

Fishery Management Report No. 13-27

**Bottom Trawl Survey of Crab and Groundfish:
Kodiak, Chignik, South Peninsula, and Eastern
Aleutian Management Districts, 2012**

by

Kally Spalinger

June 2013

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



Symbols and Abbreviations

The following symbols and abbreviations, and others approved for the Système International d'Unités (SI), are used without definition in the following reports by the Divisions of Sport Fish and of Commercial Fisheries: Fishery Manuscripts, Fishery Data Series Reports, Fishery Management Reports, and Special Publications. All others, including deviations from definitions listed below, are noted in the text at first mention, as well as in the titles or footnotes of tables, and in figure or figure captions.

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	all commonly accepted professional titles	e.g., Dr., Ph.D., R.N., etc.	base of natural logarithm	e
hectare	ha	at	@	catch per unit effort	CPUE
kilogram	kg	compass directions:		coefficient of variation	CV
kilometer	km	east	E	common test statistics	(F, t, χ^2 , etc.)
liter	L	north	N	confidence interval	CI
meter	m	south	S	correlation coefficient (multiple)	R
milliliter	mL	west	W	correlation coefficient (simple)	r
millimeter	mm	copyright	©	covariance	cov
		corporate suffixes:		degree (angular)	°
Weights and measures (English)		Company	Co.	degrees of freedom	df
cubic feet per second	ft ³ /s	Corporation	Corp.	expected value	E
foot	ft	Incorporated	Inc.	greater than	>
gallon	gal	Limited	Ltd.	greater than or equal to	≥
inch	in	District of Columbia	D.C.	harvest per unit effort	HPUE
mile	mi	et alii (and others)	et al.	less than	<
nautical mile	nmi	et cetera (and so forth)	etc.	less than or equal to	≤
ounce	oz	exempli gratia	e.g.	logarithm (natural)	ln
pound	lb	(for example)		logarithm (base 10)	log
quart	qt	Federal Information Code	FIC	logarithm (specify base)	log ₂ , etc.
yard	yd	id est (that is)	i.e.	minute (angular)	'
		latitude or longitude	lat. or long.	not significant	NS
Time and temperature		monetary symbols (U.S.)	\$, ¢	null hypothesis	H ₀
day	d	months (tables and figures): first three letters	Jan, ..., Dec	percent	%
degrees Celsius	°C	registered trademark	®	probability	P
degrees Fahrenheit	°F	trademark	™	probability of a type I error (rejection of the null hypothesis when true)	α
degrees kelvin	K	United States (adjective)	U.S.	probability of a type II error (acceptance of the null hypothesis when false)	β
hour	h	United States of America (noun)	USA	second (angular)	"
minute	min	U.S.C.	United States Code	standard deviation	SD
second	s	U.S. state	use two-letter abbreviations (e.g., AK, WA)	standard error	SE
				variance	
Physics and chemistry				population	Var
all atomic symbols				sample	var
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. 13-27

**BOTTOM TRAWL SURVEY OF CRAB AND GROUND FISH: KODIAK,
CHIGNIK, SOUTH PENINSULA, AND EASTERN ALEUTIAN
MANAGEMENT DISTRICTS, 2012**

by
Kally Spalinger
Alaska Department of Fish and Game, Division of Commercial Fisheries, Kodiak

Alaska Department of Fish and Game
Division of Sport Fish, Research and Technical Services
333 Raspberry Road, Anchorage, Alaska, 99518-1565

June 2013

The Fishery Management Reports series was established in 1989 by the Division of Sport Fish for the publication of an overview of management activities and goals in a specific geographic area, and became a joint divisional series in 2004 with the Division of Commercial Fisheries. Fishery Management Reports are intended for fishery and other technical professionals, as well as lay persons. Fishery Management Reports are available through the Alaska State Library and on the Internet: <http://www.adfg.alaska.gov/sf/publications/>. This publication has undergone regional peer review.

*Kally Spalinger,
Alaska Department of Fish and Game, Division of Commercial Fisheries
351 Research Court, Kodiak, AK 99615, USA*

This document should be cited as:

Spalinger, K. 2013. Bottom trawl survey of crab and groundfish: Kodiak, Chignik, South Peninsula, and Eastern Aleutians Management Districts, 2012. Alaska Department of Fish and Game, Fishery Management Report No. 13-27, Anchorage.

The Alaska Department of Fish and Game (ADF&G) administers all programs and activities free from discrimination based on race, color, national origin, age, sex, religion, marital status, pregnancy, parenthood, or disability. The department administers all programs and activities in compliance with Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act (ADA) of 1990, the Age Discrimination Act of 1975, and Title IX of the Education Amendments of 1972.

If you believe you have been discriminated against in any program, activity, or facility please write:

ADF&G ADA Coordinator, P.O. Box 115526, Juneau, AK 99811-5526
U.S. Fish and Wildlife Service, 4401 N. Fairfax Drive, MS 2042, Arlington, VA 22203
Office of Equal Opportunity, U.S. Department of the Interior, 1849 C Street NW MS 5230, Washington DC 20240

The department's ADA Coordinator can be reached via phone at the following numbers:

(VOICE) 907-465-6077, (Statewide Telecommunication Device for the Deaf) 1-800-478-3648,
(Juneau TDD) 907-465-3646, or (FAX) 907-465-6078

For information on alternative formats and questions on this publication, please contact:

ADF&G Division of Sport Fish, Research and Technical Services, 333 Raspberry Road, Anchorage AK 99518 (907) 267-2375.

TABLE OF CONTENTS

	Page
LIST OF TABLES.....	ii
LIST OF FIGURES.....	ii
LIST OF APPENDICES.....	iii
ABSTRACT.....	1
INTRODUCTION.....	1
METHODS.....	3
Trawl Description and Procedures.....	3
Catch Sampling Procedures.....	4
Other Projects.....	5
Bitter Crab Sampling.....	5
Tanner and King Crab Population Estimation.....	5
RESULTS AND DISCUSSION.....	5
Kodiak.....	5
Tanner Crab.....	6
Red King Crab.....	7
Groundfish.....	7
South Peninsula and Chignik.....	7
Tanner Crab.....	8
Red King Crab.....	9
Groundfish.....	9
Eastern Aleutian.....	9
Tanner Crab.....	9
Red King Crab.....	10
Groundfish.....	10
Prevalence of Bitter Crab Disease.....	10
Weathervane Scallop Sampling.....	10
Skate Sampling.....	10
Water Temperature.....	11
REFERENCES CITED.....	12
APPENDIX A. EXPLANATION OF TERMS.....	83
APPENDIX B. FISHING LOG AND TRAWL STATIONS FISHED.....	87
APPENDIX C. TRAWL MAPS.....	99
APPENDIX D. TANNER CRAB POPULATION ESTIMATES BY STATION.....	115

LIST OF TABLES

Table	Page
1. Bottom trawl survey hauls by management district, 1988–2012.....	16
2. Male red king and male Tanner crabs caught by location, cohort, and shell condition in the 2012 trawl survey.....	17
3. Tanner crab population estimates from bottom trawl surveys in the Kodiak District, 1988–2012.	19
4. Tanner crab harvest strategy mature male population threshold levels in number of crab, estimates of number of mature male crab by survey year, and fishery guideline harvest levels from bottom trawl surveys, 2008–2012.....	24
5. Red king crab population estimates from trawl surveys in the Kodiak and Alaska Peninsula Areas, 2003–2012.....	25
6. Dominant species by weight in the Kodiak District bottom trawl survey, 2012.	31
7. Tanner crab population estimates from bottom trawl surveys in the South Peninsula and Chignik Districts, 1988–2012.	32
8. Dominant species by weight in the South Alaska Peninsula and Chignik districts bottom trawl survey, 2012.....	42
9. Tanner crab population estimates from bottom trawl surveys in the Eastern Aleutian District, 1990–2012.....	43
10. Dominant species by weight in the Eastern Aleutian District bottom trawl survey, 2012.	47
11. Bitter crab disease percent prevalence by station and year from Alitak Bay hemolymph samples, 2001–2010.....	48
12. Tanner crab per station estimated to have bitter crab disease and population estimates from stations sampled for bitter crab in Alitak Bay, 2001–2010.	49
13. Average near-bottom water temperature by location for the warmest and coldest survey locations in each district during 2012 from the bottom trawl surveys, 2003-2012.....	50

LIST OF FIGURES

Figure	Page
1. Bottom trawl survey stations, 2012.....	51
2. Historic trawl survey areas and current Tanner crab management sections in the Kodiak District.	52
3. Tanner crab relative size frequency by sex and district from the 2012 bottom trawl survey.	53
4. Tanner crab per kilometer towed in the 2012 Kodiak bottom trawl survey.	54
5. Tanner crab male population estimate by carapace width and shell condition from the Northeast, Eastside, and Southeast sections of the 2012 Kodiak District bottom trawl survey.....	55
6. Tanner crab male population estimate by carapace width and shell condition from the Southwest, Westside, and North Mainland sections of the 2012 Kodiak District bottom trawl survey.....	56
7. Tanner crab male population estimate by carapace width in the Kodiak District bottom trawl surveys, 2003–2012.....	57
8. Tanner crab and red king crab adult female egg clutch fullness by shell condition in the Kodiak bottom trawl survey, 2012.....	58
9. Red king crab per kilometer towed in the 2012 Kodiak and Alaska Peninsula Area bottom trawl survey.....	59
10. Red king crab male population estimate by carapace length in the Kodiak Area bottom trawl surveys, 2003–2012.....	60
11. Arrowtooth flounder, flathead sole, rock sole, and yellowfin sole catch in kilograms per kilometer towed from the 2012 Kodiak bottom trawl survey.....	61
12. Sablefish, Pacific cod, rougheye rockfish, and walleye pollock catch in kilograms per kilometer towed from the 2012 Kodiak bottom trawl survey.....	62
13. Tanner crab per kilometer towed in the 2012 South Peninsula and Chignik bottom trawl survey.....	63
14. Tanner crab male population estimate by carapace width and shell condition from Sanak Island, Morzhovoi Bay, and Cold Bay/Belkofski Bay in the Western Section of the 2012 South Peninsula bottom trawl survey.....	64

LIST OF FIGURES (Continued)

15.	Tanner crab male population 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 2012 South Peninsula trawl survey.	65
16.	Tanner crab male population estimate by carapace width in the South Peninsula District bottom trawl surveys, 2003–2012.	66
17.	Tanner crab male population estimate by carapace width and shell condition from Ivanof Bay and Mitrofanina in the 2012 Chignik bottom trawl survey.	67
18.	Tanner crab male population estimate by carapace width and shell condition from Chignik Bay and Kujulik Bay in the 2012 Chignik bottom trawl survey.	68
19.	Tanner crab male population estimate by carapace width in the Chignik District bottom trawl surveys, 2003–2012.	69
20.	Tanner crab adult female egg clutch fullness by shell condition in the South Peninsula, Chignik, and Eastern Aleutian bottom trawl survey, 2012.	70
21.	Arrowtooth flounder, flathead sole, rock sole, and yellowfin sole catch in kilograms per kilometer towed from the 2012 Alaska Peninsula bottom trawl survey.	71
22.	Sablefish, Pacific cod, rougheye rockfish, and walleye pollock catch in kilograms per kilometer towed from the 2012 Alaska Peninsula bottom trawl survey.	72
23.	Tanner crab per kilometer towed in the 2012 Eastern Aleutian bottom trawl survey.	73
24.	Arrowtooth flounder, flathead sole, rock sole, and yellowfin sole catch in kilograms per kilometer towed from the 2012 Eastern Aleutian bottom trawl survey.	74
25.	Sablefish, Pacific cod, rougheye rockfish, and walleye pollock catch in kilograms per kilometer towed from the 2012 Eastern Aleutian bottom trawl survey.	75
26.	Weathervane scallop catch in kilograms per kilometer towed from the 2012 bottom trawl survey.	76
27.	Weathervane scallop shell height frequency from the 2012 bottom trawl survey.	77
28.	Big, longnose, Bering, Alaska, and Aleutian skate relative size frequency by species from the 2012 bottom trawl survey.	78
29.	Bering, Aleutian, and Alaska skate catch in kilograms per kilometer towed from the 2012 bottom trawl survey.	79
30.	Big and longnose skate catch in kilograms per kilometer towed from the 2012 bottom trawl survey.	80
31.	Near-bottom water temperatures from the 2012 bottom trawl survey.	81

LIST OF APPENDICES

Appendix	Page	
A1.	Explanation of Tanner crab and red king crab terms.	84
B1.	2012 bottom trawl survey fishing log.	88
B2.	2012 bottom trawl survey stations and areas fished by district and section.	95
C1.	Izhut, Kazakof, Kizhuyak, and Marmot bays station boundaries with station name, trawl haul number, location and direction of haul, June 2012.	100
C2.	Chiniak Bay and Chiniak Gully station boundaries with station name, trawl haul number and location and direction of haul, June 2012.	101
C3.	Ugak Bay, Kiliuda Bay, and Barnabas Gully station boundaries with station name, trawl haul number and location and direction of haul, June and July 2012.	102
C4.	South Sitkalidak Strait, Twoheaded Island, and Horse’s Head area station boundaries with station name, trawl haul number and location and direction of haul, July 2012.	103
C5.	Alitak Bay and Alitak Flats station boundaries with station name, trawl haul number and location and direction of haul, July 2012.	104
C6.	Shelikof Strait station boundaries with station name, trawl haul number and location and direction of haul, September 2012.	105

LIST OF APPENDICES (Continued)

C7.	Uyak, Uganik, and Viekoda Bays station boundaries with station name, trawl haul number and location and direction of haul, September 2012.....	106
C8.	Morzhovoi Bay, Cold Bay, Belkofski Bay, Deer Island, and Sanak Island station boundaries with station name, trawl haul number and location and direction of haul, August 2012.....	107
C9.	Pavlof and Volcano Bays station boundaries with station name, trawl haul number and location and direction of haul, August 2012.....	108
C10.	Unga Strait, Beaver Bay, Balboa Bay, and West Nagai Strait station boundaries with station name, trawl haul number and location and direction of haul, August 2012.....	109
C11.	Stepovak, Ivanof, and Kuiu Bays, and Mitrofan station boundaries with station name, trawl haul number and location and direction of haul, August 2012.....	110
C12.	Kujulik, Chignik, and Castle Bays station boundaries with station name, trawl haul number and location and direction of haul, August 2012.....	111
C13.	Akutan Bay station boundaries with station name, trawl haul number and location and direction of haul, July 2012.....	112
C14.	Unalaska, Makushin, and Pumicestone Bays station boundaries with station name, trawl haul number and location and direction of haul, July 2012.....	113
D1.	Tanner crab population estimates in the Kodiak District by station, section, and total district, 2012.....	116
D2.	Tanner crab population estimates in the South Peninsula District by station, sampling locale, section, and total district, 2012.....	122
D3.	Tanner crab population estimates in the Chignik District by station, sampling locale, and total district, 2012.....	125
D4.	Tanner crab population estimates in the Eastern Aleutian District by station, sampling locale, and total district, 2012.....	127

ABSTRACT

This report summarizes the June through September 2012 bottom trawl survey to assess crab and groundfish resources in the Kodiak, Chignik, South Peninsula, and Eastern Aleutian management districts. Trawl hauls were assessed for species catch composition, population estimates of commercially important crabs, and density estimates (kg/km towed) of commercially important groundfish. The estimated Tanner crab *Chionoecetes bairdi* abundance was above the minimum population threshold required by regulation to consider a fishery opening in the Eastside and Southeast sections of the Kodiak District. Tanner crab abundance also met all requirements to consider fishery openings in the Eastern Section of the South Peninsula District and the Unalaska/Kalekta Bay Section of the Eastern Aleutian District. Red king crab *Paralithodes camtschaticus* population estimates in each of the surveyed registration areas remain too low to consider opening the red king crab commercial fishery. Walleye pollock *Theragra chalcogramma*, arrowtooth flounder *Atheresthes stomias*, and Flathead sole *Hippoglossoides elassodon* dominated the groundfish catch in all of the areas surveyed.

Key words: crab, groundfish, *Chionoecetes bairdi*, *Paralithodes camtschaticus*, trawl survey, Kodiak, South Peninsula, Chignik, Eastern Aleutian, bitter crab syndrome, *Gadus macrocephalus*, *Hippoglossoides elassodon*, *Atheresthes stomias*, *Theragra chalcogramma*

INTRODUCTION

The Alaska Department of Fish and Game (ADF&G) conducted a bottom trawl survey during 2012, focusing on inshore waters around Kodiak Island, along the Alaska Peninsula from Cape Douglas to False Pass, and in the Eastern Aleutian Islands from Akutan to Unalaska Island (Figure 1). The survey area corresponds to the Kodiak, Alaska Peninsula, and Aleutian Islands king crab registration areas, defined by Alaska Administrative Code 5 AAC 34.400, 5 AAC 34.500, and 5 AAC 34.600; the Kodiak, Chignik, South Peninsula, and Eastern Aleutian districts of the Westward Registration Area for Tanner crab *Chionoecetes bairdi*, defined by 5 AAC 35.505 (a)(b)(c) and (f); and the Kodiak, Chignik, and South Alaska Peninsula registration areas for groundfish, defined by 5 AAC 28.400, 5 AAC 28.500, and 5 AAC 28.550. Tanner crab management units are districts; king crab and groundfish management units are areas. This report summarizes survey data by district or area depending on the species.

ADF&G began bottom trawl surveys around Kodiak Island in 1963. Early surveys focused on red king crab in the Kodiak District and targeted Long Island Bank (Reynolds and Powell 1964), Marmot Flats (McMullen 1967a), Portlock Bank (McMullen 1967b), Albatross Bank (McMullen 1968), and Alitak and Kaguyak bays (Kingsbury and James 1971). Trawl surveys to assess Tanner crab in the Kodiak District were initiated in 1980 in North Shelikof Strait (Colgate and Hicks 1982; Figure 2) and expanded to other areas of the Kodiak and Chignik districts in 1981 (Colgate and Hicks 1983), and to Pavlof Bay in the South Peninsula District in 1984 (Colgate 1984). The first comprehensive trawl survey of the Kodiak District was conducted in 1987 (Jackson 1990) and in 1988 became the standard Tanner crab stock assessment tool in the Kodiak, Chignik, South Peninsula, and Eastern Aleutian districts (Urban and Vining 1999). The Eastern Aleutian District bottom trawl survey was added to the region-wide survey program in 1990 and generally continued on a triennial basis until 2003. Beginning in 2004, selected locations of the Eastern Aleutian District have been annually surveyed to support Tanner crab fishery management.

From 1973 to 1986 Tanner crab were surveyed as an adjunct to ADF&G's king crab pot surveys (Colgate and Hicks 1983). The final transition to a trawl survey in 1988 occurred for multiple reasons:

1. Trawl gear is assumed to be less selective in capturing crabs than pot gear and is therefore a better tool to assess population abundance and predict future recruitment. Catchability of crabs by pots varies depending on size, sex, and bait characteristics (Colgate and Hicks 1982).
2. Trawl survey catch per unit effort (CPUE) is a direct measure of crab and fish density, concentration of animals in relation to the size of an area, which allows for consistent spatial and temporal expansion estimates across a fixed grid of survey stations. The catch of sub-legal male and female crab by pots does not appear to be proportionate to their abundance in the population and suggests that crab behavior affects pot survey CPUE (Colgate 1984).
3. A trawl net allows faster surveying of an area (Urban 1993), which allows a single trawl vessel to survey the amount of area in one season that previously was surveyed by multiple pot survey vessels, providing cost savings.
4. Trawl surveys allow for collection of information such as species composition and size frequencies of commercially and ecologically important species. National Marine Fisheries Service (NMFS) currently incorporates walleye pollock *Theragra chalcogramma* abundance estimates and biological information collected from the ADF&G trawl survey into their Stock Assessment and Fishery Evaluation report. NMFS is also developing methods to incorporate ADF&G trawl survey data from Pacific cod *Gadus macrocephalus* and northern and southern rock sole *Lepidopsetta polyxstira* and *L. bilineata* into the Stock Assessment and Fishery Evaluation reports for those species.

Since 1988, between 287 and 423 annual trawl hauls have been completed during the bottom trawl survey (Table 1). In 1999, ADF&G developed a Tanner crab harvest strategy for the above districts that set minimum threshold population levels for opening commercial fishing and brought Tanner crab management into compliance with Alaska Board of Fisheries regulation on harvest strategies (5 AAC 35.080; Urban et al. 1999). The population threshold to consider opening a district to fishing was defined as half the long-term average abundance of mature males (carapace width ≥ 115 mm; Urban and Vining 1999). Tanner crab guideline harvest levels (GHLs) are primarily determined by estimating the number of molting mature male crab in a district or section and applying a harvest rate based on composition of the male population. Additional precautionary measures are contained within the harvest strategy to ensure conservative management when stocks are rebuilding (Urban and Vining 1999). Tanner crab fisheries were closed due to low population abundance in the Kodiak District from 1994 to 2000, South Peninsula District from 1990 to 2000 and from 2002 to 2004, and Chignik District from 1990 to 2004 and 2007 to 2009.

The primary objectives of the 2012 crab and groundfish bottom trawl survey were to estimate the abundance and condition of Tanner and red king crabs *Paralithodes camtschaticus*, and determine species composition, length frequency distributions, and density (kg/km towed) of commercially important groundfish. A secondary objective was to document prevalence of bitter crab disease in Tanner crab in Alitak Bay.

The following additional data were collected as part of the standard assessment survey (Spalinger and Cavin 2004): 1) shell height of weathervane scallops *Patinoplectin caurinus*; 2) skate (*Raja spp.* and *Bathyraja spp.*) species, sex, and size; 3) chela height of male Tanner

crab in Marmot Bay; and 4) walleye pollock size, sex, and ear bones called otoliths that are located in the head and from which age is determined.

Data and biological samples were collected for special projects in 2012 (Spalinger 2012b), including: 1) chela height of male Tanner crab in the Northeast, Eastside, and Westside sections of the Kodiak District; 2) whole adult female Tanner crab from the Northeast, Eastside, and Westside sections of the Kodiak District; 3) whole stomachs from walleye pollock, Pacific cod, arrowtooth flounder *Atheresthes stomias*, Pacific halibut *Hippoglossus stenolepis*, flathead sole *Hippoglossoides elassodon*, northern rock sole, and spiny dogfish *Squalus acanthius* in Marmot Bay of the Kodiak District; 4) whole specimens of juvenile walleye pollock, Pacific cod, arrowtooth flounder, sablefish *Anoplopoma fimbria*, and rockfish *Sebastes* and *Sebastolobus* from the Kodiak District and Shumagin Islands of the South Peninsula District; and 5) weathervane scallop samples from around Kodiak Island and the Shumagin Islands for isotope analysis.

This report documents trawl survey crab catch and includes select information on groundfish catch and bitter crab disease prevalence in Tanner crab. Bitter crab disease is caused by a parasitic dinoflagellate *Hematodinium* sp. that infects blood and causes a bitter, aspirin-like flavor in cooked crab. It is fatal to the crab and can affect recruitment and population size if high in prevalence.

Tanner crab chela height data and female Tanner crab collection are ongoing ADF&G research projects; results are not presented in this report. Walleye pollock otoliths, groundfish stomachs, juvenile fish, and associated data were collected at the request of NMFS and these data can be obtained by contacting the Resource Ecology and Fisheries Management Division of NMFS at the Alaska Fisheries Science Center in Seattle, WA.

METHODS

TRAWL DESCRIPTION AND PROCEDURES

Since 1988 ADF&G has utilized the research vessel *Resolution* (27.4 m) to survey areas of known Tanner crab habitat. In 2012 one bottom trawl haul was made in each of 374 stations, except from one to three extra hauls were made in eight of the offshore stations in the Kodiak District to evaluate the accuracy of Tanner crab estimation methods in large survey stations (Spalinger 2012b).

The bottom trawl survey net is a 400-mesh eastern otter trawl designed to sweep a 12.2 m path. The net was constructed with 10.2 cm stretch mesh at the mouth; 8.9 cm stretch mesh in the body, and a 3.2 cm stretch mesh liner in the codend. The net has a 21.3 m headrope with 18 floats 20.3 cm in diameter. The footrope is 29.0 m long without roller gear or tickler chain. The footrope is weighted with a 1.0 cm diameter chain attached every 25.4 cm to ensure the footrope tends bottom. The dandylines are 45.7 m long, each consisting of an 18.3 m section of 1.5 cm cable and a pair of 27.4 m sections of 1.3 cm cable, one attached to the top and the other to the bottom of each net wing. Astoria “V” type doors weighing 340 kg and measuring 1.5 m x 2.1 m are used; for diagrams see Spalinger and Cavin (2004).

The survey area is divided into inshore and offshore stations. The size of offshore stations average approximately 74.6 km² and inshore stations average approximately 21.0 km². Considerable size variation of stations occurs due to coastline topography and bathymetry. The

area (km²) classified as crab and fish habitat in inshore stations is calculated using depths greater than 20 fathoms (Spalinger and Cavin 2004). Station design has been generally consistent since 1988.

Within each station, the trawl was towed on bottom at an average speed of 5.0 km per hour for 1.85 km, equivalent to 1 nmi. The length of the haul is intended to capture a sample weight small enough for the vessel equipment to weigh, yet provide a representative sample of fishery resources. Irregular bottom type, net hang ups, or exceptionally large catches occasionally caused haul length to differ from 1.85 km. Haul length was determined by Global Positioning System. The vessel captain estimated corrections in distance for hauls that were not straight. Haul location was limited to locations of trawlable substrate as determined from nautical charts and bottom mapping software 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 repeated when the skipper and crew leader determined the net did not adequately sample the bottom (Spalinger and Cavin 2004). A temperature-depth data logger was attached to the headrope, recording water temperature and depth approximately 2 m above the sea floor for each haul.

CATCH SAMPLING PROCEDURES

Total catch weight from each haul was determined by weighing the full trawl codend with an electronic crane scale accurate to ± 1.0 kg, then emptying the codend, weighing the empty codend, and subtracting the weight of the empty codend from the full trawl codend weight. A 1.5 m² splitting net was tied into the on-deck sorting bin before the trawl catch was dumped from the codend. After emptying the entire catch from the codend into the sorting bin, selected species were weighed (± 0.1 kg), counted, and measured (± 1.0 cm) when applicable (whole-haul). The following species were whole-haul sampled: sablefish *Anoplopoma fimbria*, Pacific cod, walleye pollock, Pacific halibut, all rockfish *Sebastes* spp. and *Sebastolobus* spp., lingcod *Ophiodon elongatus*, Atka mackerel *Pleurogrammus monoptyerygus*, giant Pacific octopus *Octopus dofleini*, squid *Berryteuthis magister*, Pacific herring *Clupea harengus*, salmon *Onchorhynchus* spp., weathervane scallop, red sea cucumber *Parastichopus californicus*, Bering skate *Bathyraja interrupta*, Aleutian skate *B. aleutica*, Alaska skate *B. parmifera*, longnose skate *Raja rhina*, big skate *R. binoculata*, Dungeness crab *Cancer magister*, Tanner crab, red king crab, snow crab *Chionoecetes opilio*, hair crab *Erimacrus isenbeckii*, box crab *Lopholithodes foraminatus*, spiny dogfish, Pacific sleeper shark *Somniosus pacificus*, salmon shark *Lamna ditropis*, wolf-eel *Anarrichthys ocellatus*, and giant wrymouth *Cryptacanthodes giganteus*. After whole-haul species were removed, the splitting net was lifted through the remaining on-deck catch and the subsample was craned to the sorting table for catch composition sampling.

Length or width measurements were taken from selected commercial finfish and shellfish species. Fish measurements were entered directly into an onboard database allowing for data collection efficiency and quality control. Finfish and sharks were measured from snout to fork or mid-point of the caudal fin. Skates were measured from the snout to posterior notch on the wing. Tanner crab carapace width (CW) was measured between the lateral margin spines, perpendicular to the midline. Red king crab were measured for carapace length (CL) from the right eye socket to the medial posterior edge of the carapace. Because legal size measurement of Tanner and king crabs is the carapace width including the lateral margin spines, each crab of questionable legal status was measured including the spines to determine if it was a legal-size

crab. An explanation of the terms used to characterize Tanner and king crabs is presented in Appendix A. Dungeness crab were measured for CW and checked for legal status across the carapace immediately anterior to the tenth anterolateral spine. Tanner, king, and Dungeness crabs were subsampled when each species/sex exceeded 200 individuals per haul. In Marmot Bay, Eastside, and Westside sections of the Kodiak District chela height was measured as the greatest height, excluding spines, on the right chela, from up to 50 male Tanner crab per haul. Clutch fullness of mature female Tanner, king, and Dungeness crabs was measured by examining each egg clutch and estimating the fractional clutch size for the size of the abdomen (Spalinger 2006). Embryo development was noted by the presence or absence of eyed eggs. External signs of disease were also recorded. A minimum of 20 weathervane scallop shell heights were measured when available from each haul following the methods detailed in Spalinger and Cavin (2004).

OTHER PROJECTS

Bitter Crab Sampling

In Alitak Bay on the south end of Kodiak Island, where bitter crab disease is prevalent, hemolymph smears from 30 randomly selected Tanner crab per station were prepared (Pearson and Meyers 1992). Smears were stained with Diff-Quik™ stain and thirty fields of view were examined on a microscope under 100 magnification for each slide. Slides were rated negative or positive on a scale of 1 to 5. Disease prevalence is defined as the proportion of crab with bitter crab disease from the total population estimate of that area during the survey period. Percent prevalence of bitter crab in the sample area and in the population of Alitak Bay Tanner crab was calculated from the results of the hemolymph smears. In addition to collecting hemolymph smears, a hemolymph sample was taken and preserved in ethanol for future genetic analysis of the bitter crab pathogen.

TANNER AND KING CRAB POPULATION ESTIMATION

Population estimates for Tanner and king crabs were derived from trawl survey data using the area swept technique (Alverson and Pereyra 1969). Assuming a 12.2 m path, the area swept by the trawl in a 1 km tow is $\frac{1}{82}$ km². Hence, catch of each species in a haul can be converted to a density estimate (number of animals per km²) by multiplying the number of animals caught per km by 82. Density estimates were multiplied by the station area to estimate station population size. The sum of estimates from stations in a geographic area provide a population estimate for the area.

Catches for all other species were standardized to kg per km towed.

RESULTS AND DISCUSSION

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

KODIAK

In the Kodiak District 149 successful hauls (haul numbers 1-153) were completed in the Northeast, Eastside, Southeast, and Southwest sections between June 14 and July 11. Twelve additional hauls were performed in 8 offshore stations to determine station catch variability. Additional haul results were not used to determine survey population estimates as sampling

methods were modified from standard sampling procedures (Spalinger 2011; Spalinger and Cavin 2004) and are not included in this report. Between September 5 and September 13, sixty hauls (haul numbers 327-387) were completed in the Westside and North Mainland sections. One standard haul was unsuccessful because strong currents caused trawl doors to cross preventing the net from fishing properly. The total area used to determine population estimates for the Kodiak District was 9,216.2 km² (Appendix B2). Kodiak District haul locations are shown in Appendices C1–C7.

Tanner Crab

The 2012 survey captured 24,216 male Tanner crab in Kodiak District with a mean size of 90.7 mm CW and 13,608 female Tanner crab with a mean size of 60.2 mm CW. There were 2 dominant male size classes with modes at approximately 45 mm CW and 135 mm CW, and a dominant female size class with a mode at approximately 45 mm CW (Figure 3). Tanner crab were captured in 99% of all hauls, with catches ranging from 0 to 3,230 crab per haul. The highest Tanner crab catch per unit effort (CPUE), 1,744 crab per km towed (Figure 4), was found in the Westside Section in Terror Bay, station KULX. Soft/new pliable shell and new shell crab comprised 71% (17,307) of the total male Tanner crab captured in the Kodiak District survey (Table 2).

Tanner crab population estimates were derived for each station and summed for each surveyed commercial fishing section described in ADF&G commercial shellfish regulations (Appendix D1). The total Kodiak District 2012 surveyed Tanner crab population was estimated at 44.6 million crab, a decrease from the 2011 estimate of 55.4 million crab (Table 3) and was the lowest population estimate since 1997. The largest decreases were prerecruit males <70 mm CW and juvenile females. The only increases in population in 2012 were prerecruit males 70-91 mm and postrecruit legal males. The Eastside Section had the largest estimated population of legal males (Figure 5), while the Westside and Northeast sections had the smallest estimated populations of legal males (Figures 5 and 6).

The 2012 estimated population of legal-sized male Tanner crab in the Kodiak District was 5.0 million crab, 0.6 million less than the 2011 estimate of 5.6 million, and the fourth largest legal-sized male population estimate on survey record (Table 3; Figure 7). In 2012, the Eastside Section had the largest estimated population of legal-sized male crab at 2.8 million crab. Based on the Tanner crab management plan (5 AAC 35.507), the Eastside and Southeast sections were above the mature male population thresholds, satisfied the minimum GHM criteria, and opened for commercial Tanner crab fishing in 2013. The Northeast, Southwest, Westside, and North Mainland sections were below the thresholds required to open a commercial Tanner crab fishery (Table 4). The 2012 estimate of legal males decreased compared to 2011 in the Northeast, Southeast, Southwest, and Westside sections but increased in the Eastside and North Mainland sections of the Kodiak District.

Egg clutches of 2,551 mature female Tanner crab from the Kodiak District were examined; 10.9% were primiparous, a decrease from 12.0% in 2011 (Spalinger 2012a). Mature female egg clutches were more than half full in 72.0% of samples (Figure 8). This was lower than 2011 when 86.6% of mature females sampled had egg clutches that were greater than half full (Spalinger 2012a).

Red King Crab

Red king crab were captured in 6.2% of Kodiak Area hauls totaling 252 males and 187 females. King crab catch ranged from 0 to 283 crab per haul, with 80.6% of king crab caught inside Alitak Bay and 18.5% caught on Alitak Flats (Figure 9). Mean king crab size was 119.8 mm CL for males and 107.6 mm CL for females. The majority of king crab were juveniles. Fifty-two adult female king crab captured in the 2012 Kodiak Area survey, or 63.4% of all adult females caught, had an egg clutch that was more than half full (Figure 8) similar to 66.3% of adult female king crab with an egg clutch more than half full in 2011 (Spalinger 2012a).

The Kodiak red king crab population remains low despite a commercial fishing closure since 1983. Red king crab population estimates were derived for four districts of the Kodiak Registration Area by size and sex categories (Table 5). The 2012 Kodiak red king crab population was estimated at 201,756 crab, down from an estimated 314,218 crab in 2011. The largest decreases from 2011 were in juvenile females and prerecruit males <95 mm CL (Figure 10). The total estimated number of legal males increased from 13,591 crab in 2011 to 17,135 crab in 2012. Prerecruit males from 95 to 130 mm CL represented 79% of the total male population. Relatively few king crab are captured by the trawl survey each year (252 males in 2012 and 162 males in 2011; Spalinger 2012a). Catches of king crab reflect uneven crab distribution, resulting in high annual sampling variability and fluctuating annual population estimates.

Groundfish

The average weight of all species from sample hauls in the Kodiak Area was 626 kg per km towed. During the 2012 survey, walleye pollock (28.6%) was the dominant species caught by weight, followed by arrowtooth flounder (20.6%), flathead sole (16.7%), and Tanner crab (5.1%; Table 6). These species were also the dominant species in recent surveys (Spalinger 2008, 2009, 2010, 2011, 2012a).

During the 2012 Kodiak Area bottom trawl survey 25,050 fish representing 36 species were measured for length. Arrowtooth flounder and flathead sole were found in almost every haul, although flathead sole were most abundant near shore (Figure 11). Yellowfin sole *Pleuronectes asper* were primarily found inside bays. Rock sole in the Kodiak Area were mainly northern rock sole except in Kupreanof Strait and outer Marmot Bay where southern rock sole were more abundant (Figure 11). Sablefish were caught in small numbers around Kodiak Island with the largest catches in Barnabas Gully (Figure 12). Pacific cod and walleye pollock were common throughout the survey with the largest densities of pollock in the bays along the east side of Kodiak Island. Rougheye rockfish *Sebastes aleutianus* were also encountered along the east side of Kodiak Island and were particularly concentrated in Marmot Bay (Figure 12).

SOUTH PENINSULA AND CHIGNIK

In the South Peninsula and Chignik districts, 137 hauls were completed from July 28 through August 25: Ninety-one hauls in the South Peninsula District (haul numbers 189-226 and 255-307; Appendices C8–C11) and 46 hauls in the Chignik District (haul numbers 162-188 and 308-326; Appendices C11–C12). The total area used to determine population estimates was 3,062.4 km² in the South Peninsula District and 1,408.4 km² in the Chignik District (Appendix B2).

Tanner Crab

The 2012 trawl survey of the South Peninsula District caught 8,236 Tanner crab. The number per haul ranged from 0 to 1,076 Tanner crab, with the highest CPUE of 581 crab per km towed at station 87D in Morzhovoi Bay in the Western Section (Figure 13). The mean CW of Tanner crab in the South Peninsula was 116.5 mm for males and 72.0 mm for females. The dominant male size class mode was approximately 140 mm CW while the dominant female size class mode was approximately 95 mm CW (Figure 3). Old and very old shell male crab accounted for 90.4% (3,574) of the total mature male (≥ 115 mm CW) Tanner crab captured in the South Peninsula survey (Table 2; Figures 14 and 15).

Population estimates were derived for each size and sex category of crab by surveyed locale (Appendix D2). The Tanner crab population in the surveyed portion of the South Peninsula District was estimated at 12.3 million crab (Table 7), a decrease from the 2011 survey estimate of 19.5 million crab. The 2012 decrease in the Tanner crab population was primarily due to the decrease of adult females, sublegal males > 114 mm CW, and newly recruited legal males (Figure 16). Population estimates of legal-sized male Tanner crab from the 2012 survey decreased to 4.2 million legal crab from 7.0 million in 2011, but were still the third highest on record. Tanner crab population estimates from the 2012 survey met the regulatory requirements for the Eastern Section of the South Peninsula District which opened for commercial Tanner crab fishing in 2013 (5 AAC 35.507; Table 4). The Western Section met the requirements for mature male population estimates, however the requirements of a 200,000 pound guideline harvest level were not met so the Western Section remained closed.

The 2012 Chignik District bottom trawl survey captured 5,269 Tanner crab with catches ranging from 4 to 637 Tanner crab per haul. Chignik Bay showed the highest CPUE of Tanner crab at 344 crab per km towed from station 4287 (Figure 13). The mean Tanner crab CW in the Chignik District was 78.8 mm for males and 49.2 mm for females. There were 2 dominant male size classes with modes at approximately 35 mm CW and 135 mm CW, and 1 dominant female size class with a mode at approximately 35 mm CW (Figure 3). While mature male (≥ 115 mm CW) Tanner crab catch was dominated by old shell and very old shell crab (85.1%), soft/new pliable and newshell juvenile male crab accounted for 60.7% of the total male Tanner crab captured in the Chignik survey, compared to 29.1% in 2011 (Spalinger 2011); most of those crab were found in Chignik Bay (Table 2; Figures 17 and 18).

Population estimates were derived for each sex-size category of Tanner crab by surveyed locale (Appendix D3). The 2012 Chignik Tanner crab population was estimated at 5.7 million crab, a decrease from the 2011 estimate of 9.9 million crab and the lowest estimate since 2003. Sublegal males ≥ 115 mm CW showed the largest decrease from the prior year (Table 7 and Figure 19). The legal-sized male Tanner crab population estimate from the 2012 survey was the fourth highest on record at 0.8 million crab, a decrease from 3.1 million crab in 2011. Population estimates from the 2012 survey met the regulatory requirements for number of mature males but did not meet minimum guideline harvest level requirements of 200,000 pounds for commercial Tanner crab fishing in the Chignik District in 2013 (Table 4).

The estimated number of adult female Tanner crab in the South Peninsula and Chignik districts in 2012 decreased to approximately 40% of the 2011 estimates (Table 7). Egg clutches that were more than half full were found in 76.7% of the 1,072 adult female Tanner crab examined in the South Peninsula District and in 84.5% of the 303 adult females in the Chignik District

(Figure 20). Multiparous females in the South Peninsula District accounted for 82.5% of adult female Tanner crab examined in 2012 compared to 95.9% in 2011 (Spalinger 2012a). In Chignik District during 2012, 96.0% of adult females examined were multiparous, similar to 97.5% multiparous in 2011 (Spalinger 2012a).

Red King Crab

The Alaska Peninsula king crab management area is roughly the same size as the South Peninsula and Chignik Tanner crab management districts combined. The red king crab population in the Alaska Peninsula Area remains at low levels. The 2012 population estimate, excluding Pavlof Bay, increased from 23,780 crab in 2011 to 72,632 crab in 2012 (Table 5). The large numbers of red king crab found in Pavlof Bay in 2011 were not seen in any other year and are not used for comparative purposes but rather demonstrate the uneven distribution of king crab that results in high annual sampling variability and fluctuating annual population estimates. The largest red king crab catches in 2012 came from Cold Bay (Figure 9). A total of 82 male and 65 female red king crab were captured in the Alaska Peninsula Area. Male king crab mean carapace length was 160.0 mm and female red king crab mean carapace length was 114.3 mm. Over half (63.1%) of female king crab were mature with egg clutches.

Groundfish

The average weight of all species from sample hauls in the Chignik Groundfish Registration Area and the Eastern District of the South Alaska Peninsula Groundfish Registration Area was 793 kg per km towed. Walleye pollock (28.1%), flathead sole (24.3%), and arrowtooth flounder (13.5%) were the dominant species by weight captured in the survey (Table 8). These species were also dominant in recent surveys (Spalinger 2008, 2009, 2010, 2011, 2012a).

Length measurements were taken from 16,980 fish representing 33 groundfish species in the Eastern District of the South Alaska Peninsula Area and the Chignik Area. Arrowtooth flounder and flathead sole were found area-wide except arrowtooth flounder were absent from Cold Bay (Figure 21). Northern rock sole were mainly found west of Kupreanof Point, as were the highest concentrations of yellowfin sole (Figure 21). Sablefish were only found in West Nagai Strait and Kuiu Bay (Figure 22). Rougheye rockfish were more abundant east of Kupreanof Point, while walleye pollock and Pacific cod were abundant throughout the survey area (Figure 22).

EASTERN ALEUTIAN

In the Eastern Aleutian Tanner Crab District 28 hauls (haul numbers 227-254) were completed from August 7 to 11 (Appendices C14–C15). The total area used to determine population estimates was 570.8 km² (Appendix B2).

Tanner Crab

The 2012 survey captured 2,478 male and 2,290 female Tanner crab. Tanner crab catch ranged from 1 to 1,025 animals per haul, with the highest CPUE at station UNF in Unalaska Bay with 553 crab per km towed (Figure 23). The mean carapace width for males was 90.8 mm and for females was 67.7 mm. There were 2 dominant male size classes with modes at 30 mm CW and 135 mm CW, and 2 dominant female size classes with modes at 30 mm CW and 95 mm CW (Figure 3). Of the 415 mature female Tanner crab sampled 78.3% had an egg clutch greater than half full (Figure 20).

The Tanner crab population estimate in the Eastern Aleutian District in 2012 was 4.2 million crab (Appendix D4), an increase from 2.6 million crab in 2011 (Table 9). The legal-sized male Tanner crab population was estimated to be 300,250 crab, with Unalaska Bay having the largest population of legal-sized male crab. The 2013 Eastern Aleutian District Tanner crab fishery opened to commercial fishing in Unalaska Bay.

Red King Crab

The red king crab population around Akutan and Unalaska islands remains at historic low levels, and the fishery has been closed since the 1982/83 season. A total of 5 male and 3 female red king crab were captured during the 2013 trawl survey.

Groundfish

The 2012 trawl survey stations in the Eastern Aleutian Tanner Crab Registration District are a part of the Bering Sea-Aleutian Islands Groundfish Registration Area, except for Beaver Inlet which is part of the Western District of the South Alaska Peninsula Groundfish Registration Area. The average weight of all animals from sample hauls in those areas was 432 kg per km towed. Walleye pollock was the dominant species by weight (23.4%), followed by arrowtooth flounder (22.9%) and flathead sole (14.5 %; Table 10).

Length measurements were taken from 3,778 fish representing 28 species during the 2012 eastern Aleutian survey. Arrowtooth flounder, flathead sole, Pacific cod, and walleye pollock were common around Unalaska and Akutan Islands (Figures 24 and 25). The largest densities of rock sole were found in Unalaska Bay (Figure 24). Yellowfin sole were only observed in Unalaska and Pumicestone bays (Figure 24). There were no sablefish found around the surveyed Aleutian Islands, while Rougheye rockfish were found around Unalaska Island, but were absent from Pumicestone and Akutan bays (Figure 25).

PREVALENCE OF BITTER CRAB DISEASE

Hemolymph smears from Alitak Bay were collected from 461 Tanner crab at 16 stations during the 2012 survey. Samples from 2012 and 2011 are in process and results are not available at the time of publication. Bitter crab disease prevalence rate, or the percentage of crab with the disease during the survey, has ranged from 0.3% to 8.6% between 2001 and 2010. Prevalence in 2010 was 0.3% from 15 sampled stations, down from the 2009 rate of 3.8% (Table 11) and the lowest on record for Alitak Bay. Annual prevalence rate has been decreasing since 2006. The population of infected crab in sampled stations was estimated to be 7,325 crab in 2010, a decrease from 115,014 infected crab in 2009 (Table 12).

WEATHERVANE SCALLOP SAMPLING

Weathervane scallop shell height measurements were collected during the 2012 survey for the 13th consecutive year. Eighty-seven percent of all weathervane scallops caught were located in the Kodiak Area (Figure 26). The 1,475 sampled scallops averaged 149.5 mm in height, a decrease from 151.2 mm in 2011 (Figure 27).

SKATE SAMPLING

Skate species and sex were determined during the 2012 trawl survey. A total of 2,927 skates were captured and measured. Bering skates comprised 44.8% of the total skate catch, and averaged 30.7 cm from snout to wing notch (Figure 28). Longnose skates comprised 22.4% of

the total skate catch and averaged 50.3 cm in length. Big skates comprised 16.7% of the skate catch and had an average length of 57.5 cm. Aleutian skates accounted for 11.5% of all skates caught and averaged 58.4 cm, while Alaska skates comprised 4.6% and averaged 44.3 cm (Figure 29). The larger skate species, big and Aleutian skates, were >65% female. The smaller species (longnose, Bering, and Alaska skates) were composed of 48.6%, 48.1%, and 45.9% females respectively. Although Bering skates were the most abundant skate species encountered during the survey, they accounted for only 15.2% of the total skate catch by weight. The less abundant big skate accounted for 34.6% of the total skate catch by weight. Skates were captured throughout the survey area, although species abundance varied by area. Bering skates were most abundant around Kodiak Island. Aleutian skates were mostly found east of Pavlof Bay and Alaska skates were most prevalent south of Kodiak Island out to Unalaska Island (Figure 29). Most longnose skates were captured east of Kupreanof Point. Big skates were typically most abundant in near shore survey stations (Figure 30).

WATER TEMPERATURE

Near bottom water temperature was recorded during each haul throughout the survey using a temperature-depth data logger attached to the headrope, recording water temperature and depth approximately 2 m above the sea floor. The coolest near-bottom temperatures were found in Deadman and Kazakof bays in the Kodiak District. The warmest temperatures were found in Cold Bay (South Peninsula District) and Kupreanof Strait (Kodiak District; Figure 31). The average survey bottom temperature was 5.40°C with a range from 0.33°C to 10.82°C. This was the coldest average survey temperature recorded in the last 10 years (Table 13).

REFERENCES CITED

- Alverson, D. L., and W. T. Pereyra. 1969. Demersal fish explorations in the northeastern Pacific Ocean—an evaluation of exploratory fishing methods and analytical approaches to stock size and yield forecasts. *Journal of the Fisheries Research Board of Canada* 26:1985-2001.
- Colgate, W. A. 1984. Westward Region Tanner crab, *Chionoecetes bairdi*, population index surveys. Alaska Department of Fish and Game, Division of Commercial Fisheries, Technical Report to Industry, Kodiak.
- Colgate, W. A. and D. M. Hicks. 1982. Investigations and life history and fishery for Tanner crab (*Chionoecetes bairdi*) in Alaska. Alaska Department of Fish and Game, Project No. 5-47-R. Commercial Fisheries Research and Development Act.
- Colgate, W. A., and D. M. Hicks. 1983. Investigations of life history and fishery for Tanner crab (*Chionoecetes bairdi*) in the Westward Region, Alaska, 1982. Alaska Department of Fish and Game, Division of Commercial Fisheries, Technical Data Report 96, Juneau. <http://www.sf.adfg.state.ak.us/FedAidPDFs/tdr.096.pdf>
- Jackson, D. R. 1990. A bottom trawl survey of crab and groundfish in the Kodiak Island and Alaska Peninsula Areas, June through September, 1989. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K90-22, Kodiak. <http://www.sf.adfg.state.ak.us/FedAidPDFs/rir.4k.1990.22.pdf>
- Kingsbury, A. P., and K. E. James. 1971. Abundance and composition of king crabs in the Alitak and Kaguyak Bay areas during April and June 1970. Alaska Department of Fish and Game, Division of Commercial Fisheries, Informational Leaflet 152, Kodiak. <http://www.sf.adfg.state.ak.us/FedAidPDFs/afrbil.152.pdf>
- McMullen, J. C. 1967a. King crab, *Paralithodes camtschatica* (Tilesius) offshore breeding study on Marmot Flats, Kodiak Island, spring of 1967. Alaska Department of Fish and Game, Division of Commercial Fisheries, Research Section, Informational Leaflet 112, Juneau. <http://www.sf.adfg.state.ak.us/FedAidPDFs/afrbil.112.pdf>
- McMullen, J. C. 1967b. A preliminary study of king crab (*Paralithodes camtschatica*) ocean reproduction and the delineation of the Kodiak District continental shelf environmental zones. Alaska Department of Fish and Game, Division of Commercial Fisheries, Research Section, Informational Leaflet 93, Juneau. <http://www.sf.adfg.state.ak.us/FedAidPDFs/afrbil.093.pdf>
- McMullen, J. C. 1968. Investigation of king crab ocean reproduction and brood stock composition, Kodiak Island. Alaska Department of Fish and Game, Division of Commercial Fisheries, Research Section, Informational Leaflet 126, Juneau. <http://www.sf.adfg.state.ak.us/FedAidPDFs/afrbil.126.pdf>
- Pearson, T., and T. Meyers. 1992. Prevalence of bitter crab syndrome and bacterial infection of Tanner Crab *Chionoecetes bairdi* in the Kodiak, Chignik, South Peninsula, and Eastern Aleutian Management Areas. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K92-26, Kodiak. <http://www.sf.adfg.state.ak.us/FedAidPDFs/rir.4k.1992.26.pdf>
- Reynolds, R. E., and G. C. Powell. 1964. King crab, *Paralithodes camtschatica* (Tilesius), trawl survey of Long Island Bank, east of Kodiak Island, Alaska, June 1963. Alaska Department of Fish and Game, Division of Biological Research, Informational Leaflet 44, Kodiak. <http://www.sf.adfg.state.ak.us/FedAidPDFs/afrbil.044.pdf>
- Spalinger, K. 2006. Special Project Plan: 2006 Bottom trawl survey of crab and groundfish: Kodiak, Chignik, South Peninsula, and Eastern Aleutian Districts. Alaska Department of Fish and Game, Regional Information Report 4K06-6, Kodiak.
- Spalinger, K. 2008. Bottom trawl survey of crab and groundfish: Kodiak, Chignik, South Peninsula, and Eastern Aleutian Management Districts, 2007. Alaska Department of Fish and Game, Fishery Management Report No. 08-49, Anchorage. <http://www.sf.adfg.state.ak.us/FedAidPDFs/fmr08-49.pdf>
- Spalinger, K. 2009. Bottom trawl survey of crab and groundfish: Kodiak, Chignik, South Peninsula, and Eastern Aleutians Management Districts, 2008. Alaska Department of Fish and Game, Fishery Management Report No. 09-25, Anchorage. <http://www.sf.adfg.state.ak.us/FedAidPDFs/FMR09-25.pdf>

REFERENCES CITED (Continued)

- Spalinger, K. 2010. Bottom trawl survey of crab and groundfish: Kodiak, Chignik, South Peninsula, and Eastern Aleutians Management Districts, 2009. Alaska Department of Fish and Game, Fishery Management Report No. 10-23, Anchorage. <http://www.adfg.alaska.gov/FedAidpdfs/FMR10-23>
- Spalinger, K. 2011. Bottom trawl survey of crab and groundfish: Kodiak, Chignik, South Peninsula, and Eastern Aleutians Management Districts, 2010. Alaska Department of Fish and Game, Fishery Management Report No. 11-40, Anchorage. <http://www.adfg.alaska.gov/FedAidpdfs/FMR11-40>
- Spalinger, K. 2012a. Bottom trawl survey of crab and groundfish: Kodiak, Chignik, South Peninsula, and Eastern Aleutians Management Districts, 2011. Alaska Department of Fish and Game, Fishery Management Report No. 12-20, Anchorage. <http://www.adfg.alaska.gov/FedAidpdfs/FMR12-20>
- Spalinger, K. 2012b. Special Project Plan: 2012 Bottom trawl survey of crab and groundfish: Kodiak, Chignik, South Peninsula, and Eastern Aleutian Districts. Alaska Department of Fish and Game, Regional Information Report 4K12-07, Kodiak.
- Spalinger, K., and M. E. Cavin. 2004. Standard project operational plan Bottom trawl survey of crab and groundfish: Kodiak, Chignik, South Alaska Peninsula, and Eastern Aleutian Areas. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K04-47, Kodiak. <http://www.sf.adfg.state.ak.us/FedAidPDFs/rir.4k.2004.47.pdf>
- Urban, D. 1993. Bottom trawl survey of crab and groundfish: Kodiak Island, Alaska Peninsula, and Dutch Harbor Areas, 1991. Alaska Department of Fish and Game, Division of Commercial Fisheries, Technical Fishery Report 93-16, Juneau.
- Urban, D., and I. Vining. 1999. Reconstruction of historic abundances of Kodiak, Chignik, and South Peninsula Tanner crab, report to the Board of Fisheries. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K99-17, Kodiak.
- Urban, D., D. Pengilly, D. Jackson, and I. Vining. 1999. A Tanner crab harvest strategy for Kodiak, Chignik, and the South Peninsula Districts, report to the Board of Fisheries. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Regional Information Report 4K99-21, Kodiak.

TABLES AND FIGURES

Table 1.–Bottom trawl survey hauls by management district, 1988–2012.

Year	Kodiak	Chignik	South Peninsula	Eastern Aleutian	Total
1988	217	0	108	0	325
1989	221	35	132	0	388
1990	217	37	123	46	423
1991	228	33	117	41	419
1992	209	29	114	0	352
1993	231	35	111	0	377
1994	200	34	122	44	400
1995	218	31	0	38	287
1996	223	27	122	0	372
1997	218	34	116	0	368
1998	219	35	93	0	347
1999	231	36	93	39	399
2000	221	37	94	35	387
2001	222	36	94	0	352
2002	226	47	95	0	368
2003	211	45	93	39	388
2004	226	45	94	24	389
2005	230	46	92	23	391
2006	216	46	90	28	380
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

Table 2.–Male red king and male Tanner crabs caught by location, cohort, and shell condition in the 2012 trawl survey.

Cohort	Definition	SHELL CONDITION				Total
		Soft/ New pliable	New	Old	Very old/ Very very old	
Kodiak red king crab						
Prerecruit IV	< 95 mm CL	0	4	0	0	4
Prerecruit III	95 - 112 mm CL	0	106	1	0	107
Prerecruit II	113 - 130 mm CL	0	96	0	0	96
Prerecruit I	> 130 mm CL and sublegal	0	13	1	0	14
Recruit	< 164 mm CL and legal soft/new	0	13			13
Postrecruit	≥ 164 mm CL or legal and not soft/new	0	0	7	11	18
Total		0	232	9	11	252
Alaska Peninsula red king crab						
Prerecruit IV	< 79 mm CL	0	1	0	0	1
Prerecruit III	79 - 95 mm CL	0	3	0	0	3
Prerecruit II	96 - 115 mm CL	0	10	0	0	10
Prerecruit I	> 115 mm CL and sublegal	0	5	1	0	6
Recruit	< 152 mm CL and legal soft/new	0	3			3
Postrecruit	≥ 152 mm CL or legal and not soft/new	2	25	16	16	59
Total		2	47	17	16	82
Kodiak Tanner crab						
Prerecruit IV	< 70 mm CW	1,365	8,658	2	16	10,041
Prerecruit III	70 - 91 mm CW	41	3,177	20	19	3,257
Prerecruit II	92 - 114 mm CW	10	1,038	92	353	1,493
Prerecruit I	≥ 115 mm CW and sublegal	32	752	446	3,559	4,789
Recruit	< 165 mm CW and legal soft/new	890	1,050			1,940
Postrecruit	≥ 165 mm CW or legal and not soft/new	211	83	708	1,694	2,696
Total		2,549	14,758	1,268	5,641	24,216
Mature only	≥ 115 mm CW	1,133	1,885	1,154	5,253	9,425
Chignik Tanner crab						
Prerecruit IV	< 70 mm CW	292	1,647	0	0	1,939
Prerecruit III	70 - 91 mm CW	1	29	0	7	37
Prerecruit II	92 - 114 mm CW	0	19	20	46	85
Prerecruit I	≥ 115 mm CW and sublegal	0	35	245	316	596
Recruit	< 165 mm CW and legal soft/new	0	144			144
Postrecruit	≥ 165 mm CW or legal and not soft/new	0	1	220	251	472
Total		293	1,875	485	620	3,273
Mature only	≥ 115 mm CW	0	180	465	567	1,212

-continued-

Table 2.–Page 2 of 2.

