0	16,702	208,406	351,515
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
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
2018	2,270,503	79,169	2,349,670	2,319,743	96,829	24,335	10,224	0	0	0	0	2,451,132	4,800,801
2019	875,967	274,279	1,150,246	1,031,876	908,269	321,936	55,363	0	1,582	0	1,582	2,319,028	3,469,272
2020	449,134	1,000,739	1,449,871	584,359	280,430	469,293	133,014	3,798	17,180	0	20,978	1,488,072	2,937,942
2021	168,232	89,063	257,294	130,864	41,054	62,930	43,514	949	0	0	949	279,313	536,604

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Table 10.–Page 6 of 10.

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			
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
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
2018	3,386,857	344,435	3,731,291	2,336,554	348,938	148,290	161,410	0	9,306	0	9,306	3,004,495	6,735,784
2019	1,182,947	3,328,673	4,511,621	337,393	1,442,501	822,155	284,025	4,934	34,716	0	39,649	2,925,721	7,437,340
2020	316,754	1,637,992	1,954,746	254,173	266,312	553,782	292,751	8,646	19,259	0	27,905	1,394,922	3,349,667
2021	87,567	251,485	339,051	71,093	81,568	309,254	152,632	6,693	5,737	0	12,430	626,974	966,026

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Table 10.–Page 7 of 10.

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			
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
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
2018	1,323,834	5,439	1,329,272	1,220,936	510,015	4,112	822	0	0	0	0	1,735,886	3,065,158
2019	232,750	69,657	302,407	188,441	271,699	163,109	0	0	0	0	0	623,250	925,657
2020	131,555	12,696	144,250	125,484	32,271	117,299	74,486	0	0	0	0	349,540	493,791
2021	28,067	25,759	53,826	18,895	6,104	26,552	43,156	8,417	0	0	8,417	103,124	156,950

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Table 10.–Page 8 of 10.

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			
WESTERN SECTION TOTALS ^a													
1988	563,223	539,247	1,102,469	307,206	368,706	349,070	318,004	124,345	49,126	20,147	193,615	1,536,605	2,639,076
1989	4,729,501	1,265,770	5,995,271	4,278,684	1,204,518	432,583	195,923	44,148	5,456	0	49,604	6,161,313	12,156,588
1990	4,232,182	1,850,119	6,082,302	3,234,701	1,212,620	900,556	480,080	128,062	85,532	5,083	218,677	6,046,634	12,128,938
1991	2,597,378	1,129,189	3,726,568	2,321,914	570,391	492,417	550,431	93,363	156,880	161	250,405	4,185,562	7,912,133
1992	886,856	1,037,143	1,923,994	561,877	595,425	412,673	341,109	71,999	61,232	2,482	135,714	2,046,793	3,970,791
1993	463,956	826,683	1,290,638	321,262	258,301	559,297	503,536	96,359	85,815	1,383	183,561	1,825,955	3,116,592
1994	215,360	535,094	750,452	143,388	119,095	195,982	283,423	33,847	58,127	1,217	93,191	835,082	1,585,535
1996	1,035,898	252,170	1,288,068	811,234	133,955	81,028	115,835	30,207	32,547	201	62,954	1,205,005	2,493,070
1997	355,813	149,582	505,393	206,087	209,470	188,458	132,801	44,181	9,796	483	54,459	791,266	1,296,660
1998	1,469,209	2,204,897	3,674,104	773,317	1,477,526	1,821,032	556,497	87,503	88,779	5,616	181,900	4,810,272	8,484,372
1999	342,257	636,464	978,720	153,783	346,556	835,053	1,043,033	124,374	81,266	2,768	208,406	2,586,837	3,565,557
2000	1,728,748	1,140,758	2,869,505	1,708,228	314,975	743,043	1,061,240	638,905	116,895	2,811	758,613	4,586,101	7,455,604
2001	2,759,018	479,387	3,238,404	2,187,693	998,632	435,659	499,885	290,144	120,746	14,250	425,137	4,547,014	7,785,417
2002	3,405,838	1,925,983	5,331,820	2,329,950	1,903,941	1,210,599	600,275	100,783	252,261	5,882	358,925	6,403,686	11,735,504
2003	1,231,067	2,140,181	3,371,248	559,578	1,535,059	1,234,770	582,419	38,984	117,448	1,136	157,568	4,069,392	7,440,643
2004	1,644,165	1,938,906	3,583,072	1,337,243	611,818	1,940,606	2,508,001	283,975	165,370	6,585	455,930	6,853,595	10,436,664
2005	1,770,145	3,993,063	5,763,208	1,278,229	538,097	697,577	1,431,885	493,565	214,870	2,649	711,083	4,656,870	10,420,082
2006	20,083,628	2,527,312	22,610,942	18,673,999	1,028,276	922,017	1,263,866	286,592	266,567	19,419	572,579	22,460,738	45,071,675
2007	18,423,652	4,935,696	23,359,353	11,694,580	8,842,360	2,700,356	2,607,291	549,879	222,204	11,696	783,778	26,628,363	49,987,715
2008	4,606,299	16,930,396	21,536,696	1,938,151	9,404,424	16,597,194	3,092,962	857,308	285,175	41,372	1,183,856	32,216,584	53,753,282
2009	1,103,083	4,366,833	5,469,917	670,106	983,572	4,973,182	10,989,344	721,333	42,876	24,579	788,788	18,404,984	23,874,899
2010	493,825	5,730,927	6,224,751	463,371	112,194	821,239	4,496,413	7,287,180	467,808	347,435	8,102,420	13,995,639	20,220,390
2011	850,269	2,695,696	3,545,963	836,690	74,356	204,060	1,504,017	1,409,609	2,717,412	343,372	4,470,392	7,089,518	10,635,475
2012	701,522	931,922	1,633,445	726,519	122,702	187,197	615,024	93,138	1,499,947	134,076	1,727,164	3,378,607	5,012,050
2013	8,393,881	195,745	8,589,622	8,648,608	449,584	89,969	199,301	72,276	611,873	48,319	732,470	10,119,936	18,709,559
2014	3,877,787	1,842,651	5,720,438	2,553,494	1,379,214	1,063,291	948,794	3,471	1,231,637	117,335	1,352,443	7,297,237	13,017,675
2015	2,276,561	2,467,296	4,743,857	784,945	2,478,199	3,694,219	1,384,073	166,930	184,775	2,727	354,431	8,695,868	13,439,726
2016	195,440	3,249,119	3,444,556	174,679	219,901	1,681,658	2,883,490	114,098	421,968	1,025	537,093	5,496,819	8,941,376
2017	706,923	410,471	1,117,394	724,447	55,659	232,435	631,092	60,791	40,699	483	101,973	1,745,608	2,863,003
2018	13,745,673	792,903	14,538,577	10,977,825	773,751	470,077	710,457	133,886	55,062	0	188,948	13,121,062	27,659,633
2019	13,158,966	5,661,182	18,820,150	6,631,522	7,910,548	1,960,697	923,497	13,071	277,380	0	290,450	17,716,726	36,536,873
2020	8,029,716	11,687,289	19,717,006	3,184,823	6,091,472	9,157,388	2,996,185	26,536	35,526	0	62,062	21,491,931	41,208,936
2021	744,583	3,305,908	4,050,492	442,890	750,472	4,277,674	8,509,196	890,722	26,530	0	917,252	14,897,489	18,947,979

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Table 10.—Page 9 of 10.

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 SECTION TOTALS ^b													
1988	471,001	906,278	1,377,278	380,618	244,380	468,012	407,639	183,744	83,877	64,227	331,851	1,832,503	3,209,785
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	370,341	373,675	744,022	206,440	328,263	562,770	474,452	12,116	57,121	0	69,238	1,641,159	2,385,184
1999	176,875	172,529	349,403	221,041	81,762	173,312	189,615	85,189	9,463	0	94,652	760,381	1,109,785
2000	2,145,486	289,026	2,434,514	2,027,815	240,079	177,428	284,799	99,252	31,902	0	131,154	2,861,277	5,295,790
2001	2,403,814	363,752	2,767,561	2,024,641	552,757	329,355	195,196	43,596	29,797	0	73,396	3,175,347	5,942,907
2002	2,002,094	851,644	2,853,738	1,785,686	1,149,925	1,192,736	553,934	50,656	57,145	1,225	109,024	4,791,306	7,645,043
2003	333,566	565,851	899,419	208,138	370,521	599,279	481,697	55,194	89,631	921	145,745	1,805,368	2,704,788
2004	698,890	643,679	1,342,566	695,983	222,915	781,209	595,767	154,396	120,521	3,060	277,972	2,573,846	3,916,413
2005	3,869,034	523,581	4,392,612	4,512,945	438,715	389,701	547,117	54,291	75,657	0	129,948	6,018,419	10,411,033
2006	9,123,896	1,533,583	10,657,481	7,912,335	3,587,205	1,505,665	746,166	37,120	100,216	980	138,315	13,889,688	24,547,167
2007	3,628,265	4,588,080	8,216,344	2,443,517	4,905,493	3,647,838	1,473,345	121,575	109,660	1,148	232,383	12,702,574	20,918,919
2008	3,681,510	11,569,819	15,251,329	1,357,770	6,986,328	7,546,202	4,012,502	523,253	68,171	8,066	599,491	20,502,293	35,753,619
2009	2,060,765	14,341,257	16,402,020	1,360,435	2,740,186	7,238,410	9,559,628	2,561,844	345,095	35,918	2,942,859	23,841,515	40,243,536
2010	907,976	5,460,241	6,368,218	699,497	623,598	1,888,647	4,798,351	3,148,581	895,228	60,429	4,104,238	12,114,330	18,482,549
2011	622,015	1,450,664	2,072,677	659,125	224,542	500,421	1,759,134	273,997	1,419,468	46,409	1,739,871	4,883,090	6,955,765
2012	756,693	652,133	1,408,822	878,384	65,173	321,188	1,355,467	84,681	1,376,999	29,019	1,490,698	4,110,903	5,519,726
2013	9,418,225	461,271	9,879,492	9,736,415	925,518	203,493	423,933	48,915	225,287	661	274,863	11,564,209	21,443,701
2014	2,542,624	630,787	3,173,414	1,532,419	2,036,583	1,007,009	496,736	28,556	269,038	4,999	302,594	5,375,341	8,548,751
2015	400,581	807,555	1,208,128	270,873	834,785	2,053,710	1,054,955	44,115	94,080	1,035	139,229	4,353,546	5,561,676
2016	276,204	2,988,688	3,264,893	311,860	109,878	951,692	1,138,644	67,526	154,140	7,650	229,316	2,741,384	6,006,275
2017	2,576,412	865,180	3,441,592	2,627,339	114,058	233,983	388,326	32,699	14,592	0	47,292	3,410,992	6,852,584
2018	11,751,986	729,986	12,481,970	10,356,590	1,220,327	442,357	374,948	15,824	30,421	0	46,245	12,440,472	24,922,439
2019	7,643,642	5,871,491	13,515,131	6,258,140	6,538,645	2,638,807	631,973	37,086	53,035	0	90,121	16,157,688	29,672,815
2020	3,822,590	5,620,508	9,443,092	2,551,390	4,565,981	5,163,906	1,702,283	86,235	87,243	0	173,478	14,157,040	23,600,133
2021	1,052,161	1,350,787	2,402,948	768,407	1,242,785	2,624,796	3,524,552	656,675	89,269	0	745,941	8,906,482	11,309,424

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Table 10.–Page 10 of 10.

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			
SOUTH PENINSULA DISTRICT TOTALS													
1988	1,034,224	1,445,525	2,479,747	687,824	613,086	817,082	725,643	308,089	133,003	84,374	525,466	3,369,108	5,848,861
1989	6,427,700	3,468,457	9,896,159	5,710,039	1,791,287	829,709	562,109	128,131	65,509	13,946	207,583	9,100,725	18,996,894
1990	6,635,805	4,510,506	11,146,316	5,526,527	1,741,616	1,583,655	869,147	208,007	200,539	17,749	426,296	10,147,241	21,293,560
1991	3,824,015	1,829,292	5,653,303	3,556,832	695,731	798,453	829,260	142,123	235,756	4,227	382,107	6,262,394	11,915,699
1992	1,420,542	1,474,238	2,894,771	962,858	775,505	599,837	493,562	106,453	85,970	2,482	194,906	3,026,665	5,921,440
1993	629,648	1,047,038	1,676,684	452,096	427,223	1,140,680	765,436	138,270	117,288	3,280	258,841	3,044,268	4,720,950
1994	315,022	707,639	1,022,660	213,735	194,311	324,501	472,792	98,202	91,748	1,217	191,167	1,396,514	2,419,171
1996	2,205,636	313,683	2,519,321	1,991,949	196,193	132,421	195,016	45,620	43,108	1,181	89,908	2,605,480	5,124,800
1997	889,414	532,461	1,421,872	538,704	622,007	460,219	217,237	49,439	44,181	1,382	95,003	1,933,157	3,355,033
1998	1,839,550	2,578,572	4,418,126	979,757	1,805,789	2,383,802	1,030,949	99,619	145,900	5,616	251,138	6,451,431	10,869,556
1999	519,132	808,993	1,328,123	374,824	428,318	1,008,365	1,232,648	209,563	90,729	2,768	303,058	3,347,218	4,675,342
2000	3,874,234	1,429,784	5,304,019	3,736,043	555,054	920,471	1,346,039	738,157	148,797	2,811	889,767	7,447,378	12,751,394
2001	5,162,832	843,139	6,005,965	4,212,334	1,551,389	765,014	695,081	333,740	150,543	14,250	498,533	7,722,361	13,728,324
2002	5,407,932	2,777,627	8,185,558	4,115,636	3,053,866	2,403,335	1,154,209	151,439	309,406	7,107	467,949	11,194,992	19,380,547
2003	1,564,633	2,706,032	4,270,667	767,716	1,905,580	1,834,049	1,064,116	94,178	207,079	2,057	303,313	5,874,760	10,145,431
2004	2,343,055	2,582,585	4,925,638	2,033,226	834,733	2,721,815	3,103,768	438,371	285,891	9,645	733,902	9,427,441	14,353,077
2005	5,639,179	4,516,644	10,155,820	5,791,174	976,812	1,087,278	1,979,002	547,856	290,527	2,649	841,031	10,675,289	20,831,115
2006	29,207,524	4,060,895	33,268,423	26,586,334	4,615,481	2,427,682	2,010,032	323,712	366,783	20,399	710,894	36,350,426	69,618,842
2007	22,051,917	9,523,776	31,575,697	14,138,097	13,747,853	6,348,194	4,080,636	671,454	331,864	12,844	1,016,161	39,330,937	70,906,634
2008	8,287,809	28,500,215	36,788,025	3,295,921	16,390,752	24,143,396	7,105,464	1,380,561	353,346	49,438	1,783,347	52,718,877	89,506,901
2009	3,163,848	18,708,090	21,871,937	2,030,541	3,723,758	12,211,592	20,548,972	3,283,177	387,971	60,497	3,731,647	42,246,499	64,118,435
2010	1,401,801	11,191,168	12,592,969	1,162,868	735,792	2,709,886	9,294,764	10,435,761	1,363,036	407,864	12,206,658	26,109,969	38,702,939
2011	1,472,284	4,146,360	5,618,640	1,495,815	298,898	704,481	3,263,151	1,683,606	4,136,880	389,781	6,210,263	11,972,608	17,591,240
2012	1,458,215	1,584,055	3,042,267	1,604,903	187,875	508,385	1,970,491	177,819	2,876,946	163,095	3,217,862	7,489,510	10,531,776
2013	17,812,106	657,016	18,469,114	18,385,023	1,375,102	293,462	623,234	121,191	837,160	48,980	1,007,333	21,684,145	40,153,260
2014	6,420,411	2,473,438	8,893,852	4,085,913	3,415,797	2,070,300	1,445,530	32,027	1,500,675	122,334	1,655,037	12,672,578	21,566,426
2015	2,677,142	3,274,851	5,951,985	1,055,818	3,312,984	5,747,929	2,439,028	211,045	278,855	3,762	493,660	13,049,414	19,001,402
2016	471,644	6,237,807	6,709,449	486,539	329,779	2,633,350	4,022,134	181,624	576,108	8,675	766,409	8,238,203	14,947,651
2017	3,283,335	1,275,651	4,558,986	3,351,786	169,717	466,418	1,019,418	93,490	55,291	483	149,265	5,156,600	9,715,587
2018	25,497,659	1,522,889	27,020,547	21,334,415	1,994,078	912,434	1,085,405	149,710	85,483	0	235,193	25,561,534	52,582,072
2019	20,802,608	11,532,673	32,335,281	12,889,662	14,449,193	4,599,504	1,555,470	50,157	330,415	0	380,571	33,874,414	66,209,688
2020	11,852,306	17,307,797	29,160,098	5,736,213	10,657,453	14,321,294	4,698,468	112,771	122,769	0	235,540	35,648,971	64,809,069
2021	1,796,744	4,656,695	6,453,440	1,211,297	1,993,257	6,902,470	12,033,748	1,547,397	115,799	0	1,663,193	23,803,971	30,257,403

^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 11.—Predominant species by weight in the Eastern Aleutian Tanner crab District large-mesh bottom trawl survey, 2021.

Common name	Species name	% of catch by weight
Arrowtooth flounder	<i>Atheresthes stomias</i>	42.3
Flathead sole	<i>Hippoglossoides elassodon</i>	12.1
Tanner crab	<i>Chionoecetes bairdi</i>	8.8
Walleye pollock	<i>Gadus chalcogrammus</i>	8.4
Rex sole	<i>Glyptocephalus zachirus</i>	6.5
Pacific halibut	<i>Hippoglossus stenolepis</i>	3.8
Pacific cod	<i>Gadus macrocephalus</i>	2.2
Aleutian skate	<i>Bathyraja aleutica</i>	1.9
Sunflower seastar	<i>Pycnopodia helianthoides</i>	1.8
Basket star	<i>Gorgonocephalus</i> sp.	1.7
Anemone	Order: Actinaria	1.4
Southern rock sole	<i>Lepidopsetta bilineata</i>	1.4
Sablefish	<i>Anoplopoma fimbria</i>	0.7
Jellyfish	Class: Schyphozoa	0.7
Alaska skate	<i>Bathyraja parmifera</i>	0.6
Bering skate	<i>Bathyraja interrupta</i>	0.6
Hermit crab	Family: Paguridae	0.6
Giant octopus	<i>Octopus dofleini</i>	0.5
Northern rock sole	<i>Lepidopsetta polyxystra</i>	0.4
Dover sole	<i>Microstomus pacificus</i>	0.3
All others	(74 species)	3.5
Total		100.0

Table 12.—Tanner crab abundance estimates from large-mesh bottom trawl surveys in the Eastern Aleutian District, 1990–2021.

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			
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
2018	82,982	892,825	975,807	45,581	88,616	141,518	38,820	0	1,877	0	1,877	316,414	1,292,222
2019	65,420	215,325	280,746	40,980	63,332	21,538	6,530	0	0	0	0	132,380	413,127
2021	506,368	429,052	935,419	788,542	1,151,937	247,708	27,404	0	0	0	0	2,215,591	3,151,009
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

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Table 12.–Page 2 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			
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
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
2018	328,884	398,981	727,865	180,726	57,799	59,636	194,377	24,324	34,748	0	59,072	551,612	1,279,479
2019	573,520	771,537	1,345,057	429,906	261,672	172,017	45,107	1,416	0	0	1,416	910,117	2,255,174
2021	402,431	105,050	507,481	265,815	49,325	25,208	4,290	2,860	0	0	2,860	347,498	854,978
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	3,151,812	986,508	4,138,324	1,593,227	685,506	408,441	130,211	8,675	160,800	1,734	171,209	2,988,596	7,126,919
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

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Table 12.—Page 3 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			
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
2018	798,103	1,673,815	2,471,918	445,736	550,279	149,211	172,215	6,210	72,310	0	78,520	1,395,961	3,867,880
2019	868,590	958,308	1,826,899	759,383	160,879	254,680	102,890	0	17,882	0	17,882	1,295,714	3,122,613
2021	1,092,023	1,417,596	2,509,618	972,852	404,010	442,705	337,673	24,905	45,309	0	70,214	2,227,455	4,737,075
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
2018	165,431	14,611	180,040	161,260	3,482	2,508	2,770	0	0	0	0	170,019	350,059
2021	412,537	2,505	415,042	396,895	4,546	0	0	0	0	0	0	401,441	816,486
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

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Table 12.–Page 4 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			
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
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

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Table 12.—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			
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
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	3,951,040	3,339,789	7,290,828	2,180,793	1,041,411	1,051,620	751,389	122,807	377,311	19,656	519,774	5,544,985	12,835,814
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
2018	1,375,400	2,980,232	4,355,630	833,303	700,176	352,873	408,182	30,534	108,935	0	139,469	2,434,006	6,789,640
2019	1,507,530	1,945,170	3,452,702	1,230,269	485,883	448,235	154,527	1,416	17,882	0	19,298	2,338,211	5,790,914
2021	2,413,359	1,954,203	4,367,560	2,424,104	1,609,818	715,621	369,367	27,765	45,309	0	73,074	5,191,985	9,559,548

Table 13.—Skate catch in kilograms and number caught by sex and species from the large-mesh bottom trawl survey, 2021.

Species	Weight (kg)	Male	Female	Total count
longnose skate	4,400	361	359	720
Bering skate	1,066	359	308	667
big skate	4,869	59	288	347
Aleutian skate	1,481	73	130	203
Alaska skate	327	30	23	53
Total	12,142	882	1,108	1,990

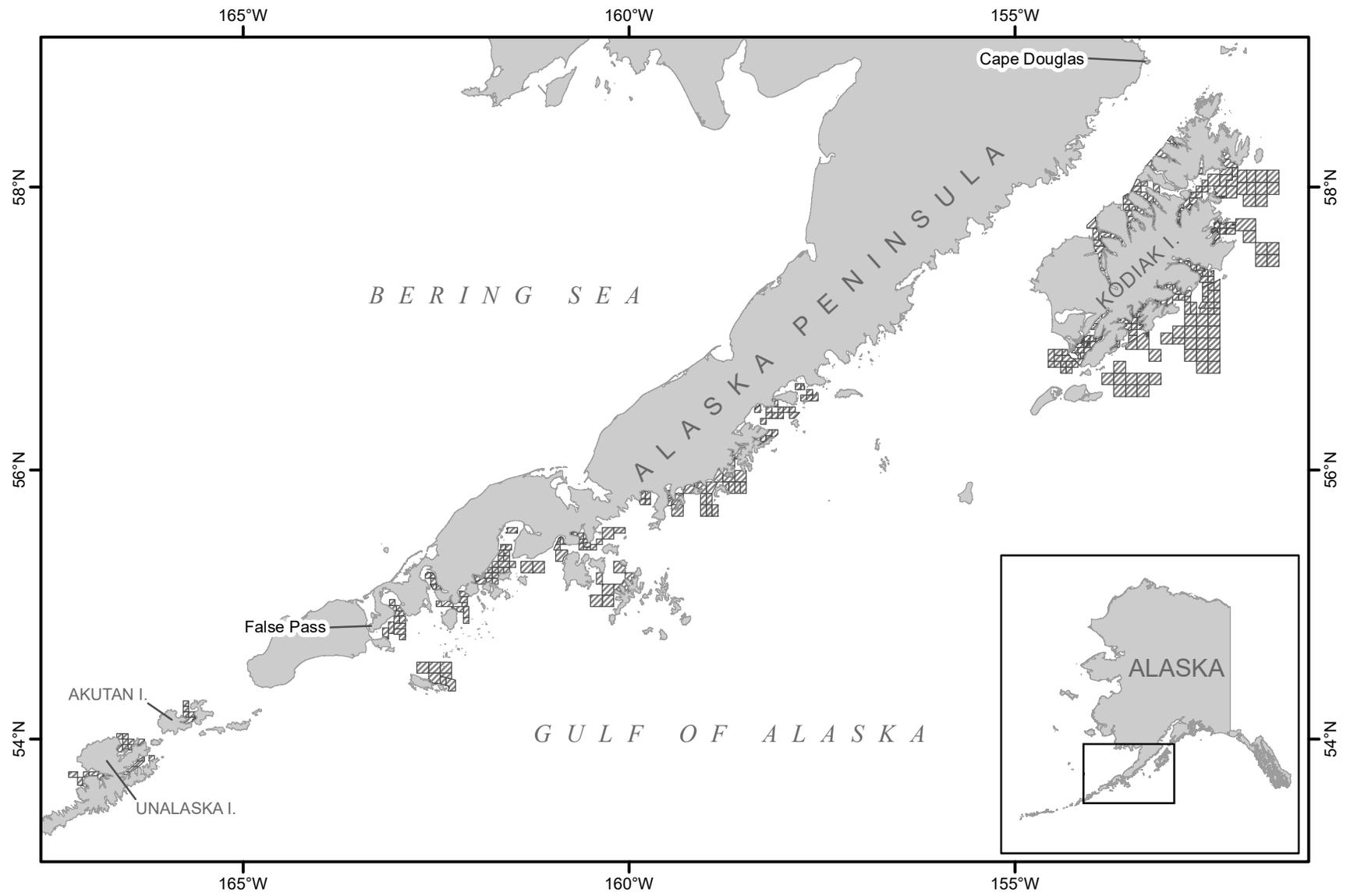


Figure 1.—Large-mesh bottom trawl survey stations, 2021.

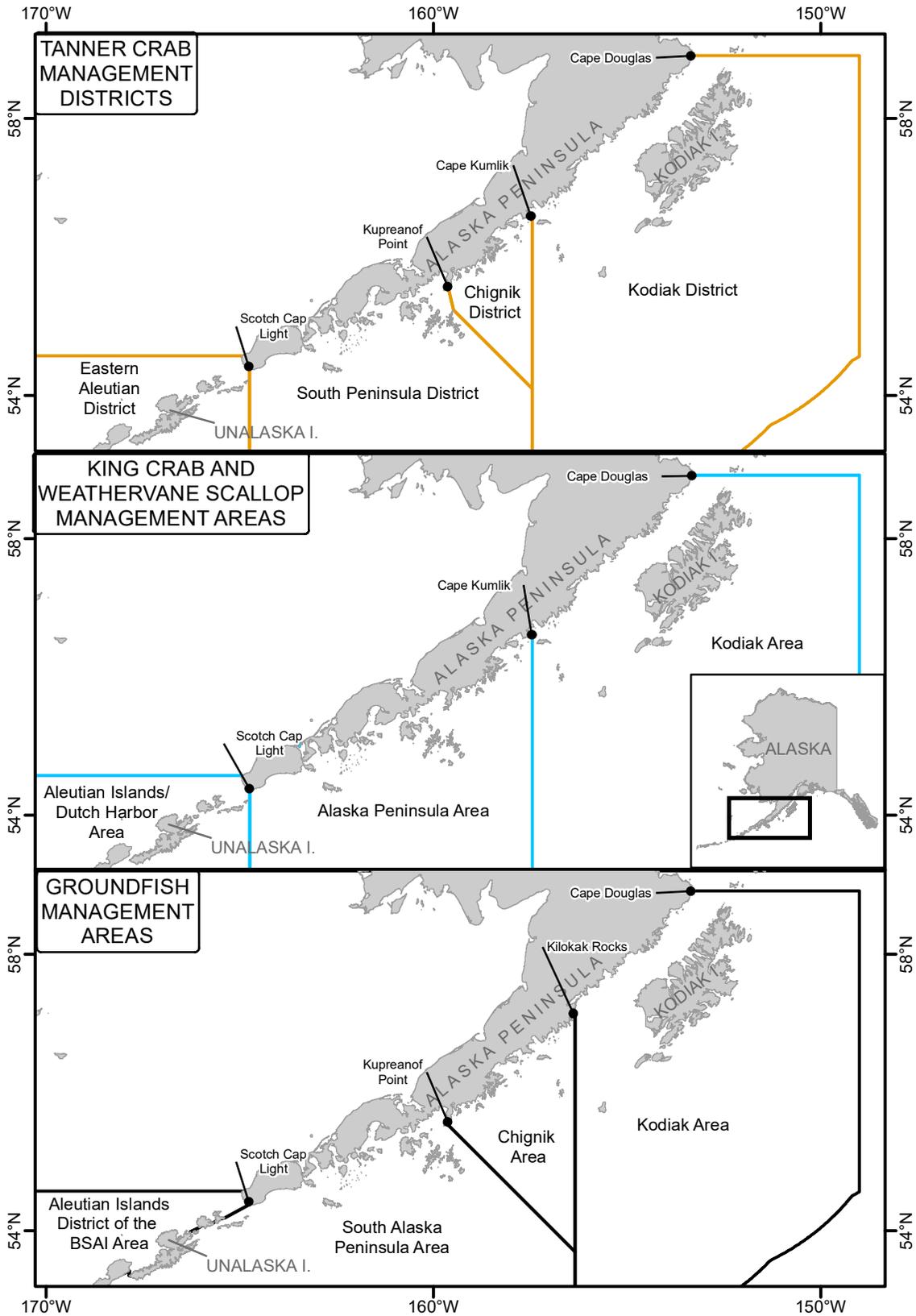


Figure 2.—Tanner crab, king crab, weathervane scallop, and groundfish management units in the bottom trawl survey area.

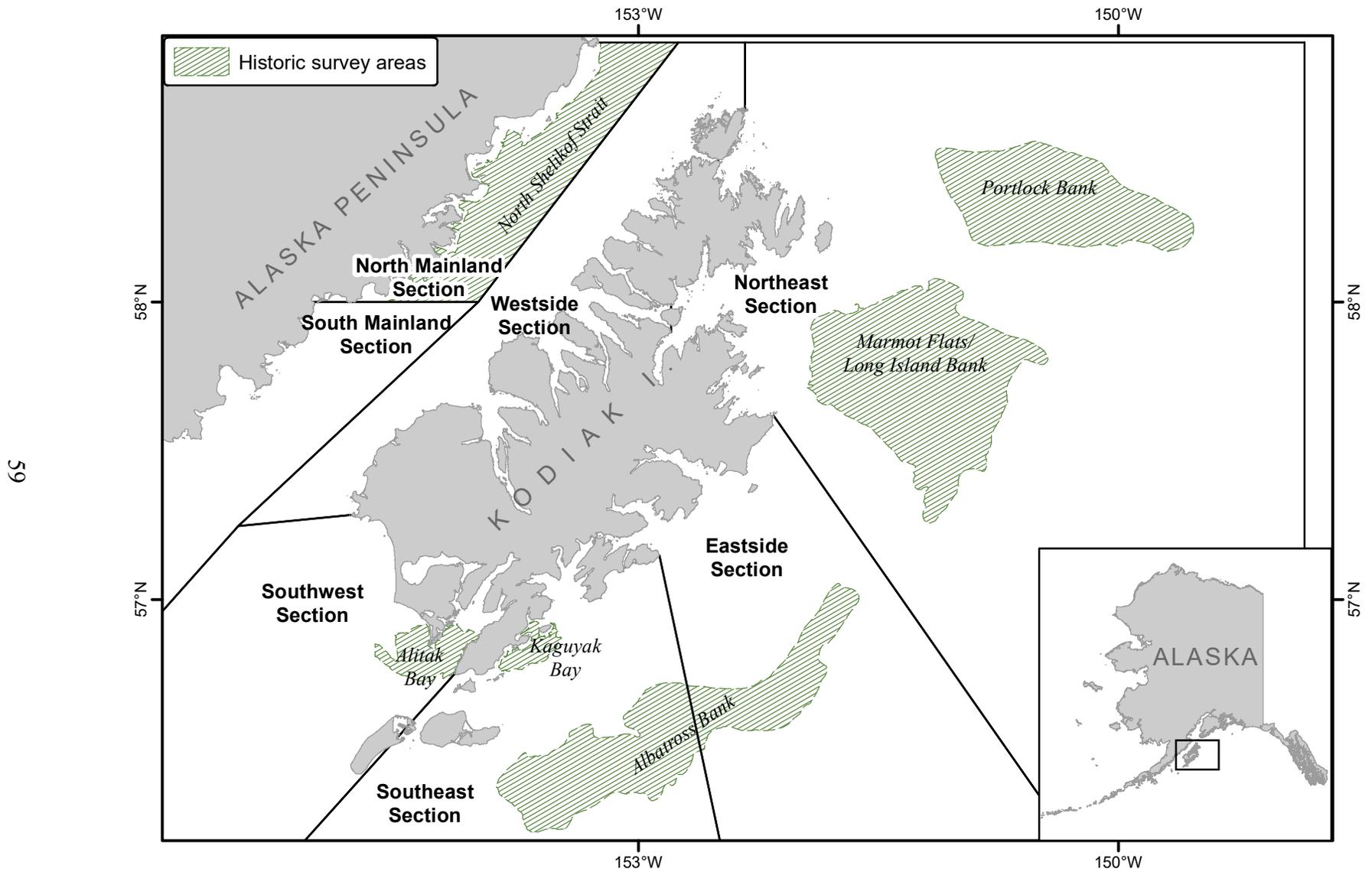


Figure 3.—Historical trawl survey areas and current Tanner crab management sections in the Kodiak District.

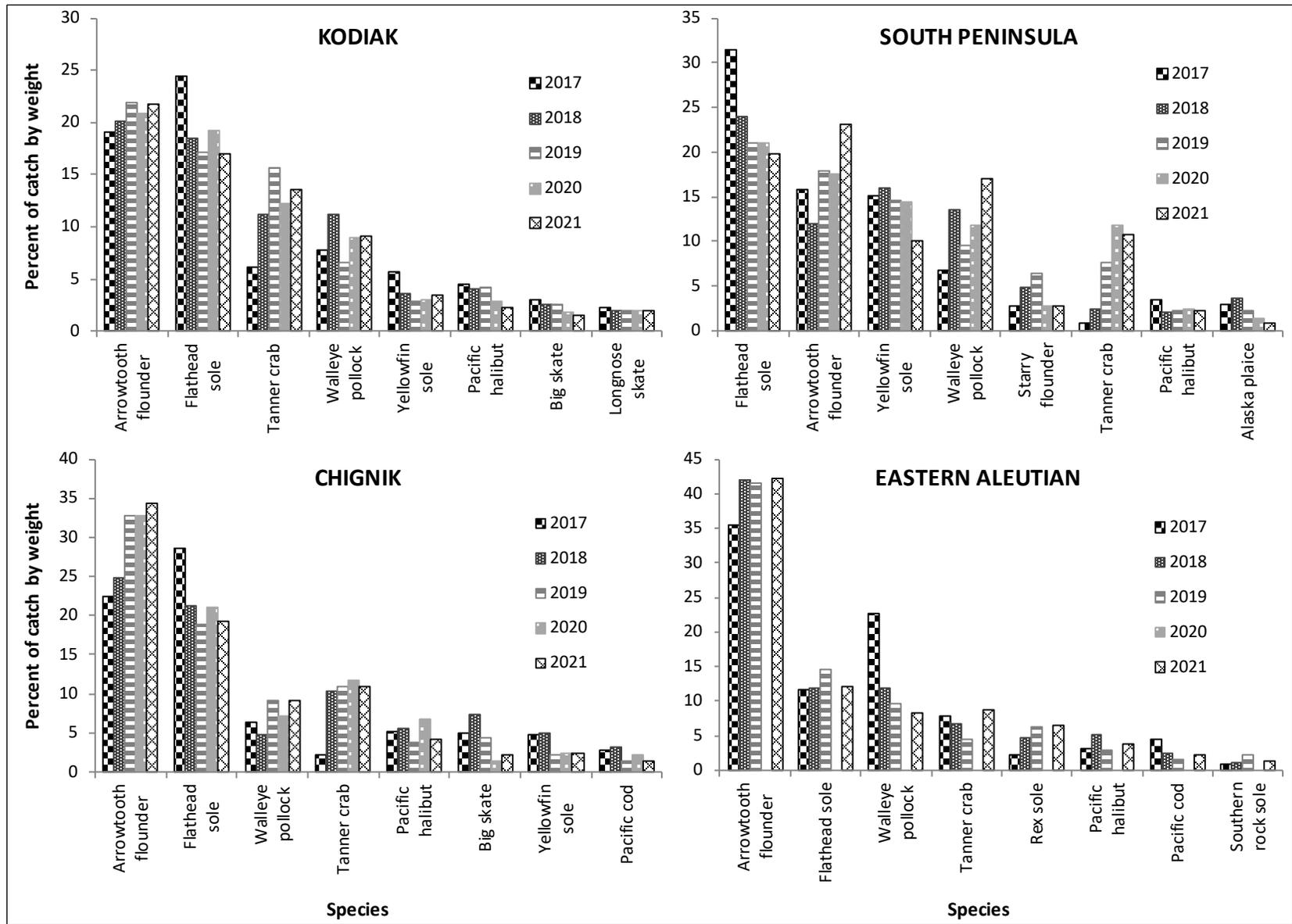


Figure 4.—Top species caught by weight in the large-mesh bottom trawl surveys by district, 2017–2021.

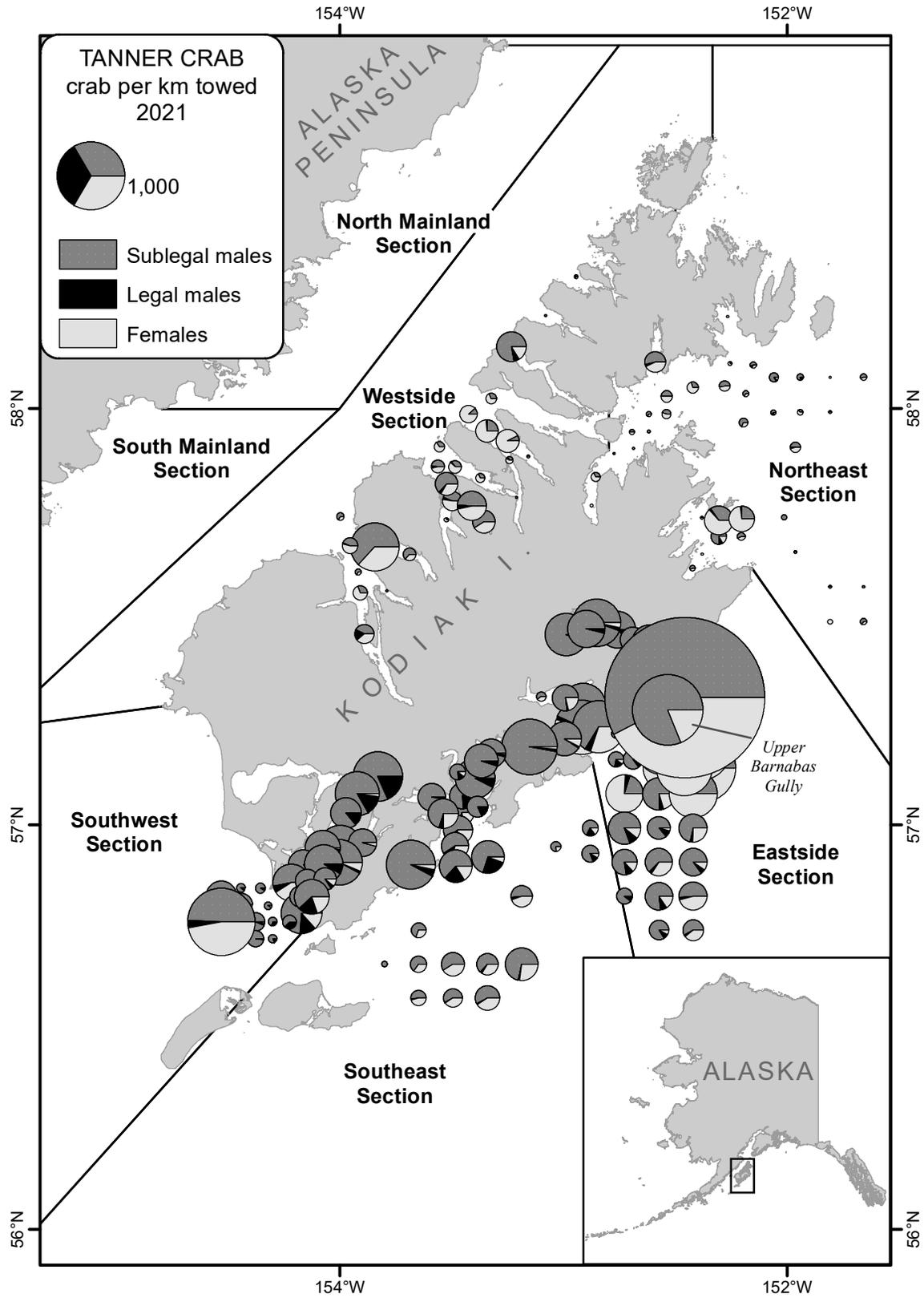


Figure 5.—Number of Tanner crab per kilometer towed in the 2021 Kodiak District large-mesh bottom trawl survey.

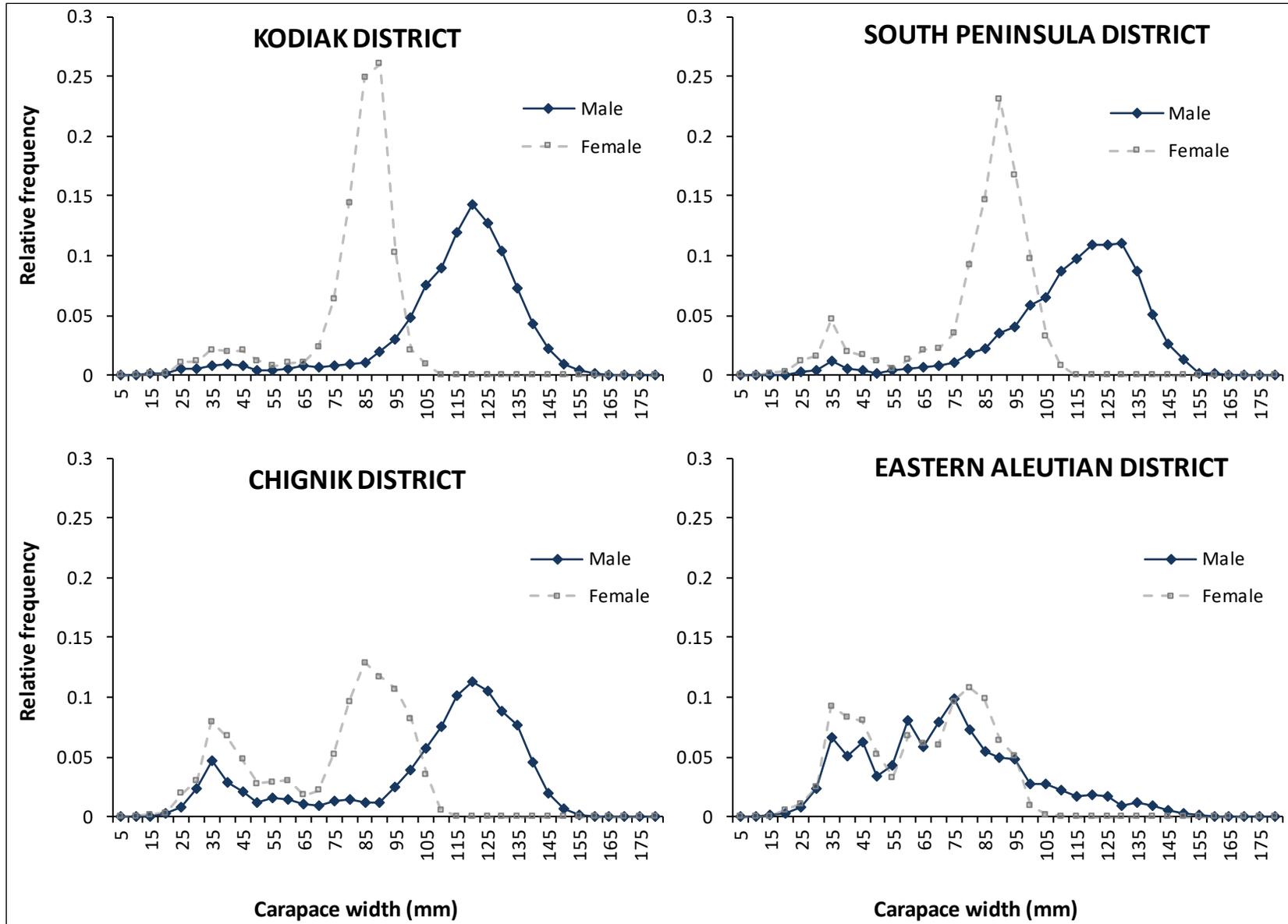


Figure 6.—Tanner crab relative size frequency by sex and district from the 2021 large-mesh bottom trawl survey.

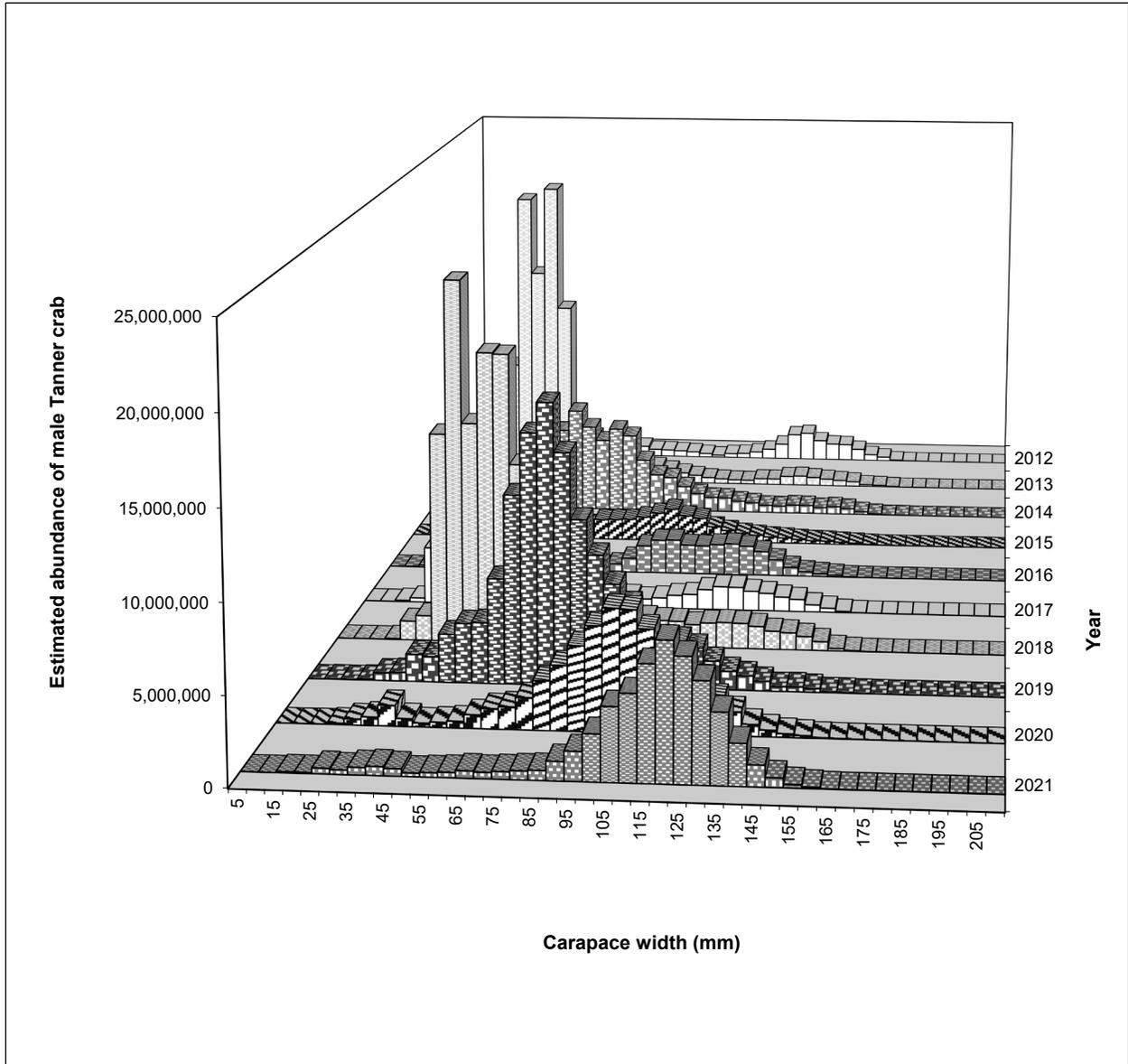


Figure 7.—Tanner crab male abundance estimate by carapace width in the Kodiak District large-mesh bottom trawl surveys, 2012–2021.

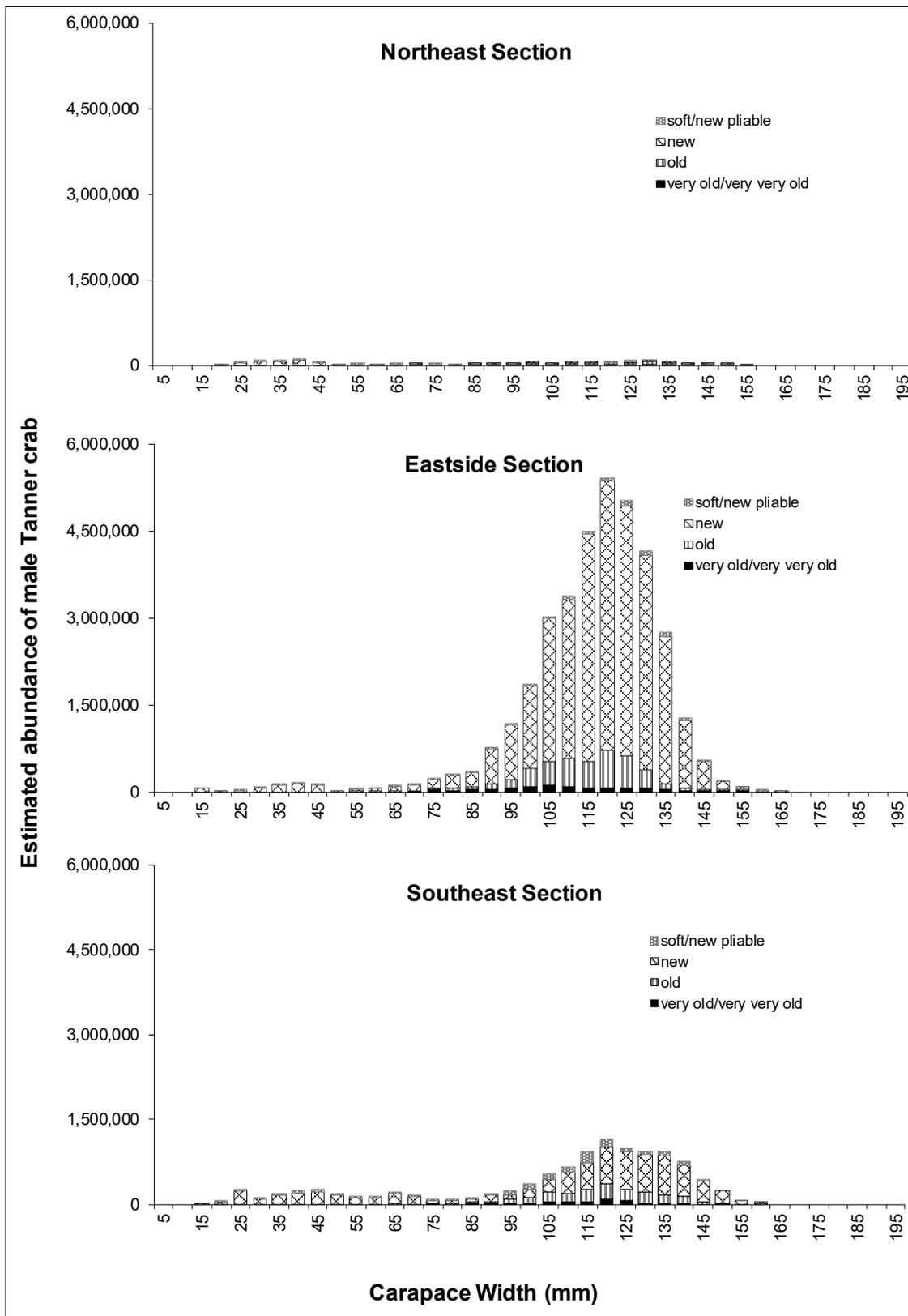


Figure 8.—Tanner crab male abundance estimate by carapace width and shell condition from the Northeast, Eastside, and Southeast Sections of the 2021 Kodiak District large-mesh bottom trawl survey.

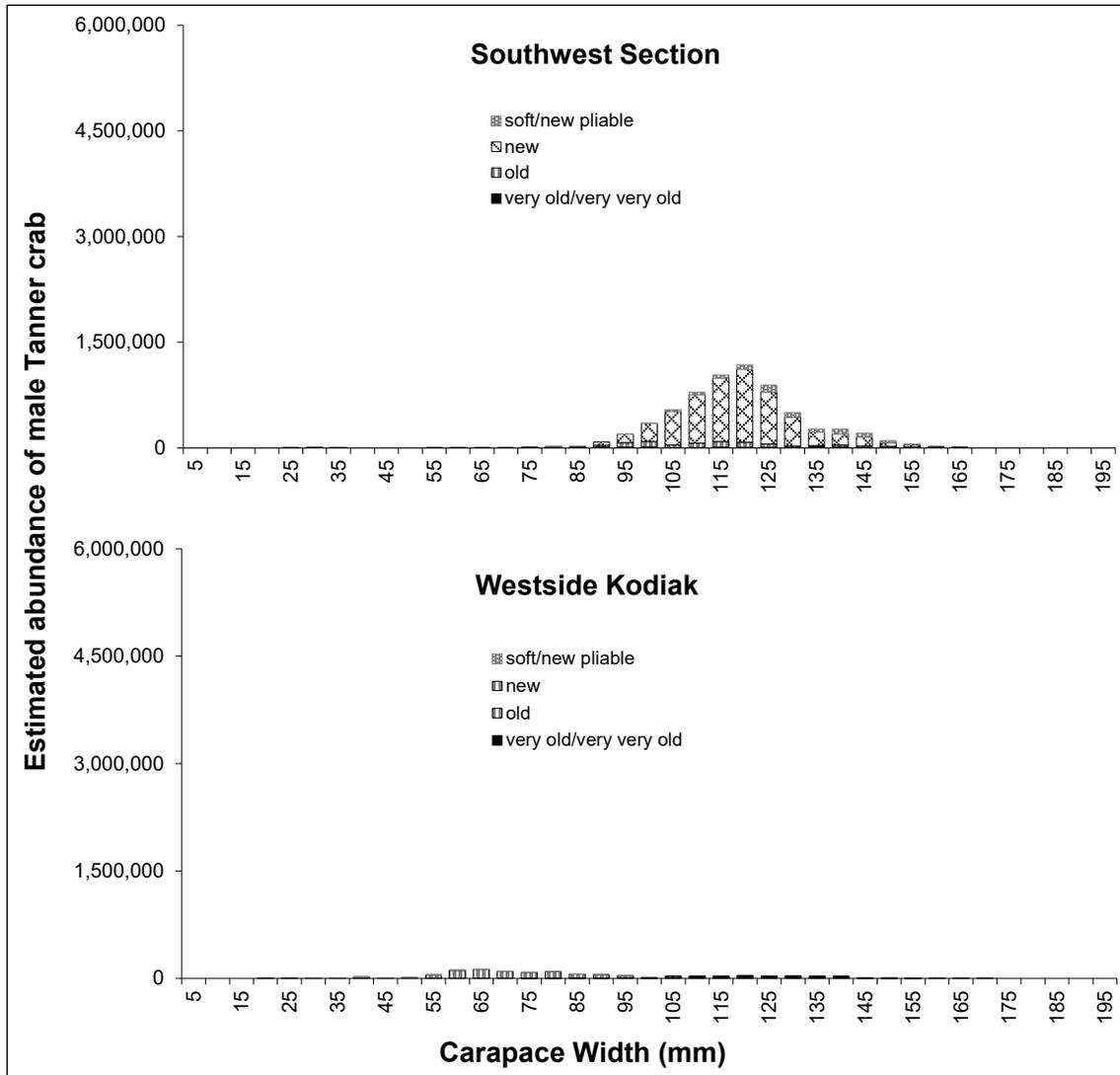


Figure 9.—Tanner crab male abundance estimate by carapace width and shell condition from the Southwest and Westside Sections of the 2021 Kodiak District large-mesh bottom trawl survey.

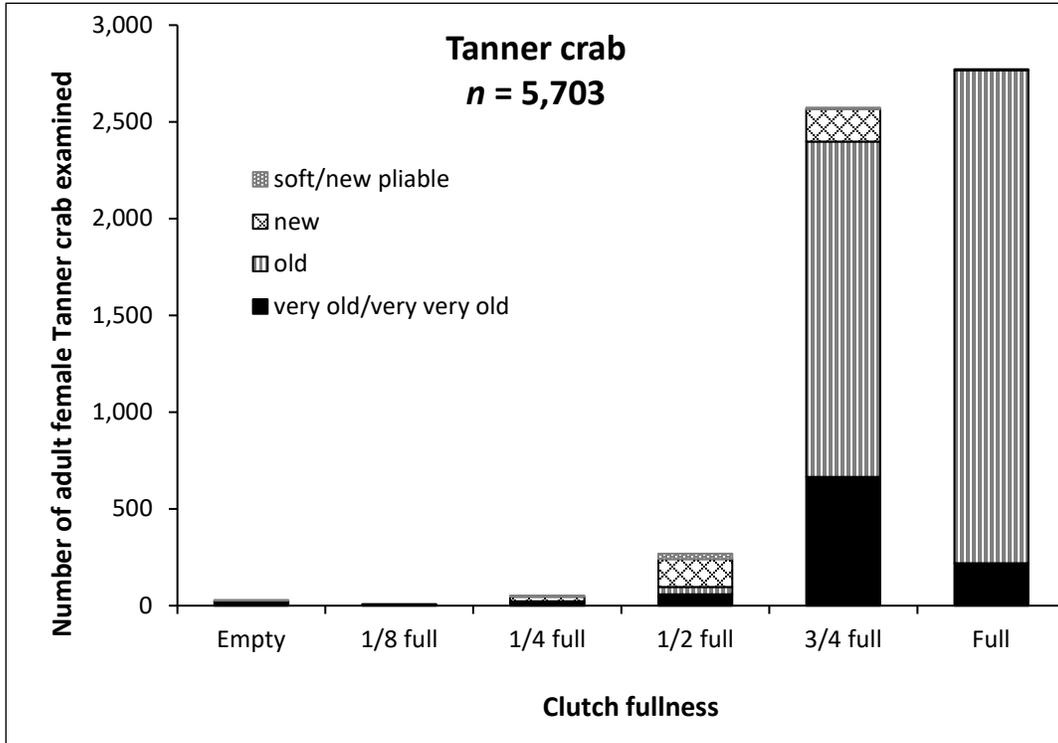


Figure 10.—Tanner crab mature female egg clutch fullness by shell condition in the Kodiak District large-mesh bottom trawl survey, 2021.

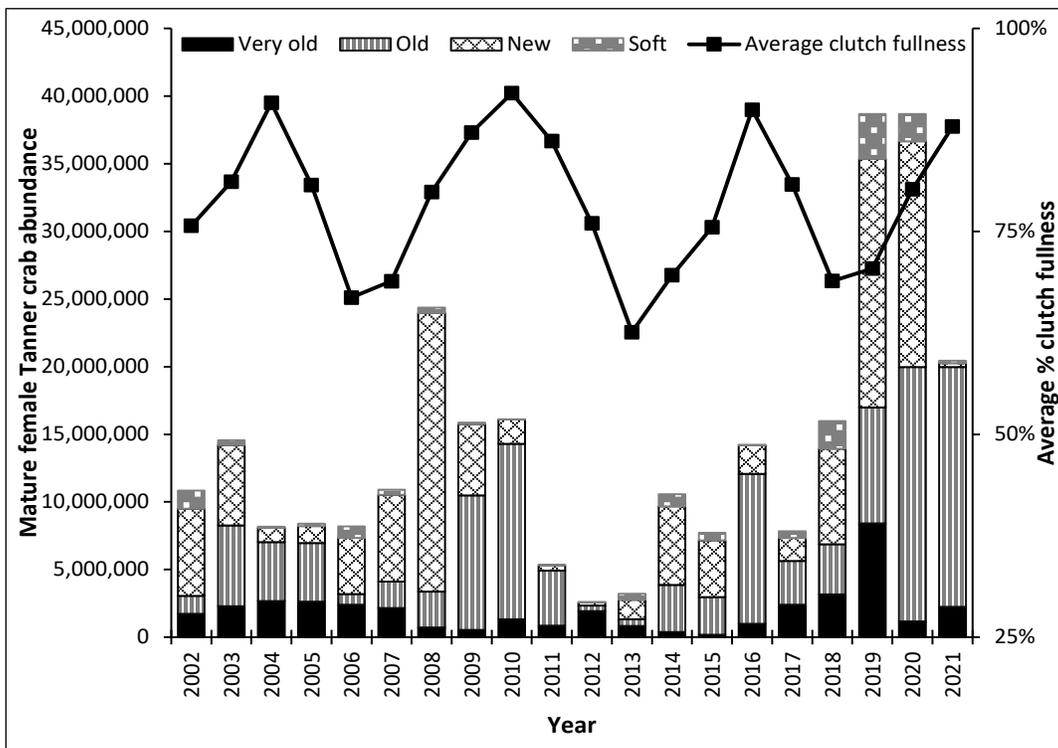


Figure 11.—Tanner crab mature female abundance by shell condition and average clutch fullness for the Kodiak District from the 2002–2021 large-mesh bottom trawl surveys.

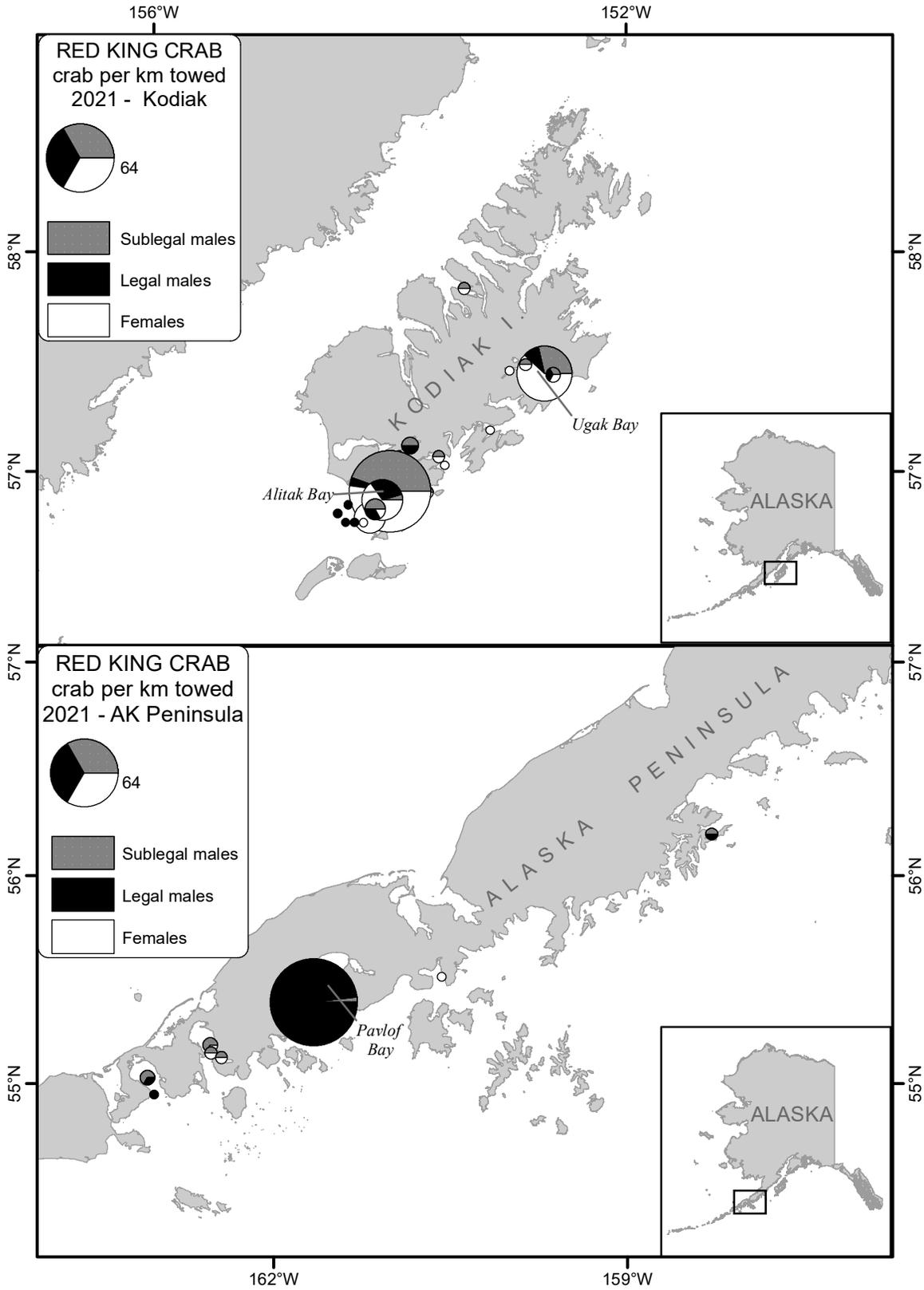


Figure 12.—Number of red king crab per kilometer towed in the 2021 Kodiak (upper) and Alaska Peninsula (lower) Areas large-mesh bottom trawl survey.

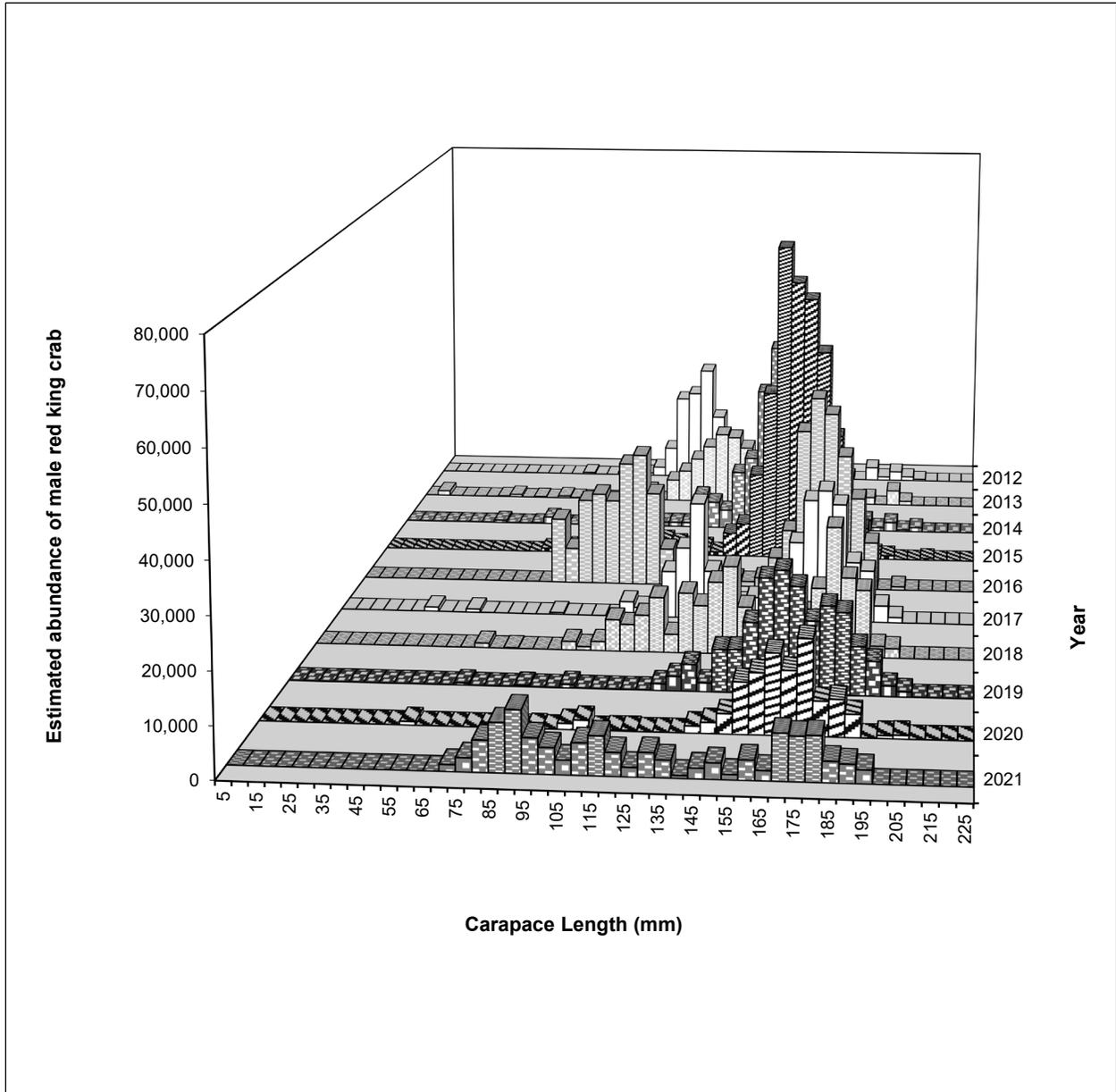


Figure 13.—Red king crab male abundance estimate by carapace length in the Kodiak Area large-mesh bottom trawl surveys, 2012–2021.

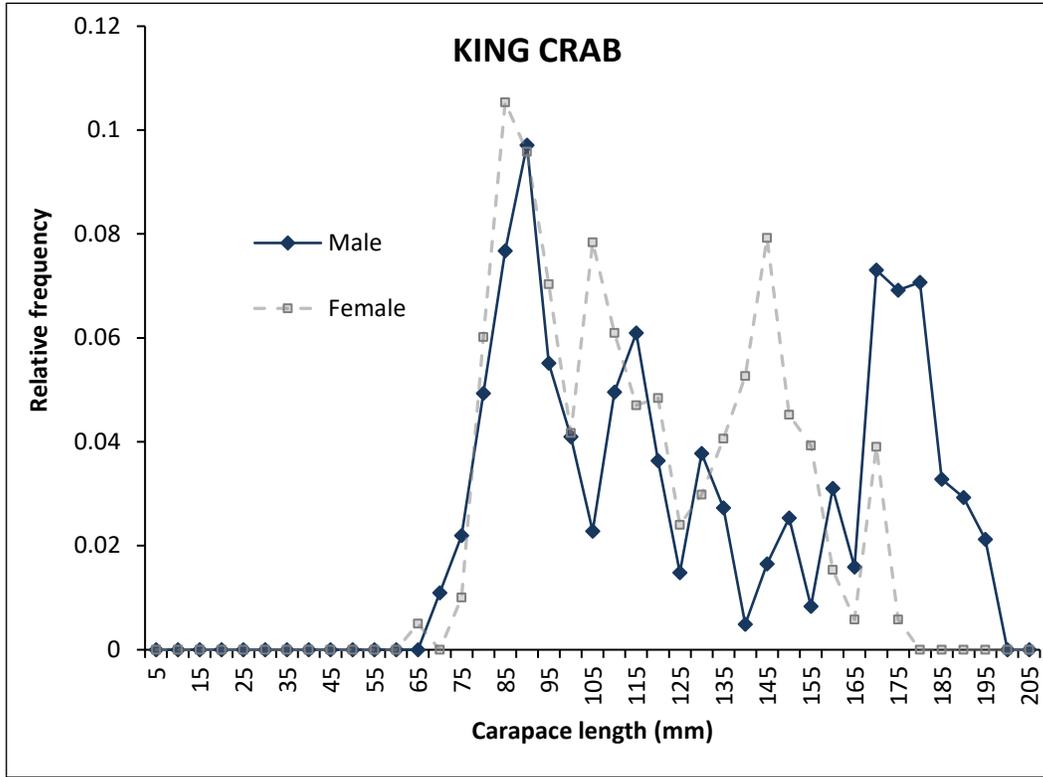


Figure 14.—Red king crab relative size frequency by sex from the Kodiak Area large-mesh bottom trawl survey, 2021.

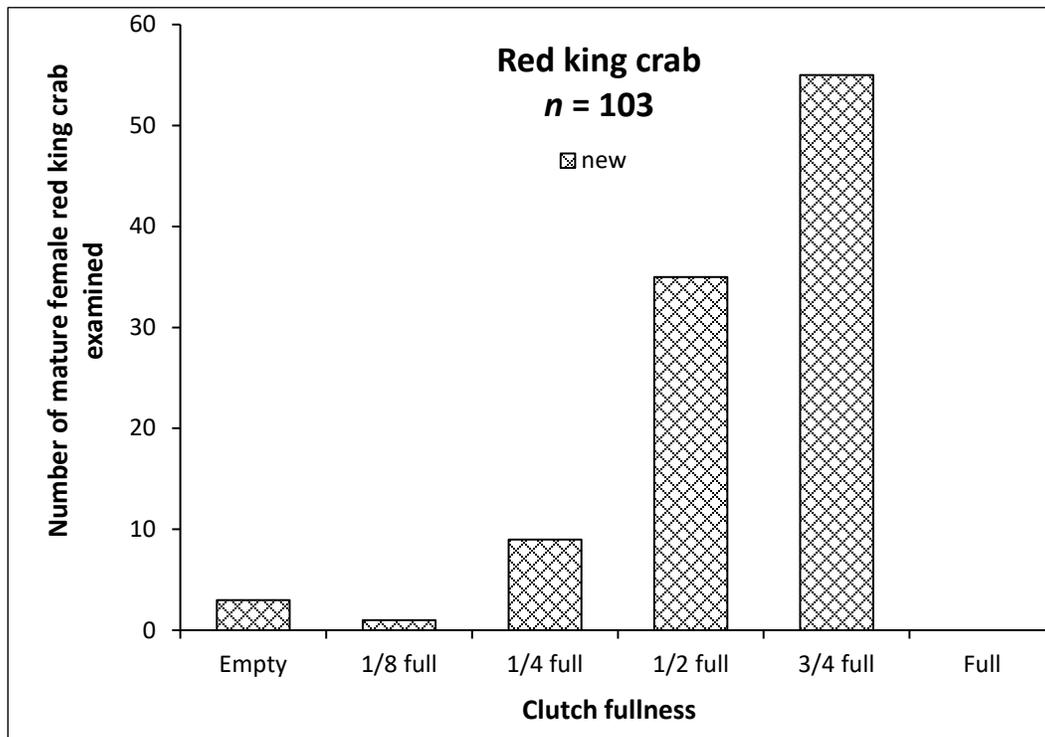


Figure 15.—Red king crab mature female egg clutch fullness by shell condition in the Kodiak Area large-mesh bottom trawl survey, 2021.

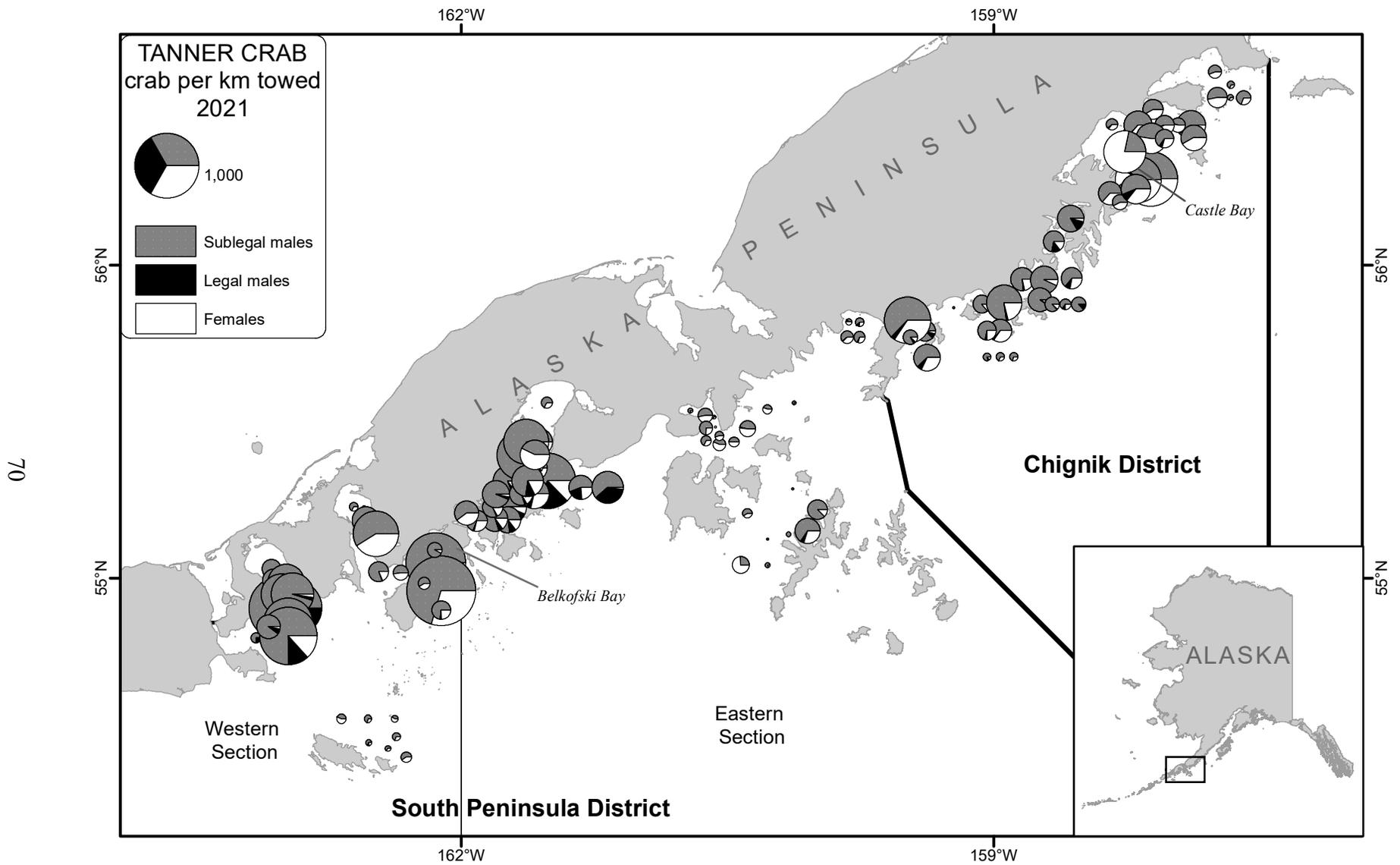


Figure 16.—Number of Tanner crab per kilometer towed in the 2021 South Peninsula and Chignik Districts large-mesh bottom trawl survey.

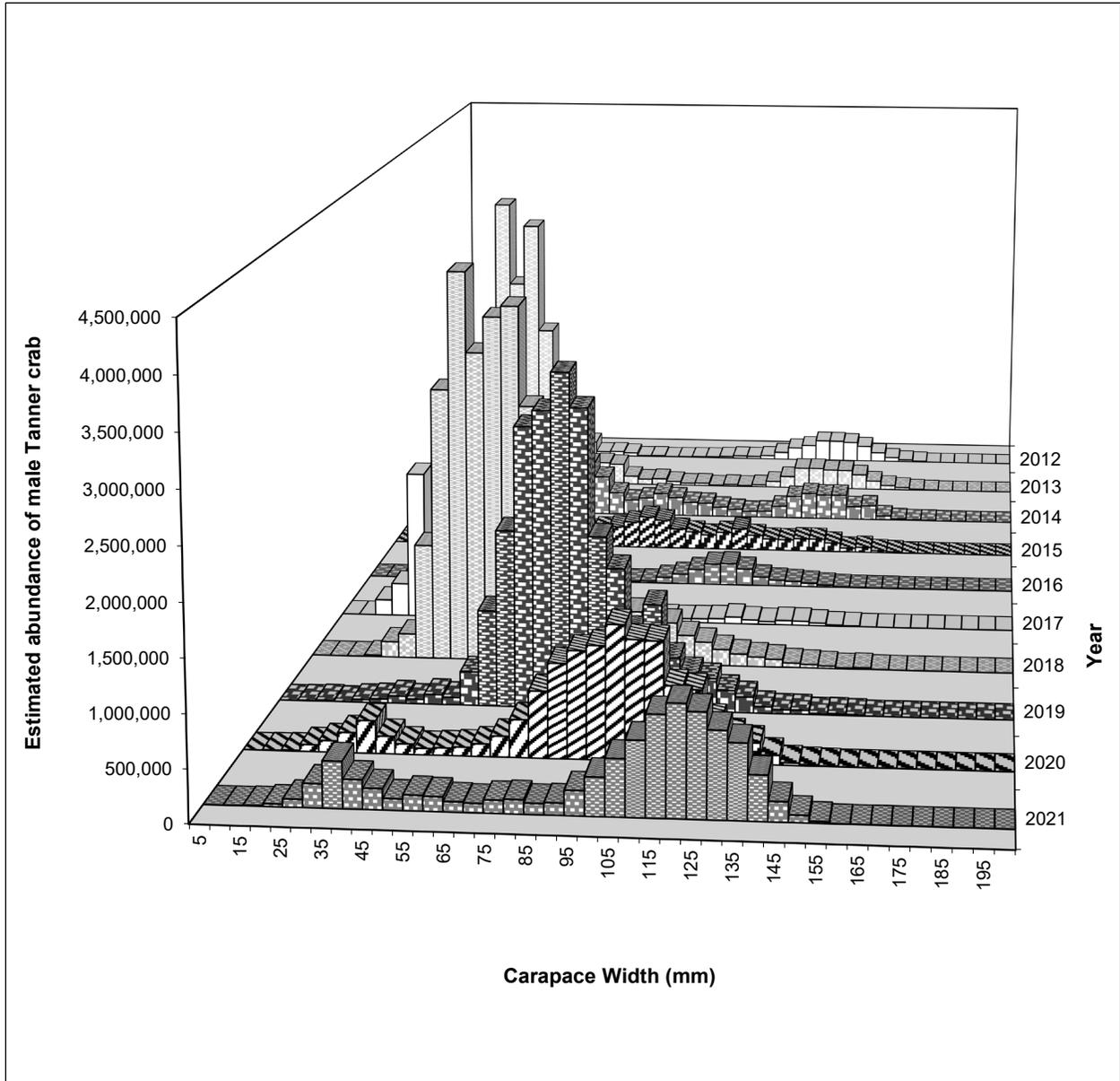


Figure 17.—Tanner crab male abundance estimate by carapace width in the Chignik District large-mesh bottom trawl surveys, 2012–2021.

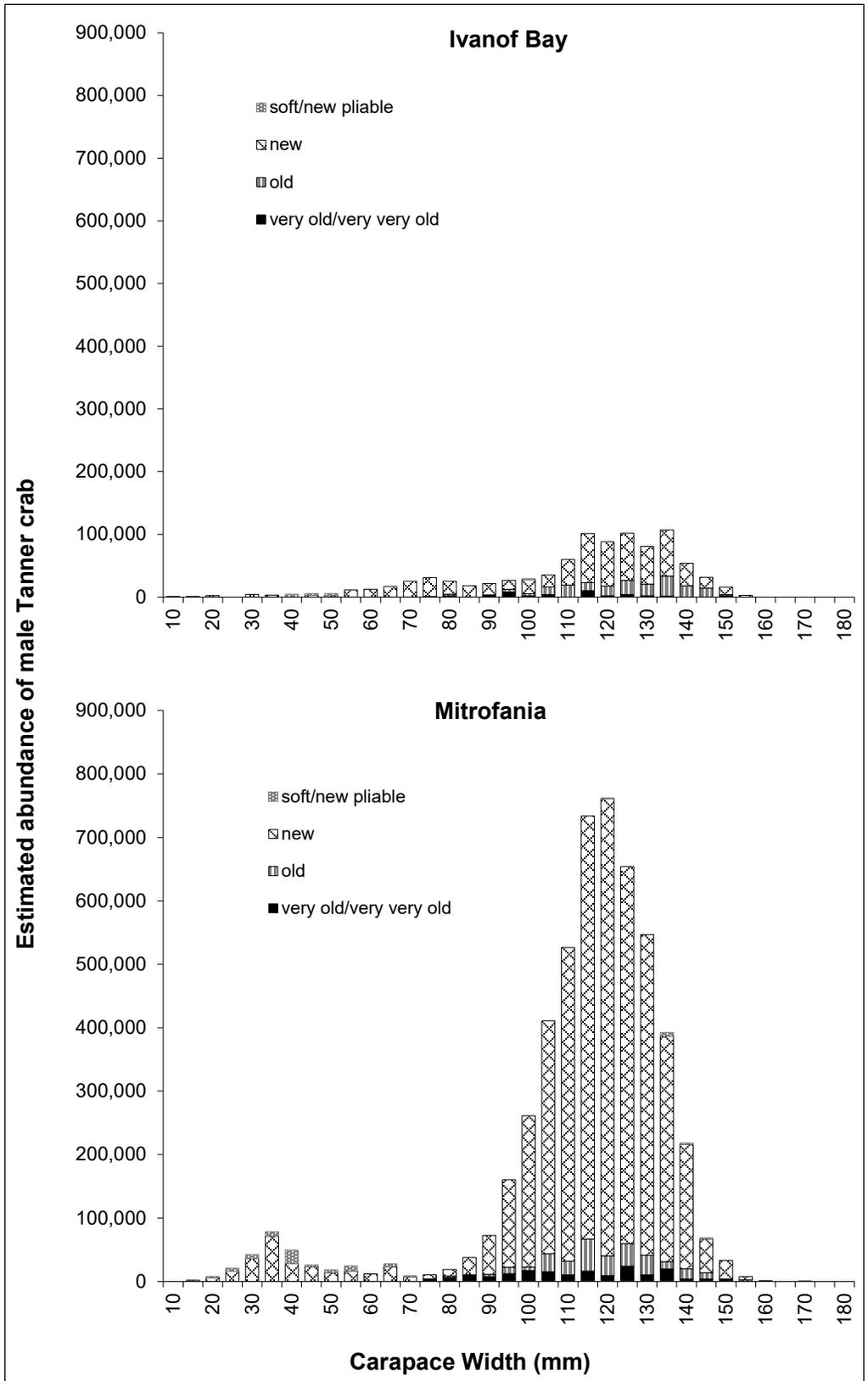


Figure 18.—Tanner crab male abundance estimate by carapace width and shell condition from Ivanof Bay and Mitrofanía in the 2021 Chignik District large-mesh bottom trawl survey.

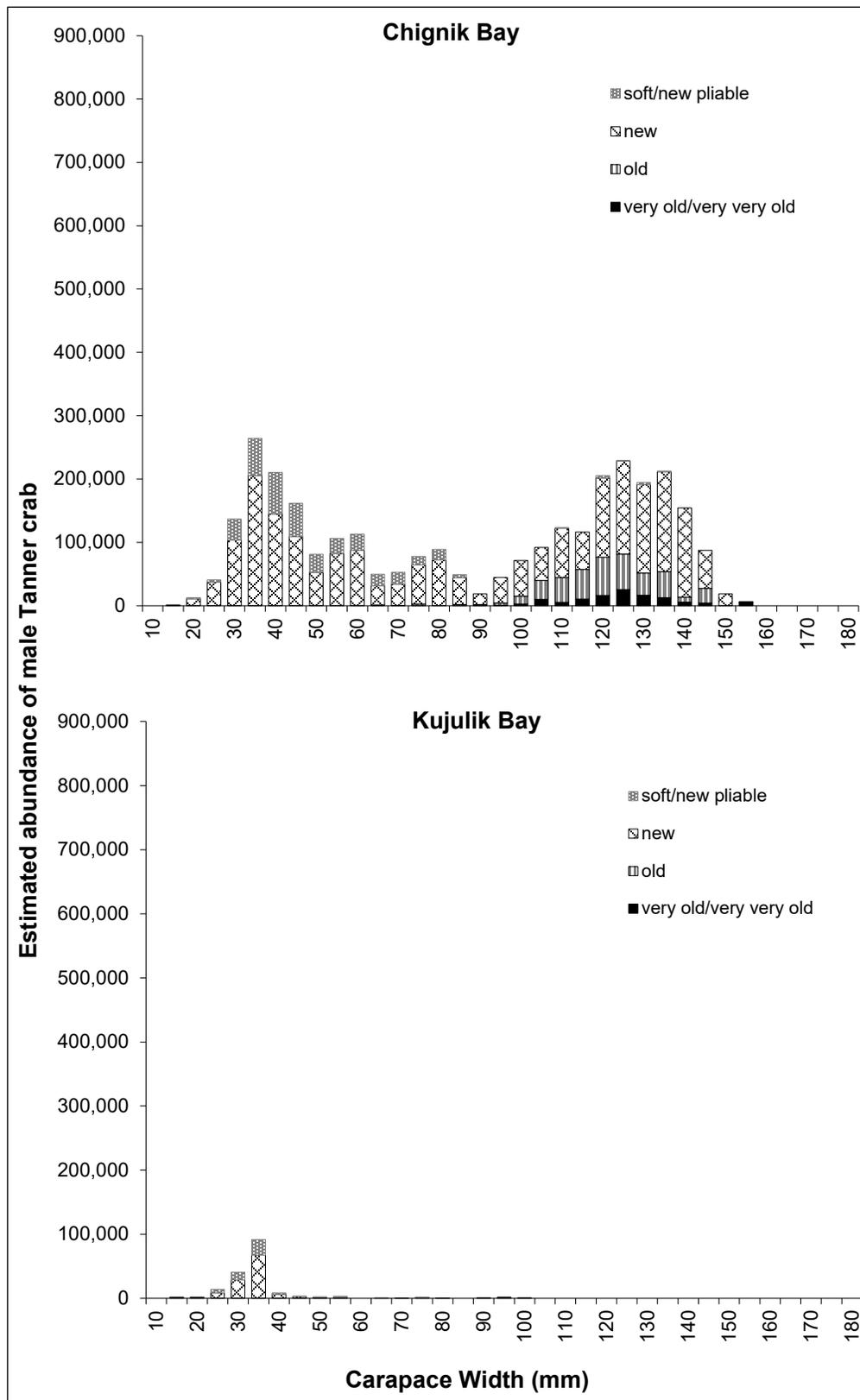


Figure 19.–Tanner crab male abundance estimate by carapace width and shell condition from Chignik Bay and Kujulik Bay in the 2021 Chignik District large-mesh bottom trawl survey.

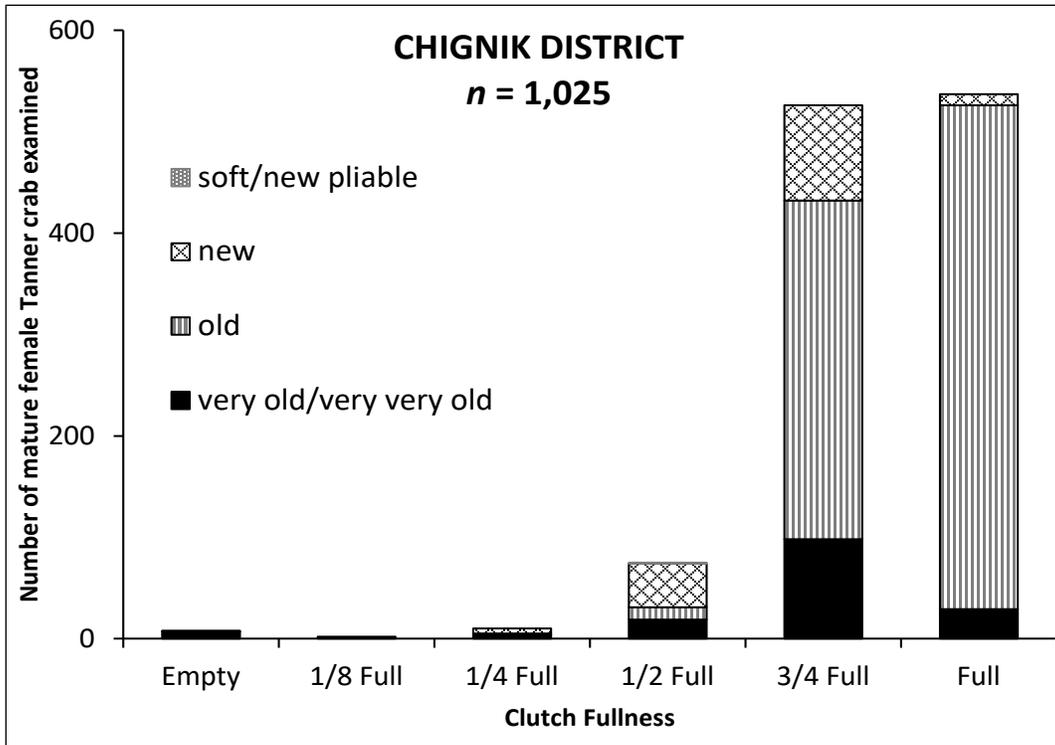


Figure 20.—Tanner crab mature female egg clutch fullness by shell condition in the Chignik District large-mesh bottom trawl survey, 2021.

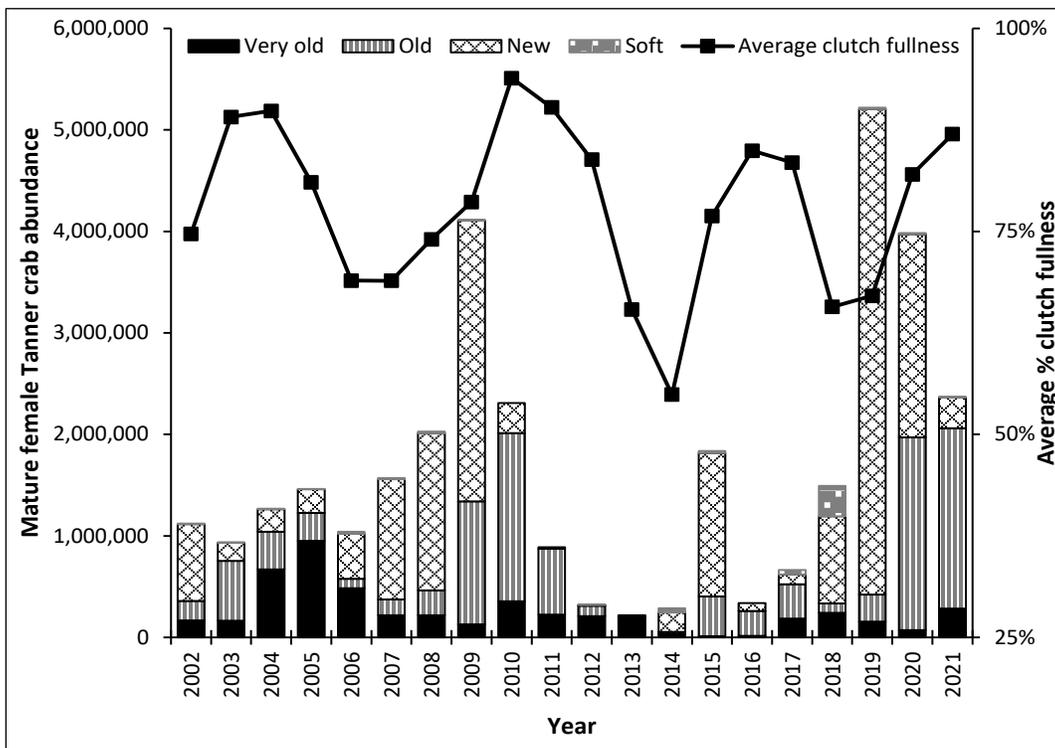


Figure 21.—Tanner crab mature female abundance by shell condition and average clutch fullness for the Chignik District from the 2002–2021 large-mesh bottom trawl surveys.