Cohort	Definition	SHELL CONDITION				Total
		Soft/ New pliable	New	Old	Very old/ Very very old	
South Peninsula Tanner crab						
Prerecruit IV	< 70 mm CW	150	1,145	1	3	1,299
Prerecruit III	70 - 91 mm CW	2	137	5	5	149
Prerecruit II	92 - 114 mm CW	0	315	23	85	423
Prerecruit I	≥ 115 mm CW and sublegal	1	217	140	1,181	1,539
Recruit	< 165 mm CW and legal soft/new	1	150			151
Postrecruit	≥ 165 mm CW or legal and not soft/new	0	11	239	2,014	2,264
Total		154	1,975	408	3,288	5,825
Mature only	≥ 115 mm CW	2	378	379	3,195	3,954
Eastern Aleutian Tanner crab						
Prerecruit IV	< 70 mm CW	129	702	1	0	832
Prerecruit III	70 - 91 mm CW	3	248	9	2	262
Prerecruit II	92 - 114 mm CW	1	261	112	15	389
Prerecruit I	≥ 115 mm CW and sublegal	0	237	398	46	681
Recruit	< 165 mm CW and legal soft/new	1	47			48
Postrecruit	≥ 165 mm CW or legal and not soft/new	0	2	245	19	266
Total		134	1,497	765	82	2,478
Mature only	≥ 115 mm CW	1	286	643	65	995

Table 3.—Tanner crab population estimates from bottom trawl surveys in the Kodiak District, 1988–2012.

Year	Females		No. Sublegal Males by Size (mm CW)				Recruits	Postrecruit (mm CW)		Total Legal	Total Males	Total Crab	
	Juvenile	Adult	Total	<70	70-91	92-114		>114	<165				≥165
Northeast													
1988	1,354,563	217,078	1,571,638	1,274,732	289,983	268,883	326,707	190,027	15,768	13,809	219,603	2,379,906	3,951,540
1989	3,562,665	2,901,955	6,464,622	3,450,667	1,199,743	1,310,029	1,079,253	599,728	70,706	112,008	782,443	7,822,131	14,286,750
1990	1,146,817	1,903,207	3,050,024	943,650	1,037,219	720,004	586,379	257,979	56,545	54,928	369,451	3,656,706	6,706,726
1991	3,144,089	1,651,931	4,796,019	2,582,124	1,110,887	1,120,967	992,477	429,496	19,580	52,116	501,194	6,307,649	11,103,662
1992	1,560,481	1,116,510	2,676,992	1,199,954	1,136,238	843,412	746,968	206,437	14,149	7,070	227,655	4,154,223	6,831,213
1993	1,003,154	712,050	1,715,206	957,185	286,858	493,452	515,267	265,334	21,702	16,787	303,823	2,556,583	4,271,788
1994	379,160	675,363	1,054,522	369,462	145,016	177,380	278,265	87,780	43,550	2,401	133,732	1,103,859	2,158,380
1995	2,881,474	634,972	3,516,446	2,802,299	689,231	194,665	172,907	9,823	54,115	0	63,938	3,923,037	7,439,481
1996	1,537,904	1,245,559	2,783,465	1,191,112	1,555,298	844,004	276,488	29,604	34,066	1,604	65,273	3,932,173	6,715,636
1997	367,576	667,066	1,034,641	389,356	829,336	821,252	414,430	40,953	18,402	0	61,632	2,516,008	3,550,650
1998	1,432,219	2,489,211	3,921,433	1,035,848	2,227,219	1,821,360	1,390,255	233,803	42,610	11,255	287,669	6,763,756	10,685,184
1999	1,548,521	948,973	2,497,494	1,758,178	265,791	564,559	709,719	173,790	104,130	1,904	279,826	3,578,072	6,075,563
2000	5,612,101	1,392,676	7,004,776	5,488,536	1,142,866	701,967	813,908	296,792	232,186	12,240	541,220	8,693,242	15,698,017
2001	14,224,509	4,717,370	18,941,884	13,744,180	4,971,609	2,796,557	1,458,801	160,749	249,893	2,963	413,604	23,384,747	42,326,627
2002	3,556,337	2,324,491	5,880,827	3,822,565	2,408,504	2,343,203	1,608,007	186,087	45,108	0	231,195	10,413,463	16,294,283
2003	1,397,871	2,655,317	4,053,190	1,527,024	1,671,604	2,965,222	2,719,471	367,217	134,752	5,115	507,088	9,390,400	13,443,591
2004	2,675,275	4,068,495	6,743,769	2,370,872	1,261,423	2,032,007	2,900,407	871,582	128,281	13,008	1,012,868	9,577,567	16,321,335
2005	3,640,106	3,090,388	6,730,489	3,927,579	1,467,199	1,434,734	2,797,064	784,428	257,122	4,905	1,046,453	10,673,021	17,403,505
2006	8,299,208	1,778,568	10,077,776	7,409,023	2,315,274	941,307	918,622	124,433	112,352	7,640	244,424	11,828,644	21,906,413
2007	5,647,488	2,056,515	7,704,011	4,069,065	2,309,251	2,300,020	1,929,099	174,433	167,966	0	342,396	10,949,823	18,653,830
2008	6,202,343	2,887,383	9,089,720	5,634,536	1,841,866	2,523,683	1,749,983	236,512	99,876	3,798	340,185	12,090,245	21,179,965
2009	3,151,614	1,871,597	5,023,208	2,616,365	2,911,974	3,088,462	2,665,171	660,261	27,141	0	687,402	11,969,368	16,992,570
2010	2,609,808	3,919,178	6,528,986	2,409,673	1,654,530	1,082,441	2,154,069	508,471	284,974	13,066	806,513	8,107,216	14,636,198
2011	1,170,402	951,553	2,122,530	1,225,874	216,752	378,393	860,921	89,261	180,250	2,564	282,944	2,964,876	5,087,405
2012	4,060,858	642,565	4,703,423	3,971,588	165,200	203,056	564,008	38,217	179,306	0	217,523	5,121,379	9,824,797
Eastside													
1988	2,061,612	762,131	2,823,741	1,599,434	434,894	610,398	689,188	279,635	97,689	1,914	379,236	3,713,138	6,536,873
1989	2,317,720	3,435,663	5,753,382	1,980,606	1,228,590	1,376,860	1,267,477	803,733	265,385	29,979	1,099,095	6,952,620	12,705,993
1990	1,474,420	9,743,534	11,217,949	1,248,609	670,041	1,957,553	3,885,702	752,612	135,298	57,684	945,596	8,707,493	19,925,444
1991	1,502,408	3,688,811	5,191,212	1,208,037	305,498	665,703	2,695,398	3,037,784	495,211	38,804	3,571,802	8,446,428	13,637,637
1992	1,496,933	1,974,291	3,471,219	1,614,073	332,577	503,076	1,607,073	538,014	270,350	76,998	885,359	4,942,146	8,413,360
1993	1,723,645	1,504,593	3,228,233	1,362,718	252,488	406,370	1,003,473	116,158	375,400	18,761	510,320	3,535,354	6,763,587
1994	1,768,545	571,131	2,339,674	1,311,718	706,289	465,080	572,335	47,970	122,224	2,837	173,030	3,228,440	5,568,113
1995	3,796,919	505,422	4,302,338	3,326,875	594,529	456,568	411,404	28,656	84,020	2,394	115,069	4,904,441	9,206,776
1996	2,099,149	916,541	3,015,687	2,187,039	705,080	609,876	849,489	107,557	179,489	14,539	301,583	4,653,060	7,668,750
1997	802,759	652,062	1,454,823	772,755	678,463	724,638	708,745	118,243	104,662	15,679	238,584	3,123,182	4,578,002
1998	4,404,845	2,431,490	6,836,331	3,867,630	1,770,282	2,730,752	2,243,275	294,484	440,937	86,566	821,987	11,433,925	18,270,254
1999	6,310,010	1,600,247	7,910,253	5,119,000	408,238	1,087,114	2,085,986	382,318	799,959	120,985	1,303,262	10,003,590	17,913,837

-continued-

Table 3.–Page 2 of 5.

Year	Females		No. Sublegal Males by Size (mm CW)				Recruits	Postrecruit (mm CW)		Total Legal	Total Males	Total Crab	
	Juvenile	Adult	Total	<70	70-91	92-114		>114	<165				≥165
2000	5,398,723	3,674,341	9,073,059	5,190,112	1,536,413	723,524	1,849,312	491,788	888,960	79,337	1,460,088	10,759,437	19,832,495
2001	28,315,476	3,112,801	31,428,278	22,797,216	3,242,923	1,459,292	1,198,178	72,247	1,114,209	87,196	1,273,651	29,971,255	61,399,533
2002	15,562,836	5,106,468	20,669,305	4,210,311	9,013,454	2,980,690	1,443,261	278,685	695,323	40,874	1,014,881	18,662,589	39,331,894
2003	2,538,553	10,743,918	13,282,473	2,658,298	3,103,448	10,681,111	5,693,592	224,498	497,337	26,157	747,989	22,884,433	36,166,904
2004	4,253,152	3,190,654	7,443,810	3,826,028	1,146,767	3,560,082	8,910,259	1,242,489	210,371	12,804	1,465,666	18,908,799	26,352,608
2005	1,555,530	3,316,790	4,872,320	1,768,741	135,364	1,329,192	7,272,525	3,119,978	562,552	52,577	3,735,106	14,240,924	19,113,246
2006	31,188,007	560,029	31,748,035	27,977,142	510,977	593,571	4,873,241	762,936	1,972,515	23,297	2,758,751	36,713,676	68,461,704
2007	41,719,338	2,377,545	44,096,877	21,273,691	25,935,359	1,605,777	3,832,203	211,070	1,459,224	19,162	1,689,456	54,336,471	98,433,348
2008	9,194,846	14,228,404	23,423,248	6,778,541	4,641,796	12,247,181	2,638,020	96,815	1,000,301	32,203	1,129,318	27,434,846	50,858,092
2009	2,971,070	10,171,061	13,142,131	713,239	3,485,397	5,299,719	13,579,233	2,465,072	283,128	39,072	2,787,271	25,864,842	39,006,970
2010	2,270,293	6,593,711	8,864,007	1,988,996	276,452	2,240,091	10,231,640	3,525,464	1,085,738	103,669	4,714,871	19,452,032	28,316,042
2011	5,284,450	2,629,107	7,917,357	5,207,569	106,517	562,576	4,291,741	1,081,083	1,298,589	55,296	2,434,967	12,603,359	20,520,713
2012	2,580,953	528,942	3,109,895	2,551,792	114,209	449,397	4,005,572	572,867	2,120,042	141,893	2,834,799	9,955,764	13,065,652
Southeast													
1988	200,497	283,473	483,970	157,833	159,910	420,986	1,034,596	663,903	123,022	46,508	833,434	2,606,755	3,090,725
1989	889,864	433,255	1,323,119	678,165	82,753	165,490	478,213	152,444	69,701	9,771	231,914	1,636,530	2,959,639
1990	1,103,929	667,540	1,771,468	1,042,974	104,310	226,362	509,185	279,905	100,818	4,420	385,142	2,267,965	4,039,429
1991	4,622,254	846,496	5,468,750	4,411,554	418,644	247,522	332,468	171,063	33,757	7,382	212,203	5,622,382	11,091,131
1992	2,145,762	1,295,586	3,441,342	1,640,284	676,401	433,272	576,851	32,734	131,767	9,970	174,472	3,501,275	6,942,612
1993	3,937,489	599,152	4,536,636	3,662,608	249,525	433,469	414,651	27,357	116,382	8,769	152,508	4,912,758	9,449,390
1994	112,690	222,891	335,580	88,248	28,664	87,917	474,049	108,209	54,865	4,252	167,325	846,202	1,181,783
1995	2,728,374	110,416	2,838,788	2,425,956	15,058	28,567	82,914	76,922	47,722	2,370	127,013	2,679,503	5,518,291
1996	2,567,949	141,850	2,709,796	2,275,506	486,974	112,033	124,449	55,489	68,182	7,990	131,660	3,130,611	5,840,404
1997	460,020	141,759	601,779	361,126	206,539	114,929	45,617	3,133	45,000	1,337	49,471	777,677	1,379,455
1998	1,989,704	128,041	2,117,746	2,242,548	47,419	92,558	228,165	28,851	26,243	866	55,960	2,666,650	4,784,391
1999	3,996,432	162,133	4,158,564	4,106,466	99,398	96,118	196,110	127,718	66,631	8,583	202,931	4,701,024	8,859,587
2000	3,429,039	365,885	3,794,922	3,758,976	303,921	81,514	189,459	19,224	127,295	253	146,773	4,480,631	8,275,551
2001	9,488,305	2,951,287	12,439,595	9,581,995	2,259,658	347,865	323,337	48,356	226,017	13,947	288,322	12,801,173	25,240,766
2002	2,704,520	1,415,379	4,119,898	3,062,744	4,500,968	2,670,371	405,352	21,057	365,786	5,094	391,938	11,031,370	15,151,262
2003	485,324	486,433	971,755	633,559	1,571,809	1,719,939	1,007,266	53,344	101,025	0	154,368	5,086,935	6,058,690
2004	4,557,134	362,642	4,919,772	4,319,951	438,628	604,252	1,734,860	254,883	61,506	0	316,387	7,414,074	12,333,843
2005	3,974,816	543,333	4,518,148	3,772,471	377,237	482,212	1,505,853	103,931	212,793	1,411	318,135	6,455,897	10,974,042
2006	14,229,497	1,407,828	15,637,326	14,507,269	1,003,803	554,434	1,071,796	7,806	301,186	0	308,990	17,446,288	33,083,614
2007	11,147,631	4,023,885	15,171,517	8,136,054	8,499,631	2,091,359	1,137,307	10,109	296,480	0	306,590	20,170,931	35,342,446
2008	1,257,827	1,789,092	3,046,919	1,082,572	1,697,133	3,423,425	1,317,045	28,846	135,311	0	164,157	7,684,324	10,731,234
2009	461,747	953,150	1,414,896	575,126	562,448	1,241,843	3,237,290	689,613	41,942	5,463	737,020	6,353,725	7,768,620
2010	2,765,279	1,200,706	3,965,983	2,152,156	291,725	1,189,260	4,497,766	1,051,935	547,876	7,263	1,607,073	9,737,972	13,703,955

-continued-

Table 3.–Page 3 of 5.

Year	Females		Total	No. Sublegal Males by Size (mm CW)				Recruits	Postrecruit (mm CW)		Total Legal	Total Males	Total Crab
	Juvenile	Adult		<70	70-91	92-114	>114		<165	≥165			
2011	1,680,379	396,584	2,076,961	1,793,239	74,326	275,014	1,984,475	349,879	1,443,757	43,057	1,836,691	5,963,736	8,040,692
2012	2,641,094	117,645	2,758,739	2,294,756	1,061,299	328,130	1,278,907	13,636	899,049	27,446	940,131	5,903,217	8,661,956
Southwest													
1988	168,241	101,027	269,266	146,165	12,664	42,072	441,675	805,810	37,444	36,343	879,598	1,522,179	1,791,445
1989	2,161,446	149,408	2,310,854	1,974,657	115,379	120,845	251,155	184,204	85,314	54,731	324,251	2,786,286	5,097,141
1990	2,378,410	604,993	2,983,400	1,914,348	844,074	463,410	353,987	35,574	34,465	6,232	76,272	3,652,090	6,635,489
1991	1,245,204	184,801	1,430,009	1,026,247	211,779	325,523	482,974	93,291	37,950	3,471	134,713	2,181,238	3,611,240
1992	457,701	199,984	657,687	452,004	154,433	321,545	234,993	268,797	67,275	4,972	347,850	1,510,826	2,168,510
1993	6,656,831	244,880	6,901,712	6,173,568	505,032	182,383	392,983	251,151	69,761	13,352	334,263	7,588,231	14,489,938
1994	205,702	120,562	326,266	131,883	70,631	60,596	145,516	129,012	23,086	7,429	159,528	568,154	894,421
1995	151,983	91,200	243,183	137,703	57,629	109,652	124,067	33,632	48,012	0	81,642	510,695	753,877
1996	348,244	44,723	392,967	326,523	98,732	162,622	240,134	36,056	74,311	1,571	111,940	939,945	1,332,916
1997	265,172	66,131	331,303	255,708	102,022	82,314	185,339	123,764	88,079	3,169	216,032	841,415	1,172,719
1998	240,981	36,904	277,887	234,957	60,269	54,856	63,017	22,385	86,073	2,193	110,654	523,754	801,642
1999	816,972	30,112	847,079	844,138	56,872	45,036	176,080	33,257	119,806	4,314	157,380	1,279,504	2,126,585
2000	3,009,608	67,986	3,077,591	2,954,868	185,143	113,642	167,077	54,853	104,402	714	159,969	3,580,700	6,658,290
2001	9,672,768	316,212	9,988,979	7,059,524	3,525,999	295,809	217,015	117,119	74,703	1,972	193,797	11,292,141	21,281,118
2002	2,512,503	977,812	3,490,315	1,591,013	1,805,551	1,786,814	426,985	85,254	74,423	1,974	161,652	5,772,011	9,262,329
2003	89,552	308,930	398,483	74,124	335,702	799,556	1,319,622	115,208	89,783	8,873	213,865	2,742,868	3,141,350
2004	339,318	310,200	649,517	307,349	65,503	319,995	958,023	1,234,236	131,485	16,512	1,382,233	3,033,102	3,682,621
2005	594,163	226,717	820,882	566,754	43,965	158,694	593,624	337,438	467,100	22,971	827,508	2,190,542	3,011,422
2006	6,083,090	599,707	6,682,799	7,081,452	243,424	134,088	470,954	106,125	599,976	23,463	729,563	8,659,481	15,342,283
2007	10,427,476	1,418,621	11,846,098	8,459,186	3,214,163	511,501	613,319	135,796	1,052,076	29,074	1,216,944	14,015,110	25,861,206
2008	5,896,237	3,635,586	9,531,824	2,281,075	5,997,435	4,618,642	705,968	129,965	245,688	9,747	385,400	13,988,520	23,520,341
2009	372,548	2,355,494	2,728,040	185,107	537,600	2,512,879	3,365,105	239,277	140,077	8,254	387,610	6,988,301	9,716,347
2010	41,228	3,260,718	3,301,947	24,725	89,283	1,413,042	4,628,258	1,040,662	191,450	6,499	1,238,613	7,393,920	10,695,866
2011	351,460	682,149	1,033,969	340,014	9,730	59,931	770,507	330,665	421,889	13,094	766,008	1,946,186	2,980,159
2012	651,509	731,402	1,382,912	691,609	29,696	43,232	578,782	29,725	514,252	10,480	579,235	1,922,554	3,305,464
Westside													
1988	970,601	515,472	1,486,074	748,320	50,614	199,783	264,921	135,354	18,143	11,886	165,384	1,429,018	2,915,089
1989	3,479,271	551,919	4,031,190	2,765,719	496,645	261,120	283,878	115,149	19,287	4,741	139,177	3,946,536	7,977,729
1990	711,701	2,095,150	2,806,854	351,550	641,582	373,763	461,881	100,744	54,900	14,632	170,276	1,999,049	4,805,903
1991	191,465	566,348	757,814	130,432	145,919	484,967	439,399	35,343	22,320	4,211	61,876	1,262,593	2,020,406
1992	168,907	419,821	588,729	129,030	171,208	214,116	299,797	114,508	46,032	5,616	166,156	980,310	1,569,035
1993	397,675	569,780	967,457	266,120	160,850	148,165	263,960	45,811	86,363	6,767	138,938	978,040	1,945,497
1994	158,351	248,765	407,116	108,532	113,241	74,756	90,261	31,732	42,413	0	74,149	460,938	868,061
1995	168,592	394,759	563,352	107,727	163,412	158,089	135,944	14,105	88,641	2,203	104,951	670,125	1,233,481
1996	221,984	406,956	628,942	104,838	263,795	293,384	226,222	36,715	99,629	469	136,815	1,025,059	1,654,001
1997	221,626	675,157	896,784	83,886	291,925	416,764	292,420	67,195	62,405	2,605	132,205	1,217,201	2,113,986

-continued-

Table 3.–Page 4 of 5.

Year	Females			No. Sublegal Males by Size (mm CW)				Recruits	Postrecruit (mm CW)		Total Legal	Total Males	Total Crab
	Juvenile	Adult	Total	<70	70-91	92-114	>114		<165	≥165			
1998	783,575	639,572	1,423,147	693,719	170,270	289,460	223,183	26,840	53,771	3,008	83,621	1,460,256	2,883,401
1999	786,633	303,891	1,090,528	495,747	389,828	252,141	208,931	43,439	102,079	8,631	154,151	1,500,799	2,591,322
2000	857,983	673,744	1,531,726	529,492	452,760	470,344	245,893	88,067	73,382	11,132	172,580	1,871,071	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	4,639,202
2004	348,491	536,566	885,057	318,080	123,002	164,582	183,538	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	9,334,219
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	816,547	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	796,308	592,852	1,389,159	916,487	63,828	96,545	199,071	42,043	101,665	20,900	164,607	1,440,538	2,829,698
2012	1,230,971	597,220	1,828,188	1,210,838	694,666	197,830	142,793	48,115	69,367	20,940	138,422	2,384,543	4,212,731
North Mainland													
1988	3,803,918	864,861	4,668,774	3,414,071	165,284	455,217	1,183,668	754,408	82,256	19,542	856,202	6,074,429	10,743,199
1989	3,969,314	1,434,954	5,404,260	3,877,932	295,569	350,999	1,158,793	189,639	109,856	25,549	325,042	6,008,316	11,412,570
1990	6,785,956	3,258,002	10,043,956	5,787,780	2,123,024	755,595	1,447,654	105,810	113,735	12,042	231,587	10,345,625	20,389,574
1991	756,795	1,115,682	1,872,473	604,265	606,410	538,129	947,691	73,675	110,321	4,747	188,743	2,885,230	4,757,700
1992	2,380,859	898,210	3,279,064	2,277,881	225,267	394,130	760,276	115,928	71,015	18,074	205,016	3,862,553	7,141,614
1993	3,812,336	1,022,424	4,834,760	3,215,647	150,171	418,016	820,823	157,191	146,366	36,468	340,024	4,944,670	9,779,427
1994	3,023,464	536,326	3,559,785	2,228,793	544,326	232,789	360,222	143,779	116,171	58,654	318,600	3,684,721	7,244,504
1995	626,586	246,766	873,352	676,802	133,804	61,121	151,273	38,079	49,674	18,654	106,405	1,129,397	2,002,745
1996	4,440,247	390,480	4,830,724	4,282,618	340,132	215,938	341,477	34,667	164,164	21,683	220,512	5,400,663	10,231,385
1997	2,395,879	263,515	2,659,391	2,345,315	505,071	343,654	654,118	56,366	183,001	8,054	247,417	4,095,567	6,754,956
1998	3,768,977	228,212	3,997,185	3,527,326	316,628	274,498	293,843	7,596	121,637	15,550	144,781	4,557,071	8,554,251
1999	3,978,558	249,442	4,227,996	4,095,930	513,789	193,813	560,732	46,816	102,885	0	149,700	5,513,955	9,741,951
2000	4,426,732	535,607	4,962,337	4,544,305	1,373,199	537,535	345,613	66,809	57,974	2,151	126,932	6,927,573	11,889,904
2001	5,571,967	581,737	6,153,698	5,958,910	493,796	449,541	398,103	21,432	174,614	5,736	201,780	7,502,119	13,655,815
2002	7,070,671	651,122	7,721,788	7,272,356	2,446,359	930,488	220,236	9,268	26,941	358	36,568	10,905,999	18,627,785
2003	1,587,275	1,005,976	2,593,247	3,245,030	614,372	253,586	227,890	23,143	52,385	4,156	79,684	4,420,553	7,013,798
2004	4,827,287	273,465	5,100,750	4,066,870	288,413	396,743	417,827	28,863	52,195	5,164	86,221	5,256,063	10,356,807
2005	6,017,629	608,052	6,625,677	5,495,788	571,959	188,006	255,203	64,158	23,541	2,023	89,723	6,600,666	13,226,334
2006	5,865,058	1,934,340	7,799,394	6,395,502	1,559,448	806,047	167,646	130,695	39,728	15,957	186,380	9,115,018	16,914,410
2007	1,165,031	273,927	1,438,960	1,349,852	79,351	170,283	207,977	32,345	78,147	25,821	136,314	1,943,767	3,382,721
2008	2,046,897	166,688	2,213,584	2,135,203	28,454	75,700	224,712	11,471	114,250	22,573	148,294	2,612,354	4,825,933
2009	2,285,824	183,381	2,469,202	1,996,739	69,811	180,720	384,244	0	157,132	25,713	182,846	2,814,356	5,283,555
2010	2,086,932	289,967	2,376,892	2,139,002	216,572	386,245	319,907	41,817	39,193	7,747	88,756	3,150,473	5,527,360

-continued-

Table 3.–Page 5 of 5.

Year	Females		Total	No. Sublegal Males by Size (mm CW)				Recruits	Postrecruit (mm CW)		Total Legal	Total Males	Total Crab
	Juvenile	Adult		<70	70-91	92-114	>114		<165	≥165			
2011	7,379,368	159,146	7,538,512	7,351,002	174,676	280,882	472,413	67,174	9,494	13,894	90,561	8,369,531	15,908,038
2012	2,394,801	59,001	2,453,802	2,436,596	30,897	77,286	199,129	257,161	16,018	19,047	292,225	3,036,134	5,489,937
KODIAK TOTAL													
1988	8,559,432	2,744,042	11,303,463	7,340,555	1,113,349	1,997,339	3,940,755	2,829,137	374,322	130,002	3,333,457	17,725,425	29,028,871
1989	16,380,280	8,907,154	25,287,427	14,727,746	3,418,679	3,585,343	4,518,769	2,044,897	620,249	236,779	2,901,922	29,152,419	54,439,822
1990	13,601,233	18,272,426	31,873,651	11,288,911	5,420,250	4,496,687	7,244,788	1,532,624	495,761	149,938	2,178,324	30,628,928	62,502,565
1991	11,462,215	8,054,069	19,516,277	9,962,659	2,799,137	3,382,811	5,890,407	3,840,652	719,139	110,731	4,670,531	26,705,520	46,221,776
1992	8,210,643	5,904,402	14,115,033	7,313,226	2,696,124	2,709,551	4,225,958	1,276,418	600,588	122,700	2,006,508	18,951,333	33,066,344
1993	17,531,130	4,652,879	22,184,004	15,637,846	1,604,924	2,081,855	3,411,157	863,002	815,974	100,904	1,779,876	24,515,636	46,699,627
1994	5,647,912	2,375,038	8,022,943	4,238,636	1,608,167	1,098,518	1,920,648	548,482	402,309	75,573	1,026,364	9,892,314	17,915,262
1995	10,353,928	1,983,535	12,337,459	9,477,362	1,653,663	1,008,662	1,078,509	201,217	372,184	25,621	599,018	13,817,198	26,154,651
1996	11,215,477	3,146,109	14,361,581	10,367,636	3,450,011	2,237,857	2,058,259	300,088	619,841	47,856	967,783	19,081,511	33,443,092
1997	4,513,032	2,465,690	6,978,721	4,208,146	2,613,356	2,503,551	2,300,669	409,654	501,549	30,844	945,341	12,571,050	19,549,768
1998	12,620,301	5,953,430	18,573,729	11,602,028	4,592,087	5,263,484	4,441,738	613,959	771,271	119,438	1,504,672	27,405,412	45,979,123
1999	17,437,126	3,294,798	20,731,914	16,419,459	1,733,916	2,238,781	3,937,558	807,338	1,295,490	144,417	2,247,250	26,576,944	47,308,845
2000	22,734,186	6,710,239	29,444,411	22,466,289	4,994,302	2,628,526	3,611,262	1,017,533	1,484,199	105,827	2,607,562	36,312,654	65,757,053
2001	69,111,883	12,547,204	81,659,089	60,596,643	15,184,465	5,755,539	4,015,215	481,797	1,913,626	121,664	2,517,087	88,068,918	169,728,000
2002	31,934,589	11,268,888	43,203,473	20,273,796	20,751,369	11,202,275	4,418,428	677,527	1,278,825	57,980	2,014,332	58,660,170	101,863,630
2003	6,669,928	16,796,157	23,466,083	8,666,025	7,601,995	17,269,485	11,517,498	898,381	989,250	54,849	1,942,480	46,997,451	70,463,535
2004	17,000,657	8,742,022	25,742,675	15,209,150	3,323,736	7,077,661	15,104,914	3,737,861	659,084	54,198	4,451,137	45,166,569	70,909,241
2005	17,059,289	8,397,544	25,456,826	16,542,184	2,963,213	3,905,076	12,612,268	4,468,564	1,637,813	90,305	6,196,678	42,219,379	67,676,188
2006	68,408,340	8,259,311	76,667,652	65,421,254	6,702,319	3,768,705	7,925,015	1,193,489	3,267,854	96,387	4,557,730	88,374,999	165,042,643
2007	70,835,014	11,380,228	82,215,246	43,634,190	41,039,085	7,317,691	8,086,856	619,046	3,257,389	86,498	3,962,933	104,040,715	186,255,949
2008	26,110,472	24,384,977	50,495,440	19,249,825	15,023,231	24,194,877	8,118,825	719,872	1,623,899	86,768	2,430,538	69,017,261	119,512,680
2009	10,278,417	17,159,097	27,437,510	6,888,245	8,085,863	12,890,615	23,913,865	4,383,358	702,847	89,136	5,175,345	56,953,904	84,391,405
2010	10,260,667	16,419,101	26,679,764	9,164,531	2,790,913	6,714,177	22,225,254	6,305,870	2,289,287	157,832	8,752,994	49,647,820	76,327,574
2011	16,662,367	5,411,391	22,078,488	16,834,185	645,829	1,653,341	8,579,128	1,960,105	3,455,644	148,805	5,575,778	33,288,226	55,366,705
2012	13,560,186	2,676,775	16,236,959	13,157,179	2,095,967	1,298,931	6,769,191	959,721	3,798,034	219,806	5,002,335	28,323,591	44,560,537

Table 4.—Tanner crab harvest strategy mature male population threshold levels in number of crab, estimates of number of mature male crab by survey year, and fishery guideline harvest levels (GHLs) from bottom trawl surveys, 2008–2012.

	Threshold (no. of mature males >114 mm)	No. of Mature Males (CW > 114 mm)				
		2008	2009	2010	2011	2012
Kodiak District						
Northeast Section	1,123,000	2,090,161	3,352,571	2,960,578	1,143,859	781,530
Eastside Section	1,552,000	3,767,333	16,366,497	14,946,506	6,726,701	6,863,093
Southeast Section	733,000	1,481,198	3,974,309	6,104,837	3,821,163	2,219,031
Southwest Section	1,236,000	1,091,367	3,752,717	5,866,870	1,536,513	1,158,016
Westside Section	764,000	1,746,282	1,076,021	690,780	363,678	281,213
North Mainland Section	1,469,000	373,001	567,085	408,659	562,973	491,353
Chignik District	973,000	1,919,477	5,138,041	11,127,240	5,947,972	1,616,431
South Peninsula District						
Eastern Section	2,015,000	5,546,830	13,089,596	9,845,840	4,554,806	4,145,991
Western Section	1,250,000	4,266,599	12,927,087	13,162,254	6,498,593	2,433,936
Eastern Aleutian District						
Akutan Section	200,000	301,323	513,229	420,268	215,728	149,485
Unalaska/Kalekta Bay Section	65,000	718,758	501,010	10,542	49,644	625,838
Makushin/Skan Bay Section	45,000	342,556	252,880	283,475	315,998	135,313
	Minimum GHL (pounds)	GHL for following Tanner season (Pounds)				
		2008	2009	2010	2011	2012
Kodiak District						
Northeast Section	100,000	100,000	100,000	100,000	— ^a	below threshold
Eastside Section	100,000	300,000	500,000	1,000,000	550,000	520,000
Southeast Section	100,000	closed^b	100,000	240,000	300,000	140,000
Southwest Section	100,000	below threshold	closed^b	150,000	100,000	below threshold
Westside Section	100,000	— ^a	closed^b	below threshold	below threshold	below threshold
North Mainland Section	100,000	below threshold	below threshold	below threshold	below threshold	below threshold
Chignik District	200,000	— ^a	closed^b	600,000	700,000	— ^a
South Peninsula District						
Eastern Section	200,000	closed^b	300,000	900,000	380,000	230,000
Western Section	200,000	275,000	200,000	1,400,000	1,240,000	— ^a
Eastern Aleutian District						
Akutan Section	35,000	35,000	45,000	35,000	— ^a	below threshold
Unalaska/Kalekta Bay Section	35,000	58,000	74,000	below threshold	below threshold	35,000
Makushin/Skan Bay Section	35,000	35,000	— ^a	35,000	35,000	— ^a

Note: **Bold** = above mature male harvest strategy threshold

^a The calculated fishery GHL did not meet minimum GHL requirements.

^b GHL requirements were met but, due to uncertainty in survey estimates and biological information indicating conservation concerns, the fishery was not opened.

Table 5.–Red king crab population estimates from trawl surveys in the Kodiak and Alaska Peninsula Areas, 2003–2012.

Year	Females			Prerecruits				Recruit	Post-recruit	Total Legal	Total Male	Total Crab
	Juvenile	Adult	Total	IV	III	II	I					
<u>KODIAK AREA</u>												
Northeast												
2003	1,139	5,077	6,216	0	0	0	1,139	0	703	703	1,842	8,058
2004	0	1,641	1,641	0	0	0	0	0	4,765	4,765	4,765	6,406
2005	0	1,952	1,952	0	0	208	416	0	2,173	2,173	2,798	4,749
2006	353	8,551	8,904	0	177	177	353	911	3,681	4,592	5,298	14,201
2007	451	2,112	2,563	0	0	0	0	0	0	0	0	2,563
2008	0	369	369	0	0	0	0	0	1,098	1,098	1,098	1,467
2009	635	270	905	270	1,080	270	0	270	0	270	1,890	2,795
2010	0	0	0	0	347	0	0	0	0	0	347	347
2011	0	0	0	0	0	1,419	0	0	0	0	1,419	1,419
2012	0	0	0	0	0	0	0	0	0	0	0	0
Southeast												
2003	0	0	0	0	0	0	0	0	2,055	2,055	2,055	2,055
2004	0	0	0	0	0	0	0	0	0	0	0	0
2005	0	0	0	0	0	0	0	0	0	0	0	0
2006	0	0	0	0	0	0	0	0	1,890	1,890	1,890	1,890
2007	0	0	0	0	0	0	0	729	668	1,397	1,397	1,397
2008	0	0	0	513	0	0	0	0	0	0	513	513
2009	0	0	0	0	0	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0	0	0	0	0	0
2011	0	0	0	0	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0	0	0	0	0
Southwest												
2003	22,309	7,894	30,204	15,244	6,098	744	360	1,451	4,908	6,358	28,806	59,012
2004	7,136	30,928	38,064	0	4,702	17,929	6,928	6,760	14,754	21,514	51,074	89,138
2005	2,856	32,151	35,007	0	7,689	11,613	12,374	6,341	20,777	27,118	58,792	93,799
2006	4,010	44,868	48,878	4,679	4,679	10,102	9,874	23,631	47,145	70,773	100,107	148,986
2007	387,177	5,309	392,486	337,765	0	714	551	7,588	11,069	18,657	357,685	750,172
2008	8,655	6,477	15,133	6,295	787	0	2,471	4,421	21,462	25,883	35,435	50,567
2009	152	3,727	3,879	4,166	0	0	0	1,831	14,181	16,013	20,179	24,058
2010	26,655	22,075	48,730	22,907	22,658	10,572	787	3,211	23,842	27,054	83,978	132,708

-continued-

Table 5.–Page 2 of 6.

Year	Females			Prerecruits				Recruit	Post-recruit	Total Legal	Total Male	Total Crab
	Juvenile	Adult	Total	IV	III	II	I					
2011	140,454	48,314	188,769	74,180	25,982	5,640	4,302	1,124	12,134	13,257	123,362	312,131
2012	45,939	36,492	82,431	2,074	49,552	43,670	5,559	5,917	10,772	16,689	117,543	199,974
Shelikof												
2003	803	201	1,004	977	0	0	0	672	471	1,143	2,120	3,124
2004	4,012	29,150	33,162	0	2,424	1,813	14,464	72,913	140,615	213,528	232,228	265,391
2005	0	3,993	3,993	1,227	1,440	2,292	1,574	1,803	2,831	4,633	11,167	15,161
2006	1,337	20,840	22,177	0	2,139	7,696	11,496	3,743	3,650	7,393	28,722	50,899
2007	0	0	0	182	0	0	0	149	267	416	598	598
2008	0	0	0	1,387	0	0	0	0	17,943	17,943	19,330	19,330
2009	1,081	0	1,081	0	0	0	0	120	203	323	323	1,404
2010	0	0	0	0	0	0	0	0	0	0	0	0
2011	0	334	334	0	0	0	0	0	334	334	334	668
2012	0	446	446	0	446	446	0	446	0	446	1,337	1,782
<u>KODIAK TOTAL</u>												
2003	24,251	13,172	37,424	16,221	6,098	744	1,499	2,123	8,137	10,259	34,823	72,249
2004	11,148	61,719	72,867	0	7,126	19,742	21,392	79,673	160,134	239,807	288,067	360,935
2005	2,856	38,096	40,952	1,227	9,129	14,113	14,364	8,144	25,781	33,924	72,757	113,709
2006	5,700	74,259	79,959	4,679	6,995	17,975	21,723	28,285	56,366	84,648	136,017	215,976
2007	387,628	7,421	395,049	337,947	0	714	551	8,466	12,004	20,470	359,680	754,730
2008	8,655	6,846	15,502	8,195	787	0	2,471	4,421	40,503	44,924	56,376	71,877
2009	1,868	3,997	5,865	4,436	1,080	270	0	2,221	14,384	16,606	22,392	28,257
2010	26,655	22,075	48,730	22,907	23,005	10,572	787	3,211	23,842	27,054	84,325	133,055
2011	140,454	48,648	189,103	74,180	25,982	7,059	4,302	1,124	12,468	13,591	125,115	314,218
2012	45,939	36,938	82,877	2,074	49,998	44,116	5,559	6,363	10,772	17,135	118,880	201,756
<u>ALASKA PENINSULA AREA</u>												
Morzhovoi Bay												
2003	0	0	0	0	0	0	0	0	714	714	714	714
2004	2,937	14,684	17,620	1,468	1,468	10,279	1,468	0	1,468	1,468	16,152	33,772
2005	1,101	3,304	4,405	0	0	2,203	0	1,101	7,853	8,954	11,157	15,562
2006	0	1,428	1,428	0	0	0	0	0	0	0	0	1,428
2007	0	0	0	0	0	881	0	0	0	0	881	881
2008	0	0	0	0	0	0	0	0	0	0	0	0

-continued-

Table 5.–Page 3 of 6.

Year	Females			Prerecruits				Recruit	Post-recruit	Total Legal	Total Male	Total Crab
	Juvenile	Adult	Total	IV	III	II	I					
2009	0	0	0	0	0	0	0	0	0	0	0	0
2010	0	2,517	2,517	0	0	0	0	0	0	0	0	2,517
2011	0	0	0	0	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0	0	0	0	0
Cold Bay/Belkofski Bay												
2003	2,440	1,151	3,591	845	0	0	161	0	3,080	3,080	4,086	7,678
2004	2,511	1,212	3,723	2,114	0	0	0	0	0	0	2,114	5,837
2005	2,032	0	2,032	1,531	1,136	0	1,136	0	1,731	1,731	5,536	7,568
2006	483	3,864	4,347	1,170	0	0	322	483	2,467	2,950	4,442	8,789
2007	2,572	693	3,265	1,561	0	0	705	0	0	0	2,266	5,530
2008	0	2,771	2,771	0	0	0	1,170	0	1,659	1,659	2,829	5,599
2009	0	483	483	0	161	161	0	0	0	0	322	805
2010	1,073	28,206	29,280	1,516	537	537	358	0	1,045	1,045	3,992	33,272
2011	433	836	1,269	433	866	433	433	1,299	5,052	6,351	8,515	9,784
2012	8,279	23,754	32,033	1,352	1,484	4,418	1,173	1,195	25,606	26,801	35,228	67,262
Pavlof Bay/Volcano Bay												
2003	0	0	0	0	0	0	0	0	0	0	0	0
2004	2,110	2,110	4,219	2,110	0	0	0	0	0	0	2,110	6,329
2005	0	0	0	978	0	0	1,208	0	2,415	2,415	4,601	4,601
2006	688	0	688	0	0	0	1,208	0	0	0	1,208	1,896
2007	0	0	0	662	0	0	0	0	949	949	1,611	1,611
2008	0	1,899	1,899	0	0	0	949	0	8,544	8,544	9,494	11,393
2009	0	946	946	0	0	0	0	0	12,580	12,580	12,580	13,526
2010	6,192	23,939	30,131	828	1,208	5,658	4,071	0	1,656	1,656	13,420	43,552
2011	396,062	426,614	822,676	46,000	334,662	605,503	265,585	82,260	65,898	148,158	1,399,908	2,222,584
2012	0	0	0	0	0	0	0	0	5,733	5,733	5,733	5,733
Beaver Bay/Balboa Bay/Unga Strait												
2003	0	0	0	0	0	0	0	0	0	0	0	0
2004	0	1,841	1,841	0	0	0	0	0	0	0	0	1,841
2005	0	747	747	0	0	0	0	0	0	0	0	747
2006	665	1,495	2,160	0	0	0	0	0	4,508	4,508	4,508	6,668
2007	0	0	0	0	0	0	0	0	0	0	0	0

-continued-

Table 5.–Page 4 of 6.

Year	Females			Prerecruits				Recruit	Post-recruit	Total Legal	Total Male	Total Crab
	Juvenile	Adult	Total	IV	III	II	I					
2008	0	0	0	747	0	0	0	0	2,989	2,989	3,737	3,737
2009	0	0	0	0	0	0	0	0	564	564	564	564
2010	773	0	773	747	0	0	0	0	3,553	3,553	4,301	5,074
2011	0	0	0	0	0	0	921	0	1,709	1,709	2,630	2,630
2012	0	0	0	0	0	0	0	0	3,163	3,163	3,163	3,163
Stepovak Bay												
2003	0	0	0	0	0	0	0	0	0	0	0	0
2004	0	0	0	0	0	0	0	0	0	0	0	0
2005	0	0	0	0	0	0	0	0	0	0	0	0
2006	0	0	0	0	0	0	0	0	0	0	0	0
2007	0	0	0	0	0	0	0	0	0	0	0	0
2008	0	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0	0	0	0	0	0
2011	0	0	0	0	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0	0	0	0	0
West Nagai Strait												
2003	0	1,849	1,849	0	0	0	0	0	0	0	0	1,849
2004	0	0	0	0	0	0	1,849	0	0	0	1,849	1,849
2005	0	0	0	0	0	0	0	0	0	0	0	0
2006	0	2,054	2,054	0	0	0	0	0	0	0	0	2,054
2007	0	0	0	0	0	0	0	0	0	0	0	0
2008	0	0	0	1,135	0	0	0	0	0	0	1,135	1,135
2009	0	0	0	0	0	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0	0	0	0	0	0
2011	0	0	0	0	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0	0	0	0	0
Ivanof Bay												
2003	0	0	0	0	0	0	0	0	0	0	0	0
2004	0	2,288	2,288	0	0	0	0	0	246	246	246	2,534
2005	0	0	0	0	0	0	0	0	2,626	2,626	2,626	2,626
2006	0	933	933	0	0	0	0	0	2,626	2,626	2,626	3,559

-continued-

Table 5.–Page 5 of 6.

Year	Females			Prerecruits				Recruit	Post-recruit	Total Legal	Total Male	Total Crab
	Juvenile	Adult	Total	IV	III	II	I					
2007	0	0	0	0	0	0	0	0	0	0	0	0
2008	0	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	246	246	246	246
2010	0	0	0	0	0	0	0	0	0	0	0	0
2011	1,166	1,166	2,332	0	0	0	2,332	2,332	1,166	3,497	5,829	8,161
2012	0	0	0	0	0	0	0	0	0	0	0	0
Mitrofanina Island												
2003	0	0	0	0	0	0	0	0	0	0	0	0
2004	0	0	0	0	0	0	0	0	0	0	0	0
2005	0	0	0	0	0	0	0	0	0	0	0	0
2006	0	0	0	1,282	0	0	0	0	0	0	1,282	1,282
2007	0	0	0	0	0	0	0	0	0	0	0	0
2008	0	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0	0	2,532	2,532	2,532	2,532
2011	0	0	0	0	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0	0	0	0	0
Chignik Bay/Castle Bay												
2003	6,621	4,691	11,312	0	4,398	2,345	4,104	2,932	4,528	7,460	18,307	29,619
2004	0	0	0	0	0	0	0	0	0	0	0	0
2005	0	0	0	0	0	0	0	0	0	0	0	0
2006	1,759	4,691	6,450	586	586	293	0	0	586	586	2,052	8,502
2007	0	293	293	0	0	0	0	0	892	892	892	1,185
2008	0	0	0	0	0	0	586	0	3,942	3,942	4,528	4,528
2009	586	586	1,173	586	0	880	1,597	586	2,607	3,193	6,255	7,428
2010	10,554	29,646	40,200	0	5,277	8,795	8,795	0	7,659	7,659	30,526	70,726
2011	0	892	892	0	0	0	1,422	0	892	892	2,313	3,205
2012	892	0	892	0	0	0	1,316	0	0	0	1,316	2,207
Kujulik Bay												
2003	0	0	0	0	0	0	0	0	0	0	0	0
2004	0	0	0	0	0	0	0	0	0	0	0	0
2005	0	0	0	0	0	0	0	0	0	0	0	0

-continued-

Table 5.–Page 6 of 6.

Year	Females			Prerecruits				Recruit	Post-recruit	Total Legal	Total Male	Total Crab
	Juvenile	Adult	Total	IV	III	II	I					
2006	0	0	0	0	0	0	0	0	0	0	0	0
2007	0	0	0	0	0	0	0	0	0	0	0	0
2008	0	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0	0	0	0	0	0
2011	0	0	0	0	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0	0	0	0	0
<u>ALASKA PENINSULA TOTAL</u>												
2003	9,061	7,691	16,752	845	4,398	2,345	4,265	2,932	8,322	11,254	23,107	39,860
2004	7,558	22,135	29,691	5,692	1,468	10,279	3,317	0	1,714	1,714	22,471	52,162
2005	3,133	4,051	7,184	2,509	1,136	2,203	2,344	1,101	14,625	15,726	23,920	31,104
2006	3,595	14,465	18,060	3,038	586	293	1,530	483	10,187	10,670	16,118	34,178
2007	2,572	986	3,558	2,223	0	881	705	0	1,841	1,841	5,650	9,207
2008	0	4,670	4,670	1,882	0	0	2,705	0	17,134	17,134	21,723	26,392
2009	586	2,015	2,602	586	161	1,041	1,597	586	15,997	16,583	19,967	22,569
2010	18,592	84,308	102,901	3,091	7,022	14,990	13,224	0	16,445	16,445	54,771	157,673
2011	397,661	429,508	827,169	46,433	335,528	605,936	270,693	85,891	74,717	160,607	1,419,195	2,246,364
2012	9,171	23,754	32,925	1,352	1,484	4,418	2,489	1,195	34,502	35,697	45,440	78,365

Note: Categories to distinguish juvenile and adult females, prerecruit IV, III, II, I, recruit, and postrecruit males differ by management area; definitions are found in Appendix A1.

Table 6.—Dominant species by weight in the Kodiak District bottom trawl survey, 2012.

Common name	Species name	% of catch by weight
Walleye pollock	<i>Theragra chalcogramma</i>	28.6
Arrowtooth flounder	<i>Atheresthes stomias</i>	20.6
Flathead sole	<i>Hippoglossoides elassodon</i>	16.7
Tanner crab	<i>Chionoecetes bairdi</i>	5.1
Sunflower sea star	<i>Pycnopodia helianthoides</i>	3.1
Yellowfin sole	<i>Pleuronectes aspera</i>	2.7
Pacific halibut	<i>Hippoglossus stenolepis</i>	2.7
Pacific cod	<i>Gadus macrocephalus</i>	2.6
Longnose skate	<i>Raja rhina</i>	1.7
Big skate	<i>Raja binoculata</i>	1.5
Rex sole	<i>Glyptocephalus zachirus</i>	1.3
Anemone	Order: Actinaria	1.1
Butter sole	<i>Isopsetta bilineata</i>	1.0
Bering skate	<i>Bathyraja interrupta</i>	1.0
Aleutian skate	<i>Bathyraja aleutica</i>	1.0
Alaska plaice	<i>Pleuronectes quadrituberculatus</i>	0.9
Dover sole	<i>Microstomus pacificus</i>	0.7
Weathervane scallop	<i>Patinopectin caurinus</i>	0.6
Great sculpin	<i>Myoxocephalus polyacanthocephalus</i>	0.6
Starry flounder	<i>Platichthys stellatus</i>	0.6
All others	(130 species)	5.9
		100.0

Table 7.—Tanner crab population estimates from bottom trawl surveys in the South Peninsula and Chignik Districts, 1988–2012.

Year	Females		Total	No. Sublegal Males by size (mm CW)				Recruits	Postrecruit (mm CW)		Total Legal	Total Males	Total Crab
	Juvenile	Adult		<70	70-91	92-114	>114		<165	≥165			
<u>SOUTH PENINSULA DISTRICT</u>													
Sanak Island													
1989	1,041,054	117,259	1,158,314	1,117,338	23,925	31,519	65,234	6,836	0	0	6,836	1,244,851	2,403,166
1990	603,210	102,533	705,742	456,464	82,684	53,495	22,785	0	0	0	0	615,427	1,321,169
1991	474,081	28,398	502,478	489,104	32,112	34,178	0	0	0	0	0	555,392	1,057,870
1992	373,197	41,014	414,210	285,671	44,645	46,627	3,798	0	0	0	0	380,738	794,947
1993	337,216	19,133	356,348	260,566	30,579	37,410	9,999	0	0	0	0	338,549	694,898
1994	87,848	69,013	156,859	112,056	13,414	18,801	19,824	0	0	0	0	164,093	320,950
1996	579,289	134,287	713,578	433,899	53,478	29,470	36,368	0	0	0	0	553,211	1,266,788
1997	104,892	53,409	158,299	79,646	75,564	38,237	17,180	0	0	0	0	210,623	368,921
1998	287,243	401,488	688,729	389,589	81,490	125,691	63,941	0	0	0	0	660,710	1,349,437
1999	88,145	94,727	182,873	55,777	5,043	44,697	20,518	0	0	0	0	126,035	308,906
2000	606,606	185,506	792,111	563,172	59,648	94,142	32,780	0	2,522	0	2,522	752,262	1,544,370
2001	914,269	131,632	1,045,901	790,961	56,567	82,328	116,972	5,043	0	0	5,043	1,051,871	2,097,771
2002	728,706	1,017,860	1,746,566	721,599	274,753	222,696	103,774	0	10,807	0	10,807	1,333,627	3,080,192
2003	249,807	392,738	642,545	207,329	84,100	222,323	124,490	0	10,086	0	10,086	648,325	1,290,869
2004	725,772	201,245	927,016	664,316	103,805	57,957	6,674	0	0	0	0	832,751	1,759,767
2005	264,849	129,560	394,408	219,764	85,954	61,175	0	0	0	0	0	366,889	761,297
2006	3,211,966	65,347	3,277,314	2,964,522	58,344	84,248	16,974	0	0	0	0	3,124,086	6,401,400
2007	4,421,280	1,978,615	6,399,895	3,724,236	686,412	245,645	98,712	0	0	0	0	4,755,004	11,154,900
2008	193,409	1,884,532	2,077,941	876,043	1,844,403	330,640	34,707	0	0	0	0	3,085,792	5,163,733
2009	77,342	669,415	746,758	97,965	194,977	236,212	61,374	17,075	2,563	0	19,639	610,166	1,356,923
2010	178,073	584,576	762,649	189,989	15,876	169,029	598,946	1,040,378	71,409	75,908	1,187,694	2,161,533	2,924,182
2011	146,395	473,044	619,438	169,003	9,285	44,693	273,099	5,767	303,962	7,690	317,418	813,498	1,432,936
2012	101,126	9,887	111,013	105,018	8,914	8,279	77,187	0	170,584	9,987	180,571	379,969	490,981
Morzhovoi Bay													
1988	443,271	427,488	870,759	250,021	243,798	226,440	245,730	83,203	40,178	16,427	139,809	1,105,797	1,976,556
1989	3,437,005	1,109,760	4,546,762	2,980,895	1,190,046	379,515	118,163	33,555	4,861	0	38,416	4,707,034	9,253,795
1990	2,137,938	1,047,227	3,185,166	1,504,270	663,567	552,543	197,011	26,108	24,592	1,116	51,816	2,969,207	6,154,372
1991	1,657,717	478,549	2,136,265	1,318,753	426,210	209,931	57,607	15,554	4,666	0	20,222	2,032,723	4,168,991
1992	364,692	886,270	1,250,961	193,850	455,384	278,844	207,282	35,947	21,470	949	58,367	1,193,726	2,444,686
1993	72,436	544,698	617,133	18,974	160,369	414,318	368,297	62,370	63,859	949	127,179	1,089,136	1,706,269
1994	43,583	284,888	328,470	9,921	62,598	132,027	214,543	7,298	49,193	0	56,491	475,580	804,051
1996	221,620	107,996	329,616	191,236	22,344	14,475	53,533	5,697	31,185	0	36,882	318,471	648,088
1997	142,087	103,607	245,694	93,088	79,526	63,074	38,078	6,646	10,622	0	17,267	291,032	536,723
1998	927,800	1,905,001	2,832,802	372,189	1,244,517	1,545,608	337,411	40,344	81,442	0	121,787	3,621,510	6,454,311
1999	162,720	506,161	668,880	51,457	287,843	555,624	767,631	66,609	59,158	1,899	127,663	1,790,219	2,459,099
2000	904,853	872,919	1,777,772	833,624	156,937	384,386	731,583	448,222	107,962	0	556,185	2,662,717	4,440,488
2001	1,087,232	331,894	1,419,125	664,348	960,195	226,770	237,689	183,362	114,032	11,371	308,764	2,397,768	3,816,893
2002	2,244,692	776,467	3,021,160	1,474,502	1,591,183	843,217	342,149	51,049	171,771	3,104	225,923	4,476,971	7,498,129

-continued-

Table 7.–Page 2 of 10.

Year	Females			No. Sublegal Males by size (mm CW)				Recruits	Postrecruit (mm CW)			Total Legal	Total Males	Total Crab
	Juvenile	Adult	Total	<70	70-91	92-114	>114		<165	≥165				
2003	581,889	1,727,722	2,309,610	131,908	1,224,831	865,697	442,380	41,603	114,404	0	156,008	2,820,821	5,130,433	
2004	365,320	1,833,648	2,198,967	312,690	216,514	1,650,340	2,550,313	294,832	194,497	7,422	496,749	5,226,603	7,425,569	
2005	566,624	4,274,817	4,841,442	405,310	158,006	400,612	1,340,751	479,938	229,744	2,848	712,531	3,017,213	7,858,654	
2006	17,819,145	2,523,016	20,342,161	17,143,999	601,039	290,068	1,128,281	266,901	293,075	20,416	580,393	19,743,775	40,085,936	
2007	11,336,243	2,253,163	13,589,409	7,540,331	6,519,311	1,823,835	2,269,793	533,570	256,958	13,482	804,009	18,957,280	32,546,687	
2008	3,876,110	12,176,231	16,052,339	1,133,128	6,152,588	13,677,697	2,020,561	787,999	221,592	45,063	1,054,656	24,038,632	40,090,971	
2009	311,582	2,598,751	2,910,333	184,644	543,978	4,494,013	8,839,156	407,590	14,726	16,511	438,828	14,500,615	17,410,946	
2010	67,519	2,635,872	2,703,391	58,106	20,657	318,493	2,566,424	5,351,471	123,283	211,852	5,686,604	8,650,280	11,353,670	
2011	261,078	1,295,373	1,556,451	278,183	6,447	94,044	890,206	1,527,764	1,842,749	330,040	3,700,552	4,969,432	6,525,884	
2012	300,577	918,719	1,219,294	260,365	33,467	20,621	381,928	84,379	1,190,445	126,152	1,400,976	2,097,361	3,316,656	
Cold Bay/Belkofski Bay														
1988	235,914	315,625	551,537	126,750	206,357	222,054	205,556	85,149	30,562	7,297	123,007	883,727	1,435,264	
1989	465,620	55,255	520,876	408,726	54,811	29,721	16,589	3,880	488	0	4,368	514,216	1,035,095	
1990	1,813,413	635,880	2,449,293	1,537,291	520,248	275,283	227,225	86,886	50,748	3,646	141,280	2,701,326	5,150,624	
1991	603,047	616,997	1,220,045	669,067	135,592	236,400	437,850	76,766	132,755	161	209,682	1,688,596	2,908,642	
1992	177,369	170,457	347,825	95,460	109,930	96,700	139,849	39,648	38,435	1,722	79,806	521,742	869,571	
1993	100,303	269,849	370,152	68,373	87,199	156,298	137,852	35,906	18,607	434	54,949	504,671	874,823	
1994	96,034	220,312	316,345	28,879	54,378	64,115	75,643	27,344	10,265	1,258	38,867	261,884	578,230	
1996	339,067	15,338	354,404	266,415	62,717	40,124	30,565	24,165	2,530	201	26,896	426,718	781,121	
1997	118,159	12,184	130,341	44,100	59,543	90,588	80,558	37,301	936	483	38,720	313,512	443,853	
1998	374,298	149,168	523,466	116,353	270,327	322,267	168,189	49,039	17,618	5,616	72,274	949,415	1,472,881	
1999	111,133	78,031	189,162	62,197	58,424	235,743	266,603	59,853	21,247	869	81,968	705,817	894,978	
2000	453,965	220,395	674,361	548,118	105,008	264,499	297,586	181,329	16,470	2,811	200,610	1,415,824	2,090,183	
2001	990,492	66,837	1,057,329	873,549	142,999	138,379	147,340	89,545	15,002	3,544	108,087	1,410,355	2,467,681	
2002	944,644	243,043	1,187,690	501,063	461,919	301,545	194,739	53,613	86,248	2,980	142,841	1,602,107	2,789,799	
2003	491,246	245,629	736,875	263,140	313,721	278,557	79,036	0	8,746	1,136	9,883	944,341	1,681,215	
2004	621,394	132,352	753,748	419,168	334,351	399,993	193,441	22,926	2,296	0	25,222	1,372,173	2,125,921	
2005	975,377	210,419	1,185,797	702,024	284,625	271,704	172,169	22,450	16,203	0	38,654	1,469,174	2,654,972	
2006	2,695,898	377,805	3,073,706	2,143,122	447,400	532,736	220,695	25,939	11,424	0	37,363	3,381,315	6,455,019	
2007	3,839,198	1,353,230	5,192,429	888,649	1,852,878	725,018	355,917	38,880	869	0	39,749	3,862,209	9,054,639	
2008	981,613	3,704,527	4,686,141	187,850	2,031,135	3,731,339	998,148	88,372	69,315	838	158,525	7,106,994	11,793,135	
2009	743,106	1,284,279	2,027,384	407,741	260,914	773,553	3,176,359	348,628	28,011	15,097	391,736	5,010,303	7,037,686	
2010	265,654	2,623,096	2,888,751	232,437	74,727	340,065	1,407,576	1,366,763	268,720	75,803	1,715,009	3,769,814	6,658,566	
2011	487,187	941,238	1,428,426	439,193	60,163	81,593	448,469	70,207	757,309	41,339	868,852	1,898,264	3,326,688	
2012	347,973	172,826	520,802	404,294	87,884	160,511	177,551	20,280	189,340	6,096	215,720	1,045,959	1,566,760	
Pavlof Bay/Volcano Bay														
1988	376,973	786,599	1,163,568	318,312	190,471	408,242	372,043	171,158	59,917	65,874	296,949	1,586,014	2,749,587	
1989	893,932	1,655,486	2,549,415	562,769	440,202	367,365	441,276	121,330	80,944	17,669	219,941	2,031,560	4,580,977	
1990	1,137,606	2,101,129	3,238,738	823,167	573,840	631,119	344,741	61,980	125,646	18,957	206,582	2,579,442	5,818,176	
1991	518,066	567,070	1,085,136	473,436	86,044	282,775	278,425	39,282	89,006	3,039	131,329	1,252,012	2,337,143	

-continued-

Table 7.–Page 3 of 10.