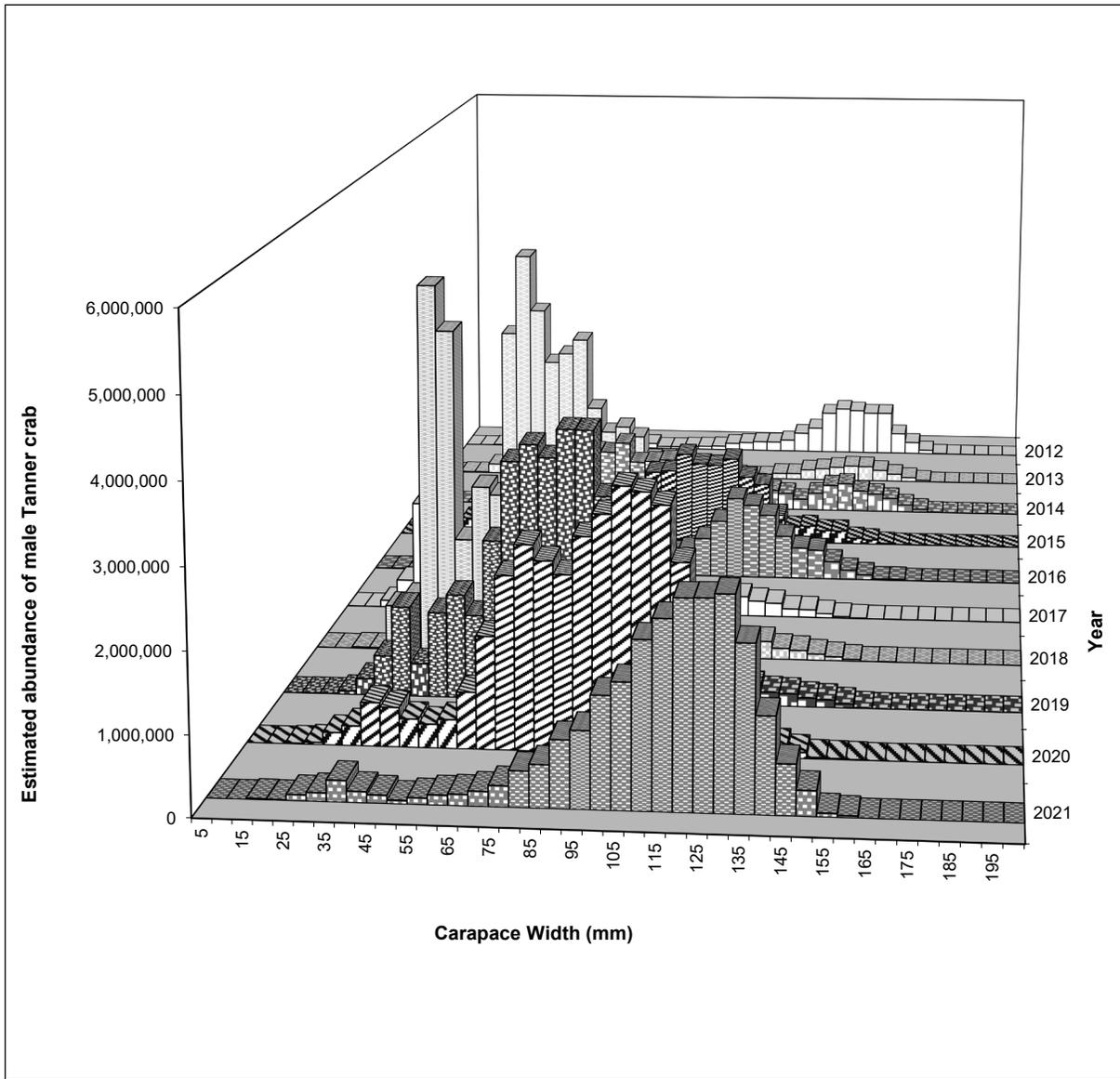


Figure 22.—Tanner crab male abundance estimate by carapace width in the South Peninsula District large-mesh bottom trawl surveys, 2012–2021.

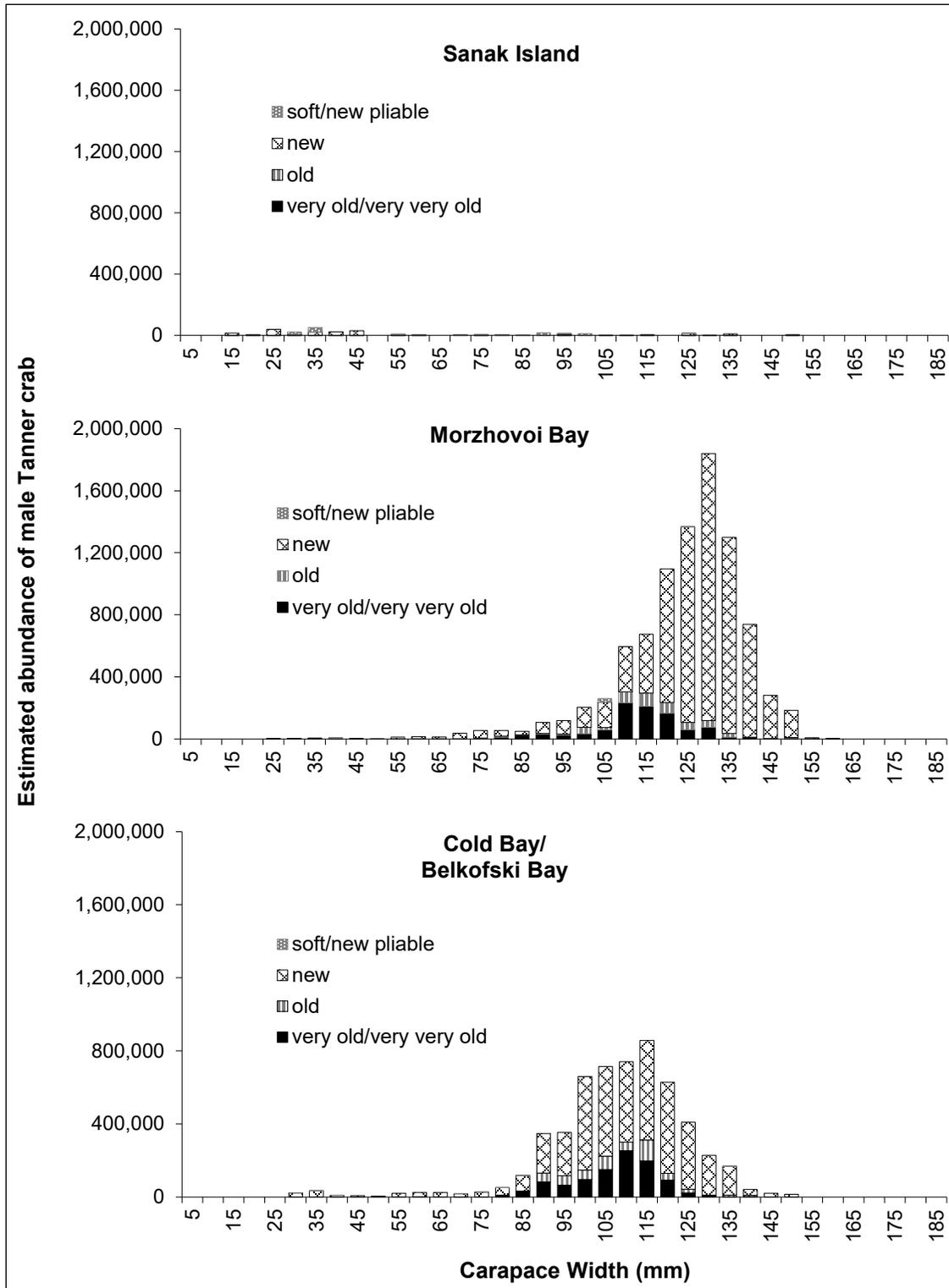


Figure 23.—Tanner crab male abundance estimate by carapace width and shell condition from Sanak Island, Morzhovoi Bay, and Cold Bay/Belkofski Bay in the Western Section of the 2021 South Peninsula District large-mesh bottom trawl survey.

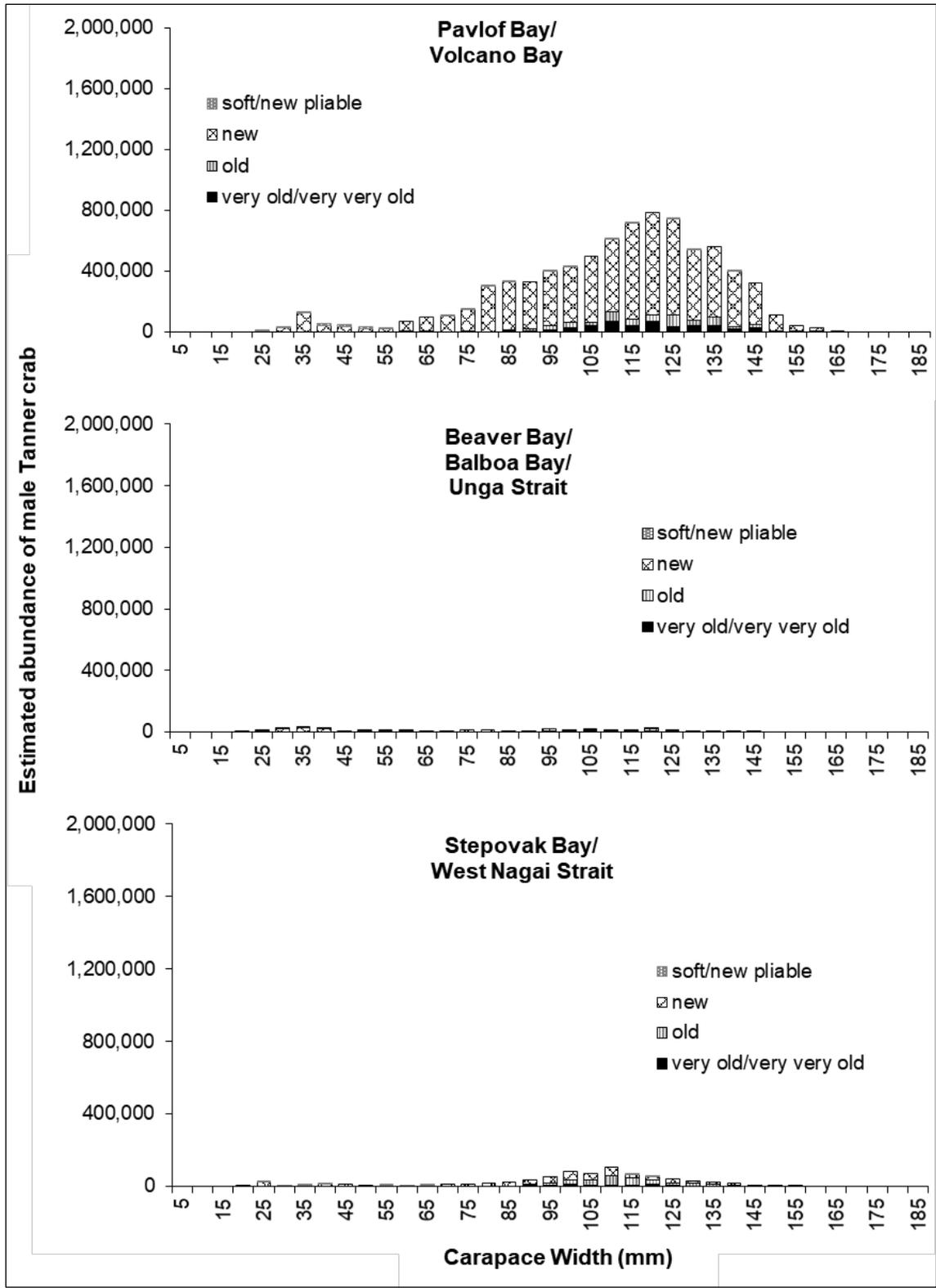


Figure 24.—Tanner crab male abundance estimate by carapace width and shell condition from Pavlof Bay/Volcano Bay, Beaver Bay/Balboa Bay/Unga Strait, and Stepovak Bay/West Nagai Strait in the Eastern Section of the 2021 South Peninsula District large-mesh bottom trawl survey.

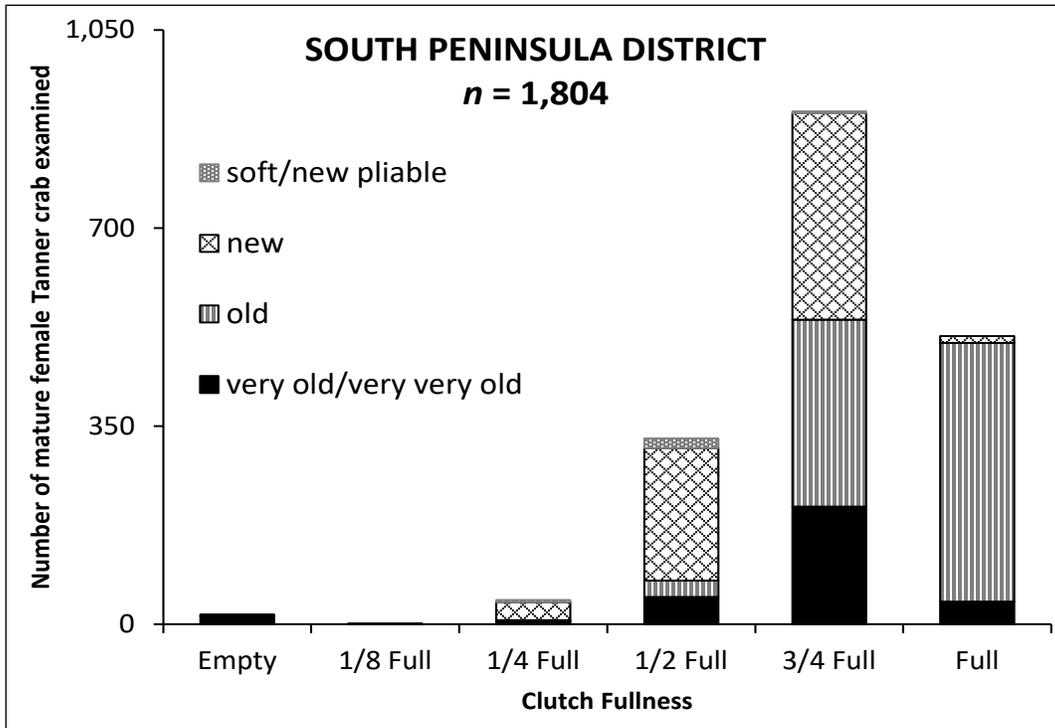


Figure 25.—Tanner crab mature female egg clutch fullness by shell condition in the South Peninsula District large-mesh bottom trawl survey, 2021.

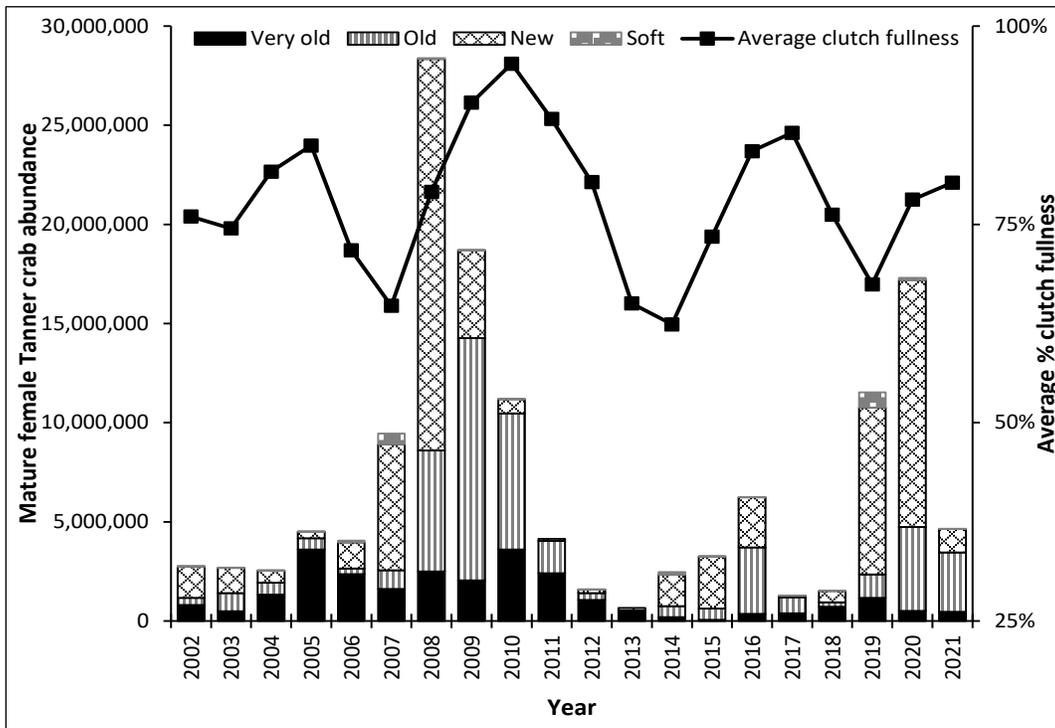


Figure 26.—Tanner crab mature female abundance by shell condition and average clutch fullness for the South Peninsula District from the 2002–2021 large-mesh bottom trawl surveys.

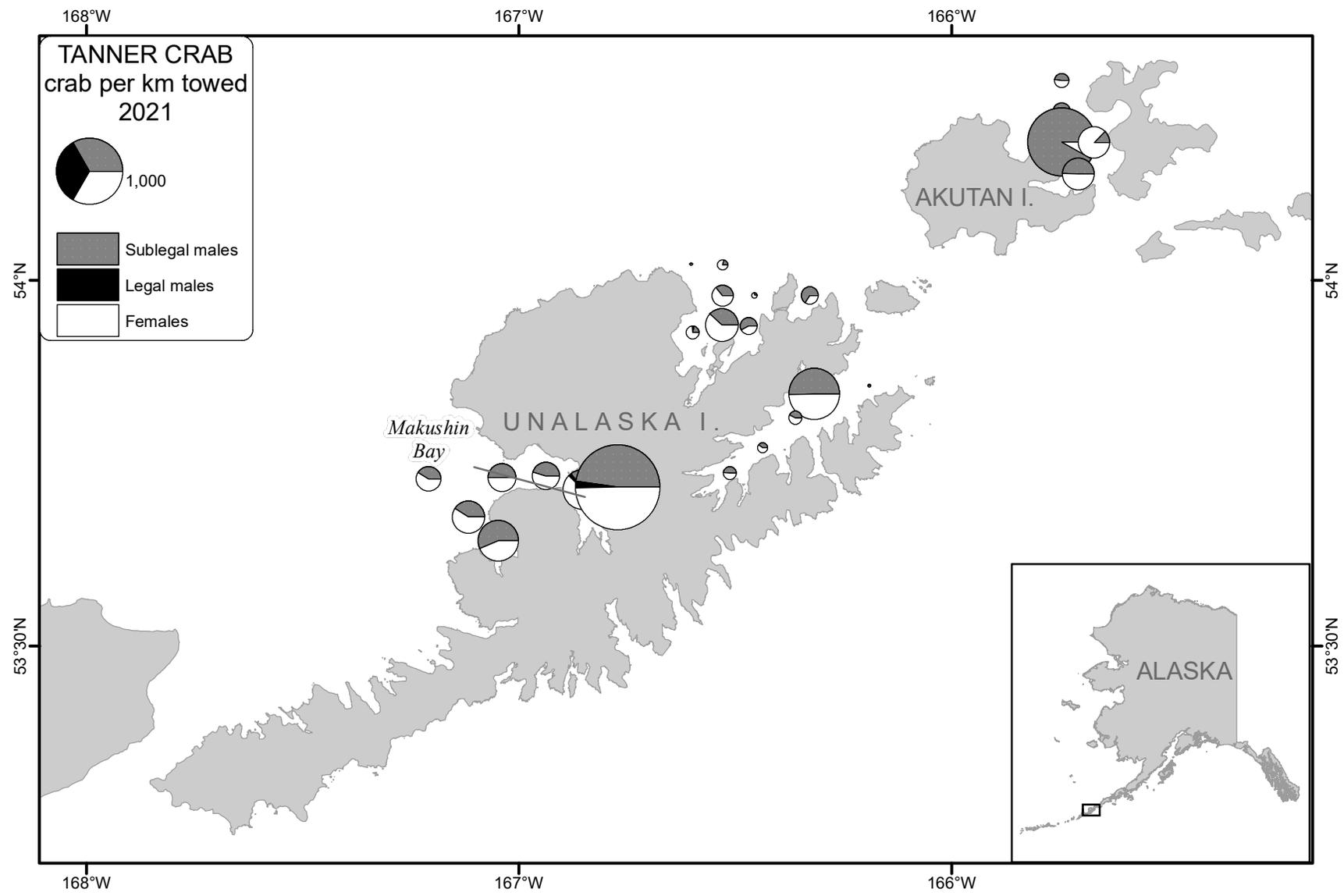


Figure 27.—Number of Tanner crab per kilometer towed in the 2021 Eastern Aleutian District large-mesh trawl survey.

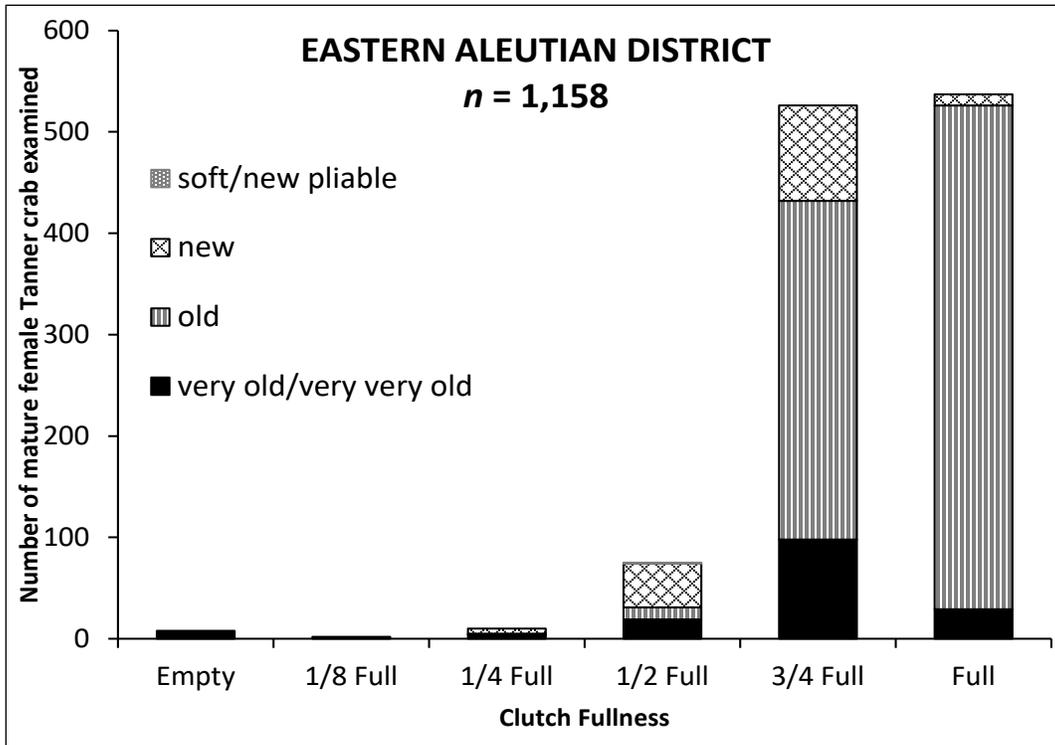


Figure 28.—Tanner crab mature female egg clutch fullness by shell condition in the Eastern Aleutian District large-mesh bottom trawl survey, 2021.

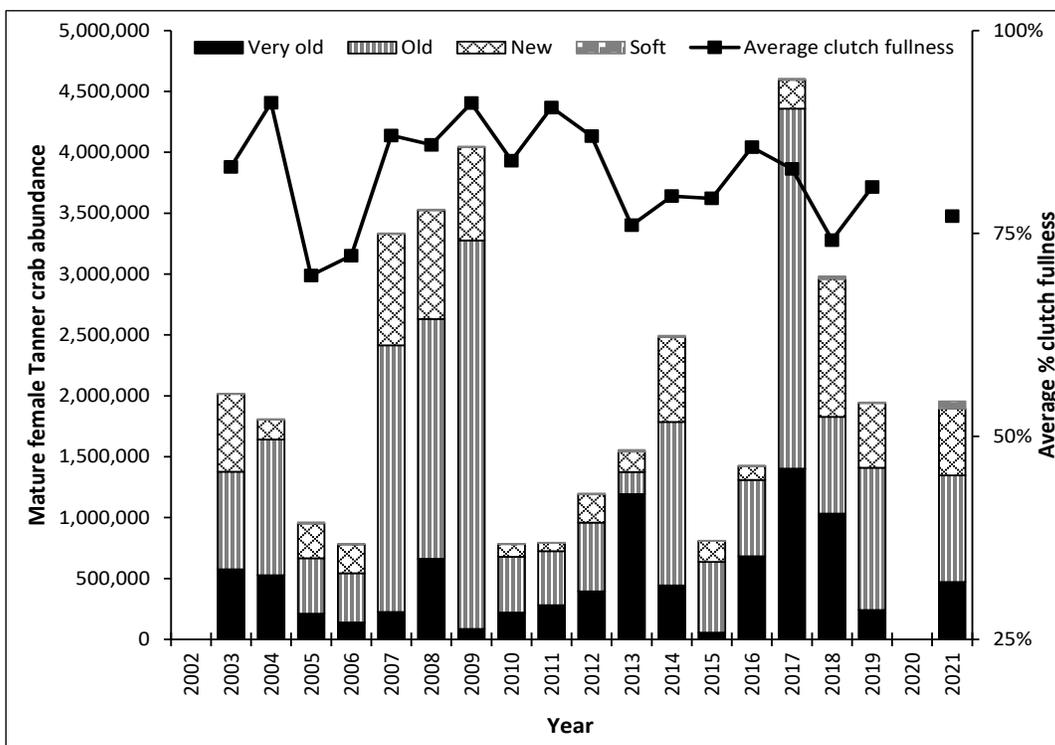


Figure 29.—Tanner crab mature female abundance by shell condition and average clutch fullness for the Eastern Aleutian District from the 2002–2021 large-mesh bottom trawl surveys.

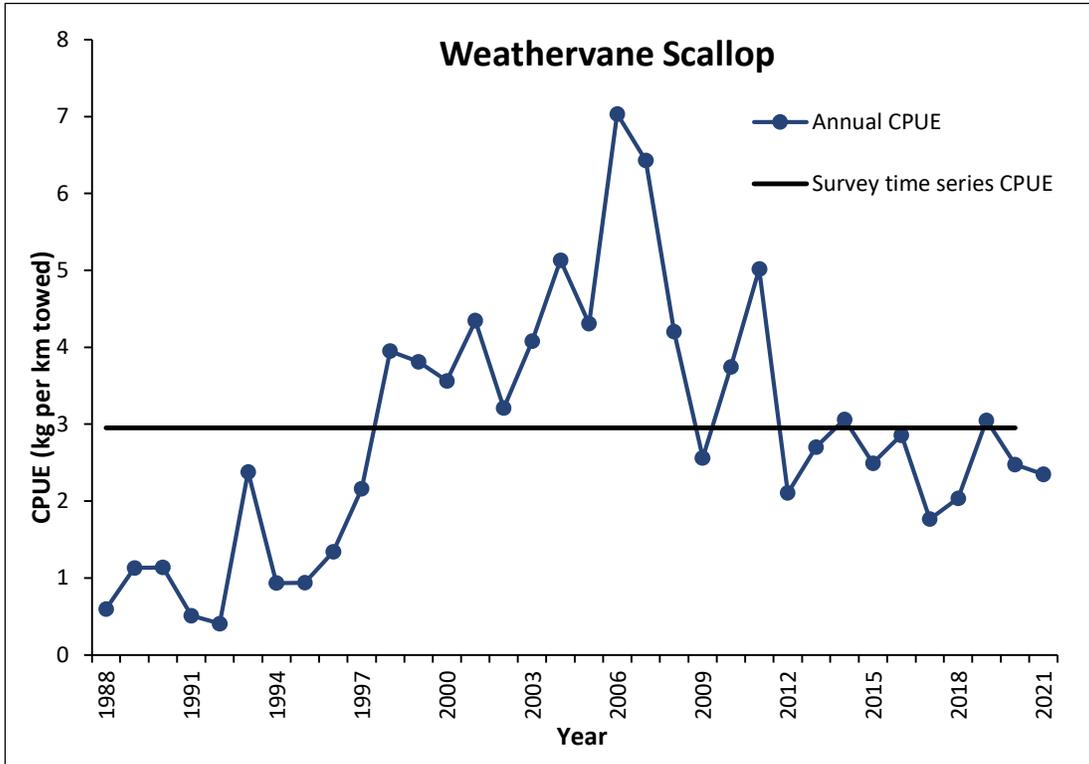


Figure 30.—Weathervane scallop annual CPUE in kilograms per kilometer towed from the 1988–2021 large-mesh bottom trawl surveys.

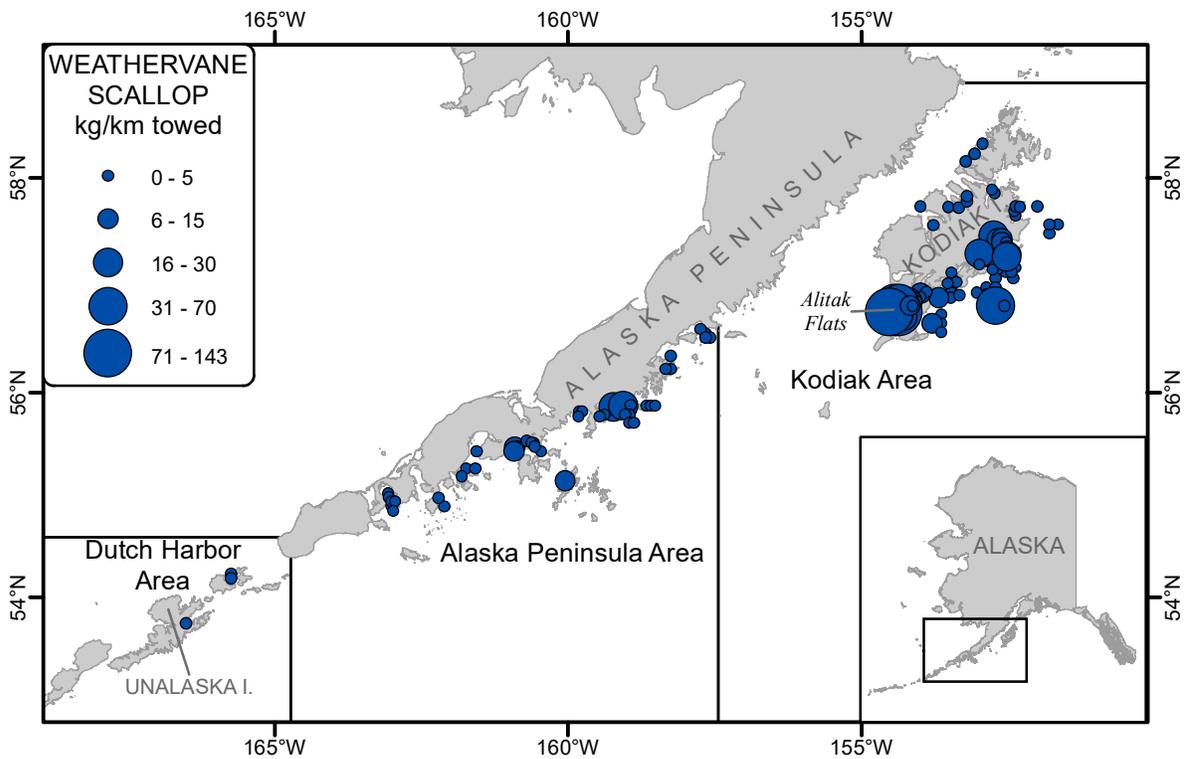


Figure 31.—Weathervane scallop station CPUE in kilograms per kilometer towed from the 2021 large-mesh bottom trawl survey.

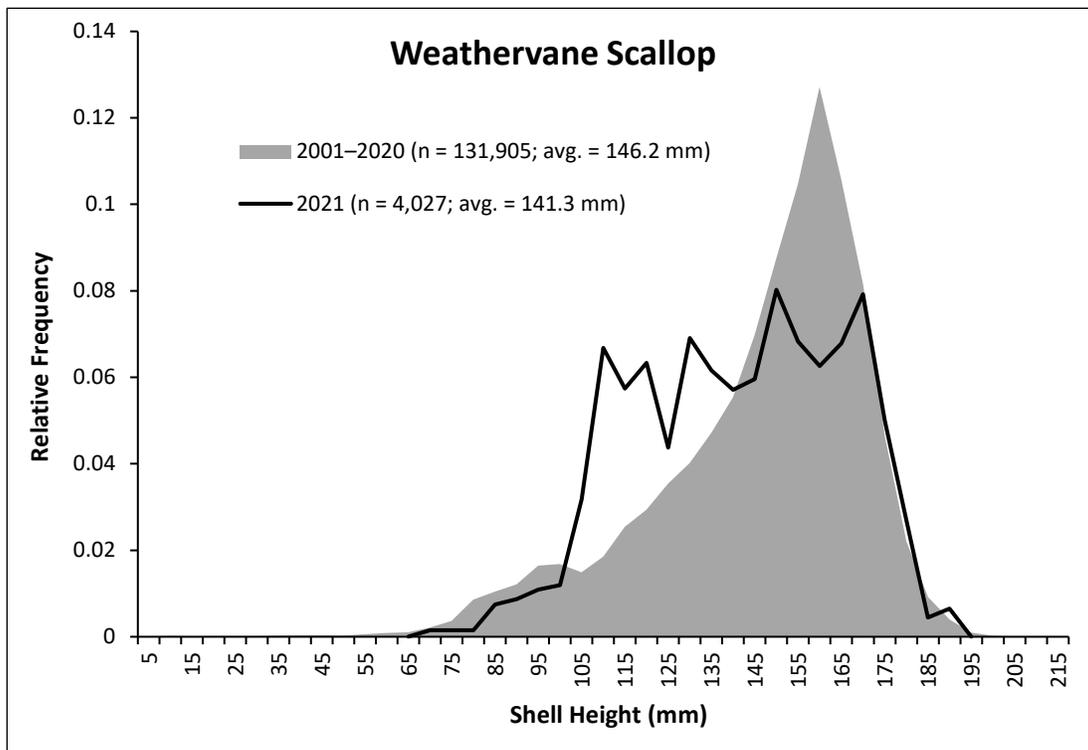


Figure 32.—Weathervane scallop shell height frequency from the large-mesh bottom trawl surveys, 2001–2021.

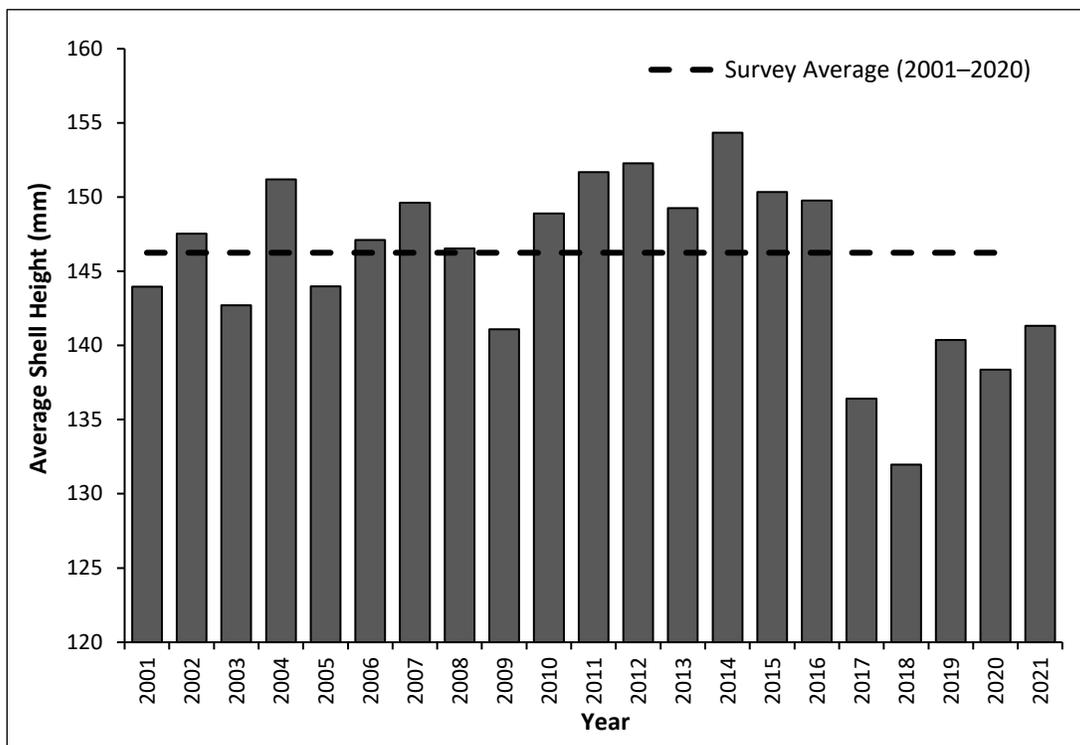


Figure 33.—Average weathervane scallop shell height from scallops caught on the large-mesh bottom trawl surveys, 2001–2021.

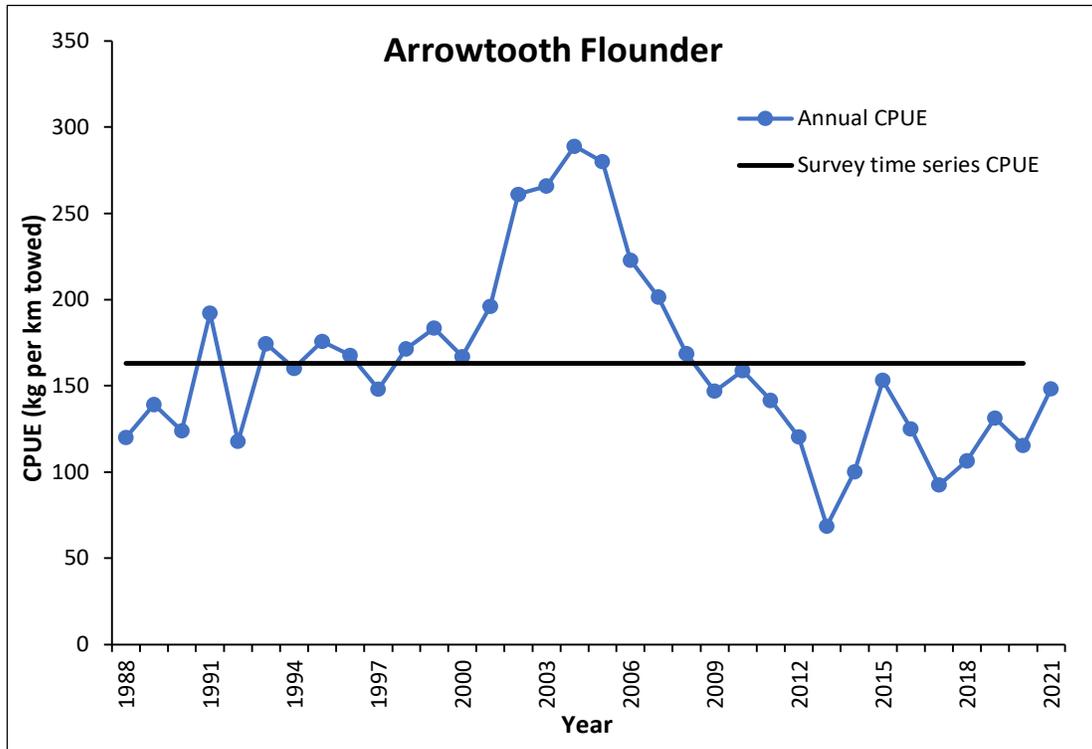


Figure 34.—Arrowtooth flounder annual CPUE in kilograms per kilometer towed from the 1988–2021 large-mesh bottom trawl surveys.

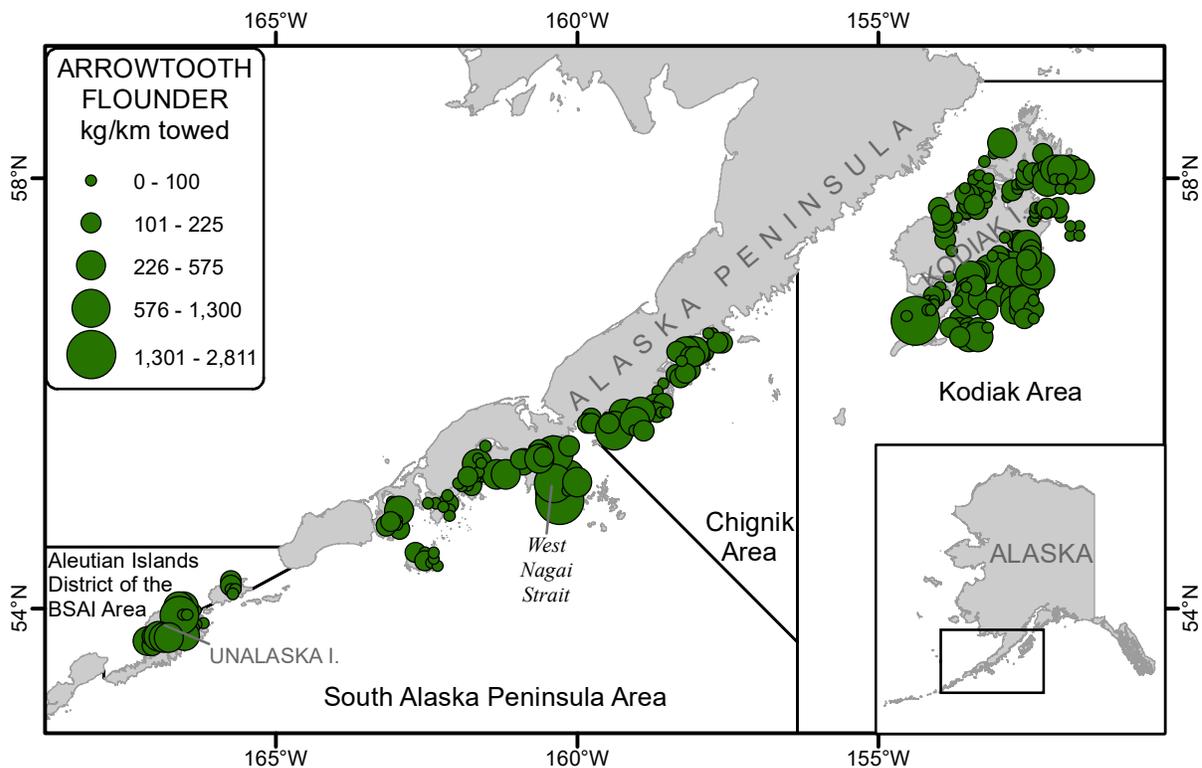


Figure 35.—Arrowtooth flounder station CPUE in kilograms per kilometer towed from the 2021 large-mesh bottom trawl survey.

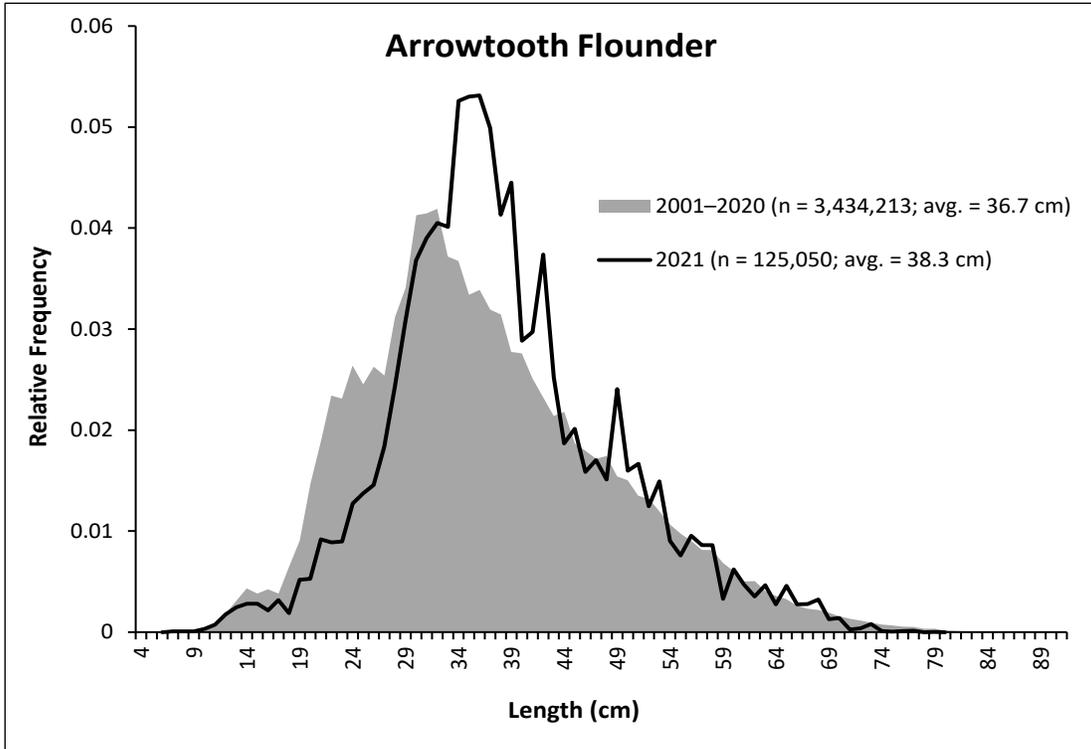


Figure 36.—Arrowtooth flounder length frequency from the large-mesh bottom trawl surveys, 2001–2021.

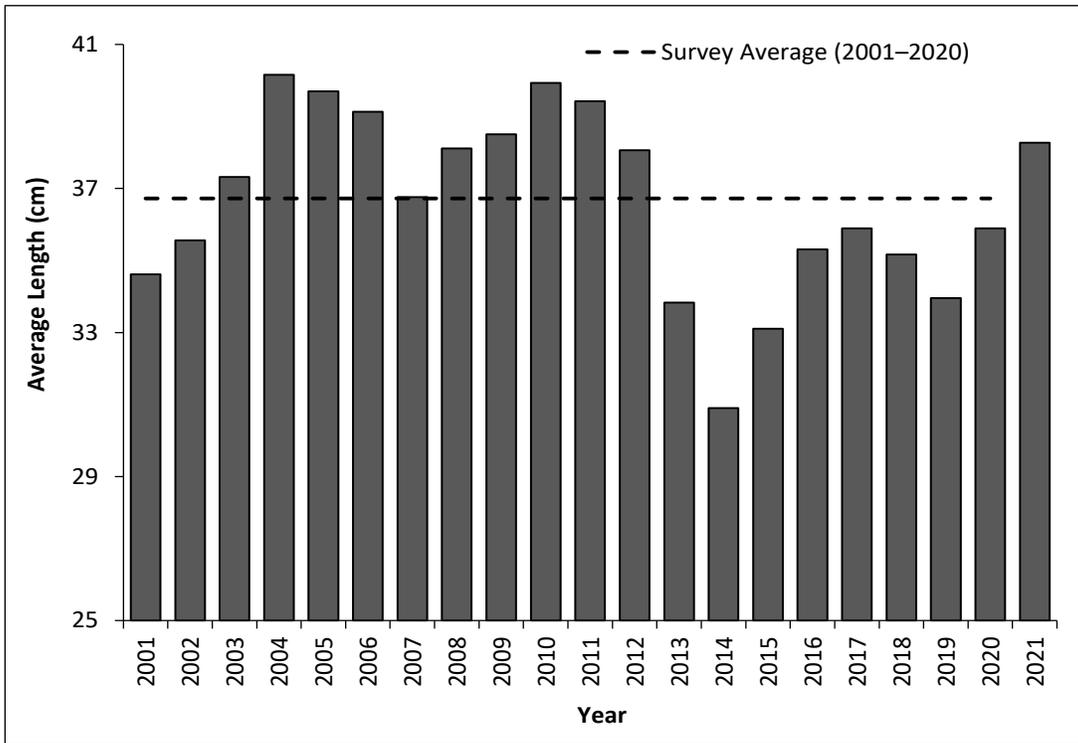


Figure 37.—Average arrowtooth flounder length from fish caught on the large-mesh bottom trawl surveys, 2001–2021.

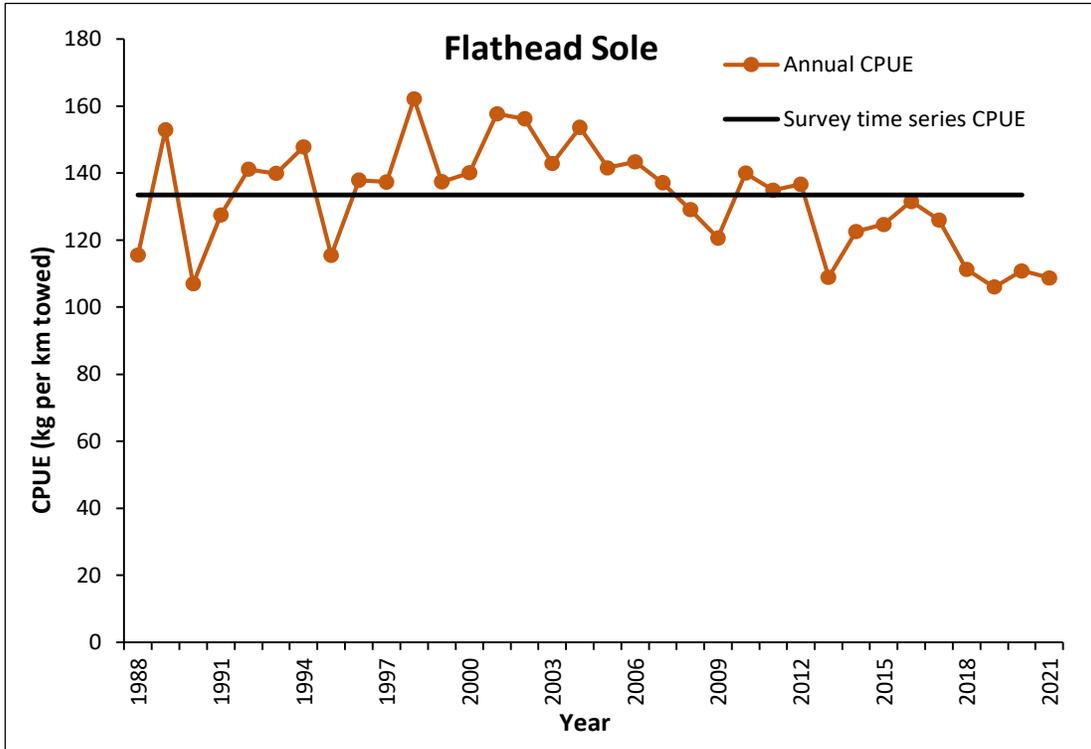


Figure 38.—Flathead sole annual CPUE in kilograms per kilometer towed from the 1988–2021 large-mesh bottom trawl surveys.

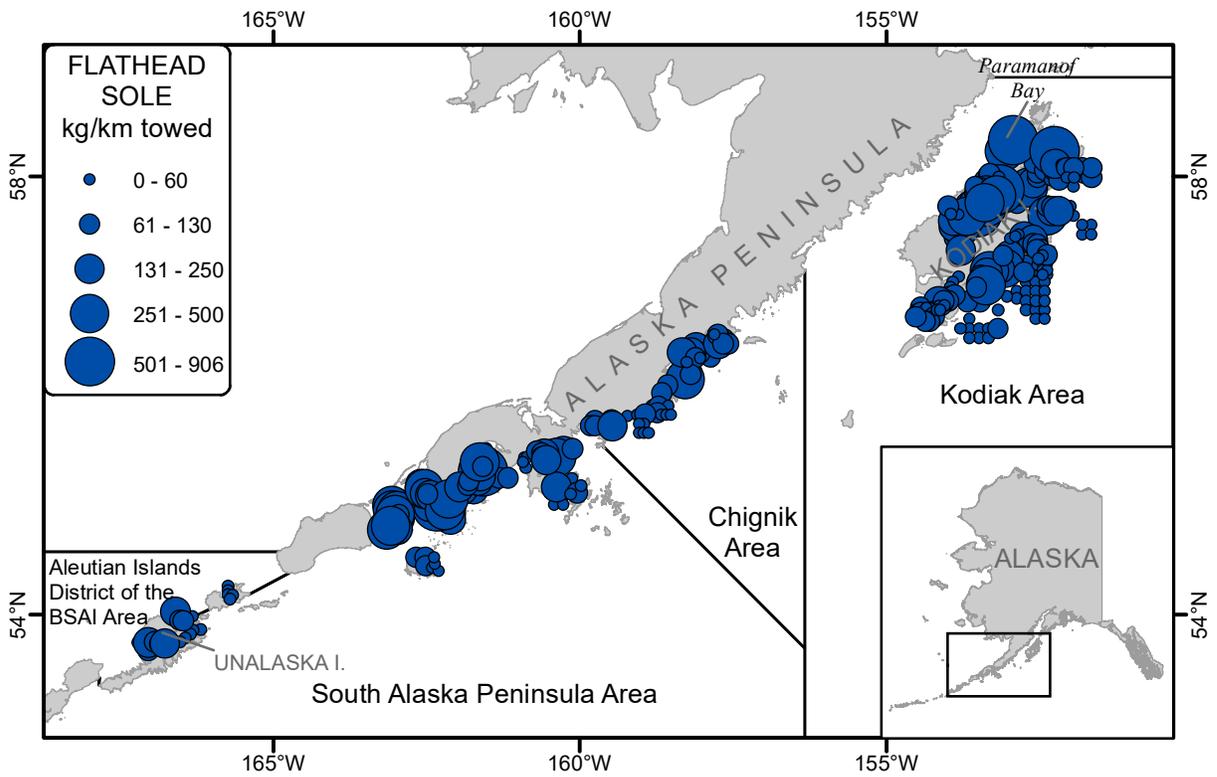


Figure 39.—Flathead sole station CPUE in kilograms per kilometer towed from the 2021 large-mesh bottom trawl survey.

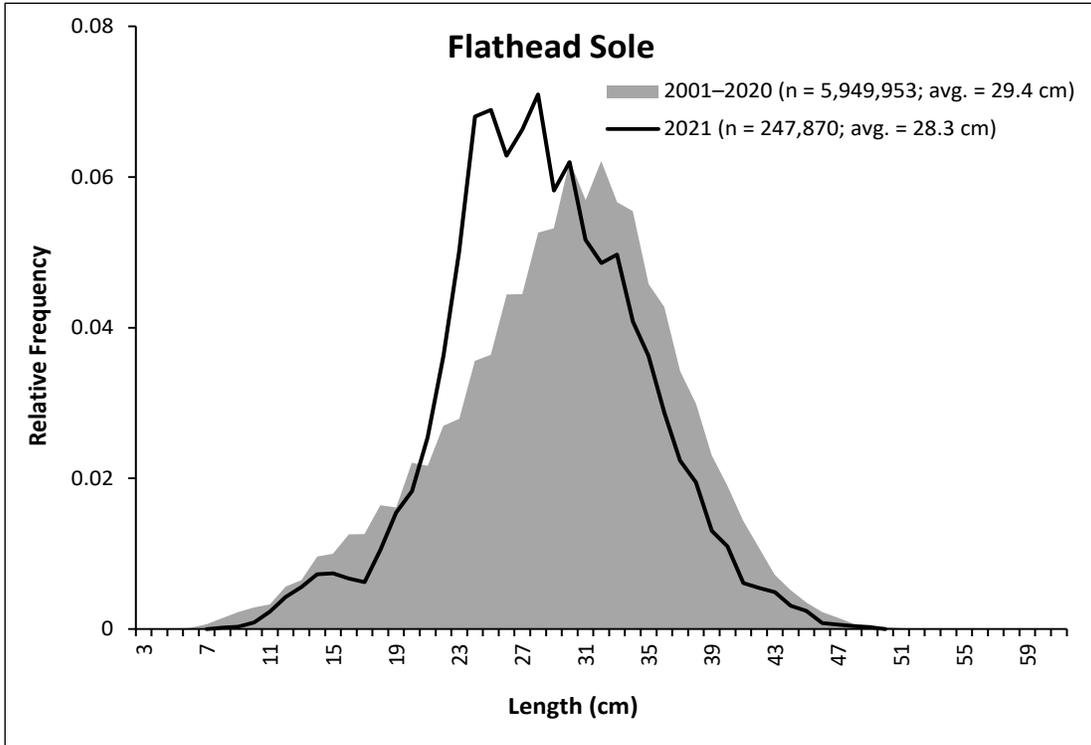


Figure 40.—Flathead sole length frequency from the large-mesh bottom trawl surveys, 2001–2021.

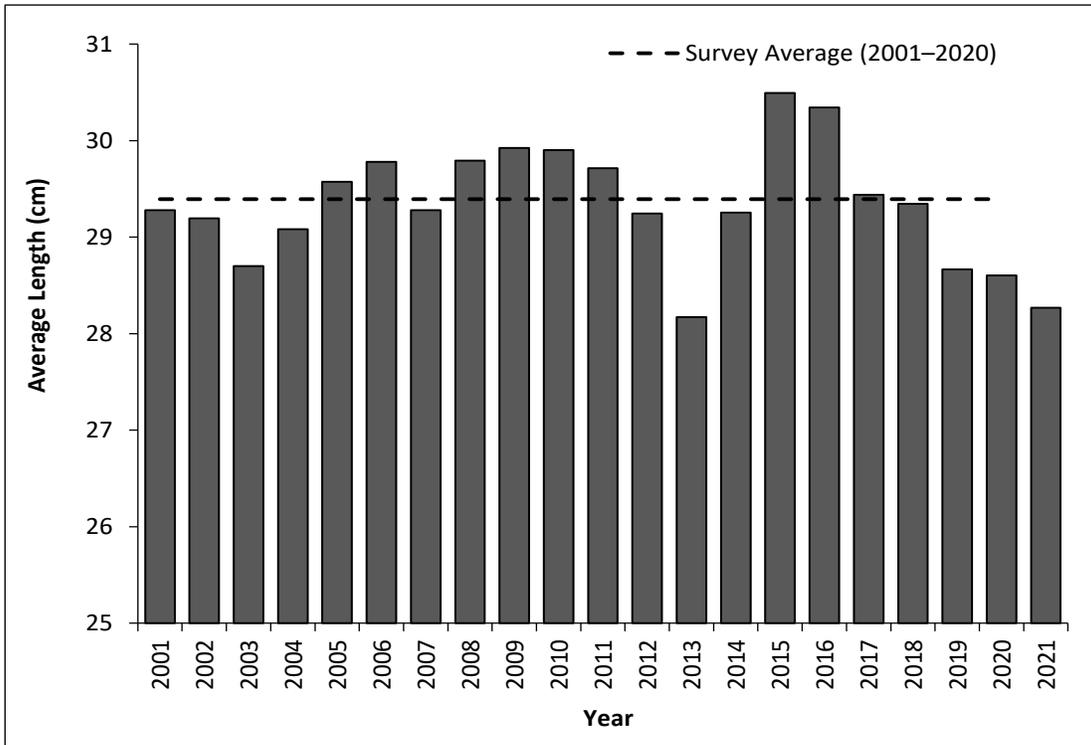


Figure 41.—Average flathead sole length from fish caught on the large-mesh bottom trawl surveys, 2001–2021.

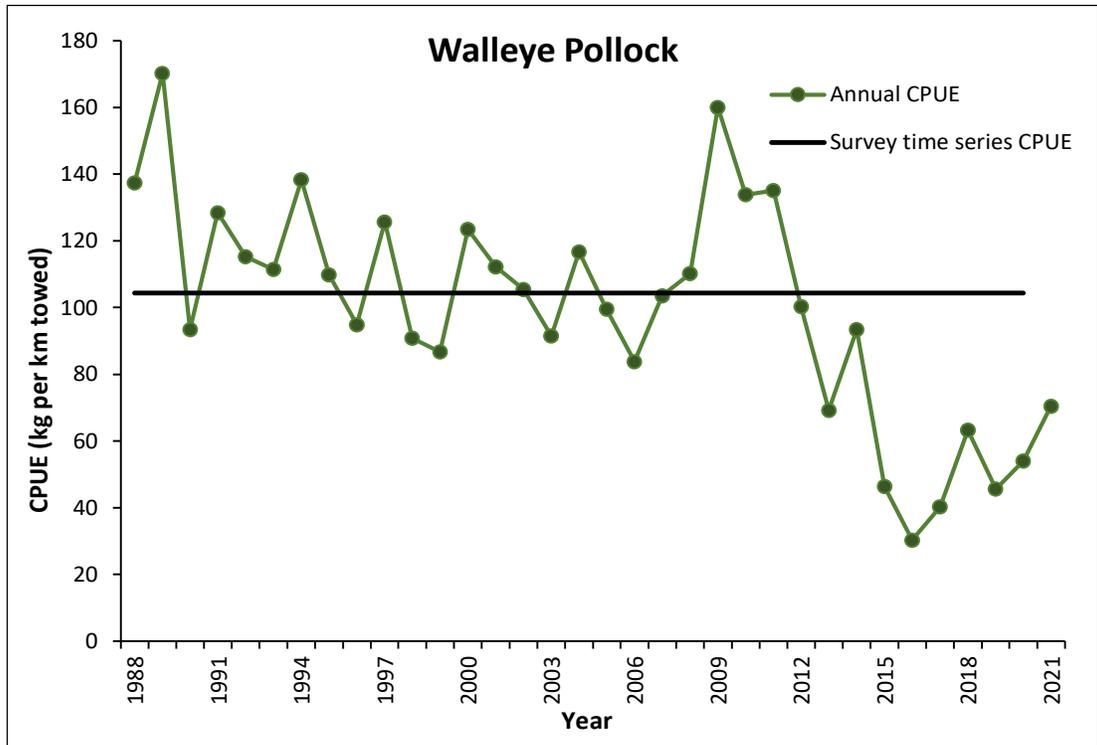


Figure 42.—Walleye pollock annual CPUE in kilograms per kilometer towed from the 1988–2021 large-mesh bottom trawl surveys.

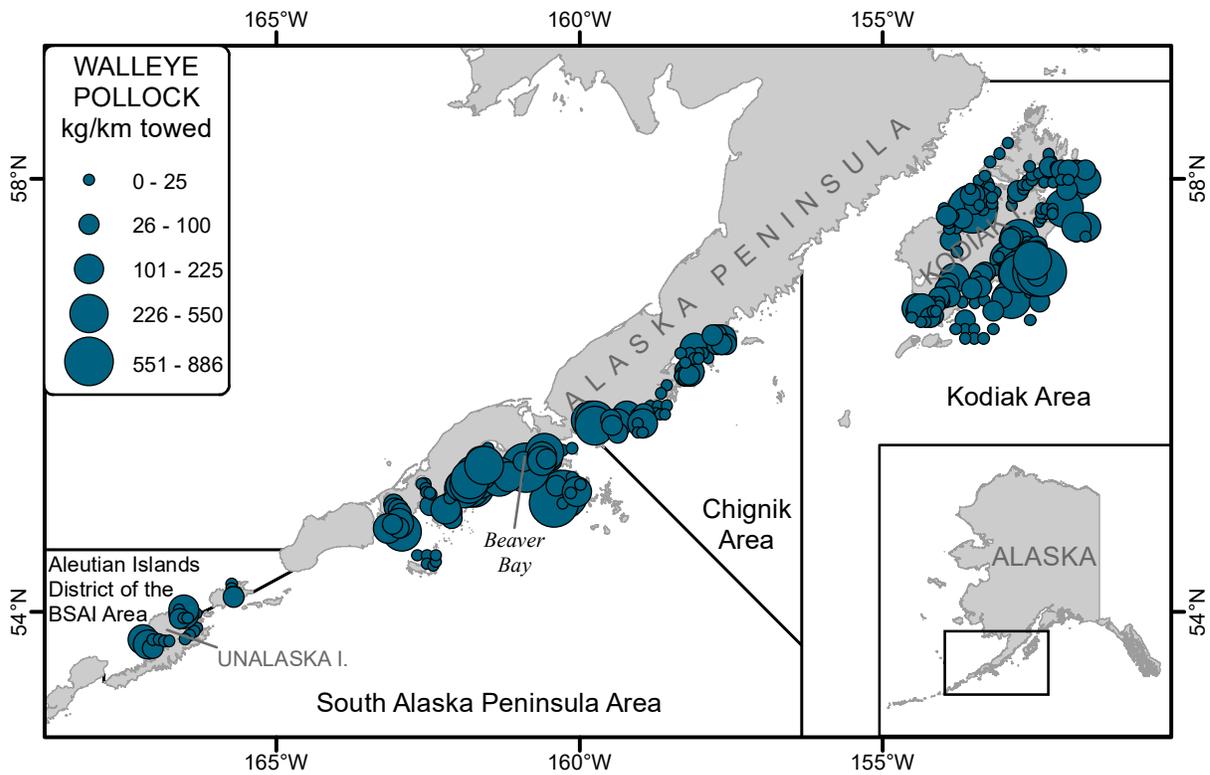


Figure 43.—Walleye pollock station CPUE in kilograms per kilometer towed from the 2021 large-mesh bottom trawl survey.

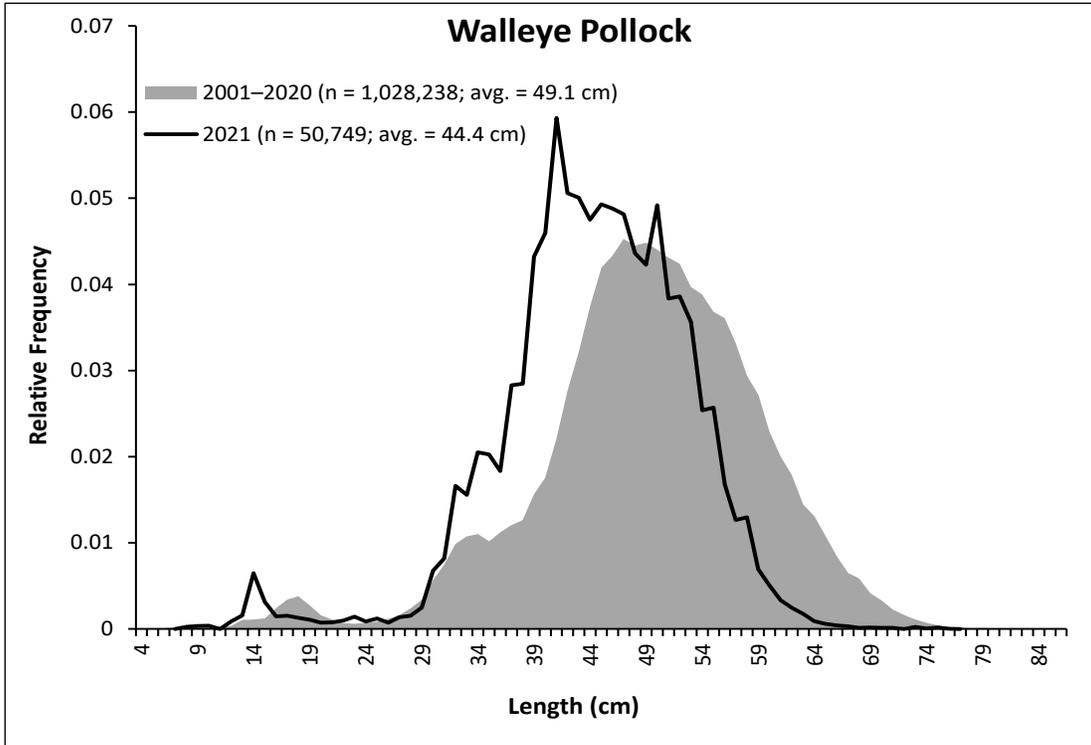


Figure 44.—Walleye pollock length frequency from the large-mesh bottom trawl surveys, 2001–2021.

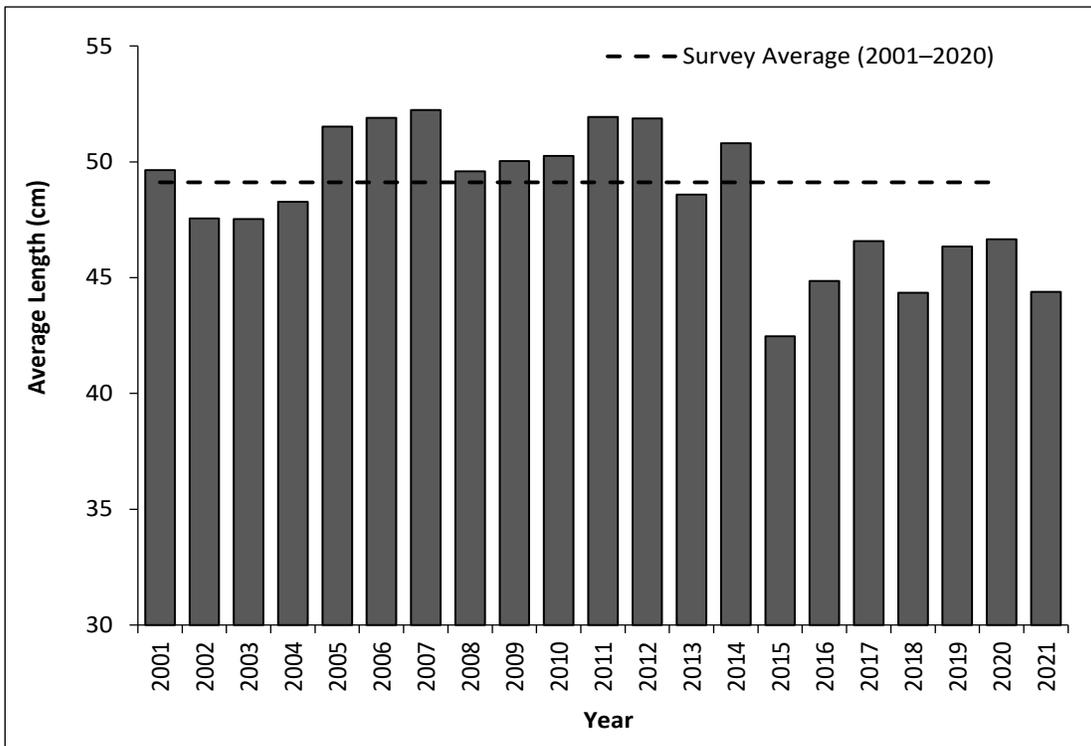


Figure 45.—Average walleye pollock length from fish caught on the large-mesh bottom trawl surveys, 2001–2021.

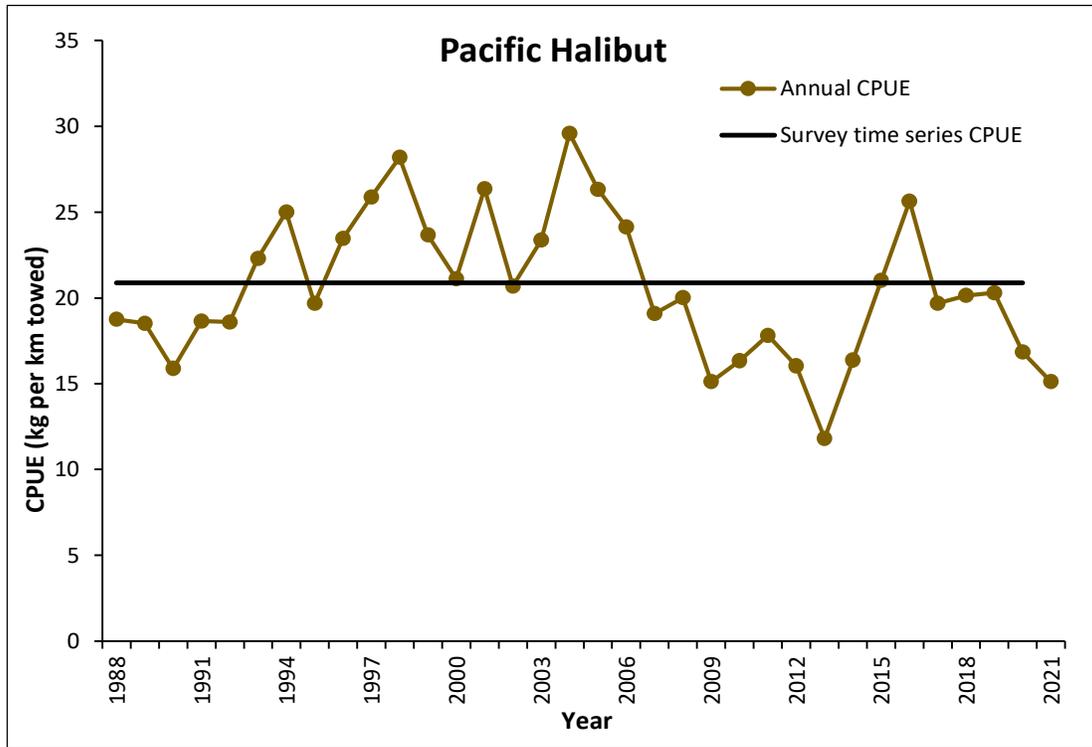


Figure 46.—Pacific halibut annual CPUE in kilograms per kilometer towed from the 1988–2021 large-mesh bottom trawl surveys.

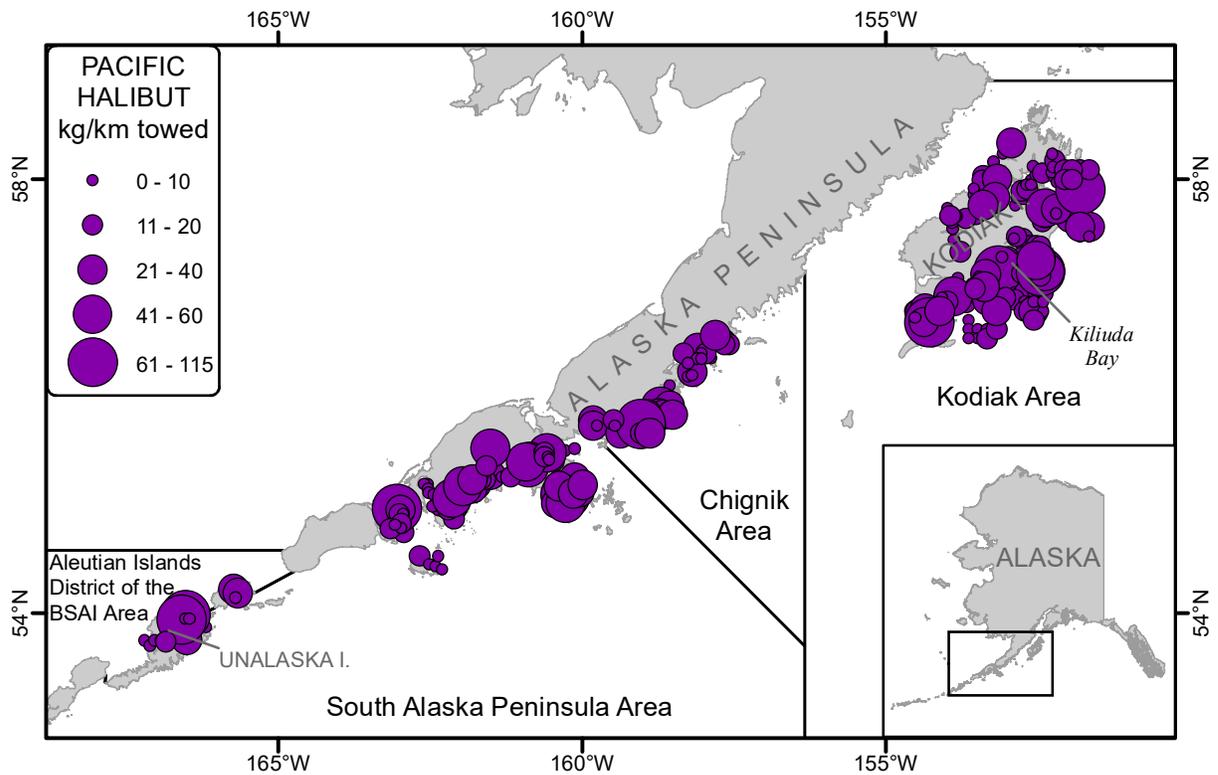


Figure 47.—Pacific halibut station CPUE in kilograms per kilometer towed from the 2021 large-mesh bottom trawl survey.

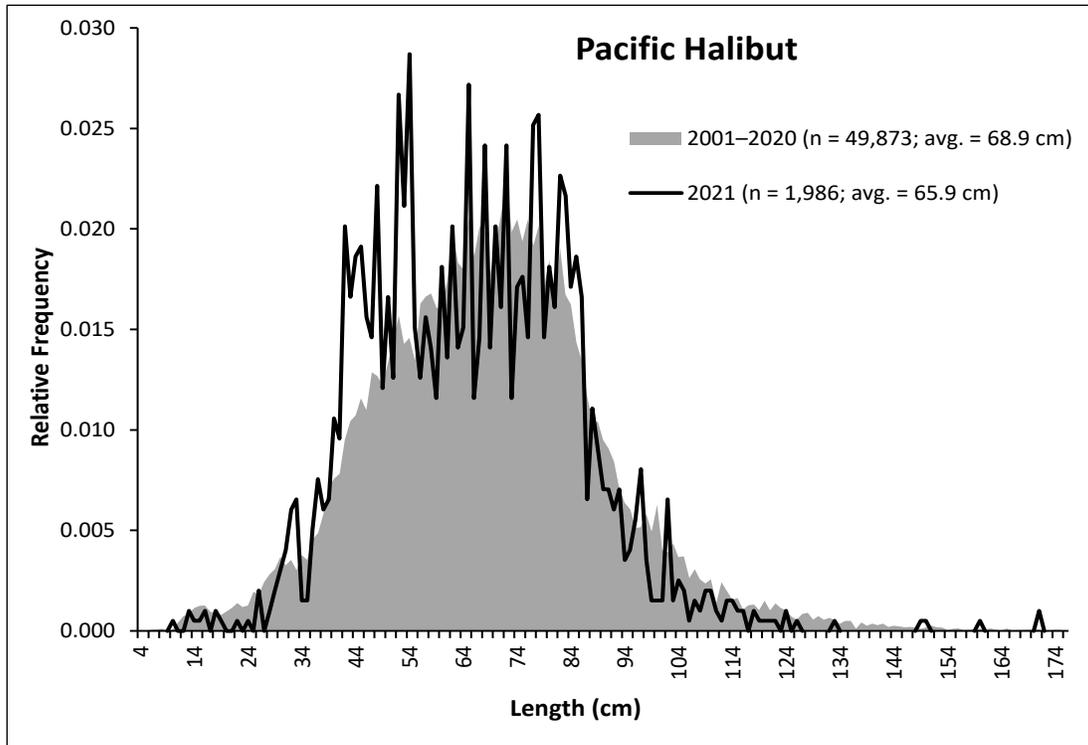


Figure 48.—Pacific halibut length frequency from the large-mesh bottom trawl surveys, 2001–2021.

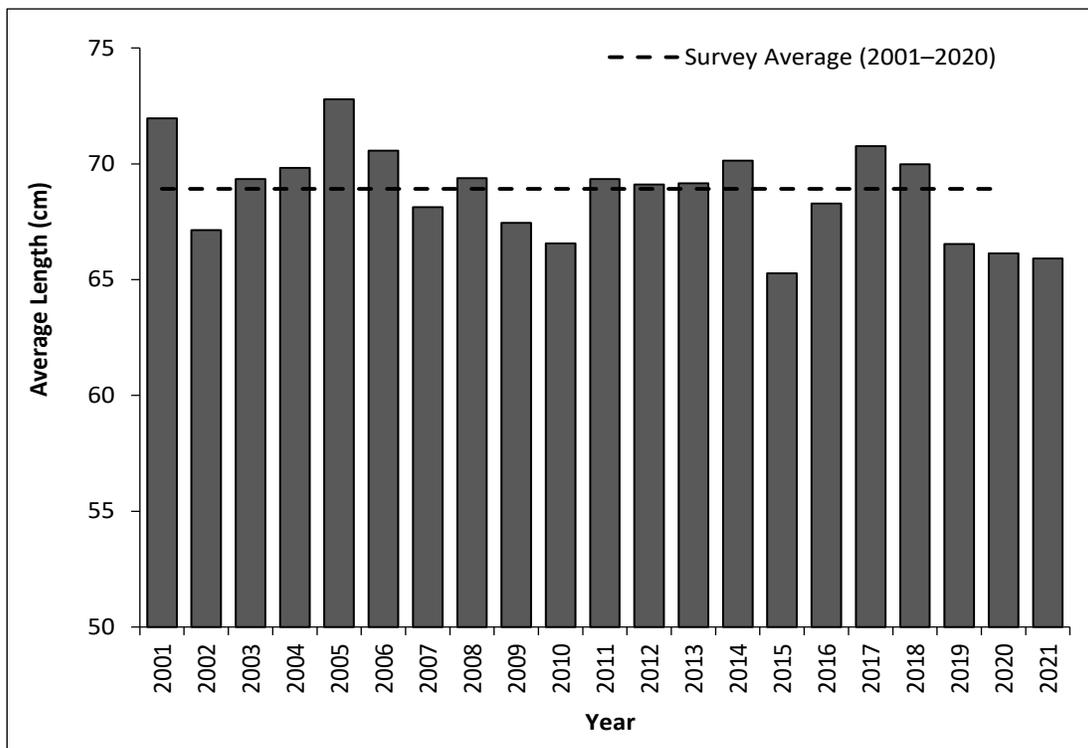


Figure 49.—Average Pacific halibut length from fish caught on the large-mesh bottom trawl surveys, 2001–2021.

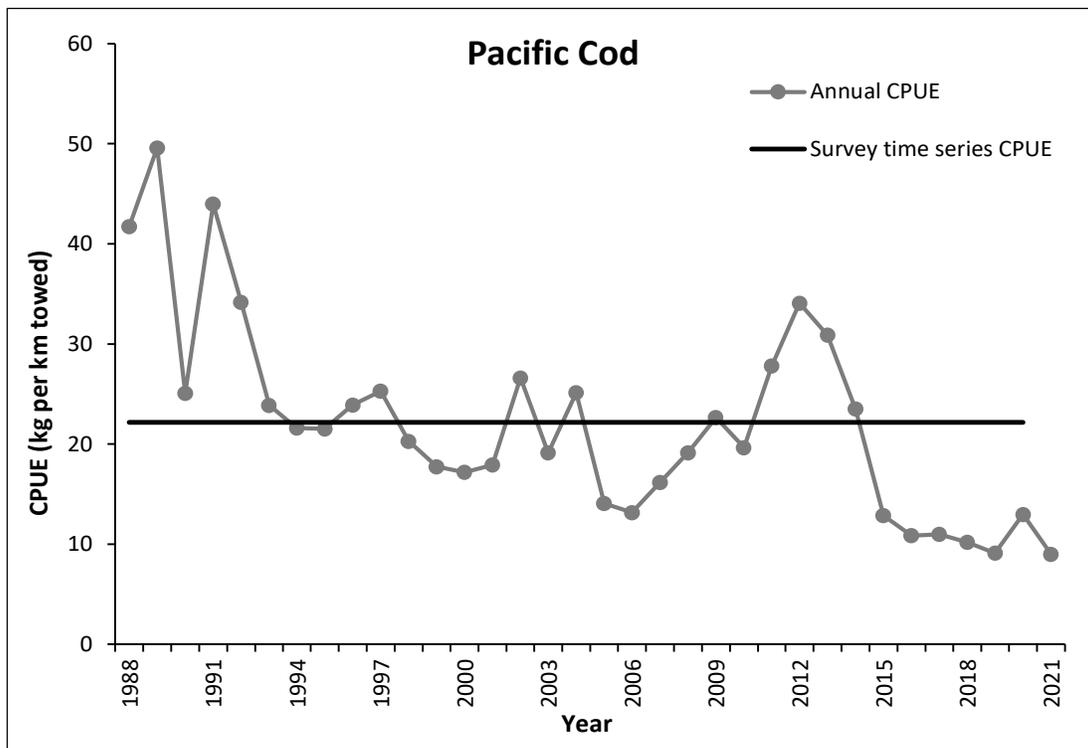


Figure 50.—Pacific cod annual CPUE in kilograms per kilometer towed from the 1988–2021 large-mesh bottom trawl surveys.

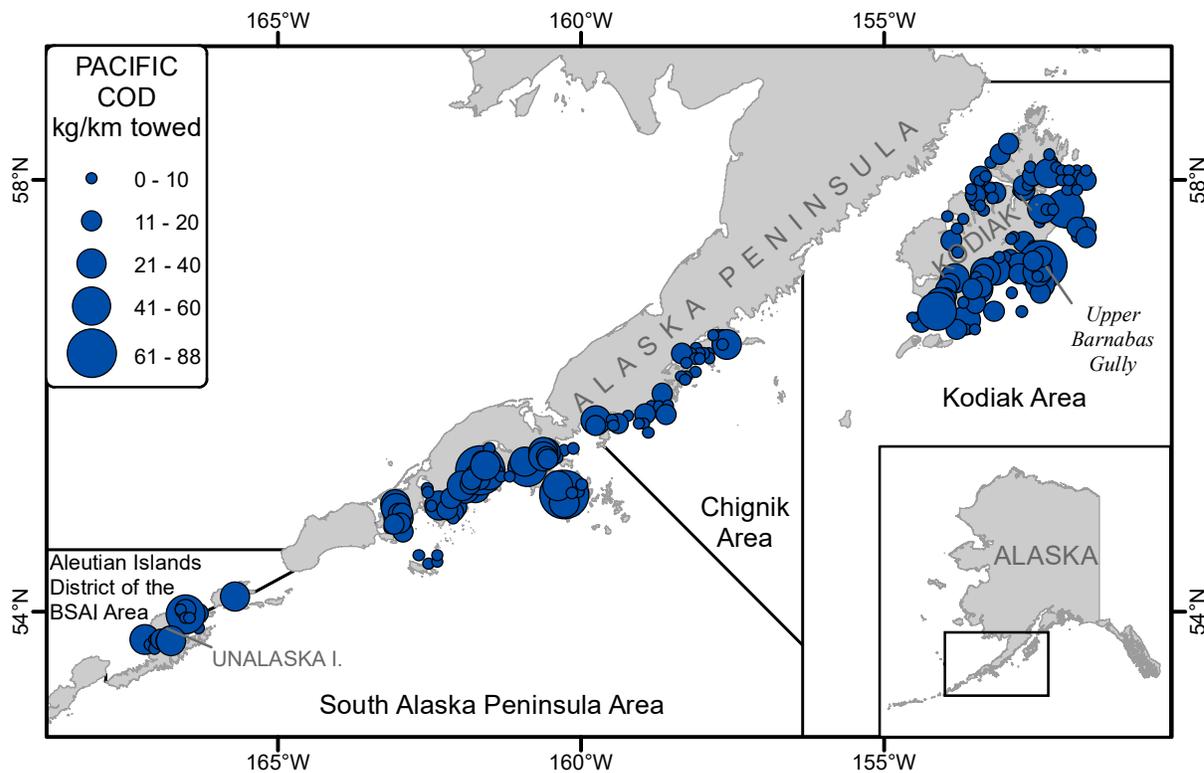


Figure 51.—Pacific cod station CPUE in kilograms per kilometer towed from the 2021 large-mesh bottom trawl survey.

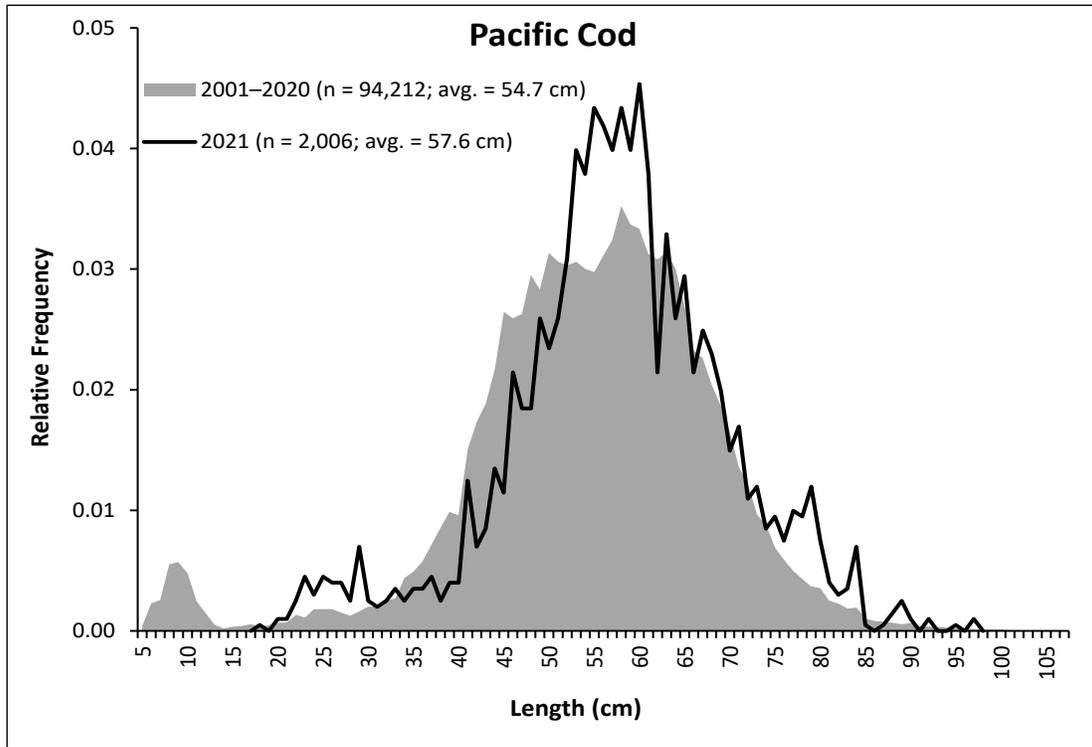


Figure 52.—Pacific cod length frequency from the large-mesh bottom trawl surveys, 2001–2021.

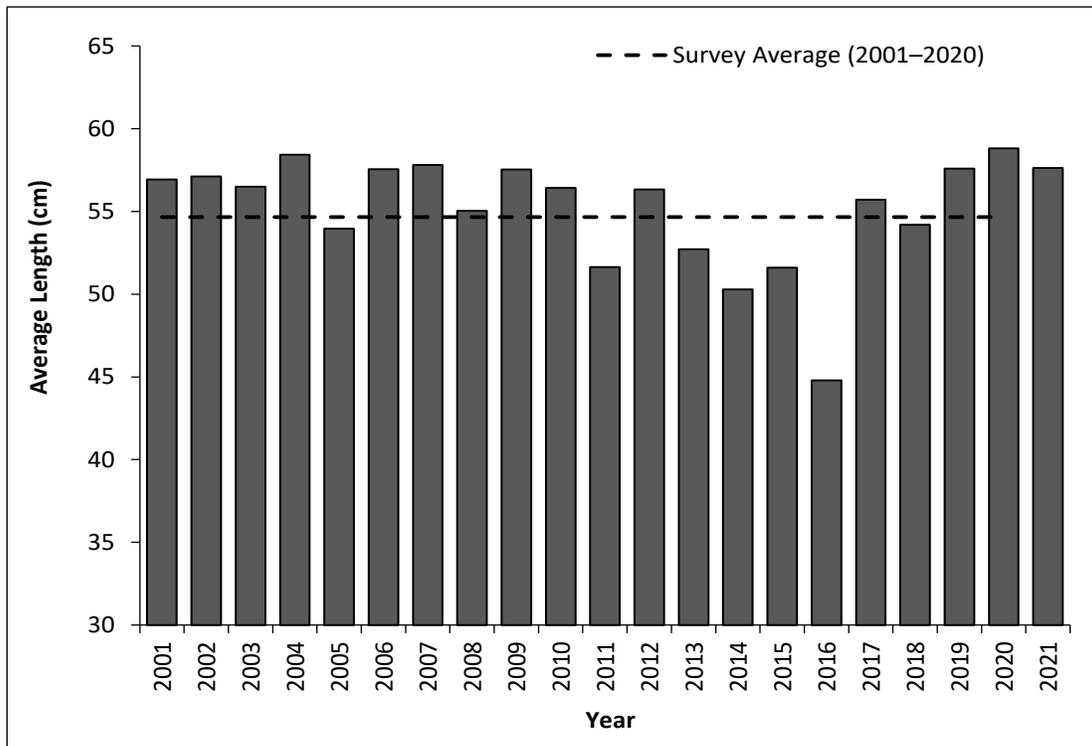


Figure 53.—Average Pacific cod length from fish caught on the large-mesh bottom trawl surveys, 2001–2021.

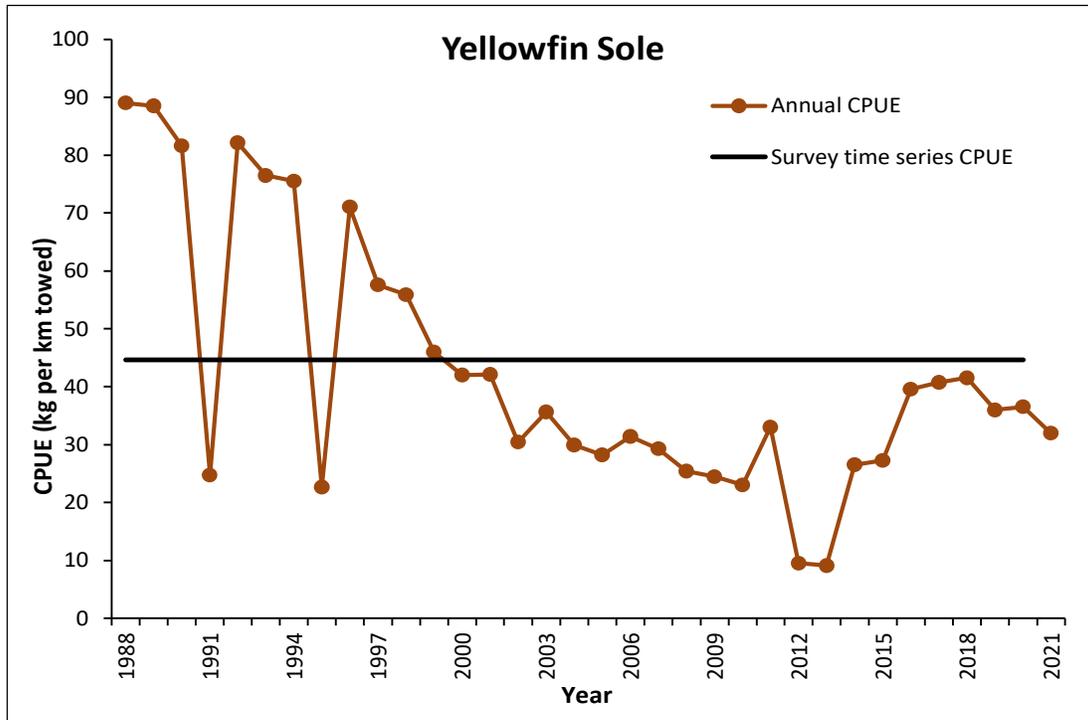


Figure 54.—Yellowfin sole annual CPUE in kilograms per kilometer towed from the 1988–2021 large-mesh bottom trawl surveys.