Year	Females			No. Sublegal Males by size (mm CW)				Recruits	Postrecruit (mm CW)			Total Legal	Total Males	Total Crab
	Juvenile	Adult	Total	<70	70-91	92-114	>114		<165	≥165				
1992	206,624	387,633	594,256	96,109	162,428	150,644	164,304	32,773	52,064	0	84,837	658,322	1,252,576	
1993	115,627	201,552	317,178	71,678	168,723	494,231	230,545	44,417	27,416	1,925	73,756	1,038,931	1,356,106	
1994	40,820	123,379	164,198	25,438	50,672	91,919	143,134	54,378	28,337	0	82,715	393,880	558,074	
1996	391,490	55,285	446,777	367,494	40,122	31,041	52,308	14,841	9,518	992	25,351	516,312	963,090	
1997	70,299	79,454	149,757	31,066	48,448	82,056	53,515	5,404	28,417	949	34,772	249,859	399,614	
1998	107,726	176,994	284,719	33,534	150,680	314,200	381,825	8,179	51,664	0	59,844	940,076	1,224,799	
1999	51,913	91,936	143,851	44,539	39,952	97,486	128,419	87,932	12,812	0	100,744	411,141	554,990	
2000	1,253,314	237,532	1,490,846	1,077,574	188,231	133,448	239,906	85,518	26,684	0	112,203	1,751,363	3,242,209	
2001	620,598	220,624	841,220	354,209	300,667	221,047	168,521	49,439	29,570	0	79,010	1,123,456	1,964,674	
2002	1,185,009	408,053	1,593,060	1,114,119	319,668	439,759	346,546	41,216	42,859	1,276	85,352	2,305,444	3,898,502	
2003	214,279	359,451	573,730	139,469	207,452	486,692	462,063	81,055	92,200	921	174,174	1,469,851	2,043,584	
2004	371,131	479,742	850,871	311,594	127,594	648,954	724,374	124,613	258,629	5,795	389,038	2,201,557	3,052,431	
2005	1,225,852	335,581	1,561,431	1,164,657	320,170	352,533	443,665	34,456	86,297	0	120,751	2,401,776	3,963,209	
2006	3,146,589	353,173	3,499,761	3,047,383	682,097	417,164	286,762	26,793	66,861	1,021	94,674	4,528,078	8,027,842	
2007	1,739,492	1,351,581	3,091,074	1,184,516	1,718,846	2,220,531	1,241,244	66,805	122,325	0	189,131	6,554,267	9,645,340	
2008	1,529,846	1,655,526	3,185,373	498,055	2,810,675	2,647,935	2,271,487	577,126	30,353	5,468	612,948	8,841,101	12,026,474	
2009	1,242,537	2,757,321	3,999,859	939,973	845,010	3,142,344	5,248,535	1,455,859	200,754	31,204	1,687,817	11,863,678	15,863,536	
2010	599,463	1,368,673	1,968,136	478,732	385,939	655,577	2,529,296	2,214,666	670,312	39,419	2,924,395	6,973,933	8,942,073	
2011	353,509	727,044	1,080,554	362,114	169,661	243,418	1,419,897	169,942	1,444,593	35,341	1,649,874	3,844,968	4,925,520	
2012	528,209	358,601	886,814	537,822	51,181	216,673	850,958	36,462	1,370,912	35,836	1,443,208	3,099,842	3,986,660	
Beaver Bay/Balboa Bay/Unga Strait														
1988	169,806	150,200	320,005	133,180	70,128	70,525	46,150	13,193	27,038	0	40,231	360,216	680,224	
1989	425,562	489,313	914,875	330,329	60,406	52,083	34,258	0	6,059	0	6,059	483,135	1,398,013	
1990	374,061	479,216	853,275	384,766	40,078	155,650	89,422	16,442	6,616	0	23,057	692,975	1,546,251	
1991	337,523	188,765	526,288	313,050	36,941	56,285	51,490	5,058	1,127	0	6,185	463,950	990,237	
1992	73,138	128,906	202,041	80,581	30,327	47,470	20,585	564	2,027	0	2,591	181,556	383,599	
1993	9,323	43,753	53,076	16,877	7,062	28,751	29,839	3,164	4,362	0	7,526	90,052	143,127	
1994	10,119	29,294	39,414	9,240	4,362	11,328	25,119	2,254	5,938	0	8,192	58,243	97,656	
1996	716,832	5,416	722,249	746,235	10,645	9,233	4,541	905	460	0	1,365	772,018	1,494,266	
1997	107,308	23,354	130,663	57,536	34,558	4,218	6,682	0	0	0	0	102,995	233,658	
1998	116,365	79,537	195,904	88,493	37,608	51,697	5,075	0	0	0	0	182,874	378,779	
1999	30,113	59,467	89,578	78,640	10,903	35,551	22,833	685	0	0	685	148,613	238,190	
2000	395,113	32,059	427,172	401,441	7,007	19,002	21,063	1,356	1,356	0	2,713	451,226	878,398	
2001	795,671	78,698	874,370	856,993	65,118	32,117	16,721	0	0	0	0	970,950	1,845,319	
2002	611,008	261,574	872,583	499,072	657,739	350,410	33,171	0	13,343	0	13,343	1,553,737	2,426,319	
2003	60,835	238,017	298,853	12,620	108,980	223,498	129,934	7,972	9,746	0	17,717	492,746	791,598	
2004	212,229	171,614	383,840	256,112	87,019	170,666	132,602	31,546	1,370	685	33,601	679,997	1,063,837	
2005	2,048,134	48,615	2,096,750	2,620,901	83,483	38,576	45,137	6,646	0	0	6,646	2,794,743	4,891,490	
2006	3,164,401	1,064,115	4,228,516	2,119,653	1,974,847	790,466	382,300	4,029	42,734	0	46,763	5,314,027	9,542,539	
2007	624,099	1,229,228	1,853,329	522,535	1,453,943	1,229,576	419,643	20,177	2,295	1,148	23,619	3,649,317	5,502,643	

-continued-

Table 7.–Page 4 of 10.

Year	Females			No. Sublegal Males by size (mm CW)				Recruits	Postrecruit (mm CW)		Total Legal	Total Males	Total Crab
	Juvenile	Adult	Total	<70	70-91	92-114	>114		<165	≥165			
2008	777,292	2,560,319	3,337,611	367,734	1,896,414	2,201,529	1,012,410	105,951	2,855	0	108,806	5,586,895	8,924,505
2009	400,925	2,050,416	2,451,338	284,555	386,879	836,604	1,249,505	621,030	108,723	949	730,703	3,488,249	5,939,590
2010	63,693	754,381	818,074	34,435	67,375	213,381	379,420	85,243	120,499	1,715	207,456	902,066	1,720,139
2011	113,221	328,115	441,336	95,875	18,170	78,304	298,352	21,467	161,175	0	182,643	673,345	1,114,681
2012	46,272	130,668	176,939	32,533	1,634	42,697	390,550	8,928	261,823	0	270,751	738,167	915,105
West Nagai Strait													
1989	266,891	202,991	469,881	310,200	137,896	71,670	23,766	2,101	5,384	0	7,485	551,017	1,020,898
1990	223,997	36,745	260,741	228,844	17,172	17,328	5,914	0	908	0	908	270,167	530,907
1991	212,475	24,806	237,280	236,403	6,002	6,002	18,007	3,813	0	0	3,813	270,227	507,507
1992	24,726	33,234	57,961	13,307	8,516	19,136	8,256	0	3,165	0	3,165	52,379	110,340
1993	19,404	4,835	24,239	16,141	9,945	74,494	14,798	908	0	0	908	116,286	140,526
1994	20,348	24,860	45,209	8,616	24,859	29,969	27,773	8,469	0	0	8,469	99,682	144,891
1996	50,748	4,706	55,454	40,628	7,431	16,596	20,149	0	908	0	908	85,713	141,166
1997	334,024	263,782	597,804	180,259	292,165	173,398	25,182	0	4,706	0	4,706	675,708	1,273,510
1998	79,789	104,053	183,843	34,977	94,673	152,269	54,389	3,761	760	0	4,520	340,829	524,671
1999	59,602	24,684	84,286	46,816	34,194	28,481	46,396	5,615	0	0	5,615	161,501	245,786
2000	324,383	24,281	348,664	368,761	5,425	5,696	18,988	5,615	1,899	0	7,513	406,383	755,045
2001	509,223	69,773	578,994	349,814	126,647	65,816	33,598	908	0	0	908	576,783	1,155,776
2002	184,778	128,229	313,008	84,584	92,106	302,759	104,534	4,747	0	0	4,747	588,730	901,736
2003	40,103	57,642	97,744	7,611	60,133	37,806	11,146	3,798	0	0	3,798	120,492	218,233
2004	36,866	92,662	129,526	33,098	11,393	59,786	46,150	12,301	1,899	0	14,199	164,626	294,151
2005	411,853	47,535	459,387	476,009	14,241	38,507	70,970	11,106	0	0	11,106	610,831	1,070,218
2006	1,148,697	124,196	1,272,893	854,456	606,163	157,389	115,801	908	2,725	0	3,633	1,737,444	3,010,339
2007	1,118,132	2,410,737	3,528,868	405,215	1,713,276	1,257,497	435,630	27,634	41,115	0	68,749	3,880,362	7,409,230
2008	846,719	6,907,176	7,753,897	305,218	1,875,051	2,683,702	1,203,088	60,456	42,677	0	103,134	6,170,191	13,924,087
2009	332,212	9,727,714	10,059,926	100,916	1,334,472	3,060,897	3,281,452	544,344	87,282	11,779	643,406	8,421,140	18,481,065
2010	191,580	3,329,836	3,521,417	149,959	169,021	1,027,531	2,135,083	1,355,030	192,369	26,083	1,573,480	5,055,073	8,576,492
2011	30,611	580,303	610,913	62,024	23,340	241,966	722,267	77,027	183,126	9,513	269,662	1,319,260	1,930,171
2012	66,031	191,917	257,947	134,778	9,128	55,834	527,604	39,306	584,623	17,486	641,414	1,368,757	1,626,704
Stepovak Bay													
1989	352,599	129,844	482,443	308,147	19,700	18,217	4,025	0	0	0	0	350,088	832,534
1990	842,468	138,655	981,124	940,262	7,256	28,930	19,636	8,266	6,158	0	14,424	1,010,509	1,991,629
1991	225,164	24,115	249,280	273,356	8,175	30,978	13,539	0	8,171	0	8,171	334,220	583,500
1992	286,230	26,900	313,131	255,298	7,249	31,206	7,801	2,013	0	0	2,013	303,568	616,698
1993	27,147	4,177	31,324	35,652	2,013	5,092	4,025	0	3,079	0	3,079	49,860	81,186
1994	30,461	2,013	32,474	32,303	0	0	0	0	0	0	0	32,303	64,776
1996	158,463	0	158,463	158,925	6,038	2,013	6,038	0	0	0	0	173,013	331,475
1997	25,774	18,114	43,888	67,372	40,254	14,089	0	0	2,013	0	2,013	123,727	167,616
1998	51,013	2,013	53,025	54,274	2,013	4,025	0	0	0	0	0	60,312	113,338
1999	40,454	8,051	48,505	58,559	0	4,025	8,051	0	0	0	0	70,635	119,140

-continued-

Table 7.—Page 5 of 10.

Year	Females			No. Sublegal Males by size (mm CW)				Recruits	Postrecruit (mm CW)		Total Legal	Total Males	Total Crab
	Juvenile	Adult	Total	<70	70-91	92-114	>114		<165	≥165			
2000	232,994	2,013	235,006	226,019	0	4,025	0	0	0	0	0	230,044	465,050
2001	479,137	0	479,137	466,342	29,292	0	0	0	0	0	0	495,636	974,772
2002	54,541	51,584	106,125	124,148	29,043	11,144	2,875	0	0	0	0	167,208	273,333
2003	57,982	6,038	64,020	65,336	10,063	14,089	4,955	0	0	0	0	94,444	158,465
2004	173,486	17,108	190,595	160,526	22,827	11,070	6,038	6,038	2,013	0	8,051	208,514	399,108
2005	419,167	101,564	520,730	515,631	11,022	13,083	20,127	6,038	0	0	6,038	565,901	1,086,631
2006	1,570,436	23,836	1,594,272	1,770,730	334,849	199,131	19,337	4,834	0	0	4,834	2,328,881	3,923,152
2007	370,600	203,449	574,048	478,146	348,853	192,724	59,862	5,701	0	0	5,701	1,085,283	1,659,333
2008	180,653	45,662	226,317	193,836	138,601	126,295	191,624	41,104	0	2,228	43,332	693,687	920,003
2009	55,241	20,290	75,532	60,636	164,796	312,245	141,401	105,943	835	0	106,778	785,858	861,391
2010	53,473	8,911	62,384	46,215	6,616	48,127	60,199	32,485	4,025	0	36,510	197,666	260,050
2011	121,056	5,790	126,846	138,324	4,337	3,272	7,578	0	4,531	0	4,531	158,042	284,887
2012	144,038	7,734	151,773	188,271	1,007	6,461	18,489	0	3,020	0	3,020	217,247	369,019
WESTERN SECTION TOTALS													
1988	679,185	743,113	1,422,296	376,771	450,155	448,494	451,286	168,352	70,740	23,724	262,816	1,989,522	3,411,820
1989	4,943,679	1,282,274	6,225,952	4,506,959	1,268,782	440,755	199,986	44,271	5,349	0	49,620	6,466,102	12,692,056
1990	4,554,561	1,785,640	6,340,201	3,498,025	1,266,499	881,321	447,021	112,994	75,340	4,762	193,096	6,285,962	12,626,165
1991	2,734,845	1,123,944	3,858,788	2,476,924	593,914	480,509	495,457	92,320	137,421	161	229,904	4,276,706	8,135,503
1992	915,258	1,097,741	2,012,996	574,981	609,959	422,171	350,929	75,595	59,905	2,671	138,173	2,096,211	4,109,204
1993	509,955	833,680	1,343,633	347,913	278,147	608,026	516,148	98,276	82,466	1,383	182,128	1,932,359	3,275,990
1994	227,465	574,213	801,674	150,856	130,390	214,943	310,010	34,642	59,458	1,258	95,358	901,557	1,703,231
1996	1,139,976	257,621	1,397,598	891,550	138,539	84,069	120,466	29,862	33,715	201	63,778	1,298,402	2,695,997
1997	365,138	169,200	534,334	216,834	214,633	191,899	135,816	43,947	11,558	483	55,987	815,167	1,349,497
1998	1,589,341	2,455,657	4,044,997	878,131	1,596,334	1,993,566	569,541	89,383	99,060	5,616	194,061	5,231,635	9,276,629
1999	361,998	678,919	1,040,915	169,431	351,310	836,064	1,054,752	126,462	80,405	2,768	209,631	2,622,071	3,662,983
2000	1,965,424	1,278,820	3,244,244	1,944,914	321,593	743,027	1,061,949	629,551	126,954	2,811	759,317	4,830,803	8,075,041
2001	2,991,993	530,363	3,522,355	2,328,858	1,159,761	447,477	502,001	277,950	129,034	14,915	421,894	4,859,994	8,382,345
2002	3,918,042	2,037,370	5,955,416	2,697,164	2,327,855	1,367,458	640,662	104,662	268,826	6,084	379,571	7,412,705	13,368,120
2003	1,322,942	2,366,089	3,689,030	602,377	1,622,652	1,366,577	645,906	41,603	133,236	1,136	175,977	4,413,487	8,102,517
2004	1,712,486	2,167,245	3,879,731	1,396,174	654,670	2,108,290	2,750,428	317,758	196,793	7,422	521,971	7,431,527	11,311,257
2005	1,806,850	4,614,796	6,421,647	1,327,098	528,585	733,491	1,512,920	502,388	245,947	2,848	751,185	4,853,276	11,274,923
2006	23,727,009	2,966,168	26,693,181	22,251,643	1,106,783	907,052	1,365,950	292,840	304,499	20,416	617,756	26,249,176	52,942,355
2007	19,596,721	5,585,008	25,181,733	12,153,216	9,058,601	2,794,498	2,724,422	572,450	257,827	13,482	843,758	27,574,493	52,756,226
2008	5,051,132	17,765,290	22,816,421	2,197,021	10,028,126	17,739,676	3,053,416	876,371	290,907	45,901	1,213,181	34,231,418	57,047,839
2009	1,132,030	4,552,445	5,684,475	690,350	999,869	5,503,778	12,076,889	773,293	45,300	31,608	850,203	20,121,084	25,805,555
2010	511,246	5,843,544	6,354,791	480,532	111,260	827,587	4,572,946	7,758,612	463,412	363,563	8,589,307	14,581,627	20,936,418
2011	894,660	2,709,655	3,604,315	886,379	75,895	220,330	1,611,774	1,603,738	2,904,020	379,069	4,886,822	7,681,194	11,285,508
2012	749,676	1,101,432	1,851,109	769,677	130,265	189,411	636,666	104,659	1,550,369	142,235	1,797,267	3,523,289	5,374,397
EASTERN SECTION TOTALS													
1988	546,779	936,799	1,483,573	451,492	260,599	478,767	418,193	184,351	86,955	65,874	337,180	1,946,230	3,429,811

-continued-

Table 7.–Page 6 of 10.

Year	Females			No. Sublegal Males by size (mm CW)				Recruits	Postrecruit (mm CW)		Total Legal	Total Males	Total Crab
	Juvenile	Adult	Total	<70	70-91	92-114	>114		<165	≥165			
1989	1,938,984	2,477,634	4,416,614	1,511,445	658,204	509,335	503,325	123,431	92,387	17,669	233,485	3,415,800	7,832,422
1990	2,578,132	2,755,745	5,333,878	2,377,039	638,346	833,027	459,713	86,688	139,328	18,957	244,971	4,553,093	9,886,963
1991	1,293,228	804,756	2,097,984	1,296,245	137,162	376,040	361,461	48,153	98,304	3,039	149,498	2,320,409	4,418,387
1992	590,718	576,673	1,167,389	445,295	208,520	248,456	200,946	35,350	57,256	0	92,606	1,195,825	2,363,213
1993	171,501	254,317	425,817	140,348	187,743	602,568	279,207	48,489	34,857	1,925	85,269	1,295,129	1,720,945
1994	101,748	179,546	281,295	75,597	79,893	133,216	196,026	65,101	34,275	0	99,376	584,108	865,397
1996	1,317,533	65,407	1,382,943	1,313,282	64,236	58,883	83,036	15,746	10,886	992	27,624	1,547,056	2,929,997
1997	537,405	384,704	922,112	336,233	415,425	273,761	85,379	5,404	35,136	949	41,491	1,152,289	2,074,398
1998	354,893	362,597	717,491	211,278	284,974	522,191	441,289	11,940	52,424	0	64,364	1,524,091	2,241,587
1999	182,082	184,138	366,220	228,554	85,049	165,543	205,699	94,232	12,812	0	107,044	791,890	1,158,106
2000	2,205,804	295,885	2,501,688	2,073,795	200,663	162,171	279,957	92,489	29,939	0	122,429	2,839,016	5,340,702
2001	2,404,629	369,095	2,773,721	2,027,358	521,724	318,980	218,840	50,347	29,570	0	79,918	3,166,825	5,940,541
2002	2,035,336	849,440	2,884,776	1,821,923	1,098,556	1,104,072	487,126	45,963	56,202	1,276	103,442	4,615,119	7,499,890
2003	373,199	661,148	1,034,347	225,036	386,628	762,085	608,098	92,825	101,946	921	195,689	2,177,533	3,211,880
2004	793,712	761,126	1,554,832	761,330	248,833	890,476	909,164	174,498	263,911	6,480	444,889	3,254,694	4,809,527
2005	4,105,006	533,295	4,638,298	4,777,198	428,916	442,699	579,899	58,246	86,297	0	144,541	6,373,251	11,011,548
2006	9,030,123	1,565,320	10,595,442	7,792,222	3,597,956	1,564,150	804,200	36,564	112,320	1,021	149,904	13,908,430	24,503,872
2007	3,852,323	5,194,995	9,047,319	2,590,412	5,234,918	4,900,328	2,156,379	120,317	165,735	1,148	287,200	15,169,229	24,216,546
2008	3,334,510	11,168,683	14,503,198	1,364,843	6,720,741	7,659,461	4,678,609	784,637	75,885	7,696	868,220	21,291,874	35,795,069
2009	2,030,915	14,555,741	16,586,655	1,386,080	2,731,157	7,352,090	9,920,893	2,727,176	397,594	43,932	3,168,704	24,558,925	41,145,582
2010	908,209	5,461,801	6,370,011	709,341	628,951	1,944,616	5,103,998	3,687,424	987,205	67,217	4,741,841	13,128,738	19,498,754
2011	618,397	1,641,252	2,259,649	658,337	215,508	566,960	2,448,094	268,436	1,793,425	44,854	2,106,710	5,995,615	8,255,259
2012	784,550	688,920	1,473,473	893,404	62,950	321,665	1,787,601	84,696	2,220,378	53,322	2,358,393	5,424,013	6,897,488
<u>SOUTH PENINSULA TOTALS</u>													
1988	1,227,389	1,679,912	2,907,294	830,400	710,754	927,261	871,197	353,415	157,695	89,598	600,708	3,940,322	6,847,624
1989	6,882,663	3,759,908	10,642,566	6,018,404	1,926,986	950,090	703,311	167,702	97,736	17,669	283,105	9,881,901	20,524,478
1990	7,132,693	4,541,385	11,674,079	5,875,064	1,904,845	1,714,348	906,734	199,682	214,668	23,719	438,067	10,839,053	22,513,128
1991	4,028,073	1,928,700	5,956,772	3,773,169	731,076	856,549	856,918	140,473	235,725	3,200	379,402	6,597,120	12,553,890
1992	1,505,976	1,674,414	3,180,385	1,020,276	818,479	670,627	551,875	110,945	117,161	2,671	230,779	3,292,031	6,472,417
1993	681,456	1,087,997	1,769,450	488,261	465,890	1,210,594	795,355	146,765	117,323	3,308	267,397	3,227,485	4,996,935
1994	329,213	753,759	1,082,969	226,453	210,283	348,159	506,036	99,743	93,733	1,258	194,734	1,485,665	2,568,628
1996	2,457,509	323,028	2,780,541	2,204,832	202,775	142,952	203,502	45,608	44,601	1,193	91,402	2,845,456	5,625,994
1997	902,543	553,904	1,456,446	553,067	630,058	465,660	221,195	49,351	46,694	1,432	97,478	1,967,456	3,423,895
1998	1,944,234	2,818,254	4,762,488	1,089,409	1,881,308	2,515,757	1,010,830	101,323	151,484	5,616	258,425	6,755,726	11,518,216
1999	544,080	863,057	1,407,135	397,985	436,359	1,001,607	1,260,451	220,694	93,217	2,768	316,675	3,413,961	4,821,089
2000	4,171,228	1,574,705	5,745,932	4,018,709	522,256	905,198	1,341,906	722,040	156,893	2,811	881,746	7,669,819	13,415,743
2001	5,396,622	899,458	6,296,076	4,356,216	1,681,485	766,457	720,841	328,297	158,604	14,915	501,812	8,026,819	14,322,886
2002	5,953,378	2,886,810	8,840,192	4,519,087	3,426,411	2,471,530	1,127,788	150,625	325,028	7,360	483,013	12,027,824	20,868,010
2003	1,696,141	3,027,237	4,723,377	827,413	2,009,280	2,128,662	1,254,004	134,428	235,182	2,057	371,666	6,591,020	11,314,397
2004	2,506,198	2,928,371	5,434,563	2,157,504	903,503	2,998,766	3,659,592	492,256	460,704	13,902	966,860	10,686,221	16,120,784

-continued-

Table 7.–Page 7 of 10.

Year	Females			No. Sublegal Males by size (mm CW)				Recruits	Postrecruit (mm CW)		Total Legal	Total Males	Total Crab
	Juvenile	Adult	Total	<70	70-91	92-114	>114		<165	≥165			
2005	5,911,856	5,148,091	11,059,945	6,104,296	957,501	1,176,190	2,092,819	560,634	332,244	2,848	895,726	11,226,527	22,286,471
2006	32,757,132	4,531,488	37,288,623	30,043,865	4,704,739	2,471,202	2,170,150	329,404	416,819	21,437	767,660	40,157,606	77,446,227
2007	23,449,044	10,780,003	34,229,052	14,743,628	14,293,519	7,694,826	4,880,801	692,767	423,562	14,630	1,130,958	42,743,722	76,972,772
2008	8,385,642	28,933,973	37,319,619	3,561,864	16,748,867	25,399,137	7,732,025	1,661,008	366,792	53,597	2,081,401	55,523,292	92,842,908
2009	3,162,945	19,108,186	22,271,130	2,076,430	3,731,026	12,855,868	21,997,782	3,500,469	442,894	75,540	4,018,907	44,680,009	66,951,137
2010	1,419,455	11,305,345	12,724,802	1,189,873	740,211	2,772,203	9,676,944	11,446,036	1,450,617	430,780	13,331,148	27,710,365	40,435,172
2011	1,513,057	4,350,907	5,863,964	1,544,716	291,403	787,290	4,059,868	1,872,174	4,697,445	423,923	6,993,532	13,676,809	19,540,767
2012	1,534,226	1,790,352	3,324,582	1,663,081	193,215	511,076	2,424,267	189,355	3,770,747	195,557	4,155,660	8,947,302	12,271,885
CHIGNIK DISTRICT													
Ivanof Bay													
1989	375,317	142,361	517,678	402,553	74,048	403,346	380,328	175,484	6,289	6,289	188,062	1,448,335	1,966,013
1990	760,011	17,004	777,016	899,720	10,616	59,070	132,651	55,200	0	0	55,200	1,157,258	1,934,273
1991	361,655	1,476	363,131	350,368	0	0	1,723	7,136	0	738	7,874	359,965	723,096
1992	32,735	2,215	34,949	37,543	1,969	984	5,028	4,119	1,889	738	6,746	52,271	87,220
1993	55,400	1,929	57,329	28,729	41,776	9,880	3,055	0	699	0	699	84,139	141,467
1994	44,185	12,095	56,280	13,569	22,612	12,866	3,833	984	246	0	1,230	54,109	110,391
1995	60,450	3,833	64,283	72,814	2,848	492	2,461	2,707	492	0	3,199	81,814	146,097
1996	72,589	699	73,288	73,697	41,649	6,890	7,872	8,754	0	0	8,754	138,863	212,150
1997	40,248	4,675	44,923	56,022	4,595	7,770	4,183	3,691	492	246	4,429	77,000	121,924
1998	27,874	1,191	29,065	40,904	1,864	246	1,230	1,723	0	0	1,723	45,966	75,031
1999	58,134	3,652	61,784	61,575	492	1,476	9,919	10,089	945	0	11,034	84,495	146,280
2000	920,897	15,177	936,075	1,178,257	37,727	25,900	15,503	10,089	945	246	11,280	1,268,668	2,204,742
2001	783,211	97,341	880,550	620,710	325,720	73,445	43,541	2,848	15,299	0	18,147	1,081,562	1,962,112
2002	394,160	75,085	469,246	281,883	1,430,141	482,812	119,398	4,490	9,228	0	13,718	2,327,954	2,797,199
2003	39,742	243,170	282,912	14,904	50,330	98,784	111,788	28,954	7,990	0	36,945	312,751	595,663
2004	78,301	451,280	529,581	120,337	36,480	444,150	681,583	217,943	36,389	6,354	260,686	1,543,236	2,072,818
2005	663,287	907,178	1,570,465	947,259	55,244	86,930	225,662	56,910	51,450	1,182	109,541	1,424,638	2,995,105
2006	9,275,500	343,120	9,618,621	12,000,574	1,751,915	125,603	230,592	53,504	112,773	46,687	212,964	14,321,648	23,940,270
2007	2,590,248	186,057	2,776,306	2,619,492	1,693,768	325,392	70,091	16,935	25,403	3,629	45,967	4,754,711	7,531,016
2008	1,270,167	794,362	2,064,529	690,097	2,471,293	1,393,829	272,918	12,249	12,249	4,083	28,581	4,856,718	6,921,246
2009	167,512	1,812,620	1,980,132	99,103	731,233	2,266,419	1,362,266	94,708	31,535	2,515	128,759	4,587,782	6,567,914
2010	12,542	497,841	510,383	17,818	24,005	892,163	2,124,920	610,730	203,185	7,312	821,228	3,880,132	4,390,515
2011	147,210	158,875	306,083	170,043	0	40,008	525,781	437,307	248,170	39,561	725,036	1,460,866	1,766,948
2012	236,248	50,634	286,883	280,465	3,231	9,254	71,965	12,854	27,679	0	40,532	405,448	692,329
Mitrofanía Island													
1989	170,450	510,311	680,761	163,434	152,639	637,889	315,908	42,526	17,719	21,263	81,508	1,351,378	2,032,138
1990	269,281	40,104	309,384	218,188	141,813	173,574	214,823	75,473	22,789	5,717	103,980	852,379	1,161,765
1991	440,867	42,474	483,341	409,897	107,657	67,876	52,191	46,473	5,064	2,532	54,071	691,692	1,175,034
1992	290,955	6,874	297,829	219,423	36,768	6,451	14,621	17,153	0	2,532	19,685	296,948	594,779
1993	133,718	17,869	151,588	76,189	68,542	37,635	15,337	18,459	9,048	653	28,160	225,862	377,448

-continued-

Table 7.—Page 8 of 10.

Year	Females			No. Sublegal Males by size (mm CW)				Recruits	Postrecruit (mm CW)		Total Legal	Total Males	Total Crab
	Juvenile	Adult	Total	<70	70-91	92-114	>114		<165	≥165			
1994	48,370	8,681	57,052	32,122	19,977	14,992	6,149	13,384	2,532	0	15,916	89,157	146,209
1995	221,670	39,309	260,980	258,696	13,476	46,293	32,346	27,261	0	2,532	29,793	380,603	641,581
1997	545,275	129,834	675,109	356,506	832,433	412,231	101,306	8,229	25,322	10,129	43,680	1,746,159	2,421,267
1998	235,431	283,845	519,277	161,546	177,977	230,585	88,287	25,342	31,019	0	56,360	714,757	1,234,033
1999	172,648	78,335	250,984	162,641	81,213	66,349	83,378	17,305	3,165	3,165	23,636	417,221	668,204
2000	884,331	134,935	1,019,267	877,395	104,618	86,768	84,651	92,390	14,832	66,560	173,781	1,327,210	2,346,477
2001	536,782	326,224	863,006	515,856	258,191	308,027	118,323	43,225	36,561	8,441	88,228	1,288,625	2,151,633
2002	732,541	394,467	1,127,008	716,939	883,121	1,126,100	339,861	34,181	7,504	1,282	42,968	3,108,993	4,235,998
2003	225,828	242,297	468,123	118,906	644,742	615,597	341,453	22,552	46,724	7,597	76,872	1,797,573	2,265,697
2004	949,424	261,894	1,211,320	967,123	204,818	916,975	675,599	163,810	29,328	5,064	198,202	2,962,717	4,174,037
2005	2,039,144	136,680	2,175,825	2,016,881	346,413	172,248	237,391	75,021	20,845	3,284	99,152	2,872,089	5,047,914
2006	4,541,695	280,072	4,821,770	4,124,071	666,002	262,359	275,457	20,960	62,795	0	83,756	5,411,644	10,233,414
2007	2,200,793	631,391	2,832,184	1,979,957	2,151,128	702,542	128,026	5,758	20,059	3,798	29,616	4,991,268	7,823,453
2008	2,825,623	622,685	3,448,309	2,112,695	3,355,896	2,889,523	644,998	47,258	9,851	4,925	62,034	9,065,146	12,513,456
2009	580,893	1,266,391	1,847,284	580,035	3,767,888	4,985,349	1,928,330	196,679	8,336	0	205,015	11,466,620	13,313,905
2010	219,314	1,049,897	1,269,213	119,650	277,853	1,898,318	3,447,284	1,327,154	118,085	16,798	1,462,038	7,205,144	8,474,357
2011	237,140	536,031	773,174	178,188	18,517	188,252	1,697,853	1,160,577	465,170	57,646	1,683,393	3,766,204	4,539,375
2012	276,916	130,157	407,074	279,396	19,622	56,757	535,029	109,430	371,650	9,827	490,908	1,381,712	1,788,790
Chignik Bay													
1989	672,318	450,164	1,122,480	660,273	89,797	81,938	174,032	40,550	13,229	0	53,781	1,059,818	2,182,299
1990	1,650,409	423,975	2,074,381	1,330,659	111,829	133,701	444,782	83,477	77,931	1,387	162,795	2,183,761	4,258,145
1991	1,119,262	486,770	1,606,032	1,065,393	98,760	48,865	131,639	67,386	66,421	0	133,807	1,478,466	3,084,498
1992	1,150,084	323,333	1,473,417	1,307,665	91,362	69,122	34,071	0	14,828	0	14,828	1,517,049	2,990,466
1993	823,019	216,260	1,039,276	790,571	467,458	307,174	186,927	22,191	60,687	3,286	86,164	1,838,291	2,877,568
1994	235,449	135,863	371,312	72,103	520,863	514,183	143,524	28,567	32,315	949	61,831	1,312,506	1,683,817
1995	173,572	93,531	267,103	206,860	3,191	52,923	174,184	82,082	14,528	0	96,610	533,768	800,871
1996	1,007,658	128,777	1,136,437	995,236	34,926	44,796	249,658	263,871	72,615	0	336,486	1,661,101	2,797,540
1997	1,125,527	334,727	1,460,254	1,020,377	270,496	167,558	237,471	150,392	77,359	5,366	233,117	1,929,012	3,389,266
1998	427,674	626,554	1,054,229	292,560	187,095	243,304	230,117	45,704	91,685	1,213	138,602	1,091,676	2,145,904
1999	628,224	146,209	774,435	471,690	307,845	353,425	431,851	144,268	165,100	0	309,366	1,874,175	2,648,607
2000	3,145,891	433,733	3,579,623	2,800,331	1,657,007	793,849	546,024	224,130	182,700	10,414	417,246	6,214,459	9,794,079
2001	2,232,040	488,212	2,720,253	922,700	2,819,622	841,521	416,754	217,593	48,659	2,554	268,807	5,269,403	7,989,658
2002	274,304	697,209	971,510	112,370	434,936	1,001,961	641,173	86,382	361,373	7,856	455,612	2,646,050	3,617,564
2003	136,009	497,809	633,819	116,352	120,965	345,914	466,463	70,510	132,708	7,476	210,693	1,260,385	1,894,203
2004	937,790	577,337	1,515,126	842,966	360,190	265,548	558,334	288,476	167,489	7,555	463,520	2,490,559	4,005,686
2005	1,020,682	440,895	1,461,578	1,040,778	375,038	638,701	514,913	112,435	84,155	1,618	198,208	2,767,634	4,229,208
2006	1,957,789	433,101	2,390,888	2,664,297	187,986	238,972	372,015	70,627	93,625	2,654	166,905	3,630,177	6,021,064
2007	776,439	768,987	1,545,426	775,260	439,435	585,328	468,728	105,851	39,291	1,898	147,042	2,415,789	3,961,215
2008	1,436,888	435,709	1,872,597	1,107,740	889,415	932,201	686,717	141,205	43,906	2,569	187,681	3,803,748	5,676,347

-continued-

Table 7.–Page 9 of 10.

Year	Females			No. Sublegal Males by size (mm CW)				Recruits	Postrecruit (mm CW)			Total Legal	Total Males	Total Crab
	Juvenile	Adult	Total	<70	70-91	92-114	>114		<165	≥165				
2009	1,560,769	602,988	2,163,756	961,854	1,050,025	1,097,366	1,024,446	332,197	43,429	9,522	385,148	4,518,836	6,682,593	
2010	342,314	594,155	936,470	362,479	351,726	829,040	1,431,076	767,292	698,850	31,965	1,498,106	4,472,427	5,408,896	
2011	787,519	131,274	918,795	949,541	17,135	162,285	594,740	137,255	483,314	47,611	668,181	2,391,880	3,310,673	
2012	988,581	127,043	1,115,623	1,131,070	15,244	36,162	198,926	58,438	181,033	5,330	244,801	1,626,202	2,741,823	
Kujulik Bay													0	
1989	82,372	13,089	95,460	77,913	772	9,150	11,387	931	0	0	931	100,154	195,613	
1990	331,331	78,499	409,830	332,971	1,691	7,737	7,189	1,519	0	0	1,519	351,106	760,935	
1991	8,256	949	9,205	14,470	0	0	0	0	0	0	0	14,470	23,675	
1992	108,457	18,988	127,445	129,875	760	760	3,038	0	1,519	0	1,519	135,951	263,395	
1993	107,647	16,184	123,831	100,150	81,074	29,658	1,367	0	0	0	0	212,249	336,080	
1994	7,736	3,190	10,926	9,141	7,321	4,952	6,472	0	2,279	0	2,279	30,165	41,092	
1995	851	28,922	29,772	2,772	0	911	456	0	0	0	0	4,139	33,911	
1996	231,502	7,595	239,097	188,333	0	0	0	0	0	0	0	188,333	427,430	
1997	49,589	61,537	111,127	63,018	456	3,711	14,105	0	5,425	0	5,425	86,714	197,841	
1998	39,289	15,190	54,479	38,304	0	2,279	3,798	0	760	0	760	45,140	99,621	
1999	92,824	0	92,824	88,526	456	0	0	0	456	0	456	89,438	182,262	
2000	221,879	949	222,829	262,224	1,307	0	0	0	0	0	0	263,530	486,360	
2001	188,570	0	188,570	213,511	760	2,640	0	931	0	0	931	217,843	406,411	
2002	15,870	844	16,714	16,479	6,179	7,689	3,376	844	0	0	844	34,567	51,281	
2003	374,933	0	374,933	451,837	949	0	0	0	0	0	0	452,786	827,719	
2004	301,691	0	301,691	350,645	9,547	2,278	949	0	0	0	0	363,420	665,112	
2005	159,269	0	159,269	150,081	4,093	2,318	0	0	0	0	0	156,492	315,762	
2006	518,134	949	519,083	806,820	1,801	851	0	0	0	0	0	809,472	1,328,555	
2007	136,283	0	136,283	161,879	2,157	0	0	0	0	0	0	164,036	300,316	
2008	423,344	3,209	426,554	447,326	9,874	8,240	26,431	9,661	0	456	10,117	501,987	928,541	
2009	268,389	188,399	456,788	159,418	192,790	230,002	93,902	10,175	0	0	10,175	686,287	1,143,076	
2010	45,087	122,319	167,405	30,116	83,769	290,322	307,962	33,108	1,519	0	34,627	746,797	914,202	
2011	91,200	12,818	104,020	87,367	456	8,811	35,888	6,205	10,896	0	17,100	149,623	253,642	
2012	168,540	32,523	201,063	200,264	3,038	7,383	25,155	0	9,114	0	9,114	244,954	446,017	
CHIGNIK DISTRICT TOTALS														
1989	1,300,457	1,115,925	2,416,379	1,304,173	317,256	1,132,323	881,655	259,491	37,237	27,552	324,282	3,959,685	6,376,063	
1990	3,011,032	559,582	3,570,611	2,781,538	265,949	374,082	799,445	215,669	100,720	7,104	323,494	4,544,504	8,115,118	
1991	1,930,040	531,669	2,461,709	1,840,128	206,417	116,741	185,553	120,995	71,485	3,270	195,752	2,544,593	5,006,303	
1992	1,582,231	351,410	1,933,640	1,694,506	130,859	77,317	56,758	21,272	18,236	3,270	42,778	2,002,219	3,935,860	
1993	1,119,784	252,242	1,372,024	995,639	658,850	384,347	206,686	40,650	70,434	3,939	115,023	2,360,541	3,732,563	
1994	335,740	159,829	495,570	126,935	570,773	546,993	159,978	42,935	37,372	949	81,256	1,485,937	1,981,509	
1995	456,543	165,595	622,138	541,142	19,515	100,619	209,447	112,050	15,020	2,532	129,602	1,000,324	1,622,460	
1996	1,311,749	137,071	1,448,822	1,257,266	76,575	51,686	257,530	272,625	72,615	0	345,240	1,988,297	3,437,120	
1997	1,760,639	530,773	2,291,413	1,495,923	1,107,980	591,270	357,065	162,312	108,598	15,741	286,651	3,838,885	6,130,298	
1998	730,268	926,780	1,657,050	533,314	366,936	476,414	323,432	72,769	123,464	1,213	197,445	1,897,539	3,554,589	

-continued-

Table 7.–Page 10 of 10.

Year	Females			No. Sublegal Males by size (mm CW)				Recruits	Postrecruit (mm CW)			Total Legal	Total Males	Total Crab
	Juvenile	Adult	Total	<70	70-91	92-114	>114		<165	≥165				
1999	951,830	228,196	1,180,027	784,432	390,006	421,250	525,148	171,662	169,666	3,165	344,492	2,465,329	3,645,353	
2000	5,172,998	584,794	5,757,794	5,118,207	1,800,659	906,517	646,178	326,609	198,477	77,220	602,307	9,073,867	14,831,658	
2001	3,740,603	911,777	4,652,379	2,272,777	3,404,293	1,225,633	578,618	264,597	100,519	10,995	376,113	7,857,433	12,509,814	
2002	1,416,875	1,167,605	2,584,478	1,127,671	2,754,377	2,618,562	1,103,808	125,897	378,105	9,138	513,142	8,117,564	10,702,042	
2003	776,512	983,276	1,759,787	701,999	816,986	1,060,295	919,704	122,016	187,422	15,073	324,510	3,823,495	5,583,282	
2004	2,267,206	1,290,511	3,557,718	2,281,071	611,035	1,628,951	1,916,465	670,229	233,206	18,973	922,408	7,359,932	10,917,653	
2005	3,882,382	1,484,753	5,367,137	4,154,999	780,788	900,197	977,966	244,366	156,450	6,084	406,901	7,220,853	12,587,989	
2006	16,293,118	1,057,242	17,350,362	19,595,762	2,607,704	627,785	878,064	145,091	269,193	49,341	463,625	24,172,941	41,523,303	
2007	5,703,763	1,586,435	7,290,199	5,536,588	4,286,488	1,613,262	666,845	128,544	84,753	9,325	222,625	12,325,804	19,616,000	
2008	5,956,022	1,855,965	7,811,989	4,357,858	6,726,478	5,223,793	1,631,064	210,373	66,006	12,033	288,413	18,227,599	26,039,590	
2009	2,577,563	3,870,398	6,447,960	1,800,410	5,741,936	8,579,136	4,408,944	633,759	83,300	12,037	729,097	21,259,525	27,707,488	
2010	619,257	2,264,212	2,883,471	530,063	737,353	3,909,843	7,311,242	2,738,284	1,021,639	56,075	3,815,999	16,304,500	19,187,970	
2011	1,263,069	838,998	2,102,072	1,385,139	36,108	399,356	2,854,262	1,741,344	1,207,550	144,818	3,093,710	7,768,573	9,870,638	
2012	1,670,285	340,357	2,010,643	1,891,195	41,135	109,556	831,075	180,722	589,476	15,157	785,355	3,658,316	5,668,959	

Table 8.—Dominant species by weight in the South Alaska Peninsula and Chignik districts bottom trawl survey, 2012.

Common name	Species name	% of catch by weight
Walleye pollock	<i>Theragra chalcogramma</i>	28.1
Flathead sole	<i>Hippoglossoides elassodon</i>	24.3
Arrowtooth flounder	<i>Atheresthes stomias</i>	13.5
Pacific cod	<i>Gadus macrocephalus</i>	7.4
Yellowfin sole	<i>Pleuronectes aspera</i>	5.5
Tanner crab	<i>Chionoecetes bairdi</i>	3.1
Alaska plaice	<i>Pleuronectes quadrituberculatus</i>	2.5
Anemone	Order: Actinaria	2.4
Starry flounder	<i>Platichthys stellatus</i>	1.9
Pacific halibut	<i>Hippoglossus stenolepis</i>	1.8
Northern rock sole	<i>Lepidopsetta polyxystra</i>	1.4
Big skate	<i>Raja binoculata</i>	1.1
Sunflower sea star	<i>Pycnopodia helianthoides</i>	0.9
Great sculpin	<i>Myoxocephalus polyacanthocephalus</i>	0.6
Yellow Irish lord	<i>Hemilepidotus jordani</i>	0.5
Aleutian skate	<i>Bathyraja aleutica</i>	0.4
Lyre whelk	<i>Neptunea lyrata</i>	0.4
Dungeness crab	<i>Cancer magister</i>	0.3
Rex sole	<i>Glyptocephalus zachirus</i>	0.3
Hermit crab	Family: Paguridae	0.3
All others	(87 species)	3.3
		100.0

Table 9.—Tanner crab population estimates from bottom trawl surveys in the Eastern Aleutian District, 1990–2012.

Year	Females			Sublegal Males (mm CW)				Recruit	Postrecruit (mm CW)		Total Legal	Total Males	Total Crab
	Juvenile	Adult	Total	<70	70-91	92-114	>114		<165	≥165			
AKUTAN BAY													
1990	464,233	779,189	1,243,422	621,580	927,652	454,522	148,140	15,190	0	0	15,190	2,167,084	3,410,504
1991	745,793	580,770	1,326,560	812,713	355,129	533,276	374,345	13,291	13,291	0	26,583	2,102,046	3,428,606
1994	949	2,937	3,887	2,937	7,685	15,638	34,572	2,848	949	0	3,798	64,631	68,518
1995	19,077	5,696	24,774	12,521	8,294	32,137	100,690	949	8,903	0	9,852	163,493	188,267
1999	126,273	698,970	825,243	20,308	148,942	726,903	1,055,747	211,475	4,451	0	215,926	2,167,827	2,993,069
2000	9,124	251,383	260,506	8,077	12,322	168,099	327,390	86,955	17,651	0	104,606	620,494	881,001
2003	57,238	694,037	751,275	38,398	140,011	416,038	123,376	21,145	74,528	4,283	99,956	817,776	1,569,052
2004	132,586	1,022,595	1,155,182	73,127	228,628	293,052	225,319	10,372	24,006	2,078	36,455	856,583	2,011,764
2005	128,780	514,705	643,485	85,513	201,219	191,187	274,967	50,725	9,975	1,187	61,887	814,771	1,458,256
2006	60,461	209,923	270,383	56,504	105,933	262,401	351,972	7,992	93,661	0	101,653	878,462	1,148,847
2007	132,373	364,725	497,097	108,499	217,880	334,162	318,982	9,721	5,195	0	14,916	994,437	1,491,535
2008	13,220	156,340	169,560	5,875	32,584	122,379	223,506	33,743	44,074	0	77,817	462,161	631,721
2009	39,406	954,407	993,812	13,848	33,266	141,310	382,423	63,381	65,382	2,043	130,806	701,655	1,695,467
2010	173,821	237,064	410,886	86,744	80,077	132,415	321,401	30,849	68,018	0	98,867	719,506	1,130,392
2011	19,250	300,674	319,924	20,609	17,051	67,517	196,191	3,798	15,739	0	19,537	320,905	640,829
2012	27,138	392,030	419,167	34,861	37,249	122,481	126,843	14,330	8,312	0	22,642	344,077	763,244
BEAVER INLET													
1990	943,653	190,344	1,133,995	931,324	229,434	97,915	27,056	3,093	772	0	3,864	1,289,592	2,423,587
1991	468,821	136,295	605,114	446,024	178,136	72,435	21,868	2,123	0	0	2,123	720,587	1,325,702
1994	38,944	51,618	90,563	33,996	6,696	41,034	47,663	17,028	772	0	17,800	147,188	237,751
1995	702,658	28,666	731,324	555,914	15,770	6,531	8,478	3,687	0	0	3,687	590,381	1,321,706
1999	159,654	14,615	174,269	145,897	7,207	5,860	1,543	0	1,543	0	1,543	162,050	336,320
2000	249,908	19,455	269,363	215,534	19,505	11,892	2,577	0	0	0	0	249,505	518,868
2003	70,900	95,139	166,037	135,175	109,282	51,368	5,414	0	0	0	0	301,238	467,277
2006	369,704	62,213	431,916	323,471	19,298	31,705	13,863	829	0	0	829	389,165	821,081
2009	228,492	70,051	298,543	208,012	35,525	87,541	15,011	1,003	0	0	1,003	347,089	645,633
2012	334,022	11,199	345,220	304,364	2,513	6,069	8,582	0	1,161	0	1,161	322,688	667,908
UNALASKA/KALEKTA BAY													
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

-continued-

Table 9.–Page 2 of 4.

Year	Females			Sublegal Males (mm CW)				Recruit	Postrecruit (mm CW)		Total Legal	Total Males	Total Crab
	Juvenile	Adult	Total	<70	70-91	92-114	>114		<165	≥165			
2000	248,548	952,496	1,201,044	31,132	195,166	243,495	148,668	35,059	12,573	738	48,370	666,834	1,867,878
2003	72,717	7,654	80,371	82,917	6,985	55,771	390,915	99,369	175,774	6,561	281,704	818,293	898,664
2004	347,648	136,331	483,979	338,119	127,521	52,962	26,311	68,737	5,855	8,008	82,600	627,510	1,111,488
2005	854,570	212,211	1,066,782	652,400	241,781	90,170	47,959	20,182	6,616	2,730	29,529	1,061,843	2,128,625
2006	152,412	372,418	524,829	133,520	262,003	138,544	185,052	42,346	460,626	35,311	538,282	1,257,405	1,782,234
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	3,707,713
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	27,374	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	674,444	123,914	64,170	169,250	380,612	20,623	215,057	9,546	245,225	983,169	1,657,611
MAKUSHIN BAY													
1990	440,133	313,413	753,546	368,957	83,150	76,482	125,452	6,927	23,029	0	29,956	683,996	1,437,542
1991	89,388	149,173	238,561	76,314	85,035	51,894	70,212	5,911	29,134	2,576	37,622	321,077	559,638
1994	148,701	159,043	307,743	127,268	19,767	98,635	109,428	36,354	1,662	0	38,016	393,113	700,856
1995	125,736	85,759	211,496	93,308	25,608	38,406	51,872	2,837	8,622	0	11,459	220,653	432,149
1999	539,110	79,122	618,234	487,270	37,716	50,718	41,163	4,800	9,597	0	14,397	631,261	1,249,495
2000	570,431	152,224	722,656	451,979	122,785	42,701	17,963	2,349	0	0	2,349	637,776	1,360,431
2003	66,656	1,156,357	1,223,012	47,889	82,459	278,262	483,759	191,066	74,815	1,159	267,042	1,159,410	2,382,424
2004	119,053	695,345	814,398	124,526	44,029	218,811	371,854	363,797	51,149	7,816	422,760	1,181,979	1,996,378
2005	316,090	229,932	546,021	341,081	23,371	35,372	311,692	165,906	211,288	6,985	384,178	1,095,695	1,641,716
2006	621,330	142,464	763,795	566,017	39,258	35,231	104,047	23,421	118,105	6,863	148,390	892,942	1,656,737
2007	3,454,188	1,068,382	4,522,572	1,702,269	792,080	453,094	145,200	9,987	175,491	1,734	187,213	3,279,857	7,802,429
2008	402,869	1,427,783	1,830,654	286,764	317,850	329,249	172,011	3,381	162,514	4,650	170,544	1,276,421	3,107,074
2009	267,904	1,783,197	2,051,099	217,485	169,488	491,976	210,803	7,792	34,284	0	42,077	1,131,828	3,182,929
2010	159,194	167,098	326,292	114,578	21,375	85,156	215,744	50,636	17,095	0	67,731	504,584	830,875
2011	194,863	254,964	449,828	130,779	29,139	66,221	228,701	26,263	61,034	0	87,296	542,137	991,965
2012	178,868	295,408	474,274	120,983	98,499	58,526	104,356	7,880	20,761	2,316	30,958	413,321	887,594
USOF BAY													
1990	103,298	25,189	128,487	103,381	100,686	29,612	2,023	574	0	0	574	236,275	364,763
1991	89,209	70,803	160,012	232,477	259,878	66,540	26,990	4,497	2,625	0	7,122	593,006	753,019
1994	15,861	3,500	19,361	13,783	8,932	6,187	7,638	875	0	0	875	37,413	56,773
1995	33,624	3,343	36,966	42,260	10,195	6,931	4,375	0	2,625	0	2,625	66,386	103,353

-continued-

Table 9.–Page 3 of 4.

Year	Females			Sublegal Males (mm CW)				Recruit	Postrecruit (mm CW)		Total Legal	Total Males	Total Crab
	Juvenile	Adult	Total	<70	70-91	92-114	>114		<165	≥165			
1999	79,821	11,426	91,247	70,550	13,340	2,523	0	0	0	0	0	86,412	177,662
2000	52,026	7,968	59,995	48,176	4,710	4,710	0	0	0	0	0	57,596	117,592
2003	30,966	70,430	101,395	34,381	90,009	151,473	30,169	0	899	0	899	306,932	408,328
AKUN BAY													
1990	2,123	1,063	3,187	0	0	0	0	0	0	0	0	0	3,187
1991	0	0	0	1,060	0	0	0	0	0	0	0	1,060	1,060
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	3,305	5,317	8,621	6,495	3,190	0	0	0	0	0	0	9,684	18,306
2003	0	3,187	3,187	0	1,063	2,127	0	0	0	0	0	3,190	6,377
PUMICESTONE BAY													
1990	48,859	0	48,859	48,607	674	0	0	0	0	0	0	49,281	98,139
1991	24,251	235	24,486	19,207	5,865	1,173	0	0	235	0	235	26,480	50,967
1994	6,510	909	7,419	5,748	5,366	5,220	674	0	0	0	0	17,008	24,428
1995	10,299	3,543	13,841	9,495	3,965	3,754	1,349	0	0	0	0	18,563	32,403
1999	13,078	0	13,078	8,657	1,171	0	1,499	749	749	0	1,499	12,826	25,904
2000	3,304	1,499	4,803	352	749	0	2,997	749	0	0	749	4,848	9,651
2003	231,803	21,096	252,899	284,381	78,593	25,522	2,698	674	0	0	674	391,868	644,768
2004	27,652	674	28,326	17,536	1,348	1,349	337	0	0	0	0	20,570	48,897
2005	46,067	19,559	65,626	42,050	19,559	49,234	7,419	1,349	674	0	2,023	120,285	185,910
2006	36,382	10,683	47,065	52,706	17,526	17,565	6,979	0	469	0	469	95,245	142,310
2007	233,042	2,600	235,642	226,435	30,282	2,600	0	0	0	0	0	259,317	494,959
2008	43,900	4,557	48,456	69,070	130,211	32,586	1,966	0	0	0	0	233,833	282,288
2009	10,439	1,202	11,642	9,326	5,161	9,501	1,466	0	0	0	0	25,453	37,095
2010	18,475	4,751	23,226	21,480	11,290	11,597	5,586	0	0	0	0	49,954	73,180
2011	254,240	528	254,768	233,779	2,639	0	0	1,394	0	0	1,394	237,813	492,581
2012	99,056	10,029	109,085	88,645	13,988	3,167	792	264	0	0	264	106,856	215,941
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

-continued-

Table 9.–Page 4 of 4.