Note: 1991 and 1995 were incomplete surveys and did not include groundfish data from the South Peninsula District, where the majority of yellowfin sole are captured.

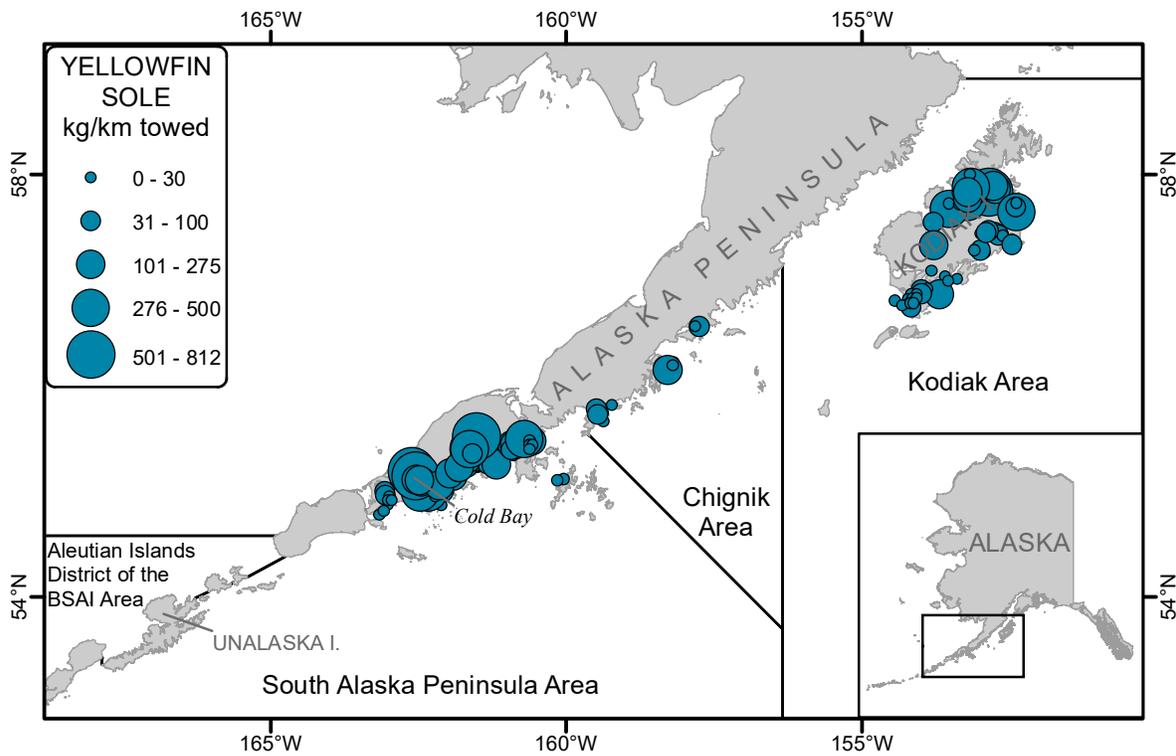


Figure 55.—Yellowfin sole station CPUE in kilograms per kilometer towed from the 2021 large-mesh bottom trawl survey.

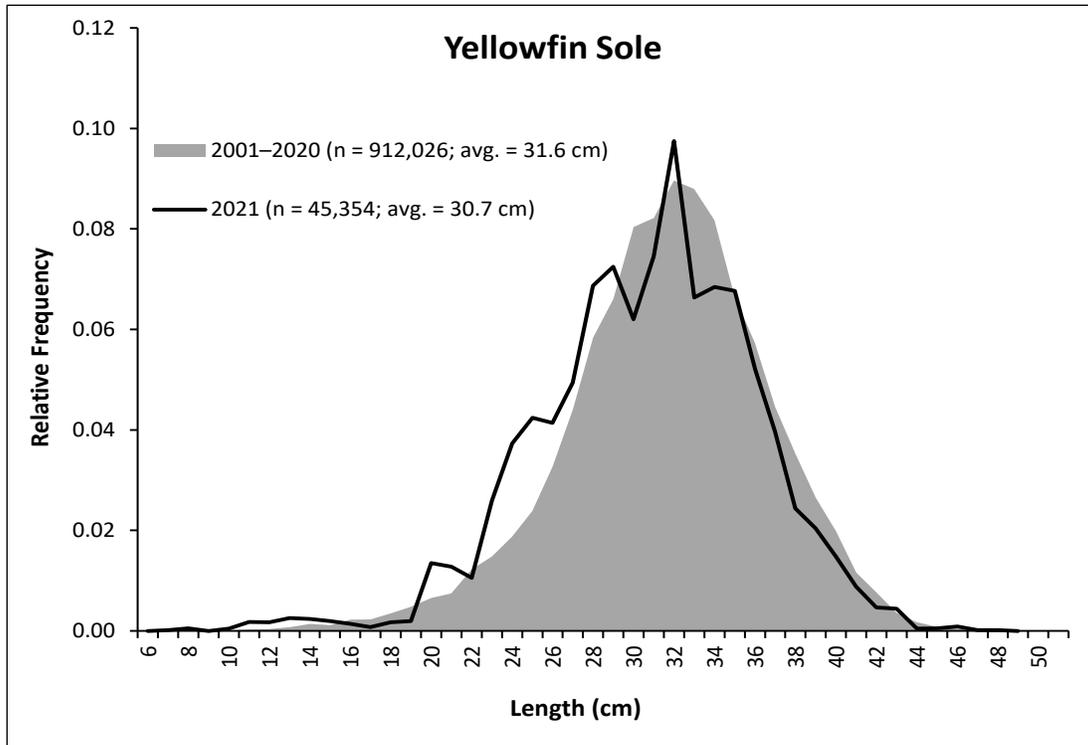


Figure 56.—Yellowfin sole length frequency from the large-mesh bottom trawl surveys, 2001–2021.

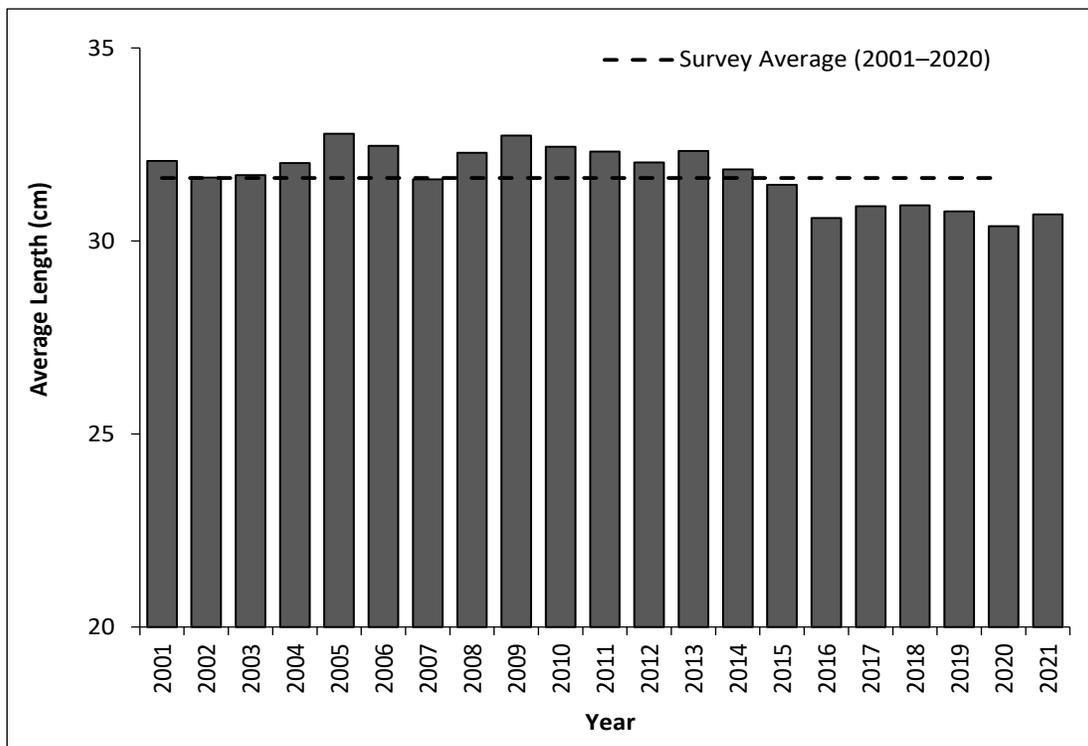


Figure 57.—Average yellowfin sole length from fish caught on the large-mesh bottom trawl surveys, 2001–2021.

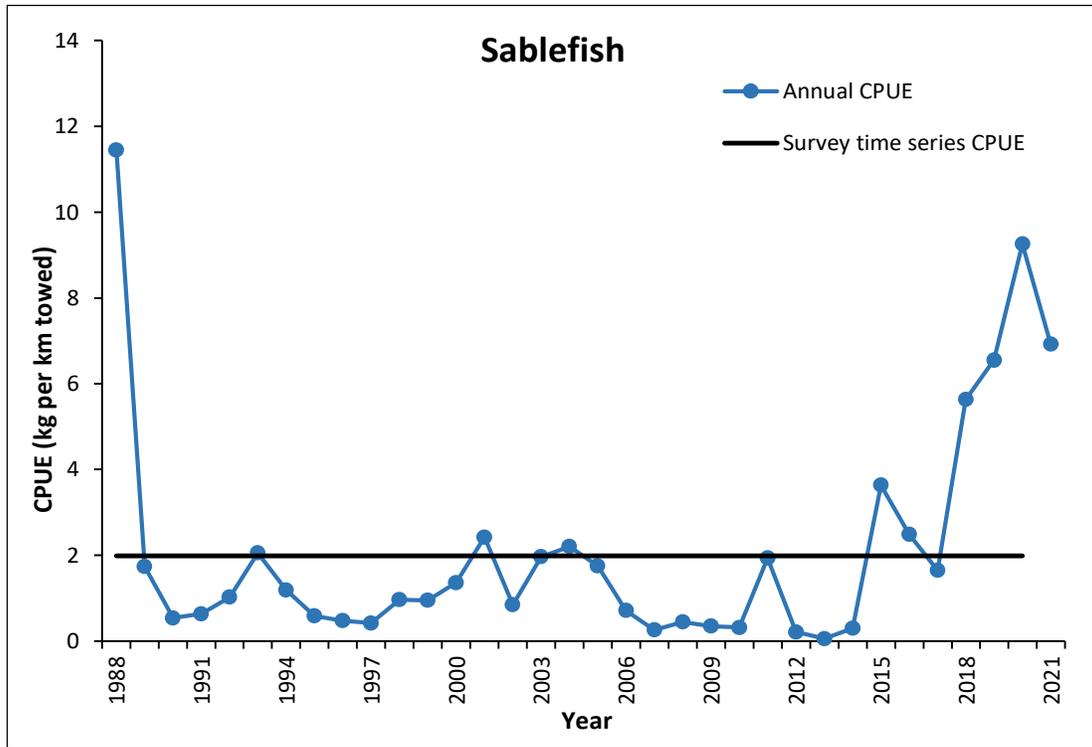


Figure 58.—Sablefish annual CPUE in kilograms per kilometer towed from the 1988–2021 large-mesh bottom trawl surveys.

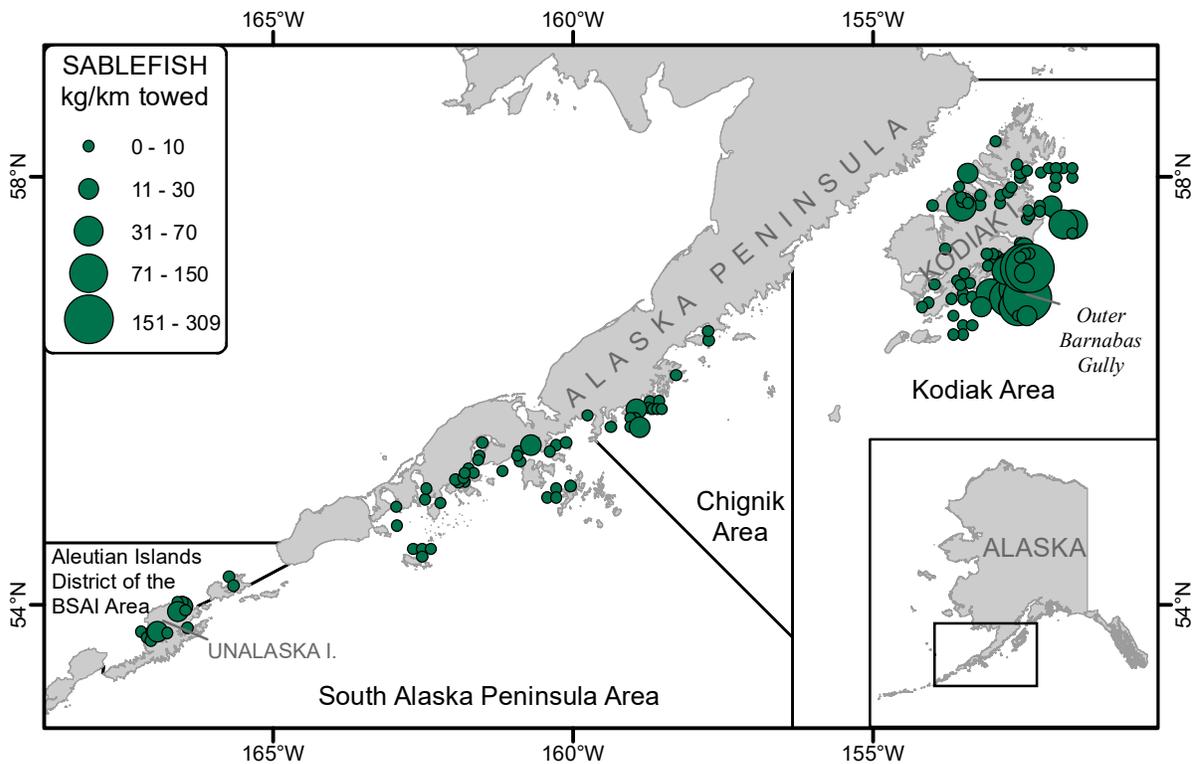


Figure 59.—Sablefish station CPUE in kilograms per kilometer towed from the 2021 large-mesh bottom trawl survey.

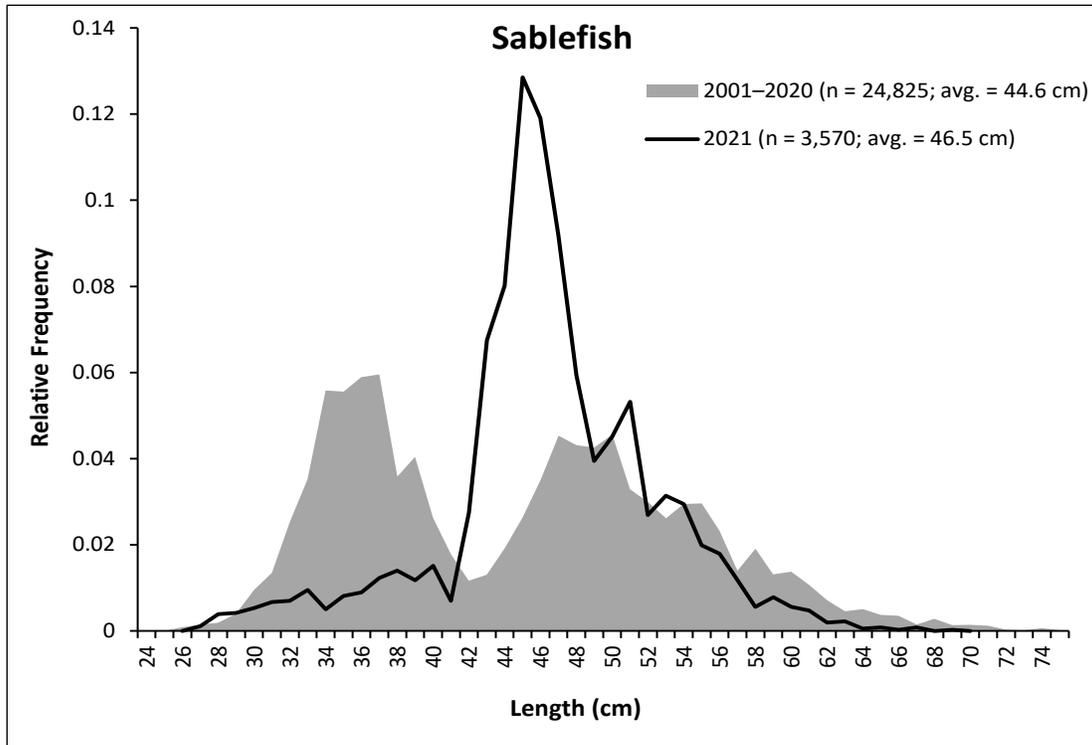


Figure 60.—Sablefish length frequency from the large-mesh bottom trawl surveys, 2001–2021.

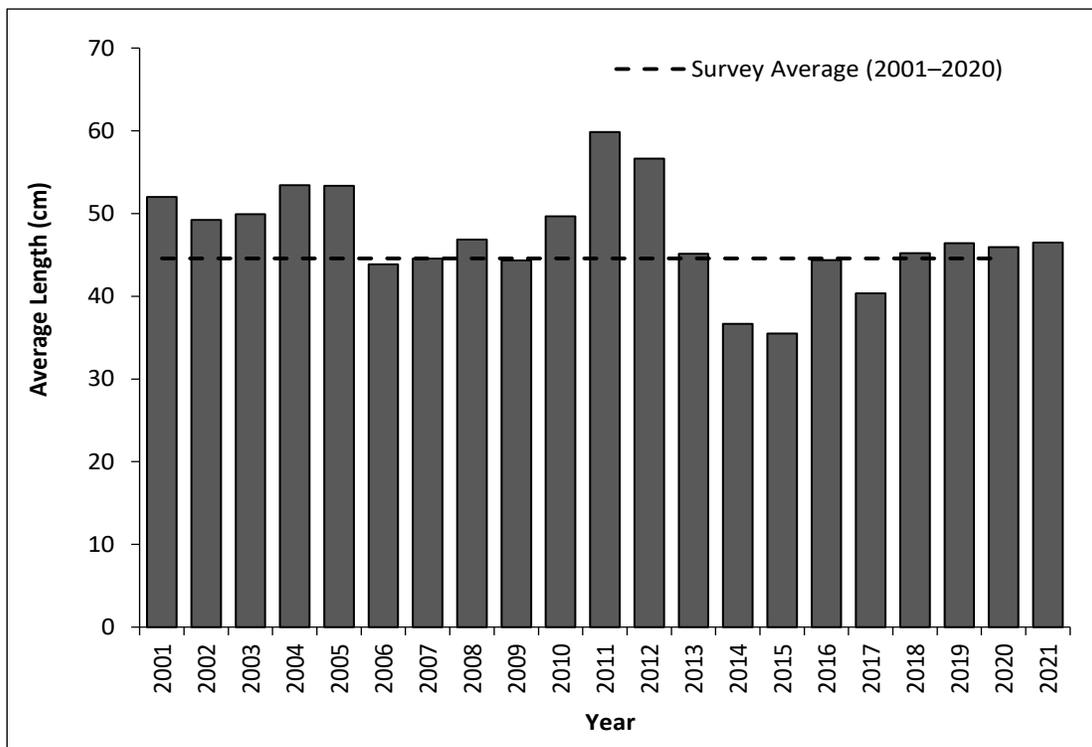


Figure 61.—Average sablefish length from fish caught on the large-mesh bottom trawl surveys, 2001–2021.

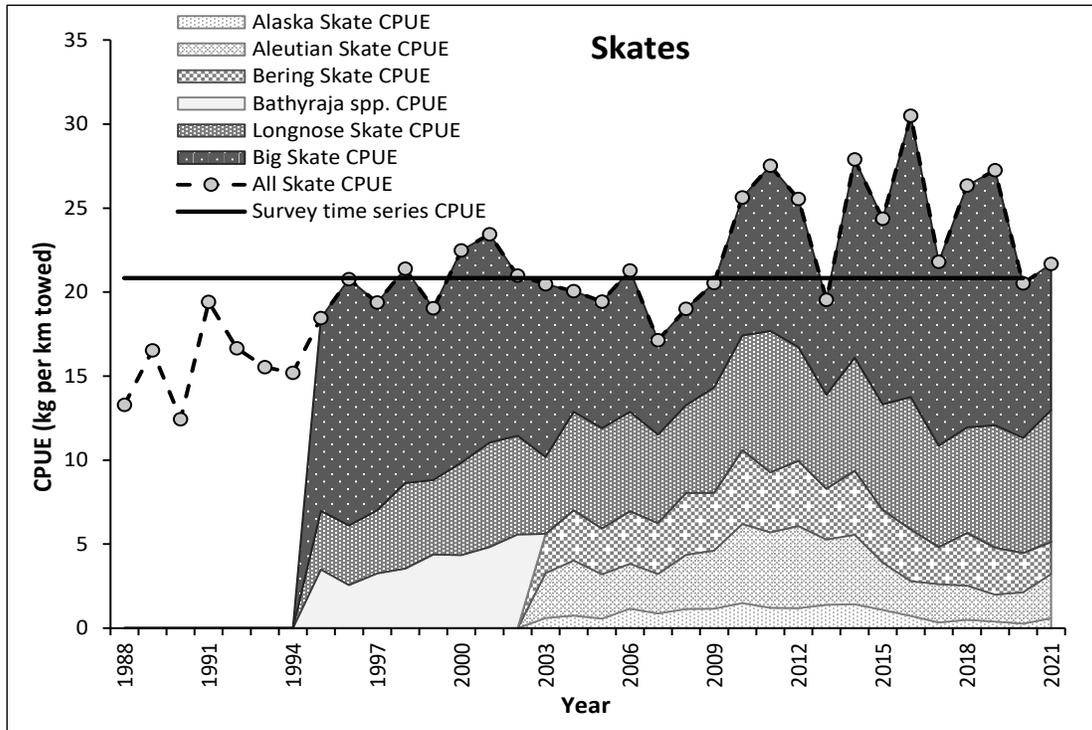


Figure 62.—Annual skate CPUE in kilograms per kilometer towed from the 1988–2021 large-mesh bottom trawl surveys.

Note: Skates were identified to genus starting in 1995, and to species starting in 2003.

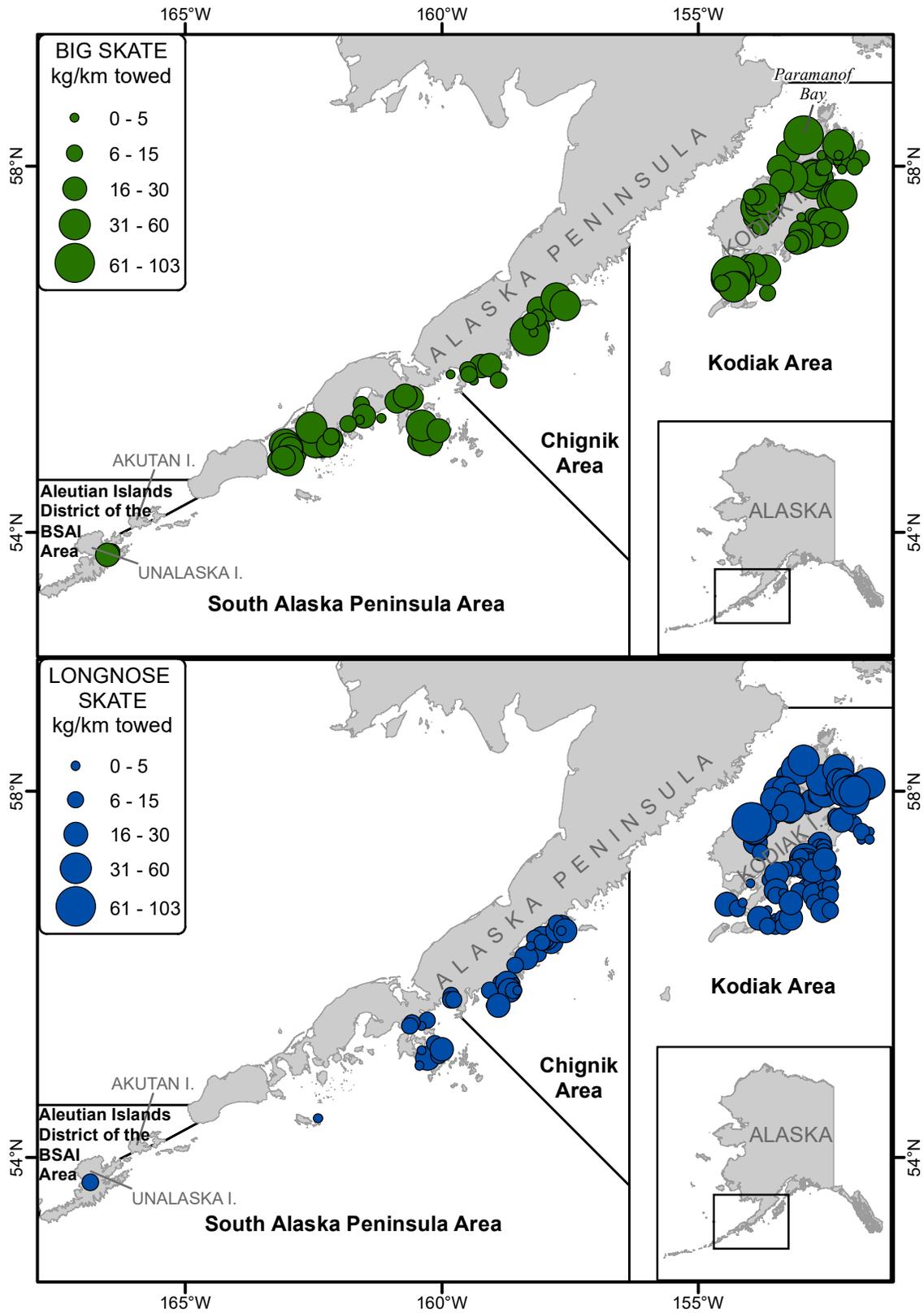


Figure 63.—Big and longnose skate catch in kilograms per kilometer towed from the 2021 large-mesh bottom trawl survey.

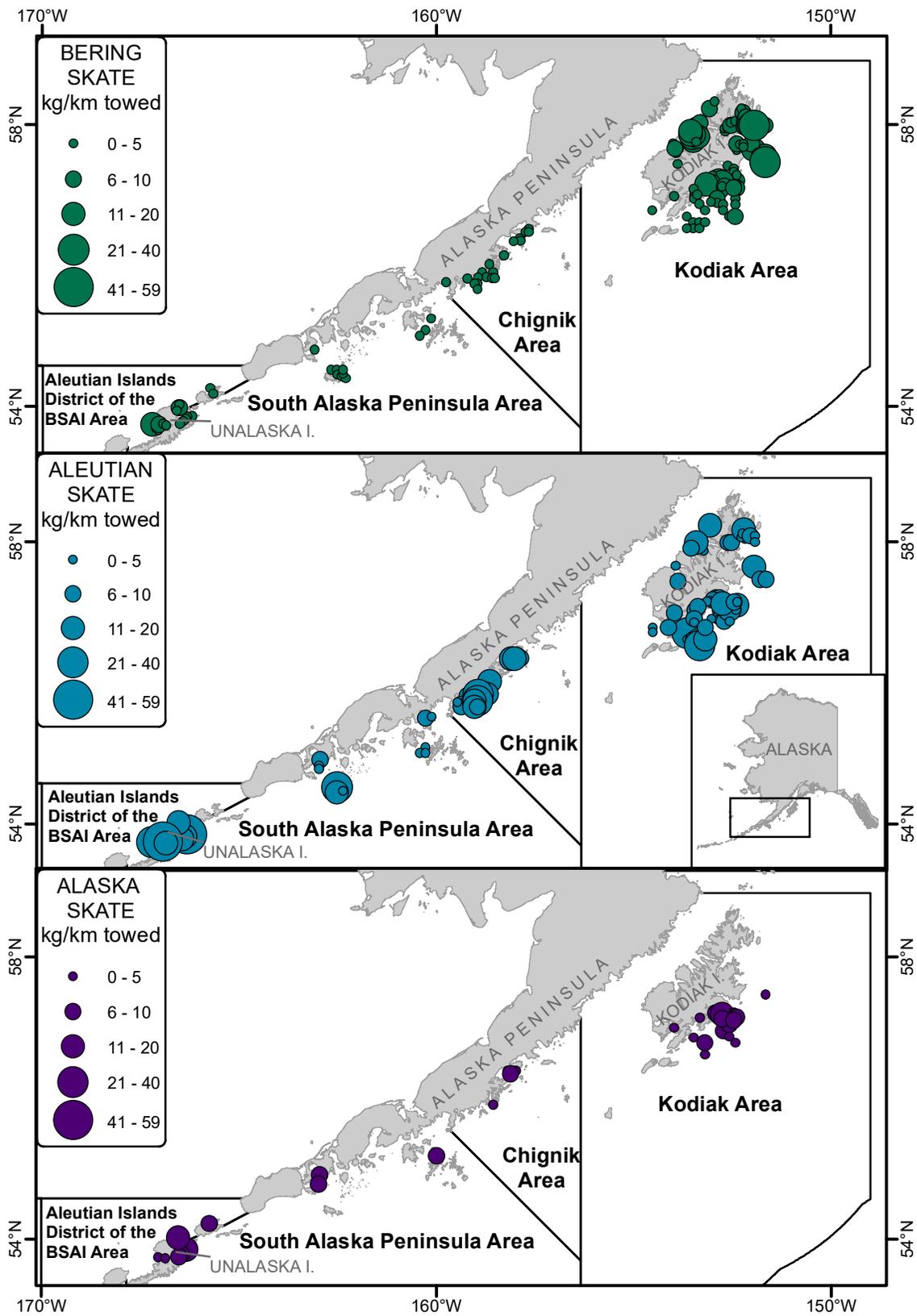


Figure 64.—Bering, Aleutian, and Alaska skate catch in kilograms per kilometer towed from the 2021 large-mesh bottom trawl survey.

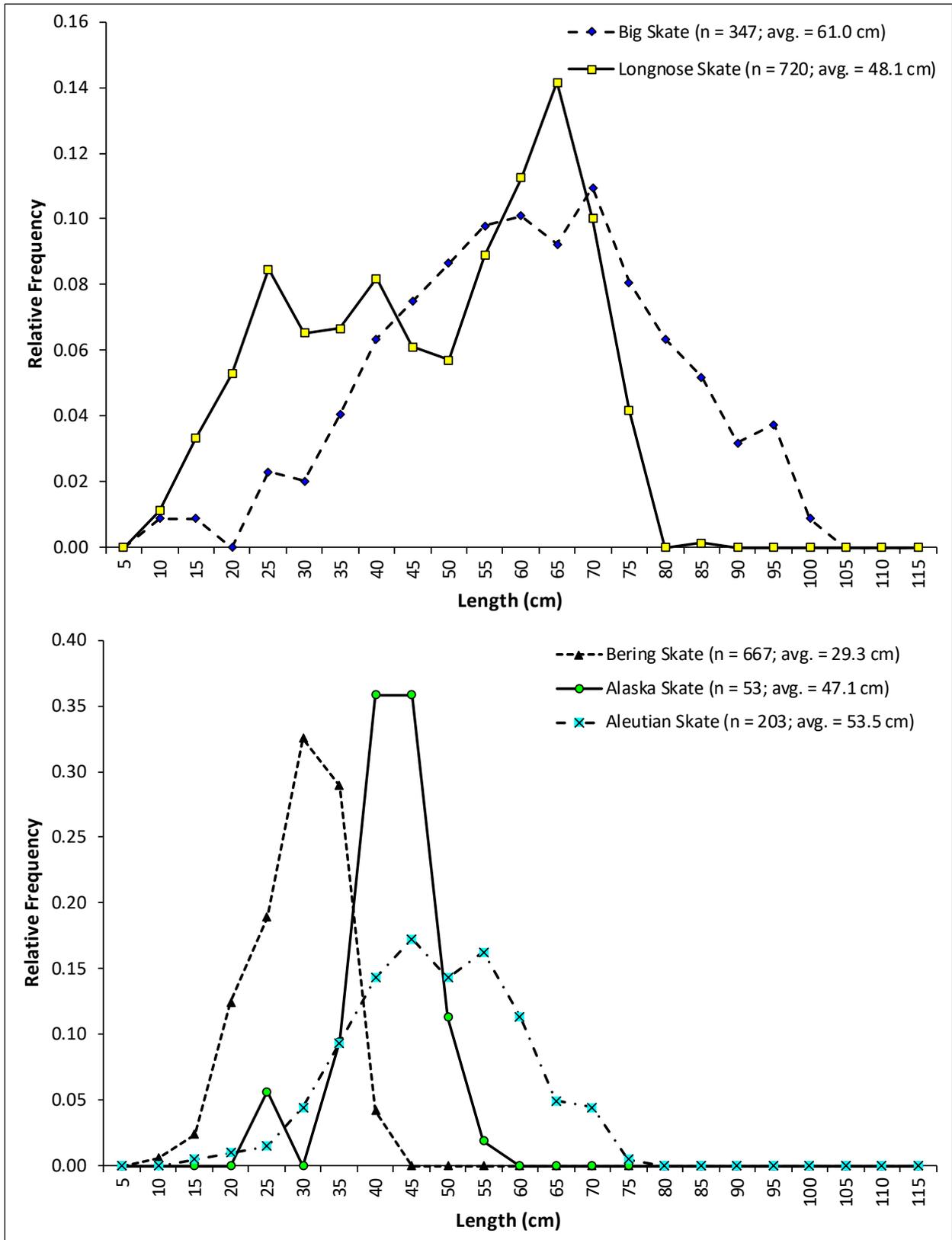


Figure 65.—Big, longnose, Bering, Alaska, and Aleutian skate relative size frequencies (snout to anterior notch of pectoral fin) from the 2021 large-mesh bottom trawl survey.

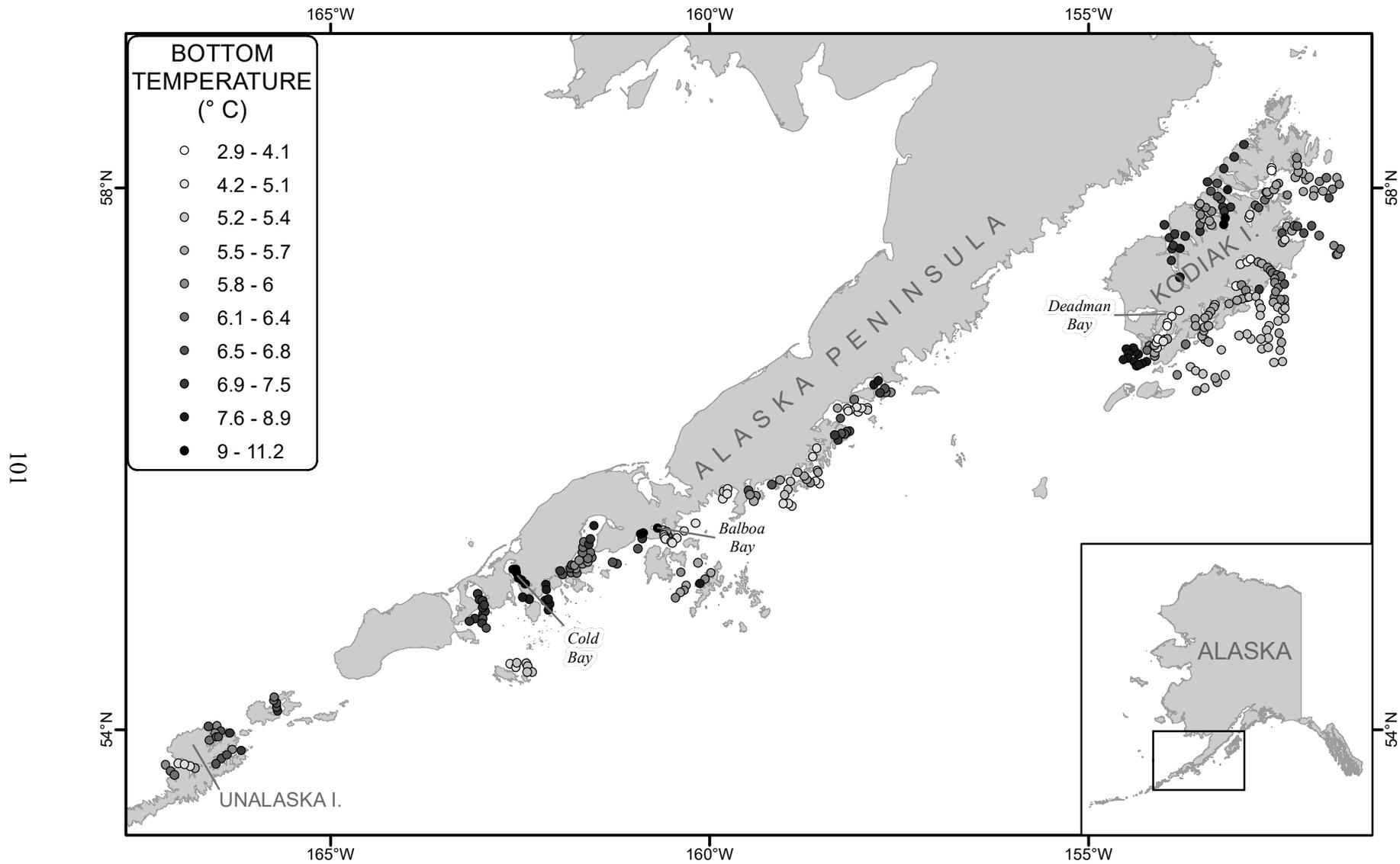


Figure 66.—Near-bottom water temperatures from the 2021 large-mesh bottom trawl survey.

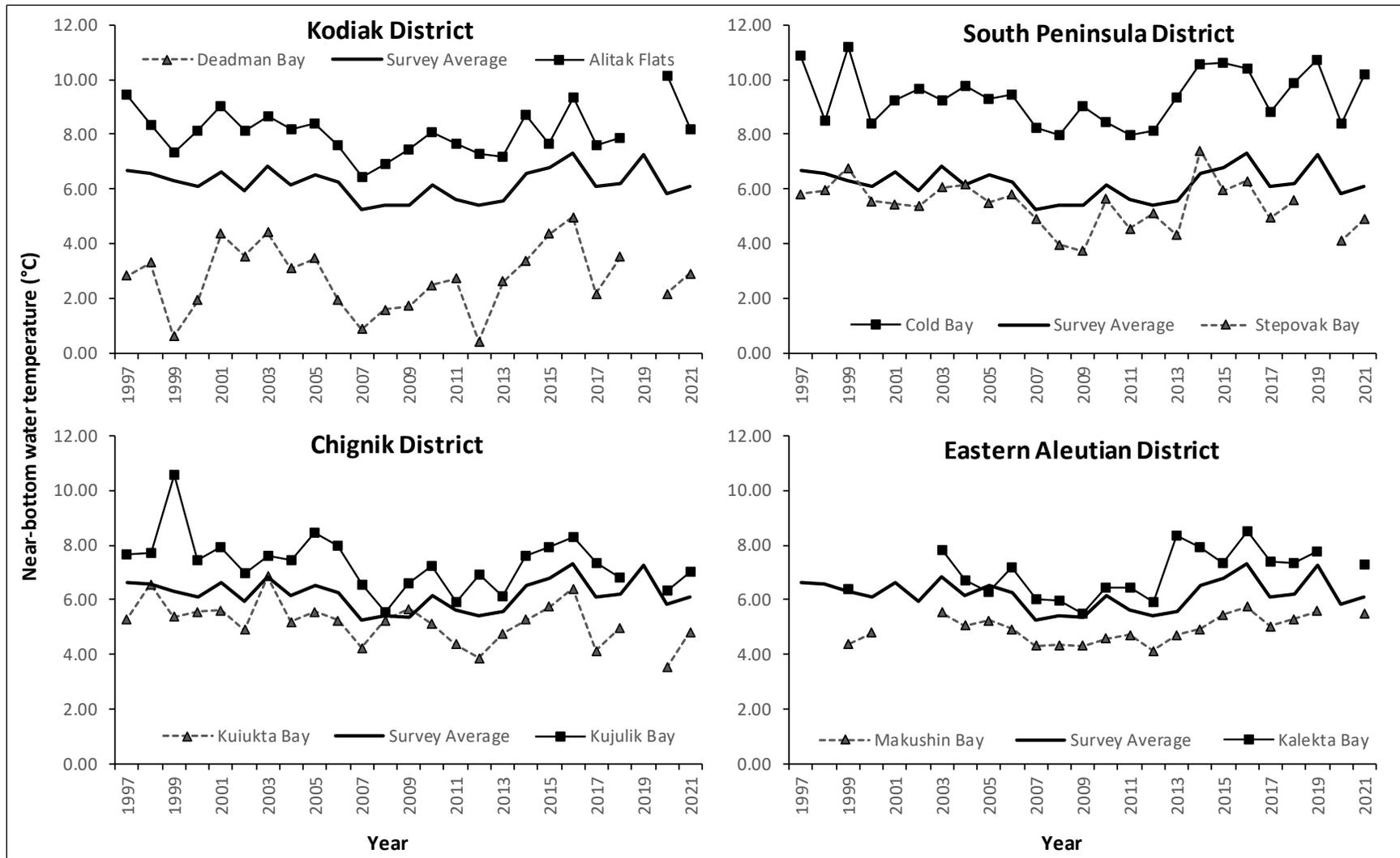


Figure 67.—Near-bottom water temperature (°C) for warmest and coldest bays during the 2021 large-mesh bottom trawl survey and the average water temperature in those bays from 1997–2021 surveys.

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

APPENDIX A. GLOSSARY

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

Crab Terms

<i>abdominal flap</i>	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.
<i>anterolateral spines</i>	Spines on the margin of anterior half of carapace.
<i>bitter crab disease</i>	Disease lethal to crabs caused by a parasitic dinoflagellate of the genus <i>Hematodinium</i> known to infect <i>Chionoecetes</i> 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.
<i>black mat</i>	A systemic fungal infection (<i>Trichomaris invadens</i>) that forms non-discrete blotches of a black, tar-like mass on the carapace and legs. Black mat has a fibrous like texture when scraped.
<i>carapace</i>	Main part of crab shell which covers body of crab. It is divided into the gastric, branchial, and cardiac regions.
<i>carapace length</i>	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.
<i>carapace width</i>	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.
<i>chela height</i>	Measurement of the right claw of a crab taken at the greatest height, excluding spines.
<i>clutch</i>	Eggs beneath a female abdominal flap.
<i>eyed eggs</i>	Stage of egg development when dark eyespots are present and visible to the human eye.
<i>juvenile</i>	An animal that has not reached sexual maturity.
<i>lateral margin</i>	The outer edge of the crab carapace.
<i>legal size</i>	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 Dungeness crab the minimum legal size is 6.5 inches (165.1 mm) carapace width, immediately anterior to the tenth anterolateral spine.
<i>mature female</i>	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 $\frac{2}{3}$ 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.

-continued-

<i>mature male</i>	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.
<i>medial-posterior edge</i>	The middle of the back edge of the carapace.
<i>midline</i>	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.
<i>multiparous female</i>	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.
<i>nemertean worms</i>	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.
<i>new shell</i>	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.
<i>old shell</i>	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.
<i>ovigerous</i>	Bearing eggs.
<i>parasitic barnacle</i>	The rhizocephalan barnacle <i>Briarosaccus callosus</i> 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.
<i>postrecruit male</i>	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.
<i>prerecruit male</i>	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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<i>primiparous female</i>	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.
<i>recruit male</i>	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.
<i>shell condition</i>	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.
<i>soft/new pliable shell</i>	(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.
<i>spines</i>	Pointed processes along the edge of a crab carapace.
<i>very old/very very old shell</i>	(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.
<u>Trawl Net Terms</u>	
<i>codend</i>	The trailing end of a tapered trawl net where catch accumulates during towing.
<i>dandylines</i>	Also called bridles. Cables between trawl door and side of trawl net.
<i>doors</i>	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.
<i>footrope</i>	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.
<i>headrope</i>	The line running along upper mouth of net with floats attached to keep the net open.
<i>mesh</i>	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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<i>net performance</i>	A rating given by the skipper describing problems encountered with the net during a haul.
<i>sweep</i>	The width net covers when towed over the seafloor.
<i>wing</i>	The portion of the trawl net forward of the main body of the net.
<u>Sampling Terms</u>	
<i>catch</i>	Quantity of animals caught in trawl net. Measured in numbers or weight of animals.
<i>catch weight database</i>	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.
<i>cruise leader</i>	Biologist in charge of coordinating biological sampling activities during the survey and responsible for the quality of collected data while on the vessel.
<i>debris</i>	Contents of the trawl net that are not identified or sampled, including rocks, empty shells, seaweed, previously dead organisms, or human-made objects.
<i>fish measurement database</i>	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.
<i>haul</i>	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.
<i>haul database</i>	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.
<i>onboard databases</i>	Databases in use during the trawl survey include: fish measurement database, shellfish measurement database, catch weight database, and haul database.
<i>on-deck sorting bin</i>	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.
<i>shellfish measurement database</i>	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.
<i>sorting table</i>	Table located on the forward part of deck where the subsample is sorted for species composition, weighing, and measuring.
<i>species composition sampling</i>	Sorting, identification, and weighing of organisms in the catch to determine proportion and total weight of each species.
<i>station</i>	Survey area sampling unit. Each station is towed once during the annual survey.
<i>subsample</i>	A representative and random subset of the total haul catch.
<i>subsampling net</i>	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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<i>whole-haul</i>	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.
<u>Management Terms</u>	
<i>abundance threshold</i>	Level of mature male Tanner crab abundance described in state regulation that must be met in order to consider opening a commercial fishery.
<i>GHL</i>	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.
<i>legal male</i>	Crab that may be retained by state regulation; only male crab of specific size are considered legal to retain.
<i>long-term average abundance</i>	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.
<i>management district</i>	Regulatory unit to facilitate resource management.
<i>management section</i>	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.
<i>molting mature male crab</i>	Estimated abundance of 100% new shell and 15% old shell male Tanner crab that are >114 mm carapace width.
<u>Other Biological Terms</u>	
<i>anterior</i>	Toward the front, near the head, or rostral end of a crab.
<i>caudal fin</i>	The tail of a fish.
<i>claspers</i>	A paired organ of male sharks and skates. Assists transfer of spermatozoa into the body of a female during copulation.
<i>dorsal</i>	The back or part of an organism away from the ground. Refers to the hinge area of a scallop shell.
<i>inclement weather</i>	Severe, rough, harsh, or stormy.
<i>pectoral fin</i>	Either of a pair of fins situated behind the head, one on each side of the body.
<i>posterior</i>	The rear, away from the head.
<i>shell height</i>	The straight-line distance from the umbo to the outer scallop shell margin, perpendicular to the hinge. Scallop shell heights are measured on the left (top) valve.
<i>umbo</i>	Beak-like projections at the dorsal part of a shell; it is the oldest part of a bivalve shell.
<i>valve</i>	One of the 2 parts of a bivalve shell, 2 valves make up one shell.
<u>Data Analysis Terms</u>	
<i>area swept</i>	The sea floor area sampled by the trawl during a haul.
<i>catchability</i>	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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<i>density</i>	The number or weight of a species present per unit of area.
<i>distance towed/haul length</i>	Distance the vessel travels between the time the trawl net footrope contacts bottom and the time the center of footrope leaves bottom.
<i>escapement</i>	The act of an organism in the trawl path evading capture by the trawl net.
<i>relative abundance indices</i>	Indices that track change in population size, but do not estimate actual population size.
<i>size selectivity</i>	The consequence of fishing gear capturing organisms of different sizes at different rates.
<i>true abundance</i>	The actual number of animals present in the area of interest.