Year	Females			Sublegal Males (mm CW)				Recruit	Postrecruit (mm CW)		Total Legal	Total Males	Total Crab
	Juvenile	Adult	Total	<70	70-91	92-114	>114		<165	≥165			
1999	949	2,848	3,798	3,798	3,798	1,898	0	0	0	0	0	9,494	13,292
2000	12,342	5,697	18,039	18,038	19,937	9,493	949	0	0	0	0	48,419	66,456
2003	0	6,646	6,646	1,898	9,493	18,038	0	0	0	0	0	29,431	36,076
INANUDAK BAY													
1990	4,658	0	4,658	0	0	3,110	949	0	0	0	0	4,059	8,717
1994	3,390	0	3,390	1,695	0	0	0	0	0	0	0	1,695	5,086
<u>EASTERN ALEUTIAN TOTALS</u>													
1990	3,130,385	1,672,398	4,802,780	2,738,782	1,403,450	739,998	349,180	37,328	27,849	2,002	67,178	5,298,584	10,101,363
1991	2,518,324	1,077,591	3,595,910	2,630,974	1,055,772	767,474	520,339	34,728	45,285	3,577	83,592	5,058,150	8,654,064
1994	231,839	220,421	452,262	205,760	55,092	166,714	201,957	58,054	4,932	0	62,987	692,507	1,144,773
1995	915,100	134,602	1,049,701	731,361	69,117	98,606	168,663	8,782	20,150	0	28,932	1,096,680	2,146,383
1999	1,153,825	1,002,513	2,156,343	877,883	312,067	1,046,152	1,413,737	340,863	59,511	1,356	401,731	4,051,565	6,207,911
2000	1,148,988	1,396,039	2,545,027	779,783	378,364	480,390	500,544	125,112	30,224	738	156,074	2,295,156	4,840,183
2003	530,280	2,054,546	2,584,822	625,039	517,895	998,599	1,036,331	312,254	326,016	12,003	650,275	3,828,138	6,412,966
2004	626,939	1,854,945	2,481,885	553,308	401,526	566,174	623,821	442,906	81,010	17,902	541,815	2,686,642	5,168,527
2005	1,345,507	976,407	2,321,914	1,121,044	485,930	365,963	642,037	238,162	228,553	10,902	477,617	3,092,594	5,414,507
2006	1,240,289	797,701	2,037,988	1,132,218	444,018	485,446	661,913	74,588	672,861	42,174	789,623	3,513,219	5,551,209
2007	4,256,210	3,433,009	7,689,218	2,292,347	1,149,690	1,097,889	768,977	124,119	392,222	19,656	535,998	5,844,898	13,534,118
2008	784,097	3,579,002	4,363,100	572,206	698,294	730,590	951,979	135,889	270,831	5,904	412,623	3,365,697	7,728,796
2009	722,581	4,114,921	4,837,499	528,722	297,658	853,275	893,899	180,426	205,242	5,031	390,700	2,964,254	7,801,755
2010	552,438	795,263	1,347,702	354,229	140,116	260,038	550,113	83,458	86,300	0	169,758	1,474,259	2,821,959
2011	494,253	810,065	1,304,317	414,417	73,824	198,386	465,034	33,622	82,996	1,112	117,729	1,269,393	2,573,709
2012	809,531	1,212,664	2,022,190	672,767	216,419	359,493	621,185	43,097	245,291	11,862	300,250	2,170,111	4,192,298

Table 10.—Dominant species by weight in the Eastern Aleutian District bottom trawl survey, 2012.

Common name	Species name	% of catch by weight
Walleye pollock	<i>Theragra chalcogramma</i>	23.4
Arrowtooth flounder	<i>Atheresthes stomias</i>	22.9
Flathead sole	<i>Hippoglossoides elassodon</i>	14.5
Pacific cod	<i>Gadus macrocephalus</i>	8.1
Tanner crab	<i>Chionoecetes bairdi</i>	6.0
Rex sole	<i>Glyptocephalus zachirus</i>	4.8
Anemone	order: Actinaria	4.2
Pacific halibut	<i>Hippoglossus stenolepis</i>	3.9
Southern rock sole	<i>Lepidopsetta bilineata</i>	1.9
Hermit crab	Family: Paguridae	1.0
Sunflower sea star	<i>Pycnopodia helianthoides</i>	0.9
Aleutian skate	<i>Bathyraja aleutica</i>	0.7
Swift's sea star	<i>Gephreaster swifti</i>	0.6
Pacific sleeper shark	<i>Somniosus pacificus</i>	0.6
Northern rock sole	<i>Lepidopsetta polyxystra</i>	0.5
Basket star	<i>Gorgonocephalus</i> sp.	0.5
Bering skate	<i>Bathyraja interrupta</i>	0.4
Alaska skate	<i>Bathyraja parmifera</i>	0.4
Sponge	Phylum: Porifera	0.4
Longsnout prickleback	<i>Lumpenella longirostris</i>	0.4
All others	(87 species)	3.9
		100.0

Table 11.—Bitter crab disease (BCD) percent prevalence by station and year from Alitak Bay hemolymph samples, 2001–2010.

Station	BITTER CRAB SAMPLING YEAR									
	2001	2002	2003 ^a	2004	2005	2006 ^b	2007	2008	2009	2010
ALA	0.0	6.7		3.3	0.0		3.3	3.3	0.0	0.0
ALB	0.0	3.3		0.0	0.0		3.6	6.7	6.7	0.0
ALC	3.4	0.0		0.0	6.7		0.0	3.4	0.0	0.0
ALD	0.0	0.0		3.3	3.4		0.0	10.0	0.0	0.0
ALF	0.0	3.3		0.0	0.0		3.3	3.3	0.0	0.0
ALG	25.0	3.3		3.3	3.3		1.7	6.7	6.7	0.0
ALH	0.0	3.3		3.3	0.0	9.1	3.3	0.0	0.0	0.0
ALI	0.0	0.0		0.0	0.0		10.0	0.0	3.3	0.0
ALJ	13.3	0.0		3.3	3.3	14.3	13.8	10.0	0.0	0.0
ALK	20.0	63.3		0.0	16.7	15.0	10.3	0.0	16.7	0.0
ALL	3.3	0.0		6.7	3.3	0.0	0.0	3.3	6.7	0.0
ALM	3.3	13.3		13.3	3.3	0.0	6.9	6.7	0.0	0.0
ALO ^c	6.7	6.7		6.7	0.0	25.0	4.7	6.9	13.3	
ALP	23.3	26.7		3.3	10.3	40.0	32.1	25.8	6.9	1.7
ALQ	45.8	30.0		3.4	0.0		27.6	34.5	6.9	3.6
ALR	20.0	10.0		0.0	3.3	28.0	40.0	20.0	0.0	0.0
Total ^d	3.7	4.3		2.5	3.2	8.6	7.2	6.4	3.8	0.3

^a No samples in 2003.

^b Some stations were not sampled in 2006.

^c Was not towed in 2010.

^d Percent prevalence of BCD in the entire sampled Alitak Bay Tanner Crab population.

Table 12.—Tanner crab per station estimated to have bitter crab disease (BCD) and population estimates from stations sampled for bitter crab in Alitak Bay, 2001–2010.

Station	BITTIER CRAB SAMPLING YEAR									
	2001	2002	2003 ^a	2004	2005	2006 ^b	2007	2008	2009	2010
ALA	0	8,593		865	0		4,967	5,678	0	0
ALB	0	4,721		0	0		1,546	29,376	26,071	0
ALC	4,669	0		0	9,840		0	16,560	0	0
ALD	0	0		3,646	1,154		0	58,992	0	0
ALF	0	38,829		0	0		175,476	33,165	0	0
ALG	223,527	17,584		5,374	3,465		277,673	37,062	11,982	0
ALH	0	25,345		284	0	22,586	75,772	0	0	0
ALI	0	0		0	0		26,080	0	6,582	0
ALJ	54,577	0		2,696	4,478	60,823	192,764	45,849	0	0
ALK	23,688	38,660		0	17,865	23,788	278,035	0	11,339	0
ALL	7,315	0		5,201	2,613	0	0	8,275	5,396	0
ALM	51,403	38,314		17,668	2,142	0	159,625	25,178	0	0
ALO ^c	23,064	12,830		10,867	0	29,028	59,396	8,572	17,566	
ALP	19,820	44,107		4,585	7,920	3,402	122,216	99,663	14,080	1,629
ALQ	17,532	22,393		9,393	0		76,910	70,617	21,999	5,696
ALR	20,260	11,493		0	5,095	47,772	63,980	35,018	0	0
Total infected	445,855	262,870		60,579	54,572	187,399	1,514,439	474,006	115,014	7,325
Population Estimate ^d	11,956,612	6,121,887	2,114,926	2,388,637	1,681,763	2,188,128	20,957,848	7,439,279	3,012,570	2,898,814

^a No samples in 2003.

^b Some stations were not sampled in 2006.

^c Not towed in 2010.

^d Includes only estimated population from Alitak Bay stations sampled for bitter crab disease.

Table 13.—Average near-bottom water temperature (°C) by location for the warmest and coldest survey locations in each district during 2012 from the bottom trawl surveys, 2003-2012.

District	Location ^a	Year									
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
KODIAK											
	Kukak Bay	8.93	8.00	9.23	9.03	9.02	9.61	9.95	8.28	8.19	7.65
	Deadman Bay	4.40	3.09	3.45	1.93	2.83	4.67	6.18	2.49	2.71	0.43
	District Average	6.73	6.01	6.49	6.02	6.07	7.23	7.64	6.17	5.81	5.30
CHIGNIK											
	Outer Ivanof Bay	7.60	7.43	7.97	8.00	10.83	10.92	9.69	7.20	5.40	7.53
	Chignik Bay	6.39	5.72	6.15	6.24	8.24	9.38	8.92	5.81	4.95	5.58
	District Average	6.94	6.41	7.04	6.95	8.86	9.01	9.96	6.58	5.26	6.11
SOUTH PENINSULA											
	Cold Bay	9.23	9.78	9.27	9.44	9.62	8.77	9.47	8.45	7.99	8.12
	Sanak Island	5.83	4.75	5.21	4.49	5.90	4.54	9.30	5.14	4.97	3.98
	District Average	7.19	6.38	6.58	6.57	8.11	7.25	10.14	6.12	5.42	5.38
EASTERN ALEUTIAN											
	Kalekta Bay	7.80	6.69	6.30	7.20	7.93	6.19	8.30	6.42	6.42	5.90
	Makushin Bay	5.53	5.06	5.25	4.92	5.33	4.82	8.12	4.57	4.71	4.13
	District Average	6.51	5.70	5.83	5.84	5.96	5.46	8.21	5.34	5.17	5.06
	Survey Average	6.84	6.13	6.54	6.25	6.91	7.33	8.57	6.16	5.61	5.40

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

^a Locations listed are the warmest and coldest areas in each district during the 2012 trawl survey. Previous years temperatures are from those areas, but may not have been the warmest or coldest locations during that respective year.

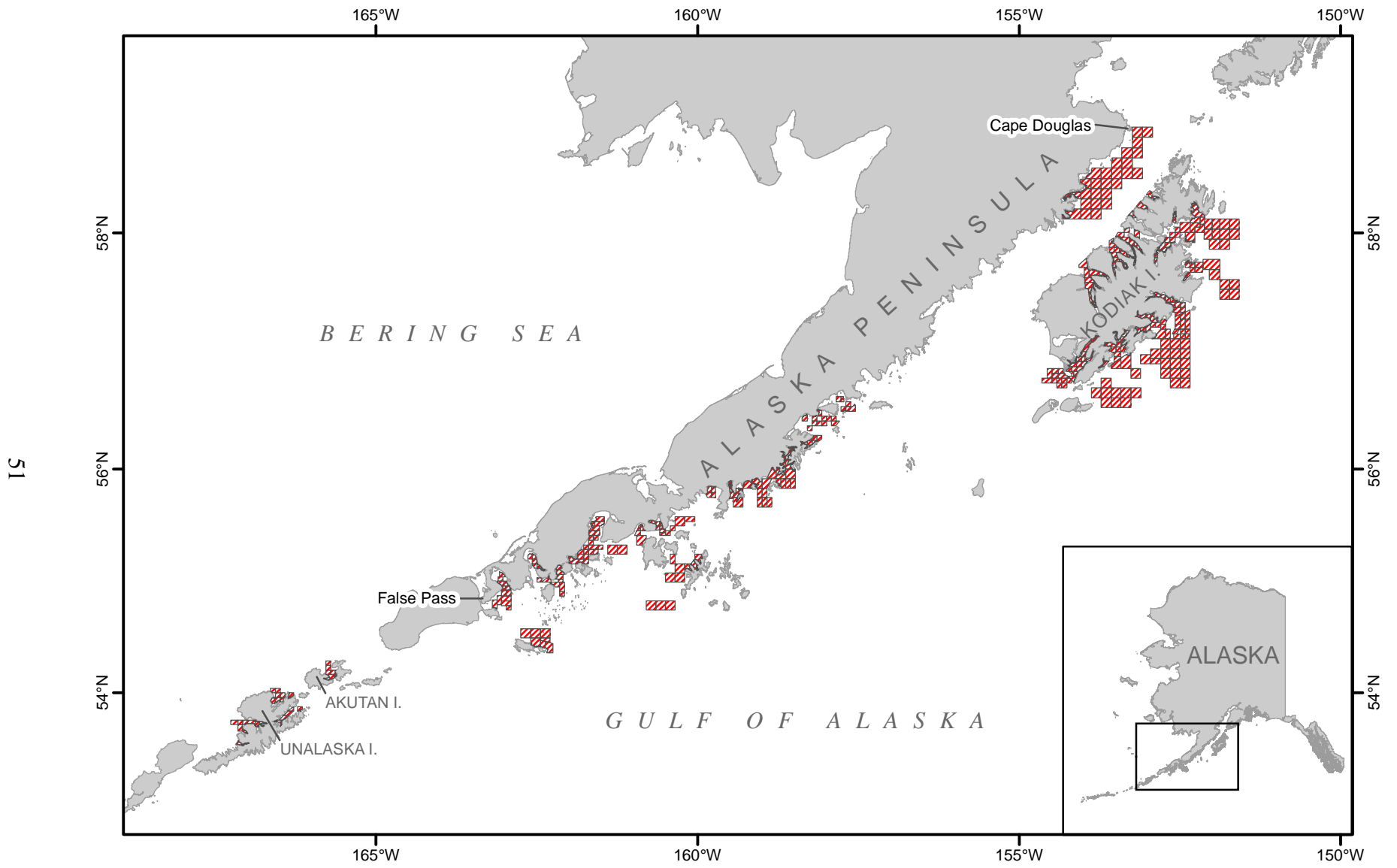


Figure 1.—Bottom trawl survey stations, 2012.

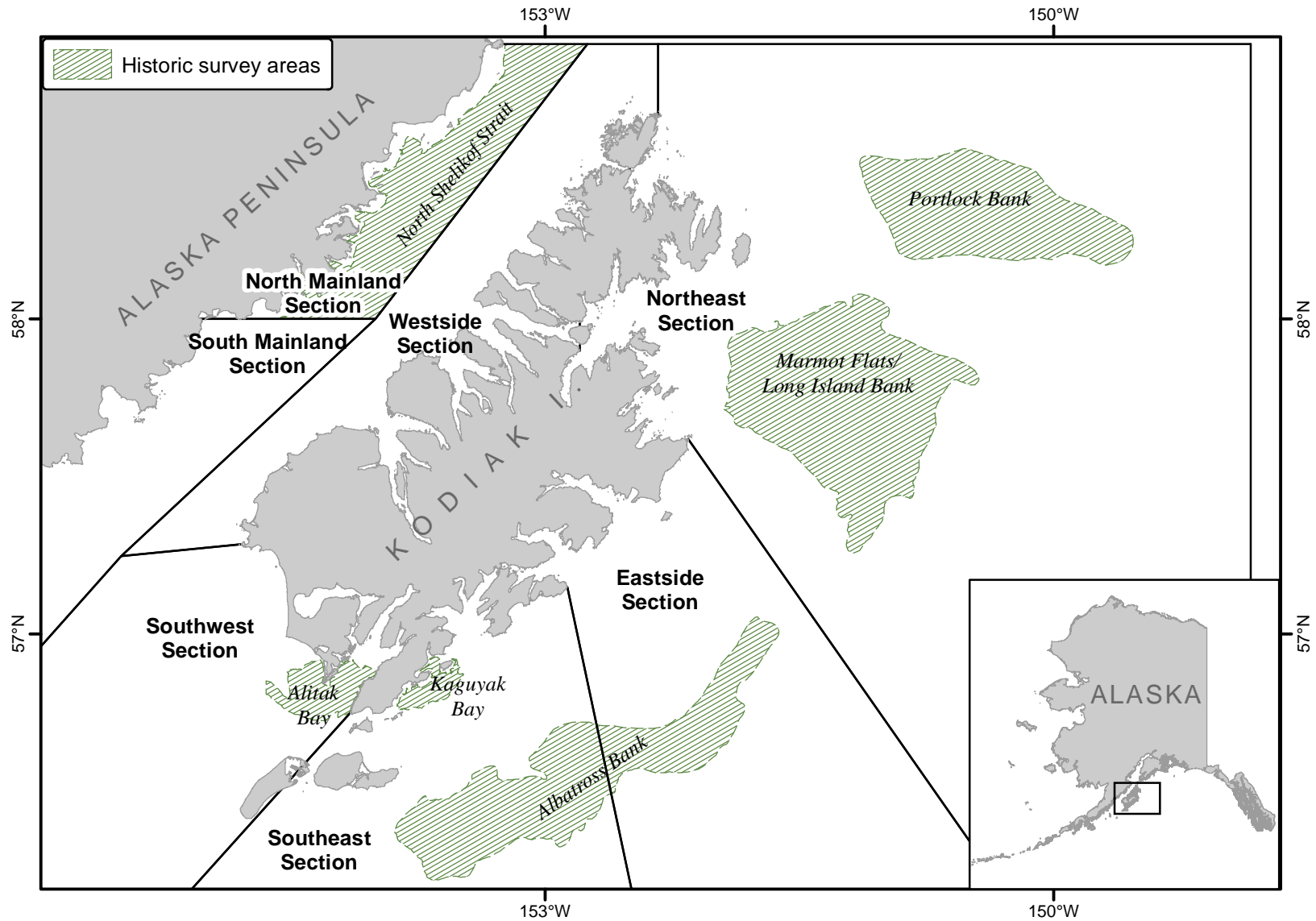


Figure 2.—Historic trawl survey areas and current Tanner crab management sections in the Kodiak District.

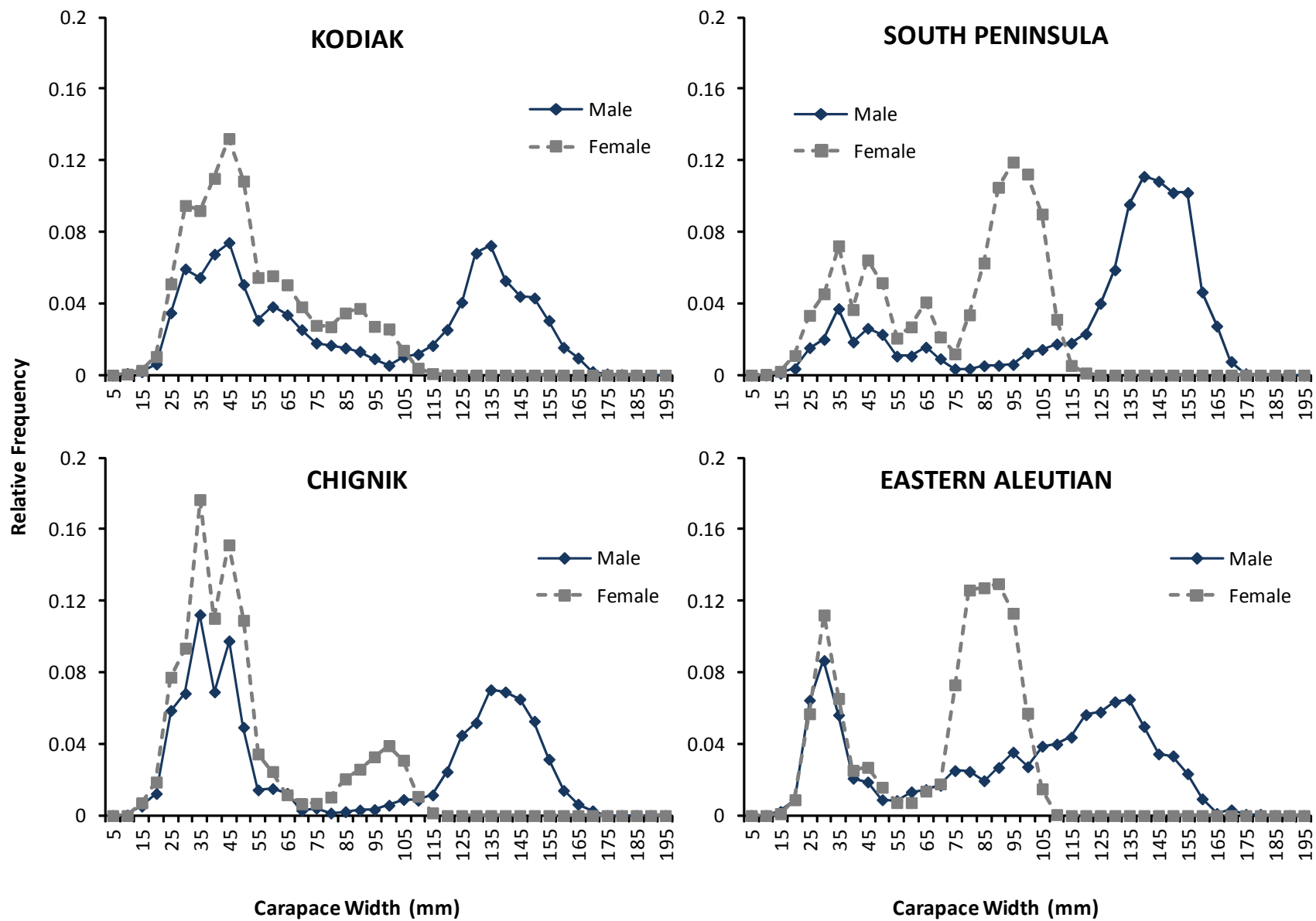


Figure 3.—Tanner crab relative size frequency by sex and district from the 2012 bottom trawl survey.

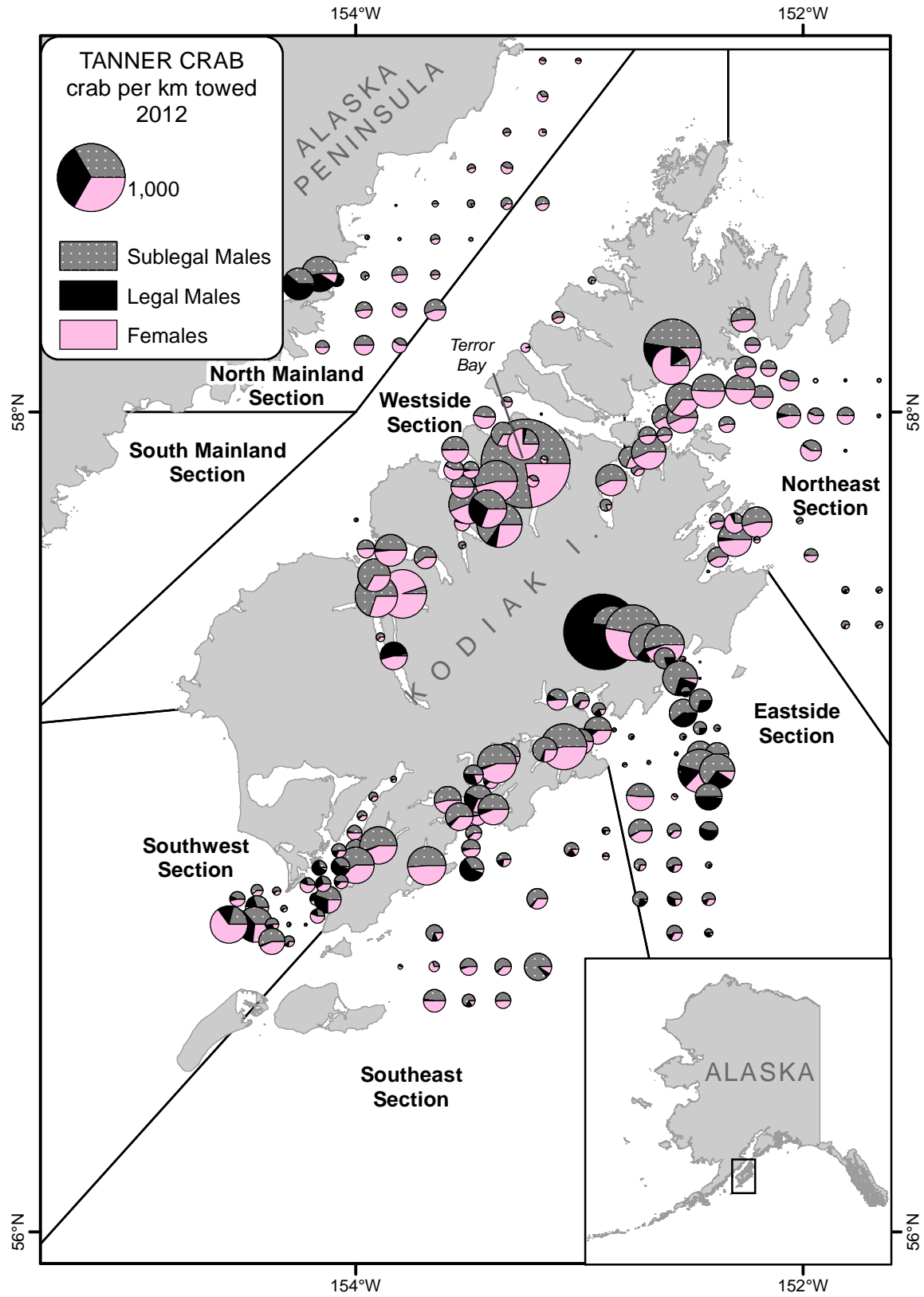


Figure 4.—Tanner crab per kilometer towed in the 2012 Kodiak bottom trawl survey.

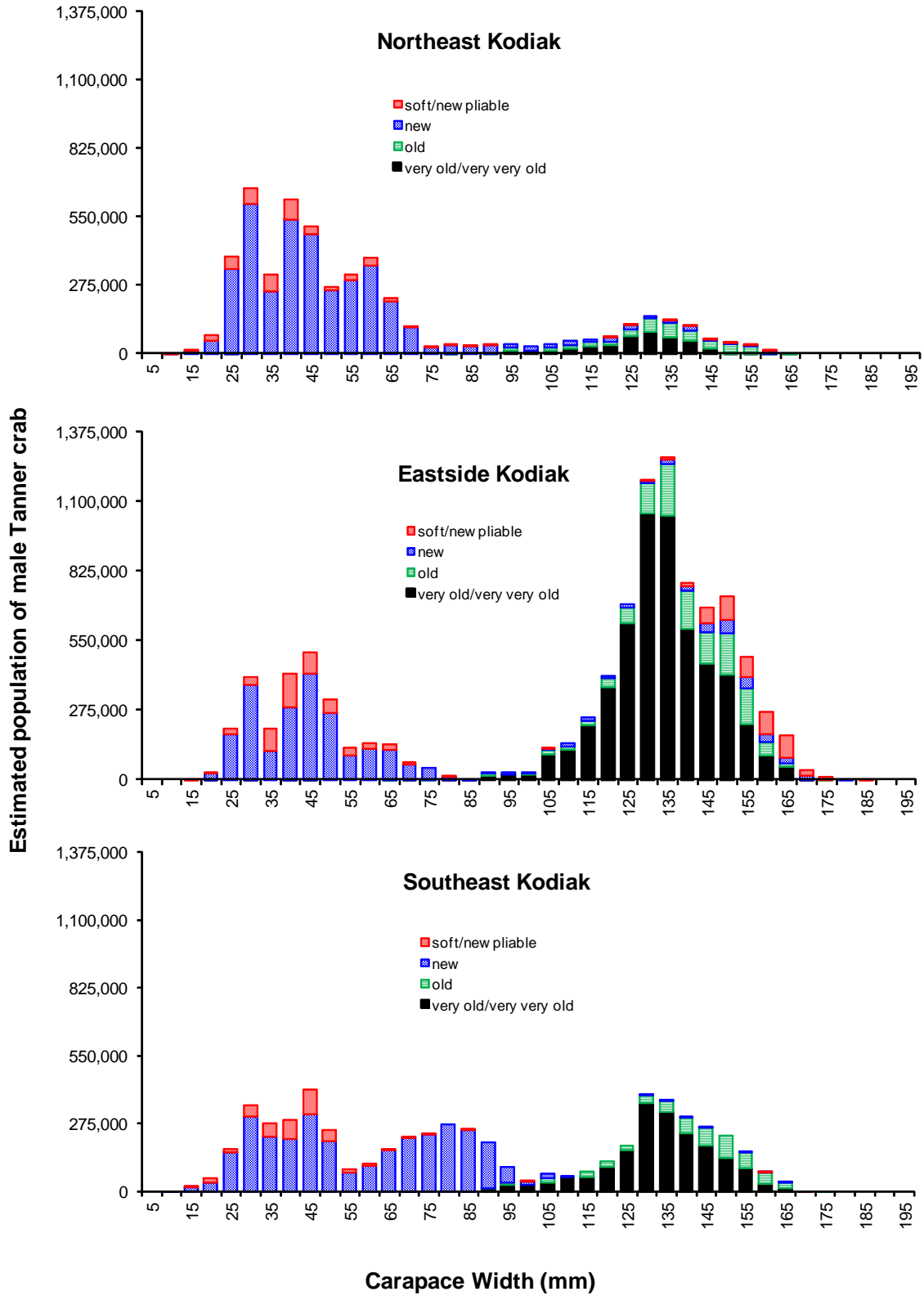


Figure 5.—Tanner crab male population estimate by carapace width (mm) and shell condition from the Northeast, Eastside, and Southeast sections of the 2012 Kodiak District bottom trawl survey.

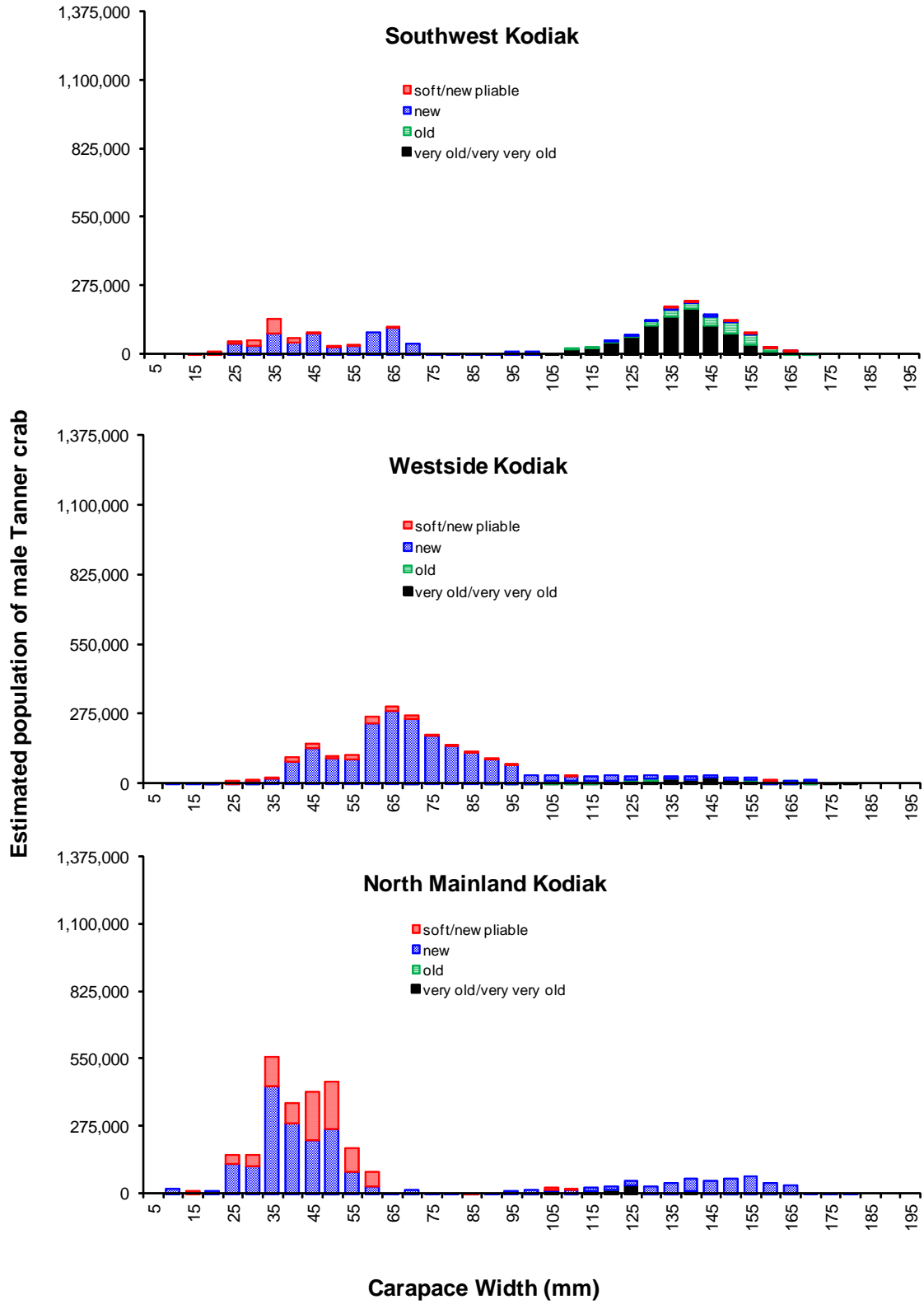


Figure 6.—Tanner crab male population estimate by carapace width (mm) and shell condition from the Southwest, Westside, and North Mainland sections of the 2012 Kodiak District bottom trawl survey.

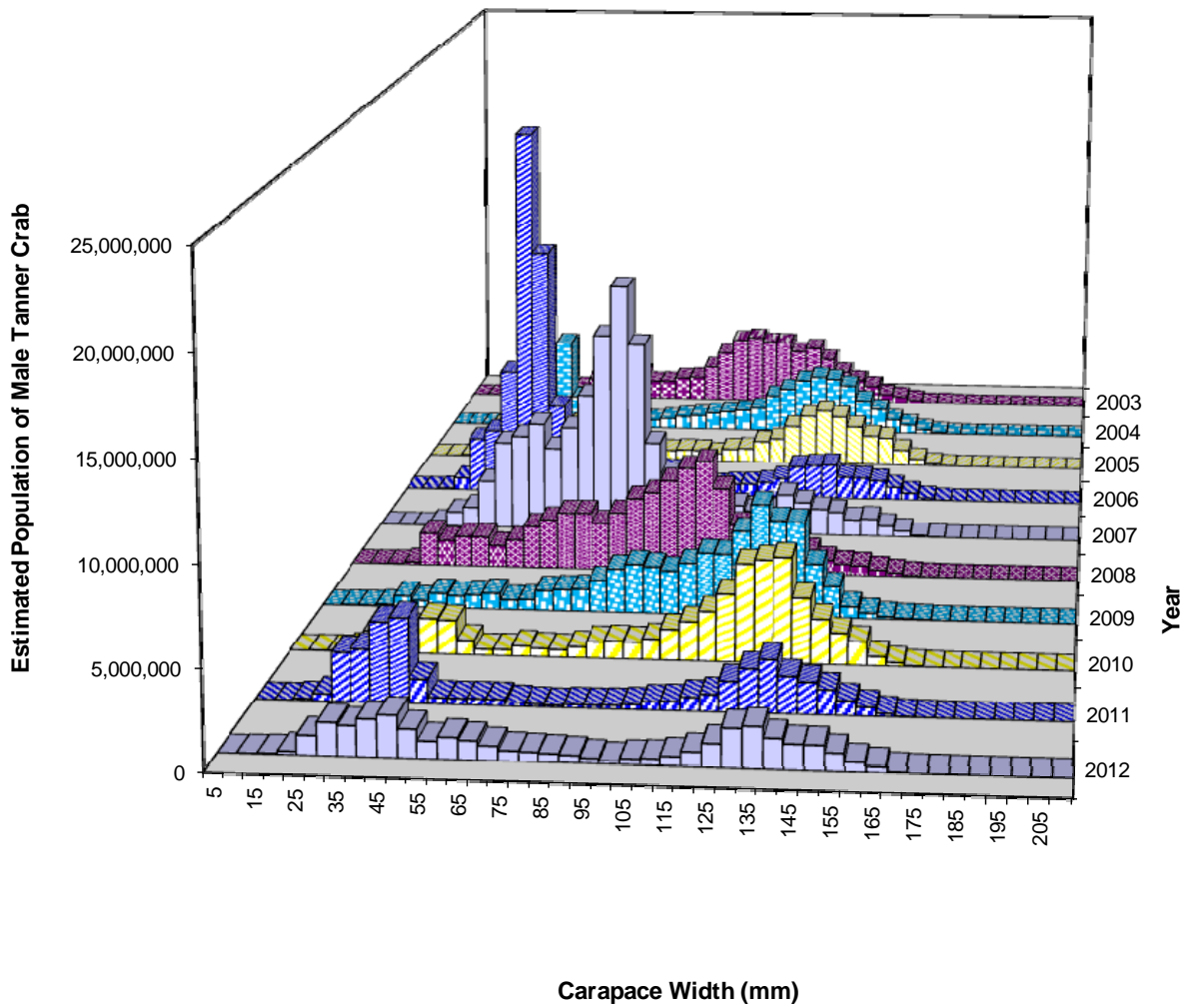


Figure 7.—Tanner crab male population estimate by carapace width in the Kodiak District bottom trawl surveys, 2003–2012.

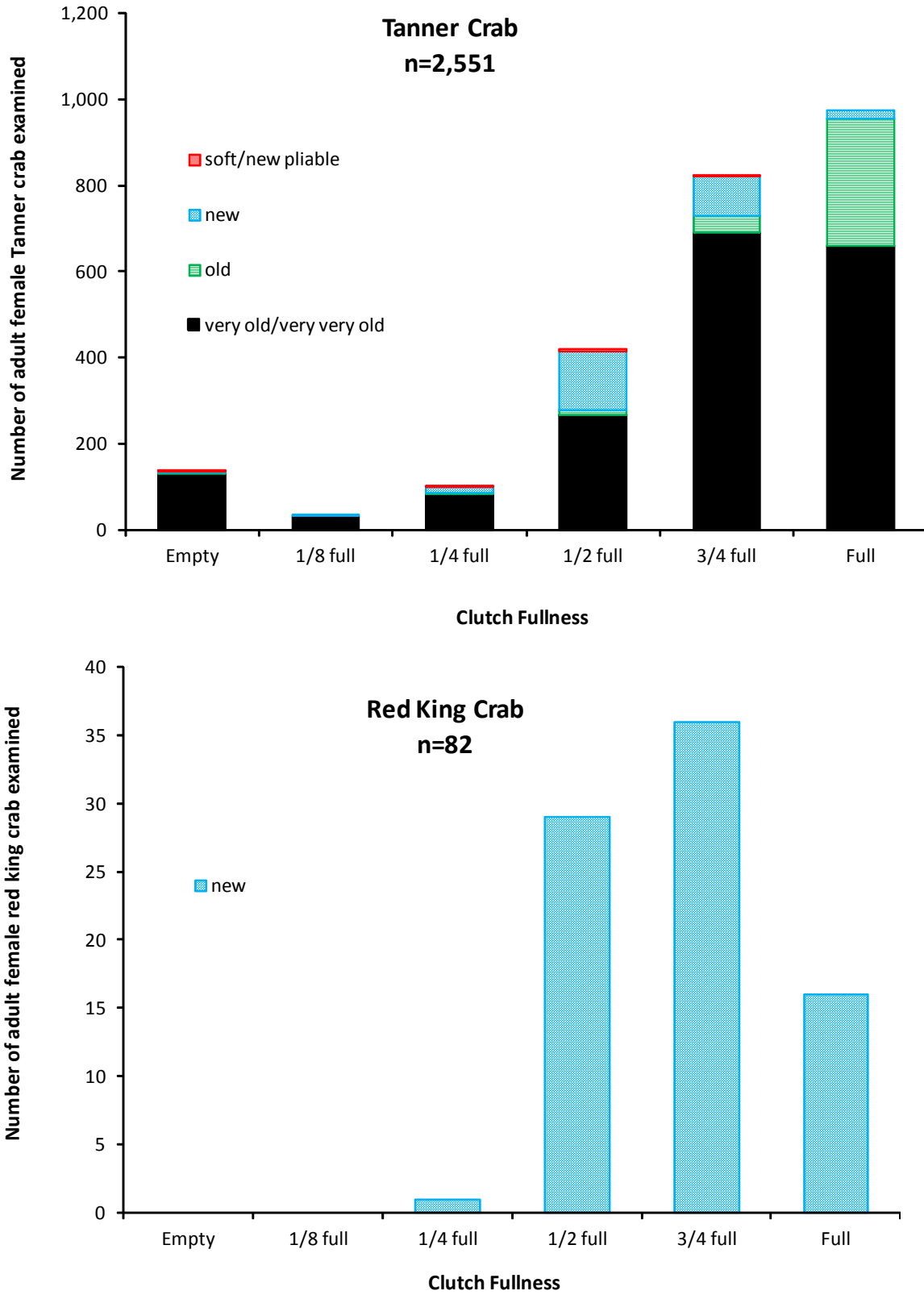


Figure 8.—Tanner crab and red king crab adult female egg clutch fullness by shell condition in the Kodiak bottom trawl survey, 2012.

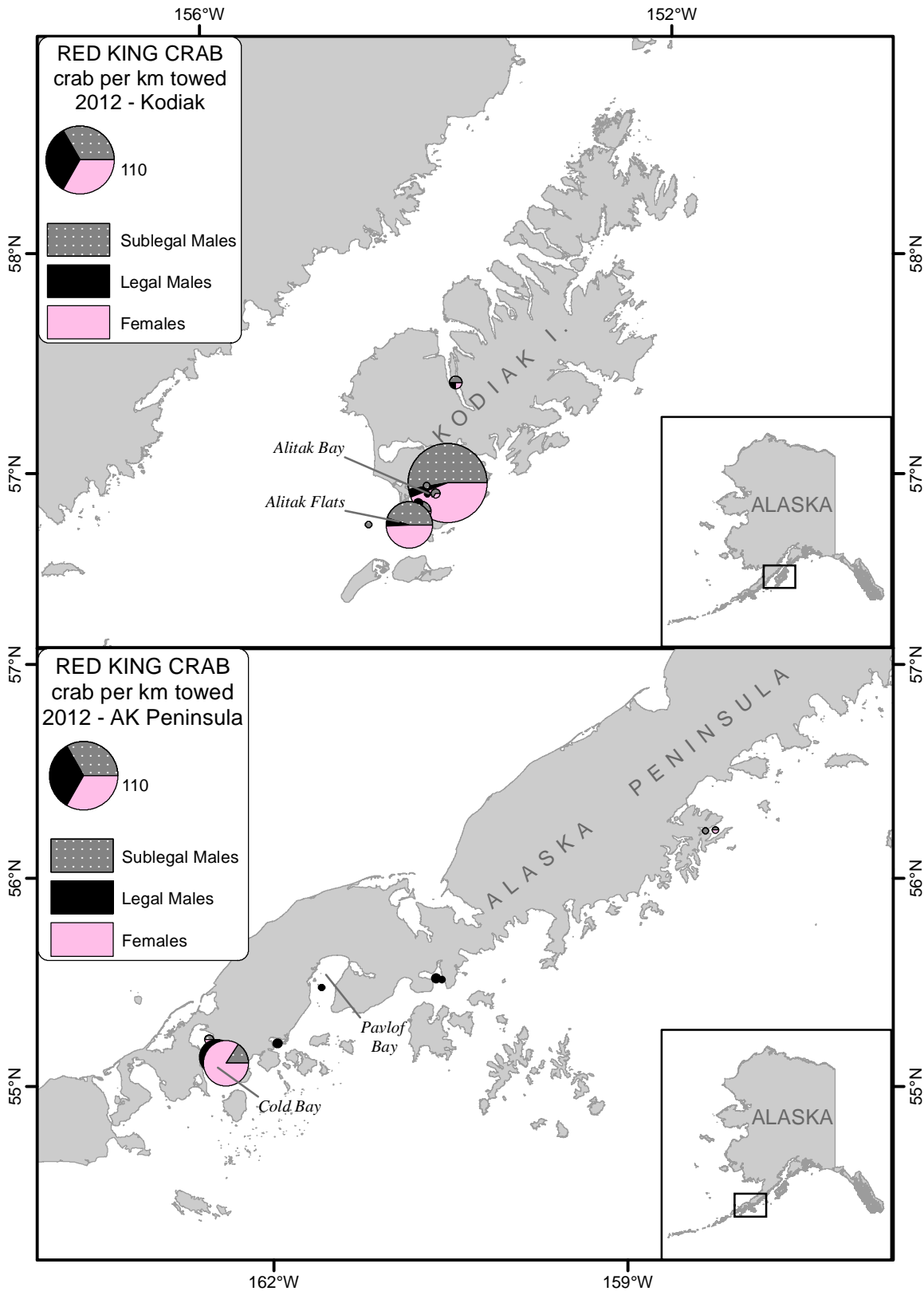


Figure 9.—Red king crab per kilometer towed in the 2012 Kodiak (upper) and Alaska Peninsula Area (lower) bottom trawl survey.

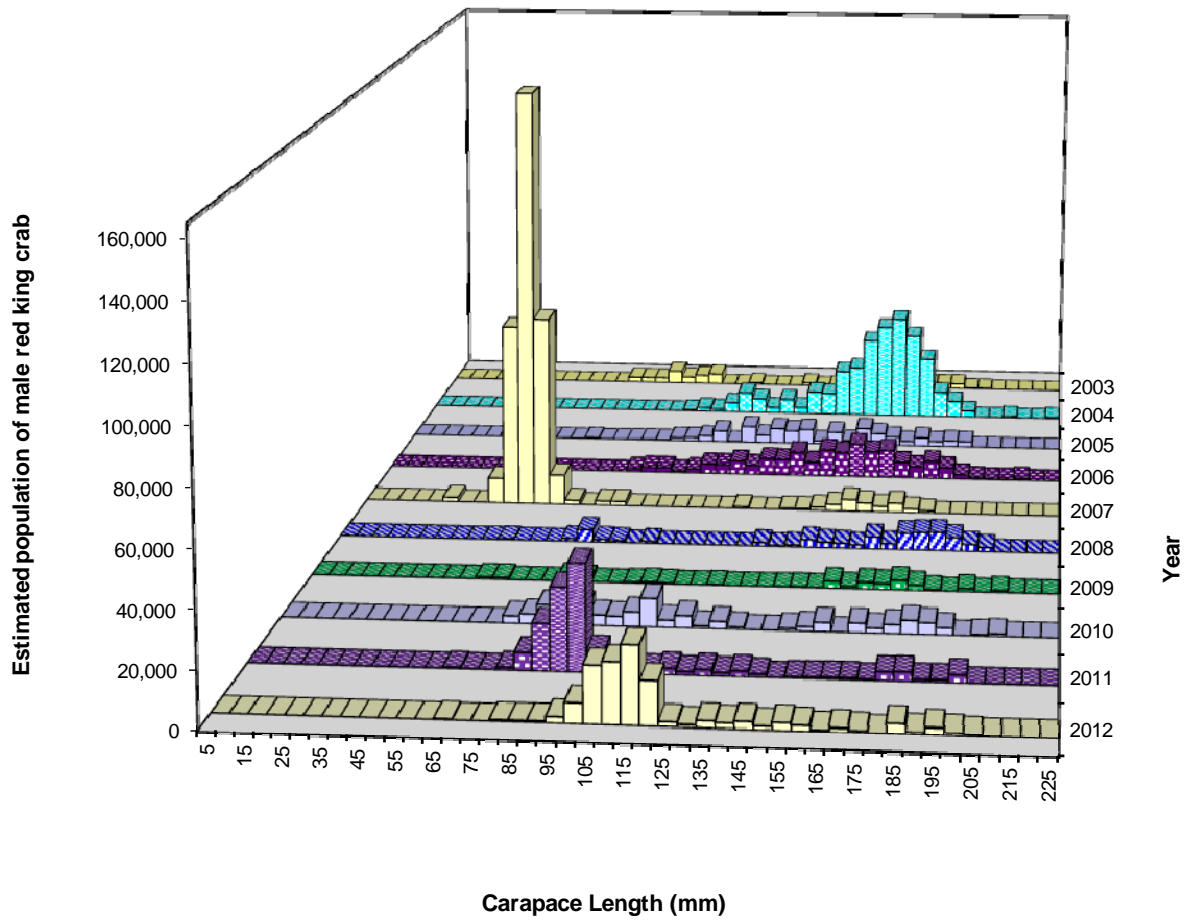


Figure 10.—Red king crab male population estimate by carapace length in the Kodiak Area bottom trawl surveys, 2003–2012.

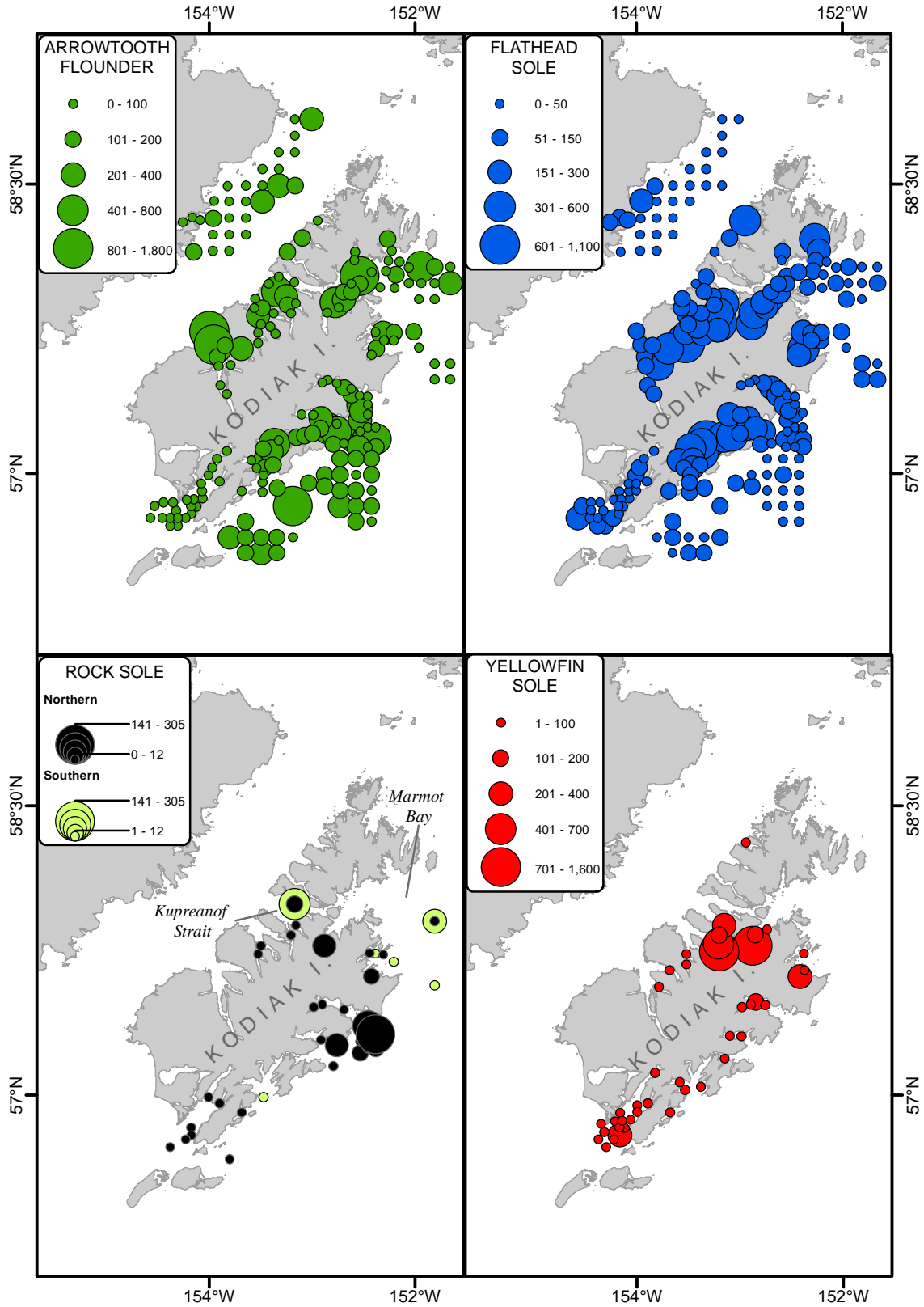


Figure 11.—Arrowtooth flounder, flathead sole, rock sole, and yellowfin sole catch in kilograms per kilometer towed from the 2012 Kodiak bottom trawl survey.

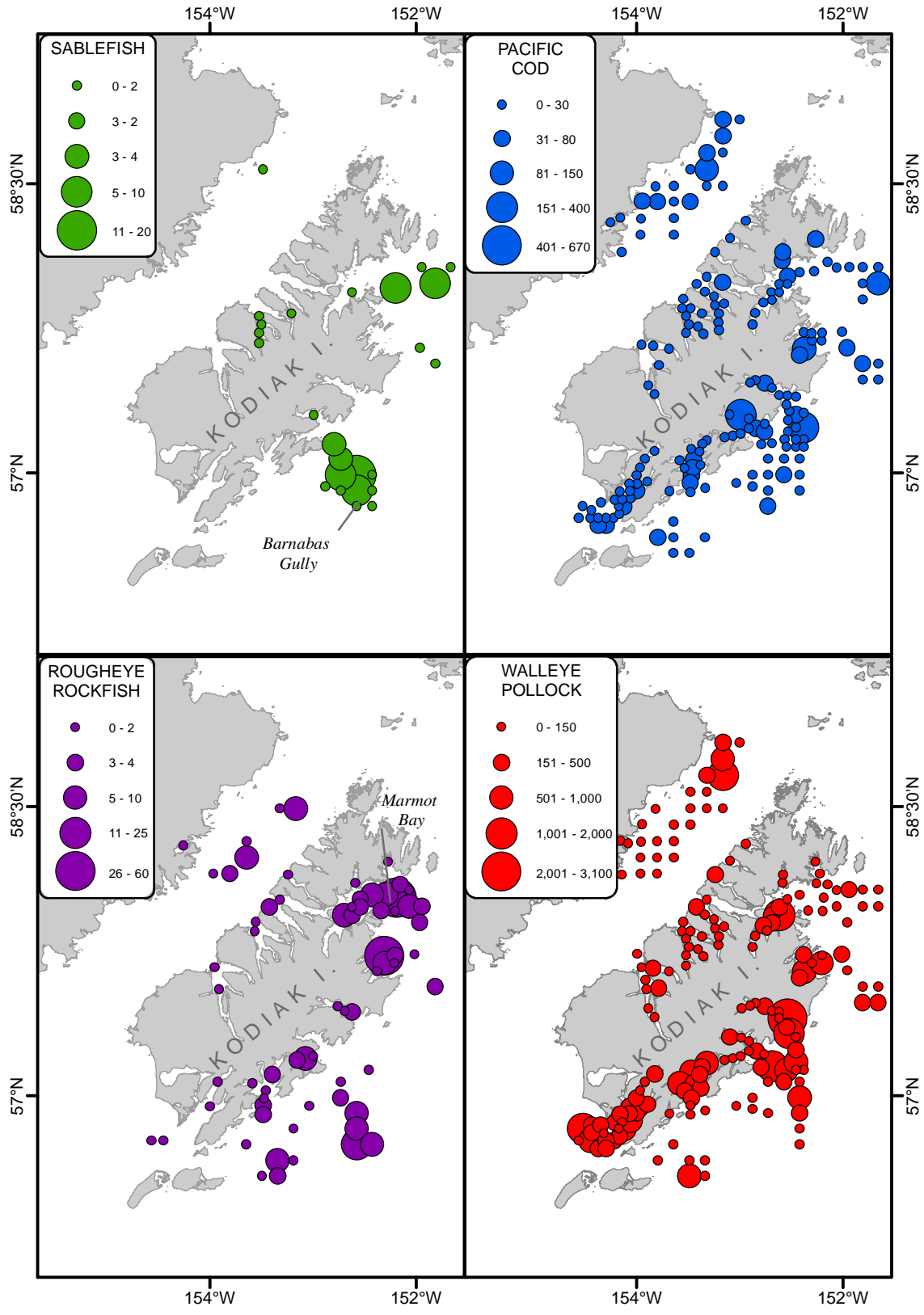


Figure 12.—Sablefish, Pacific cod, rougheye rockfish, and walleye pollock catch in kilograms per kilometer towed from the 2012 Kodiak bottom trawl survey.