**APPENDIX B. FISHING LOG AND TRAWL STATIONS
SAMPLED**

Appendix B1.–2021 large-mesh bottom trawl survey fishing log.

Haul	1	2	3	4	5	6	7	8	9	10	11	12	13
Location	NE Kod.												
Month/Day/Year	06-18-21	06-18-21	06-18-21	06-18-21	06-18-21	06-23-21	06-23-21	06-23-21	06-23-21	06-23-21	06-24-21	06-24-21	06-24-21
Station	CHJ	CHE	CHA	CHB	CHF	KZA	KZB	KZD	KZC	KZE	KZG	KZF	KZJ
Longitude start (°W)	152.3812	152.4457	152.4402	152.4093	152.3142	152.8780	152.8668	152.7978	152.7490	152.6752	152.6240	152.6570	152.6460
Latitude start (°N)	57.7287	57.6800	57.6120	57.6340	57.6980	57.7892	57.8127	57.8778	57.8603	57.9140	57.9525	57.9698	57.9673
Heading, degrees	128	45	40	38	41	11	29	55	42	41	272	215	57
Average depth (m)	100.5	18.28	40.23	82.29	146.2	45.71	51.20	89.60	64.00	98.75	128.0	124.3	131.6
Distance fished (km)	1.852	1.111	1.852	1.852	1.852	1.111	1.111	1.852	1.666	1.852	1.389	1.481	1.852
Bottom temp. (°C)	5.61	6.77	5.97	4.97	5.66	4.96	4.99	6.15	6.54	6.17	5.63	5.71	5.68
Haul	14	15	16	17	18	19	20	21	22	23	24	25	26
Location	NE Kod.												
Month/Day/Year	06-24-21	06-24-21	06-24-21	06-24-21	06-25-21	06-25-21	06-25-21	06-25-21	06-25-21	06-25-21	06-25-21	06-25-21	06-26-21
Station	KZK	MOEX	MONX	KZO	KZR	KZR	MOPB	MOLB	MOLA	MOPA	MOXB	MOXA	255A
Longitude start (°W)	152.5530	152.3763	152.4907	152.5228	152.5850	152.5875	152.2712	152.1315	152.1702	152.2350	152.2440	152.2500	152.0867
Latitude start (°N)	57.9862	57.9477	58.0283	58.0180	58.1370	58.1212	58.0745	58.0575	58.1017	58.1112	58.1580	58.2098	58.0728
Heading, degrees	55	90	14	224	200	181	58	171	327	218	141	168	171
Average depth (m)	181.0	128.0	199.3	202.9	109.7	106.0	164.5	159.0	199.3	171.8	168.2	153.6	151.7
Distance fished (km)	1.852	1.852	1.852	1.852	1.111	1.852	1.759	1.852	1.852	1.852	1.852	1.852	1.852
Bottom temp. (°C)	5.49	6.04	5.51	5.50	4.02	3.86	5.61	5.68	5.60	5.65	5.65	5.84	5.60
Haul	27	28	29	30	31	32	33	34	35	36	37	38	39
Location	NE Kod.												
Month/Day/Year	06-26-21	06-26-21	06-26-21	06-26-21	06-26-21	06-26-21	06-26-21	06-26-21	06-27-21	06-27-21	06-30-21	06-30-21	06-30-21
Station	255B	256	257	285	284	314	283B	283A	MOGX	313	CHK	CHL	CHG
Longitude start (°W)	151.9492	151.8612	151.7183	151.6908	151.7762	151.8237	151.9093	152.0195	152.1658	152.0293	152.2875	152.2467	152.1593
Latitude start (°N)	58.0422	58.0692	58.0688	58.0242	57.9902	57.9288	57.9765	57.9822	57.9705	57.9407	57.7337	57.7295	57.6830
Heading, degrees	14	97	62	217	213	217	271	271	34	104	213	69	15
Average depth (m)	135.3	135.3	166.4	128.0	133.4	64.00	175.5	175.5	173.7	199.3	144.4	195.6	138.9
Distance fished (km)	1.666	1.852	1.852	1.852	1.481	1.852	1.296	1.852	1.852	1.852	1.852	1.852	1.852
Bottom temp. (°C)	5.74	6.06	5.65	5.76	5.76	6.56	5.50	5.64	5.61	5.66	6.37	6.63	6.46
Haul	40	41	42	43	44	45	46	47	48	49	50	51	52
Location	E Kod.												
Month/Day/Year	07-01-21	07-01-21	07-01-21	07-01-21	07-01-21	07-01-21	07-01-21	07-01-21	07-02-21	07-02-21	07-02-21	07-02-21	07-02-21
Station	UGAC	UGAD	UGAA	UGB	UGC	UGD	UGE	UGF	KLA	KLB	KLC	KLH	KLG
Longitude start (°W)	152.9927	152.9065	152.8587	152.7560	152.7127	152.6370	152.6002	152.5710	153.0547	152.9833	152.9275	152.9090	152.9770
Latitude start (°N)	57.4597	57.4752	57.4965	57.4735	57.4640	57.4358	57.4172	57.3988	57.3072	57.3113	57.2737	57.2227	57.2102
Heading, degrees	51	82	146	158	112	127	157	154	264	149	157	260	242
Average depth (m)	38.40	69.49	80.46	89.60	91.43	98.75	100.5	87.77	93.26	82.29	95.09	131.6	120.6
Distance fished (km)	1.481	1.852	1.852	1.852	1.852	1.852	1.852	1.852	1.111	1.852	1.852	1.852	1.852
Bottom temp. (°C)	4.52	4.09	3.96	5.61	5.53	5.87	5.98	6.15	3.83	6.02	5.91	5.52	5.52

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Haul	53	54	55	56	57	58	59	60	61	62	63	64	65
Location	E Kod.												
Month/Day/Year	07-02-21	07-02-21	07-03-21	07-03-21	07-03-21	07-03-21	07-03-21	07-03-21	07-03-21	07-03-21	07-04-21	07-04-21	07-04-21
Station	KLF	KLE	KLI	KLD	KLL	510C	535A	535B	511B	511A	UGG	UGJ	UGI
Longitude start (°W)	153.0398	153.1403	152.8788	152.7473	152.7892	152.5445	152.4632	152.4138	152.4122	152.4635	152.5070	152.4587	152.5433
Latitude start (°N)	57.2023	57.1763	57.2267	57.2797	57.2293	57.2210	57.1843	57.1732	57.2100	57.2083	57.3852	57.3753	57.3585
Heading, degrees	266	47	96	195	130	214	172	184	355	314	83	183	330
Average depth (m)	122.5	117.0	140.8	29.25	140.8	91.43	137.1	128.0	76.80	104.2	67.66	71.31	96.92
Distance fished (km)	1.852	1.852	1.852	1.296	1.852	1.852	1.852	1.111	1.481	1.852	1.852	1.852	1.852
Bottom temp. (°C)	5.54	5.60	5.39	7.11	5.27	5.84	5.47	5.29	5.81	5.85	6.31	6.32	5.93
Haul	66	67	68	69	70	71	72	73	74	75	76	77	78
Location	E Kod.	SE Kod.											
Month/Day/Year	07-04-21	07-04-21	07-04-21	07-04-21	07-05-21	07-05-21	07-05-21	07-05-21	07-05-21	07-05-21	07-05-21	07-05-21	07-06-21
Station	UGM	486A	486B	510D	533A	533B	534BX	534DX	535C	535D	561	560	THN
Longitude start (°W)	152.5423	152.4952	152.4097	152.5277	152.7470	152.7290	152.5575	152.4995	152.4352	152.4068	152.4087	152.4933	153.3342
Latitude start (°N)	57.3310	57.2930	57.3198	57.2655	57.1768	57.1467	57.1877	57.1537	57.1272	57.1452	57.0710	57.0535	57.1702
Heading, degrees	176	15	169	318	211	88	68	191	355	190	188	346	199
Average depth (m)	104.2	100.5	71.31	100.5	140.8	146.2	104.2	129.8	151.7	137.1	138.9	140.8	107.8
Distance fished (km)	1.852	1.852	1.852	1.111	1.852	1.852	1.852	1.852	1.852	1.852	1.296	1.852	1.481
Bottom temp. (°C)	5.86	5.85	6.50	5.88	5.31	5.29	5.58	5.35	5.30	5.33	5.36	5.29	5.40
Haul	79	80	81	82	83	84	85	86	87	88	89	90	91
Location	SE Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.	E Kod.						
Month/Day/Year	07-06-21	07-06-21	07-06-21	07-06-21	07-06-21	07-06-21	07-06-21	07-07-21	07-07-21	07-07-21	07-07-21	07-07-21	07-07-21
Station	THM	THL	THK	THJ	THI	THFA	651	654	655	695	696	656	621
Longitude start (°W)	153.3490	153.3907	153.4267	153.4612	153.5888	153.5815	153.2463	152.7127	152.6300	152.5557	152.4395	152.4720	152.4538
Latitude start (°N)	57.1527	57.1228	57.0937	57.0752	57.0682	57.0213	56.8453	56.8537	56.8640	56.7553	56.7593	56.8420	56.9012
Heading, degrees	217	199	12	175	122	63	138	317	105	197	31	27	25
Average depth (m)	122.5	126.1	122.5	115.2	89.60	76.80	173.7	98.75	137.1	142.6	177.3	171.8	155.4
Distance fished (km)	1.481	1.852	1.666	1.852	1.481	1.296	1.481	1.296	1.481	1.481	1.481	1.481	1.481
Bottom temp. (°C)	5.47	5.52	5.61	5.61	5.55	5.73	5.44	5.30	5.28	5.38	5.31	5.30	5.51
Haul	92	93	94	95	96	97	98	99	100	101	102	103	104
Location	E Kod.	SE Kod.	SE Kod.	SE Kod.	SE Kod.	SE Kod.	SE Kod.	SE Kod.					
Month/Day/Year	07-07-21	07-08-21	07-08-21	07-08-21	07-08-21	07-08-21	07-08-21	07-08-21	07-08-21	07-08-21	07-09-21	07-09-21	07-09-21
Station	589	559	588	587	620	619	618A	586	585X	THA	614	615	THCX
Longitude start (°W)	152.4853	152.7297	152.6172	152.6520	152.6290	152.7275	152.8523	152.9082	153.0115	153.7170	153.4632	153.4175	153.4983
Latitude start (°N)	56.9673	57.0945	57.0207	56.9887	56.9322	56.9243	56.9252	56.9597	56.9495	56.8865	56.9225	56.9060	56.9470
Heading, degrees	345	229	126	229	138	317	22	235	259	67	178	15	4
Average depth (m)	140.8	153.6	151.7	151.7	151.7	135.3	122.5	129.8	137.1	49.37	140.8	137.1	131.6
Distance fished (km)	1.481	1.481	1.481	1.481	1.481	1.481	1.481	1.481	1.111	1.852	1.852	1.852	1.852
Bottom temp. (°C)	5.54	5.30	5.38	5.29	5.29	5.28	5.30	5.32	5.33	6.28	5.55	5.60	5.54

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Haul	105	106	107	108	109	110	111	112	113	114	115	116	117
Location	SE Kod.	SE Kod.	SE Kod.	SW Kod.									
Month/Day/Year	07-09-21	07-09-21	07-09-21	07-10-21	07-10-21	07-10-21	07-10-21	07-10-21	07-10-21	07-10-21	07-10-21	07-11-21	07-11-21
Station	THDX	THG	THH	ALD	ALF	ALBX	ALA	ALCA	ALG	ALH	ALI	ALR	ALQ
Longitude start (°W)	153.4758	153.4683	153.4167	154.1903	154.1635	154.2255	154.1310	154.1278	154.0945	154.1295	154.1007	153.8052	153.8950
Latitude start (°N)	56.9848	57.0092	57.0205	56.8778	56.8567	56.8423	56.7993	56.8247	56.8608	56.8813	56.8998	57.1277	57.0855
Heading, degrees	191	57	353	188	13	133	212	19	63	35	32	221	222
Average depth (m)	131.6	124.3	117.0	56.69	51.20	38.40	62.17	71.31	58.51	65.83	80.46	117.0	170.0
Distance fished (km)	1.852	1.759	1.481	1.852	1.852	1.852	1.852	1.852	1.852	1.852	1.852	1.852	1.852
Bottom temp. (°C)	5.57	5.65	5.72	5.84	5.52	6.31	5.90	5.49	5.00	5.51	4.40	3.01	2.87
Haul	118	119	120	121	122	123	124	125	126	127	128	129	130
Location	SW Kod.												
Month/Day/Year	07-11-21	07-11-21	07-11-21	07-11-21	07-11-21	07-11-21	07-12-21	07-12-21	07-12-21	07-12-21	07-12-21	07-12-21	07-12-21
Station	ALP	ALP	ALL	ALM	ALK	ALJ	646D	646B	646A	645B	646C	683A	682B
Longitude start (°W)	153.9570	153.9633	154.0855	153.9957	153.9530	154.0137	154.3418	154.3878	154.4125	154.5023	154.4730	154.4803	154.5367
Latitude start (°N)	57.0430	57.0197	56.9247	56.9223	56.9265	56.9097	56.8143	56.8328	56.8610	56.8533	56.8198	56.7848	56.7758
Heading, degrees	218	222	45	43	63	219	271	5	249	165	131	172	131
Average depth (m)	153.6	166.4	95.09	65.83	69.49	73.14	53.03	56.69	60.34	65.83	65.83	62.17	71.31
Distance fished (km)	1.852	1.852	1.852	1.852	1.481	1.852	1.481	1.481	1.481	1.481	1.481	1.481	1.481
Bottom temp. (°C)	2.89	2.86	3.31	5.41	5.51	5.00	8.37	8.69	8.20	7.77	7.71	8.09	8.09
Haul	131	132	133	134	135	136	137	138	139	140	141	142	143
Location	SW Kod.	SE Kod.											
Month/Day/Year	07-12-21	07-12-21	07-13-21	07-13-21	07-13-21	07-13-21	07-13-21	07-13-21	07-13-21	07-14-21	07-14-21	07-14-21	07-14-21
Station	683B	684B	684A	683D	684C	725	759	760	761	688	726	727	728
Longitude start (°W)	154.3955	154.2335	154.2868	154.3652	154.3342	153.8305	153.5707	153.4622	153.3008	153.6550	153.5875	153.4878	153.3252
Latitude start (°N)	56.7607	56.7625	56.7458	56.7310	56.7370	56.6668	56.5508	56.5710	56.6122	56.7207	56.6952	56.6717	56.6433
Heading, degrees	99	55	281	113	93	52	194	36	96	108	154	168	54
Average depth (m)	64.00	69.49	58.51	69.49	69.49	96.92	144.4	135.3	140.8	151.7	153.6	148.1	144.4
Distance fished (km)	1.481	1.481	1.481	1.481	1.481	1.111	1.481	1.481	1.481	1.481	1.481	1.481	1.481
Bottom temp. (°C)	8.12	8.92	8.18	8.13	8.09	5.73	5.65	5.32	5.49	5.39	5.38	5.24	5.55
Haul	144	145	146	147	148	149	150	151	152	153	154	155	156
Location	SE Kod.	NE Kod.	Kujulik	Kujulik	Kujulik	Kujulik	Kujulik	Kujulik					
Month/Day/Year	07-14-21	07-15-21	07-15-21	07-15-21	07-15-21	07-15-21	07-15-21	07-26-21	07-26-21	07-26-21	07-26-21	07-26-21	07-26-21
Station	729	443	444	421	420	395	369X	4308	4302	4301	4298	4290	4296
Longitude start (°W)	153.1928	151.7303	151.7068	151.6773	151.7578	151.9608	152.0533	157.6125	157.6743	157.6883	157.7510	157.8302	157.7743
Latitude start (°N)	56.6648	57.5272	57.5300	57.5693	57.5922	57.6635	57.7323	56.5395	56.5400	56.5667	56.5347	56.5965	56.6233
Heading, degrees	20	291	106	335	317	295	359	154	116	153	84	309	154
Average depth (m)	146.2	146.2	159.0	118.8	122.5	204.8	109.7	128.0	98.75	91.43	91.43	27.43	69.49
Distance fished (km)	1.481	1.481	1.481	1.481	1.111	1.481	1.111	1.852	1.852	1.852	1.852	1.296	1.852
Bottom temp. (°C)	5.37	5.77	5.75	6.06	6.03	6.29	6.49	5.93	6.27	6.63	6.86	8.45	7.91

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Haul	157	158	159	160	161	162	163	164	165	166	167	168	169
Location	Chignik												
Month/Day/Year	07-26-21	07-27-21	07-27-21	07-27-21	07-27-21	07-27-21	07-27-21	07-27-21	07-27-21	07-28-21	07-28-21	07-28-21	07-28-21
Station	4286	4287	4278	4282	4272	4277	4274	4266	4256	4262	4267	4312	4270
Longitude start (°W)	157.9137	157.9135	158.0372	157.9942	158.0923	158.0580	158.1448	158.1783	158.3070	158.2688	158.1667	158.1483	158.1867
Latitude start (°N)	56.4267	56.4093	56.3935	56.4213	56.4870	56.4292	56.4060	56.4193	56.4210	56.3473	56.4015	56.2548	56.2500
Heading, degrees	113	247	321	96	152	166	116	271	271	139	309	79	71
Average depth (m)	168.2	201.1	190.1	195.6	118.8	179.2	170.0	155.4	96.92	76.80	118.8	128.0	100.5
Distance fished (km)	1.852	1.852	1.852	1.852	1.852	1.852	1.852	1.852	1.852	1.666	1.852	1.852	1.852
Bottom temp. (°C)	5.01	5.19	4.71	4.75	6.21	4.71	4.60	4.62	5.53	6.84	4.89	6.60	6.61
Haul	170	171	172	173	174	175	176	177	178	179	180	181	182
Location	Chignik	Chignik	Chignik	Chignik	Mitro.								
Month/Day/Year	07-28-21	07-28-21	07-28-21	07-29-21	07-29-21	07-30-21	07-30-21	07-30-21	07-30-21	07-30-21	07-30-21	07-30-21	07-30-21
Station	4271	4264	4265	4964	4065	4063	4048	4065	4066B	4066A	4050B	4050A	4049
Longitude start (°W)	158.2138	158.2603	158.3055	158.3453	158.5767	158.5838	158.6340	158.5658	158.5472	158.5978	158.6652	158.7212	158.7487
Latitude start (°N)	56.2333	56.2353	56.1915	56.2247	55.9663	56.1315	56.0638	55.9490	55.8677	55.8877	55.8758	55.8955	55.9203
Heading, degrees	69	208	30	104	344	228	183	174	351	197	4	302	298
Average depth (m)	95.09	76.80	58.51	69.49	126.1	155.4	166.4	104.2	118.8	117.0	117.0	138.9	144.4
Distance fished (km)	1.852	1.852	1.666	1.852	1.852	1.852	1.852	1.852	1.852	1.852	1.852	1.666	1.852
Bottom temp. (°C)	6.62	6.77	6.96	7.10	5.26	4.82	4.61	5.52	4.98	5.04	5.99	5.47	5.50
Haul	183	184	185	186	187	188	189	190	191	192	193	194	195
Location	Mitro.	Ivanof	Ivanof	Ivanof	Ivanof	Ivanof							
Month/Day/Year	07-31-21	07-31-21	07-31-21	07-31-21	07-31-21	07-31-21	07-31-21	07-31-21	08-01-21	08-01-21	08-01-21	08-01-21	08-01-21
Station	4035	4036	4037	4038B	4038A	4026	4025	4024	4915	4007	4008	4000X	4000Y
Longitude start (°W)	158.8408	158.9310	158.9652	158.9118	158.9583	159.0265	159.0077	159.0707	159.1813	159.3923	159.4200	159.4865	159.4695
Latitude start (°N)	55.9515	55.8840	55.8237	55.7037	55.7185	55.7185	55.7843	55.8922	55.8608	55.7782	55.7382	55.8177	55.7865
Heading, degrees	113	198	180	204	209	23	0	134	213	198	171	155	126
Average depth (m)	140.8	129.8	129.8	148.1	144.4	140.8	122.5	98.75	64.00	87.77	102.4	71.31	85.94
Distance fished (km)	1.852	1.852	1.852	1.666	1.666	1.666	1.852	1.852	1.852	1.852	1.852	1.666	1.666
Bottom temp. (°C)	5.59	5.25	5.08	5.06	5.00	5.00	5.07	5.73	6.59	5.96	5.63	6.53	5.83
Haul	196	197	198	199	200	201	202	203	204	205	206	207	208
Location	Stepovak	Stepovak	Stepovak	Stepovak	Beaver								
Month/Day/Year	08-02-21	08-02-21	08-02-21	08-02-21	08-02-21	08-02-21	08-02-21	08-03-21	08-03-21	08-03-21	08-03-21	08-03-21	08-03-21
Station	STD	STA	STB	STE	368A	348	329B	BAC	BAF	BAD	BAA	BAE	311A
Longitude start (°W)	159.8237	159.8140	159.7600	159.7660	160.1877	160.3342	160.4295	160.6152	160.5533	160.5722	160.6843	160.6018	160.5940
Latitude start (°N)	55.7568	55.8088	55.8272	55.7910	55.5720	55.5147	55.4633	55.5193	55.4780	55.5098	55.5350	55.4862	55.4690
Heading, degrees	18	4	180	183	220	47	69	180	335	330	304	174	165
Average depth (m)	120.6	100.5	107.8	120.6	179.2	171.8	177.3	100.5	78.63	93.26	31.08	118.8	122.5
Distance fished (km)	1.481	1.481	1.481	1.481	1.852	1.481	1.852	1.852	1.852	1.852	1.111	1.852	1.852
Bottom temp. (°C)	4.74	5.18	4.74	4.81	4.90	4.80	4.76	5.05	6.18	5.66	11.2	4.80	4.84

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Haul	209	210	211	212	213	214	215	216	217	218	219	220	221
Location	Beaver	Beaver	Beaver	W. Nagai	W. Nagai	Beaver							
Month/Day/Year	08-03-21	08-03-21	08-03-21	08-04-21	08-04-21	08-04-21	08-04-21	08-04-21	08-04-21	08-04-21	08-05-21	08-05-21	08-06-21
Station	311B	311C	329C	393	373B	373A	353	354	334	334	371	332B	BVC
Longitude start (°W)	160.5840	160.5050	160.4937	159.9815	160.0585	160.1262	160.3067	160.3340	160.3845	160.4505	160.1522	160.3757	160.8920
Latitude start (°N)	55.4565	55.4335	55.4275	55.2003	55.1515	55.1190	55.1050	55.0673	55.0535	55.0138	55.2778	55.2047	55.4587
Heading, degrees	97	276	79	337	320	323	220	31	246	240	329	7	246
Average depth (m)	137.1	135.3	131.6	76.80	76.80	27.43	138.9	124.3	151.7	133.4	135.3	181.0	84.12
Distance dished (km)	1.852	1.852	1.852	1.296	1.759	1.296	1.481	1.852	1.296	1.481	1.666	1.481	1.296
Bottom temp. (°C)	4.75	4.78	4.78	5.54	5.75	7.75	5.71	5.84	5.70	5.79	5.70	5.76	7.03
Haul	222	223	224	225	226	227	228	229	230	231	232	233	234
Location	Beaver	Beaver	Beaver	Pavlof	Pavlof	Akutan	Akutan	Akutan	Akutan	Unalaska	Beaver In.	Beaver In.	Beaver In.
Month/Day/Year	08-06-21	08-06-21	08-06-21	08-06-21	08-06-21	08-08-21	08-08-21	08-08-21	08-08-21	08-09-21	08-09-21	08-09-21	08-09-21
Station	BVB	BVA	278	245	228	AKA	AKC	AKD	AKG	CAA	BIN	BIK	BID
Longitude start (°W)	160.8752	160.9077	160.9448	161.2227	161.2797	165.7007	165.7117	165.7083	165.7482	166.3300	166.1805	166.3012	166.4373
Latitude start (°N)	55.5002	55.4930	55.3810	55.2703	55.2792	54.1460	54.1758	54.2073	54.2253	53.9725	53.8350	53.8457	53.7753
Heading, degrees	212	182	358	297	102	10	355	171	340	23	328	239	61
Average depth (m)	36.57	42.06	98.75	82.29	82.29	71.31	87.77	87.77	98.75	76.80	65.83	287.1	252.3
Distance fished (km)	1.111	1.111	1.111	1.666	1.666	1.666	1.852	1.852	1.852	1.666	0.926	1.481	1.481
Bottom temp. (°C)	10.0	9.31	6.74	6.59	6.61	6.92	6.72	6.55	6.30	7.30	7.27	5.88	6.78
Haul	235	236	237	238	239	240	241	242	243	244	245	246	247
Location	Beaver In.	Beaver In.	Makush.	Unalaska	Unalaska	Unalaska	Unalaska						
Month/Day/Year	08-09-21	08-09-21	08-10-21	08-10-21	08-10-21	08-10-21	08-11-21	08-11-21	08-11-21	08-11-21	08-11-21	08-11-21	08-12-21
Station	BIB	BIG	MKK	MKN	MKP	MKF	MKB	MKC	MKE	UNI	UNJ	UNG	UNC
Longitude start (°W)	166.5103	166.3718	167.1757	167.1123	167.0628	167.0128	166.7857	166.8532	166.9265	166.6142	166.4968	166.4437	166.6028
Latitude start (°N)	53.7352	53.8040	53.7270	53.6765	53.6475	53.7390	53.7008	53.7160	53.7310	54.0272	54.0290	53.9898	53.9178
Heading, degrees	49	63	127	313	300	256	312	284	271	125	189	240	352
Average depth (m)	173.7	248.7	118.8	135.3	142.6	193.8	100.5	177.3	197.5	82.29	164.5	87.77	142.6
Distance fished (km)	1.481	1.481	1.852	1.852	1.852	1.852	1.666	1.852	1.852	1.111	1.666	1.666	1.296
Bottom temp. (°C)	6.74	6.52	5.80	6.24	6.35	4.90	5.52	4.69	4.79	6.82	5.88	6.58	6.16
Haul	248	249	250	251	252	253	254	255	256	257	258	259	260
Location	Unalaska	Unalaska	Unalaska	Akutan	Morzhov.	Sanak I.	Morzhov.						
Month/Day/Year	08-12-21	08-12-21	08-12-21	08-14-21	08-15-21	08-15-21	08-15-21	08-15-21	08-15-21	08-15-21	08-15-21	08-16-21	08-17-21
Station	UNF	UNE	UND	AKL	MOSX	MORX	MOK	MOL	MOOX	87AX	87D	113	MOH
Longitude start (°W)	166.5223	166.5028	166.4797	165.7423	163.0987	163.1655	162.9920	162.9558	162.9868	163.0030	162.9477	162.6278	162.9972
Latitude start (°N)	53.9712	53.9427	53.9435	54.2527	54.8540	54.8318	54.8888	54.9078	54.8527	54.8168	54.7787	54.5088	54.9395
Heading, degrees	31	359	12	345	50	104	38	359	346	47	139	121	342
Average depth (m)	151.7	113.3	78.63	102.4	96.92	91.43	118.8	131.6	96.92	84.12	87.77	128.0	96.92
Distance fished (km)	1.481	1.111	1.111	1.852	1.852	1.852	1.852	1.852	1.852	1.666	1.852	1.481	1.852
Bottom temp. (°C)	5.95	6.20	6.45	6.36	6.90	7.04	6.89	7.02	6.83	7.04	6.58	5.04	7.09

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Haul	261	262	263	264	265	266	267	268	269	270	271	272	273
Location	Morzhov.	Morzhov.	Morzhov.	Morzhov.	Sanak I.	Cold B.	Cold B.	Cold B.					
Month/Day/Year	08-17-21	08-17-21	08-17-21	08-17-21	08-18-21	08-18-21	08-18-21	08-18-21	08-18-21	08-18-21	08-18-21	08-19-21	08-19-21
Station	MOD	MOF	MOG	MOI	126	125	137	138A	138C	138B	COOX	COB	COC
Longitude start (°W)	163.0588	163.0328	162.9962	162.9695	162.5557	162.5412	162.4190	162.3975	162.3425	162.4097	162.3817	162.5940	162.5542
Latitude start (°N)	55.0433	54.9978	54.9920	54.9557	54.4838	54.5177	54.5125	54.4902	54.4463	54.4467	55.0012	55.2260	55.2258
Heading, degrees	156	162	146	166	120	122	145	151	138	299	97	160	173
Average depth (m)	87.77	82.29	91.43	104.2	138.9	146.2	146.2	142.6	144.4	153.6	104.2	53.03	45.71
Distance fished (km)	1.852	1.852	1.852	1.852	1.481	1.481	1.481	1.481	1.481	1.481	1.481	1.111	1.111
Bottom temp. (°C)	7.11	7.18	7.07	7.09	5.05	5.13	5.22	5.21	5.23	5.13	7.91	10.1	10.2
Haul	274	275	276	277	278	279	280	281	282	283	284	285	286
Location	Cold B.	Pavlof	Pavlof										
Month/Day/Year	08-19-21	08-19-21	08-19-21	08-19-21	08-19-21	08-20-21	08-20-21	08-20-21	08-20-21	08-20-21	08-20-21	08-20-21	08-21-21
Station	COE	COF	COGA	COGB	COM	BEG	157A	156A	BEF	BECX	BEE	VOPX	VOLX
Longitude start (°W)	162.5452	162.5232	162.4748	162.4302	162.4615	162.1713	162.1235	162.1065	162.1235	162.1597	162.1490	161.9363	161.9695
Latitude start (°N)	55.1985	55.1608	55.1432	55.1172	55.0158	54.9897	54.9188	54.9648	55.0022	55.1135	55.0710	55.1850	55.2148
Heading, degrees	171	124	329	325	99	178	152	342	25	191	178	36	117
Average depth (m)	65.83	87.77	89.60	54.86	78.63	82.29	74.97	85.94	95.09	78.63	78.63	82.29	71.31
Distance fished (km)	1.111	1.481	1.481	1.111	1.481	1.481	1.666	1.852	1.852	1.666	1.852	1.666	1.852
Bottom temp. (°C)	10.1	10.1	10.2	10.2	8.14	7.87	7.80	7.64	7.65	7.62	7.71	6.66	6.88
Haul	287	288	289	290	291	292	293	294	295	296	297	298	299
Location	Pavlof												
Month/Day/Year	08-21-21	08-21-21	08-21-21	08-21-21	08-21-21	08-21-21	08-21-21	08-21-21	08-22-21	08-22-21	08-22-21	08-22-21	08-22-21
Station	VOQ	VOR	VON	VOH	VOI	VOD	PAV	VOBX	VOM	VOFB	VOG	VOA	PAU
Longitude start (°W)	161.8212	161.7480	161.7593	161.6793	161.6095	161.5475	161.5752	161.6095	161.8375	161.8208	161.7798	161.7210	161.6738
Latitude start (°N)	55.1987	55.1973	55.2273	55.2667	55.2822	55.3153	55.3537	55.3095	55.2312	55.2597	55.2535	55.2943	55.3537
Heading, degrees	95	321	60	53	66	75	177	259	1	58	105	15	0
Average depth (m)	93.26	117.0	118.8	104.2	109.7	118.8	98.75	98.75	87.77	96.92	104.2	113.3	129.8
Distance fished (km)	1.852	1.852	1.852	1.852	1.852	1.852	1.852	1.852	1.852	1.852	1.852	1.852	1.852
Bottom temp. (°C)	6.31	6.18	5.92	5.93	5.99	6.07	6.27	6.14	6.52	6.58	5.98	6.02	6.12
Haul	300	301	302	303	304	305	306	307	308	309	310	311	312
Location	Pavlof	Pavlof	Pavlof	Pavlof	Pavlof	W Kod.							
Month/Day/Year	08-22-21	08-22-21	08-22-21	08-23-21	08-23-21	09-11-21	09-11-21	09-11-21	09-12-21	09-12-21	09-12-21	09-12-21	09-12-21
Station	PARA	PAOB	PARB	PAEX	PAP	KUD	KUF	KUG	KUM	KUK	KUJ	KUI	KULA
Longitude start (°W)	161.6720	161.6568	161.5912	161.5248	161.5713	153.1628	153.3025	153.4317	153.1205	153.2533	153.2953	153.3882	153.2242
Latitude start (°N)	55.3922	55.4328	55.4143	55.5522	55.4560	57.9850	58.0288	58.0400	57.8635	57.9180	57.9367	57.9738	57.8623
Heading, degrees	15	35	174	69	242	274	271	185	279	300	300	279	326
Average depth (m)	104.2	98.75	82.29	29.25	74.97	34.74	144.4	73.14	71.31	137.1	162.7	246.8	106.0
Distance fished (km)	1.852	1.111	1.296	1.111	1.296	1.111	1.852	1.666	1.852	1.852	1.852	1.666	1.666
Bottom temp. (°C)	6.18	6.34	6.94	8.82	6.91	7.76	6.75	7.07	7.03	6.46	6.46	6.49	6.93

-continued-

Appendix B1.–Page 7 of 7.

Haul	313	314	315	316	317	318	319	320	321	322	323	324	325
Location	W Kod.												
Month/Day/Year	09-12-21	09-12-21	09-13-21	09-13-21	09-13-21	09-13-21	09-13-21	09-13-21	09-14-21	09-14-21	09-14-21	09-14-21	09-14-21
Station	KULB	KUYA	KUYB	KUNX	KUP	KUW	KUV	KUU	KUXB	KUXA	KUT	KUS	KUQ
Longitude start (°W)	153.2068	153.1957	153.2135	153.3797	153.4485	153.5263	153.5285	153.4813	153.3798	153.4065	153.5205	153.5473	153.5237
Latitude start (°N)	57.8340	57.7880	57.7433	57.8367	57.8577	57.6950	57.7427	57.7827	57.7390	57.7685	57.8127	57.8738	57.8855
Heading, degrees	2	185	43	300	289	168	1	312	354	309	350	166	319
Average depth (m)	84.12	71.31	25.60	131.6	159.0	64.00	80.46	160.9	106.0	128.0	181.0	182.8	186.5
Distance fished (km)	1.852	1.111	1.111	1.852	1.852	1.481	1.296	1.852	1.481	1.481	1.852	1.852	1.852
Bottom temp. (°C)	6.99	9.08	9.54	5.91	5.77	7.23	6.19	5.72	5.66	5.65	5.77	5.74	5.73
Haul	326	327	328	329	330	331	332	333	334	335	336	337	
Location	W Kod.												
Month/Day/Year	09-15-21	09-15-21	09-15-21	09-15-21	09-16-21	09-16-21	09-16-21	09-16-21	09-16-21	09-16-21	09-17-21	09-17-21	
Station	PMA	MAA	RAA	UYBX	UYT	UYQX	UYMX	UYO	UYKX	UYEX	UYHX	UYFX	
Longitude start (°W)	152.9520	153.0772	153.2150	153.9975	153.7962	153.9038	153.8993	153.7980	153.8778	153.9283	153.7222	153.8585	
Latitude start (°N)	58.3017	58.2167	58.1340	57.7412	57.3692	57.4848	57.5667	57.5700	57.5920	57.6457	57.6618	57.6745	
Heading, degrees	332	287	144	158	351	341	353	310	336	1	269	286	
Average depth (m)	128.0	131.6	107.8	140.8	42.06	142.6	106.0	85.94	135.3	184.6	91.43	159.0	
Distance fished (km)	1.852	1.481	1.481	1.852	1.111	1.852	1.852	1.852	1.852	1.852	1.481	1.666	
Bottom temp. (°C)	7.42	7.12	7.51	7.02	7.95	7.45	7.32	7.79	7.32	6.88	7.43	7.26	

Appendix B2.–2021 bottom trawl survey locations, stations, and station areas by district and section.

KODIAK DISTRICT							
Northeast Section				Eastside Section			
Chiniak Gully		Chiniak Bay		Ugak Bay		Barnabas Gully	
Station	km ²	Station	km ²	Station	km ²	Station	km ²
395	85.8	CHA	5.5	UGAA	16.0	486A	25.0
420	83.3	CHB	7.9	UGAC	3.2	486B	29.4
421	83.3	CHE	20.6	UGAD	4.4	510C	21.5
443	83.5	CHF	12.7	UGB	5.8	510D	38.0
444	83.5	CHG	32.8	UGC	17.5	511A	42.0
369X	142.8	CHJ	11.3	UGD	11.0	511B	42.9
Total	562.1	CHK	8.6	UGE	12.7	533A	42.9
Marmot Bay		CHL	14.1	UGF	15.8	533B	42.9
Station	km ²	Total	113.4	UGG	11.0	534BX	20.8
MOEX	36.2			UGI	22.3	534DX	29.0
MOGX	65.9	Kizhuyak Bay		UGJ	21.0	535A	21.1
MOLA	28.0	Station	km ²	UGM	16.8	535B	21.4
MOLB	44.8	KZA	11.7	Total	157.4	535C	21.1
MONX	75.5	KZB	2.7			535D	21.4
MOPA	27.8	KZC	12.3	Kiliuda Bay		559	85.8
MOPB	19.9	KZD	23.7	Station	km ²	560	85.8
MOXA	13.0	KZE	25.8	KLA	20.92	561	85.8
MOXB	29.5	KZF	20.1	KLB	9.261	587	85.8
256	82.1	KZG	21.2	KLC	19.55	588	85.8
257	82.1	KZJ	21.4	KLD	18.18	589	85.8
284	82.4	KZK	21.4	KLE	8.232	619	85.8
285	82.4	KZO	21.4	KLF	15.09	620	85.8
313	85.8	KZR	10.8	KLG	16.46	621	85.8
314	82.5	Total	192.6	KLH	16.81	654	85.8
255A	64.4			KLI	21.44	655	85.8
255B	63.9			KLL	21.44	656	85.8
283A	67.9			Total	167.4	695	85.8
283B	64.0					696	85.8
Total	1,098.1					Total	1,619.9
Southeast Section				Southwest Section			
South Sitkalidak Strait		Offshore Twoheaded		Alitak Flats		Alitak Bay	
Station	km ²	Station	km ²	Station	km ²	Station	km ²
THA	15.1	618A	42.9	645B	34.3	ALA	3.1
THCX	19.6	585X	78.8	646A	27.1	ALBX	12.8
THDX	28.6	614	61.2	646B	16.5	ALCA	8.1
THFA	22.3	615	99.5	646C	27.9	ALD	13.0
THG	21.1	651	85.8	646D	37.4	ALF	21.4
THH	19.2	Total	368.1	682B	21.7	ALG	19.9
THI	21.6	Horse's Head		683A	22.2	ALH	16.1
THJ	17.8	Station	km ²	683B	20.9	ALI	16.6
THK	16.5	586	85.8	683D	9.3	ALJ	15.1
THL	9.3	688	85.8	684A	21.7	ALK	9.9
THM	10.6	725	85.8	684B	10.3	ALL	8.2
THN	5.1	726	85.8	684C	8.6	ALM	16.1
Total	206.8	727	85.8	Total	257.9	ALP	18.4
		728	85.8			ALQ	14.4
		729	85.8			ALR	13.4
		759	85.8			Total	206.7
		760	85.8				
		761	85.8				
		Total	857.5				

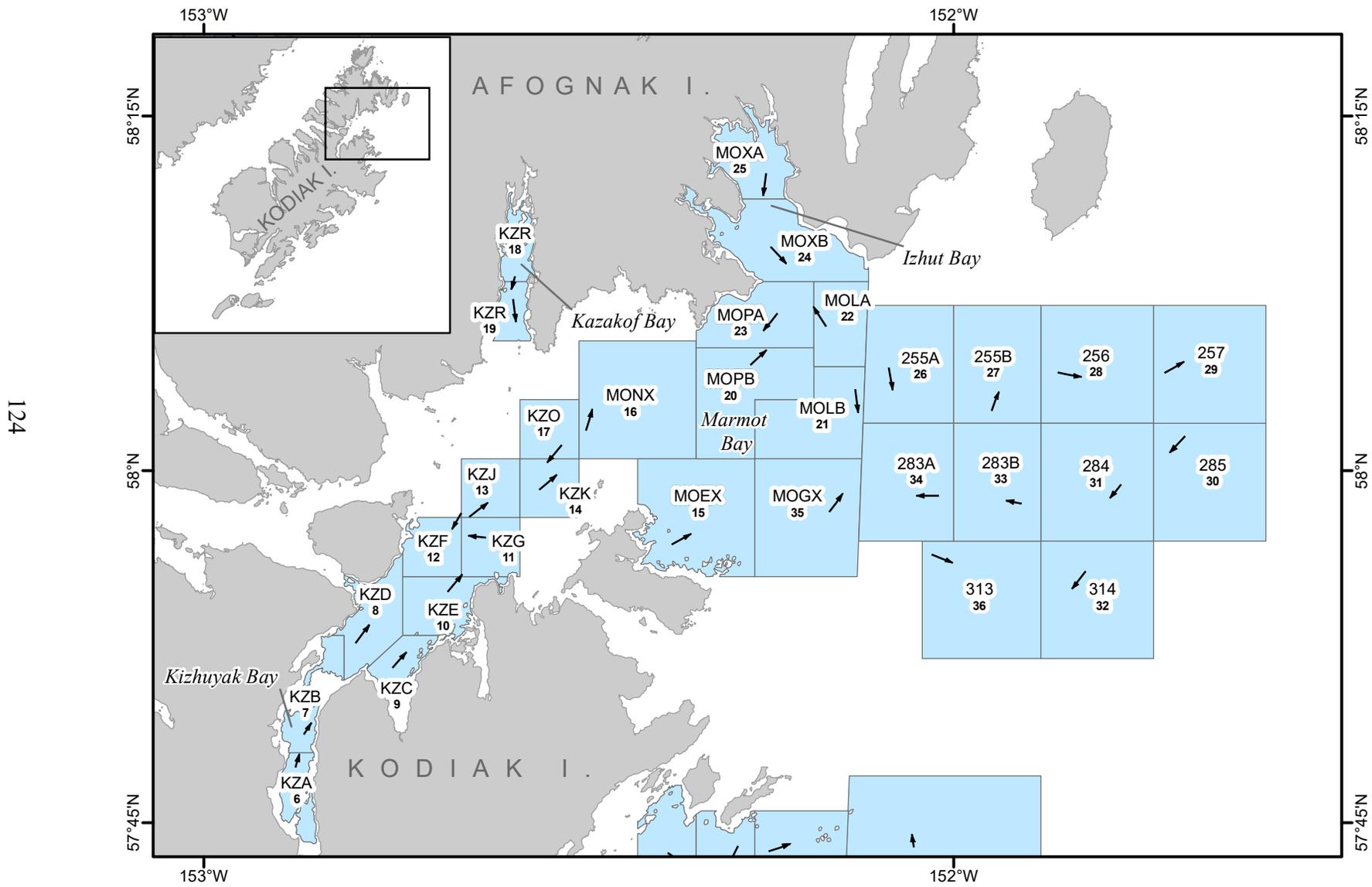
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SOUTH PENINSULA DISTRICT							
Pavlof/Volcano Bay		West Nagai Strait		Cold/Belkofski Bay		Morzhovoi Bay	
Station	km ²	Station	km ²	Station	km ²	Station	km ²
228	12.8	332B	42.9	156A	44.2	87AX	42.9
245	21.0	373A	28.0	157A	21.0	87D	22.3
PAEX	14.2	373B	20.5	BECX	25.7	MOD	16.1
PAOB	19.6	334	85.8	BEE	21.4	MOF	20.0
PAP	20.8	353	86.1	BEF	14.5	MOG	17.6
PARA	19.1	354	85.8	BEG	20.3	MOH	15.1
PARB	20.8	371	76.0	COB	20.8	MOI	16.9
PAU	21.4	393	42.0	COC	14.2	MOK	21.4
PAV	20.6	Total	467.0	COE	20.2	MOL	21.4
VOA	22.1			COF	11.5	MOOX	43.8
VOBX	43.5	Beaver/Balboa/Unga		COGA	9.8	MORX	33.7
VOD	20.8	Station	km ²	COGB	3.6	MOSX	42.7
VOFB	15.5	278	71.4	COH	4.8	Total	313.9
VOG	22.1	348	85.8	COM	18.5		
VOH	21.7	311A	15.5	COOX	27.7	Sanak Island	
VOI	21.2	311B	19.4	Total	278.3	Station	km ²
VOLX	17.7	311C	16.2			138A	34.8
VOM	27.5	329B	21.4	Stepovak Bay		138B	18.4
VON	22.1	329C	21.4	Station	km ²	138C	56.9
VOPX	29.7	BAA	12.0	STA	21.0	113	77.2
VOQ	15.9	BAC	16.9	STB	18.9	125	77.2
VOR	21.1	BAD	8.3	STD	22.4	126	77.8
Total	471.3	BAE	12.7	STE	15.5	137	85.8
		BAF	9.4	Total	77.8	Total	428.0
		BVA	13.5				
		BVB	14.0	S PENINSULA DISTRICT TOTALS			
		BVC	18.9			km ²	
		368A	43.9	Sanak Island			
		Total	400.7	Morzhovoi Bay			
				Cold/Belkofski Bay			
				Pavlof/Volcano Bay			
				West Nagai Strait			
				Beaver/Balboa/Unga			
				Stepovak Bay			
				S Peninsula District			
				2,437.1			