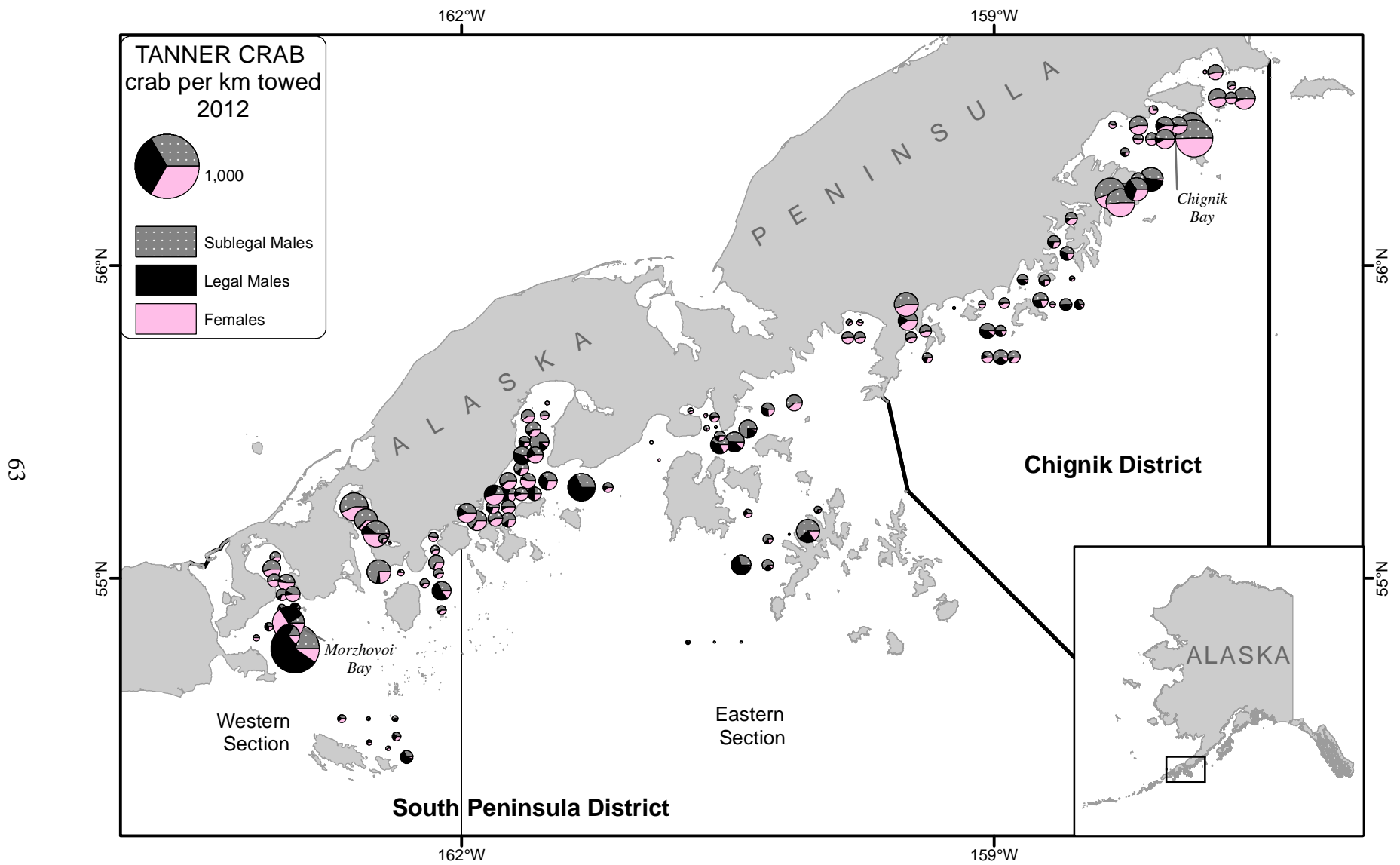


Figure 13.—Tanner crab per kilometer towed in the 2012 South Peninsula and Chignik bottom trawl survey.

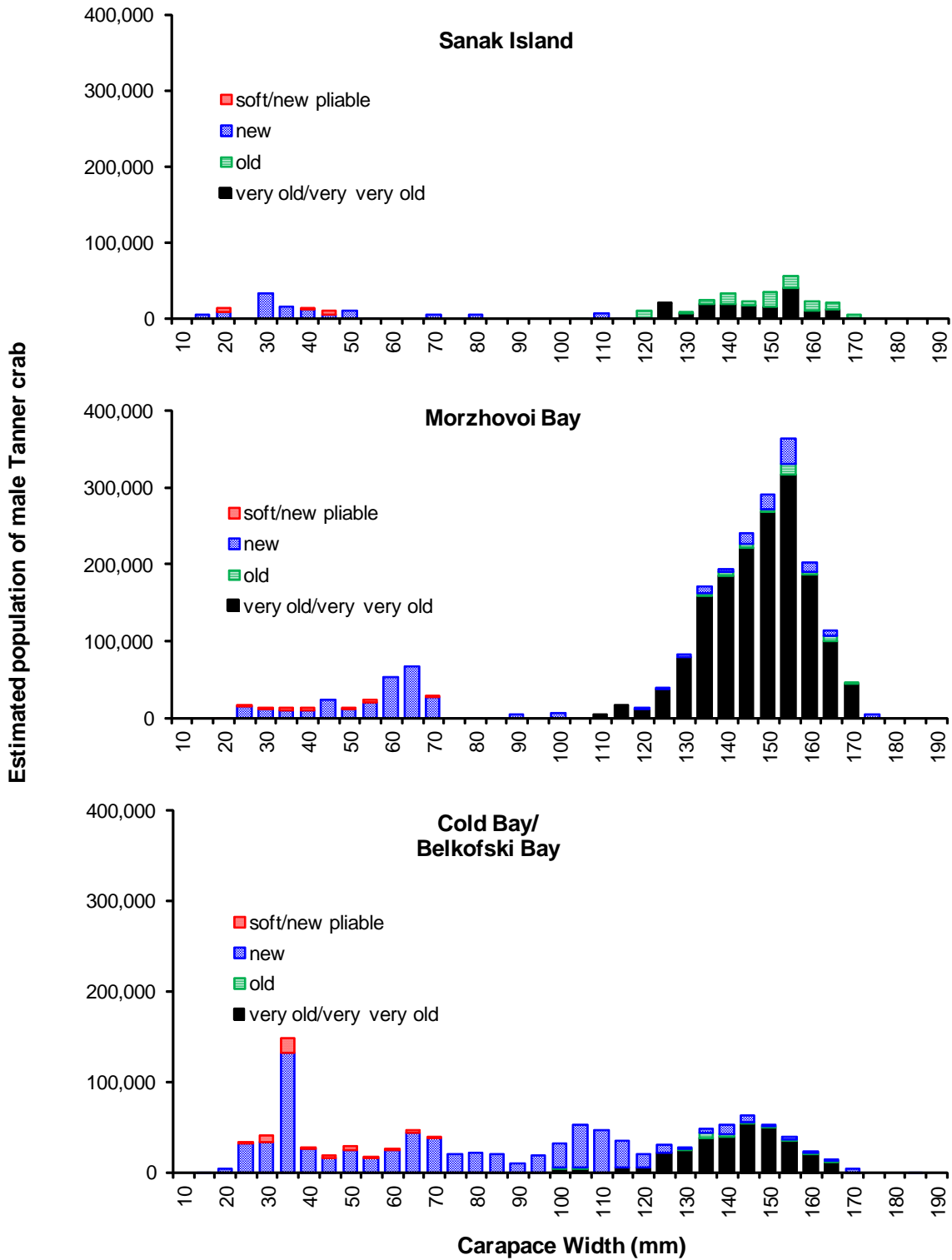


Figure 14.—Tanner crab male population estimate by carapace width and shell condition from Sanak Island, Morzhovoi Bay, and Cold Bay/Belkofski Bay in the Western Section of the 2012 South Peninsula bottom trawl survey.

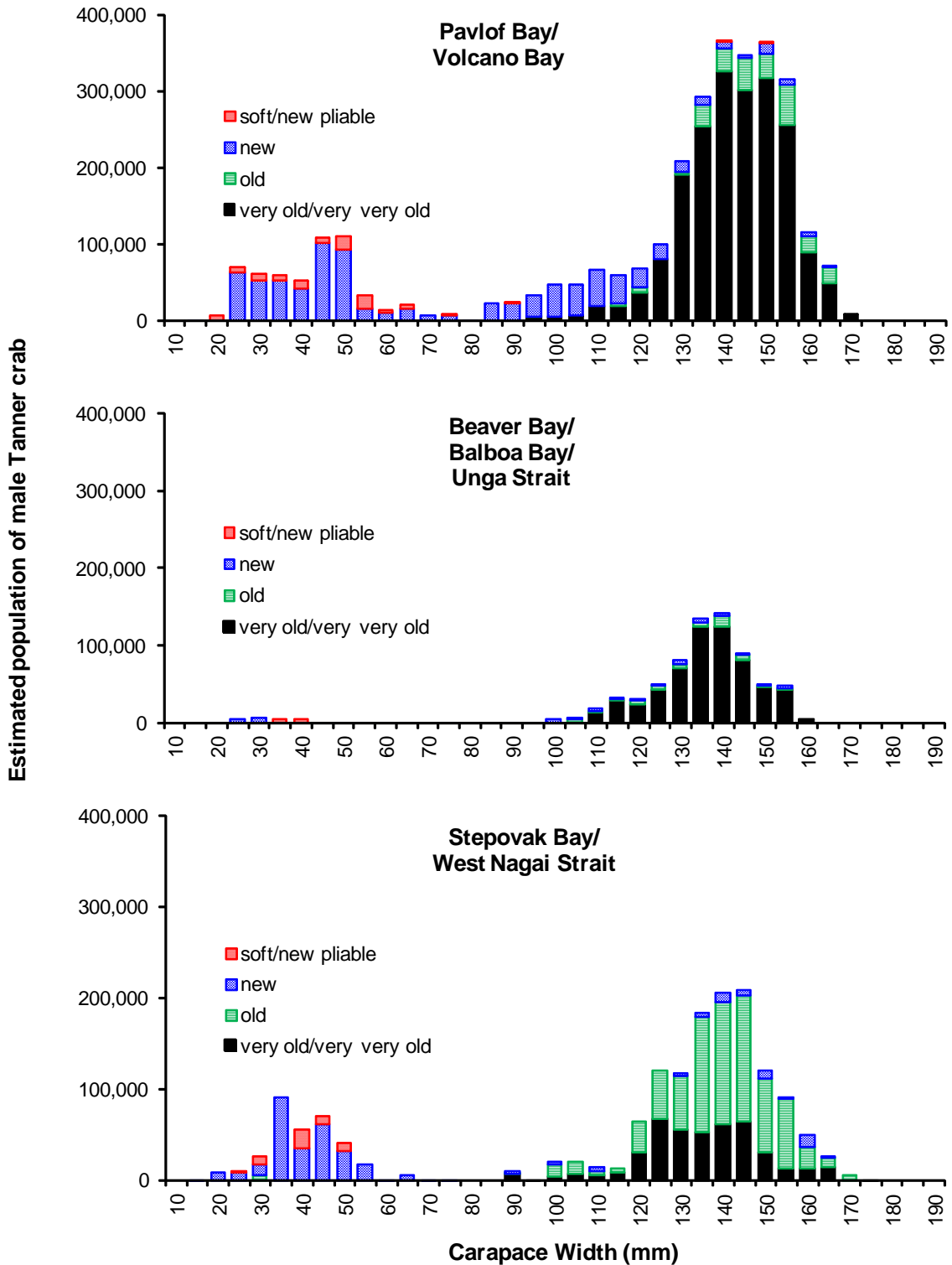


Figure 15.–Tanner crab male population estimate by carapace width and shell condition from Pavlof Bay/Volcano Bay, Beaver Bay/Balboa Bay/Unga Strait, and Stepovak Bay/West Nagai Strait in the Eastern Section of the 2012 South Peninsula trawl survey.

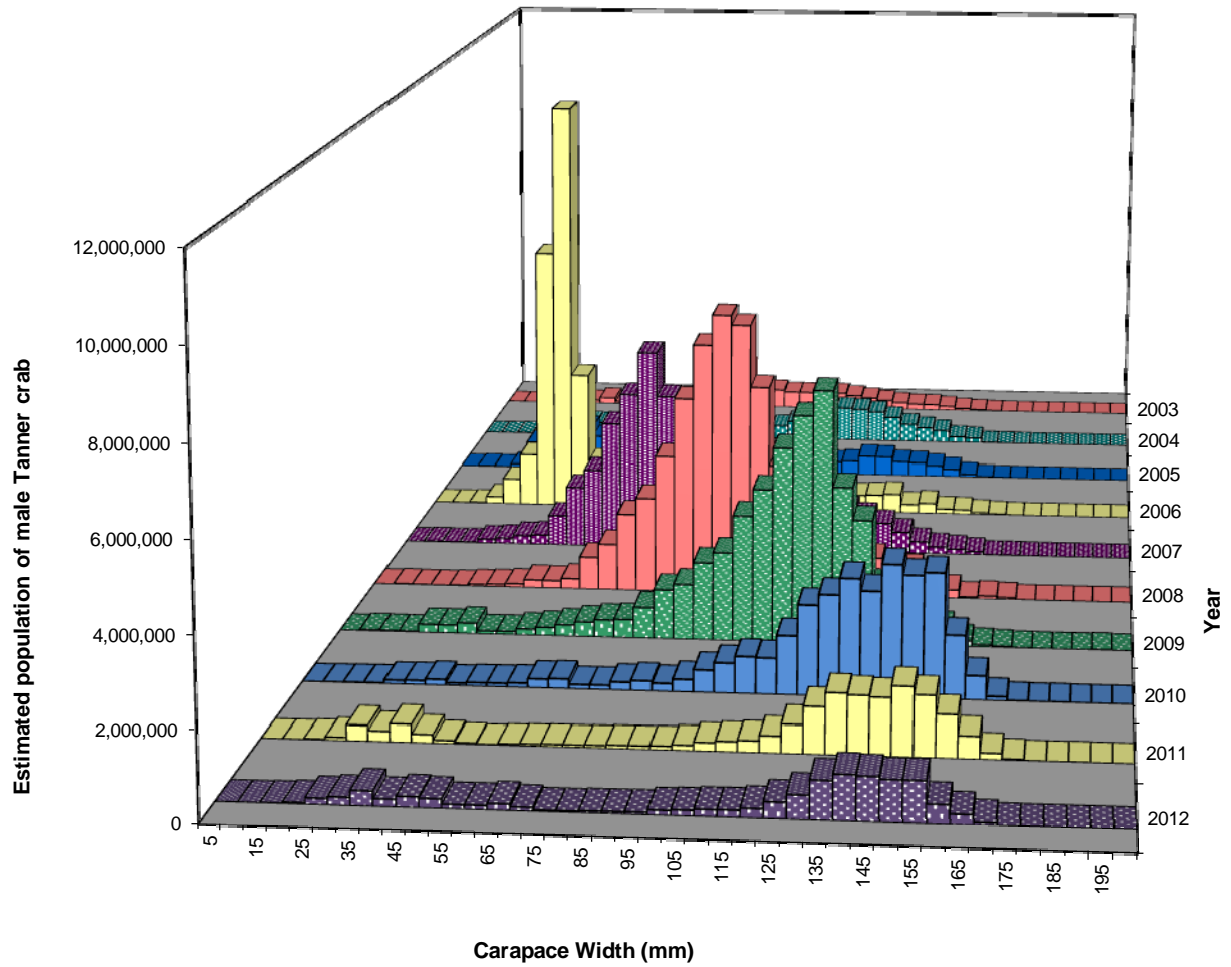


Figure 16.—Tanner crab male population estimate by carapace width in the South Peninsula District bottom trawl surveys, 2003–2012.

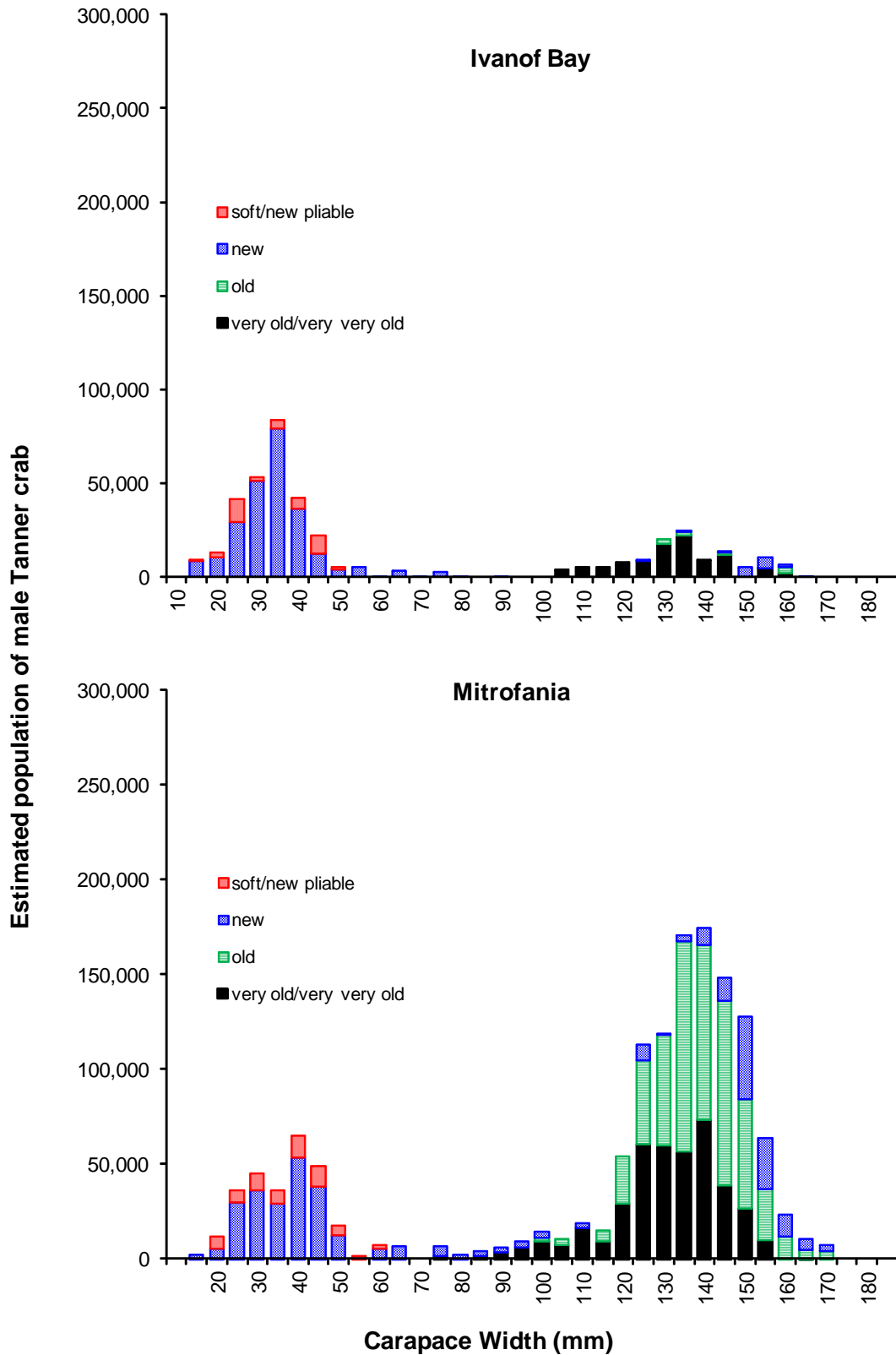


Figure 17.—Tanner crab male population estimate by carapace width and shell condition from Ivanof Bay and Mitrofanía in the 2012 Chignik bottom trawl survey.

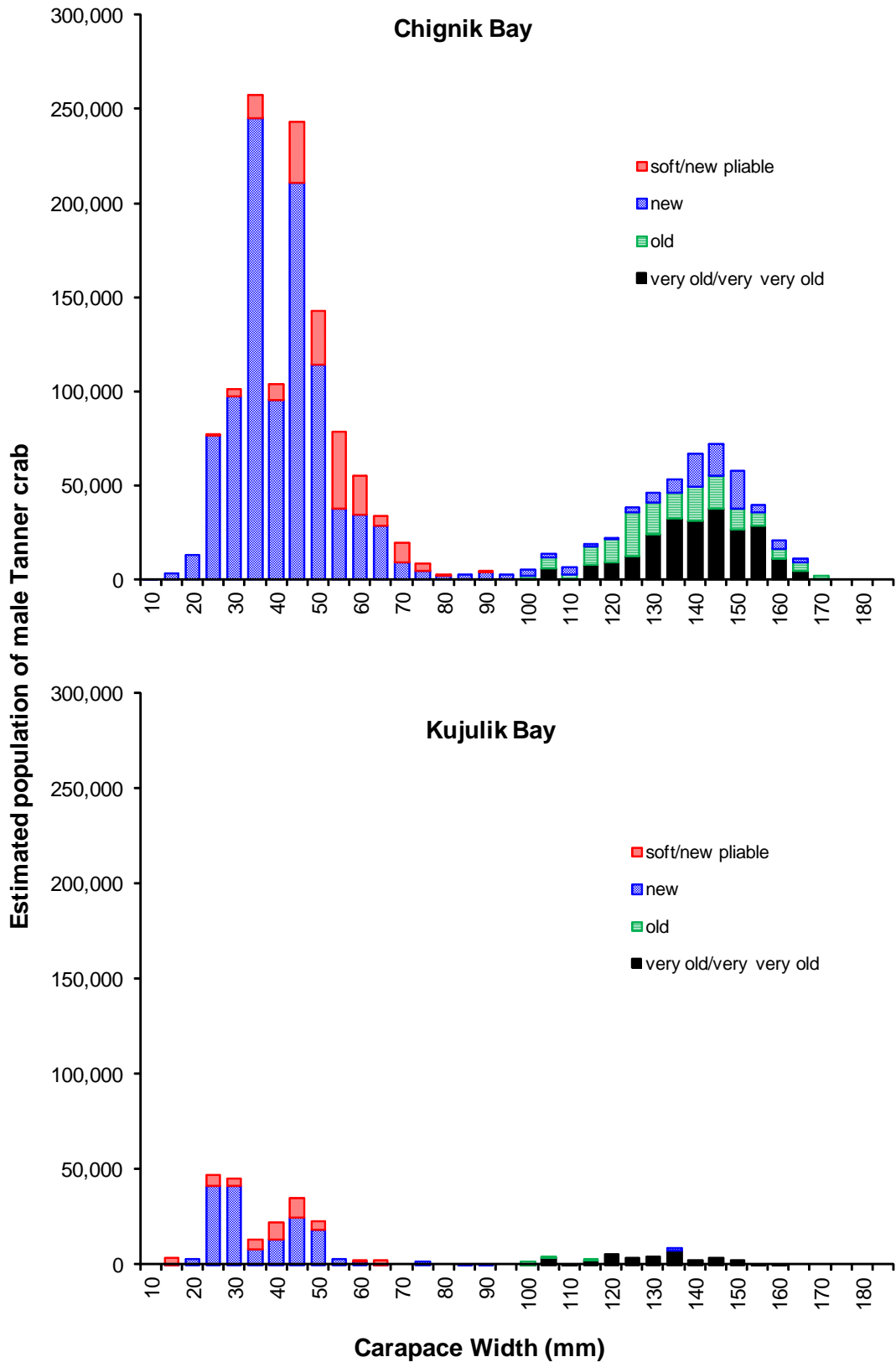


Figure 18.—Tanner crab male population estimate by carapace width and shell condition from Chignik Bay and Kujulik Bay in the 2012 Chignik bottom trawl survey.

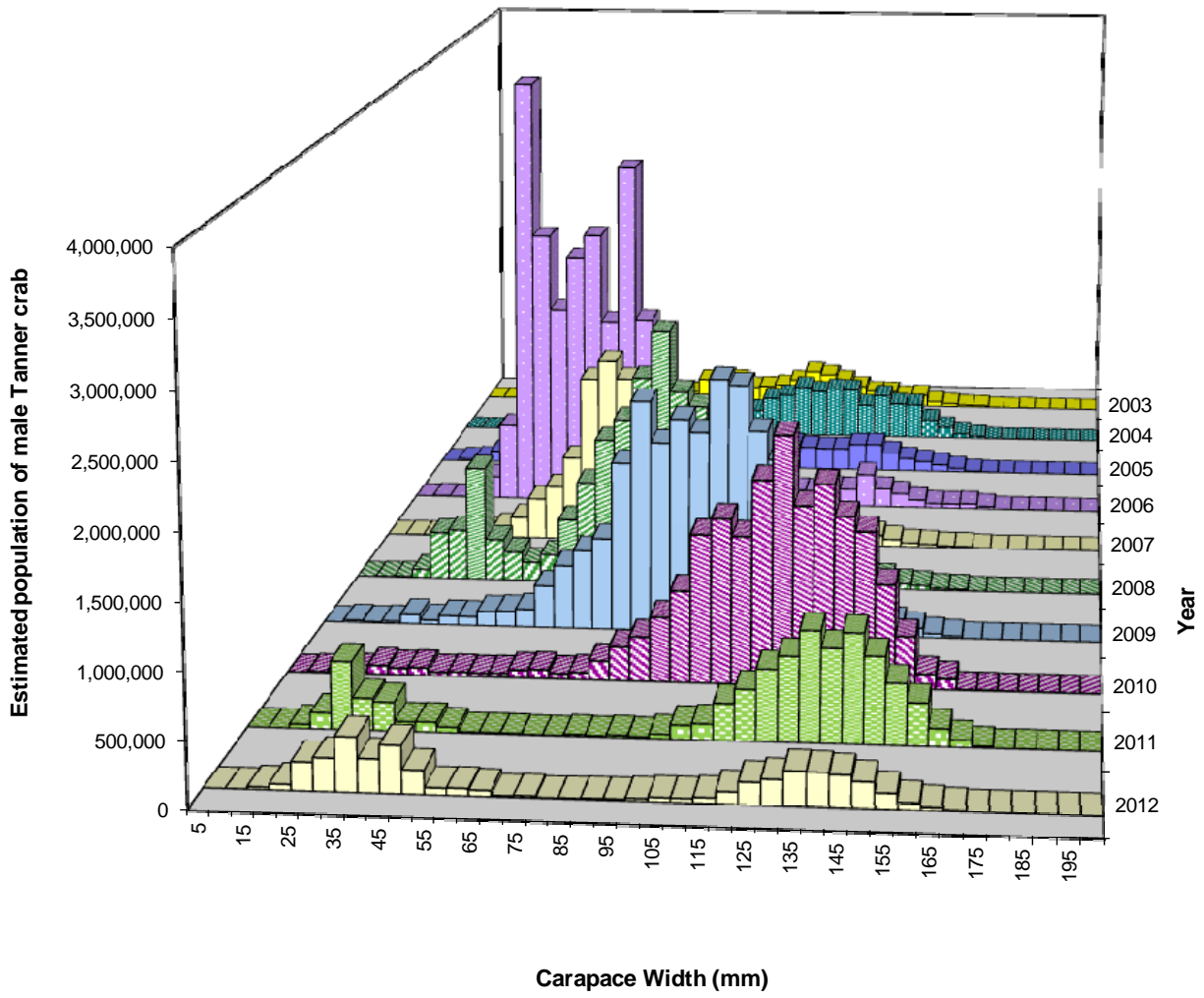


Figure 19.—Tanner crab male population estimate by carapace width in the Chignik District bottom trawl surveys, 2003–2012.

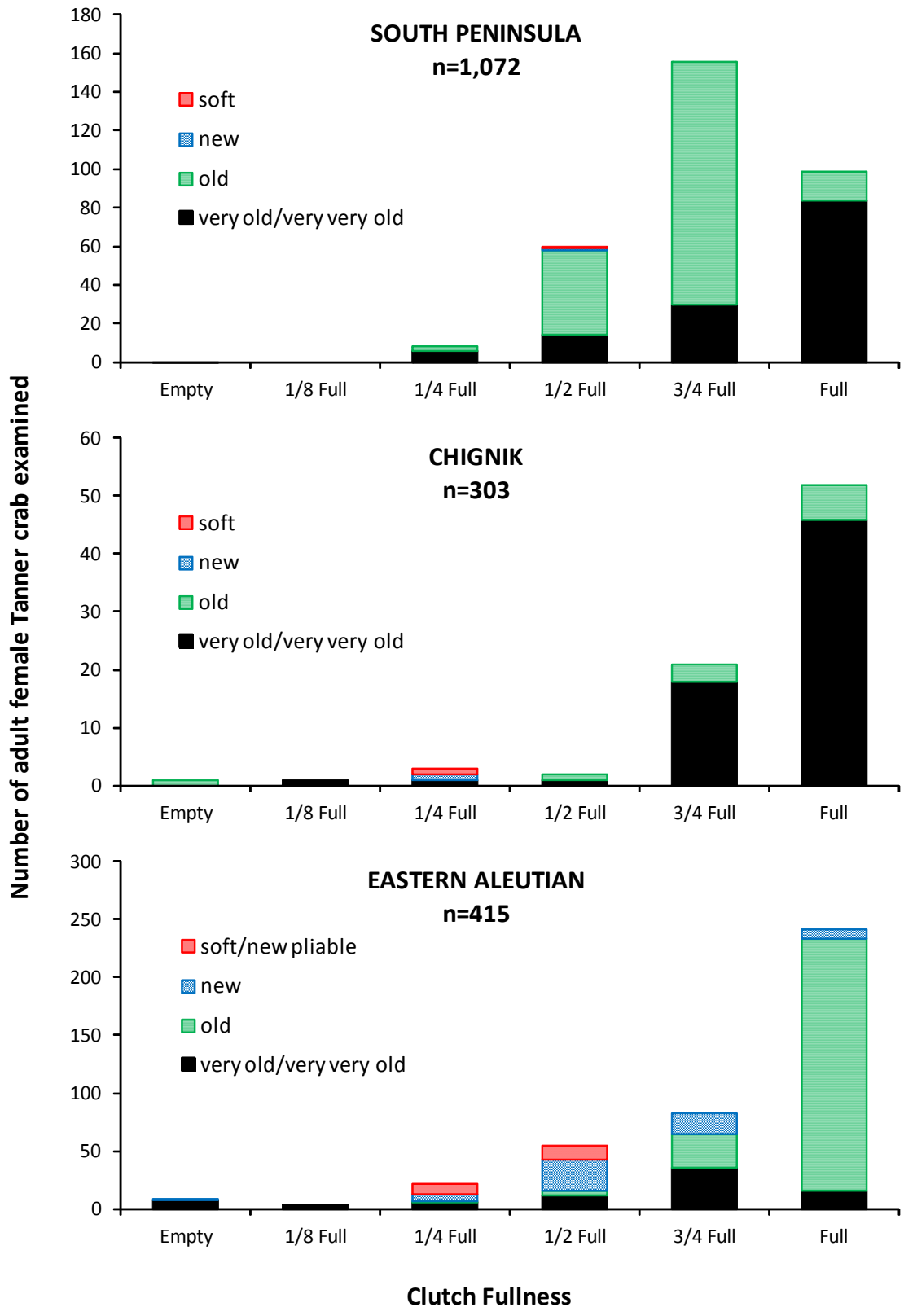


Figure 20.—Tanner crab adult female egg clutch fullness by shell condition in the South Peninsula, Chignik, and Eastern Aleutian bottom trawl survey, 2012.

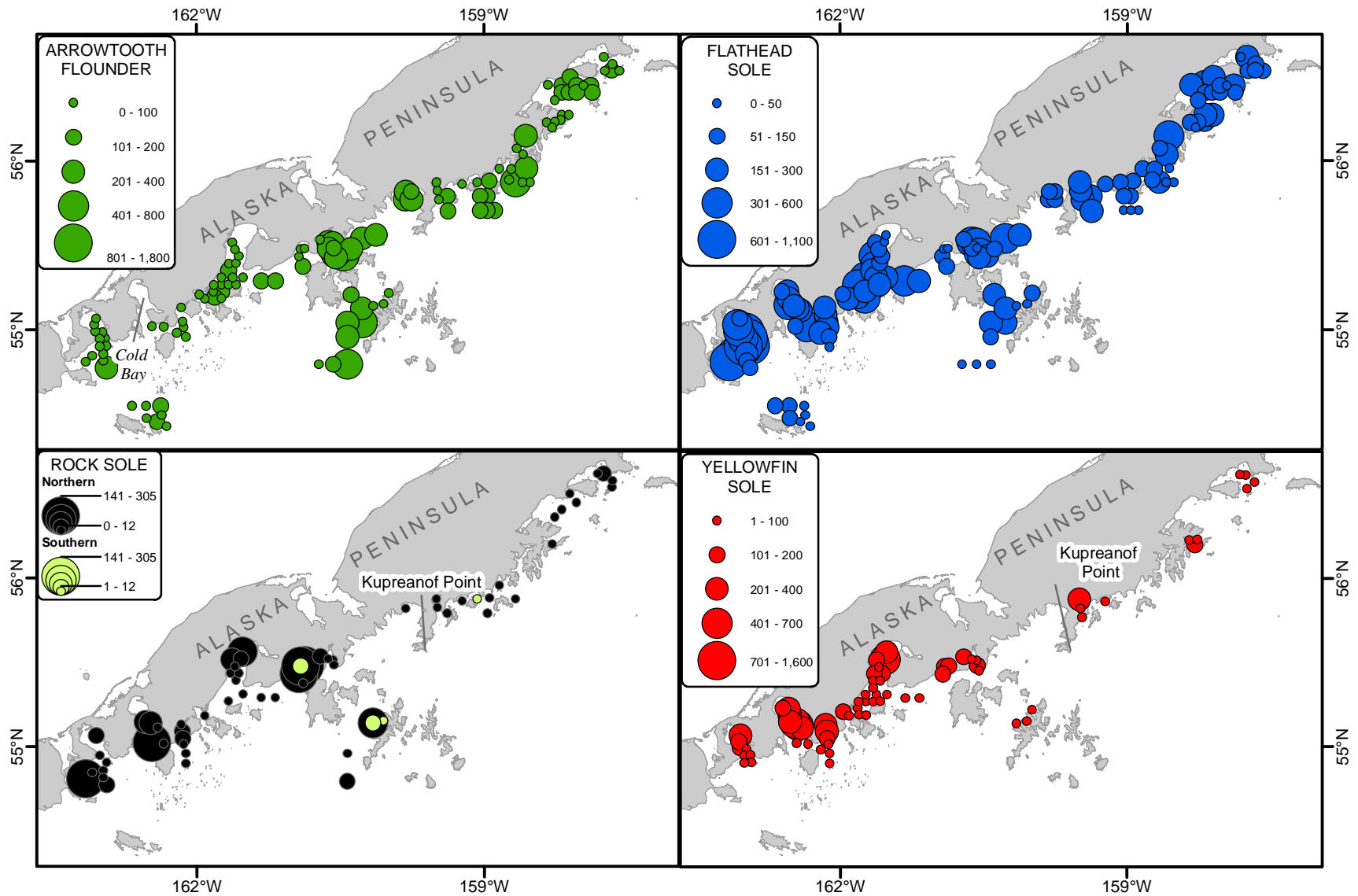


Figure 21.—Arrowtooth flounder, flathead sole, rock sole, and yellowfin sole catch in kilograms per kilometer towed from the 2012 Alaska Peninsula bottom trawl survey.

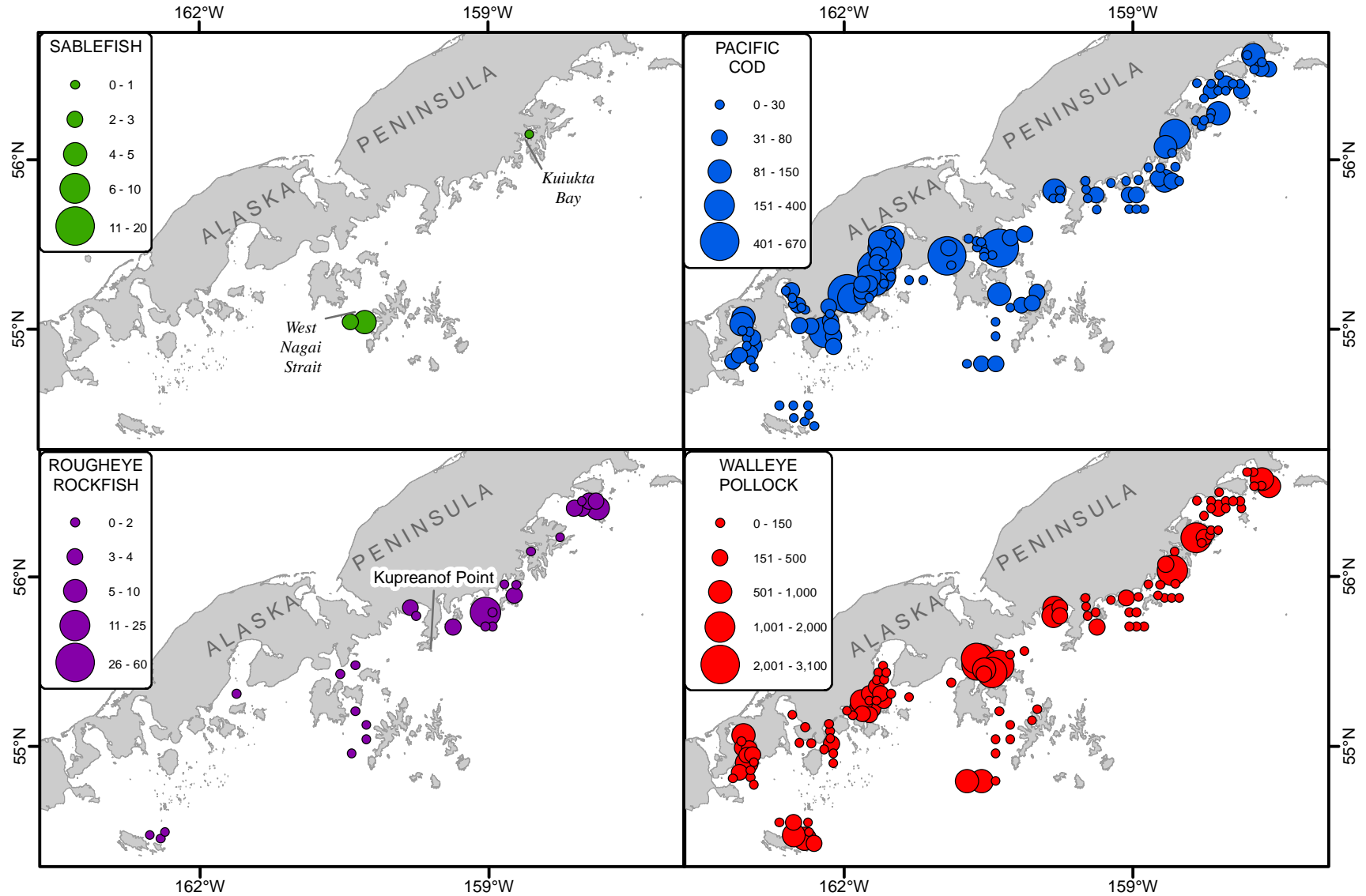


Figure 22.—Sablefish, Pacific cod, rougheye rockfish, and walleye pollock catch in kilograms per kilometer towed from the 2012 Alaska Peninsula bottom trawl survey.

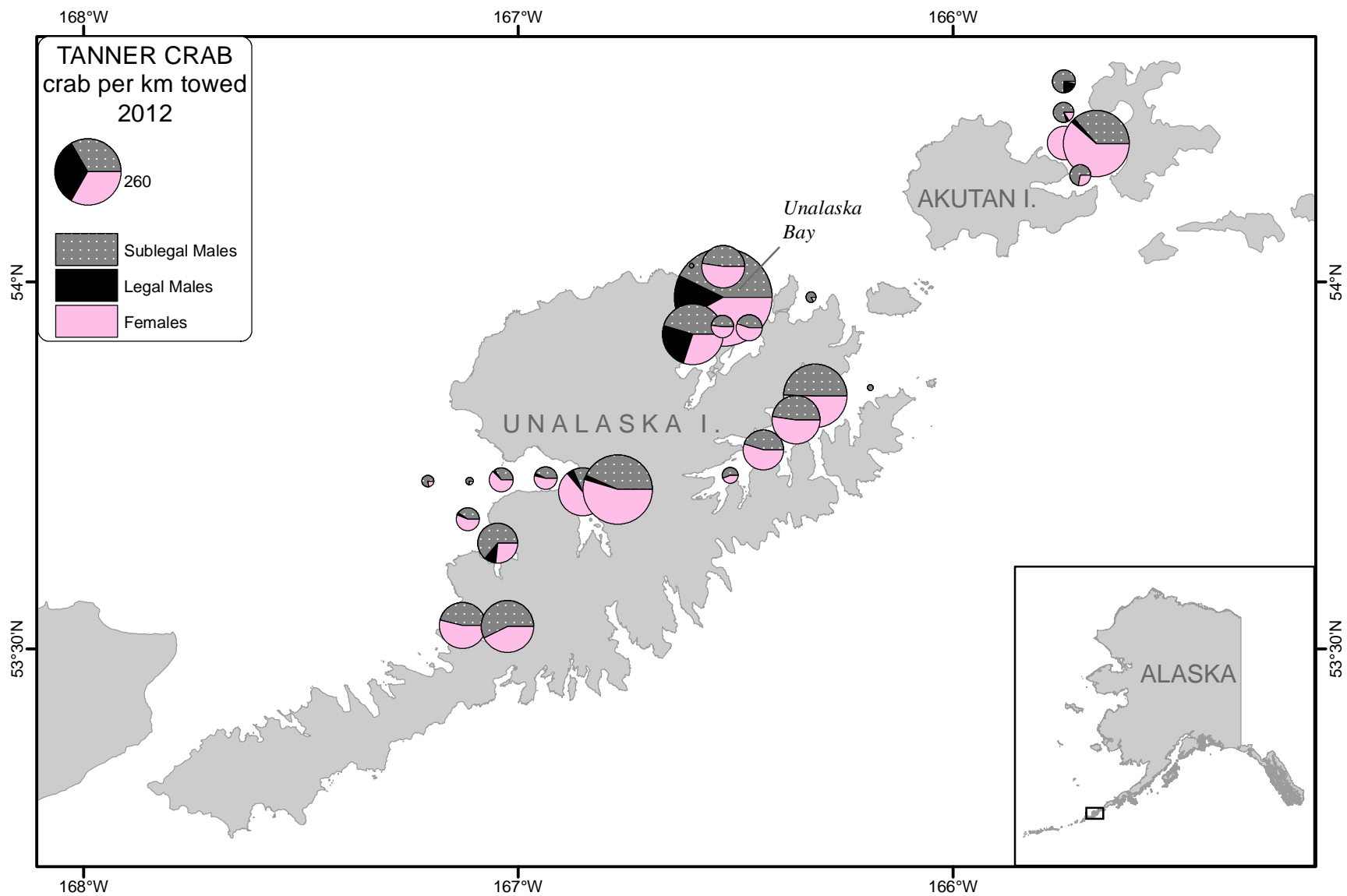


Figure 23.—Tanner crab per kilometer towed in the 2012 Eastern Aleutian bottom trawl survey.

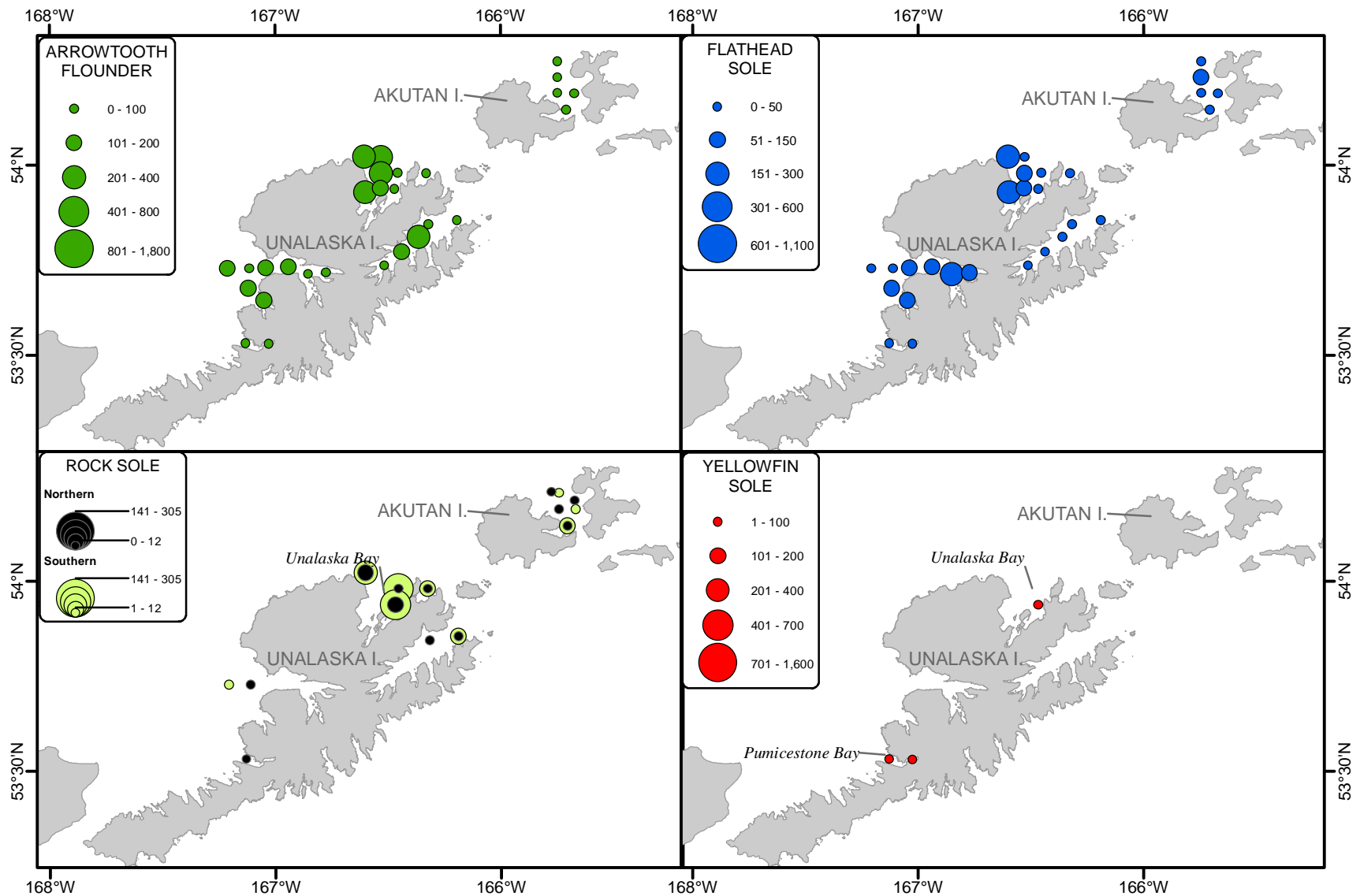


Figure 24.—Arrowtooth flounder, flathead sole, rock sole, and yellowfin sole catch in kilograms per kilometer towed from the 2012 Eastern Aleutian bottom trawl survey.

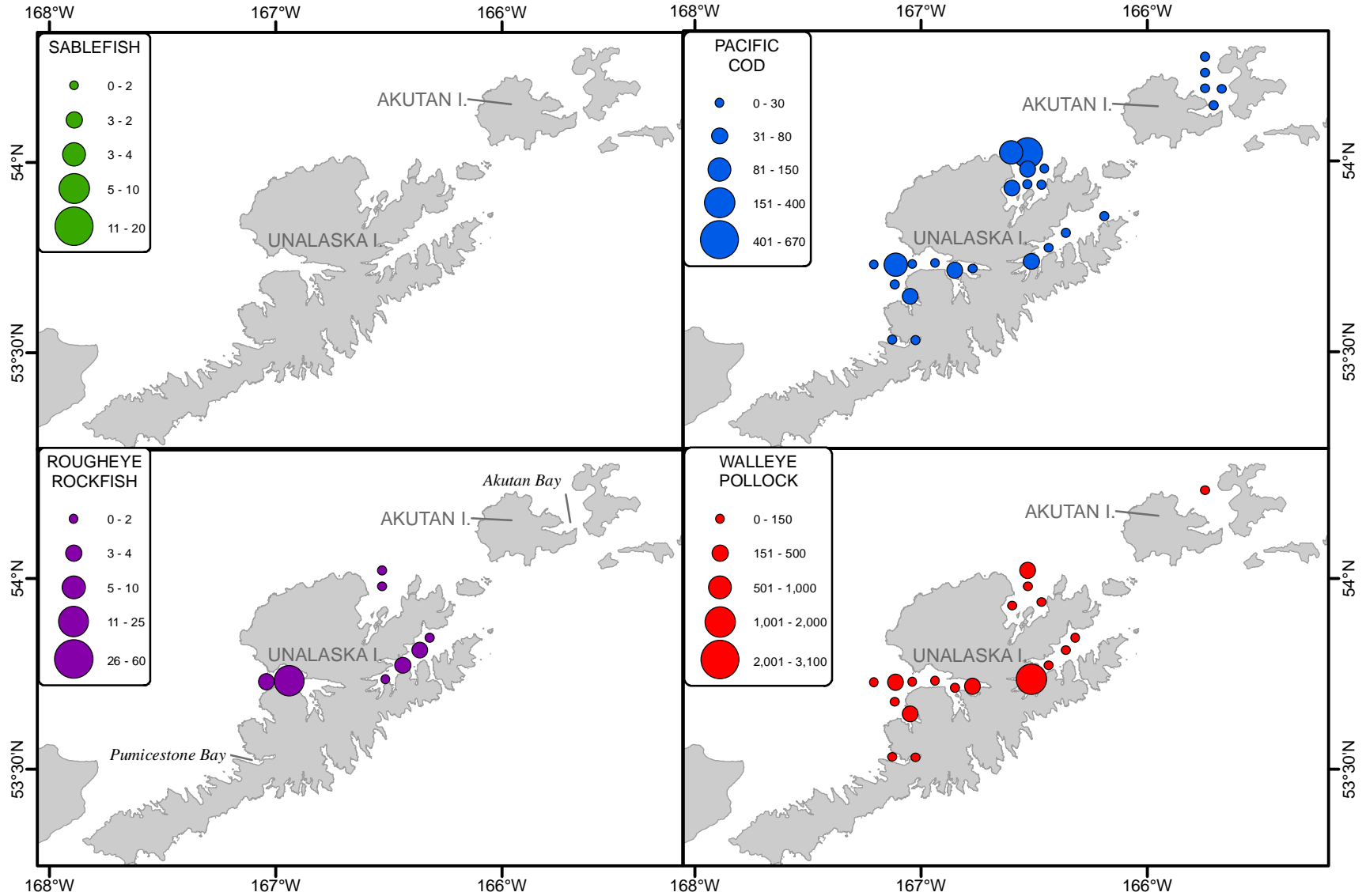


Figure 25.—Sablefish, Pacific cod, rougheye rockfish, and walleye pollock catch in kilograms per kilometer towed from the 2012 Eastern Aleutian bottom trawl survey.

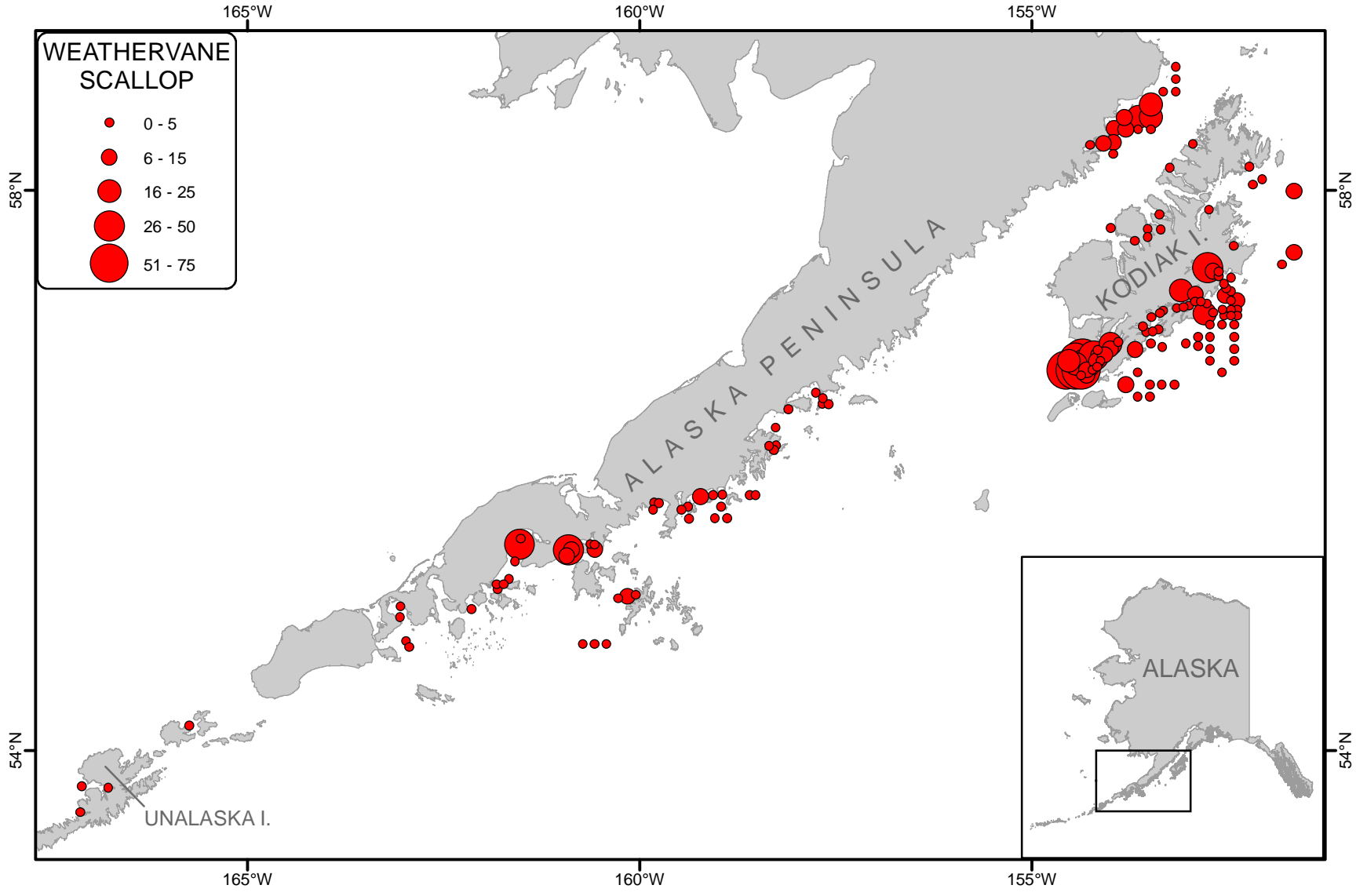


Figure 26.—Weathervane scallop catch in kilograms per kilometer towed from the 2012 bottom trawl survey.

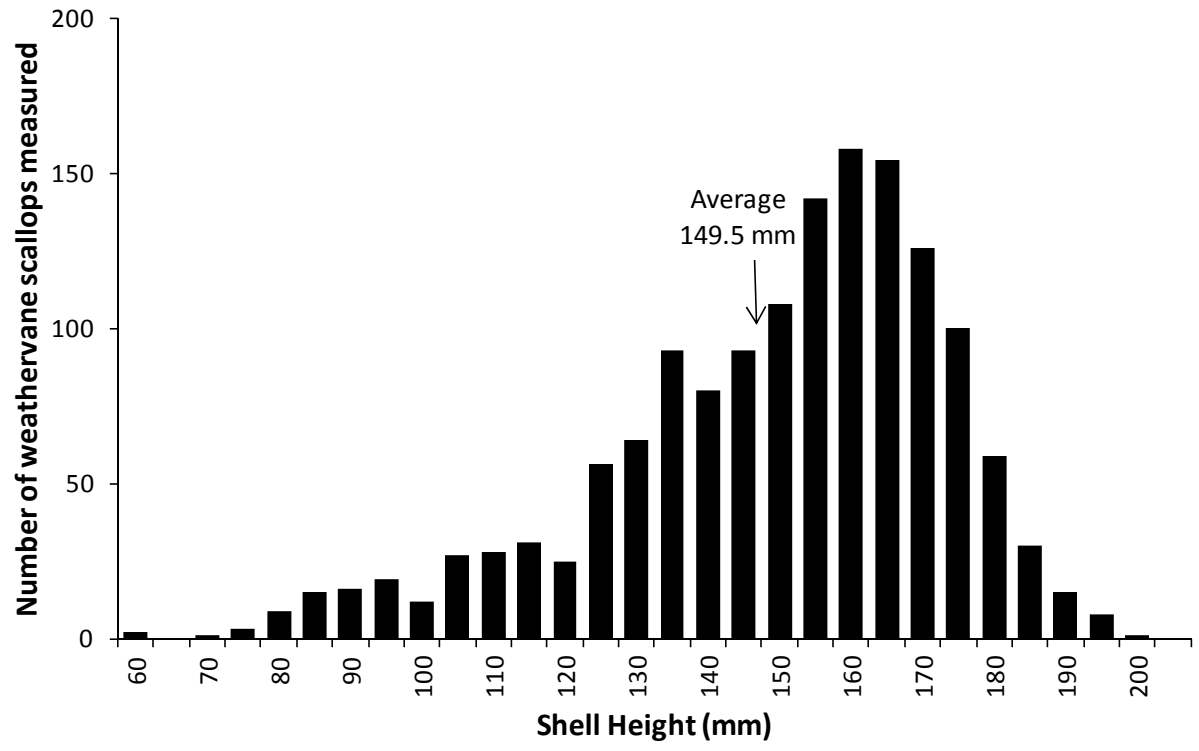


Figure 27.—Weathervane scallop shell height frequency from the 2012 bottom trawl survey.