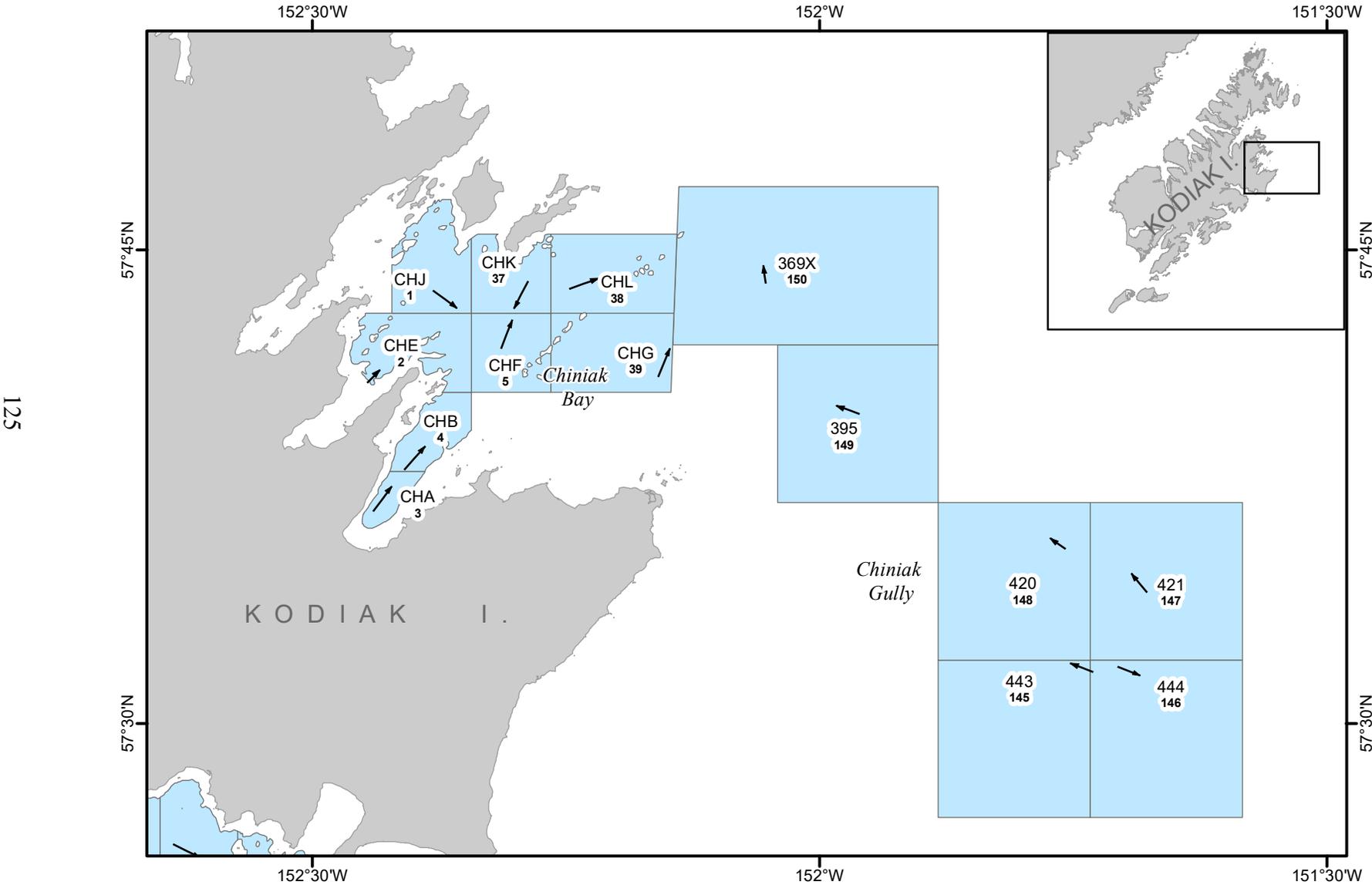
EASTERN ALEUTIAN DISTRICT							
Unalaska/Kalekta Bay Section		Makushin Bay Section		Akutan Bay Section		Beaver Inlet	
Station	km ²	Station	km ²	Station	km ²	Station	km ²
KAA	19.5	MKB	15.8	AKA	33.2	BIB	17.3
UNC	22.6	MKC	18.5	AKC	21.2	BID	19.0
UND	11.7	MKE	29.1	AKD	22.5	BIG	22.6
UNE	17.9	MKF	20.9	AKG	21.4	BIK	13.1
UNF	21.4	MKK	35.7	AKL	21.4	BIN	17.5
UNG	21.4	MKN	26.2	Total	119.7	Total	89.5
UNI	19.7	MKP	11.1	E ALEUTIAN DISTRICT TOTALS			
UNJ	21.4	Total	157.3	Section	km ²		
Total	155.7			Akutan Bay	119.7		
				Unalaska/Kalekta Bay	155.7		
				Makushin Bay	157.3		
				Beaver Inlet	89.5		
				E Aleutian District	522.2		

APPENDIX C. TRAWL MAPS

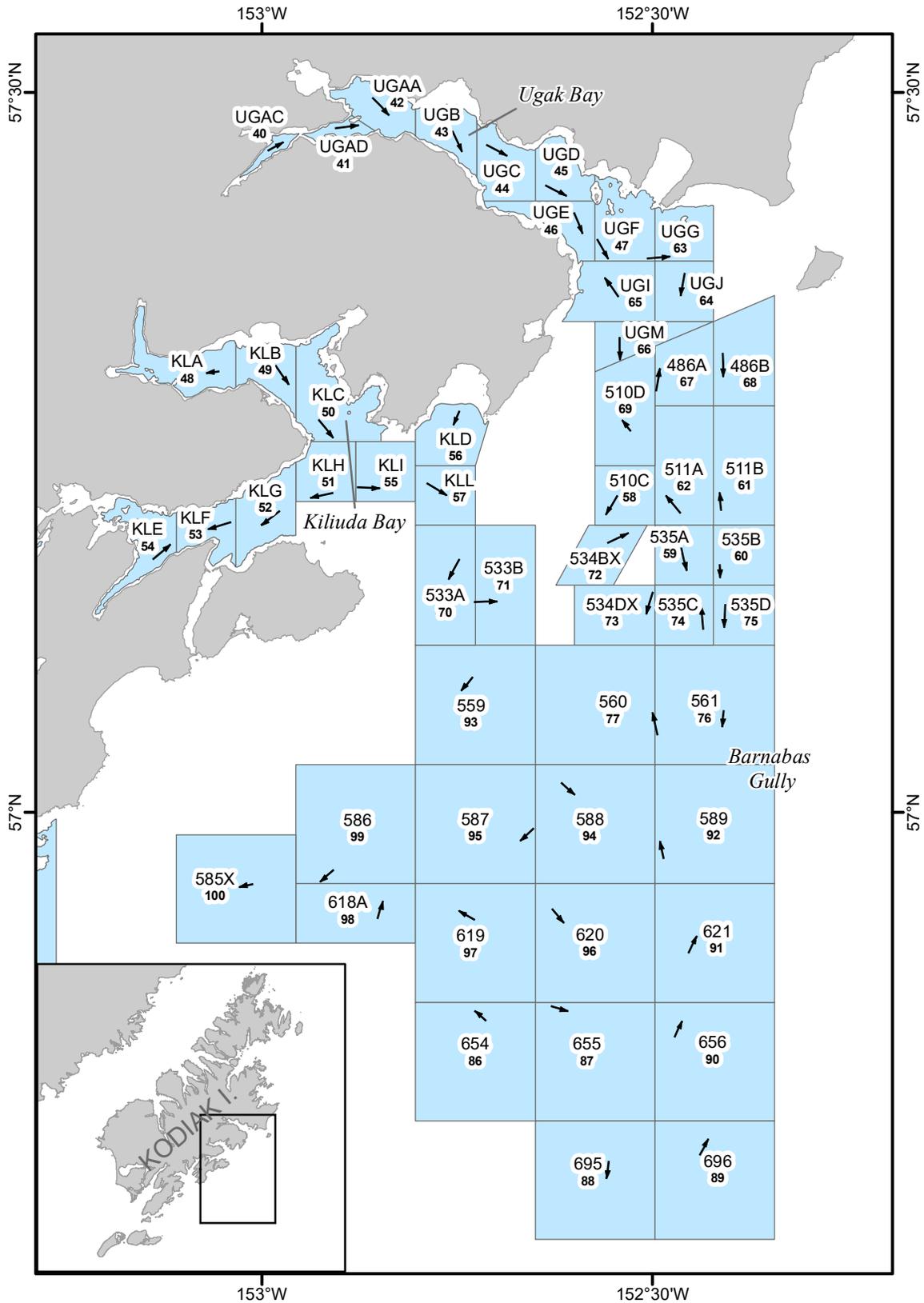
Appendix C1.—Izhut Bay, Kazakof Bay, Kizhuyak Bay, and Marmot Bay station boundaries with station name, trawl haul number (bold), and haul location and direction (arrow), June 2021.



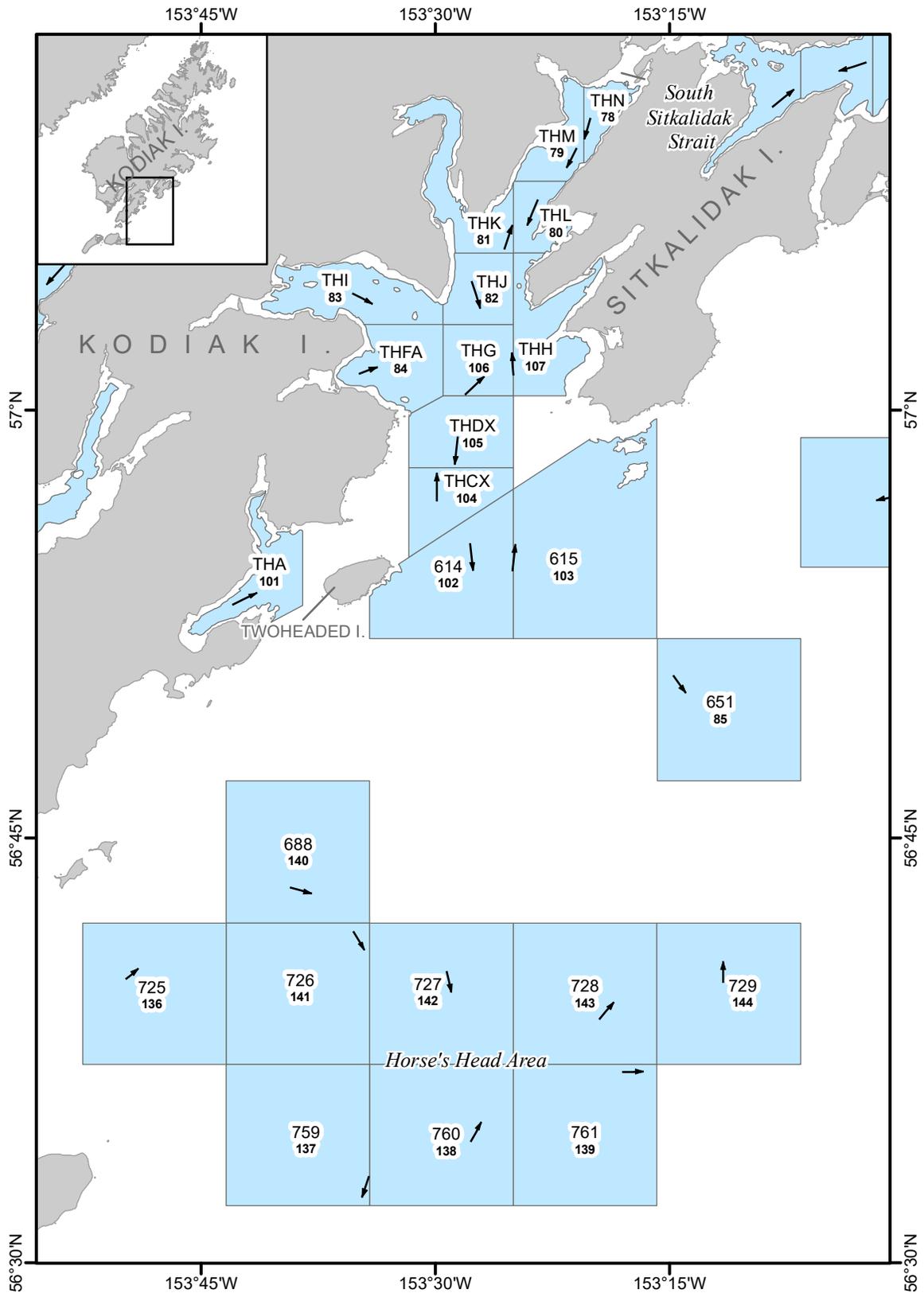
Appendix C2.—Chiniak Bay and Chiniak Gully station boundaries with station name, trawl haul number (bold), and haul location and direction (arrow), June and July 2021.



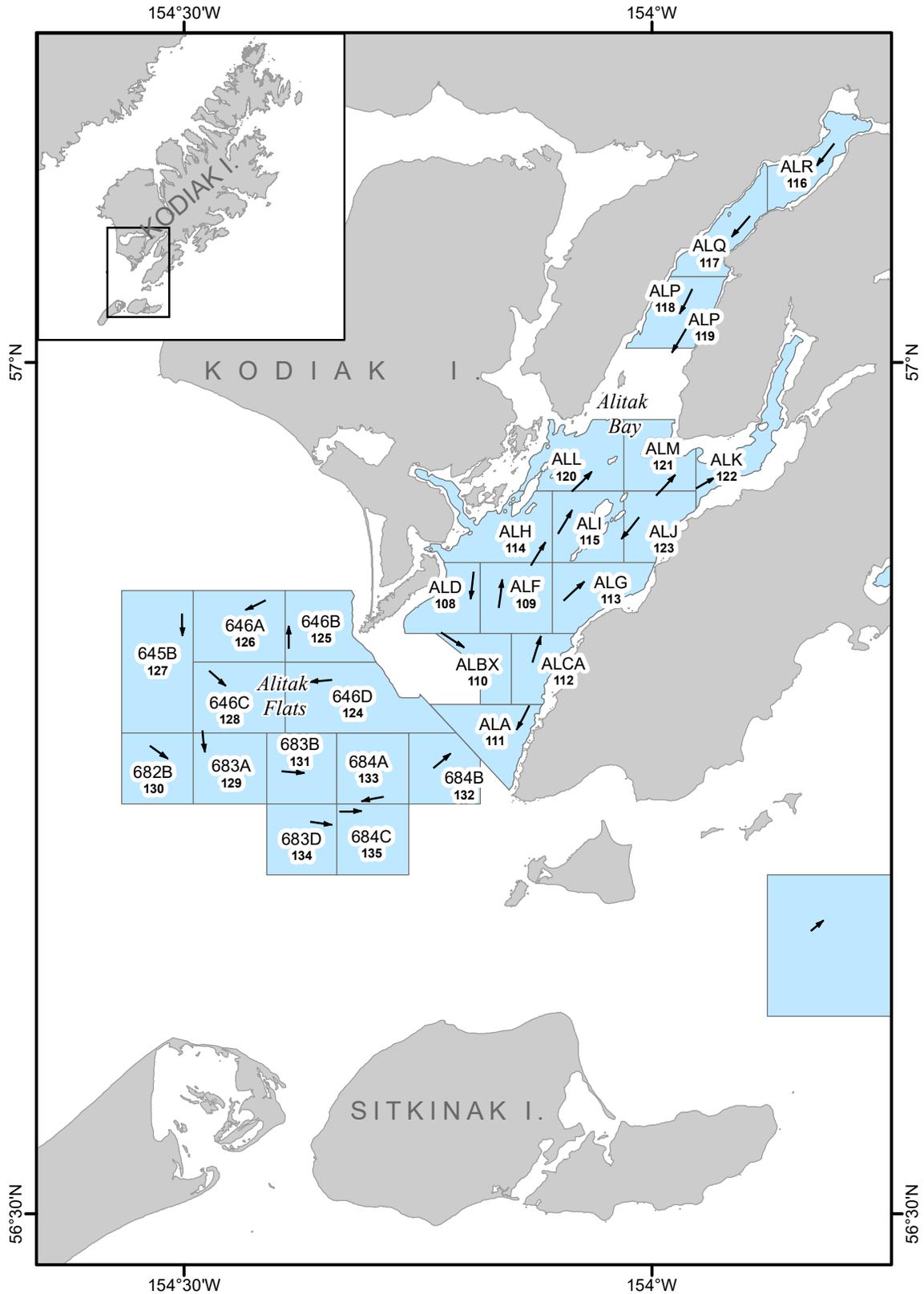
Appendix C3.—Ugak Bay, Kiliuda Bay, and Barnabas Gully station boundaries with station name, trawl haul number (bold), and haul location and direction (arrow), July 2021.



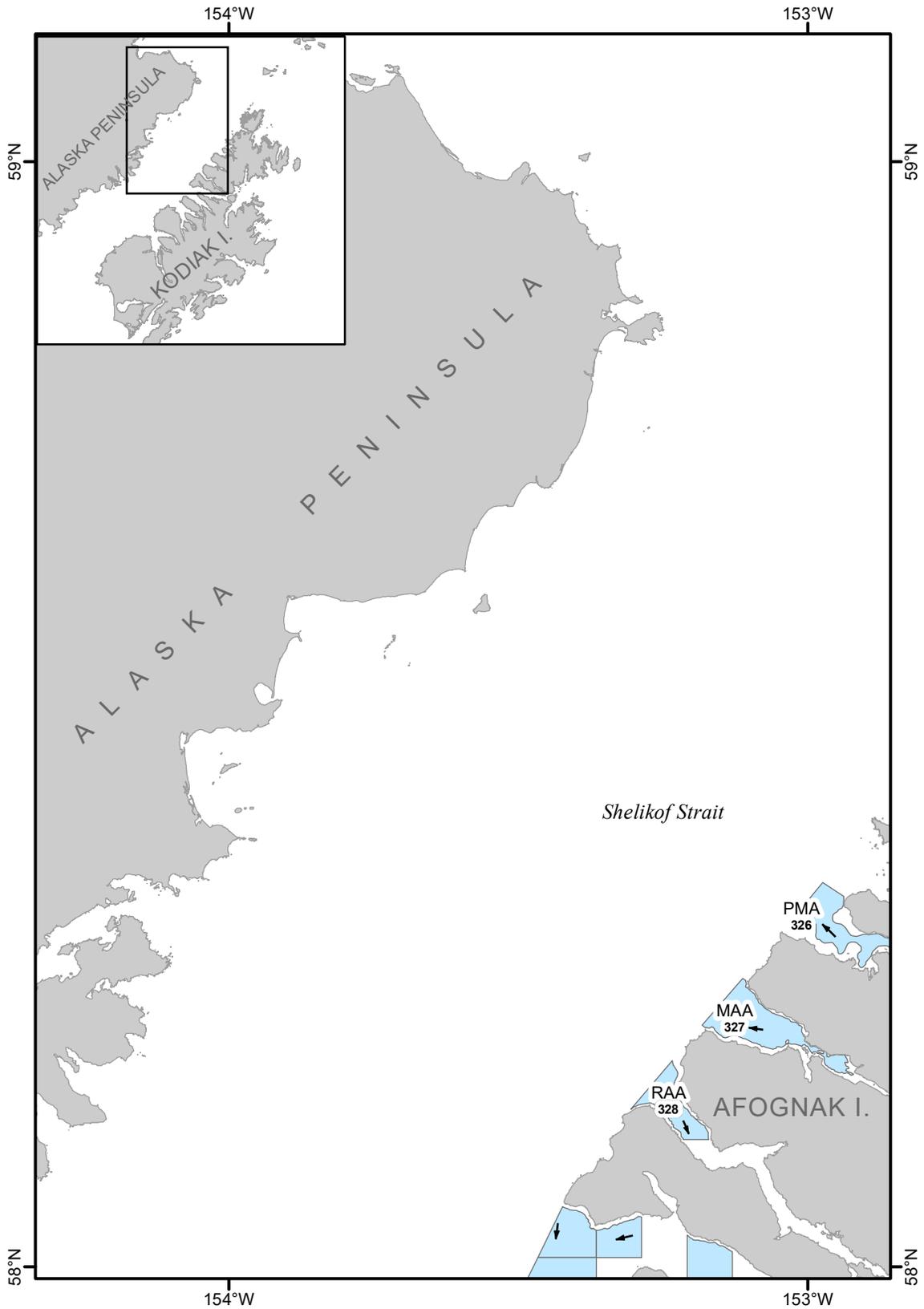
Appendix C4.—South Sitkalidak Strait, Twoheaded Island, and Horse’s Head area station boundaries with station name, trawl haul number (bold), and haul location and direction (arrow), July 2021.



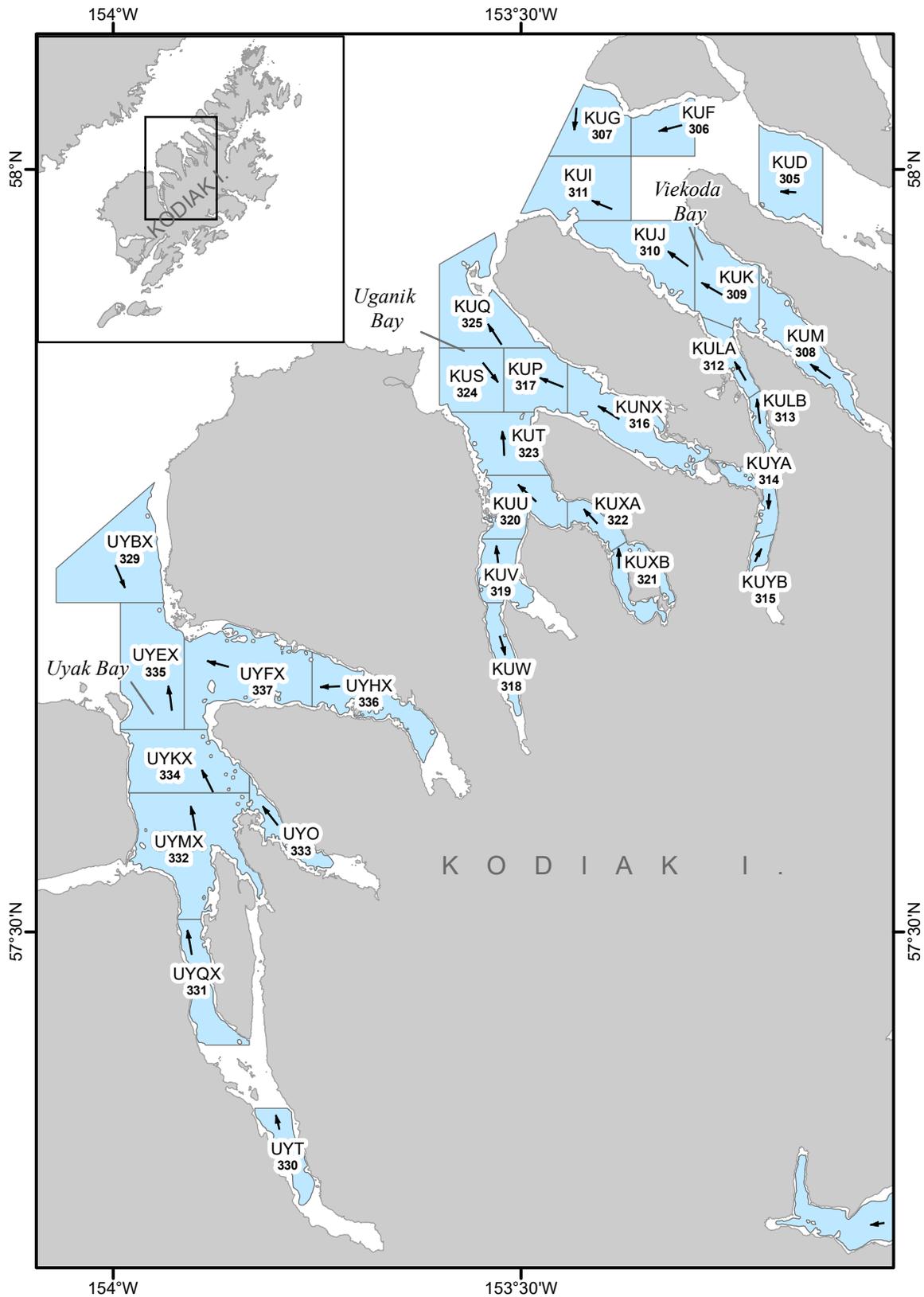
Appendix C5.—Alitak Bay and Alitak Flats station boundaries with station name, trawl haul number (**bold**), and haul location and direction (arrow), July 2021.



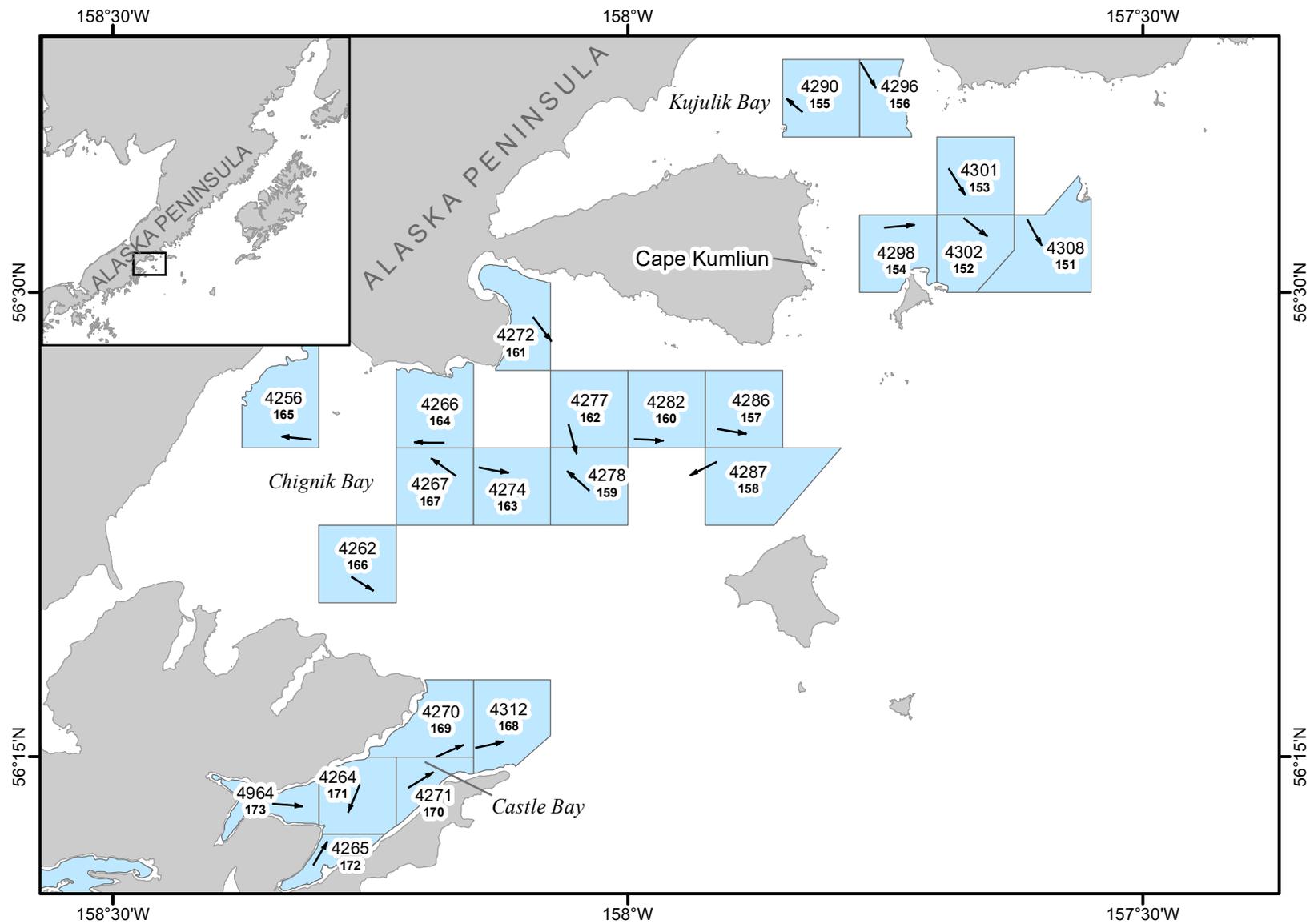
Appendix C6.—Shelikof Strait and Afognak Island station boundaries with station name, trawl haul number (bold), and haul location and direction (arrow), September 2021.



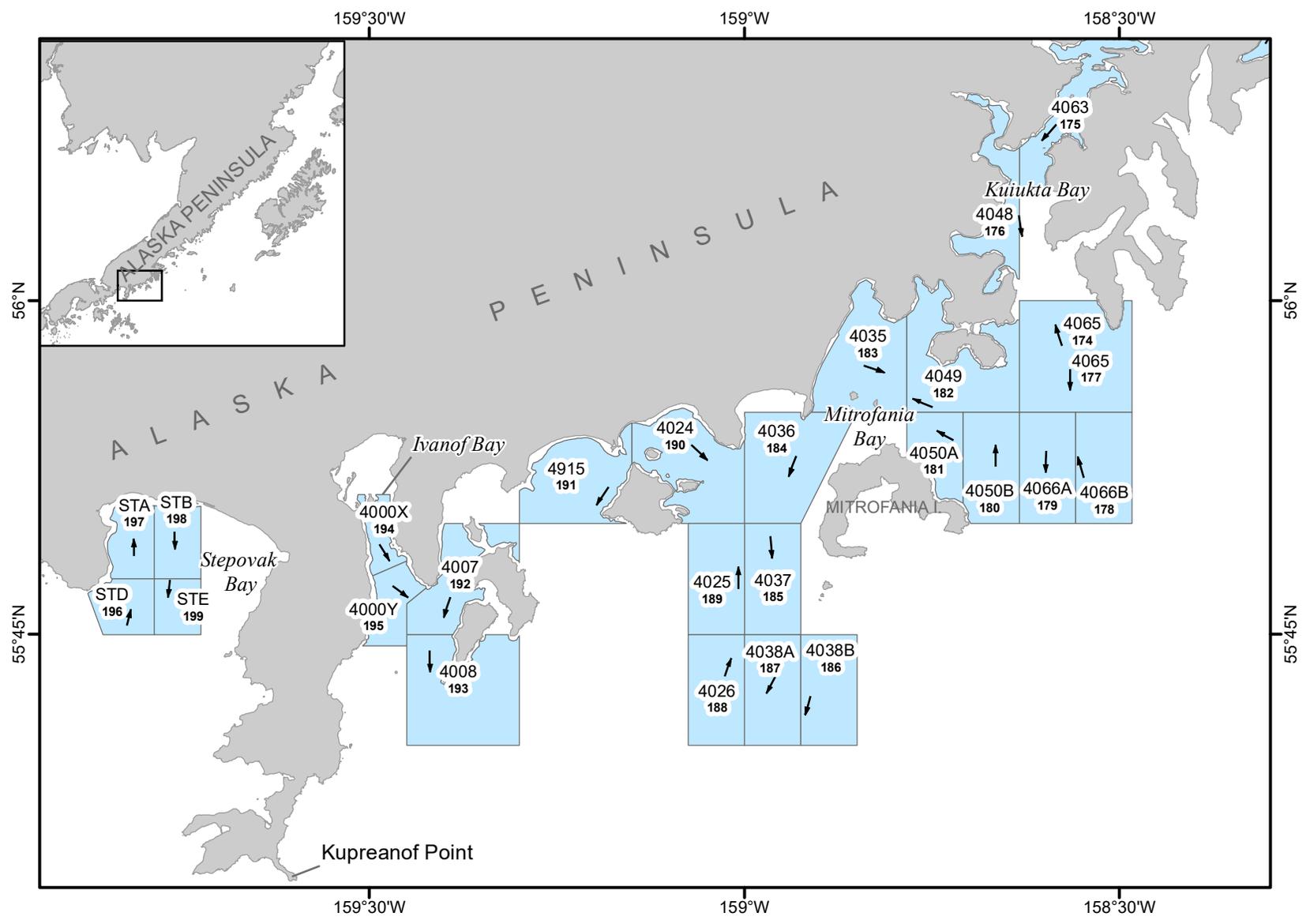
Appendix C7.—Uyak Bay, Uganik Bay, and Viekoda Bay station boundaries with station name, trawl haul number (bold), and haul location and direction (arrow), September 2021.



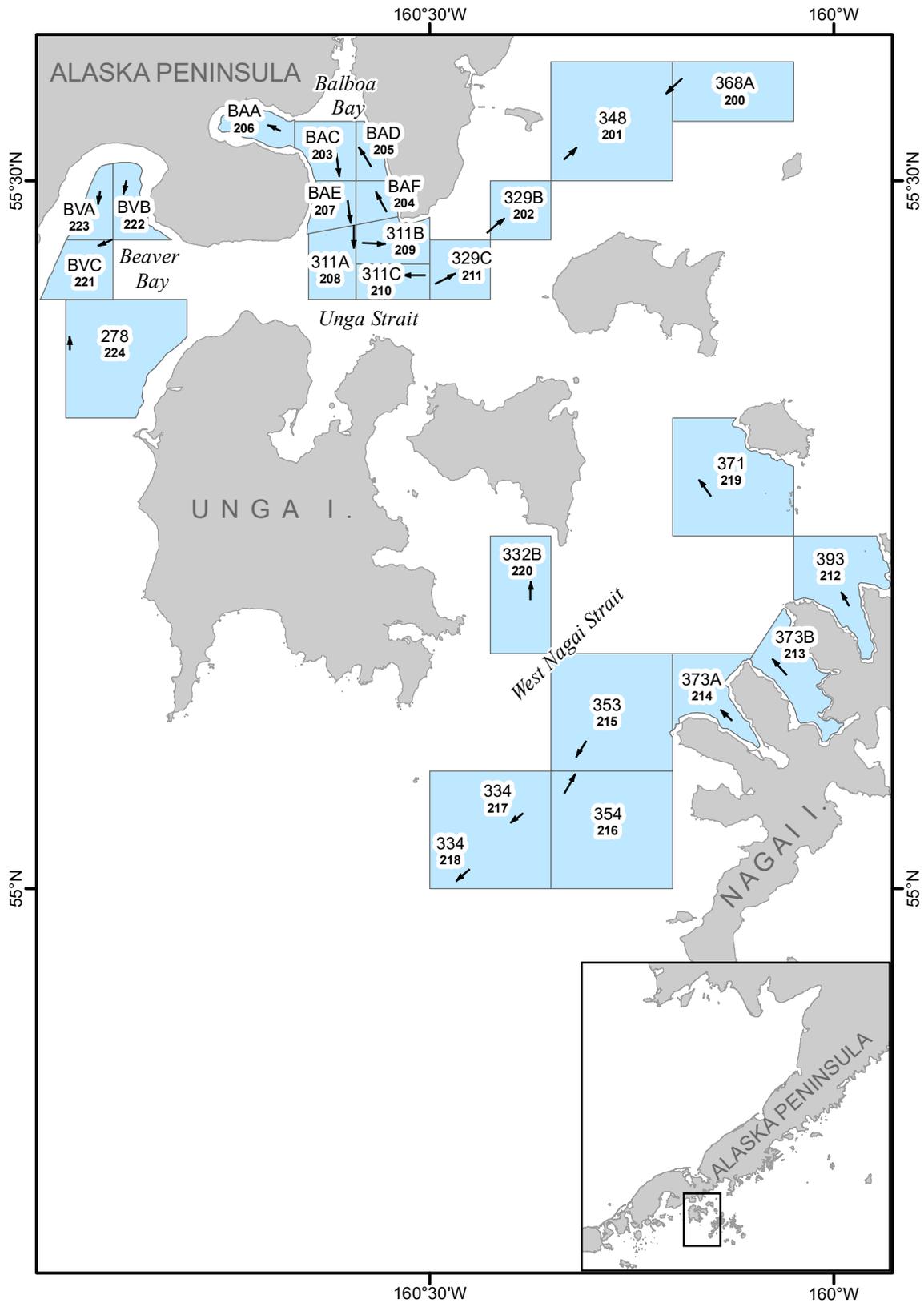
Appendix C8.—Kujulik Bay, Chignik Bay, and Castle Bay station boundaries with station name, trawl haul number (bold), and haul location and direction (arrow), July 2021.



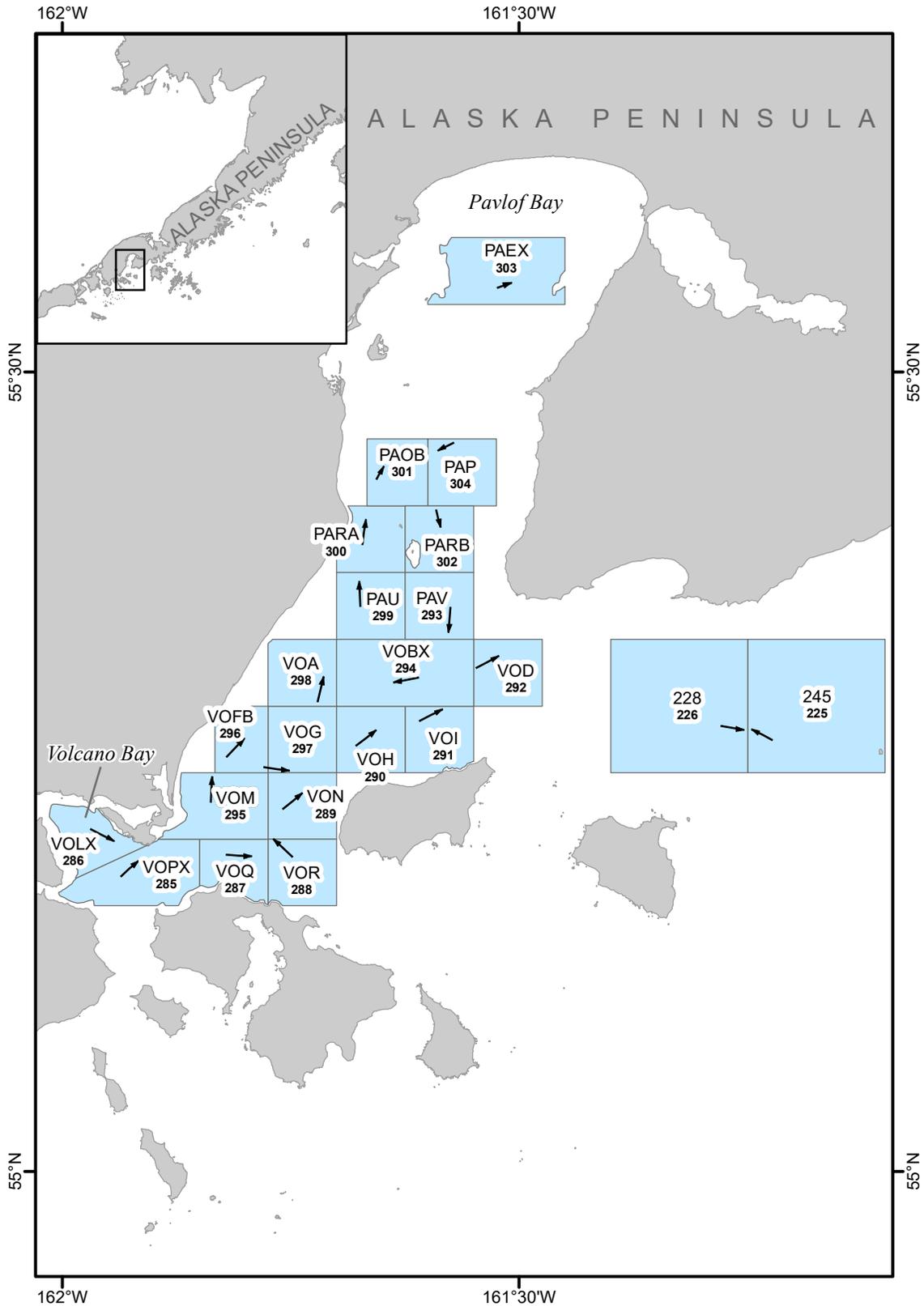
Appendix C9.—Stepovak Bay, Ivanof Bay, Kuiukta Bay, and Mitrofanía Bay station boundaries with station name, trawl haul number (bold), and haul location and direction (arrow), July and August 2021.



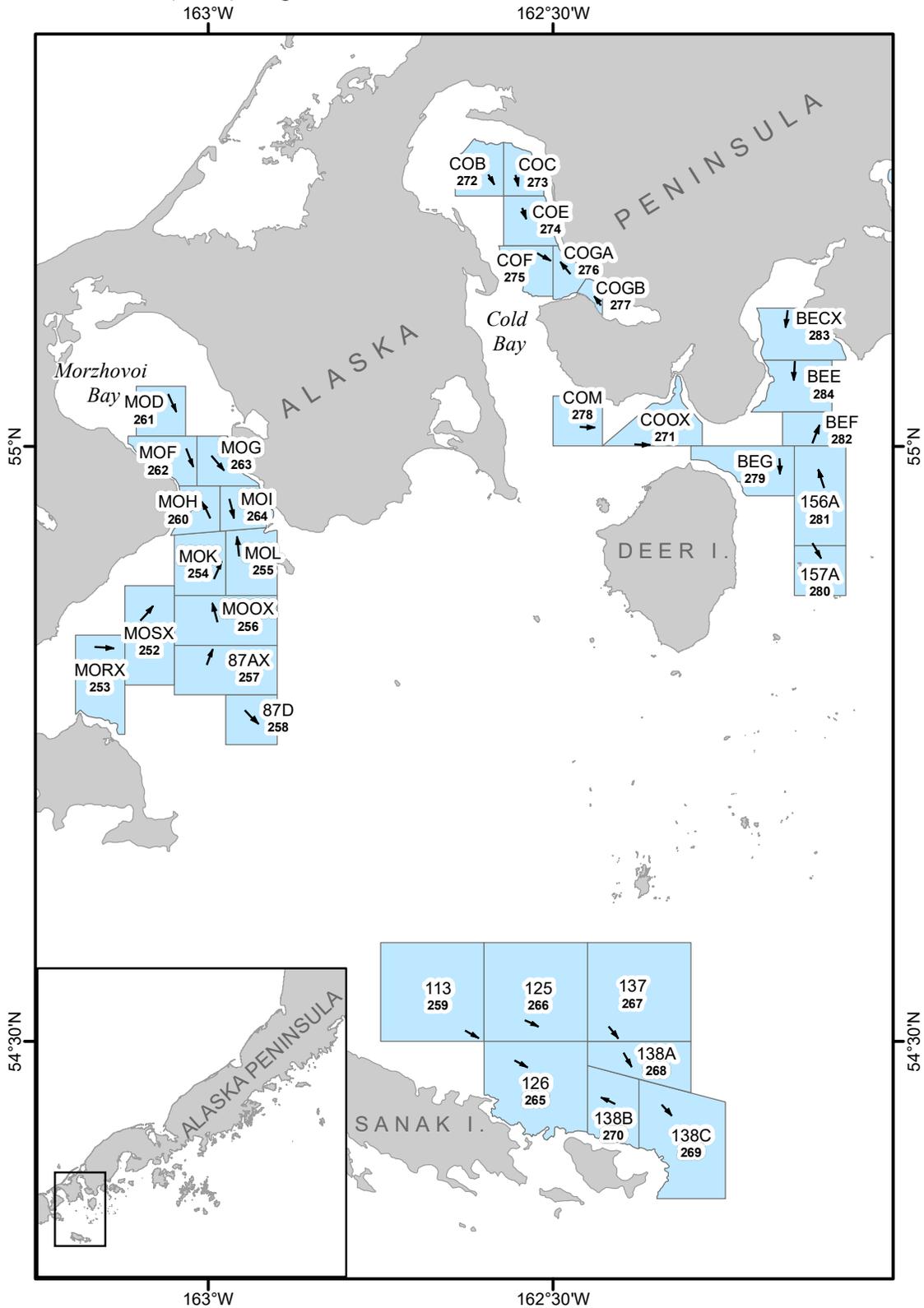
Appendix C10.—Unga Strait, Beaver Bay, Balboa Bay, and West Nagai Strait station boundaries with station name, trawl haul number (bold), and haul location and direction (arrow), August 2021.



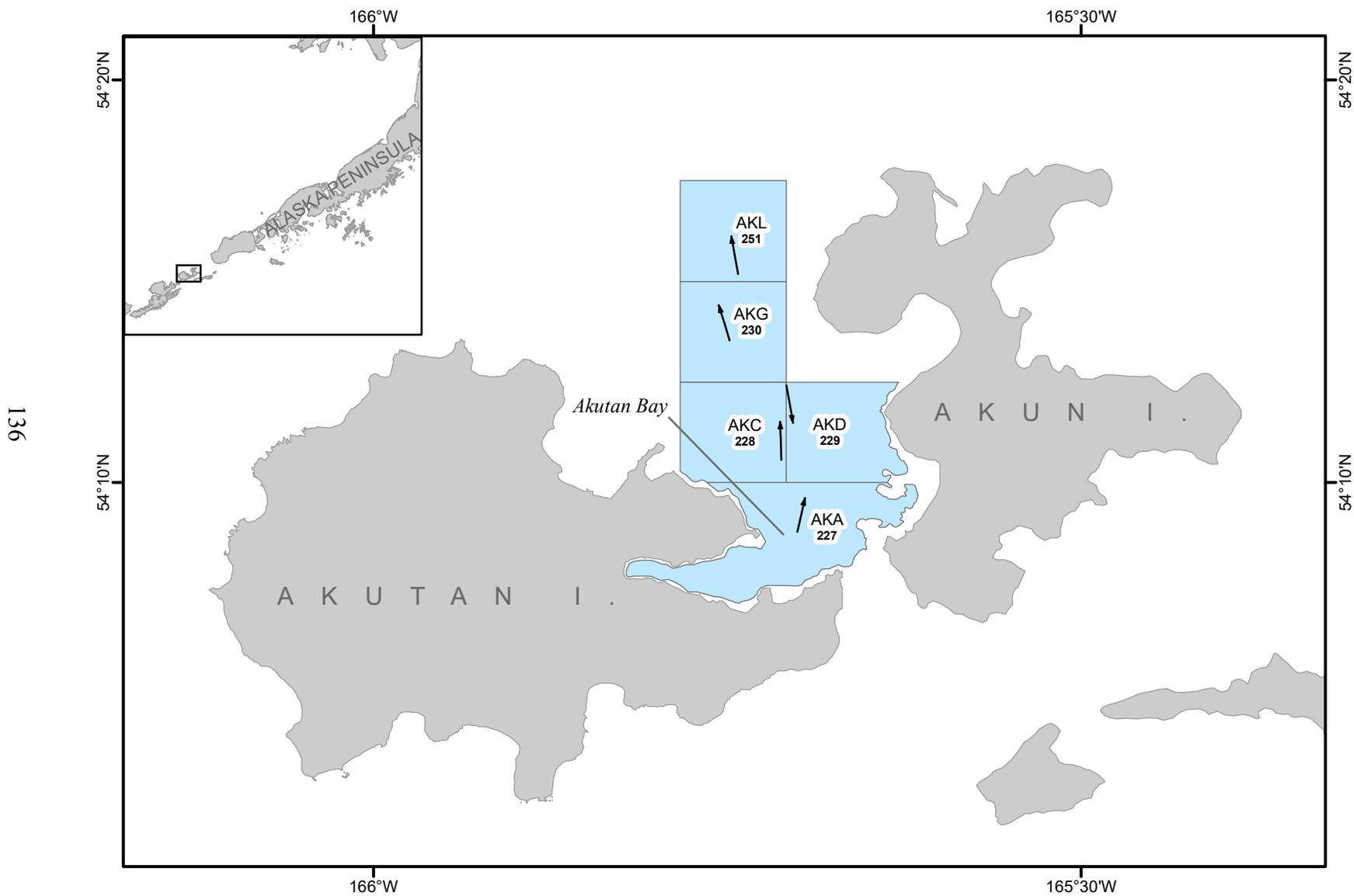
Appendix C11.–Pavlof Bay and Volcano Bay station boundaries with station name, trawl haul number (**bold**), and haul location and direction (arrow), August 2021.



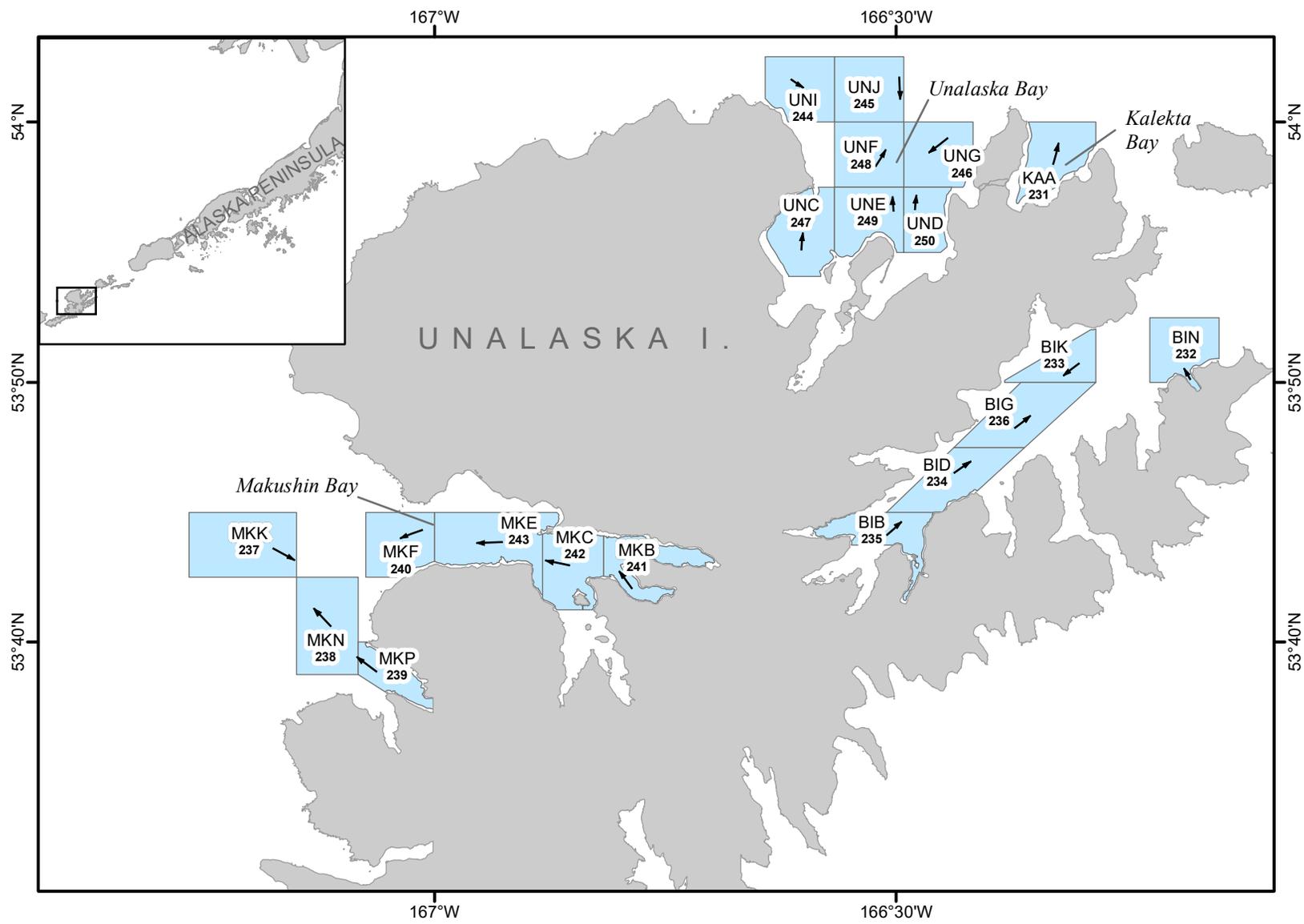
Appendix C12.—Morzhovoi Bay, Cold Bay, Belkofski Bay, Deer Island, and Sanak Island station boundaries with station name, trawl haul number (bold), and haul location and direction (arrow), August 2021.



Appendix C13.—Akutan Bay station boundaries with station name, trawl haul number (**bold**), and haul location and direction (arrow), August 2021.



Appendix C14.—Unalaska Bay, Kalekta Bay, and Makushin Bay station boundaries with station name, trawl haul number (**bold**), and haul location and direction (arrow), August 2021.



**APPENDIX D. TANNER CRAB ABUNDANCE ESTIMATES
BY STATION**

Appendix D1.—Tanner crab abundance estimates in the Kodiak District by station and section, 2021.

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														
395	149	4,747	0	4,747	4,747	0	0	0	0	0	0	0	4,747	9,494
420	148	6,147	0	6,147	0	0	6,147	0	0	0	0	0	6,147	12,294
421	147	0	0	0	0	4,610	0	0	0	0	0	0	4,610	4,610
443	145	36,972	0	36,972	0	0	0	0	0	0	0	0	0	36,972
444	146	23,108	0	23,108	32,351	4,622	0	0	0	0	0	0	36,972	60,080
369X	150	0	0	0	42,167	0	21,084	0	0	0	0	0	63,251	63,251
CHA	3	1,215	0	1,215	1,944	0	0	0	0	0	0	0	1,944	3,160
CHB	4	349	0	349	0	0	0	0	0	0	0	0	0	349
CHE	2	0	0	0	0	0	0	0	0	0	0	0	0	0
CHF	5	2,248	6,744	8,992	2,248	562	11,241	27,539	4,496	0	0	4,496	46,086	55,079
CHG	39	10,155	7,253	17,408	4,352	5,803	1,451	7,253	0	0	0	0	18,858	36,266
CHJ	1	501	0	501	0	501	0	0	0	0	0	0	501	1,003
CHK	37	2,003	78,124	80,127	380	1,519	11,393	30,380	1,519	1,139	0	2,658	46,330	126,457
CHL	38	5,605	117,085	122,690	4,982	2,491	6,851	28,026	0	1,868	0	1,868	44,218	166,908
KZA	6	861	861	1,722	0	0	0	0	0	0	0	0	0	1,722
KZB	7	405	2,228	2,633	0	0	1,215	203	0	0	0	0	1,418	4,051
KZC	9	0	0	0	0	0	0	0	0	0	0	0	0	0
KZD	8	0	0	0	0	0	1,048	0	0	0	0	0	1,048	1,048
KZE	10	0	0	0	1,142	0	0	0	0	0	0	0	1,142	1,142
KZF	12	4,451	0	4,451	4,451	0	0	0	0	0	0	0	4,451	8,901
KZG	11	0	0	0	3,761	0	0	0	0	0	0	0	3,761	3,761
KZJ	13	2,848	0	2,848	6,646	0	0	0	0	0	0	0	6,646	9,494
KZK	14	9,494	8,544	18,038	13,291	0	0	0	0	0	0	0	13,291	31,329
KZO	17	17,089	7,595	24,684	23,734	0	0	949	0	0	0	0	24,684	49,368
256	28	3,638	0	3,638	0	0	0	0	0	0	0	0	0	3,638
257	29	25,466	0	25,466	36,380	0	0	0	0	0	0	0	36,380	61,846
284	31	4,559	0	4,559	0	0	4,559	0	0	0	0	0	4,559	9,118
285	30	0	0	0	0	0	0	0	0	0	0	0	0	0
313	36	56,963	18,988	75,950	49,368	3,798	18,988	7,595	0	3,798	0	3,798	83,545	159,495
314	32	0	0	0	0	0	0	0	0	0	0	0	0	0
255A	26	2,853	8,558	11,411	8,558	2,853	8,558	51,348	0	5,705	0	5,705	77,022	88,433
255B	27	0	0	0	3,144	0	3,144	31,443	0	9,433	0	9,433	47,165	47,165
283A	34	0	6,015	6,015	3,008	0	0	15,038	0	3,008	0	3,008	21,053	27,069

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Appendix D1.–Page 2 of 6.

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			
283B	33	8,103	20,257	28,360	0	0	8,103	4,051	0	0	0	0	12,154	40,514
KZR	18	2,385	15,501	17,886	0	8,347	11,924	1,987	0	1,192	0	1,192	23,451	41,337
KZR	19	7,154	9,062	16,217	4,770	1,669	7,393	5,247	954	477	0	1,431	20,510	36,726
MOEX	15	0	0	0	0	0	0	0	0	0	0	0	0	0
MOGX	35	29,165	0	29,165	43,747	0	2,916	8,749	0	0	0	0	55,413	84,578
MOLA	22	6,205	0	6,205	6,205	1,241	1,241	0	1,241	0	0	1,241	9,928	16,133
MOLB	21	5,947	3,965	9,911	11,894	0	0	11,894	0	0	0	0	23,788	33,699
MONX	16	33,418	83,545	116,963	30,076	0	3,342	13,367	0	0	0	0	46,785	163,748
MOPA	23	7,382	0	7,382	2,461	0	0	0	0	0	0	0	2,461	9,843
MOPB	20	18,548	0	18,548	20,403	0	0	0	0	0	0	0	20,403	38,950
MOXA	25	577	0	577	0	0	0	0	0	0	0	0	0	577
MOXB	24	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		340,561	394,325	734,885	366,210	38,016	130,598	245,069	8,210	26,620	0	34,830	814,722	1,549,608
Eastside Section														
UGAA	42	2,837	19,153	21,991	0	57,491	399,245	166,086	12,776	0	0	12,776	635,598	657,589
UGAC	40	353	1,236	1,589	0	9,550	75,398	14,577	2,011	0	0	2,011	101,536	103,125
UGAD	41	0	196	196	551	13,215	69,929	22,025	4,405	0	0	4,405	110,124	110,320
UGB	43	0	0	0	0	701	20,332	103,061	16,125	0	0	16,125	140,219	140,219
UGC	44	9,296	13,944	23,241	5,102	18,706	55,268	91,829	3,401	0	0	3,401	174,305	197,546
UGD	45	1,944	1,944	3,889	2,076	10,378	85,098	108,967	1,038	0	0	1,038	207,556	211,445
UGE	46	1,124	21,919	23,043	1,636	17,993	114,503	188,112	4,907	1,636	0	6,543	328,788	351,831
UGF	47	1,397	699	2,096	0	5,485	216,662	318,136	8,228	0	0	8,228	548,511	550,607
UGG	63	0	0	0	0	486	3,403	1,944	486	0	0	486	6,319	6,319
UGI	65	0	2,962	2,962	0	16,849	460,552	629,046	11,233	0	0	11,233	1,117,680	1,120,642
UGJ	64	0	0	0	0	0	8,353	1,856	1,856	0	0	1,856	12,065	12,065
UGM	66	0	308,889	308,889	0	27,584	565,475	786,148	0	0	0	0	1,379,206	1,688,095
KLA	48	10,810	3,089	13,899	18,532	0	0	1,544	0	0	0	0	20,076	33,975
KLB	49	9,023	15,585	24,608	8,896	35,585	25,799	16,903	2,224	0	0	2,224	89,408	114,016
KLC	50	1,732	17,317	19,048	0	83,939	202,852	314,770	13,990	94,431	0	108,421	709,981	729,029
KLD	56	0	1,150	1,150	0	0	0	2,300	0	0	0	0	2,300	3,450
KLE	54	1,823	5,104	6,927	13,627	220,307	163,527	49,967	6,814	0	0	6,814	454,242	461,168
KLF	53	5,347	2,005	7,352	0	4,010	8,020	4,679	0	0	0	0	16,709	24,061
KLG	52	3,646	23,332	26,977	44,914	86,619	123,513	60,954	4,812	0	0	4,812	320,813	347,790

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Appendix D1.–Page 3 of 6.

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			
KLH	51	2,441	485,826	488,267	8,003	4,002	120,048	254,101	12,005	6,002	0	18,007	404,160	892,428
KLI	55	2,570	313,572	316,142	15,053	52,685	146,767	477,932	33,869	3,763	0	37,632	730,069	1,046,211
KLL	57	0	0	0	3,798	1,899	6,646	8,544	7,595	949	0	8,544	29,431	29,431
559	93	16,415	1,649,738	1,666,153	9,494	28,481	75,950	337,028	80,697	9,494	0	90,191	541,144	2,207,297
560	77	0	326,585	326,585	6,310	25,241	170,377	1,003,334	63,103	0	0	63,103	1,268,365	1,594,950
561	76	12,888	2,526,012	2,538,900	10,850	59,675	206,150	743,225	32,550	0	0	32,550	1,052,450	3,591,350
587	95	170,888	0	170,888	150,514	78,840	107,510	960,420	150,514	0	0	150,514	1,447,797	1,618,684
588	94	14,241	18,988	33,228	34,758	34,758	89,379	526,341	69,517	0	0	69,517	754,753	787,981
589	92	0	308,547	308,547	0	28,481	232,597	602,853	28,481	4,747	4,747	37,975	901,906	1,210,453
619	97	37,975	90,191	128,166	47,469	47,469	90,191	569,625	90,191	9,494	0	99,684	854,438	982,603
620	96	109,178	284,813	393,991	75,950	23,734	147,153	479,434	42,722	0	0	42,722	768,994	1,162,984
621	91	9,494	99,684	109,178	33,252	11,084	49,878	931,062	66,504	0	0	66,504	1,091,781	1,200,959
654	86	0	0	0	0	0	48,825	303,800	43,400	0	0	43,400	396,025	396,025
655	87	132,913	47,469	180,381	152,252	9,823	117,873	628,655	73,671	9,823	0	83,493	992,097	1,172,478
656	90	23,734	536,397	560,131	18,988	33,228	156,647	422,472	23,734	9,494	0	33,228	664,563	1,224,694
695	88	23,734	18,988	42,722	56,963	99,684	80,697	261,078	47,469	0	0	47,469	545,891	588,613
696	89	85,444	175,634	261,078	37,975	28,481	75,950	246,838	18,988	0	0	18,988	408,231	669,309
486A	67	0	4,904,458	4,904,458	67,387	269,548	3,975,835	2,358,546	33,694	0	0	33,694	6,705,010	11,609,468
486B	68	0	5,201	5,201	0	1,300	3,901	1,300	0	0	0	0	6,501	11,702
510C	58	0	0	0	0	0	78,326	1,116,152	29,372	0	0	29,372	1,223,851	1,223,851
510D	69	0	637,329	637,329	0	27,462	1,208,310	1,496,656	13,731	13,731	0	27,462	2,759,889	3,397,218
511A	62	0	85,596	85,596	0	26,014	208,109	1,422,079	78,041	0	0	78,041	1,734,242	1,819,838
511B	61	0	4,747	4,747	0	11,867	14,241	49,842	7,120	0	0	7,120	83,070	87,817
533A	70	1,899	17,089	18,988	0	7,595	18,988	104,431	30,380	1,899	0	32,279	163,293	182,280
533B	71	0	0	0	1,899	1,899	20,886	214,559	41,773	0	0	41,773	281,015	281,015
534BX	72	0	490,522	490,522	0	3,248	82,818	227,343	12,991	0	0	12,991	326,400	816,921
534DX	73	0	517,885	517,885	0	8,867	68,719	361,331	4,434	0	0	4,434	443,351	961,235
535A	59	0	660,328	660,328	0	0	217,122	743,039	9,650	4,825	0	14,475	974,636	1,634,963
535B	60	0	675,639	675,639	0	9,067	142,042	444,260	9,067	0	0	9,067	604,435	1,280,074
535C	74	0	582,916	582,916	0	11,617	63,892	499,521	11,617	0	0	11,617	586,647	1,169,563
535D	75	0	1,101,275	1,101,275	0	3,557	96,029	593,955	21,340	0	0	21,340	714,879	1,816,154
Total		693,146	17,003,953	17,697,098	826,249	1,558,504	10,719,785	21,272,660	1,282,526	170,288	4,747	1,457,559	35,834,750	53,531,841

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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														
614	102	13,549	178,853	192,403	4,891	14,674	68,479	650,551	215,220	24,457	0	239,677	978,272	1,170,675
THA	101	18,046	4,010	22,056	55,204	38,967	263,030	256,535	29,226	0	0	29,226	642,962	665,018
THCX	104	6,061	70,998	77,059	3,636	909	20,905	129,065	24,540	3,636	0	28,176	182,690	259,749
THDX	105	0	116,410	116,410	6,208	0	23,281	226,599	54,322	4,656	0	58,978	315,066	431,477
THFA	84	2,821	87,451	90,272	7,053	0	63,473	180,544	12,695	4,232	0	16,926	267,995	358,267
THG	106	8,865	43,338	52,202	1,970	985	35,458	124,104	14,774	1,970	0	16,744	179,261	231,464
THH	107	1,063	2,127	3,190	2,127	2,127	6,380	114,836	23,393	1,063	0	24,456	149,925	153,115
THI	83	2,392	0	2,392	4,450	10,383	109,764	166,130	5,933	0	0	5,933	296,661	299,053
THJ	82	3,160	4,739	7,899	7,235	1,034	19,637	136,425	40,307	3,101	0	43,408	207,738	215,637
THK	81	8,101	0	8,101	3,241	810	8,101	46,178	8,911	810	0	9,722	68,051	76,153
THL	80	410	410	820	0	0	86,964	161,699	20,382	0	0	20,382	269,045	269,866
THM	79	589	0	589	0	3,327	90,926	114,212	11,089	0	0	11,089	219,552	220,141
THN	78	1,424	0	1,424	1,135	378	26,862	45,400	2,270	0	0	2,270	76,045	77,469
586	99	28,481	28,481	56,963	42,722	18,988	56,963	142,406	71,203	0	0	71,203	332,281	389,244
615	103	8,810	101,317	110,128	17,971	8,986	98,841	1,213,046	422,320	44,928	0	467,247	1,806,091	1,916,218
651	85	175,634	137,659	313,294	180,381	47,469	80,697	56,963	23,734	4,747	0	28,481	393,991	707,284
688	140	85,444	18,988	104,431	104,431	33,228	47,469	47,469	0	0	0	0	232,597	337,028
725	136	0	0	0	0	0	44,304	6,329	0	0	0	0	50,633	50,633
726	141	94,938	52,216	147,153	99,684	14,241	71,203	90,191	0	0	0	0	275,319	422,472
727	142	270,572	71,203	341,775	313,294	23,734	85,444	80,697	0	4,747	0	4,747	507,916	849,691
728	143	151,900	85,444	237,344	156,647	23,734	118,672	151,900	9,494	9,494	0	18,988	469,941	707,284
729	144	327,534	118,672	446,206	425,320	139,748	388,864	230,888	30,380	0	0	30,380	1,215,200	1,661,406
759	137	99,684	66,456	166,141	47,469	9,494	47,469	85,444	0	4,747	0	4,747	194,622	360,763
760	138	104,431	123,419	227,850	109,178	23,734	61,709	118,672	0	9,494	0	9,494	322,788	550,638
761	139	232,597	137,659	370,256	170,888	56,963	123,419	185,128	14,241	0	0	14,241	550,638	920,894
585X	100	11,636	23,271	34,907	11,636	11,636	52,360	29,089	0	0	0	0	104,720	139,626
618A	98	7,120	9,494	16,614	4,747	0	23,734	144,780	26,108	0	0	26,108	199,369	215,983
Total		1,665,262	1,482,615	3,147,879	1,781,518	485,549	2,124,408	4,935,280	1,060,542	122,082	0	1,182,623	10,509,369	13,657,248
Southwest Section														
ALA	111	0	12,304	12,304	0	801	9,215	58,896	11,619	401	0	12,020	80,932	93,236
ALBX	110	0	567	567	0	0	8,499	77,622	13,598	0	0	13,598	99,719	100,286
ALCA	112	0	34,560	34,560	0	3,546	34,754	71,635	25,533	7,093	0	32,626	142,561	177,121

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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			
ALD	108	0	131,606	131,606	0	3,763	47,043	118,549	13,172	5,645	0	18,817	188,174	319,780
ALF	109	0	25,633	25,633	0	2,848	31,329	133,862	18,988	4,747	0	23,734	191,774	217,407
ALG	113	881	18,501	19,382	0	0	44,051	108,365	7,929	2,643	0	10,572	162,989	182,371
ALH	114	0	4,284	4,284	1,272	2,543	40,690	179,292	27,975	3,815	0	31,789	255,587	259,871
ALI	115	0	2,947	2,947	0	0	173,293	225,281	28,160	8,665	0	36,825	435,399	438,345
ALJ	123	668	35,423	36,091	0	15,723	259,430	243,707	10,482	0	0	10,482	529,341	565,433
ALK	122	1,101	4,405	5,506	642	4,497	80,944	48,181	642	0	0	642	134,906	140,413
ALL	120	1,823	1,094	2,916	897	897	84,301	87,888	5,381	0	0	5,381	179,364	182,280
ALM	121	0	6,425	6,425	0	22,422	308,298	232,625	2,803	0	0	2,803	566,146	572,572
ALP	118	0	2,447	2,447	743	5,200	56,453	72,052	19,313	0	0	19,313	153,760	156,207
ALP	119	0	6,526	6,526	0	2,541	43,836	71,154	14,612	0	0	14,612	132,144	138,670
ALQ	117	1,276	9,570	10,846	0	2,438	112,158	304,778	73,147	0	0	73,147	492,521	503,366
ALR	116	592	1,777	2,370	0	0	94,217	385,700	103,050	5,889	0	108,938	588,856	591,225
645B	127	1,899	3,798	5,696	0	5,809	182,985	392,111	5,809	0	0	5,809	586,714	592,410
646A	126	3,000	0	3,000	4,500	0	3,000	27,000	3,000	0	0	3,000	37,500	40,500
646B	125	911	0	911	0	1,823	7,291	18,228	911	0	0	911	28,253	29,165
646C	128	3,087	4,631	7,718	3,087	3,087	80,272	166,718	4,631	4,631	0	9,262	262,426	270,145
646D	124	4,139	0	4,139	6,209	2,070	4,139	24,836	0	0	0	0	37,253	41,393
682B	130	0	836,646	836,646	0	32,910	413,726	432,532	18,806	47,014	0	65,820	944,989	1,781,635
683A	129	2,461	30,760	33,221	4,922	1,230	35,681	62,750	4,922	6,152	0	11,074	115,657	148,877
683B	131	0	3,475	3,475	1,158	1,158	37,064	75,285	4,633	0	0	4,633	119,298	122,773
683D	134	0	0	0	0	0	9,741	33,836	1,025	0	0	1,025	44,602	44,602
684A	133	0	0	0	0	0	1,204	20,465	8,427	0	0	8,427	30,095	30,095
684B	132	0	0	0	0	0	1,139	21,646	13,101	0	0	13,101	35,886	35,886
684C	135	475	0	475	0	475	1,899	6,171	1,424	0	0	1,424	9,968	10,443
Total		22,313	1,177,379	1,199,691	23,430	115,781	2,206,652	3,701,165	443,093	96,695	0	539,785	6,586,814	7,786,507
Westside Section														
KUD	305	0	0	0	0	0	0	0	0	0	0	0	0	0
KUF	306	500	15,992	16,492	0	1,499	4,498	1,000	0	0	0	0	6,997	23,488
KUG	307	0	0	0	0	0	0	0	0	0	0	0	0	0
KUI	311	947	29,668	30,615	316	2,209	1,578	0	0	0	0	0	4,103	34,718
KUJ	310	6,015	106,771	112,786	2,256	2,256	10,527	21,053	2,256	1,504	0	3,760	39,851	152,637
KUK	309	6,228	117,085	123,312	4,360	1,246	0	4,982	0	0	0	0	10,587	133,900

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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			
KULA	312	618	618	1,235	515	0	0	206	0	103	0	103	824	2,059
KULB	313	0	0	0	0	0	0	0	0	0	0	0	0	0
KUM	308	930	0	930	465	0	0	0	0	0	0	0	465	1,394
KUYA	314	0	0	0	0	301	0	0	0	0	0	0	301	301
KUYB	315	0	0	0	0	0	0	0	0	0	0	0	0	0
MAA	327	0	0	0	0	0	583	0	0	0	0	0	583	583
PMA	326	668	668	1,337	668	0	0	0	0	668	0	668	1,337	2,673
RAA	328	5,210	11,909	17,119	876	12,697	28,021	41,156	4,378	2,189	0	6,567	89,317	106,436
KUNX	316	3,296	8,005	11,301	2,354	471	471	471	0	0	0	0	3,767	15,068
KUP	317	12,377	12,966	25,343	7,072	1,179	1,179	5,304	0	589	0	589	15,324	40,667
KUQ	325	25,519	0	25,519	10,025	0	911	911	0	0	0	0	11,848	37,367
KUS	324	7,528	9,141	16,670	8,066	0	3,764	5,915	0	2,151	0	2,151	19,896	36,565
KUT	323	16,648	12,486	29,134	15,400	19,562	11,238	8,324	0	2,913	416	3,330	57,853	86,987
KUU	320	38,692	9,673	48,365	28,414	3,627	5,441	3,627	0	3,023	0	3,023	44,133	92,498
KUV	319	521	521	1,042	260	0	0	0	0	0	0	0	260	1,302
KUW	318	0	0	0	0	0	0	0	0	0	0	0	0	0
KUXA	322	34,759	5,537	40,295	30,145	6,460	2,768	3,384	3,691	0	0	3,691	46,447	86,742
KUXB	321	15,591	0	15,591	21,013	1,356	226	226	0	0	0	0	22,821	38,412
UYBX	329	6,656	951	7,607	13,313	0	0	0	0	0	0	0	13,313	20,920
UYEX	335	26,461	43,661	70,122	18,523	5,292	14,554	19,846	0	1,323	0	1,323	59,537	129,659
UYFX	337	288,978	55,043	344,021	233,625	266,155	38,445	47,317	0	5,915	0	5,915	591,456	935,478
UYHX	336	4,329	0	4,329	5,241	2,279	0	0	0	0	0	0	7,519	11,848
UYKX	334	3,682	0	3,682	4,296	614	0	1,227	0	0	0	0	6,137	9,819
UYMX	332	18,441	35,037	53,478	10,142	3,688	5,532	5,532	0	0	0	0	24,895	78,373
UYO	333	0	0	0	0	149	0	0	0	0	0	0	149	149
UYQX	331	8,506	11,909	20,415	3,062	2,382	7,145	9,527	8,166	1,021	0	9,187	31,304	51,719
UYT	330	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		533,100	487,641	1,020,740	420,407	333,422	136,881	180,008	18,491	21,399	416	40,307	1,111,024	2,131,762
Kodiak District Total		3,254,382	20,545,913	23,800,293	3,417,814	2,531,272	15,318,324	30,334,182	2,812,862	437,084	5,163	3,255,104	54,856,679	78,656,966

Note: CW = carapace width.

Appendix D2.—Tanner crab abundance estimates in the Chignik District by station and sampling locale, 2021.

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														
4007	192	14,847	0	14,847	23,095	9,898	51,139	194,657	14,847	8,248	0	23,095	301,883	316,730
4008	193	27,957	160,288	188,245	2,012	24,146	102,621	237,437	24,146	14,085	0	38,231	404,447	592,693
4915	191	0	0	0	4,521	0	0	0	0	0	0	0	4,521	4,521
4000X	194	70,531	12,862	83,393	43,084	65,018	23,500	18,800	5,483	783	0	6,267	156,670	240,063
4000Y	195	7,764	0	7,764	10,093	3,882	3,882	35,713	3,882	0	0	3,882	57,452	65,216
Total		121,099	173,150	294,249	82,805	102,944	181,142	486,607	48,358	23,116	0	71,475	924,973	1,219,223
Mitrofanina Island														
4024	190	51,008	0	51,008	58,659	10,202	68,861	175,978	0	0	0	0	313,699	364,707
4025	189	9,668	63,812	73,480	5,801	9,668	42,541	154,695	3,867	7,735	0	11,602	224,308	297,788
4026	188	6,456	2,152	8,608	8,608	6,456	15,063	12,912	2,152	0	0	2,152	45,190	53,798
4035	183	131,242	2,625	133,866	120,742	0	141,741	223,111	13,124	0	0	13,124	498,718	632,585
4036	184	20,107	330,329	350,436	25,723	12,862	533,757	694,528	25,723	0	0	25,723	1,292,593	1,643,029
4037	185	3,867	158,562	162,430	5,801	7,735	96,684	185,634	5,801	0	0	5,801	301,655	464,085
4048	176	3,266	16,329	19,595	1,960	3,266	16,982	71,849	16,982	653	653	18,289	112,345	131,940
4049	182	55,708	0	55,708	19,922	19,922	370,554	398,445	3,984	0	0	3,984	812,828	868,535
4063	175	17,127	3,114	20,241	2,460	27,060	115,621	280,442	61,501	4,920	0	66,421	492,004	512,245
4065	174	14,175	88,596	102,771	12,403	8,860	19,491	191,367	26,579	1,772	0	28,351	260,471	363,242
4065	177	5,316	63,789	69,105	8,860	0	33,666	67,333	8,860	0	0	8,860	118,718	187,823
4038A	187	17,215	0	17,215	23,671	0	8,608	6,456	0	0	0	0	38,735	55,950
4038B	186	17,215	0	17,215	15,063	2,152	10,760	15,063	0	0	0	0	43,038	60,254
4050A	181	7,646	14,017	21,663	2,650	3,975	91,424	161,649	6,625	0	0	6,625	266,323	287,986
4050B	180	5,705	17,116	22,821	0	1,902	28,527	127,420	3,804	0	0	3,804	161,652	184,473
4066A	179	0	25,079	25,079	0	3,858	13,504	46,299	9,646	0	0	9,646	73,307	98,386
4066B	178	0	1,929	1,929	1,929	0	23,150	133,110	13,504	9,646	0	23,150	181,338	183,267
Total		365,721	787,449	1,153,170	314,252	117,918	1,630,934	2,946,291	202,152	24,726	653	227,532	5,236,922	6,390,093

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Appendix D2.–Page 2 of 2.

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	165	19,899	0	19,899	33,828	0	0	1,990	995	0	0	995	36,813	56,712
4262	166	127,686	466,201	593,887	40,085	59,072	42,194	23,207	1,055	0	0	1,055	165,613	759,500
4264	171	56,773	0	56,773	59,393	0	1,747	5,241	873	0	0	873	67,254	124,026
4265	172	12,704	0	12,704	16,939	0	0	0	0	0	0	0	16,939	29,642
4266	164	108,609	3,475	112,084	122,074	15,379	13,457	44,216	3,845	0	0	3,845	198,971	311,055
4267	167	190,955	20,756	211,711	176,168	35,487	8,872	29,150	7,604	0	0	7,604	257,281	468,991
4270	169	87,606	348,233	435,839	8,381	57,271	82,414	125,717	15,365	4,191	0	19,556	293,339	729,178
4271	170	20,775	41,993	62,768	7,355	10,750	11,882	68,461	14,711	0	0	14,711	113,159	175,928
4272	161	54,976	0	54,976	72,596	705	0	1,410	0	0	0	0	74,710	129,686
4274	163	166,945	40,968	207,913	146,204	12,342	6,646	22,785	949	0	0	949	188,926	396,839
4277	162	37,026	32,279	69,304	42,722	2,848	13,291	25,633	0	4,747	0	4,747	89,241	158,546
4278	159	18,038	24,684	42,722	16,139	1,899	12,342	63,608	0	6,646	0	6,646	100,634	143,356
4282	160	15,190	34,178	49,368	11,393	949	5,696	23,734	949	0	0	949	42,722	92,089
4286	157	145,254	0	145,254	205,568	1,076	1,076	8,610	1,076	0	0	1,076	217,407	362,661
4287	158	142,467	16,390	158,857	175,247	13,868	7,565	21,433	0	0	0	0	218,113	376,970
4312	168	53,385	378,550	431,935	4,853	43,679	169,862	509,587	116,477	29,119	0	145,596	873,577	1,305,512
4964	173	39,413	0	39,413	67,808	848	0	0	0	0	0	0	68,656	108,069
Total		1,297,701	1,407,707	2,705,407	1,206,753	256,173	377,044	974,782	163,899	44,703	0	208,602	3,023,355	5,728,760
Kujulik Bay														
4290	155	0	0	0	0	0	0	0	0	0	0	0	0	0
4296	156	15,038	0	15,038	16,861	1,367	456	0	0	0	0	0	18,684	33,722
4298	154	74,896	0	74,896	81,628	0	842	0	0	0	0	0	82,470	157,365
4301	153	6,635	0	6,635	14,218	948	0	0	0	0	0	0	15,166	21,801
4302	152	4,840	0	4,840	8,872	0	0	0	0	0	0	0	8,872	13,712
4308	151	22,026	0	22,026	46,330	760	760	0	0	0	0	0	47,849	69,874
Total		123,435	0	123,435	167,909	3,075	2,058	0	0	0	0	0	173,041	296,474
Chignik District Total		1,907,956	2,368,306	4,276,261	1,771,719	480,110	2,191,178	4,407,680	414,409	92,545	653	507,609	9,358,291	13,634,550

Note: CW = carapace width.

Appendix D3.—Tanner crab abundance estimates in the South Peninsula District by station, sampling locale, and section, 2021.

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	259	81,172	0	81,172	59,811	0	4,272	0	0	0	0	0	64,083	145,254
125	266	25,633	0	25,633	51,266	0	4,272	4,272	0	0	0	0	59,811	85,444
126	265	12,919	0	12,919	8,613	17,225	0	12,919	4,306	0	0	4,306	43,064	55,983
137	267	47,469	0	47,469	23,734	0	14,241	0	0	0	0	0	37,975	85,444
138A	268	15,403	0	15,403	19,253	0	7,701	1,925	0	0	0	0	28,880	44,283
138B	270	4,079	0	4,079	3,059	1,020	3,059	0	0	0	0	0	7,137	11,216
138C	269	44,127	6,304	50,431	37,823	18,912	9,456	9,456	0	0	0	0	75,646	126,077
Total		230,802	6,304	237,106	203,559	37,157	43,001	28,572	4,306	0	0	4,306	316,596	553,701
Morzhovoi Bay														
87AX	257	14,606	365,144	379,750	0	29,166	408,324	1,720,793	335,409	0	0	335,409	2,493,692	2,873,442
87D	258	1,975	987	2,962	1,975	10,861	16,785	58,254	14,810	0	0	14,810	102,684	105,646
MOD	261	12,137	0	12,137	7,853	1,428	2,142	91,383	2,856	0	0	2,856	105,662	117,798
MOF	262	24,754	0	24,754	19,029	3,625	18,123	138,642	1,812	0	0	1,812	181,232	205,986
MOG	263	52,108	2,333	54,441	25,841	15,074	116,284	264,869	6,460	0	0	6,460	428,528	482,969
MOH	260	9,378	670	10,048	15,012	7,506	90,072	362,790	25,020	0	0	25,020	500,400	510,448
MOI	264	12,006	5,253	17,259	0	9,174	183,486	403,670	9,174	3,058	0	12,232	608,563	625,822
MOK	254	23,821	107,193	131,014	0	95,601	179,253	1,242,818	191,203	0	0	191,203	1,708,875	1,839,889
MOL	255	6,646	0	6,646	0	0	56,534	1,067,863	169,602	0	0	169,602	1,293,998	1,300,644
MOOX	256	81,116	1,000,425	1,081,540	0	48,914	293,483	679,359	43,479	16,305	0	59,784	1,081,540	2,163,080
MORX	253	2,983	0	2,983	5,967	2,983	1,492	38,783	10,442	2,983	0	13,425	62,650	65,633
MOSX	252	15,129	0	15,129	4,591	22,957	48,210	351,247	34,436	0	0	34,436	461,442	476,571
Total		256,659	1,482,005	1,738,663	80,268	247,289	1,414,188	6,420,471	844,703	22,346	0	867,049	9,029,266	10,767,928
Cold Bay/Belkofski Bay														
156A	281	17,053	1,244,871	1,261,924	14,954	194,407	1,450,579	1,330,943	29,909	0	0	29,909	3,020,793	4,282,717
157A	280	36,211	0	36,211	23,796	2,069	27,934	55,869	3,104	0	0	3,104	112,772	148,984
BECX	283	6,312	1,262	7,575	7,575	18,937	47,973	25,249	0	0	0	0	99,734	107,309
BEE	284	38,140	254,267	292,408	12,719	120,828	807,641	324,328	0	0	0	0	1,265,517	1,557,924
BEF	282	32,051	30,128	62,179	29,678	11,691	65,652	72,846	899	0	0	899	180,767	242,946
BEG	279	23,605	0	23,605	29,226	0	0	3,372	0	0	0	0	32,598	56,203

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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			
COB	272	9,220	1,537	10,757	10,757	6,147	3,073	1,537	0	0	0	0	21,514	32,271
COC	273	0	1,051	1,051	0	0	1,051	1,051	0	0	0	0	2,101	3,152
COE	274	26,841	34,296	61,137	2,982	29,823	125,257	73,066	1,491	2,982	0	4,473	235,602	296,739
COF	275	7,633	55,339	62,972	1,272	23,535	51,523	31,168	1,272	0	0	1,272	108,770	171,742
COGA	276	2,468	165,332	167,800	0	16,824	159,824	62,488	2,403	1,202	0	3,605	242,740	410,540
COGB	277	268	1,878	2,147	0	805	17,980	19,322	1,610	0	0	1,610	39,717	41,864
COM	278	17,431	9,228	26,658	9,228	19,481	48,190	42,038	1,025	0	0	1,025	119,963	146,621
COOX	271	39,889	18,410	58,299	16,876	21,479	13,808	16,876	0	0	0	0	69,039	127,338
Total		257,122	1,817,599	2,074,723	159,063	466,026	2,820,485	2,060,153	41,713	4,184	0	45,897	5,551,627	7,626,350
Pavlof Bay/Volcano Bay														
228	226	6,925	28,329	35,254	1,259	11,961	26,441	45,327	30,848	0	0	30,848	115,836	151,090
245	225	4,138	4,138	8,277	0	6,192	45,409	206,404	154,803	0	0	154,803	412,809	421,085
PAEX	303	30,410	0	30,410	58,056	2,765	0	0	0	0	0	0	60,821	91,231
PAOB	301	88,180	111,310	199,490	0	173,491	249,945	164,669	14,703	0	0	14,703	602,808	802,298
PAP	304	47,341	3,945	51,286	35,506	69,696	82,846	69,696	1,315	0	0	1,315	259,059	310,345
PARA	300	42,228	58,275	100,503	17,364	247,440	390,695	195,348	17,364	0	0	17,364	868,212	968,715
PARB	302	9,190	202,179	211,369	2,626	22,318	69,581	61,704	0	1,313	0	1,313	157,542	368,911
PAU	299	37,026	45,570	82,596	32,006	83,216	281,654	243,247	6,401	0	0	6,401	646,524	729,120
PAV	293	78,380	17,317	95,697	69,266	17,317	34,633	40,102	15,494	1,823	0	17,317	178,634	274,331
VOA	298	51,766	4,884	56,650	57,190	29,368	75,738	140,657	15,457	0	0	15,457	318,410	375,059
VOBX	294	28,914	123,367	152,281	21,686	25,300	169,871	419,255	79,514	7,229	0	86,742	722,854	875,135
VOD	292	18,936	146,756	165,693	0	28,367	113,469	743,224	192,898	68,082	0	260,979	1,146,040	1,311,732
VOFB	296	4,129	4,129	8,257	5,694	6,833	103,632	103,632	7,972	0	0	7,972	227,763	236,021
VOG	297	13,717	77,401	91,117	8,818	8,818	73,482	107,773	5,879	980	0	6,858	205,749	296,866
VOH	290	34,670	4,815	39,485	26,002	18,298	65,487	76,081	5,778	0	0	5,778	191,646	231,131
VOI	291	1,877	108,894	110,772	2,737	2,737	68,421	181,999	15,053	4,105	0	19,158	275,051	385,823
VOLX	286	80,575	1,565	82,140	96,221	22,686	2,347	4,694	782	0	0	782	126,730	208,870
VOM	295	36,547	2,436	38,984	14,619	19,492	63,348	90,150	4,873	0	0	4,873	192,482	231,465
VON	289	30,372	7,838	38,210	37,000	176,464	167,925	156,540	31,308	0	0	31,308	569,238	607,448
VOPX	285	58,532	21,950	80,482	24,876	111,211	36,583	19,023	4,390	0	0	4,390	196,083	276,564

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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			
VOQ	287	26,078	5,639	31,717	19,749	7,181	46,679	95,154	11,670	0	0	11,670	180,433	212,150
VOR	288	38,364	3,743	42,107	16,880	22,908	57,874	120,571	24,114	0	0	24,114	242,347	284,454
Total		768,295	984,480	1,752,777	547,555	1,114,059	2,226,060	3,285,250	640,616	83,532	0	724,145	7,897,071	9,649,844
Beaver Bay/Balboa Bay/ Unga Strait														
278	224	0	0	0	0	0	0	0	0	0	0	0	0	0
348	201	56,963	18,988	75,950	33,228	4,747	14,241	9,494	0	0	0	0	61,709	137,659
311A	208	9,591	685	10,276	15,072	685	3,425	685	0	0	0	0	19,867	30,143
311B	209	14,616	0	14,616	11,177	1,720	0	4,299	0	0	0	0	17,195	31,811
311C	210	22,179	5,008	27,187	20,033	0	715	0	0	0	0	0	20,748	47,935
329B	202	15,190	41,773	56,963	11,393	8,544	16,139	16,139	949	0	0	949	53,165	110,128
329C	211	11,393	10,443	21,836	8,544	0	7,595	5,696	0	0	0	0	21,836	43,671
368A	200	3,892	0	3,892	1,946	1,946	0	1,946	0	0	0	0	5,838	9,729
BAA	206	886	0	886	4,430	0	0	0	0	0	0	0	4,430	5,316
BAC	203	25,410	8,221	33,631	17,936	12,705	6,726	747	0	0	0	0	38,115	71,745
BAD	205	368	0	368	1,470	0	0	0	0	0	0	0	1,470	1,838
BAE	207	7,326	3,945	11,271	5,635	10,707	14,089	4,508	0	0	0	0	34,940	46,211
BAF	204	418	0	418	0	0	0	0	0	0	0	0	0	418
BVA	223	0	0	0	0	0	0	0	0	0	0	0	0	0
BVB	222	0	0	0	0	0	0	0	0	0	0	0	0	0
BVC	221	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		168,232	89,063	257,294	130,864	41,054	62,930	43,514	949	0	0	949	279,313	536,604
Stepovak Bay														
STA	197	9,296	0	9,296	2,324	0	2,324	3,486	2,324	0	0	2,324	10,458	19,755
STB	198	7,310	0	7,310	7,310	1,044	2,089	7,310	3,133	0	0	3,133	20,886	28,196
STD	196	3,720	22,318	26,038	4,960	2,480	16,118	18,598	1,240	0	0	1,240	43,396	69,433
STE	199	7,741	3,441	11,182	4,301	2,580	6,021	13,762	1,720	0	0	1,720	28,384	39,566
Total		28,067	25,759	53,826	18,895	6,104	26,552	43,156	8,417	0	0	8,417	103,124	156,950

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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			
West Nagai Strait														
334	217	5,425	173,600	179,025	8,138	5,425	35,263	13,563	0	0	0	0	62,388	241,413
334	218	2,373	0	2,373	0	0	0	0	0	0	0	0	0	2,373
353	215	0	0	0	0	0	0	4,766	0	0	0	0	4,766	4,766
354	216	3,798	3,798	7,595	0	0	26,583	3,798	0	0	0	0	30,380	37,975
371	219	0	0	0	7,484	0	0	0	0	0	0	0	7,484	7,484
393	212	15,936	23,905	39,841	7,968	26,561	172,645	74,370	0	0	0	0	281,544	321,386
332B	220	28,481	2,373	30,855	42,722	0	2,373	0	0	0	0	0	45,095	75,950
373A	214	0	0	0	0	1,773	3,546	3,546	0	0	0	0	8,864	8,864
373B	213	31,554	47,809	79,362	4,781	47,809	68,844	52,589	6,693	5,737	0	12,430	186,453	265,815
Total		87,567	251,485	339,051	71,093	81,568	309,254	152,632	6,693	5,737	0	12,430	626,974	966,026
Western Section ^a		744,583	3,305,908	4,050,492	442,890	750,472	4,277,674	8,509,196	890,722	26,530	0	917,252	14,897,489	18,947,979
Eastern Section ^b		1,052,161	1,350,787	2,402,948	768,407	1,242,785	2,624,796	3,524,552	656,675	89,269	0	745,941	8,906,482	11,309,424
South Peninsula District Total		1,796,744	4,656,695	6,453,440	1,211,297	1,993,257	6,902,470	12,033,748	1,547,397	115,799	0	1,663,193	23,803,971	30,257,403

Note: CW = carapace width.

^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 D4.—Tanner crab abundance estimates in the Eastern Aleutian District by station and sampling locale, 2021.

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	227	272,558	52,227	324,784	274,190	34,274	4,896	1,632	0	0	0	0	314,992	639,776
AKC	228	131,945	19,192	151,137	461,499	1,085,376	170,925	8,546	0	0	0	0	1,726,347	1,877,484
AKD	229	52,497	320,607	373,104	13,929	20,894	14,924	2,985	0	0	0	0	52,732	425,836
AKG	230	4,747	37,026	41,773	949	9,494	56,963	14,241	0	0	0	0	81,646	123,419
AKL	251	44,621	0	44,621	37,975	1,899	0	0	0	0	0	0	39,874	84,494
Total		506,368	429,052	935,419	788,542	1,151,937	247,708	27,404	0	0	0	0	2,215,591	3,151,009
Unalaska/Kalekta Bay Section														
UNI	244	1,456	0	1,456	0	1,456	0	0	0	0	0	0	1,456	2,911
UNJ	245	10,549	22,152	32,701	6,329	0	1,055	0	0	0	0	0	7,384	40,085
UNG	246	8,439	0	8,439	3,165	0	0	0	0	0	0	0	3,165	11,603
UNC	247	11,440	42,901	54,341	4,290	4,290	2,860	4,290	2,860	0	0	2,860	18,590	72,932
UNF	248	106,805	10,680	117,485	62,896	2,373	2,373	0	0	0	0	0	67,643	185,128
UNE	249	216,731	13,215	229,946	133,475	5,286	2,643	0	0	0	0	0	141,404	371,350
UND	250	24,962	1,722	26,684	16,355	12,912	8,608	0	0	0	0	0	37,874	64,558
KAA	231	22,049	14,380	36,429	39,305	23,008	7,669	0	0	0	0	0	69,982	106,411
Total		402,431	105,050	507,481	265,815	49,325	25,208	4,290	2,860	0	0	2,860	347,498	854,978
Makushin/Skan Bay Section														
MKK	237	213,473	30,044	243,517	162,872	11,069	0	0	0	0	0	0	173,941	417,458
MKF	240	151,712	1,850	153,562	147,086	3,700	1,850	925	0	0	0	0	153,562	307,124
MKB	241	367,834	715,233	1,083,067	369,306	190,084	249,825	228,101	21,724	32,586	0	54,310	1,091,626	2,174,693
MKC	242	23,481	322,028	345,509	24,386	55,134	44,531	72,098	3,181	12,723	0	15,904	212,054	557,563
MKE	243	213,827	11,593	225,420	168,743	15,457	1,288	0	0	0	0	0	185,488	410,908
MKN	238	104,906	201,069	305,975	92,720	57,950	53,314	10,431	0	0	0	0	214,414	520,390
MKP	239	16,790	135,779	152,568	7,739	70,616	91,897	26,118	0	0	0	0	196,370	348,939
Total		1,092,023	1,417,596	2,509,618	972,852	404,010	442,705	337,673	24,905	45,309	0	70,214	2,227,455	4,737,075

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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
		Mature	Adult	Total	<70 mm	70–91 mm	92–114 mm	>114 mm		<165 mm	≥165 mm			
Beaver Inlet														
BIN	232	0	1,546	1,546	1,546	0	0	0	0	0	0	0	1,546	3,093
BIK	233	322,043	0	322,043	326,003	3,293	0	0	0	0	0	0	329,296	651,340
BID	234	21,038	0	21,038	13,675	0	0	0	0	0	0	0	13,675	34,713
BIB	235	26,848	959	27,807	26,848	0	0	0	0	0	0	0	26,848	54,656
BIG	236	42,608	0	42,608	28,823	1,253	0	0	0	0	0	0	30,076	72,684
Total		412,537	2,505	415,042	396,895	4,546	0	0	0	0	0	0	401,441	816,486
Eastern Aleutian District Total														
		2,413,359	1,954,203	4,367,560	2,424,104	1,609,818	715,621	369,367	27,765	45,309	0	73,074	5,191,985	9,559,548