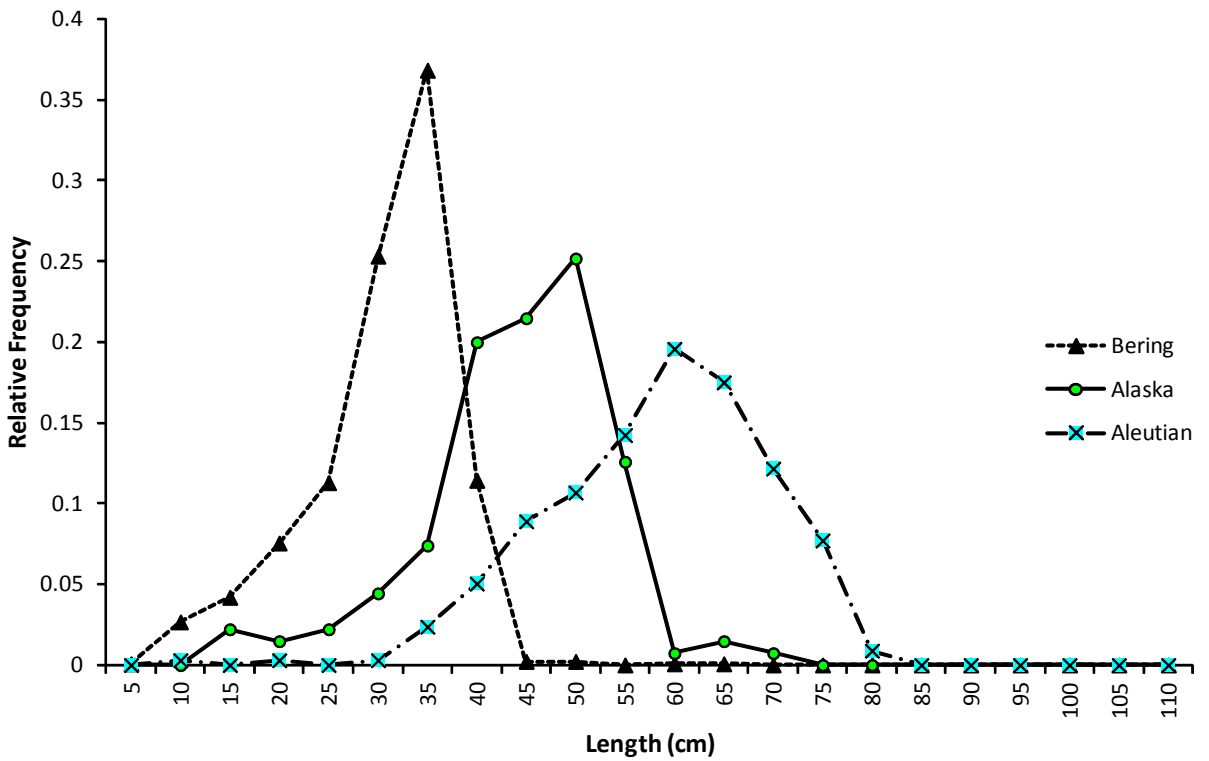
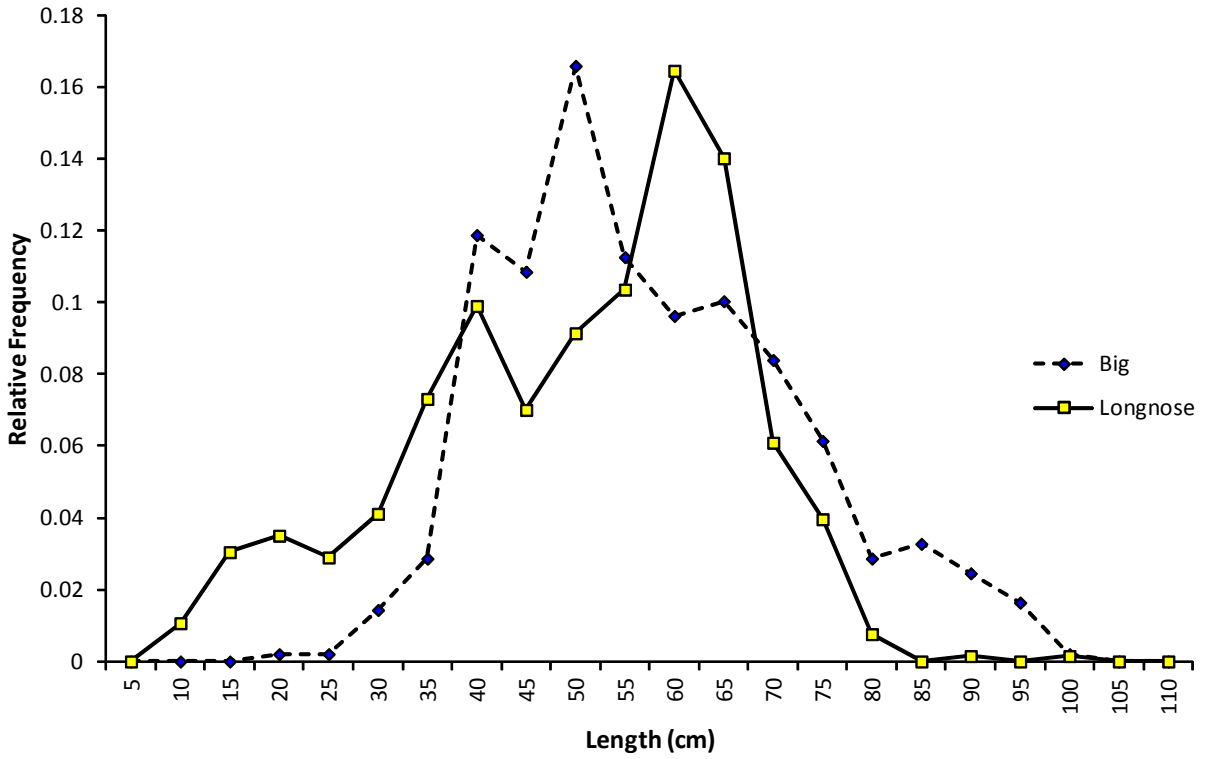


Figure 28.—Big, longnose, Bering, Alaska, and Aleutian skate relative size frequency (snout to wing notch) by species from the 2012 bottom trawl survey.

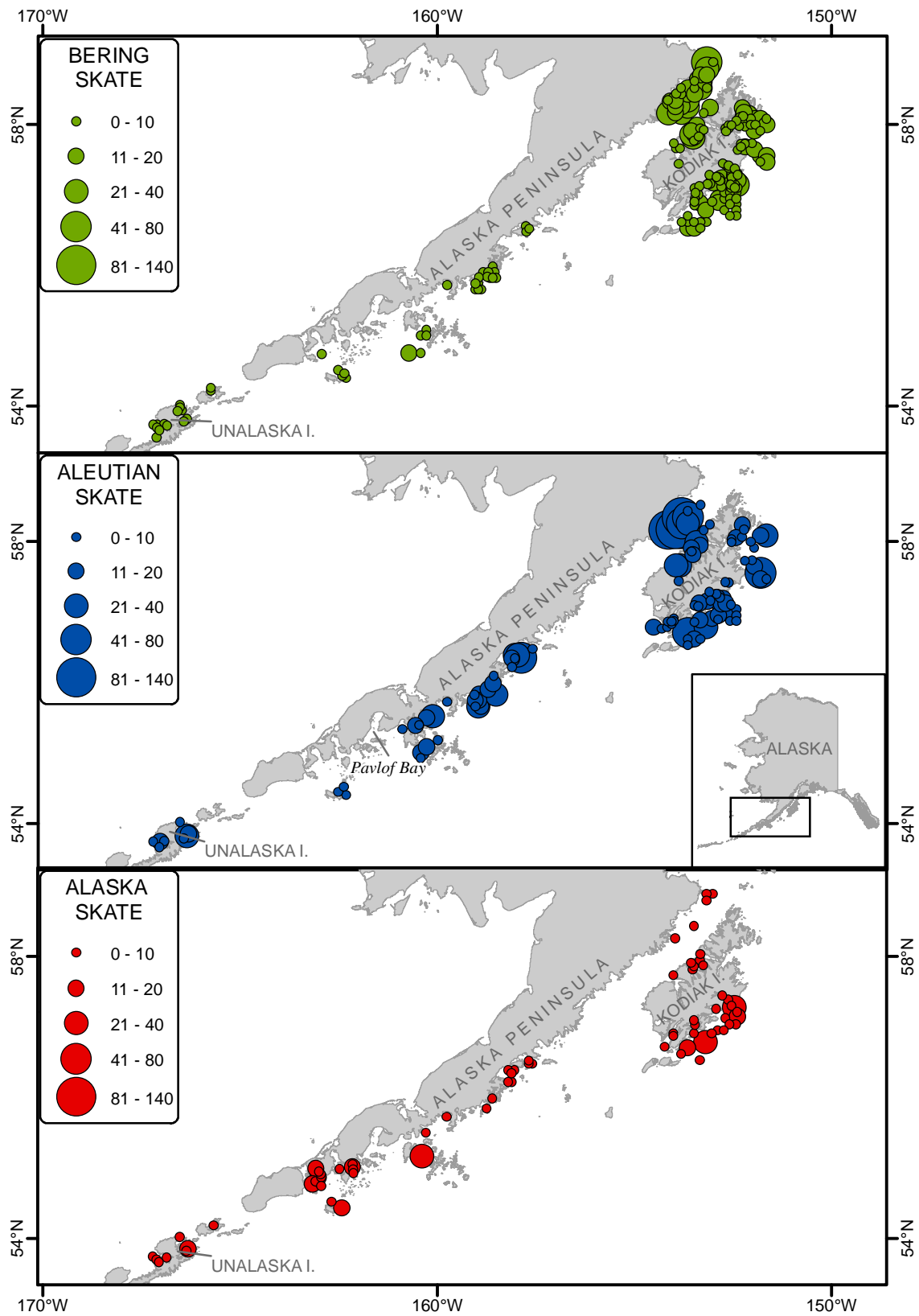


Figure 29.—Bering, Aleutian, and Alaska skate catch in kilograms per kilometer towed from the 2012 bottom trawl survey.

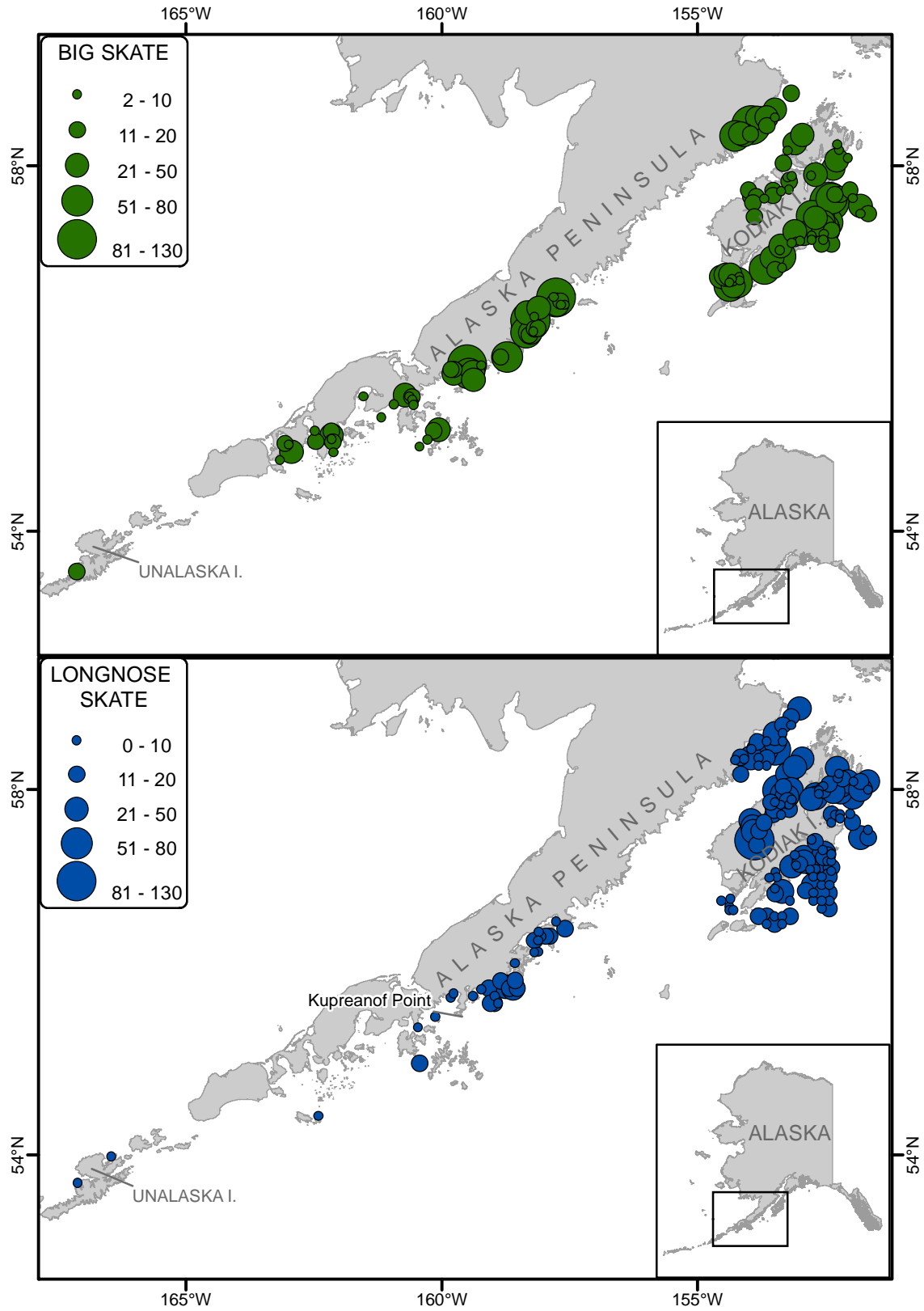


Figure 30.—Big and longnose skate catch in kilograms per kilometer towed from the 2012 bottom trawl survey.

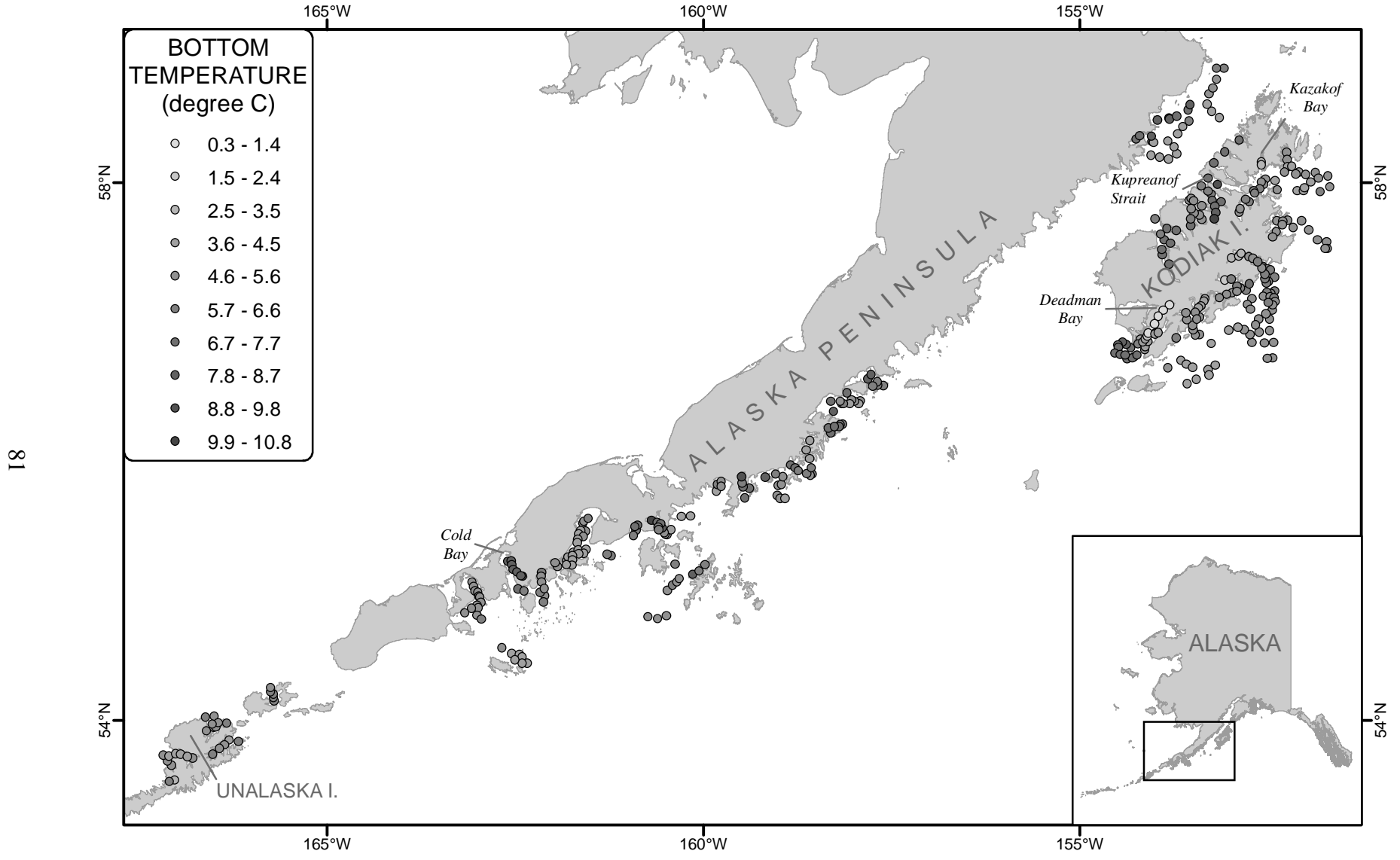


Figure 31.—Near-bottom water temperatures from the 2012 bottom trawl survey.

APPENDIX A. EXPLANATION OF TERMS

Appendix A1.–Explanation of Tanner crab and red king crab terms.

The following definitions were developed for characterizing Tanner crab *Chionoecetes bairdi*.

Soft/New Pliable Shell	1) 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 chelae 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. No scratches, abrasions, or epibionts are present.
New Shell	Carapace and chelae 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 females, subtle grasping marks imprints may be present on the first two pairs of legs.
Old Shell	Colors are dull. Iridescence on the chelae may be visible. Ventral surface typically appears yellow to brown. Spines, chela tips, chela teeth, and dactyl tips may show wear. Abdomen, coxae, and legs have few to numerous scratches and abrasions, which may be slightly darker than the shell. Slight fouling may be present, including but not limited to: leech egg cases, barnacles, bryozoans, tubeworm casings, and anemones. On females, grasping marks are often present and discolored on the first two pairs of legs.
Very Old/Very Very Old Shell	1) Colors are dull and often dark on the dorsal surface. Ventral surface typically appears yellow to brown with darker areas. Spines, chela tips, chela teeth, and dactyl tips are 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 females, multiple grasping marks are often present and discolored on the first two 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.
Carapace Width (CW)	The straight-line distance across the carapace at a right angle to a line midway between the eyes to the posterior margin. For biological purposes this measure does not include spines. However, legal size is measured outside the spines.
Chela Height	Chela height is the greatest height on the right chela, excluding spines.
Prerecruit Males	Male Tanner crab that are below the minimum legal size limit.

-continued-

Mature Males	Male Tanner crab ≥ 115 mm CW.
Molting Mature Males	100% of new shell and 15% of old shell crab male Tanner crab that are greater than size at maturity (≥ 115 mm CW).
Recruit Legals	Soft/new pliable and new shell male Tanner crab 140-164 mm CW outside the spines.
Postrecruit Legals	Old shell and very old/very very old shell male Tanner crab 140-164 mm outside the spines and all males ≥ 165 mm CW.
Total Legals	All male Tanner crab > 139 mm CW outside the spines.
Females	Identified as adult or immature by visual observation of size of abdominal flap. Abdominal flap in mature females covers most of the ventral surface.
Primiparous Female	A new shell ovigerous female.

The following definitions were developed for characterizing red king crab *Paralithodes camtschaticus*.

Carapace Length (CL)	The straight line distance across the carapace from the posterior margin of the right eye orbit to the medial-posterior margin of the carapace.
Legal Size	In the Kodiak registration area, king crab legal size is seven inches (178 mm) or greater CW. In the Alaska Peninsula and Dutch Harbor Registration areas, legal size is 6.5 inches (165 mm CW). Measurement is made including the spines, as the straight line distance across the carapace at a right angle to a line midway between the eyes to the midpoint of the posterior portion of the carapace.
Juvenile Females	Nonovigerous female king crab with CL ≤ 115 mm in the Kodiak Registration Area, ≤ 99 mm in the Alaska Peninsula and Dutch Harbor Registration areas, and that have not had a previous egg clutch.
Adult, Mature Females	Ovigerous and nonovigerous female king crab with CL > 115 mm in the Kodiak Registration Area, > 99 mm in the Alaska Peninsula and Dutch Harbor Registration areas.
Adult, Mature Males	Male king crab with CL > 130 mm Kodiak Registration Area, > 115 mm in the Alaska Peninsula and Dutch Harbor Registration areas.
New Shell Males	King crab that molted during the last molting season (generally January through April).
Old Shell Males	(Skip molts) King crab that failed to molt during last molting season.
Very Old Shell Males	(Double Skip molts) King crab that failed to molt during the last two or more molting seasons.

-continued-

Prerecruit IV	King crab estimated to be 4 or more years from legal size and < 95 mm CL in the Kodiak Registration area, < 79 mm CL in the Alaska Peninsula and Dutch Harbor Registration areas.
Prerecruit III	King crab estimated to be 3 years from legal size and 95-112 mm CL in the Kodiak Registration area, and 79-95 mm CL in the Alaska Peninsula and Dutch Harbor Registration areas.
Prerecruit II	King crab estimated to be 2 years from legal size and 113-130 mm CL in the Kodiak Registration area, and 96-115 mm CL in the Alaska Peninsula and Dutch Harbor Registration areas.
Prerecruit I	King crab estimated to be 1 year from legal size, which includes all sublegals > 130 mm CL in the Kodiak Registration area, and > 115 mm CL in the Alaska Peninsula.
Recruits	Soft and new shell male king crab which are legal size and are in their first year of availability to the fishery which includes crab ≤ 164 mm CL in the Kodiak Registration area, and ≤ 152 mm CL in the Alaska Peninsula and Dutch Harbor Registration areas.
Postrecruit	Male king crab which are legal size and old shell or very old shell or soft and new shell male king crab which are of greater length than recruit crab.

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

Appendix B1.--2012 bottom trawl survey fishing log.

Haul	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Location	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD
Month/Day/Year	6/14/2012	6/14/2012	6/14/2012	6/14/2012	6/15/2012	6/15/2012	6/15/2012	6/15/2012	6/19/2012	6/19/2012	6/19/2012	6/19/2012	6/19/2012	6/20/2012
Station	CHJ	CHL	369X	CHG	CHK	CHB	CHA	CHF	MOGX	313	314	285	257	255X
Longitude Start (°W)	152.3787	152.2418	152.0533	152.1612	152.3015	152.3898	152.4403	152.3128	152.1108	152.029	151.8055	151.6788	151.701	152.087
Latitude Start (°N)	57.7278	57.7335	57.7297	57.6802	57.7243	57.6507	57.6115	57.7003	57.9395	57.9415	57.9347	57.9675	58.0448	58.0742
Heading, Degrees	134	70	11	21	275	49	31	45	79	114	114	20	355	168
Average Depth (m)	104.2	197.5	115.2	122.5	155.4	100.5	40.23	146.2	155.4	201.1	60.34	102.4	157.2	151.7
Distance Fished (km)	1.85	1.85	2.03	1.85	1.48	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	5.19	5.32	5.17	5.18	5.32	4.95	5.57	4.81	4.16	3.9	5.63	5.27	4.88	4.49
Haul	15	17	19	20	21	23	24	25	26	27	28	29	30	31
Location	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD
Month/Day/Year	6/20/2012	6/20/2012	6/20/2012	6/20/2012	6/20/2012	6/21/2012	6/21/2012	6/21/2012	6/21/2012	6/21/2012	6/21/2012	6/21/2012	6/21/2012	6/22/2012
Station	255	256	284	283	283X	MOX	MOXX	MOPX	MOT	MOLX	MOQ	MOEX	MONX	KZS
Longitude Start (°W)	151.9987	151.8703	151.8308	151.9327	152.0163	152.2497	152.2492	152.2368	152.2777	152.1822	152.1335	152.3752	152.4033	152.5828
Latitude Start (°N)	58.0568	58.0692	58.03	58.0017	57.9627	58.2118	58.1602	58.1102	58.0723	58.113	58.0592	57.9477	58.0125	58.1442
Heading, Degrees	78	107	232	233	216	180	165	207	54	167	149	72	98	192
Average Depth (m)	128	137.1	155.4	173.7	190.1	142.6	153.6	168.2	166.4	199.3	155.4	118.8	219.4	104.2
Distance Fished (km)	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.66	1.85	1.29
Bottom Temp. (°C)	4.9	5.08	4.63	4.04	3.97	4.64	4.58	4.42	4.54	4.27	4.61	5.53	4.39	2.88
Haul	32	34	35	36	37	38	39	40	41	42	43	44	45	46
Location	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD
Month/Day/Year	6/22/2012	6/22/2012	6/22/2012	6/22/2012	6/22/2012	6/22/2012	6/22/2012	6/22/2012	6/23/2012	6/23/2012	6/23/2012	6/28/2012	6/28/2012	6/28/2012
Station	KZR	KZO	KZK	KZJ	KZG	KZF	KZE	KZC	KZA	KZB	KZD	395	420	421
Longitude Start (°W)	152.587	152.5317	152.5537	152.5852	152.6125	152.6887	152.6782	152.7473	152.8775	152.8662	152.795	151.9573	151.843	151.7217
Latitude Start (°N)	58.1242	58.022	57.9865	58.0017	57.953	57.9403	57.923	57.8623	57.7918	57.8137	57.8788	57.6625	57.5935	57.578
Heading, Degrees	188	207	48	168	258	212	195	46	21	20	47	289	168	190
Average Depth (m)	120.6	192	188.3	153.6	133.4	135.3	104.2	67.66	45.71	54.86	82.29	206.6	155.4	133.4
Distance Fished (km)	0.92	1.85	1.85	1.66	1.48	1.11	0.92	1.11	0.92	0.92	1.48	2.03	1.85	1.85
Bottom Temp. (°C)	2.74	4.54	5.13	5.15	5.72	6.25	6.03	6.24	4.62	4.67	6.22	5.46	5.45	5.52
Haul	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Location	N.E.KOD	N.E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD
Month/Day/Year	6/28/2012	6/28/2012	6/29/2012	6/29/2012	6/29/2012	6/29/2012	6/29/2012	6/29/2012	6/29/2012	6/29/2012	6/29/2012	6/30/2012	6/30/2012	6/30/2012
Station	444	443	UGF	UGG	UGJ	486B	486A	510B	UGM	UGI	UGE	UGAC	UGAB	UGAA
Longitude Start (°W)	151.7068	151.7375	152.5682	152.5117	152.461	152.4122	152.4947	152.5232	152.5407	152.5428	152.5782	152.9843	152.8863	152.8535
Latitude Start (°N)	57.53	57.5302	57.4023	57.3837	57.3772	57.325	57.2943	57.285	57.3168	57.3467	57.3927	57.4632	57.4765	57.4963
Heading, Degrees	140	300	183	81	183	176	9	340	9	353	324	50	83	121
Average Depth (m)	160.9	146.2	91.43	73.14	71.31	69.49	100.5	102.4	102.4	100.5	96.92	36.57	71.31	78.63
Distance Fished (km)	1.66	1.66	1.85	1.85	1.85	1.85	1.85	1.85	1.29	1.85	1.29	0.92	1.11	0.74
Bottom Temp. (°C)	5.42	5.47	5.98	6.24	6.15	6.33	5.92	5.95	5.79	5.91	5.54	3.46	3.01	2.89

Appendix B1.-Page 2 of 7.

Haul	61	62	63	64	65	66	67	68	69	70	71	72	73	74
Location	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD
Month/Day/Year	6/30/2012	6/30/2012	6/30/2012	6/30/2012	6/30/2012	6/30/2012	7/1/2012	7/1/2012	7/1/2012	7/1/2012	7/1/2012	7/1/2012	7/1/2012	7/1/2012
Station	UGB	UGC	UGD	511B	511A	510C	533B	534B	535A	535B	535D	561	589	621
Longitude Start (°W)	152.7547	152.6977	152.6355	152.4152	152.456	152.5125	152.7168	152.5587	152.4677	152.416	152.4055	152.4447	152.4768	152.4785
Latitude Start (°N)	57.4725	57.4595	57.4355	57.2245	57.207	57.2153	57.1712	57.1862	57.1848	57.176	57.1483	57.0872	57.0233	56.9382
Heading, Degrees	178	106	132	176	286	255	136	60	124	157	182	207	190	181
Average Depth (m)	91.43	93.26	98.75	76.8	106	95.09	140.8	102.4	137.1	128	137.1	149.9	140.8	160.9
Distance Fished (km)	1.29	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	4.97	5.53	5.68	5.85	5.92	5.84	4.95	5.32	5.38	5.97	5.36	4.98	4.99	5.04
Haul	75	76	77	78	79	80	81	82	83	84	85	86	87	88
Location	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	S.E.KOD	E.KOD	E.KOD	S.E.KOD	S.E.KOD	E.KOD
Month/Day/Year	7/1/2012	7/2/2012	7/2/2012	7/2/2012	7/2/2012	7/2/2012	7/2/2012	7/2/2012	7/2/2012	7/3/2012	7/3/2012	7/3/2012	7/3/2012	7/3/2012
Station	656	588	620	655	696	695	654	619	618A	533A	559	586	585X	587
Longitude Start (°W)	152.4268	152.6257	152.6145	152.5443	152.4402	152.5105	152.7155	152.7365	152.8135	152.7688	152.7357	152.9015	153.0185	152.6637
Latitude Start (°N)	56.854	57.0227	56.9307	56.8492	56.7388	56.736	56.854	56.9128	56.9452	57.1288	57.0933	56.9648	56.9437	56.983
Heading, Degrees	188	175	147	148	155	335	317	0	287	184	215	225	270	55
Average Depth (m)	164.5	151.7	155.4	155.4	182.8	157.2	100.5	135.3	128	142.6	153.6	128	135.3	153.6
Distance Fished (km)	1.85	1.85	1.85	1.85	1.85	1.85	1.11	1.85	1.85	1.48	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	5.02	5	5.02	4.88	5.04	4.92	5.26	4.9	5.07	5	4.97	4.33	4.23	5
Haul	89	90	91	92	93	94	95	96	97	98	99	100	101	102
Location	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	S.E.KOD
Month/Day/Year	7/3/2012	7/3/2012	7/3/2012	7/4/2012	7/4/2012	7/4/2012	7/4/2012	7/4/2012	7/4/2012	7/4/2012	7/5/2012	7/5/2012	7/5/2012	7/5/2012
Station	560	535C	534D	KLL	KLD	KLI	KLC	KLA	KLB	KLK	KLH	KLF	KLE	THN
Longitude Start (°W)	152.527	152.4372	152.499	152.789	152.7463	152.8597	152.9112	153.0697	152.9868	152.9777	152.9105	153.044	153.1405	153.334
Latitude Start (°N)	57.0608	57.1255	57.141	57.2287	57.278	57.2458	57.2617	57.3068	57.312	57.2118	57.222	57.2002	57.1763	57.1695
Heading, Degrees	29	0	358	114	209	141	313	85	132	247	267	259	51	190
Average Depth (m)	138.9	151.7	131.6	133.4	25.6	118.8	95.09	95.09	84.12	118.8	131.6	122.5	117	115.2
Distance Fished (km)	1.85	1.85	1.85	1.85	1.29	1.85	1.48	0.92	1.85	1.48	1.85	1.85	1.85	1.48
Bottom Temp. (°C)	5	5.26	5.73	5.63	6.97	5.75	5.82	2.41	5.98	5.41	5.43	5.4	5.54	4.31
Haul	103	104	105	106	107	108	109	110	111	112	113	114	115	116
Location	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD
Month/Day/Year	7/5/2012	7/5/2012	7/5/2012	7/6/2012	7/6/2012	7/6/2012	7/6/2012	7/6/2012	7/6/2012	7/6/2012	7/6/2012	7/7/2012	7/7/2012	7/7/2012
Station	THM	THL	THK	THH	615	651	729	728	761	760	759	688	726	727
Longitude Start (°W)	153.3492	153.3932	153.4232	153.4142	153.4138	153.2483	153.1993	153.2968	153.2835	153.45	153.5712	153.6575	153.5862	153.499
Latitude Start (°N)	57.1523	57.1188	57.1052	57.0372	56.9103	56.8455	56.6863	56.6543	56.6153	56.5832	56.5522	56.7213	56.6943	56.6733
Heading, Degrees	216	200	194	216	178	125	188	232	218	222	237	105	153	153
Average Depth (m)	122.5	118.8	122.5	117	142.6	171.8	148.1	146.2	140.8	137.1	146.2	151.7	155.4	149.9
Distance Fished (km)	1.48	1.48	1.66	1.85	1.85	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
Bottom Temp. (°C)	4.11	4.15	4.32	4.58	4.54	3.56	3.55	3.61	3.59	3.78	3.74	4.13	3.81	3.71

-continued-

Appendix B1.-Page 3 of 7.

Haul	117	118	119	120	121	122	123	124	125	126	127	128	129	130
Location	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD
Month/Day/Year	7/7/2012	7/7/2012	7/7/2012	7/7/2012	7/7/2012	7/8/2012	7/8/2012	7/8/2012	7/8/2012	7/8/2012	7/8/2012	7/8/2012	7/9/2012	7/9/2012
Station	725	THA	614	THC	THD	THJ	THG	THF	THI	684A	683D	684C	646D	646B
Longitude Start (°W)	153.828	153.7167	153.46	153.4968	153.4982	153.46	153.4465	153.581	153.5895	154.285	154.3695	154.3023	154.3237	154.3848
Latitude Start (°N)	56.6683	56.8867	56.9092	56.946	56.9798	57.0743	57.0222	57.022	57.0682	56.7463	56.7335	56.7383	56.813	56.8395
Heading, Degrees	55	64	2	0	0	169	213	76	121	255	119	233	283	348
Average Depth (m)	96.92	49.37	142.6	131.6	128	117	122.5	76.8	91.43	62.17	74.97	76.8	54.86	60.34
Distance Fished (km)	1.11	1.48	1.85	1.85	1.85	1.85	1.85	1.48	1.85	1.85	1.85	1.48	1.48	1.48
Bottom Temp. (°C)	5.22	5.9	4.69	4.59	4.72	4.78	4.65	5.09	4.72	6.99	6.94	7.39	7.03	7.85
Haul	131	132	133	134	135	136	137	138	139	140	141	142	143	144
Location	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD
Month/Day/Year	7/9/2012	7/9/2012	7/9/2012	7/9/2012	7/9/2012	7/9/2012	7/9/2012	7/10/2012	7/10/2012	7/10/2012	7/10/2012	7/10/2012	7/10/2012	7/10/2012
Station	646A	645B	646C	682B	683A	683B	684B	ALD	ALB	ALA	ALC	ALG	ALF	ALH
Longitude Start (°W)	154.4313	154.4942	154.4843	154.5305	154.4628	154.395	154.235	154.1902	154.2265	154.1342	154.1295	154.097	154.1618	154.1297
Latitude Start (°N)	56.8565	56.835	56.8167	56.7752	56.7638	56.7618	56.7625	56.8778	56.8432	56.8007	56.822	56.8605	56.8575	56.8813
Heading, Degrees	293	192	119	127	119	96	65	190	135	196	23	57	8	41
Average Depth (m)	62.17	65.83	65.83	69.49	60.34	60.34	73.14	56.69	40.23	65.83	69.49	56.69	53.03	64
Distance Fished (km)	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.85	1.85	1.85	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	7.92	7.4	7.12	7.32	6.91	6.98	7.38	4.14	5.7	4.87	4.34	3.61	4.04	3.5
Haul	145	146	147	148	149	150	151	152	153	162	163	164	165	166
Location	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	KUJULIK	KUJULIK	KUJULIK	KUJULIK	KUJULIK
Month/Day/Year	7/10/2012	7/11/2012	7/11/2012	7/11/2012	7/11/2012	7/11/2012	7/11/2012	7/11/2012	7/11/2012	7/28/2012	7/28/2012	7/28/2012	7/28/2012	7/28/2012
Station	ALI	ALR	ALQ	ALP	ALO	ALL	ALM	ALJ	ALK	4308	4302	4301	4298	4290
Longitude Start (°W)	154.1015	153.8068	153.8928	153.9557	154.0072	154.0883	153.9955	154.0028	153.9532	157.6118	157.6788	157.689	157.7498	157.8182
Latitude Start (°N)	56.9003	57.1258	57.0873	57.0447	56.9877	56.9238	56.9235	56.9143	56.9265	56.54	56.541	56.5668	56.5347	56.5878
Heading, Degrees	42	209	221	210	212	57	50	212	62	153	126	147	89	327
Average Depth (m)	82.29	118.8	175.5	153.6	133.4	87.77	69.49	71.31	73.14	128	100.5	84.12	91.43	27.43
Distance Fished (km)	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.11
Bottom Temp. (°C)	1.95	0.58	0.33	0.36	0.43	1.29	4.05	3.89	4.5	5.78	6.27	6.37	6.51	8.48
Haul	167	168	169	170	171	172	173	174	175	176	177	178	179	180
Location	KUJULIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	MITRO.
Month/Day/Year	7/28/2012	7/29/2012	7/29/2012	7/29/2012	7/29/2012	7/29/2012	7/29/2012	7/29/2012	7/29/2012	7/29/2012	7/30/2012	7/30/2012	7/30/2012	7/30/2012
Station	4296	4286	4287	4282	4277	4278	4312	4270	4271	4265	4964	4264	4068	4067
Longitude Start (°W)	157.7723	157.9162	157.9352	157.9968	158.0318	158.0542	158.1493	158.1805	158.2023	158.3072	158.3425	158.2602	158.5535	158.5792
Latitude Start (°N)	56.6212	56.4265	56.4035	56.4222	56.4312	56.4052	56.2547	56.252	56.2367	56.19	56.2245	56.2357	55.882	55.8765
Heading, Degrees	158	102	63	103	132	124	69	79	246	42	97	205	166	335
Average Depth (m)	73.14	164.5	192	188.3	190.1	199.3	128	106	91.43	54.86	73.14	74.97	120.6	118.8
Distance Fished (km)	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.29	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	8.1	4.81	4.39	4.62	4.55	4.26	6.55	6.62	6.78	7.37	7.3	6.83	5.81	5.48

-continued-

Appendix B1.-Page 4 of 7.

Haul	181	182	183	184	185	186	187	188	189	190	191	192	193	194
Location	MITRO.	MITRO.	MITRO.	MITRO.	MITRO.	MITRO.	IVANOF	IVANOF	STEP.	STEP.	STEP.	STEP.	STEP.	BEA VER
Month/Day/Year	7/30/2012	7/31/2012	7/31/2012	7/31/2012	7/31/2012	7/31/2012	7/31/2012	7/31/2012	8/1/2012	8/1/2012	8/1/2012	8/1/2012	8/1/2012	8/2/2012
Station	4066	4025	4026	4038	4043	4037	4036	4024	STD	STA	STB	STE	368A	329C
Longitude Start (°W)	158.63	159.0075	159.0215	158.9798	158.9153	158.9628	158.9452	159.0392	159.8245	159.8138	159.7652	159.7647	160.1707	160.4855
Latitude Start (°N)	55.8873	55.7988	55.7238	55.7032	55.7023	55.8062	55.8648	55.881	55.755	55.8082	55.8268	55.7912	55.5673	55.43
Heading, Degrees	305	176	201	53	199	5	17	299	10	358	180	196	244	56
Average Depth (m)	113.3	122.5	140.8	146.2	148.1	129.8	128	100.5	118.8	96.92	109.7	120.6	182.8	131.6
Distance Fished (km)	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	5.85	5.47	4.95	4.8	4.47	5.53	5.57	5.75	4.52	5.8	5.41	4.71	3.81	3.95
Haul	195	196	197	198	199	200	201	202	203	204	205	206	207	208
Location	BEA VER	BEA VER	BEA VER	BEA VER	BEA VER	PA VLOF	PA VLOF	PA VLOF	PA VLOF	PA VLOF	PA VLOF	PA VLOF	PA VLOF	PA VLOF
Month/Day/Year	8/2/2012	8/2/2012	8/2/2012	8/2/2012	8/2/2012	8/2/2012	8/2/2012	8/3/2012	8/3/2012	8/3/2012	8/3/2012	8/3/2012	8/3/2012	8/3/2012
Station	311C	BVC	BVB	BVA	278	245	228	PAH	PAIX	PAEX	PAP	PALX	PAOA	PARB
Longitude Start (°W)	160.5045	160.8948	160.8773	160.9063	160.9252	161.2222	161.2827	161.6032	161.5857	161.5288	161.5683	161.6297	161.6553	161.5922
Latitude Start (°N)	55.433	55.4615	55.4988	55.4897	55.4212	55.2702	55.2795	55.5143	55.5278	55.549	55.4567	55.4583	55.434	55.4155
Heading, Degrees	277	235	192	190	202	298	101	182	173	97	222	44	27	166
Average Depth (m)	133.4	84.12	38.4	45.71	133.4	84.12	78.63	56.69	51.2	29.25	76.8	93.26	93.26	85.94
Distance Fished (km)	1.85	1.48	1.11	1.11	1.29	1.85	1.85	1.29	1.29	1.11	1.85	1.66	1.85	1.85
Bottom Temp. (°C)	3.73	6.35	7.08	6.89	5.66	5.61	5.74	4.88	5.22	6.07	4.7	4.22	3.97	4.73
Haul	209	210	211	212	213	214	215	216	217	218	219	220	221	222
Location	PA VLOF	PA VLOF	COLD B.	COLD B.	COLD B.	COLD B.	COLD B.	COLD B.	COLD B.	MORZ.	MORZ.	MORZ.	MORZ.	MORZ.
Month/Day/Year	8/3/2012	8/3/2012	8/4/2012	8/4/2012	8/4/2012	8/4/2012	8/4/2012	8/4/2012	8/4/2012	8/5/2012	8/5/2012	8/5/2012	8/5/2012	8/5/2012
Station	PARA	PAU	156A	157A	BEG	BEBX	BE CX	BEE	BEF	MOB	MOD	MOF	MOG	MOH
Longitude Start (°W)	161.6718	161.6752	162.103	162.123	162.1717	162.1488	162.1592	162.1492	162.1138	163.0733	163.0512	163.0348	162.998	162.9858
Latitude Start (°N)	55.3927	55.3695	54.964	54.9187	54.9922	55.1412	55.1135	55.069	55.0187	55.0667	55.0337	55.0012	54.9923	54.9617
Heading, Degrees	6	193	347	184	179	200	187	186	193	162	167	158	136	196
Average Depth (m)	106	128	87.77	74.97	84.12	65.83	82.29	82.29	96.92	71.31	87.77	80.46	91.43	98.75
Distance Fished (km)	1.85	1.85	1.85	1.85	1.85	1.48	1.85	1.85	1.85	1.29	1.66	1.85	1.85	1.85
Bottom Temp. (°C)	3.8	3.63	5.48	5.74	5.66	5.79	5.3	5.52	5.53	5.49	4.96	5	4.99	5.17
Haul	223	224	225	226	227	228	229	230	231	232	233	234	235	236
Location	MORZ.	MORZ.	MORZ.	MORZ.	AKUTAN	AKUTAN	AKUTAN	AKUTAN	AKUTAN	UNAK.	BEA VER	BEA VER	BEA VER	BEA VER
Month/Day/Year	8/5/2012	8/5/2012	8/5/2012	8/5/2012	8/7/2012	8/7/2012	8/7/2012	8/7/2012	8/7/2012	8/7/2012	8/8/2012	8/8/2012	8/8/2012	8/8/2012
Station	MOI	MOL	MOK	MOOX	AKA	AKC	AKD	AKG	AKL	KA A	BIK	BIG	BID	BIB
Longitude Start (°W)	162.9702	162.9562	163.0085	162.9918	165.7008	165.7122	165.7075	165.7463	165.7517	166.3283	166.3015	166.3652	166.4282	166.5142
Latitude Start (°N)	54.955	54.9115	54.892	54.8718	54.1537	54.1795	54.2068	54.2255	54.2552	53.9755	53.8453	53.8075	53.78	53.7337
Heading, Degrees	171	355	18	175	23	4	184	343	14	10	230	234	58	58
Average Depth (m)	106	124.3	100.5	98.75	74.97	89.6	87.77	98.75	102.4	82.29	292.5	256	254.1	173.7
Distance Fished (km)	1.85	1.85	1.85	1.85	1.11	1.85	1.85	1.85	1.85	0.92	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	5.22	5.08	5.07	4.93	6.4	6.25	6.32	5.7	5.35	5.9	3.88	5.23	5.17	5.58

-continued-

Appendix B1.–Page 5 of 7.

Haul	237	238	239	240	241	242	243	244	245	246	247	248	249	250
Location	BEAVER	PUM. B.	PUM. B.	MAKUSH.	MAKUSH.	MAKUSH.	MAKUSH.	MAKUSH.	MAKUSH.	MAKUSH.	MAKUSH.	UNAK.	UNAK.	UNAK.
Month/Day/Year	8/8/2012	8/9/2012	8/9/2012	8/9/2012	8/9/2012	8/9/2012	8/9/2012	8/9/2012	8/9/2012	8/10/2012	8/10/2012	8/10/2012	8/10/2012	8/11/2012
Station	BIN	PUA	PUB	MKP	MKN	MKK	MKJ	MKF	MKE	MKB	MKC	UNI	UNJ	UNE
Longitude Start (°W)	166.1783	167.0205	167.0902	167.0652	167.1198	167.177	167.0992	167.0097	166.9492	166.7878	166.8533	166.611	166.501	166.503
Latitude Start (°N)	53.8337	53.5307	53.5193	53.6482	53.6805	53.7275	53.7188	53.7397	53.7327	53.7022	53.7168	54.0263	54.0332	53.9437
Heading, Degrees	326	270	295	310	316	123	95	253	97	300	290	120	179	4
Average Depth (m)	82.29	76.8	54.86	133.4	138.9	120.6	137.1	199.3	201.1	100.5	177.3	93.26	173.7	113.3
Distance Fished (km)	1.66	1.48	1.85	1.85	1.85	1.85	1.85	1.66	1.85	1.48	1.85	1.85	1.85	1.48
Bottom Temp. (°C)	6.23	3.07	5.84	5.28	5.14	4.92	4.41	3.7	3.62	4.58	3.52	5.58	4.75	5.05
Haul	251	252	253	254	255	256	257	258	259	260	261	262	263	264
Location	UNAK.	UNAK.	UNAK.	UNAK.	SANAK	SANAK	SANAK	SANAK	SANAK	SANAK	SANAK	MORZ.	MORZ.	MORZ.
Month/Day/Year	8/11/2012	8/11/2012	8/11/2012	8/11/2012	8/14/2012	8/14/2012	8/14/2012	8/14/2012	8/14/2012	8/14/2012	8/14/2012	8/15/2012	8/15/2012	8/15/2012
Station	UND	UNG	UNF	UNC	113	125	137	138A	138C	138B	126	MOSX	MORX	87AX
Longitude Start (°W)	166.479	166.4463	166.5243	166.6025	162.6773	162.5445	162.4482	162.4053	162.345	162.4078	162.5055	163.0762	163.1668	163.0058
Latitude Start (°N)	53.9453	53.98	53.9692	53.917	54.5647	54.5185	54.5135	54.4953	54.4472	54.4458	54.4705	54.8682	54.832	54.8153
Heading, Degrees	14	36	34	354	150	120	103	152	130	313	297	227	96	47
Average Depth (m)	80.46	78.63	151.7	137.1	133.4	148.1	146.2	144.4	146.2	148.1	144.4	95.09	91.43	84.12
Distance Fished (km)	1.29	1.11	1.85	1.85	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.85	1.85	1.85
Bottom Temp. (°C)	5.16	5.45	4.85	4.88	5.14	3.67	3.72	3.84	3.61	3.83	4.05	5.21	5.25	5.37
Haul	265	266	267	268	269	270	271	272	273	274	275	276	277	278
Location	MORZ.	COLD B.	COLD B.	COLD B.	COLD B.	COLD B.	COLD B.	COLD B.	COLD B.	COLD B.	PAVLOF	PAVLOF	PAVLOF	PAVLOF
Month/Day/Year	8/15/2012	8/15/2012	8/15/2012	8/16/2012	8/16/2012	8/16/2012	8/16/2012	8/16/2012	8/16/2012	8/16/2012	8/17/2012	8/17/2012	8/17/2012	8/17/2012
Station	87D	COM	COO	COB	COC	COE	COF	COGA	COH	COGB	VOMB	VOFB	VOA	VOBX
Longitude Start (°W)	162.9508	162.4613	162.3833	162.5978	162.5553	162.5458	162.5258	162.4752	162.3993	162.4287	161.8208	161.797	161.7287	161.662
Latitude Start (°N)	54.7843	55.0158	55.0012	55.2265	55.2283	55.1992	55.162	55.1437	55.1103	55.1162	55.2273	55.257	55.2935	55.3143
Heading, Degrees	150	96	97	146	176	163	126	329	281	325	31	37	38	65
Average Depth (m)	87.77	80.46	104.2	53.03	45.71	65.83	91.43	91.43	47.54	56.69	95.09	100.5	113.3	98.75
Distance Fished (km)	1.85	1.11	1.85	1.11	0.92	0.92	1.66	1.66	1.29	1.29	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	5.97	7.01	6.57	8.19	8.25	7.96	8.02	8.12	8.16	8.11	4.3	4.01	3.75	3.78
Haul	279	280	281	282	283	284	285	286	287	288	289	290	291	292
Location	PAVLOF	PAVLOF	PAVLOF	PAVLOF	PAVLOF	PAVLOF	PAVLOF	PAVLOF	PAVLOF	W.NAGAI	W.NAGAI	W.NAGAI	W.NAGAI	W.NAGAI
Month/Day/Year	8/17/2012	8/17/2012	8/17/2012	8/17/2012	8/17/2012	8/17/2012	8/18/2012	8/18/2012	8/18/2012	8/19/2012	8/19/2012	8/19/2012	8/19/2012	8/19/2012
Station	VOD	VOI	VOH	VOG	VON	VOR	VOQ	VOP	VOLX	301	318	337	335	334
Longitude Start (°W)	161.5587	161.5852	161.6608	161.7425	161.7383	161.7445	161.8187	161.9383	161.9735	160.7348	160.6078	160.4948	160.477	160.4085
Latitude Start (°N)	55.3178	55.289	55.2827	55.2682	55.2378	55.1963	55.199	55.1838	55.2147	54.8022	54.7873	54.8097	55.0067	55.045
Heading, Degrees	87	230	252	230	224	314	101	40	112	145	80	43	20	70
Average Depth (m)	113.3	106	102.4	106	117	120.6	93.26	84.12	71.31	107.8	106	95.09	137.1	151.7
Distance Fished (km)	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.48	1.48	1.48	1.48	1.48
Bottom Temp. (°C)	3.77	3.61	3.98	3.82	3.66	3.74	4.2	4.63	5.02	5.21	5.27	5.56	5.56	5.67

-continued-

Appendix B1.-Page 6 of 7.

Haul	293	294	295	296	297	298	299	300	301	302	303	304	305	306
Location	W.NAGAI	W.NAGAI	W.NAGAI	W.NAGAI	W.NAGAI	W.NAGAI	BEA VER	BEA VER	BEA VER	BEA VER	BEA VER	BEA VER	BEA VER	BEA VER
Month/Day/Year	8/19/2012	8/19/2012	8/19/2012	8/20/2012	8/20/2012	8/20/2012	8/20/2012	8/20/2012	8/20/2012	8/21/2012	8/21/2012	8/21/2012	8/21/2012	8/21/2012
Station	354	353	373A	373B	393	332B	329B	311B	BAF	BAA	BAC	BAD	BAE	311A
Longitude Start (°W)	160.3515	160.3195	160.1388	160.0592	159.9822	160.376	160.426	160.5153	160.5533	160.6915	160.6153	160.5717	160.5988	160.593
Latitude Start (°N)	55.0663	55.0918	55.1263	55.152	55.2013	55.2043	55.4645	55.4442	55.4782	55.537	55.5203	55.5092	55.486	55.4677
Heading, Degrees	48	22	130	322	334	8	35	307	335	114	177	325	165	180
Average Depth (m)	140.8	146.2	29.25	76.8	82.29	190.1	182.8	144.4	84.12	29.25	100.5	91.43	118.8	120.6
Distance Fished (km)	1.48	1.66	1.11	1.48	1.29	1.66	1.85	1.85	1.85	0.92	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	5.5	5.48	8.11	5.83	6.4	5.76	3.98	5.02	8.29	10	7.17	7.23	5.74	5.79
Haul	307	308	309	310	311	312	313	314	315	316	317	318	319	320
Location	BEA VER	IVANOF	IVANOF	IVANOF	IVANOF	IVANOF	IVANOF	MITRO.	MITRO.	MITRO.	MITRO.	MITRO.	MITRO.	MITRO.
Month/Day/Year	8/22/2012	8/22/2012	8/23/2012	8/23/2012	8/23/2012	8/23/2012	8/23/2012	8/23/2012	8/23/2012	8/24/2012	8/24/2012	8/24/2012	8/24/2012	8/24/2012
Station	348	4008	4007	4000	400X	4900	4915	4035	4049	4095	4065	4064	4063	4048
Longitude Start (°W)	160.2963	159.4457	159.392	159.4758	159.4853	159.4925	159.1815	158.841	158.7833	158.7387	158.5663	158.5935	158.5835	158.6337
Latitude Start (°N)	55.5655	55.7055	55.7785	55.788	55.8163	55.8635	55.8603	55.9515	55.9293	55.9068	55.93	55.9973	56.1317	56.0635
Heading, Degrees	82	17	201	118	145	59	221	116	129	111	12	338	221	188
Average Depth (m)	186.5	104.2	89.6	85.94	73.14	36.57	65.83	140.8	146.2	148.1	104.2	149.9	155.4	173.7
Distance Fished (km)	1.85	1.85	1.85	1.85	1.66	0.92	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	3.98	6.71	7.51	7.31	5.78	9.23	8.38	6.87	6.63	6.53	6.61	4.2	3.86	3.52
Haul	321	322	323	324	325	326	327	328	329	330	331	332	333	334
Location	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD
Month/Day/Year	8/25/2012	8/25/2012	8/25/2012	8/25/2012	8/25/2012	8/25/2012	9/5/2012	9/5/2012	9/5/2012	9/5/2012	9/5/2012	9/5/2012	9/5/2012	9/5/2012
Station	4262	4267	4274	4272	4266	4256	KUM	KUK	KUJ	KUI	KULX	KUL	KUY	KUYX
Longitude Start (°W)	158.27	158.1623	158.1453	158.0918	158.1803	158.3068	153.1233	153.2523	153.2948	153.386	153.238	153.2072	153.1957	153.2125
Latitude Start (°N)	56.3483	56.4035	56.4057	56.4863	56.4202	56.421	57.8638	57.918	57.9365	57.9735	57.8732	57.8335	57.787	57.7435
Heading, Degrees	142	322	110	143	270	271	288	295	298	287	168	11	189	25
Average Depth (m)	80.46	137.1	168.2	124.3	155.4	93.26	69.49	142.6	159	241.3	102.4	82.29	73.14	25.6
Distance Fished (km)	1.85	1.85	1.85	1.85	1.85	1.85	1.66	1.85	1.85	1.85	1.85	1.85	1.11	1.11
Bottom Temp. (°C)	7.9	6.1	5.61	6.7	5.56	6.87	7.2	6.59	6.59	6.46	7.24	7.36	8.14	10.8
Haul	335	336	338	339	340	341	342	343	344	345	346	347	348	349
Location	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.
Month/Day/Year	9/6/2012	9/6/2012	9/6/2012	9/6/2012	9/6/2012	9/7/2012	9/7/2012	9/7/2012	9/7/2012	9/7/2012	9/7/2012	9/7/2012	9/7/2012	9/8/2012
Station	KUD	KUF	RAA	MAA	PAA	121	120	91	60	61	31	3	2	144
Longitude Start (°W)	153.1662	153.296	153.2218	153.0725	152.8773	153.1417	153.247	153.3065	153.2805	153.2353	153.1832	153.0822	153.1788	153.9703
Latitude Start (°N)	57.9848	58.0288	58.1382	58.2153	58.2973	58.4558	58.5	58.5497	58.6172	58.66	58.7188	58.7957	58.7962	58.4377
Heading, Degrees	272	271	138	277	99	349	311	22	26	32	32	28	200	44
Average Depth (m)	38.4	138.9	106	135.3	98.75	173.7	170	166.4	157.2	157.2	173.7	164.5	179.2	95.09
Distance Fished (km)	0.92	1.85	1.85	1.85	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
Bottom Temp. (°C)	9.06	6.64	7.55	6.74	7.1	4.02	4.16	4.48	5.37	5.53	5.06	6.12	5.75	7.68

-continued-

Appendix B1.–Page 7 of 7.

Haul	350	351	352	353	354	355	356	357	358	359	360	361	362	363
Location	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.
Month/Day/Year	9/8/2012	9/8/2012	9/8/2012	9/8/2012	9/8/2012	9/8/2012	9/8/2012	9/8/2012	9/9/2012	9/9/2012	9/9/2012	9/9/2012	9/9/2012	9/9/2012
Station	117	145	118	119	90	147	146	174	172	198	222	223	224	200
Longitude Start (°W)	153.8132	153.8108	153.7127	153.5595	153.5312	153.545	153.6322	153.6988	154.0393	154.022	154.0543	153.9377	153.819	153.7117
Latitude Start (°N)	58.4522	58.4445	58.4655	58.5082	58.5452	58.4318	58.3897	58.3395	58.285	58.2785	58.1937	58.1787	58.1635	58.2018
Heading, Degrees	52	229	57	52	45	185	239	214	53	218	181	74	60	57
Average Depth (m)	85.94	100.5	135.3	133.4	117	142.6	171.8	179.2	124.3	164.5	277.9	208.4	195.6	192
Distance Fished (km)	1.48	1.48	1.48	1.48	1.48	1.66	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
Bottom Temp. (°C)	8.01	7.8	7.46	6.69	8.09	6.15	4.22	4.17	7.8	4.36	4.47	4.15	4.12	4.07
Haul	364	365	366	367	368	369	370	371	372	373	374	375	376	377
Location	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD
Month/Day/Year	9/9/2012	9/9/2012	9/9/2012	9/10/2012	9/10/2012	9/10/2012	9/10/2012	9/10/2012	9/10/2012	9/10/2012	9/10/2012	9/11/2012	9/11/2012	9/11/2012
Station	199	173	171Y	171	171X	KUS	KUQ	KUP	KUNX	KUX	KUXX	KUU	KUW	KUV
Longitude Start (°W)	153.7468	153.8305	154.0478	154.251	154.2023	153.5477	153.523	153.4912	153.3775	153.3802	153.4092	153.4832	153.527	153.5293
Latitude Start (°N)	58.2493	58.2905	58.3227	58.3043	58.3255	57.8737	57.885	57.8703	57.836	57.7388	57.7687	57.7835	57.6963	57.7413
Heading, Degrees	327	337	186	75	76	150	322	134	299	354	317	319	167	353
Average Depth (m)	192	213.9	82.29	113.3	106	186.5	190.1	164.5	126.1	109.7	126.1	157.2	69.49	89.6
Distance Fished (km)	1.48	1.48	1.48	1.48	1.48	1.85	1.85	1.85	1.85	1.66	1.48	1.85	1.11	1.48
Bottom Temp. (°C)	4.1	4.18	8.21	7.33	7.4	5.17	5.13	5.15	5.44	5.09	5.06	5.3	6.92	5.68
Haul	378	379	380	381	382	383	384	385	386	387				
Location	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD				
Month/Day/Year	9/11/2012	9/12/2012	9/12/2012	41164	41164	41164	41164	41164	41165	41165				
Station	KUT	UYSS	UYQX	UYMX	UYKX	UYO	UYEX	UYHX	UYFX	UYBX				
Longitude Start (°W)	153.521	153.8165	153.9047	153.91	153.8772	153.7965	153.9233	153.7185	153.8433	153.9983				
Latitude Start (°N)	57.8137	57.4205	57.4857	57.5232	57.5915	57.5693	57.6347	57.6618	57.6732	57.7432				
Heading, Degrees	344	188	343	182	325	323	5	271	274	173				
Average Depth (m)	184.6	74.97	144.4	140.8	131.6	76.8	162.7	96.92	155.4	137.1				
Distance Fished (km)	1.85	1.11	1.48	1.48	1.66	0.92	1.48	1.85	1.85	1.85				
Bottom Temp. (°C)	5.18	7.35	6.86	6.87	6.67	7.42	6.14	7.1	6.88	6.2				

Appendix B2.-2012 bottom trawl survey stations and areas fished by district and section.

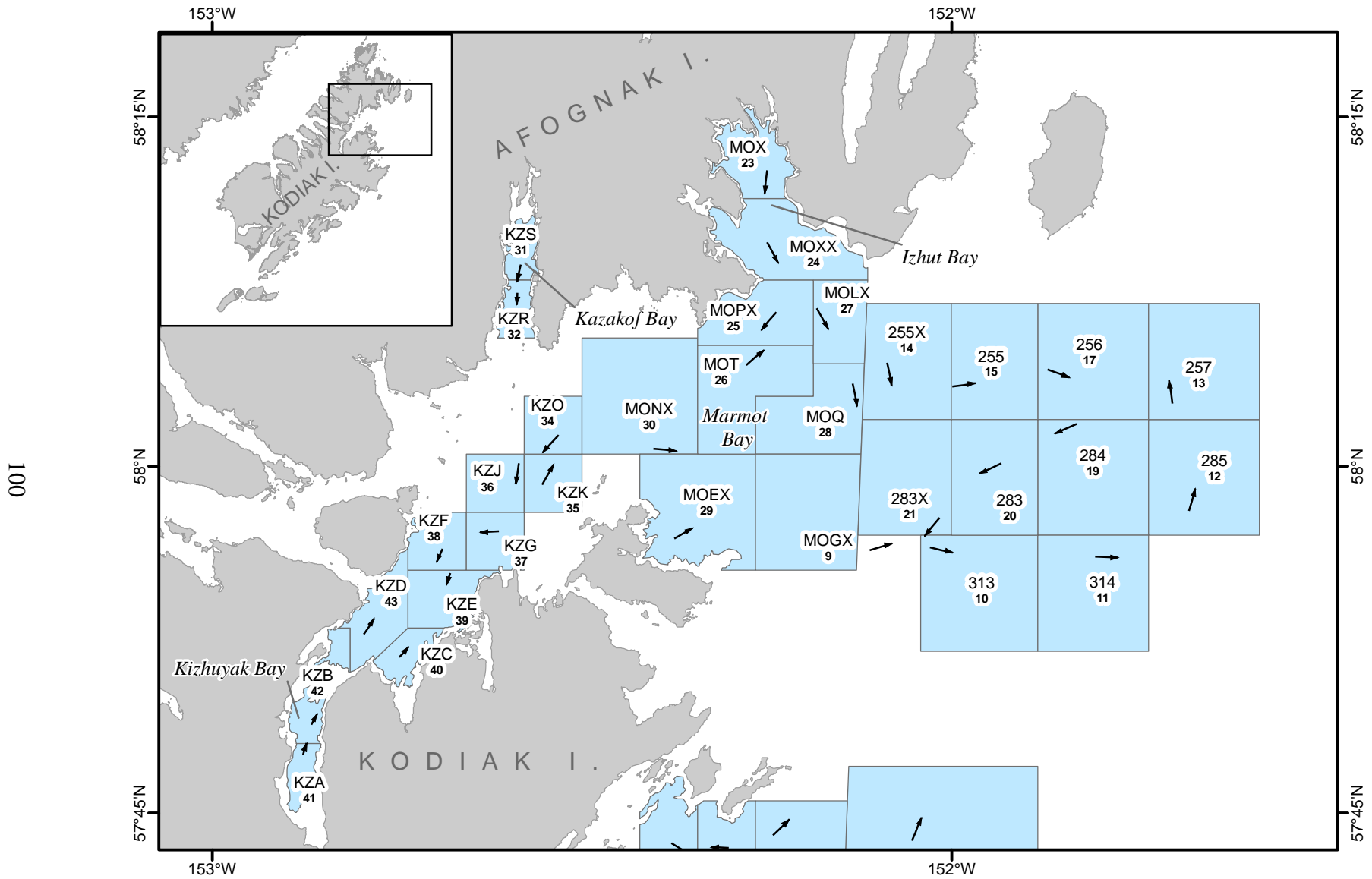
KODIAK DISTRICT											
NORTHEAST SECTION			EASTSIDE SECTION			SOUTHEAST SECTION			SOUTHWEST SECTION		
Kizhuyak Bay			Ugak Bay			South Sitkalidik			Alitak Flats		
Station	KM ²	NM ²	Station	KM ²	NM ²	Station	KM ²	NM ²	Station	KM ²	NM ²
KZA	11.7	3.4	UGAA	16.0	4.7	THA	15.1	4.4	645B	34.3	10.0
KZB	2.7	0.8	UGAB	4.7	1.4	THC	19.6	5.7	646A	27.1	7.9
KZC	12.3	3.6	UGAC	3.2	0.9	THD	28.6	8.3	646B	16.5	4.8
KZD	23.7	6.9	UGB	5.8	1.7	THF	22.3	6.5	646C	29.2	8.5
KZE	27.4	8.0	UGC	17.5	5.1	THG	21.4	6.3	646D	37.4	10.9
KZF	20.6	6.0	UGD	11.0	3.2	THH	19.2	5.6	682B	23.0	6.7
KZG	21.3	6.2	UGE	12.7	3.7	THI	21.6	6.3	683A	23.0	6.7
KZJ	21.4	6.3	UGF	15.8	4.6	THJ	17.8	5.2	683B	20.9	6.1
KZK	21.4	6.3	UGG	11.0	3.2	THK	16.5	4.8	683D	9.3	2.7
KZO	21.4	6.3	UGI	6.2	1.8	THL	9.3	2.7	684A	23.0	6.7
KZR	13.7	4.0	UGJ	21.4	6.3	THM	10.6	3.1	684B	10.3	3.0
KZS	3.1	0.9	UGM	16.8	4.9	THN	5.1	1.5	684C	8.6	2.5
	200.8	58.6		142.1	41.4		207.1	60.4		262.4	76.5
Marmot Bay			Kiliuda Bay			Offshore Twoheaded			Alitak Bay		
Station	KM ²	NM ²	Station	KM ²	NM ²	Station	KM ²	NM ²	Station	KM ²	NM ²
MOEX	36.2	10.6	KLA	20.9	6.1	618A	42.9	12.5	ALA	3.1	0.9
MOGX	65.9	19.2	KLB	9.3	2.7	585X	94.3	27.5	ALB	17.8	5.2
MOLX	27.6	8.1	KLC	19.6	5.7	614	64.1	18.7	ALC	8.1	2.4
MONX	75.5	22.0	KLD	18.2	5.3	615	99.5	29.0	ALD	13.0	3.8
MOPX	27.8	8.1	KLE	8.2	2.4	651	85.8	25.0	ALF	21.4	6.3
MOQ	21.4	6.3	KLF	15.1	4.4		386.6	112.7	ALG	19.9	5.8
MOT	19.9	5.8	KLG	16.5	4.8				ALH	16.1	4.7
MOX	13.0	3.8	KLH	16.8	4.9				ALI	16.6	4.9
MOXX	29.5	8.6	KLI	21.4	6.25				ALJ	15.1	4.4
255	63.5	18.5	KLL	21.4	6.25	Horse's Head			ALK	9.9	2.9
256	85.8	25.0		167.4	48.8	Station	KM ²	NM ²	ALL	8.2	2.4
257	85.8	25.0				586	85.8	25.0	ALM	16.1	4.7
283	64.5	18.8	Horseshoe/Barnabas			688	85.8	25.0	ALO	16.8	4.9
284	85.8	25.0	Station	KM ²	NM ²	725	85.8	25.0	ALP	19.2	5.6
285	85.8	25.0	486A	27.9	8.1	726	85.8	25.0	ALQ	14.4	4.2
313	85.8	25.0	486B	29.4	8.6	727	85.8	25.0	ALR	13.4	3.9
314	85.8	25.0	510B	63.0	18.4	728	85.8	25.0		229.3	66.9
314	85.8	25.0	510C	40.7	11.9	729	85.8	25.0			
255X	60.0	17.5	511A	42.9	12.5	759	85.8	25.0			
283X	63.5	18.5	511B	42.9	12.5	760	85.8	25.0			
	1,082.7	315.7	533A	42.9	12.5	761	85.8	25.0			
			533B	42.9	12.5		1,630.6	475.4			
Chiniak Gully			533B	42.9	12.5						
Station	KM ²	NM ²	534B	21.6	6.3						
369X	150.9	44.0	534D	28.3	8.3						
395	85.8	25.0	535A	21.4	6.3						
420	85.8	25.0	535B	21.4	6.3						
421	85.8	25.0	535C	21.4	6.3						
443	85.8	25.0	535D	21.4	6.3						
444	85.8	25.0	559	85.8	25.0						
	493.9	169.0	560	85.8	25.0						
Chiniak			561	85.8	25.0						
Station	KM ²	NM ²	587	85.8	25.0						
CHA	5.5	1.6	588	85.8	25.0						
CHB	7.9	2.3	589	85.8	25.0						
CHF	12.7	3.7	619	85.8	25.0						
CHG	34.6	10.1	620	85.8	25.0						
CHJ	11.3	3.3	621	85.8	25.0						
CHK	8.6	2.5	654	85.8	25.0						
CHL	14.1	4.1	655	85.8	25.0						
	94.7	27.6	656	85.8	25.0						
			695	85.8	25.0						
			696	85.8	25.0						
				1,668.6	486.5						

-continued-

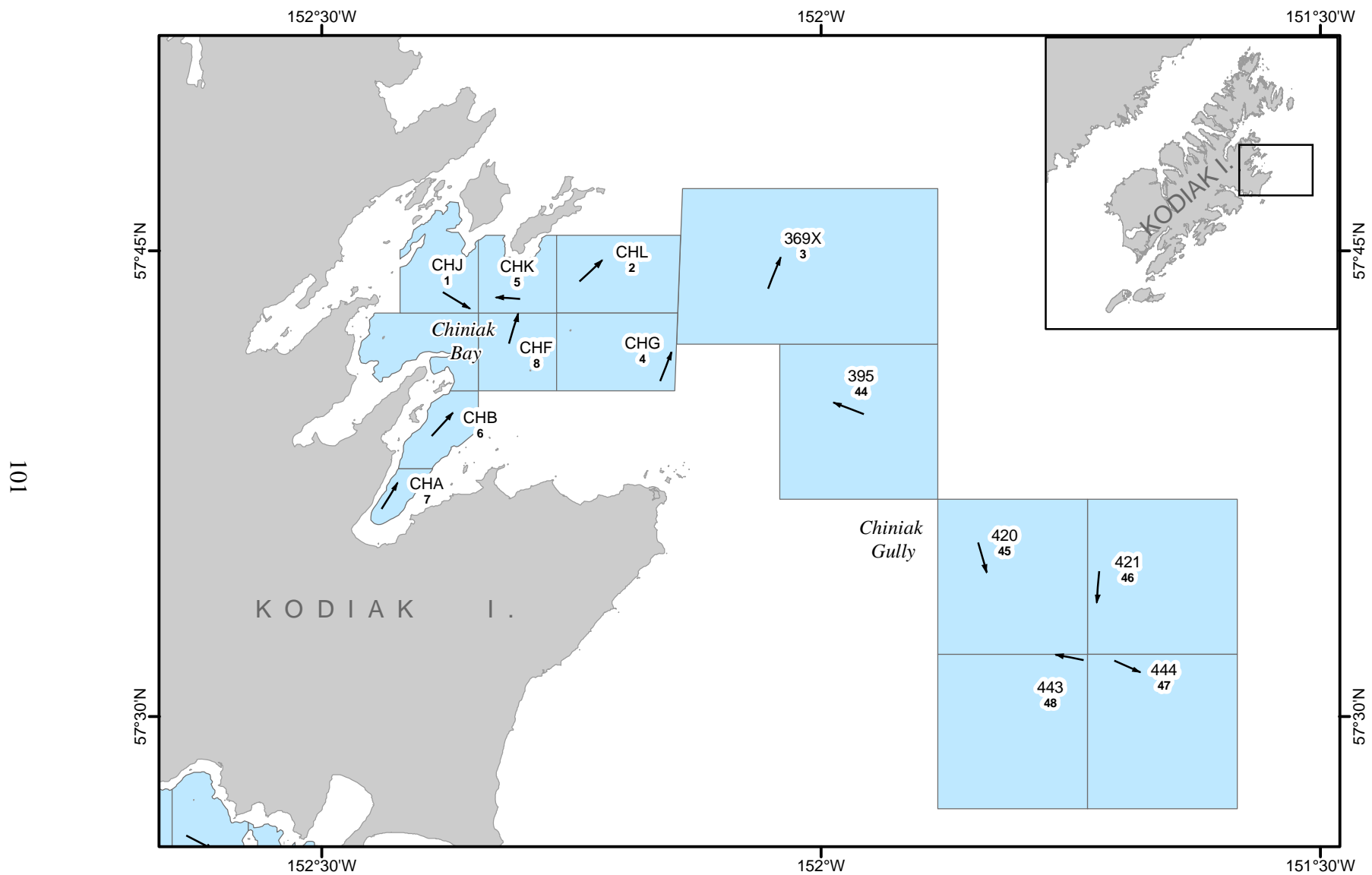
KODIAK DISTRICT (Continued)											
N.MAINLAND SECTION						WESTSIDE SECTION					
			Uyak Bay			Kupreanof-Viekoda			Uganik Bay		
Station	KM ²	NM ²	Station	KM ²	NM ²	Station	KM ²	NM ²	Station	KM ²	NM ²
2	85.8	25.0	UYBX	21.5	6.3	KUD	27.1	7.9	KUNX	10.6	3.1
3	85.8	25.0	UYEX	29.9	8.7	KUF	11.3	3.3	KUP	13.3	3.9
31	83.7	24.4	UYFX	22.1	6.4	KUI	6.4	1.9	KUQ	20.6	6.0
60	85.8	25.0	UYHX	4.1	1.2	KUJ	17.0	5.0	KUS	12.1	3.5
61	85.8	25.0	UYKX	13.9	4.0	KUK	14.1	4.1	KUT	9.4	2.7
90	80.3	23.4	UYMX	20.8	6.1	KUL	2.7	0.79	KUU	13.7	4.0
91	85.8	25.0	UYO	3.4	1.0	KUM	10.5	3.1	KUV	4.1	1.2
117	97.8	28.5	UYQX	7.7	2.2	KUY	4.1	1.2	KUW	5.2	1.5
118	85.8	25.0	UYSS	6.0	1.8	KULX	2.1	0.61	KUX	4.1	1.2
119	85.8	25.0		129.3	37.7	KUYX	2.6	0.8	KUXX	5.6	1.6
120	85.8	25.0					97.8	28.5		98.6	28.8
121	85.8	25.0	West Afognak								
144	60.7	17.7	Station	KM ²	NM ²						
145	85.8	25.0	RAA	6.7	2.0						
146	85.8	25.0	PAA	15.1	4.4						
147	89.2	26.0	MAA	10.6	3.1						
171	11.4	3.3		32.4	9.5						
171X	8.1	2.4									
171Y	29.1	8.5									
172	89.2	26.0									
173	85.8	25.0									
174	85.8	25.0									
198	85.8	25.0									
199	85.8	25.0									
200	85.8	25.0									
222	113.2	33.0									
223	85.8	25.0									
224	85.8	25.0									
	2,206.1	643.2									
KODIAK DISTRICT TOTALS											
			SECTION			KM²			NM²		
			Northeast			1,957.9			570.8		
			Eastside			1,978.1			576.7		
			Southeast			2,224.3			648.5		
			Southwest			491.7			143.4		
			Westside			358.2			104.4		
			N. Mainland			2,206.1			643.2		
			Kodiak District			9,216.2			2,686.9		
CHIGNIK DISTRICT											
CHIGNIK BAY			IVANOF BAY			KUJULIK BAY			MITROFANIA ISLAND		
Station	KM ²	NM ²	Station	KM ²	NM ²	Station	KM ²	NM ²	Station	KM ²	NM ²
4256	24.0	7.0	400X	5.6	1.6	4290	21.4	6.3	4025	37.6	11.0
4262	21.4	6.3	4000	15.8	4.6	4296	10.3	3.0	4026	40.1	11.7
4264	20.1	5.9	4007	59.3	17.3	4298	19.2	5.6	4035	68.6	20.0
4265	6.6	1.9	4008	42.1	12.3	4301	21.4	6.3	4036	67.9	19.8
4266	19.6	5.7	4024	65.7	19.2	4302	21.0	6.1	4037	45.2	13.2
4267	21.4	6.3	4900	10.7	3.1	4308	17.2	5.0	4038	41.0	12.0
4270	17.1	5.0	4915	51.7	15.1		110.5	32.2	4043	32.6	9.5
4271	10.3	3.0		250.8	73.1				4048	14.7	4.3
4272	15.9	4.6							4049	57.2	16.7
4274	21.4	6.3							4063	57.2	16.7
4277	21.4	6.3							4064	57.2	16.7
4278	21.4	6.3							4065	80.0	23.3
4282	21.4	6.3							4066	28.9	8.4
4286	21.4	6.3							4067	28.9	8.4
4287	29.7	8.7							4068	28.9	8.4
4312	21.9	6.4							4095	36.1	10.5
4964	9.6	2.8								722.1	210.5
	325.0	94.7									
CHIGNIK DISTRICT TOTALS											
			SECTION			KM²			NM²		
			Chignik Bay			325.0			94.7		
			Ivanof			250.8			73.1		
			Kujulik			110.5			32.2		
			Mitrofanania			722.1			210.5		
						1,408.4			410.6		

-continued-

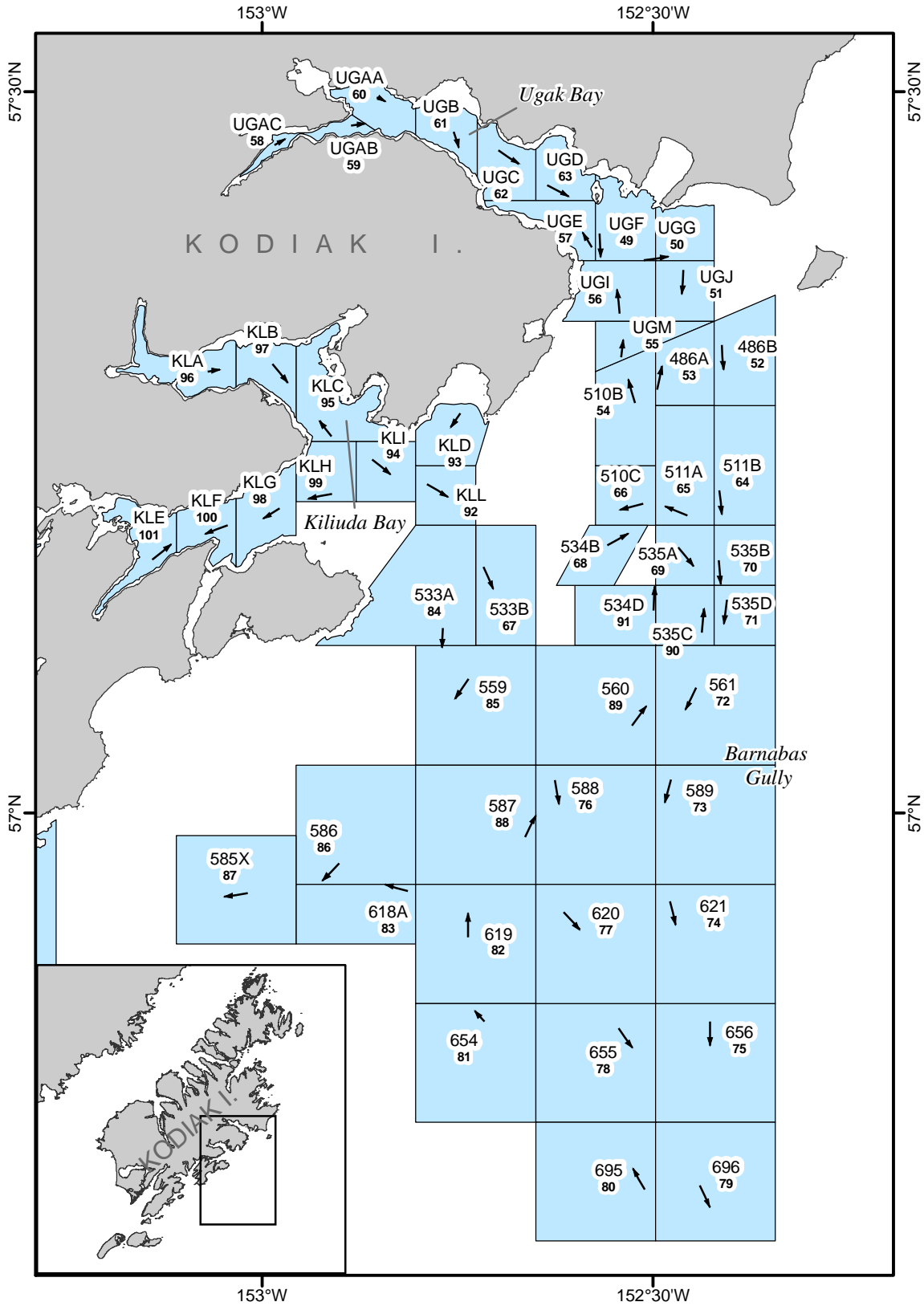
APPENDIX C. TRAWL MAPS



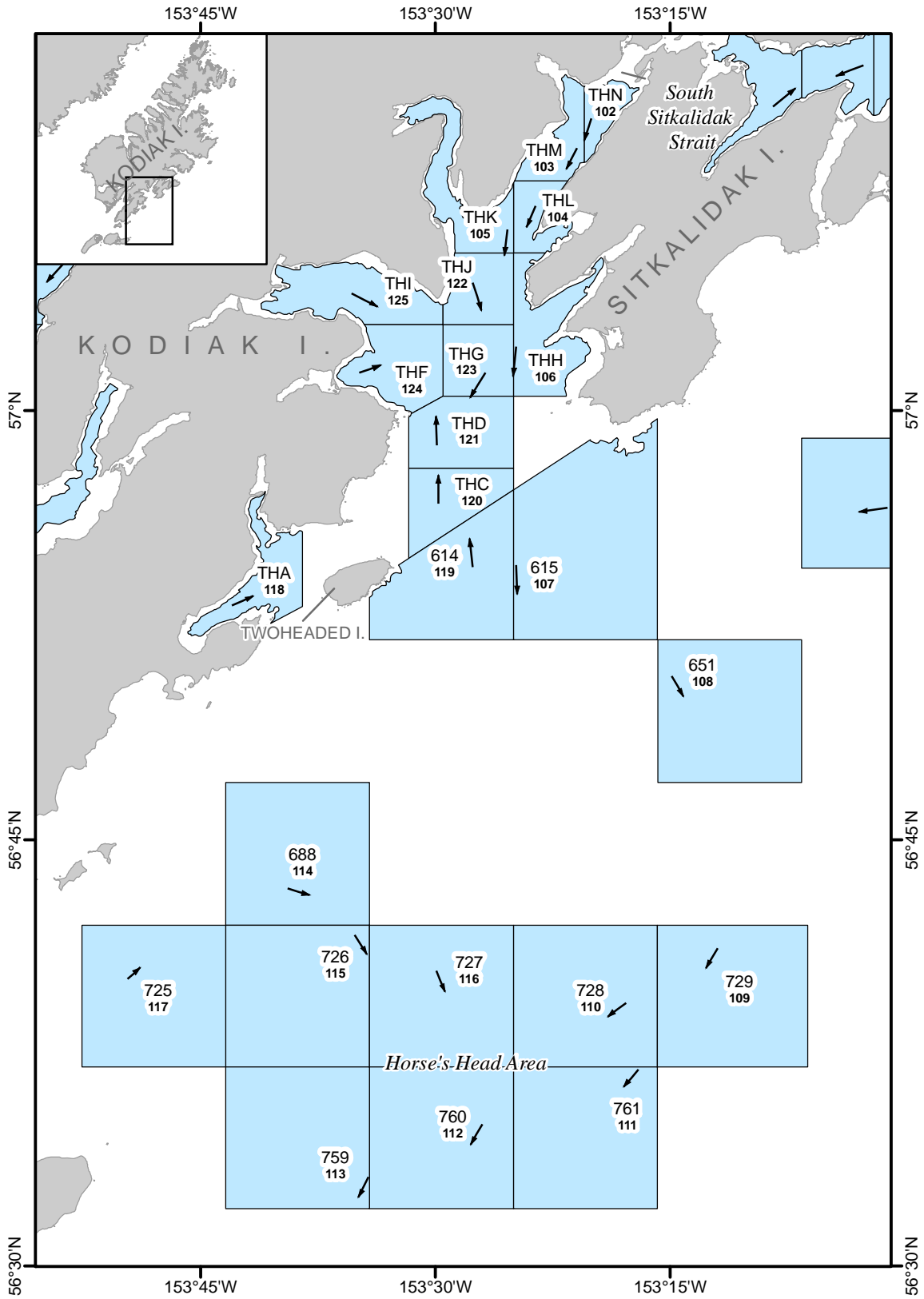
Appendix C1.–Izhut, Kazakof, Kizhuyak, and Marmot bays station boundaries with station name, trawl haul number (bold), location and direction of haul (arrow), June 2012.



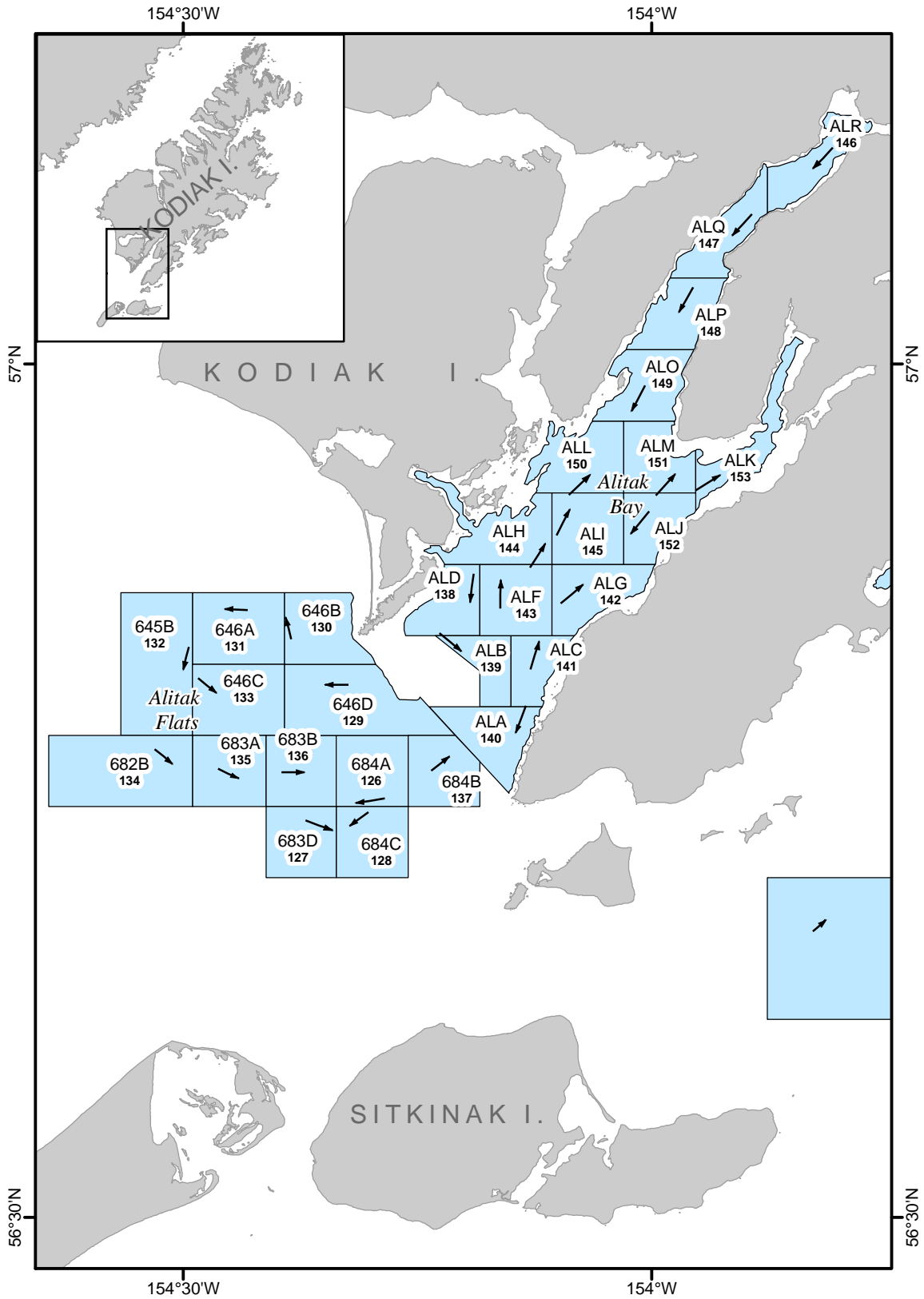
Appendix C2.—Chiniak Bay and Chiniak Gully station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), June 2012.



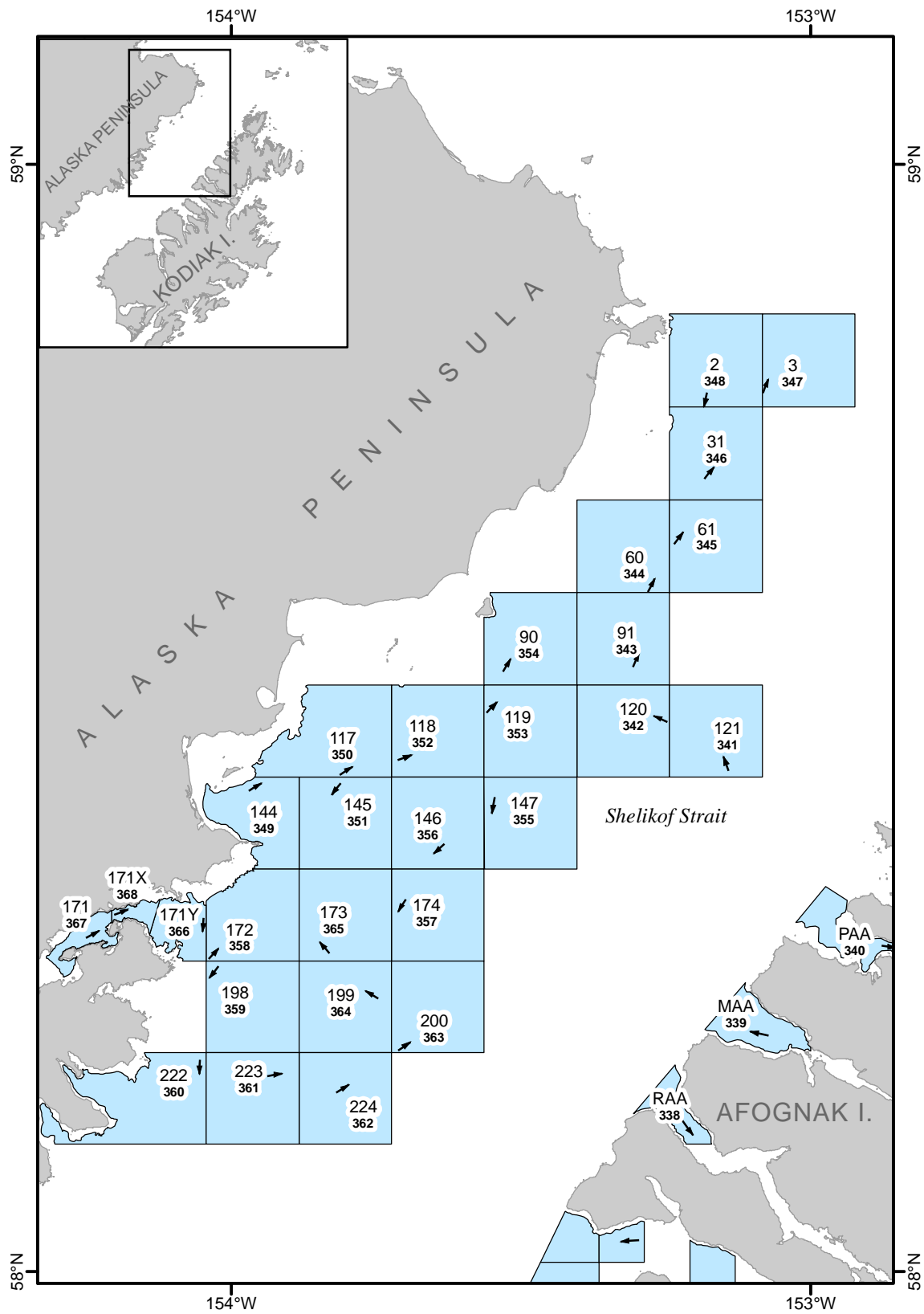
Appendix C3.—Ugak Bay, Kiliuda Bay, and Barnabas Gully station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), June and July 2012.



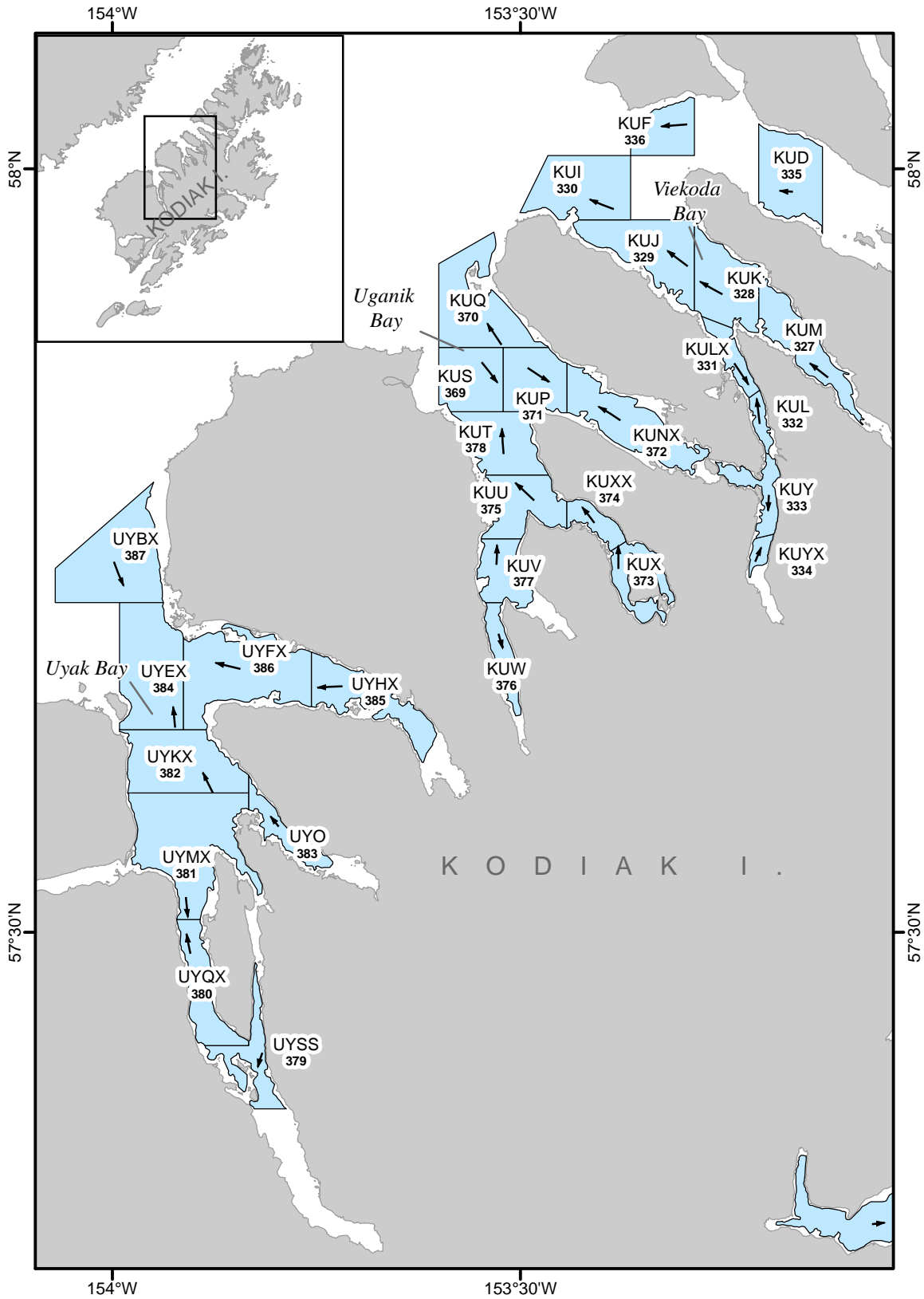
Appendix C4.—South Sitkalidak Strait, Twoheaded Island, and Horse's Head area station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), July 2012.



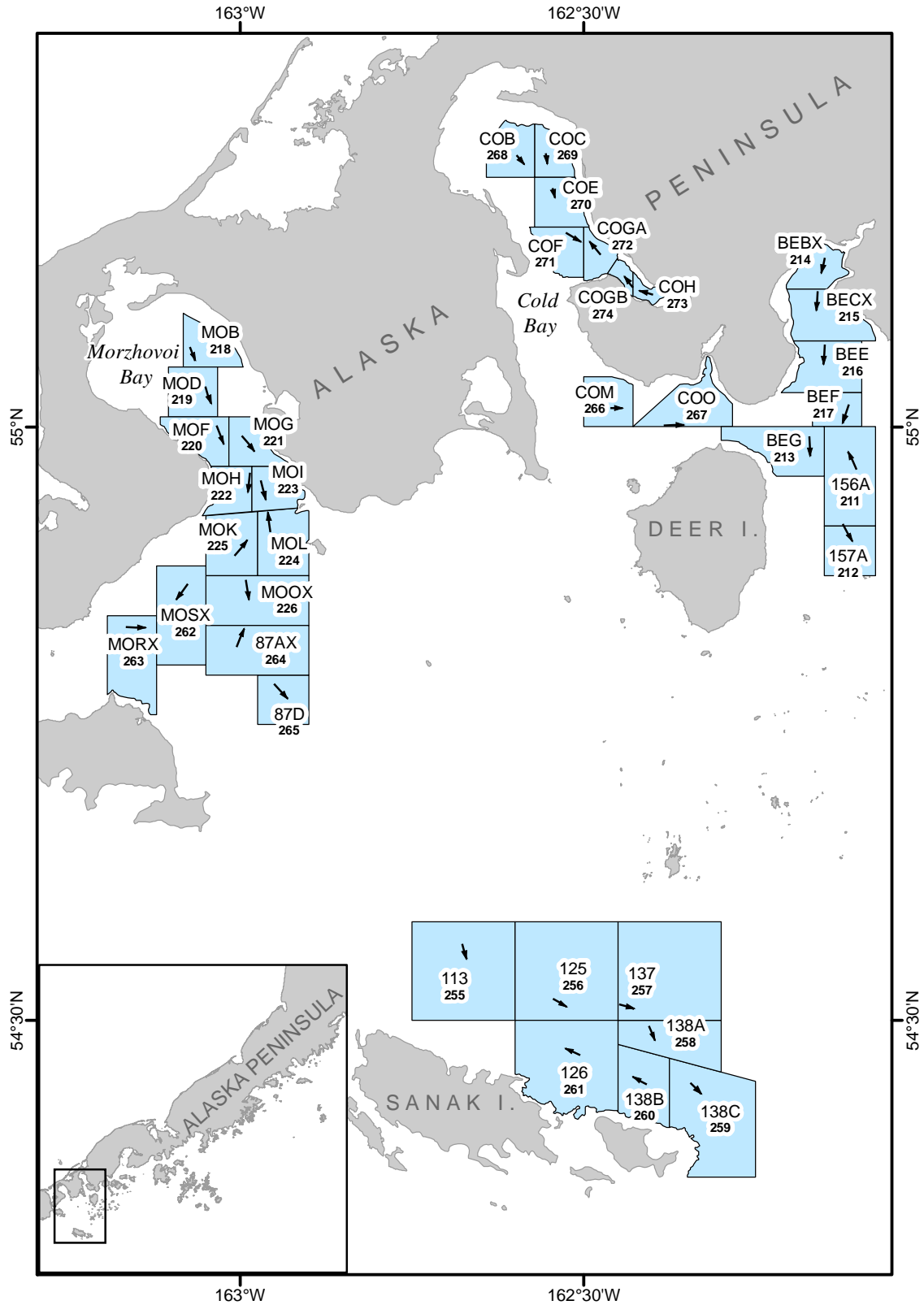
Appendix C5.—Alitak Bay and Alitak Flats station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), July 2012.



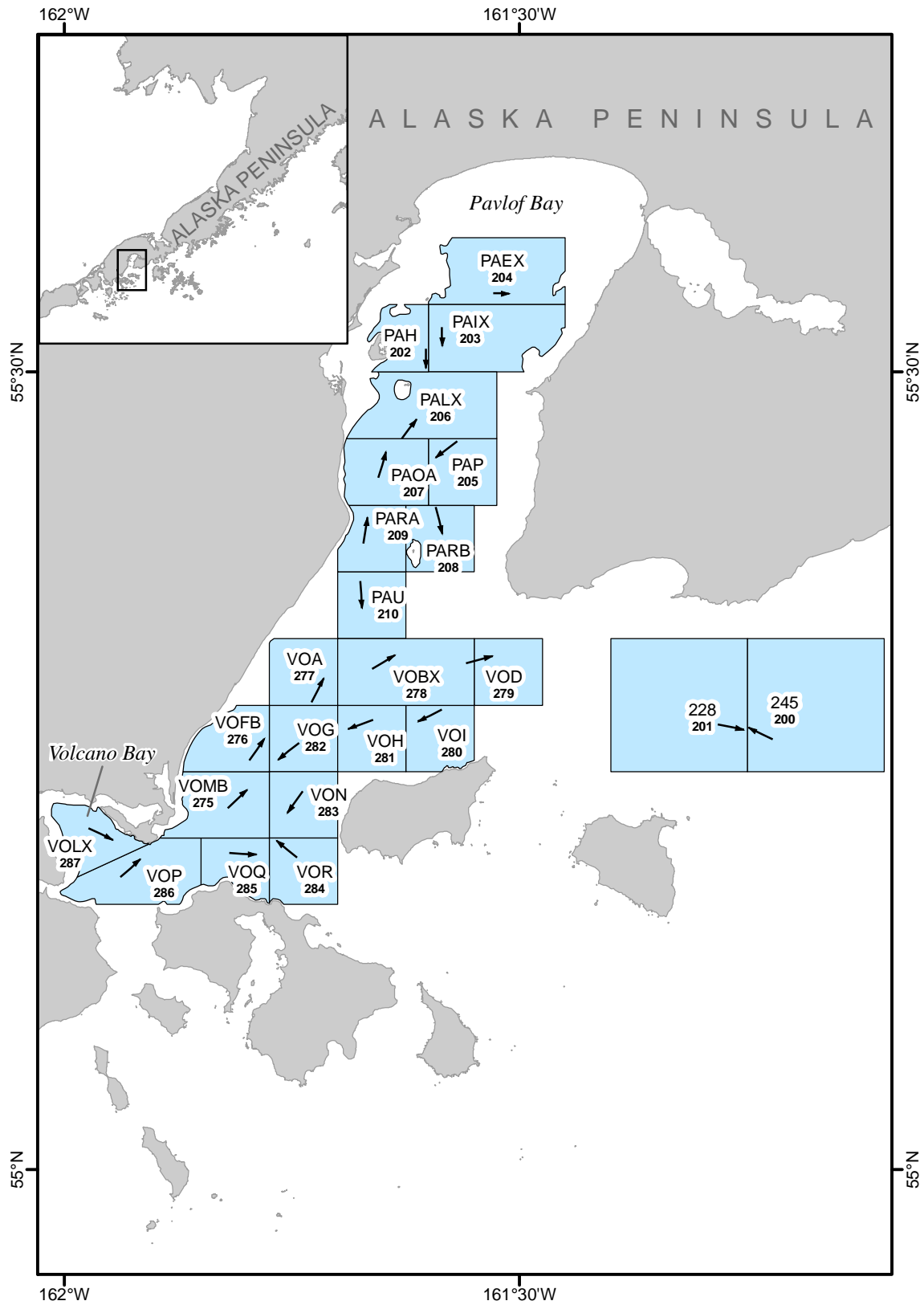
Appendix C6.—Shelikof Strait station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), September 2012.



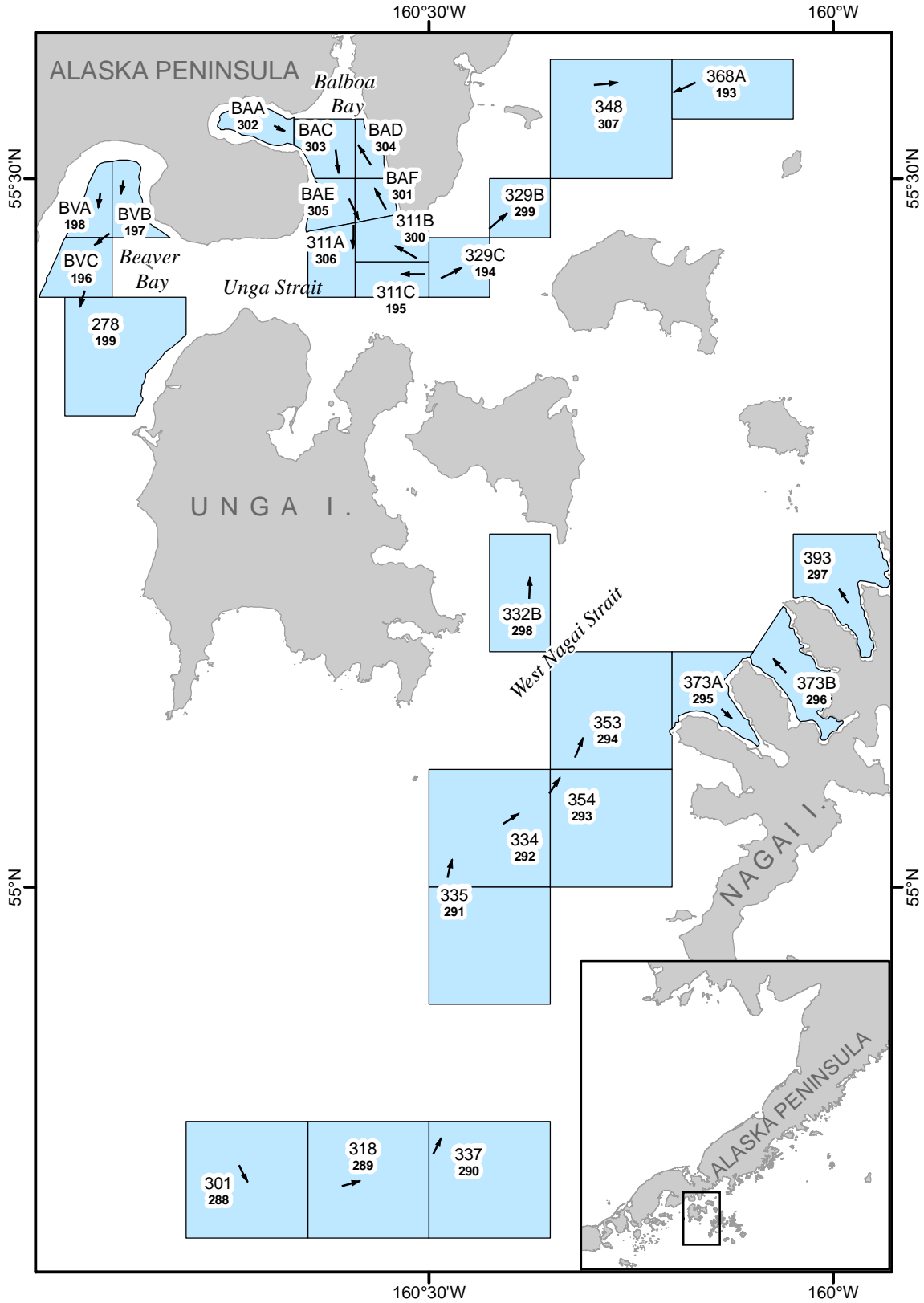
Appendix C7.—Uyak, Uganik, and Viekada Bays station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), September 2012.



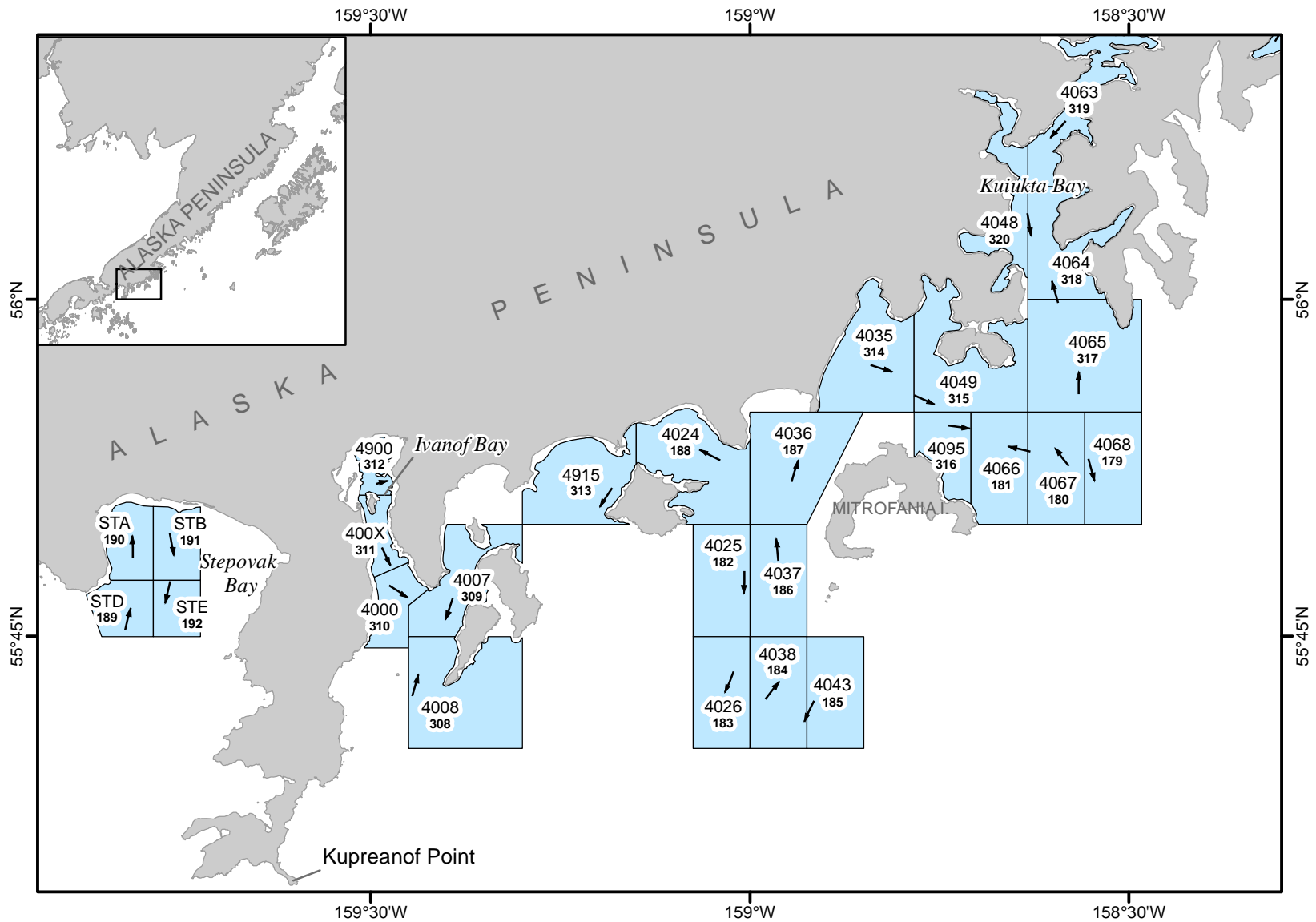
Appendix C8.—Morzhovoi Bay, Cold Bay, Belkofski Bay, Deer Island, and Sanak Island station boundaries with station name, trawl haul number (bold) and location and direction of haul, August 2012.



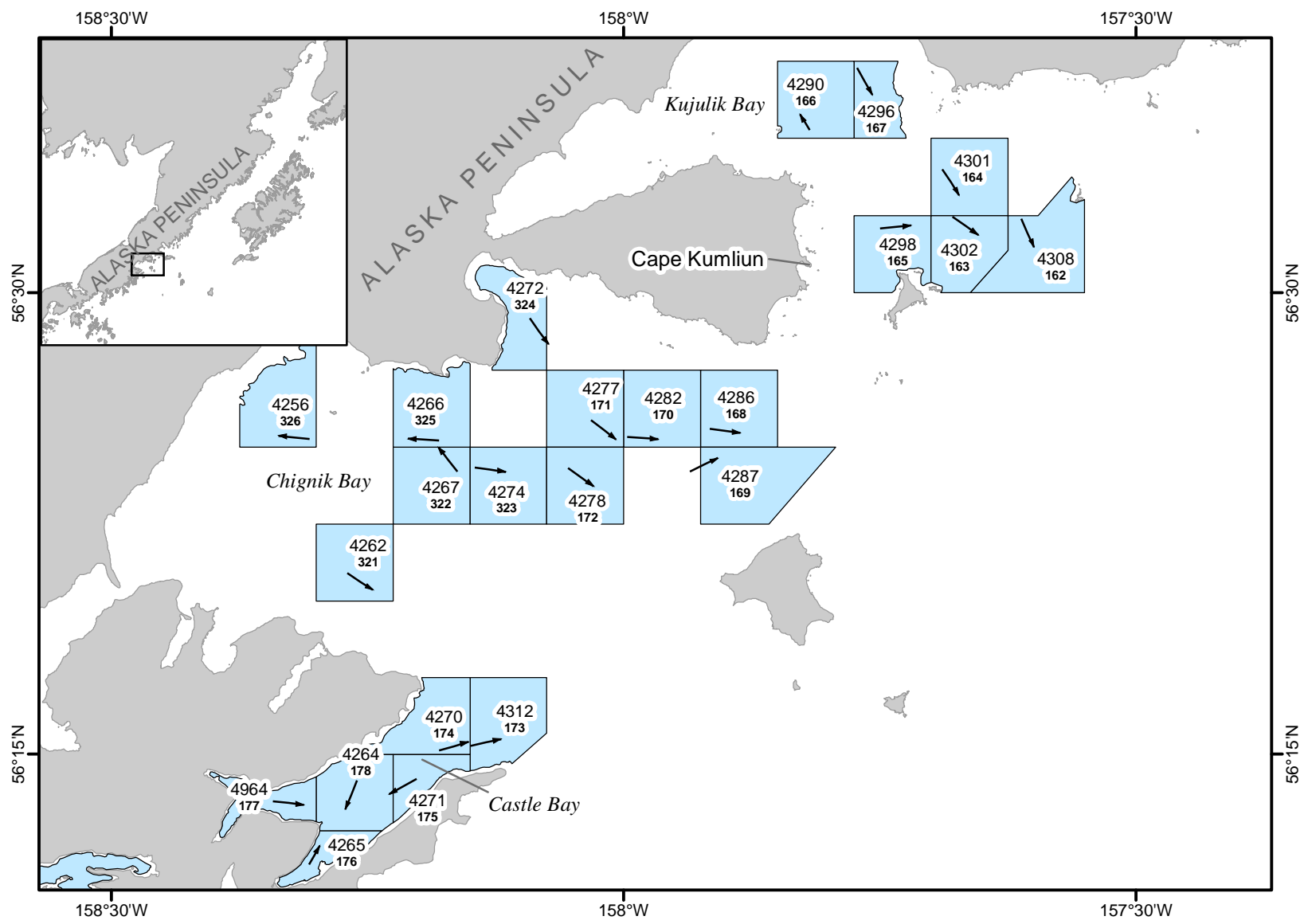
Appendix C9.–Pavlof and Volcano Bays station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), August 2012.



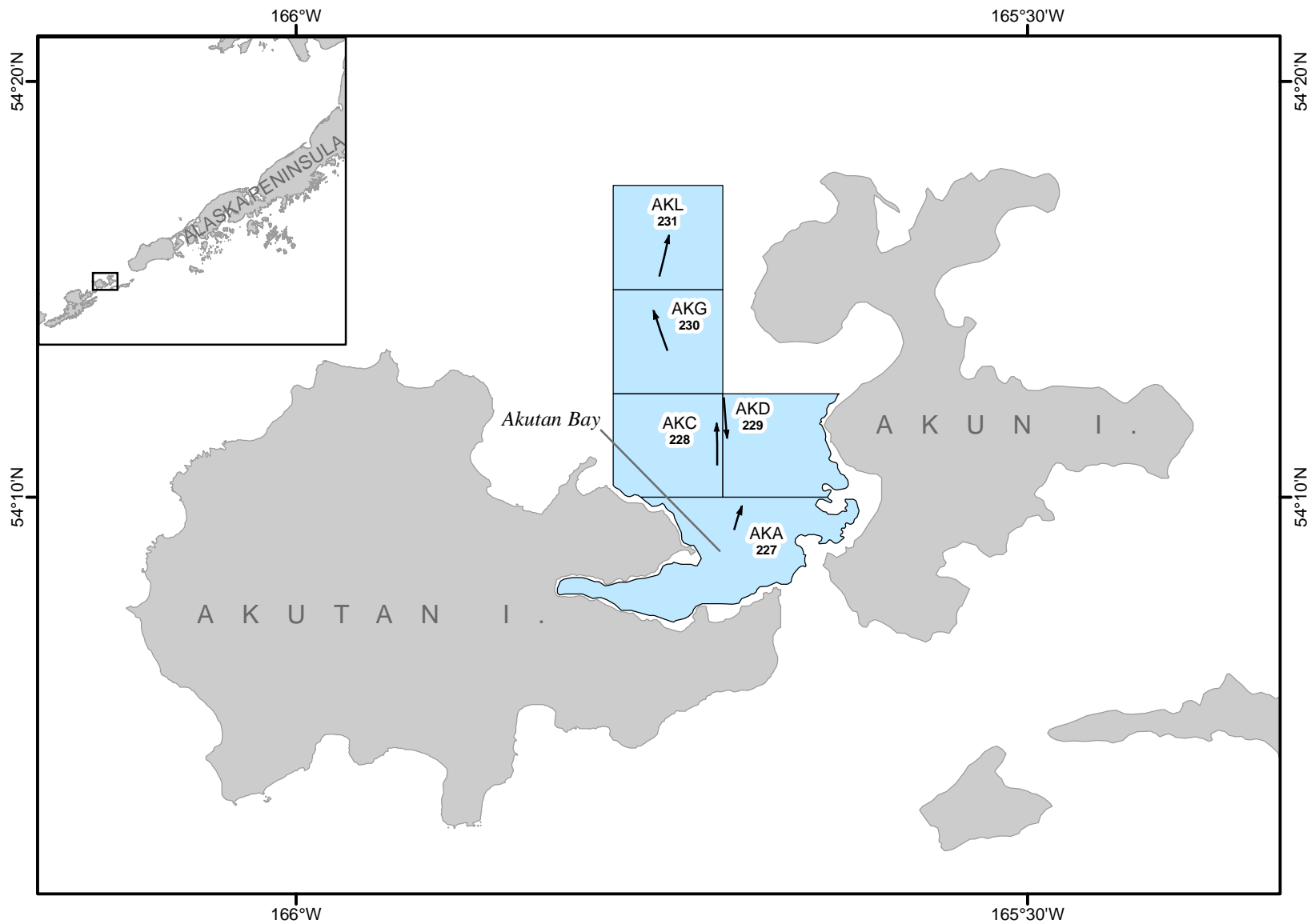
Appendix C10.—Unga Strait, Beaver Bay, Balboa Bay, and West Nagai Strait station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), August 2012.



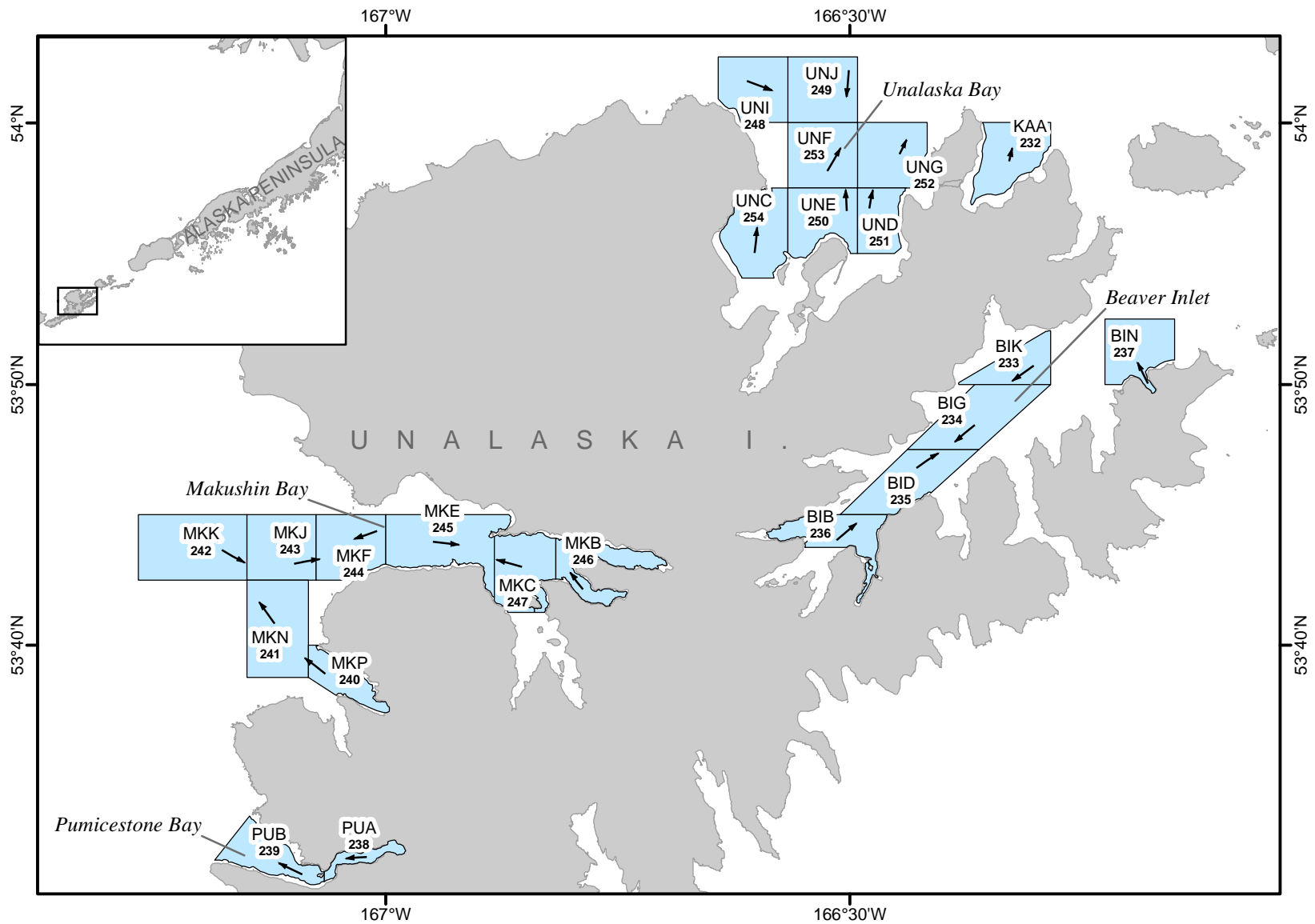
Appendix C11.—Stepovak, Ivanof, and Kuiukta Bays, and Mitrofanial station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), August 2012.



Appendix C12.—Kujulik, Chignik, and Castle Bays station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), August 2012.



Appendix C13.—Akutan Bay station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), July 2012.



Appendix C14.—Unalaska, Makushin, and Pumicestone Bays station boundaries with station name, trawl haul number (bold) and location and direction of haul (arrow), July 2012.

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

Appendix D1.—Tanner crab population estimates in the Kodiak District by station, section, and total district, 2012.

Station	Haul no.	Females			Sublegals (mm CW)				Recruits	Postrecruits (mm CW)		Total Legal	Total Males	Total Crab
		Juvenile	Adult	Total	<70	70-91	92-114	>114		<165	≥165			
NORTHEAST Section														
255	15	0	0	0	0	0	6,076	21,266	0	0	0	0	27,342	27,342
255X	14	199,369	26,583	225,951	138,229	0	13,291	31,899	0	5,317	0	5,317	188,736	414,687
256	17	0	3,798	3,798	3,798	0	0	3,798	0	0	0	0	7,595	11,393
257	13	0	0	0	18,988	0	0	7,595	0	0	0	0	26,583	26,583
283	20	144,305	23,089	167,394	101,013	0	0	25,975	0	5,772	0	5,772	132,761	300,154
283X	21	238,863	61,823	300,686	193,900	0	14,051	89,925	2,810	39,342	0	42,152	340,028	640,714
284	19	178,483	53,165	231,648	151,900	3,798	18,988	37,975	0	0	0	0	212,660	444,308
285	12	0	3,798	3,798	0	0	7,595	11,393	0	0	0	0	18,988	22,785
313	10	341,775	56,963	398,738	231,648	0	22,785	15,190	0	15,190	0	15,190	284,813	683,550
314	11	7,595	0	7,595	0	0	0	3,798	0	0	0	0	3,798	11,392
369X	3	42,532	0	42,532	42,532	0	0	30,380	0	0	0	0	72,912	115,444
395	44	127,734	6,905	134,639	100,116	3,452	6,905	27,618	0	10,357	0	10,357	148,448	283,086
420	45	15,190	0	15,190	7,595	0	0	45,570	0	18,988	0	18,988	72,153	87,343
421	46	18,988	0	18,988	11,393	3,798	3,798	11,393	0	3,798	0	3,798	34,178	53,165
443	48	29,536	0	29,536	50,633	0	8,439	16,878	0	4,219	0	4,219	80,169	109,706
444	47	25,317	0	25,317	25,317	0	16,878	8,439	0	4,219	0	4,219	54,853	80,169
CHA	7	0	0	0	972	0	0	0	0	0	0	0	972	972
CHB	6	24,456	0	24,456	32,142	1,397	0	0	0	349	0	349	33,889	58,345
CHF	8	121,398	5,620	127,019	118,109	1,312	0	5,905	0	7,874	0	7,874	133,201	260,220
CHG	4	13,808	0	13,808	10,739	0	0	1,534	0	1,534	0	1,534	13,808	27,615
CHJ	1	17,043	3,008	20,051	15,038	2,005	4,511	3,509	501	0	0	501	25,565	45,616
CHK	5	8,544	35,127	43,671	13,766	949	0	2,373	0	3,798	0	3,798	20,886	64,558
CHL	2	107,120	0	107,120	122,067	1,868	1,246	623	0	0	0	0	125,804	232,923
KZA	41	5,165	1,033	6,198	2,066	18,593	4,132	0	0	0	0	0	24,790	30,988
KZB	42	19,929	486	20,415	23,575	3,403	243	0	0	0	0	0	27,220	47,636
KZC	40	13,671	0	13,671	22,785	1,823	0	0	0	0	0	0	24,608	38,279
KZD	43	57,646	3,930	61,576	90,399	19,652	14,412	14,412	1,310	0	0	1,310	140,185	201,761
KZE	39	250,331	0	250,331	320,813	2,430	2,430	0	0	0	0	0	325,674	576,005
KZF	38	51,646	3,038	54,684	59,241	1,519	0	0	0	0	0	0	60,760	115,444
KZG	37	40,026	0	40,026	43,557	1,177	0	0	0	0	0	0	44,735	84,760
KZJ	36	103,376	0	103,376	144,516	0	0	0	0	0	0	0	144,516	247,892
KZK	35	150,001	3,798	153,799	181,294	20,370	4,074	4,074	0	0	0	0	209,812	363,611
KZO	34	141,457	8,544	150,001	199,207	20,301	22,839	25,377	0	0	0	0	267,724	417,725
KZR	32	4,492	266,498	270,990	1,215	1,215	4,861	25,519	0	54,684	0	54,684	87,494	358,484
KZS	31	37,276	25,415	62,691	26,130	24,886	8,710	27,374	33,596	0	0	33,596	120,695	183,387
MOEX	29	74,856	0	74,856	87,332	0	0	0	0	0	0	0	87,332	162,189
MOGX	9	107,910	32,081	139,991	87,494	2,916	2,916	46,664	0	2,916	0	2,916	142,908	282,899

-continued-

Appendix D1.–Page 2 of 6.

Station	Haul no.	Females		Sublegals (mm CW)				Recruits	Postrecruits (mm CW)		Total Legal	Total Males	Total Crab	
		Juvenile	Adult	Total	<70	70-91	92-114		>114	<165				≥165
MOLX	27	59,545	1,215	60,760	57,114	2,430	2,430	2,430	0	0	0	64,406	125,166	
MONX	30	805,374	0	805,374	738,022	22,944	7,648	0	0	0	0	768,614	1,573,988	
MOPX	25	104,583	0	104,583	124,269	1,230	0	0	0	0	0	125,500	230,083	
MOQ	28	87,343	15,190	102,533	86,393	0	3,798	14,241	0	949	0	949	105,381	207,913
MOT	26	156,822	881	157,703	152,416	0	0	881	0	0	0	153,297	311,000	
MOX	23	64,649	577	65,226	69,844	1,732	0	0	0	0	0	71,575	136,801	
MOXX	24	62,704	0	62,704	64,011	0	0	0	0	0	0	64,011	126,715	
Population Estimate		4,060,858	642,565	4,703,423	3,971,588	165,200	203,056	564,008	38,217	179,306	0	217,523	5,121,379	9,824,797
EASTSIDE Section														
486A	53	0	0	0	1,236	0	9,892	173,105	1,236	75,424	0	76,661	260,894	260,894
510B	54	0	0	0	0	0	21,501	503,112	0	339,708	8,600	348,308	872,921	872,921
510C	66	0	0	0	0	0	0	25,243	0	7,212	0	7,212	32,455	32,455
511A	65	0	0	0	0	1,899	1,899	93,039	0	34,178	0	34,178	131,014	131,014
511B	64	0	1,899	1,899	5,696	0	11,393	13,291	0	0	0	0	30,380	32,279
533A	84	4,747	2,373	7,120	9,494	0	0	0	0	0	0	0	9,494	16,614
533B	67	0	1,899	1,899	0	0	0	7,595	0	0	0	0	7,595	9,494
534B	68	0	0	0	0	0	0	3,798	0	1,899	0	1,899	5,696	5,696
534D	91	1,253	5,013	6,266	0	0	1,253	1,253	0	1,253	0	1,253	3,760	10,025
535A	69	949	41,773	42,722	7,033	0	7,033	145,678	0	46,215	1,005	47,220	206,964	249,686
535B	70	0	13,291	13,291	0	949	19,937	140,508	0	21,836	0	21,836	183,229	196,521
535C	90	0	271,521	271,521	0	0	4,568	331,200	0	125,628	0	125,628	461,396	732,917
535D	71	0	44,621	44,621	0	2,162	34,599	270,308	0	121,098	0	121,098	428,168	472,789
559	85	581,018	0	581,018	508,865	7,595	3,798	30,380	0	7,595	0	7,595	558,233	1,139,250
560	89	18,988	15,190	34,178	7,595	0	0	15,190	0	0	0	0	22,785	56,963
561	72	22,785	3,798	26,583	15,836	0	47,507	480,346	0	506,738	5,279	512,017	1,055,705	1,082,287
587	88	349,370	0	349,370	394,940	0	22,785	75,950	0	11,393	3,798	15,190	508,865	858,235
588	76	110,128	0	110,128	102,533	0	3,798	72,153	0	15,190	0	15,190	193,673	303,800
589	73	3,798	7,595	11,393	0	3,798	15,190	227,850	0	284,813	7,595	292,408	539,245	550,638
619	82	53,165	0	53,165	56,963	0	26,583	64,558	0	7,595	0	7,595	155,698	208,863
620	77	98,735	0	98,735	64,558	3,798	11,393	110,128	0	49,368	0	49,368	239,243	337,978
621	74	3,798	3,798	7,595	3,798	0	11,393	34,178	0	3,798	0	3,798	53,165	60,760
654	81	12,658	6,329	18,988	0	0	56,963	202,533	0	75,950	0	75,950	335,446	354,433
655	78	72,153	0	72,153	45,570	0	3,798	87,343	87,343	15,190	3,798	106,330	243,040	315,193
656	75	75,950	11,393	87,343	68,355	7,595	30,380	34,178	3,798	30,380	0	34,178	174,685	262,028
695	80	117,723	0	117,723	136,710	3,798	26,583	34,178	0	37,975	3,798	41,773	243,040	360,763
696	79	15,190	0	15,190	26,583	0	0	18,988	0	37,975	0	37,975	83,545	98,735
KLA	96	27,798	3,706	31,504	55,595	0	0	3,706	7,413	0	1,853	9,266	68,568	100,072
KLB	97	7,792	27,069	34,861	7,382	1,230	4,101	16,405	0	7,382	0	7,382	36,502	71,363

-continued-

Appendix D1.–Page 3 of 6.

Station	Haul no.	Females		Total	Sublegals (mm CW)				Recruits	Postrecruits (mm CW)		Total Legal	Total Males	Total Crab
		Juvenile	Adult		<70	70-91	92-114	>114		<165	≥165			
KLC	95	10,823	0	10,823	8,658	2,165	4,329	23,810	0	12,987	0	12,987	51,950	62,773
KLE	101	24,426	0	24,426	36,091	1,458	2,916	21,144	0	3,281	0	3,281	64,892	89,317
KLF	100	268,790	1,227	270,017	265,618	43,111	0	1,391	0	0	0	0	310,119	580,136
KLG	98	87,494	1,823	89,317	113,014	0	0	4,557	0	911	0	911	118,482	207,799
KLH	99	84,851	5,210	90,062	86,340	0	0	23,074	0	29,028	0	29,028	138,442	228,503
KLI	94	2,848	0	2,848	1,899	949	949	949	0	0	0	0	4,747	7,595
KLL	92	0	0	0	2,848	0	0	6,646	0	2,848	0	2,848	12,342	12,342
UGAA	60	101,086	24,828	125,914	164,929	30,148	12,414	14,187	97,539	0	12,414	109,953	331,632	457,546
UGAB	59	1,387	2,775	4,162	0	0	4,669	25,679	368,849	0	86,376	455,225	485,574	489,736
UGAC	58	1,978	0	1,978	2,260	283	0	0	3,390	0	283	3,673	6,216	8,193
UGB	61	169,428	2,479	171,907	148,632	0	1,556	4,669	778	778	0	1,556	156,414	328,321
UGC	62	110,781	3,099	113,879	62,147	3,271	31,074	204,432	0	52,335	0	52,335	353,259	467,138
UGD	63	137,561	0	137,561	138,309	0	2,577	25,772	1,718	5,154	0	6,872	173,531	311,091
UGE	57	803	0	803	1,606	0	2,409	77,078	803	19,270	0	20,072	101,165	101,968
UGF	49	699	0	699	699	0	699	6,987	0	1,397	0	1,397	9,782	10,481
UGG	50	0	486	486	0	0	0	0	0	0	0	0	0	486
UGI	56	0	24,684	24,684	0	0	9,458	331,041	0	113,500	7,094	120,593	461,092	485,776
UGJ	51	0	0	0	0	0	0	949	0	0	0	0	949	949
UGM	55	0	1,063	1,063	0	0	0	17,013	0	12,760	0	12,760	29,772	30,836
Population Estimate		2,580,953	528,942	3,109,895	2,551,792	114,209	449,397	4,005,572	572,867	2,120,042	141,893	2,834,799	9,955,764	13,065,652
SOUTHEAST Section														
585X	87	37,595	16,709	54,304	45,950	12,532	54,304	100,254	0	66,836	4,177	71,013	284,053	338,357
586	86	30,380	0	30,380	22,785	0	3,798	11,393	0	18,988	0	18,988	56,963	87,343
614	119	19,884	17,043	36,927	9,459	12,612	18,918	189,179	0	384,665	15,765	400,430	630,598	667,525
615	107	83,697	13,215	96,912	66,077	17,620	22,026	88,102	4,405	61,671	0	66,077	259,901	356,813
618A	83	18,988	1,899	20,886	3,798	0	5,696	5,696	1,899	1,899	0	3,798	18,988	39,874
651	108	208,863	14,241	223,103	232,597	66,456	23,734	90,191	0	14,241	0	14,241	427,219	650,322
688	114	71,203	9,494	80,697	66,456	4,747	28,481	204,116	0	52,216	0	52,216	356,016	436,713
725	117	25,317	0	25,317	12,658	0	0	0	0	0	0	0	12,658	37,975
726	115	104,431	4,747	109,178	37,975	0	4,747	9,494	0	0	0	0	52,216	161,394
727	116	194,622	0	194,622	118,672	0	23,734	85,444	0	14,241	0	14,241	242,091	436,713
728	110	151,900	0	151,900	194,622	9,494	0	52,216	0	14,241	0	14,241	270,572	422,472
729	109	75,950	23,734	99,684	120,642	702,870	104,906	62,944	0	57,698	0	57,698	1,049,059	1,148,744
759	113	384,497	4,747	389,244	294,306	0	9,494	71,203	0	18,988	0	18,988	393,991	783,234
760	112	42,722	0	42,722	66,456	0	4,747	104,431	0	42,722	0	42,722	218,356	261,078
761	111	180,381	0	180,381	151,900	0	9,494	28,481	0	4,747	0	4,747	194,622	375,003
THA	118	193,691	968	194,660	147,883	48,968	979	2,938	1,959	0	1,959	3,917	204,685	399,345
THC	120	50,218	866	51,084	48,486	0	0	8,658	866	6,061	0	6,927	64,071	115,155

-continued-

Appendix D1.–Page 4 of 6.

Station	Haul no.	Females		Sublegals (mm CW)				Recruits	Postrecruits (mm CW)		Total Legal	Total Males	Total Crab	
		Juvenile	Adult	<70	70-91	92-114	>114		<165	≥165				
THD	121	48,082	0	48,082	72,124	0	0	3,796	0	3,796	0	3,796	79,716	127,798
THF	124	114,779	1,234	116,014	80,222	35,791	4,937	64,178	0	12,342	0	12,342	197,470	313,484
THG	123	67,406	949	68,355	62,659	1,899	949	4,747	0	7,595	0	7,595	77,849	146,204
THH	106	142,057	0	142,057	140,662	0	0	19,837	0	18,935	902	19,837	180,336	322,393
THI	125	133,976	957	134,933	66,988	84,213	2,871	957	0	0	0	0	155,029	289,962
THJ	122	80,568	0	80,568	66,350	18,957	0	22,907	1,580	56,871	2,370	60,821	169,034	249,602
THK	105	17,013	4,051	21,063	15,393	4,861	810	34,026	0	34,836	810	35,646	90,735	111,798
THL	104	13,329	1,025	14,355	12,817	1,538	1,025	2,051	0	3,589	0	3,589	21,019	35,374
THM	103	124,197	1,766	125,963	104,635	37,317	2,195	10,244	2,927	732	1,463	5,122	159,514	285,477
THN	102	25,348	0	25,348	32,184	1,424	285	1,424	0	1,139	0	1,139	36,456	61,804
Population Estimate		2,641,094	117,645	2,758,739	2,294,756	1,061,299	328,130	1,278,907	13,636	899,049	27,446	940,131	5,903,217	8,661,956
SOUTHWEST Section														
645B	132	26,583	37,975	64,558	24,684	0	0	37,975	0	13,291	0	13,291	75,950	140,508
646A	131	24,000	4,500	28,500	31,500	0	1,500	10,500	0	0	0	0	43,500	72,001
646B	130	7,291	0	7,291	7,291	0	0	3,646	0	911	0	911	11,848	19,139
646C	133	62,944	83,925	146,868	50,032	0	4,842	32,279	0	50,032	1,614	51,646	138,799	285,667
646D	129	2,070	6,209	8,279	0	0	4,139	14,487	0	4,139	0	4,139	22,766	31,045
682B	134	28,147	347,141	375,288	30,532	1,272	12,722	77,602	0	77,602	0	77,602	199,730	575,017
683A	135	19,082	119,583	138,666	12,740	1,820	3,640	171,078	0	187,458	3,640	191,098	380,377	519,042
683B	136	8,108	4,633	12,741	8,108	0	1,158	24,323	0	17,374	1,158	18,532	52,121	64,861
683D	127	47,575	820	48,395	54,547	0	1,230	6,152	0	1,641	0	1,641	63,570	111,965
684A	126	0	0	0	2,035	0	0	5,089	0	1,018	0	1,018	8,142	8,142
684B	137	1,139	0	1,139	570	0	0	0	0	0	0	0	570	1,709
684C	128	4,747	0	4,747	3,798	0	0	8,070	0	1,899	0	1,899	13,766	18,513
ALA	140	1,367	5,332	6,699	820	0	137	2,324	547	957	0	1,914	5,195	11,894
ALB	139	787	22,032	22,818	0	0	0	14,950	2,361	6,295	0	14,950	29,900	52,718
ALC	141	2,160	23,760	25,920	1,800	0	2,520	42,480	1,080	29,880	0	31,680	78,481	104,401
ALD	138	2,886	28,284	31,170	1,732	0	1,154	12,699	577	5,195	0	8,081	23,666	54,836
ALF	143	949	36,076	37,026	1,899	0	2,848	23,734	3,798	14,241	0	26,583	55,064	92,089
ALG	142	17,620	7,929	25,550	20,263	881	0	11,453	881	7,929	0	10,572	43,170	68,720
ALH	144	3,570	0	3,570	3,570	714	714	9,995	4,284	37,124	714	43,550	58,542	62,112
ALI	145	2,947	737	3,684	8,104	0	737	27,995	5,157	53,780	1,473	61,884	98,720	102,403
ALJ	152	148,376	0	148,376	176,517	7,472	1,868	25,217	1,868	934	0	2,802	213,875	362,251
ALK	153	107,357	1,008	108,365	122,469	13,055	1,243	3,108	2,487	0	1,243	3,730	143,606	251,972
ALL	150	9,114	0	9,114	11,666	0	0	2,916	1,094	2,552	0	4,739	19,322	28,436
ALM	151	64,968	714	65,682	59,256	2,142	2,142	3,570	1,428	0	0	1,428	68,537	134,219
ALO	149	33,494	744	34,238	29,028	1,489	0	1,489	1,489	0	0	2,233	34,238	68,477
ALP	148	13,610	0	13,610	16,162	851	0	2,552	851	0	0	851	20,415	34,026

-continued-

Appendix D1.–Page 5 of 6.

Station	Haul no.	Females		Sublegals (mm CW)				Recruits	Postrecruits (mm CW)		Total Legal	Total Males	Total Crab	
		Juvenile	Adult	Total	<70	70-91	92-114		>114	<165				≥165
ALQ	147	7,656	0	7,656	8,932	0	638	1,914	638	0	638	1,276	12,760	20,415
ALR	146	2,962	0	2,962	3,554	0	0	1,185	1,185	0	0	1,185	5,924	8,886
Population Estimate		651,509	731,402	1,382,912	691,609	29,696	43,232	578,782	29,725	514,252	10,480	579,235	1,922,554	3,305,464
WESTSIDE Section														
KUD	335	0	0	0	2,400	0	0	0	0	0	0	0	2,400	2,400
KUF	336	1,499	11,494	12,994	0	1,499	3,498	3,498	0	1,000	0	1,000	9,495	22,489
KUI	330	26,701	3,977	30,678	24,997	284	568	568	0	0	0	0	26,417	57,095
KUJ	329	47,370	8,271	55,641	81,958	3,760	15,038	14,286	0	752	0	752	115,793	171,434
KUK	328	58,271	128,566	186,837	29,271	6,228	2,491	16,193	0	8,719	0	8,719	62,902	249,739
KUL	332	1,560	2,880	4,440	1,920	360	120	0	0	0	0	0	2,400	6,840
KULX	331	65,268	1,910	67,178	43,449	123,488	53,740	10,291	1,143	0	0	1,143	232,111	299,289
KUM	327	5,681	0	5,681	4,648	0	0	0	0	0	0	0	4,648	10,329
KUNX	372	129,635	28,114	157,748	86,093	86,093	7,327	2,748	0	916	0	916	183,176	340,924
KUP	371	19,449	12,377	31,826	17,681	1,179	4,126	8,841	0	4,715	0	4,715	36,541	68,367
KUQ	370	92,963	41,013	133,976	116,659	7,291	4,557	3,646	0	2,734	0	2,734	134,887	268,863
KUS	369	21,509	27,424	48,933	27,424	1,075	1,613	5,377	0	1,075	0	1,075	36,565	85,498
KUT	378	39,123	5,411	44,534	32,048	7,492	832	2,497	416	0	0	416	43,285	87,819
KUU	375	144,984	17,644	162,627	114,945	85,950	6,213	1,036	0	1,036	0	1,036	209,178	371,806
KUV	377	3,418	6,380	9,798	228	456	684	2,734	0	4,101	228	4,329	8,430	18,228
KUW	376	1,147	0	1,147	2,294	1,529	0	0	0	0	0	0	3,823	4,970
KUX	373	38,964	2,209	41,173	15,071	52,750	15,610	13,995	9,151	538	538	10,227	107,653	148,827
KUXX	374	13,842	30,760	44,602	2,434	27,746	8,762	18,984	29,207	11,683	1,460	42,350	100,277	144,878
KUY	333	904	603	1,506	1,205	603	0	0	0	0	0	0	1,808	3,314
MAA	339	6,995	5,130	12,125	4,663	3,264	4,197	3,731	0	0	0	0	15,855	27,980
PAA	340	3,342	0	3,342	9,190	0	0	835	0	0	0	0	10,025	13,367
RAA	338	595	8,932	9,527	595	0	0	0	0	0	0	0	595	10,123
UYBX	387	1,902	0	1,902	2,853	0	0	951	0	0	0	0	3,804	5,705
UYEX	384	79,383	3,308	82,691	85,998	0	0	0	0	0	0	0	85,998	168,689
UYFX	386	106,462	90,835	197,297	97,672	65,440	22,464	13,674	0	10,744	0	10,744	209,994	407,291
UYHX	385	14,218	0	14,218	20,962	0	0	0	0	0	0	0	20,962	35,180
UYKX	382	82,505	4,773	87,278	121,535	41,094	13,115	5,246	0	1,749	0	1,749	182,739	270,017
UYMX	381	200,542	3,458	204,000	252,480	173,725	32,429	11,582	4,633	0	0	4,633	474,847	678,847
UYO	383	18,911	114,768	133,678	5,061	2,084	0	298	0	0	0	0	7,443	141,121
UYQX	380	3,828	0	3,828	5,104	1,276	0	0	0	0	0	0	6,380	10,208
UYSS	379	0	36,983	36,983	0	0	446	1,782	3,565	19,605	18,714	41,884	44,112	81,094
Population Estimate		1,230,971	597,220	1,828,188	1,210,838	694,666	197,830	142,793	48,115	69,367	20,940	138,422	2,384,543	4,212,731

-continued-

Appendix D1.–Page 6 of 6.

Station	Haul no.	Females		Sublegals (mm CW)				Recruits	Postrecruits (mm CW)		Total Legal	Total Males	Total Crab
		Juvenile	Adult	Total	<70	70-91	92-114		>114	<165			
NORTH MAINLAND Section													
117	350	5,411	0	5,411	5,411	0	0	0	0	0	0	5,411	10,823
118	352	28,481	0	28,481	28,481	0	0	0	0	0	0	28,481	56,963
119	353	14,241	0	14,241	71,203	0	0	0	0	0	0	71,203	85,444
120	342	80,697	0	80,697	123,419	0	0	0	0	0	0	123,419	204,116
121	341	123,419	4,747	128,166	151,900	0	0	0	0	0	0	151,900	280,066
144	349	3,361	0	3,361	16,804	3,361	0	0	0	0	0	20,165	23,526
145	351	0	0	0	14,241	0	0	0	0	0	0	14,241	14,241
146	356	61,709	0	61,709	71,203	0	4,747	0	0	0	0	75,950	137,659
147	355	0	0	0	21,097	0	0	0	0	0	0	21,097	21,097
171	367	2,529	632	3,161	1,001	4,004	15,017	61,068	117,131	0	6,007	123,137	207,389
171X	368	5,377	11,203	16,580	845	9,291	33,787	54,059	67,574	0	3,379	70,953	185,515
171Y	366	1,610	0	1,610	0	0	0	8,051	72,456	11,271	9,661	93,388	101,439
172	358	24,684	0	24,684	83,925	0	0	0	0	0	0	83,925	108,609
173	365	175,634	4,747	180,381	175,634	9,494	4,747	9,494	0	0	0	199,369	379,750
174	357	66,456	0	66,456	61,709	0	0	4,747	0	0	0	66,456	132,913
198	359	189,875	4,747	194,622	223,103	0	0	0	0	0	0	223,103	417,725
199	364	185,128	4,747	189,875	128,166	0	0	0	0	0	0	128,166	318,041
2	348	33,228	0	33,228	28,481	0	0	0	0	0	0	28,481	61,709
200	363	308,547	14,241	322,788	375,003	4,747	4,747	14,241	0	0	0	398,738	721,525
222	360	187,976	0	187,976	181,710	0	0	0	0	0	0	181,710	369,687
223	361	299,053	0	299,053	280,066	0	4,747	14,241	0	0	0	299,053	598,106
224	362	194,622	0	194,622	85,444	0	9,494	33,228	0	4,747	0	4,747	132,913
3	347	28,481	0	28,481	23,734	0	0	0	0	0	0	23,734	52,216
31	346	111,191	0	111,191	64,861	0	0	0	0	0	0	64,861	176,052
60	344	42,722	0	42,722	52,216	0	0	0	0	0	0	52,216	94,938
61	345	66,456	0	66,456	18,988	0	0	0	0	0	0	18,988	85,444
90	354	39,988	4,443	44,431	57,760	0	0	0	0	0	0	57,760	102,191
91	343	113,925	9,494	123,419	90,191	0	0	0	0	0	0	90,191	213,609
Population Estimate		2,394,801	59,001	2,453,802	2,436,596	30,897	77,286	199,129	257,161	16,018	19,047	292,225	3,036,134
Kodiak Total		13,560,186	2,676,775	16,236,959	13,157,179	2,095,967	1,298,931	6,769,191	959,721	3,798,034	219,806	5,002,335	28,323,591

Appendix D2.—Tanner crab population estimates in the South Peninsula District by station, sampling locale, section, and total district, 2012.

Station	Haul no.	Females			Sublegals (mm CW)				Recruits	Postrecruits (mm CW)		Total Legal	Total Males	Total Crab
		Juvenile	Adult	Total	<70	70-91	92-114	>114		<165	≥165			
SANAK ISLAND														
113	255	38,450	0	38,450	17,089	4,272	0	12,817	0	17,089	4,272	21,361	55,538	93,988
125	256	4,272	0	4,272	17,089	0	0	0	0	4,272	0	4,272	21,361	25,633
126	261	23,212	0	23,212	13,927	4,642	0	0	0	9,285	0	9,285	27,855	51,067
137	257	9,494	0	9,494	23,734	0	0	9,494	0	14,241	0	14,241	47,469	56,963
138A	258	20,507	2,563	23,070	15,380	0	5,127	7,690	0	15,380	2,563	17,943	46,140	69,209
138B	260	2,039	1,020	3,059	2,039	0	0	3,059	0	0	0	0	5,098	8,157
138C	259	3,152	6,304	9,456	15,760	0	3,152	44,127	0	110,317	3,152	113,469	176,508	185,964
Population Estimate		101,126	9,887	111,013	105,018	8,914	8,279	77,187	0	170,584	9,987	180,571	379,969	490,981
MORZHOVOI BAY														
87AX	264	11,393	47,469	58,861	11,393	0	5,696	58,861	5,696	258,230	28,481	292,408	368,358	427,219
87D	265	2,962	99,722	102,684	0	0	9,455	208,015	4,728	680,775	56,731	742,234	959,704	1,062,389
MOB	218	17,620	0	17,620	25,172	2,517	0	0	0	0	0	0	27,689	45,310
MOD	219	48,389	0	48,389	49,975	6,346	793	793	0	0	0	0	57,908	106,296
MOF	220	35,127	0	35,127	35,127	949	949	1,899	0	0	0	0	38,924	74,051
MOG	221	58,861	1,899	60,760	42,722	3,798	949	2,848	4,747	0	0	4,747	55,064	115,824
MOH	222	13,398	0	13,398	19,352	2,977	0	5,210	3,722	1,489	0	5,210	32,750	46,147
MOI	223	44,621	1,899	46,519	29,431	8,544	0	2,848	6,646	949	949	8,544	49,368	95,887
MOK	225	11,393	2,848	14,241	9,494	0	0	949	949	0	949	1,899	12,342	26,583
MOL	224	6,646	949	7,595	1,899	0	0	2,848	18,988	6,646	5,696	31,329	36,076	43,671
MOOX	226	15,094	762,262	777,356	8,336	8,336	2,779	83,364	38,903	222,305	33,346	294,554	397,370	1,174,726
MORX	263	23,377	0	23,377	20,780	0	0	2,597	0	0	0	0	23,377	46,755
MOSX	262	11,696	1,671	13,367	6,684	0	0	11,696	0	20,051	0	20,051	38,431	51,798
Population Estimate		300,577	918,719	1,219,294	260,365	33,467	20,621	381,928	84,379	1,190,445	126,152	1,400,976	2,097,361	3,316,656
COLD BAY/BELKOFSKI BAY														
156A	211	1,956	44,999	46,955	1,956	0	7,826	93,911	1,956	162,387	1,956	166,300	269,993	316,948
157A	212	11,174	931	12,105	16,761	0	0	1,862	0	1,862	931	2,793	21,416	33,521
BEBX	214	14,096	0	14,096	13,215	0	0	0	0	0	0	0	13,215	27,312
BE CX	215	14,771	2,272	17,043	19,316	0	1,136	1,136	0	1,136	0	1,136	22,724	39,767
BEE	216	27,532	2,848	30,380	43,671	6,646	4,747	8,544	949	949	0	1,899	65,507	95,887
BEF	217	9,044	1,391	10,436	12,523	696	696	1,391	1,391	1,391	0	2,783	18,088	28,524
BEG	213	12,589	899	13,489	13,489	899	0	4,496	0	2,698	0	2,698	21,582	35,071
COB	268	145,034	0	145,034	180,903	7,798	0	3,119	0	0	0	0	191,819	336,853
COC	269	6,760	0	6,760	20,279	0	0	0	0	0	0	0	20,279	27,038
COE	270	69,242	11,228	80,471	61,756	50,528	16,843	9,357	5,614	0	0	5,614	144,098	224,569
COF	271	2,827	10,177	13,004	1,131	1,131	4,523	6,219	1,131	2,827	565	4,523	17,528	30,532
COGA	272	3,862	65,648	69,509	1,448	2,414	17,860	31,858	6,275	6,275	2,414	14,964	68,544	138,053

-continued-

Appendix D2.–Page 2 of 3.

Station	Haul no.	Females			Sublegals (mm CW)				Recruits	Postrecruits (mm CW)		Total Legal	Total Males	Total Crab
		Juvenile	Adult	Total	<70	70-91	92-114	>114		<165	≥165			
COGB	274	1,380	0	1,380	3,680	0	0	0	230	0	230	460	4,140	5,520
COH	273	0	990	990	495	0	0	0	0	0	0	0	495	1,484
COM	266	17,772	31,443	49,216	13,671	17,772	103,900	13,671	2,734	6,835	0	9,570	158,584	207,799
COO	267	9,934	0	9,934	0	0	2,980	1,987	0	2,980	0	2,980	7,947	17,882
Population Estimate		347,973	172,826	520,802	404,294	87,884	160,511	177,551	20,280	189,340	6,096	215,720	1,045,959	1,566,760
PAVLOF BAY/VOLCANO BAY														
228	201	0	8,285	8,285	0	6,991	0	454,442	0	943,841	27,966	971,807	1,433,240	1,441,525
245	200	50,493	11,652	62,145	38,841	0	11,652	31,073	0	31,073	0	31,073	112,638	174,784
PAEX	204	3,068	0	3,068	9,205	0	0	0	0	0	0	0	9,205	12,274
PAH	202	18,922	2,838	21,761	17,030	1,892	10,407	1,892	0	0	0	0	31,222	52,983
PAIX	203	21,815	2,424	24,239	26,663	0	2,424	0	0	0	0	0	29,087	53,326
PALX	206	52,743	10,549	63,292	52,743	4,219	31,646	18,987	2,110	16,878	0	18,987	126,583	189,875
PAOA	207	3,870	893	4,764	4,168	893	595	2,382	0	4,168	0	4,168	12,207	16,970
PAP	205	1,841	11,046	12,887	3,682	1,841	56,151	54,310	921	22,092	0	23,013	138,998	151,885
PARA	209	11,824	0	11,824	17,736	0	2,534	34,627	2,534	49,829	845	53,208	108,104	119,928
PARB	208	4,663	43,835	48,499	8,394	0	10,259	19,586	2,798	21,451	0	24,249	62,489	110,987
PAU	210	23,734	1,899	25,633	23,734	4,747	11,393	16,139	2,848	6,646	0	9,494	65,507	91,140
VOA	277	45,628	2,976	48,603	49,595	2,976	1,984	14,879	4,960	992	0	5,951	75,385	123,988
VOBX	278	81,534	23,295	104,829	58,238	0	7,765	11,648	0	15,530	0	15,530	93,182	198,011
VOD	279	24,854	16,569	41,423	28,536	0	921	22,092	1,841	44,185	921	46,946	98,495	139,918
VOFB	276	7,569	50,232	57,801	9,633	0	688	13,074	0	39,910	2,064	41,975	65,370	123,171
VOG	282	11,228	20,415	31,644	6,125	0	1,021	18,374	0	75,537	3,062	78,599	104,118	135,762
VOH	281	22,150	12,520	34,670	16,372	963	1,926	13,483	963	10,594	0	11,557	44,300	78,970
VOI	280	8,804	12,717	21,521	7,826	0	0	15,652	1,956	36,195	978	39,129	62,607	84,128
VOLX	287	9,661	84,532	94,193	10,868	1,208	10,868	59,173	0	32,605	0	32,605	114,722	208,916
VOMB	275	11,256	7,504	18,760	17,259	750	750	10,505	1,501	12,006	0	13,507	42,772	61,532
VON	283	31,741	6,943	38,684	27,773	1,984	4,960	8,927	3,968	992	0	4,960	48,603	87,288
VOP	286	31,329	23,734	55,064	37,975	18,038	37,026	16,139	0	4,747	0	4,747	113,925	168,989
VOQ	285	28,897	0	28,897	37,355	0	1,410	1,410	705	705	0	1,410	41,584	70,482
VOR	284	20,585	3,743	24,328	28,071	4,679	10,293	12,164	9,357	936	0	10,293	65,499	89,828
Population Estimate		528,209	358,601	886,814	537,822	51,181	216,673	850,958	36,462	1,370,912	35,836	1,443,208	3,099,842	3,986,660
BEAVER BAY/BALBOA BAY/UNGA STRAIT														
278	199	9,040	0	9,040	0	0	0	0	0	0	0	0	0	9,040
311A	306	5,481	4,795	10,276	2,055	685	2,740	11,646	6,166	0	0	6,166	23,292	33,568
311B	300	2,716	21,728	24,444	5,432	0	905	53,414	0	51,603	0	51,603	111,355	135,799
311C	195	5,348	17,573	22,922	3,056	0	2,292	35,911	0	19,865	0	19,865	61,125	84,046
329B	299	949	3,798	4,747	5,696	0	16,139	82,596	0	29,431	0	29,431	133,862	138,609

-continued-

Appendix D2.–Page 3 of 3.

Station	Haul no.	Females			Sublegals (mm CW)				Recruits	Postrecruits (mm CW)		Total Legal	Total Males	Total Crab
		Juvenile	Adult	Total	<70	70-91	92-114	>114		<165	≥165			
329C	194	3,798	17,089	20,886	949	949	1,899	78,798	0	69,304	0	69,304	151,900	172,786
348	307	3,798	64,558	68,355	0	0	15,190	121,520	0	91,140	0	91,140	227,850	296,205
BAA	302	3,190	0	3,190	4,253	0	0	0	0	0	0	0	4,253	7,443
BAC	303	4,484	0	4,484	747	0	0	0	0	0	0	0	747	5,231
BAD	304	6,904	0	6,904	5,523	0	1,841	1,841	2,762	0	0	2,762	11,967	18,871
BAE	305	564	1,127	1,691	2,818	0	1,691	1,691	0	0	0	0	6,199	7,890
BAF	301	0	0	0	960	0	0	0	0	480	0	480	1,440	1,440
BVC	196	0	0	0	1,044	0	0	3,133	0	0	0	0	4,177	4,177
Population Estimate		46,272	130,668	176,939	32,533	1,634	42,697	390,550	8,928	261,823	0	270,751	738,167	915,105
STEPOVAK BAY														
368A	193	84,532	4,025	88,558	130,824	0	2,013	10,063	0	2,013	0	2,013	144,913	233,470
STA	190	5,578	0	5,578	10,226	0	0	0	0	0	0	0	10,226	15,804
STB	191	7,519	0	7,519	5,848	0	0	0	0	0	0	0	5,848	13,367
STD	189	29,206	3,021	32,227	24,170	1,007	1,007	7,050	0	1,007	0	1,007	34,241	66,468
STE	192	17,203	688	17,891	17,203	0	3,441	1,376	0	0	0	0	22,019	39,910
Population Estimate		144,038	7,734	151,773	188,271	1,007	6,461	18,489	0	3,020	0	3,020	217,247	369,019
WEST NAGAI STRAIT														
301	288	0	4,747	4,747	0	4,747	0	9,494	0	18,988	0	18,988	33,228	37,975
318	289	0	0	0	4,747	0	0	0	0	0	0	0	4,747	4,747
332B	298	16,878	6,329	23,207	6,329	2,110	4,219	6,329	8,439	4,219	2,110	14,768	33,756	56,962
334	292	9,494	9,494	18,988	23,734	0	4,747	166,141	0	431,966	14,241	446,206	640,828	659,816
335	291	0	109,178	109,178	9,494	0	9,494	66,456	0	33,228	0	33,228	118,672	227,850
337	290	0	0	0	0	0	0	4,747	0	0	0	0	4,747	4,747
353	294	25,418	8,473	33,891	72,017	0	12,709	21,182	8,473	12,709	0	21,182	127,090	160,980
354	293	14,241	9,494	23,734	14,241	0	18,988	94,938	18,988	33,228	0	52,216	180,381	204,116
373A	295	0	0	0	3,081	0	0	0	0	0	0	0	3,081	3,081
373B	296	0	35,199	35,199	1,135	2,271	5,677	128,306	3,406	44,283	1,135	48,824	186,214	221,413
393	297	0	9,003	9,003	0	0	0	30,011	0	6,002	0	6,002	36,013	45,017
Population Estimate		66,031	191,917	257,947	134,778	9,128	55,834	527,604	39,306	584,623	17,486	641,414	1,368,757	1,626,704
Western Section		749,676	1,101,432	1,851,109	769,677	130,265	189,411	636,666	104,659	1,550,369	142,235	1,797,267	3,523,289	5,374,397
Eastern Section		784,550	688,920	1,473,473	893,404	62,950	321,665	1,787,601	84,696	2,220,378	53,322	2,358,393	5,424,013	6,897,488
South Peninsula Total		1,534,226	1,790,352	3,324,582	1,663,081	193,215	511,076	2,424,267	189,355	3,770,747	195,557	4,155,660	8,947,302	12,271,885

Appendix D3.—Tanner crab population estimates in the Chignik District by station, sampling locale, and total district, 2012.

Station	Haul no.	Females			Sublegals (mm CW)				Recruits	Postrecruits (mm CW)		Total Legal	Total Males	Total Crab
		Juvenile	Adult	Total	<70	70-91	92-114	>114		<165	≥165			
IVANOF BAY														
4000	310	9,782	5,590	15,372	16,770	0	0	4,891	0	2,096	0	2,096	23,757	39,129
4007	309	36,769	36,769	73,538	55,153	0	5,253	34,143	0	5,253	0	5,253	99,801	173,339
4008	308	20,502	7,455	27,957	13,047	1,864	3,728	26,093	0	16,774	0	16,774	61,506	89,463
400X	311	15,858	820	16,679	14,765	1,367	273	820	6,836	547	0	7,382	24,608	41,286
4024	188	34,907	0	34,907	31,998	0	0	0	0	0	0	0	31,998	66,904
4036	187	66,201	0	66,201	75,228	0	0	6,018	6,018	3,009	0	9,027	90,274	156,475
4900	312	52,229	0	52,229	64,354	0	0	0	0	0	0	0	64,354	116,583
4915	313	0	0	0	9,150	0	0	0	0	0	0	0	9,150	9,150
Population Estimate		236,248	50,634	286,883	280,465	3,231	9,254	71,965	12,854	27,679	0	40,532	405,448	692,329
MITROFANIA ISLAND														
4025	182	6,653	13,306	19,960	16,633	0	3,327	59,879	0	69,859	1,663	71,522	151,361	171,320
4026	183	33,710	15,968	49,677	21,290	3,548	1,774	21,290	0	14,194	0	14,194	62,097	111,774
4035	314	15,182	3,036	18,219	9,109	0	21,255	51,620	39,474	21,255	3,036	63,766	145,751	163,970
4037	186	4,004	20,020	24,025	10,010	0	0	48,049	4,004	34,035	0	38,039	96,098	120,123
4038	184	16,337	3,630	19,967	18,152	1,815	5,446	81,684	0	50,826	0	50,826	157,923	177,890
4043	185	18,839	17,390	36,228	18,839	0	8,695	26,084	0	8,695	0	8,695	62,312	98,541
4048	320	11,757	1,306	13,063	8,491	0	1,306	12,410	6,532	4,572	0	11,104	33,312	46,375
4049	315	32,918	2,532	35,450	45,579	2,532	2,532	30,386	15,193	7,597	0	22,790	103,819	139,270
4063	319	68,369	2,532	70,901	53,176	10,129	2,532	22,790	17,725	0	0	17,725	106,351	177,252
4064	318	2,532	43,047	45,579	2,532	0	2,532	88,626	2,532	70,901	0	73,433	167,123	212,703
4065	317	10,631	3,544	14,175	14,175	0	0	3,544	0	7,088	0	7,088	24,807	38,982
4066	181	10,256	0	10,256	7,692	0	0	1,282	0	0	0	0	8,974	19,231
4067	180	2,564	2,564	5,128	6,410	0	2,564	33,333	0	33,333	1,282	34,615	76,922	82,050
4068	179	6,410	1,282	7,692	2,564	0	0	14,102	0	26,923	3,846	30,769	47,435	55,128
4095	316	36,754	0	36,754	44,744	1,598	4,794	39,950	23,970	22,372	0	46,342	137,427	174,181
Population Estimate		276,916	130,157	407,074	279,396	19,622	56,757	535,029	109,430	371,650	9,827	490,908	1,381,712	1,788,790
CHIGNIK BAY														
4256	326	14,886	0	14,886	11,696	0	0	0	0	0	0	0	11,696	26,582
4262	321	7,595	949	8,544	4,747	1,899	1,899	10,443	6,646	0	0	6,646	25,633	34,178
4264	178	50,824	7,133	57,957	62,416	892	892	7,133	24,075	0	0	24,075	95,407	153,364
4265	176	51,514	0	51,514	54,864	0	0	0	0	419	0	419	55,283	106,797
4266	325	59,952	1,738	61,690	73,854	0	0	869	0	869	0	869	75,592	137,281
4267	322	21,836	0	21,836	20,886	0	0	0	949	0	0	949	21,836	43,671
4270	174	23,497	0	23,497	45,479	1,516	0	758	0	0	0	0	47,753	71,250
4271	175	5,013	28,709	33,722	9,114	911	3,646	25,519	1,823	36,000	911	38,734	77,925	111,646
4272	324	16,211	0	16,211	7,048	0	0	0	0	0	0	0	7,048	23,259

-continued-

Appendix D3.–Page 2 of 2.

Station	Haul no.	Females		Sublegals (mm CW)			Recruits	Postrecruits (mm CW)		Total Legal	Total Males	Total Crab	
		Juvenile	Adult	Total	<70	70-91		92-114	>114				<165
4274	323	32,279	0	32,279	35,127	0	0	0	0	0	35,127	67,406	
4277	171	38,924	19,937	58,861	22,785	949	9,494	25,633	1,899	18,988	0	20,886	138,609
4278	172	33,228	34,178	67,406	46,519	949	8,544	21,836	949	13,291	0	14,241	159,495
4282	170	34,178	29,431	63,608	39,874	1,899	949	16,139	0	14,241	0	14,241	136,710
4286	168	101,583	0	101,583	161,394	949	1,899	0	0	0	0	0	265,825
4287	169	411,686	3,997	415,683	420,160	2,101	0	0	0	0	0	0	837,944
4312	173	4,853	971	5,824	14,363	2,210	8,839	90,596	22,097	97,225	4,419	123,741	245,572
4964	177	80,522	0	80,522	100,744	969	0	0	0	0	0	0	182,234
Population Estimate		988,581	127,043	1,115,623	1,131,070	15,244	36,162	198,926	58,438	181,033	5,330	244,801	2,741,823
KUJULIK BAY													
4290	166	4,747	0	4,747	1,582	0	0	0	0	0	0	0	6,329
4296	167	21,874	0	21,874	25,063	0	456	0	0	0	0	0	47,393
4298	165	58,694	851	59,545	69,752	0	851	851	0	0	0	0	130,999
4301	164	12,342	949	13,291	21,836	0	0	0	0	0	0	0	35,127
4302	163	26,072	1,862	27,934	28,866	0	0	0	0	0	0	0	56,800
4308	162	44,811	28,861	73,672	53,165	3,038	6,076	24,304	0	9,114	0	9,114	169,369
Population Estimate		168,540	32,523	201,063	200,264	3,038	7,383	25,155	0	9,114	0	9,114	446,017
Chignik Total		1,670,285	340,357	2,010,643	1,891,195	41,135	109,556	831,075	180,722	589,476	15,157	785,355	5,668,959

Appendix D4.—Tanner crab population estimates in the Eastern Aleutian District by station, sampling locale, and total district, 2012.

Station	Haul no.	Females			Sublegals (mm CW)				Recruits	Postrecruits (mm CW)		Total Legal	Total Males	Total Crab
		Juvenile	Adult	Total	<70	70-91	92-114	>114		<165	≥165			
AKUTAN BAY														
AKA	227	19,585	0	19,585	26,929	22,033	0	0	0	0	0	0	48,962	68,547
AKC	228	3,755	89,180	92,935	1,877	939	5,632	11,265	0	0	0	0	19,714	112,649
AKD	229	0	297,153	297,153	4,156	11,429	77,925	85,198	1,039	8,312	0	9,351	188,058	485,211
AKG	230	3,798	3,798	7,595	1,899	2,848	25,633	2,848	949	0	0	949	34,178	41,773
AKL	231	0	1,899	1,899	0	0	13,291	27,532	12,342	0	0	12,342	53,165	55,064
Population Estimate		27,138	392,030	419,167	34,861	37,249	122,481	126,843	14,330	8,312	0	22,642	344,077	763,244
BEAVER INLET														
BIB	236	2,315	7,717	10,031	772	772	4,630	5,402	0	0	0	0	11,575	21,606
BID	235	79,945	0	79,945	65,639	0	0	0	0	0	0	0	65,639	145,584
BIG	234	129,328	0	129,328	119,302	0	0	0	0	0	0	0	119,302	248,630
BIK	233	122,434	3,482	125,916	117,792	1,741	580	2,321	0	1,161	0	1,161	123,595	249,511
BIN	237	0	0	0	859	0	859	859	0	0	0	0	2,577	2,577
Population Estimate		334,022	11,199	345,220	304,364	2,513	6,069	8,582	0	1,161	0	1,161	322,688	667,908
UNALASKA BAY/KALEKTA BAY														
KAA	232	0	1,726	1,726	0	1,726	5,177	1,726	0	0	0	0	8,628	10,354
UNC	254	42,043	78,080	120,123	13,509	29,720	49,983	87,808	9,456	81,054	6,754	97,264	278,284	398,406
UND	251	14,756	5,902	20,658	0	11,805	4,427	738	0	0	0	0	16,969	37,628
UNE	250	16,850	4,956	21,805	19,823	0	991	0	0	0	0	0	20,814	42,619
UNF	253	0	409,181	409,181	2,792	16,750	106,086	290,340	11,167	134,003	2,792	147,961	563,929	973,109
UNG	252	0	3,165	3,165	1,582	3,165	1,582	0	0	0	0	0	6,329	9,494
UNI	248	0	0	0	873	0	0	0	0	0	0	0	873	873
UNJ	249	96,798	988	97,786	85,335	1,004	1,004	0	0	0	0	0	87,343	185,128
Population Estimate		170,447	503,998	674,444	123,914	64,170	169,250	380,612	20,623	215,057	9,546	245,225	983,169	1,657,611
MAKUSHIN BAY														
MKB	246	80,949	119,924	200,873	35,241	70,482	24,669	28,193	3,524	4,405	0	7,929	166,513	367,385
MKC	247	7,369	121,992	129,361	4,094	6,550	18,831	34,387	1,637	8,187	0	9,825	73,687	203,048
MKE	245	30,915	7,729	38,643	24,474	3,864	2,576	0	0	0	1,288	1,288	32,203	70,846
MKF	244	28,780	6,167	34,947	15,418	0	0	4,111	0	1,028	1,028	2,056	21,585	56,532
MKJ	243	1,044	0	1,044	1,044	1,044	2,087	0	0	0	0	0	4,174	5,218
MKK	242	3,324	1,662	4,985	14,956	1,662	1,662	0	0	0	0	0	18,280	23,265
MKN	241	15,067	24,339	39,406	20,862	3,477	0	2,318	0	1,159	0	1,159	27,816	67,222
MKP	240	11,420	13,595	25,015	4,894	11,420	8,701	35,347	2,719	5,982	0	8,701	69,063	94,078
Population Estimate		178,868	295,408	474,274	120,983	98,499	58,526	104,356	7,880	20,761	2,316	30,958	413,321	887,594
PUMICESTONE BAY														
PUA	238	16,100	10,029	26,129	17,155	13,988	3,167	792	264	0	0	264	35,366	61,495
PUB	239	82,956	0	82,956	71,490	0	0	0	0	0	0	0	71,490	154,446
Population Estimate		99,056	10,029	109,085	88,645	13,988	3,167	792	264	0	0	264	106,856	215,941
Eastern Aleutian Total		809,531	1,212,664	2,022,190	672,767	216,419	359,493	621,185	43,097	245,291	11,862	300,250	2,170,111	4,192,298